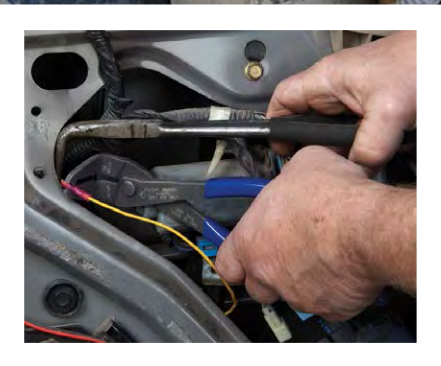
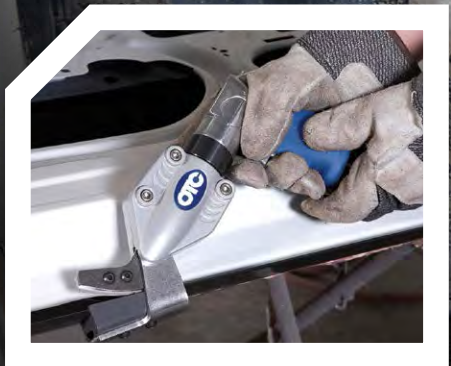




# BODY SERVICE SOLUTIONS

FORGED FROM 100 YEARS OF  
RELENTLESS INNOVATION





2524

2525

**2525 Power door skin remover and 2524 power door skin remover air**

- Cuts through rounded door-hem edge, over body lines, and around corners to remove door skins.
- Eliminates time consuming and messy grinding.
- 20 gauge capacity in steel and other common sheet metals.
- Cuts straight and to the left for round or square auto body patches.
- Compact, lightweight, one hand operation.

**2524 Power Door Skin Remover Air**

Compatible with most existing air set-ups.

**2525 Power Door Skin Remover**

Use with minimum 14.4V 3/8" cordless or corded drill.

**2525RB Replacement Blades**



2526

2527

**2527 Power Hemming Tool and 2526 Power Hemming Tool Air**

- Designed to efficiently hem the edges of replacement door skins with speed and precision.
- Minimum manual tacking required.
- High impact ABS polymer anvil will not scratch or mar the replacement door skin.
- 20 gauge capacity in steel and other common sheet metals.

**2526 Power Hemming Tool Air**

Compatible with most existing air set-ups.

**2527 Power Hemming Tool**

Use with minimum 14.4V 3/8" cordless or corded drill.

**2527RA Replacement Anvil**



2528

2529

**2529 Power Quarter Panel Hemming Tool and 2528 Power Quarter Panel Hemming Tool Air;**

- Easily bend and close wheel arc flanges on quarter panels.
- Replicates a hammer and dolly motion at high speed, with greater precision and faster results.
- Reversible hammer head allows folding of the flange and sealing of the seam.
- Hand peg provides smooth operation and controlled maneuverability.

**2528 Power Quarter Panel Hemming Tool Air**

Compatible with most existing air set-ups.

**2529 Power Quarter Panel Hemming Tool**

Use with minimum 14.4V 3/8" cordless or corded drill.

**2529RH Replacement Hammer**

**2529RA Replacement Anvil**





Use with minimum 14.4V 3/8" cordless or corded drill.

**2531 Power Shear Corrugated Metal**

- Easily cuts body panels across sharper body lines as well as large and small corrugated sheet metal.
- 24 gauge capacity in steel and other common sheet metals.
- Cuts straight and to the left for round or square holes.
- Compact, lightweight, one hand operation.

**2531RB Replacement Blades**



**2535 Power shear 18 and 2534 power shear 18 air**

- Easily cuts body panels, wide opening jaws also navigate thick plastic bumper profiles, rocker panels, and layered material.
- 18 gauge capacity in steel and other common sheet metals.
- Cuts straight and to the left for round or square auto body patches.
- Compact, lightweight, one hand operation.

**2534 Power Shear 18 Air**  
Compatible with most existing air set-ups.

**2535 Power Shear 18**  
Use with minimum 14.4V 3/8" cordless or corded drill.

**2535RB Replacement Blades**



**2537 Power shear 16 and 2536 power shear 16 air**

- Heavy metal cutting performance with a 16 gauge capacity.
- The spiral foot allows for easy left, right, or straight cutting action.
- Outstanding accessibility and control at air speed.
- 5 position 0 to 90 degree adjustable head angle.
- Long life 4 sided cutting insert.

**2536 Power Shear 16 Air**  
Compatible with most existing air set-ups.

**2537 Power Shear 16**  
Use with minimum 14.4V 3/8" cordless or corded drill.

**2537RB Replacement Blades**

**HAMMER & DOLLY SETS**



**2541 Hammer & Dolly Set, 4-piece**

- General Purpose Pick Hammer with Fiberglass Handle
- Cross Chisel Curved Hammer with Fiberglass Handle
- Light Dinging Spoon
- Toe Dolly Block
- Made in USA

**2541-1 General Purpose Pick Hammer**

**2541-2 Cross Chisel Curved Hammer**

**2541-3 Light Dinging Spoon**

**2541-4 Toe Dolly Block**



**2543 Hammer & Dolly Set, 7-piece**

- Cross Chisel Curved Hammer with Fiberglass Handle
- Shrinking Hammer with Fiberglass Handle
- Utility Pick Hammer with Fiberglass Handle
- Light Dinging Spoon
- Toe Dolly Block
- Heel Dolly Block
- General Purpose Dolly Block
- Made in USA

**2543-1 Shrinking Hammer**

**2543-2 Utility Pick Hammer**

**2543-3 Heel Dolly Block**

**2543-4 General Purpose Dolly**

**2541-2 Cross Chisel Curved Hammer**

**2541-3 Light Dinging Spoon**

**2541-4 Toe Dolly Block**

**SYNTHETIC BODY TOOLS**



**2479**  
**Trim Wedge, 30mm**  
For safe removal of body trim safely - without damage.



**2480**  
**Trim Wedge, 60mm**  
For safe removal of body trim - wider profile for larger pieces.



**2485**  
**Bumping Tool Set, 3-piece**  
Door Aligner, Center Punch and Straightener - Available individually.



**2481**  
**Blind Panel Removal Wedge**  
Designed to reach inside panel release points for blind removal support.



**2487**  
**Combination Wedge Pry Tool**  
Designed to safely pry plastic automotive pin style fasteners.



**2482**  
**Pick Hammer, 120mm x 30mm**  
Synthetic hammers designed by body repair pros for precise and effective working, ease of use.



**2488**  
**Pinch Seam Straightener**  
Designed to realign, and straighten pinch seams.



**2483**  
**Pick Hammer, 140mm x 40mm**  
Two - sizes for a variety of application



**2491**  
**Stepped Lever Wedge**  
Designed to assist alignment of doors and glass



**2484**  
**Finishing Hammer, 160mm x 40mm**  
Use directly on body panel, or in conjunction with other repair tools.



**2490**  
**Universal Hook**

- Dual purpose hooking / prying tool.
- Designed to safely pry small bezel components from interiors without damage.



**2489-8**  
**Single Spotweld Carbide Drill Bit**

- High Speed Steel construction specially treated to maintain sharpness.
- Self Centering with 3 cutting points!
- Designed for Drilling through Spot Welds.



**2492**  
**Spotweld Carbide Drill Bit Set, 5-piece**

- Super Hard Titanium construction - specially treated to resist dulling in hi temp environments.
- Designed for Drilling through Spot Welds.

**SYNTHETIC BODY TOOLS**



**2470  
Spot Weld Breaker**  
Use with hammer to slice through panels after spot welds have been drilled.



**2471  
Trim & Bezel Tool**  
Trim panel pry tool - non-marring tool for many interior trim and bezel pieces.



**2472  
Window Trim and Molding Remover**  
Perfect for removal of fragile trim pieces like chrome window trim.



**2473  
Half Round Bumping Tool**  
• Designed to reshape rounded metal profiles  
• Good performance in confined areas.



**2474  
Heavy Duty Profile Straightening Tool**  
Designed to reshape straight profiles with minimal deflection



**2475  
Round Body Anvil**  
• Use on rounded surfaces.  
• Rounded Chisel end to reshape small diameter round profiles.  
• Wide striking area for accurate strikes.



**2476  
Curved and Flat Dolly**  
Designed for both curved and straight area shaping.



**2477  
Edge Straightener**  
• Use to straighten edges.  
• Wide profile enhances professional finish.  
• Perfect for doors, fenders and hoods.



**2478  
Extended Reach Bumping Tool**  
Designed for use on hard to reach areas such as door skins, panels, hood and deck lids.



**5550  
Spectrum Solar 10W LED Work Light with UV Top Light**

**5550 Specifications**

10W LED Work light with UV Top Light  
LI-ION Rechargeable Battery – 3.6V 2250 mA, AC/DC  
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V  
Power Output: 5.0V 1000 mA  
Charger Time: 3.5 ~ 4.0 hours  
Active Time: 2.5 hours  
Storage Temperature: -4°F to 158°F; -20°C to 70°C  
Operating Temperature: 23°F to 122°F; -5° to 50°C  
PS: LED Sector: 170°  
At 50 cm: 350 LUX (750 LM)  
Waterproof Grade IP65



**5551  
Spectrum Trio9W LED Work Light with 3W LED Top Light**

**5551 Specifications**

9W LED Work light with 3W LED Top Light  
LI-ION Rechargeable Battery – 3.6V 2250 mA, AC/DC  
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V  
Power Output: 5.0V 1000 mA  
Charger Time: 3.5 ~ 4.0 hours  
Active Time: 3.0 hours  
Storage Temperature: -4°F to 158°F; -20°C to 70°C  
Operating Temperature: 23°F to 122°F; -5° to 50°C  
PS: LED Sector: 25°  
At 50 cm: 4000 LUX  
Waterproof Grade IP65



**5552  
Spectrum 30+430 Pc. LED Work Light with 4 Pc. LED Top Light**

**5552 Specifications**

30 Piece LED Work light with 4 Piece LED Top Light  
LI-ION Rechargeable Battery – 3.6V 2250 mA, AC/DC  
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V  
Power Output: 5.0V 1000 mA  
Charger Time: 3.5 ~ 4.0 hours  
Active Time: 4.0 to 5.0 hours  
Storage Temperature: -4°F to 158°F; -20°C to 70°C  
Operating Temperature: 23°F to 122°F; -5° to 50°C  
PS: LED Sector: 15°  
At 50 cm: 2250 LUX  
Waterproof Grade IP65

- AC/DC Rechargeable
- Li-Ion battery
- Magnetic base
- Bright LEDs - 50,000 hour life
- Adjustable 60° angle
- Slip resistant textured body
- Impact and water resistant
- Limited Lifetime Warranty



# BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4549 Door Panel & Upholstery Tool Set Heavy-duty door panel and upholstery tools

- 4549-1 – removes window and door handle clips, and upholstery tucking.
- 4549-2 – V-notched door panel clip removal tool
- 4549-3 – U-notched door panel clip removal tool



## 6785 Euro Door Handle Kit

- This kit contains the tools needed to service most door hinges and door handles on Audi, Mercedes-Benz, Porsche, and Volkswagen vehicles.
- Kit includes: A ratchet wrench with three 12-point bits (4 mm, 8 mm, 10 mm), one T40 and one T45 TORX® bit; a T30 TORX® long handled driver; and a T20 TORX® T-handle driver.
- T30 driver, 14" long; T20 driver, 9-1/2" long; hex ratchet, 9-1/2" long.



## 6642 Trim Tool Kit, 11-Piece

Includes 11 specialty tools designed to remove trim strips, panels, wheel caps, bezels, liners, shrouds, fascia, and more...

- Tools are constructed of durable, impact-resistant nylon that will not damage non-metal interior trim surfaces.
- Cloth pouch rests flat on a dashboard or fender for easy access to tools and then folds up with tools inside for storage.
- Kit has multiple applications in the automotive, aviation marine, and other industries.

## 4551 Door Panel & Upholstery Tool Set

Heavy-duty U-notched and V-notched tools with stainless steel blades used for removing small door panels and upholstery clips.



## 8200A Ford Mirror Removal Tool

Save shop labor time and cost by allowing mirror to be removed without damaging or removing the mirror assembly.

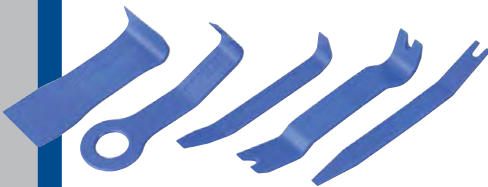
### Works on these outside door mirrors:

- Windstar, Crown Vic, Grand Marq, Marauder, Taurus, Sable, Mustang, Town Car, Ranger, Excursion, Super Crew (F-250–F-550), F-650, F-750, Escape, Thunderbird, Explorer, Mountaineer, Expedition, Navigator, F-150, E-Series van, LS, Explorer Sport, Explorer Sport Trac, Aviator, Dual arm mirror used on Excursion, Super, Crew (F-250–F-550), F-650, F-750
- Also works on 1999 and newer Ford interior / rearview.



## 4492 E-Clip Tool Set, 5-piece

- Dual operation tool: one end of tool releases e-clip; other end of tool installs e-clip.
- Tools fit four sizes of e-clips: 6 mm, 7 mm, 8 mm, and 9 mm.
- Each tool easily locks into handle provided.



## 4489 Trim Fastener and Molding Removal Set

- Set includes five different sizes and styles of tools that allow easy removal of trim fasteners, moldings, and wheel hubs.
- Tools are made of plastic to prevent damage to trim, moldings, alloy wheels, or vehicle paint.
- Can be used on trim fasteners and moldings inside, or outside, the vehicle.

## 4550 Professional Scraper Set, 3-piece

Scrapers feature polished, heat-treated, stiff, stainless steel blades. Handles are ergonomic two-component plastic and feature a non-slip grip and steel bolstered end.

- Packaged in a storage tray. Includes: 1-1/4" straight blade, 1-1/4" bent blade, and 2" straight blade.



## 7827 Saturn Window Glass Socket

This specially designed socket enables you to easily remove the tricky fasteners that Saturn uses to hold window glass to the regulator in its car doors. Our tool won't cause the damage that often results from makeshift methods.

- For use on 1991 to 2009.
- Accommodates a 3/8" drive ratchet and extension.





**5945**

**Air Bag Release Tool Kit**

- Use to remove the air bag module from the steering wheel.
- Work on many GM, Ford and Mercedes Benz vehicles.

**Applications:**

**539255 – Air Bag Release Tool**

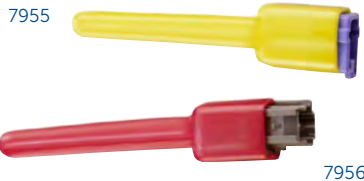
GM 1999-newer Chevrolet Impala, Lumina, Monte Carlo, Venture, Pontiac Bonneville, Grand Prix, Montana, Buick LeSabre, Century, Regal, Olds Intrigue, Cadillac El Dorado, Deville, STS, SLS.

**539254 – T30 TORX® Socket**

Mercedes Benz Models 107,123, 124, 126, 129, 140, 163, 164, 170, 201, 202, 203, 208, 209, 210, 211, 215, 219, 220, 221 and 463.

**539256 – Anti-Theft Socket**

Ford 2000-'04 Taurus/Sable, 1999-'03 Windstar Van.



**Ford Air Bag Simulator**

When plugged into the vehicle harness connector, power is restored to simulate a complete circuit for diagnostic purposes.

**7955 – Ford air bag simulator.** Special one-ohm resistor for use on air bags on Probe vehicles.

**7956 – Ford air bag simulator.** Special two-ohm resistor for use on 1993 and newer Ford system II air bags.



**4676**

**Windshield Wiper Puller**

- Removes wiper arms on many foreign and domestic cars and light trucks.
- Will not damage wiper arm or hood cowl during removal.
- Simply place puller feet under wiper arm and tighten forcing screw against wiper shaft.



**4448**

**Door Buzzer Shutoff Tool**

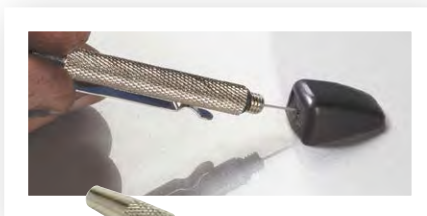
- This simple tool allows for work with the vehicle door open without the annoying door buzzer on.
- High tension spring can be placed in the door jamb to close the door buzzer switch typically found by the hinges.



**4449**

**Air Wedge Lockout Tool**

- Air wedge is designed to create working room around the window frame when using other lockout tools.
- Adjustable inflation and release valve provides versatile use.



**4658**

**Windshield Spray Nozzle Needle**

- Makes quick work of clearing obstructions from the windshield washer spray nozzle.
- Easily pierces corrosion or remove blockage.
- The barrel is knurled for grip and control.
- Threaded end caps keep the needle points covered when not in use. The pocket clip keeps the tool handy.

**6676**

**Truck Windshield Wiper Puller, 18mm**

- Designed to remove aluminum wiper arm from the steel stud that often galvanizes, locking the arm and stud together.
- Investment cast design is strong, easier to use, and saves time.
- Live center and more precise alignment save labor. Works on these and many other vehicles: Jeep Liberty, Grand Cherokee, Dodge Caravan, Stratus, Ram Diesels, Dakota & PT Cruiser, Chrysler LHS, Town & Country, Saturn Vue Buick Rendezvous, Cadillac CTS, Ford Focus, Ford Windstar, Honda Civic, Odyssey Toyota Camry.

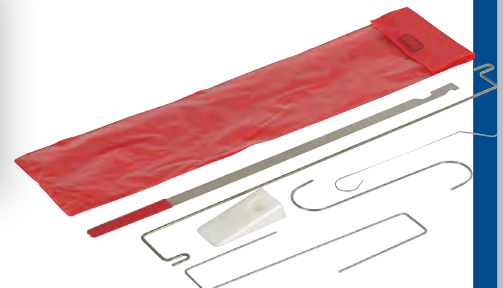


**4452**

**Master Lockout Tool Set**

Set includes:

- Lock Knob Puller
- Slide Lock Linkage Hook
- Under Window Knob Puller
- Under Window Lock Button Depressor
- Under Window Slide Lock Puller
- Lockout Wedge
- Porsche Lock Button Depressor
- Toyota/Chrysler Key Hole Lever
- GM/Ford Linkage Slider
- Ford Vent Window Lever
- Vent Window Button Depressor
- Vent Window Lever Puller
- Bell Crank Thin Bar
- Bell Crank Wide Bar
- Mercedes/Vovlo Lock Linkage Puller
- 119-2 Gas Cap Key.
- Instruction Manual



**4450**

**Lockout Tool Set, 6-piece**

Set includes:

- Lockout Wedge
- Lock Knob Hook
- Slide Lock Linkage Hook
- Toyota/Chrysler Key Hole Lever
- Vent Window Lever Puller
- Bell Crank Thin Bar
- Instruction Manual

# BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4546 Steering Wheel Holder & Pedal Depressor Kit

- This kit has two applications: 1) holds steering wheel in position for alignment adjustments, and 2) depresses brake pedal for various brake checks, including brake lamp operation.
- Rod easily slides in actuator for fast, easy installation of tool on brake pedal or steering wheel. Simply hand squeeze the actuator to accomplish fine adjustments.
- Kit includes: actuator assembly; extension rod for actuator (use when depressing brake pedal); hook assembly (hooks on steering wheel when depressing brake pedal or holding steering wheel); and flat pad (rests on front seal when holding steering wheel).

4546-1 – Handle and Rod.

4546-2 – Steering wheel and pedal holder.



## 4485 Spot Weld Cutter Set

- Use with electric drill or air drill to cut 5/16" and 3/8" spot welds.
- Cutter bits have cutting teeth on each end.
- Replacement kit No. 4485-1 consists of (3) 5/16" cutter bits; (3) 3/8" cutter bits; and (4) centering tips.



## 4651 Screw Extractor Set

- Removes broken studs and bolts.
- Includes ten guide bushings, five drill bits and five screw extractors with extractor nuts.
- Drill bits are left handed to help removal.



## 4705 Telescopic Support

- Car hoods, or trunk lids with weak hinges or struts can sag or fall. The OTC 4705 securely holds these panels up and out of the way. Great tool for setting a hard cover on a pick-up box - turns a two man job into one.
- Just 21" when collapsed to almost 48" when fully extended.
- A simple twist loosens the support for expansion. Twist in the opposite direction to lock in place at the desired length.
- Rubber end caps prevent scratching and scuffing.



## 4602 Brass Punch Set (2 piece)

- Two large, brass non-sparking punches. Ideal for use near precision parts or in locations where sparks from ferrous metal could be hazardous.
- Includes an 8" punch (5/8" hex, tapered to 3/8") and 10" straight punch (3/4" dia., chamfered at both ends).



## 4606 Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Hammer head weighs 24 oz.; brass drift punch is 10" x 3/4" diameter; brass tapered punch is 8" x 5/8" hex tapered to 3/8" diameter point.



## 4383 Hole Punch Kit

- Easy, smooth operation. Will pierce up to 14 gauge steel.
- 7 sets punches and dies. Sizes: 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", and 9/32".



## 4629 Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Two hammer head weighing 24 and 12 oz.
- Two tapered punches 14" x 5/8", 10" x 5/8".
- One hex tapered punch 8" x 5/8".
- Two drift punches 10" x 3/4", 8" x 1/2".
- Two pin punches 6" x 3/8", 4" x 1/4".





**898A**  
**Body and Fender Dent Puller**

Often, the biggest time-consuming part of dent removal is the removal and installation of interior panels and upholstery. This tool eliminates those steps. Simply drill a hole at the base of the dent and thread in the tool's self-tapping screw. A few sharp blows of the slide hammer will pull the dent out.

- Puller is 17" long with Pyralin handle grip.
- Replaceable self-tapping screw. Instructions included. 104427-PK5 – Replacement screws (5 pack).



**4784**  
**Profile Gauge, 10"**

This 10" gauge provides an exact copy of a contour or profile needed during bodywork or fabrication. The plastic fingers will not scratch original finish.



**5900A**  
**Master TORX® Socket Set**

52-piece, professional socket set in a blow-molded case.

Hundreds of applications from front to rear on cars and trucks:

- Seat belt bolts
- Interior and exterior trim screws
- Engine assemblies
- Tail lamp lenses & assemblies
- Bumpers
- Headlight bezels
- Door strikers & latches
- Brake rotor bolts
- GM front-wheel drive front wheel bearings
- Truck box liners

- Styles available: TORX bit sockets, TORX PLUS bits sockets, tamper-resistant TORX bits, and TORX sockets for external bolts.
- Made from superior S2 steel to meet or exceed torque specifications.
- See Page 110 for more information.



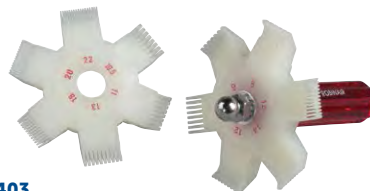
**6627**  
**Grip Wrench Adapters**

- For grip wrenches using single-lead thread adjusting screw.
- Adapter threads onto a slide hammer with a 5/8"–18 thread.

**205378** – Grip wrench threads onto a 7/16"–14 end of adapter for pulling use.

**557479** – Grip wrench threads onto a 5/16"–18 end of adapter for pulling use.

**557480** – Grip wrench threads onto a 1/4"–20 end of adapter for pulling use.



**18403**  
**Fin Straightener**

- Clean and straighten condenser, evaporator and radiator cooling fins.
  - Compact design for confined spaces: the straightener head is 3-1/8" in diameter; the handle is 3-1/2" long.
  - Includes 12 clearly marked combs
- Wheel 1: 8, 9, 10, 12, 14, & 15 fins per inch  
Wheel 2: 10.5, 11, 13, 18, 20, & 22 fins per inch



**4509**  
**Straight-Blade Hose Cutter**

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

**4509-1** – Replacement hose cutter blade.



**4411**  
**Ratcheting Hose & PVC Cutter (Standard)**

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



**4412**  
**Ratcheting Hose & PVC Cutter (Heavy Duty)**

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



**4818**  
**Multi-purpose Scissors**

Will cut hose, wire and cables, wood dowel, PVC, and thin sheet metals in addition to general cutting. The hardened stainless steel blades have an angle ground into one that eliminates slipping when cutting round materials.

# HYDRAULIC SPREADERS AND RAMS

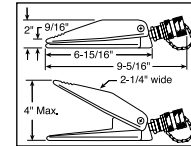


### Hydraulic Spreaders

- Included as standard equipment with our collision sets, these versatile hydraulic spreader tools are also available individually. Ideal for removing dents and creases, performing straightening jobs, or for use as a clamp. Makes working in tight spots easy.
- Maximum spread is 3-1/4".

**9101B** – 1/2-ton spreader with 1/4" NPT ram half coupler

**9102** – 1/2-ton spreader with 3/8" NPT ram half coupler



### 4085

#### Hydraulic Spreader, 1-ton Capacity

This hydraulic spreader is rated at a full 1-ton capacity at 10,000 PSI and that's enough for a wide variety of jobs. Working in tight spots is no problem—it needs only a 9/16" clearance to engage the jaws. With a big 4" spread, it's ready for a variety of applications: straightening work, removing dents and creases from sheet metal, or as a clamp. The device's spring-return jaws are made of high-strength alloy steel. It can be dead-ended at 4" spread under full load. Ideally suited to work with No. 4012 hand pump (not included).



4083B

4082A

### Hydraulic Rams for Collision Repair Sets

These premium quality rams are designed for long, trouble-free service. Backed by a life-time warranty, they are ideal replacements for worn-out, leaky rams. They feature a special piston rod that permits their use with the snap-together components of OTC's collision repair sets, or with most similar competitive products.

**4082A** – 4-ton ram with 5" stroke and special piston rod end designed to fit most collision repair set components.

**4083B** – 10-ton ram with 6-1/8" stroke and special piston rod end designed to fit most collision repair set components.

Specifications	4082A	4083B
Min. height	10-7/8"	14-5/8"
Max. height	15-7/8"	20-3/4"
Spring return	Yes	Yes
Rod end dia.	.874"	1.310"
Max. operating. Pressure	8,950	8,950
Oil cap. (cu. in.)	4.97	13.69
Oil port	1/4" NPT	3/8" NPT



9110B

9104B

### Hydraulic Rams for Collision Repair Sets

These premium quality rams are designed for long, trouble-free service. Backed by a two-year warranty, they feature a special piston rod that permits their use with the snap-together components of OTC Stinger's new collision repair sets, or with most similar competitive products.

**9104B** – 4-ton ram with 4" stroke and special piston rod end designed to fit most collision repair set components.

**9110B** – 10-ton ram with 6" stroke and special piston rod end designed to fit most collision repair set components.

Specifications	9104B	9110B
Min. height	10-3/8"	15"
Max. height	14-3/8"	21"
Spring return	Yes	Yes
Rod end dia.	.874"	1.310"
Max. operating. Pressure	8,950	8,950
Oil cap. (cu. in.)	4.97	13.69
Oil port	1/4" NPT	1/4" NPT



**7175**  
**Indexing Pry Bar Set, 3-piece**

- Sizes 10", 12" and 15".
- Indexible to 180° for better access.
- 14 locking positions for leverage in multiple applications.
- Knurled handle assures a sure grip.
- Meets or exceeds ANSI specifications for pry bars

**7172** – 10" Indexing Pry Bar

**7173** – 12" Indexing Pry Bar

**7174** – 15" Indexing Pry Bar



**Rolling Head Pry Bars**

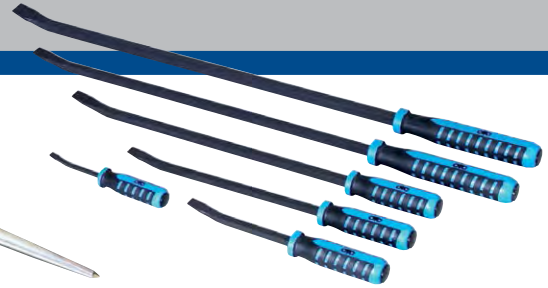
You'll have a lot of leverage using one of these rolling head pry bars. The long, tapered body will also serve as an aligning drift.

**7162** – Pry bar; 6" long

**7163** – Pry bar; 12" long

**7164** – Pry bar; 16" long

**7165** – Pry bar; 18" long



**Handled Pry Bars**

Heavy-duty pry bar made of tempered square steel that you can hit without damaging the handle.

- Black chrome striking cap allows hitting the bar without damage to the handle.
- Ergonomic handle – dual durometer composite handle for user comfort; reduces hand fatigue.
- Polished tip with black oxide finish.
- Long-life finish resists rust and wear during use.
- OTC Marathon Lifetime Warranty.

**8203** – 3-piece handled pry bar set in gray molded tray. Includes 12", 18", and 24" sizes.

**8206** – 6-piece handled pry bar set in gray molded tray. Includes 8", 12", 18", 24", 32" and 36" sizes.

**8208** – 8" handled pry bar

**8212** – 12" handled pry bar

**8218** – 18" handled pry bar

**8224** – 24" handled pry bar

**8232** – 32" handled pry bar

**8236** – 36" handled pry bar



**7703**  
**Slide Hammer Puller, Ten-Pound**

This heavy-duty slide hammer puller gets tough with those really stuck parts. It has all the features of our smaller versions – heat treated, 24" long, and a 5/8"–18 threaded end to adapt to any of OTC's pulling attachments. The difference is the ten-pound hammer that gives you the extra muscle for really stubborn pulling jobs.



**Basic Slide Hammer Units**

May be used with an OTC internal pulling attachment (page 129), or with internal or external-internal threaded adapters (page 127).

**1155** – Slide hammer unit is 24" long with a 5 lb. hammer, 5/8"–18 threaded end.

**1156** – Slide hammer unit is 24" long with a 2-1/2 lb. hammer, 5/8"–18 threaded end.



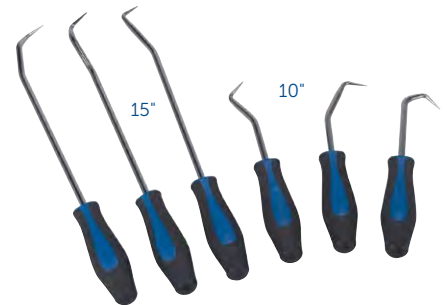
**14450**  
**Heat Gun**

A lightweight source of directed heat offering 500°F and 750°F settings, and also has a "cold" setting. This handy heat gun is ideal for many applications, including:

- Fast heating/drying of materials.
- Quick curing/drying of epoxies.
- Applying shrink tubing.
- Softening tubing for bending.
- Speed-drying of touch-up paint to eliminate "haze."
- Drying out condensation in motors, clutches, controls, etc.
- Shock-proof and cool-running with a tough housing, the unit weighs just 2-1/2 lbs.
- 115V 50/60 Hz.

Replacement parts

**44997** – Switch assembly.



**8260**  
**Hose Removal Set, 6-piece**

- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray which can be placed in tool drawer.

# BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS



## EASILY REMOVE HOSES, CLIPS, WASHERS AND GASKETS

### 8260M Short Pick, Long Pick and Hook Set (14-piece)

- Combines 8260, 8262 and 8263 sets.
- Packaged in molded trays which can be placed in tool drawer.



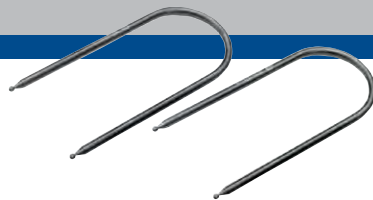
### 8263 Long Pick and Hook Set (4-piece)

- Consisting of four (4), 6.5", soft-handled picks.
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing o-rings, accessing snap ring and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove o-rings, shaft seals, cv boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.



### 4515 Mini Pick and Hook Set – 4-piece

- Sturdy stainless steel points and shafts designed for marking, removing o-rings, accessing snap rings, and performing other tasks. Assorted angle tips allow you to reach awkward locations.
- Knurled shaft design enhances finger control for delicate jobs.



Similar to Ford T87P-19061-A, 415-001

### 7575 Ford Radio Removal Tool Kit

These dual-purpose tools release the retaining clips of a radio faceplate so you can pull the radio from the instrument panel. For use on 1987 to current Mustang; 1988 and newer Tempo/Topaz; 1989 to current Lincoln Continental; 1990 to current Taurus/Sable, Ranger/Bronco II, Probe, Lincoln Town Car, Mark VII, Crown Victoria/ Grand Marquis, Thunderbird/Cougar, F-series pickups and E-series vans; 1991 to current Explorer; 1995 to 2003 Windstar.



### 4676PN Windshield Wiper Puller and Nozzle Needle Combo

- The puller removes wiper arms on many foreign and domestic cars and light trucks.
- Will not damage wiper arm or hood cowl during removal.
- Simply place puller feet under wiper arm and tighten forcing screw against wiper shaft.
- The Nozzle Needle makes quick work of clearing obstructions from the windshield washer spray nozzle.
- Easily pierces corrosion or remove blockage.
- The barrel is knurled for grip and control.
- Threaded end caps keep the needle points covered when not in use.



### 4706 Universal Lift Support Clamp (pair)

- Easy-to-use clamps designed for placement on hood/lid strut rods preventing the body component from falling of sagging.
- Great for vehicles & shrouds with weak or dry struts.
- Simply place over strut rod and tighten.
- Small design keeps access to the compartment unobstructed.



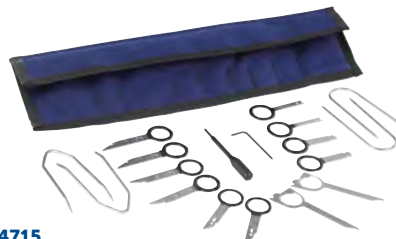
### 4711 Deluxe Radio and Antenna Service Kit

- Eleven-piece kit in molded case.
- Universal antenna wrench.
- Ford radio removal tool.
- Deep sockets to remove and install the tamper-proof radio nuts from many GM, Chrysler, and other aftermarket radios.
- Antenna nut sockets cover most import and domestic antenna nuts.



### 4712 Euro Radio Removal Tool Kit

- Includes the popular tools needed to remove the radio from the dash on the following European vehicles: BMW, VW, Audi, and Mercedes-Benz.
- Easily removes the radio without damaging the radio or the dash panel.



### 4715 Deluxe European Radio Tool Set

- 18-piece set of tools used to remove radios on most European vehicles sold in the U.S. and Europe.
  - Quickly and easily removes the radio from the dash without damage to the radio or dash.
- Replacement Parts

**4715-1** – Removal Keys (4 pieces) Audi, Becker, Mercedes-Benz, VW.

**4715-2** – Removal Keys (2 pieces) Becker, Mercedes-Benz, Porsche.

**4715-3** – Removal Keys (2 pieces) VW.

**4715-4** – Removal Keys (2 pieces) Skoda.

**4715-5** – Removal Keys (2 pieces) Becker.

**4715-6** – Pentagon Wrench BMW.

**4715-7** – Bent U-hook (2 pieces) Blaupunkt.

**4715-8** – U-hook (2 pieces) Audi, Blaupunkt, Ford, Grundig, VW.

**4715-9** – Allen Hex Wrench BMW, Opel.

## OTC BFH HAMMERS

- Indestructible handle - never needs replacement!
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.



5791ID-412



5792ID-216



5793ID-2414

OTC No.	Head Weight	Handle Length	Total Weight
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### Club/Hand Drill Hammer, Indestructible Handle

<b>5791ID-312</b>	2.5 lbs.	12"	4 lbs.
<b>5791ID-412</b>	4 lbs.	12"	5.1 lbs.
<b>5791ID-416</b>	4 lbs.	16"	5.5 lbs.

### Cross Peen Hammer, Indestructible Handle

<b>5792ID-216</b>	2 lbs.	16"	4.5 lbs.
<b>5792ID-316</b>	3 lbs.	16"	5.4 lbs.

### Ball Peen Hammer, Indestructible Handle

<b>5793ID-2414</b>	24 oz.	14"	2.6 lbs.
<b>5793ID-3214</b>	32 oz.	14"	3.0 lbs.



### 5912

#### Crimpwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" – improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



### 4467

#### Self Adjusting Wire Stripper, 9"

- Strips insulating sheathing from wires ranging from 10 ga. to 22 ga.
- Easy-to-use, just insert wire and squeeze.
- Also cuts and crimps.



### 5950A

#### CrimPro™ 4-in-1 Angled Wire Tool

- The angled feature allows access to close quarters and facilitates superior crimps.
- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



### 5950S

#### CrimPro™ 4-in-1 Wire Tool

- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



### 4467

#### Automatic Wire Stripper

- Quick removal of insulation on wire AWG 12-20.
- Comes with adjustable depth gauge (8mm to 12mm).
- Sharp v-shaped tooth easily removes insulation without any damage to soft wire strands.
- Cutting tool stored below the stripper.
- Features a space saving locking mechanism for pockets or tool drawer storage.

## BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS



1513B – 4-Ton



1515B – 10-Ton

### Collision Repair Sets, Stinger Series 4- and 10-Ton

- Very competitively priced, yet high quality sets include single-speed hydraulic hand pump, hose, and ram.
- Components snap together for quick setups to apply pushing, spreading.
- Components include: hydraulic pump, hose, and ram; ram flat base; extension tubes (4); 1/2-ton spreader; tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

**1513B** – 4-ton collision repair set. Has single speed hydraulic hand pump and ram with 4" stroke.

**1515B** – 10-ton collision repair set. Has single speed hydraulic hand pump and ram with 6" stroke.



1517A – 4-Ton



1519A – 10-Ton

### Collision Repair Sets, OTC Series 4- and 10-Ton

- We've matched our OTC hydraulics with versatile tooling.
- Components snap together, permitting you to apply pushing, spreading.
- Components include: hydraulic pump, hose, and ram; ram flat base; 1/2-ton hydraulic spreader; extension tubes (4); tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

**1517A** – 4-ton collision repair set. Has single speed hydraulic hand pump (4000) and ram (4082B) with 5" stroke.

**1519A** – 10-ton collision repair set. Has two-speed hydraulic hand pump (4004) and ram (4083B) with 6-1/8" stroke.

**504888** – Replacement quick coupler (external).

**504889** – Replacement quick coupler (internal).

### 5086 Collision Repair Set, 10-Ton

- Exert hydraulic force just where it's needed to lift, spread, bend, or straighten. Handles the high-force jobs you face daily in trailer maintenance or other applications.
- Includes reliable components including 10-ton, 10-1/8" stroke hydraulic ram; air/hydraulic pumping unit; hydraulic hose; four snap-together extension tubes; extension tube coupling; serrated saddle; flat base; 90° wedge head; flex head; storage case.
- All set components are covered by OTC Lifetime Marathon Warranty®.





## 5900A Master TORX® Socket Set

52-piece, professional socket set in a blow-molded case.

Hundreds of applications from front to rear on cars and trucks:

- Seat belt bolts
- Interior and exterior trim screws
- Engine assemblies
- Tail lamp lenses & assemblies
- Bumpers
- Headlight bezels
- Door strikers & latches
- Brake rotor bolts
- GM front-wheel drive front wheel bearings
- Truck box liners

- Styles available: TORX bit sockets, TORX PLUS bits sockets, tamper-resistant TORX bits, and TORX sockets for external bolts.
- Made from superior S2 steel to meet or exceed torque specifications.

Master Torx Socket Set includes:

### TORX® Bit Socket Set T6 to T60 (15-piece)



### TORX PLUS® Bit Sockets TP8 to TP60 (12-piece)



### TORX® External Socket E4 to E24 (13-piece)



### TORX® Tamper-Resistant Bits TT8 to TT60 (12-piece)



Part No.	Size	Sq. Drive	Part No.	Size	Sq. Drive	Part No.	Size	Sq. Drive	Part No.	Size	Hex Insert
5906	T6	1/4"	5918	TP8	1/4"	5934	E4	1/4"	5919	TT8	1/4"
5908	T8	1/4"	6181	TP10	1/4"	5935	E5	1/4"	5920	TT10	1/4"
6101	T10	1/4"	6182	TP15	1/4"	6151	E6	1/4"	5921	TT15	1/4"
6102	T15	1/4"	6183	TP20	1/4"	6152	E7	1/4"	5922	TT20	1/4"
6103	T20	1/4"	6184	TP25	1/4"	6153	E8	1/4"	5923	TT25	1/4"
6104	T25	1/4"	6185	TP27	1/4"	6154	E10	3/8"	5924	TT27	1/4"
6105	T27	1/4"	6186	TP30	1/4"	6155	E12	3/8"	5925	TT30	1/4"
6106	T30	1/4"	6187	TP40	3/8"	6156	E14	3/8"	5926	TT40	3/8"
6107	T40	3/8"	6188	TP45	3/8"	6157	E16	3/8"	5927	TT45	3/8"
6108	T45	3/8"	6191	TP50	3/8"	5936	E18	1/2"	5928	TT50	3/8"
6109	T47	3/8"	6192	TP55	3/8"	5937	E20	1/2"	5929	TT55	3/8"
6110	T50	3/8"	6193	TP60	1/2"	5938	E22	1/2"	5930	TT60	1/2"
6111	T55	3/8"				5939	E24	1/2"			
6112	T60	1/2"									
6198	T70	1/2"									

### 6100 Standard TORX® Socket Set T10 to T60 (12-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6101	T10	1/4"
6102	T15	1/4"
6103	T20	1/4"
6104	T25	1/4"
6105	T27	1/4"
6106	T30	1/4"
6107	T40	3/8"
6108	T45	3/8"
6109	T47	3/8"
6110	T50	3/8"
6111	T55	3/8"
6112	T60	1/2"



### 6135 Universal Brake Caliper Socket Set (9-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6107	T40	3/8"
6108	T45	3/8"
6110	T50	3/8"
6112	T60	3/8"
6165	1/4"	3/8"
6167	3/8"	3/8"
6175	7 mm	3/8"
6176	8 mm	3/8"
6177	10 mm	3/8"



### 6145 Tamper-Resistant TORX® Socket Set (7-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
5920	TT10	1/4"
5921	TT15	1/4"
5922	TT20	1/4"
5923	TT25	1/4"
5924	TT27	1/4"
5925	TT30	1/4"
5926	TT40	3/8"



# FASTENER SERVICE AUTOMOTIVE SPECIALTY TOOLS

## 6160 Fraction Hex Socket Set (7-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6161	1/8"	3/8"
6162	5/32"	3/8"
6163	3/16"	3/8"
6164	7/32"	3/8"
6165	1/4"	3/8"
6166	5/16"	3/8"
6167	3/8"	3/8"



## 6170 Metric Hex Socket Set (7-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6171	3 mm	3/8"
6172	4 mm	3/8"
6173	5 mm	3/8"
6174	6 mm	3/8"
6175	7 mm	3/8"
6176	8 mm	3/8"
6177	10 mm	3/8"



## 6150 External TORX® Socket Set (7-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6151	E6 x 25	1/4"
6152	E7 x 25	1/4"
6153	E8 x 25	1/4"
6154	E10 x 32	3/8"
6155	E12 x 32	3/8"
6156	E14 x 32	3/8"
6157	E16 x 32	3/8"



## 6180 TORX® PlusSocket Set (9-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6181	TP10	1/4"
6182	TP15	1/4"
6183	TP20	1/4"
6184	TP25	1/4"
6185	TP27	1/4"
6186	TP30	1/4"
6187	TP40	3/8"
6188	TP45	3/8"
6191	TP50	3/8"



## 5905 Tammer-Resistant TORX® Plus Socket Set (11-piece)

Set includes one each of the following:

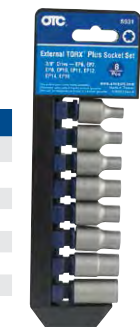
No.	Size	Sq. Drive
5905-8	8IPR	1/4"
5905-10	10IPR	1/4"
5905-15	15IPR	1/4"
5905-20	20IPR	1/4"
5905-25	25IPR	1/4"
5905-27	27IPR	1/4"
5905-30	30IPR	1/4"
5905-40	40IPR	3/8"
5905-45	45IPR	3/8"
5905-50	50IPR	3/8"
5905-55	55IPR	3/8"



## 5931 External Torx® Plus Socket Set (8-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
5931-6	6EP	3/8"
5931-7	7EP	3/8"
5931-8	8EP	3/8"
5931-10	10EP	3/8"
5931-11	11EP	3/8"
5931-12	12EP	3/8"
5931-14	14EP	3/8"
5931-16	16EP	3/8"



## 5942 XZN Super Short Socket Bit Set (8-piece)

Set includes one each of the following:

No.	Size	Sq. Drive
5942-4	SP4	1/4"
5942-5	SP5	1/4"
5942-6	SP6	1/4"
5942-8	SP8	1/4"
5942-10	SP10	3/8"
5942-12	SP12	3/8"
5942-14	SP14	3/8"
5942-16	SP16	3/8"



## 6952 Metric Ball Hex "L" Keys 1.5mm to 10mm (10-piece)

Set includes one each of the following:

No.	Size
6952-1	1.5mm
6952-2	2mm
6952-3	2.5mm
6952-4	3mm
6952-5	4mm
6952-6	5mm
6952-7	6mm
6952-8	7mm
6952-9	8mm
6952-10	10mm



## 6954 Standard TORX® "L" Keys T8 to T50 (10-piece)

Set includes one each of the following:

No.	Size
6954-1	T8
6954-2	T10
6954-3	T15
6954-4	T20
6954-5	T25
6954-6	T27
6954-7	T30
6954-8	T40
6954-9	T45
6954-10	T50



## 6956 TORX® Plus "L" Keys TP8 to TP50 (10-piece)

Set includes one each of the following:

No.	Size
6956-1	TP8
6956-2	TP10
6956-3	TP15
6956-4	TP20
6956-5	TP25
6956-6	TP27
6956-7	TP30
6956-8	TP40
6956-9	TP45
6956-10	TP50



## 6958 TORX® TAMPER RESISTANT "L" Keys TT8 to TT50 (10-piece)

Set includes one each of the following:

No.	Size
6958-1	TT8
6958-2	TT10
6958-3	TT15
6958-4	TT20
6958-5	TT25
6958-6	TT27
6958-7	TT30
6958-8	TT40
6958-9	TT45
6958-10	TT50







### 7365 Hex Key Wrenches

Allen head cap screws are everywhere, which makes a set of these wrenches a necessity.

- Extra long for added leverage and accessibility.
- Meets ANSI specs.
- Plastic pouch containing wrench Nos. 7345 through 7354.

Tool No.	Size	Fits Set Screws	Fits HH Cap Screws
7345*	1/16"	6	—
7346*	5/64"	8	—
7347*	3/32"	10 & 12	—
7348*	1/8"	1/4"	8
7349*	5/32"	5/16"	10
7350*	3/16"	3/8"	1/4"
7351*	7/32"	7/16"	5/16"
7352*	1/4"	1/2"	3/8"
7353*	5/16"	5/8"	3/8" & 7/16"
7354*	3/8"	3/4"	1/2"
7355†	7/16"	13/16"	9/16"
7356†	1/2"	7/8"	5/8"
7357†	9/16"	1" & 1-1/8"	3/4"
7358†	5/8"	1-1/4" & 1-3/8"	1"
7359†	3/4"	1-1/2"	1-1/8" & 1-1/4"
7360†	1"	1-3/4" & 2"	1-1/2"

\* Included in No. 7365 set.

† Available separately; not included in set.



Similar to Toyota No. 09043-50080

### 6022 Toyota Head Bolt Socket

- Specially designed socket is needed to tighten or loosen head bolts on Toyota Paseo vehicles with 3S-GE and 3S-FE engines.
- 8 mm socket features a 12-point, 1/2" drive socket.



### 7334 Metric Hex Key Wrench Set

These long-arm hex key wrenches provide added leverage and accessibility.

- Rust-resistant black oxide finish.
- There are 9 sizes, from 1.5 mm to 10 mm.
- Available separately: 12 mm, 14 mm, 17 mm, and 19 mm.

Metric hex key set in plastic pouch. Sizes: 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm, and 10 mm.

Tool No.	Size (mm)
7321*	1.5
7322*	2
7323*	2.5
7324*	3
7325*	4
7326*	5
7327*	6
7328*	8
7329*	10
7330†	12
7331†	14
7332†	17
7333†	19

\* Included in No. 7334 set.

† Available separately; not included in set.



### 4651 Screw Extractor Set

- Removes broken studs and bolts.
- Includes ten guide bushings, five drill bits and five screw extractors with extractor nuts.
- Drill bits are left handed to help removal.



### 5940 BMW Head Bolt Socket

- Socket is designed to fit in the cylinder head on M42 and M50 engines to remove and install cylinder head bolts.
- Spring loaded detent ball holds bolt in place.
- Works with 1/2 inch ratchet, breaker bar, or torque wrench. Socket size is E12 for external TORX® bolts.



### 6986 Stud Remover Set, Fractional

This fractional, 4-piece, stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

- Housed in a blow-molded storage case. 3/8" drive for:

**6986-1** – 1/4" stud remover

**6986-2** – 5/16" stud remover

1/2" drive for:

**6986-3** – 3/8" stud remover

**6986-4** – 7/16" stud remover



### 6987 Stud Remover Set, Metric

This metric, 4-piece stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

- Housed in a blow-molded storage case. 3/8" drive for:

**6987-6** – 6 mm stud remover

**6987-8** – 8 mm stud remover

1/2" drive for:

**6987-10** – 10 mm stud remover

**6987-12** – 12 mm stud sizes.

# FASTENER SERVICE AUTOMOTIVE SPECIALTY TOOLS



## Impact Drivers

- Loosens hard-to-turn screws, bolts or nuts.
- Handle design prevents possibility of hitting hand with hammer when striking impact driver.
- Bit holder has 3/8" drive (No. 4608), 1/2" (No. 4607) drive, and 5/16" hex for Phillips and flat screwdriver bits.
- Includes eight screwdriver bits:
  - No. 2 Phillips bit, 1-3/8" long with 5/16" hex
  - No. 2 Phillips bit, 3-1/8" long with 5/16" hex
  - No. 3 Phillips bit, 1-3/8" long with 5/16" hex
  - No. 3 Phillips bit, 3-1/8" long with 5/16" hex
  - 5/16" wide x 1-3/8" long with 5/16" hex slotted bit
  - 5/16" wide x 3-1/8" long with 5/16" hex slotted bit
  - 3/8" wide x 1-3/8" long with 5/16" hex slotted bit
  - 3/8" wide x 3-1/8" long with 5/16" hex slotted bit

**4607** – 1/2" Impact Driver

**4608** – 3/8" Impact Driver



## 4576 Universal C-Frame Nut Splitter

- Forged and heat-treated frame with offset handle works where ordinary nut splitters may fail. Smooth action cracks nuts without damaging bolt threads.
- Chisel rotates to line up parallel to bolt. Splits non-heat-treated nuts of 7/16" (11 mm) through 3/4" (19 mm) diameter. Tool is 6-3/4" in length.



## Universal Outside Thread Chaser

Quickly restore threads to near new condition without expensive thread cutting equipment.

- Use for 1-1/4" to 5" O.D.

**7402** – Thread chaser, includes Standard Die Set 216884. 6 dies, threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.

## Replacement V-pads and Die Sets:

**216884** – Standard die set. Includes 6 dies, threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.

**202817** – Metric die set. Includes three dies: 1 mm-1.25 mm-1.5 mm-1.75 mm, 2 mm-2.5 mm-3.0 mm-3.5 mm; 4 mm pitch dies.

**206803** – V-pad.



## 4614 Side Terminal Battery Wrench

- Designed for use on GM side-terminal batteries, or any 5/16" hex head battery bolt.
- 5/16", 6 point, box end, 5-1/2" long, ratcheting wrench; insulated handle.



## 4615 Long-Side Terminal Battery Wrench

- Designed for use on GM side-terminal batteries, or any 5/16" hex head battery bolt.
- Long handle allows access to hard-to-reach battery terminal bolts.
- 5/16", 6 point, box end, 10" long, ratcheting wrench; insulated handle.



## 4616 Battery Terminal Wrench – 10mm

- Designed for use on 10 mm battery terminal bolts found on many import and domestic vehicles.
- 10 mm, 12 pt., box-end ratcheting wrench; 5-1/2" long with insulated handle.



## 4791 Spanner Wrench, 3/4" - 2"

This chrome vanadium hardened steel wrench features a 5" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



## 4792 Spanner Wrench, 2" - 4 3/4"

This chrome vanadium hardened steel wrench features a 9" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



Fed. Spec.: GGG-W-665b

## 885 Adjustable Hook Spanner Wrench

Here's a tool that's needed wherever turret adjusting nuts or packing gland nuts are used.

- Capacity is 1-1/2" to 4".
- Handle is 24" long, 11/16" diameter.



7307

Fed. Spec.: GGG-W-665b



7308

## Adjustable Hook Spanner Wrenches

These pieces will replace many fixed-size wrenches needed to service industrial tractors and other equipment. Their drop-forged jaws adjust to 11 positions for a capacity of 4-3/4" to 12-3/4" O.D.

- Handle is 24" long and 1" in diameter.

**7307** – Spanner wrench with one 3/8" thick jaw.

**7308** – Spanner wrench with two interchangeable jaws: one 3/8" thick, one 3/4" thick.



Fed. Spec.: GGG-W-665b

## 7309 Heavy-Duty Adjustable HookSpanner Wrench

Some jobs require beefier tools. Here's a wrench to fill that need. It's drop-forged and features extra heavy construction and a 3/4" thick, 11-position hook jaw that's capable of gripping fasteners from 4-3/4" to 12-3/4" O.D.

- Handle is 25-3/4" long and 15/16" in diameter.



## 7380 Dial Torque Wrench

- Torques in both right and left hand directions with equal accuracy.
- Can be used with confidence in all automotive, and industrial applications.
- Reads directly in both English and Metric graduations.
- Wrench can be held at any point without affecting accuracy.
- Memory or follow-up pointer can be utilized to indicate the maximum torque reached.
- Accuracy; +/- 4% CW and CCW.
- Torque Range; 0-150 in. lbs. (0-17 N-m).
- 3/8" square drive, 10" length.
- Includes blow-molded storage case.

Tool No.	Torque Range	Graduations	Square Drive	Length
<b>7380</b>	0-150 in. lbs. (0-17 N·m)	4 in. lbs.	3/8"	10"



### Accutorq™ Klikker Torque Wrenches

These precision torque wrenches make a loud click when you've reached the torque setting. They feature ratcheting heads, all-metal construction, permanently roll-marked scales, and soft-grip rubber handles that enable you to firmly grasp the wrench for right- or left-hand torquing.

- Includes molded plastic case.
- One-year warranty.

Tool No.	Torque Range	Graduations	Square Drive	Length
7375	100-1000 in.-lb (11-113 N•m)	10 in.-lb	3/8"	15-1/8"
7377	10-150 ft.-lb (14-203 N•m)	2 ft.-lb	1/2"	17-3/4"
7378	25-250 ft.-lb (34-339 N•m)	2 ft.-lb	1/2"	19-3/8"
7379	100-600 ft.-lb (136-813 N•m)	10 ft.-lb	3/4"	42-1/4"



### 7367 Torque Multiplier, 1000 lb-ft

- Drive Input; 1/2", 365 lb-ft Max
- Drive Output; 3/4", 1100 lb-ft Max
- Head Width; 2.9", 3.3:1 Ratio
- Reaction Bar; 13-3/4"
- Includes reaction foot.
- Note; frictional gear loss = 6%



### 7368 Torque Multiplier, 2000 lb-ft

- Drive Input; 3/4", 730 lb-ft Max
- Drive Output; 1", 2200 lb-ft Max
- Head Width; 3.6", 3.3:1 Ratio
- Reaction Bar; 15-5/8"
- Includes reaction foot.
- Note; frictional gear loss = 6%

### 4554 Torque Angle Gauge

- Required when servicing many late model engines that use torque-to-yield fasteners. Measures angle of rotation after pre-torque in torque-angle applications.
- The 360° scale is marked in 2° increments and intervals of 10° and 30°; easily zeroed for next application by turning the tool housing.
- Has 1/2" male and female square drives.



### 7415 Torque Angle Gauge

- Many manufacturers specify a torque angle procedure for tightening fasteners and head bolts because it helps ensure more accurate tightening. This torque angle gauge, featuring an easy-to-read gauge, will provide a precise reading.
- Accommodates a 1/2" drive torque wrench.



### Torque Multipliers

These 4:1 ratio torque multipliers provide the power to tighten threaded fasteners in a number of truck and tractor repair operations.

**5073 – 1,000 lb. capacity torque multiplier.** Has 1/2" square drive and 3/4" square drive output. Includes 14" extension handle.

**5074 – 2,000 lb. capacity torque multiplier.** Has 3/4" square drive and 1" square drive output. Includes 18" extension handle.



### 5776 Preset Torque Wrench Set

These color coded click torque wrenches are pre-set to the most common lug nut torque settings, making them perfect for tire shops. Highly durable design can hold up to the toughest tire shop demands.

- No need for adjustments
  - Durable satin finish
  - 1/2" Drive, 36 tooth
  - Quick release ratchet head
  - Perfect for Wheel / Tire shop
  - Accuracy better than  $\pm 3\%$  CW
- Sold Individually:

**5776-1**  
Preset Torque Wrench, 1/2" 65 lb-ft

**5776-2**  
Preset Torque Wrench, 1/2" 80 lb-ft

**5776-3**  
Preset Torque Wrench, 1/2" 100 lb-ft

**5776-4**  
Preset Torque Wrench, 1/2" 120 lb-ft

**5776-5**  
Preset Torque Wrench, 1/2" 140 lb-ft

# FASTENER SERVICE AUTOMOTIVE SPECIALTY TOOLS

## Giant Adjustable Wrenches

The really big jobs call for really big tools. These wrenches will handle 42 bolt sizes from 1-3/8" to 4-3/4". Together, both wrenches weigh just 41 lbs., but can replace over 1,000 lbs. of fixed-size wrenches.

**7640** – Giant adjustable wrench. Rated to withstand 2,000 ft. lbs. of torque.

**7641** – Giant adjustable wrench. Rated to withstand 5,000 ft. lbs. of torque.



7640

7641

Tool No.	Nut / Bolt Size	Increments of Jaw Adjustment	Lgth.	Head Thickness	Wt. (lbs.)
<b>7640</b>	1-3/8" to 2-7/8"	1/8"	24"	7/8"	10.6
<b>7641</b>	2-3/4" to 4-3/4"	1/8"	36"	1-1/8"	30.3



### 6969 Ratcheting Chain Wrench – 24"

- Ratcheting action makes it possible to re-grip without removing wrench.
- Handles parts of most any shape... round, square, hexagon, or octagon.
- Handle is 24" long; chain grips objects ranging from 3" to 6-1/2" O.D.

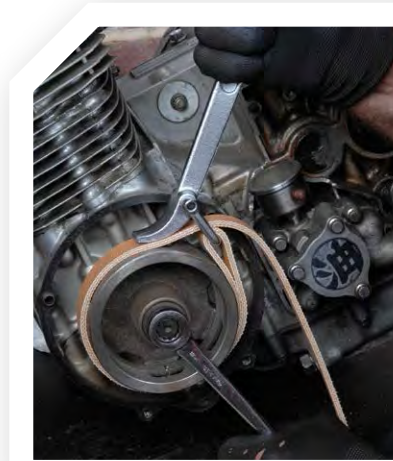
**516942** – Replacement chain



### 6968 Ratcheting Chain Wrench – 12"

- Works on many different-shaped objects, such as square, round, hexagon, oval, etc.
- Handle is 12" long; chain grips objects ranging from 1/2" to 4-1/2" O.D.

**516941** – Replacement Chain



5800TGLV-M

5801SGLV-M

## OTC Technician Gloves

- Washable synthetic leather palm with padding ensures comfort and a secure grip.
- Polyester and Lycra material around fingers offer a durable lightweight cover that stretches for a great fit.
- PVC cushions help protect knuckles from injury due to slippage.
- Comfortable polyester back panels include webbing for improved ventilation.

**5800TGLV-M** – Medium

**5800TGLV-L** – Large

**5800TGLV-XL** – Extra large

## SmartTech™ Technician Gloves

- Same as above, also works with touchscreen technology.

**5801SGLV-M** – Medium

**5801SGLV-L** – Large

**5801SGLV-XL** – Extra large



### 7400 Ratcheting Chain Wrench

This multi-purpose tool will grip parts of nearly any shape. It features a ratcheting head design that lets you turn in either direction without removing wrench from the work.

- 13" handle with capacity from 1/2" to 4-3/4" O.D.

**209199** – Replacement Chain



### 7206 Multipurpose Strap Wrench

You'll find many uses for this heavy-duty strap wrench. The 53" long nylon strap won't mar precision surfaces of shafts, pulleys, or other components. Useful on engine, transmission, and drive pulleys up to 16 inches. Special head design self-tightens the strap as force is applied to the lightweight, 12" long handle.

**305085** – Replacement Strap



### 4804 Heavy Duty Pulley Holder

This strap style universal wrench features a 9" drop forged handle and 23" leather strap for excellent grip on diameters up to 7". The milled foot increases grip on the strap and pulley as handle force is increased.



### 7401 Ratcheting Chain Wrench

This multi-purpose tool will grip parts of nearly any shape. It features a ratcheting head design that lets you turn in either direction without removing wrench from the work.

- 19" handle with capacity from 3" to 6-3/4" O.D.

**209200** – Replacement Chain

## RETAINING RING PLIERS

Here are a variety of retaining ring pliers, available individually or in sets, to handle many applications.

### 7053K

Internal/external retaining ring pliers kit. Includes four 90° tips (.038" diameter), four 45° tips (.047" diameter), and eight straight tips (.047" and .070" diameter).

### 15702

Replacement tip kit. Contains 4 sets, 4 tips per set.



### 7123K

Convertible retaining ring pliers kit. For internal or external rings. Contains one No. 1120 (.038" diameter) and one No. 1340 (.070" diameter) straight tip pliers.



### 7125K

Convertible retaining ring pliers kit. For internal or external rings. Contains one No. 1125 (.038" diameter) and one No. 1345 (.070" diameter) 45° pliers.



### 7300

Internal, straight tip retaining ring pliers. 16" long.

### 7301

External, straight tip retaining ring pliers. 16" long.



7300 Internal tip

7301 External tip

Replacement tips (pairs):

**209201** For pliers Nos. 7300 and 7301.

**222029** 45° for pliers Nos. 7300 and 7301.

**222030** 90° for pliers Nos. 7300 and 7301.



209201

222029

222030

INTERNAL		CONVERTIBLE		EXTERNAL	
No. 0100	No. 0300	No. 1120	No. 1340	No. 0200	No. 0400
No. 0500		No. 1125	No. 1345	No. 0600	No. 7301

### How to select the correct pliers:

1. If ring number is known, locate ring number in chart —pliers are listed in right-hand column.
2. Or, measure diameter of shaft bore and locate size in chart—pliers are in right-hand column.

Ring Series No.	Size Range (Ring Size No.)	Bore of Shaft Dia. Range ("Inch" equiv.)	Pliers No.	
	12 to 87	1/8" to 7/8"	0200	
	12,15,25 to 66	1/8" to 21/32"	1120, 1125	
	25 to 143	1/4" to 1-7/16"	7053K, 7123K, or 7125K	
	93 to 143	15/16" to 1-7/16"	1340, 1345, or 0400	
	31 to 75	5/16" to 3/4"		
5102 555	150 to 350	1-1/2" to 3-1/2"	0600	
	75	3/4"		
	354 to 650	3-35/64" to 6-1/2"	7301	
	50 to 100	1/2" to 1"	0200	
	50 to 78	1/2" to 25/32"	1120	
	50 to 200	1/2" to 2"	7053K, 7123K, or 7125K	
	106 to 200	1-1/16" to 2"	1340, 1345, or 0400	
5108	215 to 334	2-1/8" to 3-11/32"	0600	
	350 to 400	3-1/2" to 4"	7301	
	37 to 102	3/8" to 1-1/32"	0100	
	37 to 56	3/8" to 9/16"	1120, 1125	
	37 to 200	3/8" to 1-3/4"	7053K, 7123K, or 7125K	
	N5000 N5001	106 to 175	1-1/16" to 1-3/4"	1340, 0300
	N5002	181 to 300	1-13/16" to 3-1/2"	0500
	306 to 625	3-1/16" to 6-1/4"	7300	
	75 to 137	3/4" to 1-3/8"	0100	
	75 to 100	3/4" to 1"	1120, 1125	
	75 to 200	3/4" to 2"	7053K, 7123K, or 7125K	
	143 to 200	1-7/16" to 2"	1340, 1345, or 0300	
	206 to 300	2-1/16" to 3"	0500	
	315 to 400	3-5/32" to 4"	7300	

# PLIERS & CUTTERS AUTOMOTIVE SPECIALTY TOOLS

## 0100

.038" tip diameter straight for removing internal rings.



## 0200

.038" tip diameter straight for removing external rings.



## 0300

.070" tip diameter straight for removing internal rings.



## 0400

.070" tip diameter straight for removing external rings.



## 0500

.090" tip diameter straight for removing internal rings.



## 0600

.090" tip diameter straight for removing external rings.



## 7295

### Retaining Ring Pliers

The "squeeze-lock" ratchet action of this tool locks retaining rings in position, making removal and installation easy. It features cushioned handles to ensure a secure grip.

- Will handle rings 3/16" thick and up to 4" in diameter.
- Pliers is 12" long.



**211051** Pair of replacement tips.

## 7313

### Retaining Ring Pliers

This tool removes the external retaining rings used in transmissions, differentials and other automotive components.

- Maximum spread is 1-1/16" and 7-3/4" long.



## 714

### Horseshoe Lock Ring Pliers

This ruggedly built pliers is designed to spread and remove horseshoe lock rings used on hydraulic brakes, differentials, transmissions, and CV joints.

- Handles are 8" long.



## 7412K

### Retaining Ring Pliers Set

This set includes 12 of our most popular retaining ring pliers, in sizes for automotive applications. Tips include straight, 45°, and 90° angles in four different sizes (.038, .047, .070, and .090" diameter).

- Includes a sturdy plastic organizer box.



## 4512

### Snap Ring Pliers Set – Internal/External

- For internal or external snap rings; thumbscrew permits quick conversion.
- Made of heavy-gauge tempered steel.
- Includes two stainless steel handled picks.
- Contained in a blow-molded plastic storage case.

## 4513

### Heavy-Duty Snap Ring Pliers Set (2 piece)

- Heat treated steel "circlip" pliers for large equipment repair.
- Replaceable tips and spring ratchet locking mechanism to securely hold against snap ring tension.
- Internal pliers' capacity 3-1/16" to 6-1/4" (78 mm to 159 mm) snap rings.
- External pliers' capacity 3-1/2" to 6-1/2" (89 mm to 165 mm) snap rings.
- Blow-molded storage case includes extra sets of replaceable tips.
- Overall length 16"; handle length 12-1/2".



### No. 4513 includes:

Tool No.	Description
4513-1	Internal snap ring pliers
4513-2	External snap ring pliers
4513-3	(2) .12" (3 mm) straight tip

Tool No.	Description
4513-4	(2) .12" (3 mm) 45° tips
4513-5	(2) .12" (3 mm) 90° tips
4513-6	4 tip retaining screws



## 7410

### Retaining Ring Pliers with replaceable tips

An ideal tool for any transmission shop, this 13" long pliers with a maximum spread of 2.5" features replaceable tips and a spring-return handle.

## 214903

Set of replacement tips.

### No. 7412K Includes:

Tool No.	Description
1120	.038" dia., straight
1125	.038" dia., 45°
1131	.038" dia., 90°
1320	.047" dia., straight
1325	.047" dia., 45°
1329	.047" dia., 90°
1340	.070" dia., straight
1345	.070" dia., 45°
1349	.070" dia., 90°
1560	.090" dia., straight
1565	.090" dia., 45°
1569	.090" dia., 90°

All items can be purchased separately.

### No. 4512 includes:

Tool No.	Description
4512-1	.090" tip, straight pliers
4512-2	.090" tip, 90° pliers
4512-3	.070" tip, straight pliers
4512-4	.070" tip, 90° pliers
4512-5	.047" tip, straight pliers
4512-6	.047" tip, 90° pliers
4512-7	.038" tip, straight pliers
4512-8	.038" tip, 90° pliers
4512-9	straight tip pick

## 4512-10

90° tip pick

All items can be purchased separately.

## 4514

### Mini Snap Ring Pliers Set, 4-piece

Service S-ring and R-ring clips, internal or external, straight or angled. Ruggedly built of heat-treated chrome molybdenum steel.

- Set includes two internal snap ring pliers (one straight, one 45°) and two external snap ring pliers (one straight, one 45°).
- All pliers have .038" (1.0mm) diameter tips.
- Overall length 3"; handle length 2".





**4509**  
**Straight-Blade Hose Cutter**

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

**4509-1** – Replacement hose cutter blade.



**4411**  
**Ratcheting Hose & PVC Cutter (Standard)**

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



**4412**  
**Ratcheting Hose & PVC Cutter (Heavy Duty)**

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



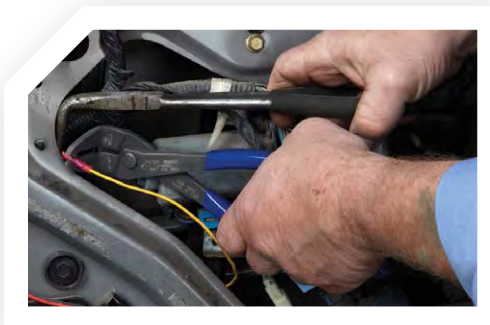
**4818**  
**Multi-purpose Scissors**

Will cut hose, wire and cables, wood dowel, PVC, and thin sheet metals in addition to general cutting. The hardened stainless steel blades have an angle ground into one that eliminates slipping when cutting round materials.



**5912**  
**Crimpwell™ Angled Crimping Pliers**

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" –improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



**4510**  
**Hose Pinch Off Pliers Set, 3 Piece**

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.
- Available separately:

- 4510-8** – 8" tool for small hoses and tight areas.
- 4510-10** – 10" tool for radiator and vacuum lines.
- 4510-12** – 12" tool for radiator and vacuum lines.



**4802**  
**Universal Pulley Holder Locking Pliers**

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the 5/16" pins.



**4613**  
**Battery Pliers**

- Serrated jaws firmly grip the battery terminal nut or bolt.
- Offset handles allow access in hard-to-reach areas.
- Works on top-post and side-post battery terminals.



**4493**  
**Angle-Tip Relay Pliers**

- Designed to remove and install relays, which are usually located in confined, hard-to-reach areas.
- Specially coated tips offer a solid grip on the relay.

**Cable Cutters,**  
**1/4" & 3/8"**

- Perfect choice for cutting heavier copper and aluminum cables.
- This tool is especially valuable for battery service where replacing a terminal is required.
- Clean cut with minimal mashing of wire strands.

- 4476** – 1/4" cable cutter.
- 4477** – 3/8" cable cutter.



# PLIERS & CUTTERS AUTOMOTIVE SPECIALTY TOOLS



## 7175 Indexing Pry Bar Set, 3-Piece

- Sizes 10", 12" and 15".
- Indexible to 180° for better access.
- 14 locking positions for leverage in multiple applications.
- Knurled handle assures a sure grip.
- Meets or exceeds ANSI specifications for pry bars

7172 – 10" Indexing Pry Bar

7173 – 12" Indexing Pry Bar

7174 – 15" Indexing Pry Bar



8203



8206

## Handled Pry Bars

Heavy-duty pry bar made of tempered square steel that you can hit without damaging the handle.

- Black chrome striking cap allows hitting the bar without damage to the handle.
- Ergonomic handle – dual durometer composite handle for user comfort; reduces hand fatigue.
- Polished tip with black oxide finish.
- Long-life finish resists rust and wear during use.
- OTC Marathon Lifetime Warranty.

**8203** – 3-piece handled pry bar set in gray molded tray. Includes 12", 18", and 24" sizes.

**8206** – 6-piece handled pry bar set in gray molded tray. Includes 8", 12", 18", 24", 32" and 36" sizes.

**8208** – 8" handled pry bar

**8224** – 24" handled pry bar

**8212** – 12" handled pry bar

**8232** – 32" handled pry bar

**8218** – 18" handled pry bar

**8236** – 36" handled pry bar



## Jimmy Bars

We've forged these bars from chrome alloy steel, then heat-treated them to resist bending and breaking.

**7166** – 5/8" diameter, 18" long

**7167** – 3/4" diameter, 24" long

**7168** – 7/8" diameter, 30" long

**7420** – 7/8" diameter, 46" long

**7421** – 1" diameter, 54" long



## Rolling Head Pry Bars

You'll have a lot of leverage using one of these rolling head pry bars. The long, tapered body will also serve as an aligning drift.

**7162** – Pry bar; 6" long

**7163** – Pry bar; 12" long

**7164** – Pry bar; 16" long

**7165** – Pry bar; 18" long



## 7171 Pry Pac

Three pry bars in one economical pack. You get 12" and 18" rolling head pry bars and a 24" jimmy bar.

- Heat-treated chrome alloy steel.



## 7687A Pry Bar Head

- Turns any 3/8" drive ratchet or breaker bar into a rolling head pry bar.
- Gives you the versatility of a pry bar without the storage problems.



## 9900A Persuader Pry Bar Merchandiser

The OTC 7168 Jimmy Bar features a forged chisel end for prying or lifting. This most popular model has a sharpened drift on the opposite end for alignment of heavy steel components for welding and fastening. The 7168 is the perfect choice for millwrights, rigging, demolition, aggregate mining and construction. Specially treated to resist bending or breaking, the OTC 7168 can "persuade" almost any obstacle encountered.

Includes 10 Chisel and Alignment Jimmy Bars:

- 30" in length; 7/8" diameter.
- Forged and chromed alloy steel.
- Designed and heat-treated to resist bending and breaking.
- Made in USA.
- Lifetime warranty.

The sturdy cardboard merchandiser is 52" high, 18" wide and 12" deep, specifically designed for the Jimmy Bars, is free with purchase.

## 9901A MAJOR Persuaders Pry Bar Merchandiser

The 9901A "MAJOR Persuader" merchandiser puts OTC's three biggest Jimmy Bars in a super convenient merchandiser designed to help increase in-store sales!

- Includes two 30" 7168 Jimmy Bars.
- Includes two 46" 7420 Jimmy Bars.
- Includes one 54" 7421 Jimmy Bar, covering almost any medium and heavy-duty application.

The sturdy cardboard merchandiser is 64" high, 16" wide and 18" deep, specifically designed for the Jimmy Bars, is easy to assemble and will safely hold up to five heavy-duty pry bars at one time.





**EASILY REMOVE HOSES,  
CLIPS, WASHERS  
AND GASKETS**



**8260M**

**Short Pick, Long Pick and Hook Set, 14-piece**

- Combines 8260, 8262 and 8263 sets.
- Packaged in molded trays which can be placed in tool drawer.



**8262**

**Short Pick and Hook Set, 4-piece**

- Consisting of four (4), 6.5", soft-handled picks.
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing o-rings, accessing snap rings and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove o-rings, shaft seals, cv boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.



**4508**

**Professional Style Seal Puller**

- Designed to remove oil and grease seals when servicing cars, SUVs, and light trucks without damaging the housing or bearing.
- Hook tips in two sizes and professional handle design allows removal of hard-to-get-at seals by getting under them.
- The tool is 12" long and the hook tip is double-secured (versus competitors' designs), for durability.
- An extra blade is included, and additional replacements (No. 4508-1) may be ordered.

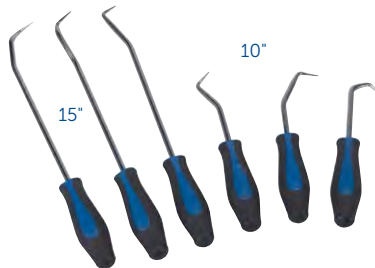
**4508-1 – Replacement blade for 4508**



**8263**

**Long Pick and Hook Set, 4-piece**

- Consisting of four (4), 9.25", soft-handled picks.
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing o-rings, accessing snap ring and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove o-rings, shaft seals, cv boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.



**8260**

**Hose Removal Set, 6-piece**

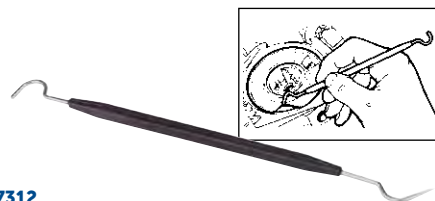
- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray which can be placed in tool drawer.



**7103**

**O-Ring / Oil Seal Pick Set**

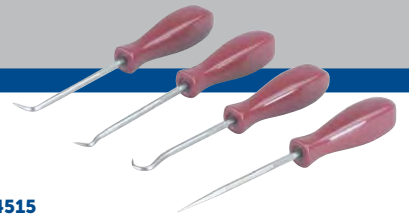
Fishing a stubborn o-ring or oil seal out of its seat is easy if you have this pair of picks in your toolbox.



**7312**

**O-Ring / Oil Seal Pick**

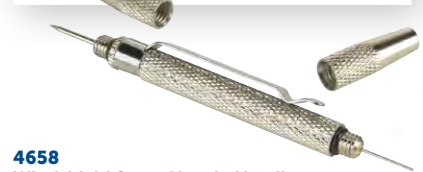
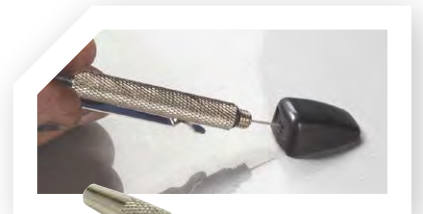
Here's an extremely handy tool that makes quick work of oil seal and o-ring removal and installation.



**4515**

**Mini Pick and Hook Set, 4-piece**

- Sturdy stainless steel points and shafts designed for marking, removing o-rings, accessing snap rings, and performing other tasks. Assorted angle tips allow you to reach awkward locations.
- Knurled shaft design enhances finger control for delicate jobs.



**4658**

**Windshield Spray Nozzle Needle**

- Makes quick work of clearing obstructions from the windshield washer spray nozzle.
- Easily pierces corrosion or remove blockage.
- The barrel is knurled for grip and control.
- Threaded end caps keep the needle points covered when not in use. The pocket clip keeps the tool handy.



**4602**

**Brass Punch Set (2 piece)**

- Two large, brass non-sparking punches. Ideal for use near precision parts or in locations where sparks from ferrous metal could be hazardous.
- Includes an 8" punch (5/8" hex, tapered to 3/8") and 10" straight punch (3/4" dia., chamfered at both ends).



**4606**

**Brass Hammer and Punch Set**

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Hammer head weighs 24 oz.; brass drift punch is 10" x 3/4" diameter; brass tapered punch is 8" x 5/8" hex tapered to 3/8" diameter point.

# STRIKE-STRUCK SERVICE AUTOMOTIVE SPECIALTY TOOLS

## OTC BFH HAMMER LINE



OTC No.	Head Weight	Handle Length	Total Weight
<b>Double Face Sledge Hammer, Indestructible Handle</b>			
<b>5790ID-616</b>	6 lbs.	16"	7.6 lbs.
<b>5790ID-624</b>	6 lbs.	24"	9.4 lbs.
<b>5790ID-630</b>	6 lbs.	30"	10.4 lbs.
<b>5790ID-812</b>	8 lbs.	12"	8.9 lbs.
<b>5790ID-816</b>	8 lbs.	16"	9.7 lbs.
<b>5790ID-824</b>	8 lbs.	24"	11.2 lbs.
<b>5790ID-830</b>	8 lbs.	30"	12.4 lbs.
<b>5790ID-1030</b>	10 lbs.	30"	14.0 lbs.
<b>5790ID-1230</b>	12 lbs.	30"	16.6 lbs.
<b>5790ID-1430</b>	14 lbs.	30"	18.5 lbs.
<b>Club/Hand Drill Hammer, Indestructible Handle</b>			
<b>5791ID-312</b>	2.5 lbs.	12"	4.0 lbs.
<b>5791ID-412</b>	4 lbs.	12"	5.1 lbs.
<b>5791ID-416</b>	4 lbs.	16"	5.5 lbs.
<b>Cross Peen Hammer, Indestructible Handle</b>			
<b>5792ID-216</b>	2 lbs.	16"	4.5 lbs.
<b>5792ID-316</b>	3 lbs.	16"	5.4 lbs.
<b>Ball Peen Hammer, Indestructible Handle</b>			
<b>5793ID-2414</b>	24 oz.	14"	2.6 lbs.
<b>5793ID-3214</b>	32 oz.	14"	3.0 lbs.
<b>Tire Service Hammer, Indestructible Handle</b>			
<b>5789ID-1032</b>	10 lbs.	32"	14.4 lbs.
<b>5789ID-520</b>	5 lbs.	20"	7.3 lbs.

### BFH Hammer

- Indestructible handle - never needs replacement
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.
- Tire Service Features for 5789ID-1032 and 5789ID-520.
  - Use top hook as a wheel tipper; sledge end hook to drag tire into position.
  - Bead breaking wedge has grooves and a convex shape to help drive tire lube into the bead.



### 4629 Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Two hammer head weighing 24 and 12 oz.
- Two tapered punches 14" x 5/8", 10" x 5/8".
- One hex tapered punch 8" x 5/8".
- Two drift punches 10" x 3/4", 8" x 1/2".
- Two pin punches 6" x 3/8", 4" x 1/4".



### 4410 Master Bushing Drive Set (33 piece Metric & Standard)

- Enables you to remove and install bushings ranging from 10mm to 42mm in diameter, and 3/8" to 1-3/8" in diameter, as used import cars, trucks, tractors, construction equipment, electric motors, and many other components having bushings.
- Includes large, medium, and small driver handles and adapters all made of steel.
- Housed in a blow-molded storage case.

### 6939 Broken Bolt Extractor Tool

- Remove frozen, broken or cut off bolts within steering or suspension bushings.
- Can also be used to remove and install wheel studs and other general pressing needs.



### 6939-1 Broken Bolt Extractor Adapter Set

Available for use with the 7248 C-Frame.



### 7248 C-Frame Press

- Used for removing/installing; universal joints with needle bearings, pressed in wheel studs, and brake anchor pins on heavy-duty vehicles. Suitable for general pressing operations.





### 4605 Interchangeable Punch and Chisel Set

- Safety protective handle allows easy grip and protects hand from being hit by hammer.
- 12 punches and chisels included: 5 flat chisels: 1/2", 5/8", 3/4", 7/8", and 1" wide blades 1 cape chisel: 1/4" wide blade 2 taper punches: 1/8" and 1/4" diameter 2 pin punches: 3/16" and 1/4" diameter 2 center punches: 1/8" and 3/16" diameter
- Double locking ball detent holds punch or chisel securely in the driver handle.

Replacement parts available:

- 4605-1 – Drive handle
- 4605-2 – 1/2" wide flat chisel
- 4605-3 – 5/8" wide flat chisel
- 4605-4 – 3/4" wide flat chisel
- 4605-5 – 7/8" wide flat chisel
- 4605-6 – 1" wide flat chisel
- 4605-7 – 1/4" cape chisel
- 4605-8 – 1/8" taper punch
- 4605-9 – 1/4" taper punch
- 4605-10 – 3/16" pin punch
- 4605-11 – 1/4" pin punch
- 4605-12 – 1/8" center punch
- 4605-13 – 3/16" center punch



### Impact Drivers

- Loosens hard-to-turn screws, bolts or nuts.
- Handle design prevents possibility of hitting hand with hammer when striking impact driver.
- Bit holder has 3/8" drive (No. 4608), 1/2" (No. 4607) drive, and 5/16" hex for Phillips and flat screwdriver bits.
- Includes eight screwdriver bits:
  - No. 2 Phillips bit, 1-3/8" long with 5/16" hex
  - No. 2 Phillips bit, 3-1/8" long with 5/16" hex
  - No. 3 Phillips bit, 1-3/8" long with 5/16" hex
  - No. 3 Phillips bit, 3-1/8" long with 5/16" hex
  - 5/16" wide x 1-3/8" long with 5/16" hex slotted bit
  - 5/16" wide x 3-1/8" long with 5/16" hex slotted bit
  - 3/8" wide x 1-3/8" long with 5/16" hex slotted bit
  - 3/8" wide x 3-1/8" long with 5/16" hex slotted bit

4607 – 1/2" Impact Driver.

4608 – 3/8" Impact Driver.



### 4408 Bearing Race and Seal Driver Kit

- The Bearing Race and Seal Driver Kit provides a convenient way to smoothly and quickly position a bearing in the inner hole of an axle.
- The kit includes a handle grip and six heavy-duty bearing drivers. The drivers have different diameters in order to match different-sized bearings, and three of the drivers are formed with two different diameters.
- Bearing Driver Sizes: 1.555" (39.5 mm) 1.752" (44.5 mm) 1.968" (50.0 mm) 2.322" (59.0 mm) 2.48" (63.0 mm) 2.559" (65.0 mm) 2.834" (72.0 mm) 2.992" (76.0 mm) 3.189" (81.0 mm)



### 4407 Metric Bushing Driver Set

- 14-piece tool kit for motorcycles, Asian and European vehicles contains adapters: 10-12 mm, 14-16 mm, 15-17 mm, 16-18 mm, 18-20 mm, 20-22 mm, 22-24 mm, 25-27 mm, 28-30 mm, 30-34 mm, 32-36 mm, 35-40 mm, 38-42 mm; one small driver handle; one medium driver handle; one large driver handle.
- Aluminum construction won't mar the bushing or affect bushing tolerance, which is critical for efficient operation of the engine, transmission, and hubs.



### 4600 Punch and Chisel Set, 16 piece

- Durable set of heat-treated chrome vanadium steel punches and chisels. Storage tray included.
- Contents of set: 3 – Cold chisels (with gauge): 3/8" x 5-1/2"; 1/2" x 6"; 5/8" x 6-1/2" 2 – Center punches: 1/8" x 5"; 3/16" x 6" 5 – Pin punches: 3/32" x 4-1/4"; 1/8" x 4-3/4"; 5/32" x 5"; 3/16" x 5-1/4"; 1/4" x 5-3/4" 5 – Taper punches: 3/32" x 5-1/4"; 1/8" x 5-3/4"; 5/32" x 6"; 3/16" x 6-1/4"; 1/4" x 6-3/4" 1 – Chisel gauge



### 4505 Bushing Driver Set, 19 piece

- Enables you to remove and install bushings ranging from 3/8" to 1-3/8" in diameter, as used in cars, trucks, tractors, construction equipment, electric motors, & many other components having bushings.
- Includes: Large, medium, and small driver handles with nuts; sixteen bushing adapters ranging from 3/8" to 1-3/8".
- Housed in a blow-molded storage case.



### 4507 Bearing Race and Seal Driver Set, 10 piece

- This aluminum constructed set permits installation of tapered bearing races and seals without damage to the component or housing.
- Tapered side of driver is used to install races. Invert the driver to the flat side to install seals.
- Set is housed in a blow-molded plastic storage case.
- Includes driver handle with bolt, plus these tool sizes: 1.565", 1.750", 1.965", 2.325", 2.470", 2.555", 2.830", 2.995", and 3.180".

### Available separately

No.	Part No.	Description
1	4600-15	Taper Punch, 1/4" x 6-3/4"
2	4600-14	Taper Punch, 3/16" x 6-1/4"
3	4600-13	Taper Punch, 5/32" x 6"
4	4600-3	Cold Chisel, 3/8" x 5-1/2"
5	4600-2	Cold Chisel, 1/2" x 6"
6	4600-1	Cold Chisel, 5/8" x 6-1/2"
7	4600-4	Center Punch, 3/16" x 8"
8	4600-5	Center Punch, 1/8" x 5"
9	4600-12	Taper Punch, 1/8" x 5-3/4"
10	4600-11	Taper Punch, 3/32" x 5-1/4"
11	4600-10	Pin Punch, 3/32" x 4-1/4"
12	4600-9	Pin Punch, 1/8" x 4-3/4"
13	4600-8	Pin Punch, 5/32" x 5"
14	4600-7	Pin Punch, 3/16" x 5-1/4"
15	4600-6	Pin Punch, 1/4" x 5-3/4"
16	4600-16	Chisel Gauge



A11000 HD  
HEAVY DUTY TOOLS & EQUIPMENT

# HEAVY-DUTY SOLUTIONS

FORGED FROM 100 YEARS OF  
RELENTLESS INNOVATION



# DIESEL COMPRESSION TESTERS HEAVY DUTY TOOLS & EQUIPMENT



## 3642 12V-24V Truck Circuit Tester

### Product Features:

- Works on 12-24 volt systems.
- Features 7" stainless steel probe.
- 24' coil cord.
- Extra large clamp.

## 3903 24' jumper leads

From headlight to taillight, this extra long test lead stretches to over 24 feet in length.

Constructed from high quality polyurethane, high visibility coil cord test lead has superior memory retention and resistance to grease and oil.



## 3673 Diesel Glow Plug Tester

Glow Plug Tester provides fault detection thru LED's for a quick analysis; Short Circuit, Over Current, Normal Operation, Open Circuit/ Under Current.

- Glow Plug Tester allows for testing without removing glow plug from engine.
- Powers the glow plug to test the plug in it's operating state.
- Much more accurate test than a cold resistance test, which can miss short circuits.
- Tester uses a current measurement to accurately determine proper operation and check for short circuits.



## 3674 Diesel Fuel Pressure Tester

- Simple one wire connectivity to the fuel pressure sensor signal wire. Designed for diesel engines that have a fuel pressure sensor reading used by vehicle computer.
- Displays pressure in PSI or BAR.
- Range 0-22,000 PSI (0-1500 BAR).
- Read diesel fuel pressure in vehicle.
- No fittings required.
- Readings alternate between current and max pressure.

Use with OTC's No. 3398 to find clogged/dirty fuel injectors.

Pinpoints worn power steering pumps or racks.

PSI reading for hydrostatic drives and high pressure hydraulics.

Finds blocked intake ports and plugged catalytic converters.

Checks transmission cooler efficiency and catalytic converter temperatures.

**No need to have fuel or transmission hoses inside vehicle during a road test.**  
**No makeshift taping of gauges to the windshield.**

## Multi-Application Digital Pressure and Temperature Analyzer

Combining the functions of vacuum, oil pressure, hydraulic system pressure, fuel pressure, transmission pressure, compression, and air conditioning—all in one!

### 3492

Heavy-duty digital pressure/temperature analyzer with four pressure input receptacles and protective boot. Set includes: No. 3491-02 (5,000 psi) transducer, No. 3491-13 20' cable, No. 3500-05 bead-type temperature probe, assorted fittings, No. 3491-31 plastic storage case, instruction manual.

## Diesel Compression Tester with Adapters

This easy-to-use compression tester is designed for light- and medium-duty diesel engines equipped with glow plugs. A dual-reading gauge, featuring a push-button release valve, measures compression to 1000 PSI and 7000 kPa. The hose end has quick disconnect fittings. The tester comes with glow plug and nozzle adapters in a handy storage case.

Tester services these engines:

- Cummins B and C
- Navistar DT466/DT360
- Ford/Navistar 6.9L & 7.3L
- Detroit 6.2L & 6.5L
- Hino diesel and Mitsubishi Fuso truck engines

### 5020 – Diesel compression tester with adapters

### 5021 – Universal diesel engine compression gauge

### 304802 – Replacement gauge

Replacement Adapters (available separately)

### 47484 – Hino diesel truck engines with 12 mm x 1.25 thread

### 209633 – Ford 6.6L & 7.8L diesels

### 217791 – Cummins B 3.9L 4 cyl. & 5.9L 6 cyl. '89-'98

### 308472 – Mitsubishi Fuso truck 4D & 6D engines with 10 mm x 1.25 thread

### 310810 – Cummins C 8.3L 6 cyl. '88-'96

### 310832 – Ford/Navistar 6.9L & 7.3L, Detroit 6.2L & 6.5L with 10 mm x 1.0 thread

### 310840 – Navistar DT466/DT360



Similar to Ford 303-D103

### 6076

### Ford Diesel Compression Test Adapter

- Use with OTC No. 5021 diesel engine compression gauge.
- Remove glow plug; this adapter is used to connect the No. 5021 gauge to perform a compression test.
- Application: 1994-2003 Ford vans and pickups with 7.3L direct-injected turbocharged (DIT) diesel engine.



"Min/Max" pinpoints:

- Fuel restrictions
- Plugged filters
- Weak fuel pumps
- Transmission pressure spikes

"Delta Zero" monitors fuel pressure dropcaused by faulty check valves.

Displays readings in BAR for checking European specs.

See Scope/Meter accessories for temp probes.

Permits comparison of ABS brake pressures at each wheel.



Accessory:

### 3491-01 – 500 psi transducer

**3491-02 – 5,000 psi transducer.** Required for ABS and power steering pressure readings.

### 3491-03 – 10,000 psi transducer.

(Note: For No. 3492 only.) **3491-11 – 6' cable,** **3491-12 – 12' cable,** **3491-13 – 20' cable.**



5020

Similar to Ford 303-D091 (D93T-6000-A)



5021

Similar to Ford 303-D092 (D93T-6000-B)



Similar to Ford 303-757

### 6660

### Ford Diesel Compression Test Adapter

- Use with OTC No. 5021 diesel engine compression gauge.
- Works on 2003-2006 Ford vans and trucks—with 6.0L diesel engines.



**6005A**  
**Glow Plug Remover**

Set includes 10 mm and 12 mm split nuts, three spacers (3/16", 1/4", and 5/16"), plastic storage/organizer case and instructions. The 10 mm split nut will work on Ford 6.9L and 7.3L diesels; GM 6.2L, and 6.5L diesels; and various diesels in import vehicles. The 12 mm split nut works on various diesels in import vehicles, plus many agricultural and construction diesel applications.



**6088**  
**Ford 5-pin Connector Harness for Glow Plug Testing**

- Provides an easy way to check glow plug resistance without having to remove the valve cover of 1994-98 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engines.
- Used with any standard digital volt ohmmeter to check glow plug resistance.

Similar to Ford 303-625



**6595**  
**Ford High Pressure Oil Line Disconnect Tool**

- Use to disconnect the high pressure oil line from the cylinder head.
- Works on 1998-2003 Ford vans and trucks with 7.3L direct-injected, turbo-charged (DIT) diesel engines.



**7835**  
**Ford Rear Main Oil Seal Kit**

- Works on 1994-2003 7.3L diesel engine in Ford 3/4- and 1-ton trucks.
- A complete kit with the tools you need to correctly remove and install the rear main oil seal and wear ring on the crankshaft.
- Eliminates makeshift methods of seal removal and installation that could damage the new seal or crankshaft.



**GM Duramax Injector Pullers**

- Designed to pull injectors on a GM Duramax 6.6L engines.

**6778** - From 2001 - 2004, Similar to J-44639.

**6779** - From 2005 - 2011, Similar to J-46594.

**6754**  
**Diesel Fuel Pressure Gauge**

- Designed to test fuel pressure on GM Duramax diesel engines.
- Similar to J-44638.



**5060**  
**Detroit Diesel Injector Socket**

Used on GM 6.2L and 6.5L engines. This 30 mm socket ensures proper fit during nozzle removal and installation. The 3/8" square drive and 7/8" hex permit easy access in tight quarters, and prevent damage to nozzle and related components.



Similar to Ford No. 303-491/No. 303-492

**6067**  
**Ford Injector Remover / Installer Kit**

- Removes and installs injectors without damaging the injector or cylinder head.

Application: 1994-2003 Ford 3/4- and 1-ton trucks, Super Duty trucks, and vans with 7.3L direct-injected turbocharged (DIT) diesel engine.



Similar to Miller 8318

**6069**  
**Cummins Diesel Fuel Injector Remover Kit**

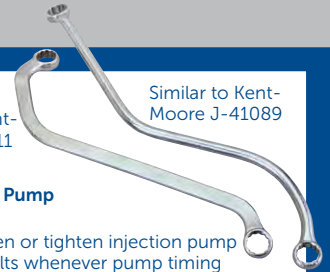
Kit contains a fuel injector connector tube remover and fuel injector puller. The fuel injector connector tube must be removed before removal of the injector, or both will be damaged.

Application: 1998-1/2-2002 Dodge pickups and vans with 5.9L 24-valve Cummins diesel turbo engine.

Similar to Kent-Moore J-41711

**6087**  
**GM Injection Pump Wrench Set**

- Use to loosen or tighten injection pump retaining bolts whenever pump timing adjustment or pump service is required. Services 1996-1999 GM full-size 2- and 4-wheel drive trucks, vans, and Suburbans with 6.5L diesel engine.
- Two specially bent wrenches are needed, due to the location of the throttle, cruise control, T.V. cable bracket, cooling system crossover pipe and bracket, and the thermostat housing on vans and pickups.
- Wrenches are 15 mm, 12-point, double box-end type.



Similar to Kent-Moore J-41089



Designed for the diesel truck market, this tool will work for just about any injector you need to remove for service or replacement.

**6752 - Fuel Injector Storage Rack with Protective Cups**

Compartment are marked to help keep the injectors organized by the cylinder they came from in order to keep the injector calibration in sync with the vehicles ECM. Similar to Ford No. 303-D113.

**6753 - Protector Cups**

A set of eight replacement cups for 6752 Fuel injector storage rack. Similar to Ford No. 303-D115.

**6749**  
**Diesel Engine Barring Socket**

- Designed to rotate engine on a Mack E7 and Cat 3208.
- Similar to J-38587-A.



**7471A**  
**Cummins Engine Barring Tool**

Insert the tool into the flywheel housing until it engages the ring gear, then attach a 1/2" square drive ratchet or breaker bar and turn. The tool's load-bearing collar provides friction-free operation while rotating the tool in the housing.

- Works on Cummins B and C series diesel engines and 5.9L liter diesels used in Dodge pickups.



# OIL FILTER WRENCHES HEAVY DUTY TOOLS & EQUIPMENT



## 7248 C-Frame Press

The C-Frame used in conjunction with OTC Ball Joint Adapters. Can also be used for removing/installing; universal joints with needle bearings, pressed in wheel studs, and brake anchor pins on heavy-duty vehicles. Suitable for general pressing operations.

## 6935 U-Joint Service Adapter

For use with the 7248 C-Frame to service the u-joints found on Dana 60 4WD front drive axles.

Application:

- 1977-1991 Chevrolet and GMC 1 Ton
- 1975-2010 Dodge ¾ & 1 Ton
- 2000-2002 Ford Excursion
- 1999-2010 F250
- 1985-2010 F350
- 1999-2008 F450
- 1999-2004 F550



## Heavy-Duty Oil Filter Wrenches

Features a 1/2" wide steel band that can stand up to the high torque needed to remove filters from trucks, tractors, and other heavy equipment.

Use with a 1/2" drive ratchet or breaker bar.

- **4555** – Heavy-Duty Oil Filter Wrench for filter dia. of 4-1/8" to 4-21/32" (104 mm to 118 mm).
- **4556** – Heavy-Duty Oil Filter Wrench for filter dia. of 4-21/32" to 5-5/32" (118 mm to 131 mm).
- **4557** – Heavy-Duty Oil Filter Wrench for filter dia. of 5-5/32" to 5-21/32" (131 mm to 144 mm).



## Adjustable Oil Filter Pliers

Forged jaws with sure-grip teeth grab the filter for easy removal. Slip-joint ratchet and lock mechanism allows a secure grip on filters.

**4560** – Small Adjustable Oil Filter Pliers. Plier is 13-1/2" long and fits filters ranging from 2-1/4" to 5" (57 mm to 127 mm) in diameter.

**4561** – Large Adjustable Oil Filter Pliers. Plier is 18" long and fits filters ranging from 3-3/4" to 7" (95 mm to 178 mm) in diameter.

**4562** – Adjustable Oil Filter Pliers Set. Includes both the No. 4560 and No. 4561 listed above.

## 4513 Heavy-Duty Snap Ring Pliers Set (2 piece)

- Heat treated steel "circlip" pliers for large equipment repair.
- Replaceable tips and spring ratchet locking mechanism to securely hold against snap ring tension.
- Internal pliers' capacity 3-1/16" to 6-1/4" (78 mm to 159 mm) snap rings.
- External pliers' capacity 3-1/2" to 6-1/2" (89 mm to 165 mm) snap rings.
- Blow-molded storage case includes extra sets of replaceable tips.
- Overall length 16"; handle length 12-1/2".

### 4513 includes:

Tool No.	Description	Tool No.	Description
4513-1	Internal snap ring pliers	4513-4	(2) .12" (3 mm) 45° tips
4513-2	External snap ring pliers	4513-5	(2) .12" (3 mm) 90° tips
4513-3	(2) .12" (3 mm) straight tip	4513-6	4 tip retaining screws



## Retaining Ring Pliers

**7300** – Internal, straight tip retaining ring pliers. 16" long.

**7301** – External, straight tip retaining ring pliers. 16" long. See page 116 for replacement tips.



7300  
Internal tip



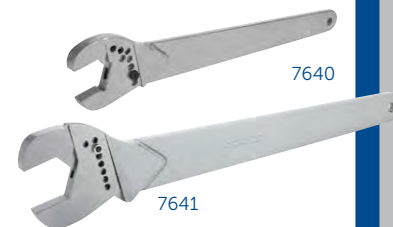
7301  
External tip

## Giant Adjustable Wrenches

The really big jobs call for really big tools. These wrenches will handle 42 bolt sizes from 1-3/8" to 4-3/4". Together, both wrenches weigh just 41 lbs., but can replace over 1,000 lbs. of fixed-size wrenches.

**7640** – Giant adjustable wrench. Rated to withstand 2,000 ft. lbs. of torque. Nut/bolt size 1-3/8" to 2-7/8". Increments of Jaw adjustment 1/8", length 24". Head thickness 7/8".

**7641** – Giant adjustable wrench. Rated to withstand 5,000 ft. lbs. of torque. Nut/bolt size 2-3/4" to 4-3/4". Increments of Jaw adjustment 1/8", length 36". Head thickness 1-1/8".



## 7463 Gland Nut Wrench

This wrench is fully adjustable to fit hydraulic cylinders on vehicles having gland nuts from 1" to 3-3/4" in diameter. It also reverses to work on either 1/4" or 7/32" pinholes.

Accommodates a 1/2" drive ratchet.

**215128** – Replacement pin.



## 1266 Adjustable Gland Nut Wrench

Here's a wrench designed to fit hydraulic cylinders on most farm and construction equipment. It fits gland nuts from 2" to 6" diameter pin to pin. Includes reversible pins, sizes 1/4" and 5/16" diameter.

Accommodates a 3/4" drive ratchet or breaker bar.



**204928** – Replacement pin.

Similar to Ford D79L-6731-A

## 7062A Universal Filter Wrench

This filter wrench will stand up to the job of removing nearly any spin-on filter (up to 6"). Universal design permits use on most vehicles. The tough 2" wide nylon strap holds firmly. The more leverage applied, the tighter it grips.

Accommodates a 3/8" drive ratchet.



## 5028 Slide Hammer Puller

Just 8-1/2" long to fit into tight spots, but its 1-1/2 pound hammer gives you a little extra muscle for stubborn jobs. It's perfect for pulling injector nozzles. The shank is threaded 1/2" – 20 and has a 5/8" – 18 threaded adapter included. Works with many OTC pulling attachments.



## 5961HD Heavy-Duty Drain Plug Pro™

For Agricultural, Commercial, and Heavy-Duty Vehicle Applications

Remove fluid drain plugs without touching the plug or hot fluids!

NO touching HOT plugs.  
NO HOT fluids on hands.

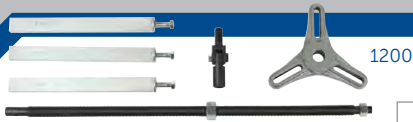
Removable attachment permits use with common 3/8" square drive sockets. Great for starting bolts in hard-to-reach places.

Just magnetically attach heavy-duty drain plug pro™ to pre-loosen drain plugs and rotate to remove.

Magnetic attachment for internal 1/2" square drive drain plugs.

Magnetic attachment for large drain plugs.





### Sleeve Puller / Installer Sets

These sets work on a wide array of truck, bus, and tractor engines, as well as those in other vehicles. They'll handle wet and dry sleeves – and you won't need to remove head studs. Save time, effort, and money.

- Choice of two sets: manual or 17-1/2 ton hydraulic powered.
- Wide range of adapter plates available to fit most engines.

### 1200 Manual Sleeve Puller Set

This manually operated, screw-powered device removes cylinder sleeves from most truck, bus, and tractor engines. Adapter plates (not included in the set) accommodate a wide range of bore sizes. See application chart on next page. The puller enables one technician to handle sleeve-pulling tasks.

Not recommended for Mack engines (use No. 1202 set).

### 1201 Installing Conversion Kit for 1200 Set

Permits the No. 1200 sleeve puller to handle both removing and installing operations. Use plate Nos. 1253–1256 for installing, and plate Nos. 1219–1250 for removing. Plates are not included with kit.



### Sleeve puller plate application chart

The puller plates listed here work with manual and 17-1/2 ton hydraulic sleeve pullers	Bore Dia.	Plate No.
J.I. CASE – 207 Diesel	4"	<b>1227</b>
CATERPILLAR – 1673C; 1674; 3304; 3306; D330C; D333C; D334, D326, D337	4-3/4" 5-1/8"	<b>1240</b> <b>1246</b>
CUMMINS – V Series 903 NT855	5-1/2"	<b>1250</b>
H & NH	4-7/8"	<b>1242</b>
GENERAL MOTORS – 53 Series	3-7/8"	<b>1225</b>
71 Series	4-1/4"	<b>1232</b>
INT'L HARVESTER – C-221, C-263	3-9/16"	<b>1221</b>
D-166, D-188, D-236, D-282, C-248, D-248, D-310, D-358, D-155	3-11/16"	<b>1222</b>
D-179, D-206, D-239	3-7/8"	<b>1225</b>
C-281, D-281, D-361	4-1/8"	<b>1230</b>
D-691, D-461	4-3/4"	<b>1240</b>
D-407	4-5/16"	<b>1233</b>
JOHN DEERE – 4-270, 6-404	4-1/4"	<b>1232</b>
6-531	4-3/4"	<b>1240</b>
6-619	5.12"	<b>1246</b>
8-955	5.512"	<b>1250</b>
MACK – END(T) 673, 675, 676	4-7/8"	<b>1243</b>
672	4-7/8"	<b>1242</b>
END (T) 711, 707	5"	<b>1245</b>
PERKINS – AD3.152, AG3.152, AD4.203	3.6"	<b>1219</b>
AG4.212, A4.236, AG4.236, A6.354, A6.3541, ATC6.3541, AT6.354, AT6.3541	3-7/8"	<b>1223</b>

**Universal puller for wet-type sleeves, see 1205.**



**24824** Thrust washer

**37592** Three-way head

**27908** 13" risers (3 required)

**22205** Forcing nut

**208675** Swivel assembly

**10088** Cap screws, hex hd. (3)

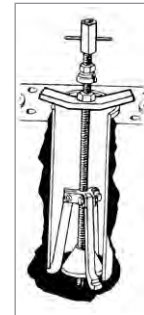
**10586** Flat washers (3)

**11466** Thrust bearing

**32976** Pulling screw



1202 shown



### 1205 Universal Puller for Wet-Type Sleeves

This tool will remove cylinder sleeves faster than ordinary pullers because it requires very little setup time. Cone adjustment positions the puller jaws quickly, locking bar is tightened. To aid in breaking "frozen" sleeves loose, adjustable bridge is positioned on the cylinder block and the bearing-mounted forcing nut is tightened. Next, bridge is removed and slide hammer assembly is attached. With a few sharp hammer blows, sleeve is pulled. In most cases, job time will average less than two minutes per cylinder. The puller features a 5 lb. slide hammer to help bust loose even the most stubborn sleeves.

- Special adapters are unnecessary.
- Adjustable jaws fit sleeves 3" to 6-1/2" in diameter.

No. 1201	Description
<b>33769</b>	Screw extension
<b>41291</b>	Installing bar
<b>302340</b>	Yoke assembly



4180

### 17-1/2 Ton Hydraulic Sleeve Puller Set

Removes and installs sleeves of many makes and models of trucks, buses, and tractors. See chart at left and on next page.

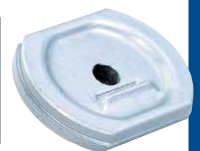
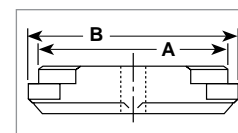
**1202** – 17-1/2 ton hydraulic sleeve puller set.

**1203** – Sleeve puller without hydraulic assembly.

No. 1202	Description (includes 1203 and 4180)
<b>37592</b>	Three-way head
<b>33769</b>	Screw extension
<b>302482</b>	Speed nut
<b>302340</b>	Yoke assembly
<b>10088</b>	Cap screws, hex hd (3)
<b>32976</b>	Pulling screw
<b>4180</b>	Hyd. ram/pump assy.
<b>27908</b>	13" risers (3 req'd)
<b>41291</b>	Installing bar
<b>10221</b>	Hex safety nut
<b>208675</b>	Swivel assembly
<b>10586</b>	Flat washers (3)
<b>21714</b>	Insert

### Sleeve Removal Plates

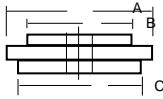
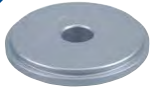
Designed to work with set Nos. 1200, 1202, and 1203, these removal plates fit the full spectrum of cylinder sleeve sizes. Determine engine bore size ("A" dimension) and O.D. of sleeve to be pulled ("B" dimension). Then consult chart to the right.



Bore Inches	A I.D. +.010 -.000	B I.D. +.010 -.000	OTC Plate Number
3.600"	3.585	3.657	<b>1219</b>
3-9/16"	3.547	3.663	<b>1221</b>
3-11/16"	3.671	3.792	<b>1222</b>
3-7/8"	3.840	4.047	<b>1223</b>
3-7/8"	3.859	4.093	<b>1225</b>
4"	3.984	4.218	<b>1227</b>
4-1/8"	4.109	4.229	<b>1230</b>
4-1/4"	4.235	4.470	<b>1232</b>
4-5/16"	4.302	4.450	<b>1233</b>
4-3/4"	4.734	5.171	<b>1240</b>
4-7/8"	4.860	4.980	<b>1242</b>
4-7/8"	4.860	5.045	<b>1243</b>
5"	4.977	5.120	<b>1245</b>
5-1/8"	5.093	5.593	<b>1246</b>
5-1/2"	5.484	5.718	<b>1250</b>



# HEAVY DUTY TOOLS HEAVY DUTY TOOLS & EQUIPMENT



## Sleeve Installation Plates

Each of these dry-sleeve installation plates covers a range of bore sizes. Their reversible design makes both sides usable. The plates work with our manual or 17-1/2 ton hydraulic puller/ installers.

(Nos. 1200, 1202, and 1203). Check chart at below to ensure correct sleeve selection.

Fits Sleeves From	A	B	C	No.
3-3/16" to 3-7/16"	3-7/8"	3.171"	3.421"	<b>1252</b>
3-9/16" to 3-7/8"	4-1/4"	3.546"	3.859"	<b>1253</b>
4-1/8" to 4-3/8"	4-3/4"	4.109"	4.359"	<b>1254</b>
4-3/8" to 4-3/4"	5-1/4"	4.390"	4.734"	<b>1255</b>
4-13/16" to 5-3/4"	6-3/8"	4.797"	5.734"	<b>1256</b>



## 5022 Oil Seal and Wear Ring Installer

This two-piece tool makes the difficult job of correctly installing the rear crankshaft seal and wear ring on most Navistar DT-360 and DT-466 engines thru 1996 an easy task. Bolt the adapter to the crankshaft and wrench the component home.

- Eliminates damage to seals or wear ring that can occur when driving them into place.



## 7106 Cylinder Liner Height Gauge with Hold-Down Bar

This set lets you meet those exacting specifications necessary for optimum diesel engine performance. It accurately measures cylinder bore flatness and depth. The hold-down bar correctly seats the liner for accurate measurement of liner protrusion. The easy-to-read dial is in .001 inch graduations, 1.000" range.



## 7161 Cummins Engine Turning Tool

This tool makes easy work of manually rotating a Cummins 855 cubic inch engine. It's essential hardware when you're bringing pistons to top dead center to adjust injector timing.

## 5039 Charged Air Cooler Tester

This is the easy way to find air leaks in the charged air cooler systems used on class 7 & 8 truck engines. The tester features a large 2-1/2", 0-60 PSI pressure gauge, regulator and relief valve, and two safety cables. It also has quick disconnect air fittings that attach to a 3", 3-1/2", or 4" cooler hose.



## 5071 Cummins Water Pump Pulley Tool

This heavy-duty tool is designed to remove or install water pump pulleys on Cummins L10 and M11 engines, 1991 and newer. The installer has a rugged thrust bearing that allows for friction-free pulley installation without damaging pump components.



## 5044 Self-Adjusting Clutch Rotating Tool

This handy tool replaces the self-adjuster mechanism on Spicer self-adjusting clutches, allowing you to manually adjust them with a wrench or socket.

- 3/4" hex drive.



## Pilot Bearing Pullers

These tools make quick work of pulling stubborn, rusted pilot bearings. No. 5048 fits 1-1/4" I.D. bearings, and No. 5049 fits 1" I.D. bearings. The puller's forcing screw expands the jaws inside the bearing and simultaneously pushes against the crankshaft.

**5048** – Pilot bearing puller for 1-1/4" I.D.

**5049** – Pilot bearing puller for 1" I.D.

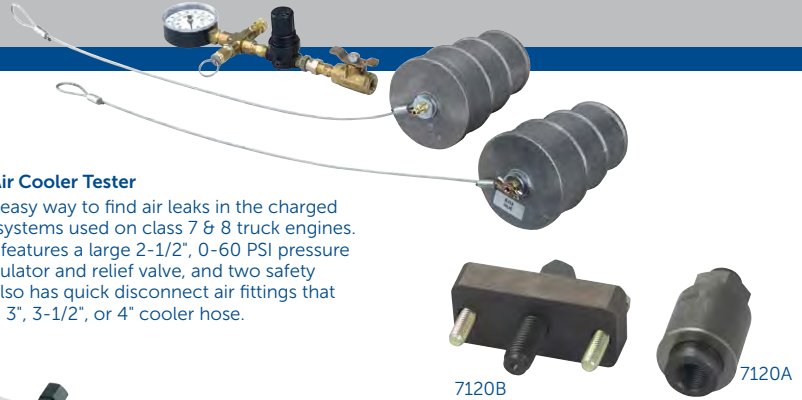
## 7470 Cummins Diesel Injector Timing Kit

Measures static timing on Cummins J, K, N, NH, V-12, N-14, and L-10 series diesel engines. With this tool you can determine the injector push tube travel in relation to piston travel. Tool is installed with one dial indicator in the injector bore and the other on the injector push tube. Turn the engine over manually to find top dead center. By checking the gauges, you can determine if timing is within factory specifications, then make adjustments to the cam followers.



## 7028 Clutch-Adjusting Wrench

This clutch-adjusting wrench will solve the difficult, time-consuming job of internally adjusting heavy-duty Spicer clutches. Using this wrench is much quicker and easier than makeshift methods such as pry bars, which often result in component damage, poor job performance, or extra downtime.



## 7120 Cummins Drive-Pulley Tool Set

This two-piece set is designed to remove and install the drive pulley on Cummins NH and NTC 855 cubic inch engines. The 7120B remover simply bolts into the tapped holes for pulling. The 7120A installer threads onto the pulley accessory drive shaft for easy installation.

**7120A** – Drive-pulley installer.

**7120B** – Drive-pulley remover.



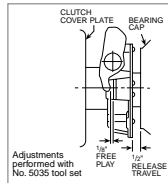


Similar to Ford 308-D008 (D93L-4201-A)

### 5035 Truck Clutch Adjustment Set

The gauges in this set enable you to check the adjustment of pull-type, heavy-duty clutches, ensuring their correct operation. One gauge checks the amount of free play between the yoke and the bearing's wear pad. The other gauge lets you determine the amount of travel between the release bearing and transmission bearing cap.

- Release bearing travel gauge.
- Clutch pedal free play gauge.



Adjustments performed with No. 5035 tool set



### 5190A Heavy-Duty U-Joint Puller

The ideal tool for disassembling drivelines.

- May be used with up to a one-inch impact wrench.
- Quickly and easily removes sealed U-joint cups without the need for hammering or heat.
- Will not damage the driveshaft, yoke, bearing cups, or joints.
- Fits practically all Class 7 and 8 trucks, including: Spicer driveline 1610, 1710, 1760, 1810, 1880 Spicer SPL 140, 170, and 250 "Life Series" Meritor (Rockwell) 16N, 17N, 18N, 1710 Meritor RPL 20 and 25 "Permalube" Series.



### 5192 Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on bolt-retained universal joints. Fits series 1610 to 1880 and nearly all other heavy-duty truck and machine type u-joints with bolt-retained bearing cups.

- Automatically aligns bearing cups during installation.
- Eliminates the possibility of damage to the needle bearing.

Similar to Ford 308-D009 (D93L7025-A)

### Truck Clutch Alignment Shafts

These 10-spline clutch alignment shafts are available in the three most popular sizes: 1-1/2", 1-3/4", 2" O.D., and are designed for use on heavy-duty single, two-plate, push/pull, manual, and self-adjust clutches. The shafts are constructed of lightweight fiberglass-reinforced nylon that won't hang up in clutch disc splines. Yet, they're rugged and will easily support the weight of heavy pressure plates.



**5070** – Truck clutch alignment shaft. 1-1/2" O.D., 30 mm pilot.

**7072A** – Truck clutch alignment shaft. 1-1/2" O.D., 1" pilot, 10 splines, 3.25" long. Similar to Ford 308-D001 (D79T-7550-A).

**7073A** – Truck clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 3.75" long. Similar to Ford 308-D002 (D79T-7550-B).

**7074A** – Truck clutch alignment shaft. 2" O.D., 1-1/4" pilot. 10 splines, 3.6" long. Similar to Ford 308-D003 (D79T-7550-C).

**7480** – Truck clutch alignment shaft. 1-3/4" O.D., 1" pilot. Similar to Ford 308-D010 (D93T-7550-A).

**5029** – Clutch alignment shaft. 2" O.D., 1-1/4" pilot. 10 splines, 7.3" long. Similar to Ford 308-D011 (D93T-7550-B).

**5030** – Clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 7.375" long. Similar to Ford 308-D012 (D93T-7550-C).



### 5191 Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on Dana/Spicer SPL "Life Series" quick-disconnect universal joints.

- Three individual adapters press bearings to the manufacturer's recommended depths.
- Adapters fit Spicer SPL 140, 170, and 250 series drivelines.



### 7490 U-Joint Tool

Designed for a 1/2" impact wrench, this U-joint tool removes even the most stubborn U-joints with ease. It's compact and easily set up, making it ideal for service calls. And it can be used at different angles and in tight places, eliminating those damaging makeshift methods. The puller's legs have holes for bolt storage.

- Bolts included: 5/16"-24 x 1-1/2", 3/8"-24 x 1-1/2", 7/16"-20 x 1-1/2", M8-1.25 mm x 35 mm.
- Works on most Dana Spicer and Meritor U-joints – except Spicer's Life series model SPL250X.



### 5043 Clutch Service Set

Here's an ideal companion set to the clutch handler. Designed for Spicer heavy-duty clutches, the nine tools in this set help with a variety of jobs, from clutch installation and removal to flywheel drive-pin installation to clutch adjustment.

- Includes handy plastic carrying case.

OTC No.	Description
<b>5044*</b>	Self-adjust clutch rotating tool. Rotates adjusting ring.
<b>5045*</b>	Flywheel drive pin installing tool. Aligns and installs drive pins in 14" heavy-duty truck pot-type flywheels.
<b>5046*</b>	Clutch release tool. Removes shipping blocks from between clutch housing and release bearing.
<b>7028*</b>	Adjusting wrench. For internal adjustment of multiple lever and angle-spring clutches.
<b>7073A*</b>	Clutch alignment tool. 1-3/4" O.D. Provides perfect fit to spline of clutch disc.
<b>7074A*</b>	Clutch alignment tool. 2" O.D. Provides perfect fit to spline of clutch disc.
<b>213013</b>	Pair of 3/8" flywheel to clutch guide pins.
<b>213014</b>	Pair of 7/16" flywheel to clutch guide pins.
<b>213015</b>	Hex key Wrench. Removes/installs flywheel drive pin set screws.

\* Tool is available separately.

### 7057 U-Joint Puller

This service tool easily removes stubborn, corroded bearings without damaging U-joint components, even in limited space. The tool applies up to 7 tons of force to separate yoke assemblies and remove bearings. Far superior to sledgehammer methods.

- Works on Meritor 16N, 17N, 18N, and 1710 series U-joints and Spicer 1600/1610 to 1880 series U-joints.
- Includes plastic storage box, No. 1036 2-jaw puller, and instructions.



# HEAVY DUTY LOCKNUT SOCKETS HEAVY DUTY TOOLS & EQUIPMENT

Wheel bearing locknuts are easy to remove or install with these specially designed sockets. They're made of high-strength steel and resist rounding out.

NOTE: Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids sockets' warranty.

1902 – Similar to Ford No. 205-039 (T70T-4252-B)

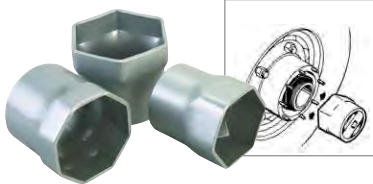
1904 – Similar to Ford No. 205-040 (T70T-4252-D)

1905 – Similar to Ford No. 205-041 (T70T-4252-E)

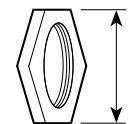
1910 – Similar to Ford No. 205-042 (T70T-4252-K)

1928 – Similar to Ford No. 205-043 (T70T-4252-W)

Measure from flat to flat to determine size of locknut, then consult chart to find the correct socket.



Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size
1901	2-3/32" (6 pt.)	1923	2-3/4" (6 pt.)	1924	3-3/8" (8 pt.)	1940	4-1/8" (8 pt.)
1920	2-1/4" (6 pt.)	1937	2-3/4" (8 pt.)	1910	3-1/2" (6 pt.)	1916	4-3/8" (6 pt.)
1902	2-3/8" (6 pt.)	1932	2-7/8" (6 pt.)	1911	3-1/2" (8 pt.)	1917	4-3/8" (8 pt.)
1936*	2-3/8" (6 pt.)	1933	2-7/8" (8 pt.)	1925	3-3/4" (8 pt.)	1938	4-1/2" (8 pt.)
1903	2-3/8" (8 pt.)	1906	3" (6 pt.)	1926	3-3/4" (6 pt.)	1941	4-13/16" (8 pt.)
1921	2-1/2" (6 pt.)	1907	3" (8 pt.)	1927	3-13/16" (8 pt.)	1918	4-7/8" (6 pt.)
1904	2-9/16" (6 pt.)	1934	3-1/8" (6 pt.)	1912	3-7/8" (6 pt.)	1919	4-7/8" (8 pt.)
1905	2-9/16" (8 pt.)	1935	3-1/8" (8 pt.)	1913	3-7/8" (8 pt.)	1939	5-1/4" (6 pt.)
1928*	2-9/16" (6 pt.)	1908	3-1/4" (6 pt.)	1914	4" (6 pt.)	7795	2-1/2" (6 pt.)
1922	2-5/8" (6 pt.)	1909	3-1/4" (8 pt.)	1915	4-1/8" (6 pt.)	7796	2-3/4" (6 pt.)



Measure from flat to flat to determine size of locknut, then consult chart to select a socket. Warranty is void if tool is subjected to impact wrench use.



\* Fits special "rounded" hex nut found on Dana axles of some Ford trucks.

\* Depth of locknut sockets is 5".

## Metric Truck Wheel Bearing Locknut Sockets

Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size
1950M	54 mm (6 pt.)	1955M	80 mm (6 pt.)	1962M	100 mm (8 pt.)
1951M	55 mm (6 pt.)	1956M	82 mm (8 pt.)	1959M	106 mm (8 pt.)
1952M	60 mm (6 pt.)	1957M	90 mm (8 pt.)	1960M	110 mm (8 pt.)
1953M	70 mm (6 pt.)	1958M	94 mm (8 pt.)	1961M	120 mm (6 pt.)
1954M	71 mm (6 pt.)				

## 5059 Hubcap Installer

Truckers like chrome, and many of them accent their truck's drive axle with chrome hubcaps designed to snugly fit around the axle-shaft bolts. Unfortunately for service shops, these hubcaps are often tricky to install without causing damage. That's where our hubcap installer comes in handy. Constructed of high-density polyethylene, this tool guides the cap into place over the axle nuts, protecting it from unwanted and costly dents.



## 5047 Lug Nut Cap Remover

Chrome-plated lug nut caps found on many heavy-duty trucks and trailers can be tough to remove, and they're easily damaged if you pry them off or use an ordinary cap remover. This tool avoids those problems. It is ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing force you apply.

- Features cushioned handles.



## 9850 Truck Wheel Bearing Locknut Sockets (6-pt.)

21 wheel bearing locknut sockets with tool board. **62908** – Display board only.

No.	Qty.	Description
1901	1	Locknut socket (2-3/32")
1902	1	Locknut socket (2-3/8")
1904	1	Locknut socket (2-9/16")
1906	1	Locknut socket (3")
1908	1	Locknut socket (3-1/4")
1910	1	Locknut socket (3-1/2")
1912	1	Locknut socket (3-7/8")
1914	1	Locknut socket (4")
1915	1	Locknut socket (4-1/8")
1916	1	Locknut socket (4-3/8")
1918	1	Locknut socket (4-7/8")
1920	1	Locknut socket (2-1/4")
1921	1	Locknut socket (2-1/2")
1922	1	Locknut socket (2-5/8")
1923	1	Locknut socket (2-3/4")
1926	1	Locknut socket (3-3/4")
1928	1	Locknut socket (2-9/16" rounded)
1932	1	Locknut socket (2-7/8")
1934	1	Locknut socket (3-1/8")
1936	1	Locknut socket (2-3/8" rounded)
1939	1	Locknut socket (5-1/4")



## 5047LP Lug Nut Cap Remover Locking Pliers

- Designed to remove lug nut caps found on heavy duty truck and trailers quickly and easily without damage. Caps can be easily damage by prying or using standard cap removers.
- Locking plier design with specially coated jaws apply maximum grip on the lug nut caps without damage.

## 9851

### Wheel Bearing Locknut Sockets (8 pt.)

18 wheel bearing locknut sockets with tool board.

**62909** – Display board only

No.	Qty.	Description
1903	1	Locknut socket (2-3/8")
1905	1	Locknut socket (2-9/16")
1907	1	Locknut socket (3")
1909	1	Locknut socket (3-1/4")
1911	1	Locknut socket (3-1/2")
1913	1	Locknut socket (3-7/8")
1917	1	Locknut socket (4-3/8")
1919	1	Locknut socket (4-7/8")
1924	1	Locknut socket (3-3/8")
1925	1	Locknut socket (3-3/4")
1927	1	Locknut socket (3-13/16")
1929	1	Locknut socket (2-5/8")



No.	Qty.	Description
1930	1	Locknut socket (2-7/8")
1931	1	Locknut socket (3-5/8")
1933	1	Locknut socket (2-7/8")
1935	1	Locknut socket (3-1/8")
1937	1	Locknut socket (2-3/4")
1938	1	Locknut socket (4-1/2")

## 9852

### Wheel Bearing Locknut Sockets

A selection of popular sizes in 6- or 8-point.

**62910** – Display board only.

No.	Qty.	Description
1904	1	Locknut socket (2-9/16" hex)
1908	1	Locknut socket (3-1/4" hex)
1909	1	Locknut socket (3-1/4" 8 pt.)
1910	1	Locknut socket (3-1/2" hex)
1913	1	Locknut socket (3-7/8" 8 pt.)
1914	1	Locknut socket (4" hex)
1915	1	Locknut socket (4-1/8" hex)
1921	1	Locknut socket (2-1/2" hex)
1922	1	Locknut socket (2-5/8" hex)



No.	Qty.	Description
1923	1	Locknut socket (2-3/4" hex)
1928	1	Locknut socket (2-9/16" hex rounded)
1932	1	Locknut socket (2-7/8" hex)

## 9814

### Truck Pinion Sockets

We've designed and built these sockets to have the correct clearance for yoke and locknut assemblies on a variety of truck transmissions and differentials. The sockets have 3" of usable depth and are 4" long. Using the right tools saves time and effort, eliminating the need to destroy standard sockets by grinding them down to fit tight pinion clearances.

No. 1981\* – Socket only, not included in set.

**62911** – Tool Board only

Socket No.	Opening Size	Socket No.	Opening Size
1975	2" (6 pt.)	1980	2-3/4" (6 pt.)
1976	2-1/8" (6 pt.)	1981*	2-1/2" (6 pt.)
1977	2-1/4" (6 pt.)	NOTE: Use sockets with 3/4" square-drive, manually powered handles only. Warranty void if tool is subjected to impact wrench use.	
1978	2-3/8" (6 pt.)		
1979	2-5/8" (6 pt.)		



## 1944

### Budd Wheel Sockets

- Metric sizes for Isuzu, Hino, Mitsubishi Fuso, and import trucks; fit front and rear axle wheels.

- 1-1/2" hex Budd wheel socket for American-made trucks with dual rear wheels.

These sockets work on the import truck Budd wheels. Their extra deep design lets you remove both nut and stud with just the one socket. Usable with a 1" square drive impact wrench.

1944 – Consists of 1945A, 1946A, 1947A, 1948A, and 1949A, in a blow molded organizer case.

**1945A** – 35 mm hex socket with 17 mm sq.

**1946A** – 38 mm hex socket with 20 mm sq.

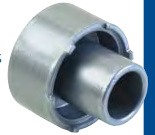
**1947A** – 41 mm hex socket with 21 mm sq.

**1948A** – 33 mm hex Budd wheel socket. For Mack Midliners, White Volvo, and other import trucks w/dual rear wheels.

**1949A** – 1-1/2" hex Budd with 13/16" square wheel socket. For American-made trucks with dual rear wheels.

### Tubular Spanner Wrenches

- Six-lug, spanner-type wrenches remove and install rear wheel bearing locknuts. They're built for use with a 3/4" square-drive ratchet or breaker bar.



**1929** – Wrench for servicing Chevrolet and GMC 5,200 and 7,200 lb. axles. Socket O.D. is 2-5/8".

**1930** – Wrench for servicing Chevrolet and GMC 11,000 to 13,500 lb. axles. Socket O.D. is 2-7/8".

**1931** – Wrench for servicing Chevrolet and GMC 15,000 lb. axles; 17,000 lb. 2-spd. axles; 15,000 lb. trailing axles. Socket O.D. is 3-5/8".



### Jimmy Bars

We've forged these bars from chrome alloy steel, then heat-treated them to resist bending and breaking.

**7166** – 5/8" diameter, 18" long

**7167** – 3/4" diameter, 24" long

**7168** – 7/8" diameter, 30" long

**7420** – 7/8" diameter, 46" long

**7421** – 1" diameter, 54" long

# STEERING / SUSPENSION TOOLS HEAVY DUTY TOOLS & EQUIPMENT



4240

## Kingpin & Brake Anchor Pin Pusher

With this pin remover, hydraulic force and precision tooling replace torch-and-hammer methods for getting the job done quickly and easily. Five special collars and two pins allow this unit to work on both straight and tapered kingpins and accommodates sizes from 7/8" to 2" in diameter and up to 11-1/4" long. The tool delivers 30 tons of hydraulic force to push out even the most corroded kingpins. A job that could consume the better part of a day is done in minutes. The anchor pin can be removed quickly by using the special adapter installed in the pusher's base block and the unit positioned over the brake's spider.

- Works on many models of trucks and buses.
- 27-1/2" high x 8-1/2" wide.
- 30-ton capacity.
- Set includes No. 4002 hydraulic hand pump, No. 9767 hose, No. 9798 hose-half coupler, No. 4121 Power Twin 30-ton ram, and No. 29424 anchor pin adapter.

**4240 – Complete kingpin and anchor pin pusher set with hydraulics**

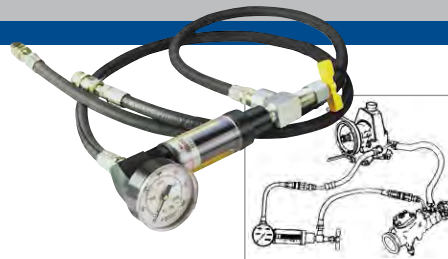
**4241 – King- and anchor-pin pusher with anchor pin adapter without hydraulics**

**29424 – Anchor pin adapter only**



4241

29424



5079

## Heavy-Duty Power Steering Pump Analyzer

- There is only one way to troubleshoot problem components in a heavy-duty power steering system: a flow and pressure reading meter. OTC's new No. 5079 measures both: 1 to 10 gallons oil flow and up to 3,000 psi of pressure.
- When connected in line, this universal analyzer will isolate the failed components in just minutes. There is no wasted time as in trial and error methods.
- The set is complete with high pressure hoses, 9/16"-18 standard fittings, and quick disconnect couplers to handle Eaton/Vickers, TRW, Ross, and Shepard power steering systems.

## 5053 Mack Kingpin Socket

Here is a socket that makes life a little easier for anyone who works on Mack trucks. Designed for 1/2" square drive ratchet or breaker bar, the socket fits the slotted adjusting screw in tapered kingpins used on most Mack front axles (12,000 to 20,000 lbs.).

- Socket O.D. 1.8"



## 7071 Differential Housing Spreader

Removing and installing differential ring gear assemblies is typically a difficult, time-consuming chore – that is, unless you're using this differential housing spreader. This device uses mechanical screw power to spread the housing. Allowing easy removal of the differential assembly while eliminating damage often caused by makeshift methods.

- Works on Dana axle models 30 through 70.

## 5065 Tie Rod Socket for Medium-Duty Trucks

Services GM-, Ford-, and Chrysler-built 1-ton 2WD and 4WD trucks. Also works on medium-duty Class 2 through Class 6 trucks. Use with a 1/2" drive impact wrench to easily remove the tie rod ends from the tie rod.

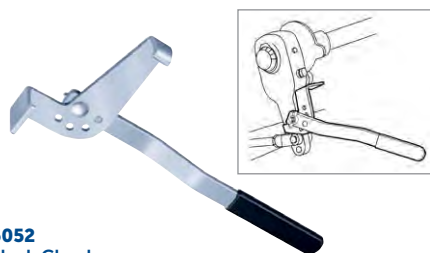
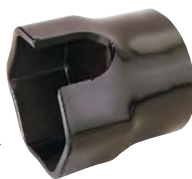
- Socket I.D. 2-1/8"



## 5068 Truck Tie Rod Socket

Designed to withstand the force of a 3/4" drive impact wrench, this rugged socket makes truck tie-rod end removal quick and simple.

- Works on inner and outer tie rod ends on 12,000 to 16,000 lb. truck axles.
- Socket I.D. 2-3/4"



## 5052 Slack Check

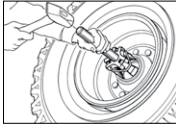
This tool enables you to quickly check the brake adjustment on class 7 and 8 trucks and trailers having S-cam brakes. It features a sturdy, four-position handle to provide the leverage you need at the proper angle.

- Works on manual or automatic slack adjusters.



## 4295 Wheel Stud Service Kit

- Works on most hubs for installation and removal.
  - All sizes of studs.
- Installation done by pushing on the head, eliminating the need for threaded adapters.
  - Reduces number of adapters required
  - Reduces damage to studs
  - Increases ease of use
- Remove and install 10 studs in only 10-15 minutes (compare to 20-30 minutes for more expensive competitive products).
- Can be powered with an impact wrench, no hydraulic power source required.
- No need to remove hub from vehicle.
- Reduces risk of damage to hubs, studs, and bearings when using tool.
- Weighs only 12 lbs., assembled to remove studs and 14 lbs., assembled to install studs.



### 7180 Universal Bearing Cup Installer

This handy, adjustable tool is designed to install wheel-bearing cups in a wide range of heavy-duty axles. Simply adjust and lock the jaws to the cup I.D., slip on the new cup, set it in the bore, and drive it in with a hammer. The tool helps eliminate the damage caused by makeshift methods.

- Works on axles from 11,000 to 50,000 lb. capacity.
- Adjusts to fit 3-5/8" to 6-1/2" O.D. bearing cups, which adds up to as many as 30 individual drivers.

**52038** – Replacement jaw.

**207561** – Replacement retaining spring.



### 5038 Brake Anchor Pin and Bushing Service Set

With the No. 5038, there's no need to remove the bearing hub assembly just to replace the pins and bushings on 16-1/2" S-cam trailer and tractor "Q" brake systems. Much less complicated and time consuming!

- Special tooling and our C-frame press get you past the hub assembly, so you can do the job quickly and professionally without damaging other parts.
- Includes everything needed for removal and replacement.



### 5081 S-Cam Air Brake Spring Tool

- Eliminate makeshift, unsafe methods of unhooking and reconnecting retaining springs when replacing brake shoes on heavy-duty tractors and trailers.
- Simply hook the retaining spring loop and press down. Lever action against the axle makes the job a snap!

**314548** – Replacement hook kit.



### 5080 Truck Front Leaf Spring, Pin, and Bushing Service Set

- Delivers 10 tons of hydraulic force to remove and install truck front spring eye bushing assemblies quickly and easily.
- Services bushings with diameters from 1-1/4" through 1-7/8", and pin diameters from 7/8" through 1-1/8". Handles all popular OE and aftermarket components, including Horton pin and bushing assemblies.
- Service bushing assemblies, in many cases, without removing leaf spring hangers and spring assemblies from the vehicle.
- All accessories are included except the hydraulic hand pump and hydraulic hose which must be purchased separately.



### 5085 Hub Oil Seal Puller

- Eliminates bearing and hub damage that can occur when a punch and hammer is used to remove the seal.
- Extra long 28" handle provides leverage, unique pulling head design quickly and easily removes the seal in one piece.
- Built from the highest quality heat-treated steel.
- Removes hub seals on trailer and truck axles, including truck steering axles.



### Slack Adjuster Pullers

These pullers will yank even the most corroded slack adjuster off the S-cam— and do so in just a fraction of the time needed with "heat and beat" methods. Plus, they won't damage components. Both pullers have a rugged forcing screw and cast steel body. Puller No. 5055 fits many manual types, and the No. 5056 works on Rockwell, Haldex, Gunit, and Bendix automatic adjusters.

**5055** – Manual slack adjuster puller.

**5056** – Automatic slack adjuster puller.



### 5054 Air Brake Service Kit

This kit has the tools needed to remove slack adjusters and push-rod clevis pins used in the S-cam brake systems of class 7 and 8 vehicles.

- Works on manual or automatic slack adjusters.
- Includes Nos. 5055 and 5056 slack adjuster pullers, 5057 brake clevis pin press, and a plastic storage case.



### 5057 Clevis Pin Press

Removing corroded clevis pins from a brake air-chamber push rod can be a maddening and time-consuming task— unless you're using our clevis pin press. This handy screw-operated tool applies the force just where it's needed. The pin is easily removed from its hole without damaging nearby components.



### 7077 Axle-Stud Cone Pliers

Now you can easily remove the tapered cone from studs used on the rear axles of medium and heavy-duty trucks. This specially designed tool gives you the leverage needed to expand the cone and remove it from the stud for axle removal.

# BRAKE / TRANSMISSION TOOLS HEAVY DUTY TOOLS & EQUIPMENT



## 4592 Truck Brake Spring Pliers

- Designed to remove and install the brake shoe return springs on medium-duty and heavy-duty drum brakes.

**4592-1** – Replacement tip.



## 7069A Heavy-Duty Brake Spring Pliers

Save time and effort when removing and installing return springs on the brake shoes of heavy-duty vehicles. This specially designed pliers works for hydraulic wedge-type and "S" cam air brakes. Its 26-1/4" length gives you the leverage to do the job more easily, and the huge jaw opening accommodates even the widest brake shoes.

**202621** – Wedge-type replacement tip

**204141** – "S" cam replacement tip



Positioned for bearing installation.



Positioned for main shaft timing.



## Transmission Timing Block Sets

These sets enable one-man installation of front and rear countershaft bearings on Fuller twin-countershaft transmissions. The set positions the upper countershaft, yet lets you slide it aside to insert the main shaft. When the main shaft is in place and timing marks line up, turn the tool vertically to engage and position the countershaft to main shaft.

**7108** – Timing block set for Fuller RTO 610/613 transmissions.

**7109** – Timing block set for Fuller RT and RTO 910, 915, 9513, 12509, 12510, 12513, and 12515 transmissions.



## 5063 Timing Tool

- Designed to support the main-case upper countershaft during transmission assembly and timing.
- Works on Eaton® Fuller® 2 Series Roadranger® transmissions.

## Truck Transmission Bearing Service Set

The set is designed to help you remove input shaft bearings and countershaft bearings, in both the main and auxiliary boxes of heavy-duty Fuller transmissions. It will also remove end yokes from 1600/1610–1810 series transmissions. The puller delivers 10 tons of mechanical power—essential force for working on big gearboxes.

- Works on Fuller twin-countershaft transmissions: 125, 600, 660, 900, 9500, 1100, 12500, 12600, 13000, 14600, 15600, and 8600 series, 910–913, 915, and 9513.

**7070A** – Truck transmission bearing service set

**7075** – Transmission output shaft end yoke remover only

**7207** – Collet only



## 7462 Hydraulic Brake Spring Tool

Here's a tool to remove and install the return springs in Lucas Girling hydraulic brake systems. The tool's machined tip cradles the return spring securely, and its sliding fulcrum gives you all the leverage needed to do the job. A knurled handle helps prevent slipping.

- Works on 1984 to current Ford F600, F700, and F800 series having Lucas Girling hydraulic brakes.



Similar to Ford 206-D005 (D90T-2588-A)

## 5072 Lucas Rear Brake Adjusting Tool

If you're working on a lot of medium-duty hydraulic brake systems, you need our adjusting tool. It enables you to easily adjust Lucas Girling hydraulic brake systems (popular in Ford F700, F800, and F900 series). The tool's offset design and extra handle length get the job done quickly.



## 205776 Bearing Puller Set

This puller set, designed for use with our No. 7070A transmission service set (sold separately), is designed to remove front countershaft and input shaft bearings on Fuller RT, RTO 610/613 twin countershaft transmissions.



## 5051 Bearing Puller Set

When teamed with our No. 7070A puller, this puller set will remove front and rear countershaft bearings from the main case of Eaton® Fuller® 2 Series Roadranger® transmissions.

- Includes pulling collet, sleeve, and a pair of puller legs.

## 5064 Countershaft Pushing Tool

Replacing rear countershaft bearing snap rings in Eaton Fuller transmissions. With this tool, you can easily move the countershaft rearward to expose the snap ring.

- Works on Eaton® Fuller® Roadranger® transmissions (series 2, 5, 6, and 7).



## 5065 Countershaft Bearing Driver

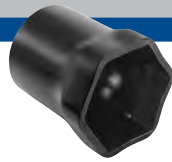
- Eases the task of installing a main-case countershaft bearing.
- Works on Eaton® Fuller® 2 Series Roadranger® transmissions.



## 5066 Bearing Driver

This tool is designed to install the bearing on 2" diameter input shafts used in Eaton® Fuller® Roadranger® transmissions.





### 1982M 70 mm Hex Socket

Attach this heavy-duty socket to your 3/4" drive ratchet or breaker bar, and you'll be able to easily remove the end-yoke locknut on Eaton® Fuller® 2 Series Roadranger® transmissions.



### 5040 Cummins® Injector Remover/ Installer

This is our best tool for removing or installing fuel injectors on Cummins L10 and N14 Celect electronically controlled engines. The large slide hammer and pin-type pulling adapter easily—and safely—handle injector jobs.

- Includes storage case.
- Two installing adapters help prevent damage to an injector's electronic solenoid.



### 5042 Cummins® Injector Puller

This helpful puller will handle a variety of injectors found in Cummins engines: mechanical L-10, PDT, and PTD top-stop 855NH. Its two-jaw design firmly grips the injector while it is being removed by the slide hammer.

- Includes storage case and special adapter for pulling STC injectors.



### 5062 Auxiliary Countershaft Shim Tool

When you're working on Eaton® Fuller® 2 Series Roadranger® transmissions, this tool holds the auxiliary countershaft in place while you set the bearing end play.

- Includes a support strap for .100 and .125 shim settings, and metric and standard mounting bolts.



### 7455 Mack Fuel Injector Nozzle Tool

Here's a handy tool for removing or installing injector nozzles on Mack E-6 4 VH and E-9 4 VH four-valve engines. The puller threads directly into the nozzle holder, and mechanical screw power does the pulling while a cylindrical guide holds the injector steady.

- Includes gauge to ensure correct injector depth during installation.



### Cummins® Fuel Injector Puller Adapter

When combined with our No. 5028 injector puller or a slide hammer with a 1/2" - 20 threaded shaft, this adapter gives you an easy, damage-free way to remove fuel injectors from Cummins B and C series engines.

**217793** – Cummins fuel injector puller adapter for B and C series engines with 12 mm x 1.5 injector threads.

**215844** – Cummins fuel injector puller adapter for B and C series engines with 14 mm x 1.5 injector threads.



### 7117 Caterpillar Fuel Injector Nozzle Puller

We've designed this nozzle puller to remove pencil nozzles on Cat engines. The tool applies straight, even pulling power through a bridge assembly and mechanical forcing screw. The job is done quickly—and without damage.

- Works on Caterpillar 1100/3208 diesel engines.



### 7121 Fuel Injector Nozzle Puller

We've designed this puller to remove the pencil-type fuel injector nozzles used in many agricultural and construction engines. The slide hammer action gives a straight, even pull without damaging components.

- Works on Case, Caterpillar, GM, John Deere, Waukesha, and White diesel engines.



### 7458 Bosch Nozzle Socket

Removes or installs injector nozzles. You use the inner socket to hold the nozzle stationary, and the outer socket to loosen or tighten the nozzle's gland nut.

- Works on Bosch KDEL 21 mm injector nozzles used in John Deere engines.



### 218163 Ford Fuel Injector Puller Adapter

Designed to work with the No. 5028 slide-hammer puller, this adapter removes injectors from Ford 6.6L and 7.8L diesel engines without damage.

- Slide-hammer threads are 1/2" x 20. Threaded end for injector is 14 mm x 1.5.



### 5024 Injector Sleeve Set

Here are the ideal tools for removing and installing the injector sleeves of International DT466 engines. The removing tool threads onto a slide hammer with 5/8" - 18 threads to remove sleeves quickly. The installer seats new sleeves equally fast, without damage.

Similar to Ford 303-230(T83T-9396-A)



### Diesel Fuel Line Wrenches

Fuel line nuts are often hard to reach, but these unique 3/8" square-drive tools solve that problem. With them, you can loosen or tighten fuel lines at the fuel injector nozzle or fuel injection pump without damaging the nut.

**7453A** – Fuel line wrench, 2.6" long. For International DT466 and 9L diesel engines. Fits 19 mm fuel line nuts.

**7460** – Fuel line wrench, 2.6" long. For International 6.9L and 7.3L diesel engines. Fits 5/8" hex nut.



Similar to Ford 303-228 (T83T-9000-C)

### 7461 Fuel Injector Pump Rotating Tool

Maximum fuel economy requires precise injector timing. The tool securely grips the front of the fuel injection pump so you can rotate it while fine-tuning the system.

- Works on Stanadyne rotary fuel pumps found on International's 6.9 and 7.3 liter engines.



# NOZZLE TESTERS HEAVY DUTY TOOLS & EQUIPMENT

## 4201

### Nozzle-Tester Adapter Set

This is our universal adapter set for testing injection nozzles on the most popular automotive, agricultural, and construction diesel engines. The set has 17 adapters that connect to our No. 4200 Nozrater testing unit.

- Includes handy metal storage box.
- 23622— used on 1989–95 Cummins 5.9L, 1983–94 Ford 6.9L and 7.3L.
- 23623— used on 1996–2000 Cummins 5.9L and Navistar 6.6L and 7.8L.



Adapter No.	Description	I.H. Truck	I.H. Farm Construction	John Deere	Oliver & Allis	Waukesha	Case, Ford Tractor, Massey, & Perkins	White	Mack	Caterpillar Pencil Nozzles	Deutz	GM Autos	VW, Audi, & Mercedes Autos	Mercedes & Magaris Truck
36352	Fuel line assembly, 9/16"–18 R.H. thd. with 24° on pipe.	•	•	•	•	•	•	•	•	•	•	•	•	•
23622	Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•		•	•	•	•	•			•	•	•	
23623	Adapter nut, 14 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•		•		•			•
23624	Adapter nut, 18 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.		•		•	•	•							
201917	Adapter nut, 9/16"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•	•				•		
23626	Adapter nut, 5/8"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•		•	•	•							
201912	Adapter nut, 3/4"–16 internal R.H. thd. to 1/2"–20 internal					•								
201913	Adapter nut, 9/16"–24 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•											
23693	Straight adapter, 1/2"–20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"–18 external R.H. thd. (E201917°).	•	•	•	•	•	•	•				•		
23692	Straight adapter, 3/8"–24 external R.H. thd. to 9/16"–18 external R.H. thd. (internal Ermeto 24°).	•	•											
23617	90° adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 9/16"–18 internal R.H. thd. (Ermeto 24°).	•	•	•	•		•		•		•	•	•	•
23621	Straight adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 1/2"–20 external L.H. thd. (60° seat).	•	•	•			•	•	•		•	•	•	•
208370	Banjo adapter, 9/16"–18 external R.H. thd. (24° seat).		•	•										
201916	Adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd. ferrule.			•										
208369	90° adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd.	•												
38279	Straight adapter, 14 X 1.5 mm external R.H. thd. (Ermeto 60°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).			•										
43468	Straight adapter, 1/2"–20 external R.H. thd. (Ermeto 24°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).							•						
<b>Additional Accessories Available (not included in 4201 Set)</b>														
44026	Straight adapter, 9/16"–18" R.H. thd. (Ermeto 24°) to Caterpillar 1100 & 3200 series pencil nozzle.									•				
201920	Adapter nut, 14 X 1.5 mm external thd. to o"–18 internal R.H. thread													Connects OTC 4200 Nozrater to other fittings used in the industry.



### Nozzle Tester Manifold/Adapter Sets

These adapter sets expand our No. 4200 Nozlrater to troubleshoot a wide range of diesel engine injector nozzles.

**4202** – Adapters for servicing Audi, GM, Mercedes-Benz, Nissan/Datsun, Toyota, and VW Rabbit diesel engines.

**4203** – Manifold/adapter set. Tests Caterpillar high- and low-pressure, capsule-type nozzles, and high-pressure, pencil-type nozzles on 1100 and 3200 series engines. Complete with Nos. 39870 and 206168 adapters, low-pressure gauge (up to 1,000 PSI), cap plug and mounting brackets.

No. 4202 set includes:

Adapter No.	Description	Chevy Chevette & GM 1980 and newer C.A.V. nozzles	GM 1979 & newer pencil nozzles	GM 1978 pencil nozzles	Nissan, Toyota, and VW Rabbit Diesels	Audi & Mercedes-Benz
<b>36352</b>	Fuel line assy., 9/16"-18 R.H. thd. with 24° on pipe.	•	•	•	•	•
<b>23617</b>	90° adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 9/16"-18 internal R.H. thd. (Ermeto 24°).	•	•	•	•	•
<b>23621</b>	Straight adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 1/2"-20 external L.H. thd. (60° seat).	•	•		•	•
<b>23622</b>	Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"-20 internal L.H. thd.	•			•	•
<b>201917</b>	Adapter nut, 9/16"-18 internal R.H. thd. to 1/2"-20 internal L.H. thd.		•	•		
<b>23693</b>	Straight adapter, 1/2"-20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"-18 external R.H. thd. (Ermeto 24°).			•		

### 4200

#### Nozlrater Diesel Injector Nozzle Tester

Here is the ultimate tool for diagnosing a number of problems that affect diesel fuel injector nozzles. The Nozlrater tester enables you to check for leakage, pop-off pressure, spray pattern, and chatter. This tool will accommodate a wide range of injectors. We also offer adapters so you can troubleshoot nozzles used in popular automotive, agricultural, and construction engines. Nozlrater features a rugged, lightweight reservoir that holds 7/10 of a gallon of fuel. It is equipped with a replaceable 2-micron filter. The large, dual-scale, high-pressure gauge is protected by a guard and includes an indicator needle to record maximum pressure reached. The tester is light enough to be easily carried for field use. Or you can bench-mount it, using the holes in its base.

• Not designed for Cummins or Detroit injectors.

**17169** – Replacement filter.

**11565** – Gauge.



#### Specifications

Overall width	5-3/4"
Overall length (includes handle)	26"
Overall height	11-1/4"
Weight (empty)	15 lbs., 10 oz.
Max. pressure	5000 PSI (350 bar)
Max. reservoir cap.	.692 gal. of diesel fuel (160 cu. in.)
Usable reservoir cap.	.628 gal. of diesel fuel (145 cu. in.)
Outlet port	For 3/8" tube
Gauge	Calibrated 0-5000 PSI (350 bar) Has 3-1/2" dial face with maximum reading indicator needle.
Gauge connection	1/4" NPT internal
Stroke of 1/2" dia. piston	3/4"
Volume per full stroke	.147 cu. in. (2.4 cc)
Intake filter	2 micron

### 208629

#### Calibration Fluid

• For use in diesel injection pump testers and injector nozzle testers.

• 1 gallon



#### Davco Diesel Filter Wrenches

• Found on Caterpillar, Cummins, Detroit Diesel, International, Mack, Mercedes-Benz, Volvo and other engines.

• Durable, stainless steel construction.

• Precise, laser-cut angles.

• Opens vent cap also.

• Soft, ergonomic handle.

**6914** – Fits Davco Diesel filter models, 232-233-234.

**6915** – Fits Davco Fuel filters 382 & 384.



### 6916

#### Duramax Water Sensor Wrench

• Used to remove and install the water sensor on the fuel filter.

• Works on 2001 and Newer 6.6L Duramax Diesel found in Chevrolet and GMC Trucks and Vans.

• 3/8" square drive hole.

# OIL FILTER CRUSHERS / FLUID RECEIVERS HEAVY DUTY TOOLS & EQUIPMENT



**1821**  
**10-Ton Capacity, Air-operated Automotive Oil Filter Crusher**

- Crushes up to four automotive filters (3-7/8" dia. x 9" high) at one time, in approximately 20 seconds. Engineered and built for dependable operation. Covered by OTC Lifetime Marathon Warranty®.
- 100% air operation eliminates electrical connections. Generous size of crushing chamber easily accommodates the largest automotive spin-on filters.
- Includes mounting stand. No wall mounting or time consuming installation required.



**1877**  
**25-Ton Capacity Heavy-Duty Oil Filter Crusher**

- Handles the big filters (up to 6" dia. and 12-1/2" long) found in trucks, construction equipment, farm implements, etc. May also be used for automotive and light truck filters. It does it all!
- Crushes filters to 1/4 of original size, removing up to 95% of filter's oil capacity. Automatic cycle feature: load the filter, push a button, and walk away.
- Air/hydraulic pump works on standard shop air (requires 9 CFM at 100 psi). Special valving returns ram automatically at the end of each cycle. No electrical connections needed.
- Built-in floor stand (completely assembled). Whole unit requires just 5 square feet of floor space.
- Covered by OTC Lifetime Marathon Warranty®.



**1896**  
**25-Ton Capacity High-Speed Heavy-Duty/Automotive Oil Filter Crusher**

- Automotive and heavy-duty filters up to 15-1/4" long and 6" diameter are crushed in approximately 8 to 16 seconds. Filters are reduced to 20% of original size, with 95% of residual oil removed.
- Automatic cycle feature lets you load the filter, push a button, and walk away.
- Powered by 2 hp electric/hydraulic pump, 230 volt, 20 amp, 60 cycle, single phase, 3,450 rpm. Has a 2-gallon reservoir.
- Built-in, heavy-duty floor stand with leveling pads is designed to accept a 30-gallon drum for oil drainage. Comes assembled. Covered by OTC Lifetime Marathon Warranty®.

Shipped assembled

## Oil Filter Crusher Comparison Chart

No.	Tonnage	Pump	Crushing Time	% Oil Removed	Filter Size	Stand Dimensions
1821	10-ton	Air	20 Seconds	95%	Chamber: 8" x 8" x 9" H.	18-1/2" W x 24" D x 63-1/2" H
1877	25-ton	Air/Hyd.	80 Seconds	95%	6" Dia. - 12-1/2" Long	18-1/2" W x 30" D x 74-1/2" H
1896	25-ton	Elec./Hyd.	16 Seconds	95%	6" Dia. - 15-1/4" Long	27" W x 30" D x 78" H

Note: Crushing times are approximate; crushing times may vary depending on air pressure available, size of filter, type of filter, etc.

## Transfer Tankers

- Draining oil from a large displacement engine and getting it to your bulk storage container is a snap with OTC's Transfer Tankers.
- Used oil is collected in a reservoir, and then rolls smoothly on 4" free-wheeling casters to your storage location.
- Pump moves five gallons a minute through the 8-foot transfer hose to the a 15-gallon reservoir.
- Handle is removable for easy storage.
- Screen attached to reservoir allows assembly to be stored on its side.
- Can also be used for transferring antifreeze.

**5077A** – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with an electric pump (No. 528093).

**5097** – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with a pneumatic pump (No. 529966).



5077A

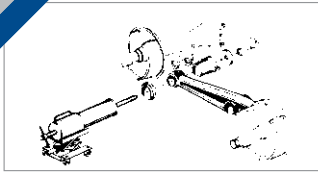


5097



**1577**  
**Low Profile Fluid Receiver**

- Designed for receiving waste fluid during a wide range of repair jobs.
- Fluid capacity: 7.5 gallons.
- Constructed of polyethylene plastic for heavy-duty use—yet, only weighs 13 pounds.
- Low profile, only 5" high, it easily slides under passenger cars.
- Designed with four casters to provide efficient maneuverability.
- Suitable for cooling system repair jobs—can be used for antifreeze.
- Includes splash screen to prevent spillage and splashing.
- Two-year warranty.



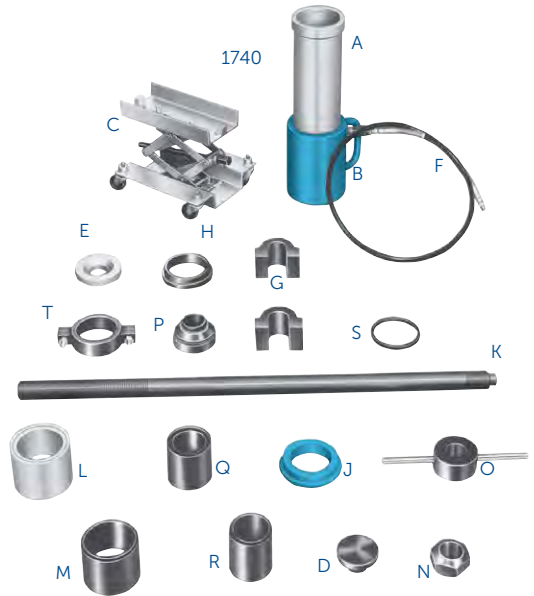
1740 tooling setup for end bushing installation.

**1740  
Hendrickson Basic Tooling Set**

This is the basic tooling set for servicing center and end beam bushings. It does not include the hydraulic pump or gauge. If you are already equipped with hydraulics, you can be replacing bushings right away! (Does not include tooling for hanger tube or end plug adapter removal.)

**For 340 thru 450 Series Hendrickson Suspensions**

Item	No.	Description	Item	No.	Description
A	44119	Receiving tube	L	302026	Installing adapter
B	51678	80-ton cylinder	M	302027	Removing adapter
C	51695	Jack cart	N	302028	Hex nut
D	206457	Press adapter	O	302029	Speed nut
E	206459	Clamp plate	P	302030	Removing adapter
F	9780	Hydraulic hose	Q	302031	Installing adapter
G	302018	Spacer (2)	R	302032	Removing adapter
H	302019	Receiving adapter	S	302401	Spacer ring (3)
J	302021	Receiving adapter	T	42052	Inst. adapter clamp
K	302023	Pulling screw			



**HENDRICKSON SERVICE SETS  
WITH HYDRAULICS**

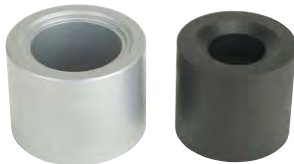
**FOR 340 – 450 SERIES HENDRICKSON SUSPENSIONS**

**1742  
Basic Tooling Set with hydraulics (Hydraulic pump 4031)**

The preferred method for servicing center and end beam bushings. You get the complete No. 1740 basic set, plus OTC's No. 4031 two-stage electric/hydraulic pump with remote hand switch, a No. 9654 pressure gauge, hose half coupler, and 80-ton single-acting ram. (Tooling for hanger tube or end plug adapter removal not included.)

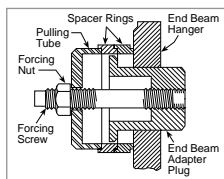
**1741  
Basic Tooling Set with hydraulics (Hydraulic pump 4062)**

The method Hendrickson recommends for suspension service. You get the No. 1740 basic set, plus OTC's No. 4062 two-stage electric/hydraulic pump with remote hand switch, a No. 9653 pressure gauge, hose half coupler, and 80-ton single-acting ram. (Tooling for hanger tube or end plug adapter removal not included.)



**1746  
R400 Center Bushing Adapter Set**

For R400 series Hendrickson suspensions having center bushing No. 49400 or field service center bushing No. 49600. Used with OTC's No. 1740 suspension tool set, these adapters let you remove and install the new style R400 center bushings on Hendrickson suspensions. Set includes one No. 310248 removing adapter and one No. 310249 installing adapter.



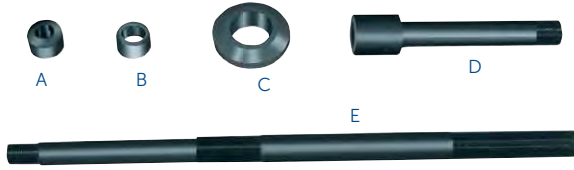
**1745  
End Bushing Adapter Puller Set**

Set contains everything needed to remove end bushing adapter plugs in 380 thru 440 series suspensions. The plugs have to be removed prior to end bushing replacement. The set is complete in a handy plastic case. For use with 1740 series tooling sets (order separately).



Item	No.	Description
A	207025	Spacers (3)
B	302592	Screw (7/8"-14)
C	302593	Screw (15/16"-12)
D	207027	Screw
E	207026	Plug gauge
F	207030	Hand tap (7/8"-14)
G	207031	Hand tap (15/16"-12)
H	207039	Nut assembly
I	302595	Receiving cup

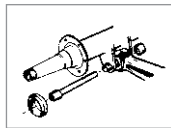
# BUSHING SERVICE HEAVY DUTY TOOLS & EQUIPMENT



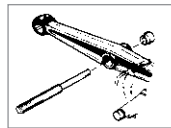
## 1743 End Bushing Hanger Tube/RU Series Center Bushing Service Set

Required for servicing RU340 series center bushings. The long puller screw is used to remove the beam cross tube. The 1743 also removes end bushing hanger tube assemblies. For use with 1740 tooling (order separately).

Item	No.	Description
A	25417	Nut
B	206455	Removing adapter
C	302015	Receiving adapter
D	302119	Special screw
E	302023	Pulling screw



Hanger tube removal with No. 1743 set.



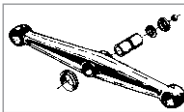
Cross tube removal with No. 1743 set.

## 1744 Bronze Center Bushing Service Set

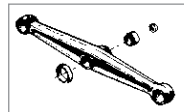
Designed for replacing bronze center bushings on 340, 380, 440, and 460 Hendrickson suspensions. Also installs bronze center bushing grease seals. For use with 1740 series tooling set (order separately).

For 340, 380, 440, & 460 series suspensions.

Item	No.	Description
A	28536	Installing adapter
B	28538	Installing adapter
C	302024	Removing/installing adapter
D	302025	Removing/installing adapter



Installing center bushing with No. 1744 set.



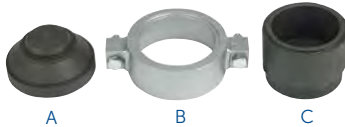
Removing center bushing with No. 1744 set.

## 1763 Center and End Bushing Service Set

This set is required for bushing service on 500 and 700 series heavy-duty suspensions. It is intended for use with a 100-ton capacity shop press. It allows replacement of center and end bushings.

For 500 & 700 series suspensions. Use with a shop press.

Item	No.	Description	Item	No.	Description
A	208350	Adapter	C	28541	Adapter
B	208349	Adapter clamp			

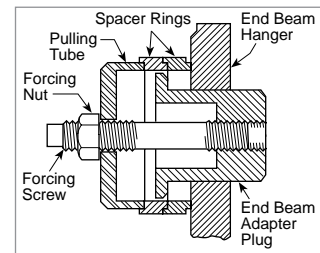
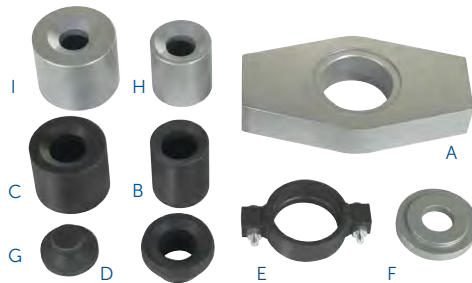


## 1764 Center and End Bushing Tool Set

This set is the answer for replacing center and end bushings on Hendrickson 340 and 380/440 series suspensions. The 1764 is for use with a 100-ton or larger hydraulic press. The press plate sits on the press bolster to provide a level, cradle-like surface for the beam to rest on during pressing.

For 340 and 380/440 series suspensions. Use with a shop press.

Item No.	Description	Item No.	Description	Item No.	Description
A	51100	Press plate	D	302030	Removing adapter
B	302032	Removing adapter	E	42052	Inst. adapter clamp
C	302031	Installing adapter	F	206459	Clamp plate
			G	206457	Press adapter
			H	302027	Removing adapter
			I	302026	Installing adapter



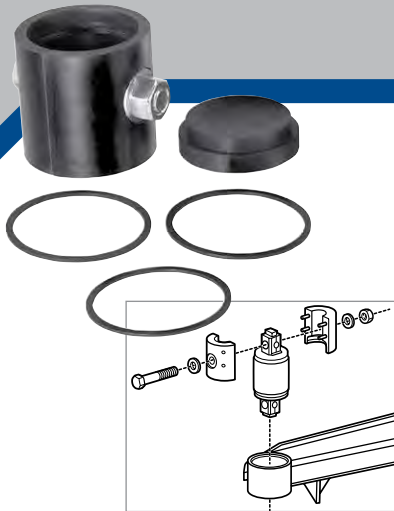
## 1748 End Bushing Adapter Puller Set for Hendrickson Truck Suspensions

This set contains everything needed to remove end bushing adapter plugs used on 400 series and the larger 460–520 series suspensions. The plugs have to be removed prior to end bushing replacement. The set is complete in a handy plastic case. For use with 1740 series tooling sets (order separately).

For servicing the 400 and larger 460–520 series suspensions.

Item	No.	Description
A	207025	Spacers (3)
B	302592	Screw (7/8"–14)
C	302593	Screw (15/16"–12)
D	207027	Screw
E	207026	Plug gauge
F	207030	Hand tap (7/8"–14)
G	207031	Hand tap (15/16"–12)
H	207039	Nut assembly
I	302595	Receiving cup
J	*221378	Hand tap (M30 x 2)
K	*313342	Screw (M30 x 2)

\*For use on 460–520 series adapter plugs (can be purchased separately and used with set No. 1745).



### 1757 Hendrickson Bar Pin Adapter Set

Servicing bar pin end bushings used on Hendrickson equalizing beam tandem truck suspensions requires the use of special tooling. OTC's No. 1757 adapter set is used with the beam removed from the truck, and in conjunction with OTC No. 51100 press plate and a 100-ton hydraulic shop press.

The 1757 set, which replaces the No. 1747 set, includes an adapter for installing bushings in older forged beams as well as the fabricated beams introduced in 1999.

To remove bushings, use OTC's previously introduced No. 302030 removing adapter and No. 206457 press adapter, both of which may be ordered separately. Reinstall bushings following procedures recommended by the suspension manufacturer.

### 1767 Hendrickson Primaax Quick Alignment Socket

- Hendrickson - Approved tool.
- Used to adjust axle alignment on the Primaax air suspension.
- Works on Primaax models 230, 460, and 690 rear suspensions.



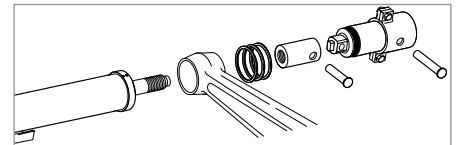
### 1768 Hendrickson PRIMAAX® Quick Wrench

- Hendrickson - Approved tool.
- Used to torque cross tube end cap bolts and longitudinal torque rod top pad bolts.
- Reduces maintenance time by eliminating the need to remove the tires to gain access to the end cap bolt.
- Use with the following Hendrickson PRIMAAX suspensions:
  - Type A - PAX 230/460/690 and FMX 240/480 with 8-1/2" ride height
  - Type B - PAX 230/460/690 with 10" ride height.

### 1749 Hendrickson Suspension Bar Pin End Bushing Adapter Set

Extend your No. 1741 and No. 1742 bushing service equipment sets. You can now remove and install worn end bushings on the Hendrickson new style bar pin end bushings without removing the equalizing beam from the vehicle. The No. 1749 works in conjunction with OTC's No. 1741 and No. 1742 80-ton portable service equipment to do the job quickly, using procedures recommended by the manufacturer.

Item	No.	Description
A	314557	Receiving tube
B	49050	Installer
C	314556	Receiving adapter
D	314558	Pin
E	314559	Pin



### Freightliner Rear Suspension Tool

- Removes and installs single-wrapped FAS II Airliner Freightliner Rear Suspension bushings in a fraction of the time of traditional methods.
- Saves an average 45 minutes per bushing (4 per vehicle) on flat rate of 1.5 hours per bushing.
- 15 ton Capacity cylinder

#### 4244 - Freightliner Rear Suspension Tool

4245 - Freightliner Rear Suspension Tool Master Kit includes 2510A Air/Hydraulic Pump.



### Hydraulic Flow Testers

50 and 75 GPM hydraulic oil flow testers accurately measure oil flow, temperature, and pressures against manufacturers' specifications.

Troubleshoot hydraulic circuits and isolate faulty components on mobile equipment, machine tools, fork lifts, agricultural and industrial tractors, and equipment (open or closed) hydraulic systems with capabilities up to 75 GPM at pressures to 5,000 PSI. Models include features such as an automatic pressure compensating load valve that lets you increase flow without affecting the pressure settings. Temperature flow and RPM readings are displayed in metric or English, and accurate to within plus or minus 2% of full scale. Each tester is protected by a safety disc, which ruptures automatically if pressures exceed the upper limits.

4221 - 75 GPM hydraulic circuit tester. Comes with two pressure gauges and three 9-volt batteries.

4235 - 50 GPM hydraulic circuit tester with single liquid-filled pressure gauge. Includes two adapter unions for 3/4" NPTF fittings.



## THE OTC NEW SERIES OF FLOW METERS

Unparalleled accuracy in testing hydraulic oil flow circuits for vehicles and machinery. All are protected by a durable steel case. Pressure accuracy is at +/- 1.6% of full scale. Due to their standard burst disc protection system, overpressure conditions prevent spillage of hydraulic fluid. All devices accommodate bi-directional flow and are CE marked as appropriate.



### **4277** 50 gpm Mechanical Hydraulic Flow Meter

- Flow Accuracy to +/- 4% of full scale
- Measures flow from 4 to 54 gpm
- Pressure up to 6000 psi
- Fluid filled analog gage that dampens vibration
- Temperatures up to 230 deg F
- Reads flow in one direction
- No batteries required
- Port is 1-5/16" - 12 UN JIC Male
- 12.25" x 4.125" x 4.875"
- 14.5 lbs



### **4278** 100 gpm Digital Hydraulic Flow Meter

- Flow Accuracy to +/- 1% of indicated value
- Measures flow from 2.5 to 100 gpm
- Pressure up to 6000 psi
- Digital display for flow, temperature, analog for pressure
- Temperatures up to 250 deg F
- Reads flow in both directions, pressure on the high side of valve
- Requires 1 9V battery (included)
- Port is 1-5/16" -12UN #16 SAE ORB
- 9.45" x 7.87" x 7.87"
- 14 lbs



### **4285** 100 gpm Digital Hydraulic Flow Test Kit

- Includes OTC 4292 Digital Readout and OTC 4291 Flow Block with Loading Valve
- Flow Accuracy to +/- 1% of indicated value
- Measures flow from 2.5 to 100 gpm
- Pressure up to 6000 psi
- Digital display for flow, temperature, analog for pressure
- Reads flow in both directions, pressure on the high side of valve
- Require 1 9V battery (included)
- Port is 1-5/16" -12UN #16 SAE ORB
- 12.99" x 12.4" x 10.24"
- 17lbs



**4290  
16 gpm Flow Block**

- Can be used with Digital Flow Meter Readout OTC 4292 included in OTC 4285 and OTC 4294
- Port is 1-1/16" -12UN #16 SAE ORB
- Flow range from 1 to 16 gpm
- Max pressure 6000 psi



**4291  
Flow Block with Loading Valve**

- Can be used with Digital Flow Meter Readout OTC 4292 included in OTC 4285 and OTC 4294
- Knob allows for pressure loading/restriction
- Port is 1-5/16" -12UN #16 SAE ORB
- Flow range from 2 to 100 gpm
- Max pressure 6000 psi



**4294  
Deluxe 100 gpm Hydraulic Flow Measurement Set**

- Comprised of OTC 4290, OTC 4291, OTC 4292, Long Cable and Hose Set and Short Cable
- Case included



**4292  
Hydraulic Flow Measurement Digital Readout**

- For remote flow measurement by using Flow Blocks OTC 4290 or OTC 4291
- Included in OTC 4285 and OTC 4294
- Digital display for flow, temperature, analog for pressure



**573295  
Long Cable and Hose Set**

- 20 feet long
- Flow, Temperature & Pressure



**573296  
Short Cable**

- 6 1/2 feet long.
- Flow & Temperature



# POWER TRAIN LIFTS / TRANSMISSION JACKS HEAVY DUTY TOOLS & EQUIPMENT



## 5078 Air-Assisted 2,000 lb. Capacity High-Lift Transmission Jack... or Trucks & Buses

- Foot-operated air pump enables the operator to effortlessly raise the transmission into place.
  - Rugged, heavy wall tubing and oversized base for stability.
  - A dedicated adapter for Allison 500- and 600-series automatic transmissions is included.
  - Covered by OTC Lifetime Marathon Warranty®.
- Specifications:
- |                          |                                  |
|--------------------------|----------------------------------|
| Min. height is 41-1/2"   | Max. side tilt (side/side) – 14° |
| Max. height is 65"       |                                  |
| Max. forward tilt – 50°  | Leg width – 46"                  |
| Max. backward tilt – 38° |                                  |



## 5130 1,000 lb. Capacity DriveMaster™ Driveline Lift

- Low profile of 6" and a lift range: 24" to 30".
  - Pivoting pump handle +/- 15° tilt in each direction
  - Includes 553516 Differential Adapter
  - ANSI/PALD
- Specifications:
- |                         |                  |
|-------------------------|------------------|
| Overall Length – 43"    | Min. Height – 6" |
| Overall Width – 30-1/4" |                  |
| Max. Height – 30"       |                  |



## 5019A 2,200 lb. Capacity Low-Lift Transmission Jack

- Special mounting adapter fits popular Eaton® Fuller® RoadRanger® transmissions used on nearly all Class 7 and 8 heavy-duty trucks. Mounting plate angle is adjusted with the turn of a wrench.
  - Swiveling pump handle permits ease of operation in restricted working spaces. Fast-acting pump quickly raises lifting arm.
  - Includes No. 49611 adapter for Eaton® Fuller® RoadRanger® transmissions (also available separately).
- Specifications:
- |                          |                                    |
|--------------------------|------------------------------------|
| Min. height is 8-1/4"    | Max. side tilt (either side) – 12° |
| Max. height is 36-1/2"   |                                    |
| Max. forward tilt – 15°  | Overall length – 52"               |
| Max. backward tilt – 20° | Overall width – 32-1/2"            |

### Power Train Lifts

- These lifts will handle engine and transmission assemblies, gas tanks, drive axle assemblies, engine/transaxle assemblies, electric vehicle batteries, and more.
- Scissors-type design allows access to all four sides of a component.
- Two independent adjusting screws tilt the table ±15° side-to-side, or fore and aft. Can be operated manually or with non-impact air wrench.
- 20" x 32" table.
- 8" swivel casters provide enhanced mobility under heavy loads.
- ANSI/PALD compliant.

### 5285 Power train lift (1,650 lb. Capacity)

- Air / hydraulic operation – Foot control pump with hose allows movement around lift.
- Min. height is 31-1/2"; Max. height is 74-1/2".
- Footprint 33" wide x 48" long.

### 1595 Power train lift (2,500 lb. Capacity)

- Powered by a quiet, 110V electric/hydraulic pump.
- Smooth, steady lifting and lowering motion controlled by hand-held remote.
- A 30 ft. long retractable extension cord is mounted to the frame.
- Min. height is 29"; Max. height is 80"
- Footprint 31" wide x 50" long.

### 1522A

### Heavy-Duty 2,000 lb. Capacity Low-Lift Transmission Jack...for Class 7 and 8 Trucks

- Includes No. 220492 adapter for Eaton® Fuller® RoadRanger® transmissions.
- Pump handle rotates 360° for operator convenience; ball bearing 3.5" diameter swivel casters provide easy positioning of jack.
- Safety overload system prevents use of jack beyond its rated capacity, and a safety bypass protects the hydraulic cylinder from damage.

### Specifications:

- |                          |                                    |
|--------------------------|------------------------------------|
| Min. height is 6-7/8"    | Max. side tilt (either side) – 11° |
| Max. height is 35-1/4"   | Overall length – 43-1/2"           |
| Max. forward tilt – 24°  | Overall width – 26"                |
| Max. backward tilt – 18° |                                    |

### Accessories for 5019A / 5078 / 1522A Transmission Jacks and 5130 Driveline Lift

- 558382** – Auxiliary box adapter. Used with all.
- 561949** – Light duty transmission adapters. Used with all.
- 528150** – Eaton® "Lightning" adapter. Used with the No. 5019A transmission jack.
- 543284** – Roadranger transmission Model series FRO-11210C to FRO-18210C that is equipped with an internal cooler. Used with the No. 5019A transmission jack.
- 49611** – Eaton® Fuller® RoadRanger® auxiliary housing adapter. Bolts directly to the countershaft bearing caps to provide a stable platform for removing and installing the auxiliary housing.
- 553516** – Differential Mounting Adapter. Mounts easily using existing bolt patterns. Fits the most common differentials currently in use on Category 7 and 8 Heavy Duty Trucks. Including: Eaton, Fuller, Rockwell, Meritor, Spicer, International, and Mack. For use on OTC (5019A – 553516 requires 565188 adapter) 5078 and Stinger 1522A Transmission Jacks.
- 314729** – Allison 500/600 series automatic transmission adapter used with No. 5078 transmission jack.
- 540231** – Eaton® Fuller® RoadRanger® transmission adapter
- 540232** – Mack transmission mounting brackets. Provides a stable platform for Mack T200 series transmissions.



5285  
extended

Casters provide a 9-1/2" clearance on lower frame



5285 collapsed



1522A



558382

561949



553516

528150

540231



543284

49611



540232

314729



**5018A**  
**Truck Clutch & Flywheel Handler**

- Replaces 14" & 15-1/2" clutch assemblies weighing up to 250 lbs.
- 13" low point enables access below side faring.
- Linkage raises load from horizontal to vertical position.
- 360 degree swivel head.
- Covered by OTC Lifetime Marathon Warranty®.

**516160 – Optional flywheel handling attachment**

**515686 – Optional splined shaft, 1-3/4" dia. with 1-1/4" pilot**

**516159 – Optional splined shaft, 1-3/4" dia. with 1" pilot**



**5015A**  
**Truck Clutch & Flywheel Handler**

- Handles 14" and 15-1/2" clutch assemblies weighing up to 150 lbs.
- Lifting range of 9" to 37". Swivel casters provide easy maneuverability.
- Includes a 2" spline shaft with a 1-1/4" pilot to aid in alignment.

**218174 – Flywheel handling attachment for use on No. 5015 and 5015A only.**

**48625 – Optional splined shaft, 1-3/4" dia. with a 1-1/4" pilot.**

**440533 – Optional splined shaft, 1-3/4" dia. with a 1" pilot. Needed for clutch service on some Navistar 466 series engines.**

**314386 – Optional 1-3/4" dia. alignment shaft extension. Used for 2-plate clutch of Navistar 466 series engine.**



**1520**  
**10-Ton Capacity Lifting System (Includes two lifts)**

- Mobile, tandem system is air-operated. This will handle your class 7 and 8 tractor lifting needs. No need to waste time re-blocking and making additional lifts for the clearance you need for under-vehicle service. Roll the system to the vehicle anywhere in the shop or outside on a level surface.
- Unique design provides lift from the tires, not the frame or axle members. Ideal for situations where limited ground clearance or a lack of clear access complicates lifting.
- Single controller operates both sides of the system for a smooth, level lift up to two full feet from the bottom of the tires to the ground. Units can double as support stands when retention pin is inserted.
- Covered by OTC Lifetime Marathon Warranty®.

Specifications:

Capacity – 10-tons (20,000 lbs.) (pair)  
Air pressure – 150 psi  
Lifting range – 0"-24"  
Saddle width – 19-1/2" – 24" dia. rim sizes  
Height – 53-1/4"  
Width – 41-1/2"  
Length – 39-1/2"



**1591B**  
**10-Ton Combination Air Lift & Support Stand**

- 40" removable handle and 8' air hose.
- Covered by OTC Lifetime Marathon Warranty®.

Specifications:

Capacity – 10 tons (at 200 PSI air)  
Minimum height (unpinned, no extension) – 18-3/4"  
Maximum height (pinned in top hole, with extension) – 50-1/2"  
Stroke – 10-7/8"



**1590**  
**10-Ton Air Lift**

- Adjustable lifting saddles and an extra-wide stance for extra stability.
- Automatic mechanical safety catch engages in five height positions.
- Two large swivel casters and pneumatic tires make it easy to maneuver, even on loose gravel.
- Covered by OTC Lifetime Marathon Warranty®.

Specifications:

Capacity – 10 tons (at 200 psi air)  
Air pressure – 100–200 psi  
Lifting range – 13"–52"  
Saddle spread – 29" – 41-3/4"  
Saddle – 4" X 5-1/4"  
Height – 67-1/2"  
Width – 41"  
Length – 36"  
Distance from lift arm to floor support – 12-1/2"

**572913 – Optional saddle set for 1590. Saddle – 4" X 5-5/8"**



**5214**  
**4-Ton Capacity Fork Lift Jack**

- 8,000 lb. capacity with a low starting height of 2-5/32".
- 10,000 lb. capacity (5 tons) when lifting from cylinder saddle– ideal for agriculture and industrial applications.
- Unique shape of primary saddle allows for handling of all lift truck configurations with flat or edged surfaces.
- Features include high-quality seals, chrome-plated internal components, and high-strength steel construction.
- Secondary lifting surface feature.
- Complies with ASME-PALD.
- Lifting Height: 2-5/32 – 17-15/16".



**1540**  
**4-Ton Capacity Fork Lift Jack**

- 8,000 lb. capacity with a low starting height of 2-5/8".
- Two-position lift pad permits handling of all lift truck configurations with flat or edged surfaces.
- Minimum low lift: 2-1/4".
- Maximum high lift: 16-1/4".
- Features include high-quality seals and high-strength steel construction.
- Handle stop makes for easy maneuverability.
- 30" long handle.



# UNDER AXLE JACKS HEAVY DUTY TOOLS & EQUIPMENT



Convenient and secure storage space for large adapter & saddle.



Maximum extended height

Saddle

Large adapter

## 5292 27.5-Ton Under Axle Jack

- Features class-leading 27.5 ton capacity
- Robust design with completely sealed piston.
- New lever design and pneumatic release valve for more precise release control.
- Power return allows lowering with no load.
- Includes two height adapters for flexibility.
- PALD compliant.
- Minimum retracted height (with saddle only): 8-1/4".
- Maximum extended height (with screw extended and large adapter): 21-3/8".
- Stroke: 4.9375".
- PSI range: 90 to 175.

## 5093B 3-Stage Under-Axle Jack

Three-stage lift capacity 20T, 35T, and 65-tons. Ideal for lifting loaded trailers, buses, and other Class 7 & 8 vehicles.

- Piston and cylinders are made from chromium molybdenum vanadium steel for durability and then liquid nitrided to prevent rust and seizing.
- Features a high load-approach speed.
- Air-driven cylinder with pressure control knob for maximum user safety.
- 4-position handle: horizontal, 45 degrees, vertical, or collapsed.
- 7-inch minimum height for low clearance vehicles.
- Comes complete with a 3-15/16 in. (100 mm) lifting extension.
- Complies with ASME / PALD test requirements.



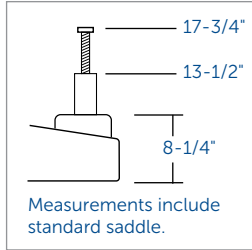
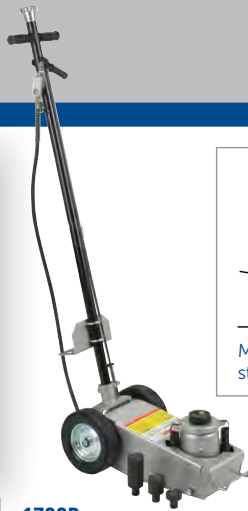
Single control switch, handy and easy to use.



4 positions: horizontal, 45 degrees, vertical, or collapsed for easier transport.



8-1/4" width for easy access to the lifting point.



## 1788B 22-Ton Capacity Under-Axle Jack

- Improvements include advanced seal ring material and one-piece air piston air pump
- Long 49-1/2" T-handle lets you easily position jack under vehicles with long overhangs.
- One pull of the handle activates the self-retracting 22-ton capacity ram without having to crawl underneath the vehicle.
- Jack has large rubber-tired wheels.
- Lifting range:
  - 3/4" saddle Max. height 17-3/4"
  - 1-15/16" saddle Max. height 18-15/16" 3-7/8" saddle Max. height 20-5/8"
- Cylinder stroke, 4-1/2"; extended screw length, 4-1/4"; PSI range, 90-145.

## 215009\* – In-line oil lubricator.

Add to air line to meter precise flow of lubricant to air motor. Has 1/4" NPT fitting. \*Not included, order separately. Prevents harmful contamination caused by moisture in the air line!

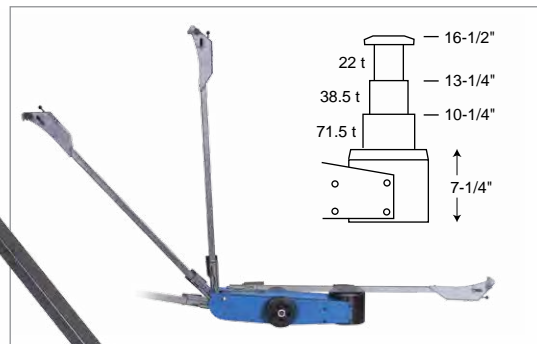


5110

## 6- & 10-Ton Capacity Air/Hydraulic Service Jack

- Huge steel front wheels are mounted in bearings for trouble-free service life. Rear swivel casters make spotting the jack easy.
  - Spring-loaded handle can be locked in three positions.
  - Covered by OTC Lifetime Marathon Warranty®.
- 5106** – 6-Ton Air/Hydraulic Service Jack. Lifting range 4-3/4" to 23-1/4", reach 87", 45" handle.
- 5110** – 10-Ton Air/Hydraulic Service Jack. Lifting range 6-3/4" to 26-7/8", reach 93", 47" handle.

Specifications	5106	5110
Capacity	6-ton	10-ton
Air pressure	90-175 PSI	90-175 PSI
Lifting range	4-3/4" to 23-1/4"	6-3/4" to 26-7/8"
Saddle dia.	7"	7-3/8"
Overall reach	87"	93"
Frame height	8"	10"
Handle length	45"	47"





**5-Ton and 10-Ton Service Jacks**

- A built-in safety overload prevents using the jack beyond its rated capacity.
- Convenient foot pedal speeds the lifting operation. Handle lock and release control are located on top of the handle. Handle can be locked in any position from vertical to horizontal.
- Both models have a spring-loaded 40" handle.

**1505B – 5-ton service jack**

**1510B – 10-ton service jack**

**20-Ton Capacity Service Jack**

- Low-profile stance and extended height add to versatility.
- Wheels and swivel casters feature internal bearings.
- Either the foot pedal or jack handle may be used for pumping action. Counter-balanced, spring-assisted handle has a three-position lock.

**1512 – 20-ton service jack**



Specifications	1505B	1510B	1512
Capacity	5-ton	10-ton	20-ton
Lifting range	6" to 22"	6-1/4" to 22"	7-1/2" to 24"
Saddle dia.	5-1/8"	6"	7-1/2"
Overall reach	47"	51"	97"
Frame height	7-3/4"	9-3/4"	10-1/4"
Handle Length	43"	43-1/4"	42"
Floor space	14-3/4" to 56"	18" to 60"	18-1/8" to 61-3/8"

**6- & 10-Ton Heavy-Duty Service Jack**

- Ergonomic handle for user comfort and easy mobility.
- Foot pedal for quick approach of the lifting saddle to load. Built-in tray for fasteners and tools.
- CE marked – ASME/PALD tested.
- Covered by OTC Lifetime Marathon Warranty®.

**5206 – 6-ton HD service jack.** Lifting range 6-11/16" to 22-13/16".

**5210 – 10-ton HD service jack.** Lifting range 6-11/16" to 23-13/16".

Specifications	5206	5210
Capacity	6-ton	10-ton
Min. Height	6-11/16"	6-11/16"
Max. Height	22-13/16"	23-13/16"
Overall length	87"	99-1/2"
Overall width	16-5/8"	16-5/8"
Handle length	39-3/8"	39-3/8"

**5-Ton and 10-Ton Air/Hydraulic Service Jacks**

- Bring the versatility of air-assist operation to your shop's lifting tasks.
- Huge front wheels mounted in bearings provide trouble-free service life. Rugged steel frame members.
- Rear swivel casters make spotting the jack easy. Spring-loaded handle may be locked in three positions, from horizontal to vertical.

**1507B – 5-ton air/hydraulic service jack**

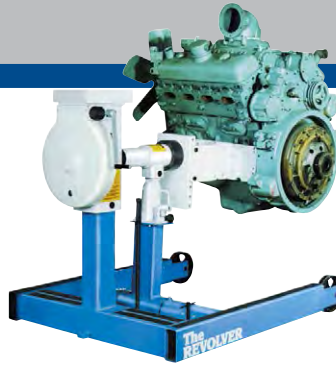
**1511B – 10-ton air/hydraulic service jack**

Specifications	1507B	1511B
Capacity	5 ton	10 ton
Air pressure	80–120 PSI	80–120 PSI
Lifting range	5-7/8" to 22"	6-3/8" to 22"
Saddle dia.	6-5/8"	5-3/4"
Overall reach	87"	90"
Frame height	8"	10"
Handle length	40"	45"



# ENGINE STANDS / ADAPTER PLATES

## HEAVY DUTY TOOLS & EQUIPMENT



### 6000 lb. Revolver® Diesel Engine Stand

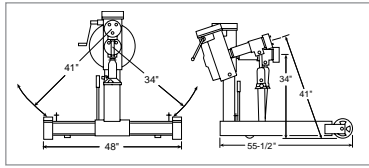
- 96-to-1 ratio worm and gear set rotates components 360°; handle locks in any position.
- Integral 12-ton jack raises the work to provide the swing radius needed for clearance. Two front wheels and two rear casters provide mobility.
- Universal adapter assembly permits use with a wide variety of mounting plates.
- Covered by OTC Lifetime Marathon Warranty®.

**1750A** – Revolver diesel engine stand with No. 205061 universal engine adapter assembly.

**1750** – Engine stand without universal engine adapter assembly.

### Revolver® Engine Adapter Plates

You can order only those plates you need for the engines you work on. The universal adapter assembly is required for mounting all plates to the stand.



**205061 Universal Adapter Plate Assembly.** Included with 1750A engine stand. (Must be used with all plates below.)

**J-29109-J Adapter plate to accommodate adapters for Kent-Moore engine stand. Detroit Diesel**

**205058\*** For Detroit engines: 53 series in-line 6 cyl., 6V & 8V; 71 series in-line 6 cyl., 6V, 8V, & 12V; 92 series 6V & 8V; 8.2 liter V-8.

**52871\*** For coach 6V and 8V series 71 Detroit Diesel.

**218504\*** For Detroit series 60 in-line 6-cylinder engines.

### Detroit Allison

**208160\*** Allison transmission mounting plate for transmission Nos. AT500, MT600, MT 6-speed, VH, VS, and V730.

**61373\*** Allison transmission adapter plate for transmission series HT-750, CLBT, HT-740D, CR/DR, and HT-750CT.

### Cummins

**205059\*** For Cummins engines: All NH, NTC, NTE, N14 855 series in-line 6 cyl; 378 series V6; 504, 555, & 903 series V8; KT 1150 series in-line 6 cyl., L10.

**61405\*** For Cummins L-10 and M11 series engines. Plate attaches to the left side of engine for complete tear down.

**218098** For Cummins "B" series 5.9L in-line 6 cyl. engines.

**218099\*** For Cummins "C" series 8.3L in-line 6 cylinder engines.

### Caterpillar

**205060\*** For Caterpillar engines: Nos. 1673, 1674, 1693, 3306, & 3406 in-line 6 cyl.; Nos. 1100, 3208, and 3408 V8.

**217687\*** For Caterpillar 3114, 3116, and 3176 in-line 6 cylinder and C12 engines.

### Mack

**205101\*** For Mack engines: All 672, 673, 675, & 711 series in-line 6 cyl.

**206629\*** For Mack engines: V8 1000, E6, & E7 in-line 6 cyl.

**528858\*** For Mack 865, and 868.

### International Harvester

**206386\*** For International Harvester engines: DT-466, DT-360, DT408, and 530 in-line 6 cylinder; DV-550, MV-404, MV-446, V304, V345, V392, 4-152, 4-196, 4-194; 9.0 liter and T444E V8; and Ford 6.9L, and 7.3L DIT.

**528856\*** For IH300 & 400 Series.

**528868\*** For International VT365.

### Ford

**61681\*** For mounting Ford 6.6L/7.8L engines.

**206386\*** For Ford 7.3 engines.

### Volvo

**528853\*** For Volvo TD67 and TD71 engines.

### John Deere

**528859\*** For JD 400 and 500 engines.

**528861\*** For JD Powertech 4.5L & 6.8L.

**528863\*** For JD 8995 V6, must be used with 528859.



205061 – Universal Adapter Plate Assembly



52871 Detroit



205058 Detroit



61373 Allison



218098 Cummins



61405 Cummins



218504 Detroit



218099 Cummins



205060 Caterpillar



218098 Cummins



205059 Cummins



206629 Mack



217687 Caterpillar



205101 Mack



61681 Ford 303-DO61 (Same as D87T-6000-A)



528853 Volvo



206386 International Harvester, Ford



528861 John Deere



528859 John Deere



528863 John Deere



528856 IH



528868 IH

**\*NOTE: Must be used with 205061 univ. adpt. plate assembly. Each engine mounting plate includes all the necessary hardware and an engine application chart.**



1735B

**1735B**  
**2,000 lb. Capacity Heavy-Duty Motor-Rotor® Repair Stand**

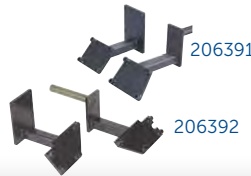
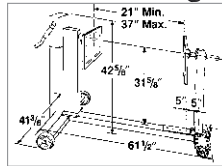
- Handles a wide variety of engines, transmissions, torque converters, and rear axles from trucks, tractors, and construction machinery.
- The 50:1 ratio gearbox allows full rotation of mounted unit with just a turn of the crank and locks in position. Easily maneuvered when loaded.
- To ensure engine stability in all positions, this repair stand is equipped with a positive-crank handle locking mechanism.
- Twin-post design, featuring laterally adjustable, 3 position outboard support; provides an extremely stable work-holding unit.
- Locking rear wheels anchor stand in position.
- Covered by OTC Lifetime Marathon Warranty®.

**206391 – 6.0L and 6.4L Ford engine adapters.** (Works with both the OTC 1735, 1735A and 1735B.)

**206392 – Ford 6.7L Engine Adapter for 1735B HD Rotor Repair Stand.**



1735B with engine



206391

206392

**1783**  
**Heavy-Duty 20-Ton Capacity Adjustable Support (One only)**

- Designed for the really big service jobs. Rugged steel construction, and large 15-1/2" square base will satisfy support requirements up to 40,000 lbs.
  - Features include 4-point adjustment. Height range is 15-1/4" to 24". Saddle diameter is 6".
  - Covered by OTC Lifetime Marathon Warranty®.
- Note: Recommend use in pairs.



**1778B**  
**12-Ton Capacity Low profile Jack Stand (One only)**

- Spun steel base won't dig or sink into asphalt or sand.
  - Height range of 19" to 29-1/2".
  - Covered by OTC Lifetime Marathon Warranty®.
- Note: Recommend use in pairs.



**1779B**  
**12-Ton Capacity High profile Jack Stand (One only)**

- Spun steel base won't dig or sink into asphalt or sand.
  - Height range of 33-3/4" to 44-1/4".
  - Covered by OTC Lifetime Marathon Warranty®.
- Note: Recommend use in pairs.



**Extension Tubes for 1778B and 1779B Jack Stands**

**543751 – Extension Tube**  
Height range of 19" to 29-1/2"

**543752 – Extension Tube**  
Height range of 33-3/4" to 44-1/4"

543751

543752



**3- and 6-Ton Capacity Ratcheting Jack Stands**

- Jack stands feature a formed steel frame for strength and long life, and rolled base edges that resist sinking into soft ground or asphalt.
- Recessed column saddle for acceptance of vehicle panel rail (pinch weld).
- Dual purpose handle serves as carrying handle and column release.
- Investment cast rack bar for long life strength.
- Covered by OTC Lifetime Marathon Warranty®.

**1736A – Pair of 6-Ton Jack Stands.** Height Range of 15-1/2" to 24-1/2".

**1733A – Pair of 3-Ton Jack Stands.** Height Range of 12-1/2" to 18-1/2".



**1774B**  
**10-Ton Capacity Ratcheting Jack Stands (pair)**

- These ratcheting jack stands are highest quality steel and factory tested to ANSI PALD standards.
- The form-fit saddle design and 12" x 14" base ensures stability.
- Height range is 20" to 31-1/2".



5373

**OTC Stinger 3-Ton, 6-Ton and 12-Ton Jack Stands**

- Formed and welded steel base for strength; self-locking ratchet handle cannot be released under load. Durable baked enamel finish resists corrosion.
- Stands conform to ANSI PALD load rating standard; factory tested before shipment.

**5372 Pair of 3-ton jack stands.** Base: 8-1/4" x 7-1/2". Height range: 12" to 17-11/16".

**5373 Pair of 6-ton jack stands.** Base: 11-9/16" x 10-3/8". Height range: 15-5/8" to 23-11/16".

**1784D Pair of 12-ton jack stands.** Base: 12-1/8" x 10-7/8". Height range: 17-1/2" to 27-1/2".

**1780**  
**22-Ton Capacity Jack Stands**

- Height range is 13-7/8" to 19-7/8".
- Saddle size 3" x 3-3/4".
- Pin-style (non-ratchet) three positions, 3" intervals.
- Reinforced collar to meet newest ANSI PALD test standards.
- 11" flat base prevents sinking into the surface.



# BOTTLE JACKS HEAVY DUTY TOOLS & EQUIPMENT

## OTC 9300 STINGER SERIES BOTTLE JACKS GIVE YOU LIFTING RANGE FROM 2 TO 50 TONS.

- Forged base and cylinder to ensure strength and eliminate leaks.
- Chromed pump piston and ram for additional rust resistance.
- In-line design for increased ease of use in positioning and operation.
- Includes free seal kit with each unit to extend product life.
- ANSI/PALD compliant.



### OTC 9300 Stinger Series Bottle Jacks

Cap. (tons)	Stroke	OTC No.	Retracted Height min.	Length of Screw Extension	Height with Screw Extension	Pump Strokes to Extend Piston One Inch	Saddle Dia.	Base Size	Carry Handle	Weight
2	4-5/8"	<b>9302</b>	7"	2-3/8"	14"	8	13/16"	4-5/16" x 2-9/16"	No	5 lbs.
3	4-1/2"	<b>9303</b>	7-1/2"	2-9/16"	14-9/16"	13	15/16"	4-9/16" x 2 7/8"	No	6.2 lbs.
5	4-13/16"	<b>9305</b>	7-13/16"	3"	15-5/8"	20	1-1/8"	5-3/16" x 3"	No	8.4 lbs.
8	4-15/16"	<b>9308</b>	7-13/16"	3"	15-3/4"	21	1-3/8"	6" x 3-9/16"	No	12.6 lbs.
12	6"	<b>9312</b>	9-3/8"	3-1/4"	18-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	17.4 lbs.
12	3-11/16"	<b>9314</b>	7-1/16"	2-7/8"	13-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	15.1 lbs.
20	6-7/8"	<b>9320</b>	10-5/8"	2-15/16"	20-7/16"	28	2-1/8"	7" x 4-11/16"	Yes	27.2 lbs.
20	3-7/16"	<b>9322</b>	7-3/16"	1-11/16"	12-5/16"	25	2-1/8"	7" x 4-11/16"	Yes	20.9 lbs.
30	6-5/8"	<b>9330</b>	11"	N/A	17-5/8"	41	2-1/2"	7-11/16" x 6"	Yes	41 lbs.
50	7-3/16"	<b>9350</b>	11-3/4"	N/A	18-15/16"	74	2-1/2"	8-11/16" x 7"	Yes	76.5 lbs.



5221



5213



5213T

#### Bottle Jacks

- Base, pressure cylinder, and oil reservoir form one internal part, which results in a stronger jack.
- Piston never contacts cylinder, so pressure will be absorbed and not damage jack if vehicle tilts.
- The No. 5213T is telescopic, allowing for very low initial height with high lifting.

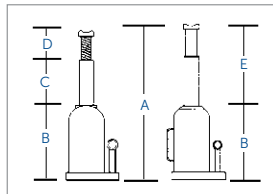
**5213** – 12-Ton Bottle Jack.

**5221** – 20-Ton Bottle Jack.

**5213T** – 12-Ton Telescopic Bottle Jack.

#### Bottle Jack Dimensions

Jack	A	B	C	D	E
<b>5213</b>	17-3/4"	8-7/8"	5-7/8"	2-15/16"	
<b>5221</b>	18-1/16"	9-1/4"	5-7/8"	2-15/16"	
<b>5213T</b>	22-1/2"	9-5/8"			12-13/16"



#### Air/Hydraulic Bottle Jacks

- Operate manually or pneumatically, 100 PSI minimum air pressure required.

**4313C** – 12-ton air-assist bottle jack; lift range 9-1/2" to 18-3/8", stroke 6-1/8".

**4321C** – 20-ton air-assist bottle jack; lift range 9-7/16" to 17-11/16", stroke 5-7/8".



4313C

#### 1734A Heavy-Duty Wheel Step

- Tire-mounted wheel step provides quick, easy access to under-hood components.
- Fits heavy-duty vehicles (Class 7/8).
- Installs in seconds; adjusts to fit 22-1/2" to 24" wheel sizes and folds for easy storage.
- 300 pound capacity.
- Non-skid platform surface.



Shown folded



**5017A  
Brake Drum Dolly**

- Remove, install, and transport truck brake drums without physically having to lift them.
- Works on 15" and 16-1/2" drums found on most Class 7 and 8 tractor and trailer brake systems.
- Heavy-gauge steel construction, ten-inch pneumatic tires, and adjustable handle.
- Covered by OTC Lifetime Marathon Warranty®.

**1543  
Brake Drum Dolly**

- Removes, installs, and transports truck brake drums without physically having to lift them.
- Works on all 15" and 16-1/2" drums found on most class 7 and 8 tractor and trailer brake systems.
- 6" height adjustment aids installation.
- Heavy-gauge steel construction, 8" tires, and 36" handle.



**Easy Lever Wheel Dollies**

- Gives technicians the leverage they need to easily remove or install truck tire-and-wheel assemblies.
- Heavy-duty construction capable of toting 300 pounds.
- Onboard rollers that make stud-hole alignment a snap.
- Spring-loaded kickstand for handy parking.
- Two models that, together, can accommodate tire diameters from 24 to 48 inches.
- Rugged tubular steel construction.

**5096A – Heavy-duty Easy Lever wheel dolly.** With a width of 26", this dolly handles tire diameters of 36" to 48".

**5095A – Easy Lever wheel dolly.** With a width of 22", this dolly handles tire diameters of 24" to 36".

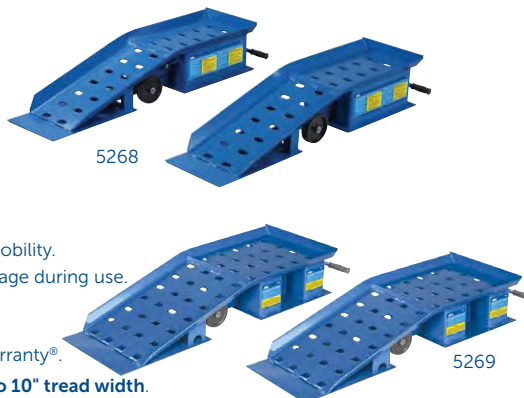


**20-Ton Truck Ramps**

- Long, retractable T-handle enhances mobility.
- Non-skid rubber matting prevents slippage during use.
- Durable, heavy-duty rubber wheels.
- Capacity per pair is 20 tons
- Covered by OTC Lifetime Marathon Warranty®.

**5268 – 20-ton truck ramps handle up to 10" tread width.**

**5269 – Wide 20-ton truck ramps handle up to 16" tread width**



5268

5269

**5090  
Back Buddy™ II**

- Remove, transport, service, and install heavy truck brake drums and hub assemblies.
- Fast-motion ratcheting jack with 14" of vertical lift.
- Pneumatic rear tires.
- Tilting mechanism to achieve the exact angle necessary for precise reassembly.
- Fold-down handle for open access to the work area.
- Onboard lube tray and toolbox.
- An array of optional adapter sets capable of grabbing almost any truck hub assembly or brake drum, inboard or outboard.



**513926 – 10 stud inboard hub & drum assemblies – 335 mm.**

**513927 – 10 hole outboard drums – 3/4" thick back plates**

Adapter Sets (sold separately)

**513925 – 5 and 6 spoke wheels**

**514644 – 8 stud inboard hub & drum assemblies**

**514645 – 8 hole outboard drums**

**514646 – 6 stud inboard hub & drum assemblies**

**514647 – 6 hole outboard drums**

**514648 – Humvee/ Hummer geared hubs**



**5105B  
1,100 lb. Capacity High-Lift DualWheel Dolly**

- Effortless air-powered hydraulic lift system for a variety of applications.
- 0 to 42" lifting range.
- Six-inch lateral adjustment.
- Tilt adjustment of +15° to -8° ensures easy alignment.
- Features four swivel casters, two locking, for enhanced mobility.



**1770A  
1,500 lb. Dual Wheel Dolly**

- Hydraulic jack provides almost 5" of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Independent lifting rack provides maximum stability; rollers won't catch on load.
- Swivel casters for easy maneuverability.
- Floor space is 45" by 41".
- 6' chain holds load in place.
- Covered by OTC Lifetime Marathon Warranty®.



**1769A  
Truck Dual Wheel Dolly**

- This 1,500 capacity dolly will remove, transport, and replace dual wheel and tire assemblies without strain or struggle.
- Swivel casters, 3-1/2" front and 3" rear, provide easy maneuverability.
- Floor space is 43" by 42".
- No. 1769A hydraulic jack provides over 6-1/2" of lift and tilts wheel assembly 7° to prevent damage to wheel seal.
- Includes a 6' support chain to hold load in place.

Model	Frame Height	Frame Width	Frame Length	Wheel Diameter	Handle Length
5268	9-1/4" (23.5 cm)	13-1/2" (34.29 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)
5269	9-1/4" (23.5 cm)	18-1/4" (46.36 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)



# TIRE SERVICE HEAVY DUTY TOOLS & EQUIPMENT

## 5789-PACK Tire Service Display

Includes 23 popular tools for changing a tire:



Part Number	Qty
5716	1
5720	1
5724	1
5728	1
5729	1
5731	1
5732	1
5733	1
5735-35	2
5735-42	2
5735-42K	1
5736-24	1
5736-30	1
5737-30	1
5739-24	1
5739-30	1
5758	2
5047LP	1
5789ID-520	1
5789ID-1032	1
5700-DISPLAY	1

## 5700-DISPLAY Hammer & Tire Service Display Rack

- Designed to display various products in the framed rack, complete with removable rear sign holder.
- Sturdy display framed with heavy 5/16" rod with heavy steel base eliminates tipping.
- Black powder coat finish for a rust free, durable finish.
- Contains 2" x 2" = 52 slots and 2" x 4" = 6 slots.
- Includes 4 side hooks (not pictured).
- Assembled dimensions; W 18.5", D 19", H 44".
- Weighs approx. 35 lbs.



## 5700A Accessory Tire Bead Seater

- Provides the ability to control the blast with both hands firmly on the nozzle assembly, increasing effectiveness and safety.
- Includes all the fittings to adapt the hose to most surge tanks found on tire changers. A tank hook is also included to hang the nozzle when not in use.
- Long 6-1/2' hose will reach all positions on the tire.



## 5702 Tire Bead Seater

The 5702 OTC Tire Bead Seater provides many of the great features of it's 5713 big brother, at a more economical price!

- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the tank/valve assembly, critical for effective and safe use.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of tire sizes and wheel diameters.
- Inline design allows for a comfortable distance from the tire and wheel while seating.
- ASME approved 2-gallon tank with inlet valve, pressure gauge, and relief pressure valve for safety.



## 5715 Tire Spoon Rack

- Designed to hold OTC Tire Spoons by the handle upset.
- Also holds tools with 3/4" or smaller diameter shafts.
- Can be hung on end of tool box or mounted to the wall via holes on 16" center.



## 5727 Sliding Bead Breaker

- The 5727 Sliding Bead Breaker has a split head, unique wedge design and slide hammer to reduce bead friction. Foot loops and tipping slots provide leverage and ease of transferring force to the tire.
- Sliding Bead Breaker, 47" extends to 81", 21 lbs.



## 5713 Tire Bead Seater

The Tire Bead Seater is used when a tire, new or used, is mounted on a wheel and the tire bead does not touch both sides of the wheel, making inflation possible. The air trigger on this tool expels a tremendous burst of air that inflates the tire to seat it to the wheel rim. This allows the tire to be inflated to the recommended pressure through the tire valve.



- The Tire Bead Seater is equipped with unique configurations that enhance ease of use, productivity and safety for technicians looking to get the job done right every time.
- Unlike other options out there, the Tire Bead Seater's ASME certified 13-gallon tank is designed with a nozzle and valve connected via hose assembly, giving the user more control rather than requiring them to hold the weight of the tank.
- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the nozzle/valve assembly, critical for effective and safe use. Wheels and handle function in either the vertical or horizontal position for easy mobility and storage.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of the tire sizes and wheel diameters.
- Air valve included for filling tank, which also provides compressed air for filling the tire while seating the bead, optimum for on-the-road service.





**Convex Slip Head** - Unique "Convex Slip Head" curved design allows the spoon to slide easily into the tire bead while the spoon bump limits the depth for quick-and-easy operation.



**Grip grooves** - Eliminate spoon slippage on the wheel rim while mounting or demounting the tire. The grooves also limit the depth of the spoon to help eliminate pinching tire tube applications.

**5716** **HD Sliding Tire Spoon** - 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.



**5716G** **HD Sliding Tire Spoon with Grip Grooves** 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.



**5720** **Sliding Dual Tire Spoon** 35" and 3/4" diameter. Unique configuration provides mount and demount heads on either end with the aid of a slide hammer mounted mid bar, allowing for hammering either end in or out of the tire bead. Twist-lock feature locks 3.5 lb. slide weight in position.



**5724** **Extending Tire Spoon** 22" extends to 34", 3/4" diameter. Twist-lock feature allows the spoon to be extended to any length and locked into position with a twist of the collar.



**5734-18** **Tire Machine Spoon, Double End**, 18" Has a curved end and a bent tip end for starting the bead on a tire changing machine.



**5734-18G** **Tire Machine Spoon, Double End with Grip Grooves**, 18" Has a curved end and a bent tip end for starting the bead on a tire changing machine.



**5735-18** **Double End Curved & Flat Tip Curved Tire Spoon**, 18" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-18G** **Double End Tire Spoon with Grip Grooves**, 18" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-35** **Double End Curved & Flat Tip Curved Tire Spoon**, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-35G** **Double End Tire Spoon with Grip Grooves**, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-42** **Double End Curved & Flat Tip Curved Tire Spoon**, 42" Same great design as the original double end mount/demount tire spoon, but in a 42" length for added leverage. 3/4" diameter.



**5735-42K** **Double End Tire Spoon with Kick Start**, 42" Includes kick loops to allow the spoon to be forced into tight bead locations with the help of foot pressure. 3/4" diameter.



**5736-18** **Curved Tire Spoon**, 18" Handle knob enables easier spoon pick up. 3/4" diameter.



**5736-18G** **Curved Tire Spoon with Grip Grooves**, 18" Handle knob enables easier spoon pick up. 3/4" diameter.



**5736-24** **Curved Tire Spoon**, 24" Handle knob enables easier spoon pick up. 3/4" diameter.



**5736-24G** **Curved Tire Spoon with Grip Grooves**, 24" Handle knob enables easier spoon pick up. 3/4" diameter.



**5736-30** **Curved Tire Spoon**, 30" Handle knob enables easier spoon pick up. 3/4" diameter.



**5737-30** **Flat Tip Curved Tire Spoon**, 30" Handle knob enables easier spoon pick up. 3/4" diameter.



**5739-24** **Curved Shank Tire Spoon**, 24" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.



**5739-30** **Curved Shank Tire Spoon**, 30" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.



# HEAVY DUTY TOOLS HEAVY DUTY TOOLS & EQUIPMENT



## Tire Service Hammers, Indestructible Handle

- Indestructible handle - never needs replacement!
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.
  - Use top hook as a wheel tipper; sledge end hook to drag tire into position.
  - Bead breaking wedge has grooves and a convex shape to help drive tire lube into the bead.

**5789ID-520** – 5 lb. head, handle length 20", total weight 7.3 lbs.

**5789ID-1032** – 10 lb. head, handle length 32", total weight 14.4 lbs.



## 5729 Inside Dual Wheel Bead Breaker

- Breaks the inner bead on the outside tire without removing the wheel from the truck.
- Unique design places pressure in the exact location required to quickly and easily break the inner bead.
- Simply pull up on the handle and the bead is forced off the wheel rim.



## 5747 Tire Valve Stem Punch Kit

- Quickly and easily remove old valve stems from a wheel with a swing of a hammer.
- Simply place the punch tip on the inside of the valve stem and strike the punch to force the old valve stem out of the wheel.
- The unique punch tip is heat treated and shaped to remove all types of valve stems, including 10mm nickel plated, steel, and brass valve stems.
- Includes hand protecting grip with interchangeable 5" and 8" punch adapters for car and truck wheel applications.



## 5752 Wheel Loader & Tipper

- The new ergonomic wheel loader and tipper integrates two very helpful tools into one.
- The wheel loader feature allows a technician to lift various sizes and types of wheels and tires in and out of a truck bed.
- The wheel tipper feature allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Both of these features allow the technician to easily and safely service and lift wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.



## 5750 Wheel Tipper

- This ergonomic wheel tipper allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Allows the technician to easily and safely service wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.



## 5728 Tire Bead Breaker

- Unique head is designed to provide a large striking area for all angles, while providing the mass needed to break the tire bead.
- This design puts the force exactly where it's required and eliminates the possibility of accidentally hitting the wheel, problems typically encountered while using larger swing hammer style bead breakers.



## 5745 Hands Free Air Chuck

- Perfect for applications where the tire valve is facing the floor while seating the tire bead, such as most dual wheel configurations.
- Hooks on the top bead seat of the wheel and the spring pressure holds the chuck on the tire valve pointing to the opposite side.
- Ball valve included to allow inflation only when needed.



## 5047LP Lug Nut Cap Remover Locking Pliers

- Designed to remove lug nut caps found on heavy duty truck and trailers quickly and easily without damage. Caps can be easily damaged by prying or using standard cap removers.
- Locking plier design with specially coated jaws apply maximum grip on the lug nut caps without damage.

## 5047 Lug Nut Cap Remover

- Chrome-plated lug nut caps found on many heavy-duty trucks and trailers can be tough to remove, and they're easily damaged if you pry them off or use an ordinary cap remover. This tool avoids those problems. It is ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing force you apply.
- Features cushioned handles.



## 5082 Wheel Tipper

This heavy-duty wheel tipper makes handling those hard-to-manage truck tires easy. To use the wheel tipper, simply deflate the tire and break the bead, then hook the wheel tipper to the rim of the wheel. The wheel tipper makes an otherwise tough task effortless.

- Designed for both aluminum and steel wheels won't damage wheel rim.



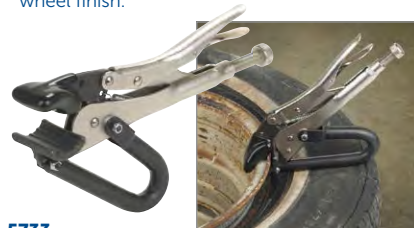
## 5731 Tire Bead Locking Pliers

- Prevents the tire from slipping while mounting the top bead.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.
- Prevents tire from contacting costly TPM Sensors.



## 5732 Tire Spoon Holding Pliers

- Tire Spoon Holding Pliers is the 3rd hand needed to ease mounting and demounting of tires with tire spoons.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



## 5733 Tire Bead Wedge Pliers

- Tire Bead Wedge Pliers keeps the tire in the bead drop area to ease mounting and demounting of larger truck and agricultural tires.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



## Accutorq™ Klikker Torque Wrenches

These precision torque wrenches make a loud click when you've reached the torque setting. They feature ratcheting heads, all-metal construction, permanently roll-marked scales, and soft-grip rubber handles that enable you to firmly grasp the wrench for right- or left-hand torquing.

- Includes molded plastic case.
- One-year warranty.

Tool No.	Torque Range	Graduations	Square Drive	Length
7378	50–250 in. lbs. (68–339 N•m)	2 ft. lbs.	1/2"	19-3/8"
7379	100–600 in. lbs. (136–813 N•m)	10 ft. lbs.	3/4"	42-1/4"



## 7367 Torque Multiplier, 1000 lb-ft

- Drive Input; 1/2", 365 lb-ft Max
- Drive Output; 3/4", 1100 lb-ft Max
- Head Width; 2.9", 3.3:1 Ratio
- Reaction Bar; 13-3/4"
- Includes reaction foot.
- Note; frictional gear loss = 6%



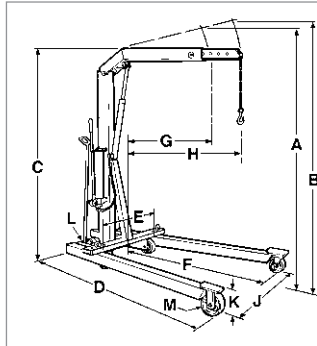
## 7368 Torque Multiplier, 2000 lb-ft

- Drive Input; 3/4", 730 lb-ft Max
- Drive Output; 1", 2200 lb-ft Max
- Head Width; 3.6", 3.3:1 Ratio
- Reaction Bar; 15-5/8"
- Includes reaction foot.
- Note: frictional gear loss = 6%

# FLOOR CRANES HEAVY DUTY TOOLS & EQUIPMENT



1819, 1820



Specifications	1819	1820
Cap., boom retracted	2,200	4,400
Cap., boom extended	1,650	3,300
A Max. boom height, boom retracted	107"	111"
B Max. boom height, boom extended	117"	122"
C Overall height, boom horizontal	80"	82"
D Overall length	83"	89"
E Minimum throat width	24"	25"
F Inside leg length	54"	57-1/2"
G Effective boom reach (retracted)	33"	35-1/2"
H Effective boom reach (extended)	48"	50-1/2"
J Inside leg width (3-position)	24", 36" 48"	26", 40" 52-1/2"
K Leg height	8"	9-1/2"
L Dolly wheel diameter	5"	5"
M Wheel diameter	6"	8"
Height, folded	79"	86"
1819 Floor space folded	27" x 38"	
1820 Floor space folded	31" x 42"	

## 2,200 and 4,400 lb. Capacity Heavy-Duty Floor Cranes

- To conserve valuable floor space, crane folds into a compact package for storage.
- For "close-in" work, leg spread adjusts to clear vehicle's wheels, telescoping boom extension gives additional reach. Roller bearing mounted wheels and steering dolly provide ease of mobility.
- A two-speed hydraulic hand pump provides fast boom travel; descent of boom is under precise control of operator.
- Covered by OTC Lifetime Marathon Warranty®.

**1819** – 2,200 lb. Capacity Crane. Has hydraulic hand pump and 16-7/8" lifting chain.

**39610** – 1/4" steel chain grade 43, 18-3/8" long, 2,200 lb. capacity. Has safety hook on end. Use with 1819.

**1820** – 4,400 lb. Capacity Crane. Has hydraulic hand pump and 18-3/8" lifting chain.

**39611** – 5/16" steel chain grade 70, 19-3/4" long, 4,400 lb. capacity. Has safety hook on end. Use with 1820.



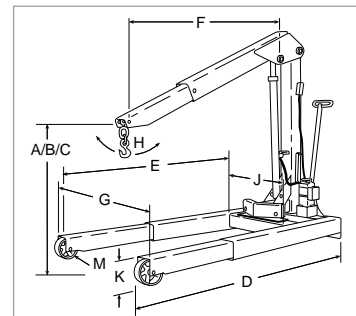
1813

No. 1812 Load-Rotor (not included)

Boom Capacity (lbs.) Description	Extended 4,000	Centered 5,000	Retracted 6,000
A Maximum boom height	161-7/8"	150-11/16"	139-1/2"
B Minimum boom height	6"	17-3/8"	28-3/4"
C Overall height (boom horizontal)	87"	87"	87"
D Overall length*	129-1/8"	113-7/8"	98-1/4"
E Inside leg length	91-11/16"	76-1/8"	43-1/4"
F Effective boom horizontal reach	94-1/4"	78-3/4"	63-1/4"
G Outside leg width**	59-3/4"	57-3/4"	55-3/4"
H Boom swing	36"	31"	26"
J Inside leg width	35-3/4"		
K Leg height	9-1/16"		
M Wheel diameter	8"		
Dolly wheel diameter	5"		

\* Legs in storage position: 80-7/8"

\*\* Legs in storage position: 53-1/2"



## 6,000 lb. Capacity Heavy-Duty Mobile Floor Cranes

- Three boom positions give capacities of 4,000, 5,000, and 6,000 lbs. to handle the biggest engines, and often the transmission right along with the engine! Usable reach is almost 92".
- Boom swivels for vertical and lateral positioning; legs extend to straddle the biggest tires.

**1814** – 6,000 lb. capacity crane with electric/ hydraulic pump (115V) with remote motor control.

**1813** – 6,000 lb. capacity crane with two-speed hydraulic hand pump.



**2,000 and 4,000 lb. Capacity Folding Floor Cranes**

- Both of these cranes fold up for compact storage.
- Front wheels are 3-1/2"; rear casters 5-7/8".

**2002** – 2000 lb. capacity crane with a reach of 24" to 36"

**2004** – 4000 lb. capacity crane with a reach of 25" to 46"

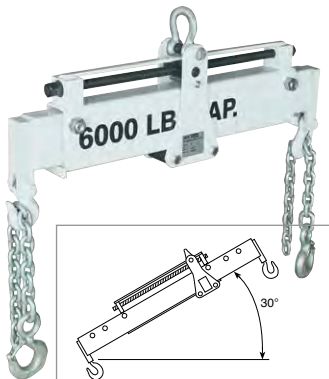
Specifications	2002	2004
Maximum capacity, boom extended	500 lbs.	1,000 lbs.
Maximum capacity, boom retracted	2,000 lbs.	4,000 lbs.
Maximum height, boom extended	94"	104"
Maximum height, boom retracted	87"	81"
Effective boom reach, boom extended	36"	48"
Effective boom reach, boom retracted	24"	26"
Leg width @ front wheels	32-1/2"	25"
Leg height	6-1/2"	7-3/4"
Floor space folded	57" x 38"	16" x 17-1/2"
Floor space unfolded	70" x 32"	33" x 33-1/2"



**4305**  
**1,500 lb. Capacity Engine Load Leveler**

Designed to hook to a crane or hoist to handle and position large, bulky components.

- The horizontal tilt can be adjusted to compensate for off-center loads, or adjusted to a certain angle for a component being positioned.



1812

**Load Leveler**

- Improved design over conventional spreader bars.
- Carriage on main support beam moved by turning lead screw; this permits fine adjustment of the tilt angle of component being lifted.
- Turn lead screw manually or with air-powered tools.
- Spreader bar adjustment secured with locking bolts.
- Chain grade is 80.
- Covered by OTC Lifetime Marathon Warranty®.

**1812** – Load Leveler. Max. lifting capacity: 6,000 lbs.; distance between hooks: min. 30", max. 46".

**1822** – Load Leveler. Max. lifting capacity: 10,000 lbs.; distance between hooks: min. 36", max. 56".



**1806**  
**4,000 lb. capacity Load-Rotor® Positioning Sling**

- Use with a floor crane. Engine, transmission, or other component is tilted or leveled by turning sling's 5/8" hex drive end with a common speed handle and socket.
- Has 65-3/4" long chain (5/16") and hook assembly with forged hook on each end. Pair of special lifting brackets included.
- Makes engine removal and installation a snap, even in close quarters.
- For use with floor cranes only; not to be used with overhead hoists or lifts.



**Heavy-Duty Adjustable Slings**

- For lifting and positioning engines, transmissions, etc. Each chain can be adjusted independently for length; plate design enables chain to be "short-hooked" for correct tilt.

**205049** – 2,000 lb. capacity sling with 1/4" chain, 56" long

**205050** – 4,000 lb. capacity sling with 5/16" chain, 65" long

**38841** – Plate only, use with any 1/4" or 5/16" alloy steel chain



302249

**Alloy Chains for Overhead Lifts and Hoists**

**302941** – 5/16" alloy chain, 26-13/16" long, 4,000 lb. capacity. With safety hook on one end. Use on No. 1812.

**302249** – 3/8" alloy chain, 28-3/8" long, 6,000 lb. capacity. With safety hook on one end.



7100

**4,000 lb. Capacity Lifting Brackets (pair)**

- Attach directly to component for easy lifting; will take 1/2" diameter bolts.

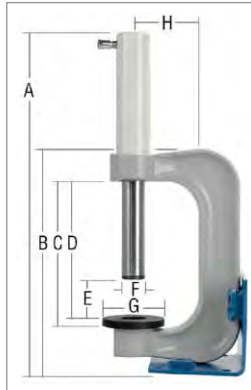
# PRESSES HEAVY DUTY TOOLS & EQUIPMENT



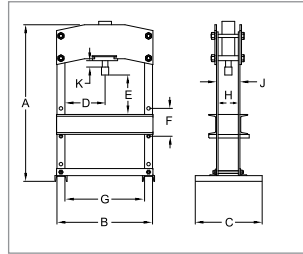
## 5180 10-Ton Portable Hydraulic C-Frame Press

- Weighing less than 28 lbs, this durable press is portable for various applications, i.e., roadside maintenance services, industrial applications, marine, general automotive.
- For clamping, pressing and bending. Ideal for welding and metal fabrication.
- 9" Open-Throat® design.
- Couples to any 4- or 10-ton Porta Power pump.
- The base can be assembled to position the press either vertically or horizontally and can also be mounted to a bench.

Set includes: C-Frame press with base, adapters: V-pushing and ram pushing (9/16" and 3/4" dia. shanks), receiving insert, flat insert, storage case.



A	B	C	D	E	F	G	H
21-1/4"	13-3/4"	9"	8-1/2"	2-1/2"	1-1/2"	4"	4-1/4"

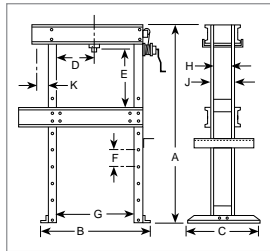


## 5230 16-1/2 Ton Capacity Bench Press

This innovative press integrates all the hydraulic elements within the chassis. The compact and functional design saves workshop space and ensures protection during transport.

- Bolster is adjustable for height.
- Automatic spring return piston.
- Pressure gauge with damper to extend its working life— positioned at eye level for easy reading.
- Includes set of two V-blocks and legs with bolt-holes for fixing to bench.

A	B	C	D	E	F	G	H	J	K
37"	16-1/2"	23-7/8"	9-1/2"	5-7/8"-17-5/8"	6"	19-5/8"	4-3/4"	5-1/2"	3"

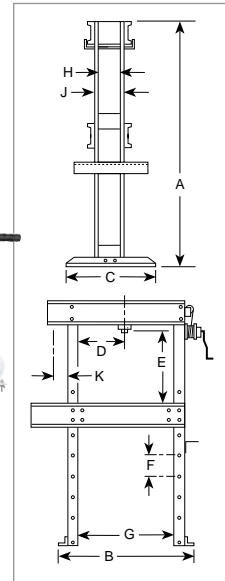


## 1825 17-1/2 Ton Capacity Heavy-Duty "Open Throat"® Press

- Ram head moves side to side for off-center pressing; ram-to-work distance is adjusted by a forcing screw that is extended or retracted by a speed crank.
- "Open-throat"® frame extensions make handling of bulky jobs possible outside of the press frame.
- This press does not have a lifting mechanism. If a lifting mechanism is needed, order 211407.
- Covered by OTC Lifetime Marathon Warranty®.
- Has No. 201832 hydraulic ram with 2" stroke, No. 4002 hydraulic hand pump, No. 9650 gauge, No. 9767 hose, adjusting screw, speed crank, ram cap, and pump mounting bracket.

211407 – 17-1/2 ton winch kit.

A	B	C	D	E	F	G	H	J	K	Floor Space
64"	28"	28"	17-7/8"	34-7/8"	3-3/8"	20"	4-1/4"	5"	4-3/8"	28" x 28"



## 25-Ton Capacity Heavy-Duty "Open Throat"® Press

- "Open throat"® feature enables ram to be positioned outside of press frame for fast axle bearing removal and installation, as well as other tasks. Rugged press is covered by OTC Lifetime Marathon Warranty®.
- Press bed is raised or lowered with a hand crank, and a spring-return hydraulic ram is laterally adjustable for off-center work at full capacity.

**1826 – 25-ton press.** Includes No. 4016 hydraulic hand pump; No. 52025 hydraulic ram with 14" stroke; No. 9652 gauge; No. 303563 hose (3/8" ID x 8'); and pump mounting bracket.

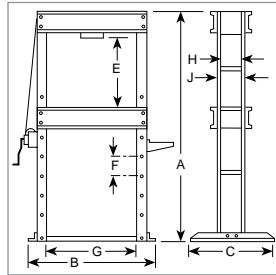
**1826A – 25-ton press.** Includes No. 4020 air/hydraulic pump; equipped the same as 1826.

A	B	C	D	E	F	G	H	J	K	Floor Space
68"	43"	28"	3"-29"	6-7/8"-4-3/8"	4-1/2"	32"	5-1/2"	6-1/2"	7"	28" x 25-1/4"

\*Lateral head movement. Frame shipped assembled.



1833



**25-Ton Capacity Shop Presses**

- Tough, economical press is ideal for pressing rear axle bearings, piston pins, and much more.
- Large 30" x 46" work area under ram makes positioning of even bulky work easy. Press bed is easily raised and lowered by a dependable lifting mechanism. Choice of model with hand- or air-driven hydraulic pump.

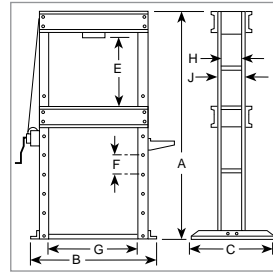
**1833 – 25-ton press.** complete with No. 4002 hydraulic hand pump; No. 9652 gauge; No. 24815 tee; No. 9767 hose (1/4" ID x 6"); hydraulic ram No. 51426 with 6-1/4" stroke; and 42733-WH2 pump mounting bracket.

**1834 – 25-ton press.** complete with air-driven No. 4020 hydraulic pump; No. 9652 gauge; No. 24815 tee; No. 9768 hose (1/4" ID x 8") and hydraulic ram with 6-1/4" stroke.

A	B	C	E	F	G	H	J	Floor Space
69-1/2"	40-1/2"	28"	5-3/4"-46"	4"	30"	5-1/2"	6-1/2"	41-1/2" x 28"



1850



**55-Ton Capacity Economy Shop Presses**

- Wide 10" throat opening between lower bolsters
- Durable steel frame resists buckling and bending. Covered by OTC Lifetime Marathon Warranty®.
- Hand-operated winch and cable mechanism adjusts lower press bolster.

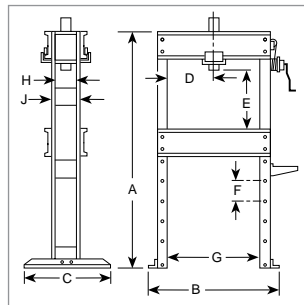
**1850 – 55-ton press.** Includes No. 52457 hydraulic ram with 6-1/4" stroke; No. 4016 hydraulic hand pump; No. 9651 gauge; No. 9767 hose (1/4" ID x 6"); and pump mounting bracket.

**1851 – 55-ton press.** Includes No. 52457 hydraulic ram with 6-1/4" stroke; No. 4020 air/ hydraulic pump; No. 9651 gauge; No. 9767 hose (1/4" ID x 6"); and pump mounting bracket.

A	B	C	E	F	G	H	J	Floor Space
70-3/4"	47-1/2"	28"	6-1/8"-41-1/8"	5"	35"	7-1/16"	10"	55-1/2" x 28"



1845



**55-Ton Capacity Heavy-Duty Presses**

- Side-to-side positioning of ram allows full capacity pressing along entire bolster length without buckling or bending. Covered by OTC Lifetime Marathon Warranty®.
- Hydraulic ram features 13" of stroke. Choice of hydraulic power units.

**1845 – 55-ton press.** Includes single-acting ram No. 52380 with 13" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 303563 hose (3/8" ID x 8"); and pump mounting bracket.

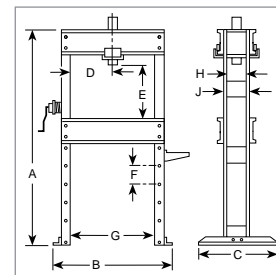
**1846A –** Same as No. 1845 except has No. 4016 hydraulic hand pump and single acting ram No. 65458 with 10-1/8" stroke.

**1847 –** Same as No. 1845 except has a No. 4022 air/hydraulic pump and a No. 9781 hose (3/8" ID x 10').

**1872 – 55-ton press.** Includes double-acting ram No. 51682 with 13" stroke; No. 4046 electric/hydraulic pump; No. 9651 gauge; No. 36887 hoses; and pump mounting bracket.

A	B	C	D	E	F	G	H	J	Floor Space
72"	48-1/2"	36"	3-1/4"-32-3/4"	6"-42"	6"	36"	6-3/4"	8"	56-1/2" x 36"

\*Lateral head movement.



1854

**100-Ton Capacity Economy Shop Press**

- Large 35" opening between press uprights allows easy handling of large gears, shafts, sprockets, and other components serviced in truck, construction, and agricultural equipment shops. Covered by OTC Lifetime Marathon Warranty®.
- Hand-operated winch and cable mechanism gives operator precise control in adjustment of lower press bolster to any height.

**1854 – 100-ton press.** Includes hydraulic ram No. 52434 with 10" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 9768 hose (1/4" ID x 8"); and pump mounting bracket.

A	B	C	D	E	F	G	H	J	Floor Space
86-5/8"	47-1/2"	28"	17-1/2"	9-5/8"-49-5/8"	8"	35"	6-3/8"	10"	55-1/2" x 28"



# PRESSES / ACCESSORIES HEAVY DUTY TOOLS & EQUIPMENT



1857



1858

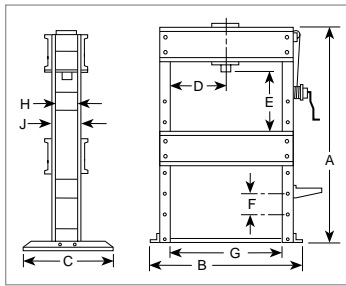
## 100-Ton Capacity Heavy-Duty Shop Presses

- Wide open uprights allow easy positioning of bars and shafts for straightening or bending.
- Upper bolster can be lowered for convenient positioning during repetitive jobs.
- Ram head glides smoothly on rollers for easy horizontal adjustments; rugged press frame will withstand a full capacity load with the ram head in any position across the upper bolster.
- Covered by OTC Lifetime Marathon Warranty®.

**1857 – 100-ton press.** Includes single-acting No. 52434 ram with 10" stroke; No. 4008 hydraulic hand pump; No. 9651 gauge; No. 9781 hose (3/8" ID x 10"); and pump mounting bracket.

**1858 – Same as No. 1857,** except has double-acting No. 51683 ram with 13" stroke; No. 61217 3-phase, 220V, 3450 rpm electric/hydraulic pump; and two No. 9769 hoses.

**1858-1P – Same as No. 1858,** except it has a No. 4064 2-stage, 1-phase hydraulic pump.



A	B	C	D	E	F	G	H	J	Floor Space
77-1/4"	64"	36"	7"-43"	2"-42"	8"	50"	8"	10"	36" x 78-1/4"

\*Lateral head movement. Frame shipped assembled.

## 100-Ton Presses Accessory Set

**50392 – Straightening fixtures (pr.)**

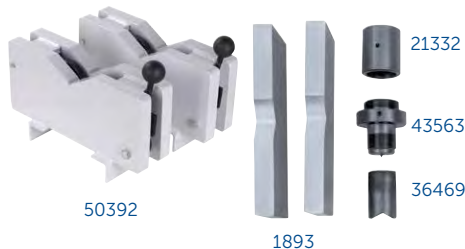
**1893 – V-blocks, 14" long (pr.)**

**21332 – Pushing adapter** (must be used with reducing adapter).

**36469 – V-pushing adapter** (must be used with reducing adapter).

**43563 – Reducing adapter** (for double-acting ram).

**43562 – Reducing adapter** (for single-acting ram, not pictured).



1880

## 17-1/2-Ton Press Accessory Set

- Adapters and accessories attach to ram's forcing screw or are used on press bed to support work.

Set includes:

**1123 – Bearing pulling attachment**

**201923 – Ram pushing adapter with a 1/2" dia. shank**

**210454 – Ram pushing adapter with a 3/4" dia. shank.**

**34806 – V-pushing adapter**

**1890 – V-blocks (pair)**



1881

## 25-Ton Press Accessory Set

- Adapters and accessories attach to ram's forcing screw or are used on press bed to support work.

Set includes:

**1124 – Bearing pulling attachment**

**34510 – Ram pushing adapter with 3/4" dia. shank**

**34511 – Ram pushing adapter with 1" dia. shank**

**34807 – V-pushing adapter**

**1891 – 11-1/2" long V-blocks (pr.)**

**28229 – Ram forcing cap**

**38953 – Threaded adapter**



1882

## 55-Ton Press Accessory Set

- Accessories attach to ram's forcing screw or support work on press bed.

Set includes:

**1126 – Bearing pulling attachment**

**34755 – Ram pushing adapter with 1" dia. shank**

**34756 – Ram pushing adapter with 1-1/4" dia. shank**

**34808 – V-pushing adapter**

**1892 – 14" long V-blocks (pr.)**

**28230 – Ram forcing cap**

**37368 – Threaded adapter – for single acting only**

**38954 – For 1872 double acting press**



### Universal Outside Thread Chaser

Damaged bolt or nut threads can be an annoying, costly problem—unless you have one of our thread chasers. It will quickly restore threads to near original condition without the use of expensive thread-cutting equipment.

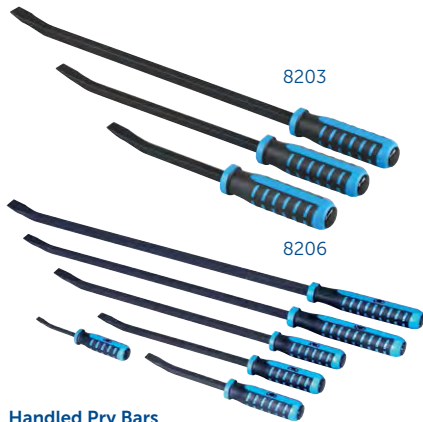
- Replaceable V-pads and dies.
- 1-1/4" to 5" O.D.

**7402 – Thread chaser with 6 dies:** threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.

**216884 – Standard die set.** Includes 6 dies, in the sizes listed above.

**202817 – Metric die set.** Includes three dies: 1 mm- 1.25 mm-1.5 mm-1.75 mm, 2 mm-2.5 mm-3.0 mm-3.5 mm; 4 mm pitch dies.

**206803 – V-pad.**



### Handled Pry Bars

Heavy-duty pry bar made of tempered square steel that you can hit without damaging the handle.

- Black chrome striking cap allows hitting the bar without damage to the handle.
- Ergonomic handle – dual durometer composite handle for user comfort; reduces hand fatigue.
- Polished tip with black oxide finish.
- Long-life finish resists rust and wear during use.
- OTC Lifetime Warranty.

**8203 – 3-piece handled pry bar set.** Includes 12", 18", and 24" sizes.

**8206 – 6-piece handled pry bar set.** Includes 8", 12", 18", 24", 32" and 36" sizes.

**8208 – 8" handled pry bar**

**8212 – 12" handled pry bar.**

**8218 – 18" handled pry bar.**

**8224 – 24" handled pry bar.**

**8232 – 32" handled pry bar.**

**8236 – 36" handled pry bar.**



### 6492

#### Engine Preluber Kit

- Ensures oil is present to internal engine components on the first start of a new or rebuilt engine, or after major engine work is performed.
- Required to prime the oil pump and fill the oil galleries and internal engine components with clean, new oil.
- Connects to engine oil system at the oil pressure sensor on a variety of domestic and import engines.
- Oil pressure sensor adapters included.



### 5086

#### 10-Ton Collision Repair Set

- Exert hydraulic force just where it's needed to lift, spread, bend, or straighten. Handles the high-force jobs you face daily in trailer maintenance or other applications.
- Includes reliable components including 10-ton, 10-1/8" stroke hydraulic ram; air/hydraulic pumping unit; hydraulic hose; four snap-together extension tubes; extension tube coupling; serrated saddle; flat base; 90° wedge head; flex head; storage case.
- All set components are covered by OTC Lifetime Marathon Warranty®.



### 1515B

#### 10-Ton Collision Repair Sets

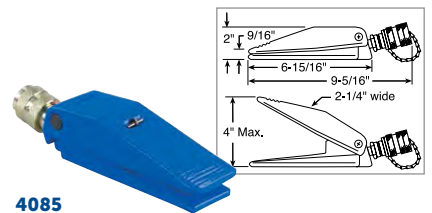
- Components snap together for quick setups to apply pushing, spreading, or pulling force.
- Components include: hydraulic pump, hose, and ram; ram flat base; extension tubes (4); 1/2-ton spreader; tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case has wheels for mobility.
- Single speed hydraulic hand pump and ram with 6" stroke.



### 4020

#### Air/Hydraulic Pump

- Ideal all-around power source develops 10,000 PSI at 100 PSI air.
- Two-stage release mechanism; internal relief valve.
- 98 cu. inches of usable oil.
- Covered by OTC Lifetime Marathon Warranty®.



### 4085

#### 1-ton Capacity Hydraulic Spreader

This hydraulic spreader is rated at a full 1-ton capacity at 10,000 PSI and that's enough for a wide variety of jobs. Working in tight spots is no problem—it needs only a 9/16" clearance to engage the jaws. With a big 4" spread, it's ready for a variety of applications: straightening work, removing dents and creases from sheet metal, or as a clamp. The device's spring-return jaws are made of high-strength alloy steel. It can be dead-ended at 4" spread under full load. Ideally suited to work with No. 4012 hand pump (not included).

### 4180

#### Power Twin Ram and Pump Set

- Center-hole feature permits extending adjusting screws, cables, puller screws, etc., straight through the ram.
- This spring return unit is compact and lightweight.
- Ideal for jobs having restricted working space.
- Set includes 4120 17-1/2 ton, 2" stroke single-acting hydraulic ram; 4002 pump; 9650 gauge; 24815 tee; 9767 hose; and 9798 hose half coupler.



### Pumps and Rams

**9110B – 10-Ton Ram with 6" stroke.** Use with the snap-together components of OTC Stinger's collision repair sets, or with most similar competitive products.

**9107B – Single Speed Hydraulic Pump.** Ideal for single acting rams. Developing up to 10,000 psi operating pressure, the pumps operate horizontally or vertically in the "head down" position. Finger tip control provides instant release or pumping action. Has a built-in safety overload valve.



5286

## Portable Diesel Particulate Filter Cleaner

The Diesel Particulate Filter (DPF) Cleaner was designed with shop service in mind. Its portability allows the unit to be placed as close to the vehicle as possible and to be stored wherever needed in the service facility. The advent of the 2010 Tier 4 cleaning requirements created the need for a lighter, more portable cleaning system which can be taken into the field to clean filters at the point of service.

### Diesel Particulate Filter features

- Lightweight and Highly Portable - ideal cleaning system for use in the shop or on a service truck.
- Flexibility - clean DPF's from 6" to 15.5" in diameter using shop or compressed air of at least 100 PSI and 20 CFM sustained airflow.
- Fully Automated Operation - once started, the cleaning process can be completed with minimal operator oversight, freeing up the technician to simultaneously do other work in the shop.
- Focused Air Jet Technology™ - concentrates a precise high pressure stream of air directly into every cell.
- Easy Maintenance - contains no internal filters that require user maintenance.
- Rugged design provides maximum durability.
- Operates on 12-24 volt DC, or 110-220 Volt AC.

### Efficiency by the Numbers\*

- Cleans up to 20% more efficiently than traditional pulse based systems.
- Cleans up to 5% more efficiently than other more expensive "air knife" systems.

\*Based on third party OE test data using Pin-gauge measurement.

### Unique floating puck prevents "splash back"

- Features Focused Air Jet Technology™ with a unique floating puck that prevents splash back.
- Includes three nozzles: two straight (short and long), for standard "open face" DPFs; and one curved for the angled-flange DPFs.
- Ensures quiet operation.

### Ash disposal System and Shield

- Innovative ash disposal system enables technician to quickly and easily remove and dispose of particulate matter in accordance with local environmental requirements.



5286 kit includes:

- Cleaning unit
- Three neoprene rings fit filters from 6 in. (165 mm) to 15.5 in. (400 mm) in diameter
- Wet / dry HEPA vacuum
- Short, long, and curved-flange filter nozzles
- Adjustment feet for standard and flanged filters
- Ash disposal kits
- AC and DC adapter cables

Accessories

**563197** (Set of 5) – Ash disposal system enables technician to quickly and easily remove and dispose of particulate matter in accordance with local environmental requirements.



Curved neck nozzle with floating puck for angled-flange DPFs.



Long nozzle with floating puck for standard open face DPFs.



Includes innovative shield to protect cleaning area from moisture.



CE

**5280**

**OTC 5280 Diesel Particulate Filter Cleaner**

The Diesel Particulate Filter (DPF) Cleaner was designed with shop service in mind. The cleaning process allows the DPF to be cleaned as part of a general maintenance schedule at the service location with minimal time away from the vehicle. It's portability allows the unit to be placed as close to the vehicle as possible and to be stored wherever needed in the service facility.

**DPF Cleaner Features**

- OE tested and Dealer recommended – By many major diesel engine manufacturers. Robust design – For long shop life. Can be used as part of a preventative maintenance program.
- High Pressure cleaning process for thorough cleaning of ash from DPF – produces 10 times the burst energy of competitive low pressure units.
- Initial Burst Quick check – To identify filters too plugged for proper cleaning.
- Movable with locking wheels – For placement throughout the shop.
- Computer Controlled Process Based on OE Requirements – for "Start to End" cleaning without constant technician monitoring.
- Containment of hazardous ash – For easy disposal.
- HEPA Filter Air Exhaust System – To exceed environmental air standards for shop.
- Operates on standard 115V outlet.
- Proven to clean to over 92% efficiency. (3)

(3) Third-party OEM test results using pin gauge measurement with approved OTC adapters and burst cycles. Actual results may vary.

DPF Cleaner Includes:

OTC Diesel Particulate Filter (DPF) Cleaner

- 535936** – Small Cone
- 543887** – Medium Cone
- 543885** – Large Cone
- 553913** – CAT Adapters
- 553915** – Cummins Adapters



**Upgrade kits for other OEM's are sold separately:**

- 556889** – Detroit Diesel upgrade kit
- 553990** – UD TRUCK (with Hino Engine) upgrade kit
- 553991** – Isuzu upgrade kit
- 553993** – Volvo/Mack upgrade kit
- 558181** – Navistar upgrade kit\*
- \* Requires use of 5281 DPF Thermal Processing Unit.
- 554654** – Includes all upgrade kit shown above.
- 558569** – 12" HEPA filter
- 558571** – 30" air filter cartridge

**5281**

**OTC DPF Thermal Processing Unit**

The 5281 DPF Thermal Processing Unit is a device which will thermally regenerate a DPF unit at a controlled, pre-programmed rate. Sometimes, the DPF cannot be regenerated on the truck due to a failure with the vehicle's own regeneration system, or in the case of retrofit applications, a lack of an on-vehicle regeneration system. Thermal regeneration of DPFs is used in conjunction with the OTC 5286 DPF Cleaner.

Designed to facilitate the cleaning of dirty filters – especially those with high amounts of wet soot, and unburned hydrocarbons.

- Pre-programmed thermal profile controls temperature 'ramp up' and 'cool down' to protect the DPF from thermal shock, reducing the risk of cracking the DPF.
- Holds temperature constant for two hours to ensure complete regeneration of filter.
- Includes both standard cycle and "pre-treat" cycle for oil-soaked filters.
- Built-in electronic safety lock prevents unauthorized opening of the door when temperatures exceed 200 degrees F.
- Large chamber accommodates various DPF sizes and shapes. Front access door allows for easy access to the thermal chamber.
- 220VAC / 60Hz / Single phase / 50 Amp.
- 1-year warranty.
- CE, UL201, UL499.
- Internal chamber dimension: 24" (L) x 24" (W) x 26" (H).



Electronic safety lock.



**J-47399  
Horizontal DPF Handler**

- The Universal mounting assembly adjusts front to back and side to side for easy DPF handling
- The height range of 6-1/2" to 29-1/2" is ideal for most of today's trucks
- Safety strap holds the load securely while moving about the shop

Specifications:

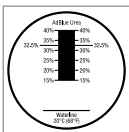
Overall Length: 34-1/2"  
Overall Width: 19-3/8"  
Max. Height: 29-3/4"  
Min. Height: 7-1/2"  
Side tilt: 30°, Front tilt: 15°, Back tilt: 15°

# GENISYS EVO® HD STANDARD HEAVY DUTY TOOLS & EQUIPMENT

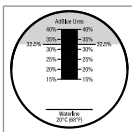


## 5025 OTC DEF Refractometer

Kit includes: Refractometer, dropper, lens wipe cloth, instructions and quick guide, screwdriver and case.



The scale without any liquid on the prism.



The scale with liquid on the prism. The reading is taken at the point the shadow line crosses the scale.

## 5025 DEF Refractometer SCR and EPA 2010

**EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.**

- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This Includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.
- SCR-equipped engines require the periodic addition of Diesel Exhaust Fluid (DEF, a urea solution) to enable the process. DEF is available in a bottle from most truck stops, and some have installed bulk DEF dispensers near the Diesel Fuel pumps. However, to ensure the proper operation of the SCR system, operators must ensure the DEF in their vehicle consists of a 32.5% Urea / Water solution.
- The OTC 5025 makes this a simple and quick process for an operator or technician.

### Application:

The refractometer is a portable, precision, optical instrument used for measuring the Diesel Exhaust Fluid (DEF) concentration. When a liquid sample is placed on the prism, the light passing through it is bent. The more concentrated the liquid, the more the light will bend. The refractometer contains a reticle, or scale, that is enlarged through the eyepiece to measure this light. The values on the scale have been established to evaluate the DEF condition.

### Scale:

- 0.5% line graduations
- 32.5% Indicated
- Scale 15-40%
- Waterline & 20 Deg C



## 3095 Digital DEF Tester SCR and EPA 2010

**EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.**

- Ensure the proper operation of Class 7-8 trucks utilizing the SCR system with accurate Diesel Exhaust Fluid solution displayed on screen.
- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This Includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.
- SCR-equipped engines require the periodic addition of Diesel Exhaust Fluid (DEF, a urea solution) to enable the process. DEF is available in a bottle at most truck stops, and some have installed bulk DEF dispensers near the Diesel Fuel pumps. However, to ensure the proper operation of the SCR system, operators must ensure the DEF in their vehicle consists of a 32.5% Urea / Water solution.
- The OTC 3095 makes this a simple and quick process for an operator or technician.
- Features:
  - Digital Display
  - Displays % UREA
  - Displays washer fluid freeze point



## 3421-79 Genisys Heavy-Duty Starter Kit

Genisys Heavy-Duty Standard software includes J1587/1708 and J1939 CAN communications.

Kit includes 9-pin Deutsch cable, 6-pin Deutsch cable, Smart Card, and PC software CD.

NOTE: System 4.0. 4GB card minimum required to install; see No. 3421-138.



## 3895-07 Genisys Touch Heavy-Duty Standard

OTC Genisys Touch HD supports two Society of Automotive Engineers (SAE) standards for the heavy-duty industry, J1587 / J1708 and J1930 CAN. Features Class 4 - Class 8 truck coverage, View and clear diagnostic trouble codes and live vehicle data.

Heavy-Duty Standard Starter Kit. Includes 9-pin Deutsch cable, 6-pin Deutsch cable, and heavy-duty security card.



## 3874HD Genisys EVO® USA Deluxe with Heavy Duty Standard Kit

Includes Genisys EVO® featuring the NEW System 5.0 with Code-Assist™ experienced-based Confirmed Fixes™ from Identifix®, NEW USA 2012 Domestic / Asian with ABS and European 2011 software including Pathfinder, Repair-Trac®, Fast fixes™ information, Heavy-Duty Standard software with cables, InfoTech Component Information software, Automated System Test™, OBD II Smart Cable, USA Domestic OEM vehicle cables (for GM, Ford, Chrysler, Jeep, Saturn), manuals, and carrying case.

NOTE: OEM cables may be required for certain vehicle system functions. Additional OEM cables are available individually or in convenient kits - Asian OEM Cable Kit 3421-94, European OEM Cable Kit 3421-75 and ABS/Airbag OEM Cable Kit 3421-54. One time scan tool registration required.

# HEAVY-DUTY WIRELESS DIAGNOSTIC SYSTEM



## PC PROGRAM FOR HD STANDARD DIAGNOSTICS

- RP1210 compatible and will work with any RP1210 VCI.
- SAE J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage.
- Read and clear diagnostic trouble codes.
- Live vehicle data of HD Standard Engine parameters.
- Vehicle data communication and live data stream.
- Demo mode permits operation without vehicle connection.
- On-screen definitions of diagnostic trouble codes.
- PC & CD user's manual.
- Customizable line graphs .
- Automatic recording of data.
- Print screen data or save reports to print later.
- Ez-Tap Kits Available.

### 3070 HD Scan Software

- Stand-alone software.
- Works with any RP1210 interface (VCI).

### 3076 HD Scan with Ez-Tap

- In-shop wireless capability.
- Ez-Tap Wireless Vehicle Communication Interface (VCI) works with OEM diagnostic software.
- One wireless VCI for all your diagnostic software.
- Eliminate cables and cable replacement costs.



Ez-Tap 3076

### 3086 HD Scan with Ez-Tap Extended Range

- 300 ft. wireless range to scan trucks anywhere on facility grounds.
- Scan trucks and preform initial diagnosis before you bring them into the shop.
- One wireless VCI for all your diagnostic software.
- Eliminate cables and cable replacement costs.



Ez-Tap 3086

# HEAVY DUTY SCAN HEAVY DUTY TOOLS & EQUIPMENT



### 3075 Ez-Tap Wireless Diagnostic Hardware Kit

- The EZ Tap Diagnostic kit enables a Heavy-Duty facility to use their OEM software for direct diagnostic mode operation.
  - Kit includes: Ez-Tap wireless (non-locking) VCI, Ez-Base wireless adapter, Ez-Tap 9-pin to 6-pin adapter, USB cable and Ez-Tap CD.
- Note: OEM diagnostic software not included.



Ez-TAP Wireless VCI



Non-Locking



3075-01  
9-pin non-locking



Locking

### 3075-02 9-pin locking

Note: For your PC to communicate with the Wireless Ez-TAP, you will need an OTC Ez-Base (3075-05) or OTC Ez-Base ER (3075-06).



3075-08  
Ez-TAP Adapter  
9-pin to 6-pin adapter cable.



### 3075-05 Ez-Base Wireless Adapter

The Ez-Base allows a PC or host computer to communicate with Ez-TAP using our AirBridge® 2 wireless technology.

- 100+ foot range.
- Built in indicator lights.
- Allows full wireless throughput for direct diagnostics.
- Allows a single PC to connect to any Ez-TAP in range.



### 3075-06 Ez-Base Extended Range Wireless

Ez-Base Extended Range allows even more range and flexibility for your truck yard or service environment.

- 300+ foot range with the included antenna.
- 1000+ foot range with optional remote mounted antenna. (3075-07) sold separately.
- Built-in Wireless signal strength indicator lights.
- Plus all the features of Ez-Base.

### Ez-TAP USB VCI



### 3075-03 9-pin non locking, 16 foot USB cable and Ez-TAP CD

Non-Locking



### 3075-04 9-pin locking, 16 foot USB cable and Ez-TAP CD

Locking



### 3940-HD Heavy Duty Digital Multimeter

OTC 550 Series Auto Ranging Multimeter

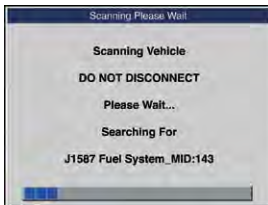
- Powerful professional grade test functions
  - Frequency
  - Duty Cycle
  - Diode & Continuity Tests

Mid-Range Amp Probe

- Non-intrusive AC/DC current measurement
- Measurement range of 2–600 amps AC/DC
  - Covers HD truck components and electric motors

Extended Length Test Leads

- 5 ft. test leads to provide improved reach
- Detachable probes allow use with amp probe



"Automatic Protocol Search"



### 3417 OTC Heavy-Duty Scan Tool

For Heavy-Duty shops that need a second tool in the shop and for their mobile repair trucks.

Product Features:

- Brilliant Color Display
- Class 4 – Class 8 truck coverage featuring "Automatic Protocol Search".
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more!
- Live vehicle data such as: Engine speed, Engine ECU temperature, Percent acceleration pedal position, Engine intercooler temperature, Engine coolant temperature, Battery volts, Alternator volts, Ambient air temperature, Air inlet temperature
- Read and clear diagnostic trouble codes.
- Global OBD II – All 9 Modes.
- English, Spanish, and French support
- Battery powered for off vehicle use.
- Trilingual Quick Start Guide included to help technicians get started fixing cars FAST.
- CD-based manuals in Spanish, French, and English.
- Customize data views in line graph, LED, or digital format with the push of a button.
- Three record modes – marker frame, freeze data history, and code triggered record.

3417 HD Scan Kit Includes: HD scan tool, 9-Pin deutsch cable, 6-Pin deutsch cable, OBD II cable, heavy duty cable, USB cable, ScanMate software operations manual, carrying case and 3-year warranty.



### 3418 OTC Heavy-Duty Code Reader

- Class 4 – 8 truck coverage.
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more for diagnostic trouble codes!
- Read and clear diagnostic trouble codes.
- Provides on screen DTC definitions for heavy-duty standard codes.
- Battery powered for off vehicle use.
- Internet update capable.

#### Applications:

Tow trucks, recreational vehicles, cement trucks, dump trucks, garbage trucks, buses, step vans, municipal vehicles, refrigerated trucks, and conventional trucks.  
Heavy-Duty Standard compliant construction, marine, agriculture, and industrial diesel power plant configurations!

#### 3418 HD Reader Kit Includes:

HD reader tool, 9-Pin deutsch cable, 6-Pin deutsch cable, operations manual, 3-year warranty, and soft nylon carrying case.



Menu



Fault



Summary



# HEAVY DUTY SCAN HEAVY DUTY TOOLS & EQUIPMENT



## SMARTER—EASIER—ESSENTIAL, THE RECOGNIZED STANDARD IN DIAGNOSTIC SCAN TOOLS.

Pro-Link iQ is designed to help diagnose engine, brake, and transmission failures. This easy-to-use, advanced tool is engineered to support today's commercial vehicles as well as the more complex vehicles of tomorrow. Using clear menus and message screens, the Pro-Link iQ guides technicians through the most complicated vehicle tests.

### 3110 Pro-Link® iQ

- Easy-to-use common user interface across all OEM applications
- Free trial period for all OEM software
- Software easily updated via the Internet
- Large capacity hard drive for future updates
- Light-weight and durable for the shop area
- 8.4" color screen for use in any light
- Touch screen for easy activation of on-screen tabs
- PC and printer connectivity via USB ports
- Can print to most USB printers
- Power from either the vehicle or internal battery for continuous use
- 2 USB ports
- 1 compact flash port
- Protective carrying case

### Available iQ Applications

- Generic
- HDS | Medium- and heavy-duty trucks
- OBD II | Light- and medium-duty trucks

### OEM

- Caterpillar | ACERT
- Detroit Diesel | DDEC III, IV, V
- International | Engine
- Allison | 1K and 2K, WTEC, CEC1
- WABCO | Air and hydraulic

3110 Pro-Link kit includes: PRO-LINK iQ scan tool, iQ Heavy-Duty Standard application, Power and data cable, 6-pin Deutsch adapter, 9-pin Deutsch adapter, 2-cell battery pack, CD manual/driver, Stylus pen and Carrying case.

### Optional Software, Cables & Accessories

<b>3110-01</b>	Pro-Link IQ software, ALLISON Suite
<b>3110-02</b>	Pro-Link IQ software, ALLISON GEN 4 Update
<b>3110-04</b>	Pro-Link IQ software, WABCO Suite
<b>3110-05</b>	Pro-Link IQ software, DDEC Suite (DDEC III, IV, V)
<b>3110-07</b>	Pro-Link IQ software, OBD II (AUTO)
<b>3110-08</b>	Pro-Link IQ software, Detroit Diesel Mercedes Benz
<b>3110-09</b>	Pro-Link IQ software, Heavy Duty J1939
<b>3110-10</b>	Pro-Link IQ Adapter, J1962 HD
<b>3110-11</b>	Pro-Link IQ Adapter, OBD II/J1962
<b>3110-12</b>	Pro-Link IQ Adapter, 6-pin
<b>3110-13</b>	Pro-Link IQ Adapter, 9-pin
<b>3110-14</b>	AC Adapter for Pro-Link IQ
<b>3110-15</b>	Pro-Link IQ software, CAT electronic engines
<b>3110-16</b>	Pro-Link IQ software, BENDIX ABS
<b>3110-17</b>	IQ LCD touchscreen protector
<b>3110-18</b>	Pro-Link IQ case with logo
<b>3110-19</b>	Pro-Link IQ DDEC VI kit with software
<b>3110-20</b>	Maxx Force
<b>3110-21</b>	Light and medium truck
<b>3110-23</b>	Pro-Link IQ International 2.0 software
<b>3110-24</b>	Pro-Link IQ International 2.0 upgrade software
<b>3110-25</b>	Pro-Link IQ Caterpillar ACERT 2.0 software
<b>3110-26</b>	Pro-Link IQ Caterpillar ACERT 2.0 upgrade software
<b>3110-27</b>	Pro-Link Brake Link V8.4.0.0 kit

### 3110-22 Pocket iQ™

The versatile Pocket iQ reports both engine and transmission functions—and it covers brakes, too.

Gather data quickly and easily. Smart and handy, compact and lightweight, the Pocket iQ puts data at your fingertips.

Pocket iQ key functions and features:

- Monitors all vehicle data
- Checks engine speed/load, pressures, temperatures, other data
- Reads and clears active and inactive fault codes
- Displays trip data
- Collects and stores vehicle data from multiple vehicles
- Stores vehicle data in PDF or text format
- Provides J1587 and J1939 data



### 3110-27 Brake-Link™

No more working under the trailer watching for blink codes. Brake-Link™ is the low-cost full-service ABS brake scan tool that:

- Connects to trailers and tractors utilizing the SAE J1587 communication protocol
- Includes a built-in PLC converter
- Comes with J560 (7-way) cable that allows direct connection to trailer without tractor
- Provides ABS coverage for a wide range of applications

Brake-Link™ ABS Coverage

Bendix EC-17, EC-30, EC-30T, EC (60) ABS 6, and TABS 6

Meritor WABCO Trailer Support

Wabash National MBS-1P and MBS-2

Eaton GEN4 and GEN5

Haldex PLC, PLC Plus, and PLC Select



### 3940-HD HD Digital Multimeter

OTC 550 Series Auto Ranging Multimeter

- Powerful professional grade test functions
  - Frequency
  - Duty Cycle
  - Diode & Continuity Tests

Mid-Range Amp Probe

- Non-intrusive AC/DC current measurement
- Measurement range of 2–600 amps AC/DC
  - Covers HD truck components and electric motors

Extended Length Test Leads

- 5 ft. test leads to provide improved reach
- Detachable probes allow use with amp prob



6522



## EVAP – LEAK DETECTION SYSTEM

- Vacuum Leak Testing
- Exhaust Leaks
- Crankcase Oil
- Cooling System Testing
- Wind and Water Leaks
- 1-Year Warranty

LeakTamer is the latest generation of leak detection systems, providing more smoke and better control. Solid-state circuitry improves reliability and ensures more consistent smoke output. A wide assortment of accessories make the LeakTamer versatile tools for quickly locating different kinds of leaks.

### LeakTamer Evap offers:

- Densest smoke in the industry.
- Newly redesigned smoke chamber and control system.
- More complete line of accessories.
- User refillable.
- Includes smoke producing solution for 500 tests.
- Non-toxic, non-corrosive smoke.

### Product Features:

- OEM approved technology
  - Contains STAR Technology; the ONLY OEM-Approved smoke technology anywhere in the world
- Large full range flow meter
  - Detects Microleaks™ down to and below 0.10
  - Flow-test components with full range of flow values
- Pinpoint leaks with Smoke and dye
  - UltraTraceUV® dye deposits at exact location of a leak
  - Finds leaks that smoke alone won't find
  - Introduce to an engine before disassembly to find internal leaks
  - It's the only OEM-Approved dye solution
- Variable Smoke Flow
  - Helps pinpoint smoke exiting a leak
  - Directional knob shows exact flow position
- Compact light weight design
  - More powerful diagnostics in smaller package
- Can be used with air or nitrogen
  - Use any inert gas for safer EVAP testing and shop air for all other tests

### 6522 EVAP – Leak Detection System

Includes: Leak Tamer unit, White/UV combination light with laser pointer, UV glasses, EVAP adapter tool, exhaust cone, cap plug adapters, removal tool, smoke producing solutions enough solution for 500 tests.

### Accessory / Replacement Parts

**6522-1** UltraTraceUV® (8 oz. / 236 ml) patented solution is the only Automaker-approved smoke-producing solution in the world. Contains a special dye that deposits at the exact location of a leak. Each bottle will perform approximately 300 tests. Part No. is for one bottle, two bottles included with 6522.



**6522-2** Inert Gas Pack Kit connects directly to fitting on back of LeakTamer 6522. Includes preset CO2 regulator with cylinder fitting, 20 oz. liquid CO2 cylinder, pressure gauge, universal push-on female coupler accommodates both automotive and industrial male fittings (Cylinder arrives empty) Performs approx. 25-50 full cycle EVAP tests per 20 liquid oz. cylinder.



**6522-3** Combination Light for easier smoke location and ultraviolet (UV) light, to highlight the fluorescent dye deposited at the exact location of a leak. Also has laser pointer. Includes batteries and glasses.



**6522-4** Standard Size Service Port Adapter.



**6522-5** Schrader® Removal/Installation Tool.



**6522-6** Cap Plugs Kit. Used for sealing some systems during leak testing.



**6522-7** Universal Fuel Neck Adapter fits the majority of vehicles. Allows access to fuel tank for evaporative system testing.



**6522-8** BMW and MINI Fuel Neck Adapter. Allows access to fuel tank for evaporative system testing.



**6522-9** Smoke Diffuser locates leaks around doors, windows, sunroofs, trunk compartment seals, EV vehicles' battery modules, or any closed system that can be pressurized from the inside and observe the smoke disturbance from the outside.



**6522-10** Cone Adapter (standard) for introducing smoke into induction or exhaust system. 1" x 3.5" & 6" long (25.4 mm x 89 mm x 152 mm).



**6522-11** Cone Adapter (Large) for introducing smoke into induction or exhaust system. 3.5" x 6" & 4.6" long (89 mm x 152 mm x 144 mm).



**6522-12** Replacement Dipstick (for 6522).



**6522-13** Replacement smoke supply hose and Delrin® Nozzle



**6522-14** Delrin® Nozzle



**6522-15** Flow meter red pointer flag. For easy viewing of flow meter measurements.



# DIESEL EMISSION TESTER HEAVY DUTY TOOLS & EQUIPMENT

## Smoke Check 1667 Diesel Emission Tester

In some states, failing the on-road emission test can result in a "must appear in court" citation, and up to an \$1,800 fine. Add the downtime, missed delivery, rescheduling, and the potential for lost business. More states are adopting emissions standards and testing programs.

This can cost time and money for local and interstate fleets.

- Fleets can determine immediately if the truck will pass state standards and interstate emission programs.
- Completely portable; all components in one case; there is no PC. One person can do the entire test. Windows-based, PC downloadable program transfers up to 100 stored tests.
- No warm-up time needed; perfect for random roadside testing or in your PM Service Program.
- The partial flow meter clips inside any smokestack; testing can be performed in any weather.
- Digital LCD screen walks you through each step; when testing is complete, a printout of results is produced for verification.
- This is the same meter used for enforcement in California, New York, Illinois, and the majority of states that test for diesel emissions compliance.
- Meets the latest SAE J1667 specifications.

### SPECIFICATIONS

Range.....	0-100%
Accuracy .....	+/-1.0% Light Source
	Green LED
Power .....	12 VDC battery (built-in)
Battery Life .....	40 hrs./charge
Warm-up Time .....	5 sec.
Response Time .....	0.01 sec.
Control Unit .....	14" x 10" x 8"
Maintenance .....	Clean lens w/cotton swab
Weight:	
Control Unit .....	15.5 lbs.
Sensor.....	3.5 lbs.

### ORDERING INFORMATION:

#### RM1020CPCL

Smoke Check 1667 diesel smoke opacity tester. Includes partial flow meter, base unit with hand-held display, built-in printer, ambient sensors, two battery chargers – one for vehicle or shop, 20 ft. cable, telescoping rod, spring clamp, neutral density filter, and sensor head case.

#### OPTIONAL ITEMS:

#### OTC3020CPCL

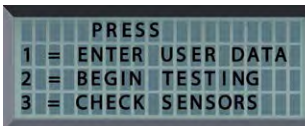
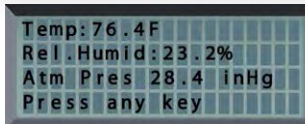
Standard meter listed above with OIL/RPM software and accessories. These options are required for state approval testing in New York and New Jersey.

#### OTCSH

Sensor head with quick detach release.



RM1020CPC



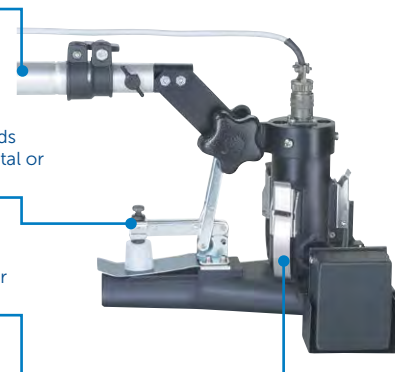
Scrolling instructions walk you through the entire testing procedure.

Aluminum rod telescopes from 3 ft. to 8 ft.; reaches all stacks.

Optional pinch clamp holds head securely, on horizontal or downward facing stacks.

Three-point detachment quickly releases the sensor head for easy cleaning.

One person can run the entire test, even in the wind, since the sensor measures smoke inside the stack.



## Sabre Heavy-Duty Battery & Electrical System Diagnostic Tester

- Heavy-duty for 24-volt battery and electrical systems.
- Diagnoses battery packs in series, parallel, or series/parallel.
- Tests AGM/gel-cell batteries.

HIGHEST CCA capacity ranges (50–4000 CCA – 24V).

LARGE DISPLAY for less scrolling, more detailed instructions. It's also backlit for all light conditions.

INDUSTRY FIRST amp-clamp connection ports for live amperage readings using optional external amp-clamp.

15 FT. Cable to perform tests from the cab of the vehicle.

FIELD UPDATEABLE to accommodate new battery types, system updates, feature additions.

### Battery Testing

- Tests the following battery pack configurations:
  - One battery (6V or 12V).
  - Two batteries in series (24V); 2, 3, or 4 batteries in parallel (12V).
  - Two banks in parallel, each bank having 2 batteries in series (24V).
- Uses pack configuration in algorithm design.
- Step-by-step user instructions for easy test completion.
- Tester-applied loads used on all pack combinations.

### Electrical System Testing

- 12V and 24V charging/starting system tests.
- 12V and 24V diode tests.
- Amp-clamps available (not included) for starting/charging and current draw tests.

### Product Features:

- Amp-Clamp Connection – allows current drain tests and starting/charging analysis.
- Tests Both FLA (flooded lead acid) and AGM (absorbed glass mat) battery types.
- Scales – CCA, CA, AHR, MCA, JIS, DIN
- User Definable – print header and footer.
- Removable Test Cables – easily field replaceable.
- PC Interface Port – allows for field updateable software.
- IR Compatible – allows optional infrared wireless printer.
- Readout Display – backlit for low light conditions, easy to view data in direct sunlight (4 x 20 character display).
- Security Cable Connection – protects against stolen or dropped units.
- Over-molded Surround with Soft-touch Keys – ruggedly built, easy to use, even with gloves.

### 3167-HD – Sabre HD deluxe kit

Includes 24-volt heavy-duty battery tester, 15' test leads, instruction manual, molded-plastic carrying case.

### 3168-HD – Sabre HD deluxe kit with printer

Same as No. 3167-HD above, but also includes an infrared wireless printer.

Accessories:

### 3172-15 – 15' lead set

### 3169 – Infrared wireless printer



3168-HD



### 3181

#### 130-Amp Heavy-Duty Battery Load Tester

Applying an industry-leading 130-amp load, this ergonomically designed, heavy-duty battery tester provides accurate, reliable test results in just 10 seconds. It includes uniquely designed clamps for a positive grip on top- and side-post batteries and an extra-large, easy-to-read display.

Product Features:

- 130-amp load capacity for accurate results.
- 0–16 volt range.
- Uniquely designed clamps for both top- and side-post batteries.
- Extra-large display with zero adjust.
- Works on both 6V and 12V batteries.
- Side tabs for on-tool clamp storage.
- Back brackets for tool storage on wall or toolbox.

34288



34788NI



### A/C Recovery & Recycling

**34288** – Combines simple operation with superior accuracy. It recovers, recycles, evacuates, leak tests, and recharges R-134A quickly and accurately. Meets SAE J-2788 standards for accuracy: 95% refrigerant recovery and charging to +/- 1/2 oz.

**34788NI** – Recover, recycle, evacuate, leak-test and recharge R-134a vehicle A/C systems. Features a larger graphical display, leak testing, automatic refrigerant refill and automated oil drain/inject – putting A/C lubricant back into the system. 34788NI boasts an ability to add a printer and refrigerant identifier. An optional refrigerant charge and oil capacities database is available for North American market vehicles.

Features:	34288	34788NI
Fully-Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves.		X
Automatic Oil Drain: A display reminds you to empty the graduated container to show the amount of oil to replace.	X	X
Oil Inject: Less than 1% cross-contamination.		X
Refrigerant & Oil Database: For North American market vehicles 1994 - 2007 (updates available mid-2008).		Optional
Visual & Audible Alarm: Notifies the user when service is complete, or if a problem has occurred.		X
Vacuum Leak Test: Monitors level after evacuation, informs of possible leak.	X	X
Automatic Air Purge: Eliminates damaging air without monitoring gauges or opening valves.	X	X
Automatic Refrigerant Refill: Maintains a user-selectable amount of refrigerant in an internal vessel and signals with it's time to change supply tank, no monitoring required.		X
Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	X	X
Display: Multilingual	X	X
Refrigerant Charging: Select a charge mode from high or low side.		X
Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	X	X

# A/C & COOLANT SERVICE HEAVY DUTY TOOLS & EQUIPMENT



**Recovers, Recycles, Evacuates, and Recharges R-12, R-134a, R-22, R-502, MP and HP Blends— and many more!**

**Design certified by UL to meet SAE J-1770.**

**One piece of equipment is all you need for A/C and refrigeration service. Also great for in-plant maintenance!**

## 17800B

### Multiple Refrigerant Recovery, Recycling, and Recharging Machine

The 17800B recovers, recycles, evacuates and recharges — all in one fast, continuous operation through one hook-up. It's ideal for refrigerated trailers, buses, RVs, and other vehicles that use more than one refrigerant. The Multi RRR machine is also great for fleet maintenance, covering a variety of makes and models since it has both R-12 and R-134a capabilities. In-plant maintenance departments will find it can handle the different types of refrigerants used in various systems.

### Proven technology simplifies service!

**Microprocessor** — Controls functions; prompts lead you through programming and also signal when it's time to change the filter-drier, vacuum pump oil, and compressor oil.

**Float Chamber** — Automatically adjusts from liquid to vapor for most efficient recovery.

**Electronic Scale** — Makes it simple to recharge to factory specifications; also weighs recovered refrigerant and provides tank overflow protection.

**CoolTech Vacuum Pump** — 6 CFM has the capacity to thoroughly evacuate the system, readying it for recharging.

**Versatility for many types of systems!**

**Lockout Panel** — Prevents mixing of refrigerants; rotates to one side for 1/4" fittings and to the other for 1/2" Acme fittings.

**Single-Pass Recycling** — Makes an initial pass through the filter-drier; additional recycling can be programmed in case of compressor burn-out, or other conditions.

**Heavy-Duty Filter-Drier** — Removes moisture and acid from the refrigerant; can handle up to 200 pounds between change-overs. Comes with two 50 pound tanks, one with 1/4" fittings and the other with 1/2" Acme fittings. Also three sets of charging hoses are included — one for R-12, one for automotive R-134a (with field service couplers), and one for other refrigerants using 1/4" SAE fittings.

### International Models

**17801B** — 220–240V 50 Hz, readout in kilograms

### Replacement Parts

**19776** — Recycling filter-drier

**17506** — 50 lb. (23 kg) refillable tank, 1/4" fittings

**34750** — 50 lb. (23 kg) refillable tank, 1/2" ACME fittings

### Specifications

Voltage	115V 60 Hz
Tanks	Two 50 lb. (23 kg) refillable
Operating Range	50° to 105° F (11° to 41° C)
Recovery Rate	Vapor — 1/2 lb/min. (.2 kg/min.) Liquid — 1 lb/min. (.4 kg/min.)
Recycling Rate	4 lbs/min. (1.8 kg/min.) flow rate
Recycling Filter-Drier	1150 g XH-9
Pump Free Air Displacement	6 cfm (142 l/m) at 50 Hz
Dimensions	47" H x 26" W x 30" D (119 cm x 66 cm x 77 cm)
Weight	256 lbs. (116 kg) without tank



19776



**Works on both pressurized and non-pressurized cooling systems.**

**Increase Your Profits**  
**Our 10-minute exchange process means no more waiting for the engine to warm up!**



75700

### Coolant Exchange Unit

Designed with the user in mind.

### Safety First

- Our "engine off" feature removes pulleys, belts, and fan blades from the safety equation.
- No additional ventilation required.
- Vacuum mode creates a "push/pull" exchange process allowing the technician to safely remove high pressure in a hot system.
- "Hands-off" transfer of used coolant to a bulk tank prevents spills and helps protect the technician.

### Simple to Operate

- Two clearly marked valves and an easy-to-read gauge make this machine very simple to use.
- Sight glass clearly shows the amount of coolant in the waste tank.
- One valve controls the flow of coolant; process is easy to understand—no special training needed.
- No electricity required. 90 psi shop air drives the exchange process, as well as the 2 gpm pump on the waste tank.

### Designed to Survive

- Impact-resistant polypropylene cabinet will not scratch or dent vehicle.
- Cabinet is impervious to chemicals commonly used in the shop.
- Large, inflatable tires carry a well-balanced platform easily across any shop floor.
- Easy to maneuver between bays and vehicles.

### Extra Design Features

- Two external new coolant supply tanks allow on-board storage of two different coolant types.
- Graduations on tanks show user the amount of new coolant on board.
- On-board storage of step adapters.
- Adapter kit included.
- No hoses to cut.
- 96" hoses can be neatly stored on unit.
- One-year warranty.

### Replacement Parts and Accessories

**75360** — Heavy-duty adapter kit. Links the two tanks for 14 gal. capacity to service class A vehicles. (Note: must have 7-gallon tank No. 75370).

**75370** — Replacement coolant 7-gallon tank

**17490** — Protect your investment with a heavy-duty vinyl dust cover.  
**Specifications**

Power Supply	— 90 psi shop air
Tanks	— Internal waste — 15-gallon capacity — External supply (2) 7-gallon capacity (removable)
Dimensions	47" H x 26" W x 33" D (119 cm x 66 cm x 84 cm)
Medium Step Adapter	Two included; fits hose size 1-1/4", 1-3/8", and 1-1/2"
Large Step Adapter	Two included; fits hose size 1-3/4", 2", and 2-1/4"



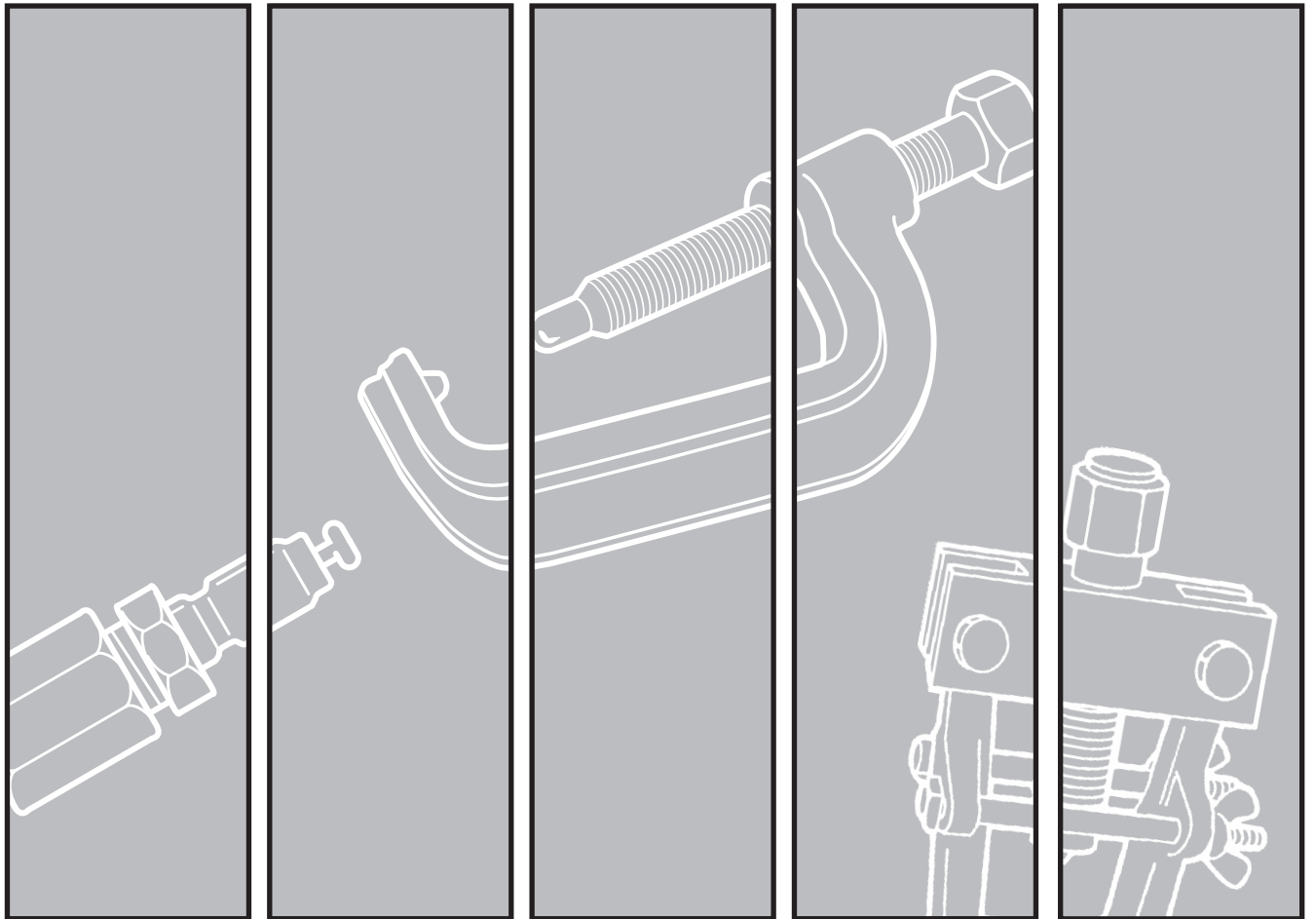
Back View: 7-gallon capacity supply tanks allow storage of different coolants.



75360

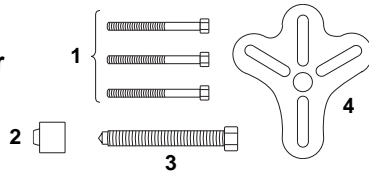


# MECHANICAL PARTS CATALOG



### No. 518

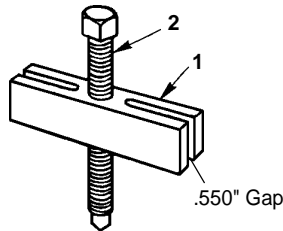
#### Flange-type Puller



Item No.	Service Part No.	Description
1	10059	Hex Hd. Cap Screw, $\frac{3}{8}$ -24 x 3" (3 reqd.)
1	10060	Hex Hd. Cap Screw, $\frac{3}{8}$ -16 x 3" (3 reqd.)
2	26342	Special Plug (shaft protector)
3	24833	Forcing Screw
4	512888	Puller Flange

### No. 522

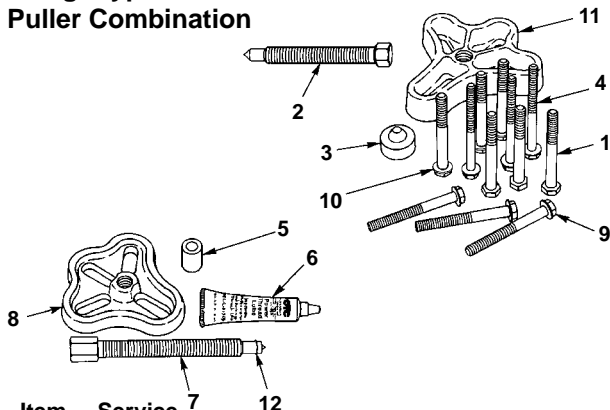
#### Gear & Pulley Puller



Item No.	Service Part No.	Description
1	22186	Cross Block, 8.25" Long
2	34703	Forcing Screw, $\frac{3}{4}$ -16 x 11.4"

### No. 525

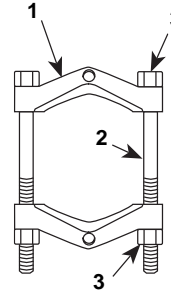
#### Flange-type Puller Combination



Item No.	Service Part No.	Description
1	10059	Hex Head Cap Screw, $\frac{3}{8}$ -24 x 3"
2	24833	Forcing Screw, $\frac{5}{8}$ -18 x 5"
3	26342	Special Plug (shaft protector)
4	209950	Flange Head Cap Screw, $\frac{3}{8}$ -16 x 3 $\frac{1}{2}$ "
5	209802	Collar
6	39448	Oil
7	304828	Forcing Screw, $\frac{7}{16}$ -20 x 5"
8	208170	Flange
9	209951	Flange Head Cap Screw, $\frac{5}{16}$ -18 x 3 $\frac{1}{2}$ "
10	209952	Flange Head Cap Screw, $\frac{5}{16}$ -24 x 3 $\frac{1}{2}$ "
11	32843	Puller Flange
12	209803	O-ring

### No. 679

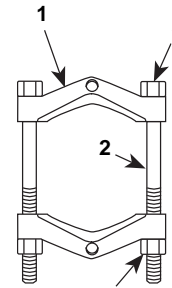
#### V-Belt Pulley Pulling Attachment



Item No.	Service Part No.	Description
1	26763	Block
2	26762	Stud, $\frac{1}{2}$ -20 x 7 $\frac{1}{2}$ "
3	10210	Hex Nut (4 reqd.)

### No. 680

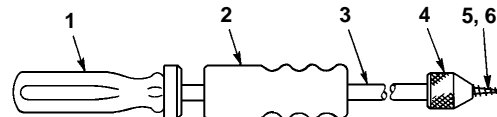
#### Pulley Pulling Attachment



Item No.	Service Part No.	Description
1	31385	Block
2	24828	Stud, $\frac{3}{4}$ -16 x 14"
3	10215	Hex Nut (4 reqd.)

### No. 898A

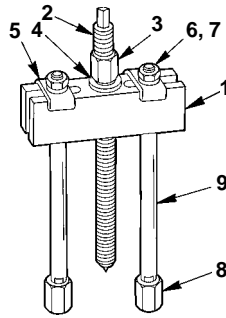
#### Body & Fender Dent Puller



Item No.	Service Part No.	Description
1	N4000	Plastic Handle
2	21949	Hammer
3	21951	Shank
4	21953	Retainer
5	10241	Lock Washer
6	11200	Screw

## No. 927

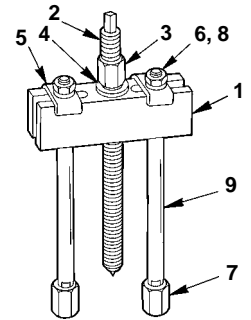
### 10-Ton Push Puller



Item No.	Service Part No.	Description
1	33483	Cross Block
2	24835	Forcing Screw
3	24836	Forcing Screw Nut
4	24837	Forcing Screw Washer
5	24838	Sliding Plate
6	24839	Leg Washer
7	10210	Leg Hex Nut
8	24827	Leg End
9	1100	6 <sup>3</sup> / <sub>4</sub> " Legs (pr.)
-	24840	6 <sup>3</sup> / <sub>4</sub> " Leg (1 only)
-	1101	15 <sup>3</sup> / <sub>4</sub> " Legs (pr.)
-	25934	15 <sup>3</sup> / <sub>4</sub> " Leg (1 only)
-	1102	11 <sup>3</sup> / <sub>4</sub> " Legs (pr.)
-	25935	11 <sup>3</sup> / <sub>4</sub> " Leg (1 only)
-	1103	4 <sup>3</sup> / <sub>4</sub> " Legs (pr.)
-	25936	4 <sup>3</sup> / <sub>4</sub> " Leg (1 only)
-	104819	Instruction Sheet

## No. 939

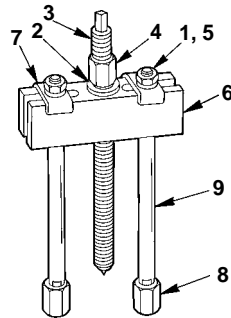
### 30-Ton Push Puller



Item No.	Service Part No.	Description
1	33038	Cross Block
2	303961	Forcing Screw
3	208586	Forcing Nut
4	208587	Thrust Washer
5	28353	Sliding Plate
6	24824	Leg Washer
7	28390	Leg End
8	10220	Leg Nut
9	1109	8" Legs (pr.)
-	32992	8" Leg (1 only)
-	1110	18" Legs (pr.)
-	32991	18" Leg (1 only)
-	1111	28" Legs (pr.)
-	32998	28" Leg (1 only)
-	104819	Instruction Sheet

## No. 938

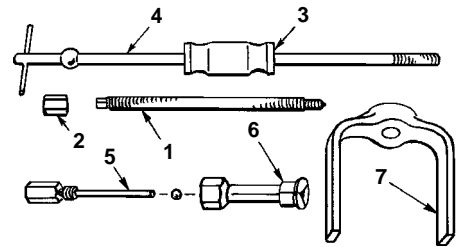
### 17<sup>1</sup>/<sub>2</sub>-Ton Push Puller



Item No.	Service Part No.	Description
1	24826	Leg Washer
2	24824	Thrust Washer
3	24822	Forcing Screw
4	19528	Forcing Screw Hex Nut
5	10215	Hex Nut
6	32127	Block
7	24825	Sliding Plate
8	24827	Leg Cap
-	1104	16 <sup>1</sup> / <sub>2</sub> " Legs (pr.)
-	32135	16 <sup>1</sup> / <sub>2</sub> " Leg (1 only)
-	1105	22 <sup>1</sup> / <sub>2</sub> " Legs (pr.)
-	32964	22 <sup>1</sup> / <sub>2</sub> " Leg (1 only)
9	1106	9 <sup>1</sup> / <sub>2</sub> " Legs (pr.)
-	32126	9 <sup>1</sup> / <sub>2</sub> " Leg (1 only)
-	1107	4 <sup>1</sup> / <sub>2</sub> " Legs (pr.)
-	32132	4 <sup>1</sup> / <sub>2</sub> " Leg (1 only)
-	1108	30" Legs (pr.)
-	32968	30" Leg (1 only)
-	104819	Instruction Sheet

## No. 981

### Blind Hole Puller Set

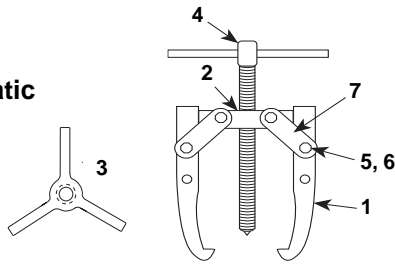


Item No.	Service Part No.	Description
1	24835	Forcing Screw
2	24836	Forcing Screw Nut
3	22185	2 <sup>1</sup> / <sub>2</sub> Lb. Hammer
4	208627	Shank and Tee Bar Assembly
5	28250	Actuator Pin, 1/8" Dia.
5	28253	Actuator Pin, 3/16" Dia.
5	28256	Actuator Pin, 1/2" Dia.
6	33856	Collet, 5/16"
6	33857	Collet, 3/8"
6	33858	Collet, 7/16"
6	33859	Collet, 1/2"
6	33860	Collet, 5/8"
6	33861	Collet, 3/4"
6	33862	Collet, 7/8"
6	33863	Collet, 1-1/4"
6	33864	Collet, 1 1/4-1 1/2"
6	33865	Collet, 1 1/2-1 3/4"
7	41331	Bridge
-	28323-GY8	Metal Storage Box
-	104994	Parts List



**No. 1020  
1021**

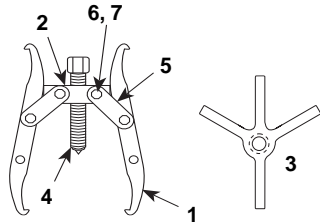
**1-Ton Grip-O-Matic  
Puller**



Item No.	Service Part No.	Description
1	21908	Jaw, 2 <sup>1</sup> / <sub>16</sub> " (1 only)
2	27592	2-Way Head (1020)
3	27475	3-Way Head (1021)
4	207029	Forcing Screw
5	21917	Hex Head Cap Screw
6	10197	Steel Hex Nut
7	27764	Strap

**No. 1022  
1023**

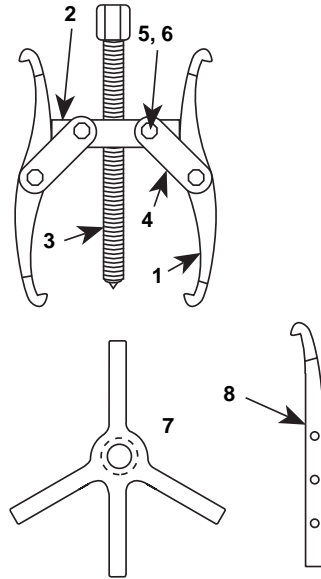
**2-Ton Grip-O-Matic  
Puller**



Item No.	Service Part No.	Description
1	43661	Jaw, 4 <sup>1</sup> / <sub>16</sub> " (1 only)
2	27476	2-Way Head (1022)
3	33423	2/3-Way Head (1023)
4	22006	Forcing Screw, 3/8-24 x 4 <sup>7</sup> / <sub>8</sub> "
5	22007	Strap
6	22008	Hex Head Cap Screw
7	10382	Hex Jam Nut

**No. 1035  
1036  
1037  
1038**

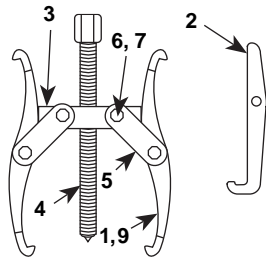
**7-Ton Grip-O-Matic Puller**



Item No.	Service Part No.	Description
1	44082	8 <sup>1</sup> / <sub>2</sub> " Reversible Jaw for 1035, 1037
2	27759	Forged Head for 1035, 1036
3	33398	Forcing Screw, 1 <sup>1</sup> / <sub>16</sub> -18 x 9"
4	22018	Strap
5	22016	Hex Head Cap Screw
6	10386	Hex Jam Nut
7	44993	2/3-Way Head for 1037, 1038
8	43892	10 <sup>1</sup> / <sub>4</sub> " Long Jaw for 1036, 1038

**No. 1024  
1025  
1026  
1027**

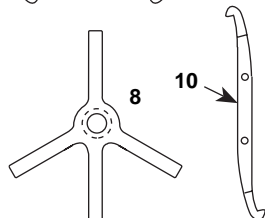
**5-Ton Grip-O-Matic  
Puller**



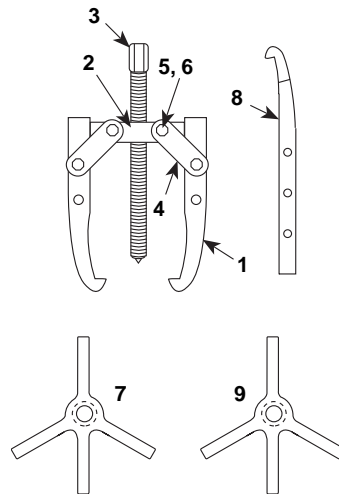
Item No.	Service Part No.	Description
1	44591	Reversible Jaw for 1024, 1026, 4 <sup>7</sup> / <sub>8</sub> " (1 only)
2	22023	Carrier Bearing Jaw for 1028, 4 <sup>7</sup> / <sub>8</sub> "
3	39959	Forged Head for 1024, 1025, 1028, 1031
4	33397	Forcing Screw, 9/16-20 x 6 <sup>3</sup> / <sub>4</sub> "
5	22025	Strap
6	22021	Hex Head Cap Screw
7	10384	Hex Jam Nut
8	39942	2/3-Way Head for 1026, 1027
9	26481	Carrier Bearing Jaw for 1031, 4 <sup>7</sup> / <sub>8</sub> " (1 only)
10	43940	Reversible Jaw for 1025, 1027, 6 <sup>1</sup> / <sub>2</sub> " (1 only)

**No. 1028  
1031**

**Differential Bearing  
Puller**



**No. 1039**  
**1040**  
**1041**  
**1042**  
**13-Ton Grip-O-Matic**  
**Puller**

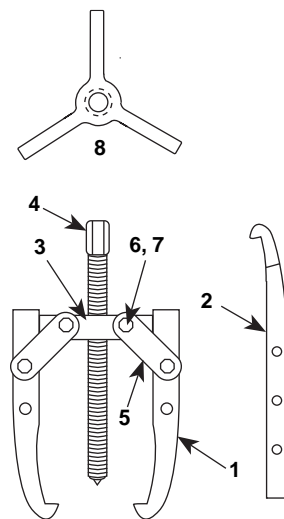


Item No.	Service Part No.	Description
1	43906	13" Jaw for 1039, 1041
2	33295	Forged Head for 1039, 1040
3	33399	Forcing Screw, $1\frac{3}{16}$ -16 x $12\frac{1}{2}$ "
4	22028	Strap
5	10388	Hex Jam Nut
6	22029	Hex Head Cap Screw
7	41195	2/3-Way Head for 1041, 1042
8	30902	Jaw, $17\frac{1}{8}$ " Long for 1040, 1042, 1060, 1061
9	41563	2/3-Way Head for 1060, 1061
-	34602	Pusher Adapter for 1060, 1061
-	4105	10-Ton Ram for 1061

**Note:** 1061 is 1060 with a 4105.

**No. 1060 §**  
**1061 §**  
**10-Ton Grip-O-Matic**  
**Puller**

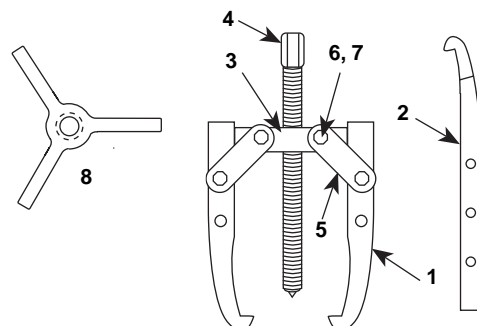
**No. 1043**  
**1044**  
**1045**  
**1046**  
**1064**  
**1065**  
**1066**  
**1067**  
**17½-Ton Grip-O-Matic**  
**Puller**



Item No.	Service Part No.	Description
1	30945	$17\frac{3}{4}$ " Jaw for 1043, 1045
2	30949	$21\frac{1}{2}$ " Long Jaw for 1044, 1046, 1064, 1066
3	33292	Forged Head for 1043, 1044
4	33290	Forcing Screw, 1-14 x $13\frac{3}{4}$ "
5	22034	Strap
6	22035	Hex Head Cap Screw
7	10392	Hex Jam Nut
8	41196	3-Way Head for 1045, 1046
-	41224	2-Way Head for 1064
-	41254	Hydraulic 3-Way Head for 1066

**Note:** 1065 consists of 1064 Puller, 24814 Adjusting Crank, 32118 Ram Adjusting Screw, 4120 17½-Ton Ram.  
 1067 consists of 1066 Puller, 24814 Adjusting Crank, 32118 Ram Adjusting Screw, 4120 17½-Ton Ram.

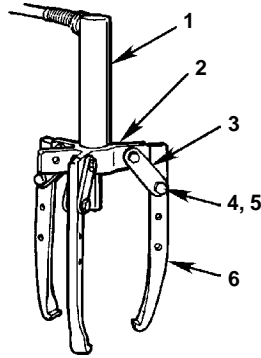
**No. 1047**  
**1048**  
**1049**  
**1050**  
**25-Ton Grip-O-Matic**  
**Puller**



Item No.	Service Part No.	Description
1	40303	$18\frac{3}{4}$ " Jaw for 1047, 1049
2	40305	$25\frac{1}{4}$ " Long Jaw for 1048, 1050
3	33433	Forged Head for 1047, 1048
4	33432	Forcing Screw, $1\frac{1}{4}$ -12 x $15\frac{15}{16}$ "
5	30966	Strap
6	22045	Hex Head Cap Screw
7	10394	Hex Jam Nut
8	41198	3-Way Head for 1049, 1050

**No. 1057 §**  
**1058 §**

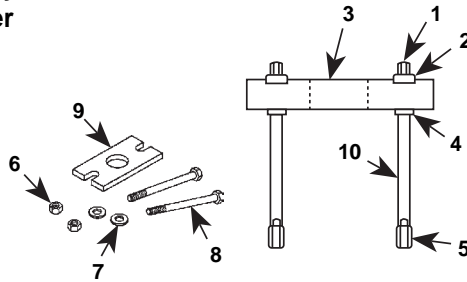
**5-Ton Hydraulic  
Grip-O-Matic Puller**



Item No.	Service Part No.	Description
1	420004	5-ton Ram Assembly for 1058
2	47997	2/3-Way Head
3	22018	Strap
4	22016	Hex Head Cap Screw
5	10386	Hex Jam Nut
6	43892	Long Jaw
-	309874	Pushing Adapter for 1058
-	309875	Pushing Adapter for 1058

**No. 1062**  
**1063**

**17 1/2-Ton Hydraulic  
Push-Puller**



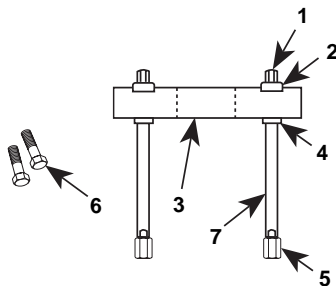
5	24827	Leg Cap
6	10201	5/16-18 Hex Nut
7	10257	Washer for 5/16" Bolt
8	214480	Cap Screw, 5/16-18 x 3 3/4"
9	308244	Plate
10	1104	16 1/2" Legs (pr.)
-	32135	16 1/2" Leg (1 only)
-	1105	22 1/2" Legs (pr.)
-	32964	22 1/2" Leg (1 only)
-	1106	9 1/2" Legs (pr.)
-	32126	9 1/2" Leg (1 only)
-	1107	4 1/2" Legs (pr.)
-	32132	4 1/2" Leg (1 only)
-	1108	30" Legs (pr.)
-	32968	30" Leg (1 only)

Item No.	Service Part No.	Description
1	10215	Hex Nut
2	24825	Sliding Plate
3	32127	Cross Block
4	24826	Leg Washer

**Note:** 1063 consists of 1062 Push-Puller, 24814 Adjusting Crank, 32118 Ram Adjusting Screw, 4120 17 1/2-Ton Ram.

**No. 1070**  
**1071**

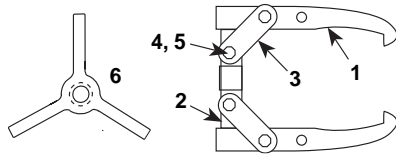
**30-Ton Hydraulic  
Push-Puller**



1	10220	Hex Nut
2	28353	Sliding Plate
3	33039	Cross Block
4	24824	Leg Washer
5	28390	Leg Cap
6	10070	Cap Screw, 7/16-20 x 2"
7	1110	18" Legs (pr.)
-	32991	18" Leg (1 only)
-	1111	28" Legs (pr.)
-	32998	28" Leg (1 only)
-	1109	8" Legs (pr.)
-	32992	8" Leg (1 only)

**Note:** 1071 consists of 1070 Push-Puller, 27198 Adjusting Crank, 34758 Ram Adjusting Screw, 4121 30-Ton Power Twin Ram and Coupler.

**No. 1072**  
**1073**  
**1074**  
**1075**



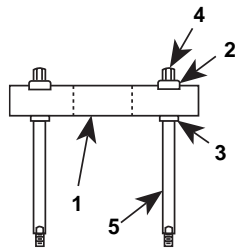
**30-Ton Hydraulic Grip-O-Matic Puller**

Item No.	Service Part No.	Description
1	40312	Jaw, 30 <sup>3</sup> / <sub>4</sub> " Long
2	41226	2-Way Head for 1072
3	30976	Strap
4	22052	Cap Screw
5	22053	Hex Nut
6	50462	3-Way Head for 1074

**Note:** 1073 consists of 1072 puller, 27198 Adjusting Crank, 34758 Ram Adjusting Screw, 4121 30-Ton Power Twin Ram and Coupler.  
 1075 consists of 1074 puller, 27198 Adjusting Crank, 34758 Ram Adjusting Screw, 4121 30-Ton Power Twin Ram and Coupler.

**No. 1076**  
**1077 §**

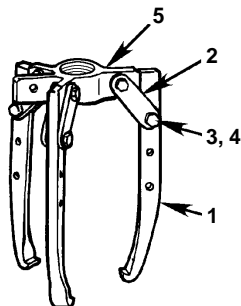
**50-Ton Hydraulic Push Puller**



Item No.	Service Part No.	Description
1	50503	Cross Block
2	33785	Upper Sliding Plate
3	28163	Leg Washer
4	10224	1 <sup>1</sup> / <sub>4</sub> " N.F. Hex Nut
5	1112	24" Legs (pr.)
-	33004	24" Leg (1 only)
-	1113	34" Legs (pr.)
-	33005	34" Leg (1 only)

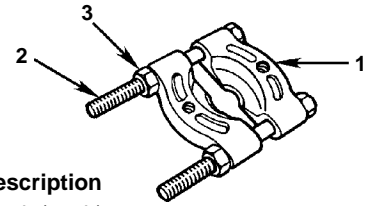
**Note:** 1077 includes 29595 Adjusting Crank, 32698 Ram Adjusting Screw, 4122 50-Ton Ram.

**No. 1080**  
**50-Ton Hydraulic Grip-O-Matic Puller**



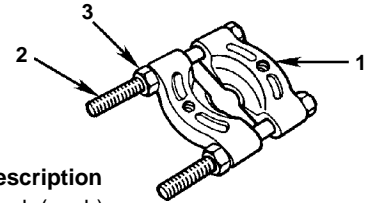
Item No.	Service Part No.	Description
1	30994	Jaw, 43" Long
2	30993	Strap
3	22089	Hex Head Cap Screw
4	10220	Hex Nut
5	50460	3-Way Head

**No. 1121**  
**Bearing Splitter**



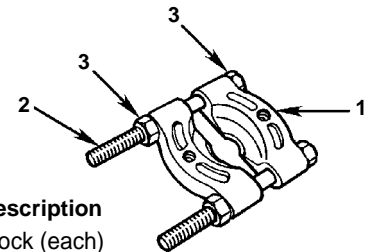
Item No.	Service Part No.	Description
1	26654	Block (each)
2	10042	Cap Screw, <sup>5</sup> / <sub>16</sub> -24 x 3"
3	10203	Hex Nut

**No. 1122**  
**Bearing Splitter**



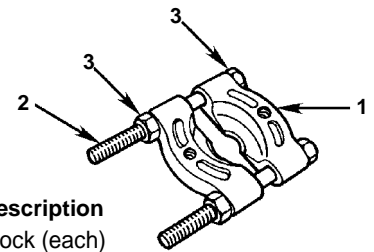
Item No.	Service Part No.	Description
1	26651	Block (each)
2	24831	Cap Screw, <sup>7</sup> / <sub>16</sub> -20 x 4 <sup>1</sup> / <sub>2</sub> "
3	10207	Hex Nut

**No. 1123**  
**Bearing Splitter**



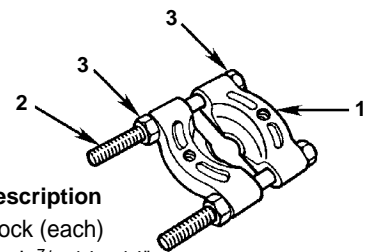
Item No.	Service Part No.	Description
1	32957	Block (each)
2	23333	Stud, <sup>5</sup> / <sub>8</sub> -18 x 8 <sup>1</sup> / <sub>2</sub> "
3	10213	Hex Nut (4 reqd.)

**No. 1124**  
**Bearing Splitter**



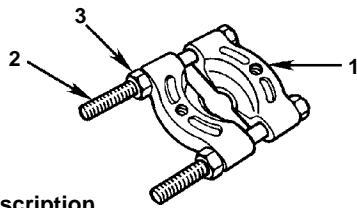
Item No.	Service Part No.	Description
1	32951	Block (each)
2	24829	9 <sup>1</sup> / <sub>2</sub> " Stud, <sup>3</sup> / <sub>4</sub> -16 x 10 <sup>7</sup> / <sub>8</sub> "
3	10215	Hex Nut (4 reqd.)

**No. 1126**  
**Bearing Splitter**



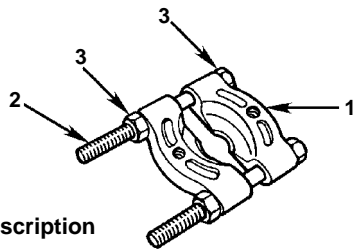
Item No.	Service Part No.	Description
1	33486	Block (each)
2	26639	Stud, <sup>7</sup> / <sub>8</sub> -14 x 14"
3	10218	Hex Nut (4 reqd.)

**No. 1127**  
**Bearing Splitter**



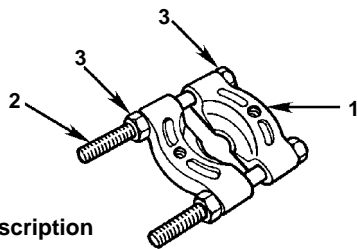
Item No.	Service Part No.	Description
1	32959	Block (each)
2	23757	Bolt, 1 1/8-12 x 20" Long
3	214550	Hex Nut (4 reqd.)

**No. 1128**  
**Bearing Splitter**



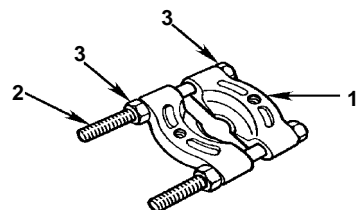
Item No.	Service Part No.	Description
1	50855	Block (each)
2	26640	Stud, 1 1/2-12 x 21"
3	10226	1 1/2" N.F. Hex Nut (4 reqd.)
-	30944	Pulling Tee

**No. 1129**  
**Bearing Splitter**



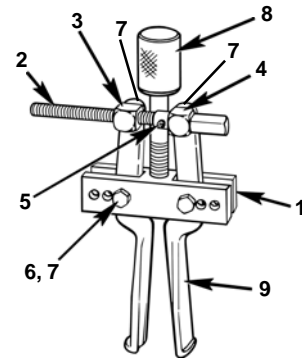
Item No.	Service Part No.	Description
1	32961	Block (each)
2	23329	Stud, 1 3/4-12 x 27 1/2"
3	23330	1 3/4" N.F. Hex Nut (4 reqd.)
-	31037	Pulling Tee

**No. 1130**  
**Bearing Splitter**



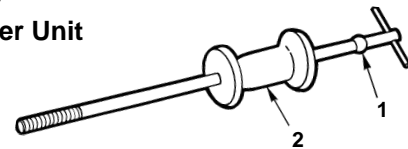
Item No.	Service Part No.	Description
1	32951	Block (each)
2	24828	13" Stud, 3/4-16 x 14 1/8"
3	10215	Hex Nut (4 reqd.)

**No. 1150**  
**1151**  
**1152**  
**1153**  
**1154**  
**Internal Pulling Attachment**



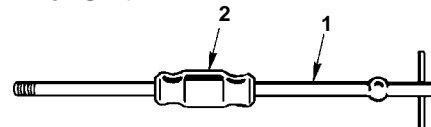
Item No.	Service Part No.	Description
1	33482	Slotted Block
2	24846	Adjusting Screw
3	24847	Tapped Swivel
4	24848	Plain Swivel
5	11560	Roll Pin
6	10054	Hex Head Cap Screw
7	10386	Hex Jam Nut
8	24850	1"-14 Reducing Adapter for 1150, 1151, 1153
8	24864	1"-8 Swivel Adapter for 1154
9	32136	Jaw, 5 1/2" Reach (1 only) for 1151
9	32137	Jaw, 4" Reach (1 only) for 1150, 1152, 1154
9	32139	Jaw, 2 1/4" Reach (1 only) for 1153

**No. 1155**  
**Slide Hammer Unit**



Item No.	Service Part No.	Description
1	208627	Shank and Tee Bar Assembly
2	34331	5 Lb. Hammer
-	104820	Parts List

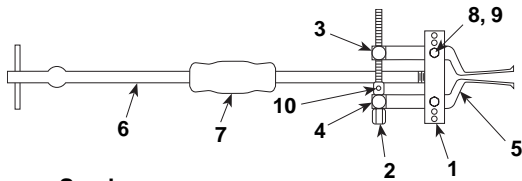
**No. 1156**  
**Slide Hammer Unit**



Item No.	Service Part No.	Description
1	208627	Shank and Tee Bar Assembly
2	22185	2 1/2 Lb. Hammer
-	104820	Parts List

**No. 1157  
1158**

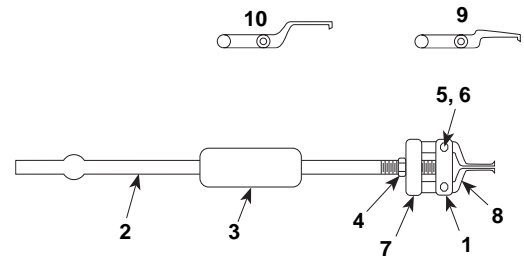
**Slide Hammer Puller  
with Cup Pulling Attachment**



Item No.	Service Part No.	Description
1	33482	Slotted Block
2	24846	Adjusting Screw, 1/4 x 6.345
3	24847	Tapped Swivel
4	24848	Plain Swivel
5	32137	4" Clearance Jaw
6	208627	Shank & Tee Bar Assembly
7	22185	2 1/2 Lb. Hammer for 1157
7	34331	5 Lb. Hammer for 1158
8	10054	Hex Head Cap Screw
9	10386	Hex Jam Nut
10	11560	Roll Pin
-	104820	Parts List

**No. 1170  
1171  
1172**

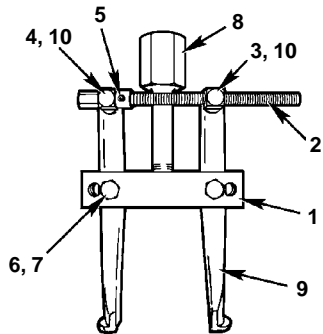
**Pilot Bearing Puller**



Item No.	Service Part No.	Description
1	27044	Cross Block
2	28382	Shank
3	28381	Hammer
4	10390	Adjusting Nut
5	10014	Hex Head Cap Screw
6	10382	Hex Jam Nut
7	201952	Adjusting Bar
8	29185	Jaw for 1170, 3/4" Reach
9	29189	Jaw for 1171, 1" Reach
10	29187	Jaw for 1172, 1 3/4" Reach

**No. 1165  
1166**

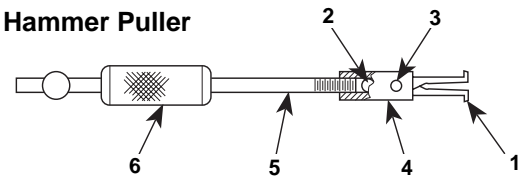
**Internal Pulling Attachment**



Item No.	Service Part No.	Description
1	33084	Slotted Block
2	33001	Adjusting Screw, 5/8 - 18 UNF-2A
3	27051	Tapped Swivel
4	27052	Plain Swivel
5	10896	Roll Pin
6	10105	Hex Head Cap Screw
7	10394	Hex Jam Nut
8	33578	Adapter, 1 1/2"-12, for 1165
8	38662	Adapter, 1 1/4"-7, for 1166
9	33083	Puller Jaw
10	10390	1/2" S.A.E. Jam Nut

**No. 1173  
1174**

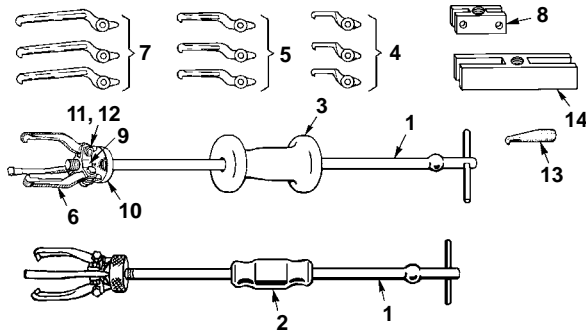
**Slide Hammer Puller**



Item No.	Service Part No.	Description
1	43372	Puller Jaw
2	14472	Ball
3	14473	Pin
4	37016	Body
5	28382	Shank for 1173
6	28381	Hammer for 1173

**No. 1176  
1177  
1178**

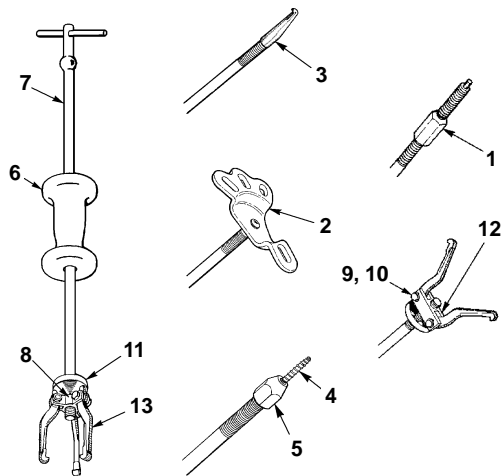
**Reversible Jaw Slide Hammer Puller**



Item No.	Service Part No.	Description
1	208627	Shank & Tee Bar Assembly
2	22185	2½ Lb. Hammer for 1176, 1178
3	34331	5 Lb. Hammer for 1177
4	32054	Pilot Brg. Jaw for 1178, 1¼" Reach
5	34698	Jaw, 2" Reach
6	44195	Jaw for 1178, 3" Reach
7	44148	Long Jaw for 1178, 5" Reach
8	27241	2-Way Cross Block Head
9	24544	3-Way Cross Block Head
10	24545	Adjusting Cone
11	22021	Hex Head Cap Screw
12	10384	Hex Jam Nut, 5/16-24
13	27315	Seal Hook for 1178
14	36578	Cross Block for 1178
-	104820	Parts List

**No. 1179**

**8-Way Slide Hammer**

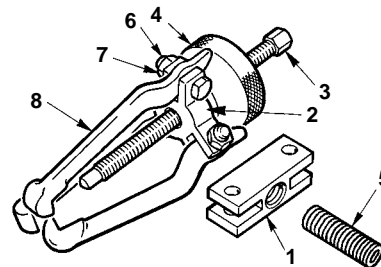


Item No.	Service Part No.	Description
1	205378	Grip Wrench Adapter
2	7372	Pulling Adapter
3	27315	Seal Hook
4	104427	Self-Tapping Screw
5	205399	Retainer
6	34331	5 Lb. Hammer
7	208627	Shank and Tee Bar Assembly
8	24544	3-Way Cross Head
9	10384	Hex Jam Nut, 5/16-24
10	22021	Hex Head Cap Screw, 5/16-24 x 1 1/8"
11	24545	Adjusting Cone
12	27241	2-Way Cross Block Head
13	34698	Puller Jaw
-	104820	Parts List

**No. 1182**

**1184**

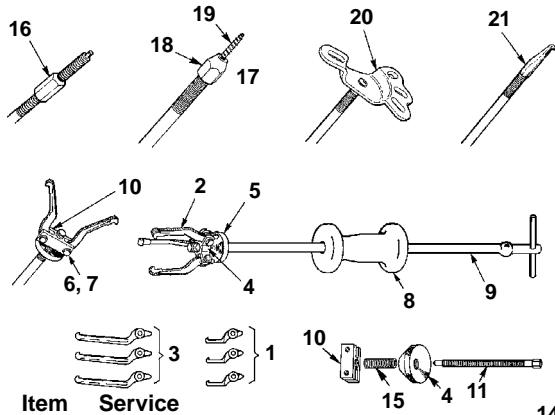
**Cone-Type Puller**



Item No.	Service Part No.	Description
1	27241	2-Way Cross Block Head
2	24544	Puller Head
3	309321	Forcing Screw, 7/16 - 20 x 6 1/2"
4	24545	Adjusting Cone
5	215895	Sleeve, 5/8 - 18
6	22021	Hex Head Cap Screw, 5/16-24 x 1 1/8"
7	10384	Hex Jam Nut, 5/16-24
8	44195	Jaw
-	44148	Jaw (1182 only)

## No. 1189

### 10-Way Slide Hammer Puller



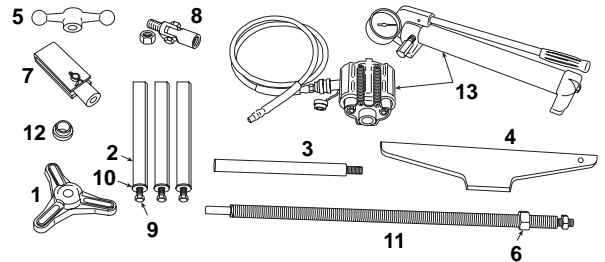
Item No.	Service Part No.	Description
1	32054	2 <sup>3</sup> / <sub>8</sub> " Jaw (each)
2	34698	3 <sup>3</sup> / <sub>4</sub> " Jaw (each)
3	44148	6 <sup>1</sup> / <sub>2</sub> " Jaw (each)
4	24544	3-Way Puller Head
5	24545	Adjusting Cone
6	10384	Hex Jam Nut, <sup>5</sup> / <sub>16</sub> -24
7	22021	Hex Head Cap Screw, <sup>5</sup> / <sub>16</sub> -24 x 1 <sup>1</sup> / <sub>8</sub> "
8	34331	5 Lb. Hammer
9	208627	Shank and Tee Bar Assembly
10	27241	Cross Block
11	309321	Forcing Screw, <sup>7</sup> / <sub>16</sub> -20 x 6.5"
12	47407	Puller Head
13	10394	Hex Jam Nut, <sup>5</sup> / <sub>8</sub> -18
14	24833	Forcing Screw, <sup>5</sup> / <sub>8</sub> -18 x 5"
15	215895	Sleeve
16	205378	Grip Wrench Adapter
17	205377	Dent Puller (consists of Nos. 18 & 19)
18	205399	Retainer
19	104427	Self-Tapping Screw, <sup>1</sup> / <sub>4</sub> " x 2"
20	7372	Puller Adapter
21	27315	Seal Hook
-	104820	Instruction Sheet

## No. 1201

## 1202

## 1203

### 17<sup>1</sup>/<sub>2</sub>-Ton Hydraulic Sleeve Puller

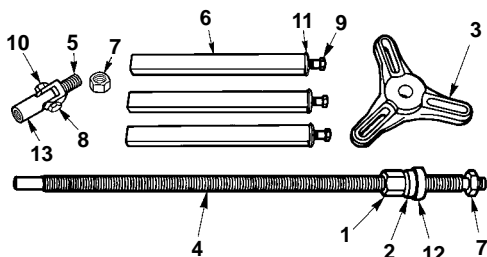


Item No.	Service Part No.	Description
1	37592	3-Way Head
2	27908	13" Riser Block (1 only)
3	33769	Screw Extension
4	41291	Installing Bar
5	302482	Speed Nut
6	10221	Hex Safety Nut
7	302340	Yoke Assembly for 1201
8	208675	Swivel Assembly
9	10088	Hex Head Cap Screw, <sup>1</sup> / <sub>2</sub> -13 x 2.00
10	10586	Flat Washer
11	32976	Pulling Screw
12	21714	Insert
13	4180	Hydraulic Pump/Ram Assy. for 1202
-	33768	Sleeve Installing Adapter
-	104856	Parts List

**Note:** 1201 consists only of 302340 Yoke Assembly, 33769 Screw Extension, 41291 Installing Bar, and 104856 Parts List.

## No. 1200

### Manual Sleeve Puller Remover

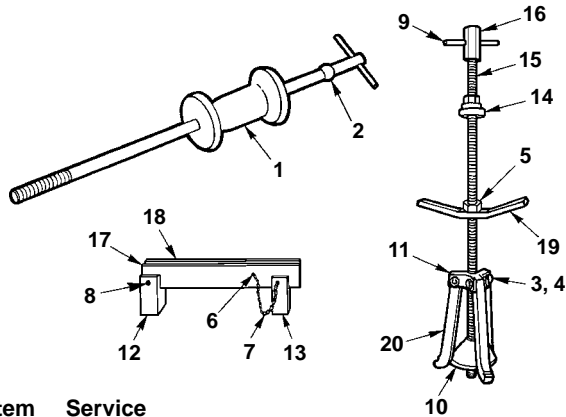


Item No.	Service Part No.	Description
1	22205	Hex Nut, 1"-8 UNC
2	24824	Thrust Washer (1.032)
3	37592	3-Way Head
4	32976	Forcing Screw
5	27914	Swivel
6	27908	13" Riser Block (each)
7	12121	Hex Nut, <sup>3</sup> / <sub>4</sub> -10 UNC
8	27912	Cap Screw, <sup>1</sup> / <sub>2</sub> -20
9	10088	Cap Screw, <sup>1</sup> / <sub>2</sub> -13
10	10390	Hex Jam Nut, <sup>1</sup> / <sub>2</sub> "
11	10586	Washer
12	11466	Thrust Bearing
13	33538	Swivel Adapter
-	104856	Parts List



## No. 1204 1205

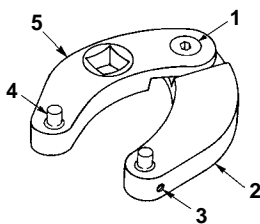
### Universal Wet-Type Sleeve Puller



Item No.	Service Part No.	Description
1	34331	5 Lb. Slide Hammer for 1205
2	208627	Shank and Tee Bar Assembly for 1205
3	22016	Hex Head Cap Screw
4	10386	Hex Jam Nut, $\frac{3}{8}$ -24
5	10395	Hex Jam Nut, $\frac{5}{8}$ -11
6	10576	Round Head Drive Screw
7	12092	Safety Chain
8	12096	Roll Pin, $\frac{1}{4}$ " Dia., 2" Long
9	14252	Roll Pin, $\frac{1}{4}$ " Dia., $3\frac{1}{2}$ " Long
10	28637	Cone
11	28638	3-Way Head
12	28698	Leg
13	28699	Leg
14	28700	Nut and Bearing Assembly
15	34126	Forcing Screw
16	34127	Adapter
17	34172	Plate
18	34173	Plate
19	34174	Locking Bar
20	41396	Jaw (1 only)
-	104842	Instruction Sheet

## No. 1266

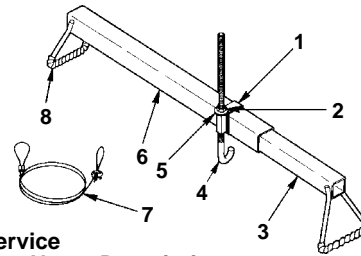
### Adjustable Gland Nut Wrench



Item No.	Service Part No.	Description
1	19660	Flat Head Socket Screw
2	38710	Arm
3	10133	Set Screw
4	204928	Pin
5	43437	Arm

## No. 1722

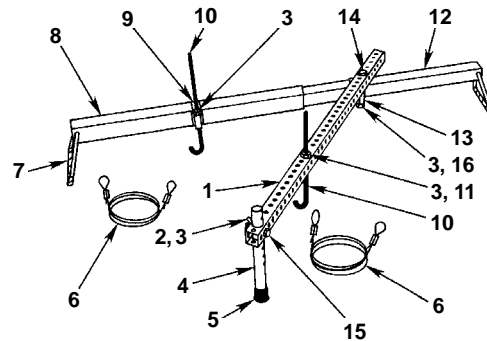
### 500 Lb. Capacity Transverse Engine Support Bar



Item No.	Service Part No.	Description
1	210188	Slide
2	10206	Steel UNC Hex Nut, $\frac{7}{16}$ -14
3	43587	Support Arm
4	39006	Hook
5	13339	Washer
6	45628	Support Arm
7	39009	Sling
8	211090	Sleeve Protector
-	102506	Parts List

## No. 1724

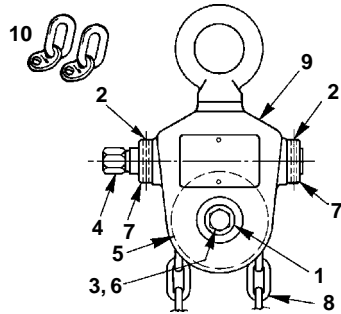
### 700 Lb. Capacity 3-Bar Engine Support



Item No.	Service Part No.	Description
1	308005	Pivot Support Arm
2	208608	Wing Nut
3	13339	Washer
4	308004	Pivot Support Leg
5	214067	Rubber Cap
6	39009	Cable
7	211090	Protective Sleeve
8	45628	Support Arm
9	210188	Slide
10	39006	Hook
11	10206	Hex Nut, $\frac{7}{16}$ -14
12	43587	Support Arm
13	214057	Slide
14	206050	Cap Screw, M10 x 1.5 x 110 mm
15	10057	Hex Head Cap Screw, $\frac{3}{8}$ -16 x 2"
16	19412	Hex Nut, M10 x 1.5
-	102506	Parts List
-	105194	Parts List

## No. 1805

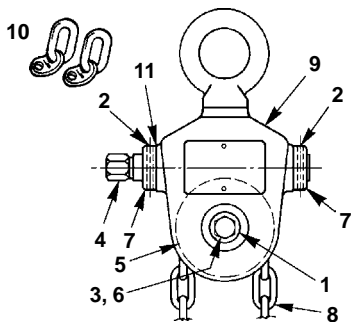
### 2,000 Lb. Capacity Load-Rotor® Positioning Sling



Item No.	Service Part No.	Description
1	10258	Washer
2	10973	Roll Pin
3	211185	Hex Head Cap Screw
4	23524	Worm
5	23525	Chain Block
6	211184	Pin
7	23728	Collar
8	31609	Chain Assembly
9	31627	Frame
10	24247	Lifting Bracket
-	102748	Parts List

## No. 1806

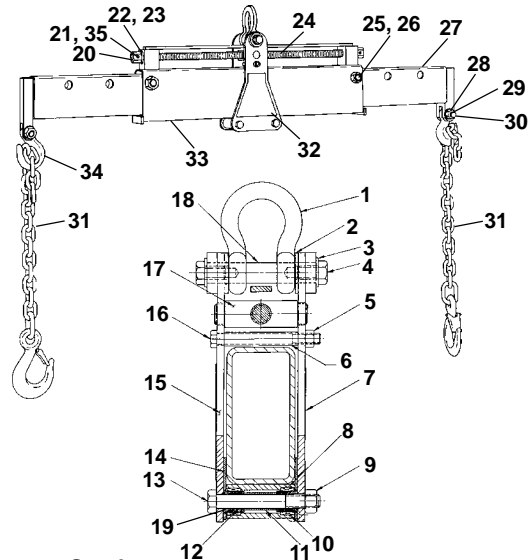
### 4,000 Lb. Capacity Load-Rotor® Positioning Sling



Item No.	Service Part No.	Description
1	13324	Washer
2	10973	Roll Pin
3	211187	Hex Head Cap Screw
4	31803	Worm
5	40569	Chain Block
6	211186	Pin
7	23728	Collar
8	31800	Chain Assembly
9	40568	Frame
10	24247	Lifting Bracket
11	214046	Shim Spacer
-	102748	Parts List

## No. 1812

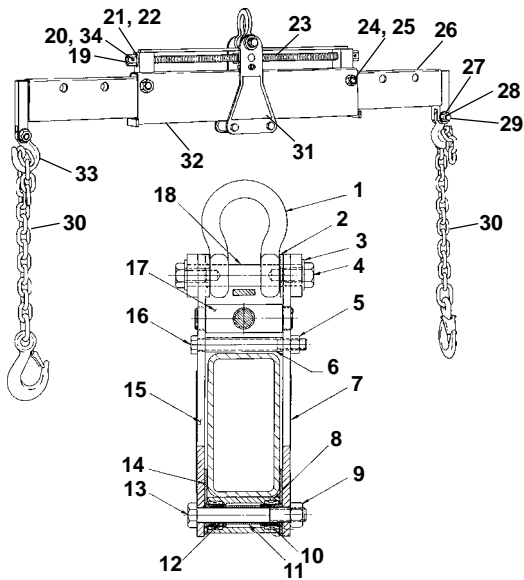
### 6,000 Lb. Capacity Load-Rotor® Load Leveler



Item No.	Service Part No.	Description
1	206679	Anchor Shackle
2	12330	Washer (for 3/4" bolt)
3	12004	Washer (for 1/2" bolt)
4	10075	Hex Hd. Cap Screw, 1/2-13 x 3/4" Lg.
5	10204	Hex Nut, 3/8-16
6	206678	Spacer
7	11281	Trade Name Decal
8	302240	Roller
9	15013	Locknut (1/2-13; torque to 25-30 ft. lbs.)
10	209692	Needle Bearing
11	206680	Spacer
12	206681	Inner Bearing Race
13	13894	Hex Hd. Cap Screw, 1/2-13 x 3/4" Lg.
14	302225	Wear Pad
15	44240	Side Plate
16	14493	Hex Hd. Cap Screw, 3/8-16 x 3/4" Lg.
17	302244	Screw Block
18	302242	Pin
19	10303	O-ring, 7/8 x 3/4 x 1/16
20	206675	Nut
21	10585	Roll Pin
22	206746	Thrust Bearing
23	16209	Thrust Washer
24	302241	Screw
25	16726	Hex Hd. Cap Screw, 3/4-10 x 3-1/4" Lg.
26	10216	Hex Nut (3/4-10)
27	44242	Inner Tube
28	13324	Washer (for 5/8" bolt)
29	10213	Hex Nut (5/8-18)
30	22045	Hex Hd. Cap Screw, 5/8-18 x 2-1/2" Lg.
31	302941	Chain & Safety Hook
32	302284	Warning Decal
33	51726-WH2	Main Tube
34	16051	Eye Grab Hook
35	10481	Roll Pin
-	216819	Made in USA Decal
-	304524	Capacity Decal
-	102424	Parts List and Operating Instructions

## No. 1822

### 10,000 Lb. Capacity Load-Rotor® Load Leveler

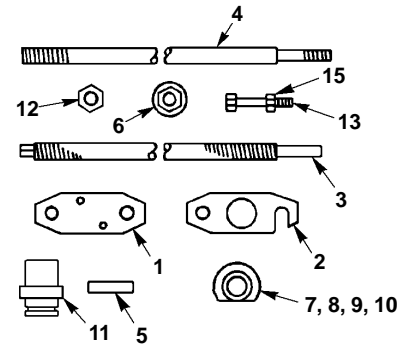


Item No.	Service Part No.	Description
1	208112	Anchor Shackle
2	208149	Spacer (for 3/4" bolt)
3	12004	Washer (for 1/2" bolt)
4	10075	Hex Hd. Cap Screw, 1/2-13 x 3/4" Lg.
5	207255	Hex Nut, 1/2-13
6	208110	Spacer
7	524674	Trade Name Decal
8	303452	Roller
9	12726	Locknut, 5/8-18; torque to 25-30 ft. lbs.
10	208087	Needle Bearing
11	208111	Spacer
12	208088	Inner Bearing Race
13	10465	Hex Hd. Cap Screw, 5/8-18 x 4 1/2" Lg.
14	303451	Wear Pad
15	52015	Side Plate
16	10094	Hex Hd. Cap Screw, 1/2-13 x 4 1/2" Lg.
17	44937	Screw Block
18	303450	Pin
19	206675	Nut
20	10585	Roll Pin
21	206746	Thrust Bearing
22	16209	Thrust Washer
23	303449	Screw
24	19340	Hex Hd. Cap Screw, 3/4-10 x 4" Lg.
25	10216	Hex Nut, 3/4-10
26	52013	Inner Tube (includes items 9, 10, 11, & 15)
27	13324	Washer (for 5/8" bolt)
28	10213	Hex Nut, 5/8-18
29	22045	Hex Hd. Cap Screw, 5/8-18 x 2 1/2" Lg.
30	302249	Chain & Safety Hook
31	303471	Warning Decal
32	61039-WH2	Main Tube
33	16051	Eye Grab Hook
34	10481	Roll Pin
—	304525	Capacity Decal
—	524675	Parts List/Operating Instructions

## No. 4240

### 4241

### 30-Ton King Pin / Brake Anchor Pin Pusher

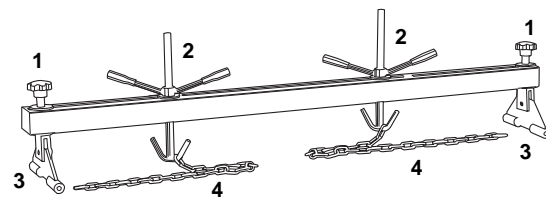


Item No.	Service Part No.	Description
1	43103	Ram Mounting Plate
2	43104	King Pin Pusher Head
3	34195	Forcing Screw
4	34193	Leg (2 reqd.)
5	28709	Pin
6	28714	Special Nut (2 reqd.)
7	34202	Bushing to 1"
8	34201	Bushing to 1 1/4"
9	34200	Bushing to 1 1/2"
10	34199	Bushng to 1 3/4"
11	29424	Anchor Pin Adapter
12	10220	Hex Nut, 1"-14 (3 reqd.)
13	10206	Hex Head Cap Screw, 7/16"-14 x 3"
15	12718	Full Hex Nut, 7/16-14
—	309962	Bushing, 1 1/4 x 3 1/2" Long
—	102488	Parts List

**Note:** 4240 also includes 25599 Hose Half Coupler, 36886 Hose Assembly, 4002 Hydraulic Hand Pump, 4121 Power Twin Ram.

## No. 4324

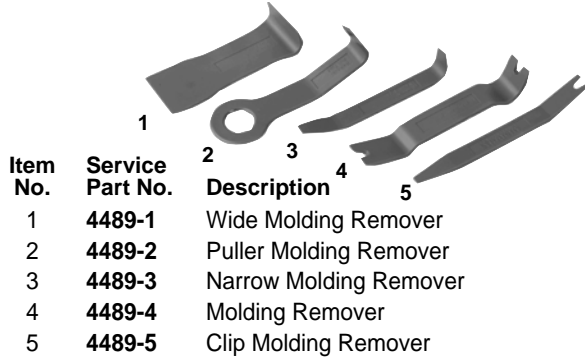
### Engine Support Bar



Item No.	Service Part No.	Description
1	517326	Knob with Washer
2	517329	Adjustable Hook Assembly
3	517327	Standing Bracket with Rubber Feet
4	517325	Chain
—	107339	Parts List

## No. 4489

### 5 Piece Interior Molding Remover



Item No.	Service Part No.	Description
1	4489-1	Wide Molding Remover
2	4489-2	Puller Molding Remover
3	4489-3	Narrow Molding Remover
4	4489-4	Molding Remover
5	4489-5	Clip Molding Remover

## No. 4492

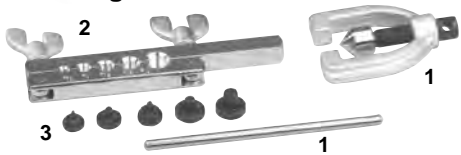
### 4 Piece E-Clip Tool



Item No.	Service Part No.	Description
1	4492-1	Handle
2	4492-2	Blade Replacement Set

## No. 4503

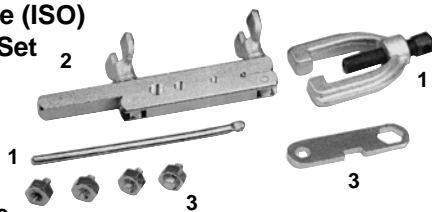
### Double Flaring Tool Set



Item No.	Service Part No.	Description
1	4503-1	Yoke/Screw Assembly (including handle)
2	4503-2	Flaring Bar Assembly
3	4503-3	Set of Five Adapters $\frac{3}{16}$ ", $\frac{1}{4}$ ", $\frac{5}{16}$ ", $\frac{3}{8}$ ", and $\frac{1}{2}$ "

## No. 4504

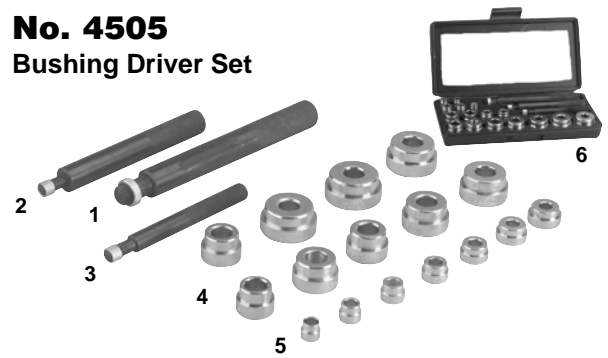
### Metric Bubble (ISO) Flaring Tool Set



Item No.	Service Part No.	Description
1	4503-1	Yoke/Screw Assembly (including handle)
2	4503-2	Flaring Bar Assembly
3	4503-3	Gauge/Wrench and Four Adapters 4.75 mm ( $\frac{3}{16}$ "), 6 mm, 8 mm, and 10 mm

## No. 4505

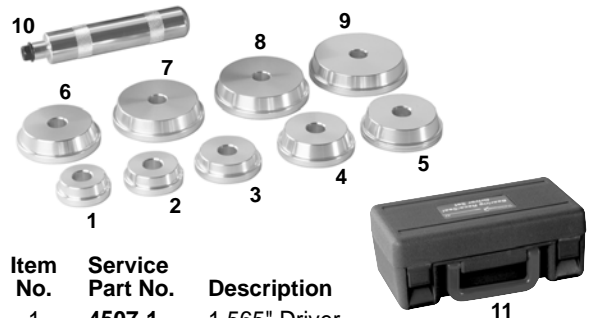
### Bushing Driver Set



Item No.	Service Part No.	Description
1	4505-1	Large Driver Handle with Nut
2	4505-2	Medium Driver Handle with Nut
3	4505-3	Small Driver Handle with Nut
4	4505-4	Nine Bushing Adapters $\frac{47}{64}$ " to $1\frac{3}{8}$ "; Use with 4505-1
5	4505-5	Seven Bushing Adapters $\frac{3}{8}$ " to $1\frac{3}{16}$ "; Use with 4505-2 or 4505-3
6	—	Carrying Case (Check for availability)

## No. 4507

### Bearing Race and Seal Driver



Item No.	Service Part No.	Description
1	4507-1	1.565" Driver
2	4507-2	1.750" Driver
3	4507-3	1.965" Driver
4	4507-4	2.325" Driver
5	4507-5	2.470" Driver
6	4507-6	2.555" Driver
7	4507-7	2.830" Driver
8	4507-8	2.995" Driver
9	4507-9	3.180" Driver
10	4507-10	Driver Handle with Bolt
11	—	Carrying Case (Check for availability)

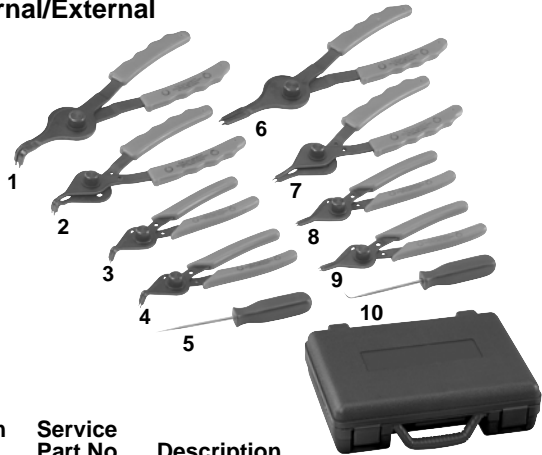
## No. 4508

### Seal Remover



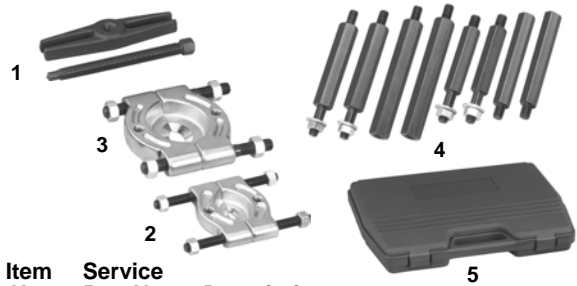
Item No.	Service Part No.	Description
1	4508-1	Blade

**No. 4512**  
**Snap Ring Pliers Set**  
**Internal/External**



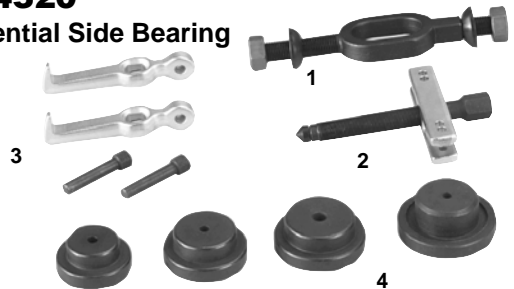
Item No.	Service Part No.	Description
1	4512-8	.038" Tip - 90° Pliers
2	4512-6	.047" Tip - 90° Pliers
3	4512-4	.070" Tip - 90° Pliers
4	4512-2	.090" Tip - 90° Pliers
5	4512-9	Straight Tip Pick
6	4512-7	.038" Tip - Straight Pliers
7	4512-5	.047" Tip - Straight Pliers
8	4512-3	.070" Tip - Straight Pliers
9	4512-1	.090" Tip - Straight Pliers
10	4512-10	90° Tip Pick
11	—	Carrying Case (Check for availability)

**No. 4518**  
**5-Ton Bar-Type Puller/Bearing Splitter Set**



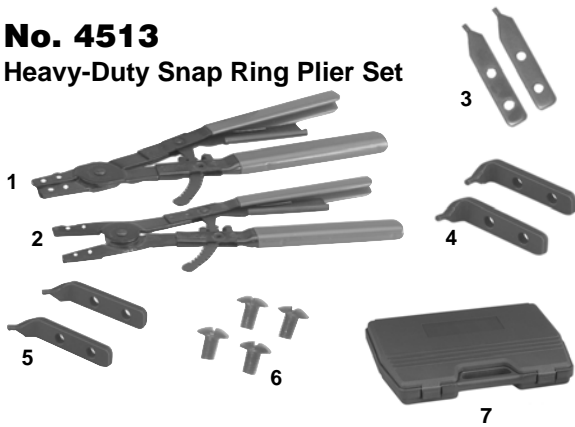
Item No.	Service Part No.	Description
1	4518-1	5" Pull Cross-bar/Forcing Screw, 6 <sup>1</sup> / <sub>2</sub> "
2	4518-3	Large Bearing Splitter
3	4518-2	Small Bearing Splitter
4	4518-4	Push-Puller Leg Set
5	—	Carrying Case (Check for availability)

**No. 4520**  
**Differential Side Bearing Puller**



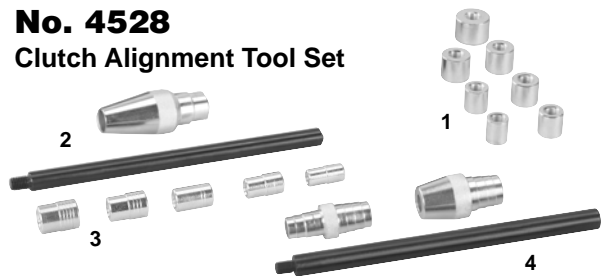
Item No.	Service Part No.	Description
1	4520-3	Puller Jaws Retaining Yoke
2	4520-1	Forcing Screw/Cross Block Assembly
3	4520-2	Puller Jaw/Pins (2)
4	4520-4	Puller Jaw Adapter Set <sup>15</sup> / <sub>16</sub> "– <sup>11</sup> / <sub>32</sub> " dia. <sup>11</sup> / <sub>8</sub> "– <sup>1</sup> / <sub>2</sub> " dia. <sup>11</sup> / <sub>4</sub> "– <sup>15</sup> / <sub>8</sub> " dia. <sup>11</sup> / <sub>8</sub> "– <sup>13</sup> / <sub>4</sub> " dia.

**No. 4513**  
**Heavy-Duty Snap Ring Plier Set**



Item No.	Service Part No.	Description
1	4513-1	Internal Pliers (3 <sup>1</sup> / <sub>16</sub> " to 6 <sup>1</sup> / <sub>4</sub> " snap rings)
2	4513-2	External Pliers (3 <sup>1</sup> / <sub>2</sub> " to 6 <sup>1</sup> / <sub>2</sub> " snap rings)
3	4513-3	Straight Tip, .12" (3 mm)
4	4415-4	45° Tip, .12" (3mm)
5	4415-5	90° Tip, .12" (3 mm)
6	4415-6	Four Tip Retaining Screws
7	—	Carrying Case (Check for availability)

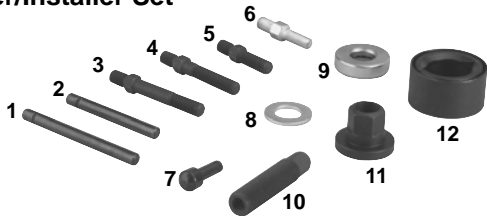
**No. 4528**  
**Clutch Alignment Tool Set**



Item No.	Service Part No.	Description
1	4528-1	7 SAE Pilot Adapters
2	4528-2	SAE Alignment Shaft with Aligner
3	4528-3	5 Metric Pilot Adapters
4	4528-4	Metric Alignment Shaft with 2 Aligners

## No. 4529

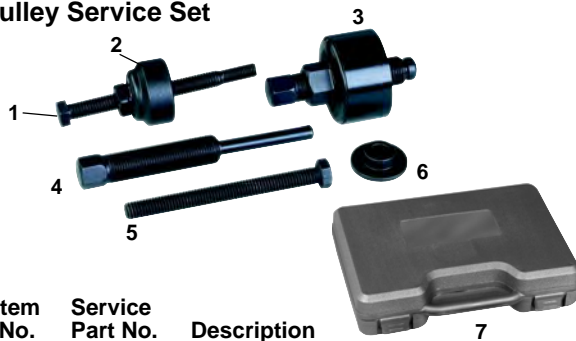
### Power Steering/Alternator Pulley Puller/Installer Set



Item No.	Service Part No.	Description
1	4529-7	Remover Pin (GM Quad 4 engines)
2	4529-8	Remover Pin (GM 3.1L, 3100, and 3400 V-6 Engines)
3	4529-9	Installer Screw (GM Quad 4 Engines)
4	4529-10	Installer Screw (GM 3.1L, 3100, 3400 V-6 Engines)
5	4529-11	Installer Screw (Used on Most Vehicles)
6	4529-12	Installer Screw (Ford Modular V-8 Engines)
7	4529-4	Remover Pin (Used on Most Vehicles)
8	4529-6	Washer (For Installing)
9	4529-5	Thrust Bearing (For Installing)
10	4529-3	Installer/Remover Forcing Screw
11	4529-1	Installer/Remover Nut
12	4529-2	Remover/Assembly, 2-piece Jaws and Sleeve

## No. 4530

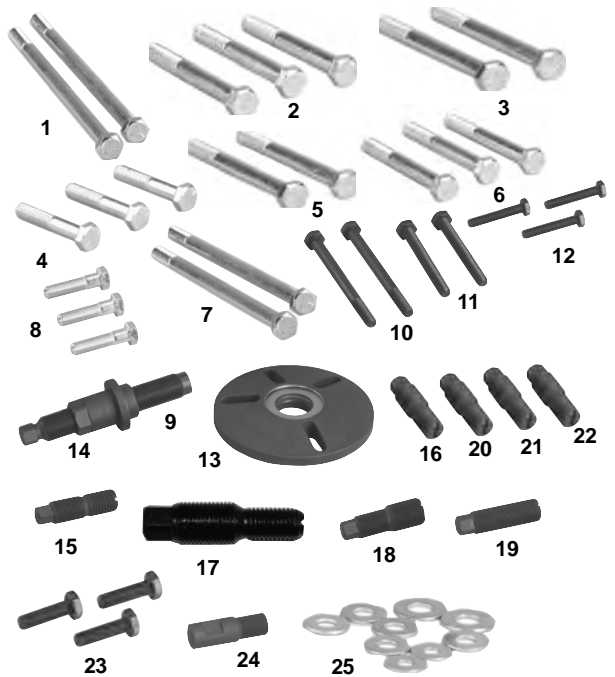
### Power Steering Pump Pulley Service Set



Item No.	Service Part No.	Description
1	312347	Forcing Screw, 8 mm x 1.25
2	312346	Special Nut
3	7185	Pump/Alternator Pulley Remover (Consists of: 208703 Sleeve, 304108 Collet Half, 304107 Nut, 27445 Forcing Screw Assembly)
4	7104	GM Pump Pulley Removal Screw (Consists of: 27445 Forcing Screw, 10378 Steel Ball, 310901 Long Nose Cone, and 10266 O-ring)
5	217946	Hex Head Cap Screw, 3/8 - 16 x 4"
6	7931	Chrysler Pump Pulley Spacer
7	—	Carrying Case (Check for availability)

## No. 4531

### Harmonic Balancer Puller/Installer Set



Item No.	Service Part No.	Description
1	4531-1	Cap Screw Set, 5/16 x 6
2	4531-2	Cap Screw Set, 5/16 x 3 1/2
3	4531-3	Cap Screw Set, 5/16 x 3
4	4531-4	Cap Screw Set, 3/8 x 1 1/2
5	4531-5	Cap Screw Set, 1/4 x 2 1/2
6	4531-6	Cap Screw Set, 3/8 x 3
7	4531-7	Cap Screw Set, 3/8 x 4 1/2
8	4531-8	Cap Screw Set, 3/8 x 2
9	4531-9	Puller Screw
10	4531-10	Cap Screw Set, M8 x 90
11	4531-11	Cap Screw Set, M8 x 65
12	4531-12	Cap Screw Set, M8 x 45
13	4531-13	Puller Flange
14	4531-14	Puller Body
15	4531-16	Adapter, M16 x 2.0
16	4531-17	Adapter, M14 x 1.5
17	4531-18	Adapter, M12 x 1.5
18	4531-19	3/4 Adapter
19	4531-20	5/8 Adapter
20	4531-21	9/16 Adapter
21	4531-22	1/2 Adapter
22	4531-23	7/16 Adapter
23	4531-24	Cap Screw Set, M10 x 35
24	4531-25	Centering Adapter
25	4531-26	Washer Set

**No. 4533**  
GM Strut Tool



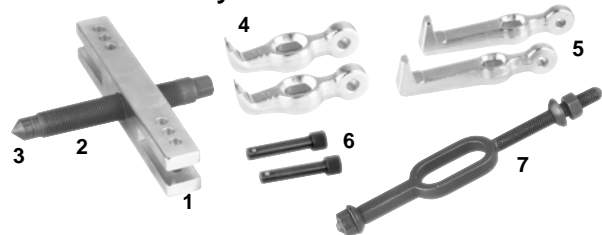
Item No.	Service Part No.	Description
1	4533-2	Handle Driver
2	4533-1	Socket

**No. 4534**  
Multipurpose Bearing & Pulley Puller Set



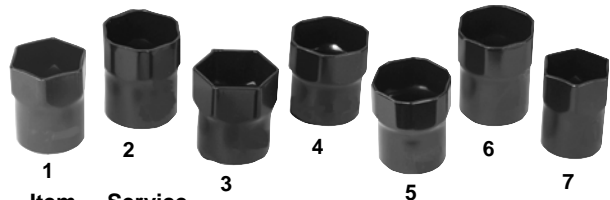
Item No.	Service Part No.	Description
1	4534-1	Puller Block (Small)
2	4534-2	2-piece Jaw Set (Medium)
3	4534-3	Forcing Screw (Long)
4	4534-4	Adjusting Yoke (Small)
5	4534-5	Washer and Bolt Set
6	—	Carrying Case (Check for availability)

**No. 4536**  
A/C Clutch Pulley Puller Set



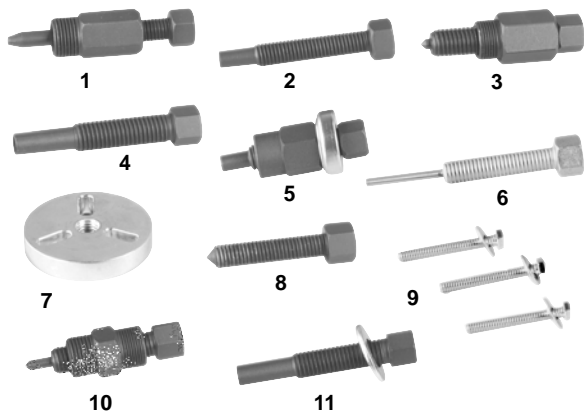
Item No.	Service Part No.	Description
1	4536-1	Puller Block
2	4536-2	Forcing Screw
3	4536-3	Live Center Tip
4	4536-4	2-piece Short Jaw Set
5	4536-5	2-piece Long Jaw Set
6	4526-6	2-piece Detent Pin
7	4536-7	Adjusting Yoke

**No. 4542**  
7-Piece Wheel/Bearing Locknut Socket Set



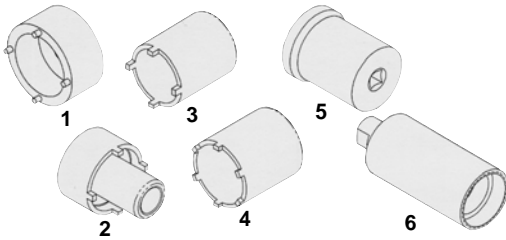
Item No.	Service Part No.	Description
1	519097-1	2 <sup>3</sup> / <sub>8</sub> " Hex Locknut Socket
2	519097-2	2 <sup>9</sup> / <sub>16</sub> " Round Hex Locknut Socket
3	519097-3	2 <sup>1</sup> / <sub>2</sub> " Hex Locknut Socket
4	519097-4	2 <sup>3</sup> / <sub>4</sub> " Round Hex Locknut Socket
5	519097-5	2 <sup>1</sup> / <sub>2</sub> " Round Hex Locknut Socket
6	519097-6	2 <sup>3</sup> / <sub>8</sub> " Round Hex Locknut Socket
7	519097-7	55 mm Locknut Socket

**No. 4535**  
A/C Clutch Hub Remover/Installer Set



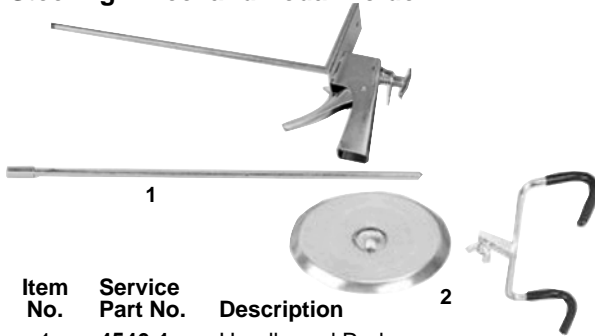
Item No.	Service Part No.	Description
1	4535-1	Nut and Forcing Screw Assembly
2	4535-2	Forcing Screw
3	4535-3	Nut/Forcing Screw Assembly
4	4535-4	Forcing Screw
5	4535-5	Nut/Forcing Screw/Bearing Assembly
6	4535-6	Forcing Screw
7	4535-7	Remover Plate
8	4537-8	Forcing Screw
9	4538-9	3-piece Screw/Washer Set
10	4535-10	Nut/Forcing Screw Assembly
11	4535-11	Forcing Screw Washer Assembly

**No. 4543**  
4-Wheel Drive Spindle Nut Socket Set



Item No.	Service Part No.	Description
1	4543-1	Toyota Locknut Socket
2	4543-2	Ford Locknut Socket
3	4543-3	Ford Locknut Socket
4	4543-4	GM Locknut Socket
5	4543-5	Ford Locknut Socket
6	4543-6	Spindle Remover Adapter

**No. 4546**  
Steering Wheel and Pedal Holder



Item No.	Service Part No.	Description
1	4546-1	Handle and Rod
2	4546-2	Steering Wheel and Pedal Holder

**No. 4547**  
Front Wheel Drive Axle Nut Socket Set



Item No.	Service Part No.	Description
1	4547-29	29 mm Socket
2	4547-30	30 mm Socket
3	4547-32	32 mm Socket
4	4547-34	34 mm Socket
5	4547-35	35 mm Socket
6	4547-36	36 mm Socket
7	4547-38	38 mm Socket

**No. 4549**  
Upholstery Tools



Item No.	Service Part No.	Description
1	4549-3	Large Panel Clip Tool
2	4549-2	Small Panel Clip Tool
3	4549-1	9" Door Clip Tool

**No. 4550**  
3-Piece Scraper Set



Item No.	Service Part No.	Description
1	4550-1	2" Straight Blade
2	4550-2	1 1/4" Straight Blade
3	4550-3	1 1/4" Bent Blade

**No. 4551**  
Small Door Panel and Upholstery Tools



Item No.	Service Part No.	Description
1	4551-1	U Panel Clip Tool
2	4551-2	V Panel Clip Tool

**No. 4552**  
Putty Knife

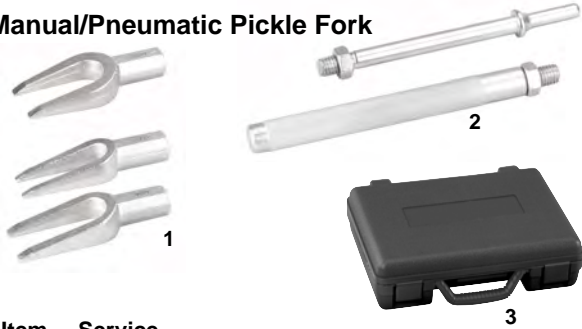


Item No.	Service Part No.	Description
1	4552-1	Large Putty Knife
2	4552-2	Medium Putty Knife
3	4552-3	Small Putty Knife



## No. 4559

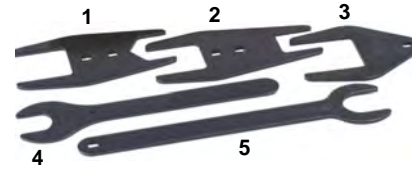
### Manual/Pneumatic Pickle Fork



Item No.	Service Part No.	Description
1	4559-1	Pickle Fork Replacement Set
2	4559-2	Pickle Fork Driver Set
3	—	Carrying Case (Check for availability)

## No. 4585

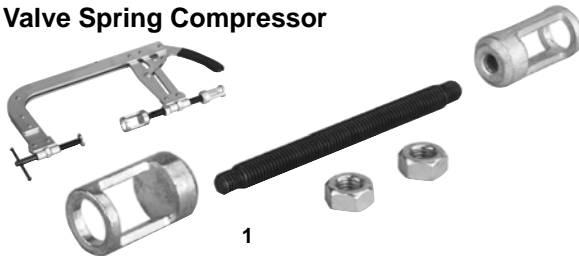
### Five-piece Fan Clutch Wrench



Item No.	Service Part No.	Description
1	4585-5	Holding, 76 mm (3") & 68 mm (2 <sup>11</sup> / <sub>16</sub> ") Wrench
2	4585-4	Turning Wrench, 40 mm (1 <sup>1</sup> / <sub>2</sub> " )
3	4585-3	Holding Wrench, 72 mm (2 <sup>13</sup> / <sub>16</sub> ") & 54 mm (2 <sup>1</sup> / <sub>8</sub> ")
4	4585-2	Holding Wrench, 83 mm (3 <sup>1</sup> / <sub>4</sub> ")
5	4585-1	Turning Wrench, 48 mm (1 <sup>7</sup> / <sub>16</sub> " )

## No. 4572

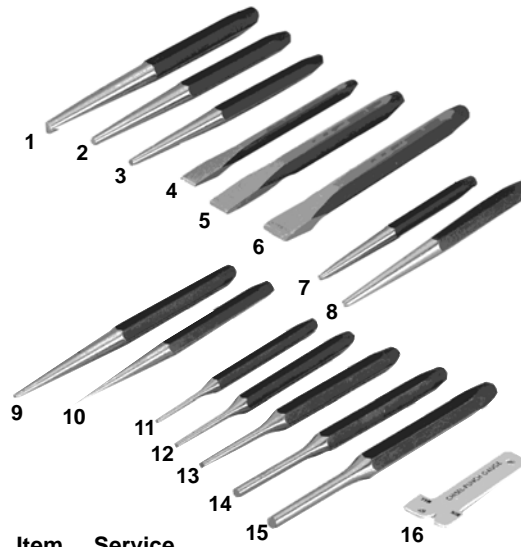
### Valve Spring Compressor



Item No.	Service Part No.	Description
1	4572-1	Valve Spring Adapters, Screw, and Nuts

## No. 4600

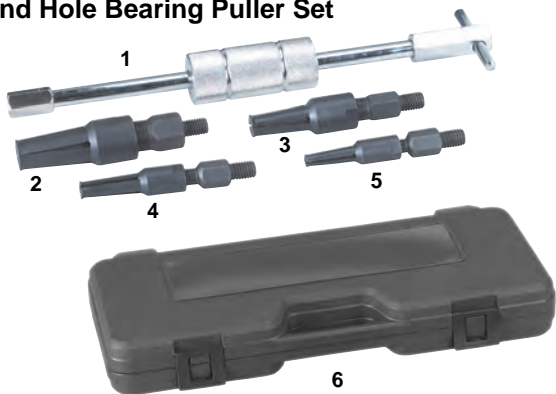
### 16 Piece Punch and Chisel Set



Item No.	Service Part No.	Description
1	4600-15	Taper Punch, 1/4 x 6 <sup>3</sup> / <sub>4</sub>
2	4600-14	Taper Punch, 3/16 x 6 <sup>1</sup> / <sub>4</sub>
3	4600-13	Taper Punch, 5/32 x 6
4	4600-3	Cold Chisel, 3/8 x 5 <sup>1</sup> / <sub>2</sub>
5	4600-2	Cold Chisel, 1/2 x 6
6	4600-1	Cold Chisel, 5/8 x 6 <sup>1</sup> / <sub>2</sub>
7	4600-4	Center Punch, 3/16 x 8
8	4600-5	Center Punch, 1/8 x 5
9	4600-12	Taper Punch, 1/8 x 5 <sup>3</sup> / <sub>4</sub>
10	4600-11	Taper Punch, 3/32 x 5 <sup>1</sup> / <sub>4</sub>
11	4600-10	Pin Punch, 3/32 x 4 <sup>1</sup> / <sub>4</sub>
12	4600-9	Pin Punch, 1/8 x 4 <sup>3</sup> / <sub>4</sub>
13	4600-8	Pin Punch, 5/32 x 5
14	4600-7	Pin Punch, 3/16 x 5 <sup>1</sup> / <sub>4</sub>
15	4600-6	Pin Punch, 1/4 x 5 <sup>3</sup> / <sub>4</sub>
16	4600-16	Chisel Gauge

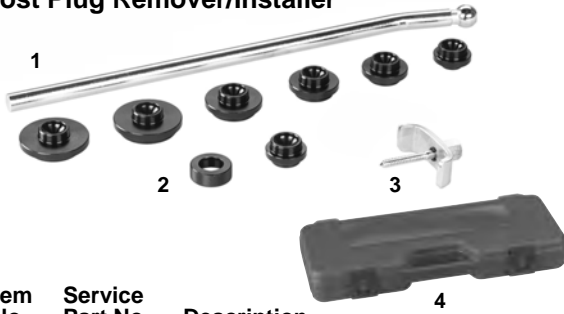
## No. 4581

### Blind Hole Bearing Puller Set



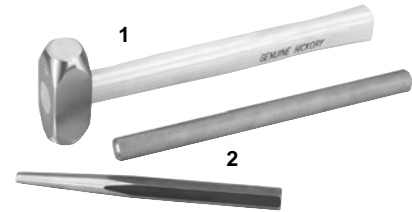
Item No.	Service Part No.	Description
1	4581-5	Slide Hammer Assembly
2	4581-4	1 <sup>1</sup> / <sub>4</sub> " Collet / Pin Assembly
3	4581-3	1" Collet / Pin Assembly
4	4581-2	3/4" Collet / Pin Assembly
5	4581-1	1/2" Collet / Pin Assembly
6	—	Carrying Case (Check for availability)

**No. 4603**  
Frost Plug Remover/Installer



Item No.	Service Part No.	Description
1	4603-1	Installer Handle
2	4603-3	Disc Set
3	4603-2	Remover
4	—	Carrying Case (Check for availability)

**No. 4606**  
Hammer/Punch Set



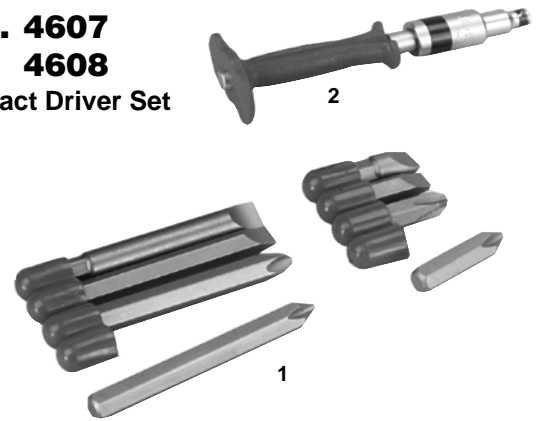
Item No.	Service Part No.	Description
1	4606-1	Hammer
2	4602	2-Piece Brass Punch Set

**No. 4604**  
Frost Plug Installer



Item No.	Service Part No.	Description
1	4604-1	Driver
2	4604-2	Disc Set
4	—	Carrying Case (Check for availability)

**No. 4607**  
**4608**  
Impact Driver Set



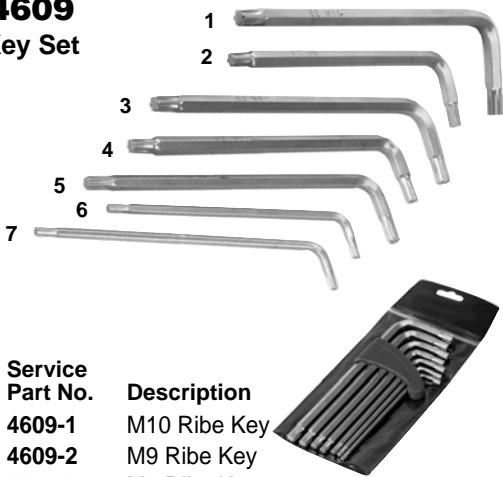
Item No.	Service Part No.	Description
1	4607-1	8 Bits, (Consists of: Two No. 2 Phillips bits: 1 <sup>3</sup> / <sub>8</sub> " long with <sup>5</sup> / <sub>16</sub> " hex and 3 <sup>1</sup> / <sub>8</sub> " long with <sup>5</sup> / <sub>16</sub> " hex Two No. 3 Phillips bits: 1 <sup>3</sup> / <sub>8</sub> " long with <sup>5</sup> / <sub>16</sub> " hex and 3 <sup>1</sup> / <sub>8</sub> " long with <sup>5</sup> / <sub>16</sub> " hex One each of the following: <sup>5</sup> / <sub>16</sub> " wide x 1 <sup>3</sup> / <sub>8</sub> " long with <sup>5</sup> / <sub>16</sub> " hex slotted bit; <sup>5</sup> / <sub>16</sub> " wide x 3 <sup>1</sup> / <sub>8</sub> " long with <sup>5</sup> / <sub>16</sub> " hex slotted bit; <sup>3</sup> / <sub>8</sub> " wide x 1 <sup>3</sup> / <sub>8</sub> " long with <sup>5</sup> / <sub>16</sub> " hex slotted bit; <sup>3</sup> / <sub>8</sub> " wide x 3 <sup>1</sup> / <sub>8</sub> " long with <sup>5</sup> / <sub>16</sub> " hex slotted bit)
2	—	Not replaceable

**No. 4605**  
Punch/Chisel Set



Item No.	Service Part No.	Description
1	4605-1	Drive Handle
2	4605-9	1/4" Taper Punch
3	4605-12	1/8" Center Punch
4	4605-13	3/16" Center Punch
5	4605-11	1/4" Pin Punch
6	4605-10	3/16" Pin Punch
7	4605-8	1/8" Taper Punch
8	4605-2	1/2" Wide Flat Chisel
9	4605-3	5/8" Wide Flat Chisel
10	4605-7	1/4" Cape Chisel
11	4605-4	3/4" Wide Flat Chisel
12	4605-6	1" Wide Flat Chisel
13	4605-5	7/8" Wide Flat Chisel

**No. 4609**  
Ribe Key Set



Item No.	Service Part No.	Description
1	4609-1	M10 Ribe Key
2	4609-2	M9 Ribe Key
3	4609-3	M8 Ribe Key
4	4609-4	M7 Ribe Key
5	4609-5	M6 Ribe Key
6	4609-6	M5 Ribe Key
7	4609-7	M4 Ribe Key

**No. 4651**  
Screw Extractor Set



Item No.	Service Part No.	Description
1	4651-1	Drill Set
2	4651-2	Guide Set
3	4651-3	Extractor Set
4	—	Carrying Case (Check for availability)

**No. 4645**  
Serpentine Belt Tool



Item No.	Service Part No.	Description
1	4645-1	Handle, long extension, short extension and a bolt
2	4645-2	Sockets (18 mm, 16 mm, 15 mm, 14 mm, 13 mm, 1/2" square drive, 3/8" square drive. Open end: 15 mm, 14 mm, and 13 mm)
3	—	Carrying Case (Check for availability)

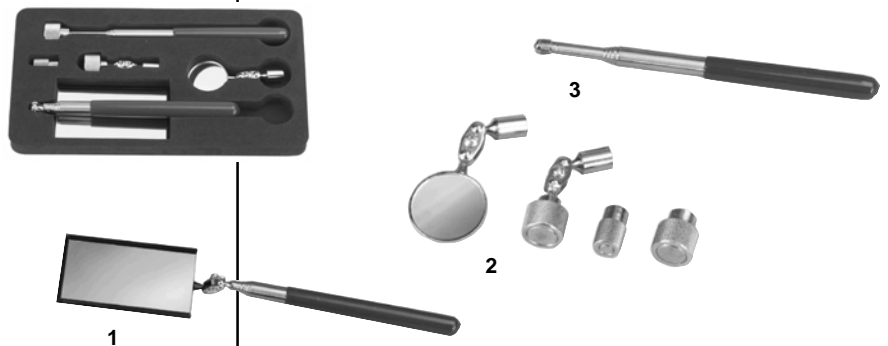
**No. 4673**  
Sending Unit/Sensor Tool



Item No.	Service Part No.	Description
1	4673-1	29 mm Socket
2	4673-2	7/8" Socket
3	4673-3	27 mm Socket
4	4673-4	7/8" Socket (Narrow slot)
5	4673-5	1 1/16" Socket
6	4673-6	22 mm Socket
7	4673-7	7/8" Socket (Short)
8	—	Carrying Case (Check for availability)

**No. 4650**  
Mirror and Magnet Set

Item No.	Service Part No.	Description
1	4650-1	Mirror and handle
2	4650-2	Magnets and mirror
3	4650-3	Handle



### No. 4681

#### Pulley Remove and Installer



Item No.	Service Part No.	Description
1	4681-2	Forcing Screw and Bearings
2	4681-1	Pullery Body

### No. 4711

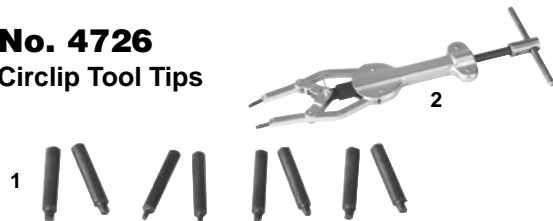
#### Deluxe Radio and Antenna Service Kit



Item No.	Service Part No.	Description
1	4711-1	Antenna Sockets and Wrench Kit
2	4411-2	Radio Socket Kit

### No. 4726

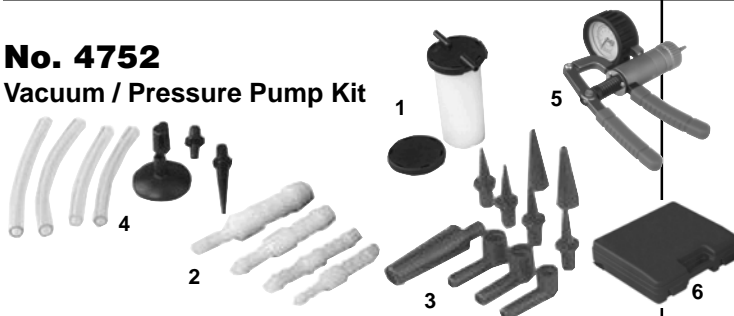
#### Circlip Tool Tips



Item No.	Service Part No.	Description
1	4726-1	Eight Tips
2	—	Snap Ring Tool (Not Replaceable)

### No. 4752

#### Vacuum / Pressure Pump Kit



### No. 4754

#### Pulley Holder and Fan Clutch



Item No.	Service Part No.	Description
1	4754-1	Pin, Dia. 11 mm / 16 mm
2	4754-2	Pin, Dia. 8 mm / 11 mm
3	4754-3	Pin, Dia. 10 mm / 12 mm
4	4754-4	Pin, Dia. 6 mm / 10 mm
5	4754-5	Knurled Nut
6	—	Carrying Case (Check for Availability)
7	—	Handle (Not Replaceable)

### No. 4756

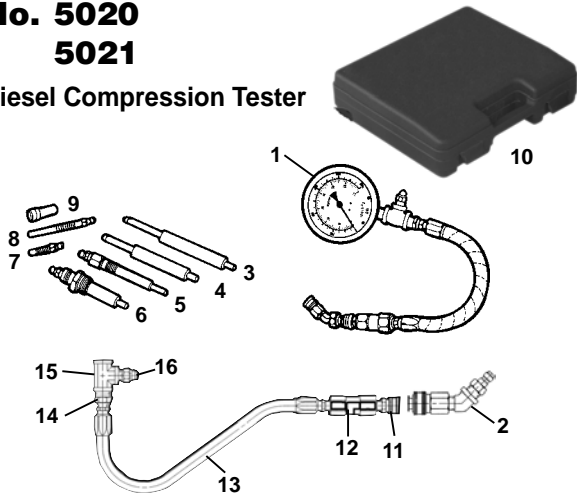
#### Autobody Chisel Parts



Item No.	Service Part No.	Description
1	4756-1	Small Curve Tool
2	4756-2	Cross Curve Tool
3	4756-3	Rounded Ball Peen Tool
4	4756-4	One-sided Flat Blade Tool
5	4756-5	Curve Blade Tool
6	4756-6	Pointed Ball Peen Tool
7	4756-7	Angle Face Tool
8	4756-8	Flat Blade Tool
9	4756-9	Square Face Tool
10	4756-10	Angle Groove Tool
11	4756-11	Roune Face Tool
12	—	Carrying Case (Check for Availability)
13	4605-1	Handle

## No. 5020 5021

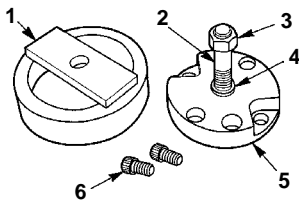
### Diesel Compression Tester



Item No.	Service Part No.	Description
1	45549	Compression Tester
2	217720	Quick Coupler Fitting
3	310810	Compression Test Adapter
4	310840	Compression Test Adapter
5	47484	Compression Test Adapter
6	217791	B-Engine Injector Adapter
7	310832	Glow Plug Adapter
8	308472	Glow Plug Adapter
9	SKW40412	6 Pt., 3/8 Drive Socket Glow Plug
10	308343	Carrying Case
11	209751	Quick Coupler, Socket Half
12	209750	Check Valve
13	209762	12" Compression Hose With 1/8 NPTF Male Ends
14	206324	Straight Fitting
15	214802	Tee Fitting
16	209749	Bleed Valve
-	48570	Inside Lid Decal
-	62337	Carrying Case Foam Insert

## No. 5022

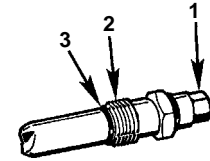
### Oil Seal / Wear Ring Installer



Item No.	Service Part No.	Description
1	04-149-3-2B	Wear Sleeve and Seal Adapter
2	11536	Socket Head Cap Screw
3	10215	Hex Nut
4	24837	Forcing Screw Washer
5	04-149-3-1A	Attaching Plate
6	17265	Screw, 5/8-18 x 1

## No. 5023

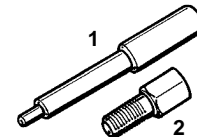
### Diesel Injector Seat Cleaner



Item No.	Service Part No.	Description
1	45172	Nozzle Seat Reamer
2	208392	Threaded Sleeve
3	10302	O-ring

## No. 5024

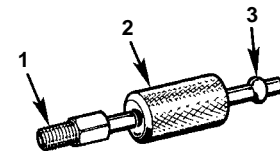
### Navistar Injector Sleeve Remover / Installer



Item No.	Service Part No.	Description
1	ZTSE2534A	Nozzle Sleeve Installer
2	ZTSE2587A	Nozzle Sleeve Remover

## No. 5028

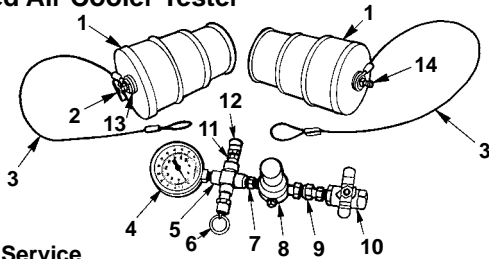
### Slide Hammer Puller



Item No.	Service Part No.	Description
1	206437	Reducing Adapter
2	208911	Hammer
3	208912	Shank

## No. 5039

### Charged Air Cooler Tester

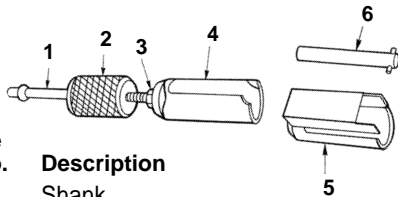


Item No.	Service Part No.	Description
1	48997	Hose Adapter
2	220194	Drain Cock Valve

3	311895	Sling
4	310526	0-60 PSI Pressure Gauge
5	208118	Cross Fitting
6	219326	Pressure Relief Valve
7	16494	Hex Nipple
8	311751	Air Regulator
9	220193	Straight Restrictor Fitting
10	215787	Ball Valve
11	206324	Fitting
12	209751	Quick Coupler Socket
13	10231	Wrought Washer, 3/8"
14	206843	Plug Half Quick Coupler
15	105768	Instruction Sheet

## No. 5040

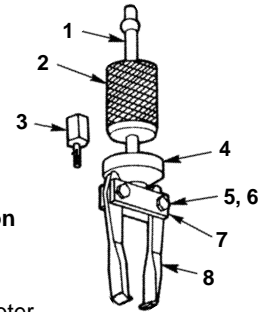
### Cummins Injector Remover / Installer



Item No.	Service Part No.	Description
1	312328	Shank
2	219779	Hammer
3	10210	Hex Nut, 1/2-20 UNF
4	219758	Installer (L10 Celect)
5	312013	Installer (N14 Celect)
6	312012	Pin-Type Puller Adapter
-	307382	Carrying Case
-	43135	Carrying Case Foam Insert

## No. 5042

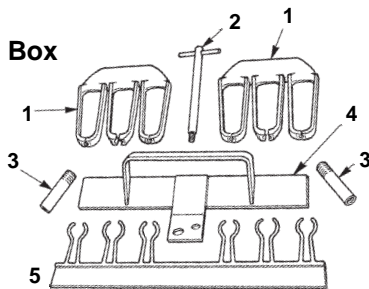
### Cummins Injector Puller



Item No.	Service Part No.	Description
1	312328	Shank
2	219779	Hammer
3	219778	Puller Adapter
4	220196	Adjusting Cone
5	22021	Hex Head Cap Screw
6	10384	Hex Jam Nut, 5/16-24
7	312327	Cross Block
8	49289	Puller Jaw
-	307382	Carrying Case
-	43135	Carrying Case Foam Insert

## No. 5041

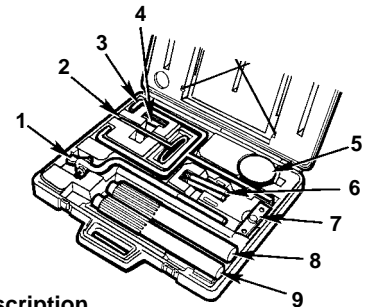
### Cummins Rocker Box Setting Tool



Item No.	Service Part No.	Description
1	312420	Push Tube Guide
2	312418	Tee Handle
3	220266	Guide Pin
4	53919	Mounting Plate
5	312419	Push Tube Guide
-	12368	Cap Screw
-	105829	Parts List

## No. 5043

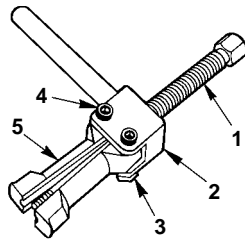
### Clutch Service Set



Item No.	Service Part No.	Description
1	7028	Adjusting Wrench
2	213015	Hex Key Wrench
3	5046	Clutch Release Tool
4	213013	Guide Pins, 3/8-16
5	5045	Drive Pin Installing Tool
6	213014	Guide Pins, 7/16-14
7	5044	Clutch Adjusting Tool
8	7074A	Truck Clutch Alignment Tool, 2"
9	7073A	Truck Clutch Alignment Tool, 1 3/4"
-	105617	Parts List
-	308344	Carrying Case
-	18745	Carrying Case Foam Insert

**No. 5048**  
**5049**

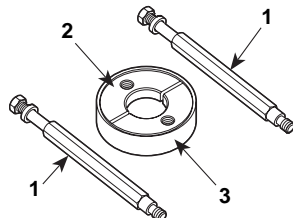
**Flywheel Pilot Bearing  
Puller**



Item No.	Service Part No.	Description
1	312548	Forcing Screw
2	312549	Puller Body
3	10199	Hex Nut, 1/4-20
4	10022	Screw
5	312551	Puller Jaw for 5048
5	312552	Puller Jaw for 5049

**No. 5051**

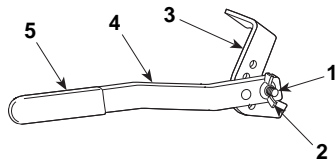
**Eaton® / Fuller®  
Bearing Puller Set**



Item No.	Service Part No.	Description
1	313579	Leg
2	440089	Collet Half
3	221645	Sleeve

**No. 5052**

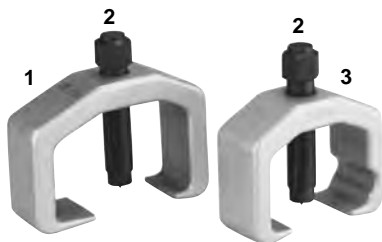
**Slack Check**



Item No.	Service Part No.	Description
1	220001	Carriage Bolt
2	13024	Wing Nut, 1/4-20
3	49225	Slack Adjuster Head
4	312174	Handle
5	14564	Handle Grip

**No. 5055**  
**5056**

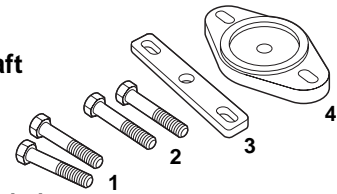
**Slack Adjuster  
Puller**



Item No.	Service Part No.	Description
1	49704	Slack Adjuster Puller for 5056
2	26619	Forcing Screw
3	49702	Slack Adjuster Puller for 5055

**No. 5062**

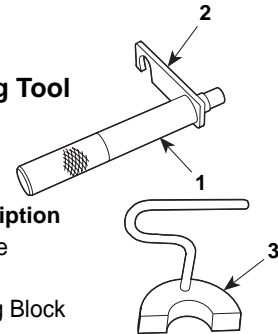
**Auxiliary Countershaft  
Shim Tool**



Item No.	Service Part No.	Description
1	19834	Hex Head Cap Screw, 3/8-16 x 2.75"
2	212336	Hex Head Cap Screw, Metric, 12 mm - 1.75 x 70 mm Long
3	313580	Plate
4	440090	Shim Gauge

**No. 5063**

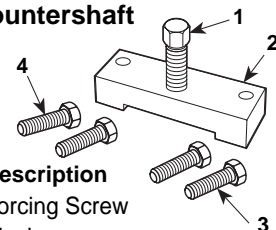
**Eaton® / Fuller® Timing Tool**



Item No.	Service Part No.	Description
1	313643	Handle
2	313642	Plate
3	313644	Timing Block

**No. 5064**

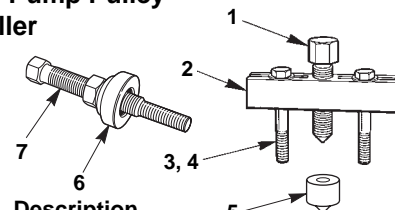
**Eaton® / Fuller® Countershaft  
Pushing Tool**



Item No.	Service Part No.	Description
1	24426	Forcing Screw
2	440091	Block
3	217871	Hex Head Cap Screw
4	216295	Hex Head Cap Screw, Metric

**No. 5071**

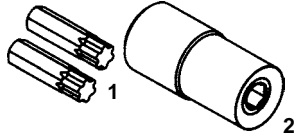
**Cummins Water Pump Pulley  
Remover / Installer**



Item No.	Service Part No.	Description
1	221895	Forcing Screw, Remover
2	26603	Cross Block
3	15317	Cap Screw
4	10257	Bolt Washer, 5/16"
5	8052	Shaft Protector
6	28746	Body Assembly
7	313847	Forcing Screw, Installer

## No. 5901

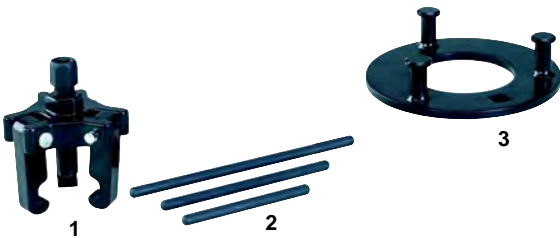
### Seat Belt Bolt Removal Tool



Item No.	Service Part No.	Description
1	520463	T47 Torx Bit
2	517923	Bit Holder

## No. 6284

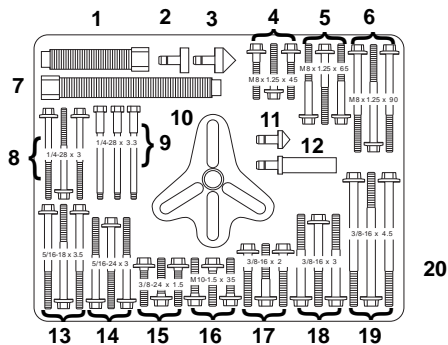
### GM/Chrysler Harmonic Balancer Puller and Holding Ring Set



Item No.	Service Part No.	Description
1	6267	Puller Set (includes 3-jaw puller, 3 forcing rods, and a 3/8" square drive forcing screw)
2	516638	Forcing Rods (3)
3	6495	Holding Tool
-	514822	Carrying Case
-	107368	Instruction Sheet

## No. 6294

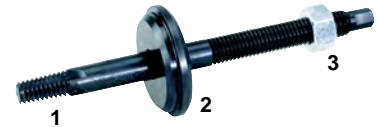
### Master Bolt Grip Set



Item No.	Service Part No.	Description
1	511039	Forcing Screw, 3/4" Short
2	511038	Adapter (Short)
3	511034	Center, Large

## No. 6292

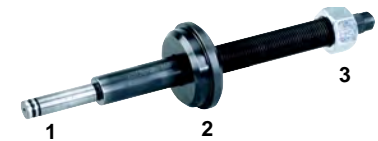
### Bushing Puller



Item No.	Service Part No.	Description
1	MLR-SP-1192A	Screw
2	MLR-SP-1193	Adapter
3	10211	Hex Nut, 9/16-12 UNC

## No. 6293

### Bushing Installer/Reamer



Item No.	Service Part No.	Description
1	MLR-SP-1199A	Screw
2	MLR-SP-1200	Adapter
3	10215	Hex Nut

4	511028	Washer Head Bolt , M8 x 1.25 x 45 mm
5	511031	Washer Head Bolt, M8 x 1.25 x 65 mm
6	511027	Washer Head Bolt, M8 x 1.25 x 90 mm
7	511036	Forcing Screw, 3/4"
8	511030	Washer Head Bolt, 1/4 - 28 UNF x 3"
9	222191	Screw, Special
10	511035	Flange, 3/4" Puller
11	511037	Center, Small
12	511033	Adapter, Long
13	511040	Washer Head Bolt, 5/16 -18 UNC x 3.5"
14	511032	Washer Head Bolt, 5/16 -24 UNF x 3"
15	511041	Washer Head Bolt, 3/8 -24 UNF x 1.5"
16	511045	Washer Head Bolt, M10 x 1.5 x 35 mm
17	511042	Washer Head Bolt, 3/8 -16 UNC x 2.0"
18	511043	Washer Head Bolt, 3/8 -16 UNC x 3.0"
19	511044	Washer Head Bolt, 3/8 -16 UNC x 4.5"
20	514232	Plastic Tray
-	107206	Parts List



## No. 6299

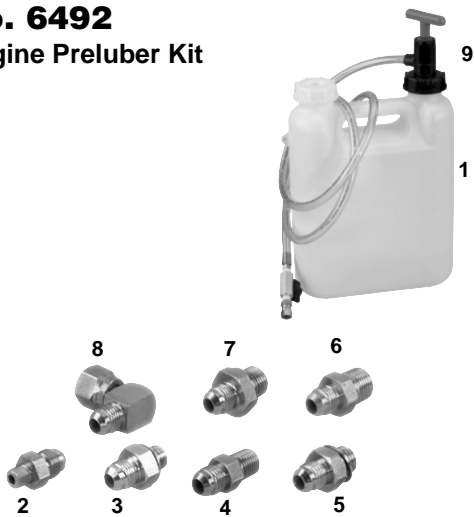
### Ball Joint/Tie Rod Service Set



Item No.	Service Part No.	Description
1	514046	Carrying Case
2	6534	Shock Link/Tie Rod Separator, 16 x 11/16"
3	6535	Ball Joint Separator, 16 x 15/16"
4	6532	GM Pitman Arm Remover, 11 3/4 x 1 5/8"
5	6533	Separator Tool, 11 5/8 x 1 7/16"
6	6531	Pitman Arm Separator, 11 x 1 1/8"

## No. 6492

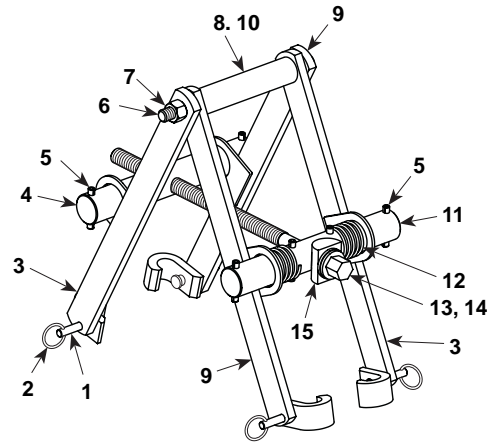
### Engine Preluber Kit



Item No.	Service Part No.	Description
1	509063	Engine Preluber Tank
2	509372	Fitting, .125 NPT
3	509373	Fitting, .25 NPT x .562 JIC
4	219433	Straight Fitting
5	509375	O-ring Fitting, M16 x 1.5
6	509376	O-ring Fitting, M12 x 1.75
7	11628	Straight Fitting
8	205965	90 Degree Elbow Fitting
9	509371	Hand Pump
-	J-36316-A	Universal Storage Pouch
-	511798	Instruction Sheet

## No. 6494

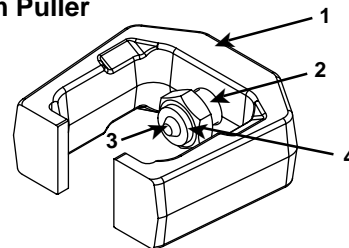
### Clamshell Strut Spring Compressor



Item No.	Service Part No.	Description
1	217183	Clevis Pin, 1 3/4" Long
2	213876	Split Ring
3	516238	Short Hook Frame
4	310334	Threaded Trunnion
5	11955	Slotted Spring Pin, 1/4 x 1 3/4"
6	217610	Hex Head Cap Screw, 1/2-13 x 7 1/2"
7	15013	Locknut, 1/2-13
8	217180-BL2	Round Spacer
9	516237	Long Hook Frame
10	217182	Compression Spring
11	513310	Plain Trunnion
12	217181	Compression Spring
13	310336	Forcing Screw
14	215842	Thrust Bearing Washer
15	5133311	Pivot Adapter
-	217186	Warning Decal
-	107300	Parts List

## No. 6496

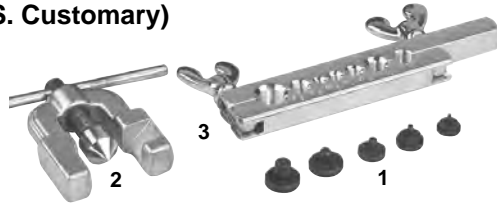
### Pitman Arm Puller



Item No.	Service Part No.	Description
1	518684-1	Puller Frame
2	518684-2	Puller Screw
3	518684-3	Center Swivel
4	211053	Packing O-ring
-	521173	Operating Instruction Sheet

## No. 6503

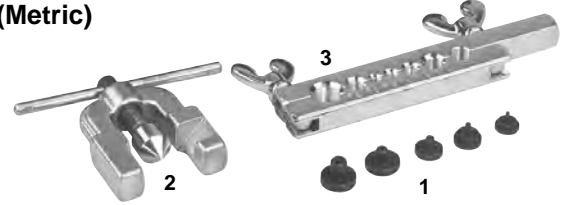
### Double Flaring Tool (U.S. Customary)



Item No.	Service Part No.	Description
1	6503-1	Adapter Set
2	6503-2	Yoke/Screw Handle Assembly
3	6503-3	Flaring Bar Assembly

## No. 6506

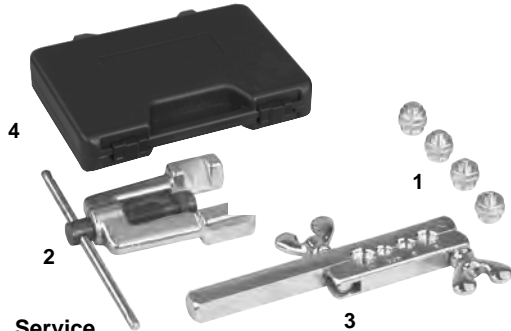
### Double Flaring Tool (Metric)



Item No.	Service Part No.	Description
1	6506-1	Adapter Set
2	6506-2	Yoke/Screw Handle Assembly
3	6506-3	Flaring Bar Assembly

## No. 6504

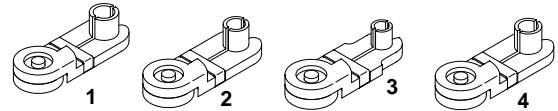
### ISO Bubble Flaring Tool



Item No.	Service Part No.	Description
1	6504-1	Adapter Set (4)
2	6504-2	Fuel Line Tool, 5/16" Red
3	6504-3	Fuel Line Tool, 1/4" Black
4	—	Carrying Case (Check for Availability)

## No. 6507

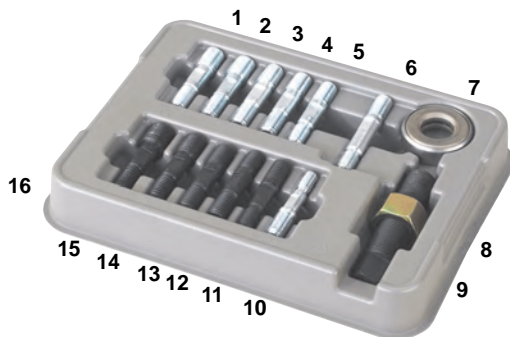
### Four-Piece Disconnect Tool



Item No.	Service Part No.	Description
1	518582	Fuel Line Tool, 3/8" Gold
2	518583	Fuel Line Tool, 5/16" Red
3	518584	Fuel Line Tool, 1/4" Black
4	519159	Transmission Oil Line Tool, Blue

## No. 6505

### Four-Piece Disconnect Tool

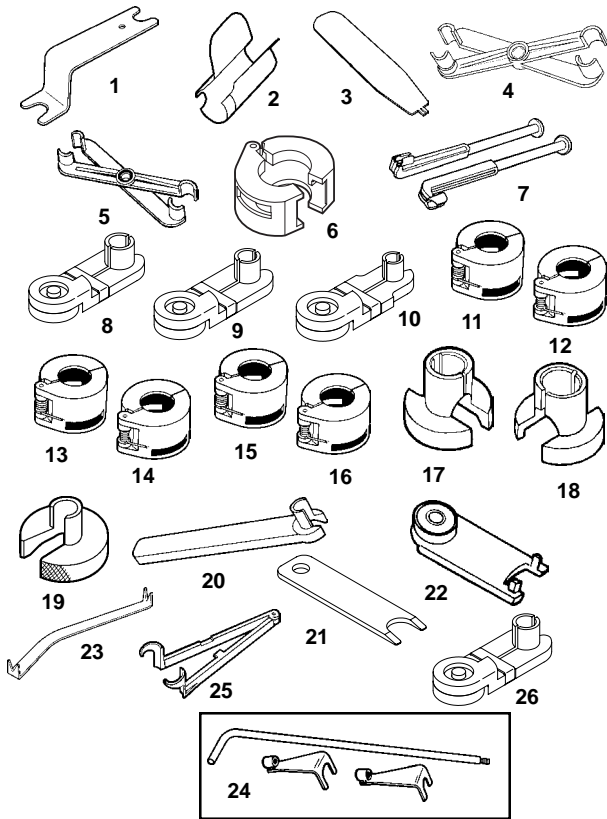


Item No.	Service Part No.	Description
1	511064	Adapter, M10 x 1.5
2	511050	Adapter, M12 x 1.5
3	511051	Adapter, M12 x 1.75

4	511052	Adapter, M14 x 1.5
5	511053	Adapter, M14 x 2.0
6	511054	Adapter, M26 x 1.5
7	Rs-25100	#608 Thrust Bearing
	-300	
8	19780	Hex Nut
9	511057	Forcing Screw
10	511055	Adapter, M16 x 2.0
11	511063	Adapter, 3/4-16
12	511062	Adapter, 5/8-18
13	511061	Adapter, 9/16-18
14	511060	Adapter, 1/2-20
15	511059	Adapter, 7/16-20
16	514008	Carrying Case
—	107205	Instruction Sheet

## No. 6508

### Master Disconnect Kit



Item No.	Service Part No.	Description
1	440384	GM Hydraulic Clutch Line Tool
2	440486	GM Transmission Oil Cooler Line Tool
3	501153	Toyota A/C Tool
4	511410	Fuel Line Disconnect Tool
5	511413	Fuel Line Tool
6	518092	Heater Hose Tool
7	518158	Fuel Line Tool Set
8	518582	Fuel Line Tool, 3/8" Gold
9	518583	Fuel Line Tool, 5/16" Red
10	518584	Fuel Line Tool, 1/4" Black
11	518896	Fuel Line Tool, 3/8" Yellow
12	518897	A/C Spring Lock Coupling, 5/8" Black
13	518898	A/C Spring Lock Coupling, 1/2" Blue
14	518899	Fuel Line Tool, 1/2" Green
15	518900	A/C Spring Lock Coupling, 3/8" Red
16	518901	A/C Spring Lock Coupling, 3/4" White
17	519067	Fuel Line Tool, 5/16"
18	519068	Fuel Line Tool, 3/8"
19	519151	Quick Disconnect Tool
20	519152	Oil Cooler Line Tool
21	519153	Clutch Coupling Tool
22	519154	Fuel Line Coupling Tool
23	519155	Chrysler Fuel Line Tool
24	519156	Ford Heater Hose Tool Set
25	519157	GM Heater Line Quick Connect Separator
26	519159	Transmission Oil Line Tool, Blue

## No. 6516

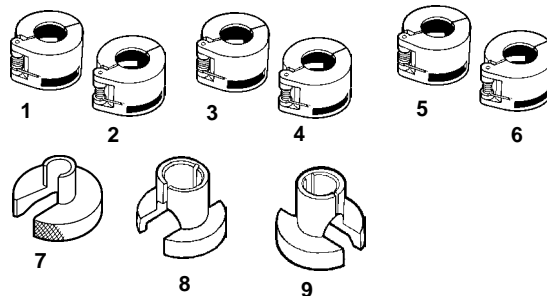
### Brake Tool Set



Item No.	Service Part No.	Description
1	519223	Carrying Case
2	519196-4	Brake Spring Pliers
3	519196-3	Brake Spring Removal Tool
4	519196-5	Brake Return Spring Removal Tool
5	519196-2	Brake Adjusting Spoon
6	519196-6	Brake Adjusting Spoon
7	519196-8	Mini Brake Adjusting Spoon
8	519196-7	Brake Spring Removal Tool (3/4" and 13/16" dia. spring)
9	519196-1	Brake Spring Removal Tool (5/8" dia. spring)

## No. 6517

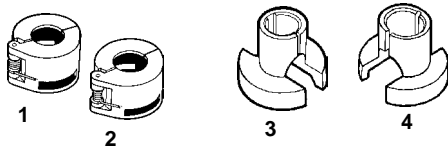
### Nine-Piece Disconnect Set



Item No.	Service Part No.	Description
1	518896	Fuel Line Tool, 3/8" Yellow
2	518897	A/C Spring Lock Coupling, 5/8" Black
3	518898	A/C Spring Lock Coupling, 1/2" Blue
4	518899	Fuel Line Tool, 1/2" Green
5	518900	A/C Spring Lock Coupling, 3/8" Red
6	518901	A/C Spring Lock Coupling, 3/4" White
7	519151	Quick Disconnect Tool
8	519068	Fuel Line Tool, 3/8"
9	519067	Fuel Line Tool, 5/16"

## No. 6519

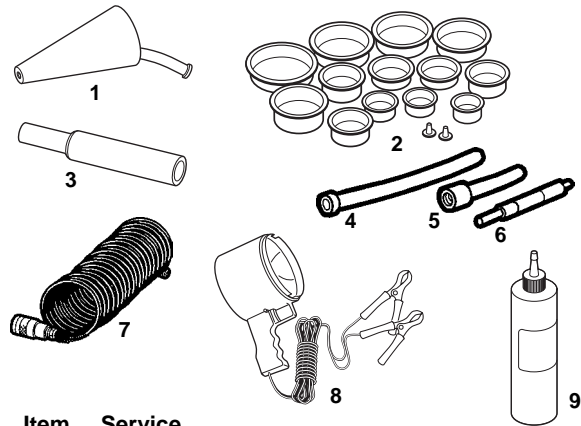
### Fuel Line Disconnect Tool Set



Item No.	Service Part No.	Description
1	518896	Fuel Line Tool, 3/8" Yellow
2	518899	Fuel Line Tool, 1/2" Green
3	519067	Fuel Line Tool, 5/16"
4	519068	Fuel Line Tool, 3/8"

## No. 6525

### LeakMaster Evaporative Emissions System Tester



Item No.	Service Part No.	Description
1	CEA-01	Exhaust Cone 3 1/2" dia.
2	CEA-02	Cap Plug Kit
3	CEA-03	Smoke Diffuser Adapter
4	CEA-04	EVAP Service Port Adapter
5	CEA-042	Ford EVAP Service Port Adapter
6	CEA-049	Schrader Valve Removal/Install. Tool
7	CEA-041	Nitrogen Coiled Hose, 25'
8	HS-400AC	Halogen Spotlight
9	P-0716-UV	Smoke-Producing Solution
-	SR00	Water Trap Filter
-	107360	Instruction Manual

## No. 6530

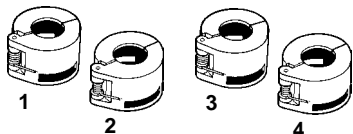
### Ball Joint Super Set



Item No.	Service Part No.	Description
1	7248	C-Frame Press (consists of 1 ea.: forcing screw; 14472 steel ball; 10273 o-ring; 29501 plug; 41925 c-frame)
2	305227	Installing Adapter
3	305228	Removing Adapter
4	29503	Receiving Tube
5	29504	Receiving Tube
6	29505	Receiving Tube
7	39976	Receiving Cup
8	313444	Ball Joint Remover
9	222305	Receiving Tube
10	222306	Receiving Tube
11	314425	Receiving Cup
12	314426	Removing Adapter
13	222304	Receiving Tube
14	204508	Receiving Cup
15	222307	Receiving Tube
16	313969	Installing Cup
17	38355	Installing Cup
18	314427	Receiving Cup
19	314392	Live Center Forcing Screw Plug
20	313967	Remover Cup
21	38354	Receiving Cup
22	313970	Installer
23	313968	Remover
24	314428	Installing Adapter
25	514480	Storage Case (Check for availability)
-	517920	Parts List

## No. 6538

### A/C Spring Lock Coupling Tools

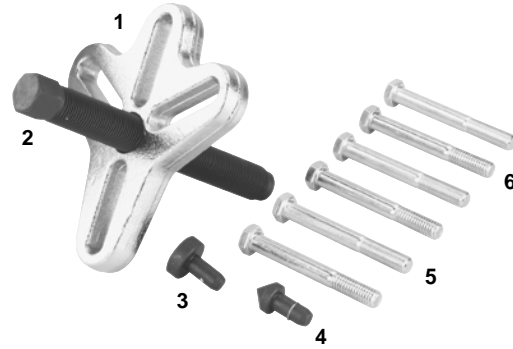


Item No.	Service Part No.	Description
1	518897	A/C Spring Lock Coupling, 5/8" Black
2	518898	A/C Spring Lock Coupling, 1/2" Blue
3	518900	A/C Spring Lock Coupling, 3/8" Red
4	518901	A/C Spring Lock Coupling, 3/4" White

## No. 6930

### Flange Puller

Item No.	Service Part No.	Description
1	511035	3/4" Flange Puller
2	511036	3/4" Forcing Screw
3	511038	Short Adapter
4	511037	Small Center
5	10059	Hex Head Cap Screws (3) (3/8 - 24 UNF x 3.0)
6	10060	Hex Head Cap Screws (3) (3/8 - 16 UNC x 3.0)



## No. 6985

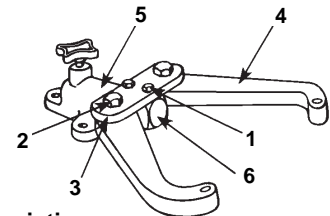
### Mercedes/BMW Fan Clutch Tool



Item No.	Service Part No.	Description
1	6985-1	Replacement Tool
2	6985-2	Replacement Tool
3	6985-3	Replacement Tool (36 mm)
4	6985-4	Replacement Tool
5	6985-5	Replacement Tool (32 mm)
6	6985-6	Replacement Tool
7	6985-7	Replacement Tool
8	—	Carrying Case (Check for Availability)

## No. 7020

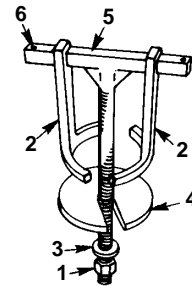
### Bench-Mounted Holding Fixture



Item No.	Service Part No.	Description
1	10080	Hex Head Cap Screw
2	10099	Hex Head Cap Screw
3	28890	Strap
4	34310-BL2	Arm
5	34607	Base
6	34309	Pivot
—	104978	Parts List

## No. 7024

### Clutch Spring Compressor

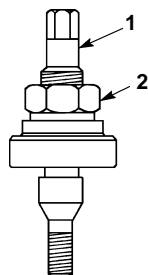


Item No.	Service Part No.	Description
1	10209	Hex Nut
2	31784	Jaw
3	12004	Washer
4	302281	Washer
5	31782	Center Tee
6	10578	Round Head Drive Screw, 6 x .25"

## No. 7005

### Power Steering Pump Pulley Replacer

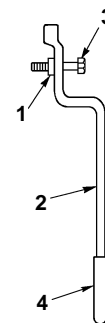
Item No.	Service Part No.	Description
1	34221	Screw
2	28746	Nut Body Assembly



## No. 7028

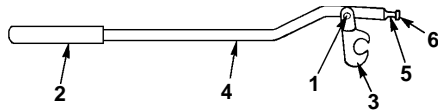
### Clutch Adjusting Wrench

Item No.	Service Part No.	Description
1	29765	Spacer
2	34856	Wrench
3	14817	Cap Screw
4	210345	Handle Grip



## No. 7029

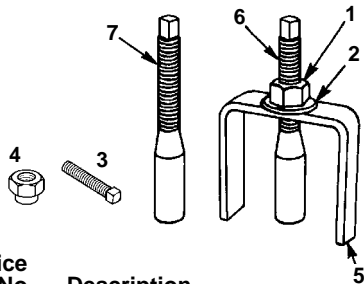
### Caster / Camber Wrench



Item No.	Service Part No.	Description
1	11916	Roll Pin
2	210345	Handle Grip
3	23810	Hook
4	41666	Handle
5	29624	Nose
6	12131	Set Screw

## No. 7031A

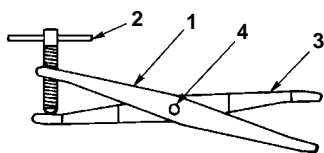
### Steering Wheel Lock Plate Remover



Item No.	Service Part No.	Description
1	10211	Hex Nut, $\frac{9}{16}$ -12
2	14869	Washer, $\frac{9}{16}$ " S.A.E.
3	19551	Set Screw
4	204789	Adapter
5	29835	Bridge Bar
6	29836	Special Screw
7	38650	Metric Screw

## No. 7034

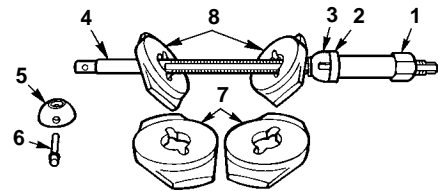
### Disc Brake Pad Spreader



Item No.	Service Part No.	Description
1	35071	Spreader Half, Tapped
2	200108	Screw Assembly
3	35070	Spreader Half, Plain
4	15072	Button Head Cap Screw, $\frac{1}{4}$ -20 x $\frac{5}{8}$ "

## No. 7045B

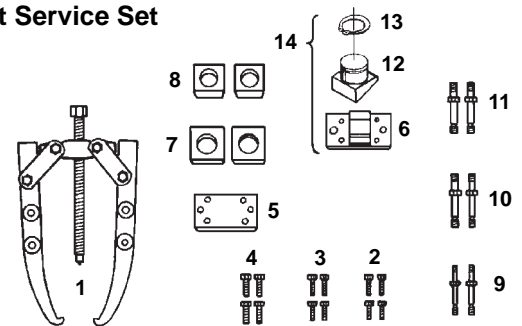
### Front Coil Spring Compressor



Item No.	Service Part No.	Description
1	37666	Barrel Nut
2	211206	Thrust Bearing
3	311835	Lower Ball
4	49169	Forcing Screw
5	37731	Upper Ball
6	204444	Pin
7	42912-BK2	Support Plate, Large
8	42913-BK2	Support Plate, Small
-	105809	Parts List

## No. 7057

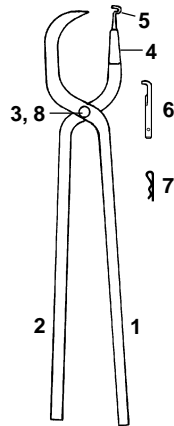
### U-Joint Service Set



Item No.	Service Part No.	Description
1	1036	Puller (See No. 1036 for separate parts.)
2	16140	Cap Screw, $\frac{5}{16}$ -24
3	16141	Cap Screw, $\frac{3}{8}$ -24
4	16142	Cap Screw, $\frac{7}{16}$ -20
5	36143	Bridge Plate
6	36149	Side Plate (1 only)
7	201456	Journal Cap (1 only)
8	201457	Journal Cap (1 only)
9	201464	Leg, $\frac{3}{8}$ -24
10	201465	Leg, $\frac{5}{16}$ -24
11	201466	Leg, $\frac{7}{16}$ -20
12	201455	Swivel Plug
13	11999	Retaining Ring
14	201533	Side Plate Assembly (consists of Nos. 6, 12, 13)
-	10204	Hex Nut (1 only)
-	201534	Storage Box
-	18745	Storage Box Foam Pad
-	16143	Parts List

### No. 7069A

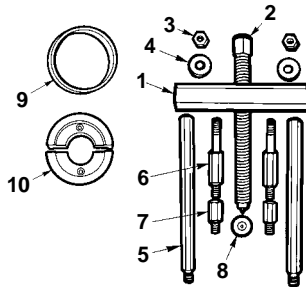
#### Heavy-Duty Truck Brake Spring Plier



Item No.	Service Part No.	Description
1	42546	Jaw Half
2	40561	Jaw Half
3	12724	Jam Nut
4	11587	Roll Pin
5	202621	Tip
6	204140	Tip
7	18290	Hair Pin
8	219500	Cap Screw

### No. 7070A

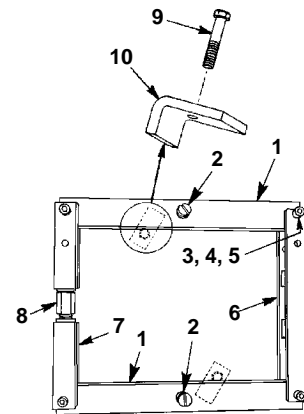
#### Truck Transmission Bearing Service Set



Item No.	Service Part No.	Description
1	42542	Cross Block
2	34703	Forcing Screw
3	10208	Hex Nut, 1/2-13 (1 only)
4	12004	Washer, 1/2" S.A.E. (1 only)
5	310553	Long Leg (1 only)
6	310552	Short Leg (1 only)
7	202893	Adapter (1 only)
8	202916	Step Plate
9	202894	Sleeve
10	48387	Collet Half
-	105596	Parts List

### No. 7071

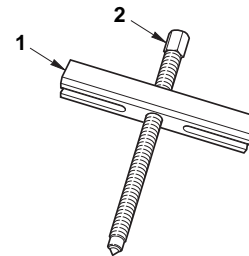
#### Differential Housing Spreader



Item No.	Service Part No.	Description
1	37050	Bolster
2	203006	Bearing Pin
3	12004	Washer, 17/32" I.D.
4	10208	Hex Nut, 1/2-13
5	12560	Socket Head Cap Screw, 1/2-13 x 2 1/2"
6	37047	Leg Weldment
7	37051	Spreader Assembly (includes 37048 Clevis; 37049 Tapped Clevis; 16209 Thrust Bearing Race; 11902 Retaining Ring.)
8	203005	Clevis Screw (included with Spreader)
9	10057	Cap Screw, 3/8-16 x 2"
10	207683	Bracket
-	104672	Parts List

### No. 7075

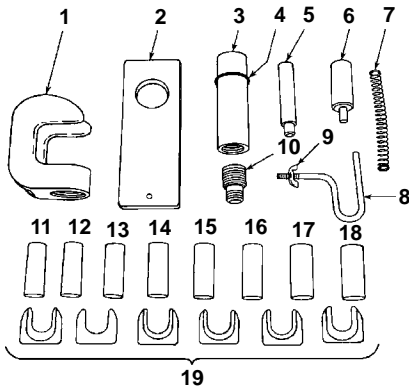
#### Transmission Output Shaft End Yoke Remover



Item No.	Service Part No.	Description
1	42542	Cross Block
2	34703	Forcing Screw

## No. 7082B §

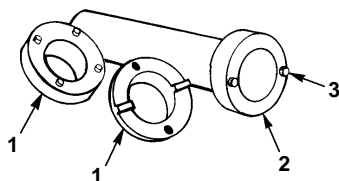
### Automotive Piston Pin Remover / Installer Set



Item No.	Service Part No.	Description
1	302186	Anvil
2	17929	Base
3	17931-B	Tube Guide
4	17945	Retaining Ring
5	17935	Driver
6	17932-B	Body Guide
7	17934	Spring
8	302224	Rear Support
9	10589	Wing Nut
10	17930-B	Threaded Plug
11	17940	Pin Guide
12	17936	Pin Guide
13	17937	Pin Guide
14	17938	Pin Guide
15	17939	Pin Guide
16	17941	Pin Guide
17	17942	Pin Guide
18	18729	Pin Guide
19	39889	Insert 1
19	39890	Insert 2
19	39888	Insert 3
19	39886	Insert 4
19	39887	Insert 5
19	39922	Insert 6
-	60835	Plastic Case
-	104609	Parts List

## No. 7084

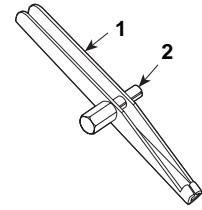
### Transmission Input Shaft Tool



Item No.	Service Part No.	Description
1	43199	Spanner Wrench Adapter
2	43195	Spanner Wrench
3	13720	Groove Pin

## No. 7085

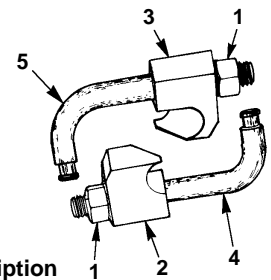
### Dust Boot Clamp Installer



Item No.	Service Part No.	Description
1	18864	Dust Boot Clamp Installer
2	220040	Pin
-	18865	Instruction Sheet

## No. 7091

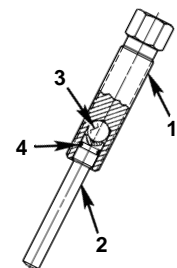
### Ford Caster / Camber Alignment Tool



Item No.	Service Part No.	Description
1	10208	Hex Nut
2	43359	Left Body
3	43360	Right Body
4	38532	Hook
5	38533	Hook

## No. 7104

### GM Power Steering Pump Pulley Removal Screw

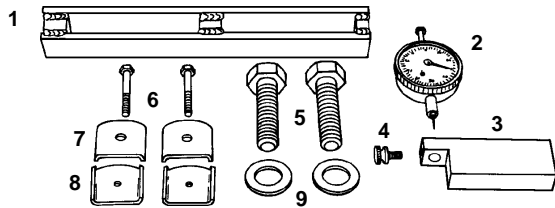


Item No.	Service Part No.	Description
1	27445	Forcing Screw
2	310901	Long Nose Cone
3	10378	Steel Ball
4	10266	O-ring



## No. 7106

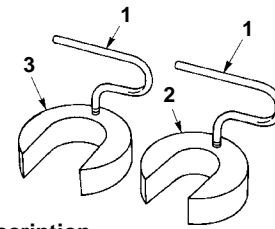
### Cylinder Liner Height Gauge w/ Hold-Down Bar



Item No.	Service Part No.	Description
1	39431	Clamping Bar
2	205655	Dial Indicator
3	39432	Gauge Bar
4	205715	Thumb Screw
5	205702	Hex Head Cap Screw, $1\frac{1}{16}$ -16 UN-2A
6	10024	Hex Head Cap Screw, $\frac{1}{4}$ -20 x $1\frac{3}{4}$ "
7	205653	Drilled Spacer
8	205652	Tapped Spacer
9	24826	Washer
-	307382	Carrying Case
-	43513	Carrying Case Foam Insert
-	102370	Parts List

## No. 7109

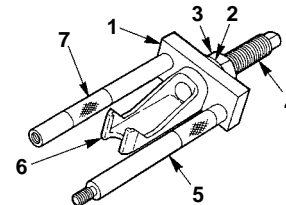
### Transmission Timing Block Tool



Item No.	Service Part No.	Description
1	302224	Rear Support
2	7109-1	Transmission Timing Block Tool (includes #302224)
3	7109-2	Transmission Timing Block Tool (includes #302224)

## No. 7117

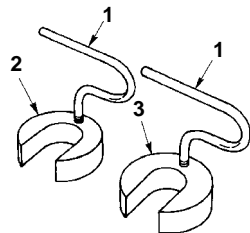
### Caterpillar Fuel Injector Nozzle Puller



Item No.	Service Part No.	Description
1	206508	Plate
2	14597	Bearing Race
3	10213	Hex Nut
4	39992	Screw
5	39989	Leg
6	39993	Puller Jaw
7	39990	Leg

## No. 7108

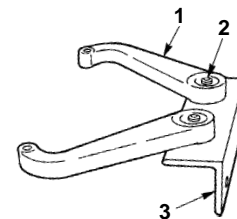
### Transmission Timing Block Tool



Item No.	Service Part No.	Description
1	302224	Rear Support
2	7108-1	Transmission Timing Block Tool (includes #302224)
3	7108-2	Transmission Timing Block Tool (includes #302224)

## No. 7118

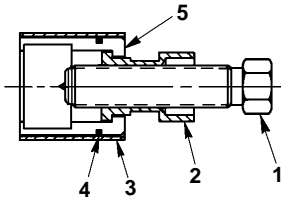
### Transmission Adapter Kit



Item No.	Service Part No.	Description
1	34310-BL2	Arm
2	10083	Hex Head Cap Screw, $\frac{1}{2}$ -13 x $1\frac{1}{2}$ "
3	43883	Angle
-	10099	Hex Head Cap Screw, $\frac{5}{8}$ -11 x $1\frac{1}{2}$ "
-	10208	Hex Nut, $\frac{1}{2}$ -13
-	102383	Operating Instructions

### No. 7119

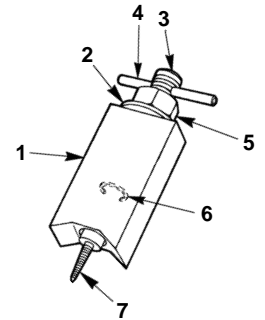
#### Compressor Drive Gear Coupling Puller



Item No.	Service Part No.	Description
1	39972	Forcing Screw
2	39973	Nut
3	206420	Tube
4	15125	O-ring
5	39971	Collet Half

### No. 7122R

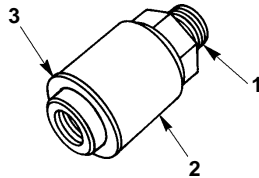
#### Ford Lock Pin Remover



Item No.	Service Part No.	Description
1	302767	Bridge
2	10257	Washer
3	302766	Forcing Screw
4	13554	Slotted Spring Pin
5	10203	Hex Nut
6	18761	Retaining Ring
7	37907	Remover Tip

### No. 7120A

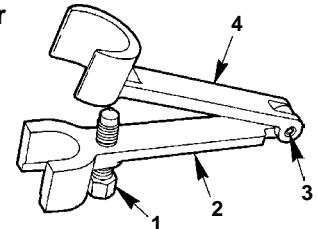
#### Drive Pulley Installer



Item No.	Service Part No.	Description
1	39978	Forcing Screw
2	39979	Nut
3	206431	Thrust Bearing Washer

### No. 7134 §

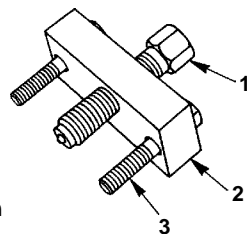
#### C.V. Joint Separator



Item No.	Service Part No.	Description
1	205422	Screw
2	43996	Spreader Half
3	11916	Roll Pin
4	39725	Spreader Half

### No. 7120B

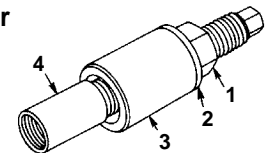
#### Drive Pulley Remover



Item No.	Service Part No.	Description
1	24426	Screw
2	39975	Cross Block
3	206422	Hex Head Cap Screw

### No. 7135A

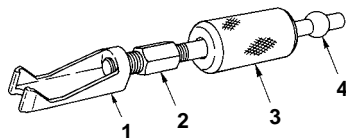
#### FWD Front Hub Installer



Item No.	Service Part No.	Description
1	12121	Hex Nut, 3/4-10
2	12330	Washer
3	207968	Sleeve
4	303374	Screw

### No. 7121

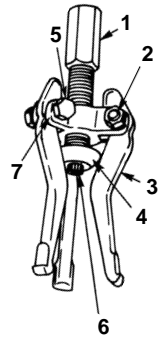
#### Fuel Injector Nozzle Puller



Item No.	Service Part No.	Description
1	39993	Puller Jaw
2	206437	Reducing Adapter
3	208911	Hammer
4	208912	Shank

## No. 7136

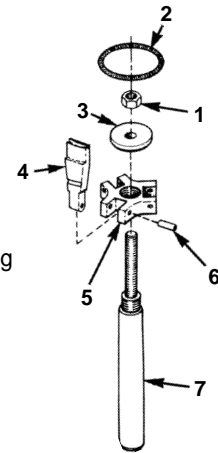
### Bearing Cup Remover



Item No.	Service Part No.	Description
1	203662	Forcing Screw
2	10384	Hex Jam Nut
3	37554	Puller Jaw
4	27299	Cone Expander
5	22021	Hex Head Cap Screw
6	13334	Shoulder Screw
7	24544	Puller Head

## No. 7180

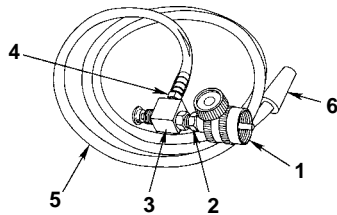
### Universal Bearing Cup Installer



Item No.	Service Part No.	Description
1	10213	Hex Nut, 5/8-18
2	207561	Extension Spring
3	210583	Expander
4	52038	Jaw
5	305130	3-Way Head
6	209624	Pin
7	305129	Handle
-	104916	Parts List

## No. 7148

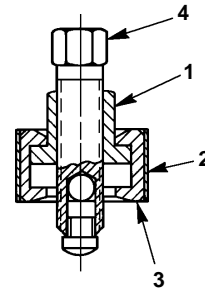
### Propane Enrichment Kit



Item No.	Service Part No.	Description
1	15912	Tank Valve
2	310831	Straight Adapter
3	15914	Poppet Valve
4	15913	Barbed Fitting, 1/8 NPTM-1/4
5	15028	Plastic Tubing
6	201186	Plug

## No. 7185

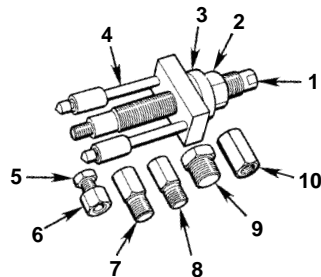
### Power Steering Pump / Alternator Pulley Remover



Item No.	Service Part No.	Description
1	304107	Nut
2	208703	Sleeve
3	304108	Collet Half
4	27447	Forcing Screw

## No. 7155A

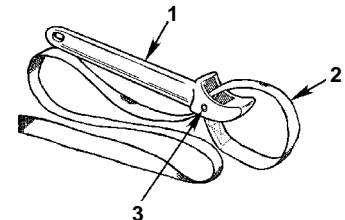
### Mack Fuel Injector Nozzle Puller



Item No.	Service Part No.	Description
1	303903	Forcing Screw, M10 x 1.0mm
2	10216	Nut, 3/4-10
3	12702	Thrust Bearing
4	208403	Bridge
5	10047	Cap Screw, 3/4-10
6	208642	Adapter
7	208533	Adapter, M14 x .5mm
8	208534	Adapter, 1/2-20
9	208535	Adapter, M20 x .75mm
10	215751	Adapter, M14 x 1.5mm
-	14701	Plastic Case
-	104721	Parts List

## No. 7206

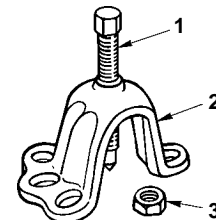
### Multi-Purpose Strap Wrench



Item No.	Service Part No.	Description
1	45742	Handle
2	305085	Strap
3	210749	Slotted Spring Pin

## No. 7208A

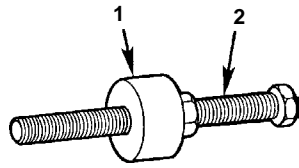
### Front Hub Installer and Puller



Item No.	Service Part No.	Description
1	24833	Forcing Screw
2	520968	Front Hub Remover
3	10394	Jam Nut

## No. 7209

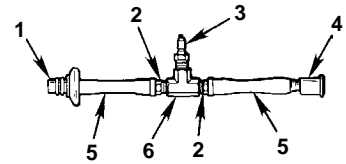
### GM Power Steering Pump Pulley Installer



Item No.	Service Part No.	Description
1	312346	Nut
2	217946	Cap Screw, 3/8-16 x 4"

## No. 7236

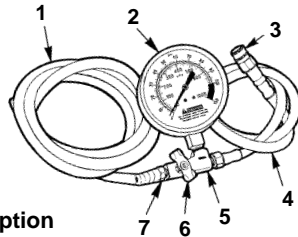
### Spring Lock Coupling Adapter



Item No.	Service Part No.	Description
1	212769	Spring Lock Coupler, Male
2	212802	Barbed Hose Fitting
3	206877	Coupler Plug
4	212755	Spring Lock Coupler, Female
5	212801	Hose (2 pcs., 2 1/4" Long)
6	12165	Pipe Tee

## No. 7211

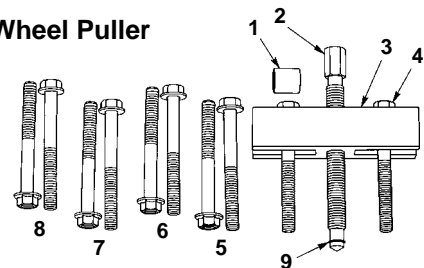
### Gauge & Hose Assembly



Item No.	Service Part No.	Description
1	15028	Flexible Tubing
2	309124	0-100 PSI Pressure Gauge
3	206878	Coupler Socket
4	211398	Pressure Hose
5	19463	Tee Fitting
6	208389	Valve
7	15913	Barbed Hose Fitting

## No. 7245

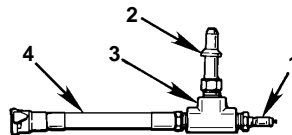
### Steering Wheel Puller



Item No.	Service Part No.	Description
1	209802	Collar
2	304828	Forcing Screw
3	304855	Cross Block
4	209950	Hex Flange Head Screw, 3/8-16 x 3 1/2" (1 only, 2 reqd.)
5	209951	Hex Flange Head Screw, 5/16-18 x 3 1/2" (1 only, 2 reqd.)
6	209952	Hex Flange Head Screw, 5/16-24 x 3 1/2" (1 only, 2 reqd.)
7	209953	Hex Flange Head Screw, M8-1.25 x 90mm (1 only, 2 reqd.)
8	218177	Hex Flange Head Screw, 5/16-18 x 4" (1 only, 2 reqd.)
9	209803	O-ring

## No. 7213

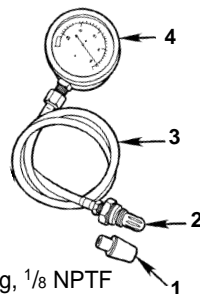
### In-Line Adapter



Item No.	Service Part No.	Description
1	206877	Coupler Plug
2	440519	Fitting
3	12165	Pipe Tee
4	212155	Hose with Fittings

## No. 7215

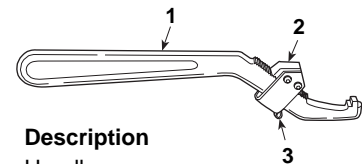
### Exhaust Back Pressure Gauge



Item No.	Service Part No.	Description
1	211474	Rubber Plug
2	212339	Manifold Adapter
3	306508	Hose
4	306509	Pressure Gauge
-	214675	Barbed Hose Fitting, 1/8 NPTF
-	14680	90° Street Elbow
-	105909	Instruction Sheet

## No. 7246

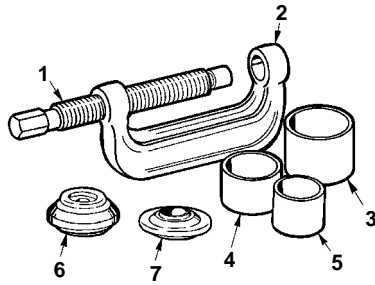
### Adjustable Spanner Wrench



Item No.	Service Part No.	Description
1	31634	Handle
2	23750	Adjusting Block
3	23753	Check Spring

## No. 7248 7249

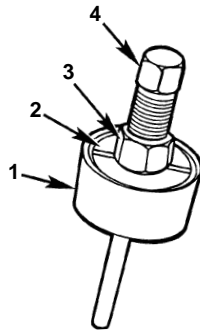
### Ball Joint Service Tools



Item No.	Service Part No.	Description
1	222395	Forcing Screw Assembly (consists of 37703 Forcing Screw, 29501 Plug, 14472 5/8" Dia. Steel Ball, 10273 O-ring.)
2	41925	C-Frame
3	29503	Receiving Tube, 3" O.D., 2 <sup>3</sup> / <sub>4</sub> " I.D.
4	29504	Receiving Tube, 2 <sup>1</sup> / <sub>2</sub> " O.D., 2 <sup>1</sup> / <sub>4</sub> " I.D.
5	29505	Receiving Tube, 2" O.D., 1 <sup>3</sup> / <sub>4</sub> " I.D.
6	305228	Removing Adapter
7	305227	Installing Adapter
-	104950	Parts List

## No. 7262

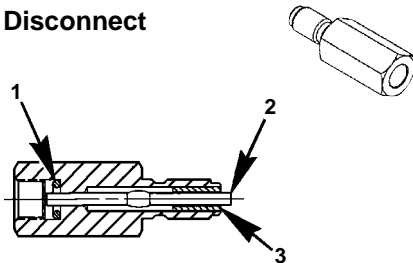
### GM Power Steering Pump Pulley Remover



Item No.	Service Part No.	Description
1	208703	Sleeve
2	304108	Collet Half
3	304107	Nut
4	27445	Forcing Screw

## No. 7272

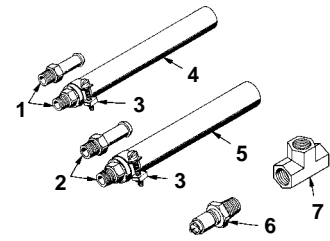
### EFI Quick Disconnect Fitting



Item No.	Service Part No.	Description
1	15023	O-ring
2	213261	Activator Pin
3	16832	Slotted Spring Pin

## No. 7273

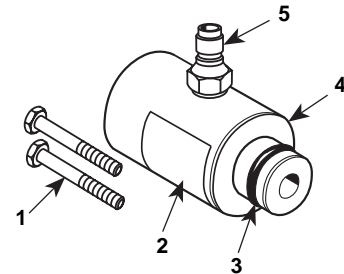
### Pressure Adapter



Item No.	Service Part No.	Description
1	213721	Carburetor Fuel Fitting (5/16" Hose)
2	213722	Carburetor Fuel Fitting (3/8" Hose)
3	213720	Hose Clamp
4	211473	Hose, 5/16" I.D., 4" Long
5	213719	Hose, 3/8" I.D., 4" Long
6	206877	Coupler Plug
7	12165	Tee Fitting (1/8 NPTF)
-	106177	Parts List

## No. 7292A 7293A

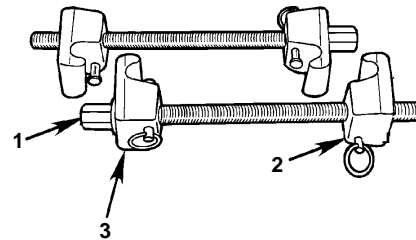
### Quick Disconnect Fitting



Item No.	Service Part No.	Description
1	210420	Metric Hex Head Cap Screw
2	210192	Warning Decal
3	18974	O-ring for 7292A
3	18996	O-ring for 7293A
4	48767	Fuel Pressure Test Adapter for 7292A
4	48768	Fuel Pressure Test Adapter for 7293A
5	206877	Coupler Plug
-	105927	Parts List

## No. 7294

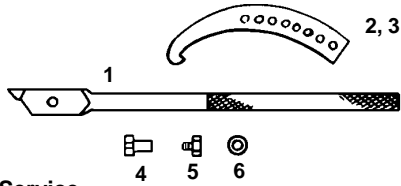
### MacPherson Strut Spring Hook Compressor



Item No.	Service Part No.	Description
1	7294-3	Forcing Screw and Thrust Bearing Washer
2	7294-1	Threaded Hook and Clevis Pin
3	7294-2	Hook and Clevis Pin

**No. 7307  
7308**

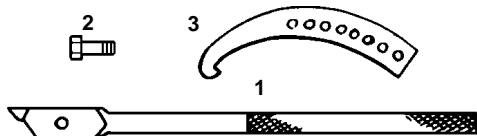
**Adjustable Hook Spanner Wrench**



Item No.	Service Part No.	Description
1	38012	Forged Handle
2	44502	Jaw
3	41617	Jaw for 7308
4	200017	Pivot Pin Body
5	200018	Pivot Pin Screw
6	200019	Pivot Pin Washer

**No. 7309**

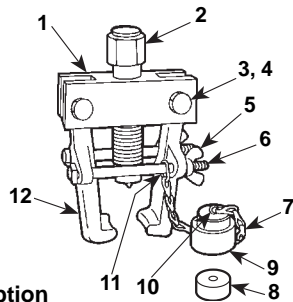
**Heavy-Duty Adjustable Spanner**



Item No.	Service Part No.	Description
1	37813	Forged Handle
2	208602	Cap Screw
3	41617	Jaw

**No. 7310**

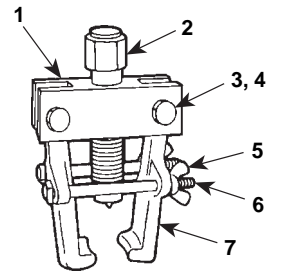
**Pitman Arm Puller**



Item No.	Service Part No.	Description
1	39131	Cross Block
2	26619	Forcing Screw
3	10069	Hex Head Cap Screw
4	10388	Hex Jam Nut
5	10590	Wing Nut, 5/16-18
6	13338	Hex Head Cap Screw
7	10473	Sash Chain
8	205862	Shaft Protector
9	205863	Shaft Protector
10	10573	Cotter Pin
11	10462	Hog Ring #3
12	208910	Puller Jaw

**No. 7311**

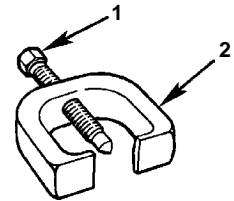
**Pitman Arm Puller**



Item No.	Service Part No.	Description
1	201110	Block
2	23609	Screw
3	10388	Hex Jam Nut
4	22029	Hex Head Cap Screw
5	10590	Wing Nut, 5/16-18
6	10043	Hex Head Cap Screw
7	38430	Puller Jaw

**No. 7314**

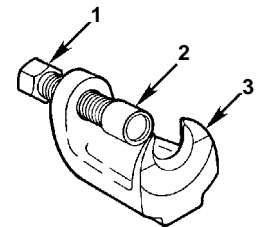
**Pitman Arm Puller**



Item No.	Service Part No.	Description
1	24833	Forcing Screw
2	305972	Puller

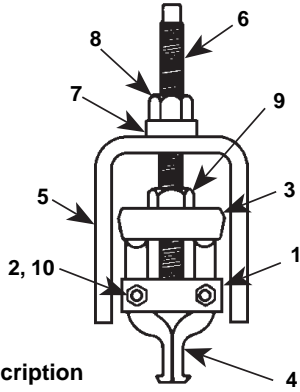
**No. 7315**

**Universal Tie Rod End Remover**



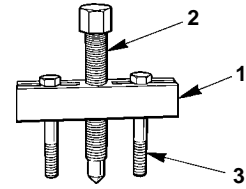
Item No.	Service Part No.	Description
1	304238	Forcing Screw
2	209390	Cap
3	45495	Body
-	10300	O-ring

**No. 7318  
7319**  
Pilot Bearing Puller



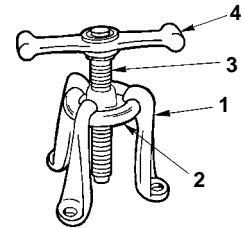
Item No.	Service Part No.	Description
1	27044	Cross Block
2	10014	Cap Screw
3	201952	Adjusting Yoke
4	29185	Jaw for 7318, 1/2" to 1 1/2" Spread
4	29189	Jaw for 7319, 7/8" to 2" Spread
5	35033	Puller Bridge
6	200063	Forcing Screw
7	24839	Washer
8	10210	Hex Nut, 1/2-20
9	10390	Hex Jam Nut, 1/2"
10	10382	Hex Jam Nut

**No. 7393**  
Gear & Pulley Puller



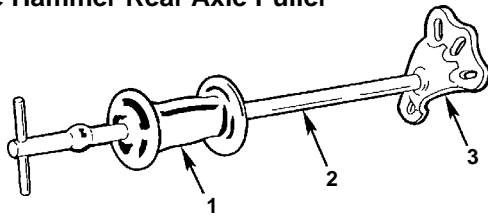
Item No.	Service Part No.	Description
1	26603	Cross Block
2	24833	Forcing Screw, 5 1/2"
3	10060	Cap Screw, 3/8 NC (1 only)

**No. 7394**  
Universal Hub Puller



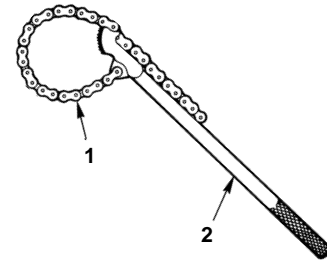
Item No.	Service Part No.	Description
1	32937	Puller Leg
2	32939	Center Hub
3	32940	Forcing Screw, 1-14 x 9" Long
4	32942	Striking Wrench

**No. 7374**  
Slide Hammer Rear Axle Puller



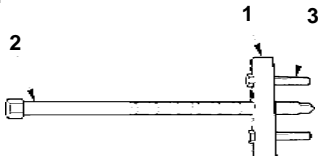
Item No.	Service Part No.	Description
1	34331	Hammer
2	208627	Shank and Tee Bar Assembly
3	7372	Pulling Adapter Plate

**No. 7400  
7401**  
Ratcheting Chain Wrench



Item No.	Service Part No.	Description
1	13905	16" Chain for 7400
1	11608	24" Chain for 7401
2	51033	Handle for 7400
2	33118	Handle for 7401
-	17154	Handle Grip for 7400

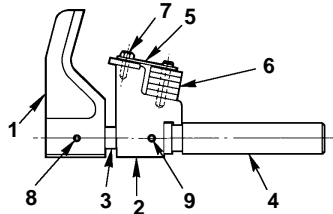
**No. 7392**  
Gear & Pulley Puller



Item No.	Service Part No.	Description
1	26603	Cross Block
2	24832	Forcing Screw, 13"
3	10060	Cap Screw, 3/8 NC (1 only, 2 reqd.)

## No. 7402 7402M

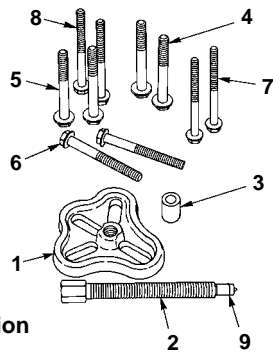
### Universal Outside Thread Chaser



Item No.	Service Part No.	Description
1	46107	V-Pad
2	52518	Post
3	25512	Screw
4	25509	Handle
5	25510	Strap
6	8090	8-10-12-14 Pitch Die for 7402
6	8091	16-18-20-24 Pitch Die for 7402
6	8092	11-11½ Pitch Die for 7402
6	8093	4-5 Pitch Die for 7402
6	8094	6-7 Pitch Die for 7402
6	8095	7½-9 Pitch Die for 7402
6	8096	1 mm–1.75 mm Pitch Die for 7402M
6	8097	2 mm–3.5 mm Pitch Die for 7402M
6	8098	4 mm Pitch Die for 7402M
7	10027	Hex Head Cap Screw
8	10585	Roll Pin, 1"
9	12828	Roll Pin, ¼ x ¾

## No. 7403

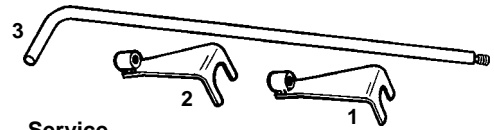
### Steering Wheel / Pulley / Flywheel Puller



Item No.	Service Part No.	Description
1	208170	Flange
2	304828	Forcing Screw
3	209802	Collar
4	209950	Hex Flange Head Cap Screw ¾–16 x 3½
5	209951	Hex Flange Head Cap Screw ⅝–18 x 3½
6	209952	Hex Flange Head Cap Screw ⅝–24 x 3½
7	218177	Hex Flange Head Cap Screw ⅝–18 x 4
8	209953	Hex Flange Head Cap Screw M8 x 1.25 x 90mm
9	209803	O-ring

## No. 7413

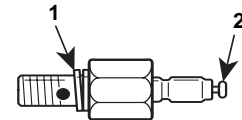
### Ford / Chrysler Heater Hose Disconnect Tool



Item No.	Service Part No.	Description
1	7413-1	⅝" Heater Hose Connection Remover
2	7413-2	¾" Heater Hose Connection Remover
3	7413-3	Handle

## No. 7426

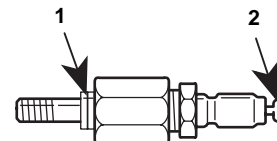
### Quick Disconnect Banjo Fitting



Item No.	Service Part No.	Description
1	215278	Sealing Ring Washer
2	215806	Shrader Valve Core

## No. 7427

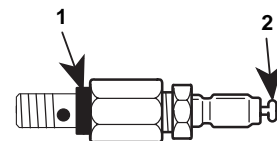
### Quick Disconnect Banjo Fitting



Item No.	Service Part No.	Description
1	215280	Sealing Ring Washer
2	215806	Shrader Valve Core

## No. 7428

### Quick Disconnect Banjo Fitting

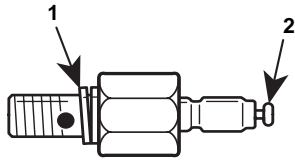


Item No.	Service Part No.	Description
1	215282	Sealing Ring Washer
2	215806	Shrader Valve Core



**No. 7429**

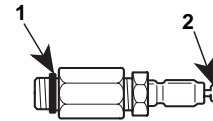
**Quick Disconnect Banjo Fitting**



Item No.	Service Part No.	Description
1	215278	Sealing Ring Washer
2	215806	Shrader Valve Core

**No. 7437**

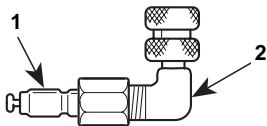
**Quick Disconnect Fitting**



Item No.	Service Part No.	Description
1	19088	O-ring
2	215806	Shrader Valve Core

**No. 7430**

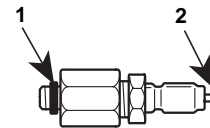
**Quick Disconnect 90° Elbow Fitting**



Item No.	Service Part No.	Description
1	212156	Quick-Plug Coupler
2	215284	Elbow Adapter Fitting, 1/8 NPT

**No. 7438**

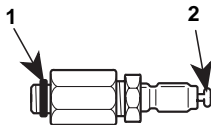
**Quick Disconnect Fitting**



Item No.	Service Part No.	Description
1	11437	O-ring
2	215806	Shrader Valve Core

**No. 7435§**

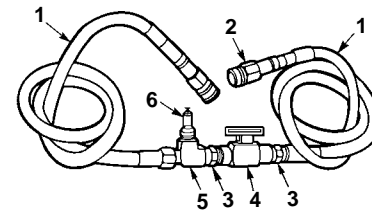
**Quick Disconnect Fitting**



Item No.	Service Part No.	Description
1	215742	O-ring
2	215806	Shrader Valve Core

**No. 7440**

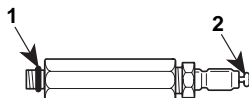
**CIS Fuel Line Adapter**



Item No.	Service Part No.	Description
1	211398	Pressure Hose
2	206878	Coupler Socket
3	12169	Hex Nipple, 1/8 NPT
4	214114	Plug Valve
5	19463	Tee Fitting
6	206877	Coupler Plug

**No. 7436§**

**Quick Disconnect Fitting**



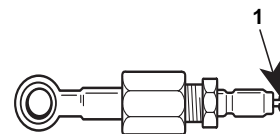
Item No.	Service Part No.	Description
1	215742	O-ring
2	215806	Shrader Valve Core

**No. 7441**

**7442**

**7443**

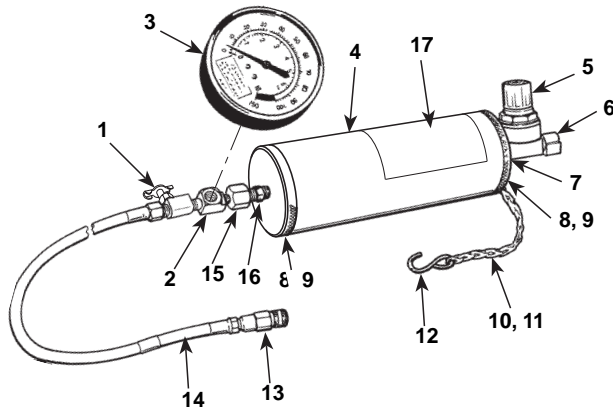
**Banjo Fitting**



Item No.	Service Part No.	Description
1	215806	Shrader Valve Core

## No. 7448

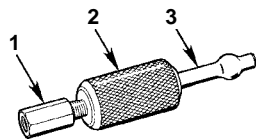
### Canister-Type Fuel Injector Cleaner



Item No.	Service Part No.	Description
1	208389	Valve
2	19463	Tee Fitting
3	313575	Pressure Gauge (0-100 PSI / 0-7 BAR)
4	47955	Cylinder Body
5	213299	Air Regulator
6	15373	90° Elbow Fitting
7	16494	Straight Fitting, 1/4 NPTF
8	309796	Cylinder Cap (1 only, 2 reqd.)
9	213209	O-ring (1 only, 2 reqd.)
10	10473	Sash Chain, 67/8" long
11	213876	Split Ring
12	15665	"S" Hook
13	206878	Coupler Socket
14	306905	Hose (1/8 NPTF x 6' long) with Fitting
15	17022	Straight Fitting
16	216297	Check Valve
17	313576	Decal
-	107340	Parts List
-	106103	Instruction Manual

## No. 7454

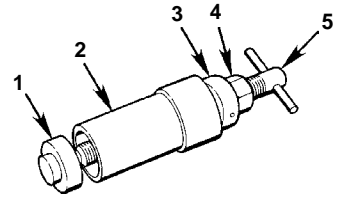
### Navistar® Fuel Injector Nozzle Puller



Item No.	Service Part No.	Description
1	215844	Adapter
2	208911	Hammer
3	208912	Shank

## No. 7455

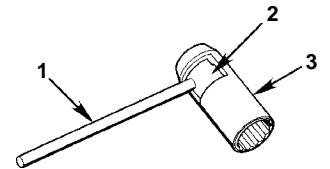
### Fuel Injector Nozzle Puller / Installer



Item No.	Service Part No.	Description
1	215752	Installation Gauge
2	215753	Tube
3	15427	Bearing
4	10213	Nut
5	309144	Forcing Screw
-	14701	Plastic Case

## No. 7458

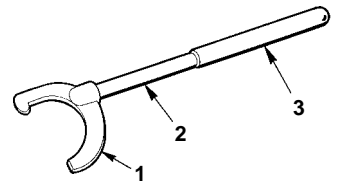
### Bosch Nozzle Socket



Item No.	Service Part No.	Description
1	201278	Handle Assembly
2	201276	Inner Socket
3	201275	Outer Socket

## No. 7461

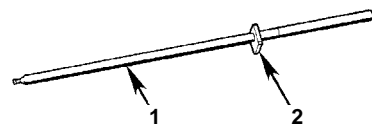
### Fuel Injection Pump Rotating Tool



Item No.	Service Part No.	Description
1	208399	Jaw
2	208398	Handle
3	11945	Handle Grip

## No. 7462

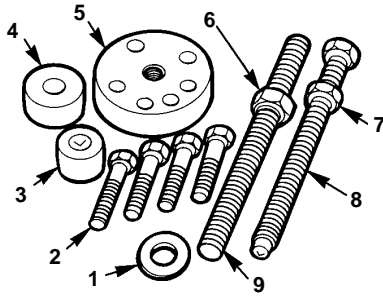
### Hydraulic Brake Spring Remover / Installer



Item No.	Service Part No.	Description
1	309350	Handle
2	215922	Plate

## No. 7464

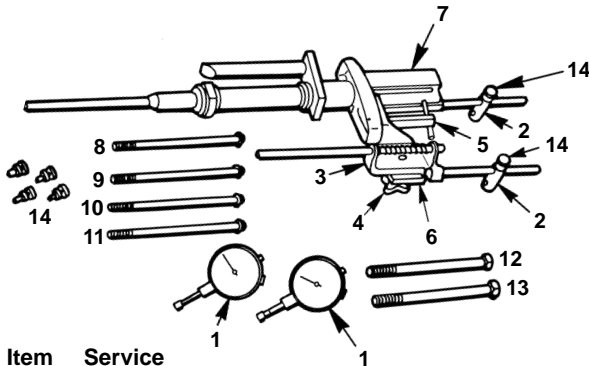
### Chrysler Crankshaft Pulley Remover / Installer



Item No.	Service Part No.	Description
1	15513	Thrust Race
2	211993	Cap Screw, M8 x 1.25 x 35 mm (1 only)
3	217294	Shaft Protector
4	217295	Drive Plate
5	310430	Puller Plate
6	18911	Hex Nut
7	19412	Hex Nut
8	217293	Special Hex Cap Screw
9	216232	Threaded Rod

## No. 7470

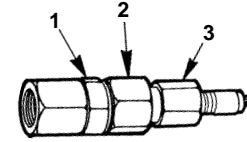
### Cummins Diesel Injector Timing Tool Set



Item No.	Service Part No.	Description
1	308171	Dial Indicator Gauge (1 only)
2	214633	Dial Indicator Support (1 only)
3	47116	Push Tube Plunger Bracket
4	214632	Push Tube Plunger Knob
5	308394	Locking Nut
6	53091	Center Support Bracket
7	61798	Bracket
8	215342	Cap Screw, M8 x 1.25 x 150 mm
9	215343	Cap Screw, $\frac{5}{16}$ -18 x 6"
10	215344	Cap Screw, $\frac{3}{8}$ -16 x 6"
11	215345	Cap Screw, $\frac{3}{8}$ -24 x 6"
12	215346	Cap Screw, $\frac{1}{2}$ -13 x 6"
13	215347	Cap Screw, $\frac{1}{2}$ -20 x 6"
14	18912	Thumb Screw (1 only)
-	61744	Storage Case
-	105277	Parts List

## No. 7472

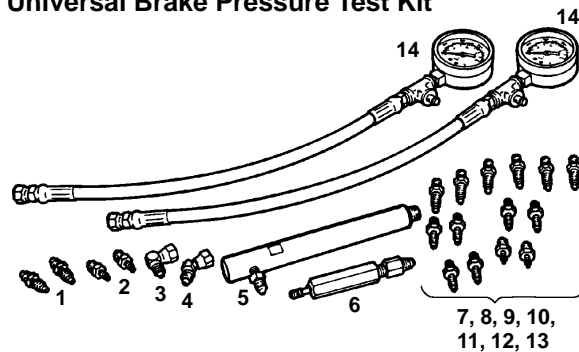
### Conversion Adapter



Item No.	Service Part No.	Description
1	218214	Straight Fitting
2	210416	Straight Fitting
3	212156	Quick-Plug Coupler

## No. 7488A

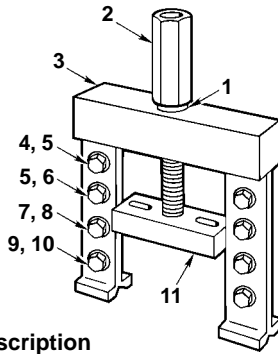
### Universal Brake Pressure Test Kit



Item No.	Service Part No.	Description
1	48854	Straight Fitting ( $\frac{7}{16}$ -20 UNF 37° Flare to $\frac{7}{16}$ -20 UNF 45° Flare)
2	48855	Straight Fitting ( $\frac{7}{16}$ -20 UNF 37° Flare to M7 x 1.0 45° Flare)
3	16867	90° Elbow Fitting (37° Flare Male to 37° Flare Female Swivel)
4	16868	45° Elbow Fitting (37° Flare Male to 37° Flare Female Swivel)
5	311102	Teves Adapter
6	311096	Anti-Lock Pressure Adapter
7	48678	Straight Fitting ( $\frac{7}{16}$ -20 UNF 37° Flare to M8 x 1.25 37° Flare)
8	48674	Straight Fitting ( $\frac{7}{16}$ -20 UNF 37° Flare to $\frac{1}{4}$ -28 UNF 37° Flare)
9	48676	Straight Fitting ( $\frac{7}{16}$ -20 UNF 37° Flare to $\frac{5}{16}$ -24 UNF 37° Flare)
10	48675	Straight Fitting ( $\frac{7}{16}$ -20 UNF 37° Flare to $\frac{3}{8}$ -24 UNF 37° Flare)
11	48673	Straight Fitting ( $\frac{7}{16}$ -20 UNF 37° Flare to $\frac{7}{16}$ -24 UNS 37° Flare)
12	48679	Bleeder Adapter ( $\frac{7}{16}$ -20 UNF 37° Flare to M10 x 1.0 45° Flare)
13	48677	Straight Fitting ( $\frac{7}{16}$ -20 UNF 37° Flare to M10 x 1.5 37° Flare)
14	7486	Gauge Assembly, 0-3000 PSI (1 only)
-	105719	Parts List
-	105760	Technician Reference Guide

## No. 7490

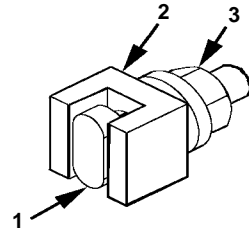
### U-Joint Tool



Item No.	Service Part No.	Description
1	24837	Forcing Screw Washer
2	216773	Forcing Screw Nut ( $3/4 - 16$ )
3	48063	Bridge
4	211993	Cap Screw, M8 x 1.25 x 35mm, Gr. 10.9
5	10257	Flat Washer for $5/16$ " Bolt
6	216775	Cap Screw, $5/16-24$ x $1\frac{1}{2}$ , Grade 8
7	216776	Cap Screw, $3/8-24$ x $1\frac{1}{2}$ , Grade 8
8	10258	Flat Washer for $3/8$ " Bolt
9	216792	Cap Screw, $7/16-20$ x $1\frac{1}{2}$ , Grade 8
10	13339	Flat Washer for $7/16$ " Bolt
11	310010	Screw and Bar Assembly
-	216774	Screw Holder
-	105334	Parts List

## No. 7491C

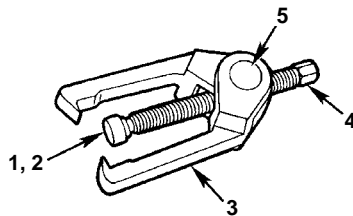
### GM Upper Control Arm Knock-Out Tool



Item No.	Service Part No.	Description
1	506142	Forcing Screw
2	506143	Bridge
3	506141	Spherical Flange Nut

## No. 7503

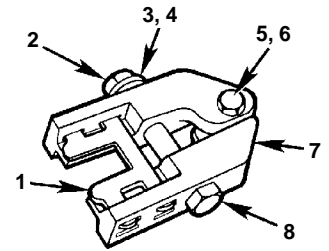
### Outer Tie Rod Remover



Item No.	Service Part No.	Description
1	310484	Forcing Screw Tip
2	215219	Retaining Ring (not shown)
3	48332	Tie Rod Remover Jaw
4	308884	Forcing Screw
5	217325	Pivot Pin

## No. 7504

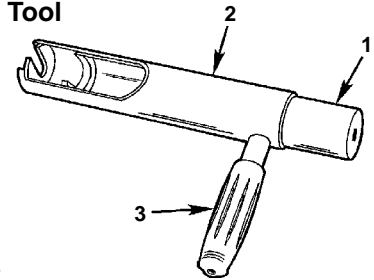
### Inner Tie Rod Crimper Tool



Item No.	Service Part No.	Description
1	310429	Guide Plate
2	215654	Nut, $1\frac{1}{2}-13$ UNC, Grade 8
3	15513	Thrust Bearing Washer
4	217285	Hex Washer
5	10055	Cap Screw, $3/8-16$ x $1\frac{1}{2}$
6	12013	Locknut, $3/8-16$
7	48305	Crimper
8	18213	Cap Screw, $1\frac{1}{2}-13$ x $3\frac{1}{2}$
-	105584	Instruction Sheet

## No. 7505

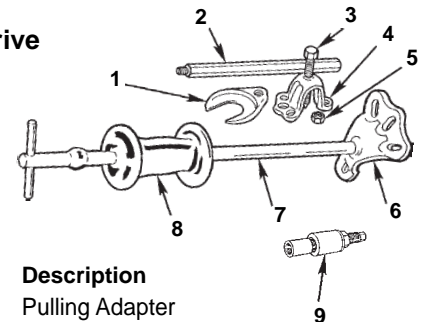
### Inner Tie Rod Tool



Item No.	Service Part No.	Description
1	48309	Inside Tube Wrench
2	48310	Outside Tube Wrench
3	11390	Handle Grip
-	105585	Instruction Sheet

## No. 7506

### Front Wheel Drive Service Set

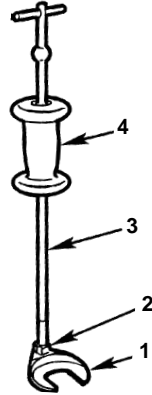


Item No.	Service Part No.	Description
1	306284	Pulling Adapter
2	7508	Extension
3	24833	Forcing Screw
4	47407	Puller Head
5	10394	Nut, $5/8-18$
6	7372	Pulling Adapter Plate
7	208627	Shank and Tee Bar Assembly
8	34331	Hammer
9	7135A	Front Hub Installer

## No. 7507 7509

### Inner C.V. Joint Puller

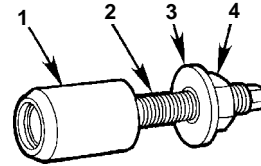
Item No.	Service Part No.	Description
1	306284	Puller Adapter
2	10394	Jam Nut, $\frac{5}{8}$ -18
3	208627	Shank and Tee Bar Assembly (7509)
4	34331	5 Lb. Hammer (7509)



## No. 7535

### Subaru Front Axle Shaft Installer

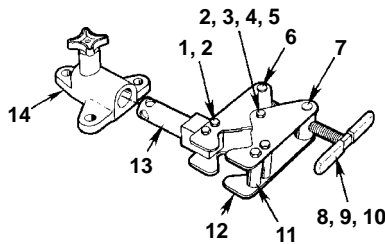
Item No.	Service Part No.	Description
1	216878	Sleeve
2	309750	Forcing Screw
3	12330	Washer
4	12121	Hex Nut, $\frac{3}{4}$ -10 UNC



## No. 7515§

### Roto and Bar Mount Vise

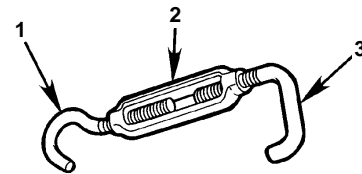
Item No.	Service Part No.	Description
1	17243	Cap Screw, $\frac{3}{8}$ -16 x 2 $\frac{1}{2}$
2	12013	Locknut, $\frac{3}{8}$ -16
3	13201	Cap Screw, $\frac{3}{8}$ -16 x 2 $\frac{3}{4}$
4	10258	Washer
5	215818	Short Spacer
6	309245	Pivot Screw
7	215815	Pivot Screw
8	309229	Adjusting Screw Assembly
9	10207	Nut
10	14223	Nut, $\frac{7}{16}$ -20
11	215817	Long Spacer
12	47736	Claw Plate
13	47737	Pivot
14	34607	Base Assembly
-	105273	Parts List



## No. 7539

### GM F-Body Camber Adjusting Tool

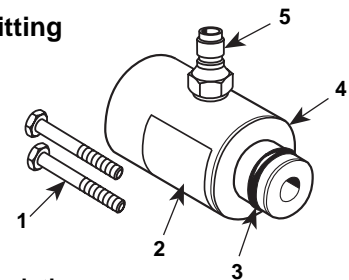
Item No.	Service Part No.	Description
1	216338	Hook Bolt
2	216337	Turnbuckle
3	309788	Hook



## No. 7577

### Quick Disconnect Fitting

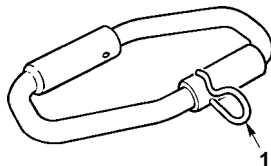
Item No.	Service Part No.	Description
1	14513	Hex Head Cap Screw, M6 x 1.0 x 50 mm
2	210192	Warning Decal
3	18996	O-ring
4	47447	Fuel Pressure Test Adapter
5	206877	Coupler Plug
-	105927	Instruction Sheet



## No. 7532

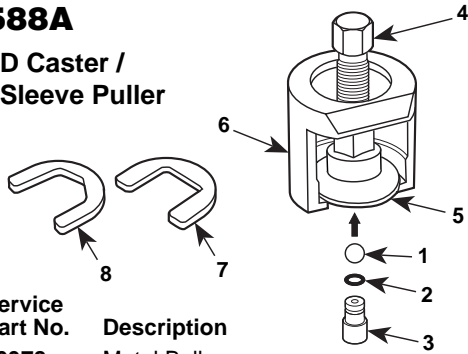
### Strut Compressor Bridge Accessory

Item No.	Service Part No.	Description
1	220241	Special Hair Pin
-	105832	Instruction Sheet



### No. 7588A

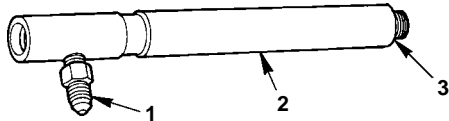
#### Ford 4WD Caster / Camber Sleeve Puller



Item No.	Service Part No.	Description
1	10378	Metal Ball
2	10266	O-ring
3	219327	Screw Tip
4	27445	Forcing Screw
5	311573	Swivel Nut
6	311575	Bushing Adapter
7	218990	Horseshoe Clip (.970)
8	221476	Horseshoe Clip (1.110)
-	106014	Parts List

### No. 7591

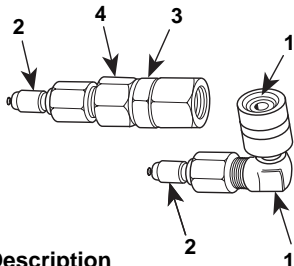
#### Teves / Delco ABS Pressure Fitting



Item No.	Service Part No.	Description
311102 includes the following:		
1	16819	Adapter Fitting
2	48682	Adapter
3	218397	O-ring Packing

### No. 7597

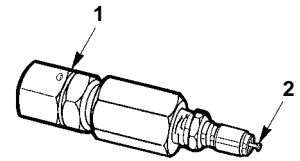
#### Conversion Adapter Kit



Item No.	Service Part No.	Description
1	215285	90° Elbow Fitting
2	212156	Quick Coupler
3	218214	Straight Fitting
4	210416	Straight Fitting

### No. 7598§

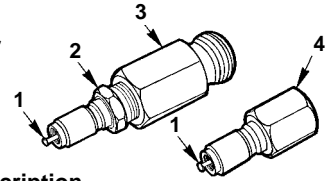
#### Conversion Adapter



Item No.	Service Part No.	Description
440512 includes the following:		
1	214053	Straight Fitting
2	215806	Schrader Valve Core

### No. 7599§

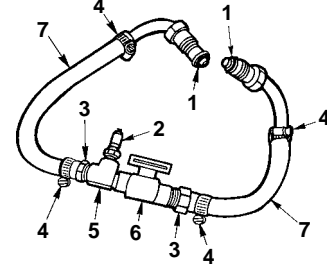
#### Conversion Adapter



Item No.	Service Part No.	Description
1	215806	Schrader Valve Core
2	206877	Coupler Plug
3	310670	Quick-Disconnect Fitting (includes 206877)
4	212156	Quick-Plug Coupler

### No. 7626

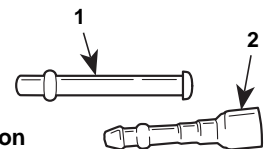
#### TBI Fuel Line Adapter



Item No.	Service Part No.	Description
1	18974	O-ring
2	206877	Coupler Plug
3	213721	Carburetor Fuel Fitting
4	210331	Hose Clamp
5	19463	Tee Fitting
6	214114	Plug Valve
7	211473	Pressure Hose

### No. 7628

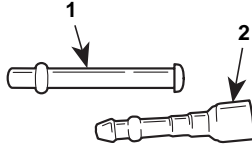
#### 5/16" Special Fitting Set



Item No.	Service Part No.	Description
1	216812	Special Fitting
2	216263	Special Fitting

### No. 7629

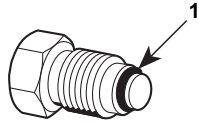
#### 3/8" Special Fitting Set



Item No.	Service Part No.	Description
1	216811	Special Fitting
2	216810	Special Fitting

### No. 7632

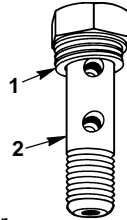
#### Fuel Return Line Plug



Item No.	Service Part No.	Description
1	11438	Viton O-ring

### No. 7634

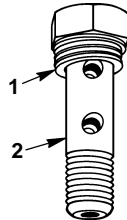
#### EFI Pressure Test Adapter



Item No.	Service Part No.	Description
1	215280	Sealing Ring Washer
2	310094	Banjo Bolt, M8 x 1.0

### No. 7638

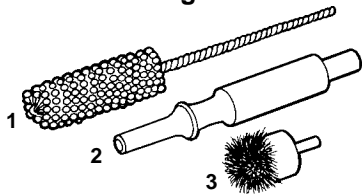
#### EFI Pressure Test Adapter



Item No.	Service Part No.	Description
1	215278	Sealing Ring Washer
2	314751	Double Banjo Bolt

### No. 7639

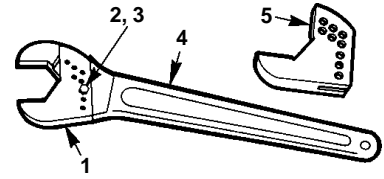
#### GM W-Body Brake Bushing Service Set



Item No.	Service Part No.	Description
1	219387	Caliper Retaining Bore Hone
2	49012	Brake Caliper Bushing Remover
3	219386	Caliper Bushing Seal Groove Brush

### No. 7640

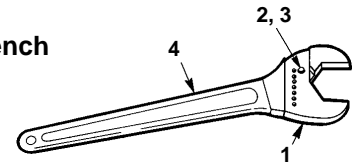
#### 24" Adjustable Wrench



Item No.	Service Part No.	Description
1	48403	Machined Jaw (17/16" to 25/16" adjustment)
2	10388	Hex Jam Nut
3	22953	Cap Screw
4	48395	Handle Assembly
5	48400	Machined Jaw (optional), 13/8" to 27/8" adjustment

### No. 7641

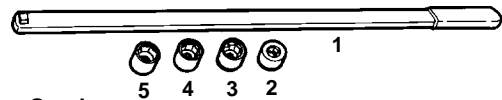
#### 36" Adjustable Wrench



Item No.	Service Part No.	Description
1	48412	Machined Jaw (23/4" to 43/4" adjustment)
2	10388	Hex Jam Nut
3	23518	Cap Screw
4	53642	Handle Assembly

### No. 7644

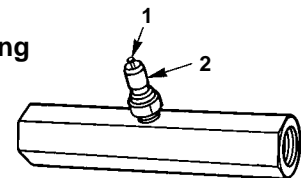
#### Serpentine Belt Service Tool



Item No.	Service Part No.	Description
1	218509	Long Handle Wrench
2	311210	13 mm Socket
3	311209	15 mm Socket
4	311208	16 mm Socket
5	311207	18 mm Socket

### No. 7665

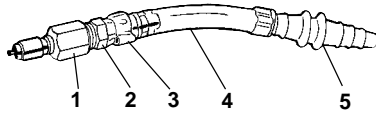
#### GM TBI Fuel Line Fitting



Item No.	Service Part No.	Description
1	215806	Schrader Valve Core
2	218336	Straight Fitting
-	106378	Instruction Sheet

### No. 7666

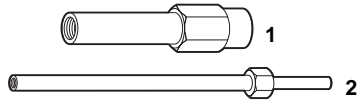
#### Decarbonizing Adapter



Item No.	Service Part No.	Description
1	212156	Quick-Plug Coupler
2	15913	Barb Fitting, 1/8 NPTM to 1/4
3	210954	Hose Clamp
4	JDG115	Hose, 120" Long
5	220479	Straight Hose Connector Fitting

### No. 7667

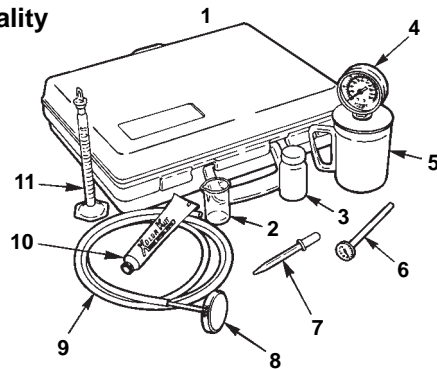
#### GM Computer-Controlled Carburetor Tools



Item No.	Service Part No.	Description
1	220437	7mm / 10mm Double-D Carburetor Tool
2	220436	2mm Double-D / 2.5mm Hex Carburetor Tool

### No. 7670

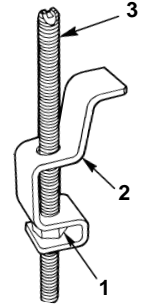
#### Gasoline Quality Testing Kit



Item No.	Service Part No.	Description
1	14713	Plastic Case
2	218278	Beaker
3	218277	Plastic Bottle
4	311068	Gas Vapor Tester
5	218274	Thermal Mug
6	ROB10569	Thermometer
7	218280	Pipette
8	311073	Flexible Probe
9	218312	Nylon Tubing
10	218275	Water Detection Paste
11	218279	Graduated Cylinder
-	48680	Instruction Decal

### No. 7676

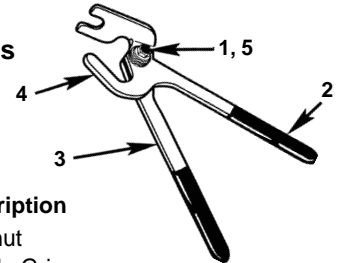
#### Alignment Assist Tool



Item No.	Service Part No.	Description
1	10217	Nut, 3/4-10
2	311792	Screw Bracket
3	311791	Adjusting Screw
-	105811	Parts List

### No. 7677

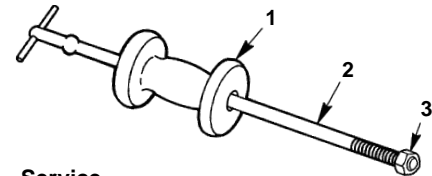
#### Exhaust Hanger Pliers



Item No.	Service Part No.	Description
1	13116	Locknut
2	14564	Handle Grip
3	49073	Drive Plier Handle
4	53856	Support Plier Handle
5	10416	Socket Head Shoulder Screw

### No. 7703

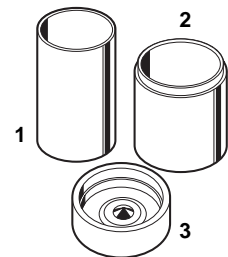
#### Ten Pound Slide Hammer Puller



Item No.	Service Part No.	Description
1	312297	10 Lb. Hammer
2	312296	Shank and Tee Bar Assembly
3	10394	Hex Jam Nut

### No. 7704

#### 4WD Ball Joint Service Tools

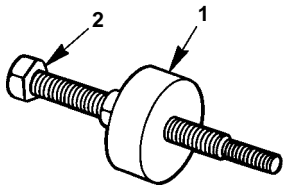


Item No.	Service Part No.	Description
1	38355	Installing Cup
2	38354	Receiving Cup
3	204508	Receiving Cup
-	105816	Parts List



## No. 7771

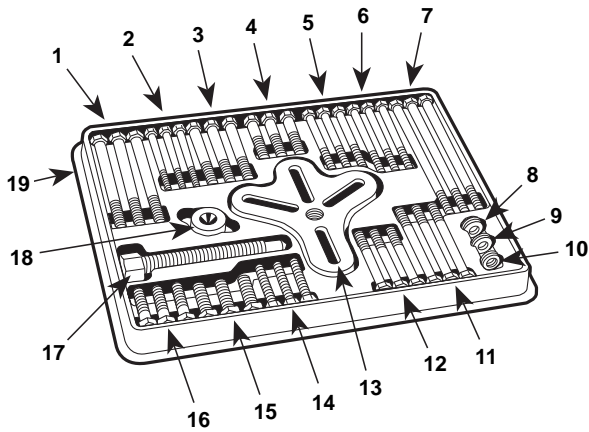
### Ford Power Steering Pump Pulley Installer



Item No.	Service Part No.	Description
1	312346	Special Nut
2	312347	Forcing Screw

## No. 7790

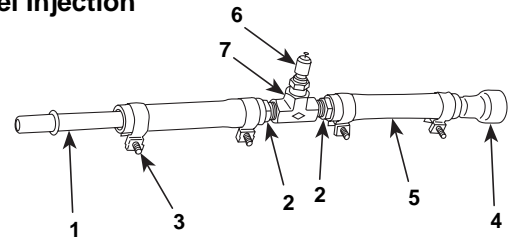
### Flange-Type Puller Set



Item No.	Service Part No.	Description
1	12407	Hex Head Cap Screw, $\frac{3}{8}$ -16 x $4\frac{1}{2}$
2	216795	Hex Head Cap Screw, $\frac{1}{4}$ -28 x 3
3	10060	Hex Head Cap Screw, $\frac{3}{8}$ -16 x 3
4	10057	Hex Head Cap Screw, $\frac{3}{8}$ -16 x 2
5	10042	Hex Head Cap Screw, $\frac{5}{16}$ -24 x 3
6	10043	Hex Head Cap Screw, $\frac{5}{16}$ -18 x $3\frac{1}{2}$
7	215349	Hex Head Cap Screw, $\frac{5}{16}$ -18 x 6
8	10258	Plain Washer, $\frac{3}{8}$ "
9	10229	Washer, $\frac{1}{4}$ "
10	10257	Bolt Washer, $\frac{5}{16}$ "
11	213232	Hex Hd. Cap Screw, M8 x 1.25 x 90mm
12	220113	Hex Hd. Cap Screw, M8 x 1.25 x 65mm
13	512888	Flange Puller
14	214170	Hex Hd. Cap Screw, M8 x 1.25 x 45mm
15	206158	Cap Screw
16	10054	Hex Head Cap Screw, $\frac{3}{8}$ -24 x $1\frac{1}{2}$
17	24833	Forcing Screw
18	26342	Shaft Protector
19	54327	Plastic Tray

## No. 7791

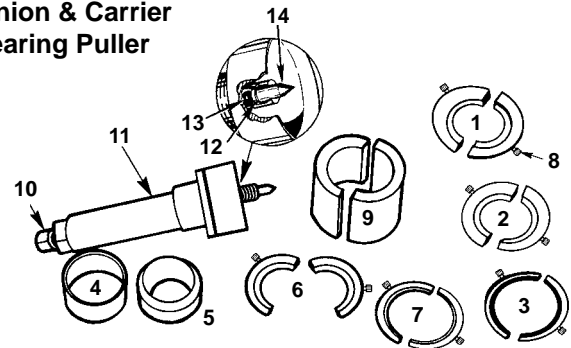
### GM Fuel Injection Fitting



Item No.	Service Part No.	Description
1	216811	Special Fitting
2	213722	Carburetor Fuel Fitting, $\frac{3}{8}$ "
3	213720	Hose Clamp
4	216810	Special Fitting
5	213719	Hose, $\frac{3}{8}$ " I.D.
6	206877	Coupler Plug
7	12165	Tee Fitting, $\frac{1}{8}$ " NPTF
-	106033	Parts List

## No. 7794

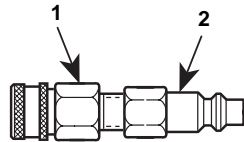
### (205-D036) Pinion & Carrier Bearing Puller



Item No.	Service Part No.	Description
1	44800	Collet Half
2	44802	Collet Half
3	45145	Collet Half
4	303174	Insert
5	303173	Insert
6	44801	Collet Half
7	44803	Collet Half
8	17965	Cap Screw, #8-32 x $\frac{1}{4}$ " Long
9	44797	Collet Half
10	303171	Screw
11	303167	Tube
12	10268	O-ring
13	12547	Steel Ball, $\frac{7}{16}$ "
14	303170	Point
-	104656	Parts List

### No. 7799

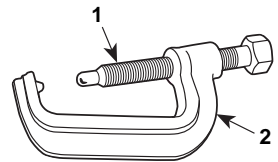
#### Fuel Injection Fitting Conversion Adapter



Item No.	Service Part No.	Description
1	212191	Coupler Socket
2	19520	Coupler Plug

### No. 7822A

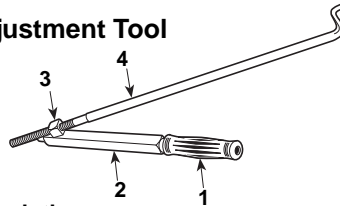
#### GM Torsion Bar Tool



Item No.	Service Part No.	Description
1	J-22517-3	Pressing Screw
2	J-42393-1	Frame Body

### No. 7809

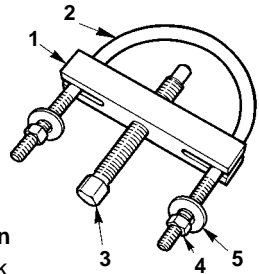
#### Saturn Rear Toe Adjustment Tool



Item No.	Service Part No.	Description
1	11610	Handle Grip
2	310396	Handle
3	24847	Tapped Swivel
4	310397	Rod
-	105948	Instruction Sheet

### No. 7826

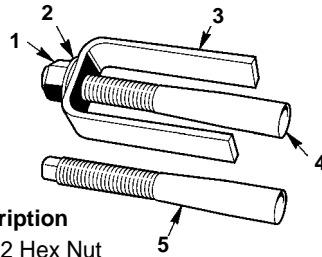
#### Ford Truck Torsion Bar Tool



Item No.	Service Part No.	Description
1	313670	Cross Block
2	313669	"U" Bolt
3	24833	Forcing Screw
4	221703	Hex Nut
5	10232	Plain Type A Washer
-	106070	Instruction Sheet

### No. 7815

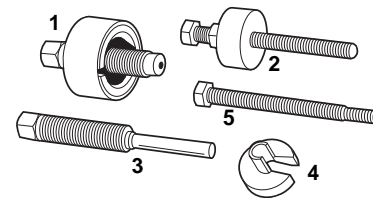
#### Steering Wheel Lock Plate Remover



Item No.	Service Part No.	Description
1	10211	9/16-12 Hex Nut
2	14869	S.A.E. Washer
3	313024	Bridge
4	313275	M14 x 1.5 Screw
5	313276	9/16-18 Screw

### No. 7830A

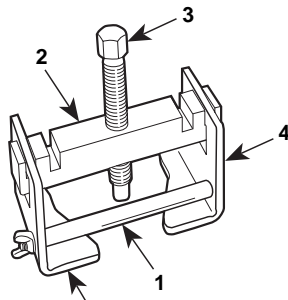
#### Power Steering Pump Pulley Remover / Installer Set



Item No.	Service Part No.	Description
1	7185	Power Steering Pump / Alternator Pulley Remover (see No. 7185 for parts)
2	7209	GM Power Steering Pump Pulley Installer (see No. 7209 for parts)
3	7104	GM Power Steering Pump Pulley Remover Forcing Screw (see No. 7104 for parts)
4	7244	Quick Disconnect Tool
5	312347	Forcing Screw

### No. 7816

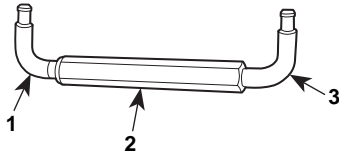
#### Ford Torsion Bar Adjustment Tool



Item No.	Service Part No.	Description
1	202-204	Spacer
2	204-207	Bar
3	204-208	Forcing Screw
4	204-209	Adapter Plate
5	204-210	Adapter Plate
-	105963	Parts List

### No. 7840

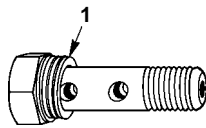
#### GM Caster / Camber Adjusting Wrench



Item No.	Service Part No.	Description
1	313429	Hook, Left Hand Threads
2	313708	Body
3	313428	Hook, Right Hand Threads
-	105984	Instruction Sheet

### No. 7851

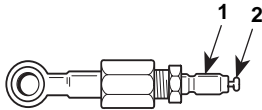
#### Banjo Bolt



Item No.	Service Part No.	Description
1	221712	Sealing Ring Washer

### No. 7852

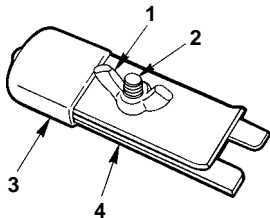
#### Quick-Disconnect Fuel Injection Banjo Fitting



Item No.	Service Part No.	Description
1	440642	Special Fitting
2	215806	Shrader Valve Core

### No. 7853

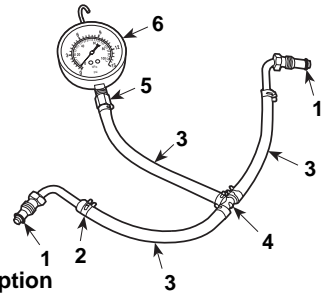
#### Proportioning Valve Depressor for ABS Brake Systems



Item No.	Service Part No.	Description
1	13024	1/4-20 Steel Wing Nut
2	RS-2100-6	Carriage Bolt
3	RS-23100-586	Plastisol Grip
4	J-39177-1	Clip

### No. 7874

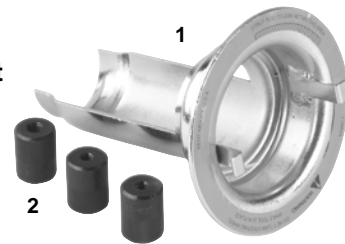
#### GM TBI Low Pressure Gauge Assembly



Item No.	Service Part No.	Description
1	18974	Viton O-ring
2	213720	Hose Clamp
3	213719	Pressure Hose
4	221551	Barbed Tee
5	213734	Barbed Hose Fitting
6	440047-1	0-15 PSI Pressure Gauge
-	218165	Warning Decal

### No. 7876

#### GM W-Body Strut Retaining Tool



Item No.	Service Part No.	Description
1	J-38844-1	Strut Retaining Tool
2	J-38844-2	Nut

### No. 7885

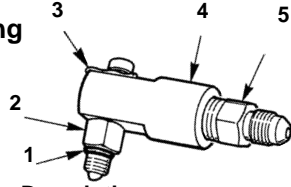
#### Fan Clutch Wrenches and Case



Item No.	Service Part No.	Description
1	513900	Case
2	513739	17/16" Fan Clutch Wrench
3	413742	17/16" Fan Clutch Wrench
4	513745	19/16" Fan Clutch Wrench
5	513746	23/8" GM Fan Clutch Wrench
6	513744	17/8" Fan Clutch Nut Wrench
7	513740	213/16" Fan Hub Wrench
8	513738	21/8" Fan Clutch Pulley Wrench
9	513743	31/4" Fan Pulley Holding Wrench
10	513741	21/4" Fan Clutch Pulley Wrench
11	513747	3" Fan Clutch Pulley Holding Wrench

### No. 7886

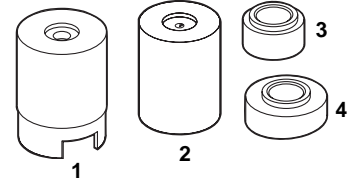
#### Bendix 10 ABS Fitting



Item No.	Service Part No.	Description
1	218339	O-ring
2	MLR-6491A-1	Adapter
3	MLR-6491A-3	External Cotter Hair Pin
4	MLR-7212A3	Fitting
5	16779	Straight Adapter
-	17716	O-ring
-	106043	Instruction Sheet

### No. 7894

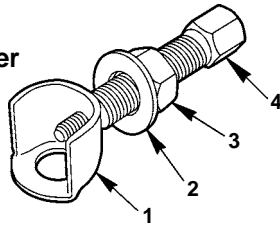
#### Upper / Lower Ball Joint Adapter Set



Item No.	Service Part No.	Description
1	313967	Remover Cup
2	313969	Installer Cup
3	313968	Remover
4	313970	Installer
-	106084	Parts List

### No. 7889

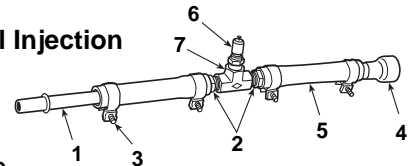
#### Pivot Pin Remover



Item No.	Service Part No.	Description
1	J-21854-1	Remover
2	10257	Washer, 5/16"
3	10203	Hex Nut
4	J-21179-5	Screw

### No. 7902

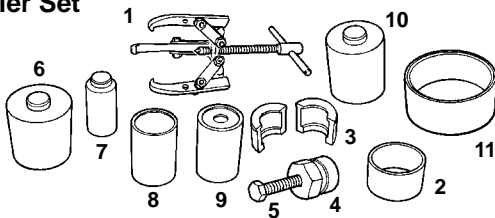
#### Chrysler Fuel Injection Fitting



Item No.	Service Part No.	Description
1	216812	Special Fitting
2	213721	5/16" Carburetor Fuel Fitting
3	213720	Hose Clamp
4	218388	Special Fitting
5	211473	Hose, 5/16" I.D.
6	206877	Coupler Plug
7	12165	1/8 NPTF Tee Fitting
-	106105	Parts List

### No. 7890

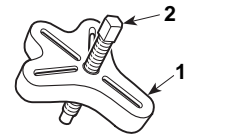
#### Delco CS Alternator Bearing Remover / Installer Set



Item No.	Service Part No.	Description
1	1021	3-Jaw Puller (see 1021 for parts)
2	221887	Sleeve
3	221889	Collet Half
4	221888	Special Nut
5	207999	Hex Head Cap Screw
6	221884	Bearing Installer
7	221882	Bearing Remover
8	221886	Bearing Installer
9	221885	Bearing Installer
10	221883	Bearing Installer
11	221881	Tube
-	106066	Parts List

### No. 7911 7912

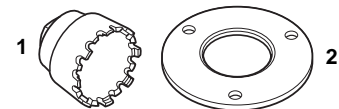
#### GM Crankshaft Balancer Puller & Adapters



Item No.	Service Part No.	Description
1	512888	Flange Puller (7912)
2	24833	Forcing Screw (7912)
3	222191	Special Screw (1 only, 3 reqd.)
4	222213	Screw Extension

### No. 7913

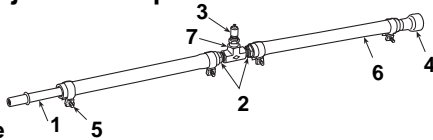
#### Front Wheel Bearing Locknut Socket



Item No.	Service Part No.	Description
1	J-42119-1	Wrench
2	J-42119-2	Wrench Plate

## No. 7916

### Dodge Fuel Injection Adapter



Item No.	Service Part No.	Description
1	314290	Special Fitting
2	213722	Fuel Fitting
3	206877	Coupler Plug
4	216810	Special Fitting
5	213720	Hose Clamp
6	213719	Pressure Hose
7	12165	Tee Fitting
-	106144	Parts List

## No. 7918

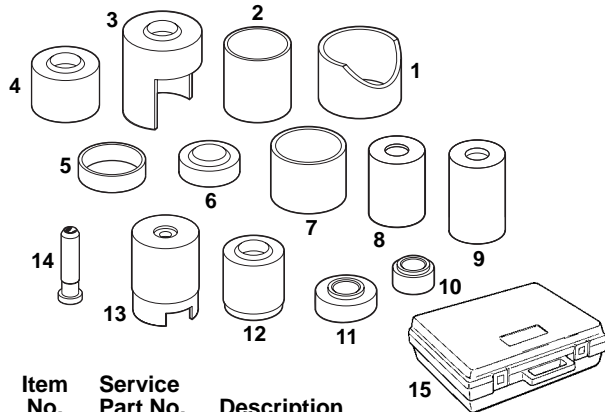
### Master Ball Joint Adapter Set (includes all parts listed)

## No. 7919

### Ford Ball Joint Adapter Set

## No. 7920

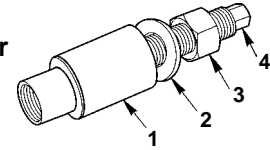
### GM Lower Ball Joint Adapter Set



Item No.	Service Part No.	Description
1	222306	Receiving Tube (included in 7920)
2	222305	Receiving Tube (included in 7919)
3	313444	Ball Joint Remover (included in 7919)
4	39976	Receiving Cup (included in 7919)
5	222304	Receiving Tube (included in 7919)
6	204508	Receiving Cup (included in 7919, 7920)
7	222307	Receiving Tube (Included in 7920)
8	313969	Installing Cup
9	38355	Installing Cup
10	313968	Remover (included in 7919)
11	313970	Installer
12	38354	Receiving Cup
13	313967	Remover Cup
14	314392	Live Center Forcing Screw Plug
15	514479	Carrying Case
-	106141	Parts List for 7918
-	106136	Parts List for 7919
-	106137	Parts List for 7920

## No. 7924A

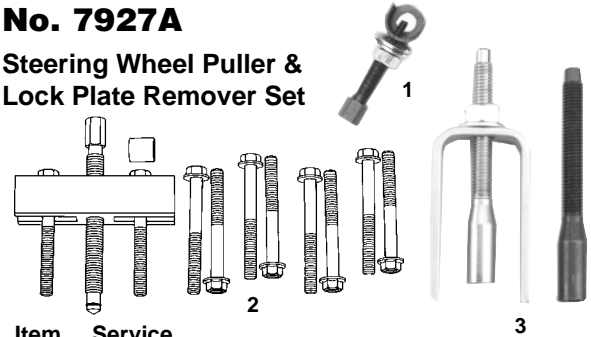
### Ford Front Hub Installer



Item No.	Service Part No.	Description
1	207968	Sleeve
2	12330	3/4" Washer
3	12121	3/4-10 Hex Nut
4	314288	22mm x 1.5 Special Screw

## No. 7927A

### Steering Wheel Puller & Lock Plate Remover Set



Item No.	Service Part No.	Description
1	7889	Steering Pivot Pin Remover (see No. 7889 for parts)
2	7245	Steering Wheel Puller (see No. 7249 for parts)
3	7815	Steering Wheel Lock Plate Remover (see No. 7815 for parts)

## No. 7942A

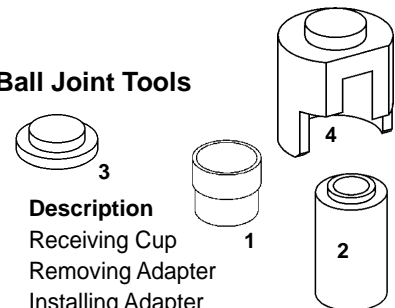
### Hub Resurfacing Pads



Item No.	Service Part No.	Description
1	J-42450-9	Disc Holder
2	222548	Sanding Pads (5 Pack)

## No. 7996

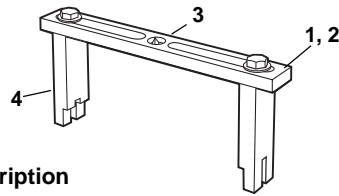
### Honda Lower Ball Joint Tools



Item No.	Service Part No.	Description
1	314425	Receiving Cup
2	314426	Removing Adapter
3	314428	Installing Adapter
4	314427	Receiving Cup
-	106192	Instruction Sheet

## No. 7998

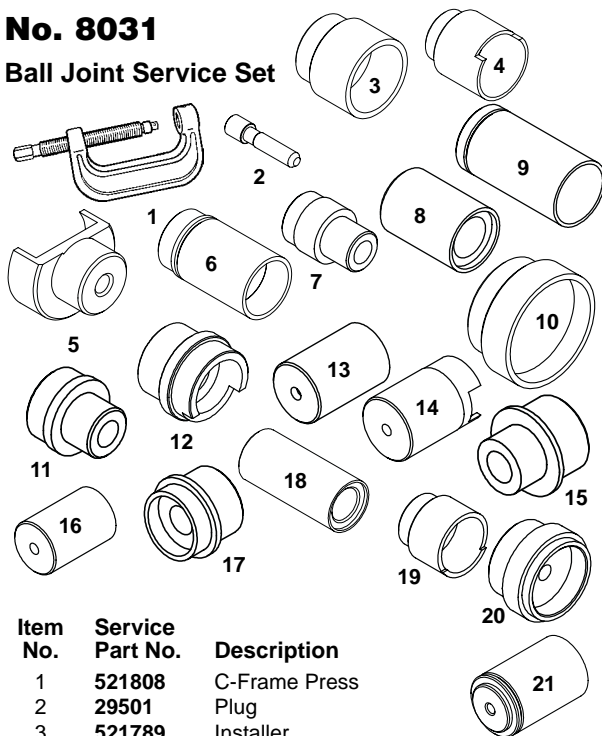
### Chrysler Fuel Pump Module Spanner Wrench



Item No.	Service Part No.	Description
1	11573	Hex Head Cap Screw (2 req.)
2	10257	5/16" Bolt Washer (2 req.)
3	312723	Bar
4	312724	Leg (2 req.)
—	106193	Instruction Sheet

## No. 8031

### Ball Joint Service Set



Item No.	Service Part No.	Description
1	521808	C-Frame Press
2	29501	Plug
3	521789	Installer
4	521790	Receiver Cup / Remover
5	521791	Remover / Installer
6	521792	Installer Cup
7	521793	Remover
8	521794	Installer
9	521795	Remover Cup
10	521796	Receiver Cup
11	521797	Remover
12	521798	Receiver
13	521799	Installer
14	521800	Remover / Installer
15	521801	Remover / Installer
16	521802	Remover / Installer
17	521803	Remover / Installer
18	521804	Receiver
19	521805	Receiver
20	521806	Installer
21	521807	Receiver Cup
—	522074	Inside Lid Decal
—	521718	Storage Case
—	517921	Parts List

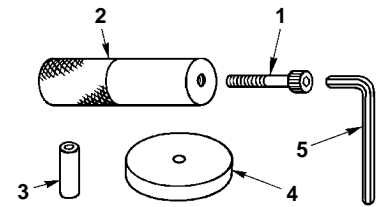
## No. 27793

### 27794

### 27795

### 27796

### 27797



### Driver Tools

#### Set 27793

Item No.	Service Part No.	Description
1	10012	1/4-20 x 7/8" Socket Head Cap Screw
1	10020	1/4-20 x 1 1/4" Socket Head Cap Screw
1	10854	1/4-20 x 1 3/4" Socket Head Cap Screw
1	12001	1/4-20 x 2 1/4" Socket Head Cap Screw
1	10855	1/4-20 x 2 3/4" Socket Head Cap Screw
2	27487	3/4" Handle
4	27493	5/8" Dia. Disc
4	27495	3/4" Dia. Disc
4	27497	7/8" Dia. Disc
4	27499	1" Dia. Disc
4	27501	1 1/8" Dia. Disc
4	27503	1 1/4" Dia. Disc
4	27505	1 3/8" Dia. Disc
4	27507	1 1/2" Dia. Disc
4	27509	1 5/8" Dia. Disc
4	27511	1 3/4" Dia. Disc
4	27513	1 7/8" Dia. Disc
4	27515	2" Dia. Disc
5	15770-6	Hex Key
—	14744	Parts List

#### Set 27794

Item No.	Service Part No.	Description
1	10012	1/4-20 x 7/8" Socket Head Cap Screw
1	10020	1/4-20 x 1 1/4" Socket Head Cap Screw
1	10854	1/4-20 x 1 3/4" Socket Head Cap Screw
1	12001	1/4-20 x 2 1/4" Socket Head Cap Screw
1	10855	1/4-20 x 2 3/4" Socket Head Cap Screw
2	27487	3/4" Handle (5" Long)
2	27488	1 1/4" Handle (6" Long)
3	27490	Extension Tube
4	27491	1/2" Dia. Disc
4	27492	9/16" Dia. Disc
4	27493	5/8" Dia. Disc
4	27494	1 1/16" Dia. Disc
4	27495	3/4" Dia. Disc
4	27496	13/16" Dia. Disc
4	27497	7/8" Dia. Disc
4	27498	15/16" Dia. Disc
4	27499	1" Dia. Disc
4	27500	1 1/16" Dia. Disc
4	27501	1 1/8" Dia. Disc
4	27502	1 3/16" Dia. Disc
4	27503	1 1/4" Dia. Disc
4	27504	1 5/16" Dia. Disc
4	27505	1 3/8" Dia. Disc
4	27506	1 7/16" Dia. Disc
4	27507	1 1/2" Dia. Disc
4	27508	1 9/16" Dia. Disc

4	<b>27509</b>	1 <sup>5</sup> / <sub>8</sub> " Dia. Disc
4	<b>27510</b>	1 <sup>11</sup> / <sub>16</sub> " Dia. Disc
4	<b>27511</b>	1 <sup>3</sup> / <sub>4</sub> " Dia. Disc
4	<b>27512</b>	1 <sup>13</sup> / <sub>16</sub> " Dia. Disc
4	<b>27513</b>	1 <sup>7</sup> / <sub>8</sub> " Dia. Disc
4	<b>27514</b>	1 <sup>15</sup> / <sub>16</sub> " Dia. Disc
4	<b>27515</b>	2" Dia. Disc
4	<b>27516</b>	2 <sup>1</sup> / <sub>16</sub> " Dia. Disc
4	<b>27517</b>	2 <sup>1</sup> / <sub>8</sub> " Dia. Disc
4	<b>27518</b>	2 <sup>3</sup> / <sub>16</sub> " Dia. Disc
4	<b>27519</b>	2 <sup>1</sup> / <sub>4</sub> " Dia. Disc
4	<b>27520</b>	2 <sup>5</sup> / <sub>16</sub> " Dia. Disc
4	<b>27521</b>	2 <sup>3</sup> / <sub>8</sub> " Dia. Disc
4	<b>27522</b>	2 <sup>7</sup> / <sub>16</sub> " Dia. Disc
4	<b>27523</b>	2 <sup>1</sup> / <sub>2</sub> " Dia. Disc
4	<b>27524</b>	2 <sup>9</sup> / <sub>16</sub> " Dia. Disc
4	<b>27525</b>	2 <sup>5</sup> / <sub>8</sub> " Dia. Disc
4	<b>27526</b>	2 <sup>11</sup> / <sub>16</sub> " Dia. Disc
4	<b>27527</b>	2 <sup>3</sup> / <sub>4</sub> " Dia. Disc
4	<b>27528</b>	2 <sup>13</sup> / <sub>16</sub> " Dia. Disc
4	<b>27529</b>	2 <sup>7</sup> / <sub>8</sub> " Dia. Disc
4	<b>27530</b>	2 <sup>15</sup> / <sub>16</sub> " Dia. Disc
4	<b>27531</b>	3" Dia. Disc
5	<b>15770-6</b>	Hex Key
-	<b>13676</b>	Instruction Sheet
-	<b>14744</b>	Instruction Decal

#### Set 27795

Item No.	Service Part No.	Description
1	<b>10012</b>	1/4-20 x 7/8" Socket Head Cap Screw
1	<b>10020</b>	1/4-20 x 1 1/4" Socket Head Cap Screw
1	<b>10854</b>	1/4-20 x 1 3/4" Socket Head Cap Screw
1	<b>12001</b>	1/4-20 x 2 1/4" Socket Head Cap Screw
1	<b>10855</b>	1/4-20 x 2 3/4" Socket Head Cap Screw
2	<b>27489</b>	1 5/8" Handle (6" Long)
4	<b>27532</b>	3 1/16" Dia. Disc
4	<b>27533</b>	3 1/8" Dia. Disc
4	<b>27534</b>	3 3/16" Dia. Disc
4	<b>27535</b>	3 1/4" Dia. Disc
4	<b>27536</b>	3 5/16" Dia. Disc
4	<b>27537</b>	3 3/8" Dia. Disc
4	<b>27538</b>	3 7/16" Dia. Disc
4	<b>27539</b>	3 1/2" Dia. Disc
4	<b>27540</b>	3 9/16" Dia. Disc
4	<b>27541</b>	3 5/8" Dia. Disc
4	<b>27542</b>	3 11/16" Dia. Disc
4	<b>27543</b>	3 3/4" Dia. Disc
4	<b>27544</b>	3 13/16" Dia. Disc
4	<b>27545</b>	3 7/8" Dia. Disc
4	<b>27546</b>	3 15/16" Dia. Disc
4	<b>27547</b>	4" Dia. Disc
4	<b>27548</b>	4 1/16" Dia. Disc
4	<b>27549</b>	4 1/8" Dia. Disc
4	<b>27550</b>	4 3/16" Dia. Disc
4	<b>27551</b>	4 1/4" Dia. Disc
4	<b>27552</b>	4 5/16" Dia. Disc
4	<b>27553</b>	4 3/8" Dia. Disc
4	<b>27554</b>	4 7/16" Dia. Disc
4	<b>27555</b>	4 1/2" Dia. Disc
5	<b>15770-6</b>	Hex Key
-	<b>13676</b>	Instruction Sheet
-	<b>14744</b>	Instruction Decal

#### Set 27796

Item No.	Service Part No.	Description
1	<b>10012</b>	1/4-20 x 7/8" Socket Head Cap Screw
1	<b>10020</b>	1/4-20 x 1 1/4" Socket Head Cap Screw
1	<b>10854</b>	1/4-20 x 1 3/4" Socket Head Cap Screw
1	<b>12001</b>	1/4-20 x 2 1/4" Socket Head Cap Screw
1	<b>10855</b>	1/4-20 x 2 3/4" Socket Head Cap Screw
2	<b>27488</b>	1 1/4" Handle
4	<b>27515</b>	2" Dia. Disc
4	<b>27516</b>	2 1/16" Dia. Disc
4	<b>27517</b>	2 1/8" Dia. Disc
4	<b>27518</b>	2 3/16" Dia. Disc
4	<b>27519</b>	2 1/4" Dia. Disc
4	<b>27520</b>	2 5/16" Dia. Disc
4	<b>27521</b>	2 3/8" Dia. Disc
4	<b>27522</b>	2 7/16" Dia. Disc
4	<b>27523</b>	2 1/2" Dia. Disc
4	<b>27524</b>	2 9/16" Dia. Disc
4	<b>27525</b>	2 5/8" Dia. Disc
4	<b>27526</b>	2 11/16" Dia. Disc
4	<b>27527</b>	2 3/4" Dia. Disc
4	<b>27528</b>	2 13/16" Dia. Disc
4	<b>27529</b>	2 7/8" Dia. Disc
4	<b>27530</b>	2 15/16" Dia. Disc
4	<b>27531</b>	3" Dia. Disc
4	<b>27532</b>	3 1/16" Dia. Disc
4	<b>27533</b>	3 1/8" Dia. Disc
4	<b>27534</b>	3 3/16" Dia. Disc
4	<b>27535</b>	3 1/4" Dia. Disc
4	<b>27536</b>	3 5/16" Dia. Disc
4	<b>27537</b>	3 3/8" Dia. Disc
4	<b>27538</b>	3 7/16" Dia. Disc
4	<b>27539</b>	3 1/2" Dia. Disc
5	<b>15770-6</b>	Hex Key
-	<b>13676</b>	Instruction Sheet
-	<b>14744</b>	Instruction Decal

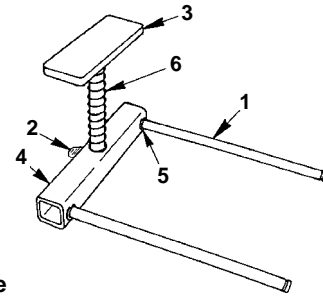
#### Master Set 27797

Item No.	Service Part No.	Description
1	<b>10012</b>	1/4-20 x 7/8" Socket Head Cap Screw
1	<b>10020</b>	1/4-20 x 1 1/4" Socket Head Cap Screw
1	<b>10854</b>	1/4-20 x 1 3/4" Socket Head Cap Screw
1	<b>12001</b>	1/4-20 x 2 1/4" Socket Head Cap Screw
1	<b>10855</b>	1/4-20 x 2 3/4" Socket Head Cap Screw
2	<b>27487</b>	3/4" Handle
2	<b>27488</b>	1 1/4" Handle
2	<b>27489</b>	1 5/8" Handle
3	<b>27490</b>	Extension Tube
4	<b>27491</b>	1/2" Dia. Disc
4	<b>27492</b>	9/16" Dia. Disc
4	<b>27493</b>	5/8" Dia. Disc
4	<b>27494</b>	11/16" Dia. Disc
4	<b>27495</b>	3/4" Dia. Disc
4	<b>27496</b>	13/16" Dia. Disc
4	<b>27497</b>	7/8" Dia. Disc
4	<b>27498</b>	15/16" Dia. Disc
4	<b>27499</b>	1" Dia. Disc

4	<b>27500</b>	1 <sup>1</sup> / <sub>16</sub> " Dia. Disc
4	<b>27501</b>	1 <sup>1</sup> / <sub>8</sub> " Dia. Disc
4	<b>27502</b>	1 <sup>3</sup> / <sub>16</sub> " Dia. Disc
4	<b>27503</b>	1 <sup>1</sup> / <sub>4</sub> " Dia. Disc
4	<b>27504</b>	1 <sup>5</sup> / <sub>16</sub> " Dia. Disc
4	<b>27505</b>	1 <sup>3</sup> / <sub>8</sub> " Dia. Disc
4	<b>27506</b>	1 <sup>7</sup> / <sub>16</sub> " Dia. Disc
4	<b>27507</b>	1 <sup>1</sup> / <sub>2</sub> " Dia. Disc
4	<b>27508</b>	1 <sup>9</sup> / <sub>16</sub> " Dia. Disc
4	<b>27509</b>	1 <sup>5</sup> / <sub>8</sub> " Dia. Disc
4	<b>27510</b>	1 <sup>11</sup> / <sub>16</sub> " Dia. Disc
4	<b>27511</b>	1 <sup>3</sup> / <sub>4</sub> " Dia. Disc
4	<b>27512</b>	1 <sup>13</sup> / <sub>16</sub> " Dia. Disc
4	<b>27513</b>	1 <sup>7</sup> / <sub>8</sub> " Dia. Disc
4	<b>27514</b>	1 <sup>15</sup> / <sub>16</sub> " Dia. Disc
4	<b>27515</b>	2" Dia. Disc
4	<b>27516</b>	2 <sup>1</sup> / <sub>16</sub> " Dia. Disc
4	<b>27517</b>	2 <sup>1</sup> / <sub>8</sub> " Dia. Disc
4	<b>27518</b>	2 <sup>3</sup> / <sub>16</sub> " Dia. Disc
4	<b>27519</b>	2 <sup>1</sup> / <sub>4</sub> " Dia. Disc
4	<b>27520</b>	2 <sup>5</sup> / <sub>16</sub> " Dia. Disc
4	<b>27521</b>	2 <sup>3</sup> / <sub>8</sub> " Dia. Disc
4	<b>27522</b>	2 <sup>7</sup> / <sub>16</sub> " Dia. Disc
4	<b>27523</b>	2 <sup>1</sup> / <sub>2</sub> " Dia. Disc
4	<b>27524</b>	2 <sup>9</sup> / <sub>16</sub> " Dia. Disc
4	<b>27525</b>	2 <sup>5</sup> / <sub>8</sub> " Dia. Disc
4	<b>27526</b>	2 <sup>11</sup> / <sub>16</sub> " Dia. Disc
4	<b>27527</b>	2 <sup>3</sup> / <sub>4</sub> " Dia. Disc
4	<b>27528</b>	2 <sup>13</sup> / <sub>16</sub> " Dia. Disc
4	<b>27529</b>	2 <sup>7</sup> / <sub>8</sub> " Dia. Disc
4	<b>27530</b>	2 <sup>15</sup> / <sub>16</sub> " Dia. Disc
4	<b>27531</b>	3" Dia. Disc
4	<b>27532</b>	3 <sup>1</sup> / <sub>16</sub> " Dia. Disc
4	<b>27533</b>	3 <sup>1</sup> / <sub>8</sub> " Dia. Disc
4	<b>27534</b>	3 <sup>3</sup> / <sub>16</sub> " Dia. Disc
4	<b>27535</b>	3 <sup>1</sup> / <sub>4</sub> " Dia. Disc
4	<b>27536</b>	3 <sup>5</sup> / <sub>16</sub> " Dia. Disc
4	<b>27537</b>	3 <sup>3</sup> / <sub>8</sub> " Dia. Disc
4	<b>27538</b>	3 <sup>7</sup> / <sub>16</sub> " Dia. Disc
4	<b>27539</b>	3 <sup>1</sup> / <sub>2</sub> " Dia. Disc
4	<b>27540</b>	3 <sup>9</sup> / <sub>16</sub> " Dia. Disc
4	<b>27541</b>	3 <sup>5</sup> / <sub>8</sub> " Dia. Disc
4	<b>27542</b>	3 <sup>11</sup> / <sub>16</sub> " Dia. Disc
4	<b>27543</b>	3 <sup>3</sup> / <sub>4</sub> " Dia. Disc
4	<b>27544</b>	3 <sup>13</sup> / <sub>16</sub> " Dia. Disc
4	<b>27545</b>	3 <sup>7</sup> / <sub>8</sub> " Dia. Disc
4	<b>27546</b>	3 <sup>15</sup> / <sub>16</sub> " Dia. Disc
4	<b>27547</b>	4" Dia. Disc
4	<b>27548</b>	4 <sup>1</sup> / <sub>16</sub> " Dia. Disc
4	<b>27549</b>	4 <sup>1</sup> / <sub>8</sub> " Dia. Disc
4	<b>27550</b>	4 <sup>3</sup> / <sub>16</sub> " Dia. Disc
4	<b>27551</b>	4 <sup>1</sup> / <sub>4</sub> " Dia. Disc
4	<b>27552</b>	4 <sup>5</sup> / <sub>16</sub> " Dia. Disc
4	<b>27553</b>	4 <sup>3</sup> / <sub>8</sub> " Dia. Disc
4	<b>27554</b>	4 <sup>7</sup> / <sub>16</sub> " Dia. Disc
4	<b>27555</b>	4 <sup>1</sup> / <sub>2</sub> " Dia. Disc
5	<b>15770-6</b>	Hex Key
-	<b>13676</b>	Instruction Sheet
-	<b>14744</b>	Instruction Decal

## No. 42615

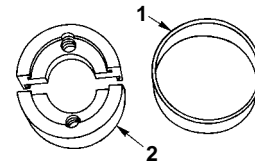
### Drum Leveling Assembly



Item No.	Service Part No.	Description
1	<b>37153</b>	Shaft
2	<b>17010</b>	Thumb Screw
3	<b>37157</b>	Leveler Pad
4	<b>42614</b>	Tube
5	<b>11581</b>	Retaining Ring
6	<b>17015</b>	Compression Spring

## No. 205776

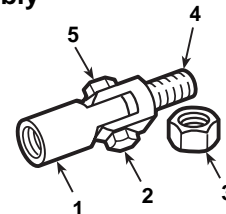
### Fuller® Bearing Puller Set



Item No.	Service Part No.	Description
1	<b>39546</b>	Sleeve
2	<b>43868</b>	Collet Half

## No. 208675

### Swivel Assembly

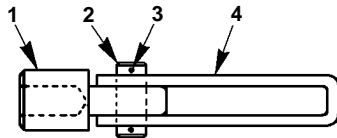


Item No.	Service Part No.	Description
1	<b>33538</b>	Swivel Adapter
2	<b>27912</b>	Cap Screw
3	<b>12121</b>	<sup>3</sup> / <sub>4</sub> -10 Hex Nut
4	<b>27914</b>	Swivel
5	<b>10390</b>	Hex Jam Nut



## No. 302340

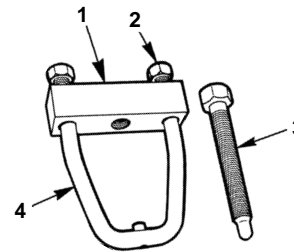
### Yoke Assembly



Item No.	Service Part No.	Description
1	33768	Adapter
2	205771	Hinge Pin
3	10573	Cotter Pin
4	208674	Yoke Sleeve

## No. J-22517-C

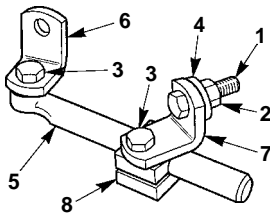
### GM Torsion Bar Unloader



Item No.	Service Part No.	Description
1	J-22517-8	Plate
2	10213	Hex Nut
3	J-22517-3	Pressing Screw
4	J-22517-7	"U" Bolt

## No. 305811

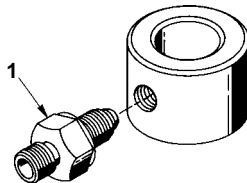
### AdjustaGrip® Mounting Arm



Item No.	Service Part No.	Description
1	10085	Hex Head Cap Screw
2	10208	Hex Nut
3	11622	Hex Head Cap Screw
4	11640	Washer
5	23032	Adjusting Arm
6	23037	Angle Bracket
7	211527	Bracket
8	305809	Block
-	11618	Instruction Tag

## No. 309277

### Diesel Injector Nozzle Test Adapter



Item No.	Service Part No.	Description
1	38279	Straight Adapter
-	102583	Instruction Sheet

# OLD / NEW PART NUMBER CROSS REFERENCE LIST

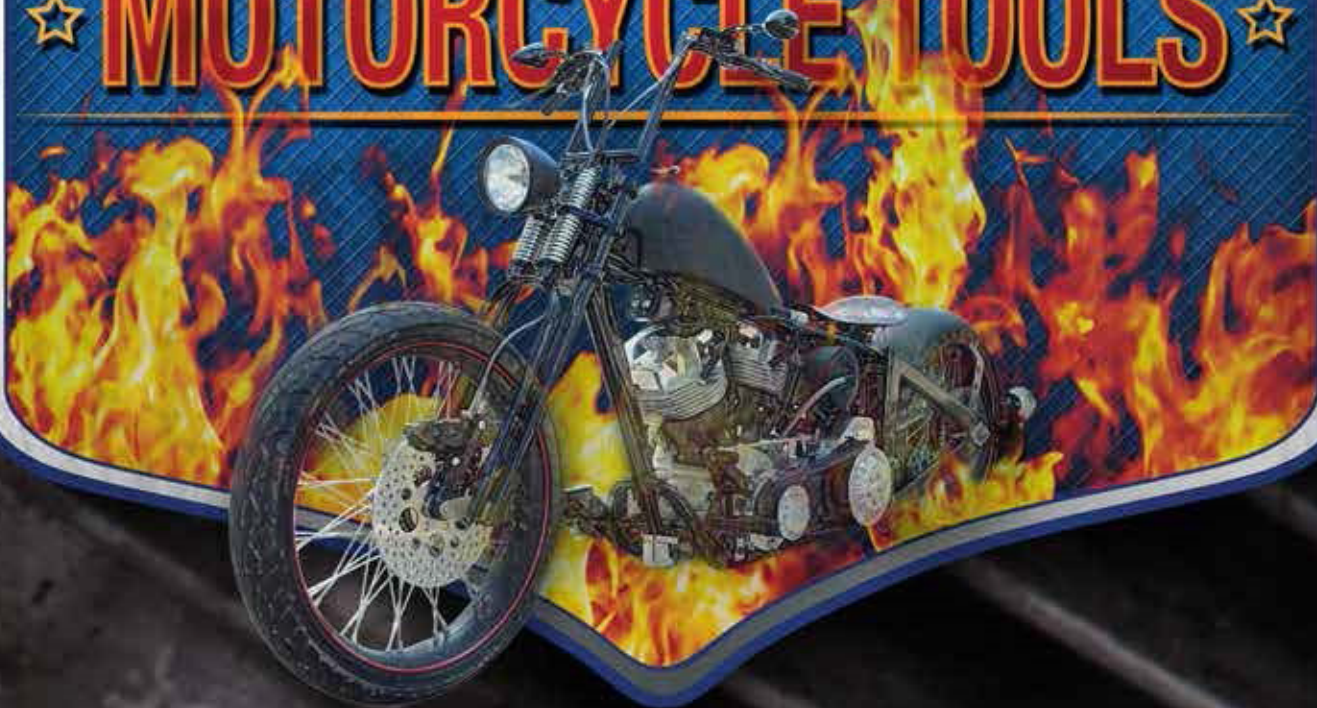
Old No.	New No.	Old No.	New No.	Old No.	New No.	Old No.	New No.
515	7392	927-D	1103	943-C-1	32139	959-1	37016
515-1	26603	927-D-1	25936	943-D-16	38662	960	1176
515-5	26342	930-B	1104	943-E	1154	960-1	34698
515-A	7393	930-B-1	32135	943-R	1155	960-2	27241
515-S	24832	930-C	1105	943-S	1156	960-3	24544
515-T	24833	930-C-1	32964	943-S1	208627	960-4	24545
518-1	32843	930-D	1106	943-S3	22185	960-B	1177
518-5	26342	930-D-1	32126	943-S4	34331	970	1200
522-1	22186	930-E	1107	943-S12	208627	970-A	37592
522-2	34703	930-E-1	32132	943-T	1157	970-C-1	27914
679-1	26763	930-F	1108	943-U	1158	970-D-3	27908
679-2	26762	930-F-1	32968	947	1165	970-H-1	12121
680-1	31385	938-1	32127	947-1	33083	970-HY	1202
827-1	32937	938-2	24822	947-2	33084	970-J-1	27912
827-2	32939	938-3	19528	947-3	33001	973	1203
827-3	32940	938-4	24824	947-4	27051	973-2	33769
827-A	32942	938-5	24825	947-5	27052	973-3	33768
827-B	7394	938-6	24826	947-10	33578	973-4	208674
887-1	51033	938-7	24827	947-E	1166	973-5A	205771
887-A	13905	938-HY	1062	949-1/2	1121	973-6	41291
887-D	7400	939-1/2-HY	1076	949-1/2-1	26654	973-8	302482
888	7401	939-1/2-1-B	50503	950	1122	973-11	33538
888-1	33118	939-1/2-5	33785	950-1	26651	973-R	302340
888-A	11608	939-1/2-5-B	28163	950-3	24831	973-S	208675
896-A	8090	939-1/2-A	1112	951	1123	974	1204
896-B	8091	939-1/2-A-1	33004	951-1	32957	974-A	1205
896-C	8092	939-1/2-B	1113	952	1124	1000	1020
896-E	8093	939-1/2-B-1	33005	952-1	32951	1000-1/2-L	1022
896-F	8094	939-1	33038	952-A	1130	1000-1/2-L-1	43661
896-G	8095	939-1-B	33039	952-D	1126	1000-1/2-L-2	27476
896-H	8096	939-2	303961	952-D-1	33486	1000-1/2-L-3	22006
896-J	8097	939-3	208586	953	1127	1000-1/2-L-4	22007
896-K	8098	939-4	208587	953-1	32959	1000-1/2-L-5	22008
897-1	206803	939-5	28353	953-C	1128	1000-1	21908
897-2A	52518	939-7	28390	953-C-1	50855	1000-2	27592
897-4A	25509	939-A	1109	953-C-5	30944	1000-3	207029
897-8	25510	939-A-1	32992	953-D	1129	1000-4	27764
897-A	7402	939-B	1110	953-D-1	32961	1000-5	21917
915-1	208170	939-B-1	32991	953-D-4	23330	1001	1024
915-2	304828	939-C	1111	953-D-5	31037	1001-1	44591
915-A	7403	939-C-1	32998	954	1170	1001-1-B	22023
927-1	33483	943	1150	954-2	27044	1001-4	22025
927-2	24835	943-2	33482	954-8	28382	1001-5	22021
927-3	24836	943-3	24846	954-10	28381	1001-7	39959
927-4	24837	943-4	24847	954-B	1171	1001-B	33397
927-5	24838	943-5	24848	954-C	1172	1001-C	1028
927-6	24839	943-10	24850	955-2	27044	1001-D	1031
927-A	1100	943-15	24864	955-13	29185	1001-L	1025
927-A-1	24840	943-A	1151	955-14	29187	1001-L-1	43940
927-B	1101	943-A-1	32136	956-2	27044	1002	1035
927-B-1	25934	943-B	1152	956-A-13	29189	1002-1	44082
927-C	1102	943-B-1	32137	957	1173	1002-4	22018
927-C-1	25935	943-C	1153	959	1174	1002-5	22016

# OLD / NEW PART NUMBER CROSS REFERENCE LIST

Old No.	New No.	Old No.	New No.	Old No.	New No.	Old No.	New No.
1002-7	27759	1013-1/2-L	1046	CW36	7401	Y-399-1A	43103
1002-8	33398	1013-1/2-LY	1066	GPP14L	7392	Y-399-2A	43104
1002-L	1036	1013-A	1041	GPP14S	7393	Y-399-3	34195
1002-L-1	43892	1013-A-7	41195	GPP27	522	Y-399-4	34193
1003	1039	1013-A-L	1042	HC-642	7310	Y-399-5	28709
1003-1/2	1043	1014	1049	HC-642-1	208910	Y-399-7	28714
1003-1/2-1	30945	1014-7	41198	HC-642-2	39131	Y-399-8	34202
1003-1/2-2-H	41224	1014-L	1050	HC-642-3	26619	Y-399-9	34201
1003-1/2-4	22034	1015-2-H	50462	HC-642-4	205863	Y-399-10	34200
1003-1/2-5	22035	1015-LY	1074	HC-642-A	205862	Y-399-11	34199
1003-1/2-7	33292	1016-2-H	50460	HC-643	7311	Y-399-12	29424
1003-1/2-8	33290	1016-LY	1080	MD-955	7318	Y-399-A	4240
1003-1/2-L	1044	4692-3	34703	MD-956	7319	Y-695-3	22205
1003-1/2-L-1	30949	7025	7248	MD-956-B1	35033		
1003-1/2-LY	1064	7025-A	7249	MD-956-B2	200063		
1003-1	43906	7081	7248	OA-36-3	23518		
1003-4	22028	19690	209950	PH172J	1064		
1003-5	22029	19691	209951	PH173J	1066		
1003-7	33295	19692	209952	PH302J	1072		
1003-8	33399	23034	305809	PH303J	1074		
1003-L	1040	23035	305809	PH503J	1080		
1003-L-1	30902	23380	211527	PM12	1020		
1004	1047	26497	209802	PM13	1021		
1004-1	40303	AP1	1121	PM22	1022		
1004-4	30966	AP2	1122	PM23C	1023		
1004-5	22045	AP4	1123	PM52	1024		
1004-7	33433	AP5	1124	PM52L	1025		
1004-8	33432	AP6	679	PM53C	1026		
1004-L	1048	AP8	1126	PM53CL	1027		
1004-L-1	40305	AP9	1130	PM72	1035		
1005-2-H	41226	AP10	680	PM72L	1036		
1005-4	30976	AP12	1128	PM73C	1037		
1005-5	22052	AP13	1127	PM73CL	1038		
1005-6	22053	AP16	1129	PM132	1039		
1005-L-1	40312	APH6	1154	PM132L	1040		
1005-LY	1072	APH9	1166	PM133C	1041		
1006-4	30993	APP5	1153	PM133CL	1042		
1006-5	22089	APP6	1150	PM172	1043		
1006-L-1	30994	APP7	1151	PM172L	1044		
1010	1021	APP9	1165	PM173	1045		
1010-1/2-A-2	33423	BPS10	981	PM173L	1046		
1010-1/2-LA	1023	CT-684	7307	PM252	1047		
1010-2	27475	CT-685	7308	PM252L	1048		
1011-1	43940	CT-685-1	38012	PM253	1049		
1011-A	1026	CT-685-2	44502	PM253L	1050		
1011-A-7	39942	CT-685-3	41617	PP10	927		
1011-A-L	1027	CT-685-4A	200017	PP17	938		
1012-A	1037	CT-685-4B	200018	PP30	939		
1012-A-7	44993	CT-685-4C	200019	PPH17J	1062		
1012-A-L	1038	CT-686	7309	PPH50J	1076		
1013-1/2	1045	CT-686-1	37813	SS-8	1179		
1013-1/2-2-H	41224	CT-686-2	208602	TC424	7402		
1013-1/2-7	41196	CW14	7400	Y-399	4241		

OTC<sup>®</sup>

☆ **MOTORCYCLE TOOLS** ☆





4565

### Swivel Handle Oil Filter Wrench

- Fits filters ranging from 2-1/2" to 3-1/8" (64 mm to 80 mm) in diameter.
- Features a 1" wide stainless steel band for positive grip on the filter; swivel handle makes it easy to turn filters in hard-to-reach areas.

4568

### Oil Filter Wrench, 2 way, 3 leg

- Fits filters ranging from 2-1/2" to 5-1/4" (65 mm to 135 mm) in diameter.
- To turn the tool, use a 1/2" ratchet in the ratchet drive or a 13/16" wrench on the nut.
- Knurled legs provide extra gripping power.



4896

### Oil Filter Ring

- Slim wrench provides clearance around oil coolers and crank position sensor. Use on 14 flute HD filters. 3/8" square drive.



6901

### Oil Filter Socket

- Fits Wix oil filters on S&S Engine applications, as well as other filters with 74mm x 15 flutes.



6905

### Oil Filter Socket

- Fits Polaris oil filters, as well as other filters with 66.5mm x 14 flutes.



4898

### Oil Filter Socket

- Fits Polaris oil filters, as well as other filters with 64mm x 14 flutes. Similar to Polaris No. PU-50105.



Strong magnetic end.

5911

### OTC Drain Plug Pro™

- Remove oil drain plug without touching the plug or hot oil.
- No touching HOT plug.
- No hot oil on hands.
- No dropping of plug in HOT oil.
- No oil soaked gloves.
- Just magnetically attach DRAIN PLUG PRO™ to pre-loosened drain plug and rotate to remove plug.



4848

### Flexible Spout Funnel

Many oil, transmission, and coolant fluid fill caps are located in hard to access areas. This aluminum 5 1/2" funnel features a removable debris screen in the base flowing to a 25" flexible spout designed to reach these difficult fill locations.

4521

### Hose Removal Tool

- Unique tip easily fits between hose and fitting to break stubborn hoses loose.
- Large handle provides a reliable grip on tool during hose removal.
- Works on fuel and oil lines – any place a rubber hose is clamped to a fitting.



8260

### Hose Removal Set (6-piece)

- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray.



4496

### Hose Clamp Pliers Set

Contains five different styles of hose clamp pliers, which will service most flat-band and ring-style hose clamps. Also contains a hose removal tool.

#### Set Contains:

- Straight hose clamp pliers set
- Hose removal tool
- Flat-type hose clamp pliers
- Offset hose clamp pliers
- 45° hose clamp pliers



4510

### Hose Pinch Off Pliers Set, 3 Piece

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.
- Available separately:

4510-8 – 8" tool for small hoses and tight areas.

4510-10 – 10" tool for radiator and vacuum lines.

4510-12 – 12" tool for radiator and vacuum lines.



4522

### Vacuum Hose & Fuel Line Removal Tool

Designed to remove vacuum hose or fuel lines (3/16" to 1/2") from fittings or tubing.



4839

### Adjustable Piston Ring Expander Pliers

These simple pliers include tips designed to capture the ends of piston rings to hold and expand them securely while installing onto pistons.



**4437**  
**Sensor Socket Set (8-Piece)**

- Includes:
- 4673-1** – 29 mm Vacuum Switch and O2 Socket, 1/2" Drive.
  - 4673-2** – 7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" Drive.
  - 4673-3** – 27 mm Thermal Sensor Switch, 1/2" Drive.
  - 4673-4** – 7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" Drive.
  - 4673-5** – 1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" Drive.
  - 4673-6** – 7/8" O2 Sensor Socket, offset 1/2" Drive.
  - 4673-7** – 7/8" O2 Sensor Socket (low profile), offset 3/8" Drive.
  - 4437-8** – 1-1/16" and 1" Oil Pressure Socket (short access), 3/8" Drive



**4480**  
**Basic Fuel Injection Service Kit**

Performs running, residual, rail and flow rate pressure tests on fuel injected engines. Kit includes adapters, hoses, fittings, and a professional dual scale gauge that reads 0-100 PSI and 0-700 kPa with relief valve. All packaged in a professional, heavy-duty, blow molded carrying case.



**7991**  
**Cooling System Pressure Tester**

Now you can pressure test the cooling system on motorcycles, ATVs, and even snowmobile applications. The tester's universal fit eliminates the need for multiple adapters.

**4838**  
**Piston Ring Compressor Set, 6 Piece**

This 6 ring set covers 2-7/8" thru 4-3/8" piston diameters. The ring compressor pliers feature a ratcheting lock to hold the handles in position for easy piston installation.



**4840**  
**Piston Ring Compressor Set with Ring Expander**

This complete set includes 12 chrome plated compressor sleeves covering 1-3/8" thru 4-3/8" diameter piston applications. Both the ring compressor and ring expander pliers feature a ratcheting lock to hold the handles in position for easy piston and ring installation. Complete with a metal carry case.



**4842**  
**Heavy Duty Valve Spring Compressor**

Used to compress valve springs for removal or installation. The heavy duty C-frame has a 9" opening and a 5" throat. Kit includes 16mm, 19mm, 23mm, 25mm, and 30mm valve spring retainer adapters.



**4572**  
**Valve Spring Compressor**

- Designed to compress valve springs on overhead valve engines.
- Includes two valve spring adapters, which fit valve spring retainers up to 1" (25 mm) and 1-3/16" (30 mm).
- Unique, direct action compressor lever gives better visibility of valve spring retainers located in difficult access areas.
- Jaw opening of 1-3/8" to 5-5/8" (35 mm to 142 mm); throat clearance of 5-7/8" (150 mm).



**4875**  
**Cam/Crank Locking Tool**

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.

**Application**

- Dyna 2006 & Later
- Similar to HD-47941.



**4876**  
**Cam/Crank Locking Tool**

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.

**Application;**

- Twin Cam 88/B 1999 & Later
- Similar to HD-42314.



**4844**  
**Cam/Crank Locking Tool, Twin Cam & Dyna**

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.
- Double end design covers;
- Twin Cam 88/B 1999 & Later
- Dyna 2006 & Later



**4849**  
**Cam Chain Tensioner Unloader Tool**

- These tools are used to unload the pressure of the primary and secondary chain tensioners when servicing HD Twin Cam 88 engines.
- Tools can also be used to check spring loads on chain tensioners.
- Applications include 99-06 FL, 99-05 FXD, 00-06 FXST.
- Similar to HD-42313.



**7419**  
**Timing Tensioner Locking Pin Set**

- This pin set is used to lock timing belt or chain tensioners once they have been compressed, required during the service procedure.
- Once the belt or chain service is complete, the pin is simply pulled out to return the tensioner to functional.
- 6 pin set with clip to cover most all applications.

**6589**  
**Electronic Ignition Spark Tester**

Use to quickly check spark on 2 and 4 stroke gasoline engines with electronic ignition systems.



**4723**  
**Ear Type Clamp Pliers**

- Used to crimp the type of clamps used on fuel and cooling system hoses.
- Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.

**4847**  
**Twin Cam Inner Cam Bearing Remover/Installer Kit**

- This kit contains the tools to remove and install inner cam bearings without damage to the crankcase.
- The bearing puller is designed to trap the needle bearings and keep them from falling into the crankcase.
- The installation tools are designed to press on the outer most diameter of the bearing, eliminating damage to the bearing, cam, or case. The press adapter will also set the bearing to its proper depth.
- Similar to HD-42325-B.



**4845**  
**Wrist Pin Installer & Remover Tool**

- Removes and installs piston wrist pins without having to hold the piston in position and use a drift.
- Applications include HD stock and aftermarket engines, including Twin Cam, and other engine makes with similar piston pin diameter sizes.



**4846**  
**Tappet Block Alignment Set**

- These adapter screws provide perfect alignment of the oil hole from the crank case to the tappet block on Shovel and Evo style engines.
- Align rocker boxes on Evo heads.
- Also align twin cam oil pump.
- Applications include all HD Big Twin single cam engines, stock and aftermarket, 76 – Present.
- Similar to HD-33443.

**4851**  
**Tappet Oil Filter Screen Plug Tool**

- A simple tool to remove the tappet oil filter screen plug without removing the exhaust pipes on HD applications. Can also be used on any slot type plug.



**4866**  
**Timing Plug**

- This threaded clear acrylic timing plug used in conjunction with a timing light allows for viewing the crankshaft timing marks without oil spraying out of the crankcase, typical during full advance RPM.
- Fits all HD models.
- Similar to HD-96295-65D.



**4948**  
**Water Pump Drive & Rotor Puller**

- Installs the water pump drive gear on the rotor and removes the rotor from the crankshaft. This tool also works on RZR XP.
- Similar to Polaris No. PA-49316.



**5604**

**Motorcycle Compression Tester Kit**

Designed specifically for testing motorcycle and small engines, this kit features a specially designed compression gauge and hose assembly, plus three different size hose adapters. Compression Tester and hose lengths are designed for optimal viewing along side engine. Covers most popular motorcycle and small engine plug sizes.

**Features and benefits:**

- Corrosion resistant nickel plated finish
- 10" flex hose gauge assembly with quick coupler.
- 2-1/2" gauge features chrome bezel and rugged protective outer boot
- Dual scale gauge reads 0-300 psi and 0-2100 kPa
- 12" flex hose -14 mm standard/plus reach (extra length supports V-Twin applications)
- 12" flex hose -12 mm standard reach
- 12" flex hose -10 mm standard reach
- Rugged blow molded hard case with removable lid
- Repair parts kit



**5613**

**Vacuum/Pressure Gauge Kit**

Ideal for testing vacuum lines and components. Accurately tests low-pressure fuel systems. Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit comes complete with adapter for most applications. Pin point hard to find problems such as cracked lines.

**Features and benefits:**

- Large 3-1/2" gauge features a chrome bezel and rugged protective outer boot.
- Dual purpose gauge reads vacuum and pressure.
- Dual scale gauge reads 0-30 in. Hg vac and 0-70 cm Hg, also reads 0-15 psi and 0-100 kPa.
- Built in rear hook allows gauge to be hung at eye level.
- Adapters for most applications.
- Blow molded hard case with removable lid.
- Detailed instruction chart.



**5609**

**Cylinder Leakage Tester Kit**

Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit come complete with adapters for most applications.

**Features and benefits:**

- Dual 2-1/2" gauges feature chrome bezel and rugged protective outer boot.
- Scales read 0-100 psi and 0-700 kPa.
- Pressure regulated manifold includes quick couplers.
- Long flex 24" 14 mm hose.
- 10 mm, 12 mm and 18 mm thread adapters.
- Blow molded hard case with removable lid.
- Detailed instruction chart.



**3367**

**Digital Timing Light**

Professional digital timing light has advanced features with a bright LED screen and mode indicator lights.

**Unique features**

- Microprocessor-controlled circuitry.
- LED tachometer display reads 0-9999 rpm.
- LED advance display indicates to 1/10.
- Unique flashlight feature.
- 2/4 cycle and rpm/advance lights.
- Up and down scroll buttons.

**Standard features**

- All metal inductive pickup.
- Reflected, super bright xenon flash.
- Removable leads with positive twist lock connector.
- One touch control.
- Durable, plated ABS housing with over-molded grips.
- Heat resistant over-molding on clips.
- Blow-molded case included.





**4862**  
**5 Speed Main Drive Gear Tool**

- This tool set will remove and install the transmission main drive gear and install the main bearing without removing the transmission. Designed to not damage the bearing or gear during installation.
- Applications include 5 speed Big Twin and aftermarket 6 speed 1980-2006 (ex 06 Dyna and Sportster 91-05).



**4860**  
**Transmission & Steering Bearing Puller/Installer Kit**

- This combination kit works on transmission main-shaft and steering stem bearings on HD motorcycles.
- Removes; Fork stem bearings on most applications. Flywheel bearing 00-03 XL. Removes/Installs; Inner bearing race on trans main-shaft Big twin 84 & later.
- Aftermarket trans main-shaft bearings & bushings on 5 & 6 spd. LSD and RSD trans.



**4742**  
**Flywheel Puller Kit**

- Developed for many small engines in the ATV, and Motorcycle service markets, these tools are machined from high quality tool grade steel and are packaged in a convenient blow-molded case.
- Each part is marked with size for reference and has a corresponding location in the storage case.
- Works on many makes like Honda, Suzuki, Kawasaki, Yamaha, Ducati and others. For street, performance or off-road.

**4864-1**  
**Flywheel Puller**

- M33x1.5 RH Internal threads.

**Applications**

- KTM 625 SMC 2006, 640 LC4 Adventure 04-07, 640 LC4E 2001, 690 RFR 2008
- Suzuki GSXR 1000 01-08, GSXR 600 01-09, GSXR 750 00-08
- Yamaha WR 450F 04-08, YFZ 450 04-09.



**4864-6**  
**Flywheel Puller**

- M38x1.5 RH Internal threads.
- Includes crankshaft protector.

**Applications**

- Arctic Cat DVX 400 04-07
- Kawasaki KLX & KSF 400 03-06
- Suzuki AN & LT-Z 400 03-07, DR-Z 250 01-07, LTZ 90 2007, LT-Z 250 04-07, LT-F 300F 99-01, DR-Z 400 01-06, DR-Z 400E 00-07, DR-Z 400S 00-06, DR-Z 400SM 05-07, LT-R 450 06-08.



**4864-2**  
**Flywheel Puller**

- M50x1.5 RH Internal threads

- Includes crankshaft protector.
- Fits Suzuki.



**4864-3**  
**Flywheel Puller**

- M24x1.5 RH Internal threads.

- Includes 12mm shaft protector cap.
- Fits Honda, Kawasaki, and Suzuki motorcycle applications.



**4864-4**  
**Flywheel Puller**

- M26x1.0 RH Internal threads.

- Includes 12mm shaft protector cap.
- Fits KTM 4 stroke motorcycles.



**4864-5**  
**Flywheel Puller**

- M30x1.0RH Internal threads.

- Fits Yamaha WR 250F.



**4800**  
**Clutch Hub and Alternator Puller**

- Removes clutch on Big Twins with 3, 5, and 10 fingers. Also works on Sportster transmission sprocket and clutch. Pulls motor sprockets, alternator covers, and many general pulling applications.



**4850**  
**Flywheel Puller**

- Designed to pull magneto flywheel, clutch hubs, or starter gears. Works on wet or dry clutches. 6x25mm and 8x40mm bolts included.



**4888**  
**Flywheel Socket Set**

- The best flywheel sockets available. These offer a low profile design that provides full nut to socket contact to eliminate rounding off the nut and slippage. Made from heat-treated chrome moly steel.

**Set includes:**

- 4888-1** – Socket fits pinion shaft nut on big twin 81-89. Size 1-1/4" with 1/2" square drive.
- 4888-2** – Socket fits crank pin nut on big twins 54 – early 81. Size 1-5/16" with 1/2" square drive.
- 4888-3** – Socket fits crank pin nut on Sportster 81-99 and Buell 87-99. Can also be used on top fork nut on glide forks. Size 1-3/8" with 1/2" square drive.
- 4888-4** – Socket fits crank pin nut on big twin 83-99 single cam. Size 1-1/2" with 1/2" square drive.
- 4888-5** – Socket fits sprocket shaft nuts on big twins 72-99 single cam. Size 1-5/8" with 3/4" square drive.



**4970**  
**Heavy Duty Flywheel Puller**

- Extremely heavy duty puller to pull the most stubborn flywheels. Includes 2 drive screws and bolts; 8mm x 1.25 x 60mm (3X), 6mm x 1.0 x 55mm (6X), 6mm x 1.0 x 50mm (6X).
- The 6 bolt capable design fits Polaris ATV, Snowmobile, Watercraft and many other makes and models.
- Similar to Polaris No. 2871043-A.

**4858**  
**Clutch Spring Compressor Tool**

This tool will release the clutch spring pressure for easy removal and installation of the retainer ring. Applications include HD big twin 90-97, and includes spring compressor nut for use on XL 91-05 and Buell.



**4992**  
**Clutch Spring Compressor Tool**

- This is a required tool for efficient servicing of HD 1340 cc (80 ci) clutches. The compressor relieves spring pressure for disassembly during servicing. Applications include 1340 cc (80 ci) Models 90-97, Buell 95-Later, XL 91-Later.
- Similar to HD-38515-A.



**4991**  
**Clutch Compressor Tool**

- This universal compressor is used to compress the drive or driven clutch during assembly of disassembly. Innovative design makes use quick and effective without binding. Works on all Polaris and TEAM clutches found on full-sized model ATV, Side x Side, and Snowmobile.
- Similar to Polaris No. PU-50518.

**4971**  
**Clutch Holding Wrench**

- Designed to hold the drive clutch for retainer bolt removal and torquing. For both P-85 and P-90 drive clutches on Polaris ATV & Side x Side.
- Similar to Polaris 9314177-A.



**4972**  
**Drive Clutch Holding Fixture**

For solid holding of drive clutch for spider removal when shimming for belt-to-sheave clearance or servicing spider.

- Bolt to bench or clamp in a vise.
- Contacts all webs for maximum support to eliminate clutch web damage.
- Center hold down for much greater holding stability while applying off center torque.
- Single person operation, even on the most difficult spiders.
- ATV and Ranger applications.
- Similar to Polaris No. 2871358-B.



**4990**  
**Clutch Holding Tool**

- Designed to hold the clutch basket while removing or servicing clutch.
- Fits 00-02 Polaris Xpedition models.
- Similar to Polaris PA-44688.



**4801**  
**Universal Clutch Holder**

Holder arms designed to fit into the external teeth of a clutch hub, but can also be used on gears and sprockets. Opens to handle a 5" OD hub.



**4986**  
**Primary Drive Clutch Puller**

- Removes primary drive clutches on Polaris ATV & Snowmobile 1985-up (except 400, 500, 600, 700, 800 domestic twins, '99 700 & 800 XCR, '99 Trial RMK, & Supersport 550 Fuji). 3/4" - 16 thread, 10-1/2" long.
- Similar to Polaris 2870506.

**4985**  
**Primary Drive Clutch Puller**

- Removes primary drive clutches on Polaris ATV Sportsman 600/700 twin EFI X2 02-08.



**4984**  
**Secondary Drive Clutch Puller**

- Removes secondary drive clutches on Polaris ATV & Side x Side 1985-up. 1" - 12 rolled thread, 5-1/2" total length.
- Similar to Polaris No. 2870913.



**4974**  
**Clutch Puller**

- Removes drive clutches on Polaris Side x Side and Snowmobile.
- Snow Applications: 700/800 XCR Fuji 3 cylinder engines 1999-2001, all Domestic twin 2-strokes model year 2000 and newer, FS/FST models 2006 and newer.
- Side x Side Applications: Ranger RZR XP 2011 and newer.
- 3/4-16 thread.
- Similar to Polaris 2872085.



**4975**  
**Clutch Puller**

- Short puller for removal of the drive clutch from the crankshaft taper on Polaris 550 Sportsman XP 4x4 09-12, 550 Sportsman (all models) 10-12, 570 RZR 4x4 12, 800 RZR 4x4 (all models) 08-12, and Ranger Diesel.
- Similar to Polaris PA-48595.



**4978**  
**Clutch Alignment Tool**

- Establishes correct clutch offset and alignment on Polaris EBS Clutches.
- Similar to Polaris 2872292.



**4979**  
**Clutch Alignment Tool**

- Establishes correct 1/2" clutch offset and alignment on Polaris ATV & Side x Side.
- Similar to Polaris 28870654.



**4980**  
**Clutch Alignment Tool**

- Establishes correct clutch offset and alignment on Polaris P85 Clutches.
- Similar to Polaris 2870426.



**4987**  
**Clutch Spider Nut Socket**

- Used to remove and install the drive clutch spider jam nut on 2011 & newer Ranger RZR XP. Similar to OE P/N PU-50578.
- Similar to Polaris No. PU-50578.



**4988**  
**Clutch Spider Nut Driver**

- Essential when servicing or re-building Polaris clutch. Fit's P85 and P90 clutches found on Polaris ATVs and snowmobiles 1972 to Present. (except 900 RZR XP 4x4 11-12, 900 RZR XP 4 4x4 12).
- Similar to Polaris No. 2870338.



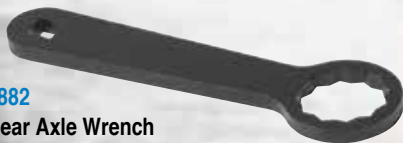
**4989**  
**Clutch Spider Tool**

- Essential when servicing or re-building Polaris clutch. Fit's P85 and P90 clutches found on Polaris ATV, Side x Side, and snowmobiles 1972 to Present.
- Similar to Polaris No. 2870341.



**4880**  
**4-in-1 Hex Axle Tool**

- Fits internal hex on many late model sport bike axles and some dirt bikes.
- Heavy duty CrMo steel construction for shop use.
- Four metric hex sizes: 17 mm, 19 mm, 22 mm and 24 mm.
- 3/8" square drive on both ends.



**4882**  
**Rear Axle Wrench**

- This wrench allows for simple adjustment of drive belt tension or rear wheel alignment.
- Eliminates the need to remove any exhaust components.
- 36mm wrench includes a 1/2" square drive allowing for use with a torque wrench for proper axle torque.
- Similar to HD-47925.



**6673**  
**Belt Tension Gauge**

Belt tension gauges are used to properly check drive belt tension on drive belts to ensure maximum belt and bearing life. This belt tension gauge simply connects to the belt to provide the tension reading. Dual scale reads 30-180 in lbs. (2.5-15 ft. lbs.) and 130-800 Newtons, covering the 10 ft. lb. spec. typically found on rear drive motorcycle belts.



**4748**  
**Belt Tension Gauge**

This easy to use and read tool allows for accurate belt tension to be set after belt replacement, adjustment, or wheel service. Use on secondary drive belts with a 10 lb. spec. Instructions; 1. Position the small O-ring over the 10 lb. mark. 2. Position the U-shaped belt cradle against the bottom of the belt at a 90 degree angle and locate the large O-ring to a reference point, record reading. 3. Push upward on the rubber bumper until the small O-ring touches the bottom of the tool body. Re-align the large O-ring to the reference point, difference in the reading is the belt deflection (refer to service manual for spec.).



**4745**  
**Chain Master Link Clip Tool**

Designed specifically for roller style chains with specialized tips to easily remove and install master link clips. Includes comfort grip handles.



**4746**  
**Chain Master Link Plate Tool**

Tool will remove press-fit master link plates found on many standard and O-ring style roller chains. Will also break 40-60 series chains to add a master link or remove links.



**4744**  
**Chain Breaker and Riveting Tool Kit**

This kit will break, press, and rivet most #25 - #35 and # 428 - #630 standard and O-ring roller chains. Includes HSS rivet tip for riveting hollow nose master links. The hardened steel body has a removable handle for compact storage.



**4738**  
**Chain Breaker & Riveting Tool Kit**

This heavy duty kit makes easy work out of breaking, pressing, and riveting # 415 - # 632 size standard and O-ring chains. The handle can be mounted in 3 different positions on the forged and hardened alloy c-frame, providing access while the chain is on the vehicle. The kit can rivet hollow nose master links as well as hardened pins. Storage case included.



**4739**  
**Chain Brush**

Use to clean and oil various sized roller chains found on motorcycles, ATVs, machinery, etc. Brushes adjust to chain widths ranging from 1/4" to 9/16".



**4749**  
**Chain Alignment Tool**

Designed to simplify the alignment of the countershaft and rear sprocket during chain adjustment or wheel service. Tool clamps to rear sprocket and held with the thumb screw. The rod indicates alignment.



**4758**  
**Motorcycle/ATV Chain Tensioner**

- Tool is designed to work on drive chains found on motorcycles and all-terrain vehicles (ATVs). Fits the following size chains: 428, 520, 525, 528, and 530.
- Tool jaws fit in chain link ends. Tightening the forcing screw pulls the jaws together to hold the chain for easy removal or installation of the chain connector or master link.



**714**  
**Horseshoe Lock Ring Pliers**

These pliers feature 8" handles and are designed to spread and remove horseshoe style lock rings found on engines, transmissions, and chassis.



**7313**  
**Retaining Ring Pliers**

These pliers are 7-3/4" long and are designed to spread and remove retaining rings found on engines, transmissions, and chassis. Maximum spread is 1- 1/16".



**4623**  
**CV Joint Banding Tool and Cutter**

Use to install and tighten the "band-it" or strap style clamps found on CV joint boots, steering gear boots, or hoses. Tighten the band by turning the handle on the tool; use a socket or wrench on the handle to torque the band to OE specifications. When the boot clamp has been tightened to specs, cut the band to the correct length by flipping the lever (at the front of the tool) forward.



**4721**  
**CV Boot Clamp Cutter**

Designed to easily cut the CV boot clamp without damaging the boot. Will cut boot clamps up to 10 mm wide and .7 mm thick. Handles are spring loaded to the open position to allow easy access to the clamp.



**4527**  
**5-Ton Pressure Beam Bearing Splitter Kit**

Single point of adjustment allows quick attachment of 3" splitter to the bushing or bearing. Pressure beam is used in conjunction with interchangeable legs. Includes carry case.



**7790**  
**Flange Puller Set (48 piece)**

Versatile puller capable of removing a wide variety of components having tapped pulling holes such as gears, pulleys, etc.

- Capable of handling 2- or 3-way bolt pulling applications.
- Puller flange: adapts to bolt circle dia. of 1-1/2" to 4-5/8".
- Forcing screw: 5-5/8" lg., 5/8-18 thread.
- Shaft protector: 1-3/16" dia. x 3/4" thick.



**525**  
**Flange-Type Puller Combination**

Two specialty pullers in one box. You get a flange-type puller for removal of parts with two or three tapped holes. You also get a pulley and flywheel puller. 525 includes: flange-type puller along with a puller with four sets of cap screws.



**5049**  
**Pilot Bearing Puller**

Make quick work of pulling stubborn, rusted pilot bearings. Fits 1" I.D. bearings. The puller's forcing screw expands the jaws inside the bearing and simultaneously pushes against the bottom of the blind hole.



**981**  
**Blind Hole Puller Set**

This set provides a complete selection of expanding collets ranging in size from 5/16" to 1-3/4". Collet is placed through bore of part to be removed, then expanded with actuator pin so that lips of collet secure a positive grip for pulling. Force is exerted by means of a forcing screw and a bridge assembly or a slide hammer. Individual pieces can be ordered separately.

**1037**  
**7-Ton Grip-O-Matic Puller**

Mechanical Grip-O-Matic® Puller Remove and install parts for fast, effective repairs. The puller is forged from quality steel, heat treated, and subjected to rigorous tests which exceed their rated capacity.

- 7-Ton, 2/3-Jaw
- Max. Reach 5" Max. Spread 10-1/2"
- Screw Size 11/16"-18 x 9"
- Jaw Thickness Upper 5/16" Lower 11/32"
- Jaw Width Upper 1" Lower 1"



**4532**  
**7-Ton Multi Purpose Bearing and Puller Set**

- Offers a bearing/pulley tool solution featuring a classic "H" Bar style puller block accommodating 7" to 11" application spread.
- Comes with 2 sets of forged jaws for a pulling reach range of 5" to 9" – tempered for heavy-duty applications. Two forcing screws are included for short and long pulls.
- Where a Push Puller is the best pulling choice and threaded holes are not available, the 4532 provides technicians and shops with a solution for many applications like side bearings, alternators, generators, power steering and crankshaft pulleys.
- Deep set works excellent for pulling the primary plate from the transmission

## 6930 Flange-Type Puller Combination

Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4".

Three cap screws, 3/8-24 x 3" long, and three cap screws, 3/8-16 x 3" long.



## 7403 Pulley and Flywheel Puller

Here's a puller that works in a variety of applications. Works as a regular 2/3-way puller to remove pulleys and small engine flywheels. Cap screws included (pairs): 3/8-16 x 3-1/2 in.; 5/16-18 x 3-1/2 in.; 5/16-24 x 3-1/2 in.; M8-1.25 x 90 mm; and 5/16-18 x 4 in. (SIR).



## 4518 5-Ton Bar-Type Puller/Bearing Separator Set

- This combination set includes our two most popular bearing "splitters" (2" and 3"), four sets of hex push-puller legs and a bar-type puller head with a 9/16" forcing screw. Separator tools are used with bar puller and legs for a wide variety of pulling jobs.
- The 5" puller cross-bar with a 6-1/4" forcing screw or each of the bearing separators may also be used separately or in combination with other pullers or tools.
- A blow-molded plastic storage case keeps set contents organized and protected from loss.

Tool No.	Min. Spread	Max. Spread	Tapped Holes	Distance Between Adj. Screws
4518-2	3/16"	2-3/8"	3/8-16	2-3/8"
4518-3	1/2"	2-3/8"	3/8-16	3-9/16"



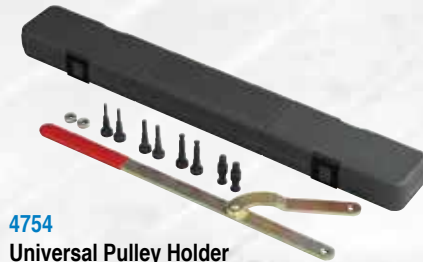
## 4852 Adjustable Primary Locking Bar

- Used to lock primary for service work.
- Will work on Chain or Belt Drive style primary drives.
- Adjustable length from 4" to 7-1/4" to cover virtually any application.

## 518 Flange Puller

Pull larger diameter parts having two or three tapped holes.

- Slotted holes in puller body permit cap screws to be positioned to handle bolt circle diameters from 1-1/2" to 4-5/8".
- Three each of two cap screw sizes included: 3/8"-24 x 3" long and 3/8"-16 x 3" long.



## 4754 Universal Pulley Holder

- Universal design fits many different size pulleys having slots or holes, such as crankshaft / transmission pulleys or gears.
- Wrench is adjustable from 1-1/2" to 8-5/8"; four different size step pins are interchangeable.
- Long handle enables technician to easily hold the pulley when tightening or loosening retaining bolts.

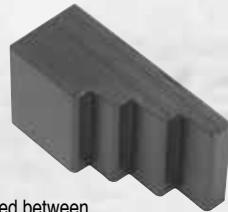


## 4802 Universal Pulley Holder Locking Pliers

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the 5/16" pins.

## 4856 Primary Drive Locking Tool

- This wedge is placed between the primary chain and motor sprocket to lock them together during removal and installation of the engine sprocket nut without damage.
- Made of POM material to not damage the sprocket or chain.
- Fits all chain primaries.
- Similar to HD-41214.



## 464 Griplock 2 Ton, 3 Jaw Puller

Three-in-One "Griplock" Puller is used for general purpose pulling such as hubs, gears, bearings and anywhere this versatile puller can be attached.

- Pressure bearing yoke cap holds jaws in place for ease of set up - in any orientation.
- Yoke arms have two jaw positions and do not require tools to change.
- 2 or 3 jaw applications, with a 3" to 4" spread.
- Both external and internal pulling action.



## 465 Griplock 5 Ton, 3 Jaw Puller

Three-in-One "Griplock" Puller is used for general purpose pulling such as hubs, gears, bearings and anywhere this versatile puller can be attached.

- Pressure bearing yoke cap holds jaws in place for ease of set up - in any orientation.
- Yoke arms have two jaw positions and do not require tools to change.
- 2 or 3 jaw applications, with a 3" to 7" spread.
- Both external and internal pulling action.



## 4803 Universal Pulley Holder Locking Pliers Set

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the addition of the interchangeable 5, 6, 7, 10, and 16mm pin sets. Complete with metal carry case.



## 4804 Heavy Duty Pulley Holder

This strap style universal wrench features a 9" drop forged handle and 23" leather strap for excellent grip on diameters up to 7". The milled foot increases grip on the strap and pulley as handle force is increased.

**4889****Fork Cap & Compression Valve Socket Set**

- This set is designed to fit fork cap sockets or the compression body with an octagonal shape. These offer a low profile design that provides full nut to socket contact to eliminate rounding off the nut and slippage. Made from high quality aluminum and can be driven with the 3/8" square drive or 19mm wrench.

**Set includes:**

**4889-1** – Internal Socket to remove the compression body from the cartridge on KYB twin chamber forks, found on Honda CRF 250 & 450. Size 32mm.

**4889-2** – Internal Socket to remove the compression body from the cartridge on KYB twin chamber forks, found on Yamaha YZ 125/250 & 250F/450F, Honda CRF250R/CRF450R, Kawasaki KX450F. Size 36mm.

**4889-3** – Socket fits fork cap on Showa BPF with 43mm fork tubes. Size 45mm.

**4889-4** – Socket fits fork cap on Showa with 44mm - 46mm fork tubes, found on late model Honda CRF 250R & Suzuki RM 125/250. Size 46mm.

**4889-5** – Socket fits fork cap on KYB forks found on Honda CRF 450R, Yamaha YZ125/250 & YZ250F/450F, Kawasaki KX450F. Size 49mm.

**4889-6** – Socket fits fork cap on Showa forks found on Honda CRF 250R/450R & CRF 250X/450X, Suzuki RM 125/250 & RMZ 250/450, Kawasaki KL250F. Size 50mm.

**4891****Fork Spring Compressor Kit**

- Designed to install fork caps on forks with a large amount of spring pre-load. Kit includes 39mm and 41mm adapter sets, and one jackscrew.
- Application: 39mm and 41mm HD forks.

**4892****Steering Head Bearing Installer**

- Designed to install steering head bearing cups and races completely straight without any damage.
- Will work on stock and custom applications.
- Similar to HD-39302.

**4886****Swing Arm Bearing Tool**

- Designed to install new needle style bearings into a swing arm. Includes 3 drivers to fit different size bearings. Driver 1 (22.0mm/26.8mm), Driver 2 (21.0mm/26.0mm), Driver 3 (20.0mm/26.0mm).
- Application: For use on late model off-road motorcycles such as Honda, Suzuki, Kawasaki, Yamaha models.

**4884****Swing Arm Pivot Bearing Puller**

- An essential tool for removing and installing pivot bearings in swing arms and front fenders.
- Applications include HD Softail swingarms 86-Present, HD Springer front fender mounts 97-11.

**4968****Swing Arm Tool**

- This 2-in-1 tool is designed with one end for removing and installing the pivot bolt lock nut, while the other end will remove the pivot bolt.
- Applications include Honda 4-stroke 4 wheelers.

**4964****Ball Joint Service Kit**

- Use to remove and install ball joints in vehicle on Sportsman XP, RZR and Ranger models.
- Similar to Polaris No. PU-50506.

**4965****ATV Steering Knuckle/Ball Joint Separator**

- Eliminates damaging the A-Arm, ball joint stud, or rubber boot while separating the ball joint from the knuckle body. Includes 2 drive bolts for Applications include ATV models Honda TRX and Yamaha YZF, YZF, and YFM.

**4966****ATV Steering Knuckle/Ball Joint Separator**

- For removal and installation of lower ball joints on models with pressed-in ball joints on the front strut casting found on Polaris and other Makes.
- Similar to Polaris No. 2870871

**4995****Coil Spring Compressor Locking Plier**

- Locking plier with special jaws that clamp on the external side of the coil spring. Use 2 pliers to evenly compress each side of the spring found on struts and coil over shocks.
- Similar to Polaris No's 2871573 & 2871574.



4517

### 7-Ton Bar Type Puller/Bearing Separator

- Includes a Bearing Splitter with 4" capacity, two sets of hex push puller legs, a 8" bar type puller head mated with a custom thread forcing screw.
- Puller/Bearing set for tough jobs, up to 7-tons, larger applications, and greater reach 8" to 16".
- Capacity to remove steering stem bearings.



4581

### Blind Hole Bearing Puller

- For pulling jobs requiring an internal pull, such as pilot bearings and pinion bushing from cam cover.
- Four collets which fit a wide range of applications. Select the appropriate sized collet by comparing it with the application. Insert the collet, expand it to fit the hole, then attach the slide hammer assembly.

#### Set includes:

- Four collet sizes: 7/16" to 1/2", 9/16" to 11/16", 5/8" to 1", 1" to 1-1/4" and 2-1/2 pound slide hammer with T-handle.
- Housed in a blow-molded plastic storage case.



6642

### Trim Tool Kit (11 Piece)

- Includes 11 tools designed to remove specialty body fasteners, trim strips, panels, bezels, liners, shrouds, fascia, and more. . .
- Tools are constructed of durable, impact-resistant nylon that will not damage metal and non-metal surfaces.



4790

### Wheel Bearing Removal/Installation Kit

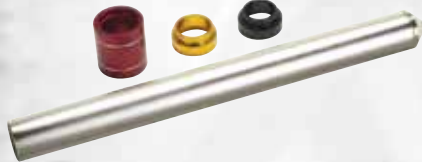
- This tool assembly will remove and install 3/4", 1", and 25mm I.D. sealed wheel bearings.
- Standard wrenches used in combination with tool. Instructions included along with blow molded case.



4507

### Bearing Driver Set, Stinger

- Permits installation of tapered bearing races and seals without damage to the component or housing. Includes a driver handle plus popular bearing and seal drivers, ranging from 1.565" to 3.180".
- Tapered side of driver is used to install races. Invert the driver to the flat side to install seals. Set is housed in a blow-molded plastic storage case.
- Bearing applications include steering stem, swing arm, and wheel bearings races.



4797

### Steering Stem Bearing Installation Tool

- Provides a quick and easy method to install lower steering stem bearings. The 14" drive tube accepts the 1.0", 1.4", and 1.75" I.D. bearing adapters.

4779

### Front Fork & Shock Vice

This vice is designed to hold up to 4" diameter round or oddly shaped components such as forks, shocks, pistons, rods, etc. The V shaped jaws are covered with thick rubber pads to ensure a firm grip without leaving a mark. Comes complete with a table/vice mounting bracket that allows adjustment to any position.



4791

### Spanner Wrench, 3/4" - 2"

This chrome vanadium hardened steel wrench features a 5" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



4792

### Spanner Wrench, 2" - 4 3/4"

This chrome vanadium hardened steel wrench features a 9" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



4784

### 10" Profile Gauge

- This 10" gauge provides an exact copy of a contour or profile needed during bodywork or fabrication. The plastic fingers will not scratch original finish and non-metal surfaces.



3176

### Smart Battery Charger & Maintainer

Excellent for vehicles in storage for weeks or months. This charger and maintainer will keep 12V batteries fully charged when not in use, without damaging the battery.

- Charges deep discharged batteries in about 12 hours.
- Switches to float mode after the battery is completely charged.
- Easy to read LED lights to show the status of charging and battery condition.
- Microprocessor controlled pulse charger.



**7206**  
**Multi-purpose Strap Wrench**

You'll find many uses for this heavy-duty strap wrench. The 53" long nylon strap won't mar precision surfaces of shafts, pulleys, or other components. Useful on engine, transmission, and drive pulleys up to 16 inches. Special head design self-tightens the strap as force is applied to the lightweight, 12" long handle. **305085** – Replacement Strap.



**4750**  
**Tire Valve Installer/Remover Tool**

This 14" steel tire valve tool includes a stepped rubber sleeve that can be positioned on the handle for optimum pulling angle of the valve, while protecting the wheel finish. Removes and installs snap-in style tire valves.



**4751**  
**Tire Pressure/Tread Depth Gauge**

This 3-in-1 gauge will measure tire pressure, lower tire pressure, and measure tread depth all in one gauge. Rugged cast housing for strength and long life.



**4770**  
**Tire Spoon with Grip**

This 13" curved tip tire spoon is strong yet comfortable to use with the form fit hand grip. The rounded head prevents puncturing the tube.



**4769**  
**Wheel Rim Protector Set, (3 piece)**

Fits over the wheel rim to protect the wheel from being scratched or damaged while using tire spoons. Set of 3.

**4771**  
**Tire Bead Alignment Tool**

This aluminum tool will hold a tire bead into the drop center of the wheel when changing the tire or installing an inner tube. The nylon thumbscrew will not damage the wheel finish.



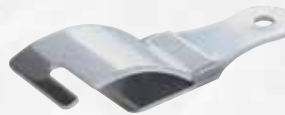
**4777**  
**Tire Bead Holding Tool, Long**

This tool allows the tire bead to be held in the drop center of the wheel when changing the tire or installing an inner tube. The slot slides over the spoke and the opposite end is depressed to push the tire into position. For use on wheels with 1 5/8" maximum side profile height.



**4775**  
**Tire Bead Holding Tool, Std.**

This tool allows the tire bead to be held in the drop center of the wheel when changing the tire or installing an inner tube. The slot slides over the spoke and the opposite end is depressed to push the tire into position. For use on wheels with 3/4" maximum side profile height.



**3833-15**  
**Digital Tire Gauge**

Digital tire gauge for accurate tire pressure measurements in 0.1 psi increments. Display is backlit for use in low light conditions. 0-150 psi capability.



**3833-17**  
**Tire Valve Core Tool**

This tire valve core tool will remove and install valve cores when servicing tires. The tool is preset to tighten the valve core to the proper torque during installation.



**4598**  
**Brake Fluid Tester**

Catch bad brake fluid before it has time to destroy expensive brake calipers and other brake system components! Tester determines quality of brake fluid. One battery included: 1.5V AAA.

1. Remove cap from brake fluid reservoir.
2. Remove probe cap from brake fluid tester.
3. Press power button on top of tester. Green LED lights up.
4. Dip entire length of metal probes into brake fluid.
5. After one second, match color of LEDs with color chart to determine brake fluid quality. Tester automatically powers off after twelve seconds of inactivity.



**4741**  
**Spoke Tool Set (9 Piece)**

- Use to tighten or loosen spoke nuts found on most motorcycle and scooter wheel applications.
- Nine interchangeable wrench ends; 5.2 mm, 5.4 mm, 5.6 mm, 5.8 mm, 6.0 mm, 6.2 mm, 6.4 mm, 6.6 mm, 6.8 mm.



**4747**  
**Spoke Torque Wrench Set (22 Piece)**

Take the guesswork out of spoke wheel assembly and maintenance. This dual head spoke wrench offers install and removal in one wrench. The click-type torque end applies accurate and equal tension to each spoke, while the fixed end easily removes damaged or rusted spokes. This set includes 11 torque heads and 11 fixed heads for use with the sealed body wrench, all complete in an organizer case. Head sizes included for both ends; 5.0mm, 5.6mm, 5.8mm, 6.0mm, 6.2mm, 6.3mm, 6.5mm, 6.7mm, 6.8mm, 7.1mm, and Spline.





6703

### Line Fluid Stopper Kit

Stop messy fluid leaks and prevent contamination during service.

- Kit seals all types of rubber and steel line found on fuel, brakes, and oil lines.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

6703-1 – Banjo Line Fluid Stoppers, 2 pk.

6703-2 – Steel Line Fluid Stoppers, 2 pk

6703-3 – Line Plug Fluid Stoppers, 6 pk



7559A

### Deluxe Vacuum Pump

This pump kit is designed for vacuum testing, brake bleeding, and fluid transfer. With this kit, one person can quickly and cleanly bleed brake and hydraulic clutch systems, actuate vacuum switches (VOES), as well as get answers to numerous diagnostic and mechanical problems.

#### Kit includes:

- Precision-made repairable vacuum pump with 360° gauge rotation for improved visibility.
- 4-1/2 oz. Reservoir jar with fluid transfer and storage lid.
- Two – 2 ft. long, 1/4" ID hoses.
- Rubber cup adapter, two universal bleed screw adapters.
- Vacuum "T" adapter, test and bleed adapters.
- User manual (English, Spanish, French).



4740

### Spring Hook (6" reach)

- Made from heat treated alloy steel.
- Designed for removing and installing hard-to-reach headlight adjusting springs, exhaust, brake and kickstand springs.



4599

### One Man Break Bleeder Hose

- Removes air from brake system—one wheel at a time—and eliminates the need for an assistant to help do the job.
- Hose easily attaches to bleeder screw, which holds hose in place and prevents leaking.
- Check-valve on end of hose prevents air from entering brake system when pumping brake pedal.

4743

### Brake Caliper Spreader

- Compresses the brake pistons on most style calipers for easy pad replacement.
- Fits calipers with 1/4" thick rotor applications, popular on motorcycles.
- Range: .25" (5 mm) to 2.25" (58 mm). Works on all automotive applications in this range.



4799

### Brake Piston Removal Locking Pliers

This specially designed locking pliers allows the removal of brake caliper pistons during service or rebuild. The pliers is simply clamped into the I.D. of the caliper piston allowing it to be pulled out of the caliper. Range; 5/8" to 2-1/4" diameter pistons.



4795

### Safety Wire Twist Pliers

These versatile 8" pliers will reliably twist safety wire rapidly and consistently. The right hand twist mechanism features an automatic spring return. The forged alloy steel construction features tapered jaws for confined areas and mated cutters to cut safety wire. For use on safety wire applications found on vehicles, machinery, and aircraft.

4796

### Steering Neck Bearing Race Remover

Simple way to remove bearing race in the steering neck. Remover is inserted into neck and bolt is adjusted to tighten the remover against I.D. of steering neck. The remover is then driven from other end of neck to remove race. Fits 1-1/8" to 2-5/8" I.D. bearing race.



4794

### Safety Wire Drill Guide Set, SAE & Metric Set

Here is the perfect way to drill those nuts and bolts for use with safety wire without breaking the drill bit. These guide, align, and support the hex head or the bolt threads. The hex fixture fits nuts and bolt heads that measure up to 1 1/4". The SAE fixture bar is threaded for 1/4"-20, 5/16"-18, 5/16"-24, 3/8"-18, 3/8"-24, 7/16"-14 bolts, and the Metric fixture bar covers M6x1.0mm, M8x1.0, M8x1.25mm, M10x1.25mm, M10x1.5mm, M12x1.5mm sizes.



8104

### Vacuum Brake Bleeder

This one man brake bleeding system allows for fast and efficient vacuum brake bleeding. Universal rubber fitting holds securely on brake bleeder screw. Attach shop air and use the quick release trigger for on-demand vacuum and hands free operation. Compact size and 17 oz. (500ml) capacity.



4870

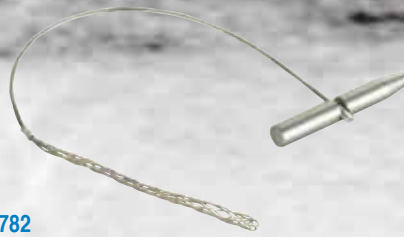
### Master Cylinder Snap-Ring Pliers

Allows for removal of the internal snap rings found in hydraulic master cylinder. Remove and install small to medium snap rings up to a 2 1/8" depth. Other snap ring applications include transmission gear locators, bearing and oil seal retention, and fork seal retaining rings.



**3910**  
**Digital Multimeter**

This digital multimeter contains all the base functions required for today's electrical system testing, at an economical price. Digital display provides; Volts, Ohms, Amps, Duty Cycle, Resistance, Capacitance, Diode, Continuity, Temperature.



**4782**  
**Wire Pulling Tool**

This tool contains an 18" cable with a "T" handle at one end and wire mesh at the other. By threading the cable through a difficult to reach area such as a bike frame, wires or connector can be hooked to the end allowing the wiring to be pulled through.



**3650**  
**Heavy-Duty, Remote Starter Switch**

Allows one person to start and crank engine while under the hood or from either side of the vehicle.

**Product Features:**

- With convenient hot circuit indicator, red ready light glows when starter switch is connected to a hot circuit; light goes off when switch is depressed.
- High current, heavy-duty push button switch ensures reliable operation and long service life.
- 5' leads made from heavy-duty, oil and grease resistant, 12-gauge wire.
- High current clips with protective boots open to an extra wide 5/8" for ease of hook-up.
- Soft, non-slip rubber grip.



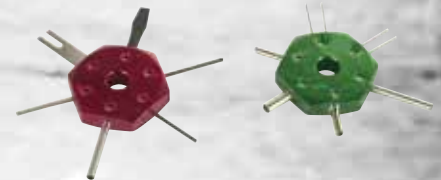
**4878**  
**Ignition Switch Housing Alignment Tool**

- This tool aligns the ignition switch housing properly as the retaining screws are being torqued. Proper switch alignment extends the life of the ignition switch. Applications include HD FL Touring models 03 – Present, V-Rods 02 – Present.
- Similar to HD-45962.



**4617**  
**Terminal Battery Brush**

- Designed to clean corrosion from side post batteries.
- One brush used to clean battery terminals; other brush used to clean battery cable ends.
- Plastic handle resists battery acid.



**4822**  
**Wire Connector Tool Set (2 Piece)**

Designed to remove terminals from connector housing without damage to the terminal or connector. Set provides 12 different tool styles fit most common connectors.



**3633**  
**Circuit Tester**

The standard in electrical system testing. This basic and simple to use tester provides the capability to locate shorts, grounds, and open circuits. 12', heavy-duty, red coil, cord lead.

- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, high intensity/slim style replaceable bulb.



**3907**  
**Probe Multimeter**

This full function digital multimeter is used for electrical system testing, but it's compact design allows it to be conveniently carried anywhere in case of emergencies. Digital display provides; Volts, Ohms, Diode, Continuity.



**4813**  
**Heat Shrink Tubing Set (171 Piece)**

Protection and insulation for solder connections and components. 2 to 1 shrink ratio with flame or heat gun.



**4614**  
**Battery Terminal Wrench, 5/16, 6 pt.**

- Designed for use on side-terminal batteries, or any 5/16" hex head battery bolt.
- 5/16", 6 point, box end, 5-1/2" long, ratcheting wrench; insulated handle.



**3908**  
**Amp Clamp Multimeter**

This digital clamp meter is well suited for testing starting/ charging circuits, and provides easy access to current, voltage, temperature and other key electrical system measurements, all in one easy to use tool. Digital display provides; Volts, Ohms, Amps, Duty Cycle, Resistance, Capacitance, Diode, Continuity, Frequency, Temperature.



**4814**  
**Waterproof Heat Shrink Tubing Set (106 Piece)**

Waterproof protection and insulation on solder connections and components. Adhesive lined inner wall to seal out moisture. 3 to 1 shrink ratio with flame or heat gun.



**4616**  
**Battery Terminal Wrench, 10mm, 12 pt.**

- Designed for use on 10 mm battery terminal bolts found on many batteries.
- 10 mm, 12 pt., box-end ratcheting wrench; 5-1/2" long with insulated handle.



## 4461 Terminal Release Tool Set

- Save time and money. Repair or rebuild a wiring harness without having to order the entire OE replacement.
- Services most OE terminal connectors. Insert the appropriate release tool to depress the locking tab and the individual wire slides out for service or replacement.

### Kit includes:

**7737** – Computer edge board and header release tool. Each end of the tool works on different terminal connector configurations. Works on various domestic and import models.

**7738** – Weather Pack sensor terminal release tool. Works on various domestic and import models.

**7740** – Micro-style terminal release tool. Works on various domestic and import models.

**7741** – Specifically designed to release ID computer terminals on various domestic and import models.

**7742** – Universal harness release tool designed to work on various domestic and import models.

**7743** – Releases terminals on most harness connectors on various domestic and import models, including water, O2, vacuum, and air temperature sensors.



## 4467 Automatic Wire Stripper

- Quick removal of insulation on wire AWG 12-20.
- Comes with adjustable depth gauge (8mm to 12mm).
- Sharp v-shaped tooth easily removes insulation without any damage to soft wire strands.
- Cutting tool stored below the stripper.
- Features a space saving locking mechanism for pockets or tool drawer storage.



## 5912 Crimpwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" –improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



## 5950A CrimPro™ 4-in-1 Angled Wire Tool

- The angled feature allows access to close quarters and facilitates superior crimps.
- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



## 5950S CrimPro™ 4-in-1 Wire Tool

- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



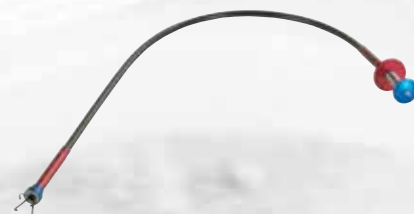
## 5953 Dual End Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.



## 5955 Magnetic Clamp Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.
- Clamp with magnet allows for attachment to a work bench, vehicle, or any other object for a firm base.



## 4783 Flexible Magnetic/Claw Pick Up Tool

The 25" flexible spring shaft allows the tool to reach difficult areas and pick up objects either magnetically or with the use of the retractable claw.



## 4818 Multi-Purpose Scissors

Will cut hose, wire and cables, wood dowel, PVC, and thin sheet metals in addition to general cutting. The hardened stainless steel blades have an angle ground into one that eliminates slipping when cutting round materials.



**5900A**

**Master Torx® Bit Socket Set, 52 Piece**

52-piece professional socket set in a blow molded case covers the popular versions of Torx® specialty fasteners in all popular sizes.

- Styles available: Torx® Bit Sockets, Torx® Plus Bits Sockets, Tamper-Resistant Torx® Bits, and Torx® Socket for external bolts.
- Made from superior S2 steel to meet or exceed torque specifications.
- All bit sockets are a 2-piece design. .20 percent stronger than a one-piece style for longer life.

**6100**

**Standard TORX® Socket Set T10 to T60 (12 piece)**

Set includes one each of the following:

No.	Size	Sq. Drive
6101	T10	1/4"
6102	T15	1/4"
6103	T20	1/4"
6104	T25	1/4"
6105	T27	1/4"
6106	T30	1/4"
6107	T40	3/8"
6108	T45	3/8"
6109	T47	3/8"
6110	T50	3/8"
6111	T55	3/8"
6112	T60	1/2"



**6150**

**External TORX® Socket set (7 piece)**

Set includes one each of the following:

No.	Size	Sq. Drive
6151	E6 x 25	1/4"
6152	E7 x 25	1/4"
6153	E8 x 25	1/4"
6154	E10 x 32	3/8"
6155	E12 x 32	3/8"
6156	E14 x 32	3/8"
6157	E16 x 32	3/8"



**6170**

**Metric Hex Socket Set (7 piece)**

Set includes one each of the following:

No.	Size	Sq. Drive
6171	3 mm	3/8"
6172	4 mm	3/8"
6173	5 mm	3/8"
6174	6 mm	3/8"
6175	7 mm	3/8"
6176	8 mm	3/8"
6177	10 mm	3/8"



**6180**

**TORX® Plus Socket Set (9 piece)**

Set includes one each of the following:

No.	Size	Sq. Drive
6181	TP10	1/4"
6182	TP15	1/4"
6183	TP20	1/4"
6184	TP25	1/4"
6185	TP27	1/4"
6186	TP30	1/4"
6187	TP40	3/8"
6188	TP45	3/8"
6191	TP50	3/8"



**6950**

**SAE Ball Hex "L" Keys 1/16" to 3/8" (10 piece)**

Set includes one each of the following:

No.	Size
6950-1	1/16"
6950-2	5/64"
6950-3	3/32"
6950-4	1/8"
6950-5	5/32"
6950-6	3/16"
6950-7	7/32"
6950-8	1/4"
6950-9	5/16"
6950-10	3/8"



**6952**

**Metric Ball Hex "L" Keys 1.5mm to 10mm (10 piece)**

Set includes one each of the following:

No.	Size
6952-1	1.5mm
6952-2	2mm
6952-3	2.5mm
6952-4	3mm
6952-5	4mm
6952-6	5mm
6952-7	6mm
6952-8	7mm
6952-9	8mm
6952-10	10mm



**6954**

**Standard TORX® "L" Keys T8 to T50 (10 piece)**

Set includes one each of the following:

No.	Size
6954-1	T8
6954-2	T10
6954-3	T15
6954-4	T20
6954-5	T25
6954-6	T27
6954-7	T30
6954-8	T40
6954-9	T45
6954-10	T50



**6956**

**TORX® Plus "L" Keys TP8 to TP50 (10 piece)**

Set includes one each of the following:

No.	Size
6956-1	TP8
6956-2	TP10
6956-3	TP15
6956-4	TP20
6956-5	TP25
6956-6	TP27
6956-7	TP30
6956-8	TP40
6956-9	TP45
6956-10	TP50



**4780**

**Personal Tool Pack**

Includes 1/4" drive ratchet, 2" extension, 16 drive bits, and Universal Spline sockets fit both SAE 3/16" - 9/16" and metric 5mm - 14mm nuts and bolts in a variety of styles; 6 pt., 12 pt., torx, square, spline, etc. All tools included in a travel pouch.





**4781**  
**Super Stubby Screwdriver Set**

These screwdrivers are perfect for those limited access fasteners typically found on carburetors or in electrical compartments and many other areas.

- 2 Phillips and 2 straight screwdrivers included in set.



**8262**  
**Short Pick & Hook Set (4 Piece)**

Consisting of four (4), 6.5", soft-handled picks.

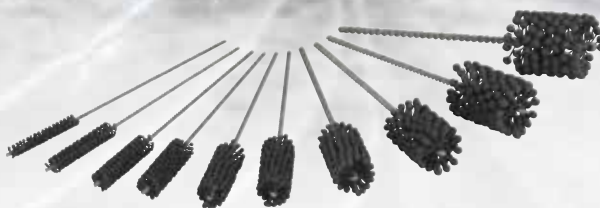
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing O-rings, accessing snap rings and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove O-rings, shaft seals, CV boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.



**8263**  
**Long Pick & Hook Set (4 Piece)**

Consisting of four (4), 9.25", soft-handled picks.

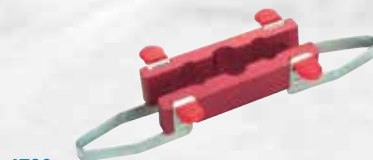
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing O-rings, accessing snap rings and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove O-rings, shaft seals, CV boot and motorcycle fork seals and dust hoods.
- Includes a knurled shaft which allows good grip with grease or oil on hands.
- Packaged in a molded tray which can be placed in tool drawer.



**7011**  
**Ball Hone Set, 10 piece**

- Ball Hones can be used for refinishing and resizing bores such as found in brake calipers, engine lifters, and u-joint yokes. Also useful for any bearing or bushing application.
- All hones are 180 grit Silicone Carbide for excellent cutting and finish.

Tool No.	Size
7011-1	.375" 10 mm
7011-2	.500" 13 mm
7011-3	.625" 16 mm
7011-4	.750" 19 mm
7011-5	.875" 22 mm
7011-6	1.00" 25 mm
7011-8	1.25" 32 mm
7011-10	1.50" 38 mm
7011-12	1.75" 44 mm
7011-14	2.00" 51 mm



**4786**  
**Aluminum Vice Inserts**

Essential for every workbench vice. Aluminum jaws have reliefs for 5/16, 3/8, & 9/16 (7mm, 10mm, & 15mm) diameter shafts. Excellent for holding steel shafts without scratching or damage such as shocks, crankshafts, or any threaded bolts and shafts.



**4410**  
**Master Bushing Driver Set**

- Enables you to remove and install bushings ranging from 10mm to 42mm in diameter, and 3/8" to 1-3/8" in diameter.
- Includes large, medium, and small driver handles and adapters all made of steel.
- Housed in a blow-molded storage case.



**5180**  
**Portable Multi Purpose C-Frame Press.**

- Lightweight (less than 28 lbs.) and durable, the 5180 portable press is perfect for bench top pressing applications.
- Use for all clamping, pressing, and bending needs. Ideal for welding and metal fabrication.
- Press can be positioned vertically or horizontally.
- Versatile 9" – 4-1/4" Open-Throat® design.
- Couples to any 4- or 10-ton Porta Power pump.
- Base allows the operator to mount the press to a bench.

Set includes: C-Frame press with base, adapters: V-pushing and ram pushing (9/16" and 3/4" dia. shanks), receiving inserts, flat insert, storage case.



**8203**  
**Handled Pry Bar Set**

Finally, a heavy-duty pry bar made of tempered square steel that you can hit without damaging the handle.

- Black chrome striking cap allows hitting the bar without damage to the handle.
- Ergonomic handle – dual durometer composite handle for user comfort; reduces hand fatigue.
- Polished tip with black oxide finish.
- Long-life finish resists rust and wear during use.
- OTC Marathon Lifetime Warranty.

Set includes 12", 18", and 24" bar shank lengths packaged in a gray molded tray.



**4497A**

**Ratcheting Terminal Crimper**

- Heavy-gauge steel crimping tool designed for insulated wire terminals.
- Ratcheting action crimps terminal to correct tightness on the wire, making crimping fast and easy.
- Insulated handles with compound mechanical leverage for power.
- For wire sizes: AWG 22-18 (0.6mm—1.0mm) red terminal; AWG 16-14 (1.3mm—1.6mm) blue terminal; AWG 12-10 (2.0mm—2.6mm) yellow terminal.



**4411**

**Ratcheting Hose & PVC Cutter (Standard)**

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



**1545**

**Motorcycle/ATV Lift**

- 1,500 lb. capacity and 17" long skids that will lift the largest, widest cruisers.
- Lowest clearance available, 3-1/2" at lowest level, with a wide lift range of 3-1/2" to 16-3/4".
- Removable handle provides 360° access to load.
- Features also include foot pedal release, locking rear casters, automatic safety lock, and two ratcheting tie down straps for safety.



**4498**

**7-in-1 Wire Stripper & Crimper**

- Strips insulation off electrical wires ranging from 10 AWG—22 AWG (0.6mm—2.6mm) in diameter. Pliers on tip of jaw for looping or grabbing wire in tight places.
- Heat-treated steel jaws cut solid or multi-strand wire.
- Screw cutter shears screws clean, with no thread clean-up required. Works on machine screw sizes 4-40, 5-40, 6-32, 8-32, 10-24, and 10-32.
- Crimps insulated and non-insulated wire terminals, 7mm—8mm spark plug wire connectors.



**4412**

**Ratcheting Hose & PVC Cutter (Heavy Duty)**

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



**4490**

**Magnetic Tray**

- Rectangular, stainless steel tray is 9-1/2" x 5-1/2" and 1-1/4" deep. Holds tools and small metal parts so they don't get lost or misplaced during repair work.
- Two heavy-duty magnets on bottom of tray have non-marring contact pads; will securely hold tray to metal objects such as a tool box, frame rail, fender, etc.



**4509**

**Straight-Blade Hose Cutter**

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

**4509-1** – Replacement hose cutter blade



**4515**

**Mini Pick and Hook Set – 4-Piece**

- Sturdy stainless steel points and shafts designed for marking, removing o-rings, accessing snap rings, and performing other tasks. Assorted angle tips allow you to reach awkward locations.
- Knurled shaft design enhances finger control for delicate jobs.



**Impact Drivers**

- Loosens hard-to-turn screws, bolts or nuts.
- Handle design prevents possibility of hitting hand with hammer when striking impact driver.
- Bit holder has 3/8" drive (No. 4608), 1/2" (No. 4607) drive, and 5/16" hex for Phillips and flat screwdriver bits.
- Includes eight screwdriver bits:
  - No. 2 Phillips bit, 1-3/8" long with 5/16" hex
  - No. 2 Phillips bit, 3-1/8" long with 5/16" hex
  - No. 3 Phillips bit, 1-3/8" long with 5/16" hex
  - No. 3 Phillips bit, 3-1/8" long with 5/16" hex
  - 5/16" wide x 1-3/8" long with 5/16" hex slotted bit
  - 5/16" wide x 3-1/8" long with 5/16" hex slotted bit
  - 3/8" wide x 1-3/8" long with 5/16" hex slotted bit
  - 3/8" wide x 3-1/8" long with 5/16" hex slotted bit
- 4607** – 1/2" impact driver.
- 4608** – 3/8" impact driver.



**4512**

**Snap Ring Pliers Set – Internal/External**

- For internal or external snap rings; thumbscrew permits quick conversion.
- Made of heavy-gauge tempered steel.
- Includes two stainless steel handled picks.
- Contained in a blow-molded plastic storage case.

No. 4512 includes:	
Tool No.	Description
<b>4512-1</b>	.090" tip, straight pliers
<b>4512-2</b>	.090" tip, 90° pliers
<b>4512-3</b>	.070" tip, straight pliers
<b>4512-4</b>	.070" tip, 90° pliers
<b>4512-5</b>	.047" tip, straight pliers
<b>4512-6</b>	.047" tip, 90° pliers
<b>4512-7</b>	.038" tip, straight pliers
<b>4512-8</b>	.038" tip, 90° pliers
<b>4512-9</b>	Straight tip pick
<b>4512-10</b>	90° tip pick
All items can be purchased separately.	



**6986**

### SAE Stud Remover Set

This SAE, 4-piece, stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

SAE stud remover set. 3/8" drive for 1/4" and 5/16" stud sizes, and 1/2" drive for 3/8" and 7/16" stud sizes. Housed in a blow-molded storage case.

- 6986-1 – 1/4" stud remover
- 6986-2 – 5/16" stud remover
- 6986-3 – 3/8" stud remover
- 6986-4 – 7/16" stud remover



**6987**

### Metric Stud Remover Set

This metric, 4-piece, stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

Metric stud remover set. 3/8" drive for 6 mm and 8 mm stud sizes, and 1/2" drive for 10 mm and 12 mm stud sizes.

Housed in a blow-molded storage case.

- 6987-6 – 6 mm stud remover
- 6987-8 – 8 mm stud remover
- 6987-10 – 10 mm stud remover
- 6987-12 – 12 mm stud remover



### Rolling Head Pry Bars

You'll have a lot of leverage using one of these rolling head pry bars. The long, tapered body will also serve as an aligning drift.

- 7163 – Pry bar; 12" long.
- 7165 – Pry bar; 18" long.

### Accutorq™ Klikker Torque Wrenches

These precision torque wrenches make a loud click when you've reached the torque setting. They feature ratcheting heads, all-metal construction, permanently roll-marked scales, and soft-grip rubber handles that enable you to firmly grasp the wrench for right- or left-hand torquing.

- Includes molded plastic case.
- One-year warranty.



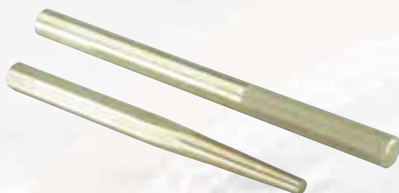
Tool No.	Torque Range	Graduations	Square Drive	Length
7375	100-1000 in.-lb (11-113 N·m)	10 in.-lb	3/8"	15-1/8"
7377	10-150 ft.-lb (14-203 N·m)	2 ft.-lb	1/2"	17-3/4"



**4629**

### Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Two hammer head weighing 24 and 12 oz.
- Two tapered punches 14" x 5/8", 10" x 5/8".
- One hex tapered punch 8" x 5/8".
- Two drift punches 10" x 3/4", 8" x 1/2".
- Two pin punches 6" x 3/8", 4" x 1/4".



**4602**

### Brass Punch Set (2 piece)

- Two large, brass non-sparking punches. Ideal for use near precision parts or in locations where sparks from ferrous metal could be hazardous.
- Includes an 8" punch (5/8" hex, tapered to 3/8") and 10" straight punch (3/4" dia., chamfered at both ends).



**4606**

### Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Hammer head weighs 24 oz.; brass drift punch is 10" x 3/4" diameter; brass tapered punch is 8" x 5/8" hex tapered to 3/8" diameter point.



## 4605

### Interchangeable Punch and Chisel Set

- Safety protective handle allows easy grip and protects hand from being hit by hammer.
- 12 punches and chisels included:
  - 5 flat chisels:** 1/2", 5/8", 3/4", 7/8", and 1" wide blades
  - 1 cape chisel:** 1/4" wide blade
  - 2 taper punches:** 1/8" and 1/4" diameter
  - 2 pin punches:** 3/16" and 1/4" diameter
  - 2 center punches:** 1/8" and 3/16" diameter
- Double locking ball detent holds punch or chisel securely in the driver handle. Replacement parts available:

- 4605-1 — Drive handle
- 4605-2 — 1/2" wide flat chisel
- 4605-3 — 5/8" wide flat chisel
- 4605-4 — 3/4" wide flat chisel
- 4605-5 — 7/8" wide flat chisel
- 4605-6 — 1" wide flat chisel
- 4605-7 — 1/4" cape chisel
- 4605-8 — 1/8" taper punch
- 4605-9 — 1/4" taper punch
- 4605-10 — 3/16" pin punch
- 4605-11 — 1/4" pin punch
- 4605-12 — 1/8" center punch
- 4605-13 — 3/16" center punch



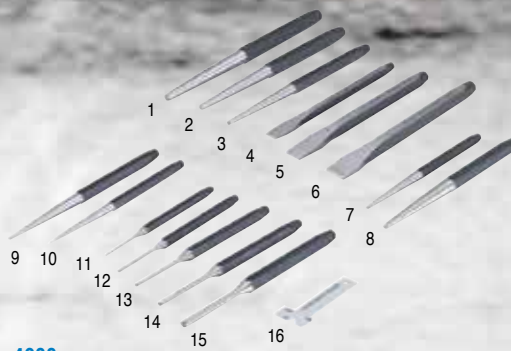
## 6613

### Variable Pin Spanner Wrench

- Universal design fits many different types of pulleys having slots or holes, including camshaft pulleys and crankshaft pulleys.
- Wrench is adjustable from 1-1/4 inch to 5 inches; works with a 1/2 inch ratchet or breaker bar.

#### Set Includes:

- 526908-1 — 3.5 mm pin
- 526908-2 — 4 mm pin
- 526908-3 — 4.5 mm pin
- 526908-4 — 5 mm pin
- 526908-5 — 6 mm pin
- 526908-6 — 7 mm pin
- 526908-7 — 10 mm pin
- 526908-8 — Handle



## 4600

### Punch and Chisel Set (16 piece)

- Durable set of heat-treated chrome vanadium steel punches and chisels. Storage tray included.

#### Contents of set:

- 3 — Cold chisels (with gauge): 3/8" x 5-1/2"; 1/2" x 6"; 5/8" x 6-1/2"
- 2 — Center punches: 1/8" x 5"; 3/16" x 6"
- 5 — Pin punches: 3/32" x 4-1/4"; 1/8" x 4-3/4"; 5/32" x 5"; 3/16" x 5-1/4"; 1/4" x 5-3/4"
- 5 — Taper punches: 3/32" x 5-1/4"; 1/8" x 5-3/4"; 5/32" x 6"; 3/16" x 6-1/4"; 1/4" x 6-3/4"
- 1 — Chisel gauge



## 4576

### Universal C-Frame Nut Splitter

- Forged and heat-treated frame with offset handle works where ordinary nut splitters may fail. Smooth action cracks nuts without damaging bolt threads.
- Chisel rotates to line up parallel to bolt. Splits non-heat-treated nuts of 7/16" (11mm) through 3/4" (19mm) diameter. Tool is 6-3/4" in length.



## 4514

### Mini Snap Ring Pliers Set (4 Piece)

- Small-size pliers for work in tight areas. Service S-ring and R-ring clips, internal or external, straight or angled. Ruggedly built of heat-treated chrome molybdenum steel.
- Set includes two internal snap ring pliers (one straight, one 45°) and two external snap right pliers (one straight, one 45°).
- All pliers have .038" (1.0mm) diameter tips.

#### Available separately:

No.	Part No.	Description
1	4600-15	Taper Punch, 1/4" x 6-3/4"
2	4600-14	Taper Punch, 3/16" x 6-1/4"
3	4600-13	Taper Punch, 5/32" x 6"
4	4600-3	Cold Chisel, 3/8" x 5-1/2"
5	4600-2	Cold Chisel, 1/2" x 6"
6	4600-1	Cold Chisel, 5/8" x 6-1/2"
7	4600-4	Center Punch, 3/16" x 8"
8	4600-5	Center Punch, 1/8" x 5"
9	4600-12	Taper Punch, 1/8" x 5-3/4"
10	4600-11	Taper Punch, 3/32" x 5-1/4"
11	4600-10	Pin Punch, 3/32" x 4-1/4"
12	4600-9	Pin Punch, 1/8" x 4-3/4"
13	4600-8	Pin Punch, 5/32" x 5"
14	4600-7	Pin Punch, 3/16" x 5-1/4"
15	4600-6	Pin Punch, 1/4" x 5-3/4"
16	4600-16	Chisel Gauge



## 4550

### Scraper Set

- Scrapers feature polished, heat-treated, stiff, stainless steel blades. Handles are ergonomic two-component plastic and feature a non-slip grip and steel bolstered end. Packaged in a storage tray. Includes: 1-1/4" straight blade, 1-1/4" bent blade, and 2" straight blade tips.

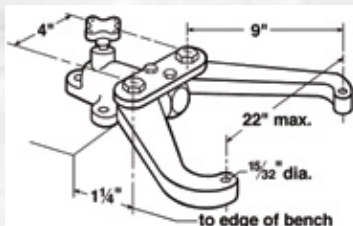


## 4651

### Screw Extractor Set

- Removes broken studs and bolts.
- Includes ten guide bushings, five drill bits and five screw extractors with extractor nuts.
- Drill bits are left handed to help removal.





### Universal Outside Thread Chaser

This thread chaser will quickly restore threads on fork tubes, steering stems, axles, etc. to near original condition without the use of expensive thread-cutting equipment.

- Replaceable V-pads and dies.
- 1-1/4" to 5" O.D.

### 7402

Thread chaser with 6 dies: threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.

### 216884

Standard die set. Includes 6 dies, in the sizes listed above.

### 202817

Metric die set. Includes three dies: 1 mm- 1.25 mm-1.5 mm-1.75 mm, 2 mm-2.5 mm-3.0 mm-3.5 mm; 4 mm pitch dies.

### 206803

V-pad.



### 4650

#### Mirror and Magnet Set

- Handles telescope from 6-1/2" to 25". Swivel heads allow access to tight areas.
- Large, rectangular swivel mirror is 2" x 3-1/2", and is attached to one telescoping handle; small mirror is 1-1/4" in diameter, and is interchangeable with magnets on the other handle.
- Magnets can lift up to 8 lbs.

### 7020

#### Bench-Mounted Holding Fixture

Securely hold and rotate small engines, transmissions, and other components while you're working on them.

- This holding fixture will handle pieces weighing up to 250 lbs., and it offers 360° of rotation with positive stops at 90° increments.
- Three sides of the mounted unit remain fully exposed.

34607 – Base assembly only.



## Spectrum Work Lights

- AC/DC Rechargeable
- Li-Ion battery
- Magnetic base
- Bright LEDs - 50,000 hour life
- Adjustable 60° angle
- Slip resistant textured body
- Impact and water resistant
- Limited Lifetime Warranty

### 5550

Spectrum Solar 10W LED Work Light with UV Top Light



### 5551

Spectrum Trio 9W LED Work Light with 3W LED Top Light



### 5552

Spectrum 30+4 30 Pc. LED Work Light with 4 Pc. LED Top Light



5550 Specifications	5551 Specifications	5552 Specifications
10W LED Work light with UV Top Light	9W LED Work light with 3W LED Top Light	30 Piece LED Work light with 4 Piece LED Top Light
LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC	LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC	LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V	Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V	Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V
Power Output: 5.0V 1000 mA	Power Output: 5.0V 1000 mA	Power Output: 5.0V 1000 mA
Charger Time: 3.5 ~ 4.0 hours	Charger Time: 3.5 ~ 4.0 hours	Charger Time: 3.5 ~ 4.0 hours
Active Time: 2.5 hours	Active Time: 3.0 hours	Active Time: 4.0 to 5.0 hours
Storage Temperature: -4°F to 158°F; -20°C to 70°C	Storage Temperature: -4°F to 158°F; -20°C to 70°C	Storage Temperature: -4°F to 158°F; -20°C to 70°C
Operating Temperature: 23°F to 122°F; -5° to 50°C	Operating Temperature: 23°F to 122°F; -5° to 50°C	Operating Temperature: 23°F to 122°F; -5° to 50°C
PS: LED Sector: 170°	PS: LED Sector: 25°	PS: LED Sector: 15°
At 50 cm: 350 LUX (750 LM)	At 50 cm: 4000 LUX	At 50 cm: 2250 LUX
Waterproof Grade IP65	Waterproof Grade IP65	Waterproof Grade IP65







## EVOLVING DIAGNOSTIC SOLUTIONS

Evolve is a professional diagnostics repair suite from OTC and Bosch. Look at codes, PIDs, data sets and likely repairs without ever leaving the vehicle. Evolve connects directly to Identifix, iATN and other repair networks and forums to help you fix faster at the vehicle\*.

The Bravo 3.0 software is easy to use and fast. AutoID most CAN vehicles in less than 5 seconds. Access on-tool repair information almost instantly to test and fix more vehicles faster. Includes one year of diagnostic updates, giving you more coverage, tests and repairs.



**NEW**

## EXCLUSIVE ON-TOOL WIRING DIAGRAMS

Exclusive on-tool wiring diagrams for vehicles 1986 and newer help you locate trouble components to test or replace.

### Wireless vehicle communication

Dual WiFi architecture keeps you connected to the vehicle and shop Internet to access troubleshooting and repair info.

### J2534 reprogramming capable\*\*

The included wireless VCI doubles as a powerful J2534 pass-through device, expanding your shop's ability to fully service and reprogram customer vehicles.

### Identifix on-tool

Direct-linking to Identifix for most diagnostic codes. OTC automatically transfers YMME to help you diagnose and fix with accuracy and confidence.

\* Must have active subscription status with Identifix or IATN.

\*\* Compliant with top 6 manufacturers. Reprogramming requires additional Windows-based PC and OEM software, purchased separately.



## 3896 EVOLVE DIAGNOSTICS

Kit includes:

- Rugged 10" shop-tested scan tool
- Wireless VCI with J2534 reprogramming capabilities
- Bravo 3.0 software powered by Bosch with exclusive on-tool wiring diagrams
- Charging / docking station with AC adapter
- Padded, protective storage and carry bag
- 5' OBD II cable
- USB cable
- 60-day Identifix Direct-Hit free trial
- One year of diagnostic updates

Made in USA with Globally Sourced Components

Available now –  
**13,000 confirmed  
HD diagnostic fixes**

New ESI[repair] subscription service with 13,000 trouble code fixes.

Free trial for new tool owners.  
Confirmed fixes based on module, code and truck configuration.



## ESI[Truck] HD Diagnostics

### Unmatched Coverage and Repair Information at the Truck

The most complete diagnostic coverage for multibrand heavy-duty trucks and engines, performing special tests and parameter reset capabilities.

### NEW REPAIR INFORMATION SUBSCRIPTION SERVICE

ESI[repair] subscription service for ESI[truck] includes 13,000 experienced based fixes. The tool includes fixes specific to trouble codes and symptoms with repair information viewed while still in diagnostic mode.

### Truck COVERAGE

Trucks: Freightliner, International, Kenworth, Mack, Volvo, Peterbilt, Sterling, Westernstar, MD Trucks (Freightliner Sprinter Van, Isuzu, GM and Ford).  
Trailer ABS Controllers; Allison & Eaton Transmissions.

### ENGINE COVERAGE

Heavy-duty engines – Caterpillar, Cummins, Detroit Diesel-MBE, Deutz, Mack, MTU, Navistar, PACCAR, Perkins and Volvo. Medium and light duty engine software included.



**3824**

### WINDOWS 7 TABLET SCAN TOOL

Includes VCI, 6 pin and 9 pin cables

**3824BSC**

### SCAN KIT

- Use with your shop PC
- Includes Bosch diagnostic software, VCI, 6 and 9 pin cables.

**3824-06**

### Bosch ESI[truck] Trailer Adapter

7-pin PLC adapter for trailer ABS diagnostics

- J2497 Power Line Carrier (PLC) communication compatible
- Allows direct connection to trailer
- Works with tractor present or without the tractor present
  - External power supply is necessary without tractor
- Bosch ESI[truck] trailer ABS coverage for Bendix, Haldex, Meritor Wabco and Wabash systems

**3824-08**

### Bosch ESI[truck] License Renewal 12-Month Security Card

**3824-08R**

### Bosch ESI[truck] Repair Information Subscription 12-Month Security Card



3824



3824-06



**3840F**

### Automotive Scope

The exclusive vehicle-specific database in the 3840F contains information for most domestic vehicles as well as many imports. The Scope also recommends the appropriate test procedures for fast, accurate repairs. Visible on the screen are diagrams showing pin numbers and wire colors for both the PCM and the component connector.



**3415**

### CAN Test Box Breakout Box for Scan Tools

- Connects between Diagnostic Link Connector (DLC).
- Connect leads for increased diagnosis, analysis, and monitoring.
- Useful Functions
  - LEDs display signal detection – Flashing LED's
  - Magnifies DLC
  - Displays battery voltage with warning

## TPMS Service Made Easy With OTC

The expected lifespan of tire pressure monitoring system (TPMS) sensors is between 7 and 10 years, meaning many vehicles coming into your shop are already in need or going to be in need of replacement sensors. Use this opportunity to educate your customers on the importance of the TPMS sensors – safety, vehicle awareness and peace of mind.

OTC recently brought a new standalone OBDII TPMS tool to market with basic diagnostics capabilities. Think of it as a TPMS tool with a built-in enhanced code reader. Plug the dongle in to the OBD II port and scan each tire's TPMS sensor. The vehicle will learn and register the sensor position and PSI almost instantly, allowing the relearn procedure to take less than 10 minutes.



**3838**

### Standalone TPMS Tool with Bluetooth OBD II

The OTC 3838 is both a sensor activation and diagnostic device that features a wireless OBD II module for TPMS sensor registration. The tool works with all OEM and aftermarket sensors.

- Exclusive wireless OBD-II module for TPMS sensor registration.
- Standalone TPMS tool with activation, relearn and diagnostic capabilities.
- Three years of software updates included.
- Allows for cloning of universal sensors.
- KEY FOB signal test and infrared print capabilities.



## OVER 26 MILLION VERIFIED FIXES, COLOR SCREEN, ADDED EUROPEAN COVERAGE & MORE!

**3210**

**NEW**



### OBD II, CAN, ABS & AIRBAG

**EPB BRAKE CALIPER RESETS, BRAKE BLEED TESTS, BMW BRAKE ZEROING TEST**

### STEERING ANGLE RESETS

### POWERTRAIN & ABS DATASTREAM

### ABS COVERAGE

1996-2012 Audi, BMW, Jaguar, Land Rover, Mercedes Benz, Smart, Volkswagen, Volvo

1996-2013 GM, Ford and Chrysler

1996-2013 Toyota, Honda, Hyundai and Nissan

### AIRBAG (SRS) COVERAGE

1996-2013 GM, Ford and Chrysler

1996-2013 Toyota, Honda, Hyundai and Nissan

### ENHANCED CODE REQUEST

For GM, Ford, Chrysler, Honda, Hyundai, Nissan, Toyota, Audi, BMW, Jaguar, Land Rover, Mercedes Benz, Smart, Volkswagen, Volvo vehicles

### BATTERY AND OIL LIGHT RESETS

Reset battery life for late model BMW, Ford F-Series trucks and Mini Coopers. Reset oil life to 100% and turn off the change oil light.

### MPG FUEL MILEAGE CALCULATION

Displays Instant MPG, Average MPG, Elapsed Time, Distance (MI), Fuel Used (GAL) and Average Speed (MPH) with the ability to alternate between English and Metric units on screen.

### CODECONNECT® WITH OVER 26 MILLION TOP REPORTED FIXES\*

The most probable solution to the vehicle problem that is specific to code and the vehicle year, make, model, engine.

**3208**



### OBD II & ABS Scan Tool

- Read ABS code and definitions for most 1996-2013 GM, Ford, Chrysler, Honda, Hyundai, Nissan and Toyota vehicles.
- View live engine data.
- Read/erase hot keys.
- View all available I/M Monitors and freeze frame data.
- Automatically reads DTC's (Diagnostic Trouble Codes) when connected for fast diagnostics.
- Works on all 1996 and newer vehicles (OBD II & CAN).

**3209**



### Trilingual OBD II, ABS & Airbag Scan Tool

- Color screen.
- ABS & Airbag code and definitions for most 1996-2013 GM, Ford, Chrysler, Honda, Hyundai, Nissan and Toyota vehicles.
- Battery, Alternator & Charging System Monitor.
- Graph, record and playback live date.
- Full manufacturer specific code definitions.
- Updateable – USB update cable included.
- Live engine data.
- AutoID® – Automatically selects the vehicle on most 2000 and newer vehicles.
- View all OBD II global data including Modes 5, 6 & 8.

### Test battery voltage and CCA in less than 10 seconds

Quickly test charging and starting system health without disconnecting leads



- Download the OTC3200 app from the Google Play or iTunes store. View battery test data by scanning the device QR code\*. Instructions included on testing device.
- All light duty applications - test 6V, 8V and 12V lead acid and AGM batteries
- Diagnose bad batteries faster – an internal 9V battery allows testing for deeply discharged batteries
- Share your test results – print, save or email a customer friendly color report
- Confidently recommend repairs – use your smart phone or tablet camera to embed photos into customer reports
- Sync feature sends information to all phones used in your shop so every tech can access reports by vehicle.

\*Smart devices paired with the tester must have auto-focusing rear-facing camera to meet full requirements



3200

### HD Battery Testers



#### 3167 Battery & Electrical System Diagnostic Tester

- Digital circuitry precisely controls battery test loads to accurately determine battery conditions.
- Tests both flooded lead acid and AGM/gell cell batteries accurately—down to 1 volt state of charge.
- Tests vehicle starting and charging systems with minimal user interaction.
- Tests all 6- & 12-volt batteries with a 50-2000 CCA operating range.
- Scales: CCA, CA, AHR, MCA, JIS, DIN.
- Removable/auto-sensing leads. (3' leads included in kits, optional 10' leads available.)
- Optional amp clamps for current drain tests and starting/charging measurements.
- Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, and molded-plastic carrying case.

### Genisys EVO® Software

3421-152

#### 2015 Super Bundle Kit

- Everything needed to update a Genisys EVO
- Includes 2015 Domestic/Asian, 2014 Euro. and preloaded System 5.0 memory card



3421-153

#### 2015 Software Loyalty Kit

- Designed for customers who already have System 4.0 and newer.
- Includes 2015 Domestic/Asian & 2014 Euro.



3421-154

#### 2015 System 5.0 4GB Memory Expansion Kit

- Pre-loaded with 2015 application software
- New applications require a separate purchase



### Encore/Genisys Touch HD



3895-07

#### OTC Heavy-Duty Standard

- Class 4 - 8 HD Standard truck Coverage
- Read / erase codes and view live engine data



3895-08

#### OTC Genisys Touch 12 Month Software Subscription

Genisys Touch Domestic, Asian and European Software 12 month subscription kit provides a year of frequent and valuable updates for new coverage, coverage enhancements, repair information and application improvements.

3834T

#### OTC TPR Activation Tool VEHICLE COVERAGE THROUGH 2016

- Can be used as standalone tool or with Evolve, Encore or Genisys Touch scan tools.
- Works on vehicle TPMS sensors through 2016.
- Bright graphic display and simple navigation buttons enable vehicle selection for fast activation.
- Automatically adjusts activation output power to eliminate cross activation of near sensors.



3183

#### OTC Digital Battery Tester

Speed. Accuracy. Reliability. These are the cornerstones behind the technology in our digital battery testers. Test 12-volt batteries (125-1400 CCAs) and analyze by measuring multiple parameters within the battery to deliver accurate results. A live voltmeter allows easy starting/charging system testing. Its bright, 4-digit LED display indicates battery status, voltage, and available CCAs. Compensates for cold temperatures.



3177A

#### Professional Memory Saver

- OBD II cable for fast connection to the vehicle
- Cigarette lighter adapter for use with vehicles that do not have an OBD II connector
- LED lights confirm circuit between the cigarette lighter/ power outlet and the vehicle's battery with the ignition on or off
- State of charge indicator identifies when the memory saver needs to be plugged in for recharge
- Resettable fuse protects against excessive current draw through either the OBD II connector or the vehicles cigarette lighter
- High capacity, rechargeable sealed lead acid battery for extended service between charges



4639

#### Battery Terminal Service Kit

Seven favorite battery tools, housed in a rugged, vinyl-coated fabric pouch. Kit includes: a heavy-duty battery terminal puller, 4-way battery post cleaner and reamer, angled battery nut pliers, GM 5/16" battery terminal ratchet wrench, extra long 5/16" terminal ratchet wrench, 10 mm battery terminal ratchet wrench, and side terminal battery brush.



3176

#### Smart Battery Charger and Maintainer

Utilizes switching technology which helps restore batteries that are slightly sulfated. Switches to float mode after the battery is completely charged.

- Maintains the battery charge level during vehicle programming.
- Charges deep discharged batteries in about 12 hours.
- Application: Lead Acid (FLA, AGM, GEL).
- Maintains battery charge level if the vehicle or the battery needs to be stored for an extended period of time.
- Easy to read LED lights to show the status of charging and battery condition.

### OEM tools



F00E9016307HH

#### The Ford Vehicle Communication Module II (VCM II)

- Authentic OEM diagnostics for Ford, Lincoln and Mercury Vehicles.
- Customer Flight Recorder (CFR) functionality with an optional pendant cable.
- Four LED indicators and signaling device providing technician with continuous visual as well as audible operating status.
- Enhanced 802.11 wireless that minimizes dependencies on service department wireless capability infrastructure.

F00E9016297HH\*

Includes VCM II, VCM to Laptop cable, USB wireless cards, and DLC cable.

F00E9016307HH\*

Includes all contents of F00E9016297HH plus CFR kit.

\*Software license sold separately.

Ford and VCM II are used under license from Ford Motor Company.

F00E9009777HH

#### Tech 2 Pro Optima

The only authentic General Motors Tech 2 scan tool with full, dealer-level diagnostics. Includes preloaded software that doesn't expire.



## Fasteners



### 5900A

#### Master TORX® Socket Set

52-piece, professional socket set in a blow-molded case. Hundreds of applications from front to rear on cars and trucks:

- Seat belt bolts
- Interior and exterior trim screws
- Engine assemblies
- Tail lamp lenses & assemblies
- Bumpers
- Headlight bezels
- Door strikers & latches
- Brake rotor bolts
- GM front-wheel drive front wheel bearings
- Truck box liners
- Styles available: TORX, TORX PLUS, tamper-resistant TORX and external TORX.
- Made from superior S2 steel to meet or exceed torque specifications.



6100



5933

#### TORX® Individual Socket Sets

**6100**  
Standard TORX® Socket Set T10 – T60 (12 pc)

**6150**  
External TORX® Socket Set (7 pc)

**5905**  
Tamper-Resistant TORX® Plus Socket set (11 pc)

**6145**  
Tamper-Resistant TORX® Socket set (7 pc)

**5931**  
External Torx® Plus Socket Set (8 pc)

**5942**  
XZN Super Short Socket Bit Set (8 pc)

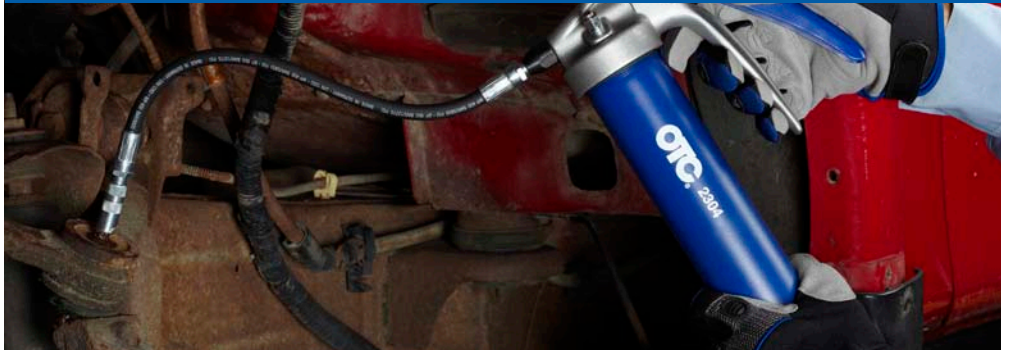
**6160**  
Fraction Hex Socket Set (7 pc)

**6170**  
Metric Hex Socket Set (7 pc)

**6180**  
TORX® Plus Socket Set (9 pc)

**5933**  
MortorQ® Super Bit Set (5-piece) (5 pc)

## Lubricant Service



### 2300

#### Professional Lever Grease Gun

- Heavy Duty Die Cast Aluminum Grease Gun Head.
- Grease Gun Head Fitted with Automatic Air Bleeder.
- Large Diameter Piston for working in cold.
- Built-In variable stroke for greasing fittings with limited access.
- Includes 6" Bent Steel Extension, Easy access 24" High Pressure Grease Hose & 3 Jaw Slim Coupler.
- 10,000 PSI.
- For use with 14 oz. grease cartridge.



### 2304

#### Professional Pistol Grease Gun

- Heavy Duty Die Cast Aluminum Grease Gun Head with integrated die cast Fixed Handle.
- Grease Gun Head Fitted with Automatic Air Bleeder.
- Large Diameter Piston for working in cold.
- Built-In variable stroke for greasing fittings with limited access.
- Includes 4" straight steel extension, easy access 24" High Pressure Grease Hose and 3 Jaw Slim Coupler.
- 7500 PSI.
- For use with 14 oz. grease cartridge.



### 2310

#### Air Operated Grease Gun-Continuous Flow

- Heavy Duty Die Cast Aluminum Grease Gun Head.
- Grease Gun Head Fitted with Automatic Air Bleeder.
- Larger Pumping Chamber, honed for rapid operation.
- Includes 6" Bent Steel Extension, Easy Access 24" High Pressure Grease Hose and 3 Jaw Slim Coupler.
- 4800 PSI.
- For use with 14 oz. grease cartridge.



### 2332

#### Quick Connect Greasing Accessory Kit

- 7 piece Quick Connect Greasing Accessory Kit
- Includes 1 each of the following Quick Connect Accessories:
  1. Recessed Lube Adapter.
  2. Angle Lube Adapter.
  3. Narrow Needle Nose Adapter.
  4. Seal Off Dispenser.
  5. Right Angled Grease Coupler.
  6. Heavy Duty Hose fitted with Spring Guard and Slim Coupler.
  7. Grease Injector Needle 1.42" Long x 18G.



### 2340

#### Heavy Duty Grease Gun Holder

- Great Grease Gun Storage accessory.
- Can be mounted to walls, machinery, or heavy equipment.
- Design to retain your grease gun in high vibration environments.
- Works with all standard 14 oz. Grease Guns and 16 oz. Suction Guns.



### 2359

#### Suction Oil Gun

- For use with gear oils to get them both into/out of gear boxes, transfer cases and differentials.
- 16 oz capacity and 14" hose.

### Fuel Injection kits

#### 7448A Canister-type Fuel Injector Cleaner

Simply and completely clean a vehicle's fuel system with the 7448A Fuel Injector Cleaner.

With the addition of a quick-connect fitting, the removable hose can be thoroughly cleaned for storage and extending the life of the product. An included blowout fitting adapts to shop air supply to remove residual cleaner from hose lines.



Fuel Injection Application Manual covers vehicles from 1997 - 2013.



#### 6550 Master Fuel Injection Kit

Test fuel injection systems on most GMs, including GM TBI, Ford, Chrysler, and Jeep vehicles. Also works on imports, including CIS and CISE fuel systems.

- 0-100 PSI fuel pressure gauge.
- 35 of the popular OTC fuel injection adapters, each equipped with a quick-connect Schrader valve.
- '97 - '13 Fuel Injection Service Application Manual.
- Replacement seal kit also included.

### 4 PIECE ROLLING HEAD PRYBAR SET

INCLUDES A FREE PAIR OF OTC SMARTTECH WORK GLOVES (L)



#### 7176

Includes 6", 12", 16" and 21" lengths for a variety of duties - small - large and in between. Heated to cherry red, upset, then forged and swaged processing creates the tool, then our special thermal treating process locks in the strength you count on. Guaranteed for life.



#### 4480 Basic Fuel Injection Service Kit

- Performs running, residual, rail and flow rate pressure tests.
- Kit includes adapters, hoses and fittings to test fuel injection systems.
- Kit includes two popular adapters for import vehicles as well as the GM TBI adapter.
- Professional dual scale gauge reads 0-100 PSI and 0-700 kPa with relief valve, fuel discharge hose and rubber boot.
- Packaged in blow molded carrying case.



#### 6550PRO Pro Master Fuel Injection Service Kit

Covers 100% of vehicles sold in North America '97-'13. Perform fuel pressure testing, diagnose weak fuel pumps or restricted filters, test for fuel flow and perform leak-down tests. Use to clean injectors and intake systems. Kit includes:

- 0 - 100 PSI Fuel Pressure Gauge.
- 47 of the popular OTC fuel injection adapters, each equipped with a quick-connect Schrader valve.
- '97 - '13 Fuel Injection Service Application Manual.
- Replacement seal kit also included.

#### 7175

#### 3 Piece Indexing Pry Bar Set

- Sizes 10", 12" and 15".
- Indexible to 180° for better access.
- 14 locking positions for leverage in multiple applications.
- Knurled handle assures a sure grip.
- Meets or exceeds ANSI specifications for pry bars



#### 6554 Fuel / AC Line Disconnect Kit

- Topside disconnects for AC and Fuel lines.
- Clips, disc, and scissor styles for broad applications.
- Hi-visibility line plugs included.

#### 7000A Pro Inject-R Kleen Fluid

Clean fuel injectors mean cleaner running, more efficient engines - and lower emissions. This fluid restores injectors' original spray pattern, helps prevent recurring problems, and reduces intake and port deposits.

- No mixing; use right from the can.
- Pro Inject-R Kleen fluid. Case of 12 16-oz. cans.



#### 6599 Fuel Tank Lock Ring Wrench

- Universal design allows tool to fit fuel tank lock rings on Ford, Chrysler, and GM vehicles with gas engines.
- Works on: 2004-newer Ford F-150 trucks; 2004-newer Chrysler / Dodge minivans, PT Cruiser, Dakota, and Durango; 2004-newer Chevy 1/2-ton and 3/4-ton trucks; and 2005-newer Jeep vehicles.
  - Tool easily removes and installs lock ring on the fuel tank when servicing the fuel pump or fuel sending unit.
  - Used with a 1/2" drive ratchet or breaker bar.

#### 4484

#### Weather Pack Ratcheting Crimper Kit

Manage environmentally-sealed connection systems with the OTC 4484 Weather Pack Crimper Kit. Weather pack connection systems are designed to protect against exposure to heat, moisture and contaminants. Includes:

- Two interchangeable crimping dies coverage wire range AWG 22 / 20-18 (DIN: 0.35 / 0.5-0.8mm) and AWG 16-14 / 12 (DIN: 1.0-2.0 / 3.0mm).
- Dies are magnetically secure and easily changed.
- Instructions clearly illustrate how to create a weather-proof seal.
- Connections found on motorcycles, Class 7 - 8 tractors, automobiles and more.



### Pliers & Cutters



**4512**

#### Snap Ring Pliers Set – Internal/External

- For internal or external snap rings; thumbscrew permits quick conversion.
- Made of heavy-gauge tempered steel.
- Includes two stainless steel handled picks.
- Contained in a blow-molded plastic storage case.



**4513**

#### Heavy-Duty Snap Ring Pliers Set (2 piece)

- Heat treated steel "circlip" pliers for large equipment repair.
- Replaceable tips and spring ratchet locking mechanism to securely hold against snap ring tension.
- Internal pliers' capacity 3-1/16" to 6-1/4" (78 mm to 159 mm) snap rings.
- External pliers' capacity 3-1/2" to 6-1/2" (89 mm to 165 mm) snap rings.
- Blow-molded storage case includes extra sets of replaceable tips.
- Overall length 16"; handle length 12-1/2".



**4514**

#### Mini Snap Ring Pliers Set (4 piece)

- Service S-ring and R-ring clips, internal or external, straight or angled. Ruggedly built of heat-treated chrome molybdenum steel.
- Set includes two internal snap ring pliers (one straight, one 45°) and two external snap ring pliers (one straight, one 45°).
- All pliers have .038" (1.0mm) diameter tips.
- Overall length 3"; handle length 2".

**NEW**



**2497**

#### 3 Piece Push Pin/Body Clip Pliers Set

- Remove plastic body fasteners and clips faster in nearly any location. Features:
- Three pairs of pliers in 45°, 90° and straight.
  - Unique design lifts center pin and removes plastic rivets and fasteners without damage.
  - Reach in wheel wells, next to firewalls, behind bumpers and dashboards.
  - Eliminates breaking plastic retention clips.
  - Covered by OTC's Lifetime Warranty.

**7401**

#### Ratcheting Chain Wrench

- This multi-purpose tool will grip parts of nearly any shape. It features a ratcheting head design that lets you turn in either direction without removing wrench from the work.
- 19" handle with capacity from 3" to 6-3/4" O.D.



**6969**

#### Ratcheting Chain Wrench – 24"

- Ratcheting action makes it possible to re-grip without removing wrench.
- Handles parts of most any shape... round, square, hexagon, or octagon.
- Handle is 24" long; chain grips objects ranging from 3" to 6-1/2" O.D.

**4462**

#### Wire Loom Threading Kit

- The 4462 Wire Loom Threading Kit from OTC is a clever grouping of wire fishing tools for the automotive technician. Whether general wiring R&R - or adding Gauge Packs, Sound Systems, Vehicle Security and Camera Systems, these tools simplify placing the wiring within the protection of existing wiring looms, without cutting tape or zip ties and without damage to other wires.
- There are 3 wire pulling tools in 15", 10" and 5.5" lengths for common automotive applications, the grommet insertion tool allows the wire to be captured within the tool to hold once it is placed, placed so you can grab from the opposite side of the firewall - and the pigtail tool assists when building a new harness on the workbench.

### Wire Service Tools

**5912**

#### Crimpwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.



**5950A**

#### CrimPro™ 4-in-1 Angled Wire Tool

- Compact 7-inch design.
- Gripping nose.
- Crimper, 12-20 AWG insulated & non-insulated wire.
- Stripper - strips 12-20 AWG wire.
- Cutter - ability to make cuts below pivot.
- Angled head to work against firewalls, frames, bulkheads and more.



**5950S**

#### CrimPro™ 4-in-1 Wire Tool

- Compact 7-inch design.
- Gripping nose.
- Crimper, 12-20 AWG insulated & non-insulated wire.
- Stripper - strips 12-20 AWG wire.
- Cutter - ability to make cuts below pivot.



**4813**

#### Heat Shrink Tubing Set (171 Piece)

- Protection and insulation for solder connections and components. 2 to 1 shrink ratio with flame or heat gun.



**4814**

#### Waterproof Heat Shrink Tubing Set (106 Piece)

- Waterproof protection and insulation on solder connections and components. Adhesive lined inner wall to seal out moisture. 3 to 1 shrink ratio with flame or heat gun.





### STRUT TAMER II EXTREME

NEW



Strut assembly not included

✓ MEETS THE NEW ASME PASE SAFETY STANDARDS FOR SPRING COMPRESSION  
✓ CAPABLE OF SAFELY COMPRESSING THE LARGEST STRUT SPRINGS

- New forged locking jaws includes larger pads and offset to clamp onto and compress springs even tighter than before.
- New extra thick 5/8" compression arms for superior strength, stability and safety.
- New locking trunions for optimal stability during spring compression.
- New Lock rings to hold arms in position - standard. Eliminates arms from spreading or sliding when compressing offset or unique strut configurations. No tools needed to adjust.
- New Spring capacity of 2-1/2" – 10" diameter, 1-1/4" – 24" vertical stroke.
- Extreme duty design to handle the heavier springs found on mid- and some full-size truck strut assemblies.

**6637**  
StrutTamer II Extreme Height 29" (736 mm)  
Width 21" (533 mm) Depth 20" (508 mm)



**6637-ST**  
StrutTamer II Extreme with stand  
Height 54" (1372 mm) (36" without handle)  
Width 22-1/2" (572 mm) Depth 32" (813 mm)



**6575**  
**Hub Grappler™ Kit**

- Jaws designed and sized to properly fit hub applications and is quickly located on the puller bar without the use of fasteners.
- 3/4" custom drive screw coupled with the special equalizer washer provides smooth operation while proprietary heat treating extends its life 5-10 longer than similar designs.
- Six adapters increase application coverage. Includes tie rod/ball joint tool and two Ford axle installers.
- Included Application Guide is the most comprehensive on the market.

**7248**

#### U-Joint Removing/Installing Tool

This helpful tool uses a forcing-screw press to safely remove and replace automotive universal joints with needle bearings, including GM plastic pin CV U-joints.



**6559**  
**Ball Joint Master Service Kit**

- The 6559 Ball Joint Master Service Kit offers complete coverage of Car and Truck/Van/SUV applications. With 70+ adapters, c-frame and application guide means there is nothing else to add for servicing ball joints.
- The majority of vehicles have press-in ball joints, so stop searching for make-shift solutions for servicing these vehicles – everything required is laid out in this one complete kit.
- With a kit of this magnitude, finding the correct adapters and using them correctly is key to minimizing service time. That is exactly what the included ball joint application guide is designed to do – contains application charts and diagrams with step-by-step instructions.



**6530**  
**Ball Joint Intermediate Service Kit**

- This 20+ adapter kit covers many Truck/Van/SUV applications and some car applications.
- With the majority of Cars and Truck/Van/SUV applications having press-in ball joints and universal joints, this kit is designed to service many of those applications.
- This kit is a combination of 7249, 7918, and 7996 kits, and includes 20+ adapters, C-Frame, and Application Diagrams all provided in a case.

**7249**  
**Ball Joint Starter Service Kit**

- This starter kit is the backbone to ball joint, U-joint, anchor pins, and many other general pressing operations. Kit includes 5 adapters and C-Frame provided in a case.



**6939**  
**Broken Bolt Extractor Tool**

- Remove frozen, broken or cut off bolts within steering or suspension bushings.
- Can also be used to remove and install wheel studs and other general pressing needs.



**6939-1**  
**Broken Bolt Extractor Adapter Set**

- Available for use with the 7248 C-Frame.



**6935**  
**U-Joint Service Adapter**

For use with the 7248 C-Frame to service the u-joints found on Dana 60 4WD front drive axles.



### OTC HAMMERS



5790ID-816

#### Automotive Heavy Hitters

**5790ID-616**  
Head 6 lbs., Handle Length 16", Total Weight 7.6 lbs.

**5790ID-812**  
Head 8 lbs. Handle Length 12", Total Weight 8.9 lbs.

**5790ID-816**  
Head 8 lbs. Handle Length 16", Total Weight 9.7 lbs.



#### Accutorq™ Clikker Torque Wrenches

**7375**  
Torque 100-1000 in.-lb (11-113 N•m)  
Graduations 10 in.-lb Square Drive 3/8" Length 15-1/8"

**7377**  
Torque 10-150 ft.-lb (14-203 N•m)  
Graduations 2 ft.-lb Square Drive 1/2" Length 17-3/4"

**7378**  
Torque 25-250 ft.-lb (34-339 N•m)  
Graduations 2 ft.-lb Square Drive 1/2" Length 19-3/8"

**7379**  
Torque 100-600 ft.-lb (136-813 N•m)  
Graduations 10 ft.-lb Square Drive 3/4" Length 42-1/4"



**6295**  
**Front End Service Set**

Kit includes five popular tools used for servicing Pitman arms, ball joints, and tie rods on most vehicles. Set includes:

- 7314A – Pitman arm puller.
- 7315A – Tie rod end remover.
- 7503 – Outer tie rod remover/ball joint separator.
- 6296 – Pitman arm/tie rod end puller.
- 6297 – Ball joint separator.



NEW

**7503HD**  
**Tie Rod/Ball Joint Puller**

- A heavy-duty version of the original 7503 puller, fitting all the same applications but twice the load capacity.
- Uses a large 3/4" drive screw with interchangeable tips included for multiple applications.



### 5713 Tire Bead Seater

The Tire Bead Seater is used when a tire, new or used, is mounted on a wheel and the tire bead does not touch both sides of the wheel, making inflation possible. The air trigger on this tool expels a tremendous burst of air that inflates the tire to seat it to the wheel rim. This allows the tire to be inflated to the recommended pressure through the tire valve.

- Equipped with unique configurations that enhance ease of use, productivity, and safety
- ASME certified 13-gallon tank is designed with a nozzle and valve connected via hose assembly, giving users more control rather than requiring them to hold the weight of the tank



### 5729 Inside Dual Wheel Bead Breaker

- Breaks the inner bead on the outside tire without removing the wheel from the truck.
- Unique design places pressure in the exact location required to quickly and easily break the inner bead.
- Simply pull up on the handle and the bead is forced off the wheel rim.

### 5727 Sliding Bead Breaker

The 5727 Sliding Bead Breaker has a split head, unique wedge design and slide hammer to reduce bead friction. Foot loops and tipping slots provide leverage and ease of transferring force to the tire.

- Sliding Bead Breaker, 47" extends to 81", 21 lbs.



### 5744 TPMS Tire Deflator/Locator;

- Evacuates air from the tire without removing the valve core.
- Tire location is marked on the color coded deflators so TPMS sensors can be replaced to the original location, eliminating the need for resetting.



### 5733 Tire Bead Wedge Pliers

- Tire Bead Wedge Pliers keeps the tire in the bead drop area to ease mounting and demounting of larger truck and agricultural tires.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



### 5747 Tire Valve Stem Punch Kit

- Quickly and easily remove old valve stems from a wheel with a swing of a hammer.
- Simply place the punch tip on the inside of the valve stem and strike the punch to force the old valve stem out of the wheel.
- The unique punch tip is heat treated and shaped to remove all types of valve stems.
- Includes hand protecting handle with interchangeable 5" and 8" punch adapters for car and truck wheel applications.

### 5735-PACK Tire Spoon Rack Pack

A pack of popular tire spoons features the 35" Double End Tire Spoon with Grip Grooves (5735-35G), 35" Curved/Flat Tip Curved Tire Spoon (5735-35) and 30" Curved Tire Spoon (5736-30), along with a FREE rack (5715) that can be hung on a toolbox or wall for easy organization.



### 5715 Tire Spoon Rack

- Designed to hold OTC Tire Spoons by the handle upset.
- Also holds tools with 3/4" or smaller diameter shafts.
- Can be hung on end of tool box or mounted to the wall via holes on 16" center.



### 5758 Hub Cap Removal Tool

- Unique slide hammer design eliminates prying against the wheel finish and potential scratches.
- Opposite end has a rubber bumper used to re-install cap with a simple tab.

## Tire Spoons



Convex Slip Head - Unique "Convex Slip Head" curved design allows the spoon to slide easily into the tire bead while the spoon bump limits the depth for quick-and-easy operation.



Grip grooves - Eliminate spoon slippage on the wheel rim while mounting or demounting the tire. The grooves also limit the depth of the spoon to help eliminate pinching tire tube applications.

**5735-35** Double End Curved & Flat Tip Curved Tire Spoon, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.

**5735-35G** Double End Tire Spoon with Grip Grooves, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.

**5735-42** Double End Curved & Flat Tip Curved Tire Spoon, 42" Same great design as the original double end mount/demount tire spoon, but in a 42" length for added leverage. 3/4" diameter.

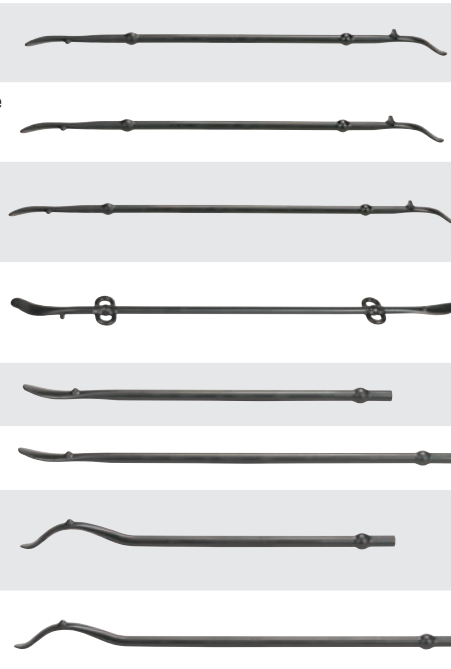
**5735-42K** Double End Tire Spoon with Kick Start, 42" Includes kick loops to allow the spoon to be forced into tight bead locations with the help of foot pressure. 3/4" diameter.

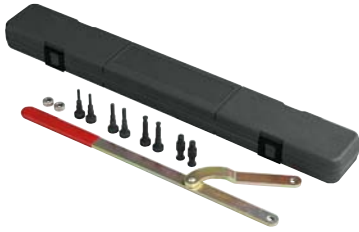
**5736-24** Curved Tire Spoon, 24" Handle knob enables easier spoon pick up. 3/4" diameter.

**5736-30** Curved Tire Spoon, 30" Handle knob enables easier spoon pick up. 3/4" diameter.

**5739-24** Curved Shank Tire Spoon, 24" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.

**5739-30** Curved Shank Tire Spoon, 30" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.





## 4754 Universal Pulley Holder

- Universal design fits many different size pulleys having slots or holes, such as crankshaft / transmission pulleys or gears.
- Wrench is adjustable from 1-1/2" to 8-5/8"; four different size step pins are interchangeable.
- Long handle enables technician to easily hold the pulley when tightening or loosening retaining bolts.



## 4769 Wheel Rim Protector Set, (3 piece)

Fits over the wheel rim to protect the wheel from being scratched or damaged while using tire spoons.



## 4795 Safety Wire Twist Pliers

These versatile 8" pliers will reliably twist safety wire rapidly and consistently. The right hand twist mechanism features an automatic spring return. The forged alloy steel construction features tapered jaws for confined areas and mated cutters to cut safety wire. For use on safety wire applications found on vehicles, machinery, and aircraft.

## 4796 Steering Neck Bearing Race Remover

Simple way to remove bearing race in the steering neck. Remover is inserted into neck and bolt is adjusted to tighten the remover against I.D. of steering neck. The remover is then driven from other end of neck to remove race. Fits 1-1/8" to 2-5/8" I.D. bearing race.



## 4844 Cam/Crank Locking Tool, Twin Cam & Dyna

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.
- Double end design covers;
- Twin Cam 88/B 1999 & Later
- Dyna 2006 & Later



## 4738 Chain Breaker & Riveting Tool Kit

This heavy duty kit makes easy work out of breaking, pressing, and riveting # 415 - # 632 size standard and O-ring chains. The handle can be mounted in 3 different positions on the forged and hardened alloy c-frame, providing access while the chain is on the vehicle. The kit can rivet hollow nose master links as well as hardened pins. Storage case included.



## 4838 Piston Ring Compressor Set, 6 Piece

This 6 ring set covers 2-7/8" thru 4-3/8" piston diameters. The ring compressor pliers feature a ratcheting lock to hold the handles in position for easy piston installation.



## 4839 Adjustable Piston Ring Expander Pliers

These simple pliers include tips designed to capture the ends of piston rings to hold and expand them securely while installing onto pistons.



## 4840 Piston Ring Compressor Set with Ring Expander

This complete set includes 12 chrome plated compressor sleeves covering 1-3/8" thru 4-3/8 diameter piston applications. Both the ring compressor and ring expander pliers feature a ratcheting lock to hold the handles in position for easy piston and ring installation. Complete with a metal carry case.



## 4948 Water Pump Drive & Rotor Puller

- Installs the water pump drive gear on the rotor and removes the rotor from the crankshaft. This tool also works on RZR XP.
- Similar to Polaris No. PA-49316.



## 4860 Transmission & Steering Bearing Puller/Installer Kit

- This combination kit works on transmission main-shaft and steering stem bearings on HD motorcycles.
- Removes; Fork stem bearings on most applications. Flywheel bearing 00-03 XL. Removes/Installs; Inner bearing race on trans main-shaft Big twin 84 & later.
- Aftermarket trans main-shaft bearings & bushings on 5 & 6 spd. LSD and RSD trans.



## 4888 Flywheel Socket Set

The best flywheel sockets available. These offer a low profile design that provides full nut to socket contact to eliminate rounding off the nut and slippage. Made from heat-treated chrome moly steel.



## 4991 Clutch Compressor Tool

- This universal compressor is used to compress the drive or driven clutch during assembly of disassembly. Innovative design makes use quick and effective without binding. Works on all Polaris and TEAM clutches found on full-sized model ATV, Side x Side, and Snowmobile.



## 4974 Clutch Puller

- Removes drive clutches on Polaris Side x Side and Snowmobile.
- Snow Applications: 700/800 XCR Fuji 3 cylinder engines 1999-2001, all Domestic twin 2-strokes model year 2000 and newer, FS/FST models 2006 and newer.
- Side x Side Applications: Ranger RZR XP 2011 and newer.
- 3/4-16 thread.

## 4987 Clutch Spider Nut Socket

- Used to remove and install the drive clutch spider jam nut on 2011 & newer Ranger RZR XP. Similar to OE P/N PU-50578.
- Similar to Polaris No. PU-50578.



## 4989 Clutch Spider Tool

- Essential when servicing or re-building Polaris clutch. Fit's P85 and P90 clutches found on Polaris ATV, Side x Side, and snowmobiles 1972 to Present.
- Similar to Polaris No. 2870341.



## 4748 Belt Tension Gauge

This easy to use and read tool allows for accurate belt tension to be set after belt replacement, adjustment, or wheel service. Use on secondary drive belts with a 10 lb. spec.



## 4852 Adjustable Primary Locking Bar

- Used to lock primary for service work.
- Will work on Chain or Belt Drive style primary drives.
- Adjustable length from 4" to 7-1/4" to cover virtually any application.



## 4882 Rear Axle Wrench

- This wrench allows for simple adjustment of drive belt tension or rear wheel alignment.
- Eliminates the need to remove any exhaust components.
- 36mm wrench includes a 1/2" square drive allowing for use with a torque wrench for proper axle torque.



### 4246 Hendrickson Rear Suspension Bushing Tool Kit

Replace rusted and frozen heavy-duty rear suspension bushings faster and easier

- Patent-pending design is suspension-mounted, eliminating the need to hold the tool during operation
- Remove and install Hendrickson PRIMAAX EX, COMFORT AIR, FCCC V Ride™ Pivot and D-Pin Bushings
- Save time and effort during suspension service to get trucks back on the road faster
- Included adapters align tool with the suspension to ensure proper bushing installation and reduce the chance of misalignment and bushing damage
- Includes an OTC 4106A 25-ton high-force cylinder



- ### 4247
- Adds an OTC 2510A air/hydraulic pump to make bushing service faster and easier
  - Includes everything in the 4246 kit



### 4250 Hendrickson Adapter Kit for Front Suspensions

- Use with your 4246 or 4247 Rear Tool on select Hendrickson Front Suspensions
- Remove and install Hendrickson PACCAR Monoleaf, Navistar Monoleaf, Volvo Monoleaf suspension Pivot Bushings



### 4274 Hendrickson Front Suspension Bushing Tool Kit

Replace rusted and frozen heavy-duty front suspension bushings faster and easier

- Patent-pending design is suspension-mounted, eliminating the need to hold the tool during operation
- Remove and install Hendrickson PACCAR Monoleaf, Navistar Monoleaf, Volvo Monoleaf suspension Pivot Bushings
- Save time and effort during suspension service to get trucks back on the road faster
- Included adapters align tool with the suspension to ensure proper bushing installation and reduce the chance of misalignment and bushing damage
- Includes an OTC 4106A 25-ton high-force cylinder



- ### 4275
- Adds an OTC 2510A air/hydraulic pump to make bushing service faster and easier
  - Includes everything in the 4274 kit



### 4254 Hendrickson Adapter Kit for Rear Suspensions

- Use with your 4274 or 4275 Front Tool on select Hendrickson Rear Suspensions
- Remove and install Hendrickson PRIMAAX EX, COMFORT AIR, FCCC V Ride™ Pivot and D-Pin Bushings



### 5286 OTC Portable Diesel Particulate Filter Cleaner

- The advent of the 2010 Tier 4 cleaning requirements created the need for a lighter, more portable cleaning system which can be taken into the field to clean filters at the point of service.
- Lightweight and Highly Portable - ideal cleaning system for use in the shop or on a service truck.
- Flexibility - clean DPF's from 6" to 15.5" in diameter using shop or compressed air of at least 100 PSI.
- Fully Automated Operation - once started, the cleaning process can be completed unmonitored, freeing up technician to simultaneously do other work in the shop.
- Focused Air Jet Technology™ - concentrates a precise high pressure stream of air directly into every cell.
- Maximum Efficiency - OTC's unique floating puck prevents "splash back," which maximizes the volume of air entering each cell.
- Easy Maintenance - contains no internal filters that require user maintenance and its rugged design provides maximum durability.



### 5280 Diesel Particulate Filter Cleaner

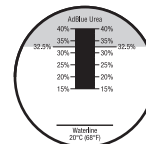
- Robust design for long shop life.
- High pressure cleaning process for thorough cleaning of ash from DPF - produces 10 times the burst energy of competitive low pressure units.
- Burst Quick Check identifies if filter is too plugged for proper cleaning.
- Movable with locking wheels for placement throughout the shop.
- Computer controlled process based on OE requirements for start-to-finish cleaning without constant technician monitoring.
- Containment of hazardous ash for easy disposal.
- HEPA Filter Air Exhaust System included to exceed shop environmental air standards.
- Operates on standard 115V outlet.
- Proven to clean to over 92% efficiency.
- Third-party OEM test results using pin gauge measurement with approved OTC adapters and burst cycles. Actual results may vary.



### 5025 Diesel Exhaust Fluid (DEF) Refractometer SCR & EPA 2010

- The OTC 5025 makes this a simple and quick process for an operator or technician to get an accurate measurement of UREA concentration in DEF or AdBlue solution.

**Scale:**  
0.5% line graduations  
32.5% Indicated  
Scale 15-40%  
Waterline & 20 Deg C



**Application:**  
The refractometer is a portable, precision, optical instrument used for measuring the Diesel Exhaust Fluid (DEF) concentration. When a liquid sample is placed on the prism, the light passing through it is bent and shows on the scale to indicate the DEF condition.



### 6- & 10-Ton Capacity Air/Hydraulic Service Jack

- Huge steel front wheels are mounted in bearings for trouble-free service life. Rear swivel casters make spotting the jack easy.
- Spring-loaded handle can be locked in three positions.

**5106**  
6-Ton Air/Hydraulic Service Jack.  
Lifting range 4-3/4" to 23-1/4", reach 87", 45" handle.

**5110**  
10-Ton Air/Hydraulic Service Jack.  
Lifting range 6-3/4" to 26-7/8", reach 93", 47" handle.



### 1770A 1,500 lb. Dual Wheel Dolly

- Hydraulic jack provides almost 5" of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Independent lifting rack provides maximum stability; rollers won't catch on load.
- Swivel casters for easy maneuverability.
- Floor space is 45" by 41".
- 6' chain holds load in place.
- Covered by OTC Lifetime Warranty®.



### 5018A Truck Clutch and Flywheel Handler

- Replaces 14" & 15-1/2" clutch assemblies weighing up to 250 lbs.
- 13" low point enables access below side faring.
- Linkage raises load from horizontal to vertical position.
- 360 degree swivel head.
- Covered by OTC Lifetime Warranty®.



### 1533A 2-Ton Aluminum Racing Jack Pack

- ASME-PASE Compliant
- 1532A – Aluminum Service Jack**
  - Min Height: 3.250"
  - Max Height: 18.625"
  - Handle Length: 47.625"
  - Weight: 41 lbs
- 1582A – Aluminum Jack Stands**
  - Low Height: 9.5"
  - High Height: 15.16"
  - Number of Adjusting Positions: 6
  - Base Diameter: 7"
  - Saddle size: 2.17" x 1.97"
  - Weight of each stand: 4.7 lbs



### 2,200 and 4,400 lb. Capacity Heavy-Duty Floor Cranes

- To conserve valuable floor space, crane folds into a compact package for storage.
- For "close-in" work, leg spread adjusts to clear vehicle's wheels; telescoping boom extension gives additional reach. Roller bearing mounted wheels and steering dolly provide ease of mobility.
- A two-speed hydraulic hand pump provides fast boom travel; descent of boom is under precise control of operator.
- Covered by OTC Lifetime Warranty®.
- 1819** – 2,200 lb. Capacity Crane. Has hydraulic hand pump and 16-7/8" lifting chain.
- 1820** – 4,400 lb. Capacity Crane. Has hydraulic hand pump and 18-3/8" lifting chain.



### 1735B OTC 2,000 lb. Capacity Heavy-Duty Motor-Rotor Repair Stand

- Handles a wide variety of engines, transmissions, torque converters, and rear axles from trucks, tractors, and construction machinery.
- The 50:1 ratio gearbox allows full rotation of mounted unit with just a turn of the crank and locks in position. Easily maneuvered when loaded.
- To ensure engine stability in all positions, this repair stand is equipped with a positive-crank handle locking mechanism.
- Twin-post design, featuring laterally adjustable, 3 position outboard support; provides an extremely stable work-holding unit.
- Locking rear wheels anchor stand in position.



### 5019A 2,200 lb. Capacity Low-Lift Transmission Jack

- Special mounting adapter fits popular Eaton® Fuller® RoadRanger® transmissions used on nearly all Class 7 and 8 heavy-duty trucks. Mounting plate angle is adjusted with the turn of a wrench.
- Swiveling pump handle permits ease of operation in restricted working spaces. Fast-acting pump quickly raises lifting arm.
- Includes No. 540231 adapter for Eaton® Fuller® RoadRanger® transmissions (also available separately).

#### Specifications:

Min. height is 8-1/4" Max. height is 36-1/2"  
Max. forward tilt – 15° Max. backward tilt – 20°  
Max. side tilt (either side) – 12°  
Overall length – 52" Overall width – 32-1/2"



### 4295 Wheel Stud Service Kit

- Installation done by pushing on the head, eliminating the need for threaded adapters.
  - Reduces number of adapters required
  - Reduces damage to studs, hubs/bearings
  - Increases ease of use
- Remove and install 10 studs in only 10-15 minutes
- Can be powered with an impact wrench, no hydraulic power source required.
- No need to remove hub from vehicle.



### 5190A Heavy-Duty U-Joint Puller

- The ideal tool for disassembling drivelines.
- May be used with up to a one-inch impact wrench.
- Quickly & easily removes sealed U-joint cups without the need for hammering or heat.
- Will not damage the driveshaft, yoke, bearing cups, or joints.
- Fits practically all Class 7 and 8 trucks, including: Spicer driveline 1610, 1710, 1760, 1810, 1880 Spicer SPL 140, 170, and 250 "Life Series" Meritor (Rockwell) 16N, 17N, 18N, 1710Meritor RPL 20 and 25 "Permalube" Series.
- Covered by OTC Lifetime Warranty®.



### 20-Ton Truck Ramps

- Long, retractable T-handle enhances mobility.
- Non-skid rubber matting prevents slippage during use.
- Durable, heavy-duty rubber wheels.
- Capacity per pair is 20 tons
- Covered by OTC Lifetime Warranty®.

#### 5268

20-ton truck ramps handle up to 10" tread width.

#### 5269

Wide 20-ton truck ramps handle up to 16" tread width.



### 1590 10-Ton Air Lift

- Adjustable lifting saddles and an extra wide stance for extra stability.
- 10 tons of lift at 200 PSI air pressure.
- Lifting range is 13" to 52".
- Automatic mechanical safety catch engages in five height positions.



### Slack Adjust Pullers

These pullers will yank even the most corroded slack adjuster off the S-cam—and do so in just a fraction of the time needed with "heat and beat" methods. Plus, they won't damage components. Both pullers have a rugged forcing screw and cast steel body. Puller No. 5055 fits many manual types, and the No. 5056 works on Rockwell, Haldex, Gunitite, and Bendix automatic adjusters.

- Covered by OTC Lifetime Warranty®.

#### 5055

Manual slack adjuster puller.

#### 5056

Automatic slack adjuster puller.



### 1780 22-Ton Capacity Jack Stands

- Height range is 13-7/8" to 19-7/8".
- Saddle size 3" x 3-3/4".
- Pin-style (non-ratchet) three positions, 3" intervals.
- Reinforced collar to meet newest ANSI PALD test standards.
- 11" flat base prevents sinking into the surface.

## Hydraulic Flow Meters

Unparalleled accuracy in testing hydraulic oil flow circuits for vehicles and machinery. All are protected by a durable steel case. Pressure accuracy is at +/- 1.6% of full scale. Due to their standard burst disc protection system, overpressure conditions prevent spillage of hydraulic fluid. All devices accommodate bi-directional flow and are CE marked as appropriate.



### 4277 50 gpm Mechanical Hydraulic Flow Meter

- Flow Accuracy to +/- 4% of full scale
- Measures flow from 4 to 54 gpm
- Pressure up to 6000 psi
- Fluid filled analog gage that dampens vibration
- Temperatures up to 230 deg F
- Reads flow in one direction
- No batteries required
- Port is 1-5/16" - 12 UN JIC Male
- 12.25" x 4.125" x 4.875", weight 14.5 lbs



### 4285 100 gpm Digital Hydraulic Flow Test Kit

- Includes OTC 4292 Digital Readout and OTC 4291 Flow Block with Loading Valve
- Flow Accuracy to +/- 1% of indicated value
- Measures flow from 2.5 to 100 gpm
- Pressure up to 6000 psi
- Digital display for flow, temperature, analog for pressure
- Reads flow in both directions, pressure on the high side of valve
- Require 1 9V battery (included)
- Port is 1-5/16" - 12UN #16 SAE ORB
- 12.99" x 12.4" x 10.24", weight 17lbs



### 4292 Hydraulic Flow Measurement Digital Readout

- For remote flow measurement by using Flow Blocks OTC 4290 or OTC 4291
- Included in OTC 4285 and OTC 4294
- Digital display for flow, temperature, analog for pressure



### 4278 100 gpm Digital Hydraulic Flow Meter

- Flow Accuracy to +/- 1% of indicated value
- Measures flow from 2.5 to 100 gpm
- Pressure up to 6000 psi
- Digital display for flow, temperature, analog for pressure
- Temperatures up to 250 deg F
- Reads flow in both directions, pressure on the high side of valve
- Requires 1 9V battery (included)
- Port is 1-5/16" - 12UN #16 SAE ORB
- 9.45" x 7.87" x 7.87", weight 14 lbs



### 4290 16 gpm Flow Block

- Can be used with Digital Flow Meter Readout OTC 4292 included in OTC 4285 and OTC 4294
- Port is 1-1/16" - 12UN #16 SAE ORB
- Flow range from 1 to 16 gpm
- Max pressure 6000 psi

### 4291 Flow Block with Loading Valve

- Can be used with Digital Flow Meter Readout OTC 4292 included in OTC 4285 and OTC 4294
- Knob allows for pressure loading/restriction
- Port is 1-5/16" - 12UN #16 SAE ORB
- Flow range from 2 to 100 gpm
- Max pressure 6000 psi



- ### 4294 Deluxe 100 gpm Hydraulic Flow Measurement Set
- Measurement Set
  - Comprised of OTC 4290, OTC 4291, OTC 4292, Long Cable and Hose Set and Short Cable
  - Case included

## OTC Cylinder Rams



Single Acting Cylinders		Cap. in Tons	Stroke	Height Collapsed	Height Extended
4100A	5-Ton Single Acting Cyl.	5	3"	5-11/16"	8-11/16"
4101A	5-Ton Single Acting Cyl.	5	5-1/4"	10-7/16"	15-11/16"
4103A	10-Ton Single Acting Cyl.	10	2-1/8"	5-9/16"	7-11/16"
4104A	10-Ton Single Acting Cyl.	10	6-1/8"	11-1/2"	17-5/8"
4105A	10-Ton Single Acting Cyl.	10	10-1/8"	15-1/2"	25-5/8"
4106A	25-Ton Single Acting Cyl.	25	6-1/4"	13-3/8"	19-5/8"
4107A	25-Ton Single Acting Cyl.	25	14-1/4"	21-3/8"	35-5/8"
4108A	5-Ton LP Single Acting Cyl.	5	9/16"	1-5/8"	2-3/16"
4110A	55-Ton Single Acting Cyl.	55	6-1/4"	11"	17-5/16"
Hollow Centered Cylinders <span style="color: blue; font-weight: bold;">NEW</span>		Cap. in Tons	Stroke	Height Collapsed	Height Extended
4120A	17 1/2 Ton Hollow Centered Cylinder w/adapter plate	17 1/2	2.00"	5.46"	7.46"
4120A-MA	17 1/2 Ton Hollow Centered Cylinder (Cylinder only)	17 1/2	2.00"	5.46"	7.46"
4121A	30 Ton Hollow Centered Cylinder w/adapter plate	30	2.50"	7.80"	10.30"
4121A-MA	30 Ton Hollow Centered Cylinder (Cylinder only)	30	2.50"	7.80"	10.30"
4122A	50 Ton Hollow Centered Cylinder w/adapter plate	50	3.00"	10.27"	13.27"
4122A-MA	50 Ton Hollow Centered Cylinder (Cylinder only)	50	3.00"	10.27"	13.27"



### 4145A 100-Ton Cylinder Ram

- 100-ton ram with 2-1/4" stroke
- Collapsed Height 5.6"
- Extended Height 7.8"



### 4000 Single-Speed Hydraulic Hand Pump

This single-speed pump is ideal for single-acting rams. Developing up to 10,000 psi operating pressure, the pump operates horizontally or vertically in the "head down" position. Fingertip control provides instant release or pumping action. Has a built-in safety overload valve. Ideal for use with OTC single-acting rams, or similar competitors' rams.



### 1572 Car Dolly (3,600 lbs., capacity pair)

- Clamps directly to pinch welds to prevent slippage during use.
- Independent units eliminate the need to adjust dolly width for different vehicle designs.
- Each unit has an independently adjustable threaded lift saddle with rubber pads to protect the vehicle frame.
- Universal design for use on all vehicle types without additional adapters.
- Provides easy movement of FWD vehicle after removal of drive train.
- 5" polypropylene casters.
- Each unit has 1,800 lbs. capacity with low height of 9" and high of 14" (3,600 lbs., pair).
- May be used with or without tires on vehicle.



### 2510A Air/Hydraulic Pump

- 10,000 PSI air/hydraulic pump.
- Internal relief valve.
- Two-stage release mechanism.
- Pump, hold, or release load with pedal control.
- 98 cu. in. usable capacity.
- 3/8 NPT oil port.

### TIF-ZX Heated Pentode® Refrigerant Detector

- Heated Pentode® sensor technology
- Tri-color visual leak size indicator
- Detects all CFC, HFC, HCFC's including R-12, R-22, R-123, R-134a, R-404a, R-407a, R-408a, and R-410a.

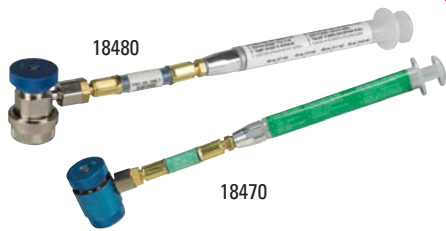


### 16009 DiscovR Refrigerant Identifier

Fast and Accurate. "Pass" and "Fail" lights clearly show if refrigerant is pure enough to be recovered.

#### Product Specifications:

Refrigerant: R134a  
Input Power: 12 VDC  
Accuracy: Pass/Fail - 95% pure R134a  
Air Detection: Yes  
Approvals: SAE J1771, UL/C



### Syringe-Type Injectors

Use these syringe-type injectors to add oil to a fully pressurized A/C system. Just fill the barrel with the amount of oil needed, connect the injector, and press the plunger.

- 18480** – R-134A oil injector, PAG labeled
- 18490** – R-134A oil injector, POE labeled
- 18460** – R1234YF oil injector, Generic
- 18465** – R1234YF oil injector, PAG labeled
- 18470** – R1234YF oil injector, POE labeled

Not recommended for UV dye injection.

### 75700 CoolTech Coolant Exchanger

- Our 10 minute exchange process means no more waiting for the engine to warm up!
- "Engine Off" feature removes pulleys, belts, and fan blades from the safety equation.
- Vacuum mode creates a "push/pull" exchange process allowing the technician to safely remove high pressure in a hot system.
- Leak check feature allows the technician to test for leaks prior to refilling.
- Two clearly marked valves and an easy-to-read gauge make this machine very easy to use.
- No electricity required. 90 psi shop air drives the exchange process, as well as the 2 gpm pump on the waste tank.
- Two external new coolant supply tanks allow on-board storage of two different coolant types.



### 75240 Coolant and Battery Refractometer

Coolant scale range:  
32° F/0° C to -60° F/-51° C.



### Econo-Clean Coolant Service Accessories

**75134**  
Coolant test strips.

**75234**  
3-way heavy-duty truck coolant test strips.



### The best way to Service A/C



34288NI



34788NI



34788NI-H



34988NI

#### A/C Comparison Chart Features

	34288NI	34788NI	34788NI-H	34988NI
<b>Fully-Automatic Function:</b> Program to recover, vacuum, leak test and charge without operating panel valves.		X	X	X
<b>Automatic Dye Inject:</b> Gives the user the ability to use the machine to inject UV dye into a vehicle's A/C system.				X
<b>Automatic Oil Drain:</b> A display reminds you to empty the graduated container to show the amount of oil to replace.	X	X	X	X
<b>Oil Inject:</b> Automatically inject oil back into the vehicle's A/C systems.		X*		X**
<b>Refrigerant &amp; Oil Database:</b> A/C system capacities for North American market vehicles (Optional – not included with the machine)	Optional	Optional	Optional	Optional
<b>A/C System Flush:</b> Flushes a vehicle's A/C system with refrigerant, eliminating any residual oil or other liquid. (Flushing adapters not included)		X	X	X
<b>Save &amp; print before and after service data:</b> Allows the user to store before and after service information by vehicle and print this information to provide to a customer.		X	X	X
<b>Visual &amp; Audible Alarm:</b> Notifies the user when service is complete, or if a problem has occurred.		X	X	X
<b>Vacuum Leak Test:</b> Monitors level after evacuation, informs of possible leak.		X	X	X
<b>Automatic Air Purge:</b> Eliminates system-damaging air without monitoring gauges or opening valves.	X	X	X	X
<b>Automatic Refrigerant Refill:</b> Maintains a user-selectable amount of refrigerant in an internal vessel and signals when it's time to change supply tank, no monitoring required.		X	X	X
<b>Vacuum Feature:</b> Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	X	X	X	X
<b>Display: Multilingual</b>	X	X	X	X
<b>Refrigerant Charging</b>	X	X***	X***	X***
<b>Refrigerant Management System:</b> Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	X	X	X	X
<b>Electric Vehicle:</b> Capable of servicing high voltage electric compressor A/C systems.			X	
<b>Printer</b>	Optional	Optional	Optional	X

\* One oil bottle. \*\* Two oil bottles and one UV dye bottle. \*\*\* Charge mode from high or low side, or use both sides.

### UV Leak Detection Kits

- The easiest and most accurate gun available today.
- No guesswork – a pre-measured application every time.
- One squeeze injects a pre-measured amount (1/8 oz.) of dye. No more adding too much dye.



16234



16235

### 92500 Transmission Fluid Exchanger

You can have the vehicle in and out of the service bay in less than 20 minutes! Operate through dipstick only, cooler line or a combination of the two!

- Exchange accuracy approx. +/- 1/4 qt.
- 32-qt. supply tank; 34-qt. waste tank.

### 92001 Automatic Transmission Fluid Diagnostic Pads

Easy, quick way to test automatic transmission fluid to determine when service is necessary. Simply place a few drops of transmission fluid from transmission dipstick onto test pad. Pad will change color indicating condition of transmission fluid. Package contains 100 pads.



**1234YF A/C Service Fully automatic operation — program for service, walk away and return when complete.**

### AC1234-6

- OEM-approved 1234yf recovery, recycle and recharge machine.
- 95% recovery efficiency.
- Programmable vacuum operation helps get to the necessary vacuum level in any condition quickly.
- System leak test to identify gross leaks in a system.
- Charge accuracy within +/- ½ oz.
- Automatic oil drain shows how much oil was removed from the system during service.
- Automatic air purge removes the potential of air accumulating in the internal tank.
- Integrated refrigerant identifier (meets SAE J2927).
- Liquid refrigerant flushing function can flush A/C systems or individual components using liquid refrigerant instead of harsh chemicals.
- Automatic internal tank refill. No stopping to fill the internal tank during service, or before service.
- 1/4 Color VGA display. Large easy to read graphical display.
- On-board printer capable of printing vehicle service report slips to present to customers.



### 18410

#### Hydraulic Flaring Kit

- Fabricates a variety of fuel, brake and A/C line flares.
- Push connect 1/4, 5/16 and 3/8".
- GM fuel line, brake line and transmission 5/16 and 3/8".
- Flare and double flare.
- Metric bubble flare.
- Comes in a custom blow molded case.



## Robinair Vacuum Pumps

### VacuMaster® Single Stage Vacuum Pumps

**15115**  
1.5 CFM Vacuum Pump.

**15310**  
3 CFM Vacuum Pump.

**15510**  
5 CFM Vacuum Pump.



### VacuMaster® 2-Stage Vacuum Pumps

**15150**  
1.5 CFM Vacuum Pump.

**15300**  
3 CFM Vacuum Pump.

**15500**  
5 CFM Vacuum Pump.



### CoolTech® Vacuum Pumps

**15434**  
4 CFM Vacuum Pump.

**15600**  
6 CFM Vacuum Pump.



## Robinair Manifolds



### 41234 R1234yf Aluminum Manifolds and Hose Set

- Easy-to-read 3-1/8" adjustable gauges.
- Durable aluminum manifold block with fittings.
- Improved face seal valves provide a tight seal, less wear and improved flow.
- Easy-to-grip control knobs.

### 2-Way Aluminum Manifold (R134A)

- 48510**
- 90° Manual couplers
  - 72" R134a Hose Set (1/2" ACME x 14mm)



### 2-Way Brass Manifold

**45111**  
R134a Manifold Hose Kit



### Economy Manifolds

**48134A**  
R134 manifold, hose set and service couplers



**49134A**  
R134 aluminum manifold, hose set and service couplers



### 22791

#### InfraRed Refrigerant Leak Detector

- Advanced infrared sensor designed to last a minimum of 10 years.
- Three sensitivity levels down to 0.15 oz./year.
- Automatically recalibrates in highly contaminated areas to help pinpoint the exact location of the leak
- Won't trigger on oil or moisture.



### TIF-9010A

#### Slimline Programmable Scale

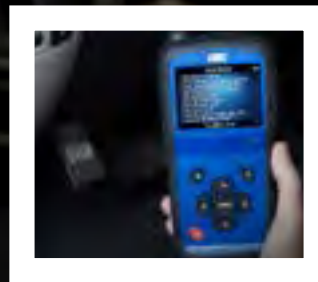
- Completely portable refrigerant scale, battery powered, can be used with all refrigerants.
- Extreme accuracy.
- 110 lb./50 kg capacity.







# ELECTRONIC DIAGNOSTICS



# FASTEST DIAGNOSTIC FLOW IN THE INDUSTRY

ROAM THE SHOP FLOOR WITH  
WIRELESS J2534 COMPLIANT VCI



## CONTINUING COVERAGE IMPROVEMENTS

### GET THE MOST OF THE 12-MONTH SUBSCRIPTION BY UPDATING YOUR TOOL. THE LATEST UPDATES INCLUDE:

- New USA Domestic / Asian / European vehicle coverage with multiple releases through the year
- Frequent updates to the largest experience-based solutions available, already with over 30 million specific fixes
- Performance improvements, user interface, repair information and product enhancements included



- ✓ SCAN
- ✓ IDENTIFY
- ✓ FIX

#### **Battery Disconnect Procedures, Key FOB and Remote Reprogramming!**

The battery update covers Domestic and Import vehicles 2000 to present, with partial coverage for 1991-1999. Procedures include battery disconnection precautions, power windows, locks and sunroof reprogramming, engine and body control system resetting and more.

The key and remote programming update covers Domestic and Import vehicles 1996 to present, with partial coverage for 1993-1995. Procedures include system operation, unusual features, programming procedures, illustrated battery replacement procedures for remote and key transmitters and more.

# CODE-TO-FIX™

BY PATTERN, SYMPTOM, CODE OR ANY WAY YOU LIKE – EVEN BY SEARCHING THE INTERNET

## AUTODETECT™

Genisys Touch software automatically detects and alerts the technician of on-tool or web-based repair information

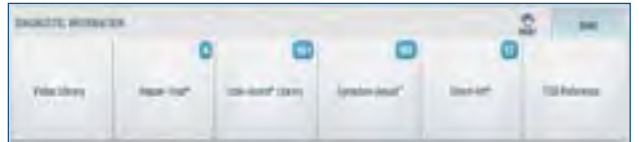
### EXPERIENCE-BASED DIAGNOSTICS

#### On Tool

Code-Assist®	Provides more than 8 million experienced-based Confirmed Fixes™ for vehicle specific, individual OBD-II Diagnostic Trouble Codes (DTCs).
Repair-Trac®	The largest database of known vehicle-specific fixes available to the automotive aftermarket. Includes coverage from 1969 through 2009 for USA Domestic, USA Asian, and USA European vehicles.
Symptom-Assist™	Provides nearly 13 million experienced-based Confirmed Fixes™ for specific symptoms for specific vehicles.

#### Web Based

Fast Touch Websites	Connect to the shop's Wi-Fi to access your favorite websites right within live diagnostic sessions so no workflow is interrupted.
Direct-Hit®	Includes a free 60-day trial subscription.



### ON TOOL REPAIR INFO

Pathfinder Trouble Shooting	Provides critical information: Code information, Symptoms, Specifications, TSB references, Data/sensor information, Component location, PCM connector information.
InfoTech Component Information Database	A vehicle-specific repair information database for testing most common vehicle components.

# START THE REPAIR

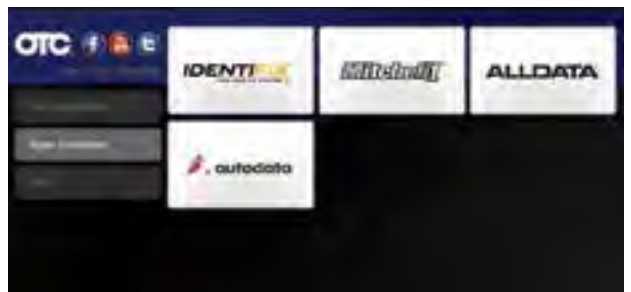
WI-FI INTERNET ACCESS AND MULTI-DEVICE PAIRING FOR MAXIMUM SHOP PRODUCTIVITY

## CONNECTIVITY

Partner up with the included OTC J2534 Communication Device. Or pair up with the optional PC-based 2-Channel Tech-Scope® or TPR Tool via long-range Class 1 Bluetooth®



Access the Internet browser within a live diagnostic session and visit one of the Fast Touch websites known by technicians for their wide range of repair information and fixes.



# LEARN THE TEST

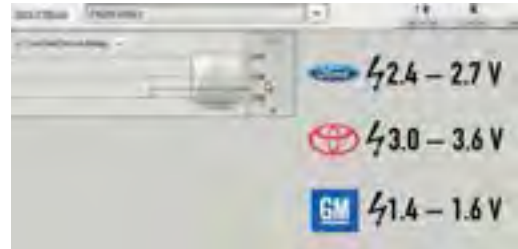
VIDEO TRAINING ON SCAN AND SCOPE TEST PROCEDURES, TOOL OPERATION AND MORE

## EMBEDDED TRAINING VIDEOS

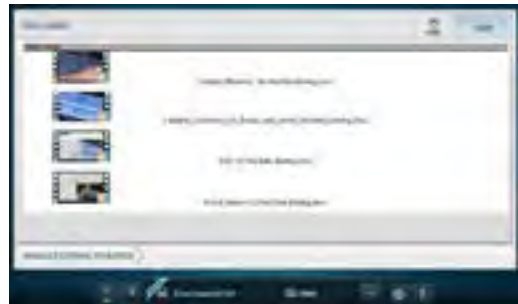
Videos within live diagnostic sessions don't interrupt workflow.



In one minute or less, learn test procedures commonly used by technicians every day. An instant alert shows if a video is available for the specific year/make/model selected. No need to attend a lengthy training class, or search on your smartphone — learn it now!



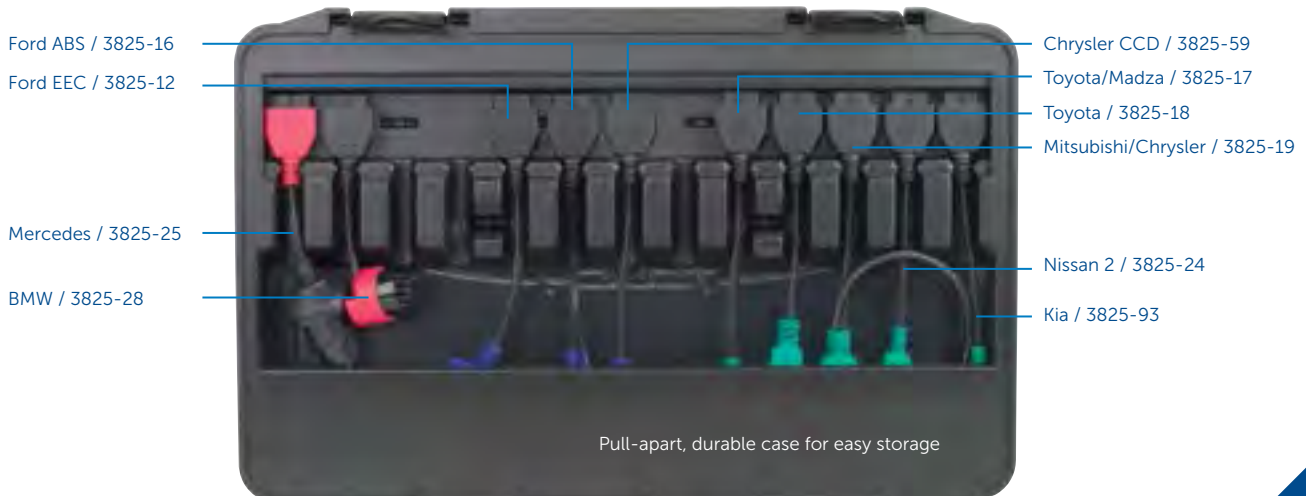
Read OEM-specific data where available



Watch videos any time in the video library

# ALL MAKES COVERAGE KIT

ALL REQUIRED OEM ADAPTERS FOR VEHICLES 1996 AND NEWER



# GO HOME EARLY TODAY

SHORTEN YOUR DIAGNOSTIC TIME, MAXIMIZE  
BILLABLE LABOR HOURS, AND GET THE REPAIR DONE  
FROM CODE-TO-FIX™ FASTER THAN EVER BEFORE

## PRODUCTIVITY ENHANCEMENTS

### Automated System Test

Perform a Comprehensive Health Test. Provides DTCs (generic and enhanced), Freeze Frame, Mode 6 Component Test, Mode 5 Oxygen Sensor Tests, Mode 1 Readiness Tests, and more.

### All System DTC Scan

Perform a trouble code check of all supported vehicle systems in seconds. Fast validation that all systems are clear of DTCs before or following a repair. Test Generic and Enhanced DTCs, then store and print the record.

### Software Wi-Fi Updates

12-month software subscription included.

## GENISYS TOUCH™ DELUXE KIT

### 3895

#### Genisys Touch™ Deluxe Kit

Includes a ruggedized 10" high resolution display tablet, J2534-1 / -2 compliant Vehicle Communications Interface (VCI), 10 OEM adapters, OBD II cable, USB cable, 12V power cable, AC power supply and custom carrying case.



### 3895-08

#### Genisys Touch™ 12 Month Software Subscription

Genisys Touch Domestic, Asian and European Software 12 month subscription kit provides a year of frequent and valuable updates for new coverage, coverage enhancements, repair information and application improvements.



### 3825-12

Ford EEC Adapter



### 3825-16

Ford ABS Adapter



### 3825-59

Chrysler CCD



### 3421-93

Kia Adapter



### 3825-17

Toyota DCL 1/ Adapter



### 3825-18

Toyota DCL 2/ Adapter



### 3825-19

Mitsubishi/Chrysler  
"Y" Adapter



### 3825-24

Nissan 2 Adapter



### 3825-25

Mercedes 38 Pin Adapter



### 3825-28

BMW Adapter



# DIAGNOSTICS FOR LIFE



## FASTEST CODE-TO-FIX® WITH A LIFETIME WARRANTY\*

### NEW BRAVO 2.0 SOFTWARE IS FASTER AND MORE RESPONSIVE

OTC has re-launched the Encore with enhanced diagnostic coverage and a lifetime hardware warranty. The mobile, Android-based system is easy to use, intuitive and fast.

#### No tool helps you fix faster than OTC Encore

- Re-engineered Bravo 2.0 software is faster, more responsive and includes major and minor bug fixes.
- First OTC tool with Bosch coverage database for European vehicles, focusing on Mercedes-Benz, BMW and Volvo
- Boot up in less than 15 seconds
- AutolD faster than anybody — identify CAN vehicles in less than 5 seconds
- Read and clear codes in seconds
- Access top reported code fixes in seconds

#### 30 Years of Unmatched OE Coverage

Alert technicians to on-tool or web-based repair information including Identifix® Direct-Hit™. Full scan functionality, including OEM Domestic, Asian and European, bi-directional controls and enhanced data Perform a Google search right within a diagnostic session.



- ✓ LIFETIME WARRANTY\*
- ✓ FASTEST TO FIX
- ✓ EXPANDED COVERAGE



Android OS



Built-in repair information



7-inch screen



Touch-screen, capacitive display



Wi-Fi



Embedded Google™ Search



Bluetooth®



Deep-link to Identifix® Direct-Hit™

## NO OTHER SCAN TOOL COMPARES

### One Touch AutoID™

Automatically detects CAN vehicles 2005 or newer to quickly set up year, make, model and engine — all in one tap.

### One Touch DTC Fixes

Tap to get codes with access to millions of confirmed experience-based fixes.

### Onboard Battery

Technicians asked. OTC listened. Avoid re-entering the vehicle ID and losing data when you cycle the key.

### Embedded Training Videos

More than 70 videos show how to perform test procedures or functions in one minute or less.

### Fast Touch Home Page

Custom browser home page with access to popular technician forums right from Encore.

## 30 MILLION EXPERIENCE-BASED REPAIR SOLUTIONS

No other tool has embedded Identifix® assets available during every type of repair, including Code-Assist™, Symptom-Assist™ and Repair-Trac™. OTC has added improvements to its 30 years of OEM level coverage with critical emphasis on most common vehicles seen by technicians every day (out-of-warranty vehicle years 1996-2012 for all OEMs).

Since OTC became part of the Bosch Automotive Service Solutions portfolio in 2012, we've combined our OTC and Bosch diagnostics coverage and made specific improvements to Land Rover, Subaru and Jaguar.

## BATTERY DISCONNECT, KEY FOB AND REMOTE REPROGRAMMING PROCEDURES

The battery update covers Domestic and Import vehicles 2000 to present, with partial coverage for 1991-1999. Procedures include battery disconnection precautions, power windows, locks and sunroof reprogramming, engine and body control system resetting and more.

The key and remote programming update covers Domestic and Import vehicles 1996 to present, with partial coverage for 1993-1995. Procedures include system operation, unusual features, programming procedures, illustrated battery replacement procedures for remote and key transmitters and more.

## HEAVY-DUTY SOFTWARE AND WIRELESS TPR\*

The first integrated diagnostics tablet for Android™ with fast startup and onboard battery has just released wireless TPR and Heavy-Duty software.\* Pair up with the optional 3834T OTC TPR TPMS Tool via Bluetooth®. The 3895-07 Heavy-Duty Standard kit is available for reading DTCs and viewing live data on Class 4 – 8 vehicles.



## ENCORE KIT

### 3893

#### Encore Kit

Encore, OBD II cable, USB cable, power adapter and hard carrying case.

### 3893MVCI

**Total Shop Solution** – 3893MVCI OTC Encore + Bosch Mastertech VCI. For details on the Mastertech VCI see page 48.

### 3893-LTW

#### Encore 1-Year Subscription & Lifetime Hardware Warranty

Encore Domestic, Asian and European Software 1-year subscription kit provides a year of frequent and valuable updates for new coverage, coverage enhancements, repair information, application improvements and includes the Diagnostics for Life\* lifetime hardware warranty.

Diagnostics for Life\* lifetime hardware warranty means OTC supports your Encore for as long as you own it, as long as you update it.



# GENISYS EVO 2014 SOFTWARE



## MORE THAN 35,000 COVERAGE ADDITIONS IN 2014\*

- Added coverage through 2014 for GM, Ford & Chrysler/Jeep
- Expanded systems coverage for many older Chrysler/Jeep and GM vehicles
- Expanded coverage for Ford Battery Monitor System Reset for 2011-2013 vehicles
- New coverage for Reprogram Injector Flow Rates for 2006-2014 Duramax diesels, required after replacing an injector

**BMW** - Battery Exchange Register, Calibrate Lateral Accel Sensor, Front Brake Zeroing, Inspection/Service Interval Reset, Oil Service Reset, Parking Brake tests, Rear Brake Zeroing, TPMS Registration

**Chrysler/Jeep** - Alternator Field Control, ABS Brake Bleeds, Height Sensor Check, Set Ride Height Level, Steering Angle Sensor Calibration, TPMS Registration

**Fiat** - Clear Steering Pull Compensation

**Ford** - Automated Bleed, Battery Monitor System Reset, Battery Saver Relay, Calibrate Lateral Accel Sensor, Calibrate Longitudinal Accel Sensor, IVD Sensor Calibration, Yaw Rate Sensor Calibration

**GM** - Brake Bleeds, Fuel Filter Life Reset, Oil Life Reset, Park Brake Cable Service Apply and Release, Power Steering Softstops Reset, Reset Trans Oil Life, Steering Angle Sensor, TPMS Registration

**Honda** - ATF Reset, Oil Life Reset, Steering Angle Sensor Calibration, TPMS Registration

**Hyundai** - Air Bleeding Mode, ASP Calibration, Pressure Sensor Calibration, Steering Angle Sensor, TPMS Registration, Wheel alignment procedure

**Kia** - Electric Park Brake Actuator Control Apply and Release, Air Bleeding Mode, TPMS Registration

**Mazda** - Automated Bleed, IVD Sensor Calibration, TPMS Registration

**Mercedes** - Clear Maintenance Intervals, Electric Parking Brake tests, Suspension tests, TPMS Registration, EHB Brake Bleed

**Mitsubishi** - All Sensor Calibration, Brake Bleeds, Steering Angle Sensor Calibration

**Nissan** - ABS Bleeds, Steering Angle Sensor Calibration, TPMS Registration, Zero Point Calibration

**Smart** - Alternator test

**Toyota** - ABS Bleeds, Battery Current Sensor Initialization, Suspension tests, Torque Sensor Adjustment, TPMS Registration, Zero Point Calibration

**Volvo** - Parking Brake service tests, Steering Angle calibration tests, Oil Light Reset tests, TPMS Registration, Battery Replacement and Battery Monitor Sensor Replacement

**Audi** - EPB Caliper Open and Close

\* 30,000 new vehicle-ECU combinations, 3,500 new Systems, 2,800 new Bidirectional Tests



**GENISYS™ / GENISYS EVO™ SOFTWARE KITS**

<b>3421-149</b>	Genisys 2014 Super Bundle Domestic/Asian/Euro/System 5.0 with memory (3.0 and Older)
<b>3421-150</b>	Genisys 2014 Domestic/Asian, 2013 Euro 5.0 Loyalty Kit (4.0 and Newer)
<b>3421-151</b>	Genisys 2014 System 5.0, 4GB Memory Kit



3421-149

<b>GENISYS EVO™ KITS</b>	<b>3875</b>	<b>3874</b>	<b>3874TPR</b>	<b>3874HD</b>
Domestic 2014 Software	•	•	•	•
Asian 2014 Software	•	•	•	•
European 2013 Software	•	•	•	•
System 5.0	•	•	•	•
OBD II Smart Cable	•	•	•	•
OEM Domestic Cable Kit		•	•	•
ABS Cable Kit		•	•	•
TPR TPMS Tool			•	
HD Software & Cables				•



3874TPR



**3421-79**

**Genisys Heavy-Duty Starter Kit**

Genisys Heavy-Duty Standard software includes J1587/1708 and J1939 CAN communications. Kit includes 9-pin Deutsch cable, 6-pin Deutsch cable, Smart Card, and PC software CD.

**NOTE:** System 5.0, 4GB card minimum required to install; see No. 3421-151.



**3834**

**Tire Pressure Monitoring Reset Tool Kit**

- Compatible with the entire Genisys family of scan tools.
- Use the TPR to activate and decode sensor ID's and transmit them to the Genisys wirelessly.
- Register new sensor ID's on Asian vehicles.
- Bluetooth wireless communication adapter included.
- Quick reference reset procedures can be quickly accessed on the Genisys.

# REFLASH, REPROGRAM, REVENUE



## **3829** Reflash, Reprogram, Revenue

Have you ever spent hours of labor chasing driveability issues only to find out that there was a software update available for the vehicle's computer? Yesterday's shops only needed to address diagnostics. Today's shops must also incorporate reprogramming. In many cases on today's modern vehicles, reflash is the only way to fix:

- OE engineering corrections
- Poor performance
- Check engine light issues
- Premature component failure
- Driveability issues
- Emissions related problems
- And many more!

### **Features**

- J2534-1, -2
- ISO 22900 -1, -2
- Standard and custom OEM protocols and pin-selections
- Wireless with advanced networking functions
- Built-in wireless and data storage
- USB
- Wireless configuration and connection manager applications

**3829 includes:** Vehicle Communication Interface, power supply adapter kit, OBD II cable, power supply cable, USB cable, J2534 training CD, quick start guide, one-year warranty and protective carry case.



## **OTC-700A** 70 AMP Power Supply Battery Charger

A power supply for Flash Reprogramming is a device that connects to the vehicle's battery and outputs a designated supply of clean DC power. The OTC Power Supply/ Battery Charger will allow the shop to power the widest variety of vehicles during Flash Reprogramming.

### **Power Supply Features**

- Constant voltage output selectable from 13.0 to 14.8V DC
- Output current up to 70 amps
- Clean power for flash reprogramming
- Provides power to vehicles on display

### **Battery Charger Features**

- Fully automatic operation for 12V batteries
- Works with regular automotive, deep-cycle, AGM, and gel cell battery types
- Variable charge rates 4/20/70 amps
- Digital volts and amps display
- Manual mode with digital timer



## **3829-700A** Combines Reflash, Reprogram, Revenue and 70 AMP Power Supply Battery Charger

Powerful J2534 solution that includes a wireless VCI and a 70 amp clean Power Supply.



## TECH-SCOPE™

### 3857

The OTC Tech-Scope™ is a standalone two-channel high-speed lab and ignition oscilloscope with multimeter that allows service technicians to quickly and efficiently test and measure virtually all of the electrical and electronic components and circuits in a modern vehicle. The tool features galvanic isolation not found on automotive scopes for hardware protection and includes an ignition scope and a digital multimeter with an ohm meter. The Tech-Scope is capable of reading 40 million samples per second on each channel with 10 ohm input impedance—eliminating the need for special adapters to capture signals from critical components. The included InfoTech software provides a vehicle-specific repair information database for testing most common vehicle components with step-by-step test procedures using a lab scope or multimeter.



#### Oscilloscope Features:

- Lab scope, ignition scope and digital multimeter display are user selectable.
- Vertical cursors show time difference/frequency between the two cursors and waveform values at the selected points.
- Automatic record stores waveforms in a circular buffer with 50 screens of data.
- AC/DC coupling.
- Auto setup automatically adjusts the vertical scale, the sweep time and trigger point.
- Peak detect captures high speed signals at the maximum sampling rate, even at slow sweep speed and is user selectable.
- Ability to capture the analog and digital glitches, along with the current waveform.
- Selectable glitch sensitivity: low – medium – high.
- Ability to change the background color.
- Ability to play the recorded files.
- Ability to enable or disable the scale grids.
- Ability to enable or disable the scale display.
- Ability to save the screen shot of the display.

#### Digital Multimeter Features:

- Measures:
  - DC volts
  - True RMS AC volts
  - Ohms
- Continuity check with audible beep features ability to turn audio on or off.
- Frequency
- Duty cycle
- Pulse width
- Auto scale
- Screen refresh is at the rate of 10 times/sec.
- Ability to view the data in following graph types:
  - Strip chart
  - Dial chart
  - Bar chart
  - Digital chart
- Ability to view the minimum, maximum and average values.
- Ability to turn the grid lines on or off for strip chart.
- Ability to toggle the background between two colors.
- Ability to turn the scale display on or off.

**3857 includes:** Tech-Scope, scope probe green, scope probe yellow, kV probe secondary, ground clamp USB cable, Tech-Scope CD, one-year warranty and protective carry case.



### 3398

#### Fuel Injection Pulse Tester

Fuel injector testing requires precision equipment. This vehicle powered tool fills that requirement. It enables you to check cylinder balance by firing individual injectors at 1/2-second increments in three different ranges: 1 pulse of 500 milliseconds, 50 pulses of 10 milliseconds, 100 pulses of 5 milliseconds.



- Power and output lights indicate test activation.
- Includes wiring harness adapter and instructions.

### 3395

#### Multimedia Interface Tester (MIT)

- Will pair via Bluetooth, Auxiliary or USB to vehicle to diagnose connectivity issues.
- Verify and diagnose customer complaints when connecting with infotainment systems.
- Provides a clean signal for accurate and reliable diagnostics.
- Works on Ford, GM and Hyundai vehicles.
- Includes a storage case that will accommodate the MIT and related adapters, etc.



### 3415

#### CAN Test Box

#### Breakout Box and Protocol Detector

- Connects between Diagnostic Link Connector (DLC) and scan tool
- Detects data and protocol communication
- Monitors system voltage – Display and high/low alarm
- Connect leads for increased diagnosis, analysis, and monitoring

#### Useful Functions

- Verify ECU activity
  - LEDs at pin-out display signal detection, Flashing LEDs for ECU activity
- Monitoring of OBDII data lines
- Probe lines with scope or multimeter for detailed signal information
- Check & monitor battery voltage
  - Continuous numeric display or voltage
  - Alarm warning when voltage drops below 11.6v or rises above 15.2v



# SCAN TOOLS SCAN DIAGNOSTICS

## SCANPRO™ ELITE

### 3499N

#### OBD I and OBD II Scan Tool

The ScanPro™ Elite has a full color screen and an ergonomically designed housing. This full function OBD I and OBD II scan tool provides enhanced powertrain coverage for GM, Ford, Chrysler, and Toyota. All compliant manufacturers are covered with global OBD II including CAN-based vehicles.



Displays codes and descriptions on the same screen



Graph live data or recorded data "flight record and playback"

#### Product Features:

- Retains data from the last 5 vehicles scanned
- Color QVGA graphic backlit LCD
- ABS code/erase capability for 1996-2006 GM, Ford and Chrysler vehicles
- On tool acronym library
- Dynamic language switching – English & Spanish
- Toyota OBD I functionality – cable sold separately
- USB port in tool – cable Included
- Print data via USB PC interface
- Graphing data – all vehicles.
- OBD II drive cycle mode
- GM, Ford, and Chrysler OBD I functionality
- Gas and diesel engine coverage
- Supports multiple trouble code requests, generic codes, pending codes, enhanced codes, and GM DTC status
- On screen definitions of DTCs
- Battery power (6 AAA batteries included)
- Quick test
- Pending codes
- Erase codes
- View data
- Record and playback of data
- Freeze frame
- O2 monitor test
- Diagnostic monitor test
- On board systems
- Vehicle information
- State OBD check
- Code lookup

**3499N includes:** Base scan tool Vehicle cables to support OBD II, Ford OBD I MCU/EEC-IV, Chrysler OBD I SCI and GM OBD I ALDL, soft carry case, USB update cable, 8' extension cable, Scanning Suite CD for Windows XP, Vista and 7, 6 AAA batteries



## TRILINGUAL OBDII, CAN, ABS & SRS SCAN TOOL

### 3111PRO

#### Trilingual OBDII, CAN, ABS & SRS Scan Tool

Fix It Faster with Expanded Domestic and Asian ABS & Airbag coverage. Now with over 4.3 million verified fixes at the touch of a button! Use AutoID® to automatically pull vehicle information for most 2000 and newer vehicles or use Component Locator to find where a component is located on the vehicle.



#### CodeConnect™

Provides millions of verified fixes specific to the vehicle's make, model, year and engine.

USB Port: For receiving online updates.

**CodeConnect™ Revolutionizes vehicle repairs.** The CodeConnect information takes vehicle repairs to another level for Technicians at an affordable price. These actual vehicle fixes have been reported and then verified by our team of ASE certified technicians.

#### Product Features:

- Airbag (SRS) & ABS Coverage: 1996-2010 GM, Ford and Chrysler 1996-2009 Honda, Hyundai, Nissan and Toyota
- CodeConnect™
- Record and playback LIVE engine data
- Display LIVE real time data
- Enhanced code request for GM, Ford, Chrysler, Honda, Hyundai, Nissan and Toyota vehicles
- 2010 MY coverage for HD, Hybrid and Diesel vehicles
- ABS code read/erase capability for most 1996-newer GM, Ford and Chrysler vehicles
- Custom data list for LIVE data
- Dual graphing - Graph two PIDs (data items) at the same time for comparison
- Displays all modes of global OBD II data
- Displays enhanced code definitions

#### Software Features:

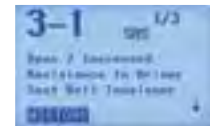
- Read and erase DTCs
- Compatible with OBD II and CAN vehicles 1996 & newer
- Read and display MIL status
- Read and display I/M monitors
- Visual indicator when communicating with vehicle
- Freeze frame data
- Drive cycle mode
- State OBD check
- Code lookup library
- Trilingual menus and definitions

#### Hardware Features:

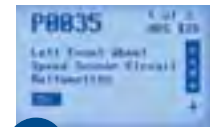
- Review data off vehicle with optional battery power
- Field updatable (USB update cable included)
- Trilingual manual (English, Spanish, & French)
- Print data to PC



**3111PRO includes:** Scan tool and user manual, USB update cable, Scanning suite CD for Windows XP, Vista and 7 and 8, 4 AAA batteries, deluxe soft storage case.



SRS AIRBAG Airbag screen view



ABS Airbag code screen view

## SOFTWARE UPGRADE



### 3111-01

**Software upgrade**  
(Adds all the features of the 3111PRO to current 3111 owners)

#### Vehicle Coverage

- 1996-2010 GM, Ford, Chrysler ABS Coverage
- 1996-2010 GM, Ford, Chrysler SRS/Airbag Coverage
- 1996-2009 Toyota, Honda, Hyundai & Nissan ABS Coverage
- 1996-2009 Toyota, Honda, Hyundai & Nissan SRS/Airbag Coverage

**Enhanced Code Request** – For 1996-2010 GM, Ford, Chrysler and 1996-2009 Honda, Hyundai, Nissan and Toyota vehicles

**Additional Live Engine data** – Now over 300+ possible PIDs. View engine RPMs, coolant temperature, Oxygen sensor readings & more!

**AutoID™** – Automatically retrieves VIN from vehicle and decodes to Year/Make/Model

**Component Locator** – Text descriptions indicate where the vehicle component is located

## TRILINGUAL OBD II/EOBD & CAN SCAN TOOL

### 3109N

#### Trilingual OBD II/EOBD & CAN Scan Tool

Use AutoID® to automatically pull vehicle information for most 2000 and newer vehicles. New features include Component Locator to indicate where a component is located on the vehicle and the ability to graph live data. Additionally, the OTC 3109N displays all modes OBD II data and meets European OBD standards.



#### OBD II information available:

- Read and display LIVE sensor data
- Displays generic and enhanced definitions on screen
- Read and display MIL status
- Read and erase diagnostic trouble codes
- It will give visual indication when the tool is trying to communicate and retrieve data from an OBD II vehicle
- Read and display I/M monitors (emissions)
- Read and display pending DTCs
- Read and display pending and permanent codes
- Read and display VIN number, CVN and Cal ID
- Display State OBD check
- Display OBD II Drive Cycle Mode
- Read and display O2 Monitor Test
- Read and display Diagnostic Monitor Test
- Read and display On Board Systems

#### Product Features:

- Over 15,000 code definitions for comprehensive coverage
- Field updatable via USB port for future expansion EOBD compatible
- CE certification
- Trilingual menu, manual and definitions (English, Spanish, French)

#### OTC 3109N DIMENSIONS

Width	2.75 inches
Height	5 inches
Depth	0.75 inches
Cord Length	31 inches

**3109N includes:** OBD II/EOBD scan tool, user manual and CD, USB cable, USB port for receiving online updates.

## POCKETSCAN® CODE READER



### 3108N

#### PocketScan® Code Reader

Now with LIVE data! View vehicle RPMs, coolant temperature and more. Over 300+ possible data items available. Diagnostic Trouble Codes (DTCs) and descriptions are just a start of the tasks it can handle. In addition to Live data, the OTC 3108N also provides Freeze Frame data, VIN info and performs the important task of (I/M) Inspection and Maintenance testing or emissions-readiness by displaying the I/M readiness monitor status. Great for use before and after repairs are made. The small size makes it perfect for tow trucks or service vehicles as well as home use.

#### Product Features:

- Over 4,000 generic code definitions
- Compatible with all 1996 and newer OBDII and CAN vehicles
- Automatically reads DTC's when connected for fast diagnostics.
- Erases DTCs and turns off the light
- Reads and displays MIL status
- Reads and displays I/M monitors
- Reads and displays pending and permanent codes
- Reads and displays freeze frame data
- Reads and displays VIN (easy way to check vehicle ID number)

#### OTC 3108N DIMENSIONS

Width	2 inches
Height	3.18 inches
Depth	0.65 inches
Cord Length	31 inches

## BATTERY RESET TOOL



### 3112

#### Battery Reset Tool

The OTC 3112 Battery Reset Tool has all you need to quickly and easily reset the battery life. The 3112 Battery Reset Tool has the latest software to work on today's vehicles where a battery reset procedure is required. Don't bother with more expensive tools with scanning features you don't need. The OTC 3112 Battery Reset Tool is reliable, affordable and gets the job done.

#### Product Features:

- For use with:
  - Late Model Ford F-Series Trucks
  - Late Model BMW
  - Late Model Mini Cooper
- Updateable
- AutoID™ – Automatically pulls Make/Model/Year/ Engine for most vehicles
- Trilingual Menu – English, Spanish and French
- Upgrade software Compatible with Windows XP, Vista, 7, and 8.
- Compatible with 32 and 64-bit OS

# SCAN TOOL COMPARISON CHART

## SCAN DIAGNOSTICS



	3108N Code Reader	3109N OBD II Scan	3111PRO Code Connect Scan	3499N ScanPro Elite	Genisys EVO Family	3893 OTC Encore	3895 Genisys Touch
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### SCAN FUNCTIONALITY

CAN Enabled Tool (no adapters to buy)	•	•	•	•	•	•	•
Global OBD II (Domestic, Asian, European)	•	•	•	•	•	•	•
OBD II Generic Diagnostic Trouble Codes	•	•	•	•	•	•	•
Diagnostic Trouble Code Descriptions	•	•	•	•	•	•	•
Vehicle Information (Mode 9)	VIN only	•	•	•	•	•	•
Freeze Frame Data	•	•	•	•	•	•	•
AutoID® Identifies VIN and vehicle on most 2000–newer		•	•			•	•
Upgradable		•	•	•	•	•	•
State OBD Check		•	•	•	•	•	•
Generic Data Stream	•	•	•	•	•	•	•
Manufacturer Specific Diagnostic Trouble Codes		•	•	•	•	•	•
OEM Enhanced Diagnostic Trouble Codes			•	•	•	•	•
Graph Data Stream		•	•	•	•	•	•
OEM Enhanced Data Stream				•	•	•	•
Domestic OBD II OEM Enhanced			•	•	•	•	•
Domestic OBD I				•	•	•	•
Domestic OEM Non-Engine Coverage			OBD II ABS/ Airbag	ABS & Trans	•	•	•
Asian OEM OBD II Enhanced				Toyota	•	•	•
Asian OBD I				Toyota	•	•	•
Asian OEM Non-Engine Coverage			OBD II ABS/ Airbag		•	•	•
Latin America Coverage					•	Future	Future
OEM Bidirectional Controls (Actuator Tests)					•	•	•
European OEM OBD II Enhanced					•	•	•
European OBD I					•	•	•
European Non-Engine Coverage					•	•	•
Heavy Duty Standard Coverage					Option	Option	Option
J2534 All Makes Reprogramming							•
Automated System Test					•	•	•
All System DTC Scan				OBD Quick Test	•	•	•
Multiple Language Support		•	•	•	•	•	•
PC Software		Scanning Suite	Scanning Suite	Scanning Suite	ConnecTech	N/A	N/A
Wired & Wireless Internet Application Connectivity						•	•

# SCAN TOOL COMPARISON CHART SCAN DIAGNOSTICS



3108N  
Code  
Reader

3109N  
OBD II Scan

3111PRO  
Code Connect  
Scan

3499N  
ScanPro Elite

Genisys EVO  
Family

3893  
OTC Encore

3895  
Genisys Touch

## VEHICLE DIAGNOSTIC SOFTWARE INFORMATION

Code Connect OBD II DTC Tech Tips							
Pathfinder Troubleshooting Diagnostics							
Repair-Trac VIN Specific Tech Tips							
Code Assist DTC Specific Tech Tips							
InfoTech Driveability & Component Test Software							
Identifi® Direct-Hit Technician deep linking							
Symptom-Assist Specific Tech Tips							
AutoDetect							
Auto ID							
Cloud Integration							
Embedded Training Videos							

## DIAGNOSTIC ACCESSORIES

High Speed Scope							
Bluetooth Wireless TPMS Sensor Reprogramming							
5-Gas Analyzer							

## HARDWARE

Color Display							
Monochrome LCD	Character Mono					N/A	N/A
Detachable Cable							
Battery Power							
High Resolution Touch Screen						7" Capacitive	10" Resistive
J2534 Hardware Compliant VCI							
Cables with Color Coding, Part Numbers, and Description							
AirBridge Technology WiFi Wireless							
Bluetooth Long Range Wireless							
Headphone Jack							
Support Stand							
Stereo Speakers							
Wireless to the car VCI							
VGA Video Out							

## SOFTWARE

Internet Browser							
Android Operating System							
Windows Operating System							
Windows Printer Support							

# HEAVY-DUTY WIRELESS DIAGNOSTIC SYSTEM



## PC PROGRAM FOR HD STANDARD DIAGNOSTICS

- RP1210 compatible and will work with any RP1210 VCI.
- SAE J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage.
- Read and clear diagnostic trouble codes.
- Live vehicle data of HD Standard Engine parameters.
- Vehicle data communication and live data stream.
- Demo mode permits operation without vehicle connection.
- On-screen definitions of diagnostic trouble codes.
- PC & CD user's manual.
- Customizable line graphs .
- Automatic recording of data.
- Print screen data or save reports to print later.
- Ez-Tap Kits Available.

### 3070

#### HD Scan Software

- Stand-alone software.
- Works with any RP1210 interface (VCI).

### 3076

#### HD Scan with Ez-Tap

- In-shop wireless capability.
- Ez-Tap Wireless Vehicle Communication Interface (VCI) works with OEM diagnostic software.
- One wireless VCI for all your diagnostic software.
- Eliminate cables and cable replacement costs.

### 3086

#### HD Scan with Ez-Tap Extended Range

- 300 ft. wireless range to scan trucks anywhere on facility grounds.
- Scan trucks and preform initial diagnosis before you bring them into the shop.
- One wireless VCI for all your diagnostic software.
- Eliminate cables and cable replacement costs.



Ez-Tap 3076



Ez-Tap 3086

**EZ-TAP**  
HEAVY-DUTY WIRELESS DIAGNOSTIC SYSTEM





**EZ-TAP WIRELESS DIAGNOSTICS  
KITS AND ACCESORIES**

**3075**

**Ez-Tap Wireless Diagnostic Hardware Kit**

The EZ Tap Diagnostic kit enables a Heavy-Duty facility to use their OEM software for direct diagnostic mode operation.

**Kit includes:** Ez-Tap wireless (non-locking) VCI, Ez-Base wireless adapter, Ez-Tap 9-pin to 6-pin adapter, USB cable and Ez-Tap CD.

**Note:** OEM diagnostic software not included.



**3075-06**

**Ez-Base Extended Range Wireless**

Ez-Base Extended Range allows even more range and flexibility for your truck yard or service environment.

- 300+ foot range with the included antenna.
- Built-in Wireless signal strength indicator lights.



**3075-01**

**Ez-TAP Wireless VCI**

9-pin non-locking



Non-Locking



3075-01

**3075-02**

**Ez-TAP Wireless VCI**

9-pin locking



Locking



3075-02

**Note:** For your PC to communicate with the Wireless Ez-TAP, you will need an OTC EZ-Base (3075-05) or OTC EZ-Base ER (3075-06).

**3075-03**

**Ez-TAP USB VCI**

9-pin non locking, 16 foot USB cable and Ez-TAP CD.



3075-03

**3075-04**

**Ez-TAP USB VCI**

9-pin locking, 16 foot USB cable and Ez-TAP CD.



3075-04

**3075-08**

**Ez-TAP Adapter**

9-pin to 6-pin adapter cable.



3075-08

**3940-HD**

**Heavy Duty Digital Multimeter**

OTC 550 Series Auto Ranging Multimeter

- Powerful professional grade test functions
  - Frequency
  - Duty Cycle
  - Diode & Continuity Tests

**Mid-Range Amp Probe**

- Non-intrusive AC/DC current measurement
- Measurement range of 2–600 amps AC/DC
  - Covers HD truck components and electric motors



**Extended Length Test Leads**

- 5 ft. test leads to provide improved reach
- Detachable probes allow use with amp prob

**3418**

**OTC Heavy-Duty Code Reader**

- Class 4 – 8 truck coverage.
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more for diagnostic trouble codes!
- Read and clear diagnostic trouble codes.
- Provides on screen DTC definitions for heavy-duty standard codes.
- Battery powered for off vehicle use.
- Internet update capable.
- Heavy-Duty Standard compliant construction, marine, agriculture, and industrial diesel power plant configurations!



**3418 HD Reader Kit Includes:** HD reader tool, 9-Pin deutsch cable, 6-Pin deutsch cable, operations manual, 3-year warranty, and soft nylon carrying case.



**3417**

**OTC Heavy-Duty Scan Tool**

For Heavy-Duty shops that need a second tool in the shop and for their mobile repair trucks.

**Product Features:**

- Brilliant Color Display
- Class 4 – Class 8 truck coverage featuring "Automatic Protocol Search".
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more!
- Live vehicle data such as: Engine speed, Engine ECU temperature, Percent acceleration pedal position, Engine intercooler temperature, Engine coolant temperature, Battery volts, Alternator volts, Ambient air temperature, Air inlet temperature
- Read and clear diagnostic trouble codes.
- Global OBD II – All 9 Modes.
- English, Spanish, and French support
- Battery powered for off vehicle use.
- Trilingual Quick Start Guide included to help technicians get started fixing cars FAST.
- CD-based manuals in Spanish, French, and English.
- Customize data views in line graph, LED, or digital format with the push of a button.
- Three record modes – marker frame, freeze data history, and code triggered record.

**3417 HD Scan Kit Includes:** HD scan tool, 9-Pin deutsch cable, 6-Pin deutsch cable, OBD II cable, heavy duty cable, USB cable, ScanMate software operations manual, carrying case and 3-year warranty.

# DIGITAL DEF TESTER / READY SCAN™ / INSPECTION CAMERA / INFOLOGGER ELECTRONIC DIAGNOSTICS

**3095**

## Heavy-Duty Digital DEF Tester

Quick, easy and accurate measurement of UREA concentration. Ensure the proper operation of Class 7-8 trucks utilizing the SCR system with accurate Diesel Exhaust Fluid solution displayed on screen.

### SCR and EPA 2010

EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.

- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This Includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.
- SCR-equipped engines require the periodic addition of Diesel Exhaust Fluid (DEF, a urea solution) to enable the process. DEF is available in a bottle at most truck stops, and some have installed bulk DEF dispensers near the Diesel Fuel pumps. However, to ensure the proper operation of the SCR system, operators must ensure the DEF in their vehicle consists of a 32.5% Urea / Water solution.

### Features

- Digital Display
- Displays % UREA
- Displays washer fluid freeze point



**3358**

## OTC Ready Scan™ Readiness Monitor Tool

A drive cycle is required after any emissions related repair. The 3358 OTC Ready Scan eliminates drive cycle guesswork by notifying any driver, or your customer, with color coded LEDs and built in speaker that the drive cycle has been completed and the vehicle is Ready. Once the vehicle's OBD II system is Ready, repair work is confirmed. If a state emission inspection is required, a retest can then be performed. Works on 1996 and newer OBD II and CAN compliant vehicles.

### Product Features:

- Easy to install and no set up required—Connects easily into the vehicle's OBD II connector and is able to display status in 15 seconds.
- Bright color coded LED's provide Readiness Status. Green LED- Vehicle is Ready.
- Built in speaker provides audible tone every 5 minutes when vehicle becomes Ready.
- Ready Scan is powered from the vehicle—no batteries required.



**3880X**

## OTC Automotive Inspection Camera

With an industry leading 5.5 millimeter camera, it allows the technician to inspect hard to reach areas that would have normally required taking an engine apart or removing body panels to inspect. With the added wireless display and ability to record images and video, the 3880X is an ideal tool for any automotive, aviation or industrial technician.

### Product Features:

- Micro camera transmits images and video to the removable wireless camera to allow viewing of hard to reach areas.
- Large 3.5" inch high resolution color screen for optimal viewing.
- Detachable 36" camera snake with position hold shaft.
- Images and video are recorded on the included SD card and can be viewed on the camera display or transferred to a computer.
- Easy to change camera allows for use with various camera sizes and lengths.
- Magnetic display mount allows for hands-free viewing.
- Camera head includes four built-in adjustable LEDs for optimal viewing from light to dark areas.
- IP67 Rated camera for complete protection from dust and standard automotive chemicals.
- Unit is powered by removable power pack with four rechargeable AA batteries (batteries and charger included).

### Applications:

- Micro 5.5 mm camera allows for inspection through spark-plug holes.
- Inspecting cylinders, valves, diesel injectors and glow plug ports.
- Viewing behind body panels and under the dashboard for electrical wiring and connections.
- Examine for corrosion and wear in hard to see areas.
- Inspect fluid lines for leaks.

**3880X includes:** Video Scope, Magnetic mount for wireless display, Micro SD card, XvidCodec installation CD, USB cable, Video out cable, Rechargeable AA batteries (4) with charger, AC power adapter, one year warranty and Protective carry case.



**3005**

## InfoLogger OBD II and EOBD Data Recorder

InfoLogger is a remote diagnostic tool that collects your engine data while you drive.

### Product Features:

- Records live engine data and trouble codes automatically
- Real-time data collection
- Plug-and-play tool with compact design
- PC required to view vehicle data and graphs
- Compatible with Windows 2000, NT, ME, XP, Vista and 7
- Includes USB cable for easy and quick downloads/uploads.





CE-certified

**3840F**

**Automotive 2-Channel Lab Scope**

The exclusive vehicle-specific database in the 3840F contains information for most domestic vehicles as well as many imports. The Scope also recommends the appropriate test procedures for fast, accurate repairs. Visible on the screen are diagrams showing pin numbers and wire colors for both the PCM and the component connector.

**Product Features:**

- Powerful built-in reference information for each preset test include a test procedure, normal reference signal pattern, theory of operation, and trouble shooting tips.
- A 25 Mega-sample per second sample rate for rapid data updates.
- True RMS GMM (Graphing Multimeter) measurements and graphs.
- "Glitch Snare" feature captures, displays, and saves abnormal signal patterns in the Scope mode for component testing.
- Real-time comparison between actual waveforms and reference waveforms on the same screen for component testing.
- Preset tests enable the user to check the majority of automotive sensors, actuators, and systems easily and quickly.
- The secondary ignition single function displays the waveform along with the spark voltage, RPM, burn time, and burn voltage.
- USB supports fast update for code and data over the internet.

**3840F includes:** Automotive 2-Channel Scope, Shielded Test Leads with Ground (2 pcs), Inductive Pickup, Secondary Ignition Pickup, Alligator Clips (3 pcs), Back Probe Pins (3 pcs), Test Probes (3 pcs), AC Power Adapter, Ni-MH Rechargeable Battery Pack (Installed), USB Interface kit, User Manual and Soft Carrying Case.

**Replacement Accessories**

- 3840-01** – Red & yellow test leads.
- 3840-06** – Ignition probe.
- 3843-07** – Inductive pickup.



**TIMING LIGHTS**



**Standard features**

- All metal inductive pickup.
- Reflected, super bright Xenon flash.
- Removable leads with positive twist lock connector.
- One touch control.
- Durable, plated ABS housing with over-molded grips.
- Heat resistant over-molding on clips.
- Blow-molded case included.

**3363**

**Inductive Timing Light**

Professional inductive timing light designed for standard base timing.

**Unique features**

- On/off touch control

3363



**3365**

**Advance Timing Light**

Professional advance timing light allows accurate adjustment of base and advance timing reading.

**Unique features**

- Adjustable knob measures centrifugal, vacuum, and computer advance.
- On/off touch control.

3365



**3367**

**Digital Timing Light**

Professional digital timing light has advanced features with a bright LED screen and mode indicator lights.

**Unique features**

- Microprocessor-controlled circuitry.
- LED tachometer display reads 0-9999 rpm.
- LED advance display indicates to 1/10.
- Unique flashlight feature.
- 2/4 cycle and rpm/advance lights.
- Up and down scroll buttons.

3367



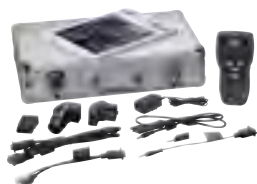
**3596J**

**Oil Light Reset Tool Kit**

- Oil changes are the #1 service your shop will perform each year.
- The 3596J kit helps eliminate the need to take the vehicle to the dealer or use an OEM scan tool to reset oil service lights.
- Electronic tool set includes the adapters and interface module required to reset the oil service lights on Volkswagen, Audi, Mercedes Benz, BMW, and Volvo.
- The included manual details Oil Light Reset tool procedures as well as the manual reset procedures for domestic and import vehicles.
- The new Oil Light Reset Tool now gives you the ability to update the tool vehicle coverage by connecting to a PC with future update kits.

**3596J includes:**

- 3596H-1** – Main unit cable.
- 3596H-2** – BMW Connector.
- 3596H-3** – Mercedes-Benz Connector.
- 3596H-4** – OBD II Connector.
- 3596H-5** – Volvo cable.
- 3596H-6** – Transfer plug.
- 3596H-7** – VW and Audi cable.
- 3596H-8** – Power cable.
- 3596J-9** – Reset Procedure Manual.
- 3596J-UPD** – Oil Light Reset Update Kit.



**Timing Light Comparison - Functions/Features**

	3363	3365	3367
Conventional, electronic, computer controlled ignition systems	•	•	•
DIS and 2-cycle systems	•		•
On/off touch control	•	•	
Adjustable advance		•	•
Digital LED readout tach and advance			•
2- to 4-cycle and rpm/advance mode lights			•
2- to 4-cycle selector button			•
Flashlight feature button			•
RPM to advance selector button			•
Up or down scroll buttons			•

# ACCESSORIES / CABLES ELECTRONIC DIAGNOSTICS

## GENISYS TOUCH ACCESSORIES

**3895-01** AC Power Supply



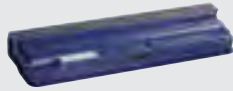
**3895-02** AC Power Cord



**3895-03** Carrying Case



**3895-05** Li-ion Battery



**3895-06** Screen Protector



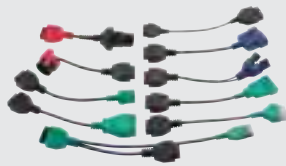
**3895-07** Heavy Duty Starter Kit



**3895-08** 12 Month Subscription



**3895-100** OEM Cable Kit



## GENISYS TOUCH / ENCORE CABLES

**Number** **Description**

**3421-93** KIA adapter



**3825-09** GM 12 pin adapter



**3825-10** Chrysler I adapter



**3825-11** MECS ABS adapter



**3825-12** FORD EEC adapter



**3825-13** GEO-ISUZU adapter



**3825-14** MAZDA MECS adapter



**3825-15** UNIV 9 PIN adapter



**3825-16** FORD ABS adapter



**3825-17** TOYOTA DCL 1/ adapter



**3825-18** TOYOTA DCL 2/ adapter



**3825-19** MITSUBISHI/CHRY "Y" adapter



**3825-20** NISSAN 1 adapter



**3825-21** SUBARU adapter



**3825-22** MITSUBISHI/HYUNDAI adapter



**3825-23** HONDA adapter



**3825-24** NISSAN 2 adapter



**3825-25** MERCEDES 38 PIN adapter



**3825-26** MERCEDES 1 PIN adapter



**3825-27** VW 4 PIN adapter



**3825-28** BMW adapter



**3825-34** CHRY 3 adapter



**3825-59** CHRYSLER CCD adapter



**3829-01** OBD II cable



**ENCORE ACCESSORIES**

**3893-01** Optional Battery



**3893-03** AC Charger



**3893-04** Carrying Case



**3895-07** Heavy Duty Starter Kit



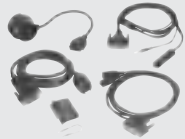
**3895-08** 12 Month Subscription



**GENISYS EVO ACCESSORIES**

**Number** **Description**

**3421-75** USA OEM European Cable Kit



**3421-94** USA Asian OEM Cable Kit



**3421-70** USA Domestic OEM Cable Kit



**3780** Genisys Performance 5-Gas Module



**NEMISYS ACCESSORIES**

**Number** **Description**

**3774-01** DB25 to OBD II cable



**3774-02** DB25 to GM OBD I cable



**3774-03** DB25 to Ford OBD I cable



**3774-04** DB25 to Chrysler OBD I cable



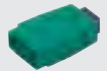
**3774-05** Cigarette plug power cord



**3774-10** Nissan DCL-1 Adapter



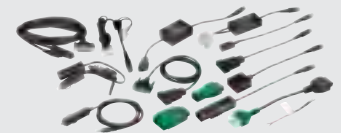
**3774-17** Toyota DCL 1 Adapter.



**3774-18** Toyota DCL 2 Adapter.



**3774-19** Asian Cable Kit



**3774-20** USB A-B Cable



**3774-34** Nemisys OBD II Smart Cable Expands the system coverage to include GM Single Wire CAN systems and more!





**3774-38** 2014 software with Memory Kit





# ACCESSORIES / CABLES ELECTRONIC DIAGNOSTICS

## GENERAL APPLICATION

Number	Description	
<b>212638</b>	Battery adapter for Monitor or Genisys. Used for under-hood access to 12-volt power supply	
<b>3305-71</b>	DB-25 extension cable to connect 25-pin Monitor and Genisys adapter cables	
<b>3305-72</b>	DB-25 to 8-pin DIN extension cable.	
<b>3421-04</b>	AC/DC power adapter for Genisys	
<b>3421-08</b>	6' PC to scan tool cable, DB-9 to RJ-45	
<b>3421-44</b>	20' PC to scan tool cable, DB-9 to RJ-45	
<b>3421-65</b>	USB to serial adapter	
<b>3421-67</b>	Compact flash reader to USB adapter for Genisys and Nemisys	
<b>3421-111</b>	Scan Tool Connector Saver	
<b>239180</b>	9.6V Genisys battery	


Number	Description	Application	
<b>3421-88</b>	OB2 II Smart Cable 2006 software (Genisys only)	Replaces 3305-73 cable and Requires all system smart inserts	
<b>3305-73</b>	System Smart Insert OB2 II 25-pin cable	Use with Monitor Elite, Monitor Enhanced or Genisys. Use with 25-pin SSI.	


## DOMESTIC APPLICATION


Number	Description	Model & Year	GM
<b>212633</b>	GM 14" vehicle adapter cable	GM most system 82-'95	
<b>212653</b>	Turned port Inj. adapter cable (gray)	GM 5.0L TPI '86 GM 5.7L TPI '86-'89 GM 2.8L V6 P4 '86-'89	


## DOMESTIC APPLICATION


<b>3305-17</b>	Geo/Isuzu adapter cable	GM Geo & '87-'95SpectrumGM Isuzu and Luv '81	
<b>238464</b>	GM ABS cable	GM ABS '90-'95Kelsey Hayes	


Number	Description	Model & Year	Ford
<b>3305-27</b>	Ford ABS cable	Ford ABS Mystique '95 Econoline Van '94-'96	


<b>3305-58</b>	Ford II14" adapter cable (gray)	Ford EEC IV '81-'95 MCU, ABS,suspension. Use with Pathfinder II or newer software.	
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<b>3305-84</b>	Ford III, 25-pin,18" cable (red) with 4' power lead	Ford EEC IV DCL '83-'95 ABS, suspension. Use with Pathfinder III or newer software	
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<b>213596</b>	MECS 6' adapter cable	Ford/Mazda '88-'95mfd. vehicles	
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<b>3305-14</b>	MET adapter	Ford/Mazda '91-'95 mfd. vehicles.	
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Number	Description	Model & Year	Chrysler
<b>212635</b>	Standard 12" adaptercable	Chrysler '84-'95	

<b>3305-65</b>	Chrysler III25-pin, 18" cable	LH Chrysler '93-'95 CCD '88-'95 with 4000 Enhanced,Monitor Elite, Nemisys, Genisys	
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## ASIAN APPLICATION

Number	Description	Model & Year	
<b>212633</b>	GM 14" adapter cable	Isuzu Pickup (3.1L) '91-'95 Rodeo '91-'95 Trooper II '89-'95	




<b>3305-68</b>	Honda/AcuraJumper	Honda '89-'95 Acura '91-'95	
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<b>213596</b>	MECS 6' adapter cable	Mazda '83-'95	
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**ASIAN APPLICATION**

Number	Description	Model & Year	
<b>3305-14</b>	MET adapter cable	Mazda 323/Protege '90-'95, '92-'95 Miata '90-'95, MX-3 '92-'95	
<b>216044</b>	Nissan 12" adapter cable	Nissan '87-'95	
<b>3305-15</b>	Subaru adapter cable	Subaru SPFI '87-'93 MPFI (Except Justy) '88-'93 EFC (Justy) '88-'90	
<b>3305-17</b>	Geo/Isuzu adapter cable	Isuzu I-Mark (Fuel Inj.) '88-'89 I-Mark (Carb.) '87-'89 I-Mark '85-'86 Impulse '84-'92 Pickup, Amigo '88-'93 (2.3 & 2.6L) Rodeo '91-'93 Trooper II '89-'91	
<b>3305-17</b>	Geo/Isuzu adapter cable	GM Import Spectrum '87-'89 Storm '90-'93 Geo/Metro '90-'93	
<b>3305-48</b>	Mitsubishi/DS adapter cable	Mitsubishi Diamante '92-'93 Precis '90-'93 3000GT '91-'93 Truck '89-'93 Eclipse '90-'93 Starion '87-'89 Mirage, Montero '89-'93 Van '87-'90 Sigma '89-'91 Galant '87-'93	
<b>3305-48</b>	Mitsubishi/DS adapter cable	Chrysler Import Stealth, D50 Truck '91-'93 Laser '91-'93 Vista '89-'93 Talon '90-'93 Colt '88-'93 Summit '89-'93 Raider '89 Conquest TSI '87-'89	
<b>3305-48</b>	Mitsubishi/DS adapter cable	Hyundai Sonata '89-'93 Scoupe '91-'92	
<b>3305-124</b>	Accord adapter	Accord '92-'95	

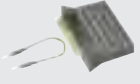



**ASIAN APPLICATION**

Number	Description	Model & Year	
<b>3305-141</b>	Nissan OBD I and II cable	Nissan '89-'99	
<b>3421-68</b>	Genisys Toyota DCL 2 adapter	Lexus '90-'00 Toyota '89-'01	
<b>3421-93</b>	Kia adapter	Genisys Platform '02-'06 Nemisys Platform '03-'06 Genisys	

**HEAVY-DUTY CABLES**

Number	Description	
<b>3421-80</b>	6 pin Deutsch cable	
<b>3421-81</b>	9 pin Deutsch cable	

**EUROPEAN APPLICATION**

Number	Description	Model & Year	
<b>3306-47</b>	38 Pin SSI	Mercedes '86-'05	
<b>3421-41</b>	38 Pin adapter	Mercedes '86-'05	
<b>3421-43</b>	VW 4 pin adapter cable	Volkswagen '86-'94	
<b>3421-76</b>	BMW adapter cable	BMW '87-'05	

## AUTOBOSS® V30 EUROPEAN / ASIAN COVERAGE

- Unequaled Diagnostic Power
- Introducing the Autoboss V30, a truly global diagnostic tool providing flexibility and portability in a Windows CE platform.
- OE level coverage for European, Asian, and Chinese cars
- Covers more than 50 vehicle makes
- Access to powertrain, chassis, and body systems
- Quick Test function to test most vehicle systems
- Fault codes (DTC's), Data Stream and Service Reset
- Actuators, Adaptations, and Control Module Coding
- Supports Multi-language
- Frequent Internet based software updates
- CAN Bus with high/low speed
- One OBD II connector for all CAN Bus systems
- High resolution VGA color TFT display
- Windows CE Operating System
- Demo Mode for many OEM's
- Data graphing
- Self-check function

## SYSTEM COVERAGE EXAMPLE

Drive  
Transmission  
ESM – Electronic Selector Module  
DTR – Distrionic  
Motor Electronics

Chassis  
SBC – Sensortronic Brake Control  
ESP – Electronic Stability Program  
AIRmatic – AIRmatic ABC  
TPC – Tire Pressure Monitor

Body  
Seats and Doors  
Actual Values  
Actuations  
Initial Startup  
Control Unit Adaptations  
Correction Programming

Air Conditioning  
AAC – Automatic Air Conditioning  
REAR AC – Rear Air Conditioning  
STH – Stationary Heater  
HSW – Heated Steering Wheel

Information & Communication  
ICM – Instrument Cluster  
SCM – Steering Column Module  
PTS – Parktronic System  
Audio, Video, Navigation and Telematics



Extensive European Vehicle Coverage



Extensive Asian Vehicle Coverage

## V30 DELUXE DIAGNOSTIC SYSTEM

### 3100DLX

#### Software

- Global European, Global Asian, Chinese
- 12 Month Subscription Included

#### Vehicle Cable Set

- OBD II Adapters
- European OEM OBD I Adapters
- Asian OEM OBD I Adapters
- USA GM OEM OBD I Adapter
- Chinese OEM Adapters

#### Included Accessories

- Carrying Case
- 100 – 240 Volt Power Supply
- SD Card Reader
- Rubber Boot





## EVAP – LEAK DETECTION SYSTEM

### 6522

- EVAP – Leak Detection System
- Vacuum Leak Testing
- Exhaust Leaks
- Crankcase Oil
- Cooling System Testing
- Wind and Water Leaks
- 1-Year Warranty

LeakTamer is the latest generation of leak detection systems, providing more smoke and better control. Solid-state circuitry improves reliability and ensures more consistent smoke output. A wide assortment of accessories make the LeakTamer versatile tools for quickly locating different kinds of leaks.

#### LeakTamer Evap offers:

- Densest smoke in the industry.
- Newly redesigned smoke chamber and control system.
- More complete line of accessories.
- User refillable.
- Includes smoke producing solution for 500 tests.
- Non-toxic, non-corrosive smoke.

#### Product Features:

- Large full range flow meter
  - Detects .020" & .040" EVAP leak sizes
  - Flow-test components with full range of flow values
- Pinpoint leaks with Smoke and dye
  - UltraTraceUV® dye deposits at exact location of a leak
  - Finds leaks that smoke alone won't find
  - Introduce to an engine before disassembly to find internal leaks
  - It's the only OEM-Approved dye solution
- Variable Smoke Flow
  - Helps pinpoint smoke exiting a leak
  - Directional knob shows exact flow position
- Compact light weight design
  - More powerful diagnostics in smaller package
- Can be used with air or nitrogen
  - Use any inert gas for safer EVAP testing and shop air for all other tests
- OEM approved technology
  - Contains STAR Technology; the ONLY OEM-Approved smoke technology anywhere in the world

#### 6522 includes

Leak Tamer unit, White/UV combination light with laser pointer, UV glasses, EVAP adapter tool, exhaust cone, cap plug adapters, removal tool, smoke producing solutions enough solution for 500 tests.



### ACCESSORY / REPLACEMENT PARTS

**6522-1** UltraTraceUV® (8 oz. / 236 ml) patented solution is the only Automaker-approved smoke-producing solution in the world. Contains a special dye that deposits at the exact location of a leak. Each bottle will perform approximately 300 tests. Part No. is for one bottle, two bottles included with 6522.



**6522-2** Inert Gas Pack Kit connects directly to fitting on back of LeakTamer 6522. Includes preset CO2 regulator with cylinder fitting, 20 oz. liquid CO2 cylinder, pressure gauge, universal push-on female coupler accommodates both automotive and industrial male fittings (Cylinder arrives empty) Performs approx. 25-50 full cycle EVAP tests per 20 liquid oz. cylinder.



**6522-3** Combination Light for easier smoke location and ultraviolet (UV) light, to highlight the fluorescent dye deposited at the exact location of a leak. Also has laser pointer. Includes batteries and glasses.



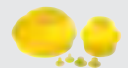
**6522-4** Standard Size Service Port Adapter.



**6522-5** Schrader® Removal/Installation Tool.



**6522-6** Cap Plugs Kit. Used for sealing some systems during leak testing.



**6522-7** Universal Fuel Neck Adapter fits the majority of vehicles. Allows access to fuel tank for evaporative system testing.



**6522-8** BMW and MINI Fuel Neck Adapter. Allows access to fuel tank for evaporative system testing.



**6522-9** Smoke Diffuser locates leaks around doors, windows, sunroofs, trunk compartment seals, EV vehicles' battery modules, or any closed system that can be pressurized from the inside and observe the smoke disturbance from the outside.



**6522-10** Cone Adapter (standard) for introducing smoke into induction or exhaust system. 1" x 3.5" & 6" long (25.4 mm x 89 mm x 152 mm).



**6522-11** Cone Adapter (Large) for introducing smoke into induction or exhaust system. 3.5" x 6" & 4.6" long (89 mm x 152 mm x 144 mm).



**6522-12** Replacement Dipstick (for 6522).



**6522-13** Replacement smoke supply hose and Delrin® Nozzle



**6522-14** Delrin® Nozzle



**6522-15** Flow meter red pointer flag. For easy viewing of flow meter measurements.



# ALL-IN-ONE TPMS DIAGNOSTICS



## OBD II TPMS TOOL WITH ACTIVATION, DIAGNOSTIC AND RELEARN CAPABILITIES

**3838**

### OBD II TPMS Tool

Save time and perform additional diagnostic capabilities during tire service tire rotations, tire sensor evaluations and reset procedures. The OTC 3838 is both a sensor activation and diagnostic device that features a wireless OBD II module for TPMS sensor registration. The tool works with all OEM and aftermarket sensors.

- Large 3.5" color display featuring easy-to-read icons
- **Exclusive** wireless OBD-II module to initiate and perform relearn procedures
- SD card for vehicle history storage
- USB for software updates
- RJ 45 connection capability
- Includes battery charger

## ABOUT TPMS

All 2008 and newer automobiles and light trucks on the road today have TPMS sensors that must be reprogrammed every time tires/wheels are replaced or rotated. If the TPMS sensors are not reprogrammed, the system will continue to report information that could be incorrect such as tire pressure and position of the wheel. TPMS sensors provide data such as sensor identification; tire pressure, temperature and sensor battery life.

## FEATURES



Graphical Interface



Integrated KEY FOB Test



## STAND-ALONE TPMS TOOL WITH BLUETOOTH OBD II

- All-in-one TPMS tool with sensor activation and on-board procedures
- 3.5" Color display with icon graphical interface
- On screen, step-by-step relearn procedures
- Software updates for 3 years
- Register TPMS sensors wirelessly via Bluetooth OBD II adapter
- OBD II adapter dock for easy storage and portability
- Complete Asian, Domestic, and European coverage
- Reads TPMS codes on applicable vehicles
- Printing via Infrared (IR) Technology or USB
- Includes SD card for vehicle history storage
- Updatable via USB port
- Rubber over-mold for enhanced durability
- Integrated Key Fob RF signal strength test
- Compatible with aftermarket programmable sensors, including Schrader EZ-sensor™, VDO REDI-sensor™, HUF IntelliSens®, and Alligator Sens.it®



## 3838 KIT INCLUDES

- TPMS Handset
- Bluetooth OBD II Adapter
- Wall Mount Battery Charger
- Carrying Case
- USB Cable
- RJ45 Cable
- Rechargeable lithium-ion battery
- Installation CD
- Relearn Magnet
- Instruction Manual
- 1-year warranty

**FULL COVERAGE TPMS SOLUTION**

**DIAGNOSTICS/RESET/RE-LEARN/REGISTER**

**The OTC Tire Pressure Monitoring Reset Tool is a fast and simple to use stand alone TPR activation tool**

- Works on all known TPMS sensors through 2013.
- Bright graphic display and simple navigation buttons enable vehicle selection for fast activation.
- Automatically adjusts activation output power to eliminate cross activation of near sensors. Combine TPR activation with the power of Genisys® scan
- Register new sensor ID's on Asian vehicles.
- Use the TPR to activate and decode sensor ID's and transmit them to the Genisys wirelessly.
- Bluetooth wireless communication adapter included.
- Quick reference reset procedures can be quickly accessed on the Genisys.



**3834  
Tire Pressure Monitoring System Reset Tool**

Includes: TPR handheld, DB25 wireless adapter, carry case, registration card, user manual for TPR and Genisys® interface.



**3834T  
TPR Activation Tool**

Combine TPR activation with the power of the Genisys Touch.



**3835  
Tire Pressure Monitoring System Reset Tool Master Kit**

Includes: TPR handheld, DB25 wireless adapter, carry case, registration card, user manual for TPR, and Genisys® interface, activation magnet, valve stem torque wrench, valve nut torque wrench, digital tire pressure gauge, TPMS Poster, TPMS flip charts, 11mm socket, 12mm socket, and torque tool.



**3834UPD  
TPR One Year update subscription**

The 3834UPD Subscription Update kit provides the user access to all Tire Pressure Reset (TPR) tool updates for one year from registration date. TPR updates include both added vehicle coverage and tool functionality improvements.



**3836  
Tire Pressure Monitoring System Accessory Kit**

Includes: Activation magnet, valve stem torque wrench, valve nut torque wrench, digital tire pressure gauge, TPMS Poster, TPMS flip charts, 11mm socket, 12mm socket, and torque tool.



Note: Genisys requires System 4.0 or later for TPR communication.

**EZ-SENSOR PROGRAMMING**



**“EZ-sensor™ PROGRAMMABLE TPMS is the first Programmable Tire Pressure Monitoring Sensor which has been designed with the goal of replacing 90% of the TPMS sensors currently stocked by the dealer.”**

– Schrader® the worldwide leader



- Fast simple programming using OTC TPR Tool
- Eliminates the need to perform relearn procedures when replacing sensors
- No scan tool required for programming
- Replaces over 90% of current TPMS sensors!
- Save money & fit the right part
- Fast simple assembly to the wheel rim

Schrader® is trademark of Schrader International Corporation.

**3834EZ  
Tire Pressure Monitoring System Reset Tool with EZ-sensor™ Programming**

Includes: TPR handheld, DB25 wireless adapter, EZ-sensor proximity boot, EZ-sensor software, USB cable, carry case, registration card, user manual for TPR and Genisys® interface.



**3834EZ-01  
EZ-sensor™ Update Kit**

Includes: EZ-sensor Proximity boot, EZ-sensor Software, USB cable, and user manual.

Note: For existing TPR owners.



**3834-01  
TPR Charging Station**

Now also available for both the OTC 3834 and OTC 3834EZ tool is the new OTC 3834-01 Charging Station. This kit includes a “drop-in” charging cradle, easy to install slimline Lithium Ion rechargeable battery which dramatically increases the amount of sensor activations over standard alkaline batteries, and AC power cable. Increase productivity by eliminating down time and reduce the cost of replacing AA batteries with the OTC 3834-01 TPR Charging Station!



## OTC TPMS IS THE TOTAL SOLUTION

### Automatically Selects the Proper Sensor Communication!

Activate sensors before tire service is performed, when tires are rotated, and when there is a problem with TPMS.

- Easy-to-follow tool menu and graphics clearly show test options.
- Auto Scan feature provides a "one button" activation mode which automatically scans for TPMS sensor communication.
- Diagnostics uses a make-year-model input which automatically selects the proper sensor communication.
- Auto Scan and Diagnostics are useful for pre-testing sensors for proper functionality prior to service.
- Kit includes vehicle specific Reset Procedures that guide the user through the complete procedure.
- Electronic manuals include critical and comprehensive vehicle set up and reset procedure, along with system descriptions and specifications through 2013 model year.



### 3833B13

#### 2013 Tire Pressure Monitor Base Kit

Includes a TPM tool with latest software subscription including 2013 MY coverage, activation magnet, quick start guide, CD containing all previous and current reset procedure manuals, update cable, CD training video, backup software CD, and a blow molded case.



### 3833M13

#### 2013 Tire Pressure Monitor Master Kit

Includes a TPM tool with latest software subscription including 2013 MY coverage, activation magnet, quick start guide, CD containing all previous and current reset procedure manuals, update cable, CD training video, 6 NiMH rechargeable batteries and recharging station, backup software CD, digital tire pressure gauge, 4-way valve tool, valve core torque driver, laminated application flip chart, service procedure flowchart poster, consumer poster, and a blow molded case.



#### Also includes TPM Electronic Torque Wrench.

- 12-120 in.-lb.  $\pm$  2% accuracy.
- Torque set quickly with unique slide bar on the scale.
- Indexing head allows for use straight (screwdriver position) to spin nut down quickly.
- Torque limit LED flashes with audible beep.
- 1/4" Drive 11mm and 12mm Deep Chrome Socket.

### 3833-80

#### 2013 Tire Pressure Monitor Software Update Kit

Includes 2013 software subscription CD, and 2013 reset manual on CD. Now includes the high-demand USB update cable that was previously sold separately.



### 3833-13

#### Internal battery stick and charging cradle for OTC TPM

The internal battery stick and charging cradle for the OTC TPM allows the unit to be placed in the cradle when not in use, allowing for the unit to always be charged. This also eliminates the need to replace batteries.



## TPMS ACCESSORIES

Part No.	Description	
3833-4	Magnet	 3833-4
3833-5	Quick Ref Manual Set	
3833-7	Software Update Cable	
3833-8	Serial to USB Adapter	
3833-9	"T" Update Kit	3833-9
3833-14	Recharge "C" Batt & Charger	
3833-15	Digital Tire Gauge	
3833-16	Valve Nut Tool	
3833-17	Valve Core Driver	3833-14
3833-18	Quick Spec Flip Chart	
3833-24	T-10 Torque Driver	
3833-25	Electronic Torque Wrench	 3833-15
		 3833-16
		 3833-17
		 3833-25

# MULTIMETER TESTERS ELECTRONIC DIAGNOSTICS



**Built-in Probe Protector**



### 3907 Probe Multimeter

This probe style meter is a full function multimeter in a convenient pocket pen type package. The probe contains a retractable probe cover and lead clip on back of meter for carrying in pocket or storage.

**Product Features:**

- Display: Max. 2000 Counts
- Function: Ohm/DCV/ACV/Diode/Continuity
- Input Impedance: 10MΩ
- Auto Range
- Auto Power Off
- Pocket pen type
- Back light and testing light
- Rotating pen tip protector
- Test lead installing socket
- Operating Switch: Combined switch with function and power switch



The meter is in compliance with the following standards:

- IEC1010 double insulation
- Pollution degree 2
- Over voltage category III (600 volts)
- Power One 9-volt alkaline battery
- (NEDA 1604 or equivalent)

### 3908 AMP Clamp/Multimeter

OTC AMP Clamp/Multimeter was designed to allow accurate current measurements using clamp jaws. The clamp meter is well suited for testing starting/ charging circuits, and provides easy access to current, voltage and other key automotive measurements, all in one easy-to-use tool.

**Product Features:**

- Duty Cycle
- Resistance
- Capacitance
- Diode
- Continuity
- Frequency
- Temperature
- Range auto/manual
- Display maximum reading of 4000 counts
- Automatic negative polarity indication
- Automatic zero adjustment
- Over range indication
- Low battery symbol
- Data hold symbol
- Relative measurement symbol
- Clamp opening size 32mm
- Auto power off



### 3910 55 Series Digital Multimeter

The 55 Series DIGITAL MULTIMETER meter provides a full feature set at an economical price. The 55 SERIES contains all the base functions required for today's automotive testing.

**Product Features:**

- Display: Max. 2000 Counts
- Auto / Manual Range
- Diode Check
- Continuity Buzzer
- Data Hold, Max Hold
- Auto Power Off

### 3940 600V CAT III 550 Series Digital Multimeter

The 550 Series DIGITAL MULTIMETER features powerful automotive test functions such as; Frequency, Duty Cycle, Diode & Continuity Tests, plus all the standard meter features you expect in a professional grade Multimeter.

**Product Features:**

- Diode Test
- Continuity Test
- Auto Range
- Data Hold
- Relative Change
- Auto Power Off



### 3980 1000V CAT III 750 Series Automotive Multimeter

The 750 Series AUTOMOTIVE MULTIMETER includes all the great features of the 550 Series METER, PLUS Automotive specific tests; True RMS, RPM, Dwell, Pulse Width, Temperature, Backlight, RS232, and Min/Max. It is CATIII so it is compatible Hybrid vehicle systems.

**Product Features:**

- Diode Test
- Continuity Test
- Auto Range
- Data Hold
- Relative Change
- Backlight
- Auto Power Off
- CATIII 1000V
- Min/Max
- RS232 & Cable
- Red & Black Test Leads
- Alligator Clips
- RPM Pickup Adapter
- Temp Probe Adapter
- Black Canvas Case
- PC Cable & Software

### 3990 1000V CAT III Hybrid Multimeter/OTC 1000V CAT III Hybrid

Multimeter with Insulation Test. A full function Multimeter with an insulation test feature is used to test for voltage leaks through insulation found on Hybrid and Electric Vehicles.

**Product Features:**

- Hybrid Insulation Resistance Test
- True RMS
- Data Logging
- Auto Ranging
- Display Backlight
- Diode Test
- Min/Max Mode
- Continuity Buzzer
- Sleep Mode
- Data Hold
- Low Battery Display



**3990 Includes:** Heavy Duty Class III test leads with alligator clips, Short Lead, K Type temperature adapter and Manual.



## HYBRID MULTIMETER ACCESSORIES

These Hybrid Electric Safety Gloves are the most important articles of personal protective equipment when working on high voltage vehicles. They are the first line of defense for contact with any energized components.

**3991-10**  
Small Glove with Leather outer protector set.

**3991-11**  
Medium Glove with Leather outer protector set.

**3991-12**  
Large Glove with Leather outer protector set.



**WARNING:** Safety Gloves must be inspected prior to each use in accordance with ASTM Standard F1236 and the applicable Service manual for the vehicle being serviced. Rubber insulating gloves must be retested electrically at least once every six (6) months using the test procedures described in the most recent editions of ASTM Standard F496.

# MULTIMETER TESTERS ELECTRONIC DIAGNOSTICS



Specifications:	3907	3910	3940	3908	3980	3505A	3990
Frequency:			1Hz ~ 10MHz ± 0.1%		1Hz ~ 10MHz ± 0.1%	1Hz ~ 10MHz	10Hz ~ 1MHz
RPM (Direct Test with Leads) or (with RPM Pickup)					0 - 10,000	0 - 10,000	
DWELL Angle					0 - 360° (1 - 12 CYL)	(1 - 12 CYL)	
Duty Cycle			0.1% ~ 99.9% ± 2.5%		0.1% ~ 99.9% ± 2.5%	0.1% ~ 99.9%	
Pulse Width-ms (negative)					1 ~ 999ms	1 ~ 999ms	
Temperature		-50°C to 200°C, -58°F to 392°F			-50°C to 400°C, -58°F to 752°F	-50°C to 400°C, -58°F to 752°F	-40°C to 537°C, -40°F to 998°F
DC Volts	200mV/2/20/200V ± 0.5%, 600V ± 0.8%	200mV/2/20/200V ± 0.5%, 600V ± 0.8%	400mV/4/40/400V ± 0.5%, 1000V ± 0.8%	400mV/4/40/400V ± 0.5%, 600V ± 0.8%	400mV/4/40/400V ± 0.5%, 1000V ± 0.8%	400mV - 600V	60mV/600mV/6V/60V/600V/1000V
AC Volts	2/20/200V ± 0.8%, 200mV/600V ± 1.2%	2/20/200V ± 0.8%, 200mV/600V ± 1.5%	4/40/400V ± 0.8%, 400mV/750V ± 1.2%	TRMS-4/40/400V ± 1%, 400mV/600V ± 1.5%	TRMS - 4/40/400V ± 1.5%, 400mV/750V ± 2%	4/40/400V 400mV/600V	TRMS - 6V/60V/600V/1000V
DC Amps (through Meter)		400/4000µA ± 2%, 40/400mA ± 1.5%, 4/10A ± 2%	400/4000µA ± 2%, 40/400mA ± 1.5%, 4/10A ± 2%		400/4000µA ± 2%, 40/400mA ± 1.5%, 4/10A ± 2%	40/4002µA ± 15%, 4/10A ± 2%	0.01mA to 600mA
AC Amps (through Meter)		200/2000µA ± 2.5%, 20/200mA ± 2%, 2/10A ± 2.5%	400/4000µA ± 2.5%, 40/400mA ± 2%, 4/10A ± 2.5%		TRMS - 400/4000µA ± 2%, 40/400A ± 2%, 4/10A ± 2.5%	40/4002µA ± 15%, 4/10A ± 2%	3mA to 600mA
DC Amps (Inductive)				400A ± (1.5% + 5), 1000A ± (2% + 10)			
AC Amps (Inductive)				400A ± (2% + 5), 1000A ± (2.5% + 10)			
Resistance	200Ω/2/20/200kΩ/2MΩ±1%, 20MΩ±2%	200Ω/2/20/200kΩ/2MΩ ± 1%, 20MΩ ± 2%	400Ω/4/40/400kΩ ± 1%, 4/40MΩ ± 2%	400Ω/4/40/400kΩ ± 1%, 4/40MΩ ± 2%	400Ω/4/40/400kΩ ± 1%, 4/40MΩ ± 2%	400Ω/4/40/400kΩ ± 1%, 4/40MΩ ± 2%	600Ω, 6kΩ, 60kΩ, 600kΩ, 6MΩ, 40MΩ
Capacitance			40nF ± 3.5%, 400nF/4µF/40µF ± 3%, 400µF/4000µF ± 20%	40nF/4µF ± (2.5%+5), 40µF/100µF ± (5%+10)	40nF/400nF/4µF/40µF ± 3%, 400µF/4000µF ± 20%	40nF/400nF/4µF/40µF ± 3%, 400µF/4000µF ± 20%	
Insulation Testing							50V, 100V, 250V, 500V, 1000V
Features:	3907	3910	3940	3908	3980	3505A	3990
Diode Test / Continuity Test	•	•	•	•	•	•	•
Auto Range	•	•	•	•	•	•	•
Auto Power Off	•	•	•	•	•	•	•
Data Hold		•	•	•	•	•	•
Backlight	•			•	•	•	•
True RMS				•	•	•	•
Relative Change			•		•	•	
Min/Ma			•		•	•	•
Temp. Adapter		•			•	•	•
Hybrid Compatible/ Class III					•		•
Alligator Clips					•	•	•
CATIII			600V		1000V		1000V
Case				•	•	•	•
RS232 Computer Interface					•		
PC Cable/Software					•		
RPM Pickup adp.					•	•	
Insulation Test (Hybrid)							•
Inductive Current Measurement				•	with Accessory Clamp (Included)	with Accessory Clamp (Included)	

# AUTOMOTIVE MULTIMETER / DIGITAL PRESSURE & TEMPERATURE ANALYZER ELECTRONIC DIAGNOSTICS

## 3505A

### 100 Series Autoranging Automotive Multimeter

The 3505A is the latest version of the Classic 100 Series Autoranging Automotive Multimeter with many new and useful troubleshooting features.

#### Product Features:

- Auto/Manual Ranging
- Resistance, Continuity, Diode and Capacitance Tests
- RPM Measurement
- Temperature Measurement (°F/°C)
- Millisecond Pulse width and Peak Volts measurements for Fuel Injectors
- Duty Cycle and Frequency to 10M Hz
- Dwell Measurement
- O2 Cross counts
- Relative Measurement, can be used for low resistance measurements to remove test lead resistance from measurement
- Data Recording: Min/Max for fluctuating measurements
- Data Hold, freeze data at the push of a button
- Fused direct current measurement up to 10 amps through meter
- Auto Power Off (can be disabled)

3505A 100 Series Autoranging Kit Includes: 100 Series Automotive Multimeter, heavy-duty test leads with removable alligator clip ends, inductive RPM clamp, temperature probe.



## SCOPE AND METER ACCESSORIES

### 3820-13

Low-range amp probe with display – use alone or connected to scope. Long, small jaws combined with superior performance are ideal for: Ignition coils, Fuel injectors, Fuel pumps, Relays, Electric motors, Parasitic draw.

- 0–60A range, measure to 90A, 100mV/A
- High accuracy, and low noise interference
- Non-intrusive AC/DC current measurement
- Resolution: 10mA
- Average responding, RMS calibrated
- Auto ranging, auto zero, data hold, low battery indicator



### 3820-06

Low-range amp probe – Measures current in two ranges: 0-60 amps AC/DC. Ignition coils, Fuel injectors, Relays, Electric motors, Parasitic draw, Non-intrusive AC/DC current measurement.



### 3825-54

Mid-range amp probe with BNC adapter. Measures current in a range of 2–600 amps AC/DC.



### 3840-04

Test probes. Three pieces: red, yellow, black.



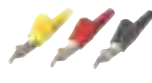
### 3840-05

Back probes. Three pieces: red, yellow, black.



### 3840-03

3-piece, 5-way alligator clip - Plug-on multiple-use clip includes: bed of nails, piercing tip, alligator clip, spade and square lug connectivity.



### 3840-02

Banana lead extension includes two 4 ft. leads.



## MULTI-APPLICATION DIGITAL PRESSURE AND TEMPERATURE ANALYZER

### Combining the functions of vacuum, oil pressure, hydraulic system pressure, fuel pressure, transmission pressure compression, and air conditioning—all in one!

No need to have fuel or transmission hoses inside vehicle during a road test. No makeshift taping of gauges to the windshield.

Use with OTC's No. 3398 to find clogged/dirty fuel injectors.

Pinpoints worn power steering pumps or racks.

PSI reading for hydrostatic drives and high pressure hydraulics.

Finds blocked intake ports and plugged catalytic converters.

Checks transmission cooler efficiency and catalytic converter temperatures.

"Min/Max." pinpoints:

- Fuel restrictions
- Plugged filters
- Weak fuel pumps
- Transmission pressure spikes

"Delta Zero" monitors fuel pressure drop caused by faulty check valves.

Displays readings in BAR for checking European specs.

See Scope/Meter accessories for temp probes.

Permits comparison of ABS brake pressures at each wheel.



### 3490

Deluxe digital pressure/temperature analyzer with four pressure input receptacles and protective boot. Set includes (500 psi) transducer, 12' cable, 8-1/2" hose, bead-type temperature probe, assorted fittings, plastic storage case, instruction manual.



### 3492

Heavy-duty digital pressure/temperature analyzer with four pressure input receptacles and protective boot. Set includes: No. 3491-02 (5,000 psi) transducer, No. 3491-13 20' cable, No. 3500-05 bead-type temperature probe, assorted fittings, No. 3491-plastic storage case, instruction manual.



#### Accessory:

**3491-01**  
500 psi transducer.

**3491-02**  
5,000 psi transducer. Required for ABS and power steering pressure readings.

**3491-03**  
10,000 psi transducer. (Note: For No. 3492 only.)

**3491-11**  
6' cable.

**3491-12**  
12' cable.

**3491-13**  
20' cable.



## THE JUDGE—ROTATING ELECTRICAL ALTERNATOR/STARTER BENCH TESTER

**The Judge will test virtually every alternator and starter precisely, providing accurate results.**

This rotating electrical tester, using advanced computer technology, lets you quickly diagnose alternators and starters with extreme accuracy—validated by component manufacturers. It features an integrated self-test to eliminate bad test leads, thus improving test results and reducing warranty costs to the auto parts retailer. Your tester investment is protected by The Judge— it can be updated to accommodate manufacturer's new starters and alternators, or to change test parameters on existing devices.

Easy-to-use, 10.5" color touchscreen allows intuitive user interface.

Innovative alternator mounting with tensioned idler and a newly designed starter vise.



- **No More Flip Charts**—Integrated "Lester-based" part number database, or by vehicle selection.
- **Faster Set-up**—new improved mounting for alternators and starters.
- **Integrated Self-test Features** provide a lead check application—ensuring bad test leads are eliminated.
- **ETL Certified**—with circuitry specifically designed for reliability and durability.
- **Hooded Test Bay**—allows observation while capturing debris, grease, or oil when testing a well-used component.
- **Full-Color Touch Screen**—easy-to-use interface screen (10.5" display).
- **Ease of Component Mounting**—improved flexibility supports the latest mounting configurations.
- **Easy-to-Use Menus**—screen prompts guide technician through procedures.
- **Expandability**—easy to update and expand as new alternators/starters are developed.
- **Compact Flash Card Port**—update software and add memory as needed.
- **Bar Code Reader**—optional feature for fast and accurate test set-up.
- **Interlock Switch**—prevents operation when door is open.



Easy-to-use screen prompts guide you through procedures quickly and accurately.

### 3643

Judge rotating electrical tester. Includes bench tester, mounting pins, alternator cable, starter cable, solenoid cable, test leads, manuals.

### 3643-01

High speed serial printer.

Hooded test bay with observation window improves safety. Door interlock switch prevents operation when door is open.



## THE JUDGE ROTATING ELECTRICAL TEST CABLE CHART

**3643-21**  
N-01



**3643-36**  
N-16



**3643-22**  
N-02



**3643-37**  
N-17



**3643-23**  
N-03



**3643-38**  
N-18



**3643-24**  
N-04



**3643-39**  
N-19



**3643-25**  
N-05



**3643-40**  
N-20



**3643-26**  
N-06



**3643-41**  
N-21



**3643-27**  
N-07



**3643-42**  
N-22



**3643-28**  
N-08



**3643-43**  
N-23



**3643-29**  
N-09



**3643-44**  
N-24



**3643-30**  
N-10



**3643-45**  
N-25



**3643-31**  
N-11



**3643-46**  
N-26



**3643-32**  
N-12



**3643-47**  
N-27



**3643-33**  
N-13



**3643-48**  
N-28



**3643-34**  
N-14



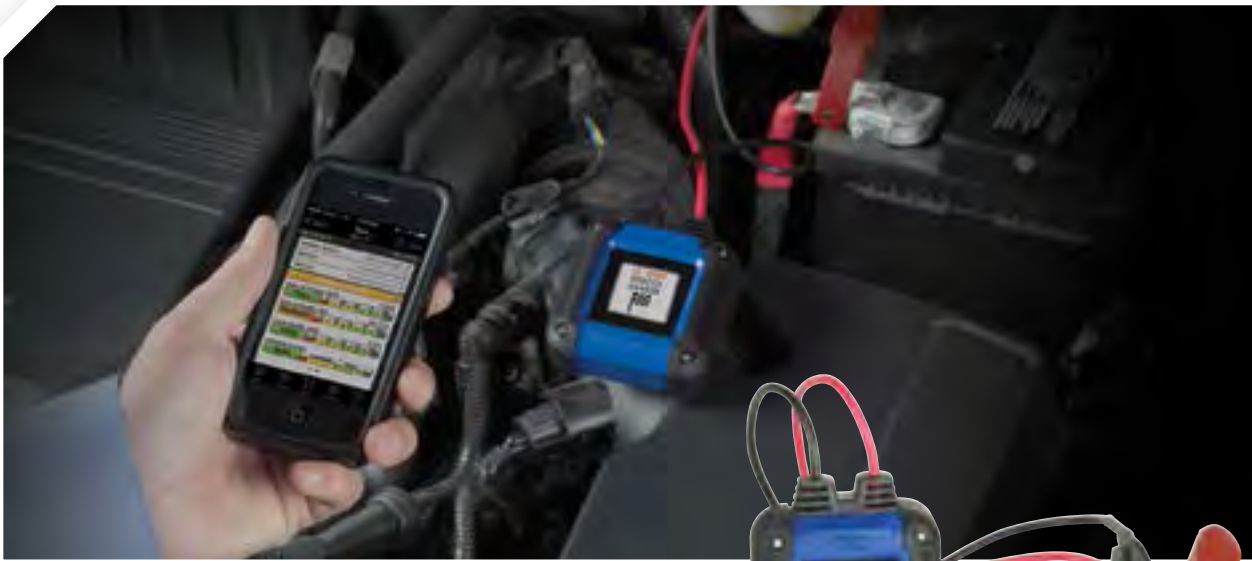
**3643-50**  
N-29



**3643-35**  
N-15



# TEST FASTER WITH THE FIRST CLAMP-AND-READ AUTOMATED DIGITAL BATTERY TESTER



## TEST AUTOMOTIVE 6V, 8V, 12V LEAD ACID BATTERIES (WET, VRLA, AGM)

### 3200 OTC SMART BATTERY TESTER

Test faster with the first market solution to utilize the power of your iOS or Android smart device when paired with the OTC 3200 App.

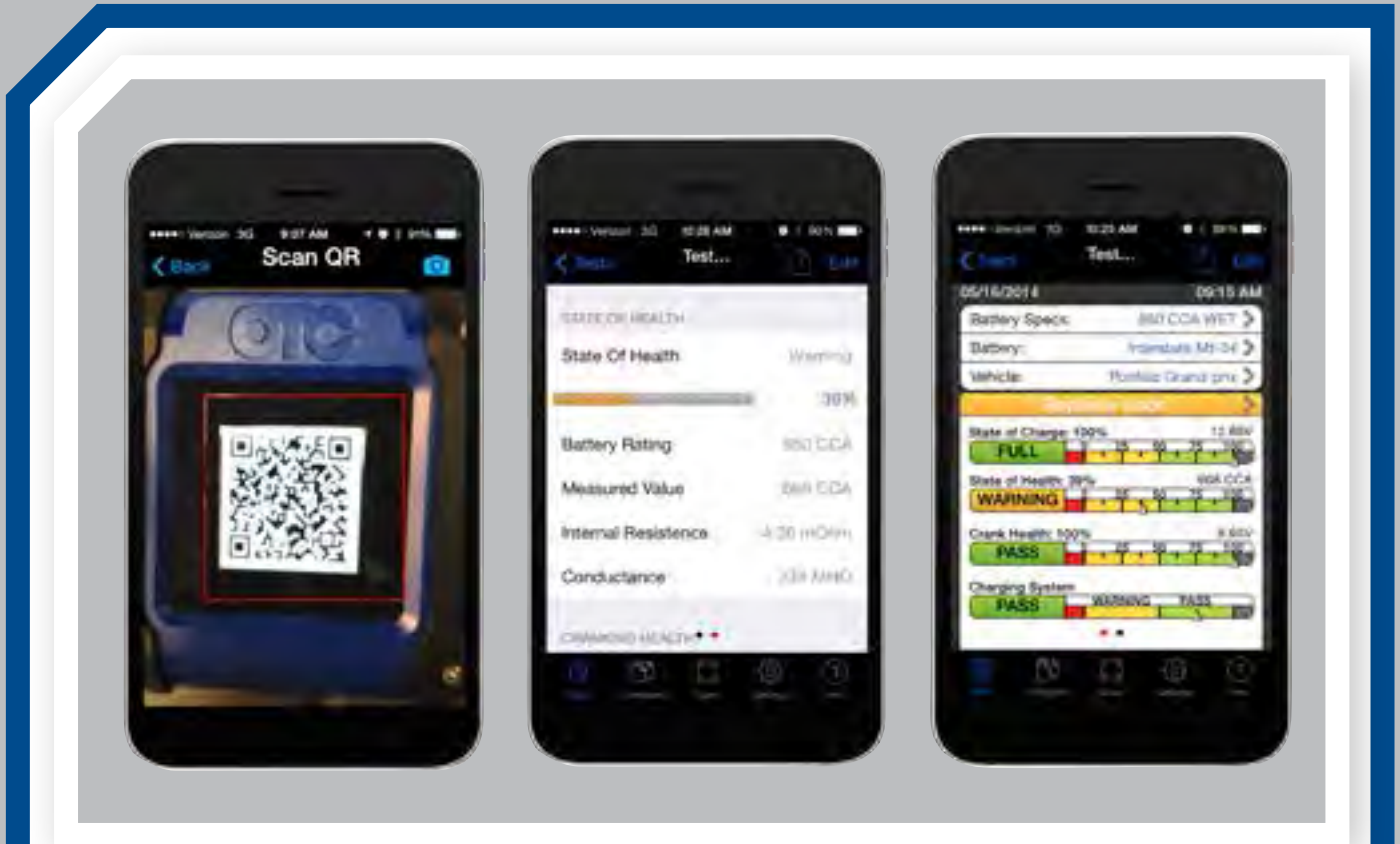
- In 10 seconds or less - get a simple visual diagnosis of a battery, and automatically display battery float voltage, cold cranking amps (Wet and AGM) and charging voltage.
- In 20 seconds or less - with the turn of the key, also test battery cranking health and charging systems.
- In less than 2 minutes - test your battery, cranking health and charging systems. Receive a comprehensive, full color and easy-to-understand test report for your customer on your smart device for easy sharing via on-screen, print or email.

The included 9V battery allows testing of deeply discharged and dead batteries for rapid diagnosis.

### UNLEASH FULL POWER WITH THE OTC 3200 APP

The free OTC 3200 App available in the iTunes and Google Play stores, reads and displays battery data contained on the tool's alternating QR code. Instructions are included and online to help get you started.

- Delivers instant stop-light style "red-yellow-green" coded graphical summary reports that can be displayed, printed, emailed and shared on-screen.
- Automatically saves all test reports on your smart device and to a secure cloud service for future searching or sharing.
- Sync feature sends information to all phones used in your shop so service managers and techs can access reports by vehicle.
- Smart phones and tablets paired with the tester must have 5MP auto-focusing, rear-facing camera to meet full requirements.



## FOR BATTERY TECHNICIANS AND INSTALLERS:

1. The 3200 is fast and simple to use. The tool's test routine is automatic with no buttons to push. Get at-a-glance understanding in seconds.
2. The 3200 test results are easy to explain to customers. The OTC 3200 App automatically generates easy to understand instant color reports.
3. The 3200 is affordable, offering more features versus competitive products priced 3x higher.

## FOR AUTOMOTIVE SHOP OWNERS:

1. The 3200 app can help you sell more batteries, offering a transparent and objective way to show customers their vehicle battery health.
2. When techs use the 3200 app, the data from every test can be used to understand and monitor testing and sales activity.
3. The 3200 drives customer satisfaction, retention and conversion. Battery tests are easily emailed to customers and also linked to customers' work orders and vehicles. You can use the data to bring customers back to the shop for periodic testing.

## HOW IT WORKS:

### Use the 3200 device alone:

The 3200 device can be used standalone as an easy and fast service lane tool delivering near-instant, easy-to-read battery information.

## USE THE 3200 DEVICE WITH THE FREE APP:

- Download the 3200 app on your smartphone, register and start the app.
- Attach the 3200 tester device directly to the lead of your battery's posts.
- Make sure to start your engine (you may turn off after 5 seconds) to receive data about the cranking health and charging voltage.
- Enter your desired battery test parameters manually or with optional UPC scan where available and scan the QR code on the tester device.
- Optionally add VIN information with make/model/year manually or via the automated VIN scan function.
- Share your results with customers on-screen, via email or printout with your network printer.

# HEAVY-DUTY BATTERY TESTER BATTERY EQUIPMENT

## SABRE HP

Sabre HP is designed to let you quickly diagnose bad batteries in a discharged state without needing to charge them first. By utilizing a patented OTC micro-load testing method, this tester ensures accurate test results without any interpretation on vehicle battery, starting, and charging systems. Ships with 3' leads.



### Product Features:

- Digital circuitry precisely controls battery test loads to accurately determine battery conditions using OTC micro-load test technology.
- Tests the battery both statically & dynamically with multiple fixed loads.
- Provides the most accurate test results.
- Less susceptible to erroneous results from remote or bad connections, surface charge, and parasitic drains.
- Accurately tests both absorption glass mat (AGM) and flooded lead acid (FLA) batteries.
- Tests vehicle's starting and charging systems with minimal user interaction; automatically applies loads for accurate charging system tests.
- Tests all 6- and 12-volt batteries with a 50–2000 CCA operating range.
- Tests batteries down to 1 volt state of charge.
- Temperature and low charge compensation.
- Detects bad cells.
- Scales: CCA, CA, AHR, MCA, JIS, DIN.
- 4 x 20 backlit display shows CCAs, voltage, and good/bad status.
- Over-molded enclosure with soft-touch keys.
- Built-in infrared printer interface for remote printing (printer optional).
- Flash upgradeable memory in field.
- Removable/auto-sensing leads (optional 10' leads available).
- Printout has date/time stamp and user definable header and footer.
- Optional amp clamps for current drain tests and starting/charging measurements—the only hand-held battery tester with this feature.
- Reverse polarity protection.
- Hard carrying case.
- 3-year warranty.

### 3167 – SABRE HP

Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, and molded-plastic carrying case.



3167

### 3168 – SABRE HP Deluxe Kit

Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, infrared wireless printer, and molded-plastic carrying case.



3168

### Accessories:

#### 3169 – Printer

Infrared wireless printer for use with No. 3167 (included with No. 3168).

#### 3167-01 – 3' test leads.

#### 3172 – 10' test leads.

## SABRE HEAVY-DUTY BATTERY & ELECTRICAL SYSTEM DIAGNOSTIC TESTER

- Heavy-duty for 24-volt battery and electrical systems.
- Diagnoses battery packs in series, parallel, or series/parallel.
- Tests AGM/gel-cell batteries.

HIGHEST CCA capacity ranges (50–4000 CCA – 24V).

LARGE DISPLAY for less scrolling, more detailed instructions. It's also backlit for all light conditions.

INDUSTRY FIRST amp-clamp connection ports for live amperage readings using optional external amp-clamp.

15 FT. Cable to perform tests from the cab of the vehicle.

FIELD UPDATEABLE to accommodate new battery types, system updates, feature additions.

### Battery Testing

- Tests the following battery pack configurations:
  - One battery (6V or 12V).
  - Two batteries in series (24V); 2, 3, or 4 batteries in parallel (12V).
  - Two banks in parallel, each bank having 2 batteries in series (24V).
- Uses pack configuration in algorithm design.
- Step-by-step user instructions for easy test completion.
- Tester-applied loads used on all pack combinations.

### Electrical System Testing

- 12V and 24V charging/starting system tests.
- 12V and 24V diode tests.
- Amp-clamps available (not included) for starting/charging and current draw tests.

### Product Features:

- Amp-Clamp Connection – allows current drain tests and starting/charging analysis.
- Tests Both FLA (flooded lead acid) and AGM (absorbed glass mat) battery types.
- Scales – CCA, CA, AHR, MCA, JIS, DIN
- User Definable – print header and footer.
- Removable Test Cables – easily field replaceable.
- PC Interface Port – allows for field updateable software.
- IR Compatible – allows optional infrared wireless printer.
- Readout Display – backlit for low light conditions, easy to view data in direct sunlight (4 x 20 character display).
- Security Cable Connection – protects against stolen or dropped units.
- Over-molded Surround with Soft-touch Keys – ruggedly built, easy to use, even with gloves.

### 3167-HD – Sabre HD deluxe kit

Includes 24-volt heavy-duty battery tester, 15' test leads, instruction manual, molded-plastic carrying case.

### 3168-HD – Sabre HD deluxe kit with printer

Same as No. 3167-HD above, but also includes an infrared wireless printer.

### Accessories:

#### 3172-15 – 15' lead set.

#### 3169 – Infrared wireless printer.



3168-HD

**Battery Charging/Starting System Professional Analyzer Kits**

Made for the professional technician, No. 3185 tests batteries and starting/charging systems faster than ever before. The BCS system analyzer has an operating range of 50–2000 CCAs and is able to store data in memory or remotely print out the results using an infrared printer interface. It also measures voltage, and tests starting and charging systems at the push of a button.

**Product Features:**

- Quick 1-second initial results.
- Tests charging and starting systems 50–2000 CCA range accurate to 5 CCAs.
- Tests 6V and 12V batteries.
- Temperature and low charge compensation.
- Detects and identifies loose leads.
- Supports CCA, IEC, EN, BCI, and DIN scales.
- 4-line, 20-character LCD display shows CCAs, voltage, and good/bad status.
- Displays results in seven languages: English, French, Spanish, German, Italian, Dutch, Swedish.
- Built-in infrared printer interface for remote printing.
- Detachable cable leads.

**3184**

BCS system analyzer kit. Includes BCS system analyzer, a 12' extension cable for in-cab testing, two voltmeter probes, battery side- and threaded-post adapters, detachable leads, 9-volt battery, soft-sided carrying case.

**3185**

BCS system analyzer kit. Same as No. 3184, but also includes an infrared printer.

**3183**

**Digital Battery Tester**

Speed. Accuracy. Reliability. These are the cornerstones behind the technology in our digital battery testers. No. 3183 tests 12-volt batteries (125–1400 CCAs) and analyzes by measuring multiple parameters within the battery to deliver accurate results. A live voltmeter allows easy starting/charging system testing. Its bright, 4-digit LED display indicates the battery's good/bad status, voltage, and available CCAs. It even compensates for cold temperatures.

**Product Features:**

- Quick 1-second initial results.
- 125–1400 CCA range.
- Analyze starting/charging system voltages.
- Tests 12V batteries.
- Temperature and low charge compensation.
- Detects and identifies loose leads.
- Detects bad cells.
- Surface charge warning.
- Measures multiple international units: CCA, IEC, DIN, BCI, and EN.
- 4-digit LED display shows good/bad status, available CCAs, and voltage.
- Includes digital battery tester. Includes digital battery tester and soft-sided carrying case.



**3180**

**100-Amp Battery Load Tester**

Tests batteries on or off the car in just 10 seconds. Convenient, portable size and easy-to-read scales.

**Product Features:**

- Heavy-duty, copper-plated clamps.
- 100 amp load capacity.
- 0–16 volt range.
- Load safety switch prevents arcing.
- Heavy-duty, chrome-plated, ventilated steel case.
- Works on both 6V and 12V batteries.
- Ceramic insulators.
- Determines state-of-charge, cranking, and charging volts.
- Determines good/bad status.
- Extra-large display with zero adjust.



**3181**

**130-Amp Heavy-Duty Battery Load Tester**

Applying an industry-leading 130-amp load, this ergonomically designed, heavy-duty battery tester provides accurate, reliable test results in just 10 seconds. It includes uniquely designed clamps for a positive grip on top- and side-post batteries and an extra-large, easy-to-read display.

**Product Features:**

- 130-amp load capacity for accurate results.
- 0–16 volt range.
- Uniquely designed clamps for both top- and side-post batteries.
- Extra-large display with zero adjust.
- Works on both 6V and 12V batteries.
- Side tabs for on-tool clamp storage.
- Back brackets for tool storage on wall or toolbox.



**3182**

**130-Amp Digital Battery Load Tester**

Produce more accurate results with this 130-amp digital battery load tester. The compact, lightweight design is rugged enough for everyday testing of 6- & 12-volt batteries.

**Product Features:**

- Large, easy-to-read display.
- Side-clamp mount.
- Comfortable, easy-to-grip, ergonomic handle.
- Alternator test lead.
- Ripple detection light.
- 0–16 volt range.
- Dual jaw load clamp design.
- State of charge.
- Battery load test.
- Starter and charging system test.
- Alternator ripple test.
- 3182 Digital battery tester. Includes 130-amp digital battery tester and test leads.



**3220**

**3220CD**

**Battery Diagnostic Manual**

Gives essential information for battery service in one convenient manual. Saves valuable time by providing information in a complete manual rather than having to go to multiple locations for information.

**Provides the following information in one manual –**

- Battery access and service locations
- Battery disconnection precautions
- Power windows, locks and sunroof programming procedures
- Convenience accessory programming procedures
- Supplemental restraint and ABS system precautions
- Engine and body control system resetting
- Available in print or CD



**3673**

**Diesel Glow Plug Tester**

Glow Plug Tester provides fault detection thru LED's for a quick analysis; Short Circuit, Over Current, Normal Operation, Open Circuit/Under Current.

- Glow Plug Tester allows for testing without removing glow plug from engine.
- Powers the glow plug to test the plug in it's operating state.
- Much more accurate test than a cold resistance test, which can miss short circuits.
- Tester uses a current measurement to accurately determine proper operation and check for short circuits.



**3674**

**Diesel Fuel Pressure Tester**

Simple one wire connectivity to the fuel pressure sensor signal wire. Designed for diesel engines that have a fuel pressure sensor reading used by vehicle computer.

- Displays pressure in PSI or BAR.
- Range 0-22,000 PSI (0-1500 BAR).
- Read diesel fuel pressure in vehicle.
- No fittings required.
- Readings alternate between current and max pressure.



# BATTERY / ELECTRICAL SYSTEMS BATTERY EQUIPMENT

## QUICK STARTER TEST ...TESTS STARTER IN SECONDS WITH NO NEED TO DISABLE IGNITION.

MinuteMan Plus saves you hours when you're testing batteries, starters, alternators, regulators, and charging systems.

### Features:

- Special AGM test options for accurately diagnosing AGM and spiral (six-pack style) batteries.
- Can switch between English and Spanish languages with a menu-based selection.

### Battery Testing

The way it has been: Your customer brings in a dead battery and you have to charge it up to test it. Then, if it's a keeper, you have to recharge it. Hardly efficient use of your valuable time. With MinuteMan Plus on the job, you can test discharged batteries down to as low as two volts, and it won't drain a charged battery you are testing. You won't waste time charging bad batteries.

Works on all 12-volt automotive-type batteries with cold cranking amp ratings of 100–1500.

This includes batteries found in motor-vehicle, marine, agricultural, forestry, and industrial applications. The tester operates from either 110 volts AC or its own internal, rechargeable 6-volt battery. Features self-calibration, an internal battery check, and an automatic shut-down to reduce power consumption.

On certain competitive, carbon-pile load battery testers, the technician must interpret the readings, then make the electrical system diagnosis. With MinuteMan Plus, all you have to do is read simple test results on the LCD display.

### Starter Testing

The MinuteMan Plus display shows cranking volts and amps, and indicates either "Good Starter" or "Bad Starter." Excessive starter current draw can indicate a defective starter. Excessive engine drag, due to tight or damaged bearings or piston drag, can also cause an abnormally high starter draw.

### Charging System Testing

Checks the charging system at high rpms and at idle, and stores the data. Results show regulator volts, peak amps, and a diode condition. MinuteMan Plus utilizes waveform analysis when testing alternator diodes, which provides more accuracy than the commonly used "ripple voltage" tests.

### Battery Tachometer Capability

Unique, patented direct-from-battery technology gives you tachometer readings without having to make complicated connections to the ignition system. Provides battery-sensing measurements to 4,000 rpm, with 1 rpm resolution.

**3130AGM** – MinuteMan Plus multi-application electrical system tester. Includes connector cables, internal rechargeable battery, battery charger, and instructions. Wt., 27 lbs.

**3131AGM** – Same as No. 3130AGM, but also includes roll-around cart with two additional shelves for other equipment. Wt., 53 lbs.

### Accessories:

**3125** – MinuteMan Tester Cart

**3135** – Printer kit.

**3130-01** – Amp Probe Assembly.

**3130-003** – Voltage Harness



3130-01 Amp  
Probe Assembly

3130-003  
Amp Probe  
Assembly



3131AGM



3125



3135

3130-01

## ONESTEP™ BATTERY ANALYZER AND CHARGER

The OneStep is a bench-top battery tester and charger that provides extremely accurate battery diagnosis. The combination of SABRE heavy load, dynamic charge, and accuracy test technologies yields unparalleled accuracy, and the addition of charge acceptance into the test algorithms further increases the level of accuracy. Precise high-output charging can test, fully charge, and return a battery to service in under 45 minutes. It also provides analysis of a battery's charge acceptance by testing the battery again following the charge cycle. It is specifically designed for all forms of the newer AGM (including spiral wound types), gel cell and deep cycle batteries, as well as conventional FLA (lead-acid) batteries.

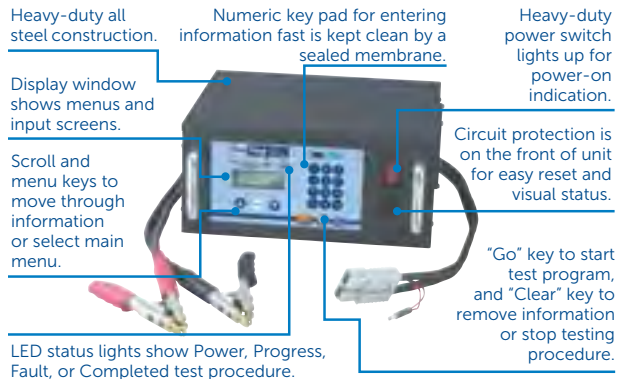
### Product Features:

OneStep gives the user one piece of equipment to completely test and charge batteries with the highest accuracy.

- Precise High-output Charging—returns charged batteries to service in less than 45 min.
- Compatible with AGM, FLA, Gel Cell, and Spiral-Wound batteries.
- Extremely accurate testing—combination of Heavy-Load, Dynamic Charge and Accuracy Test Technology.
- LED Status Lights—quickly identify test status.
- Built Rugged—all-steel construction with solid copper transformer.
- Compact Flash Card Port—updates software and add memory as needed.
- Low Cost of Ownership—designed with internal overload protections for high volume use; field replaceable cables.
- Precise Output Charging—computerized control of charging voltage and current.
- Easy-to-Use Menus—screen prompts guide user through procedures.
- Expandability—easy-to-update and expand as new battery technologies are released.
- Bar Code Reader—optional feature for fast and accurate entry of battery specifications.
- Battery Warranty Output Code—allows easy warranty administration analysis.

### Specifications:

- Battery Test Range: 12 volt, 150 – 1500 CCA
- Battery Type: Works on all constructions of 12-volt lead-acid, gel-cell, absorbed glass mat (AGM), wet cell, spiral-wound batteries.
- Operating Temperature Range: 4° F – 158° F ambient air temperature.
- Humidity: 0 – 85%
- Voltage Input: 115 volt 20 amp dedicated. Optional 15 amp input available.



**3641** – OneStep battery analyzer/charger, 20-amp input. Wt., 68 lbs.

**3640** – OneStep battery analyzer/charger, 15-amp input. Wt., 68 lbs.

### Accessories:

**3136** – Serial printer kit.

Utilizes switching technology which helps restore the batteries that are slightly sulfated.

Switches to float mode after the battery is completely charged.

Application: Lead Acid (FLA, AGM, GEL).



**3176**

**Smart Battery Charger and Maintainer**

The Smart Battery charger and Maintainer utilizes a patented 5-Stage Automatic charging system designed to charge a battery efficiently while prolonging the life of the battery. The automatic power switching gives you the ability to charge your battery to 100% without worrying about damaging the battery. The battery charger/maintainer comes with clamps for jump starts or overnight charging and ring connectors for permanent connection to seasonally used vehicles such as RVs and motorcycles.

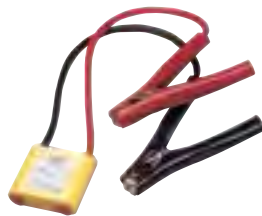
**Product Features:**

- Maintains the battery charge level during vehicle programming
- Charges deep discharged batteries in about 12 hours
- Maintains the battery charge level if the vehicle or the battery needs to be stored for an extended period of time.
- Switches to float mode after the battery is completely charged
- Utilizes switching technology which helps restore the batteries that are slightly sulfated
- Easy-to-read LED lights to show the status of charging and battery condition
- Micro processor controlled pulse charger
- LED indicator lights : Red & Green
- Input: 110V AC
- Application: Lead Acid (FLA, AGM, GEL)
- Output: 5Amp /12Vdc
- Auto polarity, Spark free & Overcharging Protection
- IP65 waterproof, Dust Splash/Rain Protection
- Switches automatically to float mode

**3386**

**Antizap Auto Surge Protector**

- Connects to battery, and becomes part of vehicle's electrical circuit. If a voltage spike is detected, the Antizap automatically clips it to a safe level to prevent damage to sensitive electronic systems.
- Protects fuel gauge, ABS brakes, radios, tape and CD players, car alarms, SRS air bags, LED instrumentation, EFI, fuel, and climate control systems. Protects against welding (Arc, Mig, and TIG).



Saves the on-board computer memory while the vehicle battery is disconnected.

**3177A**

**Professional Memory Saver**

An effective solution for saving vehicle data. Saves the vehicles on board diagnostic memory and other on-board memory components such as anti-theft radios, digital clocks, radio presets, seats, mirrors, comfort settings, etc. when the vehicles battery is removed or disconnected.

**Product Features:**

- OBD II cable for fast connection to the vehicle
- Cigarette lighter adapter for use with vehicles that do not have an OBD II connector
- LED lights confirm circuit between the cigarette lighter/power outlet and the vehicle's battery with the ignition on or off
- State of charge indicator identifies when the memory saver needs to be plugged in for recharge
- Resettable fuse protects against excessive current draw through either the OBD II connector or the vehicles cigarette lighter
- High capacity, rechargeable sealed lead acid battery for extended service between charges
- Power on/off switch
- One, complete, durable compact unit

**3177A includes:** Memory saver power station with rechargeable high capacity 12V battery, 12V AC/DC charger, OBD II connector, Cigarette/power plug and cord.



**3665**

**Phototach**

- Phototach can be used as a contact as well as a non-contact tachometer.
- Four styles of contact adapter tips clip easily to the top of the phototach.
- Infrared technology makes the phototach accurate, convenient, and easy to use.
- Infrared beam not affected by ambient light.
- Non-contact design results in (zero) torque loss for true precision.
- Phototach is equipped with a laser pointer for accurate targeting.
- Reflective tape placed on a revolving object can be measured at distances from 2" to 20".
- Wide measuring range and high resolution, 2.5 to 99,999 rpm with a large 5-digit display, autoranging, min/max memory storage, and low-battery indicator.





## 3630

### Battery Powered Continuity Tester

Designed to test any type of non-live electrical circuit. Track down broken wires, bad grounds, and blown fuses quickly.

#### Product Features:

- Comes with AAA alkaline battery.
- Ergonomic, slim designed clear handle.
- 12', red coil cord.
- Low voltage replaceable bulb.
- Molded strain relief.
- Heavy-duty stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



## 3633

### Mini-coil Cord Circuit Tester

Small handle with needlepoint stainless steel probe allows easy back probing and piercing. Special threaded probe comes with screw on alligator clip for additional versatility. Useful in testing electrical circuits and locating shorts, grounds, and open circuits.

#### Product Features:

- 12', heavy-duty, red coil, cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, high intensity/slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



## 3639

### Extra Long, Heavy-Duty Circuit Tester

Long 7" probe shank allows access to difficult to reach areas for testing electrical circuits and locating shorts, grounds, and open circuits.

#### Product Features:

- 12-foot, heavy-duty, red coil cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



## 3631

### Heavy-duty Logic Probe Tester

Multi-functional design allows testing range of 3–26 volts. Bright red and green LEDs interpret voltage signals such as ground, power, and frequency. Tests fuel injectors, solenoids, presence of serial data, and tach reference signals. Output tests on MAF, Cam, Crank, Hall Effect VRS sensors and more. High impedance input compatible with computer circuits and sensors.

#### Product Features:

- Air bag safe.
- 12', heavy-duty, twin clip, red coil cord lead.
- Checks 6-, 12-, and 24-volt systems.
- Ergonomic, slim designed clear handle.
- Positive contact molded strain relief.
- Heavy-duty stainless steel probe with insulated shaft.



## 3634

### Heavy-Duty, Straight Cord Circuit Tester

Designed for testing electrical circuits and locating shorts, grounds, and open circuits.

#### Product Features:

- 5-foot heavy-duty cord.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



## 3644

### 12-Pack Display Assortment

Stand-up display of 12 circuit testers contains an assortment of all 6 circuit testers in a point-of-purchase display.

#### Contents include:

- 3630 – Battery powered continuity tester - (1)
- 3631 – Heavy-duty logic probe tester - (1)
- 3633 – Mini-coil cord circuit testers - (3)
- 3634 – Straight cord circuit testers - (2)
- 3636 – Coil cord circuit testers - (3)
- 3639 – Extra long circuit tester - (1)
- 3642 – 12V–36V truck circuit tester - (1)



## 3642

### 12V–24V Truck Circuit Tester

#### Product Features:

- Works on 12–24 volt systems.
- Features 7" stainless steel probe.
- 24' coil cord.
- Extra large clamp.



## 3636

### Heavy-Duty, Coil Cord Circuit Tester

Designed for testing electrical circuits and locating shorts, grounds, and open circuits.

#### Product Features:

- 12-foot, heavy-duty, red coil cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Insulated shaft.
- Heavy-duty clip with positive soldered connection.

### Replacement Bulbs

#### 3630-10

10 pack of replacement bulbs for No. 3630.

#### 3633-10

10 pack of replacement bulbs for Nos. 3633 – 3639.

#### 3642-10

10 pack of replacement bulbs for No. 3642.





**OTC Test Leads**

Constructed from high quality polyurethane, these high visibility coil cord test leads have superior memory retention and resistance to grease and oil, making them a perfect compliment to any technician's arsenal of test equipment. Test leads come with a variety of interchangeable tips suited for just the right application.

**3902**

Twin 5' jumper leads. High visibility black and red leads stretch to over 5 feet in length.

**3903**

24' jumper leads. From headlight to taillight, this extra long test lead stretches to over 24 feet in length.

**3904**

Twin 5' multimeter lead set. Expand the usefulness of any standard multimeter. This set includes one black and one red test lead, 2 multimeter probes, 2 banana plugs, and 4 alligator clips.

**3905**

Twin 5' multimeter/piercing jumper lead set. Pierce small gauge wires with this complete jumper lead set. This set includes one black and one red test lead, 2 multimeter probes, 2 banana plugs, 2 bed-of-nails, and 2 alligator clips.

**3906**

Twin 5' piercing test lead set. With 2 banana plugs and 2 bed-of-nails, this test lead set has just the right combination of tips for most testing applications.



**3650**

**Heavy-Duty, Remote Starter Switch**

Allows one person to start and crank engine while under the hood or from either side of the vehicle.

**Product Features:**

- With convenient hot circuit indicator, red ready light glows when starter switch is connected to a hot circuit; light goes off when switch is depressed.
- High current, heavy-duty push button switch ensures reliable operation and long service life.
- 5' leads made from heavy-duty, oil and grease resistant, 12-gauge wire.
- High current clips with protective boots open to an extra wide 5/8" for ease of hook-up.
- Soft, non-slip rubber grip.



**3385**

**Universal Gauge and Component Tester**

This is the fast way to pinpoint problems in fuel, oil, temperature, and vacuum electrical gauges. This gauge and component tester includes a test light and switch to also test instrument voltage regulators on various vehicles. Plus, you can use it as an instrument gauge tester by attaching the alligator clips to sensors and wiring harnesses on a variety of vehicles. Included is an instrument gauge application data sheet listing resistance set points for GM, Ford, Chrysler, Toyota, Nissan, VW, Mack, Navistar, and John Deere.



**Ignition System Quick Test Kit**

This kit enables technicians to do power-balance tests and diagnose problems on standard, electronic, or distributorless ignition systems. Comes with brass adapters to fit all auto coils, test probes and leads, spark gap tester, and step-by-step instructions that lead technicians through the power-balance test.

- Performs power-balance in less than 5 minutes on standard, electronic, or distributorless ignition systems.
- Spark gap tester checks for adequate KV voltages on electronic ignition systems, providing instant diagnosis of problems—whether a faulty coil, ignition wire, or spark plug.
- Ideal for checking spark in no-start condition, instead of wasting time trying to "ground out your screwdriver."
- Step-by-step instructions lead technician through tests to check if ignition has a bad ground all the way to defective coils.

**3589** – Ignition system quick test kit.

**3579** – Ignition system adapters, set of six.

**6589**

**Electronic ignition spark tester**

Check for spark on gasoline engines used in import and domestic cars and trucks, plus small engines.



**3569**

**Terminal Test Kit with Circuit Tester (Standard Adapters)**

- 14-piece standard terminal adapter set for the popular Packard Weather Pack, Metri-Pack, and Micro-Pack style connectors. External-internal versions of adapter styles.
- Circuit tester with bulb for 6-12-24 volt systems with interchangeable probes for use with terminal test adapters. Heavy-duty coil cord extends to 12 ft.
- Terminal adapters have flexible joints that eliminate damaged connector terminals that result from testing with a standard test probe.
- Complete kit in plastic storage case.



**3587**

**Terminal Test Kit (Standard Adapters)**

- Excellent accessory when testing with a scope or meter.
- 32-piece standard terminal adapter set for the popular Packard Weather Pack, Metri-Pack, and Micro-Pack style connectors. Multiple external-internal versions of adapter styles.
- Terminal adapters have flexible joints that eliminate damaged connector terminals that result from testing with a standard test probe.
- Set of 4 patch cords (4 ft.) included for use on multiple terminal connectors, for use with terminal adapters.
- Complete kit in plastic storage case.



**3590**

**Electronic Stethoscope**

- Quickly pinpoints noise and location of bad bearings, bushings, dirty fuel injectors, wind/air leaks, valves, and lifters.
- Flexible shaft reaches tight areas.
- Ultra-sensitive mic and amplifier provide a full range of sounds needed by the professional.
- 7 sound-level control settings; 60 dB to 120 dB.



# Bosch Diagnostics

Unmatched Coverage and Repair



**BOSCH**  
Invented for life

# ESI[truck] HD Diagnostics

## Unmatched Coverage and Repair Information at the truck



Bluetooth wireless capability.

### Increase Shop Efficiency

- ▶ Code to fix at the truck
  - Trouble shooting information in the tool
- ▶ Tech stays at the vehicle
- ▶ Repair Info at the truck
  - Wiring Diagrams
  - Component Pictures & Locations
  - Test Procedures & Descriptions
  - DTC Look-up
- ▶ Automatic Vehicle ID

### Single, Intuitive Interface

- ▶ Work on all trucks with a common scan tool
- ▶ Intuitive, easy to use

### Functions Mechanics Need

- ▶ Read & clear fault codes
- ▶ Cylinder cut-out
- ▶ Cylinder compression/balance
- ▶ Injector actuations
- ▶ Key component actuations
- ▶ Key system tests

### Works with Other Software

- ▶ RP1210 VCI
- ▶ Compatible with industry software including most OEM's



Code	Description	Severity	Resettable	Confirmed
P0128	Engine Coolant Temperature Below Normal	2	Yes	Yes
P0135	Oxygen Sensor Heater Control Circuit (Bank 1 Sensor 1)	2	Yes	Yes
P0171	System Too Lean (Bank 1)	2	Yes	Yes
P0172	System Too Rich (Bank 1)	2	Yes	Yes
P0300	Random/multiple Cylinder Misfire Detected	3	Yes	Yes
P0301	Cylinder 1 Misfire Detected	3	Yes	Yes
P0302	Cylinder 2 Misfire Detected	3	Yes	Yes
P0303	Cylinder 3 Misfire Detected	3	Yes	Yes
P0304	Cylinder 4 Misfire Detected	3	Yes	Yes

## Best Aftermarket Coverage

- ▶ Truck Brands  
Freightliner, International, Kenworth, Mack, Volvo, Peterbilt, Sterling, Western Star
- ▶ Engine Brands  
Cummins, Caterpillar, Detroit Diesel-MBE, Volvo Mack, Navistar, PACCAR, Perkins, Deutz, MTU
- ▶ Brake Systems
- ▶ Transmissions
- ▶ Trailer ABS
- ▶ In-Depth Heavy Duty, Medium Duty
- ▶ Light Duty basic



**3824**

### Bosch ESI[truck]

- Includes ruggedized 10" tablet
- RP1210 Data Link Adapter
- 6 Pin, 9 Pin, and 16 Pin Connectors
- ESI[truck] Diagnostics Software
- External DVD Drive
- One year warranty



**3824BSC**

### Bosch ESI[truck]

- RP1210 Data Link Adapter
- 6 Pin, 9 Pin, and 16 Pin Connectors
- ESI[truck] Diagnostics Software
- One year warranty



## Accessories



**3824-01**  
9-Pin Adapter cable



**3824-02**  
6-Pin Adapter cable



**3824-03**  
16-Pin/OBD cable



**3824-04**  
Multipin cable



**3824-05**  
USB Cable



**3824-06**  
Trailer Adapter

# Mastertech VCI

## Scan Tool Diagnostic

### Essential Product. New Configuration. Impressive Price.

The Bosch Mastertech VCI is now available in a more cost-effective configuration that offers validated flashing that meets both SAE J2534 and ISO 22900 industry standards. It also is capable of OEM-level diagnostics so it is like having multiple OEM tools in one.



### Bosch Mastertech VCI provides;

- ▶ **Validated J2534 Flashing** – covers GM, Ford, Chrysler, Honda, Nissan, Mazda, Mitsubishi, Saab, BMW, and more to come in the future. M-VCI is an approved reprogramming device.
- ▶ **Authentic OEM Dealer Level Diagnostics** – compatible with BMW ISTA, Saab GDS 2, GM Tech2Win, GM GDS 2, and more to come in the future. OEM dealer level diagnostic software is purchased separately from vehicle OEM websites.
- ▶ **Optional Aftermarket Diagnostic Software** – Domestic, Asian and European vehicle coverage is available for purchase.
- ▶ **Enhanced High Speed Ford Cylinder Contribution Test<sup>1</sup>** – Enables technicians to quickly diagnose cylinder performance problems on Ford CAN vehicles.

<sup>1</sup> The M-VCI is required to run the application

### Great coverage for all vehicle models using the Mastertech VCI



Laptop



European



Asian



Domestic

**\*Note:** OEM's have specific PC requirements for their application to work properly. Please consult their respective websites for information about PC requirements necessary to properly run OEM Applications prior to use. Vehicle calibration files purchased directly from the OEM.

**F00E901631** Bosch Mastertech VCI, hardware kit- Includes the base Mastertech VCI, DLC cable, WIFI wireless dongle, AC power supply, USB cable and carrying case. Software not included.

### Advantages of M-VCI:

- ▶ Industry-standard SAE J1962 16-pin connector with no special “keys” or adapters required for OBD II vehicles
- ▶ Operates with a Windows PC through either 802.11 wireless, Ethernet or USB connection
- ▶ Fully OBD II compliant, including Controller Area Network (CAN) protocols
- ▶ Includes USB WiFi adapter that provides internet connectivity during vehicle diagnostics



F00E901631

**F00E901632** The Bosch Mastertech VCI Aftermarket Diagnostic Software- Includes the final release of Shop Foremen Pro and ESI 2.0. The 2013 final release software is a one time purchase license (no future updates).

### Advantages of Optional ESI[tronic] 2.0 and Shopforeman Pro Software:

- ▶ Quick module status check of the vehicle network
- ▶ Intuitive system menus to speed diagnostics
- ▶ Pulls OBD II codes with 4 clicks!
- ▶ Wide range of functions such as\*: Auto Brake Bleed Test
  - Bi-directional controls for engine, body and chassis systems
  - Steering Wheel Angle Reset
  - Maintenance Light Reset
  - Electronic Stability Control Test
  - Electronic Throttle Programming
  - Tire Pressure Sensor ID Programming
- ▶ Technical support for tester operations via technical hotline
- ▶ Vehicle health test that is easy to use
- ▶ Includes the following vehicle coverage:
  - European Vehicle Coverage- Audi, BMW, Mercedes-Benz, Mini, Volvo, Volkswagen, Smart
  - Domestic Vehicle Coverage- Chrysler, Ford, General Motors
  - Asian Vehicle Coverage-Toyota, Honda, Nissan, Hyundai, Kia, Lexus, Scion, Acura, Infiniti



F00E901632

\*Depending on vehicle/system

**3893MVCI** Total Shop Solution: 3893MVCI OTC Encore + Bosch Mastertech VCI. For details on the OTC Encore see page 8.

# Bosch Diagnostics

## Authentic OEM Diagnostics to Aftermarket with Ford VCM II

### The Ford Vehicle Communication Module II (VCM II)

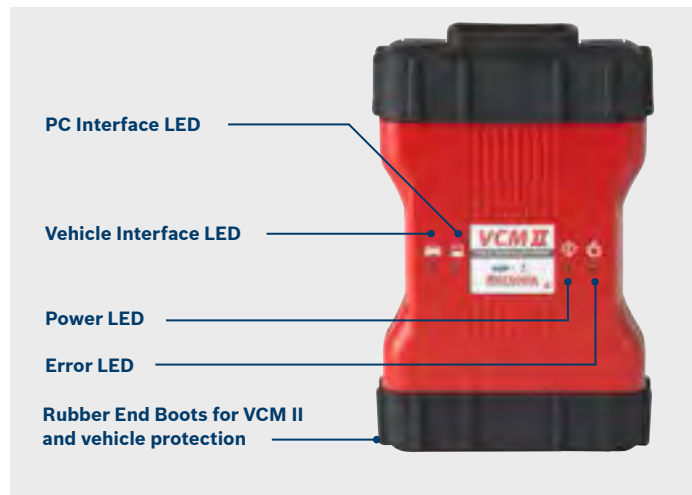
The Ford VCM II is the authentic Ford OEM diagnostics scan tool that works with the Ford IDS diagnostics application running on a PC to diagnose Ford, Lincoln and Mercury vehicles

#### The VCM II offers:

- ▶ Authentic OEM diagnostics for Ford, Lincoln and Mercury Vehicles.
- ▶ Customer Flight Recorder (CFR) functionality with an optional pendant cable.
- ▶ Industry standardized J1962 Data Link Connector (DLC) and USB cables.
- ▶ Four LED indicators and signaling device providing technician with continuous visual as well as audible operating status.
- ▶ Enhanced 802.11 wireless that minimizes dependencies on service department wireless capability infrastructure.
- ▶ Improved durability.
- ▶ SmartPower Management system to protect the VCM II in extreme environments.

#### Integration with IDS:

- ▶ New wireless software integrated with IDS installation package.
- ▶ Wireless functionality preferred for all IDS functions including module reprogramming. USB wired connections are only required to update the VCM II loaded code and to set up the VCM II to function as a Customer Flight Recorder.
- ▶ CFR option added to provide legacy and future vehicle coverage.



#### **F00E9016297HH**

Includes VCM II, VCM to Laptop cable, USB wireless cards, and DLC cable

\*software license sold separately



#### **F00E9016307HH**

Includes VCM II, VCM to Laptop cable, USB wireless cards, DLC cable and CFR kit.

\*software license sold separately

# Bosch Diagnostics

## Authentic OEM Diagnostics to Aftermarket with GM (MDI)

### GM Multiple Diagnostic Interface (MDI) Programming Solution Bundle



- ▶ The GM MDI Unit is a compact communication module that manages the transfer of data between a vehicle's onboard ECU network and a PC.
- ▶ The GM MDI Programming Solution Bundle includes a one year subscription to the GM Technical Information System (TiS) SPS – a \$995 value!
- ▶ With your included TiS SPS subscription you can always access the most current General Motors vehicle control module calibrations.
- ▶ The GM MDI Unit has an easy to grip, comfortable, rugged enclosure.
- ▶ The GM MDI Programming Solution Bundle allows the user to perform Pass-Thru programming procedures using software running on a laptop or desktop PC.
- ▶ Using the GM MDI Unit for programming frees up your Tech 2 for diagnostics.
- ▶ User can perform Data transfer and Electronic Control Unit (ECU) reprogramming.
- ▶ The GM MDI Unit has shop network communications (LAN and WLAN) capabilities.
- ▶ Future expandability, including diagnostic applications.
- ▶ GM MDI is also available without TiS SPS subscription.



#### GM Software Subscriptions

To enable Independent Service Centers to be competitive in the automotive aftermarket, ACDelco offers GM Technical Information System (TiS) subscriptions via the Web.

#### GM MDI Software Subscription (included in bundle)

The GM MDI unit requires the GM Technical Information System (TiS) SPS subscription to perform vehicle programming.



#### **FOOK10832235E** GM MDI

Includes the GM MDI, Ethernet and USB cables, cable keeper, power adapter, data link cable, MDI users guide (CD), and four AAA batteries.



#### **169900012935E** CANdi Module

Includes the CAN diagnostic interface module and instruction sheet. **IMPORTANT:** In order for the CANdi module to work, you must have a 32 MB PCMCIA card with at least software version 24.001 in your Tech 2.



# Tech 2

## Scan Diagnostics



### Ideal for vehicle diagnostics.

The Tech 2 has been an essential tool in dealerships worldwide since 1997. Now you can put the same dealer software in your shop. When your business depends on maximum productivity, don't settle for anything less.

With additional OEM purchased software, the Tech 2 can be used to diagnose Izuzu, Saab, and Suzuki vehicles. Contact the OEM dealer for software purchase details.

### Essential Features

- ▶ Authentic General Motors software coverage
  - Model year 1992 to 2009
  - Most vehicles
  - 2010 to Current – Select vehicles not covered by General Motors GDS 2
- ▶ Covers all powertrain, chassis, and body systems
- ▶ Enhanced diagnostics on GMLAN (CAN) vehicles with optional CANDi module
- ▶ Patented bi-directional control testing



### F00E9009777HH Tech 2 Pro Optima

Kits come with pre-loaded General Motors scantest software. Additional TIS 2 Web software must be purchased separately via the ACDelco Tech Connect website.

### What Makes the Tech 2 Different?



Access to all on-board systems



Multiplex network module status



Enhanced GMLAN



Comprehensive OEM-validated bi-directional control testing

# MTS 5200

## Scope/Engine Diagnostic

### Comprehensive Engine Analysis

The MTS 5200 is the single solution to all your engine analysis needs. Now you can have the power of the “big box” analyzers in one portable hand-held tool.



### Modular Design

Build the functions as they are needed to make a full function engine analyzer.

**Start** with a 4-channel oscilloscope and a graphing multimeter.



**Next**, add the ignition upgrade package and get primary and secondary ignition support.

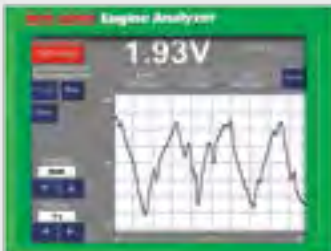


**Then**, add the vacuum, pressure and failed cylinder test package and get a full complement of mechanical tests.

- F00K1085847HH** MTS 5200 Engine Analyzer Technician Efficiency Pro Package with Amp Probes
- F00K1085837HH** MTS 5200 Engine Analyzer Technician Efficiency Package
- F-00K-108-032** MTS 5200 Engine Analyzer Base Kit

### 4 Tools in 1

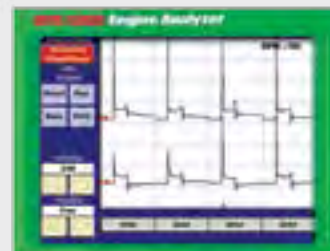
Graphing Multimeter/DVOM



4-channel Oscilloscope



Ignition Analyzer



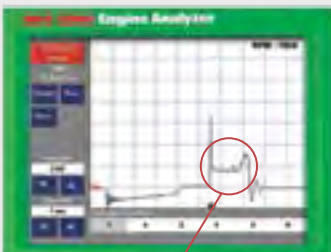
Engine Analyzer



Start with the basic kit and build the MTS 5200 to fit your diagnostic needs.

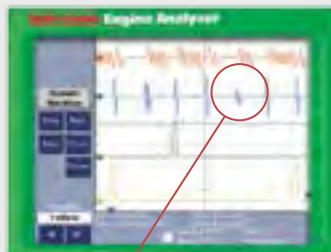
### Complex Problems...Simple Solutions

Coil On Plug



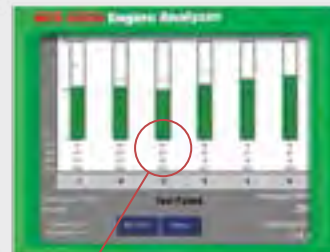
**Good burn time**  
Painless COP diagnosis displays a waveform in three easy steps

Multichannel Pinpoint Test



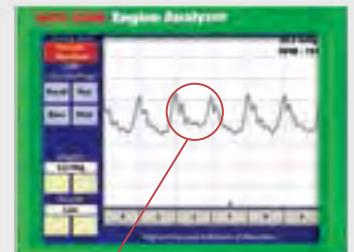
**Faulty crankshaft position sensor**  
Simplified intermittent diagnosis multichannel sensor display

Cranking KV



**Weak coil output**  
Efficient ignition analysis in less than 60 seconds

Vacuum Per Cylinder



**Low vacuum on cylinder #2**  
Comprehensive mechanical testing includes vacuum, pressure and ignition KV

# SMT 300

## Smoke Machine Tester

**The Bosch SMT 300 Smoke Machine Tester is a full featured device which allows today's shop to perform various types of vehicle leak testing.**

The compact design and full complement of accessories makes this an ideal fit for any repair shop needing a workhorse of a smoke tester. It has built in safety features for EVAP testing. Suitable for leak testing of any closed system found on today's vehicles.

### Essential Features:

- ▶ Compact (13" x 12" x 13" tall)
- ▶ Lightweight (19 lbs)
- ▶ Operates off vehicle (12 V) battery
- ▶ Full featured machine with graduated smoke flow control valve, air flow meter, and pressure/vacuum decay gauge
- ▶ Full complement of accessories with storage case
- ▶ Multi-purpose tester designed for leak detection in any low pressure closed system; usable to pinpoint wind and water leaks of passenger and trunk areas
- ▶ OEM approved smoke test technology
- ▶ Designed for safe use in any vehicle; will not damage vehicle components or void any factory warranty
- ▶ Meets SAE standard for safe EVAP testing (2007-01-1235 and 2008-01-0554)
- ▶ Uses UltraTraceUV® dye solution to create Diagnostic Smoke®; the only OEM approved solution
- ▶ Dye deposit is UV light-traceable (light included w/kit)



**F00E90029135E** SMT 300 Smoke Machine Tester Kit

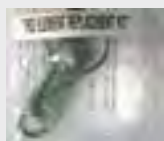
### Replacement parts for kit—Included items

- F00E90034835E** Smoke Solution
- F00E90034935E** Cap Plug Set
- F00E90035035E** Exhaust Cone
- F00E90035135E** Smoke Diffuser
- F00E90035235E** Light and Glasses
- F00E90035335E** EVAP Port Adapter
- F00E90035435E** Schrader Valve Tool
- F00E90036435E** Accessories Case

### Optional Accessories



**F00E90035535E**  
Insert Gas Pack



**F00E90036135E**  
Filter Kit



**F00E900362**  
Universal Neck Adapter



**F00E90036335E**  
BMW-Mini Neck Adapter



**F00E90036535E**  
Preset 100 psi Regulator\*



**F00E90036635E**  
Cylinder Hose\*

\*For use with larger inert gas bottles found in shops.

# Bosch Diagnostics

## Digital Multimeter

**The Bosch MMD 540H Hybrid Multimeter is a CAT safety rated, auto ranging digital multimeter designed for use in diagnostics of electronic circuits.**

Whatever your shop services: automotive, fleet, motorcycle, marine or small engine, the MMD 540H has the capability to keep up with your business.



### The MMD 540H offers:

- ▶ CAT III (1000v) safety rating for hybrid vehicle circuits
- ▶ Peak, Min/Max readings as fast as 1 millisecond
- ▶ Higher amperage test ranges, up to 20 Amps
- ▶ Inductive RPM clamp for conventional and DIS ignition systems
- ▶ Fused diagnostic test leads for safe trouble shooting (up to 20 amps) at the circuit fuse location
- ▶ K-Type thermocouple for quick temperature measurement
- ▶ Large LCD display with bright backlighting and auto shutdown
- ▶ Tri-lingual users manual on CD (English, Spanish, French)
- ▶ Rugged nylon case with handle for efficient storage

### **FO0E9001013CM** MMD 540H Hybrid Multimeter Kit

- ▶ Extra long test leads
- ▶ Inductive RPM clamp
- ▶ Additional fused diagnostic test leads for ATC and Mini fuse types
- ▶ K-type thermocouple
- ▶ 9 volt battery
- ▶ CD based, tri-lingual users guide
- ▶ Nylon storage case with handle



### The FSA 050: Future-proof as a standalone device or as a special accessory

The diagnostics module for testing vehicles with electric and hybrid drive. The hand-held device be linked wirelessly to a PC system.

As an individual solution, the FSA 050 offers insulation and high-voltage testing for electric and hybrid drives.

### Essential Features:

- ▶ More versatility and competence during troubleshooting
- ▶ Cost-effective entry to diagnostics of electric and hybrid vehicles
- ▶ Flexible as a standalone device or as a special accessory



### Equipped for professional diagnostics of electric and hybrid vehicles

- ▶ Hand-held unit with radio connection to Windows operating systems<sup>1</sup>
- ▶ Testing of vehicles with electric and hybrid drive
- ▶ High-voltage tests
- ▶ Insulation tests
- ▶ Multimeter function: Voltage, resistance, capacity, continuity test
- ▶ Use as a standalone device
- ▶ Windows operating use with systems<sup>1</sup> PC

### **0684010050480** Multimeter-FSA Hybrid Tester

- ▶ 2 Measuring cables
- ▶ High-voltage probe
- ▶ DVD CompacSoft[plus]
- ▶ Bluetooth stick
- ▶ Storage case



# BAT 55, BAT 110

## Battery Charger / Battery Tester

**BAT 55 Stable Power Supply Charger provides reliable power supply for charging and maintaining battery state-of-charge during ECU reprogramming.**



### Essential Features:

- ▶ Advanced switch-mode design
- ▶ Provides a cleaner, more reliable power source than standard battery chargers
- ▶ Fully-regulated DC output prevents overcharging of the battery and precisely maintains the necessary battery voltage during complex service and reprogramming
- ▶ Multiple protection features for a long, trouble-free life:
  - Reverse battery polarity protection via replaceable fuses
  - Brownout input protection
  - Over-current protection; cycle-by-cycle peak limiting and rated current-limiting to maximize the life of the converter
  - Over-temperature protection
- ▶ Quiet, small and compact for portability
- ▶ Commercial design and heavy-duty internal components ensure years of continuous use
- ▶ High quality, detachable cables for easy field service
- ▶ Protective carrying case for storage or during use

**FO0E9003737HH** BAT 55 Stable Power Supply and Charger

Unique proportional fan control circuit sets the fan speed directly proportional to the converter's internal ambient temperature. This enables the fan to turn on and off very slowly, minimizing unwanted fan starting noise.



**The BAT 110 is a rugged workshop battery tester that uses conductance technology to provide quick and accurate testing of batteries, charging systems and starter systems.**

### Essential Features:

- ▶ Large LED display
- ▶ Battery condition is indicated by illuminated LEDs
- ▶ Capable of testing AGM and standard flooded batteries
- ▶ Temperature compensation for accurate test results
- ▶ 5 Large, easy-to-use navigation buttons
- ▶ 12V load-free battery tester
- ▶ Suitable for testing lead-acid batteries: standard, maintenance-free, plus AGM batteries
- ▶ Capable of diagnosing 12V starter and charging systems
- ▶ Lowest voltage storage function when testing starter systems
- ▶ Highest and lowest voltage storage function when testing charging systems
- ▶ Tests CCA norms\*, as well as IEC, DIN, SAE, and EN
- ▶ Accurate test results under all temperature conditions
- ▶ Indicator for defective battery
- ▶ Solid and rugged housing stands up to daily shop use
- ▶ The four digit LED voltage screen, three LED indicators and the arrow keys enable easy and intuitive handling of the device



\*A JIS Conversion table is located on the back of the device

**FO0E90025835E** BAT 110 Battery Tester 12V System

A quick reference guide is located on the back of the unit for starting and charging system tests, as well as a JIS conversion chart.

The BAT 110 is designed for a variety of uses in the workshop. Perform numerous, reliable tests efficiently with the clear, easy-to-use navigation buttons.



# BAT 131, BAT 151

## Battery and Starting/Charging System Tester Battery Tester

### Testing batteries and starting/charging systems is fast and easy with the BAT 131 from Bosch

The BAT 131 is the benchmark in battery testing, and is designed for testing all types of 6V and 12V starter batteries, including lead-acid, gel and fleece batteries/AGM. The rugged, exterior housing is specially designed to survive the harshest workshop conditions and molded perfectly for one-handed operation.

The load free test procedure provides fast, precise and reliable measurement results between 100 and 2000 CCA. In addition to CCA, the BAT 131 can also measure and display to CA, MCA, DIN, SAE, EN, IEC and JIS standards.



### Essential Features:

- ▶ Easy to use menu
- ▶ Test batteries that are installed in or removed from the vehicle
- ▶ Optimized test algorithm for testing new batteries that are in stock or never been installed
- ▶ Extended test of the starting/charging system for 12 V and 24 V batteries
- ▶ Optional amp clamp upgrade for more extensive starting/charging system testing
- ▶ Integrated printer provides easy to read printouts and can be customized to display your shop's name, address, telephone and website
- ▶ USB port for transferring and storing of test results onto a computer
- ▶ Flexible platform allows for future upgrades

**06844007327HH**

BAT 131 Battery System Tester

### Complete System for Effective Diagnostics

The BAT 151 is a versatile, reliable and easy-to-use electrical diagnostic tool for today's modern automotive service center.

### Essential Features

- ▶ Advanced battery testing
- ▶ Enhanced starter system testing
- ▶ Improved alternator diagnostics
- ▶ Cable drop verification testing



### Expandable Electrical Diagnostic Platform

#### Dynamic Conductance Battery Testing Technology

- ▶ Combines direct temperature measurement with deep scan technology to improve accuracy and decisiveness
- ▶ Advanced preventative maintenance algorithms for identifying batteries as they approach end-of-life

#### Enhanced Starter Diagnostics Including Optional Amp Clamp

- ▶ Combines voltage drop with amps measurements to fully diagnose all parts of the the starting system
- ▶ Output includes current draw graph and voltage drop graph when using optional amp-clamp

#### Advanced Electrical System Diagnostics Featuring Digital Signal Processing

- ▶ Digital Signal Processing (DSP) provides the capability to digitize the measured alternator output voltage and evaluate the spectral content of the signal to provide a detailed and accurate analysis
- ▶ Provides the ability to analyze the amplitude level and frequency of the diode ripple pattern for improved accuracy and identification of open or shorted diodes and open phase conditions

#### Conductance Cable Verification Test

- ▶ Uses conductance technology to calculate the voltage drop across the positive (+) and negative (-) sides of any circuit and total circuit drop without running the engine
- ▶ Preset tests for battery ground, starter and alternator circuits, and user-defined test are available

**F00E90006635E**

BAT 151 Base Kit

**F00E90023535E**

BAT 151 Complete Kit

# ROBINAIR

## A/C Recovery & Recycling



As long as there's been air conditioning, there's been Robinair, the global leader in automotive and HVAC/R air conditioning (A/C) refrigerant recovery, recycling and recharge tools, equipment and accessories. Vehicle manufacturers (OEMs), dealership service departments, auto repair shops, industrial and commercial contractors have turned to Robinair for A/C service products since 1956.





**34288**

**Cool-Tech A/C Recover, Recycle, Recharge Machine**

The 34288 combines simple operation with superior accuracy. It recovers, recycles, evacuates, and recharges R-134a quickly and accurately. Meets SAE J-2788 standards for accuracy: 95% refrigerant recovery and charging to +/- 1/2 oz.



**34788NI**

**Premier R-134A Refrigerant Recovery, Recycling, and Recharging Machine**

Recover, recycle, evacuate, leak-test and recharge R-134a vehicle A/C systems. Features a larger graphical display, leak testing, automatic refrigerant refill and automated oil drain/inject – putting A/C lubricant back into the system. 34788NI also boasts an ability to add a printer and refrigerant identifier. An optional refrigerant charge and oil capacities database is available for North American market vehicles. (34788NI-230, 220V)

## Combining Simple Operation With Superior Accuracy:

These machines will test, recover, and recharge R-134a automotive A/C systems quickly and accurately.

Features	34288	34788NI	34788NI-H	34988NI
<b>Fully-Automatic Function:</b> Program to recover, vacuum, leak test and charge without operating panel valves.		X	X	X
<b>Automatic Dye Inject:</b> Gives the user the ability to use the machine to inject UV dye into a vehicle's A/C system.				X
<b>Automatic Oil Drain:</b> A display reminds you to empty the graduated container to show the amount of oil to replace.	X	X	X	X
<b>Oil Inject:</b> Automatically inject oil back into the vehicle's A/C systems.		X*		X**
<b>Refrigerant &amp; Oil Database:</b> A/C system capacities for North American market vehicles (Optional – not included with the machine)		Optional	Optional	Optional
<b>A/C System Flush:</b> Flushes a vehicle's A/C system with refrigerant, eliminating any residual oil or other liquid. (Flushing adapters not included)		X	X	X
<b>Save &amp; print before and after service data:</b> Allows the user to store before and after service information by vehicle and print this information to provide to a customer.		X	X	X
<b>Visual &amp; Audible Alarm:</b> Notifies the user when service is complete, or if a problem has occurred.		X	X	X
<b>Vacuum Leak Test:</b> Monitors level after evacuation, informs of possible leak.		X	X	X
<b>Automatic Air Purge:</b> Eliminates system-damaging air without monitoring gauges or opening valves.	X	X	X	X
<b>Automatic Refrigerant Refill:</b> Maintains a user-selectable amount of refrigerant in an internal vessel and signals when it's time to change supply tank, no monitoring required.		X	X	X
<b>Vacuum Feature:</b> Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	X	X	X	X
<b>Display:</b> Multilingual.	X	X	X	X
<b>Refrigerant Charging:</b>	X	X***	X***	X***
<b>Refrigerant Management System:</b> Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	X	X	X	X
<b>Electric Vehicle:</b> Capable of servicing high voltage electric compressor A/C systems.			X	
<b>Printer</b>		Optional	Optional	X

\* One oil bottle. \*\* Two oil bottles and one UV dye bottle. \*\*\* Charge mode from high or low side, or use both sides.





**34788NI-H**

**Premier R-134A Refrigerant Recovery, Recycling, and Recharging Machine for Hybrid and Non-Hybrid Vehicles**

All of the same great features and functions included on the 34788NI, plus the added capability of servicing Hybrid vehicles that use high voltage electric compressors. Recover, recycle, evacuate, leak-test and recharge R-134a vehicle A/C systems. Features a larger graphical display, leak testing, automatic refrigerant refill and automated oil drain. An optional refrigerant charge and oil capacities database is available for North American market vehicles.



**34988NI**

**Premium Refrigerant Recover, Recycle, Recharge Machine**

Premium A/C Machine combines ease of use and superior accuracy. It recovers, recycles, evacuates, leak tests and recharges R-134a vehicle systems quickly and accurately. The fully automatic function will recover, vacuum, leak test and charge on its own without the need to stand and monitor the machine. The product is fully SAE J2788 compliant and exceeds the requirements for charge accuracy and recovery efficiency. (34988NI-230, 220V)

Replacement / Accessories / Maintenance Kits	34288	34788NI	34788NI-H	34988NI
<b>Replacement Items</b>				
34724 – Filter (See page 6)	X	X	X	X
18190A – Low Side (Blue) Coupler (See page16)	X	X	X	X
18191A – High Side (Red) Coupler (See page16)	X	X	X	X
<b>Accessories</b>				
34412-A – Refrigerant Capacities DB (See page 5)		X	X	X
16256 – Oil Injector (See page 5)	X		X	
17492 – Dust Cover, fits 34288, 34788 34788-H and 34988 models. (See page 5)	X			
17499 – Dust Cover, fits 34788NI, 34788NI-H and 34988NI models. (See page 5)		X	X	X
<b>Maintenance Kits</b>				
13172 – Maintenance Kit (See page 5)	X	X	X	X



**AC1234-6**

**Service R1234yf refrigerant vehicles with Robinair's SAE-standard AC1234-6 ACS machine**

The AC1234-6 was the first A/C machine in North America to fully meet SAE's requirement for recovering, recycling and recharging vehicle A/C systems that use the new R1234yf refrigerant. The AC1234-6 is a fully automatic ACS machine that comes with an integrated refrigerant identifier that samples the refrigerant in the vehicle's A/C system prior to recovery. A highly accurate and reliable machine, it can service both standard and hybrid vehicle A/C systems.



**One piece of equipment is all you need for A/C and refrigeration service. Also great for in-plant maintenance!**



Recovers, Recycles, Evacuates, and Recharges R-12, R-134a, R-22, R-502, MP and HP Blends – and many more!

Design certified by UL to meet SAE J-1770.

**17800B**

**Multiple Refrigerant Recovery, Recycling, and Recharging Machine**

The 17800B recovers, recycles, evacuates and recharges – all in one fast, continuous operation through one hook-up. It's ideal for refrigerated trailers, buses, RVs, and other vehicles that use more than one refrigerant. The Multi RRR machine is also great for fleet maintenance, covering a variety of makes and models since it has both R-12 and R-134a capabilities. In-plant maintenance departments will find it can handle the different types of refrigerants used in various systems.

**Features**

**Fully automatic operation** Program for service, walk away and return when complete.

**95% Recovery efficiency.**

**Programmable vacuum** Operation helps get to the necessary vacuum level in any condition quickly.

**System leak Test** to identify gross leaks in a system.

**Charge Accuracy** within +/- 1/2 oz.

**Automatic oil drain** Shows how much oil was removed from the system during service.

**Automatic air purge** Removes the potential of air accumulating in the internal tank.

**Integrated refrigerant identifier** Meets SAE J2927

**Liquid refrigerant flushing function** Can flush A/C systems or individual components using liquid refrigerant instead of harsh chemicals.

**Automatic internal tank refill** No stopping to fill the internal tank during service, or before service.

**1/4 Color VGA display** Large easy to read graphical display

**On-board printer** Capable of printing vehicle service report slips to present to customers.

**Specifications**

<b>Compressor</b>	1/3HP
<b>Dimensions</b>	107 cm x 61 cm x 76 cm
<b>Filter Capacity</b>	150 kg
<b>Humidity</b>	90°F (32.2°C), 86% RH non-condensing
<b>Pressure Gauges</b>	Ø 100 mm
<b>Maximum Pressure</b>	25 bar
<b>Noise</b>	<70dB(A)
<b>Nominal Voltage</b>	103V–127V, 60 Hz
<b>Oil Drain Bottle</b>	355 ml
<b>Operating Temperature</b>	50°F to 122°F (10°C to 50°C)
<b>Power Consumption</b>	1100 VA
<b>Pump Free-Air Displacement</b>	1.5 CFM (35 l/m)
<b>Service Hoses</b>	250 cm / SAE J2888
<b>Tank Capacity</b>	9.09 kg (20.04 lb.)
<b>Weight</b>	107kg (235lbs.)

**Features**

**Microprocessor** Controls functions; prompts lead you through programming and also signal when it's time to change the filter-drier, vacuum pump oil, and compressor oil.

**Float chamber** Automatically adjusts from liquid to vapor for most efficient recovery.

**Electronic scale** Makes it simple to recharge to factory specifications; also weighs recovered refrigerant and provides tank overflow protection.

**CoolTech vacuum pump** 6 CFM has the capacity to thoroughly evacuate the system, readying it for recharging.

**Lockout panel** Prevents mixing of refrigerants; rotates to one side for 1/4" fittings and to the other for 1/2" Acme fittings.

**Single-pass recycling** Makes an initial pass through the filter-drier; additional recycling can be programmed in case of compressor burn-out, or other conditions.

**Heavy-duty filter-drier** Removes moisture and acid from the refrigerant; can handle up to 200 pounds between change-overs. Comes with two 50 pound tanks, one with 1/4" fittings and the other with 1/2" Acme fittings. Also three sets of charging hoses are included – one for R-12, one for automotive R-134a (with field service couplers), and one for other refrigerants using 1/4" SAE fittings.

**International Models**

**17801B** – 220–240V 50 Hz, readout in kilograms.

**Replacement Parts**

**19776** – Recycling filter-drier.

**17506** – 50 lb. (23 kg) refillable tank, 1/4" fittings.

**34750** – 50 lb. (23 kg) refillable tank, 1/2" ACME fittings.



**Specifications**

<b>Voltage</b>	115V 60 Hz
<b>Tanks</b>	Two 50 lb. (23 kg) refillable
<b>Operating Range</b>	50° to 105° F (11° to 41° C)
<b>Recovery Rate</b>	Vapor – 1/2 lb./min. (.2 kg/min.) Liquid – 1 lb./min. (.4 kg/min.)
<b>Recycling Rate</b>	4 lbs./min. (1.8 kg/min.) flow rate
<b>Recycling Filter-Drier</b>	1150 g XH-9
<b>Pump Free Air Displacement</b>	6 cfm (142 l/m) at 50 Hz
<b>Dimensions</b>	47" H x 26" W x 30" D (119 cm x 66 cm x 77 cm)
<b>Weight</b>	256 lbs. (116 kg) without tank



**17580**

**A/C flushing unit**

**Make flushing part of your regular A/C service**

You know that not all A/C jobs are simple recharges – there are times when you need to flush a vehicle’s air conditioning system to ensure that it operates satisfactorily. These circumstances fall into three categories:

**Routine Maintenance** – As an air conditioning system ages, oil, sludge, and particulates build up, plug screens, expansion valves, and capillary tubes. Periodically, you should flush the system components to remove these contaminants.

**Repairs** – To be sure the system will operate properly, you should flush it whenever you repair or replace components. Failed components may contain metal shavings, sludge, and other debris that damage the system or affect the operation.

**R-134a Retrofits** – In some cases, conversion procedures call for complete removal of existing oil in an A/C system before changing fittings and recharging with R-134a. Flushing is the most thorough means of removing the oil, and it will also pick up any refrigerant residue in the system. Flushing, combined with pulling a deep vacuum, is your assurance the system is ready for the new refrigerant.

**A/C Component Flusher**

The 17580 makes flushing of lines, evaporators, and condensers fast and easy.

**Features**

**Closed Loop** Circulates solvent continuously through components (adapters are needed).

**Pulsing Action** Loosens dirt, corrosion, and other debris; by switching the hoses, you can also back flush.

**Air Agitation Needle Valve** Bubbles air into liquid stream to enhance cleaning action.

**Hose Adapters** Contains adapters to mate with 1/4" flare and 3/8" quick disconnect fitting kits.

**Sight Glass** To observe flow rates and cleaning process.

One gallon of solvent is needed for the flush procedure. The unit purges solvent from the component, collecting the used material in the collection tank. An activated charcoal filter limits emissions and odors during flushing and purging.

**Adapter Kit**

**17607** – Universal A/C flushing adapter kit.

**17581** – Adapter.

**Specifications**

**Dimensions** 52" H x 33" W x 20" D

**Weight** 110 lbs. (50 kg)

**Supply Pressure** 80–150 psi.



**Vehicle Database Screens**

- ▶ Electronic capacities database that provides A/C charge and oil lubricant amounts by vehicle for model years 1995-2016.
- ▶ Provides capacity information right at your finger tips when needed using your A/C RRR machine.
- ▶ Can be used with the Robinair 34988, 34788 and 34788-H A/C RRR machines.

**34411-F** – Use with the Robinair 34788, 34988, and 34788-H A/C RRR machines.

**34412-A** – Use 34788NI, 34788NI-H and 34988NI A/C RRR machines.



**Maintenance Kits**

Keep recovery and recycling units operating at peak efficiency with a convenient maintenance kit. Contains one Quick Change filter-drier to be used on both R-12 and R-134a stations, and one 16-ounce bottle of our Premium High Vacuum Pump Oil.

**13172** – Maintenance kit for models using No. 34724 filter-drier (34288, 34788, 34788-H, 34988, 34788NI, 34788NI-H, AC1234-6, 17700A, 17700-2K, 34700, 34700-2K, 34700Z, 342000, 34711-2K, 34800, 34800-2K, 34900 series).

**13169** – Maintenance kit for early models using No. 34430 filter-drier (AC375A, AC374C, AC374, 34134Z, 34134-2K, 17700A, 34700, 34300-2K, 34134Z, 34134-2K).

See your instruction manual if you have questions about which filter-drier to use.



**Syringe-Type Injectors**

Use these syringe-type injectors to add oil to a fully pressurized A/C system. Just fill the barrel with the amount of oil needed, connect the injector, and press the plunger.

**16256** – R-134a oil injector, 1/2" Acme quick coupler.

**18480** – R-134A oil injector, PAG labeled

**18490** – R-134A oil injector, POE labeled

**18460** – R1234YF oil injector, Generic

**18465** – R1234YF oil injector, PAG labeled

**18470** – R1234YF oil injector, POE labeled

Not recommended for UV dye injection.



**Vinyl Dust Covers**

Protect your investment with a heavy-duty vinyl cover. Features corded seams for durability; medium gray color with CoolTech logo.

**17490** – Fits all 75700, 17800B, 34900, 34800-2K, series.

**17492** – Fits all 34288, 34788, 34788-H, 34988, AC375C, AC375A, AC375, 342000, 17700-2K, 34700-2K, 34134Z, 34700Z, 34711-2K, 17700Z, 34702Z.

**Dust Cover for A/C RRR Machines**

**17499** – Fits AC1234-6, 34788NI, 34788NI-H and 34988NI models.

**Recycling Filter-Driers**

Specially blended for maximum acid and moisture removal.

**17630** – Inlet filter for 17625A, 34650.

**17663** – Inlet filter for 17650A.

**17677** – XH-9 filter drier for 17800A, 17800-2K series (not shown).

**19776** – Quick change filter for 17800B.

**34430** – Quick change filter for older 17700A, 34450, 34700 (1997), AC375, AC375A, AC375C, 34134Z.

**34724** – Spin-on filter for 17700-2K, 34134A, 34134-2K, 342000, 34234, 34300-2K, 34700, 34700-2K, 34700Z, 34788, 34800, 34800-2K, 34900 series.



17630



17633



19776



34430



34724

**Refrigerant Tanks**

**17121** – 30 lb. tank, 1/4" fittings (25150, 25175, 25200B, 34234, 34300-2K, 34800 series).

**17506** – 50 lb. tank, 1/4" fittings (17800A, 17800-2K, 17700A, 25150, 25175, 25200B series).

**17605** – 30 lb. tank with float switch (17650A series).

**17572** – 50 lb. tank with float switch.

**17686** – 50 lb. tank with 3/8" fitting, float assembly for 17680A series.

**34102** – 30 lb. tank for R-134a (34234, 34300-2K, 34800, 34134A, 34134-2K series).

**34579** – 30 lb. tank (34650 series).

**34750** – 50 lb. tank for R-134a (34700 series).



17121



17506



17605



17572



17686



34102



34579



34750



**10986 Orifice Tube Remover**

Use this handy tool to remove the orifice tube before flushing. Speeds service by removing the build-up of particulates on the orifice screen and restrictions that slow flushing. The basic tool works on GM and Ford vehicles and comes with: an extender body for 1985 and newer Ford models; an adapter for 1989–91 GM "J", "L", and "N" cars; and an adapter for 1991 and newer GM "C" and "K" trucks with #3096068 orifices.



**17595 Flush Gun Kit**

An economical means of flushing contaminants and scale from A/C system components, the flush gun uses dry shop air to pressurize the solvent. The process thoroughly cleans the part, removing oil, any refrigerant contaminants, and residue. The attached nozzle directs the flow of solvent without spray-back.



17565



17609

**Power Flush Solvent**

Gives you the cleaning power to flush particulates and system lubricant from A/C and refrigeration lines, evaporators, and condensers. An ideal substitute for CFC-113, it has excellent cleaning properties and good evaporation rate. Compatible with all CFC, HCFC, and HFC refrigerants. Meets ANSI/ASHRAE 97-1933.

**17565** – Gallon, six per carton.

**17609** – Quart, six per carton.

GAUGE ON PANEL SHOWS  
SYSTEM PRESSURE



### 16910

#### CoolTech ID Plus Refrigerant Identifier

##### Critical for today's automotive A/C service

It's been estimated that one in 10 vehicles on the road has an A/C system with contaminated refrigerant. The only way to know for sure if you can safely recover these charges is with a refrigerant identifier. You may also save hundreds of dollars by checking bulk tanks for purity before use.

Robinair's CoolTech line shows you in just seconds if it's safe to recover or recharge the refrigerant. There's no guesswork, because a red light indicates "fail", while a green light is your signal to continue with service. For R-12 and R-134a vehicles.

**Fast and Accurate** – Displays test results in less than a minute and passes the refrigerant only if it's 98% pure. To ensure consistent, rapid results, the units are not pressure/temperature dependent.

**Reliable Technology** – The instruments use dependable infrared technology developed by Neutronics, Inc., to determine if the refrigerant is an acceptable type and is pure enough to be used.

**Unique Case Design** – Puts all the components up front where you can see them at a glance, including the filter. Contoured case can be held in either hand, and rubber feet protect the vehicle's finish.

##### Identifies refrigerant type and purges damaging air

In addition to dependable refrigerant identification, the ID Plus measures non condensable gases (air) in the refrigerant and purges them directly from the tank or system.

- › Displays the actual percentage of R-12, R-134a, R-22, and air in the system or tank.
- › Gives you the option of purging air if significant concentration is found.
- › Hydrocarbon alarm sounds if flammable substances are sensed.
- › On-board printer port allows you to connect a printer for a hard copy of testing results.

##### Replacement Parts

**16913** – Replacement filter.

**19713** – R-12 replacement hose.

**19714** – R-134a low-side coupler, 1/2" Acme internal adapter.

**19716** – R-134a replacement hose.

##### Specifications

Power Source	100- 220V
Dimensions	11" H x 9" W x 4-1/2" D (27.94 cm x 22.86 cm x 11.43 cm)
Weight	1.75 lbs. (740 g)



### 16009

#### DiscovR™ Refrigerant Identifier

##### How pure is your refrigerant?

Most technicians never question the purity of virgin refrigerant, and most assume the refrigerant in a vehicle is "pure enough" unless the A/C system has a mysterious cooling problem.

If a technician has no way of checking the refrigerant before they pull it out of a customer's vehicle into their recovery equipment it may contaminate their service equipment as well as other vehicles that are serviced with the contaminated equipment.

##### The first line of defense

The best defense against unknown refrigerant and the risks associated with unknown refrigerant is a refrigerant identifier. With the new Robinair 16009 DiscovR™ 134a refrigerant identifier you can:

**Protect your A/C service equipment** – Know whether or not you have acceptable R134a refrigerant before servicing the vehicle with the DiscovR™ refrigerant identifier.

**Guard against costly recovery equipment repairs** – Contaminated refrigerant can wreak havoc on any R134a recovery, recycle and recharge machine. The average repair cost is \$300, and in many cases contaminated refrigerant will void the product's warranty. Shield your RRR machine from contaminated refrigerant by using the DiscovR™ refrigerant identifier before connecting to the vehicle.

**Uncover hard to find air contamination** – DiscovR™ refrigerant identifier notifies you when the system contains excessive air.

**Fast and Accurate** – "Pass" and "Fail" lights clearly show if refrigerant is pure enough to be recovered.

##### Replacement Parts

**16109** – Replacement hose and filter (3 pack).

##### Specifications

Refrigerant	R134a
Input Power	12 VDC
Accuracy	Pass/Fail - 95% pure R134a
Air Detection	Yes
Approvals	SAE J1771, UL/C



**22791**  
**InfraRed Refrigerant Leak Detector**

The InfraRed Refrigerant Leak Detector uses infrared optics to create a refrigerant leak detector that combines sensitivity, speed, battery life, portability, and ease of use.

- › Advanced infrared sensor designed to last a minimum of 10 years.
- › Three sensitivity levels down to 0.15 oz./year.
- › Automatically recalibrates in highly contaminated areas to help pinpoint the exact location of the leak
- › Won't trigger on oil or moisture.
- › Senses CFC, HFC, HCFC blends and HFO-1234yf refrigerants.
- › 8-hour lithium Ion battery lasts all day long and beyond.
- › Visual alert and peak button make it easy to find leaks in noisy environments.
- › Audible alert with mute button.
- › Magnetic hanger to easily hang the unit during leak repair.
- › Durable carrying case let's you easily store leak detector and accessories.
- › Meets NEW SAE J2913 standard for 1234yf and previous SAE J2791 standard for 134A.

The InfraRed Refrigerant Leak Detector includes, wall charge, car charger, 5 filters, 3 O-rings, lithium-ion battery and blow-molded carrying case.

**Optional Accessories**

- 74367** – Extension Probe (9 inch)
- 74368** – Rigid Extension Probe

**Replacement Parts**

- 74361** – 100–240 VAC Charger
- 74362** – 12V DC Charger
- 74363** – Filters (5) and O-rings (3)
- 74364** – Lithium-ion Battery



**Specifications**

<b>Gases measured</b>	CFC, HFC, HCFC blends and HFO-1234yf
<b>Sensing element</b>	Infrared
<b>Response time</b>	0.5 to 1 second
<b>Sensitivity levels</b>	HIGH 0.15 oz./year and higher MEDIUM 0.25 oz./year and higher LOW 0.5 oz./year and higher
<b>Accuracy</b>	Meets current SAE J2791 and J2913 standards
<b>Calibration</b>	Automatic
<b>Warm up time</b>	30 seconds
<b>Probe length</b>	15 inches
<b>Battery type</b>	3.7VDC(nominal) rechargeable lithium-ion battery
<b>Battery life</b>	Approximately, 8 hours when fully charged

**TIFZX**  
**Heated Pentode® Refrigerant Detector**

The TIFZX uses proven heated-pentode technology with an improved grip and easy-to-read display. The design of the TIFZX eliminates false alarms from moisture, solvents and cleaners. An improved, true mechanical pump allows for instant response and clearing.

- › Heated Pentode® sensor technology
- › Tri-color visual leak size indicator
- › Detects all CFC, HFC, HCFC's including R-12, R-22, R-123, R-134a, R-404a, R-407a, R-408a, and R-410a.
- › Tactile keypad controls with one-touch reset and adjustable sensitivity
- › True mechanical pump provides instant response and clearing
- › Battery test function
- › Sensor failure indication
- › Rechargeable batteries
- › Revolutionary design
- › Three year warranty

**Specifications**

<b>Sensor Technology</b>	Heated Pentode® (advanced heated diode)
<b>Electronic Technology</b>	Microprocessor-controlled circuit, including constant battery and sensor condition detector
<b>Refrigerants detected</b>	Detects all CFC, HFC, HCFC's including R-12, R-22, R-123, R-134a, R-404a, R-407a, R-408a, and R-410a
<b>Sensitivity</b>	Less than 0.1 oz/yr (3 gr/yr); as low as 0.05 oz/yr (R-12)
<b>Warm-up Period</b>	20 seconds
<b>Excessive Refrig. Tolerance</b>	Sensor cannot be poisoned by excessive refrigerant
<b>Battery Life</b>	5 to 6 hours, depending on sensor age. Integral constant power indication
<b>Battery Technology</b>	Rechargeable NiMH
<b>Battery Recharge Time</b>	2 hours, integral charge status indicator
<b>Failed Sensor Indication</b>	All LEDs flash red, pump off
<b>Sensor Life</b>	Up to 150 hours
<b>Operating Environment</b>	0°C to 50°C (32°F to 122°F), 0 to 95% RH non-condensing
<b>Dimensions</b>	26 cm L x 6.5 cm Dia. (10.25" L X 2.5" Dia.)
<b>Weight</b>	Approximately 452 grams (16 ounces)

**Heated Pentode® Refrigerant Detector Kits**



**TIFZX includes:**

- (1) ZX Refrigerant Leak Detector
- (1) Battery pack, nickel metal hydride (NiMH)
- (1) Battery charger
- (1) Soft carrying case
- (1) Owner's manual

**International Models**

- TIFZX-E** Same as TIFZX (220-240V)
- TIFZX-J** Same as TIFZX (90-110V)



**TIFZXKIT includes:**

- (1) ZX Refrigerant Leak Detector
- (2) Replacement sensors
- (5) Replacement filters
- (2) Battery pack, nickel metal hydride (NiMH)
- (1) Charging base
- (1) Battery charger
- (1) Cigarette lighter charger (12V)
- (1) Blow-molded carrying case
- (1) Owner's manual

**International Models**

- TIFZXKITE** Same as TIFZXKIT (220-240V)
- TIFZXKITJ** Same as TIFZXKIT (90-110V)

**Replacement Parts & Accessories**

- TIFZX-2** Replacement Heated Pentode® Sensor
- TIFZX-3** 110V-60 Hz Battery charger (North and South America)
- TIFZX-3E** 230V-50 Hz Battery charger (Europe, Asia)
- TIFZX-6** Remote Battery charging base, 110V-60 Hz (Optional)
- TIFZX-7** Nickel-Metal hydride (NiMH) battery pack
- TIFZX-10** Flexible probe (includes probe tip)
- TIFZX-11** 12V DC battery charger
- TIFZX-14** Filter and O-ring
- TIFZX-15** Filter elements (5 pack)
- TIFZX-55** Soft carrying case



TIFZX-2



TIFZX-3, TIFZX-3E



TIFZX-7



TIFZX-6, TIFZX-6E



TIFZX-10



TIFZX-55



TIFZX-14



TIFZX-15



TIFZX-11



TIFXP-1A



TIFRX-1A



TIFXL-1A



Design Certified by MET Laboratories, Inc., to meet SAE J1627 for R-134a, R-12, and R-22.

U.S. Patent Nos. Re: 32,552; 4,282,521; 5,400,015

CLASSIFIED BY UNDERWRITERS LABORATORIES INC® ONLY TO INTRINSIC SAFETY IN CLASS 1 GROUPS C & D HAZARDOUS LOCATIONS.

**TIFXL-1A, TIFRX-1A, TIFXP-1A Leak Detectors**

The revolutionary new “Generation X” line of TIF refrigerant leak detectors brings you tomorrow’s technology today. We not only changed the way our leak detectors look, but the way to look at leak detectors. Innovative MPC circuitry and Advanced Digital Signal Processing monitor the sensing tip up to 2000 times per second. Automatic reset, true mechanical pump, and visual indicators (TIF XP-1 and TIF RX-1) speed and simplify leak searches.

A completely re-designed sensing tip increases sensitivity, improves reliability, and lasts twice as long as its predecessor. This results in fewer comebacks, less hassle, and lower maintenance costs. We are so confident in the design and quality of these detectors that they are backed by a warranty of up to 3 years.

**All Models Feature**

- › Microprocessor controlled circuit with Advanced Digital Signal Processing.
- › Detects ALL halogenated refrigerants.
- › Certified to SAE J1627.
- › Variable frequency audible alarm.
- › CE approval.
- › UL classified.
- › Constant power indication.
- › Cordless and portable; operates on two C-cell batteries.
- › 14" (35.5 cm) flexible stainless steel probe with liner.
- › Carrying case included, optional holster.
- › Optional reference leak source.

**Additional Features**

**TIFXL-1A**

- › Single switch control.
- › Two-year warranty.

**TIFRX-1A**

- › Six-segment visual leak size indicator.
- › True mechanical pump provides positive airflow through sensing tip.
- › High and low sensitivity levels.
- › One touch reset.
- › Tactile keypad controls.
- › Two-year warranty.

**TIFXP-1A**

- › Tri-color, six-segment visual leak size indicator displays 18 alarm levels.
- › Seven levels of sensitivity adjustment provide an increase of up to 64x.
- › Battery test function with true voltage indication.
- › Mute feature silences audible alarm.
- › True mechanical pump provides positive airflow through sensing tip.
- › One touch reset.
- › Tactile keypad controls.
- › Three-year warranty.

**Replacement Parts (all models)**

- TIFXP-2 – Maintenance kit (3 tips, 3 protectors).
- TIFXP-5A – Battery cover.

Specifications	
Power Source	3V DC; 2 "C" cell alkaline batteries
Ultimate Sensitivity	TIFXL-1A - Less than 0.4 oz./yr. (11 g/yr.) TIFRX-1A - Less than 0.25 oz./yr. (7 g/yr.) TIFXP-1A - Less than 0.1 oz./yr. (3 g/yr.)
Sensing Tip Life	Approx. 20 hours
Operating Range	30° to 125° F (0° to 52° C)
Battery Life	TIFRX-1A and TIFXP-1A – Approx. 30 hrs. TIFXL-1A – Approx. 40 hrs.
Duty Cycle	Continuous
Response Time	Instantaneous
Reset Time	One second
Warm-up Time	Approx. 2 seconds
Unit Weight	1.2 lbs. (560 grams)
Unit Dimensions	9" x 2.25" x 2.25" (22.9 cm x 5.7 cm x 5.7 cm)
Fixed Probe Length	14" (35.5 cm)





**TIF8800X  
Combustible Gas Detector**

The TIF8800X is a low maintenance, battery operated, combustible gas detector that provides a ticking signal that increases in frequency as the source of combustible gas or vapor is located. The TIF8800X is small enough to be operated with just one hand, yet loaded with the kind of advanced features service professionals demand. This tool allows you to pinpoint combustible gas leaks as small as 1 ppm quickly, while checking a relatively large area in a short amount of time with absolutely no calibration required.

**Applications**

The TIF8800X may be used in almost any situation where a combustible gas, vapor, or residue needs to be found. An ideal instrument for pinpointing combustible gas leaks in commercial, residential, and industrial applications.

- › Audible “ticking” signal
- › Leak strength indicating LEDs
- › Adjustable sensitivity
- › Cordless operation
- › Fast warm-up
- › Battery status indication
- › 15 inch flexible probe for hard-to-reach areas
- › One-year warranty



Kit includes: TIF8800X, battery, battery charger and soft case.

**International models**

TIF8800X-E – 220V

**Replacement Parts**

- TIF8801 – Sensor
- TIF8802 – A/C adapter
- TIF8802E – A/C adapter 220V
- TIF8802J – A/C adapter 90-100 r
- TIF8808 – Battery cover
- TIF8809 – Ni Mh battery pack
- TIF8818 – Rubber boot



**16600**

**Electronic Leak Detector**

For all CFC, HCFC, and HFC Refrigerants  
Robinair's electronic leak detector is ergonomically designed to fit in your hand. Holding it is natural and comfortable, and it fits into tight spots, so you can thoroughly check for leaks. No. 16600 is packed with features that help you pinpoint leaks quickly.  
**One-Hand Operation** – The 16" gooseneck probe holds its position so you can operate the detector with one hand.

**Audible and Visual Leak Indicators** – An alarm increases in frequency as the tip gets close to a high concentration of refrigerant. LEDs are especially helpful when you're working in a noisy environment.

**Threshold Balancing Control** – Gives you infinite control for eliminating background contamination, so you can zero in on the leak site.

**Volume Control** – Adjust the audible leak signal to the volume that's right for the background noise in the shop or at the job site.

**Reliable Technology = Dependable Leak Detecting**

No. 16600 uses proven corona discharge technology to sense leaks. It works by creating a high voltage corona in the sensing tip. When this field is interrupted by refrigerant, the alarm is triggered. All corona discharge leak detectors are not the same, however – the quality of key components is critical in providing an effective instrument.

**Transformer** – To create the high voltage corona, the unit must “pump up” from the battery output to 2000 volts. It takes a specialized transformer to consistently provide this voltage, and ours is the result of years of testing and field use to ensure operation you can rely on.



**Back View**  
The gooseneck probe clips into a holder on the back of the unit for protection during storage and transit.

**Specifications**

<b>Power Source</b>	Four AA Alkaline batteries (included)
<b>Battery Life</b>	Approximately 25 hours
<b>Dimensions</b>	8-1/2" L x 3-1/4" W x 2" D (21.59 cm x 8.26 cm x 5 cm)
<b>Probe Length</b>	16 in. (40.6 cm)
<b>Weight</b>	1.14 lbs. (.52 kg) with batteries

**16503**

**Sensing Tip**

The materials, shape, and finish of the sensor and surrounding shell are critical to the effectiveness and life of the tip. Specially engineered tip is built with a mirror finish for superior sensitivity and durability.



Specifications	
<b>Power Source</b>	4.8V NiMH rechargeable battery pack
<b>Operation</b>	Continuous
<b>Time</b>	Approximately 4 hours
<b>Battery Pack</b>	Lifetime Approximately 500 charge cycles
<b>Warm-up</b>	30 seconds
<b>Duty Cycle</b>	Continuous; no limitation
<b>Response Time</b>	Instantaneous
<b>Sensitivity</b>	Variable; as low as 1 ppm (gasoline)
<b>Operating Environment</b>	32°F to 104°F (0°F to 40°C)
<b>Unit Weight</b>	Approximately 16 ounces (454 grams)
<b>Unit Dimensions</b>	8 in. x 3 in. x 1.8 in. (20.3 x 7.6 x 4.6 cm)
<b>Certifications</b>	UL913 7th Edition (use in Class I, II, or III, Division 1 hazardous (classified) locations)

# A/C Recovery & Recycling

Combustible Gas, Ultrasonic Detectors & Digital Thermometers

## TIF8900

### Combustible Gas Detector

The TIF8900 is a super-sensitive, cordless, combustible gas detector that detects a broad range of natural gases including propane, methanol, butane, and gasoline.

- › Solid-state sensor technology, long life, and precision.
- › Adjustable sensitivity levels; as low as 5ppm.
- › Audible “Geiger counter” signal.
- › Rechargeable battery and charger included.

#### International models

TIF8900-E – 220V.

#### Replacement Parts

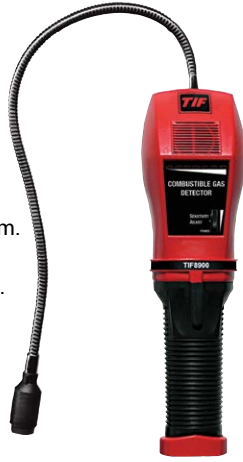
TIF8801 – Sensing tip.

TIF8803A – 115V battery charger.

TIF8805 – Cigarette lighter adapter.

TIF8806A – Rechargeable Ni-Cad batteries.

TIF8806B – 220V battery charger.



## 43240

### Digital Thermometer

- › Sampling time is just one second; HOLD button freezes display for accuracy.
- › Easy-to-read display can be read even in direct sunlight.
- › Durable case includes a cover to protect the probe.
- › Min/Max display for reading temperature ranges.



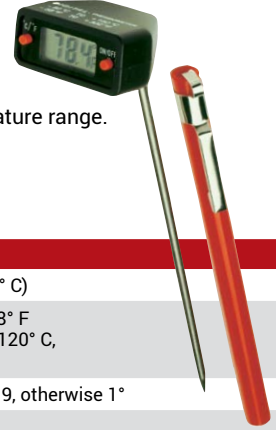
#### Specifications

Range	-40° to 390° F (-40° to 200° C)
Accuracy	± 2° F between -14° and 212° F ± 1° C between -10° and 100° C, Otherwise: ± 3° F (± 1° C)
Display Resolution	0.1° F (0.1° C) throughout range
Battery	One 1.5V x 1, Size LR44

## 43230

### Swivel Head Digital Thermometer

- › 180° swivel head makes display easier to read in tight places.
- › Reliable readings over the entire temperature range.
- › Sampling time is just one second.
- › Durable case includes a pocket clip.
- › For surface, liquid, and air temperatures.



#### Specifications

Range	-58° to 302° F (-50° to 150° C)
Accuracy	± 2° F between -4° and 248° F q± 1° C between -20° and 120° C, Otherwise: ± 4° F (± 2° C)
Display Resolution	0.1° between -19.9 to 199.9, otherwise 1°
Battery	One 1.5V x 1, Size LR44
Automatic Power OFF	After 10 minutes if ON/OFF is not pressed.

#### Specifications

Power Source	Two 2.4V Ni-Cad batteries (included)
Battery Life	Approx. 4 hours per charge
Dimensions	8-1/2" L x 2-1/2" W x 2" D (21.59 cm x 6.35 cm x 5.08 cm)
Operating Range	32° F to 105° F
Probe Length	16 inches, weights 12.3 oz.

## 16455

### TruTrack Ultrasonic Leak Detector

#### Use TruTrack to identify:

- › Refrigerant leaks
- › Pressurized gas leaks
- › Vacuum leaks
- › Dry nitrogen gas leaks
- › Steam leaks
- › Failing solenoids, valves, bearings

**Easy to Use** – Just put on the headset, adjust the sensitivity level, and place the sensor near the suspected problem area; you can use the sensor alone or with one of the probes.

**Positive Identification** – You hear the sound of the leak in the headset with no beeps or squeals; the sound is loudest when you are near the leak.

**Accurate** – Wind, stray gases, or other contaminants will not trigger a false alarm; the unit suppresses most background noises.

**Dependable** – There are no clogged tips to clean, or sensors to replace, to get accurate readings.

**Versatile** – Ideal for a wide range of service and preventive maintenance applications. Taking regular readings of bearing or solenoid function, for instance, can show increased noise, which may be a sign the component is starting to fail.

16455 – Comes complete with padded carrying case, headset, solid contact probe, and flextube.

#### Replacement Parts

16956 – Contact probe.

16958 – Replacement headset.



### Dial Thermometers

All pocket thermometers come with a pocket-clip carrying case for protection and easy access. Easy-to-read faces are available in a variety of sizes and ranges.

Part No.	Temperature	Size
10596	-40° to + 160°F	1" dial face
10597	0° to + 220°F	1" dial face
10945	0° to + 220°F	1-3/4" dial face
40859	-40° to + 70°C	1" dial face

## 16451

### TruTrack Ultrasonic Sound Generator

An ideal accessory for Robinair’s Model 16455 Ultrasonic Leak Detector, the sound generator detects seal failure in refrigerators, microwaves, vehicle passenger compartments, trunks, and any other location where there should be a good seal. Battery-operated unit emits special frequency from inside the test area; where the sound can be heard, a leak exists.



#### Specifications

Power Source	One 9V battery (included)
Dimensions	4-1/2" L x 3-3/8" W x 3/4" D (11.43 cm x 8.57 cm x 1.9 cm)
Weight	5 oz. (140 g)



**UV Leak Detection**

- › Meets the new SAE J2297 standard for use with both R134A and R1234YF.
- › The easiest and most accurate gun available today.
- › One squeeze injects a pre-measured amount (1/8 oz.) of dye. No more adding too much dye.
- › Brightest dyes in the industry, exceeds all industry performance standards.
- › Most powerful light in its class. Fluorescent dye from up to 50ft away. (Light is only used in 16235 kit)

**16234**  
Injection gun.  
Fluorescent leak detection dye.

**16215**  
Fluorescent light.  
UV glasses.

**16235**  
Injection gun.  
Fluorescent light.  
Fluorescent leak detection dye.  
Fluorescent dye cleaner.  
UV glasses and blow molded case.



16234



16215



16235

**A/C Fluorescent Dyes**

- › Exceeds all industry performance standards.
- › Compatible with all materials found in a vehicle's A/C system.
- › Meets the new SAE J2297 standard for use with both R134A and R1234YF.
- › REACH and CLP compliant.



**16240**  
64 applications  
One 8 oz. bottle



**16241**  
64 applications  
One 8 oz. bottle



**16242**  
12 applications  
Twelve 1/4 oz. bottles



**16243**  
24 applications  
Six 1 oz. bottles

**UV Leak Detection**

UV leak detection can be used for both automotive and HVAC-R systems, and dyes won't harm the system.

- › High intensity beam makes even small leaks visible and is bright enough to be used in daylight.
- › Rugged case and a shock-absorbing mounting mechanism protect the lamp during use and storage.
- › UV bulb is rated for 3000 hours and is economical to replace.
- › Comes with a 15' (4.57 m) long cord with battery clips for automotive use or with a transformer for 115V operation, doing away with heavy batteries and the need to recharge.
- › Designed with super luminescence, so leaks are easy to spot, even small ones.
- › Won't affect the viscosity of refrigerant lubricants and is safe for the entire A/C system.
- › Speeds service, since there's no need to recover the charge, add dye, and recharge, as with some other brands.

**16350** – UV leak detection kit includes: Powerful 50-watt/12-volt UV lamp with 15' cord and battery clips. Injection gun with R-134a hose and R-12 adapter. Four universal A/C dye twist-on cartridges (No. 16356). Enough dye for 20 applications (OEM-approved and SAE-certified dye). UV enhancing glasses with dye cleaner.

**16355** – UV injection kit include: Injection gun with R-134a hose and R-12 adapter, four universal A/C dye twist-on cartridges (No. 16356, 1 oz./ 30 ml each), and service stickers.

**16356** – Universal A/C dyes includes: Four 1 oz./30 ml twist-on cartridges. Enough dye for 20 applications (OEM-approved and SAE-certified dye). For kit Nos. 16350, 16380, and 16355.

**16357** – Six 1/4 oz./7.5 ml twist-on cartridges. Enough dye for six applications (OEM-approved and SAE-certified dye). For kit Nos. 16350, 16380, and 16355.

**UV Lamps**

- 16296** – 12V UV lamp, UV shield/enhancer glasses, power cord with battery clips, CE approved.
- 16254** – Replacement 50 watt bulb for 16345.
- 16208** – On/Off switch for 16345.
- 16249** – Replacement lens for UV lamp for 16345.
- 16348** – 120V battery charger,
- 16349** – 220V battery charger.



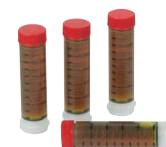
16350



16355



16296



16356



16357

### TIF7620, TIF7612, TIF7610 IR Thermometer PRO

- › Complete IR design is incorporated inside of a single chip, reducing space and creating a compact and light weight product.
- › Innovative optical lens – accurate measurements; wide temperature range.
- › Laser pointer – Easy to define the target area to be measured.
- › Extend temperature – TIF7612 and TIF7620 have a thermocouple interface that can extend the temperature up to 1999°F.
- › Simple and easy to operate – Simply point at desired target and press the trigger button for a temperature reading.
- › Set alarm temperatures (Low and High Temperatures) to receive alert information when the you are measured out of the range (TIF7612 and TIF7620 only).
- › (MAX), (MIN), Difference between MAX and MIN (DIF), and average (AVG) modes are available in TIF7612 and TIF7620.
- › The new TIF IR thermometers incorporate visual low battery indication and simple operation of two “AAA” batteries.



Specification	TIF7610	TIF7612	TIF7620
Measurement Range	-76 to +932°F (-60 to +500°C)	-76 to +932°F (-60 to +500°C)	-76 to +1400°F (-60 to +760°C)
Thermocouple Measurement Range	N/A	83.2 to +1999°F (-64 to +1400°C)	83.2 to +1999°F (-64 to +1400°C)
Accuracy: Tobj = 59°-95°F (15-35°C) Tamb=77°F (25°C)	±1.8°F (1.0°C)	±1.8°F (1.0°C)	±1.8°F (1.0°C)
Accuracy: Tobj = -27-932°F (-33-500°C) Tamb= 73°F ±5°F (23 ± 3°C)	±2% of reading or 4°F (2°C) whichever is greater	±2% of reading or 4°F (2°C) whichever is greater	±2% of reading or 4°F (2°C) whichever is greater
Thermocouple Accuracy	N/A	±1% of reading or 1.8°F (1°C) whichever is greater (Test under Tamb=73±11°F[23+6°C])	±1% of reading or 1.8°F (1°C) whichever is greater (Test under Tamb=73±11°F[23+6°C])
Emissivity	0.95 fixed	Adjustable	Adjustable
Resolution: 14.2° F~199.9° F (-9.9~199.9°C)	0.1°F/0.1°C (1° below 9.9 and above 199.9)	0.1°F/0.1°C (1° below 9.9 and above 199.9)	0.1°F/0.1°C (1° below 9.9 and above 199.9)
Spectral Response	5 ~ 14µm	8 ~ 14µm	8 ~ 14µm
Response Time (90%)	.5 sec	.5 sec	.5 sec
Distance: Spot	10:1	12:1	20:1
Battery Life	Typ.18 hours	Typ.18 hours	Typ.18 hours
Dimensions	175.2 x 39.0 x 71.9mm	175.2 x 39.0 x 71.9mm	175.2 x 39.0 x 71.9mm
Weight	179 grams including batteries (AAA*2pcs)	179 grams including batteries (AAA*2pcs)	179 grams including batteries (AAA*2pcs)

### TIF7201

#### Pocket IR Thermometer

- › System-on-a-chip SoC technology: compact and lightweight
- › Backlit LCD display w/ dual readings
- › °C / °F Switch and MAX function
- › Auto power off after 15 sec.
- › Battery level indication
- › Distance to spot (D/S): 1:1

#### Applications:

- › Automotive
- › Electrical
- › General home use
- › HVAC/R



TIF7201



TIF7201D



Available in 4pk. display:  
**TIF7201D**  
(Includes 4 of the TIF7201)

### 2-Way Brass Manifolds

Robinair brass manifold bodies are constructed from solid brass for added durability needed for repeated, tough daily use. Contoured easy to grip hand wheels are color coded for quick and easy identification.

- › Improved face seal valves. Better design provides a tighter seal, less wear and improved flow.
- › Double O-ring piston for extra reliability and longer service life.



**44150**

#### Dual R12/R134a Kit

- › Brass manifold with easy-to-grip handles.
- › R12/R134a gauges, PSI, and °F Temp.
- › 1/2" ACME bottom ports.
- › Rear R134a and 1/2" ACME fittings for holding hoses.
- › 90° manual couplers.
- › 72" R134a Hose Set (1/2" ACME x 14mm).
- › 72" R12 Hose Set (1/2" ACME x 1/4" MFL).
- › Blow molded carrying case.



**45111**

#### R134a Manifold Hose Kit

- › Brass manifold with easy-to-grip handles.
- › R12/R134a gauges, PSI, and °F Temp.
- › 1/2" ACME bottom ports.
- › Rear R134a and 1/2" ACME fittings for holding hoses.
- › 90° manual couplers.
- › 72" R134a Hose Set (1/2" ACME x 14mm).

### 2-Way Aluminum Manifolds

Manifold bodies are constructed from solid aluminum for added durability needed for repeated, tough daily use. Contoured easy to grip hand wheels are color coded for quick and easy identification.

- › Improved face seal valves. Better design provides a tighter seal, less wear and improved flow.
- › Double O-ring piston for extra reliability and longer service life.
- › Easy-to-read 3-1/8" gauges with Lexan lenses.
- › Aluminum Manifolds include sight glass.



**47150**

#### Dual R12/R134a Kit

- › Aluminum manifold.
- › 90° Manual couplers.
- › 72" R134a Hose Set (1/2" ACME x 14mm).
- › 72" R12 Hose Set (1/2" ACME x 1/4" MFL).
- › Blow-molded carrying case.



**48510**

#### R134a Manifold Hose Kit

- › Aluminum manifold.
- › 90° Manual couplers.
- › 72" R134a Hose Set (1/2" ACME x 14mm).
- › Blow-molded carrying case.



**41234**

#### R1234yf Aluminum Manifolds and Hose Set

- › Easy-to-read 3-1/8" adjustable gauges.
- › Durable aluminum manifold block with fittings.
- › Improved face seal valves provide a tight seal, less wear and improved flow.
- › Easy-to-grip control knobs.

### Digital Manifold Gauges

The low side gauge has a pressure scale of 30 inHg VAC to 250 psig and the high side gauge has a pressure scale of 0 to 800 psig. Gauges come with a backlight to enhance the view and make the gauges easy to see in low light conditions.

- › Includes profiles for 17 common refrigerants.
- › Detects vacuums in "Hg.
- › Selectable temperature and pressure units of measure.
- › Easy-to-read LCD screen with large digits.
- › Automatic shutdown after 15 minutes of inactivity.
- › Low battery indicator.



11910



11920



43180



43186

### Economy Manifolds



**48134A**

R134 brass manifold, 90° manual couplers and 60" R134a hose set.



**48134B**

R12 and R134 brass manifold, 90° manual couplers and 60" R12/R134a hose sets.



**49134A**

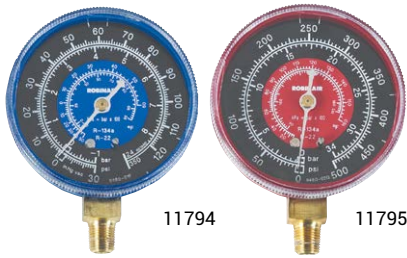
R134 aluminum manifold, 90° manual couplers, 60" R134a hose set and blow-molded case.



**49134B**

R12 & R134 aluminum manifold, 90° manual couplers, 60" R12/R134a hose sets and Blow-molded case.

Part No.	Description
11910	Low side digital gauge
11920	High side digital gauge
43180	2-Way Manifold with Digital Gauges - No hoses
43186	2-Way Manifold with Digital Gauges - and 60" Enviro-Guard hoses



## Replacement Gauges

**11780** – Replacement gauge. Blue/Low side - 3-1/4 in. PSI pressure readings and R-1234yf temperature readings in degrees F.

**11781** – Replacement gauge. Red/High side - 3-1/4 in. PSI pressure readings and R-1234yf temperature readings in degrees F.

**11784** – Replacement gauge. Blue/Low side - 3-1/4 in. PSI pressure readings and R12/ R134A temperature readings in degrees F.

**11785** – Replacement gauge. Red/High side - 3-1/4 in. PSI pressure readings and R12/ R134A temperature readings in degrees F.)

**11794** – Replacement gauge (replaces 11692). Universal compound replacement gauge, psi/kPa pressure readings, R-22 and R-134a temperature readings in degrees Fahrenheit.

**11797** – Replacement gauge.

Universal compound replacement gauge, psi/kPa pressure readings, R-22 and R-134a temperature readings in degrees Celsius.

**11795** – Replaces 11693.

Universal pressure replacement gauge, psi/ kPa pressure readings, R-22 and R-134a temperature. Temperature readings in degrees Fahrenheit.

**11798** – Replacement gauge.

Universal pressure replacement gauge, psi/ kPa pressure readings, R-22 and R-134a temperature. Temperature readings in degrees Celsius.

**11796** – Replacement gauge lens.

Replacement gauge lens, quarter turn on-off.



## Service Couplers for Automotive R-134a

Field service couplers connect to our special Enviro-Guard hoses to allow access to service ports on automotive R-134a A/C systems. The quick-connect design has an integral safety sleeve, which protects against injury and refrigerant loss if the coupler is disconnected under pressure. The compact design easily fits into tight quarters, which is especially handy for retrofits. Six-ball couplers provide a more stable grip on the fitting than do couplers with four balls.

**18190A** – Low-side manual coupler, blue actuator.

**18191A** – High-side manual coupler, red actuator.

**18192** – Set of manual service couplers.

**18341** – High- and low-side automatic couplers.

**19150** – O-ring kit for field service couplers.



## R-1234yf Service Couplers

› Integrated safety sleeve, protects against refrigerant loss.

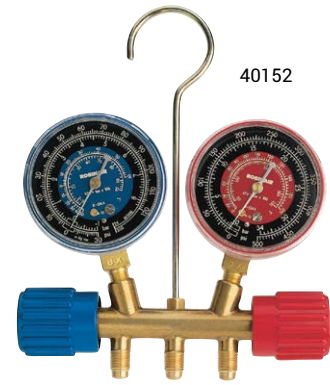
› Compact design.

› Provides a stable grip on the fitting.

**18122** – R-1234yf Low side service coupler.

**18123** – R-1234yf High side service coupler.

**18124** – R-1234yf High- and low-side service coupler set.



## Side-Wheel Manifolds with 1/4" Fittings

Our popular side-wheel manifold is easy to use and designed for accuracy.

**Bar** – Solid forged brass for long life; handwheels are durable, color-coded Lexan™.

**Universal Gauges** – Clearly marked so they're easy to read and protected with Lexan™ lenses.

**Field-Proven Face Seal Valve** – Prevents leakage past the stem.

### Models

**40152** – Standard side-wheel manifold, color-coded gauges, Fahrenheit scale, brass bar, handwheels, and hanging hook– no hoses.

**40151** – Standard side-wheel manifold, color-coded gauges, Celsius scale, brass bar, handwheels, and hanging hook– no hoses.

**40153** – Standard side-wheel manifold set, includes three 36" standard hoses with 1/4" fittings.

**40169** – Standard side wheel manifold set, includes three 60" standard hoses with 1/4" fittings.



## 18576

### Replacement Parts Kit for R-134a Manifold Gauges and Hoses

› 4 manifold stems.

› 6 o-rings, 14 mm.

› 12 valve core depressors.

› 12 hose gaskets, 1/4".

› 12 manifold stem o-rings.

› 6 Quick Seal™ o-rings for R-134a.

› 2 caps with straps, 1/2" Acme.

› O-ring lubricant (high vacuum grease).

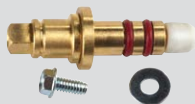
› Valve core remover/installer with 6 valve cores.

› 4 color-coded Lexan® handwheels & screws.

› Set of R-134a coupler o-rings, high- and low-side.

### Stem Replacement Assembly Kit

Kits include all necessary parts to service one manifold valve. To replace stems on both valves, order two kits.



**40232**  
Stem assembly kit for manifolds with conical seal design.



**13148**  
Face seal kit for side-wheel manifolds, includes stem with o-rings, spring, and screw. Will not fit sight glass manifold.



**19695**  
Face seal kit for sight glass manifolds.



**13067**  
High vacuum grease.

### Replacement Handwheels



**40449**  
Set of one red and one blue with 1/4" drive.



**41698**  
Set of one red and one blue with 1/4" drive (barrel style).

### Replacement Parts for Hoses and Adapters

Help's you keep your charging hoses and adapters in top working condition.



**18180**  
O-rings for Quick Seal™ 1/4" fittings and adapters, package of six.



**40531**  
O-rings for 10293 adapters, package of six.



**40082**  
1/4" valve core depressors, package of six.



**40083**  
1/4" gaskets, package of six.



**40084**  
3/8" gaskets, package of six.



**40677**  
3/16" gaskets, package of six.



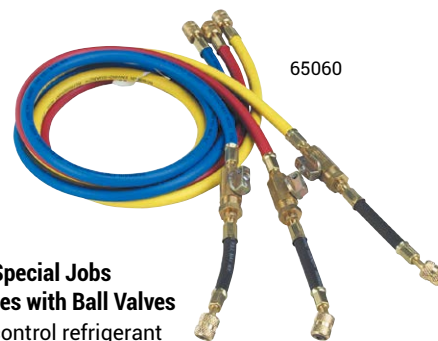
**40653B**  
3/16" valve core depressors, package of six.



30072

### Hoses

**30072** – Standard hose (500/2500 psi) – 72", 1/4" SAE internal fitting x 1/4" SAE internal.



65060

### Special Hoses for Special Jobs Enviro-Guard™ Hoses with Ball Valves

In-line ball valves control refrigerant flow, open and close in a quarter turn.

**65060** – Set of three 60" hoses with ball valves.

**65160** – 60" Enviro-Guard™ hose with ball valve, yellow.

**65260** – 60" Enviro-Guard™ hose with ball valve, blue.

**65360** – 60" Enviro-Guard™ hose with ball valve, red.



40333



10328

### Hose Extension Coupler

Connect any number of hoses to get the extra length you need – there's no need to order special hose lengths.

**40333** – 1/4" MFL x 1/4" MFL, no valve core.

**10328** – 1/2" Acme external x 14 mm internal (for automotive R-134a).

### 20' Charging Hoses

**68020** – Set of 20' Enviro-Guard™ red and blue, 1/4" fittings.

**68420** – Set of 20' Enviro-Guard™ red and blue, Quick Seal™ fittings.



68020

# A/C Recovery & Recycling

A/C Charging Hoses, Coolants

## Charging Hoses

Robinair premium refrigerant charging hoses are built for long life and dependability. A strong, six-sided crimp provides a reliable connection between the hose and barb, even at maximum pressure. The coupler nuts are deeply knurled for quick finger-tightening. Enviro-Guard™ hoses are ideal for high pressure applications, including R-410a systems.



### Hose Selection Charts

1/4" Standard Hoses with Standard Fittings	Length (inches)	Yellow	Blue	Red	Pkg. Set (Blue, Red, Yellow)
Neoprene-coated for flexibility and wear resistance, with a valve core depressor and a 45° bend on one end for convenient access to the system. 500 psi working pressure; 2500 psi burst pressure.	36	31036	32036	33036	30036
	60	31060	32060	33060	30060
	72	31078	32072	31079	30072
	96	31096	32096	33096	N/A

1/4" Standard Hoses with Quick Seal™ Fittings	Length (inches)	Yellow	Blue	Red	Pkg. Set (Blue, Red, Yellow)
500 psi working pressure; 2500 psi burst pressure.	72	38172A	38272A	38372A	39072A

1/4" Enviro-Guard™ Hoses with Quick Seal™ Fittings	Length (inches)	Yellow	Blue	Red	Pkg. Set (Blue, Red, Yellow)
Special barrier material prevents virtually any permeation of refrigerant, yet remains flexible. With 45° Quick Seal™ fittings. 740 psi working pressure; 3700 psi burst pressure.	36	68136A	68236A	68336A	69036A
	60	68160A	68260A	68360A	69060A
	72	68172A	68272A	68372A	69072A
	96	68196A	68296A	68396A	69096A

Enviro-Guard™ Hoses for Automotive R-134a	Length (inches)	Yellow 1/2" ACME	Blue 14 mm x 1/2" ACME	Red 14 mm x 1/2" ACME	Pkg. Set (Blue, Red, Yellow)
Meets all specifications for low permeation construction. Clearly marked for R-134a. See page 16 for service couplers. 500 psi working pressure; 2500 psi burst pressure.	60	61060	62060	62243	60060
	72	61072	62072	62244	60072
	96	61096	62121	63096	60096
	240	NA	NA	NA	64240 (excl. yellow)
	240	NA	NA	62246	NA
	240	NA	62242	NA	NA

## 75240 Coolant and Battery Refractometer

This can be used for measuring the freezing point of either propylene and ethylene glycol based cooling systems. It can also be used for checking the strength of electrolyte solution in batteries. This precision instrument features high quality optics with ultra smooth focusing on the body. Coolant scale range: 32° F/0° C to -60° F/ -51° C.



75234 75134

## Econo-Clean Coolant Service Accessories

To ensure coolant will provide adequate protection to the vehicle, the coolant should be adjusted to the manufacturer's specifications. These accessories will help you quickly test coolant.

**75134** – Coolant test strips – Just dip a strip in coolant and it shows the freeze point and the pH; bottle of 50 strips.

**75234** – 3-way heavy-duty truck coolant test strips – shows pH, freeze point, and nitrite (0–4000 ppm), pH <7.5–11+, glycol 0–60%.



## 75260 Coolant Refiller

- › 26" Hg vacuum refills cooling system without air lock.
- › Eliminates the need for "bleeding."
- › Checks for system leaks and utilizes OEM approved technology.
- › Universal "fits all" cone adapter.
- › Built-in gauge protector.

## Multi-purpose Dye and Coolant Fluorescent Dye

- › Brightest dyes in the industry to help find leaks faster.
- › Exceeds all industry performance standards.
- › OEM backed and approved.
- › Solvent-free formula.
- › REACH and CLP compliant.



16244

Tracker Multi-purpose Dye. Six 1/4 oz. bottles, 6 applications



16245

Tracker Multi-purpose Dye. One 8 oz. bottle, 32 applications



16885

Tracker Coolant Dye. Six 1/4 oz. bottles, 6 applications



16890

Tracker Coolant Dye. One 8 oz. bottle, 32 applications



**Works on both pressurized and non-pressurized cooling systems.**

**OUR 10-MINUTE EXCHANGE PROCESS MEANS NO MORE WAITING FOR THE ENGINE TO WARM UP**



**75700**

**Coolant Exchange Unit  
Designed with the user in mind.**

**Safety First**

- › Our “engine off” feature removes pulleys, belts, and fan blades from the safety equation.
- › No additional ventilation required.
- › Vacuum mode creates a “push/pull” exchange process allowing the technician to safely remove high pressure in a hot system.
- › “Hands-off” transfer of used coolant to a bulk tank prevents spills and helps protect the technician.

**Simple to Operate**

- › Two clearly marked valves and an easy-to-read gauge make this machine very simple to use.
- › Sight glass clearly shows the amount of coolant in the waste tank.
- › One valve controls the flow of coolant; process is easy to understand—no special training needed.
- › No electricity required. 90 psi shop air drives the exchange process, as well as the 2 gpm pump on the waste tank.

**Designed to Survive**

- › Impact-resistant polypropylene cabinet will not scratch or dent vehicle.
- › Cabinet is impervious to chemicals commonly used in the shop.
- › Large, inflatable tires carry a well-balanced platform easily across any shop floor.
- › Easy to maneuver between bays and vehicles.

**Extra Design Features**

- › Two external new coolant supply tanks allow on-board storage of two different coolant types.
- › Graduations on tanks show user the amount of new coolant on board.
- › On-board storage of step adapters.
- › Adapter kit included.
- › No hoses to cut.
- › 96” hoses can be neatly stored on unit.
- › One-year warranty.

**Replacement Parts and Accessories**

- 75369** – Replacement coolant 5-gallon tank.
- 75360** – Heavy-duty adapter kit. Links the two tanks for 14 gal. capacity to service class A vehicles. (Note: must have 7-gallon tank No. 75370).
- 75370** – Replacement coolant 7-gallon tank.
- 17490** – Protect your investment with a heavy-duty vinyl dust cover.

**Specifications**

<b>Power Supply</b>	90 psi shop air
<b>Tanks</b>	– Internal waste – 15-gallon capacity – External supply (2) 7-gallon capacity (removable)
<b>Dimensions</b>	47” H x 26” W x 33” D (119 cm x 66 cm x 84 cm)
<b>Medium Step Adapter</b>	Two included; fits hose size 1-1/4”, 1-3/8”, and 1-1/2”
<b>Large Step Adapter</b>	Two included; fits hose size 1-3/4”, 2”, and 2-1/4”



Back View:  
7-gallon capacity supply tanks allow storage of different coolants.

**92500**

**Transmission Fluid Exchanger**

- › Top-off feature. Add or subtract in 1/10 qt. increments.
- › “Low Fluid Alarm” and “Indicator Light” to alert operator.
- › “Drain Waste” feature automatically pumps used fluid from the machine into a waste oil container.
- › “Drain Pan” feature drains the pan for easy filter replacement. No mess.

**Three modes of operations:  
Dipstick only, cooler line, or a combination of the two!**

- › Unprecedented one-tenth quart flow metering for adding or subtracting fluid from the pan.
- › Complete set of cooler line adapters for most foreign and domestic vehicles.
- › Works with all types of automatic transmission fluid.
- › Integral performance designed hose and tool compartment with drain.

**529734** – Replacement nylon tube.



**Specifications**

<b>Electrical</b>	12V DC
<b>Exchange Accuracy</b>	+/- 1/4 qt.
<b>Controls</b>	Microprocessor with digital keypad and LEDs
<b>Fluid Tanks</b>	32 quarts supply (24.6 liters), 34 quarts waste (26.6 liters)
<b>Hoses</b>	91” black & red (Exchange); 76” white transfer tube (Straw)
<b>Fluid Types</b>	Multiple fluid capability.
<b>Adapter Set</b>	Complete set for most applications. Standard adapters for Ford, GM, Chrysler, European, and Universal (covering most Asian imports).
<b>Pump</b>	Positive displacement gear pump, 2 gallons per minute maximum
<b>Weight</b>	158 lbs. (72 kg)
<b>Dimensions</b>	52” H x 33” W x 20” D (132 cm x 84 cm x 51 cm)
<b>Process Time</b>	Depends on mode
<b>Warranty</b>	1 year parts and labor

**92001**

**Automatic Transmission Fluid Diagnostic Pads**

Easy, quick way to test automatic transmission fluid to determine when service is necessary. Simply place a few drops of transmission fluid from transmission dipstick onto test pad. Pad will change color indicating condition of transmission fluid. Package contains 100 pads.



**92000**

**Transflow Transmission Oil Cooler Flusher**

Fix it right the first time... designed to measure oil flow capacity within the transmission oil cooler, and also has the capability to flush contaminated oil from the TOC after repairs.

- › Only unit in the industry that performs a flow rate test.
- › Flush and flow test time is 5 to 8 minutes.
- › 32-quart supply tank; 34-quart waste tank.
- › Supply and waste hoses each 10’ long.
- › 10’ long, 12V DC power cables with battery lead clips.
- › Requires shop air (90 psi, min.) and 12V DC source.





## Premium High Vacuum Pump Oil

The performance of your pump depends largely on the quality and purity of the vacuum pump oil. Robinair's oil is engineered to maintain maximum viscosity at high running temperatures and to improve cold weather starts.

To keep the pump operating at peak efficiency, change the oil frequently. Moisture and other contaminants can quickly deteriorate the purity of the oil, thinning it, and reducing the pump's ability to reach deep vacuum conditions.

### Thermally Stable

Laboratory tests prove that Robinair oil is more thermally stable in comparison to other leading brands, which means it resists breaking down due to heat for a longer period of time.

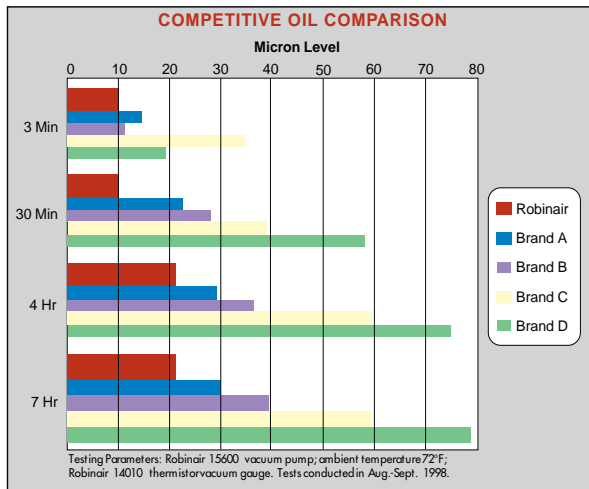
### Lower Moisture Content

Robinair oil has a lower moisture content than other oils, thanks to our special packaging and handling procedures. Moisture degrades the oil's purity, thinning it, and reducing the pump's ability to reach a deep vacuum.

**13119** – Pint bottle, 12 per case.

**13203** – Quart bottle, 12 per case.

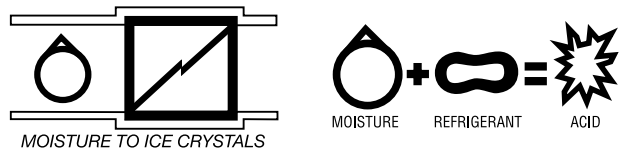
**13204** – Gallon bottle, 4 per case.



## Change Your Vacuum Pump Oil Frequently

Clean oil is important for peak vacuum pump performance. When the oil is contaminated, it reduces your pump's ability to remove moisture from a system. You should change the pump oil frequently, and especially in the following situations:

- › You have just evacuated a system that you suspect was overly moisture-laden.
- › You have just evacuated a system with a compressor burnout.
- › The pump oil looks cloudy or milky.
- › The pump will not pull to factory specifications when blanked off to an electronic thermistor vacuum gauge.
- › Every 10 hours of operation.



## The Importance of Deep Vacuum

The purpose of a vacuum pump is to remove moisture and air from an A/C-R system. Modern systems are built tighter and charges are more critical. That means these systems have a greater sensitivity to moisture and other contaminants, making thorough evacuation more important than ever before.

Moisture in a refrigeration system, directly or indirectly, is the cause of most problems and complaints. First, moisture can cause freeze-up in a system. Moisture is picked up by the refrigerant and transported through the refrigerant line in a fine mist, with ice crystals forming at the point of expansion.

"Freeze-up" is not the only problem caused by moisture. It can also result in corrosion, the effects of which are not apparent until the real damage has occurred. Moisture alone is bad enough, but combined with refrigerants containing chlorine, hydrochloric acids can form. These greatly increase the corrosion of metals.

Also, refrigerant oil rapidly absorbs moisture. Water-formed acids combine with the refrigerant, forming a closely bonded mixture of fine globules. The effect is called sludging and it greatly reduces the lubricating ability of the oil.

A vacuum pump removes troublesome moisture by lowering the pressure within the system and vaporizing (or boiling off) the moisture, then exhausting it along with air.

## CoolTech™ – The Inside Story

A vacuum pump that's fast and thorough saves you not only time, but also the expense of callbacks and dissatisfied customers. Robinair pumps perform better than other pumps in the industry, ensuring you complete dehydration before recharging.

Robinair pumps are engineered specifically to meet the needs of the kind of A/C work you're doing today, and to give you trouble-free operation. We've put our years of experience and know-how into developing pumps that help you do the job faster and better.

All Robinair pumps are backed by our exclusive "No Hassle" over-the-counter replacement warranty. You can return a pump to your Robinair distributor for an immediate exchange – with no hassle! (In U.S. and Canada only; in other locations, see your Robinair distributor.)

Robinair CoolTech vacuum pumps are designed for use on A/C-R systems using CFCs, HCFCs, and HFCs in conjunction with mineral oil, ester oil, alkylbenzene oil, and PAG oil as lubricants. Do not use them with ammonia or lithium bromide systems; not for use with flammable refrigerants.

U.S. Patent Numbers: 4,523,897; 4,631,006; 5,209,653.

### › Oil Fill Port

Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

### › Two-stage Design

Cleans the system more thoroughly than a single-stage pump; the second stage starts pumping at a lower pressure so you can pull a deeper ultimate vacuum.

### › Heavy Duty Motor

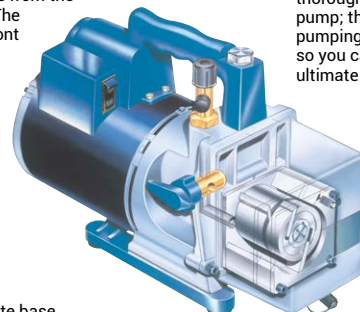
High torque design for easy startup and efficient operation.

### › Molded Base

Durable polycarbonate base improves pump balance and minimizes vibration during operation.

### › Iso-Valve™

Isolates the pump from the system with just a quarter-turn.



### › Die-Cast Aluminum Housing

Cast aluminum housings make the pumps lightweight but durable.

### › Oil Drain Valve

Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

### › Offset Rotary Vanes

Our proven design builds a powerful compression within the pumping chamber to reduce system pressure and vaporize moisture, so it can be exhausted along with air.

### Selecting the right size pump

The more air a pump moves, the faster it can reach an acceptable vacuum. A smaller pump takes more time to evacuate a system than one that's the correct size for the job.



### Use this Chart as a Guide to Selecting the Right Size Pump.

System	Recommended Pump Size	
	Robinair® Pump	VacuMaster™ Pump
Up to 10 tons (35kW); Domestic Refrigeration, Passenger Cars	–	1.5 CFM (35 l/m)
Up to 30 tons (105kW); Residential A/C, Panel Trucks & RV's	4 CFM (93 l/m)	3 CFM (71 l/m)
Up to 50 tons (176kW); Rooftop A/C systems, Tractor/Trailers, Buses	6 CFM (142 l/m)	5 CFM (118 l/m)
Up to 70 tons (246kW)	10 CFM (236 l/m)	8 CFM

	Oil Fill Port	Heavy Duty Motor	Two-Stage Design	Molded Base	Die-Cast	Oil Drain Valve	Offset Rotary Vanes	Iso-Valve	Gas Ballast
Robinair® Pumps	•	•	•	•	•	•	•	•	•
VacuMaster® Pumps	•	•	•	•	•	•			

All Robinair pumps are backed by our exclusive “No Hassle” over-the-counter replacement warranty. You can return a pump to your Robinair distributor for an immediate exchange – with no hassle! (In U.S. and Canada only; in other locations, see your Robinair distributor.)

### Robinair Vacuum Pumps

- › Power and capacity for a wide range of service applications.
- › High CFM rating for fast, thorough evacuation.
- › Two-stage rotary vane design.

**Iso-Valve™** – Isolates the pump from the system with just a quarter-turn.

**Gas Ballast** – Moisture laden air passing through the pump mixes with relatively dry air so compression does not cause condensation.

**Two-stage Design** – Cleans the system more thoroughly than a single-stage pump; the second stage starts pumping at a lower pressure so you can pull a deeper, ultimate vacuum.

**Oil Drain Valve** – Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

**Oil Fill Port** – Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

**Heavy-Duty Motor** – High torque design for easy startup and efficient operation.

**Offset Rotary Vanes** – Our proven design builds a powerful compression within the pumping chamber to reduce system pressure and vaporize moisture so it can be exhausted along with air.

**Molded Base** – Durable polycarbonate base improves pump balance and minimizes vibration during operation.

**Die-Cast Aluminum Housing** – Cast aluminum housings make the pumps lightweight but durable.



15120A – 10 CFM



15600 – 6 CFM,  
15400 – 4 CFM, 15434 – 4 CFM

Model	Free Air Displacement	Factory Micron Rating	No. of Stages	Intake Fitting	Oil Capacity	Motor Size	Voltage	Approvals	Weight	Dimensions
<b>Domestic Models</b>										
15400	4 CFM	15 microns	2	1/4" MFL & 1/2" MFL	15 oz. (445 ml)	1/2 hp	115V 60 Hz	UL	27 lbs. (12.2 kg)	9.75" H x 5.625" W x 15.5" L 247 mm x 143 mm x 394 mm
15434	4 CFM	15 microns	2	1/4" MFL & 1/2" Acme	13 oz. (384 ml)	1/3 hp	115V 60 Hz	UL	29 lbs. (13 kg)	9.75" H x 5.625" W x 15" L 247 mm x 143 mm x 381 mm
15600	6 CFM	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	15 oz. (445 ml)	1/2 hp	115V 60 Hz	UL	27 lbs. (12.2 kg)	9.75" H x 5.625" W x 15.5" L 247 mm x 143 mm x 394 mm
15120A	10 CFM	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	16.5 oz. (488 ml)	1/2 hp	115V 60 Hz	UL	38 lbs. (17.24 kg)	10.75" H x 5.625" W x 16.5" L 273 mm x 143 mm x 419 mm
<b>International Models</b>										
15401	94 liters/minute	15 microns	2	1/4" MFL & 1/2" MFL	13.5 oz. (400 ml)	1/3 hp	115V/220-250V 50/60 Hz	CE	29 lbs. (13 kg)	9.688" H x 5.625" W x 15.75" L 246 mm x 143 mm x 400 mm
15424	94 liters/minute	20 microns	2	1/4" MFL & 1/2" Acme	13.5 oz. (400 ml)	1/3 hp	115V/220-250V 50/60 Hz	CE	32 lbs. (14.5 kg)	9.763" H x 5.625" W x 15.75" L 248 mm x 143 mm x 400 mm
15601	142 liters/minute	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	13.5 oz. (400 ml)	1/3 hp	115V/220-250V 50/60 Hz	CE	29 lbs. (13 kg)	9.688" H x 5.625" W x 16.5" L 246 mm x 143 mm x 419 mm
15121A	283 liters/minute	15 microns	2	1/4" MFL, 3/8" MFL, & 1/2" MFL	16.5 oz. (488 ml)	1/2 hp	115V/220V 50/60 Hz	CE	41 lbs. (18.60 kg)	10.75" H x 5.625" W x 17.5" L 273 mm x 143 mm x 445 mm

### VacuMaster™

#### Economy Vacuum Pumps

- › Performance tested to meet Robinair's high standards
- › Power and capacity for a wide range of service applications.
- › High CFM rating for fast, thorough evacuation.
- › Two-stage rotary vane design.

#### Features:

**Two-stage Design** – Cleans the system more thoroughly than a single-stage pump; the second stage starts pumping at a lower pressure so you can pull a deeper, ultimate vacuum.

**Oil Drain Valve** – Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

**Oil Fill Port** – Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

**Heavy-Duty Motor** – High torque design for easy startup and efficient operation.

**Die-Cast Aluminum Housing** – Cast aluminum housings make the pumps lightweight but durable.



15150 – 1.5 CFM  
15300 – 3 CFM  
15500 – 5 CFM



15800 – 8 CFM

Model	Free Air Displacement	Factory Micron Rating	No. of Stages	Intake Fitting	Oil Capacity	Motor Size	Voltage	Weight	Dimensions
<b>Domestic Models</b>									
<b>15150</b>	1.5 CFM	50 microns	2	1/4" MFL and 3/8" Acme 3/8" FFL x 1/2" Acme adapter	7.4 oz. (219 ml)	1/4 hp	115V 60Hz	22 lbs. (10 kg)	9.5" H x 4.75" W x 12.5" L 240 mm x 120 mm x 315 mm
<b>15300</b>	3 CFM	35 microns	2	1/4" MFL and 3/8" MFL 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	115V 60Hz	28 lbs. (12.5 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm
<b>15500</b>	5 CFM	35 microns	2	1/4" MFL and 3/8" Acme 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	115V 60Hz	28 lbs. (12.2 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm
<b>15800</b>	8 CFM	35 microns	2	1/4" MFL and 3/8" MFL	18.6 oz. (550 ml)	1 hp	115V 60Hz	37 lbs. (16.8 kg)	16" H x 6" W x 10" L 406" mm x 152mm x 254mm
<b>International Models</b>									
<b>15301</b> 3 CFM	71 liters/ minute	35 microns	2	1/4" MFL and 1/2" MFL 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	220V 50Hz	28 lbs. (12.5 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm
<b>15501</b> 5 CFM	118 liters/ minute	35 microns	2	1/4" MFL and 1/2" Acme 3/8" FFL x 1/2" Acme adapter	7.5 oz. (220 ml)	1/3 hp	220V 50Hz	28 lbs. (12.5 kg)	10" H x 5" W x 13" L 255 mm x 123 mm x 336 mm

### VacuMaster™

#### Single-Stage Vacuum Pumps

- › Performance tested to meet Robinair's high standards
- › High CFM rating for fast, thorough evacuation.

#### Features:

**The one-stage rotary vane design** – provides powerful, quiet, high vacuum capability and ensures moisture removal, while the high pumping capacity reduces evacuation time.

**Oil Drain Valve** – Positioned at the bottom of the oil reservoir and angled for faster, more complete draining.

**Oil Fill Port** – Makes adding oil simple since the port is accessible from the front or either side. The sight glass on the front of the pump shows you when enough oil has been added.

**The intake screen** – prevents foreign matter from entering the pumping chamber, and an internal exhaust filter separates oil vapor from the exhaust flow.

**Aluminum housing and rotary vanes** – keep the pump weight low, making it easy to carry.



15115 – 1.5 CFM



15310 – 3 CFM or 15510 – 5 CFM

Model	Free Air Displacement	Factory Micron Rating	No. of Stages	Intake Fitting	Oil Capacity	Motor Size	Voltage	Weight	Dimensions
<b>Domestic Models</b>									
<b>15115</b>	1.5 CFM	115 microns	1	1/4" flare and 1/2" Acme	10 oz. (300 ml)	1/5 hp	110V 60Hz	15 lbs. (6.9 kg)	11.25" H x 4.75" W x 11.375" L 286 mm x 124 mm x 288 mm
<b>15310</b>	3 CFM	75 microns	1	1/4" flare and 1/2" Acme	8.5 oz. (250 ml)	1/4 hp	110V 60Hz	18 lbs. (8.2 kg)	10" H x 4.875" W x 13.25" L 255 mm x 123 mm x 336 mm
<b>15510</b>	5 CFM	75 microns	1	1/4" flare and 1/2" Acme	10 oz. (300 ml)	1/2 hp	110V 60Hz	21 lbs. (9.7 kg)	10" H x 4.875" W x 13.25" L 255 mm x 123 mm x 336 mm



34970

**Air-VacTM for R-12 and R-134a**

Economical Air-Vac uses shop air to pull the system into vacuum and includes inlet fittings with 1/4" and 1/2" Acme sizes.

**Easy-to-use** – Unique venturi design runs on shop air.

**Rugged Lexan® Case** – Both oil- and scratch-resistant and comes with a convenient handle.

**Low Maintenance** – There's no oil or moving parts to replace.

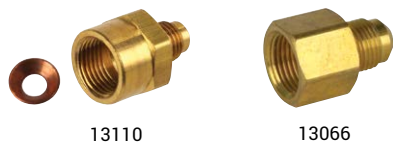
34977 – Replacement inlet tee, 1/4" MFL and 1/2" acme.

**Specifications**

Drive	Compressed air
Free Air Displacement	1 CFM
Input Pressure	75 psi
Vacuum Rating	29 in./Hg
Intake Fitting	1/4" MFL and 1/2" ACME
Dimensions	4-1/2" H x 4" W x 7-1/2" L
Weight	2 lbs./1 kg

**Pump Intake Fittings**

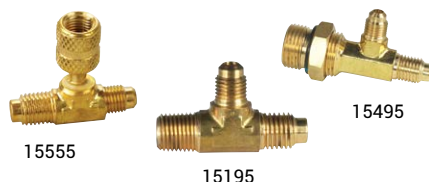
R-12/R-134a Dual Inlet Fittings Convert your pump to R-12 and R-134a. Solid brass tees replace inlet fittings on pump; includes a branch with a 1/4" MFL fitting for R-12 (and other refrigerants) and a branch with 1/2" Acme fittings for automotive R-134a.



**Pump Intake Fitting Adapters:**

13110 – Adapter, 3/8" FFL to 1/4" MFL.

13066 – Adapter, 1/2" FFL to 3/8" MFL.



**Also Available:**

15555 – Screw-on inlet adapter converts any pump, 1/4" FFL coupler x 1/4" MFL x 1/2" Acme.

15195 – 1/4" MFL/1/2" Acme combination inlet fitting for 15200 series vacuum pumps.

15495 – 1/4" MFL/1/2" Acme combination inlet fitting for 15400/15600 series vacuum pump.



14830A

**Thermistor Vacuum Gauge**

› Solid-state instrument constantly monitors and visually indicates the vacuum level in 10 segments from atmosphere to 50 microns.

› LCD screen can be read even in direct sunlight and minimizes battery consumption.

› No adjustments to make, no calibrations for atmospheric pressure or altitude.

› Durable carrying case protects the instrument and has a built-in compartment for storing the 24" charging hose (included).

**Specifications**

Range	25,000 to 50 microns in 10 segments
Power Supply	Four "D" cell batteries (not included) or optional A/C adapter
Display	Custom LCD, 10 segments
Weight	2.38 lbs. (1.08 kg) without batteries
Dimensions	10" H x 7.5" W x 3.375" D (25.4 cm x 19 cm x 8.6 cm)



14777

**Compact Electronic Vacuum Gauge**

Robinair's 14777 electronic vacuum gauge is just 2-1/2" x 3" in size, but accurate enough to clearly indicate when the system is free from moisture and ready for recharging. Specifically designed for use with a high vacuum pump, the 14777 measures to 10 microns.

**Clearly Shows Vacuum Level** – The display is an easy-to-read LCD type with readout showing the current vacuum level.

**6' Lead for Service Flexibility** – Hang the gauge in a location that's convenient for you to monitor vacuum level.

**Mounting Magnet** – Position the 14777 where it's easy-to-read the LCD.

14778 – Replacement thermistor tube.

**Specifications**

Power Supply	One 9V battery (included)
Vacuum Fitting	1/4" MFL
Length of Lead	6 feet (8.3 m)
Vacuum Rating	29 in./Hg
Dimensions	3" H x 2.5" W x 1" D (7.62 cm x 6.35 cm x 2.54 cm)

RAVG-1

**Digital Vacuum Gauge Easy as 1 - 2 - 3**

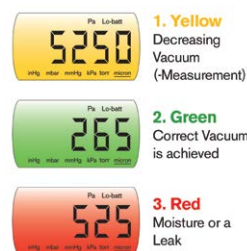
**Connect, Measure, Test**

The RAVG-1 employs a sophisticated MEMS Pirani type sensor that directly measures flow. Unlike all other field service gauges on the market, the RAVG-1 is NOT affected by temperature.

The RAVG-1 measures vacuum from Atmosphere to 10 microns in 6 different scales, and can withstand overpressure beyond 30 bar. The unit employs an industry first multi-color backlight that functions as an instant go/no go indicator of acceptable vacuum or leakage.



Highlight: Integrated "Magnetic Hook" or connect to a manifold.



First time introduction: 3 color backlight display offers at one glance the vacuum process status

**Features**

- › High Resolution and unique backlight indicator make precision readings easy
- › Patent Pending design, employs a sophisticated MEMS Pirani sensor
- › Range from Atmosphere down to 10 microns
- › Measure vacuum in Microns, mmHg, inHg, mBar, Pascals or Torr
- › Extremely accurate at low micron levels
- › Impact and water resistant case with protective Rubber boot
- › Rapid response to changes in vacuum
- › Large easy to read 5 digit display
- › Auto shut off feature prolongs battery life
- › Battery powered
- › Integrated "magnetic" hook
- › Includes carrying case and tee adapters or in-line connections (1/4" MFL x 1/4" MFL and 1/4" FFL x 1/4" MFL versions)

**Specifications**

Operating Range	Atmosphere to 10 Microns
Resolution	As low as 5 Microns/ 0.005mmHg/0.002inHg/0.007mBar/0.66Pa/0.005Torr
Accuracy	As low as +/- 5 % of RDG
Over pressure	~ 31 Bar/450 psi
Measuring Units	Microns/mmHg/inHg/mBar/Pa/Torr
Display	5 digit STN LCD, 50 x 30 mm with tricolor LED backlight
Power Supply	3 x size "AAA" 1.5 V Batteries
Input Connection	1/8"-27 NPT Male

## Slimline Refrigerant Scales

The TIF Slimline scales offered industry leading accuracy and performance with the choice of getting the familiar usability and quality in either a 110 pound/50 kg. or 200 pound/100 kg. capacity.

### Features

- › Touch Key controls.
- › Three display modes – Lbs./oz.; Decimal Lbs., Kilograms.
- › Extremely Accurate.
- › Auto Zero.
- › Removable platform and control box with prop stand/hanging hook.
- › Compact design, completely portable.
- › Removable control box with prop stand/hanging hook.
- › CE approved.
- › Two year warranty.
- › Blow molded case.



TIF9010A



TIF9020A



## TIF9035 Charging Scale and Manifold Storage Combo

In many service situations two tools are almost always sure to be found, the charging scale, and the manifold and hose kit. This TIF9035 allows the charging scale, service manifold and hoses to be stored and carried to the work site in one convenient package. A tough plastic outer case helps protect your manifold gauge.

- › Molded design, easy to carry.
- › Integrated manifold and hose storage.
- › Can be used with ALL refrigerants.
- › High weight capacity, up to 200 Lbs.
- › Excellent accuracy and resolution.
- › Display provides Lbs/oz; decimals Lbs and Kg measurements.
- › Battery powered, one 9V battery.
- › Platform adapts to most existing tanks (9" x 9").
- › Multifunction LCD readout.
- › Color-coded tactile integrated keypad.
- › 3 Control keys: ON/OFF, zeroing and measurement units.
- › CE approved.
- › 1 Year Warranty.

Specifications	TIF9010A	TIF9020A
<b>Range</b> 15.8 oz., OR	0 lbs. 0.0 oz. to 110 lbs. 0.0 oz., 0.000 lbs. to 110.000 lbs., OR 0.000 kg to 55.000 kgs	0 lbs. 0.0 oz. to 199 lbs.0.000 lbs. to 199.990 lbs., OR 0.000 kg to 100.000 kg
<b>Resolution</b>	0.1 oz./0.005 lbs./2 grams	0.2 oz./0.010 lbs./4 grams
<b>Accuracy</b>	± 0.5% of reading	± 0.5% of reading ± 1 digit
<b>Operating Temp</b>	32° to 120°F (0° to 49°C)	32° to 120°F (0° to 49°C)
<b>Power Supply</b>	9VDC	9VDC
<b>Battery Life</b>	30 hours	30 hours
<b>Coil Cord Length</b>	6 ft. (1.8m)	6 ft. (1.8m)



TIF9031



TIF9030

## Economy Digital Refrigerant Scale

- › Easy to carry and store.
- › Capacity up to 220 lbs. (100 kg). Display shows lbs./oz. and kg.
- › High accuracy (±0.5 oz.) and resolution (0.1oz).
- › 9-volt battery power.
- › Platform to adapt to most existing tanks (9" x 9").
- › Three control keys: On/Off, automatic zeroing, and measurement units.
- › Charging and recovery capabilities
- › CE approved.
- › One-year warranty.



TIF9030 – Economy digital refrigerant scale.

TIF9031 – Economy digital refrigerant scale carrying case.

## TIF9055 Certified Refrigerant Scale

- › 220 pound / 100 kg capacity.
- › Allows automatic charging or recovery operations.
- › Color-coded keypad controls.
- › Three display modes – lbs./oz.; decimal lbs.; kilograms.
- › Very high resolution – 0.2 oz./0.010 lbs./4 grams.
- › Can be used with all refrigerants.
- › Advanced charge and recovery modes – uses tare weight and maximum capacity of cylinder to calculate maximum charge/recovery available.
- › User programmable memory for up to 99 different stored values.
- › "Repeat" charge feature.
- › Removable platform and control box with prop stand/hanging hook.
- › Compact design – completely portable, battery powered.
- › Low battery indicators.
- › Five-year warranty.



### Specifications

<b>Range</b>	0 lbs. 0.0 oz. to 219.99 lbs. 0.0 oz., OR 0.000 lbs. to 219.990 lbs., OR 0.000 kg to 100.000 kg
<b>Resolution</b>	0.2 oz./0.010 lbs./4 grams
<b>Accuracy</b>	± 0.5% of reading
<b>Power Supply</b>	Four AA batteries & one 9V battery
<b>Battery Life</b>	30 hours
<b>Max. Solenoid Operating Pressure</b>	500 psi
<b>Operating Temp.</b>	32°F to 120°F (0°C to 49°C)
<b>Inlet/Outlet Ports</b>	1/4" MFL fittings with 1/2" ACME adapters
<b>Weight</b>	Approx. 7 lbs.

**10994**

**Heater Blanket**

Robinair's heater blanket speeds charging by maintaining a constant temperature, thus creating a positive pressure between the refrigerant tank and the A/C system.

- › Fits 30 and 50 pound refrigerant tanks.
- › Thermostat is set at 125°F (55°C).
- › 300 watts, 2.6 amps.
- › Thermal cut-off switch protects against overheating.



**International Models**

**13184** – Heater blanket, 220V–240V 50 Hz, with internal IEC receptacle.



**6512**

**Heavy-Duty Tubing Cutter**

- › Works on tubing sizes 1/8" to 1-1/8" O.D. (3 mm to 29 mm).
- › Easily cuts copper, brass, aluminum, and steel brake lines.
- › Ream folds onto cutter body for storage.
- › Extra cutting wheel stored under ream.



42080, 42090

42071

**Ratcheting Tubing Cutters**

- Designed for confined spaces.
- Unique ratcheting action operates like a socket ratchet, but cuts copper, aluminum, stainless steel, and PVC.
- Spring-loaded adjusting screw applies continuous pressure while cutting.

**42071** – Ratcheting tubing cutter for 1/8" to 1/2" tubing.

**42080** – Ratcheting tubing cutter for 1/4" to 7/8" tubing.

**42090** – Ratcheting tubing cutter for 1/4" to 1-1/8" tubing.



**42022**

**Mini Tubing Cutter**

With a short swing radius, this cutter makes quick work of cutting tubing in tight spots. The 42022 is especially versatile with its larger range: 1/8" to 1-1/8" O.D. tubing capacity.



**42028**

**Tubing Cutter**

Our roller-type cutter makes clean cuts in copper, aluminum, steel, and stainless steel tubing. Features easy action, wide capacity range, and a pencil reamer. For 1/4" to 1-1/2" O.D. tubing



**Replacement Cutter Wheels**

These top quality replacement cutter wheels are thinner for cleaner cuts with less effort. Made of high quality, shock-resistant, tool steel, the cutters are also heat treated to resist breakage and last longer. Cutter wheels are available to fit Robinair cutters, and can be used as replacements in nearly all other brands.



**42024**

**Mini Tubing Cutter**

With the smallest cutting radius in the industry, the 42024 is ideal for extremely tight places. A finer thread screw provides easier tightening. For 1/8" to 5/8" O.D. tubing.



**42035**

**Slip-Adjust Tubing Cutter**

- › All metal construction.
- › Spring-loaded cutting tool for faster cutting.
- › Two locations for spare cutting wheels (1 included).
- › For 1/4" to 2" tubing.
- › Includes attached reaming tool.

**Replacement Wheel Chart**

Model No.	Fits Cutter No.
42062	42028
42073	42071
42083	42080, 42090



**6514**

**Mini Tubing Cutter**

- › Works on tubing sizes 1/8" to 5/8" O.D. (3 mm to 16 mm).
- › Easily cuts copper, brass, aluminum, and steel brake lines in hard-to-reach places.
- › Ream folds onto cutter body for storage.
- › Extra cutting wheel stored under ream.



**42040**  
**Single Blade Deburring Tool**

This handy tool removes internal burrs in copper tubing. It features a high-speed steel, blade, aluminum handle, and pocket clip. Tubing size is unlimited.



**13162**  
**Deburring Tool**

Quickly deburrs aluminum, copper, and steel tubing, and can work on any size tubing. It's made with a high-speed, steel blade and a durable aluminum handle. Three spare blades store in the handle.



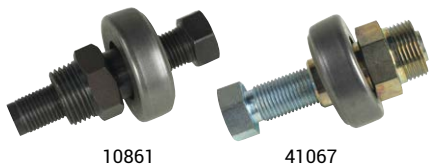
**45355**  
**Fiber Optics Inspection Light with Magnetic Tip and Base**

The applications for this handy tool are practically endless...check burners on heat exchangers for cracks, check coils for dirt and damage, look at serial numbers, fan motor tags, etc., on furnaces and condensing units. Fiber optics provide a bright light, but the shaft is just 7.6 mm in diameter. A durable cover fits over the 15" flexible shaft for protection. Powered by three AA batteries.



**11009**  
**Clutch Plate Remover**

Designed to overcome resistance when removing the clutch plate.



10861

41067

**Clutch Plate Remover/Installer**

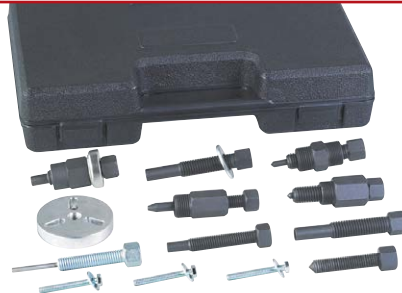
These compact tools are used both to remove the clutch for access to the shaft seal and to re-install it by simply inverting the nut and main bearing.

**10861** – A6, R4. **41067** – V5, DA6, HR6.



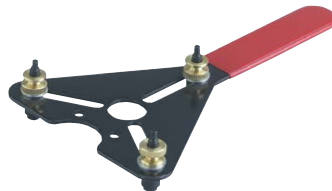
**4536**  
**A/C Clutch Pulley Puller Set**

- For removal of stubborn air conditioning clutch pulleys. Also used on many alternator, generator, power steering, and crankshaft pulleys, harmonic balancers, and fiber timing gears.
- Set includes drop-forged components: one 3/4"-16 x 5" live-center forcing screw, 5-1/2" crossbar with three spread settings, two pairs of jaws, and a clamp bolt.
- Spread: 3" to 5"; Reach: 1" to 5".
- Includes blow-molded plastic case.



**4535**  
**A/C Clutch Hub Remover/Installer Set**

- For damage-free removal and installation of the clutch hubs on these air conditioning compressors: GM-Harrison DA-6, HR-5, V-5, A-6, and early R4; Nippondenso Ford/Chrysler A590, C171, FS-6, 6P148A (new style); Sanden & Sankyo; York/Tecumseh HR980; Zexel/Mitsubishi CH series.
- Set includes a removing flange, plus forcing screws and adapter assemblies to remove and install virtually all clutch hubs.
- Includes blow-molded plastic case.



**4537**  
**A/C Clutch Holding Tool**

This three-stud spanner wrench keeps the A/C clutch from turning when loosening or tightening the retaining nut. Adjusts quickly with brass thumbscrews to fit various styles of A/C compressors used on GM, Ford, and Chrysler vehicles. Also fits a variety of other pulleys.



**7238**  
**Spring Lock Coupler Disconnect Set**

Set includes four sizes for use on 3/8", 1/2", 5/8", and 3/4" tubes. Allows quick, safe disconnect of spring lock couplers on late model Ford systems and Tecumseh HR980 compressors.



**6511**  
**Fuel Line Disconnect Tool**

Special low-profile design works in close quarters on GM, Ford, and Chrysler vehicles where there is limited clearance between the fuel line fittings and fuel filters, fuel rails, or sending units. This tool is designed to access the center port on the GM fuel tank sending unit. For 3/8" and 1/2" applications; will also service 2001 thru current 3/4- and 1-ton trucks with the Duramax Diesel engine.



**4503**  
**Double Flaring Tool Kit**

- Designed for double or single flare in copper, aluminum, soft steel brake line, and brass tubing (to 45 degrees).
- Includes five adapters 3/16" through 1/2" (4.8 mm through 12.7 mm).
- Chrome swivel, made of alloy steel, reduces friction. Forged yoke made of heat-treated steel. Housed in a blow-molded storage case.



**4504**  
**Bubble (I.S.O.) Flaring Tool Kit**

- Designed for crack-free bubble flares on soft steel tubing used in automotive brake systems.
- Includes four dies: 4.75, 6, 8, and 10 mm adapters.
- Forged steel yoke, flaring bar, and all the adapters needed for ISO bubble flaring.
- The most economical "Bubble" flare tool to date. Housed in a blow-molded storage.

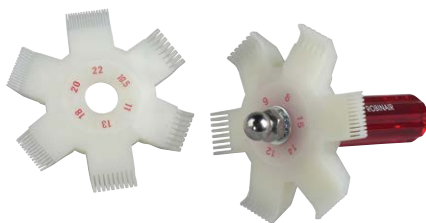




**18410**

**Hydraulic Flaring Kit**

- › Fabricates a variety of fuel, brake and A/C line flares.
- › Push connect 1/4, 5/16 and 3/8".
- › GM fuel line, brake line and transmission 5/16 and 3/8".
- › Flare and double flare.
- › Metric bubble flare.
- › Comes in a custom blow molded case.



**18403**

**Fin Straightener**

- › Clean and straighten condenser and evaporator coils.
- › Compact design for confined spaces: the straightener head is 3-1/8" in diameter; the handle is 3-1/2" long.
- › Includes 12 clearly marked combs  
Wheel 1: 8, 9, 10, 12, 14, & 15 fins per inch  
Wheel 2: 10.5, 11, 13, 18, 20, & 22 fins per inch



**14774**

**Pick Extractor**

For use with No. 18560 or 18561, valve core remover/ installer, this extractor lets you remove damaged cores in the service line while the system is fully charged. There's no release of refrigerant into the atmosphere.

**Access Valve Core Removers  
Save Service Time**

These handy tools remove valve cores without losing the system charge. They're designed specifically for use during evacuation or recharging on any system with valve core-type access ports. Removing the core restriction results in maximum flow, greatly reducing the time required for evacuation and charging.



**12540**

**Tubing reamer**



**18560**

**Valve Core Remover / Installer**

Remove and install the valve core from a 1/4" male flare access fitting without the loss of refrigerant. Durable, solid brass tool has a ball valve that can be opened and closed in just a quarter-turn, rather than a stem-type valve. Designed with a stainless steel ball and brazed side fitting for durability and long life.



**11014**

**R-12 Valve Core Remover**

Services late model GM cars with deeper valve cores.



**18706**

**Eccentric flaring tool**



**18561**

**Valve Core Remover / Installer**

Replace leaking valve cores quickly and easily, or remove the valve core and hold it out of place for evacuation or charging. The 18561 features a solid brass body with convenient handle that opens and closes in a quarter-turn to speed service. The compact design easily fits most installations.



**10588**

**R-134a Valve Core Remover**

Our popular valve core remover/installer has been engineered for use when servicing deeper core R-134a A/C systems.



**18548**

**Four-In-One Tube Bender**

Effortlessly bends four different sizes of soft or annealed tubing without crimping, flattening, or scratching. Calibration allows duplication of any angle. Handles are 8-1/2" long, so extensions are not needed, and glass/plastic construction combines strength with lightweight durability.



**14773**

**Thread Chaser**

For use with No. 18560 or 18561, valve core remover/ installer. This item actually repairs damaged threads on valve cores in the service line, without releasing refrigerant into the atmosphere.



**13145**

**1/4" Valve Core Remover, pkg/6**

Robinair's standard valve core remover includes six replacement valve cores which store in the tool's body.

## 18340

### Valve Core Remover Kit

- › Standard valve core extractor.
- › 8 mm valve core extractor.
- › 10 mm valve core extractor.
- › GM high flow valve core extractor.
- › JRA valve core extractor.
- › R-134a low- and high-side body assemblies with side ports.
- › R-134a low- and high-side port adapters.
- › Plastic carrying case.
- › Usage chart.



### Access Adapters

Robinair offers a complete selection of access adapters for hooking up A/C systems for evacuation and recharging. These adapters fit most systems, and sizes are available to fit most passenger cars. "A" models have longer valve core depressors to work on both standard and the deeper-set valve cores in some vehicles. Check manufacturer's specifications for specific applications.

#### 90° Style Adapters

Solid brass fitting is ideal for tight spots or locations where making connections is difficult.

**10469A** – 1/4" MFL x 3/16" FFL.

**40563A** – 1/4" MFL x 1/4" FFL.



40563A

#### Straight Style Adapters

Straight adapter is versatile and easy to use. Made of solid brass.

**10468A** – 1/4" MFL x 3/16" FFL.

**40560A** – 1/4" MFL x 1/4" FFL.



10468A

#### Flexible Adapters

Flexible adapters feature brass fittings and a durable neoprene-coated hose, 6" long.

**10293** – 1/4" MFL x 1/8" FFL, blue.

**10470A** – 1/4" MFL x 3/16" FFL, red.

**10778** – 1/4" MFL x 1/4" FFL, yellow.

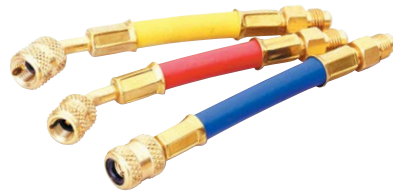
**40531** – Replacement o-rings for 10293, pkg/6.

**40677** – 3/16" gasket.

**40653B** – 3/16" valve core depressors.

**40082** – 1/4" valve core depressors.

**40083** – 1/4" hose gaskets.



## 14450

### Heat Gun

A lightweight source of directed heat offering 500°F and 750°F settings, and also has a "cold" setting. This handy heat gun is ideal for many applications, including:

- › Fast heating/drying of materials.
- › Quick curing/drying of epoxies.
- › Applying shrink tubing.
- › Softening tubing for bending.
- › Speed-drying of touch-up paint to eliminate "haze."
- › Drying out condensation in motors, clutches, controls, etc. Shock-proof and cool-running with a tough Lexan® housing, the unit weighs just 2-1/2 lbs.
- › 115V 50/60 Hz.



#### Replacement parts

**44996** – Carbon brush.

**44997** – Switch assembly.



## 10237A

### Fits-All Adapter Kit

Our access adapters have been combined into a kit that's ideal for accessing R-12 vehicle A/C systems, as well as other types of systems. Five different adapters are included with 1/4" fittings: three flexible adapters (part numbers 10293, 10470A, 10778) and two 90° brass adapters (part numbers 10469A and 40563A). See descriptions below for specifications.



## 18143

### Straight Adapter

This straight adapter is designed specifically for General Motors vehicles with R-12 air conditioning systems featuring "Positive Seal" high-side charge valves. The adapter is made of brass with an easy-to-grip coupler nut, 1/4" MFL x 3/16" FFL.



10292

### Quick Seal™ Adapters

Quick Seal fittings automatically shut off the charging hose when you disconnect it from the system, so any refrigerant left in the hose is not released. This also prevents "finger burn" and adds an extra measure of safety. Made of solid brass.

**10292** – 1/4" MFL to 1/4" FFL.

**10296** – 1/4" MFL to 3/16" FFL.

**10250** – 1/4" MFL to 1/4" FFL, 90°.



18451

### Quick Seal Repair Kits

**18451** – 45° 1/4" Quick Seal™ kit.

**40302** – 1/2" Acme Quick Seal™ kit.

**18180** – 1/4" Quick Seal™ o-rings.



40572

### Brass Caps

**40572** – 1/4" solid brass caps have knurled ridges for easy gripping. Package of six.



# THE MODERN TECH

**CUSTOM TRUCK  
BUILD WITH  
BRYAN FULLER**

**FIX CARS FASTER**

See how OTC's diagnostics lineup goes uncontested with fastest code-to-fix, best-in-class coverage and more.

**TOOL TALK**

Eric the Car Guy, Eric Obrochta and Jim the Car Guy weigh in on Specialty Tools, Encore and Pullers.

**WIRE SERVICE TOOLS  
INVENTOR MIKE KAWELL**

**HEAVY-DUTY  
SUSPENSION BUSHING  
TOOL KITS**



# FIND THE RIGHT TOOLS, USE THEM FOR LIFE.

## WHAT WE LIKE MOST ABOUT TECHNICIANS IS THEIR WORK ETHIC.

Technicians are problem solvers who aren't afraid of sweat on their brow and grease on their hands. They provide high quality services that demand high quality tools. When they need a reliable tool, they know they can depend on OTC tools to deliver.



Owatonna Tool Company for the long haul — proudly designing and manufacturing American specialty service tools, diagnostics and shop equipment since 1925.



# LOOKING FOR AN OTC PRODUCT?

OTC tools and equipment are sold through distribution partners, resellers and at retailers.

## DISTRIBUTORS



## RETAIL



## MOBILE DISTRIBUTORS



## HEAVY DUTY DISTRIBUTORS



# THAT'S HIM, HE FIXED MY CAR

POWERED  
BY BOSCH

FASTEST  
TO THE FIX

ON-TOOL  
& ONLINE REPAIR  
INFORMATION

EASY  
TO USE

VEHICLE  
COVERAGE



## FIX CARS FASTER THAN THE USUAL SUSPECTS

The OTC Encore diagnostic system with Identifix® works fastest from code-to-fix, has best-in-class coverage, is easy to use and is the ultimate repair suite.



WELCOME

# FROM THE FORGE

## MY LIFE'S WORK AS OTC'S HEAD HAMMER

By Steve Cross, Drop Forge Hammer Operator

Thirty-nine years ago, I hired on at Owatonna Tool Company as a janitor, a role that was never meant to last. I quickly moved into material handling, then I got shoved in the weld shop, then I got hammers in the forge department, and here I've stayed. I wasn't sure if it was for me at first, but it was something that looked challenging. Some people just don't want to be that physical, but I don't mind it.

The forge is where OTC makes specialty tools. It's not an easy job. You throw the steel in, wait until it gets up to temperature, get everything running, heat the dies, then hammer products out. There's a lot of heavy lifting, twisting, turning, a lot of heat and a lot of noise. We go through an average of 1,000 pounds of steel every day depending on the size of the job. On a typical day, you come in, punch in, get everything ready, check your equipment over, load up the furnace and get steel in it, then start running. Then you do that all day long.

I'm proud of the products we make – pullers, c-frames, u-joints, hub grapplers to name a few. It's tough to say what my favorite product to make is. I like to make a job where you have to roll and block a part and finish it out, not just beat it. We make anything that is made out of solid steel, hand tools, hard tools, all that stuff. Making tools in the fire is the best way. Our tools are high quality, because if you don't make quality then you don't last. There's a lot of competition out there and we can beat 'em. Our craftsmanship is what puts us ahead in the game. All of these tools are made by guys that have used them, and they work. You're not going to buy something that doesn't work. If it doesn't finish the job, you're not going to buy another one.

*"I'M ALSO PROUD OF THE OTC BRAND. I'M MAKING A BRAND THAT'S BEEN AROUND A LONG TIME. ANY GUY THAT'S WORKED ON A CAR HAS HEARD OF THE OTC BRAND, AND THEY PROBABLY HAVE USED IT."*

We're a USA company that's been here for many years. I think that's what makes the brand. When I picture the OTC brand in my mind, I see a single jaw puller that we've been making for years. Just a plain jaw puller that's been around for a long time. If you've ever used one, it works. It's reliable and easy to use. That's how I describe the brand.

I've had other jobs here, and there's nothing else I really care to do. Most people would say they don't want to touch the forge. Only a handful of people would maybe like the money, but they stay away from the forge because of the rugged physical strain you're put through. There are days when it's 100 degrees in Minnesota and you're working in 140 degrees all day.

My motto is to always do the best I can. If tools go out right, and they look good, then I did my job right.



# FASTER ONE-MAN BRAKE SERVICE

## 6596 BRAKE PAD GAUGE

Check brake pad life without removing wheels. Green-yellow-red indicator clearly shows pad life.



## 7302 BRAKE CALIPER PIN/BOLT REMOVER

Quickly remove stuck caliper pins and bolts with this 90° pickle-fork style tool. Two tools, one for use with an air hammer and the other with a striking cap, drive pins and bolts inward toward the vehicle.



## 6980 BRAKE DRUM/ROTOR PULLER

Stuck drums or rotors slow the job down. Use the right puller to help remove and replace worn rotors or drums with up to 7 tons of force\*.



## 6720 FLARE NUT LOCKING PLIERS

Rusted or rounded flare nuts waste your time and patience. Grip all 6 sides of a flare nut with these locking jaw pliers to turn and remove damaged flare nuts.



## 6703 LINE FLUID STOPPER KIT

Eliminate fluid leaks and prevent moisture from entering brake fluid when replacing lines. Includes two banjo stoppers, two steel line stoppers, six plugs, a line disconnect tool and a long-reach pinch tool.



## 8104A-SET BRAKE BLEEDER WITH AUTO FILLER SET

Bleed brake lines and automatically refill the fluid reservoir without any help. Using shop air, create a controlled vacuum to bleed brake lines and refill the system.





# DIAGNOSTICS EVOLUTION

OTC scan tools, powered by Bosch, are the fastest from code-to-fix with more than 30 years of OE-level coverage. The easy-to-use tools are favored among technicians who want coverage and repair information on the tool for vehicles they see in the shop everyday.



## TRIAGE TOOL

### 3210 CodeConnect with ABS & Airbag

OBD II coverage and likely fixes for most 1996 and newer cars and light trucks.

- Color screen
- EPB Caliper Retract for most Audi/VW vehicles
- Brake Bleed test for Ford, GM, Chrysler & Toyota vehicles
- Steering Angle Reset for GM and Nissan vehicles
- CodeConnect® database on-tool with 26+ million most likely fixes based on DTC and vehicle
- Read and erase most Domestic, Asian and European(NEW!) ABS & SRS/Airbag trouble codes, 1996-2013
- ABS & Engine Enhanced Live Datastream for GM, Ford and Toyota
- Transmission Enhanced Live Datastream for GM and Ford
- Oil Light Reset
- Battery life reset
- Dual PID graphing



## FIX CARS FASTER

### 3893 Encore

The OTC Encore diagnostic system with Identifix® is fastest at what counts, and that's fixing vehicles. No tool is faster from code to fix, pulling the DTC and showing the likely repair.

- Fastest from code-to-fix
- Best-in-class vehicle coverage
- 7" screen
- Powerful, fast Android OS
- Easy to use
- Ultimate online and on-tool repair suite
- Powered by Bosch
- Optional 3834 TPR kit with Bluetooth wireless TPMS performs sensor ID transfer
- Optional HD Standard 3895-07 kit includes Class 4 – 8 vehicle coverage
- Key and remote reprogramming procedures for vehicle and transmitters for remote controlled alarm, central locking and immobilizer systems
- Battery disconnect procedures for vehicles that have had battery service, replacement or loss of electrical power



## COMING SOON: ELITE DIAGNOSTICS

### 3896 Evolve

As modern vehicles become increasingly complex, OTC diagnostics, powered by Bosch, continues to evolve. The flagship tool includes a wireless VCI, J2534-compliant device, larger screen and full-system wiring diagrams.

- 10.4" high-resolution screen reduces glare
- Powerful, fast Android OS
- Dual WiFi architecture provides a secure, wireless VCI connection and reliable Internet connection. Move freely around the vehicle and shop with confidence.
- Includes full system wiring diagrams, not offered on any other scan tool in the market
- Includes tablet docking station and backpack for increased battery life, performance and safe storage
- Includes J2534 compatible device for reprogramming and reflash.

## CODE-TO-FIX WITH IDENTIFIX

OTC diagnostics is built around repair information, with more than 26 million fixes on-tool from Identifix, access to top repair networks and sources. OTC tools have exclusive access to Identifix on-tool within the diagnostic session without having to re-enter vehicle information.

*Not an Identifix subscriber? Purchase an Encore or Evolve and receive free access to the most complete repair information and Identifix ASE Master Technicians for 60 days.*

MEET THE INNOVATOR

# THE OTC CRIMPWELL



**AS AN EXPERIENCED MECHANIC TURNED SHOP OWNER/MANAGER,** Mike Kawell of Mike's Garage in Faribault, MN has seen it all when it comes to automotive repairs. From a cut and dry oil change to a tinkering noise coming from "somewhere" on the vehicle, it's the unscripted repair endeavors that can either be the most frustrating or rewarding – it depends on your approach! Kawell looks at these challenges as an opportunity and as a result can add the title 'inventor' to his already robust industry resume.

In 2010, Kawell had been working on a vehicle that had had its stereo removed, resulting in a cut lateral harness that created a nearly impossible angle to reconnect the radio wiring to the little stubs that were left. The 90 degree needle-nose pliers were just too flexible to actually crimp wire connectors. He needed something maneuverable, but firm. The solution was a side cutter and a little welding magic for the facades. Applying his persistence and creative problem-solving, Kawell shared his discovery through the 'Invent with OTC' program and thus, the OTC 5912 Crimpwell Angled Wire Crimper was born.

Kawell and the OTC engineers worked closely through the development process, sharing notes and collaborating along the way. Kawell's design of the OTC 5912 crimpers makes crimping connectors easier than ever - and is especially valuable where wire service is compromised by limited access. The final product came from Kawell's understanding that if he was bending, modifying and tinkering, then other technicians were most likely looking for the same solution as well. **Necessity is the mother of invention!**



*Have a solution to a common service problem? This is your opportunity to showcase your innovative tool creations, so show us something we haven't seen before. Submit your tool idea to OTC today. It could be the next must-have in the OTC Tool lineup and we'll review to potentially prototype, manufacture, and sell it. If your tool is selected, you will receive a competitive royalty on every tool sold.*



# VITAL SERVICE TOOLS

## 6980 BRAKE DRUM & ROTOR PULLER

- Remove and replace worn rotors or drums faster
- Pull with up to 7 tons of force\*
- Spread to 12-3/4" and 5" of reach



## 5942 XZN BIT SET

- For use in Audi and VW door hardware
- Sizes 4, 5, 6 and 8 with 1/4" internal drive and 7/16" external hex drive
- Sizes 10, 12, 14 and 16 with 3/8" internal drive and 5/8" external hex drive



## 4579 9-WAY SLIDE HAMMER SET

- Quickly pulls bearings, gears and seals
- Internal and external jaws work on multiple pulling jobs
- Included wrench adapter and cross blocks help pull more components



## 6575 HUB GRAPPLER KIT

- Removes wheel hubs and bearings on vehicle
- Easier to use, faster and more applications than the Hub Tamer
- Larger, stronger forcing screw and proprietary heat-treated steel extends tool life



## 8330 RESURFACING GRINDER

- Resurface and clean wheel centers or studless rotors
- Reduce lateral runout and ensure solid tire-rotor-hub connections
- Removes corrosion on most flat surfaces. 1,500 RPM max



## 4295 WHEEL STUD SERVICE KIT

- Works on most hubs, all stud sizes with fewer adapters
- Use on-vehicle with impact wrench for faster service
- Reduces damage to hubs, studs and bearings



# EVAP SYSTEM TESTING ON LATE-MODEL VEHICLES

## THE IMPACT OF MODE 10 ON YOUR EMISSIONS DIAGNOSTIC TESTING

MANY LATE-MODEL VEHICLES USE A NATURAL VACUUM LEAK DETECTION SYSTEM TO ALERT DRIVERS OF EMISSIONS PROBLEMS. Using your scan tool, you can diagnose those issues by reading codes and testing the various components within the EVAP system. These include the vent solenoid and purge valve.

After you plug in your scan tool and pull codes, perform an all-systems scan to look for freeze frame data. This information will show you what happened when the code was set, allowing you to repeat those conditions and isolate the issue.

The next step is using maintenance or special tests specifically for the EVAP system. In here you'll be able to test the vent-purge solenoid and purge valve to check the impact it has on fuel tank pressure. As you increase the purge, fuel tank pressure should drop. If you decrease purge, fuel tank pressure will rise as vapors are not being allowed to vent.

If increasing or decreasing purge does not change fuel tank pressure, you may have a failed solenoid that is not opening or closing the purge valve.

If the EVAP purge test fails, grab a voltmeter and go under the hood. From there you'll test voltage at the connector for the purge solenoid. Using your scan tool, increase purge percentage. If voltage changes, you've confirmed the wiring is good and the purge solenoid needs to be replaced.

Once you've identified the problem and replaced the failed part, run your tests again to confirm the fix. Go back into your EVAP special tests and increase purge. As you purge vapors from the fuel tank, pressure will drop, confirming your solenoid is operating properly. You're now pulling engine vacuum into the fuel system, allowing fuel tank pressure to be released.

After fixing the vehicle you may be tempted to clear the codes, but you might not be able to. Mode 10 requires newer vehicles to self-validate EVAP issues, requiring a specific number of drive cycles to self-test and clear the codes.

### MODE 10 REQUIRES NEWER VEHICLES TO SELF-VALIDATE EVAP ISSUES

So if you're fixing a vehicle with an EVAP issue, remember to run all your EVAP / emissions special tests, do an all systems check to view freeze frame data and that Mode 10 may not let you clear codes. If the repair has been completely successful the scan tool may allow you to turn off the check engine light, but a emission code may still be present in Mode 10 (\$0A) when reading DTCs, until the computer has ran its own internal system test validating the repair was successful.

To help in your next EVAP diagnosis, remember there are three main criteria for when a vehicle will perform its tests and turn off a DTC light.

#### THOSE CRITERIA ARE:

- The PCM turns off the malfunction indicator lamp (MIL) after three consecutive ignition cycles that the diagnostic runs and does not fail
- A last test failed, or current DTC, clears when the diagnostic runs and does not fail
- Mode 10 DTC clears after 40 consecutive warm-up cycles if no failures are reported by this or any other emission-related diagnostic



encore

SPECIAL TESTS

- All Special Tests
- EVP Tests
- EVP Caster Wheel Valve
- EVP Leak Test
- EVP Purge Valve Control
- Diagnostic Emission Caster Pump Valve One Cycle

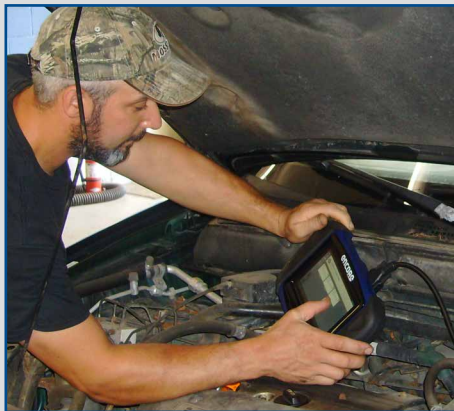
otc

THE SOUTH MAIN AUTO  
YouTube CHANNEL



**ERIC OBROCHTA**  
SOUTH MAIN AUTO REPAIR  
AVOCA, NEW YORK

**"THE OTC ENCORE IS INTUITIVE AND EASY TO USE, SO I COULD SEE THIS TOOL BEING A STAPLE IN GARAGES AND SHOPS"**



# TOOL TALK WITH ERIC OBROCHTA ON THE OTC ENCORE

**AKA South Main Auto Repair on YouTube**

I'm Eric of the YouTube channel South Main Auto Repair, named after the three bay shop in upstate New York that I own and operate. I produce videos to record the automotive repairs that come in the shop day-to-day, providing accurate information to save consumers time and money. Through my YouTube channel, I have the ability to share my love for fixing cars along with my knowledge and experiences. The automotive industry is my passion; I grew up in my parents' shop helping out where I could and learning the basics. For over 17 years, I have worked full time as a mechanic with experience repairing domestic and Asian cars as well as light trucks.

At South Main Auto Repair, we see more diagnostic work than anything else. When given the opportunity to test out the OTC Encore, I was excited to give it a try. People ask me why I switch scan tools in my videos, and the answer is that some tools are just more capable than others. So far I've had the chance to play with it a bit, and have had it plugged into about 5 different cars already. Whether it's been used to assess a lean code and a misfire on a 2007 Mazda B-Series Pickup B3000 or no power locks and no power windows in a 2008 Chrysler Town and Country, the Encore works quite well. There are many functionalities with the Encore and though it's still pretty new to me, so far I've been super impressed with this tool and it's been phenomenal to have in the shop. The OTC Encore is intuitive and easy to use, so I could see this tool being a staple in garages and shops.

After featuring the OTC Encore in my repairs, I have received plenty of inquiries from viewers about the tool.



# TOOL TALK WITH JIM MAROTTA

## AKA JimtheCarGuy on YouTube

Jim Marotta is a technician with more years of experience under the hood than many others in the profession have even been alive. For more than 40 years, Jim has been identifying, diagnosing and fixing whatever problems are presented to him at his shop, J&S Auto Repair in Bayonne, NJ.

Jim truly believes that the right tools are part of the equation. "To do this job well, you need to be honest, knowledgeable and have the right tools to get the job done. I've been doing this for so long and my reputation is what keeps people coming back. I've seen children of my oldest customers grow up to now have children of their own. Some of my customers have been coming back to me through three generations."

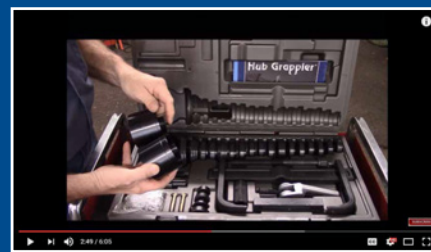
**"I'VE HAD ALL SORTS OF OTC TOOLS FROM HUB GRAPPLERS TO PULLERS, AND THROUGHOUT IT ALL, THEY PERFORM EXACTLY AS NEEDED AND ALWAYS GET THE JOB DONE BETTER THAN ANYTHING ELSE ON THE MARKET."**

Throughout his career, Jim has seen the profession change drastically. The most significant advancement is the inclusion of on-board diagnostics (OBD) and the new set of skills required of technicians to decipher and repair modern-day issues.

Despite the changes related to the vehicles he services, the one thing that has not changed in his shop is his use of OTC tools. In fact, he can even recall the first time his tool guy walked into his own shop and sold him an OTC Valve Spring Compressor. Jim still has that same tool and despite its obvious wear and tear, still uses it to this day on some of the classic cars that regularly come in for service.



**JIM MAROTTA**  
J&S AUTO REPAIR  
BAYONNE, NJ



Jim's channel, JimTheCarGuy features videos explaining how to accurately diagnose and repair today's complicated cars and trucks that come through his shop, J&S Auto Repair. He has more than 40 years in the business and has seen just about everything. Relying on his experience and ingenuity, he thoroughly walks through many problems that other technicians experience and keeps up with it all just because he likes helping others do good, quality work.

## WE CHATTED WITH JIM RECENTLY ON OTC, HIS SHOP AND HOW THE WORK HAS CHANGED.

### *How have OTC tools worked for you over the years?*

JM: Throughout the years, I've learned that if you want a tool that lasts, you need to first see if OTC has that specific tool in its portfolio. I've had all sorts of OTC tools from hub grapplers to pullers, and throughout it all, they perform exactly as needed and always get the job done better than anything else on the market. In fact, a number of years ago, when GM started using snap ring fasteners on their fuel lines and transmissions, there was really nothing available in the aftermarket to easily get to them. I even tried to make my own tool to get the job done, but it still wasn't quite right. So after that didn't quite work, I made a few phone calls to colleagues I knew and trusted and was pointed in the direction of the OTC 6611 Transmission Line Disconnect. That specific tool is still used in my shop and I've recommended it to anyone that asks. It's the only thing that gets the job done without damaging anything else in the process.

### *Has their usefulness evolved over the years?*

JM: This profession has really evolved over the past years. Lighter metals, increased use of plastics and reduced space in the engine compartment has really made simple jobs from years past more difficult. You can't get by with just a few wrenches, screwdrivers and pliers. OTC has kept ahead of the needs of technicians and continues to provide specific solutions for the continuing advancements of vehicle technology.

### *What is the most common type of work you do at the shop?*

JM: It seems more and more that we are completing brake job after brake job at the shop and OTC tools are often used in that process. In fact, OTC 4503 Stinger Double Flaring Tool Kit is one product that is invaluable when I'm working on brake lines. It's the only tool I've seen, when used correctly, to ensure there is no leak in the brake line once the job is done. It's one of the stars of my videos. I've featured it in a handful of the various brake videos, regardless of manufacturer, on the site.





NEW GIANT ALLOY

adjustable

wrenches

REPLACE 29 SIZES

THINNER • LIGHTER

STRONGER



NOT THIS

THIS

Now for the first time quality, light-weight, alloy steel adjustable wrenches drop-forged to stand up under heavy duty jobs. The OTC Slim Twins make tough jobs easy -- save tool and time costs -- result in faster, more productive work in your shop or on emergency calls. The OTC Slim Twin Wrenches replace 29 standard size wrenches.

OA-24 is 24" long, 7/8" thick and weighs only 10 lbs. Adjusts to 13 standard sizes from 1-3/8" to 2-7/8". OA-36 is 35" long, 1-1/8" thick and weighs only 22 lbs. Adjusts to 16 standard sizes from 2-15/16" to 4-3/4".



EXCLUSIVE DESIGN GIVES ADDED STRENGTH IN PROPERLY LOCATED LEVERAGE POINTS FOR LONG SERVICE.

PATENT APPLIED FOR



**OTC ENCORE 3893**

The OTC Encore is the fastest-to-the-fix diagnostic tool with a powerful Android operating system, crisp touch screen display, comfortable rubber overmolded grips, 8GB internal storage and integrated Wi-Fi and Bluetooth. Encore owners will be automatically enrolled in our Diagnostics for Life program that provides a lifetime hardware warranty\*. Quarterly software updates add more vehicle coverage, tests and resets to help you access, diagnose and fix more vehicles faster.

*\*Terms and conditions apply*



# DIAGNOSTICS



**CAN TEST BOX 3415**

Connect, detect, monitor voltage and more. Use this tool for diagnosing electrical faults and CAN bus line activity. Check power and ground circuits, check active protocol lines or connect a multimeter or oscilloscope for detailed signal analysis. Connects between Diagnostic Link Connect (DLC). Verify ECU activity, monitor OBD II data lines, check monitor and battery voltage and more.



**AWARD WINNING**

**SMART BATTERY TESTER 3200**

Test faster with the first market solution to utilize the power of your smart device. Test battery, charging and starting systems in less than three minutes. Receive a comprehensive, full color report directly to your smart device for easy sharing with your customer. The internal 9V battery allows testing of deeply discharged batteries.

## PRODUCT SPOTLIGHTS



**BEST SELLER**

### BATTERY & ELECTRICAL SYSTEM DIAGNOSTIC TESTER 3167

Digital circuitry precisely controls battery test loads to accurately determine battery conditions. Tests both flooded lead acid and AGM/GEL cell batteries accurately—down to 1 volt state of charge. Tests vehicle starting and charging systems with minimal user interaction. Tests all 6- & 12-volt batteries with a 50-2000 CCA operating range.



**BEST SELLER**

### MINUTEMAN BATTERY TESTERS 3130AGM / 3131AGM

MinuteMan Plus multi-application electrical system tester saves you hours when you're testing batteries, starters, alternators, regulators and charging systems. Works on all 12-volt automotive-type batteries with cold cranking amp ratings of 100-1500. This includes batteries found in motor-vehicle, marine, agricultural, forestry, and industrial applications. The tester operates from either 110 volts AC or its own internal, rechargeable 6-volt battery. Features self-calibration, an internal battery check, and an automatic shut-down to reduce power consumption.

#### 3131AGM

Same as No. 3130AGM, but also includes roll-around cart with two additional shelves for other equipment.

## SOFTWARE UPDATES FOR GENISYS EVO®



### 2015 SOFTWARE LOYALTY KIT OTC-3421-153

- Designed for customers who already have System 4.0 and newer.
- Includes 2015 Domestic/Asian and 2014 European



### 2015 SUPER BUNDLE KIT OTC-3421-152

- Everything needed to update a Genisys EVO
- Includes 2015 Domestic/Asian, 2014 European, and preloaded System 5.0 memory card

# KEEP YOUR TRUCKS RUNNING

## A CLEAN DPF SAVES MONEY AND REDUCES DOWNTIME

Cleaning diesel particulate filters can take as little as 40 minutes to restore filtration efficiency.

### Installing a DPF cleaner in your shop can:

- Reduce DPF replacement costs
- Reduce DPF cleaning costs
- Increase your fleet's efficiency
- Make your filters last longer



## PRODUCT SPOTLIGHTS



### SMART BATTERY CHARGER AND MAINTAINER 3176

The Smart Battery charger and Maintainer utilizes a patented 5-Stage Automatic charging system designed to charge a battery efficiently while prolonging the life of the battery. The automatic power switching gives you the ability to charge your battery to 100% without worrying about damaging the battery. The battery charger/maintainer comes with clamps for jump starts or overnight charging and ring connectors for permanent connection to seasonally used vehicles such as RVs and motorcycles.



### PROFESSIONAL MEMORY SAVER 3177A

An effective solution for saving vehicle data, the Professional Memory Saver saves the vehicles on board diagnostic memory and other on-board memory components such as anti-theft radios, digital clocks, radio presets, seats, mirrors, comfort settings, etc. when the vehicles battery is removed or disconnected. Includes OBD II cable for fast connection to the vehicle, cigarette lighter adapter for use with vehicles that do not have an OBD II connector LED lights confirm circuit between the cigarette lighter/power outlet and the vehicle's battery with the ignition on or off.

## BEST SELLER



### TRILINGUAL OBD II, ABS & AIRBAG SCAN TOOL 3209

Live data with color screen scan tool. Updated with 2013 model year coverage. Record and playback live data. Monitor battery, alternator and charging systems. AutoID upon plugging the tool in will automatically populate vehicle data for most 2000 and newer vehicles. Works with all 1996 and newer vehicles (OBD II, CAN, EOBD). View all modes OBD global data including oxygen sensors and Mode 6. Reads and displays ABS and airbag codes for most 1996 and newer GM, Ford, Chrysler, Toyota, Honda, Nissan and Hyundai vehicles. USB update cable included.

## INNOVATION

### CODECONNECT® WITH OVER 26 MILLION TOP REPORTED FIXES\*

The most probable solution to the vehicle problem that is specific to code and the vehicle year, make, model, engine.



### OBD II, CAN, ABS & AIRBAG 3210

Live data with color screen scan tool, now with brake service, steering service, oil and battery resets, including EPB caliper, steering angle and BMW brake pad sensor resets. Includes Codeconnect® with over 26 million top reported fixes\*, the most probable solution to the vehicle problem that is specific to code and the vehicle year, make, model, engine. Includes European ABS and manufacturer specific powertrain coverage. Updated 2013 model year coverage for manufacturer specific codes and through latest model year for global coverage. Monitor battery, alternator and charging systems. AutoID upon plugging will automatically populate vehicle data for most 2000 and newer vehicles. Works with all 1996 and newer vehicles (OBD II, CAN, EOBD). View all modes obd ii global data including oxygen sensors and mode 6. Reads and displays abs and airbag codes for most 1996 and newer GM, Ford, Chrysler, Honda, Hyundai, Nissan, Toyota, Audi, BMW, Jaguar, Land Rover, Mercedes Benz, Smart, Volkswagen, Volvo vehicles. Displays instant mpg, average mpg, elapsed time, distance (MI), fuel used (GAL) and average speed (mph) with the ability to alternate between English and metric units on screen.



**OBD II & ABS SCAN TOOL 3208**

Diagnose and fix problems on vehicles 1996 and newer when the check engine and ABS warning lights are on. Use read/erase hot keys to quickly view and erase codes and turn off the lights. Live data allows you to view vehicle sensor, switch and relay inputs in real time, while the engine is running. Live data information helps pinpoint the problem components for a faster diagnosis.



**COMING SOON**

**OBD I & II SCAN TOOL 3211**

OBD I & II tool for coverage on older GM, Ford, Chrysler and Toyota vehicles and that also works with all 1996 and newer cars and light trucks with 26 million+ CodeConnect Top Reported Fixes. Includes Oil Light and Battery Resets, ABS & Airbag/SRS Coverage. Graph two PIDs at same time. Read, record and playback live sensor data. Stores previous five vehicle's scan data.



**OTC EVAP – LEAK DETECTION SYSTEM 6522**

Find the leak, clear the code, smoke the test. Put better technology and portability in your shop with OTC's new and improved smoke machine. Nearly 80% of top codes can be diagnosed with smoke technology. This unit is half the size and twice as mighty with more powerful features. Includes UltraTrace UV® dye, the only OE approved solution. Detects microleaks to and below .010".

## PRODUCT SPOTLIGHTS



### 1000V CAT III HYBRID MULTIMETER 3990

A full function multimeter with an insulation test feature is used to test for voltage leaks through insulation found on Hybrid and Electric Vehicles.

**BEST SELLER** ▲



### TIRE PRESSURE MONITORING SYSTEM RESET TOOL 3834

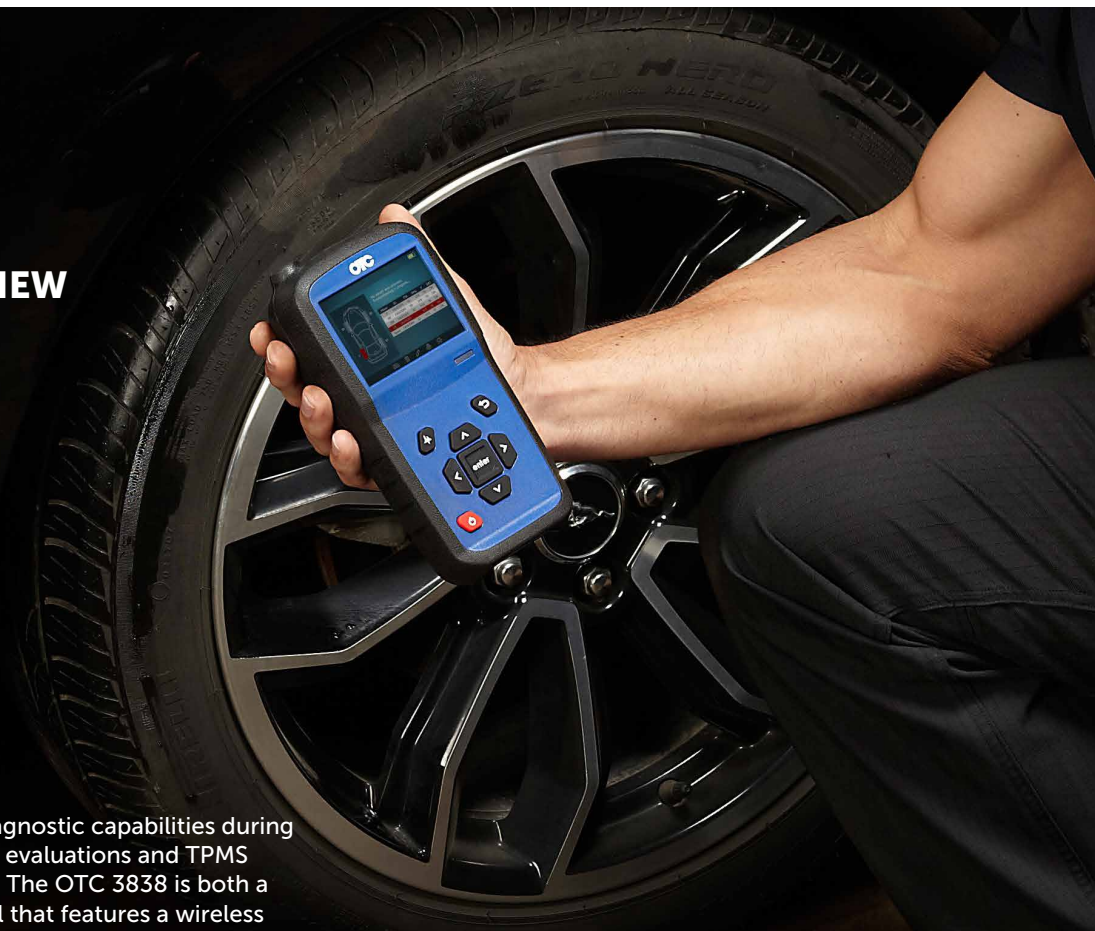
The OTC's TPR is a fast and simple-to-use standalone TPMS activation tool. Combine TPR activation with the power of Genisys and Encore diagnostics systems. Register new sensor IDs on Asian vehicles. Use the TPR to activate and decode sensor IDs and transmit them to the Genisys and Encore scan tools wirelessly. Bluetooth wireless communication adapter included.



**NEW** ▲

### OBD II TPMS TOOL 3838

Save time and perform additional diagnostic capabilities during tire service, tire rotations, tire sensor evaluations and TPMS sensor reset and relearn procedures. The OTC 3838 is both a sensor activation and diagnostic tool that features a wireless OBD II module for TPMS sensor registration. The tool works with all OEM and aftermarket sensors.



# CAPTURE BATTERY SERVICE OPPORTUNITIES

TOOLS DESIGNED TO FIX ALL  
MAKES, ALL MODELS



## 60-SECOND BATTERY TESTING

### OTC 3200 smart battery tester

- Test voltage, starting and charging system health in under 1 minute
- Tests 6V, 8V and 12V AGM and wet-cell battery types



## ALL-IN-ONE BATTERY SERVICE



### OTC 4631 battery terminal service kit

- Includes terminal wrenches, cable cutters and terminal puller
- Clean, replace or service most batteries with this 8-piece kit

## RESET CHARGING SYSTEMS TO EXTEND BATTERY LIFE

### OTC 3112 battery reset tool

- Perform reset procedures for BMW, Mini and Ford F-series
- AutoID pulls YMME for most vehicles.



## DIAGNOSE BATTERY OR ELECTRICAL PROBLEMS

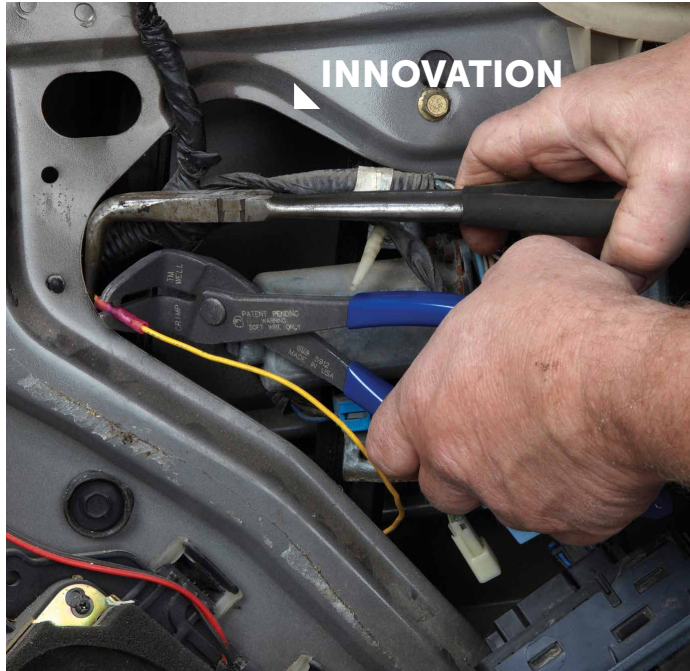
### OTC 3167 Sabre HP battery/electrical system diagnostic tester

- Tests 6V and 12V AGM and wet-cell batteries with 50 - 2,000 CCA range
- Controlled load testing down to 1 volt state of charge





## PRODUCT SPOTLIGHTS



INNOVATION

### CRIMPWELL™ ANGLED CRIMPING PLIERS 5912

An innovative, simple-to-use tool for crimping terminal or joint connectors to common soft wire. The design of the wire crimpers makes cutting wire and crimping connectors easier than ever and is especially valuable when wire service is comprised by limited access. Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG. Angled design keeps the connector, wire and crimper in-line – improving visibility and access in hard to reach places. Service techs can use as much force as desired to ensure connection and it will not damage connector insulation.



NEW

### WEATHER PACK RATCHETING CRIMPER KIT 4484

Now you can manage environmentally sealed connection systems on vehicles with the OTC 4484 Weather Pack Crimper Kit. Weather Pack connection systems are designed to protect against exposure to heat, moisture and contaminants with unfaltering performance. The OTC 4484 comes with 2 interchangeable crimping dies, covering wire range AWG 22 / 20-18 (DIN: 0.35 / 0.5-0.8 mm<sup>2</sup>) and AWG 16-14 / 12 (Din: 1.0-2.0 / 3.0 mm<sup>2</sup>). The dies are easily interchanged and secured by strong ferrite magnets. The inside lid decal shows how to create a proper Weather Pack crimp seal. These connections are found on automobiles, Class 7-8 Tractors, motorcycles and other areas where weatherproof electrical connections are needed.

# TOOLS



AWARD WINNING

### LOCKING COLLAR RACK WRENCH 7485

Service steering linkage in place with this handy, time-saving tool designed to work with all component connections in one place. Simply remove one pin and place open collar around tie-rod end, steering knuckle or other components. Close collar and replace pin to lock around the component. A 1/2" square drive allows adjustment and leverage from a ratchet or breaker bar. No need to disconnect linkage for adjusting tool placement. Multiple applications from steering linkage, wheel alignment, small diameter exhaust and general pipe adjustment. Use with component diameters of 1" to 1-7/8" (25.4mm to 47.6mm). Ideal for steering service, wheel alignment, strut cartridge, small diameter exhaust and general pipe adjustment.

BEST SELLER



### S-CAM AIR BRAKE SPRING TOOL 5081

Eliminate makeshift, unsafe methods of unhooking and reconnecting retaining springs when replacing brake shoes on heavy-duty tractors and trailers. Simply hook the retaining spring loop and press down. Lever action against the axle makes the job a snap!

# SEE HOW THE ENCORE STACKS UP



Technicians have multiple scan tool brands to choose from. The OTC Encore is fastest at what counts, and that's fixing vehicles. No tool is faster at code-to-fix, pulling the DTC and showing the likely repair.

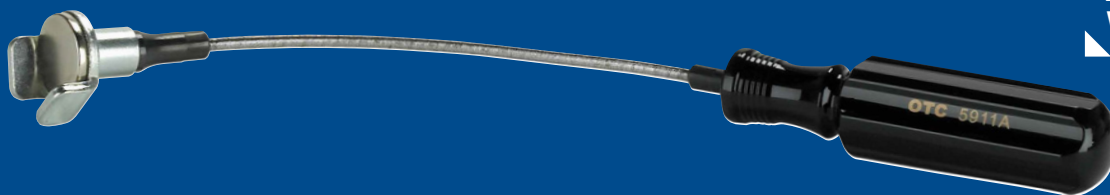
Request an Encore demo in your shop and fix faster than the usual suspects.

## PRODUCT SPOTLIGHTS



### 4 PIECE ROLLING HEAD PRYBAR SET INCLUDES A FREE PAIR OF OTC SMARTTECH WORK GLOVES 7176

Includes 6", 12", 16" and 21" lengths for a variety of duties - small - large and in between. Heated to cherry red, upset, then forged and swaged processing creates the tool, then our special thermal treating process locks in the strength you count on. Won't bend or break.



### OTC DRAIN PLUG PRO™ TOOL KIT 5911

Hot oil in the pan, not on your hand. Remove oil drain plug without touching the plug or hot oil. No touching a hot plug, hot oil on hands, no dropping of plug in hot oil and no oil soaked gloves. Just magnetically attach Drain Plug Pro™ to pre-loosened drain plug and rotate to remove plug. Includes multiple 1/4" internal square drive adapters for drain plugs of various shapes and sizes. The flexible shaft can also be used with other 1/4" internal sockets.

## INNOVATION



### CRIMPRO™ 4-IN-1 WIRE TOOL 5950S

Compact 7" straight wire crimps for nearly all automotive and other wire service jobs. Crimps, cuts and strips 12-20 AWG insulated and non-insulated wire.

## BEST SELLER



### CYLINDER LEAKAGE TESTER KIT 5609

Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit comes complete with adapters for most applications.

## AWARD WINNING

### 3 PIECE PUSH PIN/BODY CLIP PLIERS SET 2497

Remove plastic body fasteners and clips faster in nearly any location. A set of three push pin / body clip pliers includes straight, 45° and 90° jaws to reach in wheel wells, under bumpers and behind the dash to remove retaining clips. The various jaw angles help access hard-to-reach places while providing maximum leverage to remove clips quickly and without damage. The unique design lifts the center pin and pulls body clips without damaging anchors, eliminating the need to provide replacement clips. Reusing these fasteners saves money and time searching for replacements of various shapes and sizes. The 3-piece set comes with an OTC lifetime warranty against defects in material or workmanship.



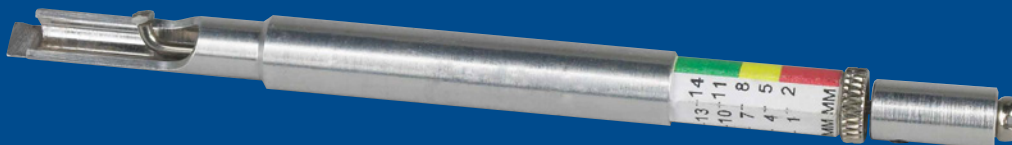
**NEW**



### FORD CAM TOOL KIT 6488

Ford cam tool kit for 1997 thru 2011 4.0L Explorer/ Mountaineer SOHC V6 engines. Kit contains tool Nos. 6478, 6479, 6480, 6481, 6482, 6484, 6485, and molded storage case.

**INNOVATION**



### BRAKE PAD GAUGE 6596

This tool allows for a definitive measurement of brake pads to determine remaining life. A unique design allows for measurement on the vehicle without the removal of any components in most cases (wheel assembly or brake caliper). Quick reference of brake pad condition via green-yellow-red color scale.

## PRODUCT SPOTLIGHTS



### STRUT TAMER II EXTREME 6637

The 6637 Strut Tamer II Extreme sets a new standard in strength and safety for strut spring compressors. This unit meets the new ASME PASE safety standards for spring compressors and is capable of safely compressing the largest strut springs. A replacement for the Strut Tamer Extreme with improvements designed to provide quick and safe strut service for technicians.

- New forged locking jaws includes larger pads and offset to clamp onto and compress springs even tighter than before
- New extra thick 5/8" compression arms for superior strength, stability and safety
- New locking trunions for optimal stability during spring compression
- New arm-locking rings eliminate the need for tools to adjust

### STRUTTAMER II EXTREME WITH STAND 6637-ST

## INNOVATION



### CRIMPRO™ 4-IN-1 ANGLED WIRE TOOL 5950A

The angled feature allows access to close quarters and facilitates superior crimps. Compact 7" design can be used 4 ways. A gripping nose can pull, twist, bend, and shape most wires. Crimps and strips 12-20 AWG insulated and non-insulated wire. Cutter provides ability to make cuts both above and below pivot.



### UNIVERSAL OUTSIDE THREAD CHASER 7402

Damaged bolt or nut threads can be an annoying, costly problem—unless you have one of our thread chasers. It will quickly restore threads to near original condition without the use of expensive thread-cutting equipment.

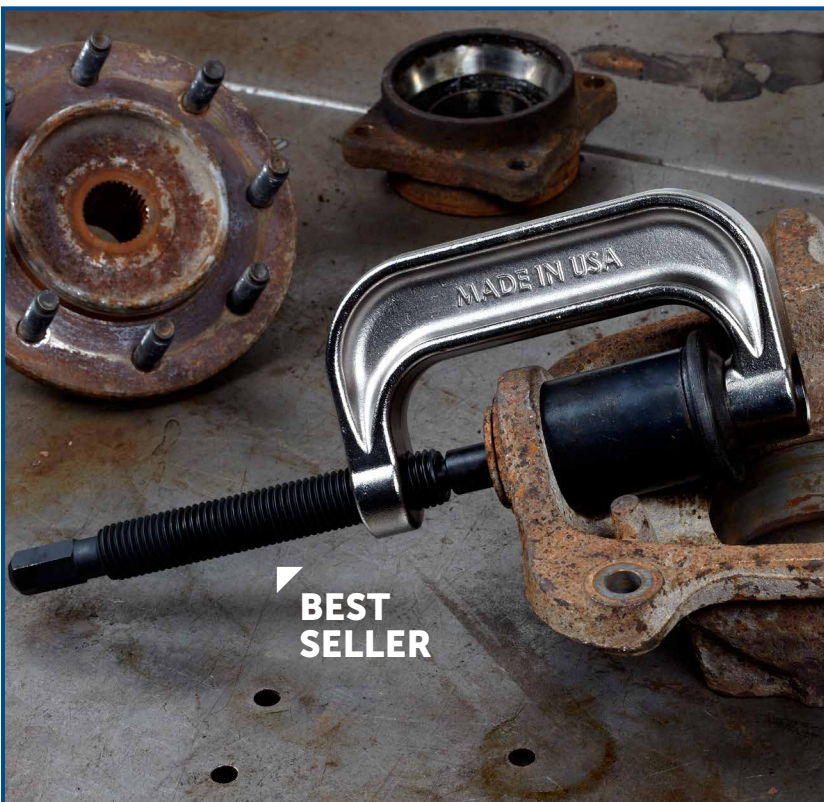
- Replaceable V-pads and dies.
- 1-1/4" to 5" O.D.



### MASTER TORX® BIT SOCKET SET, 52 PIECE 5900A

52-piece professional socket set in a blow molded case covers the popular versions of Torx® specialty fasteners in the most used sizes. Styles include Torx® Bit Sockets, Torx® Plus Bits Sockets, Tamper-Resistant Torx® Bits and Torx® Socket for external bolts. Made from superior S2 steel to meet or exceed torque specifications. All bit sockets are a 2-piece design and are 20 percent stronger than a one-piece style for longer life.

## PRODUCT SPOTLIGHTS



**BEST  
SELLER**

### **BALL JOINT STARTER SERVICE KIT 7249**

This starter kit is the backbone to ball joint, U-joint, anchor pins, and many other general pressing operations. Kit includes 5 adapters and C-Frame provided in a case.



### **HEAVY DUTY TIE ROD AND BALL JOINT PULLER 7503HD**

A universal heavy-duty puller that removes a wide range of tie rods and ball joints from a variety of cars, trucks, SUVs and heavy-duty vehicles. The 7503HD has a 10-ton pulling capacity, twice the force applied by the original 7503. Jaw spread and reach are increased to 3- and 4-inches for a wider variety of applications and larger vehicles. A heavy duty forcing screw, measuring 3/4" – 10, 6 1/2" long, includes interchangeable tips including cone, flat and cup for multiple applications. The tool will remove pitman arms and can be used in many situations that require a 2-jaw puller on vehicles and machinery.

## INNOVATION



### **FORD SPARK PLUG REMOVER KIT, 3V ENGINE 6918**

Finally, a Ford spark plug remover tool designed to not break the spark plug in the first place. Unlike similar tools designed to remove the spark plug once it's broken, this tool is designed to prevent breakage of the spark plug. Unique design helps prevent breakage by locking the plug porcelain core to the plug hex allowing it to turn as one complete unit. Will also pull plug porcelain core if plug hex only is removed.



### **HUB GRAPPLER™ KIT 6575**

The complete solution for servicing wheel hubs and bearings on the vehicle without removing the steering components or knuckle. This eliminates unnecessary alignments or the use of a shop press, cutting service time dramatically. Jaws are designed and sized to properly fit hub applications and are quickly adjusted on the puller bar using high-strength steel tension clips. Six adapters increase application coverage. Includes tie rod/ball joint tool and two Ford axle installers.

## PRODUCT SPOTLIGHTS



### 10 TON END LIFT 1590

Adjustable lifting saddle and lifting range from 13" to 52" services a variety of vehicles. Automatic mechanical safety catch engages in (5) height positions. Lifting range is 13" to 52".

**BEST  
SELLER**

### TRUCK CLUTCH AND FLYWHEEL HANDLER 5018A

Handles 14" and 15-1/2" clutch assemblies weighing up to 250lbs. Swivel casters provide easy maneuverability. Includes a 2" splined shaft with a 1-1/4" pilot to aid in alignment and 360-degree swivel head. Minimum height of 15 degrees allows access below side faring. When raised, centerline of clutch will be 38-1/4" off floor. Floor space is 32-3/8" long by 24-1/2" at widest point.



**INNOVATION**

# EQUIPMENT



**BEST  
SELLER**

### 2,200 LB. CAPACITY LOW-LIFT TRANSMISSION JACK 5019A

The 8-1/4" low height is perfect for aerodynamic trucks with low ground clearance. Special mounting adapter (No. 49611) fits popular Eaton® Fuller® RoadRnager® transmissions used on nearly all Class 7 and 8 heavy-duty trucks. Mounting plate angle is adjusted with the turn of a wrench. Tilts 20 degrees back, 15 degrees forward and 12 degrees side to side. Swiveling pump handle permits ease of operation in restricted working spaces. Fast-acting pump quickly raises lifting arm.



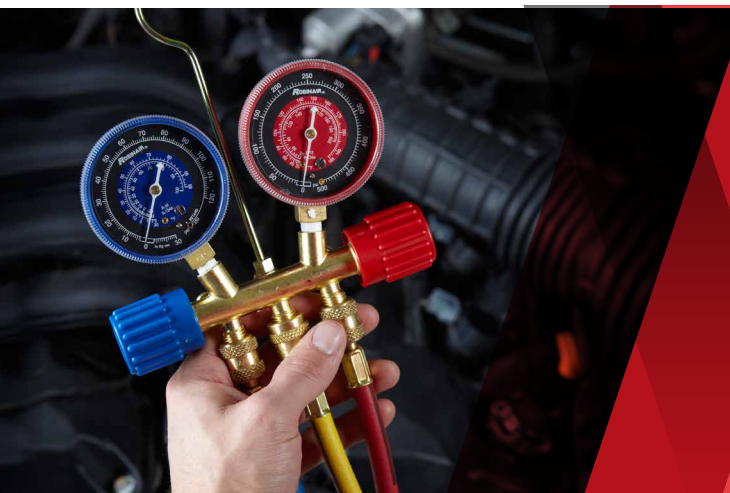
**NEW**

### TWO TON ALUMINUM RACING JACK 1532A

This low profile jack is perfect for use with performance cars that have low ground clearance. Its two speed design reaches full height in just 5 pumps. With carrying handles, a 2-piece handle, and light-weight aircraft grade aluminum construction, vehicle service can become less of a chore. Its removable rubber saddle protects vehicles and prevents slipping. ASME-PASE-2014 Compliant.

# 60 years of A/C service

A full line of A/C machines and accessories to find leaks, test system pressure, recover and recharge A/C systems and more.



## Recovery Machines

34788NI

- › The most efficient machine in North America
- › Fully automatic function
- › 34788NI-H model for high-voltage systems in hybrid and electric vehicles

## Vacuum pumps

15300 3 CFM pump

- › Offset rotary vane for fast, full evacuation
- › Lifetime filtration prevents chamber contamination

## Leak detection

22791 Infrared leak detector

- › Sensor designed to last at least 10 years
- › Senses CFC, HFC, HCFC blends and HFO-1234yf refrigerants

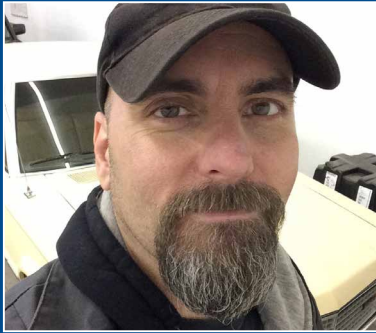
## Accessory bundles

48134B-DYEKIT

- › R134A and R12 brass manifold set with 6' hoses
- › UV dye and injection gun for leak detection



**ERIC THE CAR GUY**



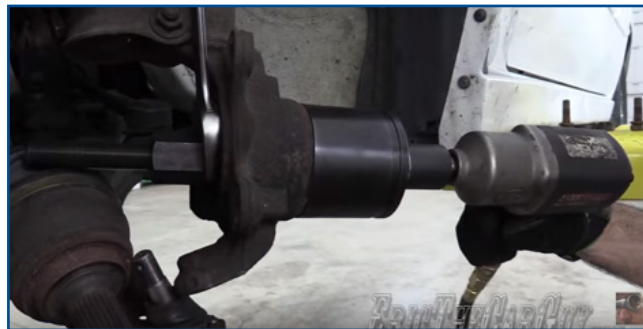
# TOOL TALK WITH ERIC COOK OTC HUB GRAPPLER 6575

**AKA EricTheCarGuy on YouTube**

Greetings readers! I'm Eric, owner of EricTheCarGuy as well as the EricTheCarGuy YouTube channel. I have been into cars for as long as I can remember, and really enjoy sharing my passion. My YouTube channel is dedicated to posting the best auto repair videos I can possibly make, and giving viewers a helpful resource to use when tackling do-it-yourself projects on their cars at home.

In one of my recent videos, I was working on my friend and cameraman Brian's Toyota 4Runner to remove his hubs and wheel bearings. I fought relentlessly hammering away to remove the wheel bearings and they simply would not come apart. That's why I was thrilled when I got my hands on OTC's Hub Grappler. In order to truly test its capabilities, I decided to take out Brian's old, discarded hubs that I still had in my shop, and decided to use OTC's Hub Grappler to see if the tool could make the process any easier.

With my wrench in hand, I turned the OTC Hub Grappler on and watched as the tool extracted the hub with ease in a matter of seconds. Since then, I've used OTC's Hub Grappler a few more times, and I'm very happy with it overall. When I have the opportunity to use it, OTC's hub grappler tool works extremely well and is a huge time-saver.



**"WHEN I HAVE THE OPPORTUNITY TO USE IT, OTC'S HUB GRAPPLER TOOL WORKS EXTREMELY WELL AND IS A HUGE TIME-SAVER."**



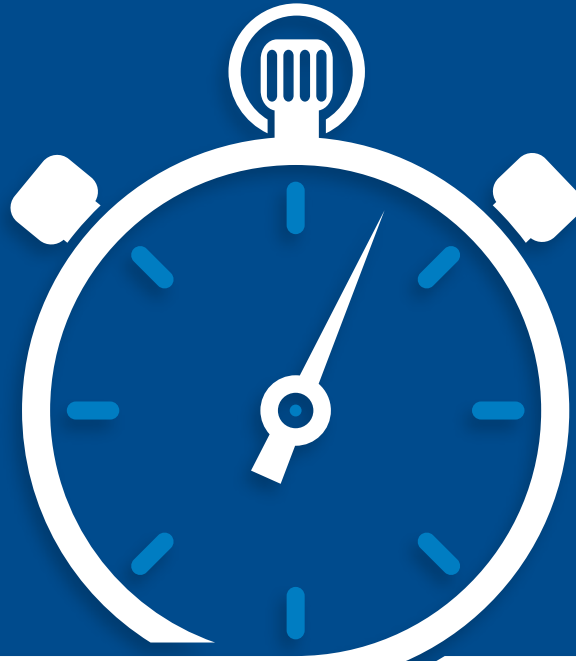
In my opinion, OTC's Hub Grappler kit is very durable and reliable. The 90-lb kit is equipped with many attachments for different applications. I particularly liked that the treads on the nuts were high, making it easy to get onto the bolt. To get familiar with the parts and uses, OTC provides a detailed, easy-to-use manual for the entire set featuring detailed diagrams and lists of applications – OTC is definitely focused on helping to build technician confidence through their products and corresponding manuals.

**I hope you enjoyed my review of the OTC Hub Grappler and until next time--be safe, have fun, don't forget to play with your tools, and stay dirty, my friends!**

**-Eric The Car Guy**



# REDUCE SERVICE TIME



## FOR HENDRICKSON HD SUSPENSION BUSHING SERVICE

### *OTC 4246 and OTC 4247 Hendrickson Suspension Bushing Tool Kits*

The patent-pending OTC 4246 Hendrickson Suspension Bushing Tool Kit and OTC 4247 Hendrickson Suspension Bushing Master Kit with Pump are designed to remove frozen Pivot and D-pin bushings on Hendrickson Primaax EX, Comfort Air and FCCC V-Ride™ suspensions. Kit 4246 includes adapters, and an OTC 4106A 25-ton high-force cylinder. Kit 4247 also includes the OTC 2510A air/hydraulic pump, hose and couplers to put the tool into service immediately.

#### **BENEFITS:**

- Reduces service time to remove and install heavy-duty rear suspension bushings
- Easy-to-use design eliminates the need to hold up the tool during use, reducing technician fatigue
- Alignment adapters reduce the likelihood of improper bushing installation and potential bushing damage

#### **APPLICATION TIPS:**

- Refer to manual to verify that appropriate adapters are used for proper mounting of tool to suspension
- Follow manual by bushing type for correct adapters and orientation for removal and installation of bushings.



## NEW HYDRAULIC FLOW METERS



### 50 GPM MECHANICAL HYDRAULIC FLOW METER 4277

Provides unparalleled accuracy in testing hydraulic flow circuits from 4 to 54 GPM for industrial and agricultural machinery. With its fluid filled gages that dampen vibration and precisely manufactured components, it can measure flow accurately within 4 percent of full scale. Due to its inner pass system, which includes extra burst discs, overpressure conditions won't lead to hydraulic fluid spills and the components can accommodate bidirectional flow, reading flow in one direction.



### 100 GPM DIGITAL HYDRAULIC FLOW METER 4278

Provides unparalleled accuracy in testing hydraulic flow circuits from 2.5 to 100 GPM for industrial and agricultural machinery. Otherwise similar to 4277 including burst discs to prevent hydraulic fluid spills.



### DELUXE HYDRAULIC FLOW SET 4294

Comprised of OTC 4290, OTC 4291, OTC 4292, Long Cable and Hose Set and Short Cable, case included.



### DIGITAL HYDRAULIC FLOW TEST KIT, 100 GPM 4285

For remote testing applications, the OTC 4285 provides unparalleled accuracy in testing hydraulic flow circuits from 2.5 to 100 GPM for industrial and agricultural machinery.

## NEW SINGLE ACTING CYLINDER RAMS

		CAPACITY IN TONS	STROKE	HEIGHT	
				COLLAPSED	EXTENDED
4100A	5-Ton Single Acting Cylinder	5	3"	5-11/16"	8-11/16"
4101A	5-Ton Single Acting Cylinder	5	5-1/4"	10-7/16"	15-11/16"
4103A	10-Ton Single Acting Cylinder	10	2-1/8"	5-9/16"	7-11/16"
4104A	10-Ton Single Acting Cylinder	10	6-1/8"	11-1/2"	17-5/8"
4105A	10-Ton Single Acting Cylinder	10	10-1/8"	15-1/2"	25-5/8"
4106A	25-Ton Single Acting Cylinder	25	6-1/4"	13-3/8"	19-5/8"
4107A	25-Ton Single Acting Cylinder	25	14-1/4"	21-3/8"	35-5/8"
4108A	5-Ton LP Single Acting Cylinder	5	9/16"	1-5/8"	2-3/16"
4110A	55-Ton Single Acting Cylinder	55	6-1/4"	11"	17-5/16"



### 22-TON CAPACITY UNDER-AXLE JACK 1788B

Long 49-1/2" T-handle lets you easily position jack under vehicles with long overhangs. One pull of the handle activates the self-retracting 22-ton capacity ram without having to crawl underneath the vehicle. Large rubber wheels provide stability, portability, strength and durability.



**BEST  
SELLER**

**NEW**



4012A

4000A

### TWO-SPEED LARGE CAPACITY HYDRAULIC HAND PUMP 4012A

This two-speed hand pump develops up to 10,000 PSI and has a built-in safety overload valve. It has a comfortable carrying handle, pumping handle grip and contoured release knob. The CE-compliant pump automatically switches from low to high-pressure mode and may be operated horizontally or vertically in the "head down" orientation.

### TWO-SPEED HYDRAULIC HAND PUMP 4000A

This two-speed pump uses single-acting cylinders, requiring fewer handle strokes than single speed pumps, saving time and effort. It develops up to 10,000 psi of operating pressure and has a built-in safety overload valve. The CE-compliant hydraulic pump automatically switches from low to high pressure mode and may be operated horizontally or vertically in the "head down" orientation. CE compliant.



**NEW**

### HENDRICKSON REAR SUSPENSION BUSHING TOOL KIT 4246

Replace rusted and frozen heavy-duty rear suspension bushings faster and easier with our patent-pending suspension-mounted removal tool. Remove and install Hendrickson PRIMAAX EX, COMFORT AIR, FCCC V Ride™ Pivot and D-Pin Bushings without having to hold the tool during operation.

Included adapters align tool with the suspension to ensure proper bushing installation and reduce the chance of misalignment and bushing damage  
Includes an OTC 4106A 25-ton high-force cylinder

**NEW**



### HENDRICKSON REAR SUSPENSION BUSHING TOOL KIT WITH PUMP 4247

Same as 4246 and includes an OTC 2510A air/hydraulic pump to make bushing service faster and easier

**BEST  
SELLER**



### 6000 LB. REVOLVER® DIESEL ENGINE STAND OTC 1750/1750A

96-to-1 ratio worm gear rotates components 360° while the handle locks in any position. Integrated 12-ton jack raises the work to provide the swing radius needed for clearance. Two front wheels and two rear casters provide mobility. Universal adapter assembly permits use with a wide variety of mounting plates. Covered by OTC Lifetime Marathon Warranty®.

### 1750A REVOLVER DIESEL ENGINE STAND WITH NO. 205061 UNIVERSAL ENGINE ADAPTER ASSEMBLY.

### 1750 ENGINE STAND WITHOUT UNIVERSAL ENGINE ADAPTER ASSEMBLY.

CUSTOM BUILDS

# LOOKING TO THE FUTURE



# WITH A TRIBUTE TO THE PAST

Fabricator, welder, builder, designer, business owner and all-around motorhead Bryan Fuller teams with OTC to build a throwback tool truck. Inspired by the original 1920s OTC salesmen, Fuller reimagined the delivery into a modern, eye-grabbing mobile showroom.

Paying homage to the 91-year history of OTC, Bryan Fuller went in search of a 1930s era Ford delivery truck, eventually finding one in Mechanicsville, Va. (*yep you can't make that up!*). Willy Glass a Bonneville 200mph record holder, used it to promote his welding supply business. Seems it was built in the late 70s or early 80s by a very capable team.

Once back in the Fuller Moto garage, Bryan and his team had the unenviable task of finding all the surprises that arise from disassembling an 80-year-old vehicle. They discovered a gem, in every sense of the word. The truck was rust-free, and believe it or not, dent-free too! The wood was perfect and everything came apart easily!

"Remember not only is this truck 80-some-odd years old, but these were commercial vehicles...they were beat on," said Fuller. "Lead work on this vehicle was so good, we didn't even remove it. That's a first in my career."

Fuller and crew had all of the paint stripped, and luckily it came off easily. Loose parts were powder coated in prep for bodywork and OTC blue paint. A few minor metalworking tricks were done to clean the body up including filling some seams and removing cowl lights.

The interior? Another story. Tuck-and-roll velvet lined the inside of the truck, a throwback to an update in the 1980s. Thankfully Fuller didn't have to dispose of shag carpeting, though they did find some interesting thatch-like covering under the roof.

A well-running 302 Ford powered the delivery to speeds not thought of when it rolled off the assembly line, mated to a C-4 automatic transmission.

The truck will make its debut at SEMA 2016 in the OTC booth, # 10171 in North Hall. Stop by to see the truck and Fuller, with plenty of before and after photos and a unique tribute to OTC, one of America's great tool companies.



**Bryan Fuller** has a Biology Degree as well as having graduated from WyoTech. Right after that, he began working for Chip Foose, and served as a Builder for his shop, and on the Overhauled series on TLC.

Following that, he moved to Atlanta, opened his own shop, and became the Co-Host of "Two Guys Garage" on the Speed Channel. The show, including reruns, averaged 1 million viewers per week.

Keep an eye out for Bryan on the Velocity Channel soon on a new show called "Caffeine and Octane" debuting February 2017!

## SEE IT LIVE

**WHERE:** SEMA 2016  
Las Vegas Convention Center, North Hall  
Las Vegas, Nevada

OTC Tools booth, #10171

**WHEN:** November 1 – 4, 2016

**WHAT ELSE:** Tools, equipment and diagnostics from OTC and sister brands Robinair, Bosch and Actron

**WIN BIG:** Compete against other technicians using OTC diagnostic tools to win daily prizes, including an OTC Encore diagnostics system.

**MORE:** Stop by the OTC booth to claim your custom-made bottle opener, forged in Owatonna, Minnesota. The forge team created each one, using the same drop forge hammer used to form the legendary OTC pullers.



# COMPLETE COLLISION REPAIR

## OTC'S LINE OF PAINLESS DENT REPAIR BODY TOOLS PROTECT PANELS DURING REPLACEMENT, RESKINNING AND RESHAPING



### 2470 SPOT WELD BREAKER

Separate panels after drilling spot welds during replacement or reskin jobs. Combine with 2492 spotweld carbide drill bit set or 2489-8 single spotweld carbide bit to quickly repair or replace panels.



### 2481 BLIND PANEL REMOVAL WEDGE

Extended-reach tool helps reach inside panel release points for removal. Thin, strong construction reaches tight access points with plenty of leverage. Removal wedges include 2479 30mm wedge, 2480 60mm wedge, 2487 combination wedge pry tool and 2491 stepped lever wedge



### 2482 120MM X 30MM PICK HAMMER

Fully synthetic construction protects body panels during reshaping, eliminating damage and marring paint. Available in a larger size, 2483 140mm x 40mm for a variety of applications.



### 2473 HALF-ROUND BUMPING TOOL

Reshape rounded metal profiles in confined areas without scratching or marring paint. Additional bumping tools from OTC are 2474 profile straightening tool, 2475 round body anvil, 2477 edge straightener and 2476 curved and flat dolly



### 2485 3-PIECE BUMPING TOOL SET

Versatile set includes a door aligner, center punch and straightener for common collision repair jobs. Add the 2478 extended reach bumping tool to reach door skins, panels, hood and deck lids for nearly any repair



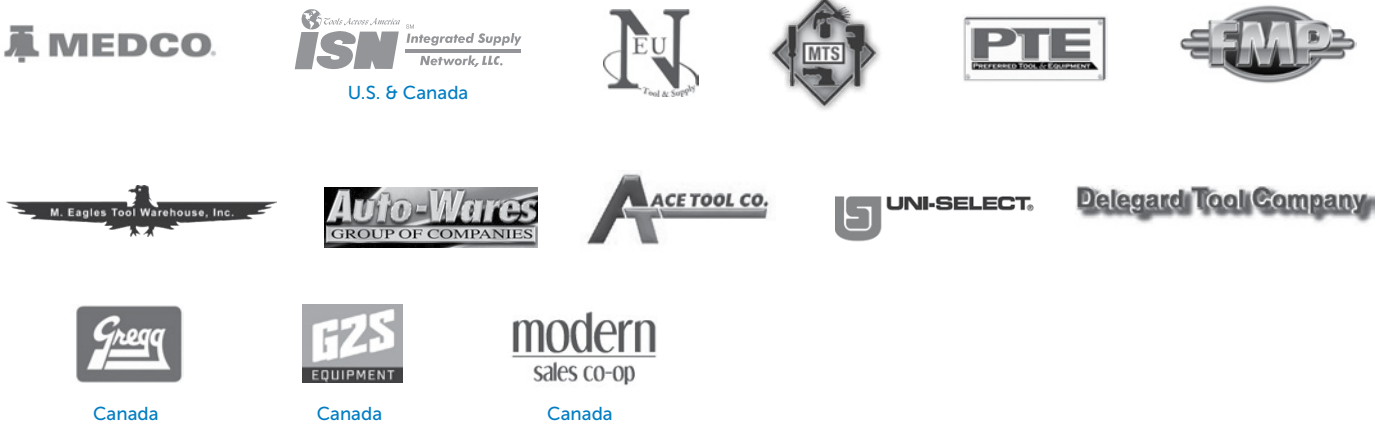
### 2472 WINDOW TRIM AND MOLDING REMOVER

Safely remove fragile trim pieces like chrome window trim and reuse it with this tool. Other synthetic tools include 2471 trim and bezel tool and 2490 universal hook to remove and prevent damage to delicate trim pieces.

# LOOKING FOR AN OTC PRODUCT?

OTC tools and equipment are sold through distribution partners, resellers and at retailers.

## DISTRIBUTORS



## RETAIL



## MOBILE DISTRIBUTORS

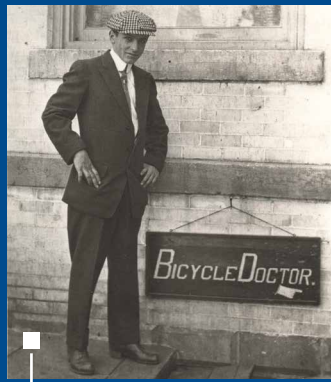


## HEAVY DUTY DISTRIBUTORS

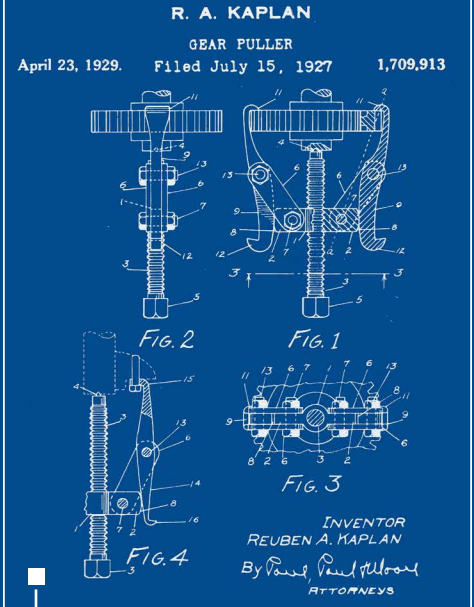




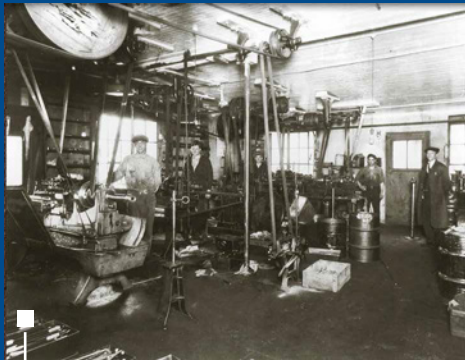
## OTC'S HERITAGE



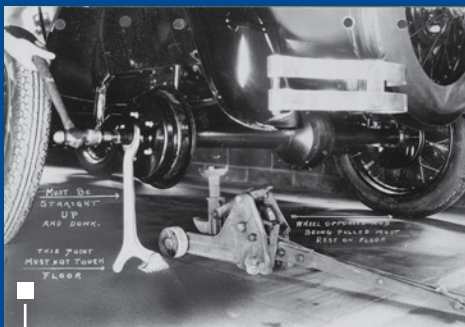
At age 16, Reuben A. Kaplan opened his own bike repair shop and called himself "The Bicycle Doctor"



Reub's inventive mind produced this gear puller design, patented in 1927. It is still being manufactured by OTC with few changes from the original.



Early machine shop photo



Ford Model T planetary transmission



### 1925

Owatonna Tool Company (OTC) founded by Reuben Kaplan

### 1927

Special tool developed for Model T planetary transmission

### 1935

OTC sells tools to mechanics from modified trucks and autos

### 1942

Tools shipped by rail to service military vehicles, planes and ships

### 1950s

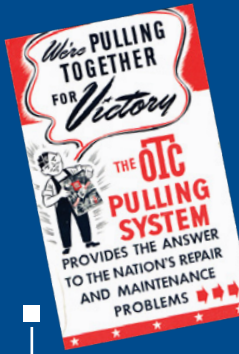
As pullers increased in size, the amount of torque increased as well. Reuben Kaplan had the solution: hydraulic power

### 1956

Large new factory built in Northwest Owatonna, MN

### 1971

OTC acquires the Tri-Mark (Lynor) Company



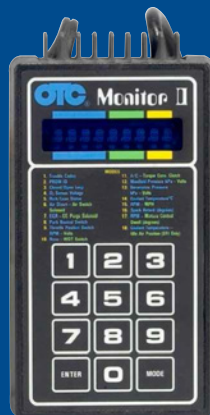
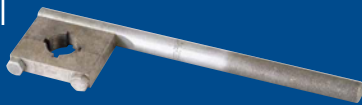
Ads announced to America that OTC's production was devoted completely to providing tools for the war effort.



Giant wrenches, such as this one, were manufactured in large numbers for the U.S. Army and Navy during World War II. Ruth Ann Piskey, who worked in the shipping department, posed with the wrench to show just how big it really was.



Two examples of small posters OTC offered free of charge to any garage or service station mechanics who requested on.



In 1985, OTC engineers decipher code, enabling the Monitor 2000 to communicate with new vehicle computers.



In 2016, OTC launches a scan tool powered by Bosch, a world leader in automotive technology, on every vehicle all over the world.

**1978**

OTC introduced a new design for the OTC logo

**1985**

OTC and subsidiaries are acquired by Sealed Power Corporation

**1988**

Sealed Power Corp. changes name to SPX Corporation

**1997**

SPX's Specialty Tools and OEM business groups combined to become a new business unit called Service Solutions

**2008**

SPX launches global tool platforms to serve the global market

**2012**

OTC becomes part of the Bosch Automotive Service Solutions portfolio of brands

**2016**

OTC - Innovation in vehicle service solutions for **91 YEARS!**



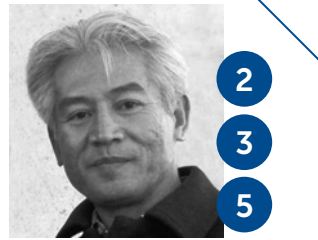
**Scott Davis**

**Position:** Field Technical Sales

**Background:** Scott is a 34-year veteran of the automotive industry. He has spent time as a tech in dealerships, general repair, body shops and specialty fabrication shops. Davis has been a trainer for the past 15 years focusing on diagnostics and A/C.

**Certification:** MACS Certified Proctor, past ASE certified

**In my spare time:** 'I enjoy all forms of motorsports and raced Superlate Model Stock Cars and am a former nationally ranked expert Jet Ski racer.'



**Sam O. Pok**

**Position:** Field Technical Sales

**Background:** Pok has worked for OTC and Robinair for the past 33 Years. He started as a field service Tech and was promoted to Field Service Manager. He then spent 10 years as a Regional Technical Trainer and 13 years as a Technical Sales Specialist

**Certification:** Electronic Technician Diploma. EE( Electrical Engineer) background. ASE Certified Electrical A6. State of California I/ M OBDII, Certified.

**In my spare time:** 'I Migrated from Cambodia, after the Vietnam War in 1979 and two years later started working for OTC. I play golf left handed and am a Los Angeles Lakers fan.'



**John Schommer**

**Position:** Field Technical Sales

**Background:** Schommer has spent 20 years as an automotive/ medium truck technician specializing in under chassis, vehicle drivability and collision work. He also spent 8 years in sales in the wholesale tire industry helping customers grow their business by bringing them continued value added services and training.

**Certification:** TIA Advanced Instructor Level 400

**In my spare time:** 'I consider staring down a hole in a frozen lake for hours on end fun.'



**Joe 'Shelby' Barton**

**Position:** Field Technical Sales

**Background:** Joe entered the automotive business in 1967 after a tour of duty as a Navy aircraft mechanic and crewman. He is a former shop owner and instructor at Bailey Technical Institute. Barton has dedicated his career to helping technicians, setting up ASA chapters in multiple states and managing national training programs for several companies.

**Certification:** Master Trainer certified in the federal ATTP program, ASE Master certified (Current), MACS Certified

**In my spare time:** 'I now have the best of all worlds; I am doing what I like best and am on the leading edge of technology with Bosch and OTC.'



**Richard Zenteno**

**Position:** Field Technical Sales

**Background:** Zenteno joined Bosch and has more than 13 years of experience in the auto industry. He has worked as a technician and also has technical marketing and sales experience. He excels at channel development and training in the Tool and Equipment segment.

**Certification:** Certified in Medical Device Repair, Installation and Training; Computer Hardware Servers and other Networking, Undergraduate Marketing and Engineering background, MBA from Baylor, CAN Networking in European vehicles, BMW Coding and Reprogramming, VW Diagnostics Data Blocks.

**In my spare time:** 'I love music and sports, especially soccer, and my road bike is my passion. I play guitar and drums and love Italian food.'



**Mike Whittington**

**Position:** Field Technical Sales

**Background:** Whittington has spent the last seven years with Bosch as an ASR/TSS. Previously he was an outside salesman for a warehouse distributor focusing on fleet and Installer sales and worked for five years as a store manager for a major auto supply company. He also served four years in the US Army.

**Certification:** ASE Parts Specialist

**In my spare time:** 'I enjoy golf, fishing and coaching football.'



**Michael Schoenbeck**

**Position:** Field Technical Sales

**Background:** Michael Schoenbeck started his automotive career as a technician and moved to another tool manufacturer, serving as a Hand Tools, Diagnostic Equipment and Air Conditioning expert for 10 years. Prior to that he was a Tools Product Manager with a small but growing tool company. Started automotive career as a technician.

**Certification:** Past ASE Master and L1, Member of SAE

**In my spare time:** 'I can't get enough of muscle cars.'



**Ed Carpenter**

**Position:** Field Technical Sales

**Background:** Ed has spent more than 30 years in the Automotive Aftermarket. He's done it all, working as a Technical Trainer, Shop Owner, Regional Sales Manager and more through the years. Carpenter has also won national awards for Training and Sales.

**Certification:** Previous ASE Master Tech

**In my spare time:** 'I'm a football and car guy'

## FIELD TECHNICAL SALES



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### Guy Garrett

**Position:** Field Technical Sales

**Background:** Garrett has been a Bosch diagnostics trainer and sales specialist for the past seven year. Previously, he was a Regional Training Manager for a major tool manufacturer and ICAR. He has more than 25 years of experience in the Automotive OEM and Aftermarket

**Certification:** ASE Certified, ICAN Certified Instructor, MACS Certified Instructor

**In my spare time:** 'I live in Ohio with my wife and two boys and spend my time at home sharing my love of youth sports, photography and music with my family.'



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### Marshall Townsend

**Position:** Field Technical Sales

**Background:** Townsend has more than six years of experience with OTC and Robinair products. Prior to joining Bosch he worked for four years at the AAA national office, 11 years as a technical trainer for a major OEM and 10 years as a technician and shop foreman.

**Certification:** ASE Automotive Master certified with L1 Advanced Engine Performance.

**In my spare time:** 'I enjoy woodworking and fixing things around my house.'



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### Frank Ranken

**Position:** Field Technical Sales

**Background:** Prior to joining Bosch for the second time, Ranken was an automotive repair shop owner for seven years, a tech rep and dealer for a major tool manufacturer for 12 years and an ASR with Bosch.

**Certification:** ASE Master L1, Master Truck 1975-2005

**In my spare time:** 'I race the local roundy round and work on anything with bolts.'



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### Nick Zappitelli

**Position:** Field Technical Sales

**Background:** Zappitelli joined Actron (a Bosch brand) tech support in 2001 as an account support specialist supporting CARQUEST from 2005 to 2008, conducting training and product forums. He served as account manager for buy to use accounts from 2008 to 2010 and as account support specialist for Balkamp/NAPA from 2010 to 2011, becoming account manager for Mac Tools and Cornwell Tools. Since 2012 he has served as a Technical Sales Specialist for Balkamp/NAPA.

**Certification:** Various ASE certifications

**In my spare time:** 'I love music and DJ on weekends. I also have an Italian Radio program supporting the Italian community. I love my Cleveland Indians and believe the Ohio State marching band is the best in the land. Go Buckeyes!'



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### Lee Brewer

**Position:** Field Technical Sales

**Background:** Brewer has spent more than 17 years in the automotive industry. He was a District Sales Manager with a major tool distributor for 15 years, winning ROY four times. Duties included organizing shows, clinics and other types of training. He was also a mobile distributor for two years.

**Certifications:** Procut Installer and Trainer, NAPA ASE and Autotech

**In my spare time:** 'I was raised on a military base and moved all around the country. I'm now married with two children and am an avid racer and love all racing from Go-carts to NASCAR. Hobbies? Fishing, golf and my favorite, an 1800cc supercharged Waverunner!'



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### Chris Ellington

**Position:** Field Technical Sales

**Background:** Ellington has more than 26 years in the automotive industry and has owned and operated an import specialist repair shop with a focus on drivability and performance. He has organized and taught drivability clinics for the past six years and still repairs and reprograms automobiles today to maintain and increase his knowledge on the subjects at hand.

**Certification:** American Honda Master Tech and ASE Master Tech

**In my spare time:** 'Turbo anything is my motto'



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### Chris Hınca

**Position:** Field Technical Sales

**Background:** Hınca has worked in the automotive industry for more than 30 years. Previously he has worked as a technician, service manager and technical trainer, specializing in diagnostics, air conditioning diagnosis/repair and ECU reprogramming.

**Certification:** ASE Certified Technician, OTC diagnostics trainer focusing on Domestic vehicles, Air Conditioning and Reflash/Reprogramming

**In my spare time:** 'I'm an avid outdoorsman, a certified SCUBA diver, hockey coach and trail runner.'



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### Brett Sanelli

**Position:** Field Technical Sales

**Background:** Sanelli has more than 22 years of experience in the tool industry. Previously, he spent more than 13 years at a major power tool manufacturer focusing on growing its tool business.

**Certification:** MACS Certified Proctor

**In my spare time:** I enjoy fishing, hunting and spending time with my college sweetheart Sabrina and six animals.'

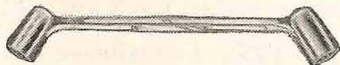


# Special Tools

## MAKE MORE MONEY FOR YOU

Save time, tempers, labor, parts and money with OTC tools built to do special jobs better, faster and easier. These and many other OTC special tools will pay for themselves on only a few jobs. Ask your dealer for OTC tools to fit your problem jobs.

### SAVE TEMPERS WITH FLEX WRENCHES



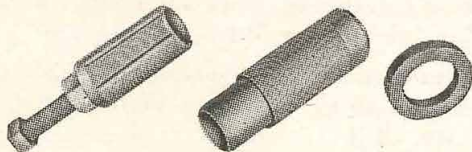
Sockets are extra deep, hot forged with thin straight walls for maximum clearance. Flex over any position within 180° radius of the handle. Sizes from 3/8" to 1".

### FLARE NUT WRENCHES



Hex openings provide a better bite and prevent turning corners on soft brass nuts necessary on fuel, oil and vacuum lines. Made of alloy steel, fully heat-treated—chrome plated finish. Sizes from 3/8" to 1 1/8".

### SAVE MONEY WITH FORD-MERCURY TRANSMISSION BUSHING & OIL SEAL PULLER AND INSTALLING SET No. 400



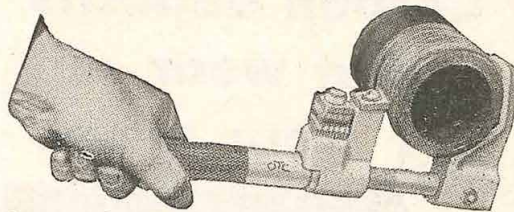
Fits all 1949-1952 Ford or Mercury Models. Takes only 15 minutes to remove and accurately install both Bushing and Oil Seal. Make money with this OTC Time Saver.

Booklet describes complete line of special and standard OTC tools.

## OWATONNA TOOL COMPANY

305 CEDAR STREET . . . OWATONNA, MINNESOTA

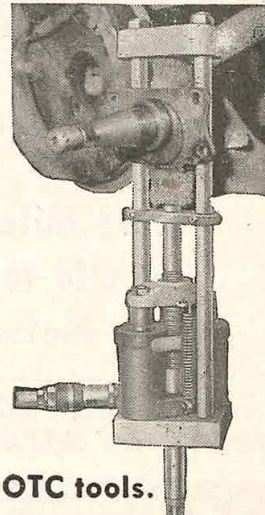
### SAVE PARTS WITH NEW UNIVERSAL THREAD CHASER No. 897



Restores battered damaged or crossed threads—eliminates machining. Adjusts quickly from 1 1/2" to 5" diameter. Six chaser dies have 16 thread pitches from 4 to 24.

### SAVE TIME WITH OTC HYDRAULIC KING-PIN PUSHER

Do king-pin jobs easy in minutes with the 17 1/2 Ton Power-Twin. No hammering—no damaged parts—no torque. King-Pin jobs bring good profits at flat rates . . . pay for tool on a few jobs.



# LIFETIME LIFTING FROM OTC

## OTC'S LINE UP OF JACKS WITH LIFETIME WARRANTY

### 1532A TWO TON ALUMINUM RACING JACK

- Perfect for use with performance cars that have low ground clearance
- Two speed design reaches full height in just 5 pumps
- 2-piece handle, and light-weight aircraft grade aluminum construction
- Rubber saddle protects vehicles and prevents slipping
- ASME-PASE-2014 compliant

### 1728 HIGH-LIFT TRANSMISSION JACK

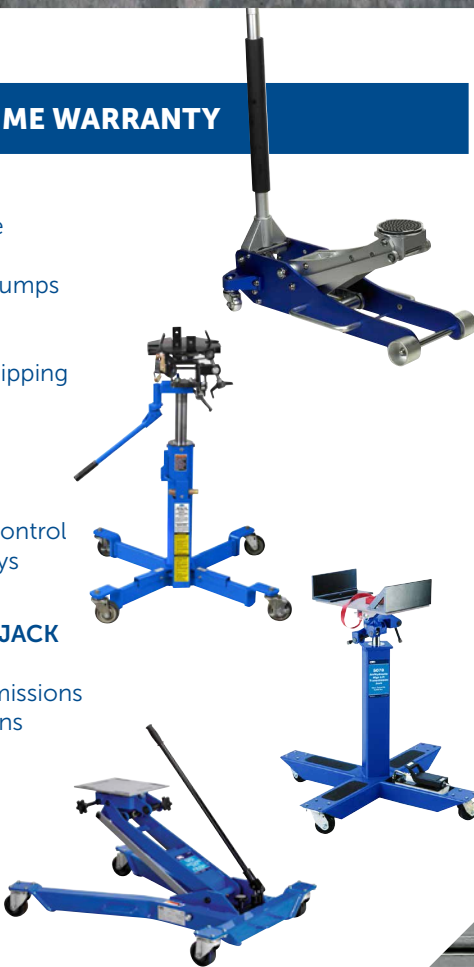
- 1,000-lb capacity lifts from 34 1/2" to 75"
- Air-assist eases effort with hydraulic precision control
- Tilts 50° forward, 20° backward and 10° sideways

### 5078 HIGH-LIFT HEAVY-DUTY TRANSMISSION JACK

- Lifts from 41 1/2" to 65"
- Includes adapter for Allison 500 and 600 transmissions
- 2,000-lb capacity for truck and bus transmissions

### 5130 DRIVEMASTER™ DRIVELINE LIFT

- Low-profile lifting range from 6" to 30"
- Includes differential adapter for versatility
- Additional commercial auxiliary box adapter available



# GRIPOMATIC

*Exclusively an*

# OTC PULLER

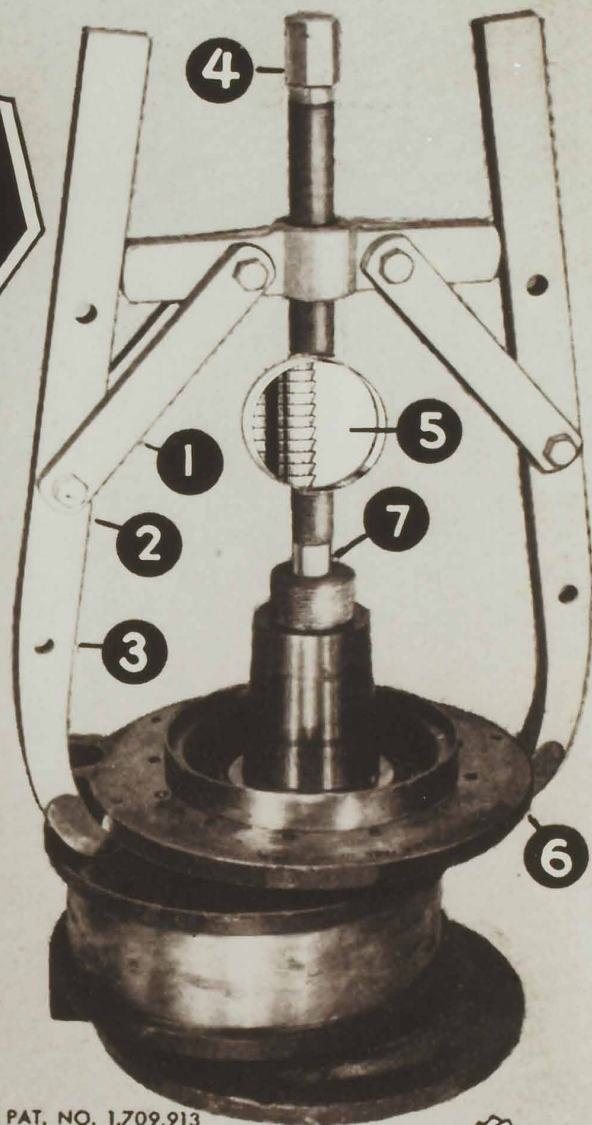
## Engineered for DEPENDABILITY

1. Patented linkage gives automatic, positive, non-slip grip.
2. Bolts act as safety link.
3. Quickly adjustable for length.
4. High alloy steel screw and head.
5. Power Pitch screw — 32% more power.
6. High alloy, drop forged, heat-treated jaws — thinner, stronger, safer.
7. Self-centering dog point forcing screw.
8. Sizes for all needs — up to 50 ton capacity.

ASK YOUR SUPPLY HOUSE or  
write for Industrial Bulletin

### OWATONNA TOOL CO.

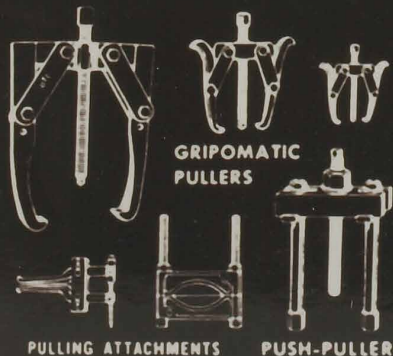
357 Cedar Street  
OWATONNA, MINN.



PAT. NO. 1,709,913

Removing a Bearing  
Cage — one of many  
pulling jobs made easy  
with a GRIPOMATIC.

*Handy McKanick*



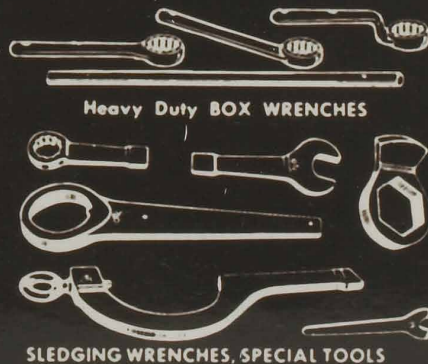
PULLING ATTACHMENTS

PUSH-PULLERS

# OTC

## TOOLS

for MACHINE  
MAINTENANCE



Heavy Duty BOX WRENCHES

SLEDGING WRENCHES, SPECIAL TOOLS

A VINTAGE AD FROM THE 1930s. LEARN MORE ABOUT OTC'S PROUD  
HERITAGE ON PAGE'S 38 & 39.

# WINNER TAKES AN ENCORE

More OTC Encore diagnostic systems in the hands of technicians means more cars fixed faster every day.

**We're giving away one free Encore every day through December 31, 2016. Enter for a chance to win.**





# All makes and models heavy-duty coverage

**The best heavy-duty coverage in North America.**

Fix heavy-duty trucks faster with Bosch ESI[truck]. The all makes/models HD scan tool covers all the big and small manufacturers. One tool, every truck, engine, transmission and brake module.



**Request  
a demo in  
your shop**



**BOSCH**  
Invented for life

# TIME-SAVING TOOLS FROM OTC

FORGED FROM 100 YEARS  
OF RELENTLESS INNOVATION



ENGINE



FUEL



PULLERS



SUSPENSION



WHEEL & TIRE  
SERVICE



SHOP  
EQUIPMENT



# **A LEGACY OF PRODUCTIVITY SOLUTIONS. A UNIVERSAL GOAL OF REPAIRING IT FASTER.**

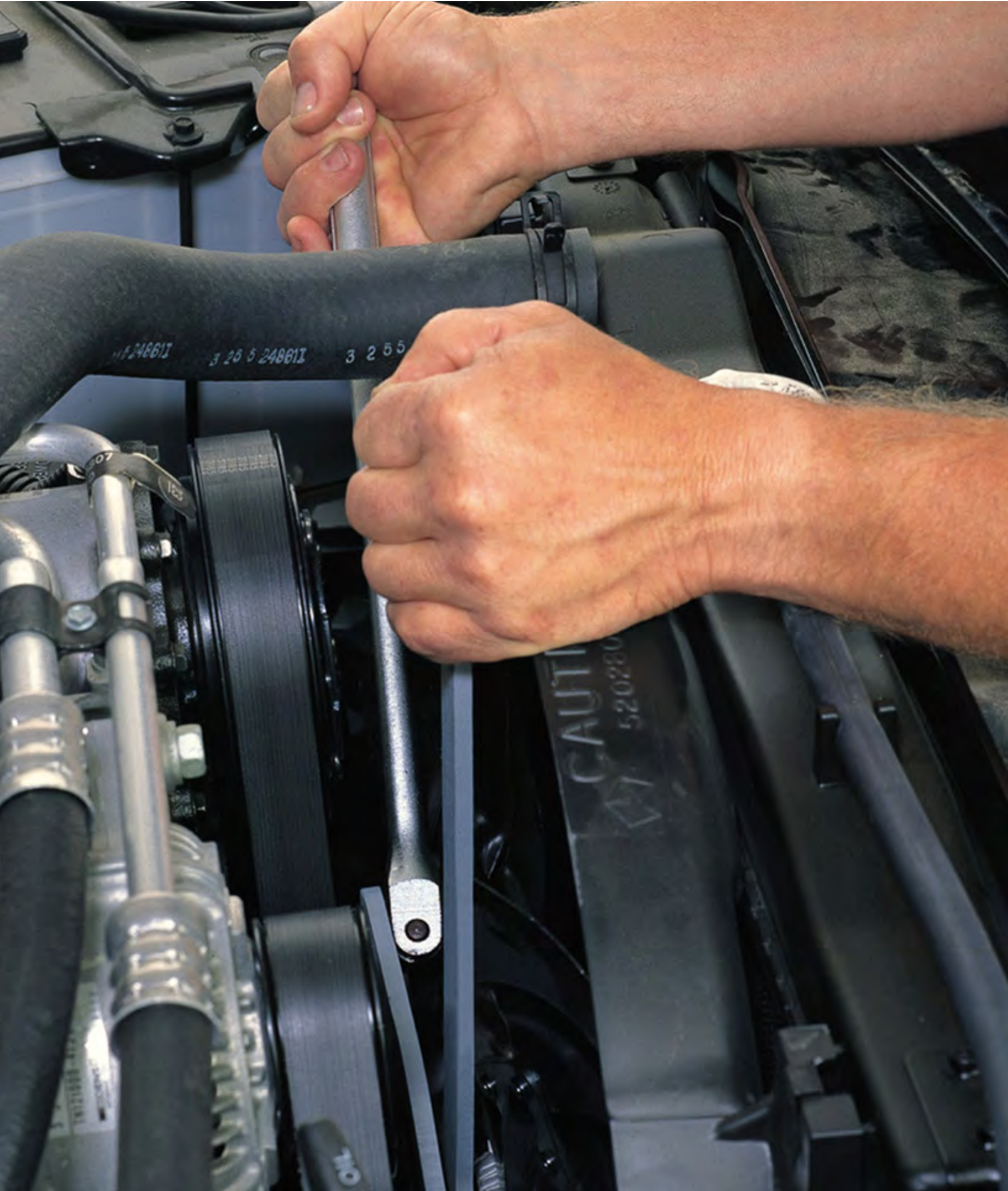


Value is at the core of the OTC tool and equipment portfolio. Whether it's a simple repair or the most complex drivability concern, these award-winning tools universally solve problems faster, and at better value, than any other product line available.

Whether it's a specialty tool or unique piece of service equipment, OTC provides top solutions to modern automotive service challenges while increasing technicians' productivity and shop profits.

## **INNOVATIVE TOOLS DESIGNED TO REDUCE WARRANTY LABOR COSTS AND ENSURE QUALITY REPAIR**





## ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS

### 6690 Ford Master Cam Tool Kit

- Contains 40 tools to ensure correct cam timing when servicing timing belts, chains, head gaskets, or other valve train repairs.
- Covers L4, V6, V8, V10 engine with 2V, 3V, 4V valve configurations, model years 1991 – Present.
- Application guide with diagrams and blow molded case included.



### 6690-1 Ford Cam Tool Kit Update

- Contains 18 tools, with case locations for addition of the popular 6489 Ford Cam Tools, making a 6690 Kit.
- Ford Cam Tools ensure correct cam timing when servicing timing belts, chains, head gaskets, or other valve train repairs.
- 6690-1 tools cover L4, V6, V8, V10 engines with 3V & 4V valve configurations, model years 2004 – Present.
- Application guide with diagrams and blow molded case included.



### 6489 Ford Cam Tool Kit

The OTC Ford cam tools ensure correct cam timing when servicing timing belts, chains, head gaskets, or other valve train repairs.

Ford cam tool kit containing all 22 cam tools covering 1992 thru 2012 for over 50 applications, in a molded storage case.



## Ford Comparison Chart

Part No.	Description	Similar to Ford	6486A	6487	6488	6489	6498	6680	6681	6682	6683	6690	6690-1
6009	Cam positioning Tool (pair)	303-380		X			X					X	
6020	Cam Positioning Tool	303-413		X			X					X	
6024	Crankshaft Positioning Tool	303-448				X						X	X
6466	Crankshaft Sensor Positioner	303-354					X						
6467	Cam Sensor Sync Tool	303-358					X						
6468	Cam Pulley Holding Tool	303-398					X						
6469	Cam Sensor Sync Tool	303-562					X					X	
6470	Cam Sensor Sync Tool	303-630					X					X	
6471	Cam Sensor Sync Tool	303-453					X						
6472	Cam Sensor Sync Tool	303-529					X					X	
6473	Cam Sensor Sync Tool	303-589					X					X	
6474	Cam Alignment Tool	303-465	X				X					X	
6475	Crankshaft TDC Timing Pin	303-574	X				X					X	
6476	Cam Positioning Tool Set	303-S568		X			X					X	
6477	Cam Holding Tool	303-557		X			X					X	
6478	Cam Gear Holding Tool	303-564			X		X					X	
6479	Crankshaft Holding Tool	303-573			X		X					X	
6480	Cam Holding Tool Adapter	303-576			X		X					X	
6481	Cam Holding Tool	303-577			X		X					X	
6482	Cam Gear Holding Tool Adapter	303-578			X		X					X	
6483	Cam Sensor Sync Tool	303-638					X					X	
6484	Timing Chain Tensioner Tool	303-571			X		X					X	
6485	Cam Gear Bolt Socket & Ext.	303-565, 303-575			X		X					X	
525216	Camshaft Positioning Tool Assy	303-445				X						X	X
525217	Camshaft Holding Tool	303-446				X						X	X
525218	Camshaft Holding Tool	303-1248				X						X	X
7419	Tensioner Retaining Pin Set	none										X	X
567611	Timing Chain Tensioner Assy	303-1532						X				X	X
567613	Crankshaft Alignment Tool	303-645A						X				X	X
567614	Cam Phaser Holding Tool	303-1046							X			X	X
567617	Timing Chain Locking Tool	303-1175							X			X	X
567618	Camshaft Holding Tool	303-1248								X		X	X
567619	Chain Tensioner Hold Down Tool	303-1530								X		X	X
567620	VCT Alignment Tool	303-1097									X	X	X
567621	Camshaft Holding Timing Tool	303-376B									X	X	X
567622	Crankshaft TDC Timing Pin	303-507	X									X	X
567623	Crankshaft TDC Timing Pin	303-748									X	X	X
567649	Camshaft Holding Tool	303-530						X				X	X



# ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 6487 Ford Cam Tool Kit

Ford cam tool kit for 1992 thru 2012 4.6L, 5.4L V8, and 6.8L V10 engines. Contains tool Nos. 6476, 6477, 6009, 6020, and molded storage case.



## 6680 Ford 3.9L 4V Cam Tool Set

The 6680 is designed to service Ford 3.9L 4V V8 engines used in 2000-2006 Lincoln LS cars.



## 6681 Ford 4.6L, 5.4L, 6.8L 3V Cam Tool Set

- The 6681 is designed to service;
- Ford 4.6L 3V V8 engines used in 05-10 Mustang, 06-10 Explorer, 09 F-Series trucks.
- Ford 5.4L 3V V8 engines used in 04-12 F-Series, 05-10 Expedition, 05-12 Lincoln Navigator.
- Ford 6.8L 3V V10 engines used in 05-12 F-Series 250-350-450.



## 6488 Ford Cam Tool Kit

Ford cam tool kit for 1997 thru 2002 4.0L Explorer/Mountaineer SOHC V6 engines. Kit contains tool Nos. 6478, 6479, 6480, 6481, 6482, 6484, 6485, and molded storage case.



## 6682 Ford 3.5L & 3.7L 4V Cam Tool Set

- Ford 3.5L 4V V6 engines used in 07-12 Edge & MKZ, 07-09 MKX, 08-12 Taurus & Taurus X & Sable, 10-12 Fusion, 10-12 MKZ & MKS & MKT, 11-12 Explorer & F150.
- Ford 3.7L 4V V6 engines used in 09-12 MKS, 10-12 MKT, 11-12 Mustang & F150 & MKZ & Edge.



## 6683 Ford 1.6L 4V Cam Tool Set

Works on Ford 1.6L 4V L4 engines used in 11-12 Fiesta.



## 6486A Ford 2.0L, 2.3L, 2.5L 4V Cam Tool Set

- Ford 2.0L 4V L4 engines used in 94-12 multiple vehicle platforms.
- Ford 2.3L 4V L4 engines used in 05-08 Escape Hybrid, Mariner Hybrid.
- Ford 2.5L 4V L4 engines used in 09-12 Escape & Mariner, 10-12 Fusion & Fusion Hybrid, 11-12 MKZ.



## 6684 Ford 3V Valve Spring Compressor

- Designed to compress valve springs on a Ford 3V 4.6L & 5.4L.
- Similar to OE p/n 303-1039.

## 6498 Ford 4.6L & 5.4L 4-Valve Cam Timing Kit

Saves time; all tools required for camshaft timing are in one kit.

### Set Includes:

- 525216** – Camshaft positioning tool
- 525217** – Camshaft holding tool
- 6024** – Crankshaft positioning tool
- 525218** – Secondary chain tensioner tool



## 6024 Ford Crankshaft Positioning Tool

- Designed for use on Ford 1993–2012 4.2L, 4.6L 2-valve, 4.6L 4-valve, 5.4L V8, and 6.8L V10 engines when installing timing chains. These engines are not free wheeling, and if an engine has “jumped time,” it is possible the cylinder heads have to be removed because of damage to the valves or pistons.
- Easily installs over the crankshaft and engine front cover alignment dowel to position the crankshaft at top-dead-center — the correct position for timing chain installation. OTC recommends the No. 6024 be used with Nos. 6009 and 6020 (but it is not required).



Similar to Ford 303-448

Similar to Ford 303-567



## 7928 Ford Valve Spring Compressor Tool

Compresses valve springs for quicker, easier camshaft, valve seal, valve spring, or retainer service—because you don’t have to remove the head from the engine first! It’s an OEM-approved tool that you use with a 3/8” ratchet or breaker bar. Works on: 1991–2004 Ford vehicles with 4.6L, two-valve, V8 engines; 4.6 4V, 5.4 V8 and 6.8 V10.



**EASY FORD SPARK  
PLUG REMOVAL**

**6918**

**Ford Spark Plug Remover Kit, 3V Engine**

- Unique design helps prevent breakage by locking the plug porcelain core to the plug hex allowing it to turn as one complete unit.
- Will also pull plug porcelain core if plug hex only is removed.
- Detailed Instructions to maximize success rate.

**Works on:**

- Ford 4.6L 3V V8 engines used in 2005–2008 Mustang, 2006–2008 Explorer.
- Ford 5.4L 3V V8 engines used in 2004–2008 F-Series, 2005–2008 Expedition, 2005–2008 Lincoln Navigator.
- Ford 6.8L 3V V10 engines used in 2005–2008 F-Series 250-350-450.



**6770**

**Ford 6.0L Diesel Service Tool Kit**

- 8 of our popular 6.0L Diesel Service Tools in one convenient kit.
- Properly test vehicle systems for leaks and blockage.
- Safely remove and re-install harnesses without damage.
- Fuel Filter Cap Wrench, Glow Plug and Injector Harness Release Tools.
- Oil Line Disconnect Tool, EGR Removal Tool.
- IPR Controller, IPR Socket Tool and Fuel Rail Pressure Adapters.



**7834**

**Ford Rear Crankshaft Seal Installer**

- This installer works on crankshaft rear oil seals that come with or without a metal wear sleeve.
- Designed for use on 1993–1997 Aerostar or 1993–2011 Ranger and Explorer with 4.0L V6 engine.

Similar to Ford 303-S524



**6900**

**Ford Spark Plug Socket**

- This unique design works on 2004–newer Ford vehicles with 5.4L, 4.6L, V8, 6.8L, V10, 3-valve engines.
- Socket end is 9/16". Soft rubber insert holds and protects spark plug during removal and installation.
- Extension is part of the socket. Easily fits down spark plug tube in cylinder head.
- Socket has a 3/8" drive for use with a ratchet or breaker bar.



**5607**

**Compression Tester Ford 14mm Adapter**

- Use with OTC compression testers to access hard to reach spark plug holes.
- Works on 2004 and 2007 Ford 4.6 and 5.4 L, V-8, 3 valve engines.
  - Easy-to-turn feature makes starting thread fast.
  - Use with compression testers with 14 mm thread.



**5608**

**Compression Tester Ford 12mm Adapter**

- Use with OTC compression testers to access hard-to-reach spark plug holes.
- Works on 2008 and newer Ford 4.6, 5.4 and 6.8L 3-valve engines with 12mm spark plugs
  - Easy-to-turn feature makes starting thread fast



**7835**

**Ford Rear Main Oil Seal Kit**

- Works on 1994–2003 7.3L diesel engine in Ford 3/4- and 1-ton trucks.
- A complete kit with the tools you need to correctly remove and install the rear main oil seal and wear ring on the crankshaft.
- Eliminates makeshift methods of seal removal and installation that could damage the new seal or crankshaft.



Similar to Ford 303-178 (T82L-6701-A)

**7786**

**Ford Rear Main Seal Installer**

- This installer is the most accurate way to ensure that the rear main seal is set to the correct depth on the crankshaft. The installer fits over the seal, and with the two bolts included, attaches to the engine crankshaft. By alternately tightening the bolts, the seal is pulled into place quickly, easily, and with no damage to the rear main seal. Works on 2.0L, 2.3L, 2.3L OHC, 2.5L, 2.5L OHC 4-cylinder engines; 3.0L 2V, 3.0L 4V, 3.4L SOHC, 3.8L, 3.8L SC V6 engines; 4.6L 2V, 4.6L 4V, 5.0L and 5.8L V8 engines.



# ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



**6768**  
**Ford 6.0L Glow Plug Release Tool**  
Safely remove and install the glow plug harness on 2004-2009 Ford 6.0L Diesel engines.



**6076**  
**Ford Diesel Compression Test Adapter**  
When the glow plug is removed from the cylinder, this adapter is used to connect the No. 5021 gauge to perform a compression test.

- Works on 1994–2005 Ford vans and pickups with 7.3L direct-injected turbocharged (DIT) diesel engine.



**6660**  
**Compression Tester**

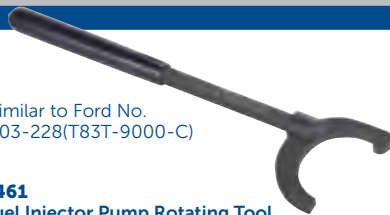
- Use with OTC No. 5021 diesel engine compression gauge.
- Works on 2003-2009 Ford vans and trucks with 6.0L diesel engines.



Similar to Ford No. 303-755

**6594**  
**Ford Oil Line Disconnect Tool for 6.0 L**

- Use to disconnect the high-pressure oil rail supply line from the fuel rail when removing fuel injectors.
- Works on the 6.0L diesel engine found in 2003–2009 F-250, F-350, F-450, F-550 trucks, Excursions and Ford vans.



Similar to Ford No. 303-228(T83T-9000-C)

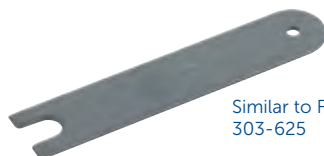
**7461**  
**Fuel Injector Pump Rotating Tool**  
Maximum fuel economy requires precise injector timing. The tool securely grips the front of the fuel injection pump so you can rotate it while fine-tuning the system.

- Works on Stanadyne rotary fuel pumps found on International's 6.9 and 7.3 liter engines.



**6088**  
**Ford 5-pin Connector Harness for Glow Plug Testing**

- Provides an easy way to check glow plug resistance without having to remove the valve cover of 1994–98 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engines.
- Used with any standard digital volt ohmmeter to check glow plug resistance.



Similar to Ford 303-625

**6595**  
**Ford High Pressure Oil Line Disconnect Tool**

- Use to disconnect the high pressure oil line from the cylinder head.
- Works on 1998 - 2003 Ford vans and trucks with 7.3L direct-injected, turbo-charged (DIT) diesel engines.



Similar to Ford 303-774

**6974**  
**Ford 6.0L Diesel Fan Clutch Wrench**

- Applications: 2003–2009 Ford F-550 and F-650 Super Duty trucks with the 6.0L diesel engine.
- This is a required tool to tighten or loosen the fan clutch on the water pump.
- Wrench has a 68.45 mm (2-11/16") opening



Similar to Ford 303-591

**6068**  
**Ford Diesel Fan Clutch Wrench**

- Designed for use with OTC No. 7205E1 holding tool to remove fan clutch assembly. Has the same size opening as the OTC No. 7205E2 wrench, but has a special bend in the handle to provide clearance for accessories found on some vehicles.

Application: 1998–2003 Ford vans and pickups with 7.3L direct-injected turbocharged (DIT) diesel engine.



Similar to 211-185

**7771A**  
**Ford Power Steering Pump Pulley Installer**  
Installs power steering pump pulleys on 1992–newer Ford Crown Victoria and Mercury Grand Marquis with 4.6 V8 engine, 1997–newer Ford truck with 4.2 & 4.6 V6, 5.4 V8, and 6.8 V10 engines.

- 8 mm x 1.25" threads fit Ford's C111 pump.



**206391**  
**Ford Engine Adapters**

- 6.0L and 6.4L Ford engine adapters. (Works with both the OTC 1735 and OTC 1735A).

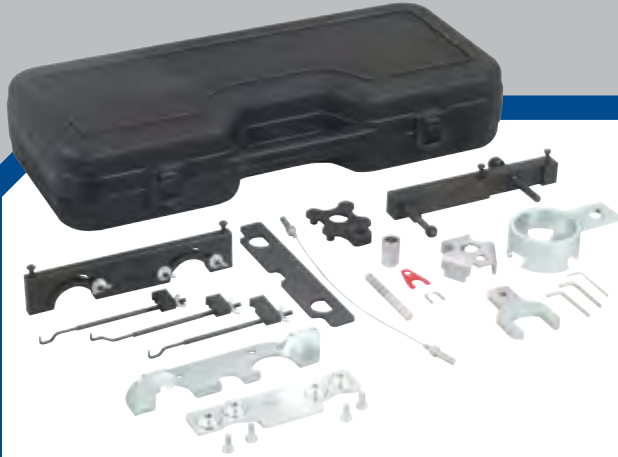


206391 Ford Engine Adapters shown mount on OTC's 1735A sold separately.



**SEE PAGE 29 FOR MORE  
FORD 6.0L TOOLS**

# GM IN-LINE 4-CYLINDER CAM TOOL SET



**6685**

**GM In-line 4-Cylinder Cam Tool Set**

- Comprehensive tool kit designed to save time when servicing GM 4-cylinder engines.

**GM In-line 4-Cylinder Cam Tool Set includes the following:**

**527045**

**Camshaft Timing  
Alignment Pins**  
Similar to GM  
J-36008A



**536172**

**Camshaft  
Holding Tool**  
Similar to GM  
J-44221



**536186**

**Timing Chain  
Holder**  
Similar to GM  
J-44217-1



**527046**

**Camshaft  
Sprocket Wrench**  
Similar to GM  
J-36013



**6675 (536173)**

**Timing Belt  
Adjuster**  
Similar to GM  
J-42492A



**536187**

**Timing Chain  
Holder**  
Similar to GM  
J44217-2



**527049**

**Camshaft  
Sprocket Wrench**  
Similar to GM  
J-39579



**536174**

**Camshaft Gear  
Holder**  
Similar to GM  
J-43299



**536254**

**Camshaft Timing  
Alignment Pin**



**527056**

**Camshaft Sprocket  
Holding Tool**  
Similar to GM  
J-43655



**536176**

**Camshaft Gear  
Holder**  
Similar to GM  
J-43299



**536255**

**Timing Chain  
Tensioner Retainer**



**532174**

**Timing Chain  
Tensioner & Shoe  
Retainer**



**536178**

**Crankshaft Pulley  
Holder**  
Similar to GM  
J-38122



**536265**

**Timing Chain  
Holder**  
Similar to GM  
J-44217-46



**532195**

**Timing Chain  
Tensioner Retainer**  
Similar to GM  
J-36589



**536181**

**Camshaft Sprocket  
Holding Tool**  
Similar to GM  
J-44222



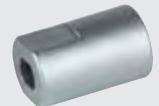
**527061-1**

**Timing Chain  
Tensioner  
Loading Tool**  
Similar to GM  
J-45027



**527061-2**

**Timing Chain  
Tensioner Loading  
Tool**  
Similar to GM  
J-45027



# ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 6686

### GM NorthStar V8 Cam Tool Set

- Kit is indispensable for quickly and correctly servicing GM NorthStar 4.0L and 4.6L V8 engines.

#### Set Includes:

- 527048 – Cam Chain Tension Holder
- 527050 – Crankshaft Rotation Tool
- 527057 – Camshaft Holding Tool (qty. 2)
- 527058 – Secondary Drive Sprocket Fixture
- 529636 – Timing Chain Retention Tool
- 529637 – Timing Chain Retention Tool
- 529638 – Timing Chain Retention Tool (qty. 2)



## 6687

### GM 6 Cylinder Cam Tool Set

- Required tools to adjust and hold cam shaft timing on GM 3.0 and 3.2 V-6 engines.
- Kit is designed to save shop time when servicing GM 3.0 and 3.2 V-6 engines.

#### Set Includes:

- 536594 – Camshaft Locking Tool
- 536595 – Camshaft Locking Tool
- 536596 – Crankshaft Holding Tool
- 536608 – Camshaft Alignment Gauge
- 536611 – Timing Belt Installation Tool
- 536612 – Timing Belt Tensioner Wrench
- 536613 – Crankshaft Socket

## 6688

### GM In-line 5, 6, or V6 Cam Tool Set

- Comprehensive tool kit designed to save time when servicing GM 5-, 6-cylinder engines.
- Tools are actually easier to use than the original OE essential tools.

#### Set Includes:

- 527051 – Camshaft Holding Tool
- 527052 – Cam Gear Holding Tool
- 527055 – Crankshaft Socket
- 527061 – Timing Belt Tensioner Loading Tool
- 536172 – Camshaft Holding Tool
- 536186 – Timing Chain Retention Tool
- 536187 – Timing Chain Retention Tool
- 536582 – Timing Belt Tensioner Pulley Retaining Tool
- 536583 – Camshaft Sprocket Holding Tool.
- 536584 – Camshaft Locking Tool
- 536585 – Camshaft Locking Tool
- 536586 – Timing Belt Tensioner Pin
- 536587 – Timing Chain Tensioner Pins
- 536588 – Crankshaft Socket
- 536589 – Timing Chain Retention Tool
- 536590 – Timing Chain Retention Tool

## 6600A

### GM Water Pump Socket

- Works on 1993–newer Cadillac 4.6L V8 Northstar engine, and 1995–1999 Oldsmobile Aurora 4.0L V8.
- 1/2" sq. drive for use with 1/2" drive breaker bar or ratchet.
- Tool is designed to self-center in the water pump housing, allowing the tangs to fully engage the water pump for removal or installation.

## 6675

### Timing Belt Adjuster Wrench

- Designed to fit the adjuster on Chevy Aveo, 2002 - 2011.



Similar to J-38816A



Similar to J-42492-A



7912

7911

### GM Crankshaft Balancer Puller Kit and Adapter Set

Everything you need to pull harmonic balancers having three tapped holes. The shoulder bolts are designed to prevent them from being installed too deeply, protecting the crank sensor and/or interrupter rings from damage. The spacer adapter gives the puller's forcing screw something to push against. The kit works on 1990–2002 3300 and 3800 V6 engines. The No. 7911 adapter set consists of the spacer adapter and shoulder bolts only, for use with your No. 518 or No. 6930 flange-type puller.

**7911 – GM crankshaft balancer puller adapter set.** Includes shoulder bolts and spacer adapter only.

**7912 – GM crankshaft balancer puller kit.** Includes No. 518 flange-type puller and No. 7911 adapter set.



Similar to J-43651

## 6616

### GM Water Pump Holding Tool

- Holds timing chain in place so water pump can be removed for service.
- Special design allows easy installation regardless of timing chain orientation.
- Simply remove access plate from front cover and install the tool.
- Tool saves costly loss of timing on 2002–2009 GM 2.2L and 2.4L EcoTech engines.



6778



6779

### GM Duramax Injector Pullers

- Designed to pull injectors on a GM Duramax 6.6L engines.

**6778** – From 2001 - 2004, Similar to J-44639.

**6779** – From 2005 - 2011, Similar to J-46594.

## 6754

### Diesel Fuel Pressure Gauge

- Designed to test fuel pressure on GM Duramax diesel engines.
- Similar to J-44638.





## 6689 Chrysler/Jeep Cam Tool Set

The Chrysler/Jeep cam timing tools are provided to ensure correct cam timing when servicing timing belts, chains, head gaskets, or performing other valve train repairs.

These 15 tools are based on OE designs and are offered to service the following applications:

Cam positioning is an important procedure. If cam timing is not correct, the engine may still run, but emissions and mileage will be affected. The engine computer may also initiate the "Check Engine" light.

### Set Includes:

- |   |   |
|---|---|
| <b>513990</b> – Crankshaft Damper Puller          | <b>522896</b> – Idler Shaft Remover           |
| <b>522888</b> – Camshaft Alignment Tools          | <b>522897</b> – Tensioner Lock Pin            |
| <b>522889</b> – Camshaft Sprocket Holder          | <b>522898</b> – Camshaft Holding Pins         |
| <b>522890</b> – Timing Chain Tensioner Reset Tool | <b>522899</b> – Timing Belt Tensioner         |
| <b>522891</b> – Harmonic Balancer Holding Ring    | <b>522900A</b> – Timing Belt Tensioner Tool   |
| <b>522892</b> – Timing Chain Wedge                | <b>522901</b> – Timing Belt Wrench            |
| <b>522893</b> – Timing Chain Wedge                | <b>522902</b> – Secondary Timing Chain Holder |
| <b>522894</b> – Camshaft Wrench                   |   |



## 6075 Chrysler Crankshaft Damper Remover/Installer Kit

The special 3-jaw puller is used with the insert to remove the crankshaft damper whenever timing belt, water pump, or front cover service is required. The tool kit includes a damper installing tool with bearing.

- Services Chrysler-built 2.0L, 2.4L, 2.5L, 3.3L and 3.5L engines.
- 1995–2010 3.3L and 3.5L V6 used in Chrysler New Yorker and Concorde, Dodge Intrepid, and Eagle Vision; 1995–newer 2.0L, 2.4L 4-cyl., and 2.5L V6 used in Cirrus, Stratus, and Breeze; 1995–newer 2.0L 4-cyl. used in Neon.



Similar to Miller 6642

## 7999 Chrysler Camshaft Alignment Tool Set

These special brackets are necessary to ensure exact alignment of the camshaft sprockets during timing belt installation on all 1993–2010 vehicles with a 3.5L OHC engine.



## 6495 Chrysler Harmonic Balancer Holding Tool

- Designed as a holding ring with three pins to fit into the openings on a harmonic balancer.
- Use with a 1/2" ratchet or breaker bar to hold the harmonic balancer in place when turning the bolt that holds the balancer to the crankshaft. Also use to hold the balancer when removing it from the engine.
- Works on 1990–2010 3.3L V6 vans; 1994–2011 3.8L V6; 1993–1997 3.3L and 3.5L V6 cars; 1998–newer 2.7L, 3.2L, and 3.5L V6 cars.



Similar to Miller No. C-3053

## 6293 Distributor Bushing Installer/Reamer

- Used to install the distributor drive shaft lower bushing into the engine block. Then use this same tool to ream the new bushing so the distributor drive shaft correctly fits into the bushing.
- Works on Chrysler, Dodge, and Plymouth 3.9L V6, 5.2L & 5.9L V8 vehicles with distributors.
- Compatible with OEM and aftermarket distributor drive bushings.



## 6667 Harmonic Balancer Puller

Designed for removing damper pulleys in tight engine compartments, without removing the radiator. Use on the following:

- GM 2000 Generation III 4.8L, 5.3L, 5.7L 6.0L, and 8.1L V8s. Also works on Cadillac 4.5, 4.6, and 4.9L V8s beginning in 1988. Chevrolet trucks 2003–later 4.2L I6, 2004–current 3.5L I5 & 2005–current 2.8L I4.
- Chrysler engines from 1990–later, including 2.0L, 2.4L-cyl; plus 2.5L, 2.7L, 3.3L, 3.5L, and 3.8L V6s.
- Ford 1995–later V8 engines with 3 spoke pressed on damper.
- Mitsubishi Eclipse 1995–1999 2.0L DOHC non-turbo.
- Kit contains the 3-jaw puller, four lengths of forcing rods, and a forcing screw with a 3/8" square drive for ratchet use, and a 3/4" hex for wrench or socket use.

Replacement rods:

- |                                     |                                    |
|-------------------------------------|------------------------------------|
| <b>537757-4</b> – 5/16" x 4" 6-1/2" | <b>537757-6</b> – 5/16" x 6-1/2"   |
| <b>537757-5</b> – 5/16" x 5-13/32"  | <b>537757-7</b> – 5/16" x 7.13/32" |



## 6284 Harmonic Balancer Puller Set

- Includes No. 6267 puller, which removes the harmonic balancer from the crankshaft; and No. 6495 holding tool, which holds the harmonic balancer when tightening or loosening the crankshaft bolt, or removing the balancer.

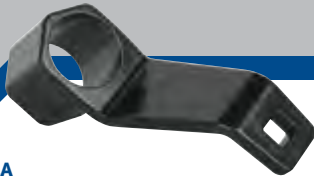


Similar to Miller MD-998767

## 7997 Chrysler Timing Belt Wrench

Correctly adjusts the timing belt tension on 1991–1994 3.0L DOHC Dodge Stealth, 1992–1994 Eagle Summit, 1992–1994 Dodge Colt, and 1984–1991 2.0L Dodge Colt. For use with a 1/4" drive ratchet.

# ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4731A

### Honda/Acura Dampner Holding Tool

- Holds dampner for removal/installation of the crank bolt on Honda/Acura engines.
- 4" offset.
- 1/2" square drive can be used with ratchet or breaker bar.
- 50mm hex with large center hole.
- Will fit around accessories eliminating additional part removal.
- Proper fit for applications and allows use of impact tool to remove bolt.

### Works on:

Honda – Accord, Civic, CRV, Del Sol, Element, Fit, Insight, Odyssey, Pilot, Prelude, Ridgeline, S2000. Acura – CL, Integra, Legend, MDX, RL, RSX, TL, TSX.

### Honda

Accord	1990–1997	2.2L 4 cyl.
Accord	1996–1997	2.7L 4 cyl.
Accord	1998–2002	2.3L 4 cyl.
Accord	1998–newer	2.4L 4 cyl.
Accord	1998–newer	3.0L V-6
Accord Hybrid	2005_2007	3.0L V-6
Civic	1992–newer	1.6L 4 cyl.
Civic	2001–2005	1.7L 4 cyl.
Civic	2006–newer	1.8L 4 cyl.
Civic	2003–newer	2.0L 4 cyl.
Civic Hybrid	2003–newer	1.3L 4 cyl.
CRV	1997–2001	2.0L 4 cyl.
CRV	2002–newer	2.4L 4 cyl.
Del Sol	1993–1997	1.6L 4 cyl.
Element	2003–newer	2.4L 4 cyl.
Fit	2007–newer	1.5L 4 cyl.
Insight	2000–newer	1.0L 3 cyl.
Odyssey	1995–1997	2.2L 4 cyl.
Odyssey	1998	2.3L 4 cyl.
Odyssey	1999–newer	3.5L V-6
Pilot	2003–newer	3.5L V-6
Prelude	1992–newer	2.2L 4 cyl.
Prelude	1992–1996	2.3L 4 cyl.
Ridgeline	2006–newer	3.5L 4 cyl.
S2000	2000–2003	2.0L 4 cyl.
S2000	2004–newer	2.2L 4 cyl.

### Acura

CL	1997	2.2L 4 cyl.
CL	1997–1999	3.0L V-6
CL	1998–1999	2.3L 4 cyl.
CL	2000–newer	3.2L V-6
Integra	1990–1992	1.6L 4 cyl.
Integra	1992–1993	1.7L 4 cyl.
Integra	1993–newer	1.8L 4 cyl.
Legend	1991–1995	3.2L V-6
MDX	2001–2006	3.5L V-6
MDX	2007–newer	3.7L V-6
RL	1996–2006	3.5L V-6
RSX	2002–2007	2.0L 4 cyl.
TL	1997–newer	3.2L V-6
TL	2007–newer	3.5L V-6
TSX	2004–newer	2.4L 4 cyl.



## 4732

### Honda/Acura Crankshaft and Harmonic Balancer Holder

- Allows the crankshaft pulley and/or harmonic balancer bolt to break loose.
- Includes tool necessary to properly counter the rotation of the crankshaft pulley/harmonic balancer during removal and reinstallation of crank bolt.
- Secures the pulley in place not allowing it to rotate during removal and reinstallation of crank bolt.

Allows the technician to more easily replace the timing belts on many 1982 to current Honda & Acura vehicle engines, including:

1.6L	4 Cylinder	Civic	1982+
1.7L	4 Cylinder	Integra	1983
1.8L	4 Cylinder	Integra	1983+
2.0L	4 Cylinder	CRV S2000	1997+ 2000+
2.2L	4 Cylinder	Accord Odyssey Prelude Acura CL	1980-1998 1985-1988 1982+ 1997+
2.3L	4 Cylinder	Accord Odyssey Prelude Acura CL	1988+ 1988 1982+ 1997+
2.7L	6 Cylinder	Accord	1986+
3.0L	6 Cylinder	Accord Acura CL	1988+ 1987+
3.2L	6 Cylinder	Acura Legend Acura TL	1981-1985 1986+
3.5L	6 Cylinder	Odyssey Acura RL	1999+ 1996+



## 6613

### Variable Pin Spanner Wrench

- Universal design fits many different types of pulleys having slots or holes, including camshaft pulleys and crankshaft pulleys.
- Wrench is adjustable from 1-1/4 inch to 5 inches; works with a 1/2 inch ratchet or breaker bar.

Set Includes:

<b>526908-1</b>	– 3.5 mm pin	<b>526908-5</b>	– 6 mm pin
<b>526908-2</b>	– 4 mm pin	<b>526908-6</b>	– 7 mm pin
<b>526908-3</b>	– 4.5 mm pin	<b>526908-7</b>	– 10 mm pin
<b>526908-4</b>	– 5 mm pin	<b>526908-8</b>	– Handle



## 5940

### BMW Head Bolt Socket

- Socket is designed to fit in the cylinder head on M42 and M50 engines to remove and install cylinder head bolts.
- Spring loaded detent ball holds bolt in place.
- Works with 1/2 inch ratchet, breaker bar, or torque wrench. Socket size is E12 for external TORX® bolts.



Similar to Toyota No. 09043-50080

## 6022

### Toyota Head Bolt Socket

- Specially designed socket is needed to tighten or loosen head bolts on Toyota Paseo vehicles with 3S-GE and 3S-FE engines.
- 8 mm socket features a 12-point, 1/2 inch drive socket.



Mirror Finish

## 6985

### Mercedes-Benz and BMW Fan Clutch Service Kit

- Mercedes-Benz fan clutch holding wrench holds the water pump pulley to allow release of the fan.
- BMW Fan clutch holding wrench holds the water pump pulley in place while loosening the radiator fan. Works on BMW M10, M20, M30, & other late model vehicles. (Holes at 38 mm & 44.5 mm.)
- Mercedes-Benz fan clutch wrench removes the thermo-viscous radiator fans found on Mercedes-Benz vehicles. Works on M-B engines: M111, OM604, OM605, and OM606 (C & E Class; 36 mm opening).
- Mercedes-Benz fan clutch wrench is used to remove or install the fan clutch assembly. Slim shaft handle lets you easily work in tight spaces. Works on M-B engines: M103, M104, M119, and M120 (65 mm opening).
- BMW fan clutch wrench is used to remove and install the thermo-viscous fan on BMWs and Fords (32 mm opening).
- Mercedes-Benz Fan Clutch Holding Tool is used to remove / replace thermo-viscous fan coupling with the radiator in place.
- Universal fan belt adjustment wrench services Mercedes-Benz, Nissan Quest, and Mercury Villager radiator fans and pulley belts. It also can be used for loosening the A/C idler pulley tensioner lock nuts for A/C belt adjustment or replacement. Also contains 2.5 mm, 8 mm, and 10 mm Allen keys.



**7196**  
**Crank & Cam Seal Service Kit**

- Removes and installs camshaft and crankshaft seals on cars, trucks, vans and SUVs without damage.
- Includes a puller coupled with specialized puller legs that hook the seal for quick and easy removal.
- The interchangeable seal install adapters are designed for use with the cam or crank bolt. Kit services seal sizes of 21.5mm to 64mm.



**6678**  
**Cam Gear Holder, 2 pack**

- The holders clamp between the engine block or head and the back of the gear to lock it in place.
- Use on single, dual, or quad cam engines to hold valve timing during belt replacement.
- Excellent for diesel injection pump belt replacement.
- The cam gear holders universal design are quick and easy to install.



**6679**  
**Cam Gear Clamp & Holder Set**

- The holders clamp between the engine block or head and the back of the gear to lock it in place. The cam gear clamp is used between two adjacent gears to lock them together and eliminate movement.
- Use on single, dual, or quad cam engines to hold valve timing during belt replacement.
- Excellent for diesel injection pump belt replacement.



**7790**  
**Flange-Type Puller Set (Grade 5)**

- Versatile puller capable of removing a wide variety of components having tapped pulling holes, including harmonic balancers, gears, crankshaft pulleys, etc.
- Capable of handling 2- or 3-way bolt pulling applications.
- Works on many cars, pickups, SUVs, and small engines.
- Carries the OTC Lifetime Marathon Warranty® against defects in workmanship and material.

**Contents of set:**

- Puller flange: adapts to bolt circle dia. of 1-1/2" to 4-5/8".
- Forcing screw: 5-5/8" lg., 5/8-18 thread.
- Shaft protector: 1-3/16" dia. x 3/4" thick.
- Three each of the following flat washers: 1/4"; 5/16"; 3/8".
- Three each of the following bolt sizes:
 

1/4"-28 x 3" lg.	3/8"-16 x 3" lg.
5/16"-24 x 3" lg.	3/8"-16 x 4-1/2" lg.
5/16"-18 x 3-1/2" lg.	M8 x 1.25 x 45 mm lg.
5/16"-18 x 6" lg.	M8 x 1.25 x 65 mm lg.
3/8"-24 x 1-1/2" lg.	M8 x 1.25 x 90 mm lg.
3/8"-16 x 2" lg.	M10 x 1.5 x 35 mm lg.



**6930**  
**Flange-Type Puller Combination**

- Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4". Three cap screws, 3/8-24 x 3" long, and three cap screws, 3/8-16 x 3" long.



**7793**  
**Master Bolt Grip Set (Grade 8)**

- Multi-Purpose applications such as steering wheels, flywheels, harmonic balancers, pulleys and gears with tapped holes.
- Includes special stepped bolts for 1990-2005 GM 3300-3800 V6 crankshaft pulleys.

**Contents of set:**

- 4-way slotted puller yoke and 2 lengths of hardened "live-center" forcing screws - a set of 3 interchangeable forcing screw tips is included to optimize pressure and prevent "walking".
- Blow molded case to prevent spilling and each bolt size is molded into the storage compartment.
- Three each of the following bolt sizes:
 

M8 x 1.25 x 90mm	3/8-24 UNF x 1.5"
M8 x 1.25 x 45mm	3/8-16 UNC x 2"
1/4-28 UNF x 3"	3/8-16 UNC x 3"
M8 x 1.25 x 65mm	3/8-16 UNC x 4.5"
5/16-24 UNF x 3"	M10 x 1.5 x 35mm
5/16-18 UNC x 3.5"	
- Special Stepped Bolts - 1990 & Newer



**525**  
**Flange-Type Puller Combination**

- Two specialty pullers in one box. You get a flange-type puller for removal of harmonic balancers, timing gears, and other parts with two or three tapped holes. You also get a steering wheel, pulley, and flywheel puller. 525 includes: flange-type puller and steering wheel puller with four sets of cap screws.

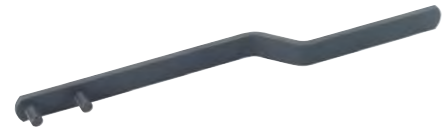
# ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



- 6505**  
**Master Harmonic Balancer Installer**
- 11 special adapters make this a complete master harmonic balancer installer set for most car and light truck applications.
  - The heavy-duty 7/8" diameter forcing screw has internal threads to fit the threaded adapters.
  - Plastic storage tray keeps set components organized for easy selection.



- 7654A**  
**Serpentine Belt Installation Tool**
- Durable tool provides extra control and reach during serpentine belt installation.
  - Works equally well on V-belts and timing belts.
  - Three-pin design for immediate push/pull capacity.
  - Handle gives technician twisting control to install belts in confined, hard-to-reach areas.



- 7161**  
**Cummins Engine Turning Tool**
- This tool makes easy work of manually rotating a Cummins 855 cubic inch engine. It's essential hardware when you're bringing pistons to top dead center to adjust injector timing.



- 4645**  
**Serpentine Belt Tool**
- Fits tensioner pulleys with 13 mm–16 mm, 18 mm hex or 3/8" and 1/2" square drives.
  - For hard to access tensioners; there are 13 mm and 15 mm 12-point wrenches built into the handle.
  - 13 mm, 14 mm and 15 mm crows foot wrenches also included.



- 7425**  
**Stretch Belt Service Set**
- The Stretch Belt Service Set includes an install tool along with a removal tool. Both tools are placed on a pulley which is turned to slip-on or slip-off stretch fit belts without damage.



- 4531**  
**Harmonic Balancer Puller/Installer Set**
- For easy removal and installation of most harmonic balancers and drive pulleys which are press-fitted onto the crank-shaft.
  - A bearing-centered circular 2/3-way puller flange handles 2-1/2" – 4-1/4" bolt circles. An assortment of metric and fractional bolts and adapters provide wide pulling coverage.
  - A heavy-duty, 3/4" dia. forcing screw is internally threaded to fit the eight adapters to install harmonic balancers. Adapter sizes included: M16 x 2.0, M14 x 1.5, M12 x 1.5, 1/2"-20, 7/16"-20, 3/4"-16, 5/8"-18, and 9/16"-18.
  - A blow-molded plastic storage case keeps set contents organized and protected from loss.



- 7471A**  
**Cummins Engine Barring Tool**
- Need to manually rotate an engine? This tool makes the job easy. Just insert the tool into the flywheel housing until it engages the ring gear, then attach a 1/2" square drive ratchet or breaker bar and turn. The tool's load-bearing collar provides friction-free operation while rotating the tool in the housing.
- Works on Cummins B and C series diesel engines and 5.9L liter diesels used in Dodge pickups.



- 7424**  
**Belt Holding Tool**
- Keeps belt from falling off of a pulley during belt installation.
  - Universal design to fit most pulley styles and sizes.
  - Super strong magnet to hold the belt firmly on the pulley.
  - Multiple holders can be used for belt applications that fit around many pulleys.
  - Durable plastic housing with magnet for steel/iron pulley applications.



# CLUTCH, PULLEY AND FLYWHEEL SERVICE



**7419**  
Timing Tensioner Locking Pin Set

- This pin set is used to lock timing belt or chain tensioners once they have been compressed, required during the service procedure.
- Once the belt or chain service is complete, the pin is simply pulled out to return the tensioner to functional.
- 6 pin set with clip to cover most all applications.



**7885**  
Fan Clutch Wrench Master Set

Conventional wrenches are just too wide for the job of removing the fan clutch assembly on some engines. Here's the solution: You hold the fan clutch stationary with the clutch holder tool, and turn the fan clutch nut with the special wrench. Most wrenches feature a square drive for attaching a breaker bar for extra torque. Time savers when replacing water pumps, or for any other front engine service in body or repair shops. Holding tools and wrenches are available individually and in sets.



**6617**  
Alternator Pulley Service Kit

- Overrunning alternator pulley and overrunning alternator decoupler pulley are designed to extend belt life and belt tensioner life. They also make for quieter and smoother accessory drive operation and reduce vibrations in the passenger compartment.
- These tools hold the alternator shaft still so the pulley can be removed or installed.
- A great time saving tool for the technician and the ability to provide a cost saving service for the vehicle owner.

**Kit contains:**

Decoupler tool assembly	28 mm / 21 mm hex cap nut driver
17 mm hex drive	28 mm / 18 mm hex cap nut driver
17 mm Allen wrench	22 mm hex cap nut driver
110 mm socket extension	



**6673**  
Universal Belt Tension Gauge

- Belt tension gauges are used to check drive belt tension on drive belts to ensure maximum belt and bearing life.
- Scale reads 30–180 lbs.



**4475**  
Grooved Pulley Strap Wrench

- Use to hold a grooved pulley when servicing alternators, water pumps, power steering pumps, etc. Also may be used to rotate the camshaft or crankshaft for engine service.
- Holds tighter than a standard strap wrench.



**4652**  
Adjustable Fan Clutch Holding Tool

- Adjustable jaws fit various water pump pulley bolt patterns.
- Jaws adjust from 1/2" to 8-5/16" opening.
- Jaws lock in place to securely hold water pump bolts.
- Long handle offers leverage for extra torque.



**7403**  
Steering Wheel, Pulley, and Flywheel Puller

- Here's a puller that works in a variety of applications. It pulls steering wheels on most late model cars. It also works as a regular 2/3-way puller to remove pulleys and small engine flywheels. Cap screws included (pairs): 3/8-16 x 3-1/2 in.; 5/16-18 x 3-1/2 in.; 5/16-24 x 3-1/2 in.; M8-1.25 x 90 mm; and 5/16-18 x 4 in. (SIR).
- Works on domestic cars with or without collapsible steering columns.



**4754**  
Universal Pulley Holder

- Universal design fits many different size pulleys having slots or holes, such as camshaft pulleys or crankshaft pulleys.
- Wrench is adjustable from 1-1/2" to 8-5/8"; four different size step pins are interchangeable.
- Long handle enables technician to easily hold the pulley when tightening or loosening retaining bolts.



# ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4603 Frost Plug Remover/Installer Set

- Designed to remove and install frost plugs used in liquid-cooled gas and diesel engines found in cars, trucks, SUVs, agricultural equipment, and construction equipment.
- Simply use a hammer with the driver and appropriate disc to install frost plugs ranging from 1" to 2-3/8" in diameter.

### Set contains:

4603-1 – Installer Handle (18" lg.);

4603-2 – Frost Plug Remover;

4603-3 – Frost Plug Disc Set (7 ea., plus 1 retaining nut).



## 6986 Stud Remover Set, Fractional

This fractional, 4-piece, stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

- Housed in a blow-molded storage case.

### 3/8" drive for:

6986-1 – 1/4" stud remover

6986-2 – 5/16" stud remover

### 1/2" drive for:

6986-3 – 3/8" stud remover

6986-4 – 7/16" stud remover



## 6987 Stud Remover Set, Metric

This metric, 4-piece stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

- Housed in a blow-molded storage case.

### 3/8" drive for:

6987-6 – 6 mm stud remover

6987-8 – 8 mm stud remover

### 1/2" drive for:

6987-10 – 10 mm stud remover

6987-12 – 12 mm stud sizes.



## 4604 Frost Plug Installer Set

- Designed to install frost plugs in liquid-cooled gas and diesel engines found in automobiles, trucks, SUVs, agricultural equipment, and construction equipment.
- Simply use an air hammer with the driver and appropriate disc to install frost plugs ranging from 1" to 2-1/16" in diameter.

### Set contains:

4604-1 – Driver (14" lg.); 4604-2 – Frost Plug

Disc Set (3 qty.).



## 4838 Piston Ring Compressor Set, 6 Piece

This 6 ring set covers 2 7/8" thru 4 3/8" piston diameters. The ring compressor pliers feature a ratcheting lock to hold the handles in position for easy piston installation.



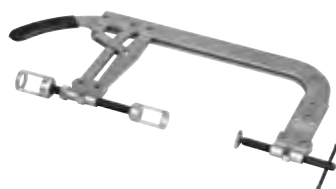
## 4842 Heavy Duty Valve Spring Compressor

Used to compress valve springs for removal or installation. The heavy duty C-frame has a 9" opening and a 5" throat. Kit includes 16mm, 19mm, 23mm, 25mm, and 30mm valve spring retainer adapters.



## 4839 Adjustable Piston Ring Expander Pliers

These simple pliers include tips designed to capture the ends of piston rings to hold and expand them securely while installing onto pistons.



## 4572 Valve Spring Compressor

- Designed to compress valve springs on overhead valve engines.
- Includes two valve spring adapters, which fit valve spring retainers up to 1" (25 mm) and 1-3/16" (30 mm).
- Unique, direct action compressor lever gives better visibility of valve spring retainers located in difficult access areas.
- Jaw opening of 1-3/8" to 5-5/8" (35 mm to 142 mm); throat clearance of 5-7/8" (150 mm).



## 4840 Piston Ring Compressor Set with Ring Expander

This complete set includes 12 chrome plated compressor sleeves covering 1 3/8" thru 4 3/8" diameter piston applications. Both the ring compressor and ring expander pliers feature a ratcheting lock to hold the handles in position for easy piston and ring installation. Complete with a metal carry case.



**4573  
Universal Overhead Valve Spring Compressor**

- Permits removal and installation of valve springs without removing the cylinder head on many cars and light trucks. Durable steel construction.
- Spring loaded offset jaws easily grip and compress valve springs.



Similar to Ford 303-567

**7928  
Ford Valve Spring Compressor Tool**

Compresses valve springs for quicker, easier camshaft, valve seal, valve spring, or retainer service—because you don't have to remove the head from the engine first! It's an OEM-approved tool that you use with a 3/8" ratchet or breaker bar. Works on: 1991–2004 Ford vehicles with 4.6L, two-valve, V8 engines; 4.6 4V, 5.4 V8 and 6.8 V10.



**3673  
Diesel Glow Plug Tester**

Glow Plug Tester provides fault detection thru LEDs for a quick analysis; Short circuit, Over current, Normal operation, Open circuit/ Under current.

- Glow Plug Tester allows for testing without removing glow plug from engine.
- Powers the glow plug to test the plug in it's operating state.
- Much more accurate test than a cold resistance test, which can miss short circuits.
- Tester uses a current measurement to accurately determine proper operation and check for short circuits.



**6589  
Electronic Ignition Spark Tester**

Check for spark on gasoline engines used in import and domestic cars and trucks, plus small engines.



**3589  
Ignition System Quick Test Kit**

This kit enables technicians to do power-balance tests and diagnose problems on standard, electronic, or distributorless ignition systems. Comes with brass adapters to fit all auto coils, test probes and leads, spark gap tester, and step-by-step instructions that lead technicians through the power-balance test.

- Performs power-balance in less than 5 minutes on standard, electronic, or distributorless ignition systems.
- Spark gap tester checks for adequate kV voltages on electronic ignition systems, providing instant diagnosis of problems—whether a faulty coil, ignition wire, or spark plug.
- Ideal for checking spark in no-start condition, instead of wasting time trying to "ground out your screwdriver."
- Step-by-step instructions lead technician through tests to check if ignition has a bad ground all the way to defective coils.



**3579  
Ignition system adapters, set of six.**



**6005A  
Glow Plug Remover**

Set includes 10 mm and 12 mm split nuts, three spacers (3/16", 1/4", and 5/16"), plastic storage/organizer case and instructions. The 10 mm split nut will work on Ford 6.9L and 7.3L diesels; GM 6.2L, and 6.5L diesels; and various diesels in import vehicles. The 12 mm split nut works on various diesels in import vehicles, plus many agricultural and construction diesel applications.



**5603  
Compression Tester - Deep Well Connector**

Use with OTC compression testers or other compression testers.

- Solid steel 8" length shaft.
- Upper t-wing grip for ease of installation and removal.
- Popular 14 mm thread for both flat and tapered seat plugs.
- Corrosion resistant nickel plated finish.

# ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 5606 Compression Tester Kit

Designed for complete compression testing on gasoline engines, including domestic, imports, motorcycles, marine, and small engines. Unique problem solving features for today's limited space engine compartments.

### Features and benefits:

- Corrosion resistant nickel plated finish.
- Adapters work on both flat and tapered seat plugs.
- Extra long 25" flex hose gauge assembly with quick coupler, allows easy viewing out of cluttered engine compartment.
- 2-1/2" gauge features chrome bezel and rugged protective outer boot.
- Dual scale gauge reads 0-300 psi and 0-2100 kPa.
- 12" flex-14 mm standard reach.
- 12" flex-14 mm long reach.
- 10 mm, 12 mm, and 18 mm thread adapters.
- Rugged blow molded hard case with removable lid.
- Repair parts kit.



## 5605 Deluxe Compression Tester Kit

Complete with standard and specialty adapters, this deluxe kit offers a complete package for compression testing on gasoline engines. Kit includes the deep well connector used on recessed plug well style heads and the Ford engine adapter using 16 mm thread plugs.

### Features and benefits:

- Corrosion resistant nickel plated finish.
- Adapters work on both flat and tapered seat plugs.
- Extra long 25" flex hose gauge assembly with quick coupler, allows easy viewing out of cluttered engine compartment.
- 2-1/2" gauge features chrome bezel and rugged protective outer boot.
- Dual scale gauge reads 0-300 psi and 0-2100 kPa.
- 8" deep well 14 mm connector.
- 5" flex Ford 16mm adapter.
- 12" flex-14 mm standard reach.
- 12" flex-14 mm long reach.
- 10 mm, 12mm, and 18 mm thread adapters.
- Rugged blow molded hard case with removable lid.
- Repair parts kit.



## 5609 Cylinder Leakage Tester Kit

Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit come complete with adapters for most applications.

### Features and benefits:

- Dual 2-1/2" gauges feature chrome bezel and rugged protective outer boot.
- Scales read 0-100 psi and 0-700 kPa.
- Pressure regulated manifold includes quick couplers.
- Long flex 24" 14 mm hose.
- 10 mm, 12 mm and 18 mm thread adapters.
- Blow molded hard case with removable lid.
- Detailed instruction chart.



## 5610 Transmission/Engine Oil Pressure Kit

This professional kit can be used for domestic and import applications. High and low pressure gauges make this kit useful for both transmission and engine work. Kit comes complete with adapter for most applications. Designed to be used for both static and on road testing.

### Features and benefits:

- Large 3-1/2" gauges feature a chrome bezel and rugged protective outer boot.
- Low pressure gauge reads 0-100 psi and 0-700 kPa.
- High pressure gauge reads 0-400 psi and 0-2800 kPa.
- Both gauges include rear hook to allow gauge to be hung conveniently out of the way.
- Gauges and hose assembly incorporate quick couplers for easy disconnect.
- Kit includes 13 adapters and a detailed instruction manual.
- Blow molded hard case with removable lid.



### 5613 Vacuum/Pressure Gauge Kit

Ideal for testing vacuum lines and components. Accurately tests low-pressure fuel systems. Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit comes complete with adapter for most applications. Pin point hard to find problems such as cracked lines, PCV, fuel pump, fuel filters and more.

#### Features and benefits:

- Large 3-1/2" gauge features a chrome bezel and rugged protective outer boot.
- Dual purpose gauge reads vacuum and pressure.
- Dual scale gauge reads 0-30 in. Hg vac and 0-70 cm Hg, also reads 0-15 psi and 0-100 kPa.
- Built in rear hook allows gauge to be hung at eye level.
- Adapters for most applications.
- Blow molded hard case with removable lid.
- Detailed instruction chart.

### 6492 Engine Preluber Kit

- Ensures oil is present to internal engine components on the first start of a new or rebuilt engine, or after major engine work is performed.
- Required to prime the oil pump and fill the oil galleries and internal engine components with clean, new oil.
- Connects to engine oil system at the oil pressure sensor on a variety of domestic and import engines.
- Oil pressure sensor adapters included.



5020

Similar to Ford 303-D091  
(D93T-6000-A)

5021

Similar to Ford 303-D092  
(D93T-6000-B)

### Diesel Compression Tester with Adapters

This easy-to-use compression tester is designed for light- and medium-duty diesel engines equipped with glow plugs. A dual-reading gauge, featuring a push-button release valve, measures compression to 1000 PSI and 7000 kPa. The hose end has quick disconnect fittings. The tester comes with glow plug and nozzle adapters in a handy storage case.

Tester services these engines:

- Cummins B and C
- Navistar DT466/DT360
- Ford/Navistar 6.9L & 7.3L
- Detroit 6.2L & 6.5L
- Hino diesel and Mitsubishi Fuso truck engines

**5020** – Diesel compression tester with adapters.

**5021** – Universal diesel engine compression gauge.

**304802** – Replacement gauge.

#### Replacement Adapters (available separately)

**47484** – Hino diesel truck engines with 12 mm x 1.25 thread

1.25 thread

**209633** – Ford 6.6L & 7.8L diesels

**310810** – Cummins C 8.3L 6 cyl. '88-'96

**217791** – Cummins B 3.9L 4 cyl. & 5.9L 6 cyl. '89-'98

**310832** – Ford/Navistar 6.9L & 7.3L, Detroit 6.2L & 6.5L with 10 mm x 1.0 thread

**308472** – Mitsubishi Fuso truck 4D & 6D engines with 10 mm x

**310840** – Navistar DT466/DT360

### 7559A

#### Deluxe Vacuum Pump

This pump kit is designed for vacuum testing, brake bleeding, and fluid transfer. With this kit, one person can quickly and cleanly bleed brake and hydraulic clutch systems, actuate vacuum switches (VOES), as well as get answers to numerous diagnostic and mechanical problems.

#### Kit includes:

- Precision-made repairable vacuum pump with 360° gauge rotation for improved visibility.
  - Pumps up to 1 cubic inch (16cc) per stroke.
  - Develops and maintains up to 25" of Mercury vacuum.
- 4-1/2 oz. Reservoir jar with fluid transfer and storage lid.
- Two – 2 ft. long, 1/4" ID hoses.
- Rubber cup adapter.
- Two universal bleed screw adapters.
- Vacuum "T" adapter.
- Automotive test and bleed adapters.
- User manual (English, Spanish, French).



### 4491

#### Mechanic's Stethoscope

- Quick and accurate way to locate vehicle noise.
- Spring diaphragm on end of hose amplifies noise.
- Includes two hose ends: long rod helps pinpoint noises in hard-to-access areas; short adapter helps locate noise in a broader area of the vehicle.



# ENGINE SERVICE AUTOMOTIVE SPECIALTY TOOLS

6522



## EVAP – LEAK DETECTION SYSTEM

- Vacuum Leak Testing
- Exhaust Leaks
- Crankcase Oil
- Cooling System Testing
- Wind and Water Leaks
- 1-Year Warranty

LeakTamer is the latest generation of leak detection systems, providing more smoke and better control. Solid-state circuitry improves reliability and ensures more consistent smoke output. A wide assortment of accessories make the LeakTamer versatile tools for quickly locating different kinds of leaks.

### LeakTamer Evap offers:

- Densest smoke in the industry.
- Newly redesigned smoke chamber and control system.
- More complete line of accessories.
- User refillable.
- Includes smoke producing solution for 500 tests.
- Non-toxic, non-corrosive smoke.

### Product Features:
















- OEM approved technology
  - Contains STAR Technology; the ONLY OEM-Approved smoke technology anywhere in the world
- Large full range flow meter
  - Detects Microleaks™ down to and below 0.10
  - Flow-test components with full range of flow values
- Pinpoint leaks with Smoke and dye
  - UltraTraceUV® dye deposits at exact location of a leak
  - Finds leaks that smoke alone won't find
  - Introduce to an engine before disassembly to find internal leaks
  - It's the only OEM-Approved dye solution
- Variable Smoke Flow
  - Helps pinpoint smoke exiting a leak
  - Directional knob shows exact flow position
- Compact light weight design
  - More powerful diagnostics in smaller package
- Can be used with air or nitrogen
  - Use any inert gas for safer EVAP testing and shop air for all other tests

### 6522 EVAP – Leak Detection System

Includes: Leak Tamer unit, White/UV combination light with laser pointer, UV glasses, EVAP adapter tool, exhaust cone, cap plug adapters, removal tool, smoke producing solutions enough solution for 500 tests.



### Accessory / Replacement Parts

- |                |  |   |
|----------------|--|---|
| <b>6522-1</b>  | UltraTraceUV® (8 oz. / 236 ml) patented solution is the only Automaker-approved smoke-producing solution in the world. Contains a special dye that deposits at the exact location of a leak. Each bottle will perform approximately 300 tests. Part No. is for one bottle, two bottles included with 6522.   |    |
| <b>6522-2</b>  | Inert Gas Pack Kit connects directly to fitting on back of LeakTamer 6522. Includes preset CO2 regulator with cylinder fitting, 20 oz. liquid CO2 cylinder, pressure gauge, universal push-on female coupler accommodates both automotive and industrial male fittings (Cylinder arrives empty) Performs approx. 25-50 full cycle EVAP tests per 20 liquid oz. cylinder. |   |
| <b>6522-3</b>  | Combination Light for easier smoke location and ultraviolet (UV) light, to highlight the fluorescent dye deposited at the exact location of a leak. Also has laser pointer. Includes batteries and glasses.  |  |
| <b>6522-4</b>  | Standard Size Service Port Adapter.  |  |
| <b>6522-5</b>  | Schrader® Removal/Installation Tool.   |  |
| <b>6522-6</b>  | Cap Plugs Kit. Used for sealing some systems during leak testing.  |  |
| <b>6522-7</b>  | Universal Fuel Neck Adapter fits the majority of vehicles. Allows access to fuel tank for evaporative system testing.  |  |
| <b>6522-8</b>  | BMW and MINI Fuel Neck Adapter. Allows access to fuel tank for evaporative system testing.   |  |
| <b>6522-9</b>  | Smoke Diffuser locates leaks around doors, windows, sunroofs, trunk compartment seals, EV vehicles' battery modules, or any closed system that can be pressurized from the inside and observe the smoke disturbance from the outside.  |  |
| <b>6522-10</b> | Cone Adapter (standard) for introducing smoke into induction or exhaust system. 1" x 3.5" & 6" long (25.4 mm x 89 mm x 152 mm).  |  |
| <b>6522-11</b> | Cone Adapter (Large) for introducing smoke into induction or exhaust system. 3.5" x 6" & 4.6" long (89 mm x 152 mm x 144 mm).  |  |
| <b>6522-12</b> | Replacement Dipstick (for 6522).   |  |
| <b>6522-13</b> | Replacement smoke supply hose and Delrin® Nozzle   |  |
| <b>6522-14</b> | Delrin® Nozzle   |  |
| <b>6522-15</b> | Flow meter red pointer flag. For easy viewing of flow meter measurements.  |  |

## TIMING LIGHTS

### Standard features

- All metal inductive pickup.
- Reflected, super bright Xenon flash.
- Removable leads with positive twist lock connector.
- One touch control.
- Durable, plated ABS housing with over-molded grips.
- Heat resistant over-molding on clips.
- Blow-molded case included.



### 3363

#### Inductive Timing Light

Professional inductive timing light designed for standard base timing.

#### Unique features

- On/off touch control

3363



### 3365

#### Advance Timing Light

Professional advance timing light allows accurate adjustment of base and advance timing reading.

#### Unique features

- Adjustable knob measures centrifugal, vacuum, and computer advance.
- On/off touch control.

3365



### 3367

#### Digital Timing Light

Professional digital timing light has advanced features with a bright LED screen and mode indicator lights.

#### Unique features

- Microprocessor-controlled circuitry.
- LED tachometer display reads 0–9999 rpm.
- LED advance display indicates to 1/10.
- Unique flashlight feature.
- 2/4 cycle and rpm/advance lights.
- Up and down scroll buttons.

3367



Timing Light Comparison - Functions/Features	3363	3365	3367
Conventional, electronic, computer controlled ignition systems	•	•	•
DIS and 2-cycle systems	•		•
On/off touch control	•	•	
Adjustable advance		•	•
Digital LED readout tach and advance			•
2- to 4-cycle and rpm/advance mode lights			•
2- to 4-cycle selector button			•
Flashlight feature button			•
RPM to advance selector button			•
Up or down scroll buttons			•



### Phototach

- No. 3665 phototach can be used as a contact as well as a non-contact tachometer.
- Four styles of contact adapter tips clip easily to the top of the phototach.
- Infrared technology makes the phototach accurate, convenient, and easy to use.
- Infrared beam not affected by ambient light.
- Non-contact design results in (zero) torque loss for true precision.
- Phototach is equipped with a laser pointer for accurate targeting.
- Reflective tape placed on a revolving object can be measured at distances from 2" to 20".
- Wide measuring range and high resolution, 2.5 to 99,999 rpm with a large 5-digit display, autoranging, min/max memory storage, and low-battery indicator.

### 3665

#### Phototach contact/non-contact

### 3660

#### Phototach non-contact only



### 4510

#### Hose Pinch Off Pliers Set, 3 Piece

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.
- Available separately:

### 4510-8

8" tool for small hoses and tight areas.

### 4510-10

10" tool for radiator and vacuum lines.

### 4510-12

12" tool for radiator and vacuum lines.



### 4522

#### Vacuum Hose and Fuel Line Removal Tool

- Designed to remove vacuum hose or fuel lines (3/16" to 1/2") from fittings or tubing.
- Simply place the black jaw on the fitting or tubing – the jaw will grip the material. Then use the silver jaw to push the vacuum hose or fuel line off the fitting or tube.



# ENGINE / EXHAUST SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4509 Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

**4509-1** – Replacement hose cutter blade



## 4411 Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



## 4412 Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



## 4550 Scraper Set

Scrapers feature polished, heat-treated, stiff, stainless steel blades. Handles are ergonomic two-component plastic and feature a non-slip grip and steel bolstered end.

- Packaged in a storage tray. Includes: 1-1/4" straight blade, 1-1/4" bent blade, and 2" straight blade.



## 6500 Flexihead O2 Sensor Wrench

- Flexible head design assists in the removal of stubborn O2 sensors that are 7/8" in diameter, a common size to most vehicles.
- Features allow extensions or wrenches to apply force in tight areas, even on seized components.
- Pivots to allow more angles of placement.



## 7807 Heated Oxygen Sensor Socket

We put a slot in the side of this wrench to accommodate connectors on heated oxygen sensors, which usually won't fit in standard sensor wrenches. The extuborn sensors without rounding them off.

- Features 1/2" double square drive, 7/8" hex.



## 7189 Oxygen Sensor Socket

- Designed to easily remove an oxygen sensor.
- Heat-treated cast steel.
- 7/8" hex, 1/2" square drive (double square for easy access).

Similar to Ford No. T79P-9472-A



## 6931 Oxygen Sensor Socket

- Works on all domestic and imported vehicles with oxygen sensors.
- Slot in socket's side allows wire clearance.
- Outside rib provides added strength, yet does not restrict access to sensors.
- 1/2" square drive, 1" male hex drive on top, 7/8" six-point opening, 3-7/8" long



## 7677 Exhaust Hanger Pliers

Many cars and trucks have rubber blocks supporting their exhaust system hanger brackets. These pliers will enable you to quickly and easily remove those push-through brackets from their hangers. These pliers feature a two-position slip joint for use on many sizes of hanger blocks.



## 4673 7-Piece Sensor Socket Set

Includes:

**4673-1** – 29 mm Vacuum Switch and O2 Socket, 1/2" drive

**4673-2** – 7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" drive

**4673-3** – 27 mm Thermal Sensor Switch, 1/2" drive

**4673-4** – 7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" drive

**4673-5** – 1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" drive

**4673-6** – 7/8" O2 Sensor Socket, offset 1/2" drive

**4673-7** – 7/8" O2 Sensor Socket (low profile), offset 3/8" drive.



## 4437 8-Piece Sensor Socket Set

Includes:

**4673-1** – 29 mm Vacuum Switch and O2 Socket, 1/2" drive

**4673-2** – 7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" drive

**4673-3** – 27 mm Thermal Sensor Switch, 1/2" drive

**4673-4** – 7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" drive

**4673-5** – 1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" drive

**4673-6** – 7/8" O2 Sensor Socket, offset 1/2" drive

**4673-7** – 7/8" O2 Sensor Socket (low profile), offset 3/8" drive

**4437-8** – 1-1/16" and 1" Oil Pressure Socket (short access), 3/8" drive



## 7215 Exhaust Back Pressure Gauge

Quickly read back pressure to determine the amount of restriction in an exhaust system. This gauge accurately measures through the oxygen sensor hole. Its large dial clearly shows pressure from 0–8 psi. The system has a stainless steel braided tube to withstand high-heat conditions.

- Includes a universal adapter for vehicles with thermactor systems.
- Works on domestic and imported vehicles.

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# FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



**HELP ENGINES RUN BETTER, EXPAND SERVICE OPPORTUNITIES**

## 7448A Canister-type Fuel Injector Cleaner

The 7448A is used exactly the same way as our original product was designed. Disconnect the vehicle fuel pump, adapt the 7448A to the vehicle's fuel rail. Add a chemical cleaner like OTC7000A.

Connect to shop air supply and set pressure – open the ball valve and start vehicle. When engine stalls, the cleaning process is complete.

With the addition of a quick connect fitting, the hose is now removable improving storage options – and we include a "blow out" fitting to allow your shops air supply to remove residual cleaners from the line – improving the overall life of the product.

The 7448A now includes our Fuel Injection Application Manual – showing OE fuel pressure specs, fuel pump disconnect points return line information and the adapter reference to OTC pressure adapter kits (6550PRO)! Covers vehicles from 1997 through 2013 model years.

Tool No.	Description
567709	Hose (1/8" NPTF x 6' long) with connector
213299	Air regulator
313575	Gauge 0-100 psi
517145	Gauge cover



Hose for gasoline, and ethanol blends as required by standard SAE30R9



## 6550PRO Pro Master Fuel Injection Service Kit ●

Covers 100% of vehicles sold in North America market '97-'13.

Perform fuel pressure testing, diagnose weak fuel pumps or restricted filters, test for fuel flow and perform leak-down tests. Use to clean injectors and intake systems. Kit includes:

- 0 – 100 PSI Fuel Pressure Gauge.
- 47 of the popular OTC fuel injection adapters, each equipped with a quick-connect Schrader valve.
- '97 – '13 Fuel Injection Service Application Manual.
- Replacement seal kit also included.



## 6550 Master Fuel Injection Kit ●

Test fuel injection systems on most GMs, including GM TBI, Ford, Chrysler, and Jeep vehicles. Also works on imports, including CIS and CISE fuel systems.

- 0–100 PSI fuel pressure gauge.
- 35 of the popular OTC fuel injection adapters, each equipped with a quick-connect Schrader valve.
- '97 – '13 Fuel Injection Service Application Manual.
- Replacement seal kit also included.



## 6550UPD Professional Fuel Injection Update Kit ●

Upgrades existing 6550 Master Fuel Injection Service Kit into the 6550PRO. Kit includes:

- 12 OTC fuel injection system adapters each with a quick connect Schrader Valve.
- 1997 – 2013 Fuel Injection Service Application Manual.

## CONTENTS OF SETS: • 6550PRO • 6550 • 6550UPD (also sold individually)

	<b>518483</b>	<ul style="list-style-type: none"> <li>Hi-Pressure Gauge 3-1/2", 0-100 psi (0-7 BAR) with quick disconnect, protective gauge boot, and hanger</li> </ul>		<b>518482</b>	<ul style="list-style-type: none"> <li>14 mm x 1.5 External O-ring Plug</li> </ul>		<b>549598</b>	<ul style="list-style-type: none"> <li>M14 x 1.5 Inverted Flare Adapter</li> </ul>
	<b>518530</b>	<ul style="list-style-type: none"> <li>Gauge Hose Assembly with Relief Valve</li> </ul>		<b>518487</b>	<ul style="list-style-type: none"> <li>16 mm x 1.5 In-Line Adapter (GM TBI)</li> </ul>		<b>549596</b>	<ul style="list-style-type: none"> <li>M12 x 1.0 Honda Pulse Damper Adapter</li> </ul>
	<b>518356</b>	<ul style="list-style-type: none"> <li>CIS/TBI Hose Assembly with Shutoff Valve</li> </ul>		<b>518499</b>	<ul style="list-style-type: none"> <li>Ford Spring Lock Coupling Adapter</li> </ul>		<b>549597</b>	<ul style="list-style-type: none"> <li>Fuel Pressure Test Adapter, Studded Rail Style (ø.625/16 mm)</li> </ul>
	<b>518477</b>	<ul style="list-style-type: none"> <li>Seal Kit</li> </ul>		<b>518490</b>	<ul style="list-style-type: none"> <li>M6 x 1.0 External O-ring Adapter</li> </ul>		<b>567840</b>	<ul style="list-style-type: none"> <li>1/4" T-Fitting Hair Pin Adapter (Honda)</li> </ul>
	<b>518480</b>	<ul style="list-style-type: none"> <li>Double Ended Hose Adapter; 5/16", 3/8"</li> </ul>		<b>518491</b>	<ul style="list-style-type: none"> <li>M8 x 1.0 External Banjo Adapter</li> </ul>		<b>549578</b>	<ul style="list-style-type: none"> <li>Schrader Fitting, 7/16"-20 Internal 90 Degree Elbow</li> </ul>
	<b>518478</b>	<ul style="list-style-type: none"> <li>Single End Hose Adapter; 1/4", 5/16", 3/8"</li> </ul>		<b>518492</b>	<ul style="list-style-type: none"> <li>M10 x 1.0 External Banjo Adapter</li> </ul>		<b>549579</b>	<ul style="list-style-type: none"> <li>Schrader Fitting, .308x32 Internal 90 Degree Elbow (Ford)</li> </ul>
	<b>518495</b>	<ul style="list-style-type: none"> <li>Schrader Fitting, .308x32 thread (Ford EFI) Ford MPI Adapter</li> </ul>		<b>518493</b>	<ul style="list-style-type: none"> <li>M12 x 1.5 External Banjo Adapter</li> </ul>		<b>528770</b>	<ul style="list-style-type: none"> <li>Fuel Pressure Test Adapter (ø.430/11 mm)</li> </ul>
	<b>518542</b>	<ul style="list-style-type: none"> <li>Schrader Fitting, 7/16"-20 thread (Chrysler, Jeep &amp; GM)</li> </ul>		<b>518494</b>	<ul style="list-style-type: none"> <li>M12 x 1.25 External Banjo Adapter</li> </ul>		<b>528771</b>	<ul style="list-style-type: none"> <li>Fuel Pressure Test Adapter (ø.580/15 mm)</li> </ul>
	<b>518476</b>	<ul style="list-style-type: none"> <li>5/16" T-Fitting Hair Pin Adapter (Ford)</li> </ul>		<b>518501</b>	<ul style="list-style-type: none"> <li>M14 x 1.50 External Banjo Adapter</li> </ul>		<b>528772</b>	<ul style="list-style-type: none"> <li>Fuel Pressure Test Adapter (ø.625/16 mm)</li> </ul>
	<b>518527</b>	<ul style="list-style-type: none"> <li>3/8" T-Fitting Hair Pin Adapter (Chrysler, Jeep, &amp; GM)</li> </ul>		<b>518485</b>	<ul style="list-style-type: none"> <li>M8 x 1.0 Internal O-ring Adapter (CIS)</li> </ul>		<b>528767</b>	<ul style="list-style-type: none"> <li>M8 x 1.0 External Double Banjo EFI Pressure Test Adapter</li> </ul>
	<b>518534</b>	<ul style="list-style-type: none"> <li>5/8"-18 External Flare with Schrader Adapter</li> </ul>		<b>518536</b>	<ul style="list-style-type: none"> <li>M8 x 1.0 External O-ring Adapter (CIS) (Long)</li> </ul>		<b>528768</b>	<ul style="list-style-type: none"> <li>M12 x 1.25 External Double Banjo EFI Pressure Test Adapter</li> </ul>
	<b>518535</b>	<ul style="list-style-type: none"> <li>5/8"-18 Internal Flare with Schrader Adapter</li> </ul>		<b>518488</b>	<ul style="list-style-type: none"> <li>M10 X 1.0 Internal O-ring Adapter (CIS)</li> </ul>		<b>528769</b>	<ul style="list-style-type: none"> <li>M8 Internal Banjo Fitting</li> </ul>
	<b>518481</b>	<ul style="list-style-type: none"> <li>16mm x 1.5 External O-ring Adapter</li> </ul>		<b>518484</b>	<ul style="list-style-type: none"> <li>M10 x 1.0 External O-ring Adapter (CIS)</li> </ul>		<b>528766</b>	<ul style="list-style-type: none"> <li>M12 Internal Banjo Fitting</li> </ul>
	<b>518472</b>	<ul style="list-style-type: none"> <li>16mm x 1.5 Internal O-ring Adapter</li> </ul>		<b>518489</b>	<ul style="list-style-type: none"> <li>M10 x 1.0 External O-ring Adapter (CIS)</li> </ul>		<b>7666</b>	<ul style="list-style-type: none"> <li>Decarbonizing Adapter</li> </ul>
	<b>518473</b>	<ul style="list-style-type: none"> <li>14mm x 1.5 External O-ring Adapter</li> </ul>		<b>518486</b>	<ul style="list-style-type: none"> <li>M12 x 1.5 Internal Swivel Adapter (CIS)</li> </ul>			
	<b>518474</b>	<ul style="list-style-type: none"> <li>14 mm x 1.5 Internal O-ring Adapter</li> </ul>		<b>518498</b>	<ul style="list-style-type: none"> <li>M14 x 1.5 External &amp; Internal Swivel Adapter</li> </ul>			
				<b>518497</b>	<ul style="list-style-type: none"> <li>1/4" BSPT External &amp; Internal Swivel Adapter</li> </ul>			
				<b>518496</b>	<ul style="list-style-type: none"> <li>M16 x 1.5 External &amp; Internal Swivel Adapter</li> </ul>			

# FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4480 Basic Fuel Injection Service Kit

- Performs running, residual, rail and flow rate pressure tests.
- Kit includes adapters, hoses and fittings to test fuel injection systems.
- Kit includes two popular adapters for import vehicles as well as the GM TBI adapter.
- Professional dual scale gauge reads 0-100 PSI and 0-700 kPa with relief valve, fuel discharge hose and rubber boot.
- Packaged in blow molded carrying case.



## 7649A Fuel Injector Cleaning Kit

Clogged fuel injectors cause sluggish engine performance, poor fuel economy, and a rough idle. You can easily correct such problems with this injector cleaning kit. It works on a wide range of engines, both domestic and imported. Using our 7000A-1 Pro Inject-R Kleen fluid, you can effectively clean injectors, restore their spray patterns, and prevent recurring deposits. The kit also enables you to do low- and high-pressure fuel system tests. It will also work with your shop's pressurized air supply for more powerful cleaning without expensive propellants.

- Removes carbon from intake and combustion systems when used with fitting No. 7666.
- Includes canister, gauge, hose, fittings, operating instructions.
- 1997 – 2013 Fuel Injection Service Application Manual.



Tool No.	Description
567709	Hose (1/8" NPTF x 6' long) with connector
213299	Air regulator
313575	Gauge 0-100 psi
517145	Gauge cover
518499	Spring lock coupling adapter
518495	EFI quick-disconnect fitting (.307-32 internal; Ford)

Tool No.	Description
518480	Pressure adapter TBI (5/16" and 3/8")
549578	Quick-disconnect 90° elbow fitting (7/16"-20 internal)
528769	Banjo fitting (M8 internal banjo)
314651	Banjo fitting (M10 internal banjo)
518499	Banjo fitting (M12 internal banjo)
47955	Fuel injector cleaner (canister)
7666	Decarbonizing Adapter



**6550MAN-13  
Pro Fuel Injection Application Manual**

Over 200 pages of valuable fuel system service information for professional technicians. English, Spanish and French translations for:

- Safety Precautions.
- Fuel System Identification.
- Adapter & Tool Identification.

General Operation instructions PLUS 1997 to 2013 Make/Model/Year Data points for:

- Fuel Pressure specifications.
- Fuel Pump Disabling Location and Procedure.
- OTC adapter reference.
- Adapter "break-in" location.



7000A



7000A-1

**7000A  
Pro Inject-R Kleen Fluid**

Clean fuel injectors mean cleaner running, more efficient engines – and lower emissions. This fluid restores injectors' original spray pattern, helps prevent recurring problems, and reduces intake and port deposits.

- No mixing; use right from the can.
- Pro Inject-R Kleen fluid. Case of 12 16-oz. cans.

**7000A-1  
Pro Inject-R Kleen Fluid**

- Single can.



**7797  
Fuel Injection Diagnostic Set**

Quickly and accurately diagnose fuel pressure problems on Chrysler, Ford, GM, or Jeep engines that have multi-port fuel injection systems. You can also bleed air from the system with the bleed valve. No. 7211 gauge assembly allows technicians to check fuel pressure and fuel volume.

Set Includes:

- 518487** – GM TBI fuel pressure adapter
- 549578** – Quick-disconnect 90° elbow fitting
- 518495** – Ford EFI quick-disconnect fitting
- 211398** – Pressure hose
- 206878** – Coupler
- 19088** – O-ring

**7635A** – Basic fuel injection diagnostic set. (Same as No. 7797, but does not include 518437 GM TBI adapter.)



7797



7635A

# FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 7211 Gauge and Hose Assembly

This gauge is designed to work with any of our fittings for testing fuel injection systems. It features a sturdy 3-1/2" dial that reads 0-100 psi. It also has a built-in (100-150 psi) retard to prevent excess pressure damage. The assembly's disconnect fitting has a check valve to lessen chance of fuel spray.

- Includes 6-ft. bleed hose and 30" pressure hose.
- Bleed valve eliminates air from injection system and can be used to reduce pressure when disconnecting hoses
- Bleed valve also allows gauge assembly to be used to check fuel pump volume.

**306905** – Optional pressure hose, 70" long.



## 5630 Fuel Pressure Tester Kit

Quickly and easily locate any malfunctioning fuel system component, including fuel filters, pressure regulators, fuel lines, and fuel pumps without removing it from the vehicle.

### Features and benefits:

- Large, easy-to-read 0-100 psi scale, 0-700 kPa.
- Solid brass fittings.
- Pressure relief valve for safe, clean testing.



## 7629 GM Fuel Line Fitting Set (3/8")

- Fits GM vehicles with 3/8" fuel lines.
- Will work on low or high pressure TBI systems.
- Quick, easy, safe. Eliminates makeshift connections that can damage plastic fuel lines or the special connector.
- Use when checking fuel pressure or when cleaning injectors.



## 7628 GM Fuel Line Fitting Set (5/16")

- Fits GM vehicles with 5/16" fuel lines.
- Will work on low or high pressure TBI systems.
- Quick, easy, safe. Eliminates makeshift connections that can damage plastic fuel lines or the special connector.
- Use when checking fuel pressure or when cleaning injectors.



## 5613 Vacuum/Pressure Gauge Kit

- Ideal for testing vacuum lines and components. Accurately tests low-pressure fuel systems. Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit comes complete with adapter for most applications. Pin point hard to find problems such as cracked lines.
- Large 3-1/2" gauge features a chrome bezel and rugged protective outer boot.
- Dual purpose gauge reads vacuum and pressure.
- Dual scale gauge reads 0-30 in. Hg vac and 0-70 cm Hg, also reads 0-15 psi and 0-100 kPa.



## 6703 Line Fluid Stopper Kit

Stop messy fluid leaks and prevent contamination during service.

- Kit seals all types of rubber and steel line found on fuel, brakes, AC, power steering and transmission system.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

**6703-1** – Banjo Line Fluid Stoppers, 2 pk.

**6703-2** – Steel Line Fluid Stoppers, 2 pk.

**6703-3** – Line Plug Fluid Stoppers, 6 pk.

## 7631 Fuel return line plug (5/16")



## 7433 Fuel return line plug (3/8")



## 7342 Quick coupler adapter



## 528776 Ford EFI adapter



## 528773 O-ring and washer set for European



## 528774 O-ring and washer set for Asian



# FULL-COVERAGE DISCONNECT TOOL SET



## 6508

### Full-Coverage Disconnect Tool Set

If you're working on Chrysler, Ford, or General Motors vehicles, this set can make your job easier. The tools are designed for heater hoses, transmission oil coolers, air conditioning and fuel lines. They're approved by vehicle manufacturers and will not damage the fittings being disconnected. Tool Nos. 518092, 518896, 518897, 518898, 518899, 518900, and 518901 are spring-loaded in the closed position to deflect any spray that occurs when lines are disconnected.

## FULL-COVERAGE DISCONNECT TOOL SET


**440384** GM hydraulic clutch line disconnect tool




**7937** GM transmission oil cooler line



**501153** Toyota A/C tool




**511410** 3/8" & 5/16" Fuel line disconnect tool



**511413** 3/8" & 1/2" Fuel line disconnect tool



**518902** Heater hose disconnect tool




**519158** Fuel line disconnect tool set



**518582** Fuel line disconnect tool. (Gold, 5/16")



**518583** Fuel line disconnect tool. (Red, 3/8")




**518584** Fuel line disconnect tool. (Black, 1/4")




**518896** Fuel line disconnect tool. (Yellow, 3/8")



**518897** A/C spring lock coupling tool. (Black, 5/8")




**518898** A/C spring lock coupling tool. (Blue, 1/2")




**518899** Fuel line disconnect tool. (Green, 1/2")



**518900** A/C spring lock coupling tool. (Red, 3/8")



**518901** A/C spring lock coupling tool. (White, 3/4")




**519067** 5/16" Fuel line disconnect tool



**519068** 3/8" Fuel line disconnect tool




**519151** Quick disconnect tool




**519152** Oil cooler line disconnect tool




**519153** Clutch coupling tool




**519154** Fuel line coupling tool




**519155** Chrysler fuel line disconnect tool



**519156** Ford heater hose disconnect tool



**519157** GM heater line quick connect separator



**519159** Transmission oil line tool



# FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 6517 Disconnect Tool Set

Designed for A/C lines, fuel lines, and transmission cooler lines.

- Contains 3/8", 1/2", 5/8", and 3/4" spring lock disconnect tools for A/C lines on Ford cars and trucks, Chrysler and Jeep vehicles.
- Contains the 3/8" and 1/2" fuel line disconnect tool for Ford vehicles.
- Contains the 5/16" and 3/8" fuel line disconnect tools for GM and Chrysler vehicles.
- Contains the transmission oil cooler line disconnect tool used on many GM and Ford vehicles.



## 7363 Fuel Line Disconnect Tool Set

- This set works on quick connect fuel lines on Ford, GM, and Chrysler, and on the spring lock fuel line couplings on Ford's popular PFI system.
- Won't damage fuel line or fuel line connectors.
- Used on 5/16", 3/8", and 1/2" fuel lines.
- Two large tools are spring loaded, durable, and completely enclose the hose, which helps deflect any spray.



## 7337 Ford Fuel Line Disconnect Tool Set

These tools will easily disconnect the spring lock couplings of fuel lines on Ford's throttle body and port fuel injection systems. The tools are spring-loaded and durable, and they enclose the line to help deflect spray.

- Includes 518896 (3/8" yellow) and 518899 (1/2" green) disconnect tools.



## 7361 Fuel Line Disconnect Tool Set

These two disconnect tools are designed to fit quick-connect fuel line fasteners. They'll work on Chrysler, Ford, or GM vehicles, and separate fuel lines without damaging the connectors.

- Includes 519067 (5/16" gray) and 519068 (3/8" blue) disconnect tools.

Similar to Ford No. 310-S039 (T90T-9550-S)



## 3050E and 3054E Noid Lite/IAC Test Kit

Noid Lites are a proven test device to quickly determine if the electrical signal is present at the fuel injector.

- Just plug in and turn over the engine; flashing noid indicates good signal.
- Expanded set of eight Noid Lites cover: GM PFI, Ford TBI, Geo TBI, Bosch PFI, GM TBI, GM SCPI, and now new applications of Bosch 2 and Multec 2.
- Kit comes in molded plastic case and includes a harness extension that allows for convenient remote viewing from the driver's seat.

3054E



## 6554 Fuel / AC Line Disconnect Kit

- Topside disconnects for AC and Fuel lines.
- Clips, disc, and scissor styles for broad applications.
- Hi-visibility line plugs included.

## 6603A GM Fuel Line Disconnect Tool

Applications: 2002–newer Tahoe and light-duty trucks with the 5.3L V8 engine.

- This is a required tool to remove the fuel line from the fuel filter.

Similar to Kent-Moore No. J-46363.



## 519154 Ford Fuel Line Disconnect Tool Set

Here's the best tool for easy, frustration-free fuel line separation. As you put the tool on the fuel line coupling, its fingers depress the retaining collar to release the fuel line, preventing component damage.

- Works on 1990 to 1995 Ford Ranger and Explorer models fitted with 4.0L, 6-cylinder engines.



## 4506 Rubber Line Clamp Set

- Set of two clamps. Used to quickly shut off flow from vacuum, brake, and fuel lines.
- Enables you to clamp and hold hose without damage.



Tool No.	Description	3050E	3054E
7187	GM TBI Noid Lite	•	•
7188	Bosch PFI Noid Lite	•	•
7601	Ford TBI Noid Lite	•	•
6023	GM Multec 2 Noid Lite	•	•
7602	GM PFI Noid Lite	•	•
7608	Geo TBI Noid Lite	•	•
7828	GM SCPI Noid Lite	•	•
6266	Bosch 2 Noid Lite	•	•
6260	Fiber optic Noid Lite extension	•	•
3052S	'82 and newer GM TBI/PFI IAC tester with square 4-pin connector		•
3053S	'87 and newer Model 700 TBI/PFI with flat 4-pin connector.		•



## 4494 Fuel and Air Conditioning Line Release Tool

- This spring-lock coupling release tool easily separates fittings on fuel and air conditioning lines.
- Tool sizes are 3/4", 5/8", 1/2", and 3/8".



Similar to Miller No. 8218

## 6511 GM & Dodge Transmission Cooler Line Disconnect Tool

- Designed for removing the cooler line from the radiator to transmission on 1995 and newer GM and Dodge pickups with automatic transmissions.
- Tool encloses the quick connect fittings and releases the locking fingers on the line. It works on both 3/8" and 1/2" lines.



## 4495 A/C and Fuel Line Disconnect Set

- Used to remove A/C and fuel line quick-disconnect fittings from hard-to-reach areas.
- Six sizes (5/16", 3/8", 1/2", 5/8", 3/4", and 7/8") available to work on many import/domestic vehicles.



**6770  
Ford 6.0L Diesel Service Tool Kit**

- 8 of our popular 6.0L Diesel Service Tools in one convenient kit.
- Properly test vehicle systems for leaks and blockage.
- Safely remove and re-install harnesses without damage.
- Fuel Filter Cap Wrench, Glow Plug and Injector Harness Release Tools.
- Oil Line Disconnect Tool, EGR Removal Tool.
- IPR Controller, IPR Socket Tool and Fuel Rail Pressure Adapters.



Similar to Ford No. 303-765 and 303-766

**6763  
Ford 6.0L Diesel High Pressure Fuel Rail Adapters**

This pair of High Pressure Fuel Rail Adapters is required to connect to the vehicle's fuel line. The fuel line connection changed in 2004 – so the two adapters give you the capability to address either platform for pressure testing.



**6764  
Ford 6.0L Diesel IPR Controller**

- When a hard start or no start condition exists, the 6764 allows a technician to close the Injector Pressure Regulator in order to determine if proper injector control pressure is achieved and sustained for the starting process.
- Tactile On/Off switch with LED confirming power to the tool and signal to the Injector Pressure Regulator.
  - Permits a quick initial diagnosis of the pressure regulator when a hard start-no start situation exists.
  - Used in conjunction with any scan tool capable of reading fuel pressure on 6.0L Ford Diesel.



Similar to Ford No. 303-1115

**6766  
Ford 6.0L Diesel Terminal Release Tool**

This Terminal Release Tool is required for removal of the vehicle's injector wiring harness without causing damage to the component.



Similar to Ford No. 303-1114

**6768  
Ford 6.0L Glow Plug Release Tool**

Safely remove and install the glow plug harness on 2004-2009 Ford 6.0L Diesel engines.



**6760  
FORD 6.0L & 7.3L Fuel Filter Wrench**

Designed to remove and install the fuel filters on the Ford 6.0L & 7.3L Power Stroke diesel engines as well as International / Navistar diesel engines.

- Low profile design for easy access in tight areas.
- Reversible Six lug design provides the convenience of two sizes in one tool.
- Light weight low profile for strength and durability.
- 3/8" drive allows the wrench to be used with a variety of drive tools.

**6594  
Ford Oil Line Disconnect Tool**

- Use to disconnect the high-pressure oil rail supply line from the fuel rail when removing fuel injectors.
- Works on the 6.0: diesel engine found in 2003-2009 F-250, F-350, F-450, F-550 trucks, Excursions and Ford vans.



Similar to Ford No. 303-755



Similar to Ford No. 303-769 and 303-1112

**6765  
Ford 6.0L Diesel Injector Pressure Regulator Socket**

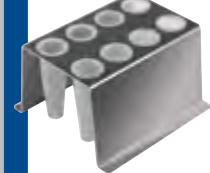
This Injector Pressure Regulator Socket actually combines two OE tools into one. The socket changed in 2005 – so the socket give you the capability to address either platform.



6752  
Similar to Ford No. 303-D113



6753  
Similar to Ford No. 303-D115



Designed for the diesel truck market, this tool will work for just about any injector you need to remove for service or replacement.

**6752  
Fuel Injector Storage Rack with Protective Cups**

Compartment are marked to help keep the injectors organized by the cylinder they came from in order to keep the injector calibration in sync with the vehicles ECM.

**6753  
Protector Cups.**

A set of eight replacement cups for 6752 Fuel injector storage rack.



Similar to Ford No. 303-491 No. 303-492

**6067  
Ford Injector Remover / Installer Kit**

- Removes and installs injectors without damaging the injector or cylinder head.
- Application: 1994-2003 Ford 3/4- and 1-ton trucks, Super Duty trucks, and vans with 7.3L direct-injected turbocharged (DIT) diesel engine.



# FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



**7998  
Chrysler Fuel Pump Module Spanner Wrench**  
Removes and installs the fuel pump retaining ring that holds the fuel pump module onto the gas tank. Works on most 1994–2005 Chrysler vehicles, and 1995–2004 Jeep vehicles.  
Similar to Miller No. 6856.



**6599  
Fuel Tank Lock Ring Wrench**  
Universal design allows tool to fit fuel tank lock rings on Ford, Chrysler, and GM vehicles with gas engines.

- Works on: 2004–newer Ford F-150 trucks; 2004–newer Chrysler / Dodge minivans, PT Cruiser, Dakota, and Durango; 2004–newer Chevy 1/2-ton and 3/4-ton trucks; and 2005–newer Jeep vehicles.
- Tool easily removes and installs lock ring on the fuel tank when servicing the fuel pump or fuel sending unit.
- Used with a 1/2" drive ratchet or breaker bar.



**7667  
GM Computer-Controlled Carburetor Tools**  
These tools are designed to adjust settings on computer controlled Rochester, DualJet, QuadraJet, and VaraJet carburetors on carbureted GM engines.  
Applications:

- 2 mm double-D – VaraJet lean authority screw and idle air bleed; and DualJet and QuadraJet mixture control adjusting screw.
- 2.5 mm hex – DualJet and QuadraJet TPS adjusting screw.
- 7 mm double-D – DualJet and QuadraJet main metering jets.
- 10 mm double-D – DualJet and QuadraJet mixture control solenoid-rich screw.

Similar to Ford 303-230



**7460  
Diesel FuelLine Wrenches**  
Fuel line nuts are often hard to reach, but this unique 3/8" square-drive tool solve that problem. You can loosen or tighten fuel lines at the fuel injector nozzle or fuel injection pump without damaging the nut.

- Fuel line wrench, 2.6" long. For International 6.9L and 7.3L diesel engines. Fits 5/8" hex nut.



**7148  
Propane Enrichment Kit**  
Ensures a correct idle mixture and compliance with emission standards.

- Works on domestic or imported vehicles.
- Uses standard 14-oz. propane cartridge.

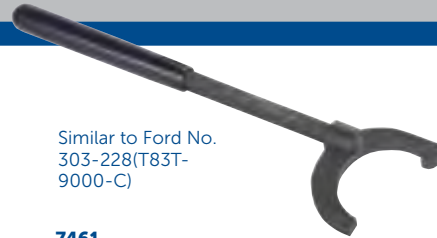
Similar to Ford No. 310-003 (T75L-9600-A).



**7670  
Gasoline Quality Testing Kit**  
This unique kit helps reduce troubleshooting time by verifying if fuel quality is affecting performance, thereby ruling out other causes. Fuel quality is especially critical to today's sophisticated, computer-controlled engines.

- Applies to all gasoline engines, from small engines to heavy-duty.
- Permits checking for water in the fuel tank without tank removal.
- Fuel volatility may also be tested by measuring its vapor pressure. You can also test for alcohol in the fuel, and the percentage present.

Similar to Ford No. 303-228(T83T-9000-C)



**7461  
Fuel Injector Pump Rotating Tool**  
Maximum fuel economy requires precise injector timing. The tool securely grips the front of the fuel injection pump so you can rotate it while fine-tuning the system.

- Works on Stanadyne rotary fuel pumps found on International's 6.9 and 7.3 liter engines.



**6916  
Duramax Water Sensor Wrench**  
Used to remove and install the water sensor on the fuel filter.

- Works on 2001 and Newer 6.6L Duramax Diesel found in Chevrolet and GMC Trucks and Vans.
- 3/8" square drive hole.



6914



6915

**Davco Diesel Filter Wrenches**

- Found on Caterpillar, Cummins, Detroit Diesel, International, Mack, Mercedes-Benz, Volvo and other engines.
- Durable steel construction.
- Precise, laser-cut angles.
- Opens vent cap also.
- Soft, ergonomic handle.

**6914 – Fits Davco Diesel filter models, 232-233-234.**

**6915 – Fits Davco Fuel filters 382 & 384.**



**7454  
Fuel Injector Nozzle Puller**  
Pulls fuel injection nozzles on Ford 6.9L/7.3L and Navistar DT466/9L diesel engines.

- Slide hammer action gives an even, straight pull on the nozzle for fast, easy removal.
- Puller nut screws onto injector nozzle inlet port.



Similar to Miller  
No. 8318

### 6069 Cummins Diesel Fuel Injector Remover Kit

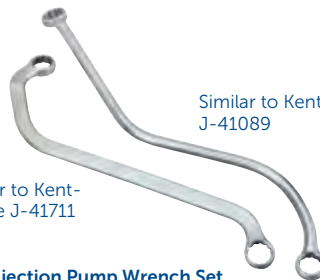
Kit contains a fuel injector connector tube remover and fuel injector puller. The fuel injector connector tube must be removed before removal of the injector, or both will be damaged.

Application: 1998-1/2-2002 Dodge pickups and vans with 5.9L 24-valve Cummins diesel turbo engine.



### 5060 Detroit Diesel Injector Socket

Used on GM 6.2L and 6.5L engines. This 30 mm socket ensures proper fit during nozzle removal and installation. The 3/8" square drive and 7/8" hex permit easy access in tight quarters, and prevent damage to nozzle and related components.



Similar to Kent-Moore  
J-41089

Similar to Kent-Moore  
J-41711

### 6087 GM Injection Pump Wrench Set

- Use to loosen or tighten injection pump retaining bolts whenever pump timing adjustment or pump service is required. Services 1996-1999 GM full-size 2- and 4-wheel drive trucks, vans, and Suburbans with 6.5L diesel engine.
- Two specially bent wrenches are needed, due to the location of the throttle, cruise control, T.V. cable bracket, cooling system crossover pipe and bracket, and the thermostat housing on vans and pickups.
- Wrenches are 15 mm, 12-point, double box-end type.



### 3674 Diesel Fuel Pressure Tester

- Simple one wire connectivity to the fuel pressure sensor signal wire. Designed for diesel engines that have a fuel pressure sensor reading used by vehicle computer.
- Displays pressure in PSI or BAR.
- Range 0-22,000 PSI (0-1500 BAR).
- Read diesel fuel pressure in vehicle.
- No fittings required.
- Readings alternate between current and max pressure.



### 3490 Multi-Application Digital Pressure and Temperature Analyzer

Combining the functions of vacuum, oil pressure, hydraulic system pressure, fuel pressure, transmission pressure, compression, and air conditioning—all in one!

Deluxe digital pressure/temperature analyzer with four pressure input receptacles and protective boot. Set includes (500 psi) transducer, 12' cable, 8-1/2" hose, bead-type temperature probe, assorted fittings, plastic storage case, instruction manual.

Accessory:

**3491-01** – 500 psi transducer.

**3491-02** – 5,000 psi transducer. (not included in 3490) Required for ABS and power steering pressure readings.

**3491-11** – 6' cable.

**3491-12** – 12' cable.

**3491-13** – 20' cable.

### 3398 Fuel Injection Pulse Tester

Fuel injector testing requires precision equipment. This vehicle powered tool fills that requirement. It enables you to check cylinder balance by firing individual injectors at 1/2-second increments in three different ranges: 1 pulse of 500 milliseconds, 50 pulses of 10 milliseconds, 100 pulses of 5 milliseconds.

- Power and output lights indicate test activation.
- Includes wiring harness adapter and instructions.

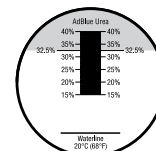
### 6754 Diesel Fuel Pressure Gauge

- Designed to test fuel pressure on GM Duramax diesel engines.
- Similar to J-44638.



### 5025 OTC DEF Refractometer SCR & EPA 2010

EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.



**Scale:**  
0.5% line graduations  
32.5% Indicated  
Scale 15-40%  
Waterline & 20 Deg C

- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.

Application:

The refractometer is a portable, precision, optical instrument used for measuring the Diesel Exhaust Fluid (DEF) concentration. When a liquid sample is placed on the prism, the light passing through it is bent. The more concentrated the liquid, the more the light will bend. The refractometer contains a reticle, or scale, that is enlarged through the eyepiece to measure this light. The values on the scale have been established to evaluate the DEF condition.



6778

6779

### GM Duramax Injector Pullers

- Designed to pull injectors on a GM Duramax 6.6L engines.
- 6778** – From 2001 - 2004, Similar to J-44639.
- 6779** – From 2005 - 2011, Similar to J-46594.

# FUEL SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4510 Hose Pinch Off Pliers Set, 3 Piece

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.
- Available separately:

**4510-8**  
8" tool for small hoses

**4510-12**  
12" tool for radiator and vacuum lines.

**4510-10**  
10" tool for radiator and vacuum lines.



## 6512 Heavy-Duty Tubing Cutter

- Works on tubing sizes 1/8" to 1-1/8" O.D. (3mm to 29mm).
- Easily cuts copper, brass, aluminum, and steel brake lines.
- Reamer folds onto cutter body for storage.
- Extra cutting wheel stored under reamer.



## 6514 Mini Tubing Cutter

- Works on tubing sizes 1/8" to 5/8" O.D. (3mm to 16mm).
- Easily cuts copper, brass, aluminum, and steel brake lines in hard-to-reach places.
- Extra cutting wheel stored in knob.

## 6515 3-in-1 180° Tubing Bender

- Capable of making 180° bends in copper, brass, aluminum, and steel tubing.
- Just one tool works on three sizes of tubing: 1/4", 5/16" and 3/8".



## 4509 Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

**4509-1**  
Replacement hose cutter blade.



## 4411 Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



## 4412 Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



## 4522 Vacuum Hose and Fuel Line Removal Tool

- Designed to remove vacuum hose or fuel lines (3/16" to 1/2") from fittings or tubing.
- Simply place the black jaw on the fitting or tubing – the jaw will grip the material. Then use the silver jaw to push the vacuum hose or fuel line off the fitting or tube.



## 4723 Ear-type CV Boot Clamp Pliers

- Designed to crimp the ear-type CV boot clamps used on front-wheel drive vehicles.
- May also be used to crimp the type of clamps used on fuel and cooling system hoses.
- Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.



## 4721 CV Boot Clamp Cutter

- Designed to easily cut the CV boot clamp without damaging the boot.
- Will cut boot clamps up to 10 mm wide and .7 mm thick.
- Handles are spring loaded to the open position to allow easy access to the clamp.



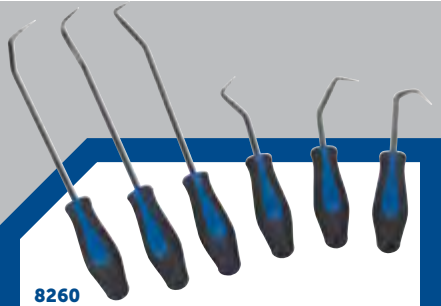
## 4403 Tubing Bender

- For 3/16" and 1/4" dia. tubing.
- Can bend up to 180+ degrees.
- Quick release handle to easily remove tubing from bender.
- Sturdy steel construction.



## 4404 Tubing Bender

- For 5/16" and 3/8" dia. tubing.
- Can bend up to 180+ degrees.
- Quick release handle to easily remove tubing from bender.
- Sturdy steel construction.



**8260**  
Hose Removal Set, 6 Piece

- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray which can be placed in tool drawer.



**6522**  
EVAP – Leak Detection System

- Vacuum Leak Testing
- Exhaust Leaks
- Crankcase Oil
- Cooling System Testing
- Wind and Water Leaks
- 1-Year Warranty

LeakTamer is the latest generation of leak detection systems, providing more smoke and better control. Solid-state circuitry improves reliability and ensures more consistent smoke output. A wide assortment of accessories make the LeakTamer versatile tools for quickly locating different kinds of leaks.



**SEE PAGE 18 FOR COMPLETE EVAP SYSTEM**



**HOT OIL IN THE PAN,  
NOT ON YOUR HAND**



Strong magnetic end.

**5911**  
OTC Drain Plug Pro™

- Remove oil drain plug without touching the plug or hot oil.
- No touching hot plug.
- No hot oil on hands.
- No dropping of plug in hot oil.
- No oil soaked gloves.
- Just magnetically attach DRAIN PLUG PRO to pre-loosened drain plug and rotate to remove plug.

1. Loosen drain plug with wrench.
2. Place DRAIN PLUG PRO on plug so that the tool locks on the plug hex.
3. Rotate handle to remove plug.
4. Pull plug away from oil stream.
5. Magnetic DRAIN PLUG PRO retains plug.

**5961**  
Drain Plug PRO Kit

The original innovation meets customer feedback for the broadest application possible! The 5961 Drain Plug PRO kit from OTC utilizes:

- 1/4" square drive.
- Mounted on a practical flexible cable.
- A variety of attachments.

All these components combine to give you safe removal of automotive drain plugs in any market!

Includes:

- Standard drain plug attachment.
- Low profile drain plug attachment.
- 17mm hex attachment for internally driven drain plugs.
- 5/16" bit driver attachment.
- All are conveniently stored in socket rail fashion.

Protect your hands and arms from hot oil in any application! Save time by preventing a dropped or lost drain plug. Never fish a dropped drain plug from a pan full of hot oil again! And, you can use the 1/4" square drive with any 1/4" drive socket you already own, to start bolts in hard to reach locations. The handy 5/16" bit driver lets you start screws in hard to reach places as well.

**5961HD**  
Heavy-Duty Drain Plug Pro™

- For Agricultural, Commercial, and Heavy-Duty Vehicle Applications
- Remove fluid drain plugs without touching the plug or hot fluids!
- No touching hot plugs.
- No hot fluids on hands.
- Removable attachment permits use with common 3/8" square drive sockets. Great for starting bolts in hard-to-reach places.
- Attach to pre-loosened drain plugs and rotate to remove.
- Magnetic attachment for internal 1/2" square drive drain plugs.
- Magnetic attachment for large drain plugs.



**5961**



**5961HD**



# OIL SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 6784 Euro/GM Oil Socket Kit

Popular oil filter wrenches for the GM, BMW, Audi, and VW. High quality, 3/8" drive, forged sockets designed to last a lifetime.

3-piece oil socket kit contains:

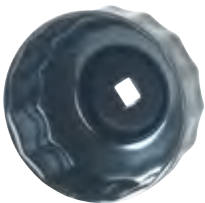
- 27 mm socket for the Cadillac STS 3.2L V6 and the Mercedes-Benz 1.8L I4.
- 32 mm socket for the 2.2L GM Ecotec and Saabs.
- 36 mm for the BMW M52, M60, M62, M70, & M73 engines; M-B OM604, 605, & 606 engines; VW/Audi VR6 engine.



## 6786 Oil Filter Cartridge Set

- Fits today's oil filter cartridge style filter applications.
- Short socket style allows for proper clearance when removing the filter element.
- 24mm – Cadillac, BMW. • 27mm – Cadillac, Mercedes, Buick, Saturn, Saab, Smart, VW.
- 29mm – Dodge.
- 32mm – Saturn, Saab, various GM.
- 35/36mm – Ford, Mini Cooper, Mercedes, BMW, VW/Audi, Mack Truck.
- 38mm – small Diesel engine applications.

Similar to Kent-Moore No. J-29142.



## 6901 GM Oil Filter Socket

Applications: 1999–2002 Olds Intrigue and 2001–2002 Olds Aurora with 3.5L V6 engine.

- This is a required tool to remove the oil filter cap from the oil pan to access the filter cartridge.



## 6903 Ford / Mazda Oil Filter Socket—75.6 mm, 14 Flutes

- Designed at 75.6 mm to fit 2.3L 4-cylinder engines.
- Works on Ford Fusion, Mercury Milan, Mazda 3, Mazda 5, and Mazda 6.



## 6904 Hyundai and Kia Oil Filter Socket—88.5 mm, 15 Flutes

- Works on newer Hyundai Sonata and Santa Fe 3.3L V6 engines.
- Works on newer Hyundai Azera, Veracruz and Entourage 3.8L V6 engines.
- Works on newer Kia Amanti, Sedona and Sorrento 3.8L V6 engines.



## 6905 Subaru Oil Filter Socket—66.5 mm, 14 Flutes

- Socket fits between the exhaust manifold and the oil filter for easy removal and installation of the filter.
- Works on 2003–newer Subaru vehicles having the 2.5L 4-cylinder, turbo engine.



## 6908 Toyota Tundra 4.7L Oil Filter Socket—73 mm, 14 Flutes



## 6906 Toyota Oil Filter Socket—65 mm, 14 Flutes

- Avalon
- 2005–'07 V6 3.5L (2GR-FE), 1995–2004 V6 3.0L (1MZ-FE)
- Camry
- 2007 V6 3.5L (2GR-FE), 2004–'06 V6 3.3L (3MZ-FE), 1994–2006 V6 3.0L (1MZ-FE)
- Camry Solara
- 2004–'07 V6 3.3L (3MZ-FE)
- Highlander
- 2004–'07 V6 3.3L (3MZ-FE) — also works on the hybrid version of this engine
- 2001–'03 V6 3.0L (1MZ-FE)
- RAV4
- 2006–'07 V6 3.5L (2GR-FE)
- Sienna
- 2007 V6 3.5L (2GR-FE)
- 2004–'06 V6 3.3L (3MZ-FE)
- 1998–2003 V6 3.0L (1MZ-FE)



## 6909 Set of Five Oil Filter Sockets with Holder

Magnetic holder and 5 oil sockets includes:

- 6903 – Ford /Mazda 75.6 mm, 14 Flutes.
- 6904 – Hyundai /Kia 88.5 mm, 15 Flutes.
- 6905 – Subaru 66.5 mm, 14 Flutes.
- 6906 – Toyota Avalon/ Tundra 5.7L 65 mm, 14 Flutes.
- 6908 – Toyota Tundra 4.7L 73mm, 14 Flutes.

6910 – Magnetic holder.



**4568**

**Three-Leg Oil Filter Wrench**

- Fits filters ranging from 2-1/2" to 5-1/4" (65 mm to 135 mm) in diameter.
- To turn the tool, use a 1/2" ratchet in the ratchet drive or a 13/16" wrench on the nut.
- Knurled legs provide extra gripping power.



**4440**

**Heavy-Duty 3 Leg Filter Wrench Standard**

- Self gripping design for true universal fit from 3" to 4-3/4".
- Heavy duty knurled leg design for extra grip and strength.
- 1/2" square drive with 21mm hex option.



**4441**

**Heavy-Duty 3 Leg Filter Wrench Large**

- Self gripping design for true universal fit from 4" to 6 1/2".
- Heavy duty knurled leg design for extra grip and strength.
- 1/2" square drive.



**4582**

**Jointed Jaw Standard Filter Pliers**

- Jointed jaws rotate 180 degrees providing access where standard pliers do not.
- Slip joint handle design provides a range from 2-1/4" to 4-3/4".
- Jaw teeth and cushioned handles provide maximum gripping power for slip free operation.



**4562**

**Adjustable Oil Filter Pliers Set**

- Forged jaws with sure-grip teeth grab the filter for easy removal.
- Slip-joint ratchet and lock mechanism allows a secure grip on filter diameters of 2-1/4" to 7" (57 mm to 178 mm).

**4560 – Small adjustable oil filter pliers.**

Pliers is 13-1/2" long; fits filters ranging from 2-1/4" to 5" (57 mm to 127 mm) in diameter.

**4561 – Large adjustable oil filter pliers.**

Pliers is 18" long; fits filters ranging from 3-3/4" to 7" (95 mm to 178 mm) in diameter.



**4584**

**Jointed Jaw Large Filter Pliers**

- Jointed jaws rotate 180 degrees providing access where standard pliers do not.
- Slip joint handle design provides a range from 3-1/8" to 7-1/2".
- Jaw teeth and cushioned handles provide maximum gripping power for slip free operation.



4555



4556



4557

**Heavy-Duty Oil Filter Wrenches**

- Fit filters ranging from 4-1/8" to 5-21/32" (104 mm to 144 mm) in diameter.
- Feature a 1-1/2" wide steel band that can stand up to the high torque needed to remove filters from trucks, tractors, and other heavy equipment.
- Use with a 1/2" drive ratchet or breaker bar.

**4555 – Heavy-duty oil filter wrench.**

Fits filters ranging from 4-1/8" to 4-21/32" (104 mm to 118 mm) in diameter.

**4556 – Heavy-duty oil filter wrench.**

Fits filters ranging from 4-21/32" to 5-5/32" (118 mm to 131 mm) in diameter.

**4557 – Heavy-duty oil filter wrench.**

Fits filters ranging from 5-5/32" to 5-21/32" (131 mm to 144 mm) in diameter.

**Swivel Handle Oil Filter Wrenches**

- Fit filters ranging from 2-1/2" to 4-3/8" (73 mm to 111 mm) in diameter.
- Feature a 1" wide stainless steel band for positive grip on the filter; swivel handle makes it easy to turn filters in hard-to-reach areas.

**4565 – Swivel handle oil filter wrench.** Fits filters ranging from 2-1/2" to 3-1/8" (64 mm to 80 mm) in diameter.

**4566 – Swivel handle oil filter wrench.** Fits filters ranging from 3-1/8" to 3-3/4" (80 mm to 95 mm) in diameter.

**4567 – Swivel handle oil filter wrench.** Fits filters ranging from 3-3/4" to 4-3/8" (95 mm to 111 mm) in diameter.



4565

4566

4567

# OIL SERVICE AUTOMOTIVE SPECIALTY TOOLS



Similar to Ford No.  
D79L-6731-A

## 7062A Universal Filter Wrench

This filter wrench will stand up to the job of removing nearly any spin-on filter (up to 6"). Universal design permits use on most vehicles. The tough 2" wide nylon strap holds firmly. In fact, the more leverage applied, the tighter it grips.

- Accommodates a 3/8" drive ratchet.



6914



6915

## Davco Diesel Filter Wrenches

- Found on Caterpillar, Cummins, Detroit Diesel, International, Mack, Mercedes-Benz, Volvo and other engines.
- Durable steel construction.
- Precise, laser-cut angles.
- Opens vent cap also.
- Soft, ergonomic handle.

## 6914

Fits Davco Diesel filter models, 232-233-234.

## 6915

Fits Davco Fuel filters 382 & 384.



## 4848 Flexible Spout Funnel

Many oil, transmission, and coolant fluid fill caps are located in hard to access areas. This aluminum 5 1/2" funnel features a removable debris screen in the base flowing to a 25" flexible spout designed to reach these difficult fill locations.



## 4673 7-Piece Sensor Socket Set

Includes:

**4673-1**  
29 mm Vacuum Switch and O2 Socket, 1/2" drive.

**4673-2**  
7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" drive.

**4673-3**  
27 mm Thermal Sensor Switch, 1/2" drive.

**4673-4**  
7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" drive.

**4673-5**  
1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" drive.

**4673-6**  
7/8" O2 Sensor Socket, offset 1/2" drive.

**4673-7**  
7/8" O2 Sensor Socket (low profile), offset 3/8" drive.



## 4437 8-Piece Sensor Socket Set

Includes:

**4673-1**  
29 mm Vacuum Switch and O2 Socket, 1/2" drive.

**4673-2**  
7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" drive.

**4673-3**  
27 mm Thermal Sensor Switch, 1/2" drive.

**4673-4**  
7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" drive.

**4673-5**  
1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" drive.

**4673-6**  
7/8" O2 Sensor Socket, offset 1/2" drive.

**4673-7**  
7/8" O2 Sensor Socket (low profile), offset 3/8" drive.

**4437-8**  
1-1/16" and 1" Oil Pressure Socket (short access), 3/8" drive

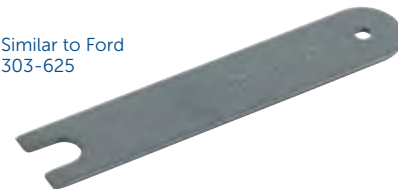
Similar to Ford No.  
303-755



## 6594 Ford Oil Line Disconnect Tool for 6.0 L

- Use to disconnect the high-pressure oil rail supply line from the fuel rail when removing fuel injectors.
- Works on the 6.0: diesel engine found in 2003-2009 F-250, F-350, F-450, F-550 trucks, Excursions and Ford vans.

Similar to Ford  
303-625



## 6595 Ford High Pressure Oil Line Disconnect Tool

- Use to disconnect the high pressure oil line from the cylinder head.
- Works on 1998 - 2003 Ford vans and trucks with 7.3L direct-injected, turbo-charged (DIT) diesel engines.



6703-3

6703-1

6703-2



## 6703 Line Fluid Stopper Kit

Stop messy fluid leaks and prevent contamination during service.

- Kit seals all types of rubber and steel line found on fuel, brakes, AC, power steering and transmission system.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

## 6703-1 Banjo Line Fluid Stoppers, 2 pk.

## 6703-2 Steel Line Fluid Stoppers, 2 pk.

## 6703-3 Line Plug Fluid Stoppers, 6 pk.



Sample of manual contents



### 3596J Oil Light Reset Tool Kit

- Oil changes are the #1 service your shop will perform each year. Enhance your service with this complete electronic tool and manual kit, No. 3596J.
- This 3596J kit eliminates the need to take the vehicle to the dealer or use an OEM scan tool to reset oil service lights.
- Electronic tool set includes the adapters and interface module required to reset the oil service lights on Volkswagen, Audi, Mercedes Benz, BMW, and Volvo.
- The included manual details Oil Light Reset tool procedures as well as the manual reset procedures for domestic and import vehicles.
- The new Oil Light Reset tool now gives you the ability to update the tool vehicle coverage by connecting to a PC with future update kits.

3596J includes:

- 3596H-1** – Main unit cable.
- 3596H-2** – BMW connector.
- 3596H-3** – Mercedes-Benz connector.
- 3596H-4** – OBD II connector.
- 3596H-5** – Volvo cable.
- 3596H-6** – Transfer plug.
- 3596H-7** – VW and Audi cable.
- 3596H-8** – Power cable.
- 3596J-9** – Reset procedure manual.
- 3596J-UPD**  
Oil Light Reset Update Kit



### Transfer Tankers

- Draining oil from a large displacement engine and getting it to your bulk storage container is a snap with OTC's Transfer Tankers.
- Used oil is collected in a reservoir, and then rolls smoothly on 4" free-wheeling casters to your storage location.
- Pump moves five gallons a minute through the 8-foot transfer hose to the a 15-gallon reservoir.
- Handle is removable for easy storage.
- Screen attached to reservoir allows assembly to be stored on its side.
- Can also be used for transferring antifreeze.

**5077A** – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with an electric pump (No. 528093).

**5097** – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with a pneumatic pump (No. 529966).

### 1577

#### Low Profile Fluid Receiver

- Designed for receiving waste fluid during a wide range of repair jobs.
- Fluid capacity: 7.5 gallons.
- Constructed of polyethylene plastic for heavy-duty use—yet, only weighs 13 pounds.
- Low profile, only 5" high, it easily slides under passenger cars.
- Designed with four casters to provide efficient maneuverability.
- Suitable for cooling system repair jobs—can be used for antifreeze.
- Includes splash screen to prevent spillage and splashing.
- Two-year warranty.



8100



8101

### Fluid Evacuation / Brake Bleeding Tools

- Use to bleed brake systems and remove a variety of fluid from vehicles, such as antifreeze, oil, transmission fluid, gear lube, etc.
- Quick connect locking hose adapters and ball-style on/off valve on hose prevent fluid leakage.
- Equipped with a relief valve to prevent over-pressurizing the tank.

**8100** – Operates by shop air or a hand pump; shipped complete with a brake bleeding hose, fluid evacuation hose, and two suction hoses (6 mm and 7 mm); 10-liter capacity tank.

**8101** – Operates with shop air; shipped with a brake bleeding hose and fluid evacuation hose; 6-liter capacity tank.



# OIL & COOLANT SERVICE AUTOMOTIVE SPECIALTY TOOLS



**1821**  
**10-Ton Capacity, Air-operated Automotive Oil Filter Crusher**

- Crushes up to four automotive filters (3-7/8" dia. x 9" high) at one time, in approximately 20 seconds. Engineered and built for dependable operation. Covered by OTC Lifetime Marathon Warranty®.
- 100% air operation eliminates electrical connections. Generous size of crushing chamber easily accommodates the largest automotive spin-on filters.
- Includes mounting stand. No wall mounting or time consuming installation required.



**1877**  
**25-Ton Capacity Heavy-Duty Oil Filter Crusher**

- Handles the big filters (up to 6" dia. and 12-1/2" long) found in trucks, construction equipment, farm implements, etc. May also be used for automotive and light truck filters. It does it all!
- Crushes filters to 1/4 of original size, removing up to 95% of filter's oil capacity. Automatic cycle feature: load the filter, push a button, and walk away.
- Air/hydraulic pump works on standard shop air (requires 9 CFM at 100 psi). Special valving returns ram automatically at the end of each cycle. No electrical connections needed.
- Built-in floor stand (completely assembled). Whole unit requires just 5 square feet of floor space.
- Covered by OTC Lifetime Marathon Warranty®.



**1896**  
**25-Ton Capacity High-Speed Heavy-Duty/Automotive Oil Filter Crusher**

- Automotive and heavy-duty filters up to 15-1/4" long and 6" diameter are crushed in approximately 8 to 16 seconds. Filters are reduced to 20% of original size, with 95% of residual oil removed.
- Automatic cycle feature lets you load the filter, push a button, and walk away.
- Powered by 2 hp electric/hydraulic pump, 230 volt, 20 amp, 60 cycle, single phase, 3,450 rpm. Has a 2-gallon reservoir.
- Built-in, heavy-duty floor stand with leveling pads is designed to accept a 30-gallon drum for oil drainage. Comes assembled. Covered by OTC Lifetime Marathon Warranty®.

Shipped assembled



**SEE PAGE 35  
FOR OIL FILTER  
WRENCHES**

**Oil Filter Crusher Comparison Chart**

No.	Tonnage	Pump	Crushing Time	% Oil Removed	Filter Size	Stand Dimensions
1821	10-ton	Air	20 Seconds	95%	Chamber: 8" x 8" x 9" H.	18-1/2" W x 24" D x 63-1/2" H
1877	25-ton	Air/Hyd.	80 Seconds	95%	6" Dia. - 12-1/2" Long	18-1/2" W x 30" D x 74-1/2" H
1896	25-ton	Elec./Hyd.	16 Seconds	95%	6" Dia. - 15-1/4" Long	27" W x 30" D x 78" H

Note: Crushing times are approximate; crushing times may vary depending on air pressure available, size of filter, type of filter, etc.



**75240**  
**Coolant and Battery Refractometer**

This can be used for measuring the freezing point of either propylene and ethylene glycol based cooling systems. It can also be used for checking the strength of electrolyte solution in batteries. This precision instrument features high quality optics with ultra smooth focusing on the body. Coolant scale range: 32° F/0° C to -60° F/ -51° C.

75234



75134

**Econo-Clean Coolant Service Accessories**

To ensure coolant will provide adequate protection to the vehicle, the coolant should be adjusted to the manufacturer's specifications. These accessories will help you quickly test coolant.

**75134 – Coolant test strips** – Just dip a strip in coolant and it shows the freeze point and the pH; bottle of 50 strips.

**75234 – 3-way heavy-duty truck coolant test strips** – shows pH, freeze point, and nitrite (0–4000 ppm), pH <7.5–11+, glycol 0–60%.



**75260**  
**Coolant Refiller**

- 26" Hg vacuum refills cooling system without air lock.
- Eliminates the need for "bleeding."
- Checks for system leaks and utilizes OEM approved technology.
- Universal "fits all" cone adapter.
- Built-in gauge protector.



**Works on both pressurized and non-pressurized cooling systems.**

**75700**

**Coolant Exchange Unit**

**Designed with the user in mind.**

**Safety First**

- Our "engine off" feature removes pulleys, belts, and fan blades from the safety equation.
- No additional ventilation required.
- Vacuum mode creates a "push/pull" exchange process allowing the technician to safely remove high pressure in a hot system.
- "Hands-off" transfer of used coolant to a bulk tank prevents spills and helps protect the technician.

**Simple to Operate**

- Two clearly marked valves and an easy-to-read gauge make this machine very simple to use.
- Sight glass clearly shows the amount of coolant in the waste tank.
- One valve controls the flow of coolant; process is easy to understand – no special training needed.
- No electricity required. 90 psi shop air drives the exchange process, as well as the 2 gpm pump on the waste tank.

**Designed to Survive**

- Impact-resistant polypropylene cabinet will not scratch or dent vehicle.
- Cabinet is impervious to chemicals commonly used in the shop.
- Large, inflatable tires carry a well-balanced platform easily across any shop floor.
- Easy to maneuver between bays and vehicles.

**Extra Design Features**

- Two external new coolant supply tanks allow on-board storage of two different coolant types.
- Graduations on tanks show user the amount of new coolant on board.
- On-board storage of step adapters.
- Adapter kit included.
- No hoses to cut.
- 96" hoses can be neatly stored on unit.
- One-year warranty.



Back View: 7-gallon capacity supply tanks allow storage of different coolants.

**INCREASE YOUR PROFITS**

**Our 10-minute exchange process means no more waiting for the engine to warm up!**

**Replacement Parts and Accessories**

**75360 – Heavy-duty adapter kit.** Links the two tanks for 14 gal. capacity to service class A vehicles. (Note: must have 7-gallon tank No. 75370).

**Specifications**

Power Supply – 90 psi shop air  
Tanks :Internal waste – 15-gallon capacity. External supply – (2) 7-gallon capacity (removable)  
Dimensions – 47" H x 26" W x 33" D (119 cm x 66 cm x 84 cm)

**75370 – Replacement coolant 7-gallon tank.**

**17490 –** Protect your investment with a **heavy-duty vinyl dust cover.**

Medium Step Adapter – Two included; fits hose size 1-1/4", 1-3/8", and 1-1/2"

Large Step Adapter – Two included; fits hose size 1-3/4", 2", and 2-1/4"



**6043**

**"Blast-Vac" Multipurpose Cleaning Gun**

- Perfectly suited for quick and efficient cooling system flushing. Simply attach it to radiator or heater hoses and you're in business.
- Also usable in washing engines and even shop floors.
- Two simple connections: one to shop air and one to a typical water faucet.
- Creates a unique vortex air/water blast for powerful cleaning applications.
- The tool can also be used to vacuum by turning the venturi inside the gun in the opposite direction. Air flow is reversed to create a strong vacuum.

Note: While normal water pressure will handle the majority of a cooling system flush, short blasts are sometimes needed to loosen some contaminants from within the system.



**7991**

**Cooling System Pressure Tester**

Now you can pressure test the cooling system on most cars, light commercial trucks, motorcycles, and even marine applications. The tester's universal fit eliminates the need for multiple adapters.

Note: Will not work on Saturn and Kia cars or Jeep with the plastic reservoir.

**7991-2 – O-ring repair kit**

**7991-3 – Pump parts kit**

**7991-4 – Gauge spare parts**

**7991-7 – Main body repair kit**

# COOLANT SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4496 Hose Clamp Pliers Set

- Contains five different styles of hose clamp pliers, which will service most flat-band and ring-style hose clamps. Also contains a hose removal tool.

Set Contains:

- Straight hose clamp pliers set
- Hose removal tool
- Flat-type hose clamp pliers
- Offset hose clamp pliers
- 45° hose clamp pliers



## 4723 Ear-type CV Boot Clamp Pliers

- Designed to crimp the ear-type CV boot clamps used on front-wheel drive vehicles.
- May also be used to crimp the type of clamps used on fuel and cooling system hoses.
- Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.



## 4510 Hose Pinch Off Pliers Set, 3 Piece

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.
- Available separately:

**4510-8**  
8" tool for small hoses and tight areas.

**4510-10**  
10" tool for radiator and vacuum lines.

**4510-12**  
12" tool for radiator and vacuum lines.



## 4502 Hose Clamp Pliers Set (2 piece)

- Includes a cross-slotted jaw pliers and a wide, flat-band hose clamp pliers. Services most ring-type or flat-band hose clamps.
- The clamps are held open with a ratchet locking mechanism. Jaws swivel to access hose clamps in any position.



## 4525 Flexible Hose Clamp Pliers

- Allows technician to access the flat-type hose clamps located in hard-to-access areas.
- Pliers has locking mechanism to hold clamp in the open position – makes removal and installation of clamp much easier.
- Heavy-duty, 24" cable flexes to almost any position.



## 4523 Offset Hose Clamp Pliers

- Head is offset from handle to allow access to hard-to-reach clamps.
- Swivel jaws allow pliers to be used on many different flat-band and ring-type hose clamps.



## 4524 45° Hose Clamp Pliers

- Jaws are bent at a 45° angle and pliers tips swivel to allow easy access to confined areas.
- Ratchet lock mechanism holds jaws open.
- Works on most flat-band hose clamps.



- 4509**  
**Straight-Blade Hose Cutter**
- Cuts rubber hoses ranging from 1/4" to 1-1/2".
  - Simply place hose in tool and squeeze handle to cut.
  - Replacement steel cutter blade No. 4509-1 is available.

**4509-1** – Replacement hose cutter blade.



- 4411**  
**Ratcheting Hose & PVC Cutter (Standard)**
- Cuts hose and PVC up to 1-3/8" dia.
  - Features metal frame and ergonomic handles for high leverage.
  - Compound ratcheting action provides maximum cutting power.
  - Will also cut cable and wires.



- 4412**  
**Ratcheting Hose & PVC Cutter (Heavy Duty)**
- Cuts hose and PVC up to 1-3/4" dia.
  - Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
  - Compound ratcheting action provides maximum cutting power.
  - Will also cut cable and wires.



- 4721**  
**CV Boot Clamp Cutter**
- Designed to easily cut the CV boot clamp without damaging the boot.
  - Will cut boot clamps up to 10 mm wide and .7 mm thick.
  - Handles are spring loaded to the open position to allow easy access to the clamp.



- 4522**  
**Vacuum Hose and Fuel Line Removal Tool**
- Designed to remove vacuum hose or fuel lines (3/16" to 1/2") from fittings or tubing.
  - Simply place the black jaw on the fitting or tubing – the jaw will grip the material. Then use the silver jaw to push the vacuum hose or fuel line off the fitting or tube.



- 4521**  
**Hose Removal Tool**
- Unique tip easily fits between hose and fitting to break stubborn hoses loose.
  - Large handle provides a good grip on tool during hose removal.
  - Works on radiator hoses, heater hoses, transmission lines – any place a rubber hose is clamped to a fitting.



- 8260**  
**Hose Removal Set, 6 Piece**
- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
  - They are made of heat-treated, chrome steel with assorted tip shapes.
  - Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
  - Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
  - Packaged in a molded tray which can be placed in tool drawer.



Similar to Ford T85T-18539-AH

- 519156**  
**Ford and Chrysler Heater Hose Disconnect Tool Set**
- Quickly and easily removes heater hose from heater core tube without damaging coupling retainer or hose.
  - This set includes the heater hose disconnect tool for 5/8" and 3/4" heater hoses with quick connect couplings at heater core, and an extension handle for easier access.
  - For use on 1986-current Aerostar vans and 1991-current full-size vans, 1987 to current Dodge Caravan and Plymouth Voyager vans.

Similar to Kent-Moore J-43181

- 6046**  
**GM Heater Line Quick-Connect Release Tool**
- Specially designed for separating quick-connect fittings on heater lines of 1999-2006 Chevy and GMC C/K trucks.
  - Tool snaps around the hose and simultaneously depresses the locking tabs to disengage the fitting.



Similar to Kent-Moore J-38723

- 519157**  
**GM Heater Line Quick Connect Separator**
- When you need to get at and release the quick connect fitting that connects the heater hose to the engine block and thermostat housing, this little tool is great for saving time and aggravation.
  - Works on 1991-current GM vehicles with 3.1L, 3.4L, and 3800 engines.



- 18403**  
**Fin Straightener**
- Clean and straighten condenser, evaporator and radiator cooling fins.
  - Compact design for confined spaces: the straightener head is 3-1/8" in diameter; the handle is 3-1/2" long.
  - Includes 12 clearly marked combs
- Wheel 1: 8, 9, 10, 12, 14, & 15 fins per inch  
Wheel 2: 10.5, 11, 13, 18, 20, & 22 fins per inch

# LUBRICANT SERVICE AUTOMOTIVE SPECIALTY TOOLS



- 2300 Professional Lever Grease Gun**
- Heavy Duty Die Cast Aluminum Grease Gun Head.
  - Grease Gun Head Fitted with Automatic Air Bleeder.
  - Large Diameter Piston for working in cold.
  - Built-In variable stroke for greasing fittings with limited access.
  - Includes 6" Bent Steel Extension, Easy access 24" High Pressure Hose & 3 Jaw Slim Coupler.
  - 10,000 PSI.
  - For use with 14 oz. grease cartridge.



- 2302 "Mini" Lever Grease Gun**
- Die cast Aluminum Grease Gun head.
  - Lever Action with best in class performance, delivers 6000 PSI.
  - Includes bent 6" steel extension with 3 jaw Slim coupler.
  - For use with 3 oz. grease cartridge.



- 2304 Professional Pistol Grease Gun**
- Heavy Duty Die Cast Aluminum Grease Gun Head with integrated die cast Fixed Handle.
  - Grease Gun Head Fitted with Automatic Air Bleeder.
  - Large Diameter Piston for working in cold.
  - Built-In variable stroke for greasing fittings with limited access.
  - Includes 4" straight steel extension, easy access 24" High Pressure Grease Hose and 3 Jaw Slim Coupler.
  - 7500 PSI.
  - For use with 14 oz. grease cartridge.



- 2310 Air Operated Grease Gun- Continuous Flow**
- Heavy Duty Die Cast Aluminum Grease Gun Head.
  - Grease Gun Head Fitted with Automatic Air Bleeder.
  - Larger Pumping Chamber, honed for rapid operation.
  - Includes 6" Bent Steel Extension, Easy Access 24" High Pressure Grease Hose and 3 Jaw Slim Coupler.
  - 4800 PSI.
  - For use with 14 oz. grease cartridge.



- 2332 Quick Connect Greasing Accessory Kit**
- 7 piece Quick Connect Greasing Accessory Kit
  - Includes 1 each of the following Quick Connect Accessories:
    1. Recessed Lube Adapter.
    2. Angle Lube Adapter.
    3. Narrow Needle Nose Adapter.
    4. Seal Off Dispenser.
    5. Right Angled Grease Coupler.
    6. Heavy Duty Hose fitted with Spring Guard and Slim Coupler.
    7. Grease Injector Needle 1.42" Long x 18G.



- 2350 Lever Action Drum Pump**
- Fits 15 – 55 gallon drums.
  - Telescoping suction tube.
  - 3 Position Handle for different fluid viscosity.
  - Extra tall pump cylinder allows smaller bucket to be placed under spout.
  - Brass piston rings for extended wear resistance.
  - Threaded outlet spout for use with common hoses.
  - Up to 14 oz. / stroke.
  - For use with oil based fluids, heating oils, motor oils, heavy and light oils, diesel and kerosene.



### 2340

#### Heavy Duty Grease Gun Holder

- Great Grease Gun Storage accessory.
- Can be mounted to walls, machinery, or heavy equipment.
- Design to retain your grease gun in high vibration environments.
- Works with all standard 14 oz. Grease Guns and 16 oz. Suction Guns.



### 2352

#### Lever Action Bucket Pump

- Fits 5 gallon pails.
- Includes 12" Drum cover.
- 3 Position Handle for different fluid viscosity.
- Steel Discharge Spout.
- Supplied with 5' Hose.
- Up to 4.6 oz. / stroke.
- For use with transmission differentials and heavier oils.



### 2334

#### Grease Fitting Unblocker

- Opens clogged grease fittings and loosens hardened grease joints.
- Comes with Grease Coupler.
- Includes flexible hose to reach difficult areas.
- Built in hand guard for safe usage.
- Includes two spare piston seals.



### 2355

#### Professional Rotary Drum Pump

- Professional Pump with Die cast Aluminum body and Zinc Rotor and Vanes.
- Fits 15 – 55 gallon drums.
- Includes 3 piece threaded Suction Tube.
- Horizontal Pump Outlet connects to a filter or meter.
- Up to 7 oz. / rotation.
- For use with Lubricating Oils, Diesel, Gasoline, Kerosene etc.



### 2359

#### Suction Oil Gun

- For use with gear oils to get them both into/out of gear boxes, transfer cases and differentials.
- 16 oz capacity and 14" hose.



### 2357

#### Brass Transfer Pump

- Drain oil from crankcase or ATF through dipstick tube – from underhood – not undercar.
- Pumps 3.2 oz per stroke.

**2320** Slim Coupler

**2322** Right Angle Grease Coupler

**2325** 14 inch Grease Gun Hose

**2326** 24 inch Grease Gun Hose

**2327** Narrow Needle Nose Dispenser

**2328** Grease Injector Needle

**2330** SAE Grease Fitting Assortment kit



#### OTC Technician Gloves

- Washable synthetic leather palm with padding ensures comfort and a secure grip.
- Polyester and Lycra material around fingers offer a durable lightweight cover that stretches for a great fit.
- PVC cushions help protect knuckles from injury due to slippage.
- Comfortable polyester back panels include webbing for improved ventilation.

**5800TGLV-M** – Medium.

**5800TGLV-L** – Large.

**5800TGLV-XL** – Extra large.

#### SmartTech™ Technician Gloves

Same as above, also works with touchscreen technology.

**5801SGLV-M** – Medium.

**5801SGLV-L** – Large.

**5801SGLV-XL** – Extra large.

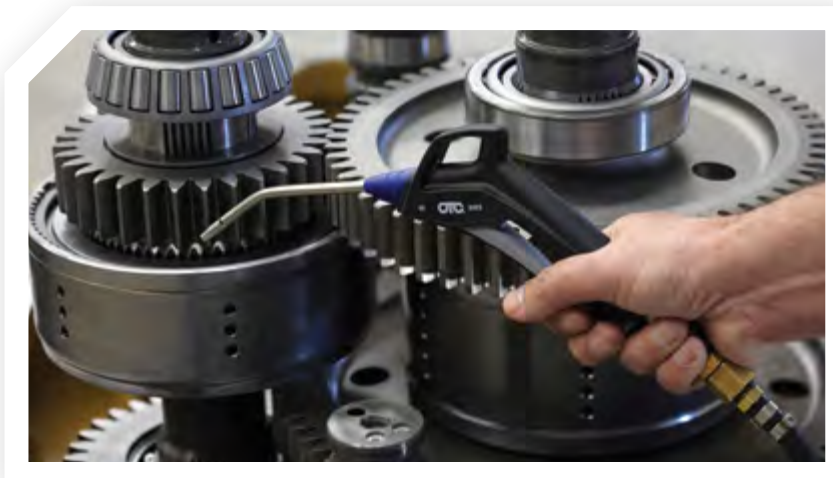


5800TGLV-M

5801SGLV-M

**PROMOTE SAFETY AND PREVENT CROSS-CONTAMINATION BY USING THE RIGHT AMOUNT OF COMPRESSED AIR FOR YOUR MAINTENANCE PROJECT WITH OTC'S SAFETY AIR BLOW GUNS.**

- The OTC PRO Series Lever Air Blow Guns are constructed from die-cast aluminum and feature an exclusive design that increases output pressure by incorporating ambient air through venturi inlets with compressed air – economically boosting total output.
- All Air Blow Guns from OTC meet OSHA Standards for safety and noise – (STD. 01-13-001; STD. 1910-95)
- Extraordinary Precision Air Control – right where you need it.



2424



2425



2423



2421

2422

**2424 & 2425  
OTC PRO Series Lever Air Blow Guns**

- Unlike ANY other metal body lever air gun – these incorporate revolutionary Venturi Mechanism that uses side ports to combine free ambient air with costly compressed air – creating a much higher volume of usable output.
- Manufactured from Die Cast Aluminum, the OTC PRO Series Air guns are made to last in the harshest environments.
- Ergonomic design of the body and the large dip coated operating lever reduce fatigue and discomfort – even during extended use.
- Manufactured fully using non corroding materials – threaded 1/4" F at inlet and 1/8" F at outlet.
- Meets OSHA Standards for Safety and Noise.

**2424** – PRO Series Venturi Air Gun (Rubber Tip).

**2425** – PRO Series Venturi Air Gun (Star Tip).

**2421, 2422 & 2423  
OTC Safety Air Blow Guns**

- Impact and Weather resistant Nylon Body.
- Safety Venting in all tips.
- Corrosion Resistant Stainless Steel Nozzles.
- Drop Resistant Construction.
- Soft Rubber Grip and ergonomic design for convenience and comfort in extended use.
- Brass threaded air inlet.
- Variable speed trigger for control of amount of air dispensed.
- Conforms to OSHA STD 1910-95 (b) for max noise level when used with 90 PSI air pressure.
- Conforms to OSHA STD 1-13.1 for safety and are classified as safety Blow Guns.

**2421** – Safety air blow gun, snub nose rubber tip.

**2422** – Safety air blow gun, 13" stainless steel nozzle.

**2423** – Safety air blow gun, 4.5 stainless steel bent tip.





# TRANSMISSION SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 92500

### Transmission Fluid Exchanger

- Top-off feature. Add or subtract in 1/10 qt. increments.
- "Low Fluid Alarm" and "Indicator Light" to alert operator.
- "Drain Waste" feature automatically pumps used fluid from the machine into a waste oil container.
- "Drain Pan" feature drains the pan for easy filter replacement. No mess.
- Unprecedented one-tenth quart flow metering for adding or subtracting fluid from the pan.
- Complete set of cooler line adapters for most foreign and domestic vehicles.
- Works with all types of automatic transmission fluid.
- Integral performance designed hose and tool compartment with drain.

529734 – Replacement nylon tube.



## THREE MODES OF OPERATIONS: DIPSTICK ONLY, COOLER LINE, OR A COMBINATION OF THE TWO

### Specifications

- Electrical - 12V DC
- Exchange Accuracy - +/- 1/4 qt.
- Controls - Microprocessor with digital keypad and LEDs
- Fluid Tanks - 32 quarts supply (24.6 liters), 34 quarts waste (26.6 liters)
- Hoses - 91" black & red (Exchange); 76" white transfer tube (Straw)
- Fluid Types - Multiple fluid capability.
- Adapter Set - Complete set for most applications. Standard adapters for Ford, GM, Chrysler, European, and Universal (covering most Asian imports).
- Pump - Positive displacement gear pump, 2 gallons per minute maximum.
- Weight - 158 lbs. (72 kg)
- Dimensions - 52" H x 33" W x 20" D (132 cm x 84 cm x 51 cm)
- Process Time - Depends on mode.
- Warranty - 1 year parts and labor.



## 5610

### Transmission/Engine Oil Pressure Kit

This professional kit can be used for domestic and import applications. High and low pressure gauges make this kit useful for both transmission and engine work. Kit comes complete with adapter for most applications. Designed to be used for both static and on road testing.

#### Features and benefits:

- Large 3-1/2" gauges feature a chrome bezel and rugged protective outer boot.
- Low pressure gauge reads 0–100 psi and 0–700 kPa.
- High pressure gauge reads 0–400 psi and 0–2800 kPa.
- Both gauges include rear hook to allow gauge to be hung conveniently out of the way.
- Gauges and hose assembly incorporate quick couplers for easy disconnect.
- Kit includes 13 adapters and a detailed instruction manual.
- Blow molded hard case with removable lid.

## 6604

### Ford Transmission Fluid Fill Adapter

- Use to fill or add fluid to the automatic transmission.
- Works on the 5R55W transmission in Ford trucks.



Similar to Ford 307-437

## 92000

### Transflow Transmission Oil Cooler Flusher

Fix it right the first time... designed to measure oil flow capacity within the transmission oil cooler (TOC), and also has the capability to flush contaminated oil from the TOC after repairs.

- Only unit in the industry that performs a flow rate test.
- Flush and flow test time is 5 to 8 minutes.
- 32-quart supply tank; 34-quart waste tank.
- Supply and waste hoses each 10' long.
- 10' long, 12V DC power cables with battery lead clips.
- Requires shop air (90 psi, min.) and 12V DC source.



92000

## 92001

### Automatic Transmission Fluid Diagnostic Pads

Easy, quick way to test automatic transmission fluid to determine when service is necessary. Simply place a few drops of transmission fluid from transmission dipstick onto test pad. Pad will change color indicating condition of transmission fluid. Package contains 100 pads.



92001



**4528**  
**Clutch Alignment Tool Set (17 piece)**

- Essential for clutch installation on virtually all cars and light-duty trucks. Aligns clutch plate by using tapered cones and pilot adapters.
- Includes seven fractional pilot adapters, 1", 13/16", 25/32", 3/4", 11/16", 5/8", 19/32" one clutch disc centering adapter, and one alignment shaft.
- Includes five metric pilot adapters, 19mm, 17mm, 16mm, 14mm, 12mm, two clutch disc centering adapters, and one alignment shaft.
- Housed in a blow-molded storage case.



**4508**  
**Professional Style Seal Puller**

- Designed to remove oil and grease seals when servicing cars, SUVs, and light trucks without damaging the housing or bearing.
- Hook tips in two sizes and professional handle design allows removal of hard-to-get-at seals by getting under them.
- The tool is 12" long and the hook tip is double-secured (versus competitors' designs), for durability.
- An extra blade is included, and additional replacements (No. 4508-1) may be ordered.

**4508-1** – Replacement blade for 4508.



519151 – Similar to Ford 307-123(T82L-9500-AH) and Kent-Moore J-36391

7587 – Similar to Ford No. 307-176(T86P-77265-AH)

**Quick-Disconnect Tool**

- Two popular disconnect tools in one set give you the versatility to quickly separate the quick connectors found on everything from radiators to transmission and power steering lines. The quick-disconnect coupler tool, No. 519151, works on late model Ford and GM vehicles without disturbing the quick-connect seals. No. 7587 releases the finger on the transmission-to-radiator oil cooler line quickly, without damaging the hose or connector. Works on 1986 and newer Ford Tauruses and Mercury Sables with an AXOD, AOD, or ATX transmission.
- Tools available separately.

**519151** – Quick-disconnect coupler tool.  
**7587** – Ford oil cooler line disconnect tool.



Similar to Ford 308-182Chrysler MLR-6638A

**7646A**  
**Clutch Coupling Tool**

- Disconnects the hydraulic clutch line from the clutch slave cylinder on the following vehicles with manual transmissions and hydraulic clutches: 1988–2012 F-series trucks, Bronco II, Ranger, Explorer, 1989–1997 Ford Thunderbird and Mercury Cougar, and 1992–2010 Chrysler PT Cruiser.
- Wedge-shaped design allows easy removal of clutch line without damaging clutch line, coupling, or slave cylinder. No need to pry the coupler apart.



Similar to Ford T65L-77515-A

**7024**  
**Automatic Transmission Clutch Spring Compressor**

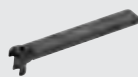
- This is a handy, adjustable tool for removing or installing the snap ring on a transmission rear clutch piston. It applies pressure to the clutch drum's retaining washer to compress piston return springs.
- For use on most American cars and light trucks.



**7937**  
**GM Transmission Oil Cooler Line Disconnect Tool**

- Specially designed to work in tight places. So simple to operate, you can do it with just one hand.
- After insertion into the quick-connect fitting on 1/2" dia. lines, a quarter turn of the tool quickly and easily releases the fitting on the transmission end of the transmission-to-radiator oil cooler line.
- Works on 2WD and 4WD pickups and vans with electronic shift overdrive automatic transmissions: 1991– newer 4L80E transmissions, and 1993–newer 4L60E transmissions.

**Transmission Line Disconnect Tools**



**519152** Oil cooler line disconnect tool.



**519153** Clutch coupling tool.



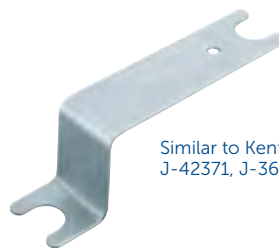
**519159** Transmission oil line tool



**519378** Chrysler/Jeep oil cooler line disconnect tool



**6511** 3/8" & 1/2" Fuel line disconnect tool



Similar to Kent-Moore J-42371, J-36221

**7910**  
**GM Hydraulic Clutch Line Disconnect Tool**

- This is a versatile tool for disconnecting clutch lines when you're working on clutch assemblies or slave and master cylinders. The bent end, intended for NVG3500 and NV4500 manual transmissions, works on 1996 to 2012 full-size 2WD and 4WD trucks, Chevrolet S-10 Blazer, and pickups. The straight end is for 1993 to '94 Chevrolet Lumina sedan, 1995 to 2000 Chevrolet Monte Carlo, 1993 to '99 Buick Regal, 1998 to 2002 Olds Intrique, 1993 to '97 Olds Cutlass Supreme and Pontiac Grand Prix.

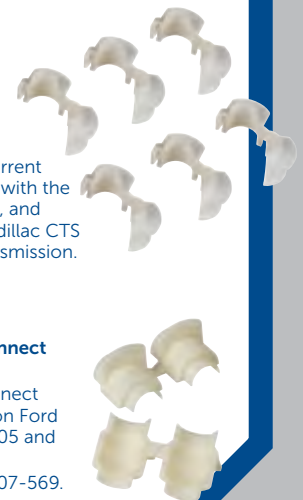
Similar to Kent-Moore J-44822

**6611**  
**Transmission Line Disconnects**

- Used on 2001 to current Chevrolet Corvette with the 4L60E transmission, and 2003 to current Cadillac CTS with the 5L40E transmission.
- 6 per pack.

**6579**  
**Transmission Disconnect (2 pack)**

- Designed to disconnect transmission lines on Ford Taurus/Explorer 2005 and newer.
- Similar to OE p/n 307-569.



# TRANSMISSION SERVICE AUTOMOTIVE SPECIALTY TOOLS



1/2" is similar to Ford 307-459.

3/8" is similar to Ford 307-441.

## 6593 Ford Transmission Cooler Line Disconnect Set

- Snap around cooler line, push into the fitting, fitting releases. The cooler line can then be removed.
- 3/8" disconnect is used on 2003–newer Ford Explorers with the 5R55W transmission.
- 1/2" disconnect is used on 2003–newer Ford Super Duty trucks with the 4R100 transmission.

Similar to Kent-Moore J-44822



## 6611 Transmission Line Disconnects

- Used on 2001 to current Chevrolet Corvette with the 4L60E transmission, and 2003 to current Cadillac CTS with the 5L40E transmission.
- 6 per pack.

## 6579 Transmission Disconnect (2 pack)

- Designed to disconnect transmission lines on Ford Taurus/Explorer 2005 and newer.
- Similar to OE p/n 307-569.



## 6517 Disconnect Tool Set

Designed for A/C lines, fuel lines, and transmission cooler lines.

- Contains 3/8", 1/2", 5/8", and 3/4" spring lock disconnect tools for A/C lines on Ford cars and trucks, Chrysler and Jeep vehicles.
- Contains the 3/8" and 1/2" fuel line disconnect tool for Ford vehicles.
- Contains the 5/16" and 3/8" fuel line disconnect tools for GM and Chrysler vehicles.
- Contains the transmission oil cooler line disconnect tool used on many GM and Ford vehicles.



See page 27 for complete details.

## 6508 Full-Coverage Disconnect Tool Set

If you're working on Chrysler, Ford, or General Motors vehicles, this set can make your job easier.



6703-3

6703-1

6703-2

## 6703 Line Fluid Stopper Kit

Stop messy fluid leaks and prevent contamination during service.

- Kit seals all types of rubber and steel line found on fuel, brakes, AC, power steering and transmission system.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.



**6703-1** Banjo Line Fluid Stoppers, 2 pk.

**6703-2** Steel Line Fluid Stoppers, 2 pk.

**6703-3** Line Plug Fluid Stoppers, 6 pk.



## 4848 Flexible Spout Funnel

Many oil, transmission, and coolant fluid fill caps are located in hard to access areas. This aluminum 5 1/2" funnel features a removable debris screen in the base flowing to a 25" flexible spout designed to reach these difficult fill locations.



## 18403 Fin Straightener

- Clean and straighten condenser, evaporator and radiator cooling fins.
  - Compact design for confined spaces: the straightener head is 3-1/8" in diameter; the handle is 3-1/2" long.
  - Includes 12 clearly marked combs
- Wheel 1: 8, 9, 10, 12, 14, & 15 fins per inch  
Wheel 2: 10.5, 11, 13, 18, 20, & 22 fins per inch



8101

8100

## Fluid Evacuation / Brake Bleeding Tools

- Use to bleed brake systems and remove a variety of fluid from vehicles, such as antifreeze, oil, transmission fluid, gear lube, etc.
- Quick connect locking hose adapters and ball-style on/off valve on hose prevent fluid leakage.
- Equipped with a relief valve to prevent over-pressurizing the tank.

## 8100

Operates by shop air or a hand pump; shipped complete with a brake bleeding hose, fluid evacuation hose, and two suction hoses (6 mm and 7 mm); 10-liter capacity tank.

## 8101

Operates with shop air; shipped with a brake bleeding hose and fluid evacuation hose; 6-liter capacity tank.



## 6514 Mini Tubing Cutter

- Works on tubing sizes 1/8" to 5/8" O.D. (3mm to 16mm).
- Easily cuts copper, brass, aluminum, and steel brake lines in hard-to-reach places.
- Extra cutting wheel stored in knob.



## 6512 Heavy-Duty Tubing Cutter

- Works on tubing sizes 1/8" to 1-1/8" O.D. (3mm to 29mm).
- Easily cuts copper, brass, aluminum, and steel brake lines.
- Reamer folds onto cutter body for storage.
- Extra cutting wheel stored under reamer.



**4422  
Pilot Bearing Puller**

- Use to pull a pilot bearing from the end of the crankshaft.
- A restriction plate catches the bridge and prevents the jaws from spinning when force is engaged.
- The "Tee Handle" design is easy-to-use and eliminates need for other tools.
- Spread covers ranges of 1/2" to 1-1/2".
- Reach has a min/max range of 3/16" to 1".



**4420  
Pilot Bearing Puller Attachment**

- Use to pull a pilot bearing from the end of the crankshaft.
- Interchangeable jaws. One set of jaws covers a spread of 1/2" to 1-1/2". Other set of jaws covers a spread of 3/8" to 1-3/8". Both sets of jaws have a reach of 1".
- Reach has a min/max range of 3/16" to 1".
- Puller attaches to OTC and other slide hammers with 5/8"-18 thread.



**4421  
Pilot Bearing Puller Attachment**

- Removes pilot bearings, thrust washers, and smaller bearings hidden in a shaft or housing.
- Jaws require a minimum of 5/8" opening and can range up to a max of 1-1/2" diameter.
- Min/Max reach is 1/8" to 1".
- Works with both 5/8"-18 as well as M18-1.5 threaded hammer shanks.



Fed. Spec.: GGG-W-665b

**885  
Adjustable Hook Spanner Wrench**

- Here's a tool that's needed wherever turret adjusting nuts or packing gland nuts are used.
- Capacity is 1-1/2" to 4".
  - Handle is 24" long, 11/16" diameter.



**Gear and Pulley Pullers**

- These tools are perfect for removing timing gears, fan pulleys, harmonic balancers, and many other parts having tapped holes.
- Each puller will spread from 1-1/2" to 4-1/4". The puller blocks are 4-7/8" wide, tapped 5/8" - 18 UNF.
  - Both include two hex head cap screws, 3/8"-16 x 3" long.

**7392  
Puller with 13" long screw.**

**7393  
Puller with 5-1/2" long screw.**

**Pilot Bearing Pullers**

Designed to pull flywheel pilot bearings in close quarters where a slide hammer cannot be used. Operates on many models with engine in chassis.

**7318 Pilot bearing puller.** Capacity: 1/2" to 1-1/2". I.D. reach: 3/4".

**7319 Pilot bearing puller.** Capacity: 7/8" to 2". I.D. reach: 1".



**Transmission Lip Seal Protectors**

Protects lips seals from damage while assembling the forward, direct, and intermediate piston assembly on GM 400 series Turbo Hydramatic transmissions.

**7038-A – Lip seal protector.**

**7038-B – Lip seal protector.**

**7038-C – Lip seal protector.**



**7118  
Transmission Adapter Kit**

- Converts your OTC engine stand into a transmission service stand.
- Kit replaces the adjustable arms of the stand to hold and position the transmission at workbench height for repair.
  - The transmission is held with three sides fully exposed for working convenience, and can be rotated a full 360° for complete access to all parts.



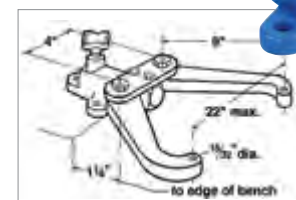
7020 Similar to Ford T57L-500-B, 307-003

**7020  
Bench-Mounted Holding Fixture**

- Here's a helpful device that enables you to securely hold and rotate small engines, transmissions, and other components while you're working on them.
- This holding fixture will handle pieces weighing up to 250 lbs., and it offers 360° of rotation with positive stops at 90° increments.
  - Three sides of the mounted unit remain fully exposed.

**34607  
Base assembly only.**

34607 Similar to Ford D83L-500-B1, 300-D041



**522  
Large Gear and Pulley Puller**

Using this tool, you can easily remove a wide range of gears, pulleys, or other parts that have tapped holes.

- The puller will spread from 2" to 7-3/4". Its block is 8-1/4" wide, and its forcing screw is 3/4"-16 x 11-5/8" long.
- Accommodates any cap screws up to 1/2" diameter.



Similar to Ford D80L-522-A, 303-D025

# DRIVE AXLE SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4543A Locknut Socket Set – 4WD (6 piece)

- Chrome vanadium steel sockets cover most SUV and light truck applications.
- Sockets have 1/2" square drive, allowing use of a torque wrench, ratchet, or breaker bar.

Contents of set:

### 4543A-1 – Toyota 4-lug locknut socket.

Serves high-torque locknuts on Toyota 4WD vehicles having free-wheel (lock out) hubs: 1995–newer Tacoma; 1996–newer T100 and 4Runner.

**4543A-2 – Ford 4-lug locknut socket** for high-shear rotating nuts on 1985–newer F-250 and F-350 truck rear axles, and Dana 80 rear axles of Ford Super Duty trucks.

**4543A-3 – 4-lug socket** for removing and installing 4-slot front axle locknuts on 1986–newer F-Series 1/2-ton trucks, full-size Bronco with Dana 44 axle, 1984–92 Ford Ranger, and Bronco II with manual hubs. Also, Dodge trucks using Dana 44 axle with automatic hubs.

**4543A-4 – 6-lug socket** for removing and installing 4-slot front axle locknuts on 1978–84 Ford F-Series 4WD heavy-duty 3/4- and 1-ton trucks; 1973–81 GM 4WD 3/4- and 1-ton trucks.

**4543A-5 – 4-lug socket** for removing and installing 4-slot front axle locknuts on 1993–newer Ford Ranger, Bronco II, and Explorer with manual hubs; 1995–newer F-Series 1/2-, 3/4-, and 1-ton trucks and full-size Bronco with manual hubs; 1959–85 F-Series 1/2- and 3/4-ton trucks and full-size Bronco; 1960–90 GM 1/2-ton trucks and full-size Blazer/Jimmy; 1969–72 International 1/2-ton trucks; 1969–89 Dodge 1/2-ton trucks with manual hubs.

### 4543A-6 – FWD front spindle puller.

Removes front spindle to access needle bearing, when lubricating and aligning front wheels. 5/8"-18 fine thread permits use with OTC No. 1155 slide hammer. Fits spindle thread sizes 2"-16, 1-5/8"-16 and 38 mm-1.5. Applications:

Full-size GM, Ford, Jeep, and International pickup with Dana front axles, plus Ranger and Bronco II.



## 4547A Axle Nut Socket Set – FWD (7 piece)

- Extra long, 1/2" drive chrome molybdenum sockets for heavy-duty use in removing and installing axle nuts.

- Use with a ratchet, breaker bar, or torque wrench.
- Contained in a blow-molded plastic storage case.

Contents of set:

**4547A-29 – 29 mm FWD axle nut socket.**

**4547A-30 – 30 mm FWD axle nut socket.**

**4547A-32 – 32 mm FWD axle nut socket.**

**4547A-34 – 34 mm FWD axle nut socket.**

**4547A-35 – 35 mm FWD axle nut socket.**

**4547A-36 – 36 mm FWD axle nut socket.**

**4547A-38 – 38 mm FWD axle nut socket.**



## 4542 7-Piece Wheel Bearing Locknut Socket Set

- For use with 1/2" ratchet or breaker bar.

Contents of set:

**519097-1 – 2-3/8" hex locknut socket** works on 1984–92 Ford Rangers and Bronco IIs with automatic locking hubs. Similar to Ford 205-040 (T70T-4252-B).

**519097-2 – 2-9/16" rounded hex locknut socket** works on 1990–93 Dodge trucks with Dana 60 manual hubs.

**519097-3 – 2-1/2" hex locknut socket** fits the hex nut found on rear axles and various front axle applications on light-duty trucks.

**519097-4 – 2-3/4" rounded hex locknut socket** works on 3/4-ton and 1-ton Ford F-250 and F-350 trucks with automatic locking hubs. Similar to Ford No. 205-349 (T95T-1197-B).

**519097-5 – 2-1/2" rounded hex locknut socket** works on 1995–96 Ford F-150 trucks and full-sized Broncos with automatic locking hubs. Similar to Ford 205-348 (T95T-1197-A).

**519097-6 – 2-3/8" rounded hex locknut socket** works on 1990–newer Ford Rangers, Bronco IIs, and Explorers with automatic locking hubs.

**519097-7 – 55 mm hex locknut socket** designed for use on front wheel adjusting nuts found on Toyota models FJ, LN, and RN.

Similar to Ford 205-039 (T70T-4252-B)

## 1902 Locknut Socket - Ford Drive 3/4" (6 pt.) 2-3/8" Hex

- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1984–92 Ford Ranger and Bronco II with automatic hubs; 1993–1997 Ford Ranger, Bronco II, and Explorer with automatic hubs.
- For manual use only, impact wrench voids warranty.

Similar to Ford 205-043 (T70T-4252-W)

## Fits special "rounded" hex nut found on Dana axles of some Ford trucks. Depth of locknut sockets is 5".

## 1928 Locknut Socket - Ford, Dodge Drive 3/4" (6 pt.) 2-9/16" Hex

- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1990–93 Dodge truck with Dana 60 manual hubs. 3/4" sq. drive.
- For manual use only, impact wrench voids warranty.

## Fits special "rounded" hex nut found on Dana axles of some Ford trucks. Depth of locknut sockets is 5".

## 1936 Locknut Socket - Ford Drive 3/4" (6 pt.) 2-3/8" Hex

- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1990–newer Ford Ranger, Bronco II, and Explorer with automatic hubs.
- For manual use only, impact wrench voids warranty.

## 6006 Locknut Socket - Dodge

- Services 1994–newer Dodge 1/2-ton 4x4 pickups with Dana 44 front axle and Dana 60 axle with vacuum disconnect front axle.
- 1/2" sq. drive.

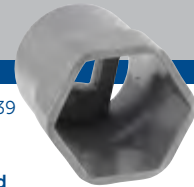
1-11/16" 43 mm

## 6601 Locknut Socket - Ford

- Services 2003–newer Ford F-250, F-350, and F-450 Super Duty trucks with 10-1/2 inch rear axle.
- 1/2" sq. drive.

Similar to Ford 205-448

2-3/4" O.D.



2-1/4"

**7157  
Locknut Socket Ford,  
Dodge, GM**

- Services 1993–newer Ford Ranger Bronco II and Explorer with manual hubs; 1995–96 Ford F-series 1/2-ton truck and full-size Bronco with manual hubs; 1995–newer Ford F-series 3/4-ton and 1-ton trucks with manual hubs; 1959–85 Ford F-series 1/2- and 3/4-ton trucks and full-size Bronco; 1960–90 GM 1/2-ton truck and full-size Blazer/Jimmy; 1969–89 Dodge 1/2-ton truck with manual hubs; 1969–72 International 1/2-ton truck.

• 1/2" sq. drive.  
Similar to Ford 205-192 (T83T-1197-B)

**7158  
Locknut Socket Ford,  
Dodge, GM**

- Services 1985-1/2–95 Ford F-series H.D. 3/4- and 1-ton Dana 50 IFS of Dana 60 front axle; 1982–90 GM H.D. 3/4- and 1-ton trucks, 1994–newer Dodge Dana 60 with Cummins.

• 1/2" sq. drive.  
Similar to Ford 205-D065 (D85T-1197-A)

**7269  
Locknut Socket Ford, GM**

- Services 1985–newer Ford F-series 3/4- and 1-ton trucks with Dana 80 rear axle.

• 1/2" sq. drive.  
Similar to Ford 205-282 (T88T-4252-A) Kent Moore J-42855

**7612  
Locknut Socket  
Toyota**

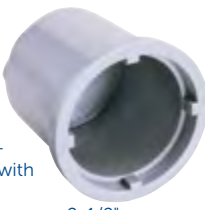
- 54 mm hex socket fits front wheel bearing adjusting nut of Toyota FJ, LN, and RN. Has 1/2" square drive end, permitting use of a torque wrench.

• 1/2" sq. drive.

**7698  
Locknut Socket Isuzu,  
Honda, Jeep**

- Services 1988–1995 Isuzu Trooper, Rodeo, Amigo, and pickup; 1989–1995 Honda Passport; Jeep J20 pickups with Dana 60 axle.

• 1/2" sq. drive.



**7795  
Locknut Socket Ford**

- Services 1995–1996 Ford F-series 1/2-ton trucks and full-size Bronco with automatic hubs.

• 1/2" sq. drive.  
Similar to Ford 205-348 (T95T-1197-A)

**7796  
Locknut Socket Ford**

- Services 1995–1998 Ford F-series 3/4- and 1-ton trucks with automatic hubs.

• 1/2" sq. drive.  
Similar to Ford 205-349 (T95T-1197-B)

**7913  
Locknut Socket  
Suzuki, Geo**

- Used to remove and install locknut on 1997–2000 Suzuki Samurai and Geo Tracker front hubs.

Similar to Kent-Moore J-42119

**7941  
Locknut Socket Toyota**

- Specially designed to fit 4WD lock-out hubs on Toyota's 1995–2002 Tacoma, and 1996–2002 T100 and 4Runner.

• 1/2" sq. drive.  
Similar to Toyota 09318-12010-01.

**7090A  
Locknut Socket Ford, GM**

- Services 1978–84 Ford F-series H.D. 3/4- and 1-ton 4WD trucks; 1973–81 GM 3/4- and 1-ton 4WD trucks.

• 1/2" sq. drive.  
Similar to Ford 205-D001 (D78T-1197-A)

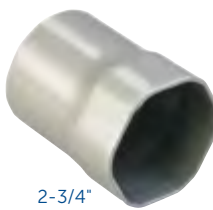
**7270A  
Locknut Socket Ford, Dodge**

- Services 1984–92 Ford Ranger and Bronco II with manual hubs; 1986–95 Ford F-series 1/2-ton truck; full size Bronco with Dana 44 front axle; 1990–93 Dodge trucks with Dana 44 automatic hubs.

• 1/2" sq. drive.  
Similar to Ford 205-244 (T86T-1197-AR)



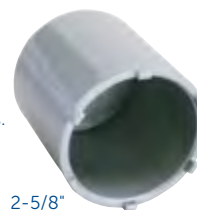
2-1/2"



2-3/4"



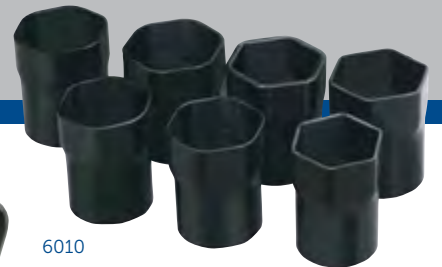
2.366 center to center on pins



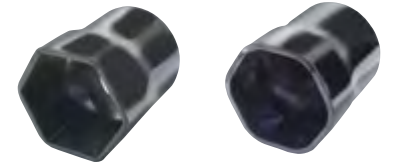
2-5/8"



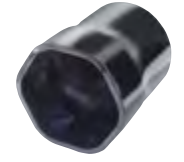
2-3/8"



6010



6612, 6902, 6921



6795, 6796, 6928, 6936

**1/2" Drive Locknut Socket Set**

- These are not light-hearted sockets; they feature a 1/2" square drive, and can be used with an extension and torque wrench for accurate tightening.
- For use on the rounded and standard hex nuts found on the most popular light-duty trucks on the road.
- Unlike the competition, these sockets are backed by the famous OTC Lifetime Marathon Warranty® against defects in materials and workmanship.

**6010 – Locknut socket set.** Includes one each: Nos. 6612, 6795, 6796, 6902, 6921, 6928, 6936. Contents of set:

**6612 – 54 mm hex locknut socket** designed for use on front wheel adjusting nuts found on Toyota FJ, LN, and RN models.

**6902 – 2-3/8" hex locknut socket** works on 1984–92 Ford Rangers and Bronco IIs with automatic locking hubs. (Ford No. T70T-4252-B and 205-040).

**6921 – 2-1/2" hex locknut socket** fits hex nut found on rear axles and various front axle applications on light-duty trucks.

**6795 – 2-1/2" rounded hex locknut socket.** Works on 1995–96 Ford F-150 trucks and full-sized Broncos with automatic locking hubs. (Ford No. T95T-1197-A and 205-348).

**6796 – 2-3/4" rounded hex locknut socket.** Works on 3/4- and 1-ton Ford F-250 and F-350 trucks with automatic locking hubs. (Ford No. T95T-1197-B and 205-349).

**6928 – 2-9/16" rounded hex locknut socket.** Works on 1990–93 Dodge trucks with Dana 60 manual hubs.

**6936 – 2-3/8" rounded hex locknut socket.** Works on 1990–newer Ford Rangers, Bronco IIs, and Explorers with automatic locking hubs.

**7217  
Axle Nut Socket**

- Designed to fit the axle nut on Chevy Topkick/Kodiak, 2003 - Newer.
- Similar to J-44275.

**6694  
Axle Seal Installer**

- Designed to install the axle seal on GM Trucks with 10-1/2" ring gear.
- Similar to J-24428-A.



# DRIVE AXLE SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 7248 C-Frame Press

The C-Frame used in conjunction with OTC Ball Joint Adapters. Can also be used for removing/installing universal joints with needle bearings, pressed in wheel studs, and brake anchor pins on heavy-duty vehicles. Suitable for general pressing operations.



## 7917 Live Center Forcing Screw Plug

This plug replaces the existing forcing screw on the No. 7248 C-frame to allow its use on heavy-duty ball joints. The shorter length gives the C-frame a wider opening to accommodate the larger ball joints on 3/4- and 1-ton trucks.

## 6935 U-Joint Service Adapter

For use with the 7248 C-Frame to service the u-joints found on Dana 60 4WD front drive axles.

Application Examples:

- 1977-1991 Chevrolet and GMC 1 Ton
- 1975-2010 Dodge 3/4 & 1 Ton
- 2000-2002 Ford Excursion
- 1999-2010 F250
- 1985-2010 F350
- 1999-2008 F450
- 1999-2004 F550



## 6541 Pulling Hook

- This slide hammer puller attachment is used to remove seals, bearings, and other press-fit parts.
- Designed to be used with OTC No. 1155 (5 lb.) or No. 1156 (2-1/2 lb.) slide hammer, or other slide hammers having 5/8-18 threads.



## Slide Hammer Rear Axle Puller

This puller will enable you to remove flange-type rear axles from most late model cars and light trucks. It works on axles having bolts and studs up to 9/16" diameter.

- Fits 4-, 5-, or 6-bolt patterns and stud circles from 4-1/4" to 5-9/16".

## 7372 – Rear axle pulling plate.

## 7374 – Rear axle pulling plate with 5-lb. slide hammer assembly.



## 7792 Rear Axle Service Set

The tools you need for flange-type rear axle and bearing removal on most late model passenger cars and light trucks. Set includes the No. 7374 rear axle pulling plate and 5 lb. slide hammer. The axle bearing pullers, used with the slide hammer, make short work of removing semi-floating rear axle bearings.

Consists of:

## 7374 – Rear axle pulling plate with 5 lb. slide hammer.

## 7495A – Rear axle bearing puller.

Fits min. bearing tube I.D. of 1" and max. axle tube I.D. of 1-7/8".

## 7496A – Rear axle bearing puller.

Fits min. bearing tube I.D. of 15/16" and max. axle tube I.D. of 2-3/8".

## 7497A – Rear axle bearing puller.

Fits min. bearing tube I.D. of 1-3/8" and max. axle tube I.D. of 2-7/8".

## 27315 – Puller hook for use with the 5 lb. slide hammer.

Removes oil seals, bearings, etc.



## 6540 Rear Axle Bearing Puller Set

- Set contains slide hammer and popular attachments needed for servicing flange-type, floating rear axle bearings and seals in most late model, rear-wheel drive cars and light trucks; comes in a molded case.
- Rear axle bearing puller fits min. bearing tube I.D. of 1" and max. axle tube I.D. of 1-7/8".
- Rear axle bearing puller, fits min. bearing tube I.D. of 1-5/16" and max. axle tube I.D. of 2-3/8".
- Rear axle bearing puller fits min. tube I.D. of 1-3/8" and max. axle tube I.D. of 2-7/8".
- Slide hammer tee bar, slide hammer 5 lb. weight, pulling hook, rear axle pulling plate, bearing cup remover.

## 6602 Differential Bearing Preload Wrench

- Use to adjust differential bearing free play on Chrysler/Dodge vehicles with 7-1/4", 8-1/4", 8-3/4", and 9-1/4" rear axles.
- Tool fits inside axle tube to access the threaded adjusters.



Similar to Miller C-4164



## 7494A Rear Axle Bearing Service Set

Designed to make the removal of semi-floating rear axle bearings easier. Allows you to capture the bearing firmly, distributing the pulling force over the entire bearing. This reduces damage and increases the amount of applications. Set includes three pullers to service most domestic cars. Use with OTC Nos. 1155 or 1156 slide hammer with 5/8"-18 UNF thread. Pullers also available separately.

## 7495A – Rear axle bearing puller.

Fits minimum bearing tube I.D. of 1" and maximum axle tube I.D. of 1-7/8".

## 7496A – Rear axle bearing puller.

Fits minimum bearing tube I.D. of 1-5/16" and maximum axle tube I.D. of 2-3/8" including 1988-2000 Chevrolet and GMC 8-1/2", 1/2-ton rear axle bearing.

## 7497A – Rear axle bearing puller.

Fits minimum bearing tube I.D. of 1-3/8" and a maximum axle tube I.D. of 2-7/8".



## Differential Bearing Pullers

For removing differential side carrier bearings on a wide variety of passenger cars and light trucks. Use with step plate adapter Nos. 8060, 8061, 8063, and 8064. (Step plate adapters are not included with 1028 or 1031. See page 135.)

## 1028 – Puller with a 3-1/2" maximum reach,

1-1/4" to 4-1/2" spread. Primarily for servicing Ford products.

## 1031 – Puller with a 3-1/4" maximum reach,

6" maximum spread. For servicing most General Motors, American Motors, and Chrysler products.



## 4520

### Differential Side Bearing Pullers

- Use to remove differential side carrier bearing. Works on a wide variety of cars and light-duty trucks.
- Includes four step plate adapters to fit carrier bearings.
- Reach: 1-5/8". Spread: 2-5/8" to 3-3/8". Forcing screw is 3/4"-16 x 6-11/16" lg.
- Set includes:

#### 4520-1 – Forcing Screw / Cross Block Assembly

#### 4520-2 – Puller Jaws / Pins (set of two each)

#### 4520-3 – Puller Jaws Retaining Yoke

#### 4520-4 – Step Plate Adapters (set of four)

15/16" – 1-11/32" diameter, 1-1/8" – 1-1/2" diameter, 1-1/4" – 1-5/8" diameter, 1-1/8" – 1-3/4" diameter

### Specifications

Reach: 1-5/8"

Spread: 2-5/8" on inside holes in crossbar  
3-3/8" on outside holes in crossbar

Forcing screw: 3/4"-16 mm x 6-11/16" lg.

Adapter sizes: 15/16" to 1-3/4" diameter



## 4508

### Professional Style Seal Puller

- Designed to remove oil and grease seals when servicing cars, SUVs, and light trucks without damaging the housing or bearing.
- Hook tips in two sizes and professional handle design allows removal of hard-to-get-at seals by getting under them.
- The tool is 12" long and the hook tip is double-secured (versus competitors' designs), for durability.
- An extra blade is included, and additional replacements (No. 4508-1) may be ordered.

#### 4508-1 – Replacement blade for 4508.



## 7140

### Ford Halfshaft Remover/Differential Rotator

No. 7140 is essential when removing the left-hand halfshaft from Escort/Lynx transaxles. It ensures correct removal and allows the technician to turn the differential.

Similar to Ford D80L-522-A,  
303-D025

## 522

### Large Gear and Pulley Puller

Using this tool, you can easily remove a wide range of gears, pulleys, or other parts that have tapped holes.

- The puller will spread from 2" to 7-3/4". Its block is 8-1/4" wide, and its forcing screw is 3/4"-16 x 11-5/8" long.
- Accommodates any cap screws up to 1/2" diameter.



### Gear and Pulley Pullers

These tools are perfect for removing timing gears, fan pulleys, harmonic balancers, and many other parts having tapped holes.

- Each puller will spread from 1-1/2" to 4-1/4". The puller blocks are 4-7/8" wide.
- Both include two hex head cap screws, 3/8"-16 x 3" long.

#### 7392 – Puller with 13" long screw.

#### 7393 – Puller with 5-1/2" long screw.



### Inner CV Joint Puller

This is the puller needed to remove inner CV joints that are held in with axle shaft retaining rings. The slide hammer feature allows removal of the axle assembly from the transaxle without causing damage to the aluminum transmission case or other components. Damage can result by using other prying methods.

**7507 – CV Joint Fork.** Used with No. 1155 Slide Hammer, No. 7508 Slide Hammer Extension, or both.

**7508 – Optional 17-1/2"-long Slide Hammer Extension.**

**7509 – Inner CV Joint Puller.** Includes No. 1155 Slide Hammer and No. 7507 CV Joint Fork.

Similar to Ford  
204-D020(D93T-3206-A)

## 7502

### 4WD Front Spindle Puller

This puller enables you to remove the front spindle on light-duty 4WD trucks. It's designed for full-size Ford, GM, International, and Jeep pickups with Dana front axles. Also works on Ford Ranger and Bronco II.

- 5/8" fine thread makes it ideal for use with our No. 1155 slide hammer.
- Fits spindle thread sizes 2"-16, 1-5/8"-16 and 38 mm-1.5.

## 4623

### CV Joint Banding Tool and Cutter

- Use to install and tighten the "band-it" or strap style clamps on CV joint boots, or on power steering rack and pinion steering gear boots.
- Once installed into the tool, tighten the band by turning the handle on the tool; use a socket or wrench on the handle to torque the band to OE specifications.
- When the boot clamp has been tightened to specs, cut the band to the correct length by flipping the lever (at the front of the tool) forward.

## 4723

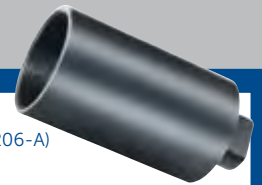
### Ear-type CV Boot Clamp Pliers

- Designed to crimp the ear-type CV boot clamps used on front-wheel drive vehicles.
- May also be used to crimp the type of clamps used on fuel and cooling system hoses.
- Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.

## 4721

### CV Boot Clamp Cutter

- Designed to easily cut the CV boot clamp without damaging the boot.
- Will cut boot clamps up to 10 mm wide and .7 mm thick.
- Handles are spring loaded to the open position to allow easy access to the clamp.





# DRIVE AXLE SERVICE AUTOMOTIVE SPECIALTY TOOLS



- 4722**  
**Heavy-Duty CV Boot Clamp Installer**
- Designed to clamp the ear-type CV boot clamps used on front-wheel drive vehicles.
  - May also be used to crimp the clamps used on fuel and cooling system hoses.
  - Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.



- 4724**  
**CV Boot Clamp Pliers**
- Special tips work on the ear-less type CV boot clamps.
  - Grips clamp in many positions to tighten clamp around boot.



- 4720**  
**Boot Clamp Pliers – Chrysler**
- Required tool for correct installation of strap-and-buckle style CV boot clamps.
  - Works on A.C.I. and G.K.N. boots found on various Chrysler, Plymouth, and Dodge front-wheel drive vehicles.
  - Prevents damage to CV boot and clamp during installation.



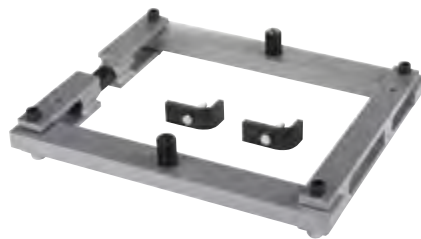
- 7085**  
**Dust Boot Cap Installer**
- Works on all vehicles with band-type boot clamps (up to 1/4" wide & .020" thick). The clamp must be installed correctly after servicing to prevent moisture and foreign material from entering the CV joint area. This tool provides exact installation of those clamps with ease.



- Fluid Evacuation / Brake Bleeding Tools**
- Use to bleed brake systems and remove a variety of fluid from vehicles, such as antifreeze, oil, transmission fluid, gear lube, etc.
  - Quick connect locking hose adapters and ball-style on/off valve on hose prevent fluid leakage.
  - Equipped with a relief valve to prevent over-pressurizing the tank.

- 8100**
- Operates by shop air or a hand pump; shipped complete with a brake bleeding hose, fluid evacuation hose, and two suction hoses (6 mm and 7 mm); 10-liter capacity tank.

- 8101**
- Operates with shop air; shipped with a brake bleeding hose and fluid evacuation hose; 6-liter capacity tank.



- 7071**  
**Differential Housing Spreader**
- Here's a tool that eases the job of removing or installing differential ring-gear assemblies on Dana axle models 30 through 70. It's a heavy-duty device using mechanical screw power to spread the housing. It helps prevent the component damage that often results from the use of homemade devices.



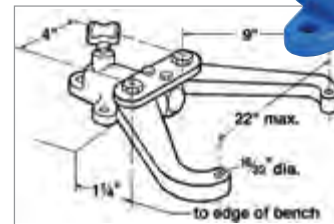
7020 Similar to Ford  
T57L-500-B, 307-003

- 7020**  
**Bench-Mounted Holding Fixture**
- Here's a helpful device that enables you to securely hold and rotate small engines, transmissions, and other components while you're working on them.

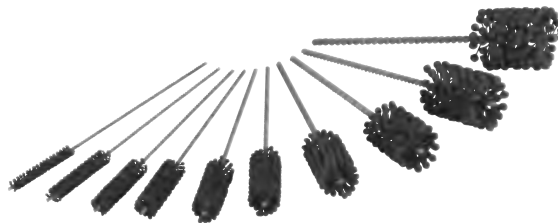
- This holding fixture will handle pieces weighing up to 250 lbs., and it offers 360° of rotation with positive stops at 90° increments.
- Three sides of the mounted unit remain fully exposed.

**34607** - Base assembly only.

34607 Similar to Ford  
D83L-500-B1, 300-D041



- 553516**  
**Differential Mounting Adapter**
- Mounts easily using existing bolt patterns. Fits the most common differentials currently in use on Category 7 and 8 Heavy Duty Trucks. Including: Eaton®, Fuller®, Rockwell®, Meritor, Spicer, International, and Mack. For use on OTC 5019A / 5078 and Stinger 1522A Transmission Jacks.



- 7011**  
**Ball Hone Set, 10 piece**
- Ball Hones can be used for refinishing and resizing bores such as found in brake calipers, engine lifters, and u-joint yokes. Also useful for any bearing or bushing application.
  - All hones are 180 grit Silicone Carbide for excellent cutting and finish.

Tool No.	Size
<b>7011-1</b>	.375" 10 mm
<b>7011-2</b>	.500" 13 mm
<b>7011-3</b>	.625" 16 mm
<b>7011-4</b>	.750" 19 mm
<b>7011-5</b>	.875" 22 mm
<b>7011-6</b>	1.00" 25 mm
<b>7011-8</b>	1.25" 32 mm
<b>7011-10</b>	1.50" 38 mm
<b>7011-12</b>	1.75" 44 mm
<b>7011-14</b>	2.00" 51 mm



# STEERING SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 6295 Front End Service Set

Kit includes five popular tools used for servicing Pitman arms, ball joints, and tie rods on most vehicles.

Set includes:

- 7314A – Pitman arm puller.
- 7315A – Tie rod end remover.
- 7503 – Outer tie rod remover/ball joint separator.
- 6296 – Pitman arm/tie rod end puller.
- 6297 – Ball joint separator.



## 7314A Pitman Arm Puller

This puller will handle nearly any Pitman arm job on passenger cars and light trucks. It features special forged jaws shaped to fit the job, ensuring a positive grip every time. Spread between jaw tips: 1-5/16".

## 7315A Tie Rod End Remover

Redesigned to use on imports and many front wheel drive vehicles, including SUVs with rack and pinion steering. Live center tip on forcing screw swivels to align tool to tie rod stud to ease in removal and prevent damage to stud. Similar to Ford 211-001 (TOOL-3290-D)



## 6496 Pitman Arm Puller

**Cuts Removal Time from 3 1/2 Hours to 40 Minutes**

- Labor intensive removal of steering sector not necessary.
- Compact design allows easy access to the Pitman arm.
- Works on most domestic SUVs and pickups.
- Live center on forcing screw and use of a standard wrench results in less effort required.
- Tool is forged steel for durability and long life.



## 6296 Pitman Arm/Tie Rod End Puller

The versatile design allows this tool to be used as a Pitman arm remover for many small, domestic rear wheel drive vehicles, or as a tie rod end puller for many domestic and import vehicles. The jaws, with a spread of 1", give a positive grip in tight work places.



## 6297 Ball Joint Separator

This tool is used to separate the ball joint from the spindle support arm. It works on many domestic and import front wheel drive vehicles, and is adjustable up to 2" for different size ball joints.



## 7503 Outer Tie Rod Remover/Ball Joint Separator

This tool is a must when you're servicing outer tie rods and ball joints. It works on imported and domestic models, front or rear wheel drive, cast or stamped-steel steering knuckles.

- Handles up to 5 tons of force.
- Jaws spread to 3" and has a 4" reach.
- Jaws, once tightened, won't slip on the knuckle.



## Works on the following four-wheel-drive vehicles

1998 – 2003	Ford Navigator
1997 – 2004	Ford F-150 and Expedition
1991 – 2004	Oldsmobile Bravada
1992 – 2011	Chevy Suburban
1988 – 2005	S-10 / S-15 GMC Trucks & Chevy Blazers
1988 – 2011	GMC & Chevy 1/2, 3/4, & 1 ton pickups
1995 – 2011	Chevy Tahoe and GMC Yukon/Denali

## 6497 Super-Duty Pitman Arm Puller

- Works on 2005 and newer Ford F-250 and F-350 four-wheel-drive Super Duty trucks.
- Allows the Pitman arm to be removed from the steering gear while the steering gear is still in the vehicle.
- Two clamp bolts lock the jaws on the Pitman arm, ensuring a solid grip.
- Maximum jaw spread is 3-1/4".



7311A Similar to Ford No. 211-003(T64P-3590-F)

## Pitman Arm Pullers

These pullers are designed for the toughest Pitman arm jobs. They're adjustable and have rugged forged jaws shaped to fit the job. Two clamp bolts lock the jaws on the Pitman arm, ensuring a solid grip. Puller No. 7310A includes an adapter for added versatility. Both pullers cover a variety of pulling jobs.

## 7310A

Pitman arm puller for medium- and heavy-duty trucks. Max jaw spread: 2-1/4".

## 7311A

Pitman arm puller for cars and light trucks to 3/4 ton. Max jaw spread: 2-1/8".





## 8149

### Pitman Arm Puller

The 8149 conical tool is designed to fit Pitman arms on compact and intermediate cars.

- Conical design gives increased strength, stability, and fits securely on a Pitman arm.
- Spread is 1-1/4" with a reach of 2-1/4".
- 3/4-16 x 4-3/4" forcing screw provides enough power to remove stubborn Pitman arms.

## 8150

### Pitman Arm Puller

The No. 8150 conical tool is designed to fit Pitman arms on domestic cars and light-duty trucks.

- Conical design gives increased strength, stability, and fits securely on a Pitman arm.
- Spread is 1-1/2" with a reach of 2-1/2".
- 3/4-16 x 4-3/4" forcing screw provides enough power to remove stubborn Pitman arms.



## 6272

### Chrysler LH Toe Adjusting Tool Set

This set enables the technician to adjust toe, to obtain a straight steering wheel, and correctly center the tie rod end. Permits easily reaching and breaking loose the tie rod jam nuts, while the entire assembly is held stable. Services 1998–newer Chrysler Concorde, Concorde 300M, New Yorker LHS, Dodge Intrepid, Dodge R/T, and Eagle Vision.



## 7891

### Chrysler LH Toe Adjustment Set

Here's a tool set that will quicken front toe adjustments on Chrysler LH series cars. Consisting of a wrench, socket, and retainer, this set is for the 1993–97 Chrysler Concorde and New Yorker, Dodge Intrepid, and Eagle Vision.

## 6531

### Pitman Arm Separator

Separating Pitman arms on cars and light trucks is quick and easy with this wedge and an appropriate sized hammer.

- 11" long and has a 1-1/8" fork spread.



## 6532

### GM Pitman Arm Remover

Removes Pitman arms on pickups and sport utility vehicles. The wedge end is placed between the Pitman arm and steering gear box, and with just a few hammer blows, it separates them. Works on 1988 and newer Chevrolet and GMC 1/2- and 3/4-ton 4WD pickups, Suburban, Tahoe, and Yukon.

- 11-3/4" long with a 1-5/8" fork spread.

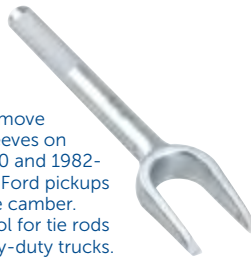


## 6533

### Separator Tool

This handy tool is multipurpose. It will remove camber adjustment sleeves on 1980-86 F-150 & F-250 and 1982-88 Bronco II & Ranger Ford pickups that have an adjustable camber. It's also a separating tool for tie rods on medium- and heavy-duty trucks. And it works as a Pitman arm wedge on light trucks.

- 11-5/8" long with a 1-7/16" fork spread.



## 6534

### Shock Link and Tie Rod Separator

Here's a tool that will convince even the most stubborn shock links and tie rods to part company. Just insert the tapered wedge between the seized parts, and smack the other end with a hammer.

- 16" long with 11/16" fork spread.



## 6535

### Ball Joint Separator

Ball joint service is easier with this tool. It was designed to remove ball joints from spindle support arms, and can be used on a wide variety of vehicles, from compact cars to light-duty trucks.

- 16" long and has a 15/16" fork spread.



## 6299

### Separator Set (5 piece)

- Features five popular "pickle forks" in a blow-molded case.
- Used to remove shock linkage, tie rods, and ball joints. Also for general service on many cars and light trucks.

Includes:

6531 – Size 11" x 1-1/8" Fork Spread.

6532 – Size 11-3/4" x 1-5/8" Fork Spread.

6533 – Size 11-5/8" x 1-7/16" Fork Spread.

6534 – Size 16" x 11/16" Fork Spread.

6535 – Size 16" x 15/16" Fork Spread.



## 4559

### Manual / Pneumatic Pickle Fork Set

- Use to separate ball joints, tie rods, and Pitman arms.
- Set contains two handles: knurled handle allows use of a hammer; smooth handle fits in a pneumatic hammer.
- Three sizes of pickle forks included: 1-1/8", 15/16", and 11/16".

Set contains:

### 4559-1

Fork heads (set of three: 11/16", 15/16", and 1-1/8").

### 4559-2

Handles (set of two: knurled handle for use with a hammer; smooth handle for use with an air hammer).

**SEE PAGE 42 FOR  
GREASE GUNS**



# STEERING SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 6275 Tie Rod/Pitman Arm Adjusting Set

These tools have a unique design that permits 360° rotation of the adjusting sleeve, even where space is limited.

- Accommodates 1/2" drive ratchet or breaker bar.
- Set consists of the following tools in a blow-molded case:

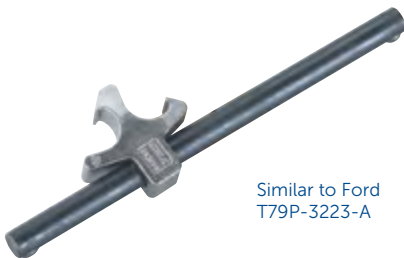
**7095** – For compact cars with 3/4" diameter adjusting sleeves.

**7096** – For full size cars with 7/8" diameter adjusting sleeves.

**7097** – For light trucks with 1-1/8" diameter adjusting sleeves.

**6274** – For Ford 3/4-ton and 1-ton trucks with 1-13/16" diameter adjusting sleeves.

**6084** – Pitman arm adjusting tool for Ford F-250 thru F-450 trucks with 1-7/16" dia. adjusting sleeves.



Similar to Ford  
T79P-3223-A

## 7023 Tie Rod Adjusting Tool

Here's a tool that will fit most models of compact and standard-size cars and light trucks. It has a four-position feature and 360° rotation that lets you locate the tool to grip the sleeve correctly, even when access is limited.



## 6065 Tie Rod Socket for Medium-Duty Trucks

Here's a heavy-duty tool for removing tie rod ends on Chrysler, Ford, and GM 1-ton trucks. It also works on many medium-duty trucks, Class 2 through 6.

- Accommodates a 1/2" drive impact wrench.



7484  
Standard



7500  
Standard



7501  
Heavy-Duty

## Inner Tie Rod Wrenches (Standard & HD)

Universal wrench will fit on all styles and allow the technician to un-screw the tie rod link for replacement.

**7484** – Unique lever design will turn hex rack ends or hex shafts from 1" to 1-5/8" (25-41mm).

**7500** – Unique cam design cover sizes from 1-1/4" to 1-5/8" (33-41mm) hex, 2 flats, round or any style rack ends.

**7501** – Unique cam design cover sizes from 1-1/2" to 1-7/8" (38-48mm) hex, 2 flats, round or any style rack ends.

Similar to Ford  
211-D029(D93L-  
3395-A)



## 7595A Inner Tie Rod Removal Set

Remove and install inner tie rods without removing steering gear. The adapters fit into the tie rod socket, and a 1/2" drive ratchet or breaker bar fits the drive end.

- Services both old and new style inner tie rods.
- For use on most Chrysler, Ford, and GM vehicles.
- The socket is 16" long and is "stepped" to accept 1-3/16" tie rods and 1-5/16" tie rods.
- Adapters fit into socket and work on 1-3/16", 1-5/16", and 1-7/16" tie rods.

**Important:** When removing and installing inner tie rods, hold steering rack shaft to prevent damage to pinion gear.



Similar to  
211-185

## 7771A Ford Power Steering Pump Pulley Installer

Installs power steering pump pulleys on 1992–newer Ford Crown Victoria and Mercury Grand Marquis with 4.6 V8 engine, 1997–newer Ford truck with 4.2 & 4.6 V6, 5.4 V8, and 6.8 V10 engines.

- 8 mm x 1.25" threads fit Ford's C111 pump.



## 7485 Locking Collar Rack Wrench

- Tool wraps over work piece and is locked in place.
- Permits service or adjustment of components without having to remove end.
- For use with diameters of 1" to 1-7/8" (25.4 mm to 47.625 mm)
- Eccentric shape of chuck automatically adjusts to component diameter
- 1/2" Sq.Dr. for maximum power with Ratchets, Extensions, and Breaker Bars.
- Ideal for steering service, wheel alignment, strut cartridge, small dia. exhaust, and general pipe adjustment



## 7676 Alignment Assist Tool

With this tool, you won't need to remove tires to adjust the camber on most GM and some Chrysler FWD vehicles. The tool sits on top of a tire and presses against the strut to prevent the tire from moving, allowing you to do the adjustments. For Chrysler and GM vehicles with slotted strut mounts that don't use eccentric washers on the through slots for camber adjustment. (Applications do not include Buick Park Avenue, Cadillac Fleetwood, Oldsmobile 88 and 98, and Pontiac Bonneville – if they have rear air suspension).

6695  
Similar to Ford 205-429



6697  
Similar to Ford  
205-830

6698  
Similar to Ford 205-831

## Ford Axle Shaft Seal Installers

Correctly installs the seal onto the axle shaft and into the wheel knuckle, preventing front hub vacuum leaks that would cause the 4WD to not engage.

**6695** – Ford Axle Shaft Seal Installer. Works on 1998-2004 Ford F-250, F-350, F-450, and F-550 4X4s having the vacuum-operated front axle.

**6697** – Ford Axle Shaft Seal Installer. Works on 2005–newer Ford F-250, F-350, 4X4s having the vacuum-operated front axle.

**6698** – Ford Axle Shaft Seal Installer. Works on 2005–newer Ford F-450, F-550, 4X4s having the vacuum-operated front axle.



### 7209

#### GM Power Steering Pump Pulley Installer

This tool offers easy, damage-free installation of power steering pump pulleys. It works on 1988–95 GM Quad 4 engines; 1990–94 Chevrolet Lumina APV, Oldsmobile Silhouette, and Pontiac Trans Sport vehicles; 1990–94 3.1L V6 engines; 1994–newer 3100 GM V6; 1999–newer 3400 GM V6. Threads are 3/8–16" to fit pulley shaft threads.



### 7362

#### GM Power Steering Pump Pulley Service Kit

Remove and install the power steering pump pulley easily and without damaging the pump shaft or pulley.

- Includes remover and installer.



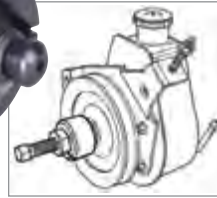
### 4681

#### Power Steering Pump/Alternator Remover/Installer Tool

- Reversible 2-in-1 tool removes and installs press-fit alternator and power steering pump pulleys.
- Also removes and installs other press-fit pulleys with a hub diameter of 1-1/8" (28 mm), 1-1/4" (32 mm), 1-5/16" (34 mm), or 1-3/8" (35 mm).



Similar to Ford 211-016(T69L-10300-B)



### 7185

#### Power Steering Pump/Alternator Pulley Remover

This puller removes pulleys on most Chrysler, Ford, GM, and VW vehicles fitted with Saginaw, Thompson, or Ford's C2 and C111 power steering pumps; GM belt-driven vacuum pumps on cars; and press-on water pump pulleys on GM 4- and 6-cylinder engines. It works on pulleys with hub diameters of 1-1/8", 1-1/4", 1-5/16", and 1-3/8".

- Designed to ensure damage-free removal.



### 4529

#### Power Steering / Alternator Pulley Puller/Installer Set

- Properly replaces pressed-on power steering and alternator pulleys on Ford, Chrysler, and late GM engines.
- Housed in a blow-molded plastic storage case.



### 7830A

#### Power Steering Pump Pulley Kit

This kit has nearly everything you need to remove and install power steering pump pulleys in Chrysler, Ford, and GM vehicles with Saginaw, Thompson, and Ford C111 and C2 power steering pumps. Fits 1-1/8", 1-1/4", 1-5/16" and 1-3/8" pulley hub diameters, including 1988–newer GM cars equipped with Quad 4 engines; 1991–94 GM 3.1L V6; 1991–newer 3800 V6 engines; 1994–newer GM 3100 V6; 1999–newer GM 3400 V6, and 1992–newer Ford Crown Victoria and Mercury Grand Marquis with 4.6 V8 engine, 1997–newer Ford truck with 4.2 & 4.6 V6, 5.4 V8, and 6.8 V10 engines.

- Also includes No. 7931 spacer for work on Chrysler Cirrus, Dodge Stratus, and Plymouth Breeze.



Similar to Ford 211-009(T65P-3A733-C)

### 7005

#### Power Steering Pump Pulley Installer

This is an ideal companion to our No. 7185 pulley remover. It's a real timesaver for installing power steering pump pulleys and GM press-on water pump pulleys.

- Designed to ensure damage-free installation.
- Internal roller bearing allows for easy turning.
- Threads are 3/8"-16 to match pulley shafts.



### 4530

#### Power Steering Pump Pulley Service Set

- A complete set of tools required to remove and install power steering pump pulleys of most domestic vehicles.
- Fits pulley hubs with diameters of 1-1/8", 1-1/4", 1-5/16" and 1-3/8".
- Includes the necessary adapters for servicing: GM 3.1L, 3100, 3400, and 3800 V6 engines, GM 2.3L Quad 4 four-cylinder engines, and Ford 4.6L and 5.4L V8, 6.8 V10 engines.



Similar to Kent Moore J-21854-A

### 7889

#### Steering Pivot Pin Remover

Tilt steering columns are much easier to service when your tool box has one of these pivot pin removers in it. Works on GM, Chrysler, and Ford vehicles with Saginaw tilt steering columns.

### 7122R

#### Ford Lock Pin Remover

Removes tie rod inner socket retaining pin on Ford vehicles with rack and pinion power steering. Replacement tips available separately.

**37907 – Tip for 7122R.**

Similar to Ford 211-D002



# STEERING SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 7984 Master Steering Wheel Service Set

- This master set is used for steering column service on most cars and light trucks, domestic and imports.
- This set includes components for steering wheel, lock plate removal, and pivot pin removal.
- Special 5/16-18 x 4" shoulder bolts allow removal of GM steering wheels without damaging the SIR module. Also use the 5/16-18 x 4" shoulder bolt for earlier models without SIR module.
- This set includes a lock plate compressor with M14 x 1.5 and 9/16-18 forcing screws for steering column shafts on GM S.I.R., as well as older GM, AMC, and Chrysler vehicles with tilt, telescoping, and conventional steering columns. Use on steering columns with or without air bags.
- Includes a screw to contain the telescopic steering column on older GM vehicles.
- The pivot pin remover covers tilt steering pivot pins on 1969 and newer GM, Ford, and Chrysler vehicles with Saginaw steering columns.
- Two hook-shaped puller legs and special forcing screw adapter remove the steering wheels without tapped pulling holes.

This set includes three each of the following hardened bolts:

- Washer Head Bolts (Grade 8) 1/4-28 UNF x 3"
- Hex Head Flange Bolts 3/8-16 UNC x 3.5"
- Hex Head Flange Bolts 5/16-24 UNF x 3.5"
- Hex Head Flange Shoulder Bolts 5/16-18 UNC x 4"
- Hex Head Flange Bolts M8 x 1.25 x 90mm

## 7929A Steering Wheel Puller Leg Set

- Particularly useful during steering wheel removal when there are no tapped holes in the assembly.
- The 7929A is designed for use with either the No. 7245 or No. 7403 OTC steering wheel puller.
- These legs get behind the steering wheel assembly to provide an even, straight pull. The collar is designed for use on Ford and Chrysler vehicles.
- Works on:
  - 1988-1993 Pontiac LeMans
  - 1997-newer GM cars, SUVs, and light trucks
  - 1997-newer Ford SUVs and light trucks
  - 1999-newer Jeep Grand Cherokee
  - 2003-newer Jeep Liberty
  - 2004-newer Dodge Sprinter van



4-1/2" reach



## 7790 Flange-Type Puller Set (Grade 5)

- Versatile puller capable of removing a wide variety of components having tapped pulling holes, including harmonic balancers, gears, crankshaft pulleys, etc.
  - Capable of handling 2- or 3-way bolt pulling applications.
  - Works on many cars, pickups, SUVs, and small engines.
  - Carries the OTC Lifetime Marathon Warranty® against defects in workmanship and material.
- Contents of set:
- Puller flange: adapts to bolt circle dia. of 1-1/2" to 4-5/8".
  - Forcing screw: 5-5/8" lg., 5/8-18 thread.
  - Shaft protector: 1-3/16" dia. x 3/4" thick.
  - Three each of the following flat washers: 1/4"; 5/16"; 3/8".
  - Three each of the following bolt sizes:
 

- 1/4"-28 x 3" lg.	- 3/8"-16 x 2" lg.
- 5/16"-24 x 3" lg.	- 3/8"-16 x 3" lg.
- 5/16"-18 x 3-1/2" lg.	- 3/8"-16 x 4-1/2" lg.
- 5/16"-18 x 6" lg.	- M8 x 1.25 x 45 mm lg.
- 3/8"-24 x 1-1/2" lg.	- M8 x 1.25 x 65 mm lg.
- M8 x 1.25 x 90 mm lg.	
- M10 x 1.5 x 35 mm lg.	



## 7927A Steering Wheel Remover/Lock Plate Compressor Set

With this set, it's easy to remove the steering wheels of most domestic and imported vehicles, with or without tilt steering columns. Also accesses the turn signal switch and SIR modules on current GM vehicles.

- Includes No. 7815 steering wheel lock plate remover, No. 7889 steering pivot pin remover for Saginaw steering columns, No. 7245 steering wheel puller, plus four sets of cap screws (2 of each size: M8-1.25 x 90 mm, 3/8"-16 x 3-1/2", 5/16"-24 x 3-1/2", and 5/16"-18 x 4").
- Contained in convenient plastic blow-molded case.



## 6930 Flange-Type Puller Combination

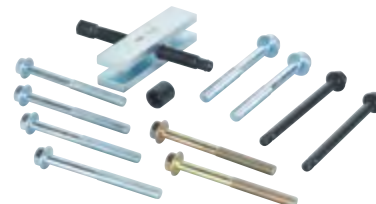
Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4". Three cap screws, 3/8-24 x 3" long, and three cap screws, 3/8-16 x 3" long.



## 7815 Steering Wheel Lock Plate Remover

This is an essential tool for compressing steering wheel lock plates on AMC, Chrysler, and GM vehicles, with or without tilt steering columns. It's also necessary for accessing the turn signal switch and SIR modules on GM vehicles.

- Also works on metric columns.



## 7245 Steering Wheel Puller

This puller removes steering wheels on most domestic and imported vehicles, with or without telescoping steering columns. Five sets of cap screws are included for various thread requirements. The forcing screw features a swivel end to protect steering shaft. Cap screws included (pairs): 3/8-16 x 3-1/2"; 5/16-24 x 3-1/2"; M8-1.25 x 90 mm; 5/16-18 x 4 (SIR). Bar measures 4" x 1" x 1".



## 7403 Steering Wheel, Pulley, and Flywheel Puller

Here's a puller that works in a variety of applications. It pulls steering wheels on most late model cars. It also works as a regular 2/3-way puller to remove pulleys and small engine flywheels. Cap screws included (pairs): 3/8-16 x 3-1/2 in.; 5/16-18 x 3-1/2 in.; 5/16-24 x 3-1/2 in.; M8-1.25 x 90 mm; and 5/16-18 x 4 in. (SIR).

- Works on domestic cars with or without collapsible steering columns.



**6559  
Ball Joint Master Service Kit. The ultimate ball joint service kit!**

- The 6559 Ball Joint Master Service Kit offers complete coverage of Car and Truck/Van/SUV applications. With 70+ adapters, c-frame and application guide means there is nothing else to add for servicing ball joints.
- The majority of vehicles have press-in ball joints, so stop searching for make-shift solutions for servicing these vehicles – everything required is laid out in this one complete kit.
- With a kit of this magnitude, finding the correct adapters and using them correctly is key to minimizing service time. That is exactly what the included ball joint application guide is designed to do – contains application charts and diagrams with step-by-step instructions.



**6529  
Car Ball Joint Master Service Kit.**

- This 50+ adapter kit is the most complete Car ball joint service kit available, and the first of it's kind on the market.
- With 70% of OEM's having cars with press-in ball joints, this kit is designed to service those applications.
- This kit is a subset of the 6559 and includes 50+ adapters, C-Frame, Ball Joint Application Guide, and Location Card all provided in 2 cases.



**6539  
Truck Ball Joint Master Service Kit.**

- This 55+ adapter kit is the most complete Truck/Van/SUV ball joint service kit available.
- With the majority of Truck/Van/SUV applications having press-in ball joints and universal joints, this kit is designed to service those applications. (note: covers same applications as the 8031 Chrysler/Jeep Truck/Van/Suv Ball Joint Kit without requiring larger C-Frame).
- This kit is a subset of the 6559 and includes 55+ adapters, C-Frame, Ball Joint Application Guide, and Location Card all provided in 2 cases.



**6530  
Ball Joint Intermediate Service Kit**

- This 20+ adapter kit covers many Truck/Van/SUV applications and some car applications.
- With the majority of Cars and Truck/Van/SUV applications having press-in ball joints and universal joints, this kit is designed to service many of those applications.
- This kit is a combination of 7249, 7918, and 7996 kits, and includes 20+ adapters, C-Frame, and Application Diagrams all provided in a case.



**8031  
Chrysler/Jeep Truck/Van/SUV Service Kit**

- This 18 adapter kit covers Chrysler/Jeep Truck/Van/SUV 2WD and 4WD applications.
- Includes Large C-Frame for use with the OEM size ball joint adapters.
- Includes 18 adapters, Large C-Frame, application chart and instructions all provided in a case.



**7249  
Ball Joint Starter Service Kit**

- This starter kit is the backbone to ball joint, U-joint, anchor pins, and many other general pressing operations. Kit includes 5 adapters and C-Frame provided in a case.

**7248  
U-Joint Removing/Installing Tool**

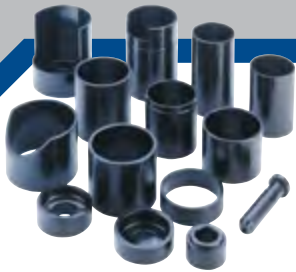
This helpful tool uses a forcing-screw press to safely remove and replace automotive universal joints with needle bearings, including GM plastic pin CV U-joints.

Similar to Ford205-086 (T74P-4635-C)





# SUSPENSION SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 7918 Ball Joint Update Adapter Set

- This adapter set will update a 7249 Ball Joint Starter Service Kit to a 6530 Ball Joint Intermediate Service Kit, less the 7996 Honda Ball Joint Lower Ball Joint Adapter Set. Greatly expands the application coverage.



## 6529-1 BMW Car Ball Joint Adapter Set

- 11 adapters included to remove & install ball joints.
- Works on upper and lower ball joints on: 1992 – 1999 318 series, 1998 – 1999 323 series, 1996 – 1999 328 series, 1996 – 1999 M3.
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.



## 6529-2 Chrysler/Mitsubishi Car Ball Joint Adapter Set

- 20 adapters included to remove and install ball joints.
- Works on upper and lower ball joints on Chrysler, Dodge, Plymouth, and Mitsubishi cars with press in ball joints
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.

## 8033 Chrysler Ball Joint Socket

- Removes and installs the screw-in type ball joints used on mid-size, rear-wheel drive Chrysler cars.
- Similar to Miller Tools No. C-3560.
- Socket is 2" long with a 3/4" drive; fits 1-59/64" ball joints.



## 6529-3 Ford/Mazda Car Ball Joint Adapter Set

- 25 adapters included to remove & install ball joints
- Works on upper and lower ball joints on Ford, Lincoln, Mercury, and Mazda cars with press in ball joints
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.



## 8032A Ford/Mercury Car Ball Joint Adapter Set

- Allows easy removal and installation of the lower ball joint on 1996–2009 Ford Taurus and Mercury Sable vehicles.
- Lower ball joint can now be replaced without having to replace the entire spindle assembly saving up to an hour of labor.
- Adapters are used with OTC No. 7248 C-Frame.



## 6529-4 GM Car Ball Joint Adapter Set

- 18 adapters included to remove & install ball joints.
- Works on upper and lower ball joints on Chevrolet, Buick, Pontiac, Oldsmobile, and Cadillac cars with press in ball joints
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.



## 6529-5 Honda/Acura Car Ball Joint Adapter Set

- 19 adapters included to remove & install ball joints
- Works on upper and lower ball joints on Honda and Acura cars with press in ball joints
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.

## 7996 Honda Car Ball Joint and Adapter Set

- Use with ball joint service set Nos. 6530, 7248, and 7249 to remove and install lower ball joints on Honda 1986–97 Accord, 1988–00 Civic, 1993–99 del Sol, 1988–91 CRX, and 1983–99 Prelude.



## 6734 Honda/Acura Car Ball Joint Adapter Set

- Use this three-piece tool kit, along with OTC C-frame No. 7248, to remove and install lower ball joints on the following Honda and Acura vehicles:

- Honda Accord Sedan '03-'08
- Honda Accord Coupe '03-'08
- Acura TSX '04-'08



## 6529-6 Import Car Ball Joint Adapter Set

- 15 adapters included to remove & install ball joints.
- Works on upper and lower ball joints on Toyota, Hyundai, Kia, Infinity, Saab, and Nissan cars with press in ball joints
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.



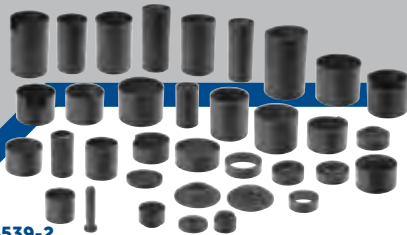
## 6529-10 Car Ball Joint Master Set Upgrade for 6539

- 14 additional adapters required to complete a 6529 Car Ball Joint Master Set when added to the 6539 Truck Ball Joint Adapter Set.



## 6539-1 Import Truck Ball Joint Adapter Set

- 35 adapters included to remove & install ball joints.
- Works on upper and lower ball joints on Toyota, Honda, Acura, Hyundai, KIA, Infinity, Isuzu, and Nissan Trucks, Vans, and SUV's with press in ball joints.
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.



**6539-2  
Chrysler/Mitsubishi Truck Ball Joint Adapter Set**

- 35 adapters included to remove & install ball joints.
- Works on upper and lower ball joints on Chrysler, Dodge, Jeep, Plymouth, and Mitsubishi Trucks, Vans, and SUV's with press in ball joints.
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.

**8034  
Chrysler Ball Joint Socket**

- Removes and installs the screw-in type ball joints used on Chrysler / Dodge light trucks and vans.
- Similar to Miller Tools No. C-3561.
- Socket is 2" long with a 3/4" drive; fits 2-9/64" ball joints.



**7894  
Dodge/Jeep Truck, SUV Ball Joint Adapter Set**

Use with ball joint service set Nos. 6530, 7248, and 7249 to remove or install aftermarket and original equipment upper and lower ball joints, and the offset ball joints used to change caster/camber. Works on '84-'89 "downsized" Jeep Wagoneer, Cherokee and Comanche; '87-'08 Wrangler; '93-'04 Grand Cherokee; '94-'99 Dodge Ram 4WD 1/2-ton pickup.



**6735  
Sprinter Van Ball Joint Kit**

- Eight piece kit contains the tools needed to service lower ball joints on '04-'09 Dodge and '04-'12 Freightliner® Sprinter vans: tie rod remover / separator; wheel alignment studs; ball joint remover; driver, receiver, & installing rings.
- Use this kit with OTC No. 6736 C-frame.

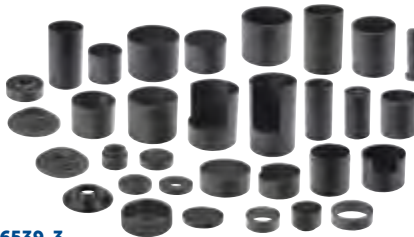


**6736  
Large C-Frame**

- Required for use with No. 6735 Sprinter Van Ball Joint Kit.
- When used with OTC No. 6730 Update Kit, you can expand the applications of OTC Nos. 7249, 7918, 6529, 6539 and 6530 Ball Joint Kits.

**6730  
C-Frame Update Kit**

Kit contains two adapters which, when coupled with the large C-frame 6736 included in OTC No. 8031 SUV Ball Joint Kit, make it possible to use any adapter designed for use with the smaller OTC No. 7248 C-frame.



**6539-3  
Ford/Mazda Truck Ball Joint Adapter Set**

- 32 adapters included to remove and install ball joints.
- Works on upper and lower ball joints on Ford, Lincoln, Mercury, and Mazda Trucks, Vans, and SUV's with press in ball joints.
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.

**6731  
Ford Truck Ball Joint Adapter Update Kit**

Three-piece kit contains specialty ball joint adapters for use with the industry standard OTC No. 7248 C-frame. Designed to work with the following Ford vehicles: F-150 '97-'03, F-250 '97-'99, Expedition '97-'02, Explorer '95-'05, Ranger '98-'08.



**7825  
Ford Van Ball Joint Adapter**

This tool enables you to quickly remove the lower ball joint on '92 to '08, 3/4- and 1-ton vans (E-250 and E-350) when used with ball joint service set Nos. 6530, 7248, and 7249.



**7919  
Ford 2WD Van Ball Joint Adapter Set**

This set is designed to remove/install press-fit upper and lower ball joints. Fits most Ford '92 to '04 2WD 3/4- and 1-ton vans.



**6733  
Honda/Toyota Truck/Van/SUV Ball Joint Adapter Set**

Two-piece kit contains specialty ball joint adapters for use with the industry standard OTC No. 7248 C-frame. Designed to work with the following Honda and Toyota vehicles:

- Honda CR-V '97-'06, Honda Odyssey '95-'06
- Toyota 4 Runner '96-'02, Toyota Sequoia '01-'08
- Toyota Tacoma '95-'04



**6539-4  
GM Truck Ball Joint Adapter Set**

- 28 adapters included to remove & install ball joints.
- Works on upper and lower ball joints on Buick, Cadillac, Oldsmobile, Pontiac, Chevrolet, GMC, and Hummer Trucks, Vans, and SUV's with press in ball joints.
- Vehicle application chart and diagrams included. Does not include the 7248 C-Frame press.

**6732  
GM Truck/SUV Ball Joint Adapter Set**

Four-piece kit designed to be used with the industry standard OTC No. 7248 C-frame. Contains specialty ball joint adapters to fit the following GM vehicles:

TrailBlazer & Envoy '02-'08, 1500 Silverado '99-'06, Suburban & Tahoe '95-'06, Avalanche '02-'08, Escalade '99-'07 Express & Savana '03-'08, Hummer H2 '03-'07.



**7920  
GM 4WD Truck/SUV GM Ball Joint Adapter Set**

Use with ball joint service set Nos. 6530, 7248, and 7249 to service GM's 1996 to 1999 4WD 1/2- and 3/4-ton pickups, and Suburban, Yukon, and Tahoe SUVs. Easily remove or install either aftermarket or original equipment press-fit lower ball joints.



**6539-10  
Truck Ball Joint Master Set Upgrade for 6529**

18 additional adapters required to complete a 6539 Truck Ball Joint Master Set when added to the 6529 Car Ball Joint Adapter Set.

# SUSPENSION SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 7704 Domestic 4WD Truck Ball Joint Adapter Set

This kit is used with ball joint service set Nos. 6530, 7248, and 7249 to remove and install upper and lower ball joints on '67 to '92 1/2- and 3/4-ton 4WD vehicles fitted with Dana 44 front axles (found on Ford, Dodge, GM, International, and Jeep vehicles).



## 7080 Domestic 4WD Truck Ball Joint Spanner Wrench

Designed for removal and installation of ball joint adjusting sleeves on 1/2-, 3/4-, and 1-ton Dana 44 open yoke front axles found on Chrysler, Ford, GM, International, and Jeep 4WD vehicles.

- Permits easy torquing with 1" socket for correct upper ball-joint preload.



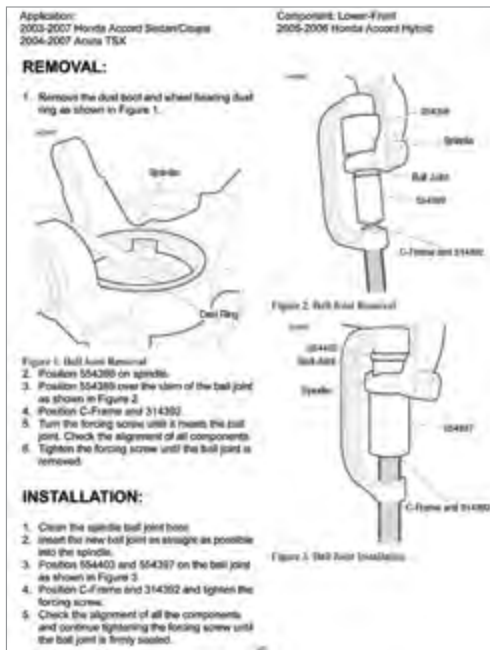
## 6529MAN-08 – Ball Joint Application Guide

Reference all ball joint adapter applications. Can be used with all ball joint kits and adapter sets.



## 6529MAN-08

- New application guide to cover Car and Truck/Van/SUV makes and models thru 2008.
- References Bolt In/Press Fit, Removal/Install adapter p/n's, and replace control arm applications.
- Includes Remove/Install diagrams with adapter p/n's to eliminate guess work.
- Quick Reference Chart to quickly determine if tools are required and which kit contains them.



Sample of Application Diagram

## 6535 Ball Joint Separator

Ball joint service is easier with this tool. It was designed to remove ball joints from spindle support arms, and can be used on a wide variety of vehicles, from compact cars to light-duty trucks.

- 16" long and has a 15/16" fork spread.



## 6297 Ball Joint Separator

This tool is used to separate the ball joint from the spindle support arm. It works on many domestic and import front wheel drive vehicles, and is adjustable up to 2" for different size ball joints.



## 7068 Upper Control Arm Bushing Service Set

Now you can easily replace press-in type upper control arm bushings on most rear wheel drive Chrysler, Ford, and GM vehicles. Mechanical screw power does the work. Set includes C-frame, screw assembly, and all adapters needed for quick removal or installation of bushings without removing or damaging the control arm.

Make	Model	Year	Truck/Car	Upper or Lower	Front or Rear	Bolt In or Press Fit	OTC Adapter P/N's (Removal)	OTC Adapter P/N's (Install)	Comments
Acura	2.3CL	1997	Car	Lower	Front	Press fit	314427, 314426	314428, 554397 or 38355A	Ball joint is spindle instead of control arm
	2.3CL	1997	Car	Lower	Front	Bolt in	Adjustable (±1 degree camber/caster)	314392	
	2.3CL	1998-1999	Car	Lower	Front	Press fit	314427, 314426	314428, 554397 or 38355A	Ball joint is spindle instead of control arm
	2.3CL	1998-1999	Car	Lower	Front	Bolt in	Adjustable (±1 degree camber/caster)	314392	
	2.3TL	1998-1999	Car	Lower	Front	Press fit	554379, 554399, 314392	554414, 554397, 314392	
	2.3TL	1998-1999	Car	Lower	Front	Bolt in	Adjustable (±1 degree camber/caster)	314392	
	3.0CL	1997-1999	Car	Lower	Front	Press fit	314427, 314426	314428, 554397 or 38355A	Ball joint is spindle instead of control arm
	3.0CL	1997-1999	Car	Lower	Front	Bolt in	Adjustable (±1 degree camber/caster)	314392	
	3.2CL	2001-2003	Car	Upper	Front	Press fit	29505 & 305227, 554420, 314392	38355A, 554414, 314392	
	3.2CL	2001-2003	Car	Lower	Front	Press fit	314427, 314426	314428, 554397 or 38355A	Ball joint is spindle instead of control arm
	3.2CL	2001-2003	Car	Lower	Front	Bolt in	Adjustable (±1 degree camber/caster)	314392	
	3.2TL	1999-2003	Car	Upper	Front	Press fit	29505 & 305227, 554420, 314392	38355A, 554414, 314392	
	3.2TL	1999-2003	Car	Lower	Front	Press fit	314427, 314426	314428, 554397 or 38355A	Ball joint is spindle instead of control arm
	3.2TL	1999-2003	Car	Lower	Front	Bolt in	Adjustable (±1 degree camber/caster)	314392	
	3.2TL	1999-2000	Car	Lower	Front	Bolt in	Adjustable (±1 degree camber/caster)	314392	
	3.2TL	2000-2005	Car	Lower	Front	Press fit	554379, 554399, 314392	Top of C-Frame is 314428, 38355A, 314392	
	3.5HL	1999-2000	Car	Lower	Front	Press fit	554399, 554550, 314392	554397, 554414, 314392	

Sample of Application Chart



**8328  
GM Truck Bushing Adapter Set**

- Works on 2000–2009 Chevy and GMC 1/2-ton and 3/4-ton trucks, 2- and 4-wheel drive.
- Adapter set is designed for quick and easy removal of the OE control arm bushing and installation of the offset camber bushing.
- Saves shop time by being able to install the offset camber bushing while aligning the front end.
- Saves replacement cost of the control arm assembly.
- Use with OTC No. 7248 C-Frame.



Similar to Kent Moore J-42393

**7822A  
GM Torsion Bar Unloading Tool**

This rugged tool is built for GM's K-3500 series trucks with heavy-duty chassis and a larger torsion bar. It features a larger C-frame opening to accommodate beefier torsion bars. The tool holds the torsion bar while you make adjustments. It also works on 1988 to 2012 GMC and Chevrolet 1/2-, 3/4-, and 1-ton pickups; the S-10 Blazer and S-15 Jimmy, 4WD pickups with 4.3L V-6 engines; and 1991 to 2001 Oldsmobile Bravada.



**7832  
GM Torsion Bar Unloader**

- Required to safely release the tension on the front suspension torsion bar to service the front suspension.
- Larger design to cover the newer GM truck applications.
- Application: 2011 & newer HD C/K trucks.

Similar to Ford 204-185 (T95T-5310-AR)



**7816  
Ford Torsion Bar Adjustment Tool**

Before servicing a torsion bar on 1995–2001 Ford Explorer and 1998–2001 Mercury Mountaineer vehicles, you must first contain the bar to avoid possible damage. This tool securely accomplishes that task, allowing you to make adjustments.



**Upper Arm Alignment Wrenches**

These specialized 1/2" drive wrenches provide easy access to the upper control arm bolts for front wheel alignment jobs.

**7414 – 13/16" hex wrench** for use on 1985 to '97 Ford Aerostar vans.

**7534 – 22 mm hex wrench** for use on 1990–2005 2WD Chevrolet Astro and GMC Safari, and 1991–2005 AWD Chevrolet Astro and GMC Safari vans.

**7536 – 3/4" hex wrench** for use on 1973 to '87 Chevrolet 2WD pickups, and Canadian-built 1985 to '90 current GM Astro and Safari vans.

**7537 – 18 mm hex wrench** for use on U.S.-built 1985 to '90 GM Astro vans.

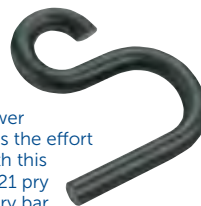


**7917  
Live Center Forcing Screw Plug**

This plug replaces the existing forcing screw on the No. 7248 C-frame to allow its use on heavy-duty ball joints. The shorter length gives the C-frame a wider opening to accommodate the larger ball joints on 3/4- and 1-ton trucks.

**6007  
Lower Control Arm Prying Tool**

Installing a ball joint on a lower control arm typically requires the effort of two people. However, with this tool and our No. 7420 or 7421 pry bar – or any 7/8" diameter pry bar – it's a one-person job.



**7826  
Ford Truck Torsion Bar Tool**

This tool firmly holds the torsion bar on Ford light-duty trucks while you adjust or service the front suspension. Without it, a torsion bar could unwind and possibly cause damage. The tool fits 1997–2003 Ford F-150 4WD pickups, 1995–2001 Ford Explorer 4WD, 1998–2001 Mercury Mountaineer, and 1998–2001 Ford Ranger.



**7539  
GM F-Body Camber Adjusting Tool**

This unique tool works like an extra hand to hold the strut while you're making camber adjustments. For use on 1982 to '92 Camaro and Firebird.



Similar to Kent Moore J-38658

**7840  
GM Caster/Camber Adjusting Tool**

This tool is designed to make caster/camber adjustments quick and easy. Simply place it into the holes in the cross-member and lower control arm, then turn the tool's turnbuckle nut to hold the correct adjustment. This allows you to tighten the adjusting bolts. For use on 1993 to 2000 Chevrolet Camaro and Pontiac Firebird. Also works on 1986–92 Buick Riviera, Cadillac Seville, Oldsmobile Toronado, and 1986–91 Buick Regal.



**7829  
Ford Caster/Camber Adjusting Wrench**

This wrench is specially bent to fit on the caster/camber adjusting cam on 1995 to 2001 Ford Explorer 4WD SUVs, and 1997 2WD and 4WD F-150 pickups. You can use it on the nut to loosen the adjusting cam, and on the bolt to set the caster/camber.

- Has a 21 mm, 12-point design.
- Accommodates a 1/2" drive ratchet or breaker bar.



Similar to Ford 204-D019(D93T-3000-A)

**7588A  
Ford 4WD Caster/Camber Sleeve Puller**

Rusted or seized bushings are no match for this puller. It easily pulls most aftermarket and OEM bushings on Ford 4WD vehicles. It's the only tool that works on any angle OEM bushing, removing it quickly and without damage. For 1980 to '96 Ford Broncos, full-size E- and F-series vans and pickups; 1983 to '89 Ranger and Bronco II. The puller comes with adapters to pull most aftermarket bushings having removable retaining rings.

**221476 – Arnwood-style bushing adapter.**

# SUSPENSION SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 6939 Broken Bolt Extractor Tool

- Remove frozen, broken or cut off bolts within steering or suspension bushings.
- Can also be used to remove and install wheel studs and other general pressing needs.



## 6939-1 – Broken Bolt Extractor Adapter Set

Available for use with the 7248 C-Frame.



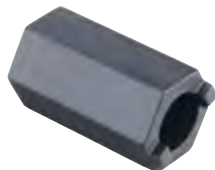
## 5057 – Broken Bolt/Clevis Pin Extractor Tool

Used for smaller application.



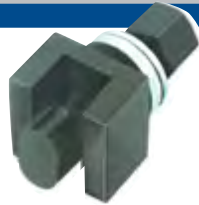
## 7544 Strut Rod Nut Socket (24 mm)

This specially designed socket is needed to loosen and tighten the top strut nut when servicing the strut spring or strut cartridge. The socket is used with a 1/2" ratchet or breaker bar to turn the strut nut while holding the strut rod with the appropriate wrench. The socket fits 24 mm strut rod nuts found on many domestic FWD vehicles including 1988–96 Pontiac Grand Prix, 1988–98 Oldsmobile Cutlass Supreme, 1988–99 Chevrolet Lumina sedan, 1995–99 Chevrolet Monte Carlo, and 1988–96 Buick Regal.



## 7707 VW and Audi Strut Nut Socket

This 1-3/4" long socket is built for VW and Audi FWD cars in which the top shock-retaining nut is recessed inside the strut tower. The tool's center bore allows you to hold the strut shaft from turning, using a 7/8" (22 mm) hex key and appropriately sized wrench.



## 7491C GM Upper Control Arm Knock-Out Tool

Here's the tool you need to remove the inserts on the upper control arm alignment brackets of light-duty GM trucks. It features an indexed forcing bolt that pulls straight and evenly, and works with off-center knock-outs. The tool fits 1989–2001 Chevrolet and GMC 1/2-, 3/4-, and 1-ton trucks, two- or four-wheel drive. Also works on 1990–2001 all-wheel drive Chevrolet Astro vans and GMC Safari vans. 1997–2002 1/2-, 3/4-, and 1-ton full size vans.



## 6578 Hub Clamp Expander Kit

- For servicing struts, ball joints, or steering knuckles with pinch bolt mounts.
- Remove most stubborn struts and ball joints with ease.
- This separator mounts in the pinch bolt holes and drives the anvil into the pinch slot, expanding the mount for easy component removal.
- Use on aluminum or cast iron pinch mounts; includes 2 dowel sizes.

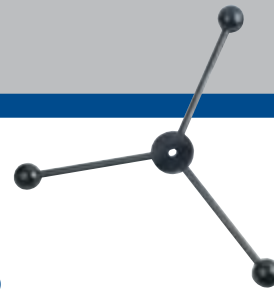


## 4533 GM W-Body Strut Tool Kit

- Includes one T50 TORX® bit, a universal drive handle, and a double-ended socket.
- Use one end of the socket to remove/install the jounce bumper; the other end to remove/install the strut cap nut.

Works on GM W-body vehicles:

- 1988–96 Pontiac Grand Prix
- 1988–98 Olds Cutlass Supreme & Chevrolet Lumina Sedan
- 1995–99 Chevrolet Monte Carlo
- 1988–96 Buick Regal



## 518450 3-Knob Handle for StrutTamer Elite

- Large, easy-to-grasp knobs provide ease of spring compression when using the StrutTamer™ Elite strut spring compressor.
- Included with the 6580, 6585 and 6591. Available separately for owners of previous model No. 6070.



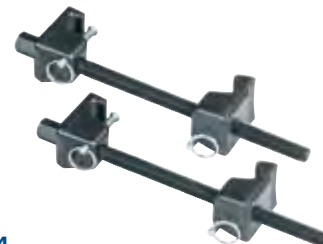
## 6587 2:1 Reduction Gearbox

- Allows a 2:1 torque compression increase when compressing struts. Fits on StrutTamer™ Extreme or StrutTamer™ HD.



## 7045B Front Coil Spring Compressor

This compressor fits most late-model rear wheel drive domestic vehicles in which the coil springs are between the upper and lower control arms. The tool features four case-hardened, self-aligning plates to ensure correct load distribution under tension. Includes two 3-3/8" ID plates and two 4" ID plates. Will not work on Mercedes-Benz vehicles.

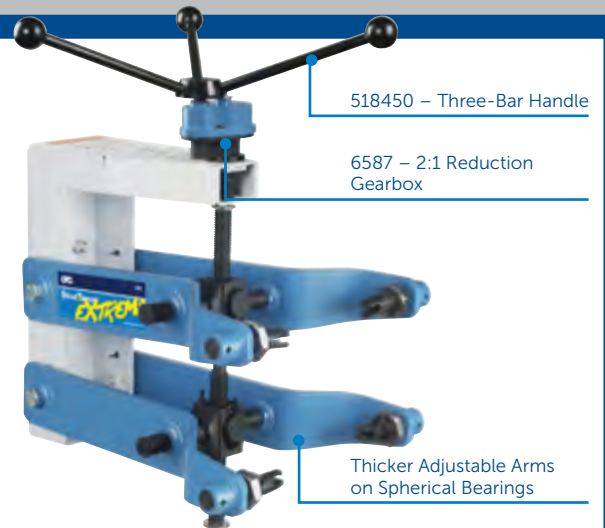


## 7294 MacPherson Strut Spring Hook Compressor

These devices quickly and easily compress most sizes of MacPherson strut springs. Setup is fast and simple. Compression is achieved by alternating from one assembly to another. Each device has a heat-treated alloy thrust screw (5/8"–11 x 12") with forged hooks.

## SIMPLY THE MOST EFFECTIVE COMPRESSOR FOR VIRTUALLY ANY STRAIGHT, CONICAL, OR OFFSET SPRING.

- Extreme duty design to handle the heavier springs found on mid- and some full-size truck strut assemblies.
- Frame includes cross bracing at arm mount locations - standard. This eliminates frame flex when compressing heavier springs.
- 2:1 reduction gearbox - standard. Allows for a 2:1 torque compression increase when compressing struts.
- Lock rings to hold arms in position - standard. This eliminates arms from spreading or sliding when compressing offset or unique strut configurations.
- Four-point locking jaws securely hold the spring in place.
- Open-ended design means you can take the strut in and out, quickly and easily.
- The arms adjust in and out, up and down, to accept many sizes of springs. (2-1/2" to 10" diameter) (2-1/2" to 24" vertical stroke)
- Extra long 3-bar handle gives user the leverage needed to compress heavier strut springs.
- No need to change shoes for different size springs.
- Easy to transport when mounted on optional stand (No. 6592 - StrutTamer Extreme with stand; No. 6582 - stand only)



### Strut Spring Coverage

2-1/2" to 10" spring diameters  
2-1/2" to 24" vertical stroke range

### Four-Point Locking Jaws

**6591 - StrutTamer Extreme strut spring compressor.** Includes 6591-1 upper arm clamps and 6587 2:1 reduction gearbox.

**6592 - StrutTamer Extreme strut spring compressor.** Includes 6591-1 upper arm clamps, 6587 2:1 reduction gearbox and 6582 mobile stand.

Accessories:

**6591-1 - Upper Arm Clamps.**  
(Set of 2) For use on springs that require additional compression.

**6582 - StrutTamer stand.**  
**6587 - 2:1 Reduction Gearbox.**



**6592**  
StrutTamer Extreme with stand Height 54" (1372 mm) (36" without handle) Width 22-1/2" (572 mm) Depth 32" (813 mm)

**6591**  
StrutTamer Extreme Height 29" (736 mm) Width 21" (533 mm) Depth 20" (508 mm)

**6582**  
StrutTamer Stand Height 44" (1118 mm) Width 22-1/2" (572 mm) Depth 32" (813 mm)

**6591-1 - Upper Arm Clamps**



Note: 6591, 6592 can all be shipped UPS.

### 6494 Clamshell Strut Spring Compressor

Servicing MacPherson struts is convenient and affordable with this compressor. It fits a wide range of struts and requires no special adapter shoes.

- Locking pins hold the compressor jaws in place.
- Tool compresses springs of 4 in. to 9 in. O.D., with diameters of 7/16" to 11/16".
- Built to use with an impact wrench.

Note: Not to be used on conventional coil springs.



### 6583 StrutTamerTM Compressor Bridge Accessory

- Used to compress strut springs if technician prefers to press on the top plate of the strut rather than attaching the locking jaws to the top coils of the spring.
- Attaches to the locking jaws and is manually adjusted to bridge the strut top plate to be compressed. Lower part of spring is still held in the two lower locking jaws.



# HUB GRAPPLER™



## CUT SERVICE TIME DRAMATICALLY

**Complete solution for servicing wheel hubs and bearings on the vehicle without removing the steering components or knuckle, eliminating unnecessary alignments or the use of a shop press.**

### 6575 Hub Grappler™ Kit

- Jaws designed and sized to properly fit hub applications and is quickly located on the puller bar without the use of fasteners.
- 3/4" custom drive screw coupled with the special equalizer washer provides smooth operation while proprietary heat treating extends its life 5-10 longer than similar designs.
- Six adapters increase application coverage. Includes tie rod/ball joint tool and two Ford axle installers.
- Included Application Guide is the most comprehensive on the market.



### 6575H Hydraulic Hub Grappler™ Kit

- An economical way to increase the performance and speed of wheel bearing and hub service.
- Kit includes a through hole 9-ton ram, OTC 2510A air/hydraulic pump, 6 ft. hose with couplers, drive screw and nut.
- Jaws designed and sized to properly fit hub applications and is quickly located on the puller bar without the use of fasteners.
- 3/4" custom drive screw coupled with the special equalizer washer provides smooth operation while proprietary heat treating extends its life 5-10 longer than similar designs.
- Six adapters increase application coverage. Includes tie rod/ball joint tool and two Ford axle installers.
- Included Application Guide is the most comprehensive on the market.



### 6575-1 Hub Grappler™ Puller

- The new Hub Grappler Puller is specifically designed to apply maximum force with minimal effort from an impact gun to also minimize service time.
- The new jaws are designed and sized to properly fit hub applications and can be quickly located on the puller bar without the use of fasteners.
- The new 3/4" custom drive screw coupled with the special equalizer washer provides smooth operation while the proprietary heat treating extends its life 5-10 times longer than similar designs.



### 6575-2 Hub Tamer™ to Grappler Update Kit

- This kit includes everything to update the previous Hub Tamer Kit to the New Hub Grappler kit.
- Includes the Hub Grappler Puller, 6 new adapters, misc. hardware and the new Hub Grappler Application Guide.

**6575-2C** – Same as above, also includes Hub Grappler case 6575-4.



### 6575-3 Hub Grappler™ Hydraulic Kit

- The Hub Grappler Hydraulic Option is an economical way to increase the performance and speed of wheel bearing and hub service.
- Kit includes a through hole 9-ton ram, OTC 2510A air/hydraulic pump, 6 ft. hose with couplers, drive screw and nut.



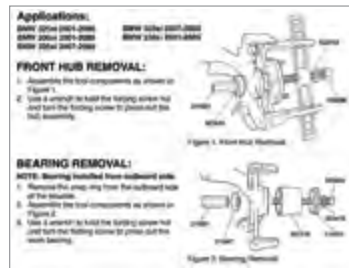
### 6575-4 Hub Grappler™ Case

- Fits the Hub Grappler puller and adapters.



## 6575MAN-09 Hub Grappler™ Application Guide

- The Hub Grappler Application Guide is the most comprehensive hub and bearing service guide on the market. Developed to be the first tool used in the kit, it provides quick reference to the other tools in the kit required to do the job, eliminating guesswork and saving time.
- Comprehensive application guide includes diagrams and instructions showing how and where every adapter is used from 1996–2009.
- Application Chart references front/rear, hub/bearing removal and installation adapter part numbers based on vehicle make, model, and year.
- Application Diagrams show puller and adapters properly mounted on steering knuckle with p/n callouts, eliminating trial-and-error.



Samples of Application Diagram and Chart.

## 6290A Front Hub Puller for 4WD Vehicles

- For removal of the front hub assembly, necessary for wheel bearing or brake rotor service. Provides the mechanical advantage and straight pull not possible with a slide hammer.
- Will not work on trucks with dual rear wheels.

### Services:

- 1988–2014 GM 1/2-ton, 3/4-ton, and 1-ton trucks, Tahoe, Suburban, and Yukon.
- 1994–2014 Dodge 3/4-ton and 1-ton Ram trucks.
- 1998–2014 Ford 3/4-ton and 1-ton trucks, Excursion.

## 7901 Front Hub Puller for 4WD Vehicles

This puller is required for removing a front hub assembly in 3/4- and 1-ton 4WD pickups with 8-bolt hubs. It works on 1994 to 2014 Dodge Ram and 1988 to 2014 Ford and GM.

- Fits bolt hole pattern 8 x 6.5".
- Will not work on trucks with dual rear wheels.
- Use with our No. 7703 10-lb. slide hammer for maximum pulling force.



## 6574 Universal Hub Puller HD with Plate

- Universal Hub Puller HD – the “Final Answer” to frozen hubs, axle shafts, and other tough pulling applications.
- Adjustable sliding puller legs can be positioned anywhere on the puller center hub for a true universal fit on wheel hubs with 5"–8"+ bolt circles.
- Pulling plate allows for quick attachment and an even pull on the popular 5 bolt hubs with 4"–5" bolt circles.
- Forged puller assembly coupled with a 1" drive screw capable of 20 tons of force.
- Drive screw approved for use with an impact gun and can be struck with a hammer.
- Additional puller legs may be added to the center hub for special applications.



## 6618 OTC Universal Bearing Race Puller

- Rugged puller built for many races, sleeves and bearings between 40mm and 60mm.
- Jaws designed with sharp edges for secure grip – even where vertical clearance is negligible.
- Jaws have radius for better attachment to round parts.
- Firm grip based on the adjustable clamping chain.
- Puller design avoids tilting.



## 6576S Dodge Hub Service Set

- Removes stubborn hubs, using 2 methods.
- First, the 6576 Hub Pressing Tool is used to press off the hub with the aid of the power steering. The tool locates spacers between the U-joint yoke and axle housing. Unique design makes this a one person operation to remove the hub with the bearing in tact.
- In the event the Hub Pressing Tool does not budge the hub, the 6577 Hub & Bearing Housing Puller is used. This may separate the bearing, but the unique dual pattern design fits both the wheel hub and bearing housing, capable of applying 20 tons of force.

**6576 – Hub Pressing Tool**, Fits Dodge 3/4 & 1 Ton 4WD 1994-Present applications.

**6577 – Hub & Bearing Housing Puller**, Fits Dodge 3/4 & 1 Ton 4WD 1994-Present applications. Also fits GM and Ford 4WD Truck hubs.



## 7394 Universal Hub Puller

With its adjustable sliding arms, this puller makes wheel-hub removal quick, easy, and damage free. It has maximum bolt circle of 7-1/2".

- The No. 32937 puller leg is available separately to complete the five necessary for Cadillac and Jeep hub removal.
- Includes striking wrench and puller screw.

### 32937 – Puller leg

## 6574-1 Puller Plate

- Optional Puller plate with screws for 7394.



## 6298 Front Hub Installer and Puller Set

Here are three tools that make front hub service easier. The universal puller removes front hubs from most FWD cars without damaging wheel bearings. The installer is used to pull the axle shaft into the front hub on Ford vehicles.

- Spare locknut works with a standard slide hammer puller and the 7208A for rear axle flanges.
- 6298 includes the No. 7208A, 7135A, and 7924A in a molded plastic case.

Available separately:

**7208A – Hub remover** to push the axle shaft from the front hub.

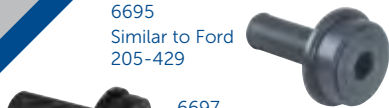
**7135A – Installer** is used to pull the axle shaft into the front hubs on Ford Taurus/Sable vehicles. Fits axle shafts with 20 mm x 1.5 thread.

**7924A – Installer** is used to pull the axle shaft into the front hub. Fits axle shafts with 22 mm x 1.5 thread on Ford Contour/Mystique, Probe, and Focus.



# HUB SERVICE AUTOMOTIVE SPECIALTY TOOLS

6695  
Similar to Ford  
205-429



6697  
Similar to Ford  
205-830



6698  
Similar to Ford  
205-831



## Ford Axle Shaft Seal Installers

Correctly installs the seal onto the axle shaft and into the wheel knuckle, preventing front hub vacuum leaks that would cause the 4WD to not engage.

**6695 – Ford Axle Shaft Seal Installer.** Works on 1998-2004 Ford F-250, F-350, F-450, and F-550 4X4s having the vacuum-operated front axle.

**6697 – Ford Axle Shaft Seal Installer.** Works on 2005–newer Ford F-250, F-350, 4X4s having the vacuum-operated front axle.

**6698 – Ford Axle Shaft Seal Installer.** Works on 2005–newer Ford F-450, F-550, 4X4s having the vacuum-operated front axle.

## 8342 Hub Resurfacing Kit

- Fits your power drill to quickly sand rust off studs and mounting surfaces where it is important to have a clean and debris free surface.
- The tool features a 1/4" dia. shank and a stud clearance pilot hole that accepts up to 1/2" studs.
- Sanding pads attach with Half turn thread.
- Includes holder and five sanding discs.
- Run at speeds between 5,000 - 20,000 rpm or less for best results.



## 552948 – 10 pack of replacement sanding pads

## 6541 Pulling Hook

- This slide hammer puller attachment is used to remove seals, bearings, and other press-fit parts.
- Designed to be used with OTC No. 1155 (5 lb.) or No. 1156 (2-1/2 lb.) slide hammer, or other slide hammers having 5/8-18 threads.



## 27315 Pulling Hook

- This slide hammer puller attachment is used oil seals and bearing in situations where conventional methods won't work.
- Designed to be used with OTC No. 1155 (5 lb.) or No. 1156 (2-1/2 lb.) slide hammer, or other slide hammers having 5/8-18 threads.



## 6578 Hub Clamp Expander Kit

- For servicing struts, ball joints, or steering knuckles with pinch bolt mounts.
- Remove most stubborn struts and ball joints with ease.
- This separator mounts in the pinch bolt holes and drives the anvil into the pinch slot, expanding the mount for easy component removal.
- Use on aluminum or cast iron pinch mounts; includes 2 dowel sizes.

## 1181 Multipurpose Puller Set

This assortment of puller tools gives you a wide range of job versatility. You get a 5 lb. slide hammer puller, hub puller, two sizes of OTC Grip-O-Matic® jaw-type pullers, a bearing pulling attachment, plus a cross-bar gear and pulley puller, all contained in a handy plastic storage case.

### Set No. 1181 consists of:

No.	Description
1177	Slide hammer puller with a 5 lb. hammer, 2-way and 3-way heads. Reversible: either two or three jaws may be used to handle both "inside" and "outside" pulling jobs.
7208A	Front hub puller for servicing front-wheel-drive cars. Includes a spare locknut, which permits use with a No. 1177 slide hammer for rear axle flanges.
1023	2-ton combination 2- or 3-jaw Grip-O-Matic puller. Has 3-3/8" max. reach, 4-3/4" max. spread.
1027	5-ton combination 2- or 3-jaw Grip-O-Matic puller. Has 5-1/2" max. reach, 7" max. spread.
7393	Bar-type gear and pulley puller with a 5-1/2" long screw. Includes two hex head cap screws, 3/8"-16 x 3" long. Spread range: 1-1/2" to 4-1/4".
1122	Bearing pulling attachment for use with No. 1027 and No. 7393 pullers. Has 2" max spread, 1/8" min. spread.

## 4579 9-Way Slide Hammer Puller Set

- Pulls flange-type rear axles and most front-wheel drive hubs.
- Internal and external jaws provide a variety of combinations to pull bearings, gears and seals.
- Two- and three-way cross blocks and cone provide the perfect jaw configuration for most jobs.
- Set also includes a grip wrench adapter and a demountable puller attachment for sheet metal or other unique pulling requirements.
- Designed for use with other OTC 5/8"-18 thread slide hammer attachments.
- Packaged in blow-molded case.

Similar to Ford  
202-405



Similar to Ford  
205-404

## 7932 Ford Vacuum Front Hub Release Tool Set

Here's the equipment you need to safely remove the plastic vacuum hubs on Ford pickups. Standard tools won't work for the job, but this set has special clips that slip into slots on the hub to release it.

- For use on 1998 to 2000 4WD Ranger with vacuum front hubs.



(7393)



5 lb. Hammer in Polished Chrome Finish.





**7948**

**Ten-way slide hammer puller set**

- 2-3/8" Jaw (3 each)
- 3-3/4" Jaw (3 each)
- 6-1/2" Jaw (3 each)
- 3-Way Puller Head
- Adjusting Cone
- Hex Jam Nut, 5/16-24
- Hex Head Cap Screw, 5/16-24 x 11/8"
- 5 Lb. Hammer
- Shank and Tee Bar Assembly
- Cross Block
- Forcing Screw, 7/16-20 x 6.5"
- Puller Head
- Hex Jam Nut, 5/8-18
- Forcing Screw, 5/8-18 x 5"
- Sleeve
- Grip Wrench Adapter
- Dent Puller
- Retainer
- Self-Tapping Screw, 1/4" x 2"
- Puller Adapter
- Seal Hook
- Plastic carry/storage case



**Bearing Cup Remover**

Ideal for servicing hubs on today's popular front-wheel-drive small cars. The cone holds the jaws in place during pulling. Perfect for pulling internal bearing cups, seals, bushings, etc. Jaw spread: 15/16" to 3-1/4", reach to 3-1/2". Use with any slide hammer having a 5/8"-18 thread (OTC No. 1155 or No. 1156 or the No. 927 Push-Puller).

**6542 - Bearing Cup Remover**

**7136 - Bearing Cup Remover.** Similar to Ford 308-047.



**Slide Hammer Rear Axle Puller**

This puller will enable you to remove flange-type rear axles from most late model cars and light trucks. It works on axles having bolts and studs up to 9/16" diameter.

- Fits 4-, 5-, or 6-bolt patterns and stud circles from 4-1/4" to 5-9/16".

**7372 - Rear axle pulling plate**

**7374 - Rear axle pulling plate with 5-lb. slide hammer assembly.**



**4507**

**Bearing Race and Seal Driver Set (10 piece)**

- This aluminum constructed set permits installation of tapered bearing races and seals without damage to the component or housing.
- Tapered side of driver is used to install races. Invert the driver to the flat side to install seals.
- Set is housed in a blow-molded plastic storage case.
- Includes driver handle with bolt, plus these tool sizes: 1.565", 1.750", 1.965", 2.325", 2.470", 2.555", 2.830", 2.995", and 3.180".



**4542**

**7-Piece Wheel Bearing Locknut Socket Set**

For use with 1/2" ratchet or breaker bar. Set contains:

**519097-1 - 2-3/8" hex locknut socket** works on 1984-92 Ford Rangers and Bronco IIs with automatic locking hubs. Similar to Ford 205-040 (T70T-4252-B).

**519097-2 - 2-9/16" rounded hex locknut socket** works on 1990-93 Dodge trucks with Dana 60 manual hubs.

**519097-3 - 2-1/2" hex locknut socket** fits the hex nut found on rear axles and various front axle applications on light-duty trucks.

**519097-4 - 2-3/4" rounded hex locknut socket** works on 3/4-ton and 1-ton Ford F-250 and F-350 trucks with automatic locking hubs. Similar to Ford No. 205-349(T95T-1197-B).

**519097-5 - 2-1/2" rounded hex locknut socket** works on 1995-96 Ford F-150 trucks and full-sized Broncos with automatic locking hubs. Similar to Ford 205-348(T95T-1197-A).

**519097-6 - 2-3/8" rounded hex locknut socket** works on 1990-newer Ford Rangers, Bronco IIs, and Explorers with automatic locking hubs.

**519097-7 - 55 mm hex locknut socket** designed for use on front wheel adjusting nuts found on Toyota models FJ, LN, and RN.



**4508**

**Professional Style Seal Puller**

- Designed to remove oil and grease seals when servicing cars, SUVs, and light trucks without damaging the housing or bearing.
- Hook tips in two sizes and professional handle design allows removal of hard-to-get-at seals by getting under them.
- The tool is 12" long and the hook tip is double-secured (versus competitors' designs), for durability.
- An extra blade is included, and additional replacements (No. 4508-1) may be ordered.

**4508-1 - Replacement blade for 4508**

Similar to Ford 205-039 (T70T-4252-B)



**1902**

**Locknut Socket - Ford**

Drive 3/4" (6 pt.) 2-3/8" Hex

- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1984-92 Ford Ranger and Bronco II with automatic hubs; 1993-1997 Ford Ranger, Bronco II, and Explorer with automatic hubs.
- For manual use only, impact wrench voids warranty.

Similar to Ford 205-043 (T70T-4252-W)

Fits special "rounded" hex nut found on Dana axles of some Ford trucks. Depth of locknut sockets is 5".



**1928**

**Locknut Socket - Ford, Dodge**

Drive 3/4" (6 pt.) 2-9/16" Hex

- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1990-93 Dodge truck with Dana 60 manual hubs. 3/4" sq. drive.
- For manual use only, impact wrench voids warranty.

Fits special "rounded" hex nut found on Dana axles of some Ford trucks. Depth of locknut sockets is 5".



**1936**

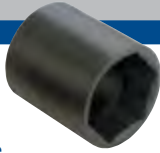
**Locknut Socket - Ford**

Drive 3/4" (6 pt.) 2-3/8" Hex

- This high-grade truck wheel bearing locknut sockets are made of high-strength steel and resist rounding out.
- Services 1990-newer Ford Ranger, Bronco II, and Explorer with automatic hubs.
- For manual use only, impact wrench voids warranty.

# HUB SERVICE AUTOMOTIVE SPECIALTY TOOLS

1-11/16" x 43 mm



## 6006 Locknut Socket - Dodge

- Services 1994–newer Dodge 1/2-ton 4x4 pickups with Dana 44 front axle and Dana 60 axle with vacuum disconnect front axle.

## 6601 Locknut Socket - Ford

- Services 2003–newer Ford F-250, F-350, and F-450 Super Duty trucks with 10-1/2 inch rear axle.
  - 1/2" sq. drive.
- Similar to Ford 205-448



2-3/4" O.D.



6010

6612, 6902, 6921, 6795, 6796, 6928, 6936

## 1/2" Drive Locknut Socket Set

- These are not light-hearted sockets; they feature a 1/2" square drive, and can be used with an extension and torque wrench for accurate tightening.
- For use on the rounded and standard hex nuts found on the most popular light-duty trucks on the road.
- Unlike the competition, these sockets are backed by the famous OTC Lifetime Marathon Warranty® against defects in materials and workmanship.

**6010 – Locknut socket set** Includes one each: Nos. 6612, 6795, 6796, 6902, 6921, 6928, 6936. Set includes one each of the following:

**6612 – 54 mm hex locknut socket** designed for use on front wheel adjusting nuts found on Toyota FJ, LN, and RN models.

**6902 – 2-3/8" hex locknut socket** works on 1984–92 Ford Rangers and Bronco IIs with automatic locking hubs. (Ford No. T70T-4252-B and 205-040).

**6921 – 2-1/2" hex locknut socket** fits hex nut found on rear axles and various front axle applications on light-duty trucks.

**6795 – 2-1/2" rounded hex locknut socket.** Works on 1995–96 Ford F-150 trucks and full-sized Broncos with automatic locking hubs. (Ford No. T95T-1197-A and 205-348).

**6796 – 2-3/4" rounded hex locknut socket.** Works on 3/4- and 1-ton Ford F-250 and F-350 trucks with automatic locking hubs. (Ford No. T95T-1197-B and 205-349).

**6928 – 2-9/16" rounded hex locknut socket.** Works on 1990–93 Dodge trucks with Dana 60 manual hubs.

**6936 – 2-3/8" rounded hex locknut socket.** Works on 1990–newer Ford Rangers, Bronco IIs, and Explorers with automatic locking hubs.

## 7157 Locknut Socket Ford, Dodge, GM

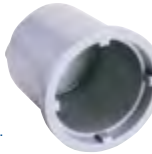
- Services 1993–newer Ford Ranger Bronco II and Explorer with manual hubs; 1995–96 Ford F-series 1/2-ton truck and full-size Bronco with manual hubs; 1995–newer Ford F-series 3/4-ton and 1-ton trucks with manual hubs; 1959–85 Ford F-series 1/2- and 3/4-ton trucks and full-size Bronco; 1960–90 GM 1/2-ton truck and full-size Blazer/Jimmy; 1969–89 Dodge 1/2-ton truck with manual hubs; 1969–72 International 1/2-ton truck.
  - 1/2" sq. drive.
- Similar to Ford 205-192 (T83T-1197-B)



2-1/4"

## 7158 Locknut Socket Ford, Dodge, GM

- Services 1985-1/2–95 Ford F-series H.D. 3/4- and 1-ton Dana 50 IFS of Dana 60 front axle; 1982–90 GM H.D. 3/4- and 1-ton trucks, 1994–newer Dodge Dana 60 with Cummins.
  - 1/2" sq. drive.
- Similar to Ford 205-D065 (D85T-1197-A)



2-1/2"

## 7269 Locknut Socket Ford, GM

- Services 1985–newer Ford F-series 3/4- and 1-ton trucks with Dana 80 rear axle.
  - 1/2" sq. drive.
- Similar to Ford 205-282 (T88T-4252-A) Kent Moore J-42855



2-3/4"

## 7612 Locknut Socket Toyota

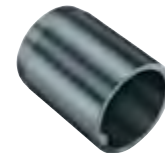
- 54 mm hex socket fits front wheel bearing adjusting nut of Toyota FJ, LN, and RN. Has 1/2" square drive end, permitting use of a torque wrench.
- 1/2" sq. drive.



2-1/8" x 54 mm

## 7698 Locknut Socket Suzuki, Honda, Jeep

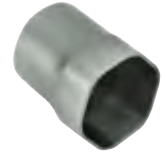
- Services 1988–1995 Isuzu Trooper, Rodeo, Amigo, and pickup; 1989–1995 Honda Passport; Jeep J20 pickups with Dana 60 axle.
- 1/2" sq. drive.



2-1/4"

## 7795 Locknut Socket Ford

- Services 1995–1996 Ford F-series 1/2-ton trucks and full-size Bronco with automatic hubs.
  - 1/2" sq. drive.
- Similar to Ford 205-348 (T95T-1197-A)



2-1/2"

## 7796 Locknut Socket Ford

- Services 1995–1998 Ford F-series 3/4- and 1-ton trucks with automatic hubs.
  - 1/2" sq. drive.
- Similar to Ford 205-349 (T95T-1197-B)



2-3/4"

## 7913 Locknut Socket Suzuki, Geo

- Used to remove and install locknut on 1997–2000 Suzuki Samurai and Geo Tracker front hubs.
- Similar to Kent-Moore J-42119



## 7941 Locknut Socket Toyota

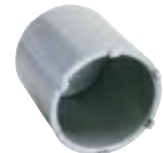
- Specially designed to fit 4WD lock-out hubs on Toyota's 1995–2002 Tacoma, and 1996–2002 T100 and 4Runner.
  - 1/2" sq. drive.
- Similar to Toyota 09318-12010-01.



2.366 center to center on pins

## 7090A Locknut Socket Ford, GM

- Services 1978–84 Ford F-series H.D. 3/4- and 1-ton 4WD trucks; 1973–81 GM 3/4- and 1-ton 4WD trucks.
  - 1/2" sq. drive.
- Similar to Ford 205-D001 (D78T-1197-A)



2-5/8"

## 7270A Locknut Socket Ford, Dodge

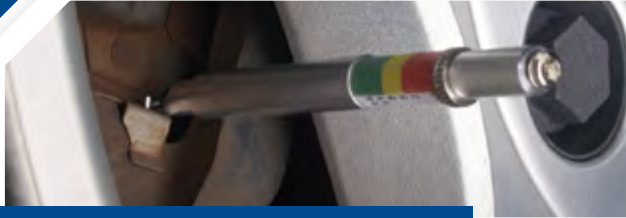
- Services 1984–92 Ford Ranger and Bronco II with manual hubs; 1986–95 Ford F-series 1/2-ton truck; full size Bronco with Dana 44 front axle; 1990–93 Dodge trucks with Dana 44 automatic hubs.
  - 1/2" sq. drive.
- Similar to Ford 205-244 (T86T-1197-AR)



2-3/8"



# BRAKE SERVICE AUTOMOTIVE SPECIALTY TOOLS



**SPEED UP YOUR INSPECTION PROCESS.**

## 6596 Brake Pad Gauge

- The 6596 Brake Pad Gauge allows for a definitive measurement of brake pads to determine remaining life.
- Unique design allows for measurement on the vehicle without the removal of any components in most cases (wheel assembly or brake caliper).
- Quick reference of brake pad condition via color code scale.

Barrel Measurement	Quick Reference Color	Brake Pad Condition
8 mm or more	Green	No replacement necessary
3 mm to 8 mm	Yellow	Suggest replacement soon
0 mm to 3 mm	Red	Recommend replacement



## 3890 Brake Fluid Safety Meter

Water can enter a brake system through microscopic holes anywhere in the system. Once inside, it can cause corrosion in system components...it can vaporize under the high heat conditions of hard braking situations...it can cause dangerous degradation of your customer's ability to stop safely! The No. 3890 can diagnose a brake system in under a minute. It actually boils a small sample of brake fluid in the reservoir to test for water contamination.

- Powered by the vehicle battery; won't operate if connected to the wrong polarity.
- On-screen prompts lead you quickly through testing.
- You'll find the minimum boiling (vaporizing) point along with minimum recommended levels for various types of brake fluid.
- Works on DOT 3, DOT 4, and DOT 5.1 fluids.
- No consumable test strips; buy this tool and test every vehicle that comes into your shop.

### Specifications:

Accuracy at 212°–356°F...1% typical, 3% max.  
Accuracy above 356°F...3% typical, 5% max.  
Testing Time...15–60 seconds  
Operating Temp Range...32°–122°F

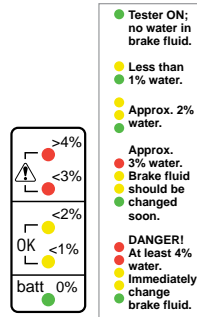
**CHECK CONDITION OF BRAKE FLUID IN  
LESS THAN A MINUTE**



Boiling point is  
298°F

DOT 3 4 5.1  
MIN 284 311 356

Temp 600°F  
Fluid OK



## Brake Fluid Tester

- Tester determines quality of brake fluid.
- One battery included: 1.5V AAA.

1. Remove cap from brake fluid reservoir.
  2. Remove probe cap from brake fluid tester.
  3. Press power button on top of tester. Green LED lights up.
  4. Dip entire length of metal probes into brake fluid.
  5. After one second, match color of LEDs with color chart to determine brake fluid quality.
- Tester automatically powers off after twelve seconds of inactivity.



**4598-DOT3** – Tester calibrated with DOT 3 fluid.

**4598-DOT4** – Tester calibrated with DOT 4 fluid.

## 7488A

### Brake Pressure Test Kit

- Complete set of fittings and gauges for pressure testing ABS and conventional brake systems on Chrysler, Ford, GM, Jeep, and import vehicles.

Kit contains:

Two 0–3,000 psi gauges, 16 adapter fittings, two Bosch ABS adapters, one Teves/Delco Powermaster III adapter, one Ford (Teves) adapter, one 90° elbow fitting, one 45° elbow fitting, bleeder, organizer case and instructions.

**7486** – Gauge Assembly, 0–3000 PSI (1 only).



## 3490

### Multi-Application Digital Pressure and Temperature Analyzer

Combining the functions of vacuum, oil pressure, hydraulic system pressure, fuel pressure, transmission pressure, compression, and air conditioning—all in one!

Deluxe digital pressure/temperature analyzer with four pressure input receptacles and protective boot. Set includes (500 psi) transducer, 12' cable, 8-1/2" hose, bead-type temperature probe, assorted fittings, plastic storage case, instruction manual.

Accessory:

**3491-01** – 500 psi transducer.

**3491-02** – 5,000 psi transducer. (not included in 3490) Required for ABS and power steering pressure readings.

**3491-11** – 6' cable

**3491-12** – 12' cable

**3491-13** – 20' cable





**6980**  
**Brake Drum and Rotor Puller**

- Handles large components such as brake drums, rotors, drive wheels, gears, flywheels, and pulleys.
- One person can easily set the tool in place and use for tough pulls even where there is little access to insert the jaws.
- Spread to 12-3/4" and 5" of reach.
- 7-tons of force, yet weighs less than 10 pounds.
- Can be used with air tools to reduce time and fatigue.



**4589**  
**Disc Brake Piston Tool**

- This "cube" tool rotates pistons back into brake calipers when replacing brake pads on vehicles with rear wheel disc brakes.
- Tool has 3/8" square drive, provides six drive pin configurations to fit most cars and light trucks. This updated version fits more applications than many competitors' tools.



**7317A**  
**Disc Park Brake Caliper Tool Kit**

Includes caliper piston adapter from 1-1/2" to 2-1/2" to service most Audi, Chrysler, Ford, GM, Honda, Jaguar, Mazda, Mitsubishi, Nissan, Saturn, Subaru, Toyota, VW, Volvo, Saab vehicles with 4 wheel disc brakes.



**6093**  
**Disc Brake Pad Spreader**

- Can be used on or off the vehicle during brake pad replacement to push the piston back into the caliper. Thick pushing plate (3/16") and wide, threaded collars are designed for heavy-duty applications.
- Works on single and dual piston calipers.
- Slotted plate design provides universal fit on dual piston caliper applications.



**7034**  
**Disc Brake Pad Spreader**

- For use on all standard and four-piston caliper disc brakes.
- Retracts piston and holds pads snugly in place for easy assembly of caliper over rotor.
- An extremely rugged tool that's easy to use.

**4743**  
**Motorcycle Brake Caliper Spreader**

- Compresses the brake pistons on most style calipers for easy pad replacement.
- Fits all front and some rear disc brakes.
- Range: .25" (5 mm) to 2.25" (58 mm). Works on all automotive applications in this range.



**6703**  
**Line Fluid Stopper Kit**

- Stop messy fluid leaks and prevent contamination during service.
- Kit seals all types of rubber and steel line found on fuel, brakes, AC, power steering and transmission system.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

- 6703-1** – Banjo Line Fluid Stoppers, 2 pk.
- 6703-2** – Steel Line Fluid Stoppers, 2 pk.
- 6703-3** – Line Plug Fluid Stoppers, 6 pk.

**4799**  
**Brake Piston Removal Locking Pliers**

This specially designed locking pliers allows the removal of brake caliper pistons during service or rebuild. The pliers is simply clamped into the I.D. of the caliper piston allowing it to be pulled out of the caliper. Range; 5/8" to 2-1/4" diameter pistons.



# BRAKE SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 6514 Mini Tubing Cutter

- Works on tubing sizes 1/8" to 5/8" O.D. (3mm to 16mm).
- Easily cuts copper, brass, aluminum, and steel brake lines in hard-to-reach places.
- Extra cutting wheel stored in knob.



## 6512 Heavy-Duty Tubing Cutter

- Works on tubing sizes 1/8" to 1-1/8" O.D. (3mm to 29mm).
- Easily cuts copper, brass, aluminum, and steel brake lines.
- Reamer folds onto cutter body for storage.
- Extra cutting wheel stored under reamer.



## 42040 Single Blade Deburring Tool

This handy tool removes internal burrs in copper tubing. It features a high-speed steel, blade, aluminum handle, and pocket clip. Tubing size is unlimited.



## 13162 Deburring Tool

Quickly deburrs aluminum, copper, and steel tubing, and can work on any size tubing. It's made with a high-speed, steel blade and a durable aluminum handle. Three spare blades store in the handle.



## 4503 Double Flaring Tool Kit

- Designed for double or single flare in copper, aluminum, soft steel brake line, and brass tubing (to 45 degrees).
- Includes five adapters 3/16" through 1/2" (4.8 mm through 12.7 mm).
- Chrome swivel, made of alloy steel, reduces friction. Forged yoke made of heat-treated steel. Housed in a blow-molded storage case.



## 4504 Bubble (I.S.O.) Flaring Tool Kit

- Designed for crack-free bubble flares on soft steel tubing used in automotive brake systems.
- Includes four dies: 4.75, 6, 8, and 10 mm adapters.
- Forged steel yoke, flaring bar, and all the adapters needed for ISO bubble flaring.
- The most economical "Bubble" flare tool to date. Housed in a blow-molded storage case.



## 6503 Double Flaring Tool Set with Cutter

- Designed for steel brake lines where double flaring is required.
- Also performs 45° single flares on 3/16", 1/4", 3/8", 7/16", 1/2", and 5/8" copper, aluminum, brass, and magnesium tubing.
- Includes the No. 6514 tubing cutter and adapters for double flaring 3/16", 1/4", 5/16", 3/8", and 1/2" tubing.
- Housed in a plastic blow-molded case.



## 6504 Bubble (I.S.O.) Flaring Tool Set with Cutter

- Designed for metric, steel brake lines where an ISO or bubble flare is required.
- Includes the No. 6514 tubing cutter and adapters for 4.75 mm, 6 mm, 8 mm, and 10 mm tubing.
- Housed in a plastic blow-molded case.



## 6506 Metric Double Flaring Tool Set with Cutter

- Designed for metric, steel brake lines where double flaring is required.
- Also performs 45° single flares on 4 mm, 4.75 mm, 6 mm, 8 mm, 10 mm, 12 mm, and 14 mm copper, aluminum, brass, and magnesium tubing.
- Includes the No. 6514 tubing cutter and adapters for double flaring 4 mm, 4.75 mm, 6 mm, 8 mm, and 10 mm tubing.
- Housed in a plastic blow-molded case.



## 6502 Master Brake Flaring Tool Kit

Covers Single, Double, and Bubble type flares:

- Single Flare Standard Lines 3/16" – 1/2".
- Single Flare Metric Lines 4mm – 14mm.
- Double Flare Standard Lines 3/16" – 1/2".
- Double Flare Metric Lines 4mm – 10mm.
- Bubble Flare Standard Lines 3/16" – 1/2".
- Bubble Flare Metric Lines 4.75mm – 10mm.
- Kit contains flaring bar, arbor press, adapters, tube cutter, deburring tool, all in a hard case.



**6516  
Brake Tool Set (8 piece)**

- Set contains the most popular brake tools for servicing drum brakes on many import and domestic vehicles.
- Includes three different brake spoons to adjust most brake drums, five different brake spring tools that will service most drum brakes.



**4590  
Brake Spring Pliers and Claw**

- Effectively removes and replaces shoe return springs of drum brakes on domestic cars and trucks. Thin, narrow point provides straight, in-line pull on spring.
- Robust handle provides powerful leverage. Double-ended design. Plated steel resists corrosion.



**4591  
Brake Spring Compressor Tool**

- Provides leverage to remove and install stubborn hold down springs of drum brakes on cars and light trucks.
- Special beveled cup end and notched design grips the retaining washers (11/16" to 7/8") used to hold the springs in place. Comfortable handle and knurled base for solid gripping.

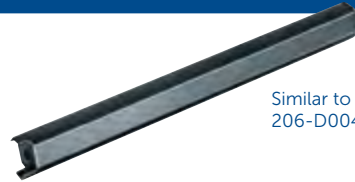


Similar to Ford 206-008

**7456  
Ford Brake Spring Tool**

The hold-down springs on rear brake drums can now be easily removed or installed with the help of this tool – without causing damage or injuries.

- For use on 1967 to 2004 3/4- and 1-ton pickups and vans.



Similar to Ford 206-D004

**7299  
Ford Caliper Pin Remover**

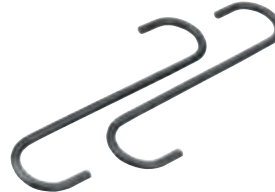
This is the damage-free way to remove brake caliper pins on 1986 to '88 Aerostar, Bronco, and E- and F-series pickups; 1983 to '88 Ranger; and 1984 to '88 Bronco II.



**7499  
Ford Disc Brake Caliper Pin Remover**

Forget those makeshift methods of disc brake caliper pin removal. With one of these tools, you can handle jobs on a variety of light-duty Ford models.

- For use on 1989 to 1996 Aerostar, Bronco, Ranger, E- and F-series pickups; 1989 to '91 Bronco II; and 1991 to 1995 Explorer.



**7661  
Caliper Hanger Set**

These hangers are designed to hold brake calipers out of your way during brake, bearing, suspension, or axle work. In doing so, they make the jobs easier and faster, and reduce possible brake hose damage.



7302-2

**7302  
Brake Caliper Pin/Bolt Remover Set**

- Allows for removal of inboard facing pins or bolts to be removed from the outboard side of the brake caliper or vehicle component.
- For caliper pin removal, simply back the pin bolt out half way and place the tool over the bolt shank to strike against the bolt head.
- Fits all sizes of pins or bolt shanks ranging from 1/4" (6mm) to 5/8" (16mm).

Set includes

**7302-1** – A striking version.

**7302-2** – Air hammer adapter.



**6720  
Flare Nut Locking Plier Set (3 pcs.)**

- Designed for use on new or damaged flare nuts that have been rounded or rusty.
- Fits Standard or Metric nuts and bolts.
- Angled jaws allow for clearance around frames and bulkheads.

**6720-1** – Covers 1/4" to 5/16" (6mm to 8mm).

**6720-2** – Covers 3/8" to 7/16" (9mm to 11mm).

**6720-3** – Covers 1/2" to 5/8" (12mm to 16mm).



**6720-4  
Flare Nut Locking Plier**

- Designed for use on new or damaged flare nuts that have been rounded or rusty.
- Fits Standard or Metric nuts and bolts.
- Angled jaws allow for clearance around frames and bulkheads.
- Covers sizes 11/16" to 7/8" (17mm to 22mm).



**6722  
Brake Spring Locking Plier**

- Designed to compress parking brake springs and hold them in a compressed position while servicing the brake cable or other brake components.
- Ford and Dodge applications.



# BRAKE SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4403 Tubing Bender

- For 3/16" and 1/4" dia. tubing.
- Can bend up to 180+ degrees.
- Quick release handle to easily remove tubing from bender.
- Sturdy steel construction.



## 4404 Tubing Bender

- For 5/16" and 3/8" dia. tubing.
- Can bend up to 180+ degrees.
- Quick release handle to easily remove tubing from bender.
- Sturdy steel construction.



## 18548 Four-In-One Tube Bender

Effortlessly bends four different sizes of soft or annealed tubing without crimping, flattening, or scratching. Calibration allows duplication of any angle. Handles are 8-1/2" long, so extensions are not needed, and glass/plastic construction combines strength with lightweight durability.



## 6515 3-in-1 180° Tubing Bender

- Capable of making 180° bends in copper, brass, aluminum, and steel tubing.
- Just one tool works on three sizes of tubing: 1/4", 5/16" and 3/8".



## 7559A Deluxe Vacuum Pump

This pump kit is designed for vacuum testing, brake bleeding, and fluid transfer. With this kit, one person can quickly and cleanly bleed brake and hydraulic clutch systems, actuate vacuum switches (VOES), as well as get answers to numerous diagnostic and mechanical problems.

Kit includes:

- Precision-made repairable vacuum pump with 360° gauge rotation for improved visibility.
  - Pumps up to 1 cubic inch (16cc) per stroke.
  - Develops and maintains up to 25" of vacuum.
- 4-1/2 oz. Reservoir jar with fluid transfer and storage lid.
- Two – 2 ft. long, 1/4" ID hoses.
- Rubber cup adapter.
- Two universal bleed screw adapters.
- Vacuum "T" adapter.
- Automotive test and bleed adapters.
- User manual (English, Spanish, French).



## 8104 Vacuum Brake Bleeder

This one man brake bleeding system allows for fast and efficient vacuum brake bleeding. Universal rubber fitting holds securely on brake bleeder screw. Attach shop air and use the quick release trigger for on-demand vacuum and hands free operation. Compact size and 17 oz. (500ml) capacity.

## 8106 Master Cylinder Auto Filler

- Automatically refills the brake fluid reservoir during brake bleeding.
- Base plate retaining clip provides positive attachment to all master cylinder reservoir types.
- Positive venting system supplies unbroken, continual fluid flow.
- Height adjustment allows user to maintain correct fluid level on all reservoir types.
- On/Off tap allows installation and storage without drips or spills.
- Suitable for use on any level controlled re-filling application (eg clutches).

## 8104-SET Brake Bleeder with Auto Filler Set

Includes both the 8104 and 8106.



## 4401 Tube Bending Pliers

- Bends tubing from the side allowing for use in limited access areas.
- 3/16" and 1/4" dia. tubing.



## One-Man Brake Bleeder Hose

- Removes air from brake system, one wheel at a time, and eliminates the need for an assistant.
- Hose easily attaches to bleeder screw, which holds hose in place and prevents leaking.
- Check valve on end of hose prevents air from entering brake system when pumping brake pedal.

## 4599 – One-man brake bleeder hose, one only.

**4809 – One-man brake bleeder hose, set of four. Do all the wheels at the same time. Includes four of the No. 4599.**





8101

8100

### Fluid Evacuation/Brake Bleeding Tools

- Use to bleed brake systems and remove a variety of fluid from vehicles, such as antifreeze, oil, transmission fluid, gear lube, etc.
- Quick connect locking hose adapters and ball-style on/off valve on hose prevent fluid leakage.
- Equipped with a relief valve to prevent over-pressurizing the tank.

**8100** – Operates by shop air or a hand pump; shipped complete with a brake bleeding hose, fluid evacuation hose, and two suction hoses (6 mm and 7 mm); 10-liter capacity tank.

**8101** – Operates with shop air; shipped with a brake bleeding hose and fluid evacuation hose; 6-liter capacity tank.

### 8101-SET Brake Bleeder/Fluid Evac. with Auto Filler Set

Includes both the 8101 and 8106.



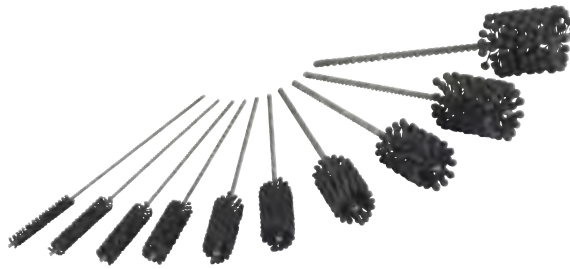
### 4546

#### Steering Wheel Holder & Pedal Depressor Kit

- This kit has two applications: 1) holds steering wheel in position for alignment adjustments, and 2) depresses brake pedal for various brake checks, including brake lamp operation.
- Rod easily slides in actuator for fast, easy installation of tool on brake pedal or steering wheel. Simply hand squeeze the actuator to accomplish fine adjustments.
- Kit includes: actuator assembly; extension rod for actuator (use when depressing brake pedal); hook assembly (hooks on steering wheel when depressing brake pedal or holding steering wheel); and flat pad (rests on front seal when holding steering wheel).

**4546-1** – Handle and Rod.

**4546-2** – Steering wheel and pedal holder.



### 7011

#### Ball Hone Set, 10 piece

- Ball Hones can be used for refinishing and resizing bores such as found in brake calipers, engine lifters, and u-joint yokes. Also useful for any bearing or bushing application.
- All hones are 180 grit Silicone Carbide for excellent cutting and finish.



Similar to Kent-Moore J-35856

### 7853

#### ABS Brake Proportioning Valve Depressor

The proportioning valve depressor works on various GM utility vehicles, vans, and pickups fitted with Kelsey Hayes anti-lock brake systems. It also works on rear-wheel anti-lock brakes.

- Two depressors work best for four-wheel anti-lock systems.



8330

8330-RP

### 8330

#### Resurfacing Grinder – Medium

- Cleans dirt, rust, and corrosion from many surfaces including hubs, rotors, inside wheel edges, and other large surface areas.
- Can resurface up to 400 hubs before replacement of media is required.
- Recommended for up to 1500 RPM.

**8330-RP** – Two replacement discs for 8330.



Similar to Kent-Moore J-39495

### 7639

#### GM W-Body Brake Bushing Service Set

Here's the complete set for servicing seized disc-brake rear-caliper slides on GM W-body cars. It includes a bushing driver, 180 grit hone, and a 1-1/4" diameter wire brush.

- For use on 1988 to 1993 Buick Regal, Oldsmobile Cutlass Supreme, Pontiac Grand Prix; 1990 to 1993 Chevrolet Lumina sedan.

Tool No.	Size
<b>7011-1</b>	.375" 10 mm
<b>7011-2</b>	.500" 13 mm
<b>7011-3</b>	.625" 16 mm
<b>7011-4</b>	.750" 19 mm
<b>7011-5</b>	.875" 22 mm
<b>7011-6</b>	1.00" 25 mm
<b>7011-8</b>	1.25" 32 mm
<b>7011-10</b>	1.50" 38 mm
<b>7011-12</b>	1.75" 44 mm
<b>7011-14</b>	2.00" 51 mm

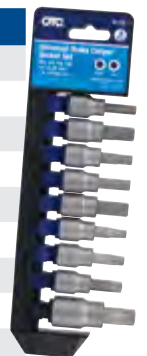
### 6135

#### Universal Brake Caliper Socket Set (9 Piece)

Set includes one each of the following:



No.	Size	sq. drive
<b>6107</b>	T40	3/8"
<b>6108</b>	T45	3/8"
<b>6110</b>	T50	3/8"
<b>6112</b>	T60	3/8"
<b>6165</b>	1/4"	3/8"
<b>6167</b>	3/8"	3/8"
<b>6175</b>	7 mm	3/8"
<b>6176</b>	8 mm	3/8"
<b>6177</b>	10 mm	3/8"



# WHEEL & TIRE SERVICE AUTOMOTIVE SPECIALTY TOOLS

## 5789-PACK Tire Service Display

Includes 23 popular tools for changing a tire:



Part Number	Qty
5716	1
5720	1
5724	1
5728	1
5729	1
5731	1
5732	1
5733	1
5735-35	2
5735-42	2
5735-42K	1
5736-24	1
5736-30	1
5737-30	1
5739-24	1
5739-30	1
5758	2
5047LP	1
5789ID-520	1
5789ID-1032	1
5700-DISPLAY	1

## 5700-DISPLAY HAMMER & TIRE SERVICE DISPLAY RACK

- Designed to display various products in the framed rack, complete with removable rear sign holder.
- Sturdy display framed with heavy 5/16" rod with heavy steel base eliminates tipping.
- Black powder coat finish for a rust free, durable finish.
- Contains 2" x 2" = 52 slots and 2" x 4" = 6 slots.
- Includes 4 side hooks (not pictured).
- Assembled dimensions; W 18.5", D 19", H 44".
- Weighs approx. 35 lbs.



## 5700A Accessory Tire Bead Seater

- Provides the ability to control the blast with both hands firmly on the nozzle assembly, increasing effectiveness and safety.
- Includes all the fittings to adapt the hose to most surge tanks found on tire changers. A tank hook is also included to hang the nozzle when not in use.
- Long 6-1/2' hose will reach all positions on the tire.



## 5702 Tire Bead Seater

The 5702 OTC Tire Bead Seater provides many of the great features of it's 5713 big brother, at a more economical price!

- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the tank/valve assembly, critical for effective and safe use.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of tire sizes and wheel diameters.
- Inline design allows for a comfortable distance from the tire and wheel while seating.
- ASME approved 2-gallon tank with inlet valve, pressure gauge, and relief pressure valve for safety.



## 5715 Tire Spoon Rack

- Designed to hold OTC Tire Spoons by the handle upset.
- Also holds tools with 3/4" or smaller diameter shafts.
- Can be hung on end of tool box or mounted to the wall via holes on 16" center.



## 5727 Sliding Bead Breaker

- The 5727 Sliding Bead Breaker has a split head, unique wedge design and slide hammer to reduce bead friction. Foot loops and tipping slots provide leverage and ease of transferring force to the tire.
- Sliding Bead Breaker, 47" extends to 81", 21 lbs.



## 5713 Tire Bead Seater

The Tire Bead Seater is used when a tire, new or used, is mounted on a wheel and the tire bead does not touch both sides of the wheel, making inflation possible. The air trigger on this tool expels a tremendous burst of air that inflates the tire to seat it to the wheel rim. This allows the tire to be inflated to the recommended pressure through the tire valve.



- The Tire Bead Seater is equipped with unique configurations that enhance ease of use, productivity and safety for technicians looking to get the job done right every time.
- Unlike other options out there, the Tire Bead Seater's ASME certified 13-gallon tank is designed with a nozzle and valve connected via hose assembly, giving the user more control rather than requiring them to hold the weight of the tank.
- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the nozzle/valve assembly, critical for effective and safe use. Wheels and handle function in either the vertical or horizontal position for easy mobility and storage.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of the tire sizes and wheel diameters.
- Air valve included for filling tank, which also provides compressed air for filling the tire while seating the bead, optimum for on-the-road service.





**Convex Slip Head** - Unique "Convex Slip Head" curved design allows the spoon to slide easily into the tire bead while the spoon bump limits the depth for quick-and-easy operation.



**Grip grooves** - Eliminate spoon slippage on the wheel rim while mounting or demounting the tire. The grooves also limit the depth of the spoon to help eliminate pinching tire tube applications.

**5716 HD Sliding Tire Spoon** 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.



**5716G HD Sliding Tire Spoon with Grip Grooves** 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.



**5720 Sliding Dual Tire Spoon** 35" and 3/4" diameter. Unique configuration provides mount and demount heads on either end with the aid of a slide hammer mounted mid bar, allowing for hammering either end in or out of the tire bead. Twist-lock feature locks 3.5 lb. slide weight in position.



**5724 Extending Tire Spoon** 22" extends to 34", 3/4" diameter. Twist-lock feature allows the spoon to be extended to any length and locked into position with a twist of the collar.



**5734-18 Tire Machine Spoon, Double End**, 18" Has a curved end and a bent tip end for starting the bead on a tire changing machine.



**5734-18G Tire Machine Spoon, Double End with Grip Grooves**, 18" Has a curved end and a bent tip end for starting the bead on a tire changing machine.



**5735-18 Double End Curved & Flat Tip Curved Tire Spoon**, 18" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-18G Double End Tire Spoon with Grip Grooves**, 18" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-35 Double End Curved & Flat Tip Curved Tire Spoon**, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-35G Double End Tire Spoon with Grip Grooves**, 35" Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-42 Double End Curved & Flat Tip Curved Tire Spoon**, 42" Same great design as the original double end mount/demount tire spoon, but in a 42" length for added leverage. 3/4" diameter.



**5735-42K Double End Tire Spoon with Kick Start**, 42" Includes kick loops to allow the spoon to be forced into tight bead locations with the help of foot pressure. 3/4" diameter.



**5736-18 Curved Tire Spoon**, 18" Handle knob enables easier spoon pick up. 3/4" diameter.



**5736-18G Curved Tire Spoon with Grip Grooves**, 18" Handle knob enables easier spoon pick up. 3/4" diameter.



**5736-24 Curved Tire Spoon**, 24" Handle knob enables easier spoon pick up. 3/4" diameter.



**5736-24G Curved Tire Spoon with Grip Grooves**, 24" Handle knob enables easier spoon pick up. 3/4" diameter.



**5736-30 Curved Tire Spoon**, 30" Handle knob enables easier spoon pick up. 3/4" diameter.



**5737-30 Flat Tip Curved Tire Spoon**, 30" Handle knob enables easier spoon pick up. 3/4" diameter.



**5739-24 Curved Shank Tire Spoon**, 24" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.



**5739-30 Curved Shank Tire Spoon**, 30" The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.



# WHEEL & TIRE SERVICE AUTOMOTIVE SPECIALTY TOOLS



5789ID-1032

5789ID-520

## Tire Service Hammers, Indestructible Handle

- Indestructible handle - never needs replacement!
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.
  - Use top hook as a wheel tipper; sledge end hook to drag tire into position.
  - Bead breaking wedge has grooves and a convex shape to help drive tire lube into the bead.

**5789ID-520** – 5 lb. head, handle length 20", total weight 7.3 lbs.

**5789ID-1032** – 10 lb. head, handle length 32", total weight 14.4 lbs.



## 5729 Inside Dual Wheel Bead Breaker

- Breaks the inner bead on the outside tire without removing the wheel from the truck.
- Unique design places pressure in the exact location required to quickly and easily break the inner bead.
- Simply pull up on the handle and the bead is forced off the wheel rim.



## 5747 Tire Valve Stem Punch Kit

- Quickly and easily remove old valve stems from a wheel with a swing of a hammer.
- Simply place the punch tip on the inside of the valve stem and strike the punch to force the old valve stem out of the wheel.
- The unique punch tip is heat treated and shaped to remove all types of valve stems, including 10mm nickel plated, steel, and brass valve stems.
- Includes hand protecting grip with interchangeable 5" and 8" punch adapters for car and truck wheel applications.



## 5752 Wheel Loader & Tipper

- The new ergonomic wheel loader and tipper integrates two very helpful tools into one.
- The wheel loader feature allows a technician to lift various sizes and types of wheels and tires in and out of a truck bed.
- The wheel tipper feature allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Both of these features allow the technician to easily and safely service wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.



## 5750 Wheel Tipper

- This ergonomic wheel tipper allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Allows the technician to easily and safely service wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.



## 5728 Tire Bead Breaker

- Unique head is designed to provide a large striking area for all angles, while providing the mass needed to break the tire bead.
- This design puts the force exactly where it's required and eliminates the possibility of accidentally hitting the wheel, problems typically encountered while using larger swing hammer style bead breakers.



## 5745 Hands Free Air Chuck

- Perfect for applications where the tire valve is facing the floor while seating the tire bead, such as most dual wheel configurations.
- Hooks on the top bead seat of the wheel and the spring pressure holds the chuck on the tire valve pointing to the opposite side.
- Ball valve included to allow inflation only when needed.



## 5047LP Lug Nut Cap Remover Locking Pliers

- Designed to remove lug nut caps found on heavy duty truck and trailers quickly and easily without damage. Caps can be easily damaged by prying or using standard cap removers.
- Locking plier design with specially coated jaws apply maximum grip on the lug nut caps without damage.

## 5047 Lug Nut Cap Remover

- Chrome-plated lug nut caps found on many heavy-duty trucks and trailers can be tough to remove, and they're easily damaged if you pry them off or use an ordinary cap remover. This tool avoids those problems. It is ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing force you apply.
- Features cushioned handles.





**5731**

**Tire Bead Locking Pliers**

- Prevents the tire from slipping while mounting the top bead.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.
- Prevents tire from contacting costly TPM Sensors.



**5732**

**Tire Spoon Holding Pliers**

- Tire Spoon Holding Pliers is the 3rd hand needed to ease mounting and demounting of tires with tire spoons.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



**5733**

**Tire Bead Wedge Pliers**

- Tire Bead Wedge Pliers keeps the tire in the bead drop area to ease mounting and demounting of larger truck and agricultural tires.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



**4771**

**Motorcycle Tire Bead Alignment Tool**

This aluminum tool will hold a tire bead into the drop center of the wheel when changing the tire or installing an inner tube. The nylon thumbscrew will not damage the wheel finish.



**5776**

**Preset Torque Wrench Set;**

These color coded click torque wrenches are pre-set to the most common lug nut torque settings, making them perfect for tire shops.

- No need for adjustments
  - Durable satin finish
  - 1/2" Drive, 36 tooth
  - Quick release ratchet head
  - Perfect for Wheel / Tire shop
  - Accuracy better than  $\pm 3\%$  CW
- Sold Individually:

**5776-1** – Preset Torque Wrench, 1/2" 65 lb-ft

**5776-2** – Preset Torque Wrench, 1/2" 80 lb-ft

**5776-3** – Preset Torque Wrench, 1/2" 100 lb-ft

**5776-4** – Preset Torque Wrench, 1/2" 120 lb-ft

**5776-5** – Preset Torque Wrench, 1/2" 140 lb-ft



**4777**

**Motorcycle Tire Bead Holding Tool, Long**

This tool allows the tire bead to be held in the drop center of the wheel when changing the tire or installing an inner tube. The slot slides over the spoke and the opposite end is depressed to push the tire into position. For use on wheels with 1 5/8" maximum side profile height.



**4771**

**Motorcycle Tire Bead Holding Tool, Std.**

This tool allows the tire bead to be held in the drop center of the wheel when changing the tire or installing an inner tube. The slot slides over the spoke and the opposite end is depressed to push the tire into position. For use on wheels with 3/4" maximum side profile height.



**5758**

**Hub Cap Removal Tool**

- Unique slide hammer design eliminates prying against the wheel finish and potential scratches.
- Opposite end has a rubber bumper used to re-install cap with a simple tab.



**4750**

**Tire Valve Installer/Remover Tool**

This 14" steel tire valve tool includes a stepped rubber sleeve that can be positioned on the handle for optimum pulling angle of the valve, while protecting the wheel finish. Removes and installs snap-in style tire valves.



**5744**

**TPMS Tire Deflator/Locator;**

- Evacuates air from the tire without removing the valve core.
- Tire location is marked on the color coded deflators so TPMS sensors can be replaced to the original location, eliminating the need for resetting.



**7248**

**C-Frame Press**

- The C-Frame used in conjunction with OTC Ball Joint Adapters. Can also be used for removing/installing; universal joints with needle bearings, pressed in wheel studs, and brake anchor pins on heavy-duty vehicles. Suitable for general pressing operations.



**4770**

**Motorcycle/ATV Tire Spoon with Grip**

This 13" curved tip tire spoon is strong yet comfortable to use with the form fit hand grip. The rounded head prevents puncturing the tube.



**4769**

**Motorcycle/ATV Wheel Rim Protector Set, 3 piece**

Fits over the wheel rim to protect the wheel from being scratched or damaged while using tire spoons. Set of three.

# WHEEL & TIRE SERVICE AUTOMOTIVE SPECIALTY TOOLS

## YOUR FULL COVERAGE TPMS SOLUTION

The OTC Tire Pressure Monitoring Reset Tool is a fast and simple to use stand alone TPR activation tool

- Diagnostics
- Reset
- Relearn
- Register



### 3835 Tire Pressure Monitoring System Reset Tool Master Kit

Includes: TPR handheld, DB25 wireless adapter, carry case, registration card, user manual for TPR, and Genisys® interface, activation magnet, valve stem torque wrench, valve nut torque wrench, digital tire pressure gauge, TPMS Poster, TPMS flip charts, 11mm socket, 12mm socket, and torque tool.



### 3836 Tire Pressure Monitoring System Accessory Kit

Includes: Activation magnet, valve stem torque wrench, valve nut torque wrench, digital tire pressure gauge, TPMS Poster, TPMS flip charts, 11mm socket, 12mm socket, and torque tool.

Note: Your Genisys requires System 4.0 or later for TPR communication.



### 4751 Tire Pressure/Tread Depth Gauge

This 3-in-1 gauge will measure tire pressure, lower tire pressure, and measure tread depth all in one gauge. Rugged cast housing for strength and long life.



#### TPMS Accessories:

Part No. Description

**3833-15** – Digital Tire Gauge

**3833-17** – Valve Core Driver

**3833-25** – Electronic Torque Wrench



5095A

### Easy Lever Wheel Dollies

Gives technicians the leverage they need to easily remove or install truck tire-and-wheel assemblies.

- Heavy-duty construction capable of toting 300 pounds.
- Onboard rollers make stud-hole alignment a snap.
- Spring-loaded kickstand for handy parking.
- Rugged tubular steel construction.
- Two models that, together, can accommodate tire diameters from 24 to 48 inches.

**5095A** – Easy Lever wheel dolly. With a width of 22", this dolly handles tire diameters of 24" to 36".

**5096A** – Heavy-duty Easy Lever wheel dolly. With a width of 26", this dolly handles tire diameters of 36" to 48".



5096A

### 5100 Wheel Mate™ Wheel Handler

- Enables truck technicians to easily remove, install, rotate, and transport single tire-wheel assemblies. Internal ratcheting jack with 14 inches of vertical travel—almost a foot higher than conventional dollies.
- U-shaped chassis that provides close, unhindered access to work area.
- A design that accommodates—and securely holds—almost any truck wheel, including wide-based singles, without restraining chains.
- Heavy-duty ball-bearing wheels mounted under ball bearing swivel casters for maximum maneuverability.
- Foot-operated wheel lock.
- Rugged structural steel tubing construction that meets the demands of the toughest shop environments.



### 1770A 1,500 lb. Capacity Dual Wheel Dolly

- Hydraulic jack provides almost 5" of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Independent lifting rack provides maximum stability; rollers won't catch on load.
- Swivel casters for easy maneuverability.
- 6' chain holds load in place.
- Covered by OTC Lifetime Marathon Warranty®.



### 5105B 1,100 lb. Capacity High-Lift Dual Wheel Dolly

- Effortless air-powered hydraulic lift system for a variety of applications.
- 0 to 42" lifting range.
- Six-inch lateral adjustment.
- Tilt adjustment of +15° to -8° ensures easy alignment.
- Features four swivel casters, two locking, for enhanced mobility.



### 5082 Wheel Tipper

- This heavy-duty wheel tipper makes handling those hard-to-manage truck tires easy. To use the wheel tipper, simply deflate the tire and break the bead, then hook the wheel tipper to the rim of the wheel. With both hands on the wheel tipper, pull it towards you.
- Designed for both aluminum and steel wheels.
- Reduces back strain when tilting deflated wheel assemblies for maintenance.







# BATTERY SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4611 Battery Terminal Puller

- Designed to remove the battery cable clamp from the post without causing damage to the battery.
- Spring-loaded sharp jaws get under the clamp for a secure grip.

## 4612 3-Way Battery Post Cleaner

- Steel blades quickly clean top-post battery terminals and cable clamps; cleaners are marked "positive" and "negative."
- Ream is tapered to clean both positive and negative battery cable clamps.



## 4613 Battery Pliers

- Serrated jaws firmly grip the battery terminal nut or bolt.
- Offset handles allow access in hard-to-reach areas.
- Works on top-post and side-post battery terminals.



## 4614 Side Terminal Battery Wrench

- Designed for use on GM side-terminal batteries, or any 5/16" hex head battery bolt.
- 5/16", 6 point, box end, 5-1/2" long, ratcheting wrench; insulated handle.



## 4615 Long-Side Terminal Battery Wrench

- Designed for use on GM side-terminal batteries, or any 5/16" hex head battery bolt.
- Long handle allows access to hard-to-reach battery terminal bolts.
- 5/16", 6 point, box end, 10" long, ratcheting wrench; insulated handle.



## 4616 Battery Terminal Wrench – 10mm

- Designed for use on 10 mm battery terminal bolts found on many import and domestic vehicles.
- 10 mm, 12 pt., box-end ratcheting wrench; 5-1/2" long with insulated handle.



## 4617 Side Terminal Battery Brush

- Designed to clean corrosion from side post batteries.
- One brush used to clean battery terminals; other brush used to clean battery cable ends.
- Plastic handle resists battery acid.



## 4618 Battery Brush

- Cleans dirt and corrosion from positive and negative battery posts and cable clamps.
- Plastic case resists battery acid and most cleaning solvents.



## 4619 Professional Battery Hydrometer

- Displays a battery's specific gravity on an easy-to-read float; scale ranges from 1.100 to 1.300.
- Thermometer indicates what must be added or subtracted from the float reading to arrive at an accurate specific gravity reading for each battery cell.
- Flexible tip offers easy access to the battery cells while the battery is still in the vehicle.

## 4620 Battery Carrier

- Use to lift and install most top post and side terminal batteries.
- Designed to transfer lifting force to a secure hold on the battery; teeth on jaws offer a secure grip.
- Vinyl strap resists battery acid and will not conduct electricity.



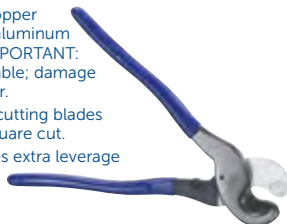
## 4621 Two-Liter Battery Filler

- Replenish battery water the easy way! The fill nozzle on this container has an automatic shut-off that prevents overfilling; the handle on the side of the container makes the job a snap. Container holds up to two liters of distilled water.



## 4622 Battery Cable Cutter

- Designed to cut copper battery cable and aluminum electrical cable. IMPORTANT: Do not cut steel cable; damage to blades will occur.
- Precision-ground cutting blades provide a clean, square cut.
- 7" long handle gives extra leverage when cutting.



## 1/4" & 3/8" Cable Cutters

- Perfect choice for cutting heavier copper and aluminum cables.
- This tool is especially valuable for battery service where replacing a terminal is required.
- Clean cut with minimal mashing of wire strands.



- 4476 – 1/4" cable cutter
- 4477 – 3/8" cable cutter



## 4639 Battery Terminal Service Kit (7 piece)

- Kit includes:
- 4611 – Battery terminal puller.
  - 4612 – 3-way battery post cleaner.
  - 4613 – Battery pliers.
  - 4614 – Side terminal battery wrench.
  - 4615 – Long-side terminal wrench.
  - 4616 – Battery terminal wrench - 10mm.
  - 4617 – Side terminal battery brush



## 4631 Battery Terminal Service Kit (8 piece)

- Kit includes:
- 4611 – Battery terminal puller.
  - 4612 – 3-way battery post cleaner.
  - 4613 – Battery pliers.
  - 4614 – Side terminal battery wrench.
  - 4615 – Long-side terminal wrench.
  - 4616 – Battery terminal wrench - 10mm.
  - 4617 – Side terminal battery brush
  - 4622 – Battery Cable Cutter

## 7645 Parasitic Draw Test Switch

- Finding electrical problems that drain the battery is getting harder all the time. But using No. 7645 with your digital amp meter takes the guesswork out of a complicated job. Attach the test switch between the negative battery cable and the battery, and then road-test the vehicle. Next, connect an amp meter to the switch to determine the parasitic amperage draw, and locate the excessive electrical drain on the battery. Works on any vehicle with side- or top-post batteries.



## 3386 Antizap Auto Surge Protector

- Connects to battery, and becomes part of vehicle's electrical circuit. If a voltage spike is detected, the Antizap automatically clips it to a safe level to prevent damage to sensitive electronic systems.
- Protects fuel gauge, ABS brakes, radios, tape and CD players, car alarms, SRS air bags, LED instrumentation, EFI, fuel, and climate control systems. Protects against welding (Arc, Mig, & TIG).





Utilizes switching technology which helps restore batteries that are slightly sulfated.

Switches to float mode after the battery is completely charged.

Application: Lead Acid (FLA, AGM, GEL).

### 3176 Smart Battery Charger and Maintainer

The Smart Battery charger and Maintainer utilizes a patented 5-Stage Automatic charging system designed to charge a battery efficiently while prolonging the life of the battery. The automatic power switching gives you the ability to charge your battery to 100% without worrying about damaging the battery. The battery charger/maintainer comes with clamps for jump starts or overnight charging and ring connectors for permanent connection to seasonally used vehicles such as RVs and motorcycles.

Product Features:

- Maintains the battery charge level during vehicle programming.
- Charges deep discharged batteries in about 12 hours.
- Maintains the battery charge level if the vehicle or the battery needs to be stored for an extended period of time.
- Switches to float mode after the battery is completely charged.
- Utilizes switching technology which helps restore the batteries that are slightly sulfated.
- Easy-to-read LED lights to show the status of charging and battery condition.
- Micro processor controlled pulse charger.
- LED indicator lights : Red & Green.
- Input: 110V AC.
- Application: Lead Acid (FLA, AGM, GEL).
- Output: 5Amp /12Vdc.
- Auto polarity, Spark free & Over charging Protection.
- IP65 waterproof, Dust Splash/Rain Protection.
- Switches automatically to float mode.



### 75240 Coolant and Battery Refractometer

This can be used for measuring the freezing point of either propylene and ethylene glycol based cooling systems. It can also be used for checking the strength of electrolyte solution in batteries. This precision instrument features high quality optics with ultra smooth focusing on the body. Coolant scale range: 32° F/0° C to -60° F/ -51° C.

### Battery Charging/Starting System Professional Analyzer Kits

Made for the professional technician, No. 3185 tests batteries and starting/charging systems faster than ever before. The BCS system analyzer has an operating range of 50–2000 CCAs and is able to store data in memory or remotely print out the results using an infrared printer interface. It also measures voltage, and tests starting and charging systems at the push of a button.

Product Features:

- Quick 1-second initial results.
- Tests charging and starting systems 50–2000 CCA range accurate to 5 CCAs.
- Tests 6V and 12V batteries.
- Temperature and low charge compensation.
- Detects and identifies loose leads.
- Supports CCA, IEC, EN, BCI, and DIN scales.
- 4-line, 20-character LCD display shows CCAs, voltage, and good/bad status.
- Displays results in seven languages: English, French, Spanish, German, Italian, Dutch, Swedish.
- Built-in infrared printer interface for remote printing.
- Detachable cable leads.

### 3184

BCS system analyzer kit. Includes BCS system analyzer, a 12' extension cable for in-cab testing, two voltmeter probes, battery side- and threaded-post adapters, detachable leads, 9-volt battery, soft-sided carrying case.

### 3185

BCS system analyzer kit. Same as No. 3184, but also includes an infrared printer.

### 3183 Digital Battery Tester

Speed. Accuracy. Reliability. These are the cornerstones behind the technology in our digital battery testers. No. 3183 tests 12-volt batteries (125–1400 CCAs) and analyzes by measuring multiple parameters within the battery to deliver accurate results. A live voltmeter allows easy starting/charging system testing. Its bright, 4-digit LED display indicates the battery's good/bad status, voltage, and available CCAs. It even compensates for cold temperatures.

Product Features:

- Quick 1-second initial results.
- 125–1400 CCA range.
- Analyze starting/charging system voltages.
- Tests 12V batteries.
- Temperature and low charge compensation.
- Detects and identifies loose leads.
- Detects bad cells.
- Surface charge warning.
- Measures multiple international units: CCA, IEC, DIN, BCI, and EN.
- 4-digit LED display shows good/bad status, available CCAs, and voltage.
- Includes digital battery tester. Includes digital battery tester and soft-sided carrying case.



### 3180 100-Amp Battery Load Tester

Tests batteries on or off the car in just 10 seconds. Convenient, portable size and easy-to-read scales.

Product Features:

- Heavy-duty, copper-plated clamps.
- 100 amp load capacity.
- 0–16 volt range.
- Load safety switch prevents arcing.
- Heavy-duty, chrome-plated, ventilated steel case.
- Works on both 6V and 12V batteries.
- Ceramic insulators.
- Determines state-of-charge, cranking, and charging volts.
- Determines good/bad status.
- Extra-large display with zero adjust.



### 3181 130-Amp Heavy-Duty Battery Load Tester

Applying an industry-leading 130-amp load, this ergonomically designed, heavy-duty battery tester provides accurate, reliable test results in just 10 seconds. It includes uniquely designed clamps for a positive grip on top- and side-post batteries and an extra-large, easy-to-read display.

Product Features:

- 130-amp load capacity for accurate results.
- 0–16 volt range.
- Uniquely designed clamps for both top- and side-post batteries.
- Extra-large display with zero adjust.
- Works on both 6V and 12V batteries.
- Side tabs for on-tool clamp storage.
- Back brackets for tool storage on wall or toolbox.



### 3182 130-Amp Digital Battery Load Tester

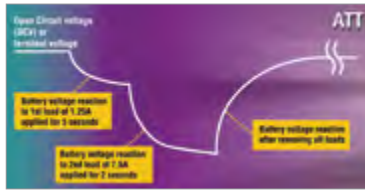
Produce more accurate results with this 130-amp digital battery load tester. The compact, lightweight design is rugged enough for everyday testing of 6- & 12-volt batteries.

Product Features:

- Large, easy-to-read display.
- Side-clamp mount.
- Comfortable, easy-to-grip, ergonomic handle.
- Alternator test lead.
- Ripple detection light.
- 0–16 volt range.
- Dual jaw load clamp design.
- State of charge.
- Battery load test.
- Starter and charging system test.
- Alternator ripple test.
- 3182 Digital battery tester. Includes 130-amp digital battery tester and test leads.



# BATTERY SERVICE AUTOMOTIVE SPECIALTY TOOLS



## Sabre HP

Sabre HP is designed to let you quickly diagnose bad batteries in a discharged state without needing to charge them first. By utilizing a patented OTC micro-load testing method, this tester ensures accurate test results without any interpretation on vehicle battery, starting, and charging systems. Ships with 3' leads.

### Product Features:

- Digital circuitry precisely controls battery test loads to accurately determine battery conditions using OTC micro-load test technology.
  - Tests the battery both statically and dynamically with multiple fixed loads.
  - Provides the most accurate test results.
  - Less susceptible to erroneous results from remote or bad connections, surface charge, and parasitic drains.
- Accurately tests both absorption glass mat (AGM) and flooded lead acid (FLA) batteries.
- Tests vehicle's starting and charging systems with minimal user interaction; automatically applies loads for accurate charging system tests.
- Tests all 6- and 12-volt batteries with a 50–2000 CCA operating range.
- Tests batteries down to 1 volt state of charge.
- Temperature and low charge compensation.
- Detects bad cells.
- Scales: CCA, CA, AHR, MCA, JIS, DIN.
- 4 x 20 backlit display shows CCAs, voltage, and good/bad status.
- Over-molded enclosure with soft-touch keys.
- Built-in infrared printer interface for remote printing (printer optional).
- Flash upgradeable memory in field.
- Removable/auto-sensing leads (3' leads included; optional 10' leads available).
- Printout has date/time stamp and user definable header and footer.
- Optional amp clamps for current drain tests and starting/charging measurements—the only hand-held battery tester with this feature.
- Reverse polarity protection.
- Hard carrying case.
- 3-year warranty.

## 3167 SABRE HP

Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, and molded-plastic carrying case.



3167

## 3168 SABRE HP Deluxe Kit

Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, infrared wireless printer, and molded-plastic carrying case.

### Accessories:

## 3169

Infrared wireless printer for use with No. 3167 (included with No. 3168).

## 3167-01

3' test leads.

## 3172

10' test leads.



3168

## Sabre Heavy-Duty Battery and Electrical System Diagnostic Tester

- Heavy-duty for 24-volt battery and electrical systems.
  - Diagnoses battery packs in series, parallel, or series/parallel.
  - Tests AGM/gel-cell batteries.
- HIGHEST CCA capacity ranges (50–4000 CCA – 24V).

LARGE DISPLAY for less scrolling, more detailed instructions. It's also backlit for all light conditions.

INDUSTRY FIRST amp-clamp connection ports for live amperage readings using optional external amp-clamp.

15 FT. Cable to perform tests from the cab of the vehicle.

FIELD UPDATEABLE to accommodate new battery types, system updates, feature additions.



### Battery Testing

- Tests the following battery pack configurations:
  - One battery (6V or 12V).
  - Two batteries in series (24V); 2, 3, or 4 batteries in parallel (12V).
  - Two banks in parallel, each bank having 2 batteries in series (24V).
  - Uses pack configuration in algorithm design.
- Step-by-step user instructions for easy test completion.
- Tester-applied loads used on all pack combinations.

### Electrical System Testing

- 12V and 24V charging system tests.
- 12V and 24V starting system tests.
- 12V and 24V diode tests.
- Amp-clamps available (not included) for starting/charging and current draw tests.

### Product Features:

Amp-Clamp Connection – allows current drain tests and starting/charging analysis.

Tests Both FLA (flooded lead acid) and AGM (absorbed glass mat) battery types.

Scales – CCA, CA, AHR, MCA, JIS, DIN

User Definable – print header and footer.

Removable Test Cables – easily field replaceable.

PC Interface Port – allows for field updateable software.

IR Compatible – allows optional infrared wireless printer.

Readout Display – backlit for low light conditions, easy to view data in direct sunlight (4 x 20 character display).

Security Cable Connection – protects against stolen or dropped units.

Over-molded Surround with Soft-touch Keys – ruggedly built, easy to use, even with gloves.

## 3167-HD Sabre HD deluxe kit

Includes 24-volt heavy-duty battery tester, 15' test leads, instruction manual, molded-plastic carrying case.

3168-HD

## 3168-HD Sabre HD deluxe kit with printer

Same as No. 3167-HD above, but also includes an infrared wireless printer.

### Accessories:

## 3172-15

15' lead set.

## 3169

Infrared wireless printer.





3220



3220CD

### 3220

#### 3220CD

#### Battery Diagnostic Manual

Gives essential information for battery service in one convenient manual. Saves valuable time by providing information in a complete manual rather than having to go to multiple locations for information.

#### Provides the following information in one manual –

- Battery access and service locations
- Battery disconnection precautions
- Power windows, locks and sunroof programming procedures
- Convenience accessory programming procedures
- Supplemental restraint and ABS system precautions
- Engine and body control system resetting
- Available in print or CD



### 5912

#### Crimpwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" –improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



### 5950A

#### CrimPro™ 4-in-1 Angled Wire Tool

- The angled feature allows access to close quarters and facilitates superior crimps.
- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



### 5950S

#### CrimPro™ 4-in-1 Wire Tool

- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



### 4498A

#### 7-in-1 Wire Stripper and Crimper

- Strips insulation off electrical wires ranging from 10 AWG–22 AWG (0.6mm–2.6mm) in diameter. Pliers on tip of jaw for looping or grabbing wire in tight places.
- Heat-treated steel jaws cut solid or multi-strand wire.
- Screw cutter shears screws clean, with no thread clean-up required. Works on machine screw sizes 4-40, 5-40, 6-32, 8-32, 10-24, and 10-32.
- Crimps insulated and non-insulated wire terminals, 7mm–8mm spark plug wire connectors.



### 4468

#### 9" Self Adjusting Wire Stripper

- Strips insulating sheathing from wires ranging from 10 ga. to 22 ga.
- Easy-to-use, just insert wire and squeeze.
- Also cuts and crimps.



### 4497A

#### Ratcheting Terminal Crimper

- Heavy-gauge steel crimping tool designed for insulated wire terminals.
- Ratcheting action crimps terminal to correct tightness on the wire, making crimping fast and easy.
- For wire sizes: AWG 22–18 (0.6 mm–1.0 mm) red terminal; AWG 16–14 (1.3 mm–1.6 mm) blue terminal; AWG 12–10 (2.0 mm–2.6 mm) yellow terminal.
- Insulated handles with compound mechanical leverage for power.



### 4467

#### Automatic Wire Stripper

- Quick removal of insulation on wire AWG 12-20.
- Comes with adjustable depth gauge (8mm to 12mm).
- Sharp v-shaped tooth easily removes insulation without any damage to soft wire strands.
- Cutting tool stored below the stripper.
- Features a space saving locking mechanism for pockets or tool drawer storage.

# ELECTRICAL SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4462 Wire Loom Threading Kit

The 4462 Wire Loom Threading Kit from OTC is a clever grouping of wire fishing tools for the automotive technician. Whether general wiring R&R - or adding Gauge Packs, Sound Systems, Vehicle Security and Camera Systems, these tools simplify placing the wiring within the protection of existing wiring looms, without cutting tape or zip ties and without damage to other wires.

There are 3 wire pulling tools in 15", 10" and 5.5" lengths for common automotive applications, the grommet insertion tool allows the wire to be captured within the tool to hold once it is placed, placed so you can grab from the opposite side of the firewall - and the pigtail tool assists when building a new harness on the workbench.

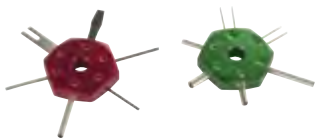
## 5953 Dual End Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.



## 5955 Magnetic Clamp Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.
- Clamp with magnet allows for attachment to a work bench, vehicle, or any other object for a firm base.



## 4822 Wire Connector Tool Set, 2 Piece

Designed to remove terminals from connector housing without damage to the terminal or connector. Set provides 12 different tool styles fit most common connectors.



## 4472 Cordless Solder Tool Kit

- Cordless, hands-free operation.
  - Safety switch prevents inadvertent ignition.
  - Fuel-level sight window.
  - Use as a - solder tool, heat tool or a torch tool.
- Kit Includes: Soldering iron, conical tip 2.4 mm, chisel tip 2.4 mm, hot knife tip, deflector tip, sponge, wrench, and soldering wire.

### 4472-1 - Soldering iron only

## 4470 Butane-Power Flameless MicroTorch

- Cordless 650° (1250°F) flameless heat.
- Waterproof piezo electronic ignition with locking trigger.
- Refillable fuel cell uses standard butane lighter fluid (butane NOT included).
- Ideal for automotive and heat shrink projects.



## 14450 Heat Gun

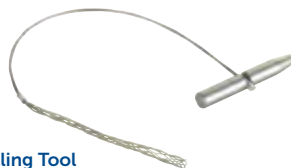
A lightweight source of directed heat offering 500°F and 750°F settings, and also has a "cold" setting. This handy heat gun is ideal for many applications, including:

- Fast heating/drying of materials.
- Quick curing/drying of epoxies.
- Applying shrink tubing.
- Softening tubing for bending.
- Speed-drying of touch-up paint to eliminate "haze."
- Drying out condensation in motors, clutches, controls, etc.
- Shock-proof and cool-running with a tough housing, the unit weighs just 2-1/2 lbs.
- 115V 50/60 Hz.



Replacement parts

### 44997 - Switch assembly.



## 4782 Wire Pulling Tool

This tool contains an 18" cable with a "T" handle at one end and wire mesh at the other. By threading the cable through a difficult to reach area such as a motorcycle frame, wires or connector can be hooked to the end allowing the wiring to be pulled through.



## 4813 Heat Shrink Tubing Set (171 Piece)

Protection and insulation for solder connections and components. 2 to 1 shrink ratio with flame or heat gun.



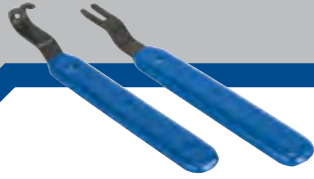
## 5947 Butt Connector Kit (240 Piece)

Two styles - insulated and non-insulated. Three sizes of each style: 12-10 AWG, 16-14 AWG and 22-16 AWG.



## 4814 Waterproof Heat Shrink Tubing Set (106 Piece)

Waterproof protection and insulation on solder connections and components. Adhesive lined inner wall to seal out moisture. 3 to 1 shrink ratio with flame or heat gun.



**4460**  
**2-Piece Electrical Connector Separator Tool**

- Releases locking tabs on electrical connectors, component connections & wiring harness connectors.
- Eliminates damage to the tab or connector.
- This pair of tools permits access to electrical connectors in any position.



**4493**  
**Angle-Tip Relay Pliers**

- Designed to remove and install relays, which are usually located in confined, hard-to-reach areas.
- Specially coated tips offer a solid grip on the relay.



**4461**  
**Terminal Release Tool Set**

- Save time and money. Repair or rebuild a wiring harness without having to order the entire OE replacement.
- Services most OE terminal connectors. Insert the appropriate release tool to depress the locking tab and the individual wire slides out for service or replacement.

Kit includes:

**7737** – Computer edge board and header release tool. Each end of the tool works on different terminal connector configurations. Works on various domestic and import models.

**7738** – Weather Pack sensor terminal release tool. Works on various domestic and import models.

**7740** – Micro-style terminal release tool. Works on various domestic and import vehicles.

**7741** – Specifically designed to release ID computer terminals on 1988 thru current GM W bodies, 1990 thru current Chevrolet Lumina sedans, and various other domestic and import vehicles.

**7742** – Universal harness release tool designed for the RWAL (rear wheel anti-lock) microprocessor found on 1988 thru current GM pickups. Also works on various other domestic and import vehicles.

**7743** – Releases terminals on most body wiring connectors on various domestic and import vehicles, including cold start injector and timer, water, O<sub>2</sub>, vacuum, and air temperature sensors.



**4448**  
**Door Buzzer Shutoff Tool**

- This simple tool allows for work with the vehicle door open without the annoying door buzzer on.
- High tension spring can be placed in the door jamb to close the door buzzer switch typically found by the hinges.



**4711**  
**Deluxe Radio and Antenna Service Kit**

- Eleven-piece kit in molded case.
- Universal antenna wrench.
- Ford radio removal tool.
- Deep sockets to remove and install the tamper-proof radio nuts from many GM, Chrysler, and other aftermarket radios.
- Antenna nut sockets cover most import and domestic antenna nuts.



**6088**  
**Ford 5-pin Connector Harness for Glow Plug Testing**

- Provides an easy way to check glow plug resistance without having to remove the valve cover of 1994–98 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engines.
- Used with any standard digital volt ohmmeter to check glow plug resistance.



**4712**  
**Euro Radio Removal Tool Kit**

- Includes the popular tools needed to remove the radio from the dash on the following European vehicles: BMW, VW, Audi, and Mercedes-Benz.
- Easily removes the radio without damaging the radio or the dash panel.



**4715**  
**Deluxe European Radio Tool Set**

- 18-piece set of tools used to remove radios on most European vehicles sold in the U.S. and Europe.
- Quickly and easily removes the radio from the dash without damage to the radio or dash.

Replacement Parts

**4715-1** – Removal Keys (4 pieces) Audi, Becker, Mercedes-Benz, VW.

**4715-2** – Removal Keys (2 pieces) Becker, Mercedes-Benz, Porsche.

**4715-3** – Removal Keys (2 pieces) VW.

**4715-4** – Removal Keys (2 pieces) Skoda.

**4715-5** – Removal Keys (2 pieces) Becker.

**4715-6** – Pentagon Wrench BMW.

**4715-7** – Bent U-hook (2 pieces) Blaupunkt.

**4715-8** – U-hook (2 pieces) Audi, Blaupunkt, Ford, Grundig, VW.

**4715-9** – Allen Hex Wrench BMW, Opel.

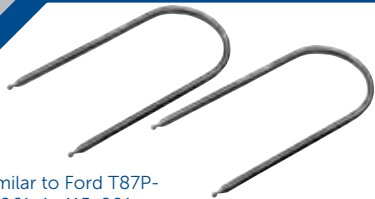


**7744**  
**Anti-Static Wrist Strap**

Virtually eliminates the possibility of static electricity causing damage while working on electronic components.

- One-size-fits-most adjustable wrist strap.
- Includes a 6' coil cord with alligator clip.

# ELECTRICAL SERVICE AUTOMOTIVE SPECIALTY TOOLS



Similar to Ford T87P-19061-A, 415-001

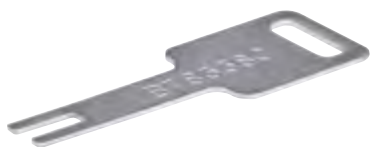
## 7575 Ford Radio Removal Tool Kit

These dual-purpose tools release the retaining clips of a radio faceplate so you can pull the radio from the instrument panel. For use on 1987 to current Mustang; 1988 and newer Tempo/Topaz; 1989 to current Lincoln Continental; 1990 to current Taurus/Sable, Ranger/Bronco II, Probe, Lincoln Town Car, Mark VII, Crown Victoria/ Grand Marquis, Thunderbird/Cougar, F-series pickups and E-series vans; 1991 to current Explorer; 1995 to 2003 Windstar.



## 6711 Mercedes-Benz Dashboard Service Tool Kit

- 8-piece tool kit contains:
- (2) removal tools for ignition lock on model W126.
- (2) removal tools for ignition locks on models W124 & W201.
- (2) removal hooks for instrument cluster on models W107, W116, W123, W124, W126, W140, and W201.
- (2) radio removal tools on models W129, W140, W202, and W210.
- Covers virtually all Mercedes-Benz models since 1992.



## 7739 GM Code Retrieval Key

- This key retrieves trouble codes from pre-OBD II model GM vehicles.
- ECM code retrieval key. Jumps between A and B terminals on ALDL connector to retrieve trouble codes from the ECM.



## 3385 Universal Gauge and Component Tester

This is the fast way to pinpoint problems in fuel, oil, temperature, and vacuum electrical gauges. This gauge and component tester includes a test light and switch to also test instrument voltage regulators on various vehicles. Plus, you can use it as an instrument gauge tester by attaching the alligator clips to sensors and wiring harnesses on a variety of vehicles. Included is an instrument gauge application data sheet listing resistance set points for GM, Ford, Chrysler, Toyota, Nissan, VW, Mack, Navistar, and John Deere.



7955

7956

## Ford Air Bag Simulator

When plugged into the vehicle harness connector, power is restored to simulate a complete circuit for diagnostic purposes.

**7955** – Ford air bag simulator. Special one-ohm resistor for use on air bags on Probe vehicles.

**7956** – Ford air bag simulator. Special two-ohm resistor for use on 1993 and newer Ford system II air bags.



Similar to Ford No. 303-1115

## 6766 Ford 6.0L Diesel Terminal Release Tool

This Terminal Release Tool is required for removal of the vehicle's injector wiring harness without causing damage to the component.



## 6768 Ford 6.0L Glow Plug Release Tool

Safely remove and install the glow plug harness on 2004-2009 Ford 6.0L Diesel engines.



## 5945 Air Bag Release Tool Kit

- Use to remove the air bag module from the steering wheel.
- Work on many GM, Ford and Mercedes Benz vehicles.

Applications:

- Ford 2000-2004 Taurus/Sable, 1999-2003 Windstar Van.
- GM 1999-2005 Chevrolet Impala, Lumina, Monte Carlo, Venture, Pontiac Bonneville, Grand Prix, Montana, Buick LeSabre, Century, Regal, Olds Intrigue, Cadillac El Dorado, Deville, STS, SLS.
- Mercedes Benz Models 107,123, 124, 126, 129, 140, 163, 164, 170, 201, 202, 203, 208, 209, 210, 211, 215, 219, 220, 221 and 463.



## 6764 Ford 6.0L Diesel IPR Controller

When a hard start or no start condition exists, the 6764 allows a technician to close the Injector Pressure Regulator in order to determine if proper injector control pressure is achieved and sustained for the starting process.

- Tactile On/Off switch with LED confirming power to the tool and signal to the Injector Pressure Regulator.
- Permits a quick initial diagnosis of the pressure regulator when a hard start-no start situation exists.
- Used in conjunction with any scan tool capable of reading fuel pressure on 6.0L Ford Diesel.



**3630**  
**Battery Powered Continuity Tester**

Designed to test any type of non-live electrical circuit. Track down broken wires, bad grounds, and blown fuses quickly.

Product Features:

- Comes with AAA alkaline battery.
- Ergonomic, slim designed clear handle.
- 12', red coil cord.
- Low voltage replaceable bulb.
- Molded strain relief.
- Heavy-duty stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



**3633**  
**Mini-coil Cord Circuit Tester**

Small handle with needlepoint stainless steel probe allows easy back probing and piercing. Special threaded probe comes with screw on alligator clip for additional versatility. Useful in testing electrical circuits and locating shorts, grounds, and open circuits.

Product Features:

- 12', heavy-duty, red coil, cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, high intensity/slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



**3639**  
**Extra Long, Heavy-Duty Circuit Tester**

Long 7" probe shank allows access to difficult to reach areas for testing electrical circuits and locating shorts, grounds, and open circuits.

Product Features:

- 12-foot, heavy-duty, red coil cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



**3631**  
**Heavy-duty Logic Probe Tester**

Multi-functional design allows testing range of 3–26 volts. Bright red and green LEDs interpret voltage signals such as ground, power, and frequency. Tests fuel injectors, solenoids, presence of serial data, and tach reference signals. Output tests on MAF, Cam, Crank, Hall Effect VRS sensors and more. High impedance input compatible with computer circuits and sensors.

Product Features:

- Air bag safe.
- 12', heavy-duty, twin clip, red coil cord lead.
- Checks 6-, 12-, and 24-volt systems.
- Ergonomic, slim designed clear handle.
- Positive contact molded strain relief.
- Heavy-duty stainless steel probe with insulated shaft.

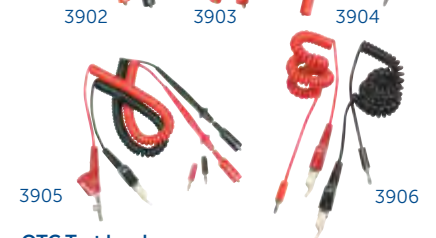


**3634**  
**Heavy-Duty, Straight Cord Circuit Tester**

Designed for testing electrical circuits and locating shorts, grounds, and open circuits.

Product Features:

- 5-foot heavy-duty cord.
- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



**OTC Test Leads**

Constructed from high quality polyurethane, these high visibility coil cord test leads have superior memory retention and resistance to grease and oil, making them a perfect compliment to any technician's arsenal of test equipment. Test leads come with a variety of interchangeable tips suited for just the right application.

**3902**  
Twin 5' jumper leads. High visibility black and red leads stretch to over 5 feet in length.

**3903**  
24' jumper leads. From headlight to taillight, this extra long test lead stretches to over 24 feet in length.

**3904**  
Twin 5' multimeter lead set. Expand the usefulness of any standard multimeter. This set includes one black and one red test lead, 2 multimeter probes, 2 banana plugs, and 4 alligator clips.

**3905**  
Twin 5' multimeter/piercing jumper lead set. Pierce small gauge wires with this complete jumper lead set. This set includes one black and one red test lead, 2 multimeter probes, 2 banana plugs, and 2 alligator clips.

**3906**  
Twin 5' piercing test lead set. With 2 banana plugs and 2 bed-of-nails, this test lead set has just the right combination of tips for most testing applications.



**3642**  
**12V–24V Truck Circuit Tester**

Product Features:

- Works on 12–24 volt systems.
- Features 7" stainless steel probe.
- 24' coil cord.
- Extra large clamp.



**3636**  
**Heavy-Duty, Coil Cord Circuit Tester**

Designed for testing electrical circuits and locating shorts, grounds, and open circuits.

Product Features:

- 12-foot, heavy-duty, red coil cord lead.
- Checks 6- and 12-volt systems.
- Ergonomic slim designed clear handle.
- Bright red, slim style replaceable bulb.
- Positive contact-molded strain relief.
- Heavy-duty, stainless steel probe with insulated shaft.
- Heavy-duty clip with positive soldered connection.



# ELECTRICAL & A/C SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 3569 Terminal Test Kit with Circuit Tester (Standard Adapters)

- 14-piece standard terminal adapter set for the popular Packard Weather Pack, Metri-Pack, and Micro-Pack style connectors. External-internal versions of adapter styles.
- Circuit tester with bulb for 6-12-24 volt systems with interchangeable probes for use with terminal test adapters. Heavy-duty coil cord extends to 12 ft.
- Terminal adapters have flexible joints that eliminate damaged connector terminals that result from testing with a standard test probe.
- Complete kit in plastic storage case.



## 3587 Terminal Test Kit (Standard Adapters)

- Excellent accessory when testing with a scope or meter.
- 32-piece standard terminal adapter set for the popular Packard Weather Pack, Metri-Pack, and Micro-Pack style connectors. Multiple external-internal versions of adapter styles.
- Terminal adapters have flexible joints that eliminate damaged connector terminals that result from testing with a standard test probe.
- Set of 4 patch cords (4 ft.) included for use on multiple terminal connectors, for use with terminal adapters.
- Complete kit in plastic storage case.



## 3650 Heavy-Duty, Remote Starter Switch

Allows one person to start and crank engine while under the hood or from either side of the vehicle. Product Features:

- With convenient hot circuit indicator, red ready light glows when starter switch is connected to a hot circuit; light goes off when switch is depressed.
- High current, heavy-duty push button switch ensures reliable operation and long service life.
- 5' leads made from heavy-duty, oil and grease resistant, 12-gauge wire.
- High current clips with protective boots open to an extra wide 5/8" for ease of hook-up.
- Soft, non-slip rubber grip.



## 4537 A/C Clutch Holding Tool

This three-stud spanner wrench keeps the A/C clutch from turning when loosening or tightening the retaining nut. Adjusts quickly with brass thumbscrews to fit various styles of A/C compressors used on GM, Ford, and Chrysler vehicles. Also fits a variety of other pulleys.



## 11009 Clutch Plate Remover

Designed to overcome resistance when removing the clutch plate.



## 4536 A/C Clutch Pulley Puller Set

- For removal of stubborn air conditioning clutch pulleys. Also used on many alternator, generator, power steering, and crankshaft pulleys, harmonic balancers, and fiber timing gears.
- Set includes drop-forged components: one 3/4"-16 x 5" live-center forcing screw, 5-1/2" crossbar with three spread settings, two pairs of jaws, and a clamp bolt.
- Spread: 3" to 5"; Reach: 1" to 5".
- Includes blow-molded plastic case.



## 4535 A/C Clutch Hub Remover/Installer Set

- For damage-free removal and installation of the clutch hubs on these air conditioning compressors: GM-Harrison DA-6, HR-5, V-5, A-6, and early R4; Nippondenso Ford/Chrysler A590, C171, FS-6, 6P148A (new style); Sanden & Sankyo; York/Tecumseh HR980; Zexel/Mitsubishi CH series.
- Set includes a removing flange, plus forcing screws and adapter assemblies to remove and install virtually all clutch hubs.
- Includes blow-molded plastic case.



## Clutch Plate Remover/Installer

These compact tools are used both to remove the clutch for access to the shaft seal and to re-install it by simply inverting the nut and main bearing.

**10861** – A6, R4.

**41067** – V5, DA6, HR6.



### A/C spring lock coupling tool

Spring-loaded in the closed position to deflect any spray that occurs when lines are disconnected.

**518900** – Red, 3/8"      **518898** – Blue, 1/2"



### A/C spring lock coupling tool

Spring-loaded in the closed position to deflect any spray that occurs when lines are disconnected.

**518897** – Black, 5/8"      **518901** – White, 3/4"



### 7238

#### Spring Lock Coupler Disconnect Set

Set includes four sizes for use on 3/8", 1/2", 5/8", and 3/4" tubes. Allows quick, safe disconnect of spring lock couplers on late model Ford systems and Tecumseh HR980 compressors.

**518900** – 3/8" (red) Same as Ford 412-026 (T81P-19623-G1).

**518898** – 1/2" (blue) Same as Ford 412-027 (T81P-19623-G2).

**518897** – 5/8" (black) Same as Ford 412-038 (T83P-19623-C).

**518901** – 3/4" (white) Same as Ford 412-040 (T85L-19623-A).



### 4494

#### Fuel and Air Conditioning Line Release Tool

- This spring-lock coupling release tool easily separates fittings on fuel and air conditioning lines.
- Tool sizes are 3/4", 5/8", 1/2", and 3/8".



### 6517

#### Disconnect Tool Set

Designed for A/C lines, fuel lines, and transmission cooler lines.

- Contains 3/8", 1/2", 5/8", and 3/4" spring lock disconnect tools for A/C lines on Ford cars and trucks, Chrysler and Jeep vehicles.
- Contains the 3/8" and 1/2" fuel line disconnect tool for Ford vehicles.
- Contains the 5/16" and 3/8" fuel line disconnect tools for GM and Chrysler vehicles.
- Contains the transmission oil cooler line disconnect tool used on many GM and Ford vehicles.



### 6073

#### Toyota A/C Disconnect Tool

- Used to release the plastic quick-connect fittings on the high- and low-pressure air conditioning lines at the evaporator.
- Services 1998–newer Toyota Corolla, 1998–newer Geo Prizm, 1998–1/2–newer Toyota Land Cruiser and Lexus LX470, 1999–newer Toyota Avalon, Camry, Solara, and Sienna mini vans.
- Easy to use: Plastic fitting on A/C line is rotated to show access to the two release holes in the fitting; tool is inserted into release holes, and pushed to release the fitting.



### 4495

#### A/C and Fuel Line Disconnect Set

- Used to remove A/C and fuel line quick-disconnect fittings from hard-to-reach areas.
- Six sizes (5/16", 3/8", 1/2", 5/8", 3/4", and 7/8") available to work on many import/domestic vehicles.



### 6508

#### Full-Coverage Disconnect Tool Set

If you're working on Chrysler, Ford, or General Motors vehicles, this set can make your job easier. The tools are designed for heater hoses, transmission oil coolers, air conditioning and fuel lines. They're approved by vehicle manufacturers and will not damage the fittings being disconnected. Tool Nos. 518902, 518896, 518897, 518898, 518899, 518900, and are spring-loaded in the closed position to deflect any spray that occurs when lines are disconnected.

**SEE PAGE 27 FOR COMPLETE DETAILS**



### 6703

#### Line Fluid Stopper Kit

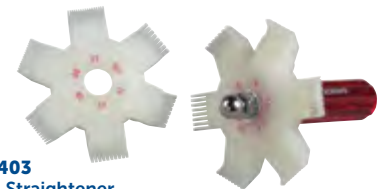
Stop messy fluid leaks and prevent contamination during service.

- Kit seals all types of rubber and steel line found on fuel, brakes, AC, power steering and transmission system.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

**6703-1** – Banjo Line Fluid Stoppers, 2 pk.

**6703-2** – Steel Line Fluid Stoppers, 2 pk.

**6703-3** – Line Plug Fluid Stoppers, 6 pk.



### 18403

#### Fin Straightener

- Clean and straighten condenser, evaporator and radiator cooling fins.
  - Compact design for confined spaces: the straightener head is 3-1/8" in diameter; the handle is 3-1/2" long.
  - Includes 12 clearly marked combs
- Wheel 1: 8, 9, 10, 12, 14, & 15 fins per inch.  
Wheel 2: 10.5, 11, 13, 18, 20, & 22 fins per inch.



**10986  
Orifice Tube Remover**

Use this handy tool to remove the orifice tube before flushing. Speeds service by removing the build-up of particulates on the orifice screen and restrictions that slow flushing. The basic tool works on GM and Ford vehicles and comes with: an extender body for 1985 and newer Ford models; an adapter for 1989–91 GM "J", "L", and "N" cars; and an adapter for 1991 and newer GM "C" and "K" trucks with #3096068 orifices.



**6512  
Heavy-Duty Tubing Cutter**

- Works on tubing sizes 1/8" to 1-1/8" O.D. (3mm to 29mm).
- Easily cuts copper, brass, aluminum, and steel brake lines.
- Reamer folds onto cutter body for storage.
- Extra cutting wheel stored under reamer.



**6514  
Mini Tubing Cutter**

- Works on tubing sizes 1/8" to 5/8" O.D. (3mm to 16mm).
- Easily cuts copper, brass, aluminum, and steel brake lines in hard-to-reach places.
- Extra cutting wheel stored in knob.



**45355  
Fiber Optics Inspection Light**

The applications for this handy tool are practically endless...check burners on heat exchangers for cracks, check coils for dirt and damage, look at serial numbers, fan motor tags, etc., on furnaces and condensing units. Fiber optics provide a bright light, but the shaft is just 7.6 mm in diameter. A durable cover fits over the 15" flexible shaft for protection. Powered by three AA batteries.

- Inspection light with magnetic tip and base.



**6515  
3-in-1 180° Tubing Bender**

- Capable of making 180° bends in copper, brass, aluminum, and steel tubing.
- Just one tool works on three sizes of tubing: 1/4", 5/16" and 3/8".



**42040  
Single Blade Deburring Tool**

This handy tool removes internal burrs in copper tubing. It features a high-speed steel, blade, aluminum handle, and pocket clip. Tubing size is unlimited.



**14450  
Heat Gun**

A lightweight source of directed heat offering 500°F and 750°F settings, and also has a "cold" setting. This handy heat gun is ideal for many applications, including:

- Fast heating/drying of materials.
- Quick curing/drying of epoxies.
- Applying shrink tubing.
- Softening tubing for bending.
- Speed-drying of touch-up paint to eliminate "haze."
- Drying out condensation in motors, clutches, controls, etc.
- Shock-proof and cool-running with a tough housing, the unit weighs just 2-1/2 lbs.
- 115V 50/60 Hz.

Replacement parts

- **44997** – Switch assembly.



**18548  
Four-In-One Tube Bender**

Effortlessly bends four different sizes of soft or annealed tubing without crimping, flattening, or scratching. Calibration allows duplication of any angle. Handles are 8-1/2" long, so extensions are not needed, and glass/plastic construction combines strength with lightweight durability.



**13162  
Deburring Tool**

Quickly deburrs aluminum, copper, and steel tubing, and can work on any size tubing. It's made with a high-speed, steel blade and a durable aluminum handle. Three spare blades store in the handle.



**6720-4  
Flare Nut Locking Plier**

- Covers sizes 11/16" to 7/8" (17mm to 22mm). Fits nut sizes found on power steering and AC lines.
- Designed for use on new or damaged flare nuts that have been rounded or rusty.
- Fits Standard or Metric nuts and bolts.
- Angled jaws allow for clearance around frames and bulkheads.

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**2525 Power door skin remover and 2524 power door skin remover air**

- Cuts through rounded door-hem edge, over body lines, and around corners to remove door skins.
- Eliminates time consuming and messy grinding.
- 20 gauge capacity in steel and other common sheet metals.
- Cuts straight and to the left for round or square auto body patches.
- Compact, lightweight, one hand operation.

**2524 Power Door Skin Remover Air**

Compatible with most existing air set-ups.

**2525 Power Door Skin Remover**

Use with minimum 14.4V 3/8" cordless or corded drill.

**2525RB Replacement Blades**



**2527 Power Hemming Tool and 2526 Power Hemming Tool Air**

- Designed to efficiently hem the edges of replacement door skins with speed and precision.
- Minimum manual tacking required.
- High impact ABS polymer anvil will not scratch or mar the replacement door skin.
- 20 gauge capacity in steel and other common sheet metals.

**2526 Power Hemming Tool Air**

Compatible with most existing air set-ups.

**2527 Power Hemming Tool**

Use with minimum 14.4V 3/8" cordless or corded drill.

**2527RA Replacement Anvil**



**2529 Power Quarter Panel Hemming Tool and 2528 Power Quarter Panel Hemming Tool Air;**

- Easily bend and close wheel arc flanges on quarter panels.
- Replicates a hammer and dolly motion at high speed, with greater precision and faster results.
- Reversible hammer head allows folding of the flange and sealing of the seam.
- Hand peg provides smooth operation and controlled maneuverability.

**2528 Power Quarter Panel Hemming Tool Air**

Compatible with most existing air set-ups.

**2529 Power Quarter Panel Hemming Tool**

Use with minimum 14.4V 3/8" cordless or corded drill.

**2529RH Replacement Hammer**

**2529RA Replacement Anvil**





Use with minimum 14.4V 3/8" cordless or corded drill.

**2531 Power Shear Corrugated Metal**

- Easily cuts body panels across sharper body lines as well as large and small corrugated sheet metal.
- 24 gauge capacity in steel and other common sheet metals.
- Cuts straight and to the left for round or square holes.
- Compact, lightweight, one hand operation.

**2531RB Replacement Blades**



**2535 Power shear 18 and 2534 power shear 18 air**

- Easily cuts body panels, wide opening jaws also navigate thick plastic bumper profiles, rocker panels, and layered material.
- 18 gauge capacity in steel and other common sheet metals.
- Cuts straight and to the left for round or square auto body patches.
- Compact, lightweight, one hand operation.

**2534 Power Shear 18 Air**

Compatible with most existing air set-ups.

**2535 Power Shear 18**

Use with minimum 14.4V 3/8" cordless or corded drill.

**2535RB Replacement Blades**



**2537 Power shear 16 and 2536 power shear 16 air**

- Heavy metal cutting performance with a 16 gauge capacity.
- The spiral foot allows for easy left, right, or straight cutting action.
- Outstanding accessibility and control at air speed.
- 5 position 0 to 90 degree adjustable head angle.
- Long life 4 sided cutting insert.

**2536 Power Shear 16 Air**

Compatible with most existing air set-ups.

**2537 Power Shear 16**

Use with minimum 14.4V 3/8" cordless or corded drill.

**2537RB Replacement Blades**

**SYNTHETIC BODY TOOLS**



**2470 Spot Weld Breaker**

Use with hammer to slice through panels after spot welds have been drilled.



**2471 Trim & Bezel Tool**

Trim panel pry tool - non-marring tool for many interior trim and bezel pieces.



**2472 Window Trim and Molding Remover**

Perfect for removal of fragile trim pieces like chrome window trim.



**2473 Half Round Bumping Tool**

- Designed to reshape rounded metal profiles
- Good performance in confined areas.



**2474 Heavy Duty Profile Straightening Tool**

Designed to reshape straight profiles with minimal deflection



**2475 Round Body Anvil**

- Use on rounded surfaces.
- Rounded Chisel end to reshape small diameter round profiles.
- Wide striking area for accurate strikes.



**2476 Curved and Flat Dolly**

Designed for both curved and straight area shaping.



**2477 Edge Straightener**

- Use to straighten edges.
- Wide profile enhances professional finish.
- Perfect for doors, fenders and hoods.



**2478 Extended Reach Bumping Tool**

Designed for use on hard to reach areas such as door skins, panels, hood and deck lids.

**SYNTHETIC BODY TOOLS**



**2479**  
**30mm Trim Wedge**  
For safe removal of body trim safely - without damage.



**2480**  
**60mm Trim Wedge**  
For safe removal of body trim - wider profile for larger pieces.



**2485**  
**3 Pc Bumping Tool Set**  
Door Aligner, Center Punch and Straightener - Available individually.



**2481**  
**Blind Panel Removal Wedge**  
Designed to reach inside panel release points for blind removal support.



**2487**  
**Combination Wedge Pry Tool**  
Designed to safely pry plastic automotive pin style fasteners.



**2482**  
**120mm x 30mm Pick Hammer**  
Synthetic hammers designed by body repair pros for precise and effective working, ease of use.



**2488**  
**Pinch seam straightener**  
Designed to realign, and straighten pinch seams.



**2483**  
**140mm x 40mm Pick Hammer**  
Two - sizes for a variety of application



**2491**  
**Stepped Lever Wedge**  
Designed to assist alignment of doors and glass



**2484**  
**160mm x 40mm Finishing Hammer**  
Use directly on body panel, or in conjunction with other repair tools.



**2490**  
**Universal Hook**

- Dual purpose hooking / prying tool.
- Designed to safely pry small bezel components from interiors without damage.



**2489-8**  
**Single Spotweld Carbide Drill Bit**

- High Speed Steel construction specially treated to maintain sharpness.
- Self Centering with 3 cutting points!
- Designed for Drilling through Spot Welds.



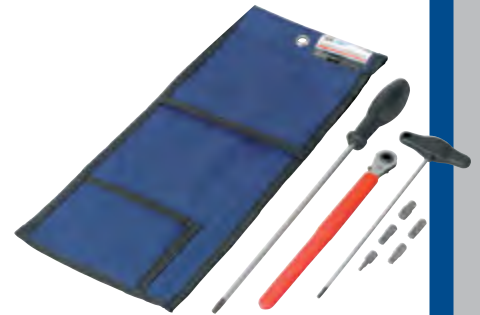
**2492**  
**5Pc Spotweld Carbide Drill Bit Set**

- Super Hard Titanium construction - specially treated to resist dulling in hi temp environments.
- Designed for Drilling through Spot Welds.



**4549**  
**Door Panel & Upholstery Tool Set - Heavy-duty door panel and upholstery tools**

- **4549-1** – removes window and door handle clips, and upholstery tucking.
- **4549-2** – V-notched door panel clip removal tool
- **4549-3** – U-notched door panel clip removal tool



**6785**  
**Euro Door Handle Kit**

- This kit contains the tools needed to service most door hinges and door handles on Audi, Mercedes-Benz, Porsche, and Volkswagen vehicles.
- Kit includes: A ratchet wrench with three 12-point bits (4 mm, 8 mm, 10 mm), one T40 and one T45 TORX® bit; a T30 TORX® long handled driver; and a T20 TORX® T-handle driver.
- T30 driver, 14" long; T20 driver, 9-1/2" long; hex ratchet, 9-1/2" long.



**6642**  
**11-Piece Trim Tool Kit**

Includes 11 specialty tools designed to remove trim strips, panels, wheel caps, bezels, liners, shrouds, fascia, and more...

- Tools are constructed of durable, impact-resistant nylon that will not damage non-metal interior trim surfaces.
- Cloth pouch rests flat on a dashboard or fender for easy access to tools and then folds up with tools inside for storage.
- Kit has multiple applications in the automotive, aviation marine, and other industries.

**4551**  
**Small Door Panel & Upholstery Tool Set**

Heavy-duty U-notched and V-notched tools with stainless steel blades used for removing small door panels and upholstery clips.



**8200A**  
**Ford Mirror Removal Tool**

Save shop labor time and cost by allowing mirror to be removed without damaging or removing the mirror assembly.

**Works on these outside door mirrors:**

- Windstar, Crown Vic, Grand Marq, Marauder, Taurus, Sable, Mustang, Town Car, Ranger, Excursion, Super Crew (F-250-F-550), F-650, F-750, Escape, Thunderbird, Explorer, Mountaineer, Expedition, Navigator, F-150, E-Series van, LS, Explorer Sport, Explorer Sport Trac, Aviator, Dual arm mirror used on Excursion, Super, Crew (F-250-F-550), F-650, F-750
- Also works on 1999 and newer Ford interior / rearview.



**4492**  
**5-Piece E-Clip Tool Set**

- Dual operation tool: one end of tool releases e-clip; other end of tool installs e-clip.
- Tools fit four sizes of e-clips: 6 mm, 7 mm, 8 mm, and 9 mm.
- Each tool easily locks into handle provided.



**4489**  
**Trim Fastener and Molding Removal Set**

- Set includes five different sizes and styles of tools that allow easy removal of trim fasteners, moldings, and wheel hubs.
- Tools are made of plastic to prevent damage to trim, moldings, alloy wheels, or vehicle paint.
- Can be used on trim fasteners and moldings inside, or outside, the vehicle.

**4550**  
**3 Pc Professional Scraper Set**

Scrapers feature polished, heat-treated, stiff, stainless steel blades. Handles are ergonomic two-component plastic and feature a non-slip grip and steel bolstered end.

- Packaged in a storage tray. Includes: 1-1/4" straight blade, 1-1/4" bent blade, and 2" straight blade.



**7827**  
**Saturn Window Glass Socket**

This specially designed socket enables you to easily remove the tricky fasteners that Saturn uses to hold window glass to the regulator in its car doors. Our tool won't cause the damage that often results from makeshift methods.

- For use on 1991 to 2009.
- Accommodates a 3/8" drive ratchet and extension.





# BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS



539254

539255

539256

## 5945

### Air Bag Release Tool Kit

- Use to remove the air bag module from the steering wheel.
- Work on many GM, Ford and Mercedes Benz vehicles.

#### Applications:

#### 539255 – Air Bag Release Tool

GM 1999-newer Chevrolet Impala, Lumina, Monte Carlo, Venture, Pontiac Bonneville, Grand Prix, Montana, Buick LeSabre, Century, Regal, Olds Intrigue, Cadillac El Dorado, Deville, STS, SLS.

#### 539254 – T30 TORX® Socket

Mercedes Benz Models 107,123, 124, 126, 129, 140, 163, 164, 170, 201, 202, 203, 208, 209, 210, 211, 215, 219, 220, 221 and 463.

#### 539256 – Anti-Theft Socket

Ford 2000-'04 Taurus/Sable, 1999-'03 Windstar Van.

7955



7956

#### Ford Air Bag Simulator

When plugged into the vehicle harness connector, power is restored to simulate a complete circuit for diagnostic purposes.

**7955 – Ford air bag simulator.** Special one-ohm resistor for use on air bags on Probe vehicles.

**7956 – Ford air bag simulator.** Special two-ohm resistor for use on 1993 and newer Ford system II air bags.



4676

#### Windshield Wiper Puller

- Removes wiper arms on many foreign and domestic cars and light trucks.
- Will not damage wiper arm or hood cowl during removal.
- Simply place puller feet under wiper arm and tighten forcing screw against wiper shaft.



4448

#### Door Buzzer Shutoff Tool

- This simple tool allows for work with the vehicle door open without the annoying door buzzer on.
- High tension spring can be placed in the door jamb to close the door buzzer switch typically found by the hinges.



4449

#### Air Wedge Lockout Tool

- Air wedge is designed to create working room around the window frame when using other lockout tools.
- Adjustable inflation and release valve provides versatile use.



4658

#### Windshield Spray Nozzle Needle

- Makes quick work of clearing obstructions from the windshield washer spray nozzle.
- Easily pierces corrosion or remove blockage.
- The barrel is knurled for grip and control.
- Threaded end caps keep the needle points covered when not in use. The pocket clip keeps the tool handy.

6676

#### 18Mm Truck Windshield Wiper Puller

- Designed to remove aluminum wiper arm from the steel stud that often galvanizes, locking the arm and stud together.
- Investment cast design is strong, easier to use, and saves time.
- Live center and more precise alignment save labor. Works on these and many other vehicles: Jeep Liberty, Grand Cherokee, Dodge Caravan, Stratus, Ram Diesels, Dakota & PT Cruiser, Chrysler LHS, Town & Country, Saturn Vue Buick Rendezvous, Cadillac CTS, Ford Focus, Ford Windstar, Honda Civic, Odyssey Toyota Camry.



4452

#### Master Lockout Tool Set

Set includes:

- Lock Knob Puller
- Slide Lock Linkage Hook
- Under Window Knob Puller
- Under Window Lock Button Depressor
- Under Window Slide Lock Puller
- Lockout Wedge
- Porsche Lock Button Depressor
- Toyota/Chrysler Key Hole Lever
- GM/Ford Linkage Slider
- Ford Vent Window Lever
- Vent Window Button Depressor
- Vent Window Lever Puller
- Bell Crank Thin Bar
- Bell Crank Wide Bar
- Mercedes/Vovlo Lock Linkage Puller
- 119-2 Gas Cap Key.
- Instruction Manual

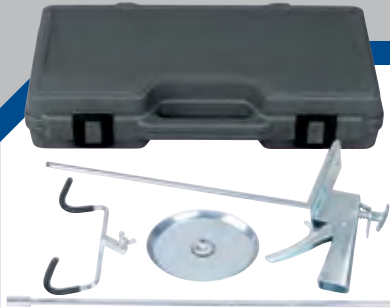


4450

#### Lockout Tool Set (6 piece)

Set includes:

- Lockout Wedge
- Lock Knob Hook
- Slide Lock Linkage Hook
- Toyota/Chrysler Key Hole Lever
- Vent Window Lever Puller
- Bell Crank Thin Bar
- Instruction Manual



- 4546**  
**Steering Wheel Holder & Pedal Depressor Kit**
- This kit has two applications: 1) holds steering wheel in position for alignment adjustments, and 2) depresses brake pedal for various brake checks, including brake lamp operation.
  - Rod easily slides in actuator for fast, easy installation of tool on brake pedal or steering wheel. Simply hand squeeze the actuator to accomplish fine adjustments.
  - Kit includes: actuator assembly; extension rod for actuator (use when depressing brake pedal); hook assembly (hooks on steering wheel when depressing brake pedal or holding steering wheel); and flat pad (rests on front seal when holding steering wheel).

**4546-1** – Handle and Rod.  
**4546-2** – Steering wheel and pedal holder.



- 4485**  
**Spot Weld Cutter Set**
- Use with electric drill or air drill to cut 5/16" and 3/8" spot welds.
  - Cutter bits have cutting teeth on each end.
  - Replacement kit No. 4485-1 consists of (3) 5/16" cutter bits; (3) 3/8" cutter bits; and (4) centering tips.



- 4651**  
**Screw Extractor Set**
- Removes broken studs and bolts.
  - Includes ten guide bushings, five drill bits and five screw extractors with extractor nuts.
  - Drill bits are left handed to help removal.



- 4705**  
**Telescopic Support**
- Car hoods, or trunk lids with weak hinges or struts can sag or fall. The OTC 4705 securely holds these panels up and out of the way. Great tool for setting a hard cover on a pick-up box - turns a two man job into one.
  - Just 21" when collapsed to almost 48" when fully extended.
  - A simple twist loosens the support for expansion. Twist in the opposite direction to lock in place at the desired length.
  - Rubber end caps prevent scratching and scuffing.



- 4602**  
**Brass Punch Set (2 piece)**
- Two large, brass non-sparking punches. Ideal for use near precision parts or in locations where sparks from ferrous metal could be hazardous.
  - Includes an 8" punch (5/8" hex, tapered to 3/8") and 10" straight punch (3/4" dia., chamfered at both ends).



- 4606**  
**Brass Hammer and Punch Set**
- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
  - Hammer head weighs 24 oz.; brass drift punch is 10" x 3/4" diameter; brass tapered punch is 8" x 5/8" hex tapered to 3/8" diameter point.



- 4383**  
**Hole Punch Kit**
- Easy, smooth operation. Will pierce up to 14 gauge steel.
  - 7 sets punches and dies. Sizes: 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", and 9/32".



- 4629**  
**Brass Hammer and Punch Set**
- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
  - Two hammer head weighing 24 and 12 oz.
  - Two tapered punches 14" x 5/8", 10" x 5/8".
  - One hex tapered punch 8" x 5/8".
  - Two drift punches 10" x 3/4", 8" x 1/2".
  - Two pin punches 6" x 3/8", 4" x 1/4".

# BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 898A Body and Fender Dent Puller

Often, the biggest time-consuming part of dent removal is the removal and installation of interior panels and upholstery. This tool eliminates those steps. Simply drill a hole at the base of the dent and thread in the tool's self-tapping screw. A few sharp blows of the slide hammer will pull the dent out.

- Puller is 17" long with Pyralin handle grip.
- Replaceable self-tapping screw. Instructions included. 104427-PK5 – Replacement screws (5 pack).



## 4784 10" Profile Gauge

This 10" gauge provides an exact copy of a contour or profile needed during bodywork or fabrication. The plastic fingers will not scratch original finish.



## 6627 Grip Wrench Adapters

- For grip wrenches using single-lead thread adjusting screw.
- Adapter threads onto a slide hammer with a 5/8"-18 thread.

**205378** – Grip wrench threads onto a 7/16"-14 end of adapter for pulling use.

**557479** – Grip wrench threads onto a 5/16"-18 end of adapter for pulling use.

**557480** – Grip wrench threads onto a 1/4"-20 end of adapter for pulling use.



## 18403 Fin Straightener

- Clean and straighten condenser, evaporator and radiator cooling fins.
- Compact design for confined spaces: the straightener head is 3-1/8" in diameter; the handle is 3-1/2" long.
- Includes 12 clearly marked combs

Wheel 1: 8, 9, 10, 12, 14, & 15 fins per inch

Wheel 2: 10.5, 11, 13, 18, 20, & 22 fins per inch



## 4509 Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

**4509-1** – Replacement hose cutter blade.



## 4411 Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



## 4412 Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



## 4818 Multi-purpose Scissors

Will cut hose, wire and cables, wood dowel, PVC, and thin sheet metals in addition to general cutting. The hardened stainless steel blades have an angle ground into one that eliminates slipping when cutting round materials.



## 5900A Master TORX® Socket Set

52-piece, professional socket set in a blow-molded case.

Hundreds of applications from front to rear on cars and trucks:

- |                                     |   |
|-------------------------------------|---|
| – Seat belt bolts                   | – Headlight bezels                          |
| – Interior and exterior trim screws | – Door strikers & latches                   |
| – Engine assemblies                 | – Brake rotor bolts                         |
| – Tail lamp lenses & assemblies     | – GM front-wheel drive front wheel bearings |
| – Bumpers                           | – Truck box liners                          |

- Styles available: TORX bit sockets, TORX PLUS bits sockets, tamper-resistant TORX bits, and TORX sockets for external bolts.
- Made from superior S2 steel to meet or exceed torque specifications.
- See Page 110 for more information.

# HYDRAULIC SPREADERS AND RAMS

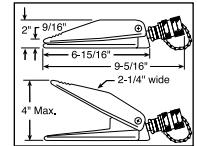


### Hydraulic Spreaders

- Included as standard equipment with our collision sets, these versatile hydraulic spreader tools are also available individually. Ideal for removing dents and creases, performing straightening jobs, or for use as a clamp. Makes working in tight spots easy.
- Maximum spread is 3-1/4".

**9101B** – 1/2-ton spreader with 1/4" NPT ram half coupler

**9102** – 1/2-ton spreader with 3/8" NPT ram half coupler



### 4085

#### 1-ton Capacity Hydraulic Spreader

This hydraulic spreader is rated at a full 1-ton capacity at 10,000 PSI and that's enough for a wide variety of jobs. Working in tight spots is no problem—it needs only a 9/16" clearance to engage the jaws. With a big 4" spread, it's ready for a variety of applications: straightening work, removing dents and creases from sheet metal, or as a clamp. The device's spring-return jaws are made of high-strength alloy steel. It can be dead-ended at 4" spread under full load. Ideally suited to work with No. 4012 hand pump (not included).



4083B

4082A

### Hydraulic Rams for Collision Repair Sets

These premium quality rams are designed for long, trouble-free service. Backed by a life-time warranty, they are ideal replacements for worn-out, leaky rams. They feature a special piston rod that permits their use with the snap-together components of OTC's collision repair sets, or with most similar competitive products.

**4082A** – 4-ton ram with 5" stroke and special piston rod end designed to fit most collision repair set components.

**4083B** – 10-ton ram with 6-1/8" stroke and special piston rod end designed to fit most collision repair set components.

Specifications	4082A	4083B
Min. height	10-7/8"	14-5/8"
Max. height	15-7/8"	20-3/4"
Spring return	Yes	Yes
Rod end dia.	.874"	1.310"
Max. operating. Pressure	8,950	8,950
Oil cap. (cu. in.)	4.97	13.69
Oil port	1/4" NPT	3/8" NPT



9110B

9104B

### Hydraulic Rams for Collision Repair Sets

These premium quality rams are designed for long, trouble-free service. Backed by a two-year warranty, they feature a special piston rod that permits their use with the snap-together components of OTC Stinger's new collision repair sets, or with most similar competitive products.

**9104B** – 4-ton ram with 4" stroke and special piston rod end designed to fit most collision repair set components.

**9110B** – 10-ton ram with 6" stroke and special piston rod end designed to fit most collision repair set components.

Specifications	9104B	9110B
Min. height	10-3/8"	15"
Max. height	14-3/8"	21"
Spring return	Yes	Yes
Rod end dia.	.874"	1.310"
Max. operating. Pressure	8,950	8,950
Oil cap. (cu. in.)	4.97	13.69
Oil port	1/4" NPT	1/4" NPT

# BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS



### 7175 3 Piece Indexing Pry Bar Set

- Sizes 10", 12" and 15".
- Indexible to 180° for better access.
- 14 locking positions for leverage in multiple applications.
- Knurled handle assures a sure grip.
- Meets or exceeds ANSI specifications for pry bars

- 7172 – 10" Indexing Pry Bar
- 7173 – 12" Indexing Pry Bar
- 7174 – 15" Indexing Pry Bar



### 7703 Ten-Pound Slide Hammer Puller

This heavy-duty slide hammer puller gets tough with those really stuck parts. It has all the features of our smaller versions – heat treated, 24" long, and a 5/8"–18 threaded end to adapt to any of OTC's pulling attachments. The difference is the ten-pound hammer that gives you the extra muscle for really stubborn pulling jobs.



### Basic Slide Hammer Units

May be used with an OTC internal pulling attachment (page 129), or with internal or external-internal threaded adapters (page 127).

- 1155 – Slide hammer unit is 24" long with a 5 lb. hammer, 5/8"–18 threaded end.
- 1156 – Slide hammer unit is 24" long with a 2-1/2 lb. hammer, 5/8"–18 threaded end.



### Rolling Head Pry Bars

You'll have a lot of leverage using one of these rolling head pry bars. The long, tapered body will also serve as an aligning drift.

- 7162 – Pry bar; 6" long
- 7163 – Pry bar; 12" long
- 7164 – Pry bar; 16" long
- 7165 – Pry bar; 18" long



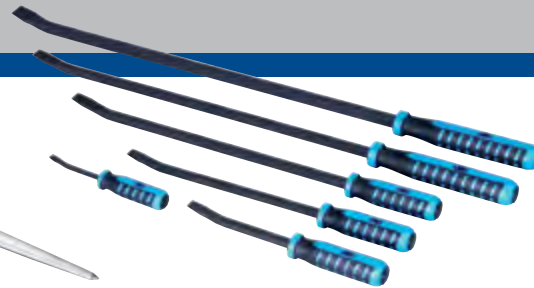
### 14450 Heat Gun

A lightweight source of directed heat offering 500°F and 750°F settings, and also has a "cold" setting. This handy heat gun is ideal for many applications, including:

- Fast heating/drying of materials.
- Quick curing/drying of epoxies.
- Applying shrink tubing.
- Softening tubing for bending.
- Speed-drying of touch-up paint to eliminate "haze."
- Drying out condensation in motors, clutches, controls, etc.
- Shock-proof and cool-running with a tough housing, the unit weighs just 2-1/2 lbs.
- 115V 50/60 Hz.

Replacement parts

- 44997 – Switch assembly.



### Handled Pry Bars

Heavy-duty pry bar made of tempered square steel that you can hit without damaging the handle.

- Black chrome striking cap allows hitting the bar without damage to the handle.
- Ergonomic handle – dual durometer composite handle for user comfort; reduces hand fatigue.
- Polished tip with black oxide finish.
- Long-life finish resists rust and wear during use.
- OTC Marathon Lifetime Warranty.

8203 – 3-piece handled pry bar set in gray molded tray. Includes 12", 18", and 24" sizes.

8206 – 6-piece handled pry bar set in gray molded tray. Includes 8", 12", 18", 24", 32" and 36" sizes.

8208 – 8" handled pry bar

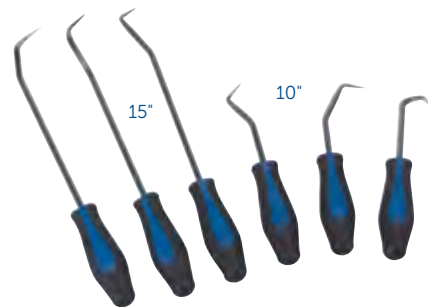
8224 – 24" handled pry bar

8212 – 12" handled pry bar

8232 – 32" handled pry bar

8218 – 18" handled pry bar

8236 – 36" handled pry bar



### 8260 Hose Removal Set (6-piece)

- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray which can be placed in tool drawer.



**EASILY REMOVE HOSES, CLIPS, WASHERS AND GASKETS**

**8260M Short Pick, Long Pick and Hook Set (14-piece)**

- Combines 8260, 8262 and 8263 sets.
- Packaged in molded trays which can be placed in tool drawer.



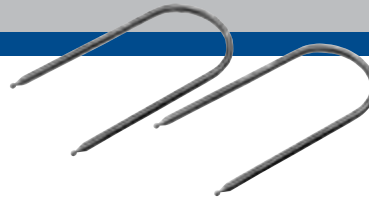
**8263 Long Pick and Hook Set (4-piece)**

- Consisting of four (4), 6.5", soft-handled picks.
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing o-rings, accessing snap ring and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove o-rings, shaft seals, cv boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.



**4515 Mini Pick and Hook Set – 4-Piece**

- Sturdy stainless steel points and shafts designed for marking, removing o-rings, accessing snap rings, and performing other tasks. Assorted angle tips allow you to reach awkward locations.
- Knurled shaft design enhances finger control for delicate jobs.



Similar to Ford T87P-19061-A, 415-001

**7575 Ford Radio Removal Tool Kit**

These dual-purpose tools release the retaining clips of a radio faceplate so you can pull the radio from the instrument panel. For use on 1987 to current Mustang; 1988 and newer Tempo/Topaz; 1989 to current Lincoln Continental; 1990 to current Taurus/Sable, Ranger/Bronco II, Probe, Lincoln Town Car, Mark VII, Crown Victoria/ Grand Marquis, Thunderbird/Cougar, F-series pickups and E-series vans; 1991 to current Explorer; 1995 to 2003 Windstar.



**4676PN Windshield Wiper Puller and Nozzle Needle Combo**

- The puller removes wiper arms on many foreign and domestic cars and light trucks.
- Will not damage wiper arm or hood cowl during removal.
- Simply place puller feet under wiper arm and tighten forcing screw against wiper shaft.
- The Nozzle Needle makes quick work of clearing obstructions from the windshield washer spray nozzle.
- Easily pierces corrosion or remove blockage.
- The barrel is knurled for grip and control.
- Threaded end caps keep the needle points covered when not in use.



**4706 Universal Lift Support Clamp (pair)**

- Easy-to-use clamps designed for placement on hood/lid strut rods preventing the body component from falling or sagging.
- Great for vehicles & shrouds with weak or dry struts.
- Simply place over strut rod and tighten.
- Small design keeps access to the compartment unobstructed.



**4711 Deluxe Radio and Antenna Service Kit**

- Eleven-piece kit in molded case.
- Universal antenna wrench.
- Ford radio removal tool.
- Deep sockets to remove and install the tamper-proof radio nuts from many GM, Chrysler, and other aftermarket radios.
- Antenna nut sockets cover most import and domestic antenna nuts.



**4712 Euro Radio Removal Tool Kit**

- Includes the popular tools needed to remove the radio from the dash on the following European vehicles: BMW, VW, Audi, and Mercedes-Benz.
- Easily removes the radio without damaging the radio or the dash panel.



**4715 Deluxe European Radio Tool Set**

- 18-piece set of tools used to remove radios on most European vehicles sold in the U.S. and Europe.
  - Quickly and easily removes the radio from the dash without damage to the radio or dash.
- Replacement Parts

- 4715-1** – Removal Keys (4 pieces) Audi, Becker, Mercedes-Benz, VW.
- 4715-2** – Removal Keys (2 pieces) Becker, Mercedes-Benz, Porsche.
- 4715-3** – Removal Keys (2 pieces) VW.
- 4715-4** – Removal Keys (2 pieces) Skoda.
- 4715-5** – Removal Keys (2 pieces) Becker.
- 4715-6** – Pentagon Wrench BMW.
- 4715-7** – Bent U-hook (2 pieces) Blaupunkt.
- 4715-8** – U-hook (2 pieces) Audi, Blaupunkt, Ford, Grundig, VW.
- 4715-9** – Allen Hex Wrench BMW, Opel.

# BODY SERVICE AUTOMOTIVE SPECIALTY TOOLS

## OTC BFH HAMMERS

- Indestructible handle - never needs replacement!
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.



5791ID-412



5792ID-216



5793ID-2414

OTC No.	Head Weight	Handle Length	Total Weight
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### Club/Hand Drill Hammer, Indestructible Handle

<b>5791ID-312</b>	2.5 lbs.	12"	4 lbs.
<b>5791ID-412</b>	4 lbs.	12"	5.1 lbs.
<b>5791ID-416</b>	4 lbs.	16"	5.5 lbs.

### Cross Peen Hammer, Indestructible Handle

<b>5792ID-216</b>	2 lbs.	16"	4.5 lbs.
<b>5792ID-316</b>	3 lbs.	16"	5.4 lbs.

### Ball Peen Hammer, Indestructible Handle

<b>5793ID-2414</b>	24 oz.	14"	2.6 lbs.
<b>5793ID-3214</b>	32 oz.	14"	3.0 lbs.



### 5912

#### Crimwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" – improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



### 4468

#### 9" Self Adjusting Wire Stripper

- Strips insulating sheathing from wires ranging from 10 ga. to 22 ga.
- Easy-to-use, just insert wire and squeeze.
- Also cuts and crimps.



### 5950A

#### CrimPro™ 4-in-1 Angled Wire Tool

- The angled feature allows access to close quarters and facilitates superior crimps.
- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



### 5950S

#### CrimPro™ 4-in-1 Wire Tool

- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



### 4467

#### Automatic Wire Stripper

- Quick removal of insulation on wire AWG 12-20.
- Comes with adjustable depth gauge (8mm to 12mm).
- Sharp v-shaped tooth easily removes insulation without any damage to soft wire strands.
- Cutting tool stored below the stripper.
- Features a space saving locking mechanism for pockets or tool drawer storage.



1513B – 4-Ton



1515B – 10-Ton

**Stinger Series 4- and 10-Ton Collision Repair Sets**

- Very competitively priced, yet high quality sets include single-speed hydraulic hand pump, hose, and ram.
- Components snap together for quick setups to apply pushing, spreading.
- Components include: hydraulic pump, hose, and ram; ram flat base; extension tubes (4); 1/2-ton spreader; tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

**1513B** – 4-ton collision repair set. Has single speed hydraulic hand pump and ram with 4" stroke.

**1515B** – 10-ton collision repair set. Has single speed hydraulic hand pump and ram with 6" stroke.



1517A – 4-Ton



1519A – 10-Ton

**OTC Series 4- and 10-Ton Collision Repair Sets**

- We've matched our OTC hydraulics with versatile tooling.
- Components snap together, permitting you to apply pushing, spreading.
- Components include: hydraulic pump, hose, and ram; ram flat base; 1/2-ton hydraulic spreader; extension tubes (4); tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

**1517A** – 4-ton collision repair set. Has single speed hydraulic hand pump (4000) and ram (4082B) with 5" stroke.

**1519A** – 10-ton collision repair set. Has two-speed hydraulic hand pump (4004) and ram (4083B) with 6-1/8" stroke.

**504888** – Replacement quick coupler (external).

**504889** – Replacement quick coupler (internal).

**5086**

**10-Ton Collision Repair Set**

- Exert hydraulic force just where it's needed to lift, spread, bend, or straighten. Handles the high-force jobs you face daily in trailer maintenance or other applications.
- Includes reliable components including 10-ton, 10-1/8" stroke hydraulic ram; air/hydraulic pumping unit; hydraulic hose; four snap-together extension tubes; extension tube coupling; serrated saddle; flat base; 90° wedge head; flex head; storage case.
- All set components are covered by OTC Lifetime Marathon Warranty®.





# FASTENER SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 5900A Master TORX® Socket Set

52-piece, professional socket set in a blow-molded case.

Hundreds of applications from front to rear on cars and trucks:

- Seat belt bolts
- Interior and exterior trim screws
- Engine assemblies
- Tail lamp lenses & assemblies
- Bumpers
- Headlight bezels
- Door strikers & latches
- Brake rotor bolts
- GM front-wheel drive front wheel bearings
- Truck box liners

- Styles available: TORX bit sockets, TORX PLUS bits sockets, tamper-resistant TORX bits, and TORX sockets for external bolts.
- Made from superior S2 steel to meet or exceed torque specifications.

### Master Torx Socket Set includes:

TORX® Bit Socket Set T6 to T60 (15 piece)			TORX PLUS® Bit Sockets TP8 to TP60 (12 piece)			TORX® External Socket E4 to E24 (13 piece)			TORX® Tamper-Resistant Bits TT8 to TT60 (12 piece)		
Part No.	Size	Sq. Drive	Part No.	Size	Sq. Drive	Part No.	Size	Sq. Drive	Part No.	Size	Hex Insert
5906	T6	1/4"	5918	TP8	1/4"	5934	E4	1/4"	5919	TT8	1/4"
5908	T8	1/4"	6181	TP10	1/4"	5935	E5	1/4"	5920	TT10	1/4"
6101	T10	1/4"	6182	TP15	1/4"	6151	E6	1/4"	5921	TT15	1/4"
6102	T15	1/4"	6183	TP20	1/4"	6152	E7	1/4"	5922	TT20	1/4"
6103	T20	1/4"	6184	TP25	1/4"	6153	E8	1/4"	5923	TT25	1/4"
6104	T25	1/4"	6185	TP27	1/4"	6154	E10	3/8"	5924	TT27	1/4"
6105	T27	1/4"	6186	TP30	1/4"	6155	E12	3/8"	5925	TT30	1/4"
6106	T30	1/4"	6187	TP40	3/8"	6156	E14	3/8"	5926	TT40	3/8"
6107	T40	3/8"	6188	TP45	3/8"	6157	E16	3/8"	5927	TT45	3/8"
6108	T45	3/8"	6191	TP50	3/8"	5936	E18	1/2"	5928	TT50	3/8"
6109	T47	3/8"	6192	TP55	3/8"	5937	E20	1/2"	5929	TT55	3/8"
6110	T50	3/8"	6193	TP60	1/2"	5938	E22	1/2"	5930	TT60	1/2"
6111	T55	3/8"				5939	E24	1/2"			
6112	T60	1/2"									
6198	T70	1/2"									

## 6100 Standard TORX® Socket Set T10 to T60 (12 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6101	T10	1/4"
6102	T15	1/4"
6103	T20	1/4"
6104	T25	1/4"
6105	T27	1/4"
6106	T30	1/4"
6107	T40	3/8"
6108	T45	3/8"
6109	T47	3/8"
6110	T50	3/8"
6111	T55	3/8"
6112	T60	1/2"



## 6135 Universal Brake Caliper Socket Set (9 Piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6107	T40	3/8"
6108	T45	3/8"
6110	T50	3/8"
6112	T60	3/8"
6165	1/4"	3/8"
6167	3/8"	3/8"
6175	7 mm	3/8"
6176	8 mm	3/8"
6177	10 mm	3/8"



## 6145 Tamper-Resistant TORX® Socket Set (7 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
5920	TT10	1/4"
5921	TT15	1/4"
5922	TT20	1/4"
5923	TT25	1/4"
5924	TT27	1/4"
5925	TT30	1/4"
5926	TT40	3/8"



## 6160 Fraction Hex Socket Set (7 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6161	1/8"	3/8"
6162	5/32"	3/8"
6163	3/16"	3/8"
6164	7/32"	3/8"
6165	1/4"	3/8"
6166	5/16"	3/8"
6167	3/8"	3/8"



## 6170 Metric Hex Socket Set (7 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6171	3 mm	3/8"
6172	4 mm	3/8"
6173	5 mm	3/8"
6174	6 mm	3/8"
6175	7 mm	3/8"
6176	8 mm	3/8"
6177	10 mm	3/8"



## 6150 External TORX® Socket Set (7 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6151	E6 x 25	1/4"
6152	E7 x 25	1/4"
6153	E8 x 25	1/4"
6154	E10 x 32	3/8"
6155	E12 x 32	3/8"
6156	E14 x 32	3/8"
6157	E16 x 32	3/8"



## 6180 TORX® Plus Socket Set (9 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6181	TP10	1/4"
6182	TP15	1/4"
6183	TP20	1/4"
6184	TP25	1/4"
6185	TP27	1/4"
6186	TP30	1/4"
6187	TP40	3/8"
6188	TP45	3/8"
6191	TP50	3/8"



## 5905 Tamper-Resistant TORX® Plus Socket Set (11 piece)

Set includes one each of the following:

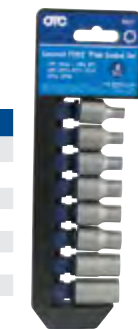
No.	Size	Sq. Drive
5905-8	8IPR	1/4"
5905-10	10IPR	1/4"
5905-15	15IPR	1/4"
5905-20	20IPR	1/4"
5905-25	25IPR	1/4"
5905-27	27IPR	1/4"
5905-30	30IPR	1/4"
5905-40	40IPR	3/8"
5905-45	45IPR	3/8"
5905-50	50IPR	3/8"
5905-55	55IPR	3/8"



## 5931 External Torx® Plus Socket Set (8 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
5931-6	6EP	3/8"
5931-7	7EP	3/8"
5931-8	8EP	3/8"
5931-10	10EP	3/8"
5931-11	11EP	3/8"
5931-12	12EP	3/8"
5931-14	14EP	3/8"
5931-16	16EP	3/8"



## 5942 XZN Super Short Socket Bit Set (8 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
5942-4	SP4	1/4"
5942-5	SP5	1/4"
5942-6	SP6	1/4"
5942-8	SP8	1/4"
5942-10	SP10	3/8"
5942-12	SP12	3/8"
5942-14	SP14	3/8"
5942-16	SP16	3/8"



## 6950 SAE Ball Hex "L" Keys 1/16" to 3/8" (10 piece)

Set includes one each of the following:

No.	Size
6950-1	1/16"
6950-2	5/64"
6950-3	3/32"
6950-4	1/8"
6950-5	5/32"
6950-6	3/16"
6950-7	7/32"
6950-8	1/4"
6950-9	5/16"
6950-10	3/8"



## 6952 Metric Ball Hex "L" Keys 1.5mm to 10mm (10 piece)

Set includes one each of the following:

No.	Size
6952-1	1.5mm
6952-2	2mm
6952-3	2.5mm
6952-4	3mm
6952-5	4mm
6952-6	5mm
6952-7	6mm
6952-8	7mm
6952-9	8mm
6952-10	10mm



## 6954 Standard TORX® "L" Keys T8 to T50 (10 piece)

Set includes one each of the following:

No.	Size
6954-1	T8
6954-2	T10
6954-3	T15
6954-4	T20
6954-5	T25
6954-6	T27
6954-7	T30
6954-8	T40
6954-9	T45
6954-10	T50



## 6956 TORX® Plus "L" Keys TP8 to TP50 (10 piece)

Set includes one each of the following:

No.	Size
6956-1	TP8
6956-2	TP10
6956-3	TP15
6956-4	TP20
6956-5	TP25
6956-6	TP27
6956-7	TP30
6956-8	TP40
6956-9	TP45
6956-10	TP50



## 6958 TORX® TAMPER RESISTANT "L" Keys TT8 to TT50 (10 piece)

Set includes one each of the following:

No.	Size
6958-1	TT8
6958-2	TT10
6958-3	TT15
6958-4	TT20
6958-5	TT25
6958-6	TT27
6958-7	TT30
6958-8	TT40
6958-9	TT45
6958-10	TT50



# FASTENER SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 7365 Hex Key Wrenches

Allen head cap screws are everywhere, which makes a set of these wrenches a necessity.

- Extra long for added leverage and accessibility.
- Meets ANSI specs.
- Plastic pouch containing wrench Nos. 7345 through 7354.

Tool No.	Size	Fits Set Screws	Fits HH Cap Screws
7345*	1/16"	6	–
7346*	5/64"	8	–
7347*	3/32"	10 & 12	–
7348*	1/8"	1/4"	8
7349*	5/32"	5/16"	10
7350*	3/16"	3/8"	1/4"
7351*	7/32"	7/16"	5/16"
7352*	1/4"	1/2"	3/8"
7353*	5/16"	5/8"	3/8" & 7/16"
7354*	3/8"	3/4"	1/2"
7355†	7/16"	13/16"	9/16"
7356†	1/2"	7/8"	5/8"
7357†	9/16"	1" & 1-1/8"	3/4"
7358†	5/8"	1-1/4" & 1-3/8"	1"
7359†	3/4"	1-1/2"	1-1/8" & 1-1/4"
7360†	1"	1-3/4" & 2"	1-1/2"

\* Included in No. 7365 set.

† Available separately; not included in set.



Similar to Toyota No. 09043-50080

## 6022 Toyota Head Bolt Socket

- Specially designed socket is needed to tighten or loosen head bolts on Toyota Paseo vehicles with 3S-GE and 3S-FE engines.
- 8 mm socket features a 12-point, 1/2" drive socket.



## 7334 Metric Hex Key Wrench Set

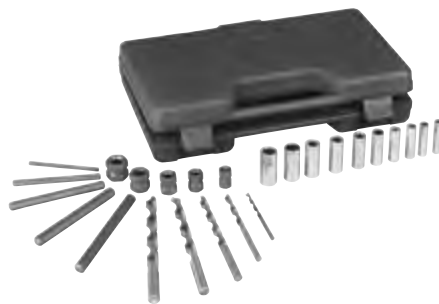
These long-arm hex key wrenches provide added leverage and accessibility.

- Rust-resistant black oxide finish.
  - There are 9 sizes, from 1.5 mm to 10 mm.
  - Available separately: 12 mm, 14 mm, 17 mm, and 19 mm.
- Metric hex key set in plastic pouch. Sizes: 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm, and 10 mm.

Tool No.	Size (mm)
7321*	1.5
7322*	2
7323*	2.5
7324*	3
7325*	4
7326*	5
7327*	6
7328*	8
7329*	10
7330†	12
7331†	14
7332†	17
7333†	19

\* Included in No. 7334 set.

† Available separately; not included in set.



## 4651 Screw Extractor Set

- Removes broken studs and bolts.
- Includes ten guide bushings, five drill bits and five screw extractors with extractor nuts.
- Drill bits are left handed to help removal.



## 5940 BMW Head Bolt Socket

- Socket is designed to fit in the cylinder head on M42 and M50 engines to remove and install cylinder head bolts.
- Spring loaded detent ball holds bolt in place.
- Works with 1/2 inch ratchet, breaker bar, or torque wrench. Socket size is E12 for external TORX® bolts.



## 6986 Stud Remover Set, Fractional

This fractional, 4-piece, stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

- Housed in a blow-molded storage case. 3/8" drive for:

**6986-1** – 1/4" stud remover

**6986-2** – 5/16" stud remover

1/2" drive for:

**6986-3** – 3/8" stud remover

**6986-4** – 7/16" stud remover



## 6987 Stud Remover Set, Metric

This metric, 4-piece stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

- Housed in a blow-molded storage case. 3/8" drive for:

**6987-6** – 6 mm stud remover

**6987-8** – 8 mm stud remover

1/2" drive for:

**6987-10** – 10 mm stud remover

**6987-12** – 12 mm stud sizes.



### Impact Drivers

- Loosens hard-to-turn screws, bolts or nuts.
- Handle design prevents possibility of hitting hand with hammer when striking impact driver.
- Bit holder has 3/8" drive (No. 4608), 1/2" (No. 4607) drive, and 5/16" hex for Phillips and flat screwdriver bits.
- Includes eight screwdriver bits:
  - No. 2 Phillips bit, 1-3/8" long with 5/16" hex
  - No. 2 Phillips bit, 3-1/8" long with 5/16" hex
  - No. 3 Phillips bit, 1-3/8" long with 5/16" hex
  - No. 3 Phillips bit, 3-1/8" long with 5/16" hex
  - 5/16" wide x 1-3/8" long with 5/16" hex slotted bit
  - 5/16" wide x 3-1/8" long with 5/16" hex slotted bit
  - 3/8" wide x 1-3/8" long with 5/16" hex slotted bit
  - 3/8" wide x 3-1/8" long with 5/16" hex slotted bit

**4607** – 1/2" impact driver

**4608** – 3/8" impact driver



### 4576 Universal C-Frame Nut Splitter

- Forged and heat-treated frame with offset handle works where ordinary nut splitters may fail. Smooth action cracks nuts without damaging bolt threads.
- Chisel rotates to line up parallel to bolt. Splits non-heat-treated nuts of 7/16" (11 mm) through 3/4" (19 mm) diameter. Tool is 6-3/4" in length.



### Universal Outside Thread Chaser

Damaged bolt or nut threads can be an annoying, costly problem—unless you have one of our thread chasers. It will quickly restore threads to near original condition without the use of expensive thread-cutting equipment.

- Replaceable V-pads and dies.
- 1-1/4" to 5" O.D.

**7402** – Thread chaser with 6 dies: threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.

**216884** – Standard die set. Includes 6 dies, in the sizes listed above.

**202817** – Metric die set. Includes three dies: 1 mm- 1.25 mm-1.5 mm-1.75 mm, 2 mm-2.5 mm-3.0 mm-3.5 mm; 4 mm pitch dies.

**206803** – V-pad.



### 4614 Side Terminal Battery Wrench

- Designed for use on GM side-terminal batteries, or any 5/16" hex head battery bolt.
- 5/16", 6 point, box end, 5-1/2" long, ratcheting wrench; insulated handle.



### 4615 Long-Side Terminal Battery Wrench

- Designed for use on GM side-terminal batteries, or any 5/16" hex head battery bolt.
- Long handle allows access to hard-to-reach battery terminal bolts.
- 5/16", 6 point, box end, 10" long, ratcheting wrench; insulated handle.



### 4616 Battery Terminal Wrench – 10mm

- Designed for use on 10 mm battery terminal bolts found on many import and domestic vehicles.
- 10 mm, 12 pt., box-end ratcheting wrench; 5-1/2" long with insulated handle.



### 4791 Spanner Wrench, 3/4" - 2"

This chrome vanadium hardened steel wrench features a 5" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



### 4792 Spanner Wrench, 2" - 4 3/4"

This chrome vanadium hardened steel wrench features a 9" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



### 885 Adjustable Hook Spanner Wrench

Here's a tool that's needed wherever turret adjusting nuts or packing gland nuts are used.

- Capacity is 1-1/2" to 4".
- Handle is 24" long, 11/16" diameter.



7307

Fed. Spec.: GGG-W-665b

7308

### Adjustable Hook Spanner Wrenches

These pieces will replace many fixed-size wrenches needed to service industrial tractors and other equipment. Their drop-forged jaws adjust to 11 positions for a capacity of 4-3/4" to 12-3/4" O.D.

- Handle is 24" long and 1" in diameter.

**7307** – Spanner wrench with one 3/8" thick jaw.

**7308** – Spanner wrench with two interchangeable jaws: one 3/8" thick, one 3/4" thick.



Fed. Spec.: GGG-W-665b

### 7309 Heavy-Duty Adjustable HookSpanner Wrench

Some jobs require beefier tools. Here's a wrench to fill that need. It's drop-forged and features extra heavy construction and a 3/4" thick, 11-position hook jaw that's capable of gripping fasteners from 4-3/4" to 12-3/4" O.D.

- Handle is 25-3/4" long and 15/16" in diameter.



### 7380 Dial Torque Wrench

- Torques in both right and left hand directions with equal accuracy.
- Can be used with confidence in all automotive, and industrial applications.
- Reads directly in both English and Metric graduations.
- Wrench can be held at any point without affecting accuracy.
- Memory or follow-up pointer can be utilized to indicate the maximum torque reached.
- Accuracy; +/- 4% CW and CCW.
- Torque Range; 0-150 in. lbs. (0-17 N-m).
- 3/8" square drive, 10" length.
- Includes blow-molded storage case.

Tool No.	Torque Range	Graduations	Square Drive	Length
7380	0-150 in. lbs. (0-17 N•m)	4 in. lbs.	3/8"	10"

# FASTENER SERVICE AUTOMOTIVE SPECIALTY TOOLS



## Accutorq™ Klikker Torque Wrenches

These precision torque wrenches make a loud click when you've reached the torque setting. They feature ratcheting heads, all-metal construction, permanently roll-marked scales, and soft-grip rubber handles that enable you to firmly grasp the wrench for right- or left-hand torquing.

- Includes molded plastic case.
- One-year warranty.

Tool No.	Torque Range	Graduations	Square Drive	Length
7375	100-1000 in.-lb (11-113 N•m)	10 in.-lb	3/8"	15-1/8"
7377	10-150 ft.-lb (14-203 N•m)	2 ft.-lb	1/2"	17-3/4"
7378	25-250 ft.-lb (34-339 N•m)	2 ft.-lb	1/2"	19-3/8"
7379	100-600 ft.-lb (136-813 N•m)	10 ft.-lb	3/4"	42-1/4"



## 7367 Torque Multiplier, 1000 lb-ft

- Drive Input; 1/2", 365 lb-ft Max
- Drive Output; 3/4", 1100 lb-ft Max
- Head Width; 2.9", 3.3:1 Ratio
- Reaction Bar; 13-3/4"
- Includes reaction foot.
- Note; frictional gear loss = 6%

## 4554 Torque Angle Gauge

- Required when servicing many late model engines that use torque-to-yield fasteners. Measures angle of rotation after pre-torque in torque-angle applications.
- The 360° scale is marked in 2° increments and intervals of 10° and 30°; easily zeroed for next application by turning the tool housing.
- Has 1/2" male and female square drives.



## 7415 Torque Angle Gauge

- Many manufacturers specify a torque angle procedure for tightening fasteners and head bolts because it helps ensure more accurate tightening. This torque angle gauge, featuring an easy-to-read gauge, will provide a precise reading.
- Accommodates a 1/2" drive torque wrench.



## 5776 Preset Torque Wrench Set

These color coded click torque wrenches are pre-set to the most common lug nut torque settings, making them perfect for tire shops. Highly durable design can hold up to the toughest tire shop demands.

- No need for adjustments
- Durable satin finish
- 1/2" Drive, 36 tooth
- Quick release ratchet head
- Perfect for Wheel / Tire shop
- Accuracy better than  $\pm 3\%$  CW

Sold Individually:

### 5776-1 Preset Torque Wrench, 1/2" 65 lb-ft

### 5776-2 Preset Torque Wrench, 1/2" 80 lb-ft

### 5776-3 Preset Torque Wrench, 1/2" 100 lb-ft

### 5776-4 Preset Torque Wrench, 1/2" 120 lb-ft

### 5776-5 Preset Torque Wrench, 1/2" 140 lb-ft



## 7368 Torque Multiplier, 2000 lb-ft

- Drive Input; 3/4", 730 lb-ft Max
- Drive Output; 1", 2200 lb-ft Max
- Head Width; 3.6", 3.3:1 Ratio
- Reaction Bar; 15-5/8"
- Includes reaction foot.
- Note; frictional gear loss = 6%



## Torque Multipliers

These 4:1 ratio torque multipliers provide the power to tighten threaded fasteners in a number of truck and tractor repair operations.

**5073 – 1,000 lb. capacity torque multiplier.** Has 1/2" square drive and 3/4" square drive output. Includes 14" extension handle.

**5074 – 2,000 lb. capacity torque multiplier.** Has 3/4" square drive and 1" square drive output. Includes 18" extension handle.

## Giant Adjustable Wrenches

The really big jobs call for really big tools. These wrenches will handle 42 bolt sizes from 1-3/8" to 4-3/4". Together, both wrenches weigh just 41 lbs., but can replace over 1,000 lbs. of fixed-size wrenches.

**7640** – Giant adjustable wrench. Rated to withstand 2,000 ft. lbs. of torque.

**7641** – Giant adjustable wrench. Rated to withstand 5,000 ft. lbs. of torque.

Tool No.	Nut / Bolt Size	Increments of Jaw Adjustment	Lgth.	Head Thickness	Wt. (lbs.)
<b>7640</b>	1-3/8" to 2-7/8"	1/8"	24"	7/8"	10.6
<b>7641</b>	2-3/4" to 4-3/4"	1/8"	36"	1-1/8"	30.3



7640



7641



### **6969** Ratcheting Chain Wrench – 24"

- Ratcheting action makes it possible to re-grip without removing wrench.
- Handles parts of most any shape... round, square, hexagon, or octagon.
- Handle is 24" long; chain grips objects ranging from 3" to 6-1/2" O.D.

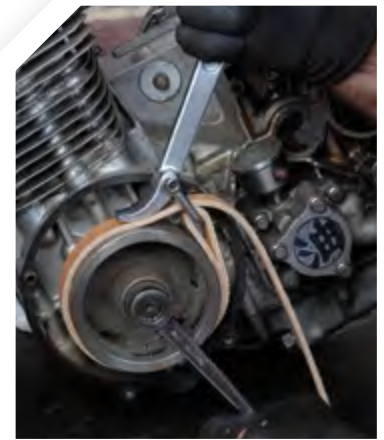
**516942** – Replacement chain



### **6968** Ratcheting Chain Wrench – 12"

- Works on many different-shaped objects, such as square, round, hexagon, oval, etc.
- Handle is 12" long; chain grips objects ranging from 1/2" to 4-1/2" O.D.

**516941** – Replacement Chain



5800TGLV-M



5801SGLV-M

## OTC Technician Gloves

- Washable synthetic leather palm with padding ensures comfort and a secure grip.
- Polyester and Lycra material around fingers offer a durable lightweight cover that stretches for a great fit.
- PVC cushions help protect knuckles from injury due to slippage.
- Comfortable polyester back panels include webbing for improved ventilation.

**5800TGLV-M** – Medium

**5800TGLV-L** – Large

**5800TGLV-XL** – Extra large  
SmartTech™ Technician Gloves

- Same as above, also works with touchscreen technology.

**5801SGLV-M** – Medium

**5801SGLV-L** – Large

**5801SGLV-XL** – Extra large



### **7400** Ratcheting Chain Wrench

This multi-purpose tool will grip parts of nearly any shape. It features a ratcheting head design that lets you turn in either direction without removing wrench from the work.

- 13" handle with capacity from 1/2" to 4-3/4" O.D.

**209199** – Replacement Chain



### **7206** Multipurpose Strap Wrench

You'll find many uses for this heavy-duty strap wrench. The 53" long nylon strap won't mar precision surfaces of shafts, pulleys, or other components. Useful on engine, transmission, and drive pulleys up to 16 inches. Special head design self-tightens the strap as force is applied to the lightweight, 12" long handle.

**305085** – Replacement Strap



### **4804** Heavy Duty Pulley Holder

This strap style universal wrench features a 9" drop forged handle and 23" leather strap for excellent grip on diameters up to 7". The milled foot increases grip on the strap and pulley as handle force is increased.



### **7401** Ratcheting Chain Wrench

This multi-purpose tool will grip parts of nearly any shape. It features a ratcheting head design that lets you turn in either direction without removing wrench from the work.

- 19" handle with capacity from 3" to 6-3/4" O.D.

**209200** – Replacement Chain

## RETAINING RING PLIERS

Here are a variety of retaining ring pliers, available individually or in sets, to handle many applications.

### 7053K

Internal/external retaining ring pliers kit. Includes four 90° tips (.038" diameter), four 45° tips (.047" diameter), and eight straight tips (.047" and .070" diameter).

### 15702

Replacement tip kit. Contains 4 sets, 4 tips per set.



### 7123K

Convertible retaining ring pliers kit. For internal or external rings. Contains one No. 1120 (.038" diameter) and one No. 1340 (.070" diameter) straight tip pliers.



### 7125K

Convertible retaining ring pliers kit. For internal or external rings. Contains one No. 1125 (.038" diameter) and one No. 1345 (.070" diameter) 45° pliers.



### 7300

Internal, straight tip retaining ring pliers. 16" long.

### 7301

External, straight tip retaining ring pliers. 16" long.



7300 Internal tip



7301 External tip

Replacement tips (pairs):

**209201** For pliers Nos. 7300 and 7301.

**222029** 45° for pliers Nos. 7300 and 7301.

**222030** 90° for pliers Nos. 7300 and 7301.



209201

222029

222030

INTERNAL		CONVERTIBLE		EXTERNAL	
No. 0100	No. 7300	No. 1120	No. 1340	No. 0200	No. 7301
No. 0300		No. 1125	No. 1345	No. 0400	
No. 0500				No. 0600	

### How to select the correct pliers:

1. If ring number is known, locate ring number in chart —pliers are listed in right-hand column.
2. Or, measure diameter of shaft bore and locate size in chart—pliers are in right-hand column.

Ring Series No.	Size Range (Ring Size No.)	Bore of Shaft Dia. Range ("Inch" equiv.)	Pliers No.
5100 5101 5102 555	12 to 87	1/8" to 7/8"	0200
	12,15,25 to 66	1/8" to 21/32"	1120, 1125
	25 to 143	1/4" to 1-7/16"	7053K, 7123K, or 7125K
	93 to 143	15/16" to 1-7/16"	1340, 1345, or 0400
	31 to 75	5/16" to 3/4"	
5108	150 to 350	1-1/2" to 3-1/2"	0600
	75	3/4"	
	354 to 650	3-35/64" to 6-1/2"	7301
	50 to 100	1/2" to 1"	0200
5008	50 to 78	1/2" to 25/32"	1120
	50 to 200	1/2" to 2"	7053K, 7123K, or 7125K
	106 to 200	1-1/16" to 2"	1340, 1345, or 0400
	215 to 334	2-1/8" to 3-11/32"	0600
	350 to 400	3-1/2" to 4"	7301
N5000 N5001 N5002	37 to 102	3/8" to 1-1/32"	0100
	37 to 56	3/8" to 9/16"	1120, 1125
	37 to 200	3/8" to 1-3/4"	7053K, 7123K, or 7125K
	106 to 175	1-1/16" to 1-3/4"	1340, 0300
	181 to 300	1-13/16" to 3-1/2"	0500
5008	306 to 625	3-1/16" to 6-1/4"	7300
	75 to 137	3/4" to 1-3/8"	0100
	75 to 100	3/4" to 1"	1120, 1125
	75 to 200	3/4" to 2"	7053K, 7123K, or 7125K
	143 to 200	1-7/16" to 2"	1340, 1345, or 0300
5008	206 to 300	2-1/16" to 3"	0500
	315 to 400	3-5/32" to 4"	7300

## 0100

.038" tip diameter straight for removing internal rings.



## 0200

.038" tip diameter straight for removing external rings.



## 0300

.070" tip diameter straight for removing internal rings.



## 0400

.070" tip diameter straight for removing external rings.



## 0500

.090" tip diameter straight for removing internal rings.



## 0600

.090" tip diameter straight for removing external rings.



## 7295

### Retaining Ring Pliers

The "squeeze-lock" ratchet action of this tool locks retaining rings in position, making removal and installation easy. It features cushioned handles to ensure a secure grip.

- Will handle rings 3/16" thick and up to 4" in diameter.
- Pliers is 12" long.



**211051** Pair of replacement tips.

## 7313

### Retaining Ring Pliers

This tool removes the external retaining rings used in transmissions, differentials and other automotive components.

- Maximum spread is 1-1/16" and 7-3/4" long.



## 714

### Horseshoe Lock Ring Pliers

This ruggedly built pliers is designed to spread and remove horseshoe lock rings used on hydraulic brakes, differentials, transmissions, and CV joints.

- Handles are 8" long.



## 7412K

### Retaining Ring Pliers Set

This set includes 12 of our most popular retaining ring pliers, in sizes for automotive applications. Tips include straight, 45°, and 90° angles in four different sizes (.038, .047, .070, and .090" diameter).

- Includes a sturdy plastic organizer box.



## 4512

### Snap Ring Pliers Set – Internal/External

- For internal or external snap rings; thumbscrew permits quick conversion.
- Made of heavy-gauge tempered steel.
- Includes two stainless steel handled picks.
- Contained in a blow-molded plastic storage case.

## 4513

### Heavy-Duty Snap Ring Pliers Set (2 piece)

- Heat treated steel "circlip" pliers for large equipment repair.
- Replaceable tips and spring ratchet locking mechanism to securely hold against snap ring tension.
- Internal pliers' capacity 3-1/16" to 6-1/4" (78 mm to 159 mm) snap rings.
- External pliers' capacity 3-1/2" to 6-1/2" (89 mm to 165 mm) snap rings.
- Blow-molded storage case includes extra sets of replaceable tips.
- Overall length 16"; handle length 12-1/2".

## No. 7412K Includes:

Tool No.	Description
1120	.038" dia., straight
1125	.038" dia., 45°
1131	.038" dia., 90°
1320	.047" dia., straight
1325	.047" dia., 45°
1329	.047" dia., 90°
1340	.070" dia., straight
1345	.070" dia., 45°
1349	.070" dia., 90°
1560	.090" dia., straight
1565	.090" dia., 45°
1569	.090" dia., 90°

All items can be purchased separately.

## No. 4512 includes:

Tool No.	Description
4512-1	.090" tip, straight pliers
4512-2	.090" tip, 90° pliers
4512-3	.070" tip, straight pliers
4512-4	.070" tip, 90° pliers
4512-5	.047" tip, straight pliers
4512-6	.047" tip, 90° pliers
4512-7	.038" tip, straight pliers
4512-8	.038" tip, 90° pliers
4512-9	straight tip pick

## 4512-10 90° tip pick

All items can be purchased separately.



## No. 4513 includes:

Tool No.	Description
4513-1	Internal snap ring pliers
4513-2	External snap ring pliers
4513-3	(2) .12" (3 mm) straight tip

Tool No.	Description
4513-4	(2) .12" (3 mm) 45° tips
4513-5	(2) .12" (3 mm) 90° tips
4513-6	4 tip retaining screws



## 7410

### Retaining Ring Pliers with replaceable tips

An ideal tool for any transmission shop, this 13" long pliers with a maximum spread of 2.5" features replaceable tips and a spring-return handle.

## 214903

Set of replacement tips.

## 4514

### Mini Snap Ring Pliers Set (4 piece)

- Service S-ring and R-ring clips, internal or external, straight or angled. Ruggedly built of heat-treated chrome molybdenum steel.
- Set includes two internal snap ring pliers (one straight, one 45°) and two external snap ring pliers (one straight, one 45°).
- All pliers have .038" (1.0mm) diameter tips.
- Overall length 3"; handle length 2".





# PLIERS & CUTTERS AUTOMOTIVE SPECIALTY TOOLS



## 4509 Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

**4509-1** – Replacement hose cutter blade.



## 4411 Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



## 4412 Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



## 4818 Multi-purpose Scissors

Will cut hose, wire and cables, wood dowel, PVC, and thin sheet metals in addition to general cutting. The hardened stainless steel blades have an angle ground into one that eliminates slipping when cutting round materials.



## 5912 Crimpwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" – improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



## 4510 Hose Pinch Off Pliers Set, 3 Piece

- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
- Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.
- Available separately:

**4510-8** – 8" tool for small hoses and tight areas.

**4510-10** – 10" tool for radiator and vacuum lines.

**4510-12** – 12" tool for radiator and vacuum lines.



## 4802 Universal Pulley Holder Locking Pliers

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the 5/16" pins.



## 4613 Battery Pliers

- Serrated jaws firmly grip the battery terminal nut or bolt.
- Offset handles allow access in hard-to-reach areas.
- Works on top-post and side-post battery terminals.



## 4493 Angle-Tip Relay Pliers

- Designed to remove and install relays, which are usually located in confined, hard-to-reach areas.
- Specially coated tips offer a solid grip on the relay.

## 1/4" & 3/8" Cable Cutters

- Perfect choice for cutting heavier copper and aluminum cables.
- This tool is especially valuable for battery service where replacing a terminal is required.
- Clean cut with minimal mashing of wire strands.

**4476** – 1/4" cable cutter.

**4477** – 3/8" cable cutter.





**7175**  
**3 Piece Indexing Pry Bar Set**

- Sizes 10", 12" and 15".
- Indexible to 180° for better access.
- 14 locking positions for leverage in multiple applications.
- Knurled handle assures a sure grip.
- Meets or exceeds ANSI specifications for pry bars

**7172** – 10" Indexing Pry Bar

**7173** – 12" Indexing Pry Bar

**7174** – 15" Indexing Pry Bar



**Handled Pry Bars**

Heavy-duty pry bar made of tempered square steel that you can hit without damaging the handle.

- Black chrome striking cap allows hitting the bar without damage to the handle.
- Ergonomic handle – dual durometer composite handle for user comfort; reduces hand fatigue.
- Polished tip with black oxide finish.
- Long-life finish resists rust and wear during use.
- OTC Marathon Lifetime Warranty.

**8203** – 3-piece handled pry bar set in gray molded tray. Includes 12", 18", and 24" sizes.

**8206** – 6-piece handled pry bar set in gray molded tray. Includes 8", 12", 18", 24", 32" and 36" sizes.

**8208** – 8" handled pry bar

**8212** – 12" handled pry bar

**8218** – 18" handled pry bar

**8224** – 24" handled pry bar

**8232** – 32" handled pry bar

**8236** – 36" handled pry bar



**Jimmy Bars**

We've forged these bars from chrome alloy steel, then heat-treated them to resist bending and breaking.

**7166** – 5/8" diameter, 18" long

**7167** – 3/4" diameter, 24" long

**7168** – 7/8" diameter, 30" long

**7420** – 7/8" diameter, 46" long

**7421** – 1" diameter, 54" long



**Rolling Head Pry Bars**

You'll have a lot of leverage using one of these rolling head pry bars. The long, tapered body will also serve as an aligning drift.

**7162** – Pry bar; 6" long

**7163** – Pry bar; 12" long

**7164** – Pry bar; 16" long

**7165** – Pry bar; 18" long



**7171**  
**Pry Pac**

Three pry bars in one economical pack. You get 12" and 18" rolling head pry bars and a 24" jimmy bar.

- Heat-treated chrome alloy steel.



**7687A**  
**Pry Bar Head**

- Turns any 3/8" drive ratchet or breaker bar into a rolling head pry bar.
- Gives you the versatility of a pry bar without the storage problems.



**9900A**  
**Persuader Pry Bar Merchansider**

The OTC 7168 Jimmy Bar features a forged chisel end for prying or lifting. This most popular model has a sharpened drift on the opposite end for alignment of heavy steel components for welding and fastening. The 7168 is the perfect choice for millwrights, rigging, demolition, aggregate mining and construction. Specially treated to resist bending or breaking, the OTC 7168 can "persuade" almost any obstacle encountered.

Includes 10 Chisel and Alignment Jimmy Bars:

- 30" in length; 7/8" diameter.
- Forged and chromed alloy steel.
- Designed and heat-treated to resist bending and breaking.
- Made in USA.
- Lifetime warranty.

The sturdy cardboard merchandiser is 52" high, 18" wide and 12" deep, specifically designed for the Jimmy Bars, is free with purchase.

**9901A**  
**MAJOR Persuaders Pry Bar Merchansider**

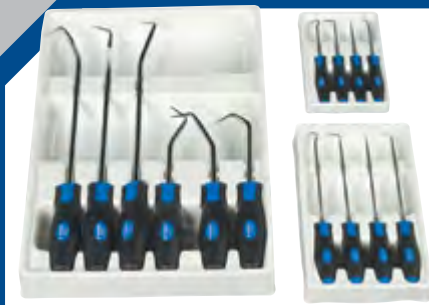
The 9901A "MAJOR Persuader" merchandiser puts OTC's three biggest Jimmy Bars in a super convenient merchandiser designed to help increase in-store sales!

- Includes two 30" 7168 Jimmy Bars.
- Includes two 46" 7420 Jimmy Bars.
- Includes one 54" 7421 Jimmy Bar, covering almost any medium and heavy-duty application.

The sturdy cardboard merchandiser is 64" high, 16" wide and 18" deep, specifically designed for the Jimmy Bars, is easy to assemble and will safely hold up to five heavy-duty pry bars at one time.



# PLIERS & CUTTERS AUTOMOTIVE SPECIALTY TOOLS



## EASILY REMOVE HOSES, CLIPS, WASHERS AND GASKETS

### 8260M

#### Short Pick, Long Pick and Hook Set (14-piece)

- Combines 8260, 8262 and 8263 sets.
- Packaged in molded trays which can be placed in tool drawer.



### 8262

#### Short Pick and Hook Set (4-piece)

- Consisting of four (4), 6.5", soft-handled picks.
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing o-rings, accessing snap rings and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove o-rings, shaft seals, cv boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.

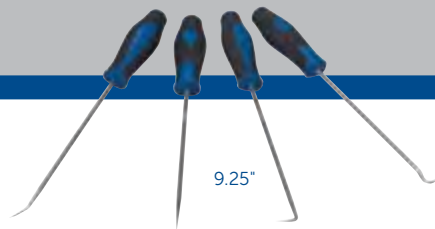


### 4508

#### Professional Style Seal Puller

- Designed to remove oil and grease seals when servicing cars, SUVs, and light trucks without damaging the housing or bearing.
- Hook tips in two sizes and professional handle design allows removal of hard-to-get-at seals by getting under them.
- The tool is 12" long and the hook tip is double-secured (versus competitors' designs), for durability.
- An extra blade is included, and additional replacements (No. 4508-1) may be ordered.

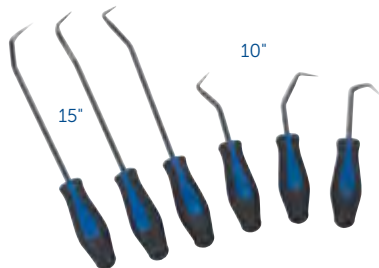
#### 4508-1 – Replacement blade for 4508



### 8263

#### Long Pick and Hook Set (4-piece)

- Consisting of four (4), 9.25", soft-handled picks.
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing o-rings, accessing snap ring and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove o-rings, shaft seals, cv boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.



### 8260

#### Hose Removal Set (6-piece)

- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
- They are made of heat-treated, chrome steel with assorted tip shapes.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
- Packaged in a molded tray which can be placed in tool drawer.



### 7103

#### O-Ring / Oil Seal Pick Set

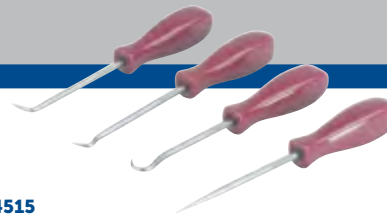
Fishing a stubborn o-ring or oil seal out of its seat is easy if you have this pair of picks in your toolbox.



### 7312

#### O-Ring / Oil Seal Pick

Here's an extremely handy tool that makes quick work of oil seal and o-ring removal and installation.



### 4515

#### Mini Pick and Hook Set – 4-Piece

- Sturdy stainless steel points and shafts designed for marking, removing o-rings, accessing snap rings, and performing other tasks. Assorted angle tips allow you to reach awkward locations.
- Knurled shaft design enhances finger control for delicate jobs.



### 4658

#### Windshield Spray Nozzle Needle

- Makes quick work of clearing obstructions from the windshield washer spray nozzle.
- Easily pierces corrosion or remove blockage.
- The barrel is knurled for grip and control.
- Threaded end caps keep the needle points covered when not in use. The pocket clip keeps the tool handy.



### 4602

#### Brass Punch Set (2 piece)

- Two large, brass non-sparking punches. Ideal for use near precision parts or in locations where sparks from ferrous metal could be hazardous.
- Includes an 8" punch (5/8" hex, tapered to 3/8") and 10" straight punch (3/4" dia., chamfered at both ends).



### 4606

#### Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Hammer head weighs 24 oz.; brass drift punch is 10" x 3/4" diameter; brass tapered punch is 8" x 5/8" hex tapered to 3/8" diameter point.



## OTC BFH HAMMER LINE

OTC No.	Head Weight	Handle Length	Total Weight
<b>Double Face Sledge Hammer, Indestructible Handle</b>			
<b>5790ID-624</b>	6 lbs.	24"	9.4 lbs.
<b>5790ID-630</b>	6 lbs.	30"	10.4 lbs.
<b>5790ID-824</b>	8 lbs.	24"	11.2 lbs.
<b>5790ID-830</b>	8 lbs.	30"	12.4 lbs.
<b>5790ID-1030</b>	10 lbs.	30"	14.0 lbs.
<b>5790ID-1230</b>	12 lbs.	30"	16.6 lbs.
<b>5790ID-1430</b>	14 lbs.	30"	18.5 lbs.
<b>Club/Hand Drill Hammer, Indestructible Handle</b>			
<b>5791ID-312</b>	2.5 lbs.	12"	4.0 lbs.
<b>5791ID-412</b>	4 lbs.	12"	5.1 lbs.
<b>5791ID-416</b>	4 lbs.	16"	5.5 lbs.
<b>Cross Peen Hammer, Indestructible Handle</b>			
<b>5792ID-216</b>	2 lbs.	16"	4.5 lbs.
<b>5792ID-316</b>	3 lbs.	16"	5.4 lbs.
<b>Ball Peen Hammer, Indestructible Handle</b>			
<b>5793ID-2414</b>	24 oz.	14"	2.6 lbs.
<b>5793ID-3214</b>	32 oz.	14"	3.0 lbs.
<b>Tire Service Hammer, Indestructible Handle</b>			
<b>5789ID-1032</b>	10 lbs.	32"	14.4 lbs.
<b>5789ID-520</b>	5 lbs.	20"	7.3 lbs.



- Indestructible handle - never needs replacement
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.
- Tire Service Features for 5789ID-1032 and 5789ID-520.
  - Use top hook as a wheel tipper; sledge end hook to drag tire into position.
  - Bead breaking wedge has grooves and a convex shape to help drive tire lube into the bead.



### 4629 Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Two hammer head weighing 24 and 12 oz.
- Two tapered punches 14" x 5/8", 10" x 5/8".
- One hex tapered punch 8" x 5/8".
- Two drift punches 10" x 3/4", 8" x 1/2".
- Two pin punches 6" x 3/8", 4" x 1/4".



### 5790-PACK Hammer Display

Includes 23 popular hammers for everyday use:

Part Number	Qty
5790ID-624	2
5790ID-630	1
5790ID-824	2
5790ID-830	1
5790ID-1030	1
5790ID-1230	1
5790ID-1430	1
5791ID-312	2
5791ID-412	2
5791ID-416	2
5792ID-216	2
5792ID-316	2
5793ID-2414	2
5793ID-3214	2
5700-DISPLAY	1

### 5700-DISPLAY Hammer & Tire Service Hammer Display Rack

- Designed to display various products in the framed rack, complete with removable rear sign holder.
- Sturdy display framed with heavy 5/16" rod with heavy steel base eliminates tipping.
- Black powder coat finish for a rust free, durable finish.
- Contains 2" x 2" = 52 slots and 2" x 4" = 6 slots.
- Includes 4 side hooks (not pictured).
- Assembled dimensions; W 18.5", D 19", H 44".
- Weighs approx. 35 lbs.



# STRIKE-STRUCK SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4605 Interchangeable Punch and Chisel Set

- Safety protective handle allows easy grip and protects hand from being hit by hammer.
- 12 punches and chisels included: 5 flat chisels: 1/2", 5/8", 3/4", 7/8", and 1" wide blades 1 cape chisel: 1/4" wide blade 2 taper punches: 1/8" and 1/4" diameter 2 pin punches: 3/16" and 1/4" diameter 2 center punches: 1/8" and 3/16" diameter
- Double locking ball detent holds punch or chisel securely in the driver handle.

- Replacement parts available:
- |                                       |                                     |
|---------------------------------------|-------------------------------------|
| <b>4605-1</b> – Drive handle          | <b>4605-8</b> – 1/8" taper punch    |
| <b>4605-2</b> – 1/2" wide flat chisel | <b>4605-9</b> – 1/4" taper punch    |
| <b>4605-3</b> – 5/8" wide flat chisel | <b>4605-10</b> – 3/16" pin punch    |
| <b>4605-4</b> – 3/4" wide flat chisel | <b>4605-11</b> – 1/4" pin punch     |
| <b>4605-5</b> – 7/8" wide flat chisel | <b>4605-12</b> – 1/8" center punch  |
| <b>4605-6</b> – 1" wide flat chisel   | <b>4605-13</b> – 3/16" center punch |
| <b>4605-7</b> – 1/4" cape chisel      |                                     |



## Impact Drivers

- Loosens hard-to-turn screws, bolts or nuts.
- Handle design prevents possibility of hitting hand with hammer when striking impact driver.
- Bit holder has 3/8" drive (No. 4608), 1/2" (No. 4607) drive, and 5/16" hex for Phillips and flat screwdriver bits.
- Includes eight screwdriver bits:
 

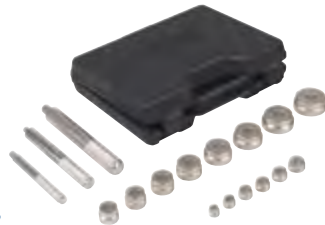
- No. 2 Phillips bit, 1-3/8" long with 5/16" hex	- 5/16" wide x 1-3/8" long with 5/16" hex slotted bit
- No. 2 Phillips bit, 3-1/8" long with 5/16" hex	- 5/16" wide x 3-1/8" long with 5/16" hex slotted bit
- No. 3 Phillips bit, 1-3/8" long with 5/16" hex	- 3/8" wide x 1-3/8" long with 5/16" hex slotted bit
- No. 3 Phillips bit, 3-1/8" long with 5/16" hex	- 3/8" wide x 3-1/8" long with 5/16" hex slotted bit

- 4607** – 1/2" impact driver.  
**4608** – 3/8" impact driver.



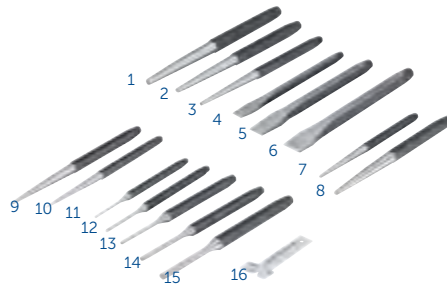
## 4408 Bearing Race and Seal Driver Kit

- The Bearing Race and Seal Driver Kit provides a convenient way to smoothly and quickly position a bearing in the inner hole of an axle.
- The kit includes a handle grip and six heavy-duty bearing drivers. The drivers have different diameters in order to match different-sized bearings, and three of the drivers are formed with two different diameters.
- Bearing Driver Sizes: 1.555" (39.5 mm) 1.752" (44.5 mm) 1.968" (50.0 mm) 2.322" (59.0 mm) 2.48" (63.0 mm) 2.559" (65.0 mm) 2.834" (72.0 mm) 2.992" (76.0 mm) 3.189" (81.0 mm)



## 4407 Metric Bushing Driver Set

- 14-piece tool kit for motorcycles, Asian and European vehicles contains adapters: 10-12 mm, 14-16 mm, 15-17 mm, 16-18 mm, 18-20 mm, 20-22 mm, 22-24 mm, 25-27 mm, 28-30 mm, 30-34 mm, 32-36 mm, 35-40 mm, 38-42 mm; one small driver handle; one medium driver handle; one large driver handle.
- Aluminum construction won't mar the bushing or affect bushing tolerance, which is critical for efficient operation of the engine, transmission, and hubs.



## 4600 Punch and Chisel Set (16 piece)

- Durable set of heat-treated chrome vanadium steel punches and chisels. Storage tray included.
- Contents of set:
 

3 – Cold chisels (with gauge): 3/8" x 5-1/2"; 1/2" x 6"; 5/8" x 6-1/2"
2 – Center punches: 1/8" x 5"; 3/16" x 6"
5 – Pin punches: 3/32" x 4-1/4"; 1/8" x 4-3/4"; 5/32" x 5"; 3/16" x 5-1/4"; 1/4" x 5-3/4"
5 – Taper punches: 3/32" x 5-1/4"; 1/8" x 5-3/4"; 5/32" x 6"; 3/16" x 6-1/4"; 1/4" x 6-3/4"
1 – Chisel gauge



## 4505 Bushing Driver Set (19 piece)

- Enables you to remove and install bushings ranging from 3/8" to 1-3/8" in diameter, as used in cars, trucks, tractors, construction equipment, electric motors, & many other components having bushings.
- Includes: Large, medium, and small driver handles with nuts; sixteen bushing adapters ranging from 3/8" to 1-3/8".
- Housed in a blow-molded storage case.



## 4507 Bearing Race and Seal Driver Set (10 piece)

- This aluminum constructed set permits installation of tapered bearing races and seals without damage to the component or housing.
- Tapered side of driver is used to install races. Invert the driver to the flat side to install seals.
- Set is housed in a blow-molded plastic storage case.
- Includes driver handle with bolt, plus these tool sizes: 1.565", 1.750", 1.965", 2.325", 2.470", 2.555", 2.830", 2.995", and 3.180".

## Available separately

No.	Part No.	Description
1	<b>4600-15</b>	Taper Punch, 1/4" x 6-3/4"
2	<b>4600-14</b>	Taper Punch, 3/16" x 6-1/4"
3	<b>4600-13</b>	Taper Punch, 5/32" x 6"
4	<b>4600-3</b>	Cold Chisel, 3/8" x 5-1/2"
5	<b>4600-2</b>	Cold Chisel, 1/2" x 6"
6	<b>4600-1</b>	Cold Chisel, 5/8" x 6-1/2"
7	<b>4600-4</b>	Center Punch, 3/16" x 8"
8	<b>4600-5</b>	Center Punch, 1/8" x 5"
9	<b>4600-12</b>	Taper Punch, 1/8" x 5-3/4"
10	<b>4600-11</b>	Taper Punch, 3/32" x 5-1/4"
11	<b>4600-10</b>	Pin Punch, 3/32" x 4-1/4"
12	<b>4600-9</b>	Pin Punch, 1/8" x 4-3/4"
13	<b>4600-8</b>	Pin Punch, 5/32" x 5"
14	<b>4600-7</b>	Pin Punch, 3/16" x 5-1/4"
15	<b>4600-6</b>	Pin Punch, 1/4" x 5-3/4"
16	<b>4600-16</b>	Chisel Gauge



- 4410**  
**Master Bushing Drive Set (33 piece Metric & Standard)**
- Enables you to remove and install bushings ranging from 10mm to 42mm in diameter, and 3/8" to 1-3/8" in diameter, as used import cars, trucks, tractors, construction equipment, electric motors, and many other components having bushings.
  - Includes large, medium, and small driver handles and adapters all made of steel.
  - Housed in a blow-molded storage case.

- 6939**  
**Broken Bolt Extractor Tool**
- Remove frozen, broken or cut off bolts within steering or suspension bushings.
  - Can also be used to remove and install wheel studs and other general pressing needs.



- 6939-1**  
**Broken Bolt Extractor Adapter Set**  
Available for use with the 7248 C-Frame.



- 7248**  
**C-Frame Press**
- Used for removing/installing; universal joints with needle bearings, pressed in wheel studs, and brake anchor pins on heavy-duty vehicles. Suitable for general pressing operations.



## SEAL & BEARING DRIVER SET

Now you can have the proper-size driver for nearly any automotive seal, bearing, or bushing installation job. These sets include discs and handles, spacers and drivers.

- Discs range from 1/2" to 4-1/2" in diameter, in 1/16" increments.
- 27793** – Starter set. Includes a handle and discs (5/8" to 2" diameter) specially selected to provide the driver sizes usually needed in automotive service. Includes plastic storage box.
- 27794** – Basic set. Includes two handle sizes and 41 discs, ranging from 1/2" to 3" diameter along with plastic storage box and insert.
- 27795** – Big-job set for servicing large components. Includes a handle and 24 discs, ranging from 3-1/16" to 4-1/2" diameter.
- 27796** – Intermediate set. Includes a handle and 25 discs, ranging from 2" to 3-1/2" diameter.
- 27797** – Master set. Includes three handle sizes and 65 discs, ranging from 1/2" to 4-1/2" diameter.
- 27810** – Tool organizer board for holding all components in No. 27797 master set.

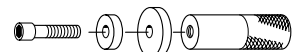
Tool No.	Description	Tool No.	Description	Tool No.	Description
10012*	Cap Screw	27508	Disc, 1-9/16" dia.	27532	Disc, 3-1/16" dia.
10020*	Cap Screw	27509*	Disc, 1-5/8" dia.	27533	Disc, 3-1/8" dia.
10854*	Cap Screw	27510	Disc, 1-11/16" dia.	27534	Disc, 3-3/16" dia.
10855*	Cap Screw	27511*	Disc, 1-3/4" dia.	27535	Disc, 3-1/4" dia.
12001*	Cap Screw	27512	Disc, 1-13/16" dia.	27536	Disc, 3-5/16" dia.
27487*	Small Handle	27513*	Disc, 1-7/8" dia.	27537	Disc, 3-3/8" dia.
27488	Medium Handle	27514	Disc, 1-15/16" dia.	27538	Disc, 3-7/16" dia.
27489	Large Handle	27515*	Disc, 2" dia.	27539	Disc, 3-1/2" dia.
27490	Extension Tube	27516	Disc, 2-1/16" dia.	27540	Disc, 3-9/16" dia.
27491	Disc, 1/2" dia.	27517	Disc, 2-1/8" dia.	27541	Disc, 3-5/8" dia.
27492	Disc, 9/16" dia.	27518	Disc, 2-3/16" dia.	27542	Disc, 3-11/16" dia.
27493*	Disc, 5/8" dia.	27519	Disc, 2-1/4" dia.	27543	Disc, 3-3/4" dia.
27494	Disc, 11/16" dia.	27520	Disc, 2-5/16" dia.	27544	Disc, 3-13/16" dia.
27495*	Disc, 3/4" dia.	27521	Disc, 2-3/8" dia.	27545	Disc, 3-7/8" dia.
27496	Disc, 13/16" dia.	27522	Disc, 2-7/16" dia.	27546	Disc, 3-15/16" dia.
27497*	Disc, 7/8" dia.	27523	Disc, 2-1/2" dia.	27547	Disc, 4" dia.
27498	Disc, 15/16" dia.	27524	Disc, 2-9/16" dia.	27548	Disc, 4-1/16" dia.
27499*	Disc, 1" dia.	27525	Disc, 2-5/8" dia.	27549	Disc, 4-1/8" dia.
27500	Disc, 1-1/16" dia.	27526	Disc, 2-11/16" dia.	27550	Disc, 4-3/16" dia.
27501*	Disc, 1-1/8" dia.	27527	Disc, 2-3/4" dia.	27551	Disc, 4-1/4" dia.
27502	Disc, 1-3/16" dia.	27528	Disc, 2-13/16" dia.	27552	Disc, 4-5/16" dia.
27503*	Disc, 1-1/4" dia.	27529	Disc, 2-7/8" dia.	27553	Disc, 4-3/8" dia.
27504	Disc, 1-5/16" dia.	27530	Disc, 2-15/16" dia.	27554	Disc, 4-7/16" dia.
27505*	Disc, 1-3/8" dia.	27531	Disc, 3" dia.	27555	Disc, 4-1/2" dia.
27506	Disc, 1-7/16" dia.			7350*	Allen Wrench
27507*	Disc, 1-1/2" dia.				



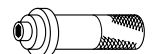
Starter Set 27793

It's this easy...

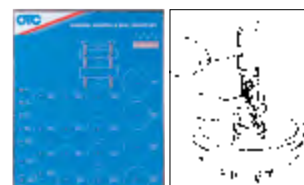
1. Select the proper size components.



2. Assemble your driver tool.



3. Perform the job easily.



27810

NOTE: All discs are 1/2" thick. \* Included in set No. 27793.

# INSPECTION AUTOMOTIVE SPECIALTY TOOLS

## 5550 Spectrum Solar10W LED Work Light with UV Top Light



## 5551 Spectrum Trio9W LED Work Light with 3W LED Top Light



## 5552 Spectrum 30+430 Pc. LED Work Light with 4 Pc. LED Top Light



- AC/DC Rechargeable
- Li-Ion battery
- Magnetic base
- Bright LEDs - 50,000 hour life
- Adjustable 60° angle
- Slip resistant textured body
- Impact and water resistant
- Limited Lifetime Warranty

### 5550 Specifications

10W LED Work light with UV Top Light  
LI-ION Rechargeable Battery – 3.6V 2250 mA, AC/DC  
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V  
Power Output: 5.0V 1000 mA  
Charger Time: 3.5 ~ 4.0 hours  
Active Time: 2.5 hours  
Storage Temperature: -4°F to 158°F; -20°C to 70°C  
Operating Temperature: 23°F to 122°F; -5° to 50°C  
PS: LED Sector: 170°  
At 50 cm: 350 LUX (750 LM)  
Waterproof Grade IP65

### 5551 Specifications

9W LED Work light with 3W LED Top Light  
LI-ION Rechargeable Battery – 3.6V 2250 mA, AC/DC  
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V  
Power Output: 5.0V 1000 mA  
Charger Time: 3.5 ~ 4.0 hours  
Active Time: 3.0 hours  
Storage Temperature: -4°F to 158°F; -20°C to 70°C  
Operating Temperature: 23°F to 122°F; -5° to 50°C  
PS: LED Sector: 25°  
At 50 cm: 4000 LUX  
Waterproof Grade IP65

### 5552 Specifications

30 Piece LED Work light with 4 Piece LED Top Light  
LI-ION Rechargeable Battery – 3.6V 2250 mA, AC/DC  
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V  
Power Output: 5.0V 1000 mA  
Charger Time: 3.5 ~ 4.0 hours  
Active Time: 4.0 to 5.0 hours  
Storage Temperature: -4°F to 158°F; -20°C to 70°C  
Operating Temperature: 23°F to 122°F; -5° to 50°C  
PS: LED Sector: 15°  
At 50 cm: 2250 LUX  
Waterproof Grade IP65



## With an industry leading 5.5 millimeter camera, it allows the technician to inspect hard to reach areas that would have normally required taking an engine apart or removing body panels to inspect.

With the added wireless display and ability to record images and video, the 3880X is an ideal tool for any automotive, aviation or industrial technician.

### Product Features:

- Micro camera transmits images and video to the removable wireless camera to allow viewing of hard to reach areas.
- Large 3.5" inch high resolution color screen for optimal viewing.
- Detachable 36" camera snake with position hold shaft.
- Images and video are recorded on the included SD card and can be viewed on the camera display or transferred to a computer.
- Easy to change camera allows for use with various camera sizes and lengths.
- Magnetic display mount allows for hands-free viewing.
- Camera head includes four built-in adjustable LEDs for optimal viewing from light to dark areas.
- IP67 Rated camera for complete protection from dust and standard automotive chemicals.
- Unit is powered by removable power pack with four rechargeable AA batteries (batteries and charger included).

### Applications:

- Micro 5.5 mm camera allows for inspection through spark-plug holes.
- Inspecting cylinders, valves, diesel injectors and glow plug ports.
- Viewing behind body panels and under the dashboard for electrical wiring and connections.
- Examine for corrosion and wear in hard to see areas.
- Inspect fluid lines for leaks.



### 3880X

**Video Scope**, Magnetic mount for wireless display, Micro SD card, XvidCodec installation CD, USB cable, Video out cable, Rechargeable AA batteries (4) with charger, AC power adapter, one year warranty and Protective carry case.





**45355**  
**Fiber Optics Inspection Light with Magnetic Tip and Base**

The applications for this handy tool are practically endless...check burners on heat exchangers for cracks, check coils for dirt and damage, look at serial numbers, fan motor tags, etc., on furnaces and condensing units. Fiber optics provide a bright light, but the shaft is just 7.6 mm in diameter. A durable cover fits over the 15" flexible shaft for protection. Powered by three AA batteries.



**3590**  
**Electronic Stethoscope**

Quickly pinpoints noise and location of bad bearings, bushings, dirty fuel injectors, wind/air leaks, valves, and lifters.

- Flexible shaft reaches tight areas.
- Ultra-sensitive mic and amplifier provide a full range of sounds needed by the professional.
- 7 sound-level control settings; 60 dB to 120 dB.



**4491**  
**Mechanic's Stethoscope**

- Quick and accurate way to locate vehicle noise.
- Spring diaphragm on end of hose amplifies noise.
- Includes two hose ends: long rod helps pinpoint noises in hard-to-access areas; short adapter helps locate noise in a broader area of the vehicle.



**4650**  
**Mirror and Magnet Set**

- Handles telescope from 6-1/2" to 25". Swivel heads allow access to tight areas.
- Large, rectangular swivel mirror is 2" x 3-1/2", and is attached to one telescoping handle; small mirror is 1-1/4" in diameter, and is interchangeable with magnets on the other handle.
- Magnets can lift up to 8 lbs.



**7559A**  
**Deluxe Vacuum Pump**

This pump kit is designed for vacuum testing, brake bleeding, and fluid transfer. With this kit, one person can quickly and cleanly bleed brake and hydraulic clutch systems, actuate vacuum switches (VOES), as well as get answers to numerous diagnostic and mechanical problems.

Kit includes:

- Precision-made repairable vacuum pump with 360° gauge rotation for improved visibility.
  - Pumps up to 1 cubic inch (16cc) per stroke.
  - Develops and maintains up to 25" of Mercury vacuum.
- 4-1/2 oz. Reservoir jar with fluid transfer and storage lid.
- Two – 2 ft. long, 1/4" ID hoses.
- Rubber cup adapter.
- Two universal bleed screw adapters.
- Vacuum "T" adapter.
- Automotive test and bleed adapters.
- User manual (English, Spanish, French).

**OTC Technician Gloves**

- Washable synthetic leather palm with padding ensures comfort and a secure grip.
- Polyester and Lycra material around fingers offer a durable lightweight cover that stretches for a great fit.
- PVC cushions help protect knuckles from injury due to slippage.
- Comfortable polyester back panels include webbing for improved ventilation.

**5800TGLV-M** – Medium.

**5800TGLV-L** – Large.

**5800TGLV-XL** – Extra large.

**SmartTech™ Technician Gloves**

- Same as above, also works with touchscreen technology.

**5801SGLV-M** – Medium.

**5801SGLV-L** – Large.

**5801SGLV-XL** – Extra large.



5800TGLV-M

5801SGLV-M



# MULTI-SYSTEM TESTING AUTOMOTIVE SPECIALTY TOOLS

6522



## EVAP – LEAK DETECTION SYSTEM

- Vacuum Leak Testing
- Exhaust Leaks
- Crankcase Oil
- Cooling System Testing
- Wind and Water Leaks
- 1-Year Warranty

LeakTamer is the latest generation of leak detection systems, providing more smoke and better control. Solid-state circuitry improves reliability and ensures more consistent smoke output. A wide assortment of accessories make the LeakTamer versatile tools for quickly locating different kinds of leaks.

### LeakTamer Evap offers:

- Densest smoke in the industry.
- Newly redesigned smoke chamber and control system.
- More complete line of accessories.
- User refillable.
- Includes smoke producing solution for 500 tests.
- Non-toxic, non-corrosive smoke.

### Product Features:
















- OEM approved technology
  - Contains STAR Technology; the ONLY OEM-Approved smoke technology anywhere in the world
- Large full range flow meter
  - Detects Microleaks™ down to and below 0.10
  - Flow-test components with full range of flow values
- Pinpoint leaks with Smoke and dye
  - UltraTraceUV® dye deposits at exact location of a leak
  - Finds leaks that smoke alone won't find
  - Introduce to an engine before disassembly to find internal leaks
  - It's the only OEM-Approved dye solution
- Variable Smoke Flow
  - Helps pinpoint smoke exiting a leak
  - Directional knob shows exact flow position
- Compact light weight design
  - More powerful diagnostics in smaller package
- Can be used with air or nitrogen
  - Use any inert gas for safer EVAP testing and shop air for all other tests

### 6522

Includes: Leak Tamer unit, White/UV combination light with laser pointer, UV glasses, EVAP adapter tool, exhaust cone, cap plug adapters, removal tool, smoke producing solutions enough solution for 500 tests.



### Accessory / Replacement Parts

- |                |  |   |
|----------------|--|---|
| <b>6522-1</b>  | UltraTraceUV® (8 oz. / 236 ml) patented solution is the only Automaker-approved smoke-producing solution in the world. Contains a special dye that deposits at the exact location of a leak. Each bottle will perform approximately 300 tests. Part No. is for one bottle, two bottles included with 6522.   |    |
| <b>6522-2</b>  | Inert Gas Pack Kit connects directly to fitting on back of LeakTamer 6522. Includes preset CO2 regulator with cylinder fitting, 20 oz. liquid CO2 cylinder, pressure gauge, universal push-on female coupler accommodates both automotive and industrial male fittings (Cylinder arrives empty) Performs approx. 25-50 full cycle EVAP tests per 20 liquid oz. cylinder. |   |
| <b>6522-3</b>  | Combination Light for easier smoke location and ultraviolet (UV) light, to highlight the fluorescent dye deposited at the exact location of a leak. Also has laser pointer. Includes batteries and glasses.  |  |
| <b>6522-4</b>  | Standard Size Service Port Adapter.  |  |
| <b>6522-5</b>  | Schrader® Removal/Installation Tool.   |  |
| <b>6522-6</b>  | Cap Plugs Kit. Used for sealing some systems during leak testing.  |  |
| <b>6522-7</b>  | Universal Fuel Neck Adapter fits the majority of vehicles. Allows access to fuel tank for evaporative system testing.  |  |
| <b>6522-8</b>  | BMW and MINI Fuel Neck Adapter. Allows access to fuel tank for evaporative system testing.   |  |
| <b>6522-9</b>  | Smoke Diffuser locates leaks around doors, windows, sunroofs, trunk compartment seals, EV vehicles' battery modules, or any closed system that can be pressurized from the inside and observe the smoke disturbance from the outside.  |  |
| <b>6522-10</b> | Cone Adapter (standard) for introducing smoke into induction or exhaust system. 1" x 3.5" & 6" long (25.4 mm x 89 mm x 152 mm).  |  |
| <b>6522-11</b> | Cone Adapter (Large) for introducing smoke into induction or exhaust system. 3.5" x 6" & 4.6" long (89 mm x 152 mm x 144 mm).  |  |
| <b>6522-12</b> | Replacement Dipstick (for 6522).   |  |
| <b>6522-13</b> | Replacement smoke supply hose and Delrin® Nozzle   |  |
| <b>6522-14</b> | Delrin® Nozzle   |  |
| <b>6522-15</b> | Flow meter red pointer flag. For easy viewing of flow meter measurements.  |  |



- 4411**  
**Ratcheting Hose & PVC Cutter (Standard)**
- Cuts hose and PVC up to 1-3/8" dia.
  - Features metal frame and ergonomic handles for high leverage.
  - Compound ratcheting action provides maximum cutting power.
  - Will also cut cable and wires.



- 4412**  
**Ratcheting Hose & PVC Cutter (Heavy Duty)**
- Cuts hose and PVC up to 1-3/4" dia.
  - Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
  - Compound ratcheting action provides maximum cutting power.
  - Will also cut cable and wires.



- 4490**  
**Magnetic Parts Tray**
- Rectangular, stainless steel tray is 9-1/2" x 5-1/2" and 1-1/4" deep. Holds tools and small metal parts, so they don't get lost or misplaced during repair work.
  - Two heavy-duty magnets on bottom of tray, with non-marring contact pads, securely hold tray to metal objects such as a tool box, air cleaner cover, frame rail, fender, etc.

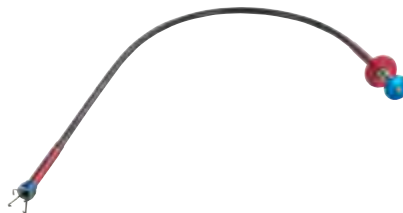
- 4779**  
**Front Fork & Shock Vice**
- This vice is designed to hold up to 4" diameter round or oddly shaped components such as forks, shocks, pistons, rods, etc. The V shaped jaws are covered with thick rubber pads to ensure a firm grip without leaving a mark. Comes complete with a table/vice mounting bracket that allows adjustment to any position.



- 4780**  
**Personal Tool Pack**
- Includes 1/4" drive ratchet, 2" extension, 16 drive bits, and Universal Spline sockets fit both SAE 3/16" - 9/16" and metric 5mm - 14mm nuts and bolts in a variety of styles; 6 pt., 12 pt., torx, square, spline, etc. All tools included in a travel pouch.



- 4781**  
**Super Stubby Screwdriver Set**
- These screwdrivers are perfect for those limited access fasteners typically found on carburetors or in electrical compartments and many other areas.
- 2 Phillips and 2 straight screwdrivers included in set.



- 4783**  
**Flexible Magnetic/Claw Pick Up Tool**
- The 25" flexible spring shaft allows the tool to reach difficult areas and pick up objects either magnetically or with the use of the retractable claw.



- 4786**  
**Aluminum Vice Inserts**
- Essential for every workbench vice. Aluminum jaws have reliefs for 5/16, 3/8, & 9/16 (7mm, 10mm, & 15mm) diameter shafts. Excellent for holding steel shafts without scratching or damage such as shocks, crankshafts, or any threaded bolts and shafts.



- 4794**  
**Safety Wire Drill Guide Set, SAE & Metric Set**
- Here is the perfect way to drill those nuts and bolts for use with safety wire without breaking the drill bit. These guide, align, and support the hex head or the bolt threads. The hex fixture fits nuts and bolt heads that measure up to 1 1/4". The SAE fixture bar is threaded for 1/4"-20, 5/16"-18, 5/16"-24, 3/8"-18, 3/8"-24, 7/16"-14 bolts, and the Metric fixture bar covers M6x1.0mm, M8x1.0, M8x1.25mm, M10x1.25mm, M10x1.5mm, M12x1.5mm sizes.



- 4795**  
**Safety Wire Twist Pliers**
- These versatile 8" pliers will reliably twist safety wire rapidly and consistently. The right hand twist mechanism features an automatic spring return. The forged alloy steel construction features tapered jaws for confined areas and mated cutters to cut safety wire. For use on safety wire applications found on vehicles, machinery, and aircraft.



- 4801**  
**Universal Clutch Holder**
- Holder arms designed to fit into the external teeth of a clutch hub, but can also be used on gears and sprockets. Opens to handle a 5" OD hub.

# GENERAL SERVICE AUTOMOTIVE SPECIALTY TOOLS



## 4802 Universal Pulley Holder Locking Pliers

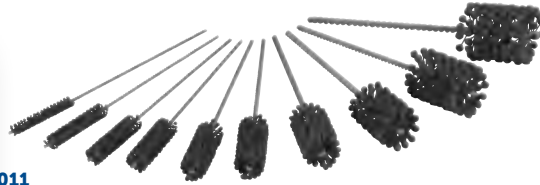
This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the 5/16" pins.

## 4803 Universal Pulley Holder Locking Pliers Set

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the addition of the interchangeable 5, 6, 7, 10, and 16mm pin sets. Complete with metal carry case.



Tool No.	Size
7011-1	.375" 10 mm
7011-2	.500" 13 mm
7011-3	.625" 16 mm
7011-4	.750" 19 mm
7011-5	.875" 22 mm
7011-6	1.00" 25 mm
7011-8	1.25" 32 mm
7011-10	1.50" 38 mm
7011-12	1.75" 44 mm
7011-14	2.00" 51 mm



## 7011 Ball Hone Set (10 piece)

- Ball Hones can be used for refinishing and resizing bores such as found in brake calipers, engine lifters, and u-joint yokes. Also useful for any bearing or bushing application.
- All hones are 180 grit Silicone Carbide for excellent cutting and finish.



## 4804 Heavy Duty Pulley Holder

This strap style universal wrench features a 9" drop forged handle and 23" leather strap for excellent grip on diameters up to 7". The milled foot increases grip on the strap and pulley as handle force is increased.



## OTC'S SAFETY AIR BLOW GUNS.

- The OTC PRO Series Lever Air Blow Guns are constructed from die cast aluminum and feature an exclusive design that increases output pressure by incorporating ambient air through venturi inlets with compressed air – economically boosting total output.
- All Air Blow Guns from OTC meet OSHA Standards for safety and noise – (STD. 01-13-001; STD. 1910-95)
- Extraordinary Precision Air Control – right where you need it.



## 6043 "Blast-Vac" Multipurpose Cleaning Gun

- Perfectly suited for quick and efficient cooling system flushing. Simply attach it to radiator or heater hoses and you're in business.
- Also usable in washing engines and even shop floors.
- Two simple connections: one to shop air and one to a typical water faucet.
- Creates a unique vortex air/water blast for powerful cleaning applications.
- The tool can also be used to vacuum by turning the venturi inside the gun in the opposite direction. Air flow is reversed to create a strong vacuum.

Note: While normal water pressure will handle the majority of a cooling system flush, short blasts are sometimes needed to loosen some contaminants from within the system.



## 2424 & 2425 OTC PRO Series Lever Air Blow Guns

- Unlike ANY other metal body lever air gun – these incorporate revolutionary Venturi Mechanism that uses side ports to combine free ambient air with costly compressed air – creating a much higher volume of usable output.
- Manufactured from Die Cast Aluminum, the OTC PRO Series Air guns are made to last in the harshest environments.
- Ergonomic design of the body and the large dip coated operating lever reduce fatigue and discomfort – even during extended use.
- Manufactured fully using non corroding materials – threaded 1/4" F at inlet and 1/8" F at outlet.
- Meets OSHA Standards for Safety and Noise.

2424 – PRO Series Venturi Air Gun (Rubber Tip)

2425 – PRO Series Venturi Air Gun (Star Tip)



## 2421, 2422 & 2423 OTC Safety Air Blow Guns

- Impact and Weather resistant Nylon Body.
- Safety Venting in all tips.
- Corrosion Resistant Stainless Steel Nozzles.
- Drop Resistant Construction.
- Soft Rubber Grip and ergonomic design for convenience and comfort in extended use.
- Brass threaded air inlet.
- Variable speed trigger for control of amount of air dispensed.
- Conforms to OSHA STD 1910-95 (b) for max noise level when used with 90 PSI air pressure
- Conforms to OSHA STD 1-13.1 for safety and are classified as safety Blow Guns.

2421 – Safety air blow gun, snub nose rubber tip

2422 – Safety air blow gun, 13" stainless steel nozzle

2423 – Safety air blow gun, 4.5" stainless steel bent tip



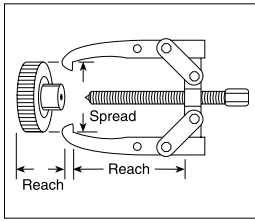
# SELECTING THE RIGHT PULLER PULLERS

## YOU CAN SOLVE THE 3 BASIC PULLING PROBLEMS...

The first thing you have to do is identify exactly what your particular pulling problem is. Once you recognize the problem, you can go on to select the right tool to solve it.

### HOW TO SELECT THE RIGHT PULLER

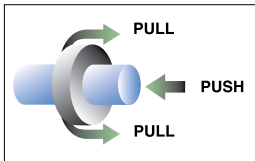
- 1: Determine the type of puller or puller combination. Which puller type is best for "getting a grip" on the part? Is a combination of puller types required?
- 2: Determine the "REACH" needed. The puller you select must have a "reach" equal to or larger than the corresponding sizes of the part.
- 3: Determine the "SPREAD" needed. The width of the part to be pulled will determine the "spread" required.
- 4: Estimate the force required. A puller with the correct "reach" and "spread" will usually have enough power. When in doubt, always use the next larger size. More power may be needed for rusted parts, or when the "area of resistance" is large.



### GENERAL RULE OF THUMB:

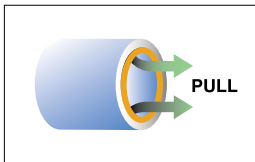
Manual pullers require that the puller screw be at least half as large (in diameter) as the shaft of the pulling job.

Hydraulic pullers need the maximum force exerted in tons to be 7–10 times the diameter of the shaft in inches.



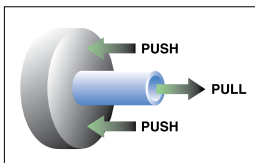
### 1 PULLING SOMETHING OFF A SHAFT.

Removing a gear, bearing, wheel, pulley, etc., to replace it or get at another part.



### 2 PULLING SOMETHING OUT OF A HOLE.

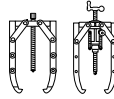
Internal bearing cups, retainers, or oil seals are usually press-fitted and are difficult to remove.



### 3 PULLING A SHAFT OUT OF SOMETHING.

A transmission shaft or pinion shaft is often hard to remove from a bore or housing. Use a Push-Puller with adapters if you can "get a hold of" the threaded end of the shaft. Sometimes it's possible to push a shaft through a housing, rather than pull it out. In applications of this type, the puller legs must be securely fastened to the housing and the screw may simply bear against the shaft.

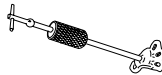
### The tools to use when pulling something off a shaft:



Jaw-type puller, either manual or hydraulic. (For extra force and convenience use a hydraulic puller.) Both are available in 2- or 3-jaw versions and are used to grip the outer circumference of an attachment.



Bearing pulling attachment. Provides "knife-like" edges to get behind the component, or when there isn't a good gripping area on the part to be pulled. The splitter gets behind the component to prevent damage to the part.



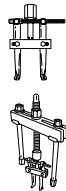
Push-Puller® with attachments. External-internal adapters can thread directly into tapped holes on a component.



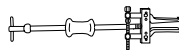
Slide hammer puller with selected attachments for multiple light-duty pulling tasks.

A variety of OTC adapters can be used to protect a shaft, bridge a hole, thread into tapped holes, or assist installation.

### The tools to use when pulling something out of a hole:



Internal pulling attachments have narrow jaws which extend through the center of the part to be pulled. They provide a straight pull and avoid damage to housings. Designed for use with Push-Pullers or slide hammer pullers.



Push-Puller in combination with internal pulling attachment. Both mechanical and hydraulically powered versions are available.



Here a slide hammer puller is combined with an internal pulling attachment. Ideal for removing parts from blind holes, especially when there is no housing to brace puller legs against.



When there is a shaft to bear against, a forcing screw of the correct size may be used in combination with an internal pulling attachment.

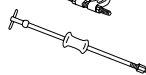
### The tools to use when pulling a shaft out of something:



Push-Puller® with threaded adapter. Use a mechanical or hydraulic puller, depending on the size of the shaft to be pulled.



When the housing lacks sufficient surface for the puller legs to bear against, a pulling attachment may be used to provide support.



Slide hammer puller with threaded adapter – either external-internal or internal can be used.



Internal adapters are fastened to the external threaded end of the shaft to pull while pushing against the housing.

External-internal adapters are threaded into the shaft to pull it while pushing against the housing.

## SAFETY PRECAUTIONS

### **⚠️ WARNING: TO PREVENT PERSONAL INJURY WHEN USING PULLERS,**

- Wear approved eye protection, such as safety glasses, goggles, or a face shield.
- Inspect puller for dents, cracks, or excessive wear before use. Inspect forcing screw for signs of galling or seizing. Replace worn or damaged components.
- Do not exceed puller's rated capacity, spread, or reach. Use correct size of puller for application.
- Ensure puller is correctly aligned with application and seated on component to be removed. Jaws must be parallel to forcing screw.
- Do not use wrench extensions when applying a load.
- Cover application with a shield or protective blanket before force is applied to contain flying debris should breakage occur.
- Apply force gradually. Do not use an impact wrench to apply force unless instructions specify use with an impact wrench.
- Do not strike or "sledge" puller or component.
- Do not modify puller by grinding, heating, or other means that could weaken puller strength.



## ABOUT MECHANICAL PULLERS

A pulling system can exert tons of force and it is difficult to predict the exact force required for a pulling application. It is important to observe safety precautions when using a puller.

The OTC pulling system is versatile. For that reason, it is possible that various components in a pulling setup will have different tonnage ratings. The lowest capacity component determines the capacity of the entire setup. For example, when an accessory having a capacity of one ton is used with a 10-ton capacity puller, the puller setup can be used at a force of only one ton.

If you are unsure which puller or attachment to select for an application, contact your OTC tool representative or Service Solutions, LLC.

## PULLER OPERATION

1. Mount the puller so its grip is tight. When using a jaw-type puller, tighten the adjusting strap bolts. For a better grip and more even pulling power, use a 3-jaw puller when possible.
2. Align puller legs and jaws. Verify the setup is rigid and the puller is square with the application.
3. Use the correct size of puller for the application. If you have applied maximum force and the component has not moved, switch to a larger capacity puller.

4. Apply force gradually. The component should give a little at a time. Do not try to speed up the application by using an impact wrench on the forcing screw.
5. Do not couple puller legs. The tonnage capacity of the puller is reduced when longer-than-standard legs are used or when legs are compressed, increasing the chance of breakage.
6. Keep reach to a minimum. Use the shortest legs possible to reach the component to be removed.
7. Install threaded puller legs evenly into the component, attachment, or adapter. Uneven legs result in greater force applied to one side of the puller, which can result in breakage.
8. Sliding plates must be on the opposite side of the cross block from the forcing screw nut or hydraulic cylinder.
9. Bearing pulling attachments may not withstand the full tonnage of the pullers with which they are used. The shape and condition of the component being pulled affects the tonnage at which puller blocks and / or studs may bend or break. Select the largest attachments that fit the component being pulled.

## PULLER MAINTENANCE

Keep the puller clean, and frequently lubricate the forcing screw from threads to tip.

## Protective Blankets

Think of them as "security blankets." They wrap around pulling, pressing, and other high-force jobs to protect you and your employees from work-related injuries as much as possible. They're made of high tensile, tear resistant ballistic nylon – similar to military flak jackets – that, when tested, withstood the shattering of a neck-down grade 8 bolt without any visible damage.

NOTE: Always reduce the force from the work piece prior to removing the blanket. Protective blankets may afford protection from injuries to users and others should part breakage occur. Because of the variety of situations that require guarding, it is the user's responsibility to determine the best method of protection.

### **1230PB**

Protective blanket. 12" x 30"

### **2036PB**

Protective blanket. 20" x 36"

### **2860PB**

Protective blanket. 28" x 60"



1230PB

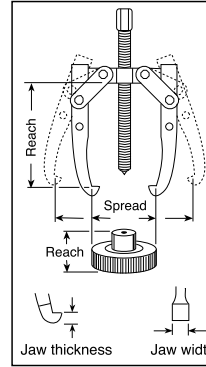
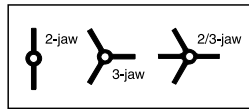
# GRIP-O-MATIC® PULLERS

## PROVIDING AUTOMOTIVE SERVICE SOLUTIONS FOR OVER 80 YEARS

### Mechanical Grip-O-Matic® Pullers

OTC has developed the most complete line of gear and bearing pullers, enabling you to remove and install parts for fast, effective repairs. The pullers are forged from quality steel, heat treated, and subjected to rigorous tests which exceed their rated capacity.

**No. 1020–1050**



### **WARNING**

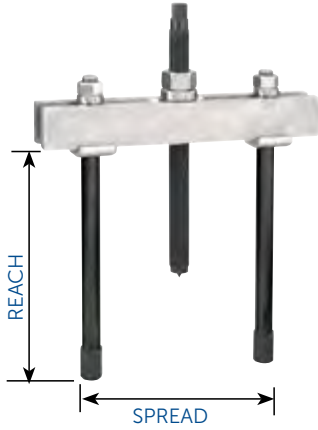
Wear approved eye protection when using pullers. See page 131 for protective blankets for your pulling jobs.

	Tool No.	Capacity Style and Weight	Max Reach	Spread	Screw Size	Jaw Thickness	Width
	<b>1020</b>	1-Ton, 2-Jaw; 5 oz.	2-1/8"	3-1/4"	5/16"–24 x 3-7/8"	9/64"	1/4"
	<b>1021</b>	1-Ton, 3-Jaw; 8 oz.	2-1/8"	3-1/4"	5/16"–24 x 3-7/8"	9/64"	1/4"
	<b>1022</b>	2-ton, 2-Jaw; 14 oz. (Reversible Jaws)	3-1/4"	4"	3/8"–24 x 4-7/8"	Upper 3/16" Lower 1/8"	Upper 1/4" Lower 1/2"
	<b>1023</b>	2-ton, 2/3-Jaw; 1 lb., 5 oz. (Reversible Jaws)	3-1/4"	4-3/4"	3/8"–24 x 4-7/8"	Upper 3/16" Lower 1/8"	Upper 1/4" Lower 1/2"
	<b>1024</b>	5-Ton, 2-Jaw; 1 lb., 12 oz. (Reversible Jaws)	3-1/4"	6"	9/16"–20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"
	<b>1026</b>	5-Ton, 2/3-Jaw; 2 lbs., 12 oz. (Reversible Jaws)	3-1/4"	7"	9/16"–20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"
	<b>1025</b>	5-Ton, Long 2-Jaw; 2 lbs. (Reversible Jaws)	5-1/2"	6"	9/16"–20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"
	<b>1027</b>	5-Ton, Long 2/3-Jaw; 3 lbs., 10 oz. (Rev. Jaws)	5-1/2"	7"	9/16"–20 x 6-15/16"	Upper 5/16" Lower 1/4"	Upper 3/8" Lower 3/4"
	<b>1035</b>	7-Ton, 2-Jaw; 4 lbs., 8 oz. (Reversible Jaws)	5"	9"	11/16"–18 x 9"	Upper 5/16" Lower 11/32"	Upper 1" Lower 1"
	<b>1037</b>	7-Ton, 2/3-Jaw; 6 lbs., 2 oz. (Rev. Jaws)	5"	10-1/2"	11/16"–18 x 9"	Upper 5/16" Lower 11/32"	Upper 1" Lower 1"

	<b>Tool No.</b>	<b>Capacity Style and Weight</b>	<b>Max Reach Spread</b>		<b>Screw Size</b>	<b>Jaw Thickness</b>	<b>Width</b>
	<b>1036</b>	7-Ton, Long 2-Jaw; 5 lbs., 6 oz.	8-3/4"	9-1/2"	11/16"-18 x 9"	11/32"	1"
	<b>1038</b>	7-Ton, Long 2/3-Jaw; 8 lbs., 2 oz.	8-3/4"	11"	11/16"-18 x 9"	11/32"	1"
	<b>1039</b>	13-Ton, 2-Jaw; 10 lbs., 13 oz.	11"	12"	13/16"-16 x 12"	9/16"	1"
	<b>1041</b>	13-Ton, 2/3-Jaw; 16 lbs., 4 oz.	11"	12"	13/16"-16 x 12"	9/16"	1"
	<b>1040</b>	13-Ton, Long 2-Jaw; 13 lbs.	15-1/4"	15-1/2"	13/16"-16 x 12"	9/16"	1"
	<b>1042</b>	13-Ton, Long 2/3-Jaw; 18 lbs., 12 oz.	15-1/4"	17"	13/16"-16 x 12"	9/16"	1"
	<b>1043</b>	17-1/2-Ton, 2-Jaw; 23 lbs.	14-1/2"	14"	1"-14 x 131/2"	13/16"	1-9/32"
	<b>1045</b>	17-1/2-Ton, 3-Jaw; 33 lbs.	14-1/2"	14"	1"-14 x 13-1/2"	13/16"	1-9/32"
	<b>1044</b>	17-1/2-Ton, Long 2-Jaw; 26 lbs.	18-3/4"	16"	1"-14 x 13-1/2"	13/16"	1-9/32"
	<b>1046</b>	17-1/2-Ton, Long 3-Jaw; 37 lbs.	18-3/4"	16"	1"-14 x 13-1/2"	13/16"	1-9/32"
	<b>1047</b>	25-Ton, 2-Jaw; 37 lbs., 8 oz.	15-1/2"	18"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"
	<b>1049</b>	25-Ton, 3-Jaw; 54 lbs.	15-1/2"	18"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"
	<b>1048</b>	25-Ton, Long 2-Jaw; 42 lbs., 12 oz.	22-1/4"	20"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"
	<b>1050</b>	25-Ton, Long 3-Jaw; 60 lbs.	22-1/4"	20"	1-1/4"-12 x 15-15/16"	1-1/16"	1-1/2"



# PUSH PULLERS & THREADED ADAPTERS PULLERS



### Push-Pullers®

**927 10-Ton Capacity** Can be used with No. 1123 bearing pulling attachment or No. 679 pulley pulling attachment. May also be used with Nos. 1150, 1151, 1152, or 1153 internal pulling attachments.

**938 17-1/2 Ton Capacity** Can be used with Nos. 1124 and 1130 bearing pulling attachments or Nos. 679 and 680 pulley pulling attachments. May also be used with Nos. 1150, 1151, 1153, 1165, or 1166 internal pulling attachments.

**939 30-Ton Capacity** Can be used with Nos. 1126 and 1127 bearing pulling attachments or No. 680 pulley pulling attachment (two 8012 adapters are required to connect 680 to puller). Can be used with No. 1165 internal pulling attachment.

### Push-Pullers® Leg Extensions

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
<b>927</b>	8-1/4"	2-1/8" – 7-1/4"	3/4"–16 x 12"	1/2" of forcing screw tip end is threaded 5/8"–18. No. 1100 legs and No. 24827 leg ends included. Wt., 7 lbs.

Extra Legs (pair) for No. 927 Push-Puller (Reach equals leg length plus 1-1/2" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
<b>1103</b>	4-3/4" 1 lb.	<b>1102</b>	11-3/4" 2 lbs., 4 oz.
<b>1100</b>	6-3/4" 1 lb., 8 oz.	<b>1101</b>	15-3/4" 3 lbs., 4 oz.

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
<b>938</b>	11-1/2"	3-1/8" – 11-3/4"	1"-14 x 13-1/4"	Leg ends threaded 5/8"–18. No. 1106 legs and No. 24827 leg ends included. Wt., 20 lbs., 12 oz.

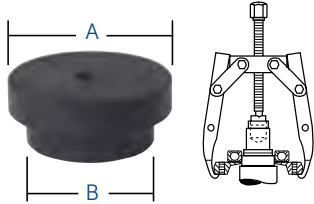
Extra Legs (pair) for No. 938 Push-Puller (Reach equals leg length plus 2" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
<b>1107</b>	4-1/2" 2 lbs., 8 oz.	<b>1105</b>	22-1/2" 9 lbs.
<b>1106</b>	9-1/2" 4 lbs., 8 oz.	<b>1108</b>	30" 11.5 lbs.
<b>1104</b>	16-1/2" 6 lbs., 8 oz.		

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
<b>939</b>	10-1/2"	7"–16-1/4"	1-1/2"–12 x 17-1/4"	Leg ends threaded 1"–14. No. 1109 legs and No. 28390 leg ends included. Wt., 44 lbs.

Extra Legs (pair) for No. 939 Push-Puller (Reach equals leg length plus 2" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
<b>1109</b>	8" 8 lbs.	<b>1111</b>	28" 22 lbs.
<b>1110</b>	18" 15 lbs.		

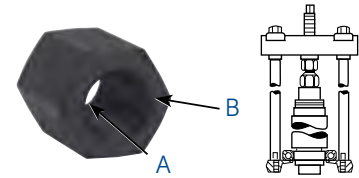


### 8074, 8076 & 8075 Step Plate Adapter Sets

Necessary for pulling and installing bearings, gears, or other parts found on hollow shafts or housings. They may be used with Grip-O-Matic® pullers and Push-Pullers®, as well as shop presses. All adapters are available separately.

Tool No.	Set No.	Dia. "A"	Dia. "B"
8057	•	1"	3/4"
8058	•	1-1/8"	7/8"
8059	•	1-1/4"	1"
8060	•	1-3/8"	1-1/8"
8061	•	1-5/8"	1-1/4"
8062	•	1-3/4"	1-3/8"
8063	•	1-7/8"	1-1/2"
8064	•	2"	1-5/8"
8065	•	2-1/8"	1-3/4"

Tool No.	Set No.	Dia. "A"	Dia. "B"
8066	•	2-3/8"	1-7/8"
8067	•	2-1/2"	2"
8068	•	2-5/8"	2-1/8"
8069	•	2-3/4"	2-1/4"
8070	•	2-7/8"	2-3/8"
8071	•	3"	2-1/2"
8072	•	3-1/4"	2-3/4"
8073	•	3-1/2"	3"



### 8044 Internal Threaded Adapter Set

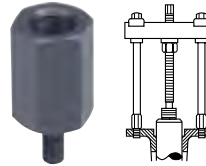
For use on the ends of Push-Puller legs or forcing screws to aid in the removal and installation of shafts, axles, and housings.

Tool No.	Internal End "A"	Internal End "B"
8035*	1/2"-20	5/8"-18
8036*	1"-14	1"-14
8037	5/8"-18	5/8"-18
8038	5/8"-18	3/4"-16
8039	5/8"-18	7/8"-14
8040	5/8"-18	1"-14
8041	5/8"-18	1-1/8"-12
8042	5/8"-18	1-1/4"-12
8043*	5/8"-18	1-1/2"-12

\* Not included in set No. 8044.  
Order separately. All adapters are available separately.

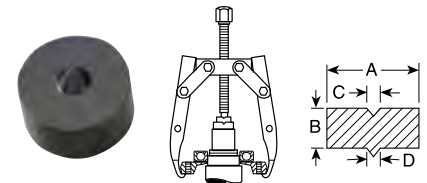
### Metric and standard External-Internal Threaded Adapters

For use on the ends of Push-Puller legs or forcing screws when pulling shafts, bearing caps, pinions, etc.



Tool No.	Internal End	External End	Length
<b>Metric Threaded Adapters</b>			
8111	5/8"-18	M6 x 1.0	2-1/4"
8112	5/8"-18	M8 x 1.0	2-1/4"
8113	5/8"-18	M8 x 1.25	2-1/4"
8114	5/8"-18	M10 x 1.25	2-1/4"
8115	5/8"-18	M10 x 1.5	2-1/4"
8116	5/8"-18	M12 x 1.25	2-1/4"
8117	5/8"-18	M12 x 1.75	2-1/4"
8121	5/8"-18	M14 x 1.5	2-1/4"
8122	5/8"-18	M14 x 2.0	2-1/4"
8123	5/8"-18	M16 x 1.5	2-3/4"
8124	5/8"-18	M16 x 2.0	2-3/4"
8125	5/8"-18	M20 x 1.5	2-3/4"
8126	5/8"-18	M20 x 2.5	2-3/4"
8131	5/8"-18	M6 x 1.0	1-5/8"
8132	5/8"-18	M8 x 1.25	1-5/8"
8133	5/8"-18	M10 x 1.5	1-5/8"
8134	5/8"-18	M12 x 1.75	1-5/8"
8135	5/8"-18	M14 x 2.0	1-5/8"
8136	5/8"-18	M16 x 2.0	1-5/8"
8137	5/8"-18	M20 x 2.5	1-5/8"
8141	1"-14	M16 x 1.5	3"
8142	1"-14	M16 x 2.0	3"
8143	1"-14	M18 x 1.5	3"
8144	1"-14	M20 x 1.5	3"
8145	1"-14	M20 x 2.5	3"
8146	1"-14	M22 x 1.5	3"
8147	1"-14	M24 x 2.0	3"
8148	1"-14	M24 x 3.0	3"

Tool No.	Internal End	External End	Length
<b>Standard Threaded Adapters</b>			
206437	1/2"-20	5/8"-18	2-1/4"
8000	5/8"-18	1/4"-20	2-1/4"
8001	5/8"-18	5/16"-18	2-1/4"
8002	5/8"-18	7/16"-14	2-1/4"
8003	5/8"-18	7/16"-20	2-1/4"
8004	5/8"-18	3/8"-24	2-1/4"
8005	5/8"-18	3/8"-16	2-1/4"
8006	5/8"-18	1/2"-20	2-1/4"
8007	5/8"-18	1/2"-13	2-1/4"
8008	5/8"-18	9/16"-18	2-1/4"
8009	5/8"-18	9/16"-12	2-1/4"
8010	5/8"-18	5/8"-11	2-1/4"
8013	5/8"-18	3/4"-16	2-1/4"
8015	5/8"-18	3/4"-10	2-1/4"
8017	5/8"-18	7/8"-14	2-1/4"
8018	5/8"-18	7/8"-9	2-1/4"
8019	5/8"-18	1"-14	2-1/4"
8022	5/8"-18	1/8" pipe	2-1/4"
8012	1"-14	5/8"-18	3-3/16"
8011	1"-14	5/8"-11	2-1/2"
8014	1"-14	3/4"-16	2-1/2"
8016	1"-14	3/4"-10	2-1/2"
8020	1"-8	5/8"-18	3"
8021	1"-8	1"-14	3"
8023	1-1/4"-12	1"-14	4-1/2"
8024	1-1/4"-12	1-3/4"-12	4-3/4"
8025	1-1/4"-7	5/8"-18	4"
8027	1-1/4"-7	1"-14	4"
8029	1-5/8"-51/2	1"-14	4"
8028	1-5/8"-51/2	1"-8	4"
8030	3/4"-16	5/8"-18	2-1/4"



### 8056 Shaft Protector Set

Designed to protect shaft centers from distortion when extreme pressures are applied with either Grip-O-Matic® pullers or Push-Pullers. Shaft protectors are available separately.

Tool No.	"A"	"B"	"C" (60°)	"D" (60°)
8050	1-1/2"	3/4"	3/8"	7/16"
8051	1-1/4"	3/4"	3/8"	3/8"
8052	1"	3/4"	3/8"	5/16"
8053	3/4"	3/4"	1/4"	1/4"
8054	5/8"	5/8"	1/4"	1/4"
8055	5/8"	5/8"	3/16"	3/16"

# HYDRAULIC PULLERS PULLERS



### No. 1062 & 1063

Usable reach equals leg length minus 4-7/8" when using leg ends.

### No. 1070 & 1071

Usable reach equals leg length minus 5-7/8" when using leg ends.

### No. 1076

Usable reach equals leg length minus 10-5/8".

**No. 1076** – 50-Ton Capacity Can be used with Nos. 1128 and 1129 bearing pulling attachments. Ends of legs are threaded 1-1/4"-12. Usable reach: 13-3/8". See page 135 to order threaded adapters for use with these pullers.

### Hydraulic Push-Puller®

**No. 1062, 1063** – 17-1/2" Ton Capacity Can be used with Nos. 1124 and 1130 bearing pulling attachments or No. 680 pulley pulling attachment. May also be used with No. 1154 internal pulling attachment. Ends of legs are threaded 5/8"-18. Usable reach: 11-5/8".

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
<b>1063</b>	18-1/2"	5-3/4"-11-3/4"	1"-8 x 20"	Puller with No. 1104 legs, No. 24827 leg ends, No. 4120 hyd. ram, No. 32118 adjusting screw, and No. 24814 adjusting crank. 38 lbs.
<b>1062</b>	18-1/2"	5-3/4"-11-3/4"	1"-8 x 20"	Puller only. 22 lbs.

Extra Legs (pair) for No. 1062, 1063 (Reach equals leg length plus 2" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
<b>1107</b>	4-1/2" 2 lbs., 8 oz.	<b>1105</b>	22-1/2" 9 lbs.
<b>1106</b>	9-1/2" 4 lbs., 8 oz.	<b>1108</b>	30" 11.5 lbs.
<b>1104</b>	16-1/2" 6 lbs., 8 oz.		

**No. 1070, 1071** – 30-Ton Capacity Can be used with Nos. 1126 and 1127 bearing pulling attachments or No. 680 pulley pulling attachment (two No. 8012 adapters are required to connect No. 680 to puller). Also may be used with No. 1166 internal pulling attachment. Ends of legs are threaded 1"-14. Usable reach: 12-1/8".

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
<b>1071</b>	20-1/2"	7"-16-1/4"	1-1/4"-7 x 24"	Puller with No. 1110 legs, No. 28390 leg ends, No. 4121 hyd. ram, No. 34758 adjusting screw, and No. 27198 adjusting crank. 90 lbs.
<b>1070</b>	20-1/2"	7"-16-1/4"	1-1/4"-7 x 24"	Puller only. 56 lbs.

Extra Legs (pair) for No. 1070, 1071 (Reach equals leg length plus 2-5/8" with leg end caps.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
<b>1109</b>	8" 8 lbs.	<b>1111</b>	28" 22 lbs.
<b>1110</b>	18" 15 lbs.		

Tool No.	Max. Reach	Max. Spread	Screw Size	Notes / Weight
<b>1076</b>	24"	8-1/2"- 20-1/2"	1-5/8"- 5-1/2" x 30-3/8"	Puller only. 106 lbs.

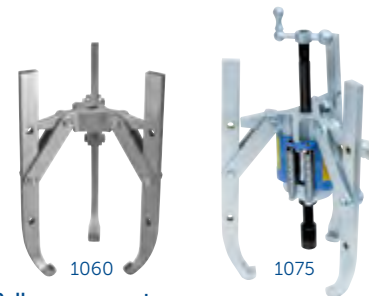
Extra Legs (pair) for No. 1076 (Reach equals leg length plus 1-1/4"-12 thd. on both leg ends.)

Tool No.	Leg Length & Wt.	Tool No.	Leg Length & Wt.
<b>1112</b>	24" 34 lbs.	<b>1113</b>	34" 47 lbs.

### Hydraulic Grip-O-Matic® Puller

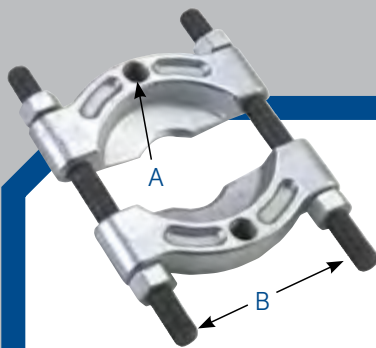
No. 1060-1080 Available in 10 to 50-ton capacities. Reliable single-acting Power Twin ram is matched with a versatile 2-jaw or 3-jaw puller. Lightweight ram can be used in other applications. You also get an adjusting screw, speed crank, and coupler where applicable. Hydraulic pump is not included; see index for pump listings.

Tool No.	MAX		Ram Capacity & Number	JAW		Screw Size & Crank No.	Style and Weight
	Reach	Spread		Thickness	Width		
<b>1060</b>	10"	17"	N/A	9/16"	1"	N/A	10-Ton, 2/3-Jaw; Puller Only; 17 lbs.
<b>1065</b>	11-1/2"	16"	17-1/2 Ton, No. 4120	13/16"	1-9/32"	1"-8 x 20" No. 24814	17-1/2 Ton, 2-Jaw; 40 lbs.
<b>1064</b>	11-1/2"	16"	N/A	13/16"	1-9/32"	N/A	17-1/2 Ton, 2-Jaw Puller Only; 24 lbs.
<b>1067</b>	11-1/2"	20"	17-1/2 Ton, No. 4120	13/16"	1-9/32"	1"-8 x 20" No. 24814	17-1/2 Ton, 3-Jaw; 53 lbs.
<b>1066</b>	11-1/2"	20"	N/A	13/16"	1-9/32"	N/A	17-1/2 Ton, 3-Jaw Puller Only; 37 lbs.
<b>1073</b>	19-7/16"	26"	30-Ton, No. 4121	1-1/8"	1-5/8"	1-1/4"-7 x 24" No. 27198	30-Ton, 2-Jaw; 91 lbs.
<b>1072</b>	19-7/16"	26"	N/A	1-1/8"	1-5/8"	N/A	30-Ton, 2-Jaw Puller Only; 59 lbs.
<b>1075</b>	19-7/16"	34"	30-Ton, No. 4121	1-1/8"	1-5/8"	1-1/4"-7 x 24" No. 27198	30-Ton, 3-Jaw; 122 lbs.
<b>1074</b>	19-7/16"	34"	N/A	1-1/8"	1-5/8"	N/A	30-Ton, 3-Jaw Puller Only; 90 lbs.
<b>1080</b>	19-7/16"	44"	N/A	1-1/8"	1-5/8"	N/A	50-Ton, 3-Jaw Puller Only; 187 lbs.



### Puller components

No.	Description	Capacity
<b>24814</b>	Speed Crank	17-1/2 Ton
<b>27198</b>	Speed Crank	30 Ton
<b>29595</b>	Speed Crank	50 Ton
<b>32118</b>	Adjusting Screw	17-1/2 Ton
<b>34758</b>	Adjusting Screw	30 Ton
<b>32698</b>	Adjusting Screw	50 Ton
<b>39448</b>	Lube for pullers	



### Bearing Splitters

No. 1121-1130 These versatile accessories feature "knife-like" edges which are easily placed behind the part to secure a gripping surface, even when clearances are extremely limited. When used with an OTC Grip-O-Matic® puller, puller jaws grip attachment's outer edge; when used with a Push-Puller, puller legs are threaded into the attachment's two tapped holes.

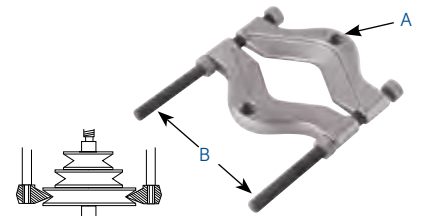
Tool No.	MAX. Spread	MIN. Spread	A	B	Weight	Application
<b>1121</b>	15/16"	1/4"	15/16"-18	1-11/16"	12 oz.	Use with puller Nos. 1020, 1022, & 1023.
<b>1122</b>	2"	1/8"	3/8"-16	2-7/16"	1 lb., 4 oz.	Use with puller Nos. 1024, 1025, 1026, 1027, 7392, & 7393.
<b>1123</b>	4-5/8"	1/2"	5/8"-18	4-3/8"	5 lbs.	Use with puller Nos. 1035, 1036, 1037, 1038, & 927.
<b>1124</b>	5-3/4"	1/2"	5/8"-18	6"	12 lbs.	Use with puller Nos. 1035, 1040, 1041, 1042, 1065, 1063, & 938.
<b>1130</b>	9"	1/2"	5/8"-18	6"	12 lbs., 9 oz.	Use with puller Nos. 1035, 1040, 1041, 1042, 1065, 1063, & 938.
<b>1126</b>	8"	5/8"	1"-14	7-1/8"	19 lbs., 12 oz.	Use with puller Nos. 1047, 1043, & 939.
<b>1127</b>	13-3/8"	3/4"	1"-14	10-1/4"	41 lbs., 12 oz.	Use with puller Nos. 1047, 1073, & 939.
<b>1128</b>	12-7/8"	5"	1-3/4"-12	13"	100 lbs.	Use with puller Nos. 1073, 1079.

A = Thread of tapped hole in adapter.  
B = Distance between adjusting screws.

### Pulley Pulling Attachments

Attachment clamps down into V-groove to distribute load. Use with Grip-O-Matic® pullers or Push-Pullers.

Tool No.	MAX. Spread	MIN. Spread	A	B	Weight	Application
<b>679</b>	5-7/8"	1-3/4"	5/8"-18	6"	4 lbs., 4 oz.	Use with puller Nos. 1035, 1036, 1037, 1038, and 927.
<b>680</b>	10"	1-5/8"	5/8"-18	10-1/16"	22 lbs., 4 oz.	Use with puller Nos. 1039, 1040, 1041, 1063, 1065, and 938.



A = Thread of tapped hole in adapter.  
B = Distance between adjusting screws.

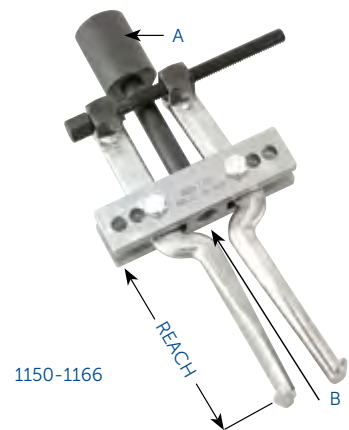
### Internal Pulling Attachments

Approved by leading bearing manufacturers, OTC's internal pulling attachments remove bearing cups, oil seals, bushings, and other parts from blind holes quickly and easily. Each attachment is designed for use with a corresponding Push-Puller or slide hammer assembly.

Tool	JAW Spread	JAW Reach	A	B	Weight	Application
<b>1153</b>	1-1/2"-5"	2-1/8"	1"-14	5/8"-18	4 lbs., 4 oz.	Use with Nos. 927 and 938 Push-Pullers, 1155 and 1156 slide hammer pullers, or 24832 and 24833 puller screw.
<b>1150</b>	1-1/2"-6"	4"	1"-14	5/8"-18	4 lbs., 4 oz.	
<b>1152</b>	1-1/2"-6"	4"	-	5/8"-18	3 lbs., 8 oz.	
<b>1151</b>	1-1/2"-7"	5-1/4"	1"-14	5/8"-18	4 lbs., 8 oz.	Use with Nos. 927 and 938 Push-Pullers, 1155 and 1156 slide hammer pullers, or 24832 puller screw.
<b>1165</b>	3"-9"	5-7/8"	1-1/2"-12	1"-14	13 lbs., 8 oz.	Use with No. 939 Push-Puller.
<b>1154</b>	1-1/2"-9"	4"	1"-8	5/8"-18	4 lbs., 8 oz.	Use with No. 1063 hyd. Push-Puller.
<b>1166</b>	3"-9"	5-7/8"	1-1/4"-7	1"-14	13 lbs., 8 oz.	Use with No. 1071 hyd. Push-Puller.

### Puller Screws

<b>24832</b>	13-3/4" long		5/8"-18	1 lb.	Use with Nos. 1150, 1151, 1152, and 1153. Acts as a regular forcing screw when threaded directly into the block of pulling attachment.
<b>24833</b>	5-1/2" long		5/8"-18	6 oz.	Use with Nos. 1150, 1152, and 1153. Acts as a regular forcing screw when threaded directly into the block of pulling attachment.



1150-1166

A = Thread of tapped hole in adapter.  
B = Distance between adjusting screws.

### 4420

#### Pilot Bearing Pulling Attachment

- Use to pull a pilot bearing from the end of the crankshaft.
- Interchangeable jaws. One set of jaws covers a spread of 1/2" to 1-1/2". Other set of jaws covers a spread of 3/8" to 1-3/8". Both sets of jaws have a reach of 1".
- Reach has a min/max range of 3/16" to 1".
- Puller attaches to OTC and other slide hammers with 5/8"-18 thread.



### 4421

#### Pilot Bearing Pulling Attachment

- Removes pilot bearings, thrust washers, and smaller bearings hidden in a shaft or housing.
- Jaws require a minimum of 5/8" opening and can range up to a max of 1-1/2" diameter.
- Min/Max reach is 1/8" to 1".
- Works with both 5/8 - 18 as well as M18-1.5 threaded hammer shanks.



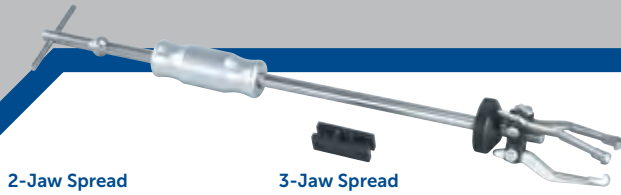
### 4422

#### Pilot Bearing Puller

- Use to pull a pilot bearing from the end of the crankshaft.
- A restriction plate catches the bridge and prevents the jaws from spinning when force is engaged.
- The "Tee Handle" design is easy-to-use and eliminates need for other tools.
- Spread covers ranges of 1/2" to 1-1/2" and 3/8" to 1-3/8".
- Reach has a min/max range of 3/16" to 1-1/4".



# REVERSIBLE-JAW SLIDE HAMMER PULLERS



2-Jaw Spread				3-Jaw Spread				Overall Length
Inside		Outside		Inside		Outside		
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
1-1/4"	3-1/2"	1"	4-1/2"	1-1/2"	4-1/4"	1-1/2"	4-1/2"	27"

## Reversible-Jaw Slide Hammer Pullers

Here are two extremely versatile pullers, which will accomplish many pulling jobs involving gears, bearings, outer races, grease retainers, oil seals, etc. Either two or three puller jaws may be used to handle "inside" pulling jobs such as bearing cups and outer races, as well as regular "outside" pulling jobs. The basic slide hammer unit can be removed and used independently. The No. 1177 slide hammer puller has a 5 lb. hammer, and the No. 1176 has a 2-1/2 lb. hammer.

- 1176** – Puller with 2-1/2 lb. hammer, 2-way and 3-way head, 27" long.
- 1177** – Same as 1176, except has a 5 lb. hammer.

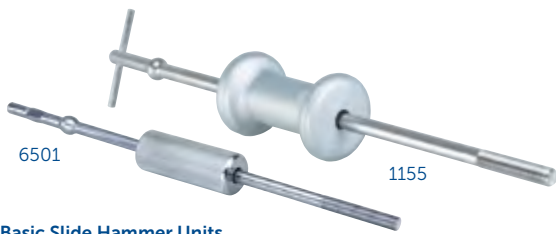


Spread			Overall Length
Min.	Max.	Reach	
1-5/8"	6"	4"	28"

## Slide Hammer Pullers with Cup Pulling Attachments

These pullers combine a basic slide hammer unit with a No. 1152 internal pulling attachment (described on page 129). Ideal for removing bearing cups, outer races, and oil seals from blind holes. Upon removal of the internal pulling attachment, the basic slide hammer unit, which has a 5/8"-18 threaded end, may be used with various adapters for a multitude of pulling jobs.

- 1157** – Slide hammer puller, consisting of an 1152 internal pulling attachment and an 1156 basic slide hammer unit with a 2-1/2 lb. hammer.
- 1158** – Slide hammer puller (not shown), consisting of an 1152 internal pulling attachment and an 1155 basic slide hammer unit with a 5 lb. hammer.



## Basic Slide Hammer Units

May be used with an OTC internal pulling attachment (page 129), or with internal or external-internal threaded adapters (page 127).

- 1155** – Slide hammer unit is 24" long with a 5 lb. hammer, 5/8"-18 threaded end.
- 6501** – Slide hammer unit is 17" long with a 1-3/4 lb. hammer, 1/2-20 threaded end.
- 1156** – Slide hammer unit is 24" long with a 2-1/2 lb. hammer, 5/8"-18 threaded end.

## 6541 Pulling Hook

- This slide hammer puller attachment is used to remove seals, bearings, and other press-fit parts.
- Designed to be used with OTC No. 1155 (5 lb.) or No. 1156 (2-1/2 lb.) slide hammer, or other slide hammers having 5/8"-18 threads.



## 27315 Pulling Hook

- This slide hammer puller attachment is used oil seals and bearing in situations where conventional methods won't work.
- Designed to be used with OTC No. 1155 (5 lb.) or No. 1156 (2-1/2 lb.) slide hammer, or other slide hammers having 5/8"-18 threads.



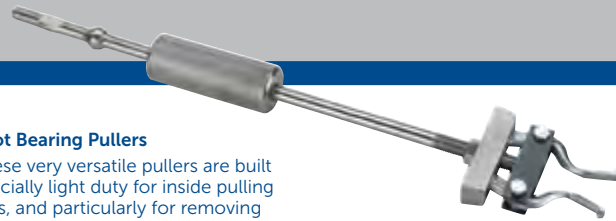
34331



22185

## Sliding Hammers

- 22185** – 2-1/2 lb. sliding hammer.
- 34331** – 5 lb. sliding hammer.



## Pilot Bearing Pullers

These very versatile pullers are built specially light duty for inside pulling jobs, and particularly for removing flywheel pilot bearings on automobiles, trucks, and tractors. Also very practical for pulling motor, generator, and magneto bearings.

Slide hammer unit is 17" long with a 1-3/4 lb. hammer, 1/2-20 threaded end.

Tool No.	Reach	I.D. Spread		Wt. (lbs./oz.)
		Min.	Max.	
<b>1170</b>	3/4"	1/2"	1-1/2"	4 / 14
<b>1171</b>	1"	7/8"	2-1/8"	4 / 14
<b>1172</b>	1-3/4"	1/2"	2"	4 / 14



1173

1174

## Special Slide Hammer Puller

Ideal for pulling jobs in very close quarters, as in removal of small-bore bushings, bearings, oil seals, etc. Internal pulling attachment has a jaw spread of 1/2" to 1-3/8", adjusted by turning the slide hammer handle. Handle end has a 1/2"-20 thread.

- 1173** – Slide hammer unit is 17" long with a 1-3/4 lb. hammer, 1/2-20 threaded end. with 1174 head assembly.
- 1174** – Head assembly only.

## 5028 Slide Hammer Puller

Just 8-1/2" long to fit into tight spots, but its 1-1/2 pound hammer gives you a little extra muscle for stubborn jobs. It's perfect for pulling injector nozzles. The shank is threaded 1/2"-20 and has a 5/8"-18 threaded adapter included. Works with many OTC pulling attachments.



## 7703 Ten-Pound Slide Hammer Puller

This heavy-duty slide hammer puller gets tough with those really stuck parts. It has all the features of our smaller versions – heat treated, 24" long, and a 5/8"-18 threaded end to adapt to any of OTC's pulling attachments. The difference is the ten-pound hammer that gives you the extra muscle for really stubborn pulling jobs.



## 1178 Slide Hammer Puller Set

This useful set contains OTC's popular No. 1176 reversible-jaw slide hammer puller, plus an assortment of special jaws and adapters. You get all the versatility of the No. 1176 (described fully on page 130), plus attachments for pulling various size pilot bearings, oil seals, bushings, timing gears, harmonic balancers, and other tightly fitted parts!

### Set No. 1178 consists of:

No.	Description
1176	Reversible-jaw slide hammer puller with 2-1/2 lb. hammer
44195	Medium jaw (3 include)
32054	Pilot bearing jaw (3 include)
44148	Long jaw (3 include)
27315	Puller hook. Removes oil seals, bearings, etc.
27241	2-way cross head
36578	Cross block. Removes timing gears, harmonic balancers, pulleys, other parts having tapped holes. Uses cap screws up to 3/8" diameter. Spread with 3/8" dia. cap screws: 1-7/8" - 5-5/8".

### 2-Jaw Spread

Tool No.	Inside		Outside	
	Min.	Max.	Min.	Max.
44195	1-1/2"	4-1/2"	3/4"	5"
32054	3/4"	2-3/8"	-	-
44148	2-3/4"	5-1/2"	3/4"	7-1/2"
34698	1-1/4"	3-1/2"	1"	4-1/2"

### 3-Jaw Spread

Tool No.	Inside		Outside	
	Min.	Max.	Min.	Max.
44195	1-1/2"	4-3/4"	1"	4-1/2"
32054	1"	2-3/4"	-	-
44148	3-1/4"	6-1/4"	1"	6-1/4"
34698	1-1/2"	4-1/2"	1-1/2"	4-1/2"



## 6627

### Grip Wrench Adapters

- For grip wrenches using single-lead thread adjusting screw.
- Adapter threads onto a slide hammer with a 5/8"-18 thread.

**205378** - Grip wrench threads onto a 7/16"-14 end of adapter for pulling use.

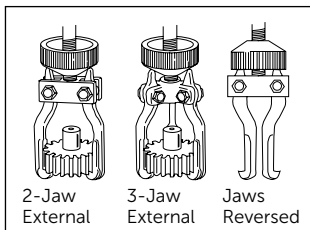
**557479** - Grip wrench threads onto a 5/16"-18 end of adapter for pulling use.

**557480** - Grip wrench threads onto a 1/4"-20 end of adapter for pulling use.



## 1179 "Silver Slapper" 8-Way Slide Hammer Puller Set

You can pull flange-type rear axles, stubborn oil seals and bearings, and other press-fit parts. Jaws can be set up for 2/3-way internal or external pulling jobs.



Application Examples

### Set No. 1179 consists of:

No.	Description
1155	Slide hammer with 5 lb. hammer
7372	Rear axle pulling attachment
24544	3-way cross-head
24545	Cone
27241	2-way cross-block
27315	Puller hook attachment
34698	Pulling jaws (3) for internal or external pulling jobs
205378	Grip wrench adapter w/single lead (wrench not included)
205377	Dent puller attachment

5 lb. Hammer in Polished Chrome Finish.



## 4579

### 9-Way Slide Hammer Puller Set

- Pulls flange-type rear axles and most front-wheel drive hubs.
- Internal and external jaws provide a variety of combinations to pull bearings, gears and seals.
- Two- and three-way cross blocks and cone provide the perfect jaw configuration for most jobs.
- Set also includes a grip wrench adapter and a dent puller attachment for sheet metal or other unique pulling requirements.
- Designed for use with other OTC 5/8"-18 thread slide hammer attachments.
- Packaged in blow-molded case.



## 7792 Rear Axle Puller Set

The tools you need for flange-type rear axle and bearing removal on most late model passenger cars and light trucks. Set includes the No. 7374 rear axle pulling plate and a 5 lb. slide hammer. The axle bearing pullers, used with the slide hammer, make short work of removing semi-floating rear axle bearings.

### Set No. 7792 consists of:

No.	Description
7374	Rear axle pulling plate with a 5 lb. slide hammer.
7495A	Rear axle bearing puller. Fits a min. bearing tube I.D. of 1" and a max. axle tube I.D. of 1-7/8".
7496A	Rear axle bearing puller. Fits min. bearing tube I.D. of 5/16" and max. axle tube I.D. of 2-3/8".
7497A	Rear axle bearing puller. Fits min. bearing tube I.D. of 1-3/8" and max. axle tube I.D. of 2-7/8".
27315	Puller hook for use with 5 lb. slide hammer in set. Removes oil seals, bearings, etc.



## 8-Way and 10-Way Slide Hammer Puller Sets

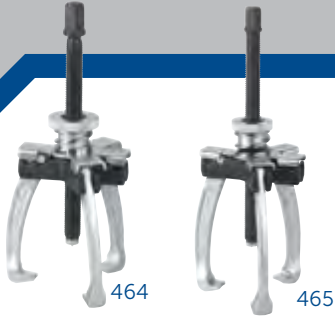
Our two most popular slide hammer puller sets—the Silver Slapper and the Silver Slapper Plus—now come packaged in a convenient plastic, blow-molded carrying/storage case. They're the same great sets with the same versatile pullers and attachments, now made even better with the addition of an organizer case. Or, if you already own either our No. 1179 or No. 1189 puller sets, we offer the plastic case separately. The case will hold either set.

**7947** - Eight-way slide hammer puller set. Same contents as No. 1179 Silver Slapper set, but includes plastic carrying/storage case.

**7948** - Ten-way slide hammer puller set.

**63106** - Puller storage case. Blow-molded plastic.

# DIFFERENTIAL BEARING PULLERS PULLERS



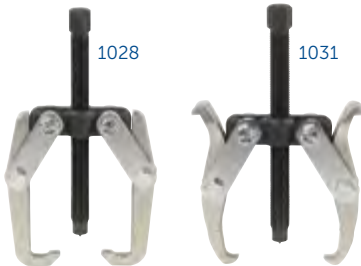
## OTC "GripLock" Pullers

Manufactured to our rigorous specifications to ensure the quality professionals expect from OTC.

- Pressure bearing yoke cap holds jaws in place for ease of set up - in any orientation.
- 2 or 3 jaw application.
- Both external and internal pulling action.
- "Live Center" action forcing screw.
- Professional finished for long lasting durability...

**464** – Puller with a 4" maximum reach, 3" to 4" spread.

**465** – Puller with a 7" maximum reach, 3" to 7" spread.



## Differential Bearing Pullers

For removing differential side carrier bearings on a wide variety of passenger cars and light trucks. Use with step plate adapter Nos. 8060, 8061, 8063, and 8064. (Step plate adapters are not included with 1028 or 1031. See page 135.)

**1028** – Puller with a 3-1/2" maximum reach, 1-1/4" to 4-1/2" spread. Primarily for servicing Ford products.

**1031** – Puller with a 3-1/4" maximum reach, 6" maximum spread. For servicing most General Motors, American Motors, and Chrysler products.

## Bearing Cup Remover

Ideal for servicing hubs on today's popular front-wheel-drive small cars. The cone holds the jaws in place during pulling. Perfect for pulling internal bearing cups, seals, bushings, etc. Jaw spread: 15/16" to 3-1/4", reach to 3-1/2". Use with any slide hammer having a 5/8"-18 thread (OTC No. 1155 or No. 1156 or the No. 927 Push-Puller).

**6542** – Bearing Cup Remover.

**7136** – Bearing Cup Remover. Similar to Ford 308-047.



## 4520 Differential Side Bearing Pullers

- Use to remove differential side carrier bearing. Works on a wide variety of cars and light-duty trucks.
- Includes four step plate adapters to fit carrier bearings.
- Reach: 1-5/8". Spread: 2-5/8" to 3-3/8". Forcing screw is 3/4"-16 x 6-11/16" lg.

Set includes:

**4520-1** – Forcing Screw / Cross Block Assembly

**4520-2** – Puller Jaws / Pins (set of two each)

**4520-3** – Puller Jaws Retaining Yoke

**4520-4** – Step Plate Adapters (set of four)

15/16" – 1-11/32" diameter

1-1/8" – 1-1/2" diameter

1-1/4" – 1-5/8" diameter

1-1/8" – 1-3/4" diameter

## 1181 Multipurpose Puller Set

This assortment of puller tools gives you a wide range of job versatility. You get a 5 lb. slide hammer puller, hub puller, two sizes of OTC Grip-O-Matic® jaw-type pullers, a bearing pulling attachment, plus a cross-bar gear and pulley puller, all contained in a handy plastic storage case.

### Set No. 1181 consists of:

No.	Description
<b>1177</b>	Slide hammer puller with a 5 lb. hammer, 2-way and 3-way heads. Reversible: either two or three jaws may be used to handle both "inside" and "outside" pulling jobs.
<b>7208A</b>	Front hub puller for servicing front-wheel-drive cars. Includes a spare locknut, which permits use with a No. 1177 slide hammer for rear axle flanges.
<b>1023</b>	2-ton combination 2- or 3-jaw Grip-O-Matic puller. Has 3-3/8" max. reach, 4-3/4" max. spread.
<b>1027</b>	5-ton combination 2- or 3-jaw Grip-O-Matic puller. Has 5-1/2" max. reach, 7" max. spread.
<b>7393</b>	Bar-type gear and pulley puller with a 5-1/2" long screw. Includes two hex head cap screws, 3/8"-16 x 3" long. Spread range: 1-1/2" to 4-1/4".
<b>1122</b>	Bearing pulling attachment for use with No. 1027 and No. 7393 pullers. Has 2" max spread, 1/8" min. spread.



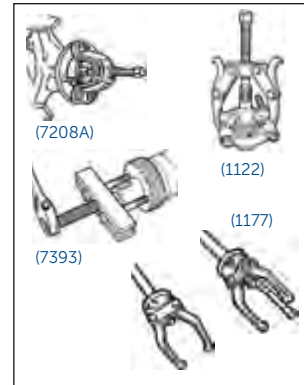
### Specifications

**Reach:** 1-5/8"

**Spread:** 2-5/8" on inside holes in crossbar  
3-3/8" on outside holes in crossbar

**Forcing screw:** 3/4"-16 mm x 6-11/16" lg.

**Adapter sizes:** 15/16" to 1-3/4" diameter



## 1184 Cone-type Puller

Reversible jaws permit handling of both internal and external pulling jobs. The 2-way/3-way head permits assembly of puller to suit the job at hand. Turning the cone on the puller head securely locks its jaws on the part to be removed. Puller reach: 2-7/8"

**2-jaw spread:**  
Inside: 1-1/2" to 4-1/2"  
Outside: 3/4" to 5"

**3-jaw spread:**  
Inside: 1-1/2" to 4-3/4"  
Outside: 1" to 4-1/2"

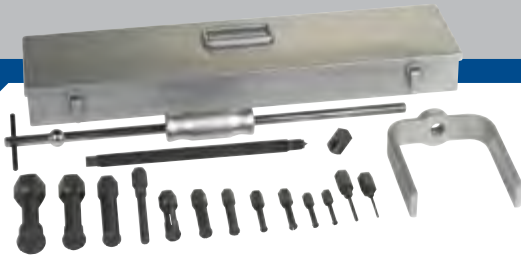
## Pilot Bearing Pullers

Designed to pull flywheel pilot bearings in close quarters where a slide hammer cannot be used. Operates on many models with engine in chassis.

**7318** – Pilot bearing puller. Capacity: 1/2" to 1-1/2". I.D. reach: 3/4".

**7319** – Pilot bearing puller. Capacity: 7/8" to 2". I.D. reach: 1".





## 981 Blind Hole Puller Set

This set provides a complete selection of expanding collets ranging in size from 5/16" to 1-3/4". Collet is placed through bore of part to be removed, then expanded with actuator pin so that lips of collet secure a positive grip for pulling. Force is exerted by means of a forcing screw and a bridge assembly or a slide hammer. Individual pieces can be ordered separately.

### Set No. 981 consists of:

No.	Description	No.	Description
24835	Forcing screw	28323	Metal box
24836	Forcing screw nut	33856	Collet 5/16" to 3/8"
22185	2-1/2 lb. hammer	33857	Collet 3/8" to 7/16"
208627	Shank and tee bar assembly	33858	Collet 7/16" to 1/2"
28250	Actuator pin, 1/8" dia., for use with collets 33856 & 33857	33859	Collet 1/2" to 5/8"
28253	Actuator pin, 3/16" dia., for use with collets 33858-33862	33860	Collet 5/8" to 3/4"
28256	Actuator pin, 1/2" dia., for use with collets 33863-33865	33861	Collet 3/4" to 7/8"
		33862	Collet 7/8" to 1"
		33863	Collet 1" to 1-1/4"
		33864	Collet 1-1/4" to 1-1/2"
		33865	Collet 1-1/2" to 1-3/4"
		41331	Bridge



## 4581 Blind Hole Bearing Puller Set

- For pulling jobs requiring an internal pull.
- Set includes four collets, which fit a wide range of applications. Select the appropriate sized collet by comparing it with the application. Insert the collet, expand it to fit the hole, then attach the slide hammer.
- Four collet sizes: 7/16" to 1/2", 9/16" to 11/16", 5/8" to 1", and 1" to 1-1/4".
- Set includes a 2-1/2 lb. slide hammer with a T-handle.
- Housed in a blow-molded plastic storage case.



## 4536 A/C Clutch Pulley Puller Set

- For removal of stubborn air conditioning clutch pulleys. Also can be used on many alternator, generator, power steering, and crankshaft pulleys, harmonic balancers, and fiber timing gears.
- Set includes drop-forged components: one 3/4"-16 x 5" live center forcing screw, 5-1/2" crossbar with 3 spread settings, two pairs of jaws, and a clamp bolt.
- Spread: 3" to 5"; Reach: 1" to 5".
- Includes a blow-molded plastic case.



## 4517 7-Ton Bar-Type Puller/Bearing Separator Set

- Includes a Bearing Splitter with 4" capacity, two sets of hex push puller legs, a 8" bar type puller head mated with a custom thread forcing screw.
- Now service and maintenance professionals have a Puller/Bearing set for tough jobs, up to 7-tons, larger applications, and greater reach 8" to 16".
- As a stand alone puller/bearing splitter set or as a compliment to the 4518 version, the 4517 7-Ton Puller/Bearing Separator Set gives your maintenance/service shop the expanded capability to keep more business in house.



## 4532 7-Ton Multi Purpose Bearing and Puller Set

- Offers a bearing/pulley tool solution featuring a classic "H" Bar style puller block accommodating 7" to 11" application spread.
- Comes with 2 sets of forged jaws for a pulling each range of 5" to 9" – tempered for heavy-duty applications. (Jaws from OTC's 4534 are interchangeable) Two forcing screws are included for short and long pulls.
- Where a Push Puller is the best pulling choice and threaded holes are not available, the 4532 provides technicians and shops with a solution for many applications like heavy-duty pinion bearings, side bearings, alternators, generators, power steering and crankshaft pulleys, timing gears and harmonic balancers.
- Deep set transmission gears and A/C clutches. Roller gears on tracked vehicles, locking collars on pivot shafts.



## 4534 Multipurpose Bearing and Pulley Puller Set

- For a wide range of pulling jobs, including: bearings, alternators, generators, power steering and crankshaft pulleys, timing gears, and harmonic balancers.
- Set includes drop-forged components, which can be used in a variety of combinations. Contents of Set: 2 – Forcing Screws (Live Center): 3/4"-16 x 6-11/16" and 3/4"-16 x 5" 2 – Cross-bar Yokes: 3 pin-hole @ 3-1/4" to 5-1/2", 2 pin-hole @ 2-3/8" to 3-3/8" 2 – Clamp Bolts 3 – Pairs of Puller Jaws: 1-3/8" Max, 1-5/8" Max, 1-3/4" Max 1 – Pair of Jaw Pins with Ball Spring 3 – Pairs of Capped Bolts
- Spread: 3" to 5", Reach: 1" to 2-1/4"
- Housed in a blow-molded plastic storage case.



## 4518 5-Ton Bar-Type Puller/Bearing Separator Set

- This combination set includes our two most popular bearing "splitters" (2" and 3"), four sets of hex push-puller legs and a bar-type puller head with a 9/16" forcing screw. Separator tools are used with bar puller and legs for a wide variety of pulling jobs.
- The 5" puller cross-bar with a 6-1/4" forcing screw or each of the bearing separators may also be used separately or in combination with other pullers or tools.
- A blow-molded plastic storage case keeps set contents organized and protected from loss.

Tool No.	Min. Spread	Max. Spread	Tapped Holes	Distance Between Adj. Screws
4518-2	3/16"	2-3/8"	3/8-16	2-3/8"
4518-3	1/2"	2-3/8"	3/8-16	3-9/16"



# PULLER/BEARING SETS PULLERS



## 1182 Lock-on, Jaw-type Puller Set

Components can be assembled to create several versatile puller versions for both internal and external pulling tasks. The puller head is turned to securely lock the jaws onto the part being removed. Both a 2-way and 3-way puller head are included, plus three long-reach and three short-reach puller jaws. Plastic storage box included. Easily removes gears, bearings, timing gears, harmonic balancers, and other press-fitted parts.



## 6618 OTC Universal Bearing Race Puller

- Rugged puller built for many races, sleeves and bearings between 40mm and 60mm.
- Jaws designed with sharp edges for secure grip - even where vertical clearance is negligible.
- Jaws have radius for better attachment to round parts.
- Firm grip based on the adjustable clamping chain.
- Puller design avoids tilting.



## Gear and Pulley Pullers

These tools are perfect for removing timing gears, fan pulleys, harmonic balancers, and many other parts having tapped holes.

- Each puller will spread from 1-1/2" to 4-1/4". The puller blocks are 4-7/8" wide, tapped 5/8" - 18 UNF.
- Includes two hex head cap screws, 3/8"-16 x 3" long.

**7392** - Puller with 13" long screw

**7393** - Puller with 5-1/2" long screw

Similar to Ford D80L-522-A, 303-D025



## 522 Large Gear and Pulley Puller

Using this tool, you can easily remove a wide range of gears, pulleys, or other parts that have tapped holes.

- The spread is 2" to 7-3/4". Its block is 8-1/4" wide, and its forcing screw is 3/4"-16 x 11-5/8" long.
- Accommodates any cap screws up to 1/2" diameter.



## 1183 Bearing Splitter Combo Set

This combo pack contains four of OTC's most popular bearing splitters, plus a pulley pulling attachment. A rugged organizer case is included, enabling you to keep the tools together for instant use.

**62885**  
Organizer case only (for 1183).

### Set No. 1183 consists of:

No.	Description
1121	Bearing splitter. Has 15/16" max. spread and 1/4" min. spread.
1122	Bearing splitter. Has 2" max. spread and 1/8" min. spread.
1123	Bearing splitter. Has 4-5/8" max. spread and 1/2" min. spread.
1130	Bearing splitter. Has 9" max. spread and 1/2" min. spread.
679	Pulley pulling attachment with a 5-7/8" max. and 1-3/4" min. spread.



## 4526 Heavy-Duty Single Pressure Beam Bearing Splitter Set

- Single point of adjustment allows quick attachment of splitter to the application.
- Pressure beam provides the ultimate in secure gripping surface.
- Push Puller is thread matched to the splitter.
- Interchangeable legs shorten or lengthen the range of pull.
- Designed of high quality tool grade materials for a lifetime of use.
- For use on most bushing or bearing jobs up to 4" in diameter.

## 7403 Steering Wheel, Pulley, and Flywheel Puller

Here's a puller that works in a variety of applications. It pulls steering wheels on most late model cars. It also works as a regular 2/3-way puller to remove pulleys and small engine flywheels. Cap screws included (pairs): 3/8-16 x 3-1/2 in.; 5/16-18 x 3-1/2 in.; 5/16-24 x 3-1/2 in.; M8-1.25 x 90 mm; and 5/16-18 x 4 in. (SIR).

- Works on domestic cars with or without collapsible steering columns.



## 1180 10-Ton Capacity Push-Puller Set

Contains three popular OTC bar-type pullers in one versatile set, packed in a handy plastic storage case. Tools included permit damage-free pulling of gears, bearings, harmonic balancers, and other parts having tapped holes. Ideal for servicing heavy-duty trucks, off-road construction equipment, and machinery.

### Set No. 1180 consists of:

No.	Description
927	10-ton Push-Puller, 8-3/8" reach, 2-1/8" to 7-1/4" spread. 6-3/4" puller legs. Other leg sizes are available separately. (See pages 134, 136.)
522	Gear and pulley puller; spread range when used with 1/2" cap screws: 2" to 7-3/4". Cap screws not included.
7393	Gear and pulley puller with standard 5-1/2" forcing screw, plus special 13" forcing screw. Includes two hex head cap screws, 3/8"-16 x 3" long. Special range: 1-1/2" to 4-1/4".



## 4527 5-Ton Single Pressure Beam Bearing Splitter Set

- Single point of adjustment allows quick attachment of splitter to the application.
- Pressure beam provides the ultimate in secure gripping surface.
- Push Puller is thread matched to the splitter.
- Interchangeable legs shorten or lengthen the range of pull.
- Designed of high quality tool grade materials for a lifetime of use.
- For use on most bushing or bearing jobs up to 3" in diameter.





## 7790 Flange-Type Puller Set (Grade 5)

- Versatile puller capable of removing a wide variety of components having tapped pulling holes, including harmonic balancers, gears, crankshaft pulleys, etc.
- Capable of handling 2- or 3-way bolt pulling applications.
- Works on many cars, pickups, SUVs, and small engines.
- Carries the OTC Lifetime Marathon Warranty® against defects in workmanship and material.

Contents of set:

- Puller flange: adapts to bolt circle dia. of 1-1/2" to 4-5/8".
- Forcing screw: 5-5/8" lg., 5/8-18 thread.
- Shaft protector: 1-3/16" dia. x 3/4" thick.
- Three each of the following flat washers: 1/4"; 5/16"; 3/8".
- Three each of the following bolt sizes:
 

- 1/4"-28 x 3" lg.	- M8 x 1.25 x 45 mm lg.
- 5/16"-24 x 3" lg.	- M8 x 1.25 x 65 mm lg.
- 5/16"-18 x 3-1/2" lg.	- M8 x 1.25 x 65 mm lg.
- 5/16"-18 x 6" lg.	- M8 x 1.25 x 90 mm lg.
- 3/8"-24 x 1-1/2" lg.	- M8 x 1.25 x 90 mm lg.
- 3/8"-16 x 2" lg.	- M10 x 1.5 x 35 mm lg.
- 3/8"-16 x 3" lg.	- M10 x 1.5 x 35 mm lg.
- 3/8"-16 x 4-1/2" lg.	



## 525 Flange-Type Puller Combination

Two specialty pullers in one box. You get a flange-type puller for removal of harmonic balancers, timing gears, and other parts with two or three tapped holes. You also get a steering wheel, pulley, and flywheel puller.

525 includes: flange-type puller and steering wheel puller with four sets of cap screws.  
3/8"-16 UNF x 3.5". 3/8"-24 UNF x 3.0". 5/16"-18 UNF x 3.5". 5/16"-24 UNF x 3.5".



## 7793 Master Bolt Grip Set (Grade 8)

- Multi-Purpose applications such as steering wheels, flywheels, harmonic balancers, pulleys and gears with tapped holes.
- Includes special stepped bolts for 1990-2005 GM 3300-3800 V6 crankshaft pulleys.

Contents of set:

- 4-way slotted puller yoke and 2 lengths of hardened "live-center" forcing screws - a set of 3 interchangeable forcing screw tips is included to optimize pressure and prevent "walking".
  - Blow molded case to prevent spilling and each bolt size is molded into the storage compartment.
  - Three each of the following bolt sizes:
 

- M8 x 1.25 x 90mm	- 3/8"-24 UNF x 1.5"
- M8 x 1.25 x 45mm	- 3/8"-16 UNC x 2"
- 1/4"-28 UNF x 3"	- 3/8"-16 UNC x 3"
- M8 x 1.25 x 65mm	- 3/8"-16 UNC x 4.5"
- 5/16"-24 UNF x 3"	- M10 x 1.5 x 35mm
- 5/16"-18 UNC x 3.5"	
- Special Stepped Bolts - 1990 & Newer



## 6930 Flange-Type Puller Combination

Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4". Three cap screws, 3/8"-24 x 3" long, and three cap screws, 3/8"-16 x 3" long.



## PA7 7-Ton Capacity Four-In-One™ Puller Set

With the parts included in the PA7, you can quickly assemble a 2/3-jaw puller with standard or long reach. 7-ton capacity, the max. reach of 8-3/4", and max. spread of 11" make it ideal for hundreds of pulling jobs. PA7 includes: 7-ton cap. Standard jaw max. reach: 5". Max. spread: 10-1/2". Long jaw max. reach: 8-3/4". Max. spread: 11".

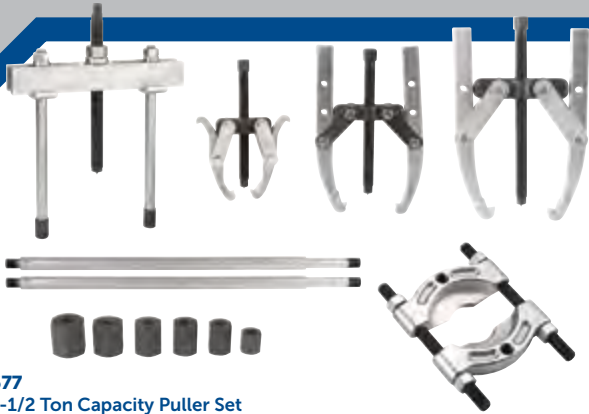


## 518 Flange-type Puller

- Pulls harmonic balancers, timing gears, and other parts having two or three tapped holes.
- Slotted holes in puller body permit cap screws to be positioned to handle bolt circle diameters from 1-1/2" to 4-5/8".
- Three each of two cap screw sizes included: 3/8"-24 x 3" long and 3/8"-16 x 3" long.



# PULLER SETS PULLERS



## 1677 17-1/2 Ton Capacity Puller Set

This puller set gives you the versatility you want and the tonnage capacity you need to tackle parts removal and installation on many models of cars, trucks, tractors, power shovels, road building machinery, etc. Maintenance operations involving the removal and replacement of gears, bearings, wheels, and other press-fit parts can be done with ease.

### Set No. 1677 consists of:

No.	Description	No.	Description
938	Push-Puller with 9-1/2" legs		Internal threaded adapters
1104	16-1/2" legs for 938 (pair)	8037	5/8"-18 x 5/8"-18
1024	2-jaw puller	8038	5/8"-18 x 3/4"-16 (2)
1036	2-jaw puller	8039	5/8"-18 x 7/8"-14
1039	2-jaw puller	8040	5/8"-18 x 1"-14
1130	Bearing splitter	8041	5/8"-18 x 1-1/8"-12
		8043	5/8"-18 x 1-1/2"-12



## 1676 Strong Box Puller Set

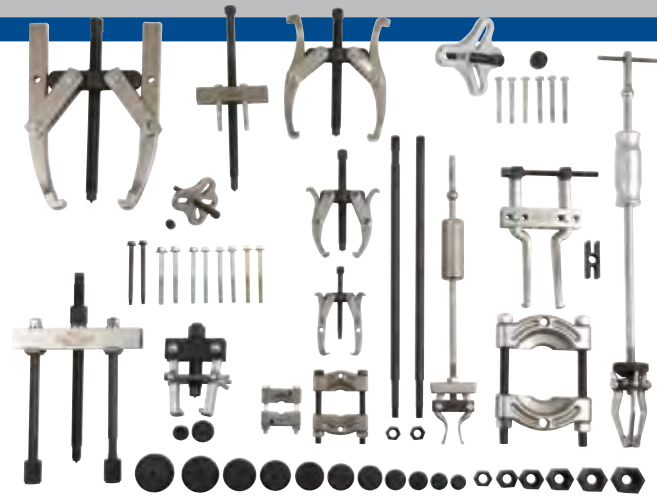
Here's a set of pullers that gives you almost unheard of versatility. You get eight pullers, five attachments, and extra puller jaws. They enable you to pull gears, bearings, pulleys, wheels, and more on cars and light trucks. All these tools are contained in a rugged, lockable metal storage cabinet you can either mount on a wall or stand on a work bench, so they are handy when you need them. Just imagine the jobs you can do with this set!

### 18886

Storage box only. 29-1/2" wide x 25-3/4" high x 10" deep.

### Set No. 1676 consists of:

No.	Description	No.	Description
1026	2/3-jaw puller	7311A	Pitman arm puller
1037	2/3-jaw puller	1122	Bearing splitter
7392	Gear and pulley puller	1123	Bearing splitter
518	Flange-type puller	7372	Rear axle pulling adapter
7403	Steering wheel puller	43888	Long jaws for No. 1026 (3)
1170	Pilot bearing puller		
1177	Slide hammer puller	43892	Long jaws for No. 1037 (3)
		18886	Metal storage box



## 1675 13-Ton Capacity Puller Set

This versatile 13-ton capacity puller set removes gears, bearings, shafts, pinions, bearing outer races, and other tightly fitted parts. The set includes a Push-Puller, Grip-O-Matic® pullers, bearing pulling attachments, specialized pullers, and many accessories. You can work on all makes and models of cars and light trucks with this set.

### 1620

Board (3' x 4') for storing No. 1675 set (not included with set).

### Set No. 1675 consists of:

No.	Description	No.	Description
927	Push-Puller with 6-3/4" legs	7310A	Pitman arm puller
1101	15-3/4" legs for 927 (pair)	8075	Step plate adapter set
1022	2-jaw puller	8035	Internal threaded adapter: 1/2" -20 x 5/8" -18 (2)
1024	2-jaw puller	8044	Internal threaded adapter set
1035	2-jaw puller	1152	Bearing cup pulling attachment
1039	2-jaw puller	1121	Bearing splitter
7392	Gear and pulley puller	1122	Bearing splitter
518	Flange-type puller	1123	Bearing splitter
7403	Steering wheel puller		
1170	Pilot bearing puller		
1176	Slide hammer puller		

## 1060-HYD OTC 10 Ton Hydraulic Puller Kit

The OTC 1060-HYD delivers 10 tons of force for industrial bearing service.

Engineered for a maximum spread of 17" and maximum reach of 15". OTC Grip-O-Matic® Pullers are designed with adjustable jaw positions in both 2 and 3 jaw configurations. Two pushing adapters are designed to fit the cylinder ram and act as 4.5" and 8.5" forcing screws.

- 10-Ton 2/3 Jaw Grip-O-Matic Puller Chassis.
- 10-Ton Single Cylinder Hydraulic Ram with 10-Ton Hand Operated Hydraulic Pump.
- Includes 2 Pushing Adapters (4-1/2" and 8-1/2").
- Includes 6 Piece Shaft Adapter Set.
- Ultra Heavy Duty Rolling Storage Case.
- Comes with a Quick Link Connector for suspending pulling from lifting equipment.



## Hydraulic Puller Sets

17-1/2, 30-, and 50-Ton Capacity – Individual items in the sets are fully described elsewhere in this catalog. . . consult index.

**1688** – 17-1/2 ton capacity hydraulic puller set

**1689** – 30-ton capacity hydraulic puller set

**1690** – 50-ton capacity hydraulic puller set

No.	Description	1688	1689	1690
<b>HYDRAULICS</b>				
4002	Single stage hydraulic hand pump assy.	x	x	x
4120	17-1/2 ton ram with threaded insert	x		
4121	30-ton ram with threaded insert		x	
4122	50-ton ram with threaded insert			x
24815	Tee adapter	x	x	x
9650	Pressure gauge	x	x	x
9767	Hydraulic hose – 6 foot	x	x	x
9798	Hose half coupler with dust cap	x	x	x
<b>PULLERS</b>				
1062	17-1/2 ton Push-Puller with 16-1/2" legs	x		
1066	17-1/2 ton 3-jaw hydraulic puller	x		
1070	30-ton hydraulic Push-Puller with 18" legs		x	
1074	30-ton 3-jaw hydraulic puller		x	
1076	50-ton hydraulic Push-Puller with 24" legs			x
1080	50-ton 3-jaw hydraulic puller			x
<b>ACCESSORIES</b>				
1105	Puller leg – 22-1/2"	x		
1111	28" legs for No. 1070		x	
1113	34" legs for No. 1076			x
1127	Bearing pulling attachment		x	x
1130	Bearing pulling attachment	x		
1154	Bearing cup pulling attachment	x		
1166	Bearing cup pulling attachment		x	
201454	Pushing adapter	x		
24814	Speed crank	x		
27198	Speed crank		x	
28228	Pushing adapter	x		
28229	Ram cap		x	
28230	Ram cap for No. 1076			x
29595	Speed crank			x
32118	Ram adjusting screw	x		
32698	Adjusting screw			x
34510	Pushing adapter		x	
34755	Pushing adapter			x
34758	Adjusting screw		x	
41226	2-way head for No. 1074		x	
41224	2-way head for No. 1066	x		
50449	2-way head for No. 1080			x
8020	1"–8 F. x 5/8"–18 M. threaded adapter	x		
8023	1-1/4"–12 F. x 1"–14 M. threaded adapter (2)			x
8028	1-5/8"–5-1/2 F. x 1"–8 M. threaded adapter			x
8029	1-5/8"–5-1/2 F. x 1"–14 M. threaded adapter			x
8036	Female threaded adapter 1"–14 x 1"–14 (2)		x	
8038	Female threaded adapter 5/8"–18 x 3/4"–16 (2)	x		



1688 17-1/2 ton capacity hydraulic puller set



1689 30-ton capacity hydraulic puller set



1690 50-ton capacity hydraulic puller set

# HYDRAULIC PULLER SETS PULLERS



## Hydraulic Puller Sets

**1679** – 17-1/2 ton hydraulic puller set

**1680** – 17-1/2 ton hyd. farm implement service set

**1681** – 17-1/2 ton and 30-ton hydraulic puller set.

**1682** – 17-1/2 ton, 30-ton, & 50-ton master puller set

**1683** – 17-1/2 ton & 50-ton hydraulic construction equipment service set

Photo for illustrative purposes only. For complete set contents, see chart below.

Individual items in the sets are fully described elsewhere in this catalog. . . consult index.

No.	Description	1679	1680	1681	1682	1683
<b>HYDRAULICS</b>						
4002	Single-stage hydraulic hand pump assembly	x	x	x	x	x
4008	2-stage hyd. hand pump w/3-way control valve	x	x	x	x	x
9650	2-stage hyd. hand pump w/3-way control valve	x	x	x	(2)	x
9798	Hose half coupler with dust cap	x	x	x	(2)	x
9767	Hydraulic hose – 6 ft.	x	x	x	(2)	x
<b>RAMS</b>						
4120	17-1/2 ton ram with threaded insert	x	x	x	x	x
4121	30-ton ram with threaded insert	x	x	x	x	x
4122	50-ton ram with threaded insert	x	x	x	x	x
<b>PULLERS</b>						
1025	2-jaw puller	x	x	x	x	x
1027	5-ton capacity 2/3-jaw puller	x	x	x	x	x
1035	2-jaw puller	x	x	x	x	x
1039	2-jaw puller	x	x	x	x	x
1062	17-1/2 ton cap. hyd. Push-Puller w/16-1/2" legs	x	x	x	x	x
1105	22-1/2" legs for No. 1062 (pair)	x	x	x	x	x
1106	9-1/2" legs for No. 1062 (pair)	x	x	x	x	x
1107	4-1/2" legs for No. 1062 (pair)	x	x	x	x	x
1070	30-ton cap. hyd. Push-Puller with 18" legs	x	x	x	x	x
1109	8" legs for No. 1070 (pair)	x	x	x	x	x
1111	28" legs for No. 1070 (pair)	x	x	x	x	x
1076	50-ton cap. hyd. Push-Puller with 24" legs	x	x	x	x	x
1113	34" legs for No. 1076 (pair)	x	x	x	x	x
1066	17-1/2 ton 3-jaw Grip-O-Matic® puller	x	x	x	x	x
41224	17-1/2 ton 2-jaw puller head	x	x	x	x	x
1074	30-ton 3-jaw hyd. puller	x	x	x	x	x
1080	50-ton 3-jaw hyd. puller	x	x	x	x	x
50449	50-ton 2-jaw puller head	x	x	x	x	x
1037	Combination 2/3-jaw puller	x	x	x	x	x
41226	30-ton 2-jaw puller head	x	x	x	x	x
43892	Long jaws for No. 1037 (3)	x	x	x	x	x
1041	Combination 2/3-jaw puller	x	x	x	x	x
30902	Long jaws for No. 1041 (3)	x	x	x	x	x
1170	Pilot bearing puller	x	x	x	x	x
1176	Slide hammer puller	x	x	x	x	x
7392	Gear and pulley puller	x	x	x	x	x
24833	Short forcing screw for No. 7392	x	x	x	x	x
<b>Accessories</b>						
8005	5/8"–18 F x 3/8"–16 M threaded adapter (2)	x	x	x	x	x
8006	5/8"–18 F x 1/2"–20 M threaded adapter (2)	x	x	x	x	x
8807	5/8"–18 F x 1/2"–13 M threaded adapter (2)	x	x	x	x	x
8010	5/8"–18 F x 5/8"–11 M threaded adapter (2)	x	x	x	x	x
8013	5/8"–18 F x 3/4"–16 M threaded adapter (2)	x	x	x	x	x
8015	5/8"–18 F x 3/4"–10 M threaded adapter (2)	x	x	x	x	x

No.	Description	1679	1680	1681	1682	1683
8017	5/8"–18 F x 7/8"–14 M threaded adapter (2)	x	x	x	x	x
8018	5/8"–18 F x 7/8"–9 M threaded adapter (2)	x	x	x	x	x
8019	5/8"–18 F x 1"–14 M threaded adapter (2)	x	x	x	x	x
8020	1"–8 F x 5/8"–18 M threaded adapter (1)	x	x	x	x	x
8021	1"–8 F x 1"–14 M threaded adapter (1)	x	x	x	x	x
8012	1"–14 F x 5/8"–18 M threaded adapter (2)	x	x	x	x	x
8025	1-1/4"–7 F x 5/8"–18 M threaded adapter (2)	x	x	x	x	x
8027	1-1/4"–7 F x 1"–14 M threaded adapter (2)	x	x	x	x	x
8023	1-1/4"–12 F x 1"–14 M threaded adapter (2)	x	x	x	x	x
8024	1-1/4"–12 F x 1-3/4"–12 M threaded adapter (2)	x	x	x	x	x
8028	1-5/8"–5-1/2 F x 1"–8 M threaded adapter (1)	x	x	x	x	x
8029	1-5/8"–5-1/2 F x 1"–14 M threaded adapter (1)	x	x	x	x	x
8036	1"–14 F x 1"–14 F threaded adapter (2)	x	x	x	x	x
8038	5/8"–18 F x 3/4"–16 F threaded adapter	(2)	x	(2)	(2)	x
8056	Shaft protector set	x	x	x	x	x
8075	Step plate adapter set	x	x	x	x	x
8076	Step plate adapter set	x	x	x	x	x
679	Pulley pulling attachment	x	x	x	x	x
680	Pulley pulling attachment	x	x	x	x	x
8044	Internal threaded adapter set	x	x	x	x	x
10215	Hex nut: 3/4"–16 (2)	x	x	x	x	x
1154	Bearing cup pulling attachment	x	x	x	x	x
32136	Long jaws for No. 1154 (2)	x	x	x	x	x
1166	Bearing cup pulling attachment	x	x	x	x	x
34479	Reducing adapter for use with No. 1166	x	x	x	x	x
1122	Bearing splitter	x	x	x	x	x
1123	Bearing splitter	x	x	x	x	x
1126	Bearing splitter	x	x	x	x	x
1127	Bearing splitter	x	x	x	x	x
1128	Bearing splitter	x	x	x	x	x
1130	Bearing splitter	x	x	x	x	x
24814	Speed crank	x	x	x	x	x
24815	Tee adapter	x	x	x	x	x
24829	Short bolt (2)	x	x	x	x	x
24832	Special puller forcing screw	x	x	x	x	x
27198	Speed crank	x	x	x	x	x
29595	Speed crank	x	x	x	x	x
28228	Ram cap	x	x	x	x	x
28229	Ram cap	x	x	x	x	x
28230	Ram cap	x	x	x	x	x
32118	Ram adjusting screw	x	x	x	x	x
32698	Ram adjusting screw	x	x	x	x	x
34758	Ram adjusting screw	x	x	x	x	x
34510	Pushing adapter	x	x	x	x	x
34755	Pushing adapter	x	x	x	x	x
201923	Pushing adapter	x	x	x	x	x





- 4565**  
**Swivel Handle Oil Filter Wrench**
- Fits filters ranging from 2-1/2" to 3-1/8" (64 mm to 80 mm) in diameter.
  - Features a 1" wide stainless steel band for positive grip on the filter; swivel handle makes it easy to turn filters in hard-to-reach areas.



- 4568**  
**Oil Filter Wrench, 2 way, 3 leg**
- Fits filters ranging from 2-1/2" to 5-1/4" (65 mm to 135 mm) in diameter.
  - To turn the tool, use a 1/2" ratchet in the ratchet drive or a 13/16" wrench on the nut.
  - Knurled legs provide extra gripping power.



- 4896**  
**Oil Filter Ring**
- Slim wrench provides clearance around oil coolers and crank position sensor. Use on 14 flute HD filters. 3/8" square drive.

- 6901**  
**Oil Filter Socket**
- Fits Wix oil filters on S&S Engine applications, as well as other filters with 74mm x 15 flutes.



- 6905**  
**Oil Filter Socket**
- Fits Polaris oil filters, as well as other filters with 66.5mm x 14 flutes.



- 4898**  
**Oil Filter Socket**
- Fits Polaris oil filters, as well as other filters with 64mm x 14 flutes. Similar to Polaris No. PU-50105.



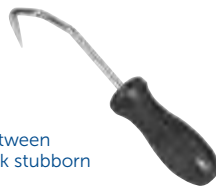
- 5911**  
**OTC Drain Plug Pro™**
- Remove oil drain plug without touching the plug or hot oil.
  - No touching HOT plug.
  - No hot oil on hands.
  - No dropping of plug in HOT oil.
  - No oil soaked gloves.
  - Just magnetically attach DRAIN PLUG PRO™ to pre-loosened drain plug and rotate to remove plug.



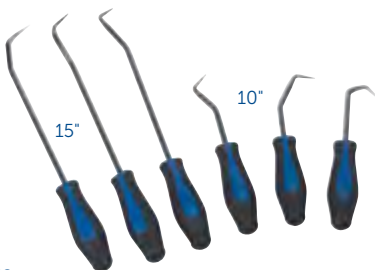
Strong magnetic end.



- 4848**  
**Flexible Spout Funnel**
- Many oil, transmission, and coolant fluid fill caps are located in hard to access areas. This aluminum 5 1/2" funnel features a removable debris screen in the base flowing to a 25" flexible spout designed to reach these difficult fill locations.



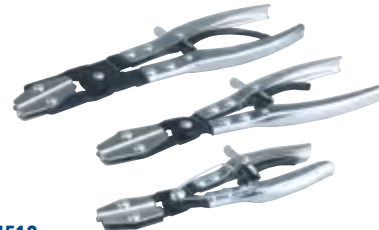
- 4521**  
**Hose Removal Tool**
- Unique tip easily fits between hose and fitting to break stubborn hoses loose.
  - Large handle provides a reliable grip on tool during hose removal.
  - Works on fuel and oil lines – any place a rubber hose is clamped to a fitting.



- 8260**  
**Hose Removal Set (6-piece)**
- Consisting of six (6) hose removal tools which consists of three (3) 10", soft-handled tools and three (3) 15", soft-handled tools, each with a hard end-cap.
  - They are made of heat-treated, chrome steel with assorted tip shapes.
  - Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
  - Hose removal tools can also be used on upper and lower radiator hoses, clips, washers, gaskets and other items.
  - Packaged in a molded tray.



- 4496**  
**Hose Clamp Pliers Set**
- Contains five different styles of hose clamp pliers, which will service most flat-band and ring-style hose clamps. Also contains a hose removal tool.
- Set Contains:
- Straight hose clamp pliers set
  - Hose removal tool
  - Flat-type hose clamp pliers
  - Offset hose clamp pliers
  - 45° hose clamp pliers



- 4510**  
**Hose Pinch Off Pliers Set, 3 Piece**
- Shuts off flow through vacuum lines, fuel lines, coolant lines, etc.
  - Cocking ratchet mechanism holds pivoting jaws tightly in place. Heavy-duty swivel jaws pivot to assure parallel pinching.
  - Available separately:
  - 4510-8** – 8" tool for small hoses and tight areas.
  - 4510-10** – 10" tool for radiator and vacuum lines.
  - 4510-12** – 12" tool for radiator and vacuum lines.



- 4522**  
**Vacuum Hose & Fuel Line Removal Tool**
- Designed to remove vacuum hose or fuel lines (3/16" to 1/2") from fittings or tubing.



- 4839**  
**Adjustable Piston Ring Expander Pliers**
- These simple pliers include tips designed to capture the ends of piston rings to hold and expand them securely while installing onto pistons.



### 4437 Sensor Socket Set (8-Piece)

Includes:

**4673-1** – 29 mm Vacuum Switch and O2 Socket, 1/2" Drive.

**4673-2** – 7/8" Vacuum Switch and O2 Socket (wide slot), 3/8" Drive.

**4673-3** – 27 mm Thermal Sensor Switch, 1/2" Drive.

**4673-4** – 7/8" Vacuum Switch and O2 Socket (narrow slot), 3/8" Drive.

**4673-5** – 1-1/16" & 1" Oil Pressure Sending Unit Socket, 3/8" Drive.

**4673-6** – 7/8" O2 Sensor Socket, offset 1/2" Drive.

**4673-7** – 7/8" O2 Sensor Socket (low profile), offset 3/8" Drive.

**4437-8** – 1-1/16" and 1" Oil Pressure Socket (short access), 3/8" Drive



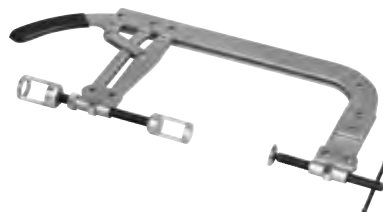
### 4842 Heavy Duty Valve Spring Compressor

Used to compress valve springs for removal or installation. The heavy duty C-frame has a 9" opening and a 5" throat. Kit includes 16mm, 19mm, 23mm, 25mm, and 30mm valve spring retainer adapters.



### 4838 Piston Ring Compressor Set, 6 Piece

This 6 ring set covers 2-7/8" thru 4-3/8" piston diameters. The ring compressor pliers feature a ratcheting lock to hold the handles in position for easy piston installation.



### 4572 Valve Spring Compressor

- Designed to compress valve springs on overhead valve engines.
- Includes two valve spring adapters, which fit valve spring retainers up to 1" (25 mm) and 1-3/16" (30 mm).
- Unique, direct action compressor lever gives better visibility of valve spring retainers located in difficult access areas.
- Jaw opening of 1-3/8" to 5-5/8" (35 mm to 142 mm); throat clearance of 5-7/8" (150 mm).



### 4840 Piston Ring Compressor Set with Ring Expander

This complete set includes 12 chrome plated compressor sleeves covering 1-3/8" thru 4-3/8" diameter piston applications. Both the ring compressor and ring expander pliers feature a ratcheting lock to hold the handles in position for easy piston and ring installation. Complete with a metal carry case.



### 4480 Basic Fuel Injection Service Kit

Performs running, residual, rail and flow rate pressure tests on fuel injected engines. Kit includes adapters, hoses, fittings, and a professional dual scale gauge that reads 0-100 PSI and 0-700 kPa with relief valve. All packaged in a professional, heavy-duty, blow molded carrying case.

### 4875 Cam/Crank Locking Tool

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.

Application

- Dyna 2006 & Later
- Similar to HD-47941.



### 4844 Cam/Crank Locking Tool, Twin Cam & Dyna

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.
- Double end design covers;
- Twin Cam 88/B 1999 & Later
- Dyna 2006 & Later



### 7991 Cooling System Pressure Tester

Now you can pressure test the cooling system on motorcycles, ATVs, and even snowmobile applications. The tester's universal fit eliminates the need for multiple adapters.

### 4876 Cam/Crank Locking Tool

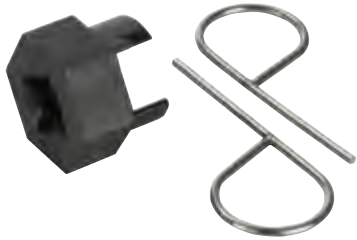
- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.

Application;

- Twin Cam 88/B 1999 & Later
- Similar to HD-42314.







**4849  
Cam Chain Tensioner Unloader Tool**

- These tools are used to unload the pressure of the primary and secondary chain tensioners when servicing HD Twin Cam 88 engines.
- Tools can also be used to check spring loads on chain tensioners.
- Applications include 99-06 FL, 99-05 FXD, 00-06 FXST.
- Similar to HD-42313.



**7419  
Timing Tensioner Locking Pin Set**

- This pin set is used to lock timing belt or chain tensioners once they have been compressed, required during the service procedure.
- Once the belt or chain service is complete, the pin is simply pulled out to return the tensioner to functional.
- 6 pin set with clip to cover most all applications.



**4723  
Ear Type Clamp Pliers**

- Used to crimp the type of clamps used on fuel and cooling system hoses.
- Ensures even, precise crimping, and eliminates possibility of damage to the clamp, boot, or hose.



**6589  
Electronic Ignition Spark Tester**

Use to quickly check spark on 2 and 4 stroke gasoline engines with electronic ignition systems.



**4845  
Wrist Pin Installer & Remove Tool**

- Removes and installs piston wrist pins without having to hold the piston in position and use a drift.
- Applications include HD stock and aftermarket engines, including Twin Cam, and other engine makes with similar piston pin diameter sizes.



**4846  
Tappet Block Alignment Set**

- These adapter screws provide perfect alignment of the oil hole from the crank case to the tappet block on Shovel and Evo style engines.
- Align rocker boxes on Evo heads.
- Also align twin cam oil pump.
- Applications include all HD Big Twin single cam engines, stock and aftermarket, 76 – Present.
- Similar to HD-33443.



**4851  
Tappet Oil Filter Screen Plug Tool**

- A simple tool to remove the tappet oil filter screen plug without removing the exhaust pipes on HD applications. Can also be used on any slot type plug.



**4847  
Twin Cam Inner Cam Bearing Remover/Installer Kit**

- This kit contains the tools to remove and install inner cam bearings without damage to the crankcase.
- The bearing puller is designed to trap the needle bearings and keep them from falling into the crankcase.
- The installation tools are designed to press on the outer most diameter of the bearing, eliminating damage to the bearing, cam, or case. The press adapter will also set the bearing to its proper depth.
- Similar to HD-42325-B.



**4866  
Timing Plug**

- This threaded clear acrylic timing plug used in conjunction with a timing light allows for viewing the crankshaft timing marks without oil spraying out of the crankcase, typical during full advance RPM.
- Fits all HD models.
- Similar to HD-96295-65D.



**4948  
Water Pump Drive & Rotor Puller**

- Installs the water pump drive gear on the rotor and removes the rotor from the crankshaft. This tool also works on RZR XP.
- Similar to Polaris No. PA-49316.



**5604  
Motorcycle Compression Tester Kit**

Designed specifically for testing motorcycle and small engines, this kit features a specially designed compression gauge and hose assembly, plus three different size hose adapters. Compression Tester and hose lengths are designed for optimal viewing along side engine. Covers most popular motorcycle and small engine plug sizes.

Features and benefits:

- Corrosion resistant nickel plated finish
- 10" flex hose gauge assembly with quick coupler.
- 2-1/2" gauge features chrome bezel and rugged protective outer boot
- Dual scale gauge reads 0-300 psi and 0-2100 kPa
- 12" flex hose -14 mm standard/plus reach (extra length supports V-Twin applications)
- 12" flex hose -12 mm standard reach
- 12" flex hose -10 mm standard reach
- Rugged blow molded hard case with removable lid
- Repair parts kit



**5613  
Vacuum/Pressure Gauge Kit**

Ideal for testing vacuum lines and components. Accurately tests low-pressure fuel systems. Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit comes complete with adapter for most applications. Pin point hard to find problems such as cracked lines.

Features and benefits:

- Large 3-1/2" gauge features a chrome bezel and rugged protective outer boot.
- Dual purpose gauge reads vacuum and pressure.
- Dual scale gauge reads 0-30 in. Hg vac and 0-70 cm Hg, also reads 0-15 psi and 0-100 kPa.
- Built in rear hook allows gauge to be hung at eye level.
- Adapters for most applications.
- Blow molded hard case with removable lid.
- Detailed instruction chart.



**5609  
Cylinder Leakage Tester Kit**

Quickly diagnose internal engine problems such as bad rings, valves and leaking head gaskets. Kit come complete with adapters for most applications.

Features and benefits:

- Dual 2-1/2" gauges feature chrome bezel and rugged protective outer boot.
- Scales read 0-100 psi and 0-700 kPa.
- Pressure regulated manifold includes quick couplers.
- Long flex 24" 14 mm hose.
- 10 mm, 12 mm and 18 mm thread adapters.
- Blow molded hard case with removable lid.
- Detailed instruction chart.



**3367  
Digital Timing Light**

Professional digital timing light has advanced features with a bright LED screen and mode indicator lights.

Unique features

- Microprocessor-controlled circuitry.
- LED tachometer display reads 0-9999 rpm.
- LED advance display indicates to 1/10.
- Unique flashlight feature.
- 2/4 cycle and rpm/advance lights.
- Up and down scroll buttons.

Standard features

- All metal inductive pickup.
- Reflected, super bright xenon flash.
- Removable leads with positive twist lock connector.
- One touch control.
- Durable, plated ABS housing with over-molded grips.
- Heat resistant over-molding on clips.
- Blow-molded case included.

# DRIVELINE / TRANSMISSION MOTORCYCLE TOOLS



## 4862 5 Speed Main Drive Gear Tool

- This tool set will remove and install the transmission main drive gear and install the main bearing without removing the transmission. Designed to not damage the bearing or gear during installation.
- Applications include 5 speed Big Twin and aftermarket 6 speed 1980-2006 (ex 06 Dyna and Sportster 91-05).



## 4860 Transmission & Steering Bearing Puller/Installer Kit

- This combination kit works on transmission main-shaft and steering stem bearings on HD motorcycles.
- Removes; Fork stem bearings on most applications. Flywheel bearing 00-03 XL. Removes/Installs; Inner bearing race on trans main-shaft Big twin 84 & later.
- Aftermarket trans main-shaft bearings & bushings on 5 & 6 spd. LSD and RSD trans.

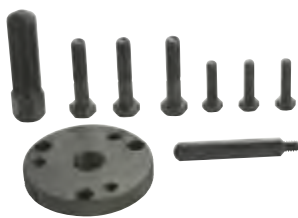


## 4742 Flywheel Puller Kit

- Developed for many small engines in the ATV, and Motorcycle service markets, these tools are machined from high quality tool grade steel and are packaged in a convenient blow-molded case.
- Each part is marked with size for reference and has a corresponding location in the storage case.
- Works on many makes like Honda, Suzuki, Kawasaki, Yamaha, Ducati and others. For street, performance or off-road.

## 4800 Clutch Hub and Alternator Puller

Removes clutch on Big Twins with 3, 5, and 10 fingers. Also works on Sportster transmission sprocket and clutch. Pulls motor sprockets, alternator covers, and many general pulling applications.



## 4850 Flywheel Puller

Designed to pull magneto flywheel, clutch hubs, or starter gears. Works on wet or dry clutches. 6x25mm and 8x40mm bolts included.

## 4864-1 Flywheel Puller

- M33x1.5 RH Internal threads.

Applications

- KTM 625 SMC 2006, 640 LC4 Adventure 04-07, 640 LC4E 2001, 690 RFR 2008
- Suzuki GSXR 1000 01-08, GSXR 600 01-09, GSXR 750 00-08
- Yamaha WR 450F 04-08, YFZ 450 04-09.



## 4864-6 Flywheel Puller

- M38x1.5 RH Internal threads.

- Includes crankshaft protector.

Applications

- Arctic Cat DVX 400 04-07
- Kawasaki KLX & KSF 400 03-06
- Suzuki AN & LT-Z 400 03-07, DR-Z 250 01-07, LTZ 90 2007, LT-Z 250 04-07, LT-F 300F 99-01, DR-Z 400 01-06, DR-Z 400E 00-07, DR-Z 400S 00-06, DR-Z 400SM 05-07, LT-R 450 06-08.



## 4864-2 Flywheel Puller

- M50x1.5 RH Internal threads

- Includes crankshaft protector.
- Fits Suzuki.



## 4864-3 Flywheel Puller

- M24x1.5 RH Internal threads.

- Includes 12mm shaft protector cap.
- Fits Honda, Kawasaki, and Suzuki motorcycle applications.



## 4864-4 Flywheel Puller

- M26x1.0 RH Internal threads.

- Includes 12mm shaft protector cap.
- Fits KTM 4 stroke motorcycles.



## 4864-5 Flywheel Puller

- M30x1.0RH Internal threads.

- Fits Yamaha WR 250F.



## 4888 Flywheel Socket Set

- The best flywheel sockets available. These offer a low profile design that provides full nut to socket contact to eliminate rounding off the nut and slippage. Made from heat-treated chrome moly steel.

Set includes:

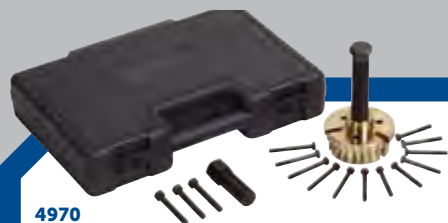
**4888-1** – Socket fits pinion shaft nut on big twin 81-89. Size 1-1/4" with 1/2" square drive.

**4888-2** – Socket fits crank pin nut on big twins 54 – early 81. Size 1-5/16" with 1/2" square drive.

**4888-3** – Socket fits crank pin nut on Sportster 81-99 and Buell 87-99. Can also be used on top fork nut on glide forks. Size 1-3/8" with 1/2" square drive.

**4888-4** – Socket fits crank pin nut on big twin 83-99 single cam. Size 1-1/2" with 1/2" square drive.

**4888-5** – Socket fits sprocket shaft nuts on big twins 72-99 single cam. Size 1-5/8" with 3/4" square drive.



## 4970 Heavy Duty Flywheel Puller

- Extremely heavy duty puller to pull the most stubborn flywheels. Includes 2 drive screws and bolts; 8mm x 1.25 x 60mm (3X), 6mm x 1.0 x 55mm (6X), 6mm x 1.0 x 50mm (6X).
- The 6 bolt capable design fits Polaris ATV, Snowmobile, Watercraft and many other makes and models.
- Similar to Polaris No. 2871043-A.

## 4858 Clutch Spring Compressor Tool

This tool will release the clutch spring pressure for easy removal and installation of the retainer ring. Applications include HD big twin 90-97, and includes spring compressor nut for use on XL 91-05 and Buell.



## 4992 Clutch Spring Compressor Tool

- This is a required tool for efficient servicing of HD 1340 cc (80 ci) clutches. The compressor relieves spring pressure for disassembly during servicing. Applications include 1340 cc (80 ci) Models 90-97, Buell 95-Later, XL 91-Later.
- Similar to HD-38515-A.



## 4991 Clutch Compressor Tool

- This universal compressor is used to compress the drive or driven clutch during assembly of disassembly. Innovative design makes use quick and effective without binding. Works on all Polaris and TEAM clutches found on full-sized model ATV, Side x Side, and Snowmobile.
- Similar to Polaris No. PU-50518.



## 4971 Clutch Holding Wrench

- Designed to hold the drive clutch for retainer bolt removal and torquing. For both P-85 and P-90 drive clutches on Polaris ATV & Side x Side.
- Similar to Polaris 9314177-A.



## 4972 Drive Clutch Holding Fixture

For solid holding of drive clutch for spider removal when shimming for belt-to-sheave clearance or servicing spider.

- Bolt to bench or clamp in a vise.
- Contacts all webs for maximum support to eliminate clutch web damage.
- Center hold down for much greater holding stability while applying off center torque.
- Single person operation, even on the most difficult spiders.
- ATV and Ranger applications.
- Similar to Polaris No. 2871358-B.



## 4990 Clutch Holding Tool

- Designed to hold the clutch basket while removing or servicing clutch.
- Fits 00-02 Polaris Xpedition models.
- Similar to Polaris PA-44688.



## 4801 Universal Clutch Holder

Holder arms designed to fit into the external teeth of a clutch hub, but can also be used on gears and sprockets. Opens to handle a 5" OD hub.

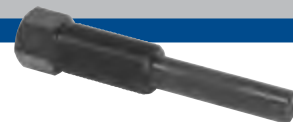


## 4986 Primary Drive Clutch Puller

- Removes primary drive clutches on Polaris ATV & Snowmobile 1985-up (except 400, 500, 600, 700, 800 domestic twins, '99 700 & 800 XCR, '99 Trial RMK, & Supersport 550 Fuji). 3/4" - 16 thread, 10-1/2" long.
- Similar to Polaris 2870506.

## 4985 Primary Drive Clutch Puller

- Removes primary drive clutches on Polaris ATV Sportsman 600/700 twin EFI X2 02-08.



## 4984 Secondary Drive Clutch Puller

- Removes secondary drive clutches on Polaris ATV & Side x Side 1985-up. 1" - 12 rolled thread, 5-1/2" total length.
- Similar to Polaris No. 2870913.



## 4974 Clutch Puller

- Removes drive clutches on Polaris Side x Side and Snowmobile.
- Snow Applications: 700/800 XCR Fuji 3 cylinder engines 1999-2001, all Domestic twin 2 -strokes model year 2000 and newer, FS/FST models 2006 and newer.
- Side x Side Applications: Ranger RZR XP 2011 and newer.
- 3/4-16 thread.
- Similar to Polaris 2872085.



## 4975 Clutch Puller

- Short puller for removal of the drive clutch from the crankshaft taper on Polaris 550 Sportsman XP 4x4 09-12, 550 Sportsman (all models) 10-12, 570 RZR 4x4 12, 800 RZR 4x4 (all models) 08-12, and Ranger Diesel.
- Similar to Polaris PA-48595.



## 4978 Clutch Alignment Tool

- Establishes correct clutch offset and alignment on Polaris EBS Clutches.
- Similar to Polaris 2872292.



## 4979 Clutch Alignment Tool

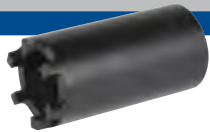
- Establishes correct 1/2" clutch offset and alignment on Polaris ATV & Side x Side.
- Similar to Polaris 28870654.



## 4980 Clutch Alignment Tool

- Establishes correct clutch offset and alignment on Polaris P85 Clutches.
- Similar to Polaris 2870426.

# DRIVELINE / TRANSMISSION MOTORCYCLE TOOLS



## 4987 Clutch Spider Nut Socket

- Used to remove and install the drive clutch spider jam nut on 2011 & newer Ranger RZR XP. Similar to OE P/N PU-50578.
- Similar to Polaris No. PU-50578.



## 4988 Clutch Spider Nut Driver

- Essential when servicing or re-building Polaris clutch. Fit's P85 and P90 clutches found on Polaris ATVs and snowmobiles 1972 to Present. (except 900 RZR XP 4x4 11-12, 900 RZR XP 4 4x4 12).
- Similar to Polaris No. 2870338.



## 4989 Clutch Spider Tool

- Essential when servicing or re-building Polaris clutch. Fit's P85 and P90 clutches found on Polaris ATV, Side x Side, and snowmobiles 1972 to Present.
- Similar to Polaris No. 2870341.



## 4880 4-in-1 Hex Axle Tool

- Fits internal hex on many late model sport bike axles and some dirt bikes.
- Heavy duty CrMo steel construction for shop use.
- Four metric hex sizes: 17 mm, 19 mm, 22 mm and 24 mm.
- 3/8" square drive on both ends.



## 4882 Rear Axle Wrench

- This wrench allows for simple adjustment of drive belt tension or rear wheel alignment.
- Eliminates the need to remove any exhaust components.
- 36mm wrench includes a 1/2" square drive allowing for use with a torque wrench for proper axle torque.
- Similar to HD-47925.

## 6673 Belt Tension Gauge

Belt tension gauges are used to properly check drive belt tension on drive belts to ensure maximum belt and bearing life. This belt tension gauge simply connects to the belt to provide the tension reading. Dual scale reads 30–180 lbs. (2.5-15 ft. lbs.) and 130-800 Newtons, covering the 10 ft. lb. spec. typically found on rear drive motorcycle belts.



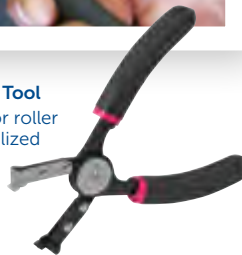
## 4748 Belt Tension Gauge

This easy to use and read tool allows for accurate belt tension to be set after belt replacement, adjustment, or wheel service. Use on secondary drive belts with a 10 lb. spec. Instructions; 1. Position the small O-ring over the 10 lb. mark. 2. Position the U-shaped belt cradle against the bottom of the belt at a 90 degree angle and locate the large O-ring to a reference point, record reading. 3. Push upward on the rubber bumper until the small O-ring touches the bottom of the tool body. Re-align the large O-ring to the reference point, difference in the reading is the belt deflection (refer to service manual for spec.)



## 4745 Chain Master Link Clip Tool

Designed specifically for roller style chains with specialized tips to easily remove and install master link clips. Includes comfort grip handles.



## 4746 Chain Master Link Plate Tool

Tool will remove press-fit master link plates found on many standard and O-ring style roller chains. Will also break 40-60 series chains to add a master link or remove links.



## 4744 Chain Breaker and Riveting Tool Kit

This kit will break, press, and rivet most #25 - #35 and # 428 - #630 standard and O-ring roller chains. Includes HSS rivet tip for riveting hollow nose master links. The hardened steel body has a removable handle for compact storage.



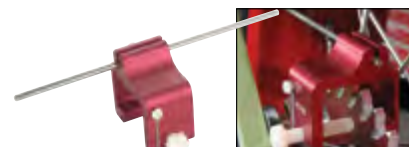
## 4738 Chain Breaker & Riveting Tool Kit

This heavy duty kit makes easy work out of breaking, pressing, and riveting # 415 - # 632 size standard and O-ring chains. The handle can be mounted in 3 different positions on the forged and hardened alloy c-frame, providing access while the chain is on the vehicle. The kit can rivet hollow nose master links as well as hardened pins. Storage case included.



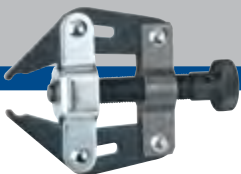
## 4739 Chain Brush

Use to clean and oil various sized roller chains found on motorcycles, ATVs, machinery, etc. Brushes adjust to chain widths ranging from 1/4" to 9/16".



## 4749 Chain Alignment Tool

Designed to simplify the alignment of the countershaft and rear sprocket during chain adjustment or wheel service. Tool clamps to rear sprocket and held with the thumb screw. The rod indicates alignment.



**4758**  
**Motorcycle/ATV Chain Tensioner**

- Tool is designed to work on drive chains found on motorcycles and all-terrain vehicles (ATVs). Fits the following size chains: 428, 520, 525, 528, and 530.
- Tool jaws fit in chain link ends. Tightening the forcing screw pulls the jaws together to hold the chain for easy removal or installation of the chain connector or master link.



**714**  
**Horseshoe Lock Ring Pliers**

These pliers feature 8" handles and are designed to spread and remove horseshoe style lock rings found on engines, transmissions, and chassis.



**7313**  
**Retaining Ring Pliers**

These pliers are 7-3/4" long and are designed to spread and remove retaining rings found on engines, transmissions, and chassis. Maximum spread is 1- 1/16".



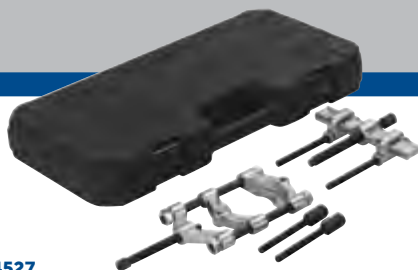
**4623**  
**CV Joint Banding Tool and Cutter**

Use to install and tighten the "band-it" or strap style clamps found on CV joint boots, steering gear boots, or hoses. Tighten the band by turning the handle on the tool; use a socket or wrench on the handle to torque the band to OE specifications. When the boot clamp has been tightened to specs, cut the band to the correct length by flipping the lever (at the front of the tool) forward.



**4721**  
**CV Boot Clamp Cutter**

Designed to easily cut the CV boot clamp without damaging the boot. Will cut boot clamps up to 10 mm wide and .7 mm thick. Handles are spring loaded to the open position to allow easy access to the clamp.



**4527**  
**5-Ton Pressure Beam Bearing Splitter Kit**

Single point of adjustment allows quick attachment of 3" splitter to the bushing or bearing. Pressure beam is used in conjunction with interchangeable legs. Includes carry case.



**7790**  
**Flange Puller Set (48 piece)**

Versatile puller capable of removing a wide variety of components having tapped pulling holes such as gears, pulleys, etc.

- Capable of handling 2- or 3-way bolt pulling applications.
- Puller flange: adapts to bolt circle dia. of 1-1/2" to 4-5/8".
- Forcing screw: 5-5/8" lg., 5/8-18 thread.
- Shaft protector: 1-3/16" dia. x 3/4" thick.



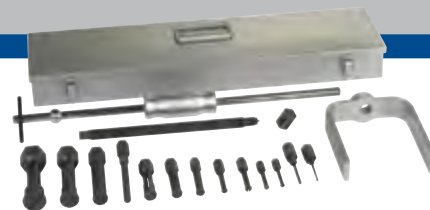
**525**  
**Flange-Type Puller Combination**

Two specialty pullers in one box. You get a flange-type puller for removal of parts with two or three tapped holes. You also get a pulley and flywheel puller. 525 includes: flange-type puller along with puller with four sets of cap screws.



**5049**  
**Pilot Bearing Puller**

Make quick work of pulling stubborn, rusted pilot bearings. Fits 1" I.D. bearings. The puller's forcing screw expands the jaws inside the bearing and simultaneously pushes against the bottom of the blind hole.



**981**  
**Blind Hole Puller Set**

This set provides a complete selection of expanding collets ranging in size from 5/16" to 1-3/4". Collet is placed through bore of part to be removed, then expanded with actuator pin so that lips of collet secure a positive grip for pulling. Force is exerted by means of a forcing screw and a bridge assembly or a slide hammer. Individual pieces can be ordered separately.

**1037**  
**7-Ton Grip-O-Matic Puller**

Mechanical Grip-O-Matic® Puller Remove and install parts for fast, effective repairs.

The puller is forged from quality steel, heat treated, and subjected to rigorous tests which exceed their rated capacity.

- 7-Ton, 2/3-Jaw
- Max. Reach 5" Max. Spread 10-1/2"
- Screw Size 11/16" - 18 x 9"
- Jaw Thickness Upper 5/16" Lower 11/32"
- Jaw Width Upper 1" Lower 1"



**4532**  
**7-Ton Multi Purpose Bearing and Puller Set**

- Offers a bearing/pulley tool solution featuring a classic "H" Bar style puller block accommodating 7" to 11" application spread.
- Comes with 2 sets of forged jaws for a pulling reach range of 5" to 9" - tempered for heavy-duty applications. Two forcing screws are included for short and long pulls.
- Where a Push Puller is the best pulling choice and threaded holes are not available, the 4532 provides technicians and shops with a solution for many applications like side bearings, alternators, generators, power steering and crankshaft pulleys.
- Deep set works excellent for pulling the primary plate from the transmission



### 7403 Pulley and Flywheel Puller

Here's a puller that works in a variety of applications. Works as a regular 2/3-way puller to remove pulleys and small engine flywheels. Cap screws included (pairs): 3/8-16 x 3-1/2 in.; 5/16-18 x 3-1/2 in.; 5/16-24 x 3-1/2 in.; M8-1.25 x 90 mm; and 5/16-18 x 4 in. (SIR).



4518-3



4518-2

### 4518 5-Ton Bar-Type Puller/Bearing Separator Set

- This combination set includes our two most popular bearing 'splitters' (2" and 3"), four sets of hex push-puller legs and a bar-type puller head with a 9/16" forcing screw. Separator tools are used with bar puller and legs for a wide variety of pulling jobs.
- The 5" puller cross-bar with a 6-1/4" forcing screw or each of the bearing separators may also be used separately or in combination with other pullers or tools.
- A blow-molded plastic storage case keeps set contents organized and protected from loss.

Tool No.	Min. Spread	Max. Spread	Tapped Holes	Distance Between Adj. Screws
4518-2	3/16"	2-3/8"	3/8-16	2-3/8"
4518-3	1/2"	2-3/8"	3/8-16	3-9/16"



### 4852 Adjustable Primary Locking Bar

- Used to lock primary for service work.
- Will work on Chain or Belt Drive style primary drives.
- Adjustable length from 4" to 7-1/4" to cover virtually any application.

### 6930 Flange-Type Puller Combination

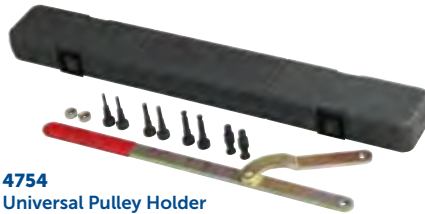
Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4". Three cap screws, 3/8-24 x 3" long, and three cap screws, 3/8-16 x 3" long.



### 518 Flange Puller

Pull larger diameter parts having two or three tapped holes.

- Slotted holes in puller body permit cap screws to be positioned to handle bolt circle diameters from 1-1/2" to 4-5/8".
- Three each of two cap screw sizes included: 3/8"-24 x 3" long and 3/8"-16 x 3" long.



### 4754 Universal Pulley Holder

- Universal design fits many different size pulleys having slots or holes, such as crankshaft / transmission pulleys or gears.
- Wrench is adjustable from 1-1/2" to 8-5/8"; four different size step pins are interchangeable.
- Long handle enables technician to easily hold the pulley when tightening or loosening retaining bolts.

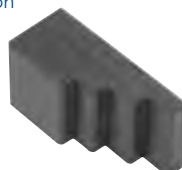


### 4802 Universal Pulley Holder Locking Pliers

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the 5/16" pins.

### 4856 Primary Drive Locking Tool

- This wedge is placed between the primary chain and motor sprocket to lock them together during removal and installation of the engine sprocket nut without damage.
- Made of POM material to not damage the sprocket or chain.
- Fits all chain primaries.
- Similar to HD-41214.



### 464 Griplock 2 Ton, 3 Jaw Puller

Three-in-One "Griplock" Puller is used for general purpose pulling such as hubs, gears, bearings and anywhere this versatile puller can be attached.

- Pressure bearing yoke cap holds jaws in place for ease of set up - in any orientation.
- Yoke arms have two jaw positions and do not require tools to change.
- 2 or 3 jaw applications, with a 3" to 4" spread.
- Both external and internal pulling action.



### 465 Griplock 5 Ton, 3 Jaw Puller

Three-in-One "Griplock" Puller is used for general purpose pulling such as hubs, gears, bearings and anywhere this versatile puller can be attached.

- Pressure bearing yoke cap holds jaws in place for ease of set up - in any orientation.
- Yoke arms have two jaw positions and do not require tools to change.
- 2 or 3 jaw applications, with a 3" to 7" spread.
- Both external and internal pulling action.



### 4803 Universal Pulley Holder Locking Pliers Set

This adjustable locking pliers can be used to hold pulleys, clutch hubs, flywheels, gears, and sprockets with internal or external teeth up to a 4" diameter. Can also be used on applications with slots or holes with the addition of the interchangeable 5, 6, 7, 10, and 16mm pin sets. Complete with metal carry case.



### 4804 Heavy Duty Pulley Holder

This strap style universal wrench features a 9" drop forged handle and 23" leather strap for excellent grip on diameters up to 7". The milled foot increases grip on the strap and pulley as handle force is increased.



### 4889 Fork Cap & Compression Valve Socket Set

- This set is designed to fit fork cap sockets or the compression body with an octagonal shape. These offer a low profile design that provides full nut to socket contact to eliminate rounding off the nut and slippage. Made from high quality aluminum and can be driven with the 3/8" square drive or 19mm wrench.

Set includes:

**4889-1** – Internal Socket to remove the compression body from the cartridge on KYB twin chamber forks, found on Honda CRF 250 & 450. Size 32mm.

**4889-2** – Internal Socket to remove the compression body from the cartridge on KYB twin chamber forks, found on Yamaha YZ 125/250 & 250F/450F, Honda CRF250R/CRF450R, Kawasaki KX450F. Size 36mm.

**4889-3** – Socket fits fork cap on Showa BPF with 43mm fork tubes. Size 45mm.

**4889-4** – Socket fits fork cap on Showa with 44mm - 46mm fork tubes, found on late model Honda CRF 250R & Suzuki RM 125/250. Size 46mm.

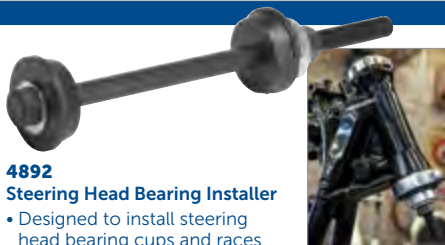
**4889-5** – Socket fits fork cap on KYB forks found on Honda CRF 450R, Yamaha YZ125/250 & YZ250F/450F, Kawasaki KX450F. Size 49mm.

**4889-6** – Socket fits fork cap on Showa forks found on Honda CRF 250R/450R & CRF 250X/450X, Suzuki RM 125/250 & RMZ 250/450, Kawasaki KL250F. Size 50mm.



### 4891 Fork Spring Compressor Kit

- Designed to install fork caps on forks with a large amount of spring pre-load. Kit includes 39mm and 41mm adapter sets, and one jack screw.
- Application: 39mm and 41mm HD forks.



### 4892 Steering Head Bearing Installer

- Designed to install steering head bearing cups and races completely straight without any damage.
- Will work on stock and custom applications.
- Similar to HD-39302.



### 4886 Swing Arm Bearing Tool

- Designed to install new needle style bearings into a swing arm. Includes 3 drivers to fit different size bearings. Driver 1 (22.0mm/26.8mm), Driver 2 (21.0mm/26.0mm), Driver 3 (20.0mm/26.0mm).
- Application: For use on late model off-road motorcycles such as Honda, Suzuki, Kawasaki, Yamaha models.



### 4884 Swing Arm Pivot Bearing Puller

- An essential tool for removing and installing pivot bearings in swing arms and front fenders.
- Applications include HD Softail swingarms 86-Present, HD Springer front fender mounts 97-11.



### 4968 Swing Arm Tool

- This 2-in-1 tool is designed with one end for removing and installing the pivot bolt lock nut, while the other end will remove the pivot bolt.
- Applications include Honda 4-stroke 4 wheelers.



### 4964 Ball Joint Service Kit

- Use to remove and install ball joints in vehicle on Sportsman XP, RZR and Ranger models.
- Similar to Polaris No. PU-50506.



### 4965 ATV Steering Knuckle/Ball Joint Separator

- Eliminates damaging the A-Arm, ball joint stud, or rubber boot while separating the ball joint from the knuckle body. Includes 2 drive bolts for Applications include ATV models Honda TRX and Yamaha YZF, YFZ, and YFM.



### 4966 ATV Steering Knuckle/Ball Joint Separator

- For removal and installation of lower ball joints on models with pressed-in ball joints on the front strut casting found on Polaris and other Makes.
- Similar to Polaris No. 2870871



### 4995 Coil Spring Compressor Locking Plier

- Locking plier with special jaws that clamp on the external side of the coil spring. Use 2 pliers to evenly compress each side of the spring found on struts and coil over shocks.
- Similar to Polaris No's 2871573 & 2871574.



# CHASSIS / BODY MOTORCYCLE TOOLS



## 4517 7-Ton Bar Type Puller/Bearing Separator

- Includes a Bearing Splitter with 4" capacity, two sets of hex push puller legs, a 8" bar type puller head mated with a custom thread forcing screw.
- Puller/Bearing set for tough jobs, up to 7-tons, larger applications, and greater reach 8" to 16".
- Capacity to remove steering stem bearings.



## 4581 Blind Hole Bearing Puller

- For pulling jobs requiring an internal pull, such as pilot bearings and pinion bushing from cam cover.
- Four collets which fit a wide range of applications. Select the appropriate sized collet by comparing it with the application. Insert the collet, expand it to fit the hole, then attach the slide hammer assembly.

Set includes:

- Four collet sizes: 7/16" to 1/2", 9/16" to 11/16", 5/8" to 1", 1" to 1-1/4" and 2-1/2 pound slide hammer with T-handle and blow-molded plastic storage case.



## 4797 Steering Stem Bearing Installation Tool

- Provides a quick and easy method to install lower steering stem bearings. The 14" drive tube accepts the 1.0", 1.4", and 1.75" I.D. bearing adapters.



## 4790 Wheel Bearing Removal/Installation Kit

- This tool assembly will remove and install 3/4", 1", and 25mm I.D. sealed wheel bearings.
- Standard wrenches used in combination with tool. Instructions included along with blow molded case.



## 4507 Bearing Driver Set, Stinger

- Permits installation of tapered bearing races and seals without damage to the component or housing. Includes a driver handle plus popular bearing and seal drivers, ranging from 1.565" to 3.180".
- Tapered side of driver is used to install races. Invert the driver to the flat side to install seals. Set is housed in a blow-molded plastic storage case.
- Bearing applications include steering stem, swing arm, and wheel bearings races.



## 6642 Trim Tool Kit (11 Piece)

- Tools designed to remove specialty body fasteners, trim strips, panels, bezels, liners, shrouds, fascia.
- Tools are constructed of durable, impact-resistant nylon that will not damage metal and non-metal surfaces.



## 4784 10" Profile Gauge

- This 10" gauge provides an exact copy of a contour or profile needed during bodywork or fabrication. The plastic fingers will not scratch original finish and non-metal surfaces.



## 4779 Front Fork & Shock Vice

This vice is designed to hold up to 4" diameter round or oddly shaped components such as forks, shocks, pistons, rods, etc. The V shaped jaws are covered with thick rubber pads to ensure a firm grip without leaving a mark. Comes complete with a table/vice mounting bracket that allows adjustment to any position.



## 4791 Spanner Wrench, 3/4" - 2"

This chrome vanadium hardened steel wrench features a 5" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



## 4792 Spanner Wrench, 2" - 4 3/4"

This chrome vanadium hardened steel wrench features a 9" handle and slim strong hook to access slotted retaining rings in hard to reach areas.



## 3176 Smart Battery Charger and Maintainer

Excellent for vehicles in storage for weeks or months. This charger and maintainer will keep 12V batteries fully charged when not in use, without damaging the battery.

- Charges deep discharged batteries in about 12 hours.
- Switches to float mode after the battery is completely charged.
- Easy to read LED lights to show the status of charging and battery condition.
- Microprocessor controlled pulse charger.



**7206**  
**Multi-purpose Strap Wrench**

You'll find many uses for this heavy-duty strap wrench. The 53" long nylon strap won't mar precision surfaces of shafts, pulleys, or other components. Useful on engine, transmission, and drive pulleys up to 16 inches. Special head design self-tightens the strap as force is applied to the lightweight, 12" long handle.

**305085** – Replacement Strap.



**4750**  
**Tire Valve Installer/Remove Tool**

This 14" steel tire valve tool includes a stepped rubber sleeve that can be positioned on the handle for optimum pulling angle of the valve, while protecting the wheel finish. Removes and installs snap-in style tire valves.



**4769**  
**Wheel Rim Protector Set, (3 piece)**

Fits over the wheel rim to protect the wheel from being scratched or damaged while using tire spoons. Set of 3.



**4770**  
**Tire Spoon with Grip**

This 13" curved tip tire spoon is strong yet comfortable to use with the form fit hand grip. The rounded head prevents puncturing the tube.

**4771**  
**Tire Bead Alignment Tool**

This aluminum tool will hold a tire bead into the drop center of the wheel when changing the tire or installing an inner tube. The nylon thumbscrew will not damage the wheel finish.



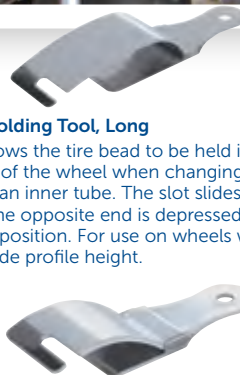
**4751**  
**Tire Pressure/Tread Depth Gauge**

This 3-in-1 gauge will measure tire pressure, lower tire pressure, and measure tread depth all in one gauge. Rugged cast housing for strength and long life.



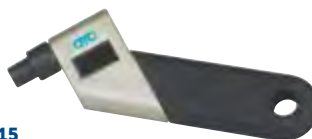
**4777**  
**Tire Bead Holding Tool, Long**

This tool allows the tire bead to be held in the drop center of the wheel when changing the tire or installing an inner tube. The slot slides over the spoke and the opposite end is depressed to push the tire into position. For use on wheels with 1 5/8" maximum side profile height.



**4775**  
**Tire Bead Holding Tool, Std.**

This tool allows the tire bead to be held in the drop center of the wheel when changing the tire or installing an inner tube. The slot slides over the spoke and the opposite end is depressed to push the tire into position. For use on wheels with 3/4" maximum side profile height.



**3833-15**  
**Digital Tire Gauge**

Digital tire gauge for accurate tire pressure measurements in 0.1 psi increments. Display is backlit for use in low light conditions. 0-150 psi capability.



**3833-17**  
**Tire Valve Core Tool**

This tire valve core tool will remove and install valve cores when servicing tires. The tool is preset to tighten the valve core to the proper torque during installation.



**4598-DOT4**  
**Brake Fluid Tester**

Catch bad brake fluid before it has time to destroy expensive brake calipers and other brake system components! Tester determines quality of brake fluid. One battery included: 1.5V AAA.

1. Remove cap from brake fluid reservoir.
2. Remove probe cap from brake fluid tester.
3. Press power button on top of tester. Green LED lights up.
4. Dip entire length of metal probes into brake fluid.
5. After one second, match color of LEDs with color chart to determine brake fluid quality. Tester automatically powers off after twelve seconds of inactivity.



**4741**  
**Spoke Tool Set (9 Piece)**

- Use to tighten or loosen spoke nuts found on most motorcycle and scooter wheel applications.
- Nine interchangeable wrench ends: 5.2 mm, 5.4 mm, 5.6 mm, 5.8 mm, 6.0 mm, 6.2 mm, 6.4 mm, 6.6 mm, 6.8 mm.



**4747**  
**Spoke Torque Wrench Set (22 Piece)**

Take the guesswork out of spoke wheel assembly and maintenance. This dual head spoke wrench offers install and removal in one wrench. The click-type torque end applies accurate and equal tension to each spoke, while the fixed end easily removes damaged or rusted spokes. This set includes 11 torque heads and 11 fixed heads for use with the sealed body wrench, all complete in an organizer case. Head sizes included for both ends: 5.0mm, 5.6mm, 5.8mm, 6.0mm, 6.2mm, 6.3mm, 6.5mm, 6.7mm, 6.8mm, 7.1mm, and Spline.

# WHEEL / BRAKE MOTORCYCLE TOOLS



6703-3

6703-2

## 6703 Line Fluid Stopper Kit

Stop messy fluid leaks and prevent contamination during service.

- Kit seals all types of rubber and steel line found on fuel, brakes, and oil lines.
- Includes two banjo style fitting stoppers, two steel line stoppers, six line plugs, a line disconnect tool, and a long reach line pinch-off tool for hard-to-reach hoses.

**6703-1** – Banjo Line Fluid Stoppers, 2 pk

**6703-2** – Steel Line Fluid Stoppers, 2 pk

**6703-3** – Line Plug Fluid Stoppers, 6 pk



## 7559A Deluxe Vacuum Pump

This pump kit is designed for vacuum testing, brake bleeding, and fluid transfer. With this kit, one person can quickly and cleanly bleed brake and hydraulic clutch systems, actuate vacuum switches (VOES), as well as get answers to numerous diagnostic and mechanical problems. Kit includes:

- Precision-made repairable vacuum pump with 360° gauge rotation for improved visibility.
- 4-1/2 oz. Reservoir jar with fluid transfer and storage lid.
- Two – 2 ft. long, 1/4" ID hoses.
- Rubber cup adapter, two universal bleed screw adapters.
- Vacuum "T" adapter, test and bleed adapters.
- User manual (English, Spanish, French).



## 4740 Spring Hook (6" reach)

- Made from heat treated alloy steel.
- Designed for removing and installing hard-to-reach headlight adjusting springs, exhaust, brake and kickstand springs.

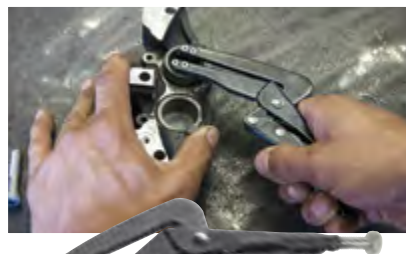


## 4599 One Man Break Bleeder Hose

- Removes air from brake system—one wheel at a time— and eliminates the need for an assistant to help do the job.
- Hose easily attaches to bleeder screw, which holds hose in place and prevents leaking.
- Check-valve on end of hose prevents air from entering brake system when pumping brake pedal.

## 4743 Brake Caliper Spreader

- Compresses the brake pistons on most style calipers for easy pad replacement.
- Fits calipers with 1/4" thick rotor applications, popular on motorcycles.
- Range: .25" (5 mm) to 2.25" (58 mm). Works on all automotive applications in this range.



## 4799 Brake Piston Removal Locking Pliers

This specially designed locking pliers allows the removal of brake caliper pistons during service or rebuild. The pliers is simply clamped into the I.D. of the caliper piston allowing it to be pulled out of the caliper. Range; 5/8" to 2-1/4" diameter pistons.



## 4795 Safety Wire Twist Pliers

These versatile 8" pliers will reliably twist safety wire rapidly and consistently. The right hand twist mechanism features an automatic spring return. The forged alloy steel construction features tapered jaws for confined areas and mated cutters to cut safety wire. For use on safety wire applications found on vehicles, machinery, and aircraft.

## 4796 Steering Neck Bearing Race Remover

Simple way to remove bearing race in the steering neck. Remover is inserted into neck and bolt is adjusted to tighten the remover against I.D. of steering neck. The remover is then driven from other end of neck to remove race. Fits 1-1/8" to 2-5/8" I.D. bearing race.



## 4794 Safety Wire Drill Guide Set, SAE & Metric Set

Here is the perfect way to drill those nuts and bolts for use with safety wire without breaking the drill bit. These guide, align, and support the hex head or the bolt threads. The hex fixture fits nuts and bolt heads that measure up to 1 1/4". The SAE fixture bar is threaded for 1/4"-20, 5/16"-18, 5/16"-24, 3/8"-18, 3/8"-24, 7/16"-14 bolts, and the Metric fixture bar covers M6x1.0mm, M8x1.0, M8x1.25mm, M10x1.25mm, M10x1.5mm, M12x1.5mm sizes.



## 8104 Vacuum Brake Bleeder

This one man brake bleeding system allows for fast and efficient vacuum brake bleeding. Universal rubber fitting holds securely on brake bleeder screw. Attach shop air and use the quick release trigger for on-demand vacuum and hands free operation. Compact size and 17 oz. (500ml) capacity.



## 4870 Master Cylinder Snap-Ring Pliers

Allows for removal of the internal snap rings found in hydraulic master cylinder. Remove and install small to medium snap rings up to a 2 1/8" depth. Other snap ring applications include transmission gear locators, bearing and oil seal retention, and fork seal retaining rings.



**3910  
Digital Multimeter**

This digital multimeter contains all the base functions required for today's electrical system testing, at an economical price. Digital display provides; Volts, Ohms, Amps, Duty Cycle, Resistance, Capacitance, Diode, Continuity, Temperature.



**4878  
Ignition Switch Housing Alignment Tool**

- This tool aligns the ignition switch housing properly as the retaining screws are being torqued. Proper switch alignment extends the life of the ignition switch. Applications include HD FL Touring models 03 – Present, V-Rods 02 – Present.
- Similar to HD-45962.



**3633  
Circuit Tester**

The standard in electrical system testing. This basic and simple to use tester provides the capability to locate shorts, grounds, and open circuits. 12', heavy-duty, red coil, cord lead.

- Checks 6- and 12-volt systems.
- Ergonomic, slim designed clear handle.
- Bright red, high intensity/slim style replaceable bulb.



**4614  
Battery Terminal Wrench, 5/16, 6 pt.**

- Designed for use on side-terminal batteries, or any 5/16" hex head battery bolt.
- 5/16", 6 point, box end, 5-1/2" long, ratcheting wrench; insulated handle.



**4616  
Battery Terminal Wrench, 10mm, 12 pt.**

- Designed for use on 10 mm battery terminal bolts found on many batteries.
- 10 mm, 12 pt., box-end ratcheting wrench; 5-1/2" long with insulated handle.



**4782  
Wire Pulling Tool**

This tool contains an 18" cable with a "T" handle at one end and wire mesh at the other. By threading the cable through a difficult to reach area such as a bike frame, wires or connector can be hooked to the end allowing the wiring to be pulled through.



**4617  
Terminal Battery Brush**

- Designed to clean corrosion from side post batteries.
- One brush used to clean battery terminals; other brush used to clean battery cable ends.
- Plastic handle resists battery acid.



**3907  
Probe Multimeter**

This full function digital multimeter is used for electrical system testing, but it's compact design allows it to be conveniently carried anywhere in case of emergencies. Digital display provides; Volts, Ohms, Diode, Continuity.



**3908  
Amp Clamp Multimeter**

This digital clamp meter is well suited for testing starting/ charging circuits, and provides easy access to current, voltage, temperature and other key electrical system measurements, all in one easy to use tool. Digital display provides; Volts, Ohms, Amps, Duty Cycle, Resistance, Capacitance, Diode, Continuity, Frequency, Temperature.

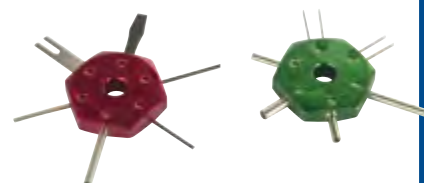


**3650  
Heavy-Duty, Remote Starter Switch**

Allows one person to start and crank engine while under the hood or from either side of the vehicle.

Product Features:

- With convenient hot circuit indicator, red ready light glows when starter switch is connected to a hot circuit; light goes off when switch is depressed.
- High current, heavy-duty push button switch ensures reliable operation and long service life.
- 5' leads made from heavy-duty, oil and grease resistant, 12-gauge wire.
- High current clips with protective boots open to extra wide 5/8" for ease of hook-up.
- Soft, non-slip rubber grip.



**4822  
Wire Connector Tool Set (2 Piece)**

Designed to remove terminals from connector housing without damage to the terminal or connector. Set provides 12 different tool styles fit most common connectors.



**4813  
Heat Shrink Tubing Set (171 Piece)**

Protection and insulation for solder connections and components. 2 to 1 shrink ratio with flame or heat gun.



**4814  
Waterproof Heat Shrink Tubing Set (106 Piece)**

Waterproof protection and insulation on solder connections and components. Adhesive lined inner wall to seal out moisture. 3 to 1 shrink ratio with flame or heat gun.

# ELECTRICAL MOTORCYCLE TOOLS



## 4461 Terminal Release Tool Set

- Save time and money. Repair or rebuild a wiring harness without having to order the entire OE replacement.
- Services most OE terminal connectors. Insert the appropriate release tool to depress the locking tab and the individual wire slides out for service or replacement.

Kit includes:

**7737 – Computer edge board and header release tool.** Each end of the tool works on different terminal connector configurations. Works on various domestic and import models.

**7738 – Weather Pack sensor terminal release tool.** Works on various domestic and import models.

**7740 – Micro-style terminal release tool.** Works on various domestic and import models.

**7741 –** Specifically designed to release ID computer terminals on various domestic and import models.

**7742 – Universal harness release tool** designed to work on various domestic and import models.

**7743 –** Releases terminals on most harness connectors on various domestic and import models, including water, O2, vacuum, and air temperature sensors.



## 4467 Automatic Wire Stripper

- Quick removal of insulation on wire AWG 12-20.
- Comes with adjustable depth gauge (8mm to 12mm).
- Sharp v-shaped tooth easily removes insulation without any damage to soft wire strands.
- Cutting tool stored below the stripper.
- Features a space saving locking mechanism for pockets or tool drawer storage.



## 5912 Crimwell™ Angled Crimping Pliers

- Universal crimping design accommodates soft wire – solid or stranded – 10-22 AWG.
- Cutting feature included for quicker preparation.
- 9" (228mm) in length, with protective grips to increase leverage and secure crimp.
- Angled design keeps the connector, the wire, and the crimper "in-line" – improving visibility and access in hard to reach places.
- Designed to not pierce connector insulation and also works on un-insulated connectors.
- Service tech can use as much force as desired to ensure connection and it will not damage connector insulation.
- Easy-to-use: Simply insert the connector into the crimping feature, slip over the connector and squeeze.



## 5953 Dual End Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.



## 5955 Magnetic Clamp Wire Holder

- Holds wire and connectors solidly during soldering or other wire service.
- Unique design allows connection to be held firmly on both sides with infinite adjustability.
- Insulated clips act as heat sinks to protect shrink tubing or other sensitive parts from heat.
- Clamp with magnet allows for attachment to a work bench, vehicle, or any other object for a firm base.



## 5950A CrimPro™ 4-in-1 Angled Wire Tool

- The angled feature allows access to close quarters and facilitates superior crimps.
- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



## 5950S CrimPro™ 4-in-1 Wire Tool

- Compact 7-inch design used 4 ways.
- Gripping nose – to pull, twist, bend, and shape.
- Crimper – crimps 12-20 AWG insulated and non-insulated wire.
- Stripper – strips 12-20 AWG wire.
- Cutter – ability to make cuts both above and below pivot.



## 4783 Flexible Magnetic/Claw Pick Up Tool

The 25" flexible spring shaft allows the tool to reach difficult areas and pick up objects either magnetically or with the use of the retractable claw.



## 4818 Multi-Purpose Scissors

Will cut hose, wire and cables, wood dowel, PVC, and thin sheet metals in addition to general cutting. The hardened stainless steel blades have an angle ground into one that eliminates slipping when cutting round materials.



### 5900A Master Torx® Bit Socket Set, 52 Piece

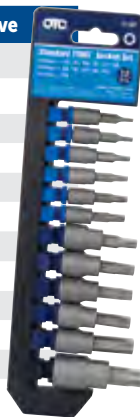
52-piece professional socket set in a blow molded case covers the popular versions of Torx® specialty fasteners in all popular sizes.

- Styles available: Torx® Bit Sockets, Torx® Plus Bits Sockets, Tamper-Resistant Torx® Bits, and Torx® Socket for external bolts.
- Made from superior S2 steel to meet or exceed torque specifications.
- All bit sockets are a 2-piece design. .20 percent stronger than a one-piece style for longer life.

### 6100 Standard TORX® Socket Set T10 to T60 (12 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6101	T10	1/4"
6102	T15	1/4"
6103	T20	1/4"
6104	T25	1/4"
6105	T27	1/4"
6106	T30	1/4"
6107	T40	3/8"
6108	T45	3/8"
6109	T47	3/8"
6110	T50	3/8"
6111	T55	3/8"
6112	T60	1/2"



### 6150 External TORX® Socket Set (7 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6151	E6 x 25	1/4"
6152	E7 x 25	1/4"
6153	E8 x 25	1/4"
6154	E10 x 32	3/8"
6155	E12 x 32	3/8"
6156	E14 x 32	3/8"
6157	E16 x 32	3/8"



### 6170 Metric Hex Socket Set (7 piece)

Set includes one each of the following:

No.	Size	Sq. Drive
6171	3 mm	3/8"
6172	4 mm	3/8"
6173	5 mm	3/8"
6174	6 mm	3/8"
6175	7 mm	3/8"
6176	8 mm	3/8"
6177	10 mm	3/8"



### 6180 TORX® PlusSocket Set (9 piece)

Set includes one each of the following:

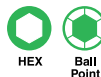
No.	Size	Sq. Drive
6181	TP10	1/4"
6182	TP15	1/4"
6183	TP20	1/4"
6184	TP25	1/4"
6185	TP27	1/4"
6186	TP30	1/4"
6187	TP40	3/8"
6188	TP45	3/8"
6191	TP50	3/8"



### 6950 SAE Ball Hex "L" Keys 1/16" to 3/8" (10 piece)

Set includes one each of the following:

No.	Size
6950-1	1/16"
6950-2	5/64"
6950-3	3/32"
6950-4	1/8"
6950-5	5/32"
6950-6	3/16"
6950-7	7/32"
6950-8	1/4"
6950-9	5/16"
6950-10	3/8"



### 6952 Metric Ball Hex "L" Keys 1.5mm to 10mm (10 piece)

Set includes one each of the following:

No.	Size
6952-1	1.5mm
6952-2	2mm
6952-3	2.5mm
6952-4	3mm
6952-5	4mm
6952-6	5mm
6952-7	6mm
6952-8	7mm
6952-9	8mm
6952-10	10mm



### 6954 Standard TORX® "L" Keys T8 to T50 (10 piece)

Set includes one each of the following:

No.	Size
6954-1	T8
6954-2	T10
6954-3	T15
6954-4	T20
6954-5	T25
6954-6	T27
6954-7	T30
6954-8	T40
6954-9	T45
6954-10	T50



### 6956 TORX® Plus "L" Keys TP8 to TP50 (10 piece)

Set includes one each of the following:

No.	Size
6956-1	TP8
6956-2	TP10
6956-3	TP15
6956-4	TP20
6956-5	TP25
6956-6	TP27
6956-7	TP30
6956-8	TP40
6956-9	TP45
6956-10	TP50



### 4780 Personal Tool Pack

Includes 1/4" drive ratchet, 2" extension, 16 drive bits, and Universal Spline sockets fit both SAE 3/16" - 9/16" and metric 5mm - 14mm nuts and bolts in a variety of styles; 6 pt., 12 pt., torx, square, spline, etc. All tools included in a travel pouch.

# GENERAL MOTORCYCLE TOOLS



## 4781 Super Stubby Screwdriver Set

These screwdrivers are perfect for those limited access fasteners typically found on carburetors or in electrical compartments and many other areas.

- 2 Phillips and 2 straight screwdrivers included in set.



## 8262 Short Pick & Hook Set (4 Piece)

Consisting of four (4), 6.5", soft-handled picks.

- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing O-rings, accessing snap rings and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove O-rings, shaft seals, CV boot and motorcycle fork seals and dust hoods.
- Packaged in a molded tray which can be placed in tool drawer.

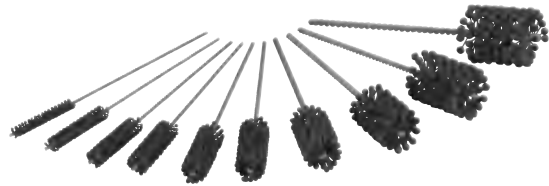


## 8263 Long Pick & Hook Set (4 Piece)

Consisting of four (4), 9.25", soft-handled picks.

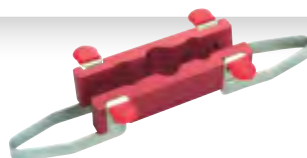
- They are sturdy, with both stainless steel shafts and tips, with assorted tip shapes designed for marking, removing O-rings, accessing snap rings and other assorted applications.
- Ergonomic handle design fits properly in the hand, allowing for easier holding of the tool.
- Multi-use tools to scribe, align pierce, clean or remove O-rings, shaft seals, CV boot and motorcycle fork seals and dust hoods.
- Includes a knurled shaft which allows good grip with grease or oil on hands.
- Packaged in a molded tray which can be placed in tool drawer.

Tool No.	Size
7011-1	.375" 10 mm
7011-2	.500" 13 mm
7011-3	.625" 16 mm
7011-4	.750" 19 mm
7011-5	.875" 22 mm
7011-6	1.00" 25 mm
7011-8	1.25" 32 mm
7011-10	1.50" 38 mm
7011-12	1.75" 44 mm
7011-14	2.00" 51 mm



## 7011 Ball Hone Set (10 piece)

- Ball Hones can be used for refinishing and resizing bores such as found in brake calipers, engine lifters, and u-joint yokes. Also useful for any bearing or bushing application.
- All hones are 180 grit Silicone Carbide for excellent cutting and finish.



## 4786 Aluminum Vice Inserts

Essential for every workbench vice. Aluminum jaws have reliefs for 5/16, 3/8, & 9/16 (7mm, 10mm, & 15mm) diameter shafts. Excellent for holding steel shafts without scratching or damage such as shocks, crankshafts, or any threaded bolts and shafts.



## 4410 Master Bushing Driver Set

- Enables you to remove and install bushings ranging from 10mm to 42mm in diameter, and 3/8" to 1-3/8" in diameter.
- Includes large, medium, and small driver handles and adapters all made of steel.
- Housed in a blow-molded storage case.



## 5180 Portable Multi Purpose C-Frame Press.

- Lightweight (less than 28 lbs.) and durable, the 5180 portable press is perfect for bench top pressing applications.
- Use for all clamping, pressing, and bending needs. Ideal for welding and metal fabrication.
- Press can be positioned vertically or horizontally.
- Versatile 9" – 4-1/4" Open-Throat® design.
- Couples to any 4- or 10-ton Porta Power pump.
- Base allows the operator to mount the press to a bench.

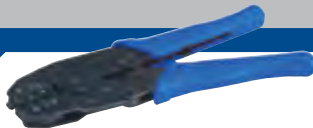
Set includes: C-Frame press with base, adapters: V-pushing and ram pushing (9/16" and 3/4" dia. shanks), receiving inserts, flat insert, storage case.



## 8203 Handled Pry Bar Set

Finally, a heavy-duty pry bar made of tempered square steel that you can hit without damaging the handle.

- Black chrome striking cap allows hitting the bar without damage to the handle.
  - Ergonomic handle – dual durometer composite handle for user comfort; reduces hand fatigue.
  - Polished tip with black oxide finish.
  - Long-life finish resists rust and wear during use.
  - OTC Marathon Lifetime Warranty.
- Set includes 12", 18", and 24" bar shank lengths packaged in a gray molded tray.



### 4497A Ratcheting Terminal Crimper

- Heavy-gauge steel crimping tool designed for insulated wire terminals.
- Ratcheting action crimps terminal to correct tightness on the wire, making crimping fast and easy.
- Insulated handles with compound mechanical leverage for power.
- For wire sizes: AWG 22-18 (0.6mm—1.0mm) red terminal; AWG 16-14 (1.3mm—1.6mm) blue terminal; AWG 12-10 (2.0mm—2.6mm) yellow terminal.



### 4498 7-in-1 Wire Stripper & Crimper

- Strips insulation off electrical wires ranging from 10 AWG—22 AWG (0.6mm—2.6mm) in diameter. Pliers on tip of jaw for looping or grabbing wire in tight places.
- Heat-treated steel jaws cut solid or multi-strand wire.
- Screw cutter shears screws clean, with no thread clean-up required. Works on machine screw sizes 4-40, 5-40, 6-32, 8-32, 10-24, and 10-32.
- Crimps insulated and non-insulated wire terminals, 7mm—8mm spark plug wire connectors.



### 4509 Straight-Blade Hose Cutter

- Cuts rubber hoses ranging from 1/4" to 1-1/2".
- Simply place hose in tool and squeeze handle to cut.
- Replacement steel cutter blade No. 4509-1 is available.

4509-1 – Replacement hose cutter blade



### 4512 Snap Ring Pliers Set – Internal/External

- For internal or external snap rings; thumbscrew permits quick conversion.
- Made of heavy-gauge tempered steel.
- Includes two stainless steel handled picks.
- Contained in a blow-molded plastic storage case.



### 4411 Ratcheting Hose & PVC Cutter (Standard)

- Cuts hose and PVC up to 1-3/8" dia.
- Features metal frame and ergonomic handles for high leverage.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



### 4412 Ratcheting Hose & PVC Cutter (Heavy Duty)

- Cuts hose and PVC up to 1-3/4" dia.
- Features metal frame and rubber padded ergonomic handles for high leverage and comfort.
- Compound ratcheting action provides maximum cutting power.
- Will also cut cable and wires.



### 4515 Mini Pick and Hook Set – 4-Piece

- Sturdy stainless steel points and shafts designed for marking, removing o-rings, accessing snap rings, and performing other tasks. Assorted angle tips allow you to reach awkward locations.
- Knurled shaft design enhances finger control for delicate jobs.

### No. 4512 includes:

Tool No.	Description
4512-1	.090" tip, straight pliers
4512-2	.090" tip, 90° pliers
4512-3	.070" tip, straight pliers
4512-4	.070" tip, 90° pliers
4512-5	.047" tip, straight pliers
4512-6	.047" tip, 90° pliers
4512-7	.038" tip, straight pliers
4512-8	.038" tip, 90° pliers
4512-9	straight tip pick
4512-10	90° tip pick

All items can be purchased separately.



### 1545 Motorcycle/ATV Lift

- 1,500 lb. capacity and 17" long skids that will lift the largest, widest cruisers.
- Lowest clearance available, 3-1/2" at lowest level, with a wide lift range of 3-1/2" to 16-3/4".
- Removable handle provides 360° access to load.
- Features also include foot pedal release, locking rear casters, automatic safety lock, and two ratcheting tie down straps for safety.



### 4490 Magnetic Tray

- Rectangular, stainless steel tray is 9-1/2" x 5-1/2" and 1-1/4" deep. Holds tools and small metal parts so they don't get lost or misplaced during repair work.
- Two heavy-duty magnets on bottom of tray have non-marring contact pads; will securely hold tray to metal objects such as a tool box, frame rail, fender, etc.



### Impact Drivers

- Loosens hard-to-turn screws, bolts or nuts.
- Handle design prevents possibility of hitting hand with hammer when striking impact driver.
- Bit holder has 3/8" drive (No. 4608), 1/2" (No. 4607) drive, and 5/16" hex for Phillips and flat screwdriver bits.
- Includes eight screwdriver bits:
  - No. 2 Phillips bit, 1-3/8" long with 5/16" hex
  - No. 2 Phillips bit, 3-1/8" long with 5/16" hex
  - No. 3 Phillips bit, 1-3/8" long with 5/16" hex
  - No. 3 Phillips bit, 3-1/8" long with 5/16" hex
  - 5/16" wide x 1-3/8" long with 5/16" hex slotted bit
  - 5/16" wide x 3-1/8" long with 5/16" hex slotted bit
  - 3/8" wide x 1-3/8" long with 5/16" hex slotted bit
  - 3/8" wide x 3-1/8" long with 5/16" hex slotted bit

4607 – 1/2" impact driver.

4608 – 3/8" impact driver.



# GENERAL SERVICE MOTORCYCLE TOOLS



## 6986 SAE Stud Remover Set

This SAE, 4-piece, stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas. SAE stud remover set. 3/8" drive for 1/4" and 5/16" stud sizes, and 1/2" drive for 3/8" and 7/16" stud sizes.

Housed in a blow-molded storage case.

**6986-1** – 1/4" stud remover

**6986-3** – 3/8" stud remover

**6986-2** – 5/16" stud remover

**6986-4** – 7/16" stud remover



## 6987 Metric Stud Remover Set

This metric, 4-piece stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

Metric stud remover set. 3/8" drive for 6 mm and 8 mm stud sizes, and 1/2" drive for 10 mm and 12 mm stud sizes.

Housed in a blow-molded storage case.

**6987-6** – 6 mm stud remover

**6987-10** – 10 mm stud remover

**6987-8** – 8 mm stud remover

**6987-12** – 12 mm stud remover



## Rolling Head Pry Bars

You'll have a lot of leverage using one of these rolling head pry bars. The long, tapered body will also serve as an aligning drift.

**7163** – Pry bar; 12" long.

**7165** – Pry bar; 18" long.

## Accutorq™ Klikker Torque Wrenches

These precision torque wrenches make a loud click when you've reached the torque setting. They feature ratcheting heads, all-metal construction, permanently roll-marked scales, and soft-grip rubber handles that enable you to firmly grasp the wrench for right- or left-hand torquing.

- Includes molded plastic case.
- One-year warranty.



7375



7377

Tool No.	Torque Range	Graduations	Square Drive	Length
<b>7375</b>	100-1000 in.-lb (11-113 N•m)	10 in.-lb	3/8"	15-1/8"
<b>7377</b>	10-150 ft.-lb (14-203 N•m)	2 ft.-lb	1/2"	17-3/4"



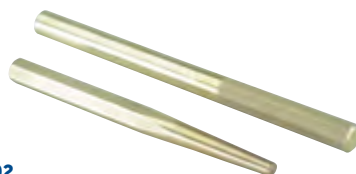
## 4629 Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Two hammer head weighing 24 and 12 oz.
- Two tapered punches 14" x 5/8", 10" x 5/8".
- One hex tapered punch 8" x 5/8".
- Two drift punches 10" x 3/4", 8" x 1/2".
- Two pin punches 6" x 3/8", 4" x 1/4".



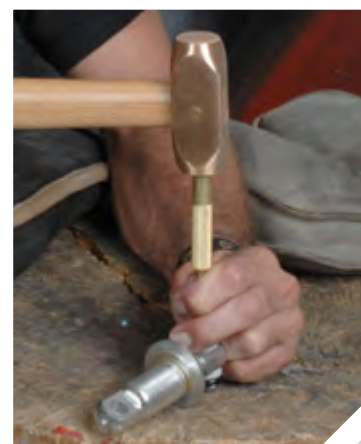
## 4606 Brass Hammer and Punch Set

- Brass-head hammer and punches are ideal to use where sparks from ferrous metals would be hazardous, or where precision metal parts could be damaged by steel tools.
- Hammer head weighs 24 oz.; brass drift punch is 10" x 3/4" diameter; brass tapered punch is 8" x 5/8" hex tapered to 3/8" diameter point.



## 4602 Brass Punch Set (2 piece)

- Two large, brass non-sparking punches. Ideal for use near precision parts or in locations where sparks from ferrous metal could be hazardous.
- Includes an 8" punch (5/8" hex, tapered to 3/8") and 10" straight punch (3/4" dia., chamfered at both ends).





## 4605

### Interchangeable Punch and Chisel Set

- Safety protective handle allows easy grip and protects hand from being hit by hammer.

12 punches and chisels included: 5 flat chisels: 1/2", 5/8", 3/4", 7/8", and 1" wide blades 1 cape chisel: 1/4" wide blade 2 taper punches: 1/8" and 1/4" diameter 2 pin punches: 3/16" and 1/4" diameter 2 center punches: 1/8" and 3/16" diameter

- Double locking ball detent holds punch or chisel securely in the driver handle.

Replacement parts available:

**4605-1** – Drive handle

**4605-2** – 1/2" wide flat chisel

**4605-3** – 5/8" wide flat chisel

**4605-4** – 3/4" wide flat chisel

**4605-5** – 7/8" wide flat chisel

**4605-6** – 1" wide flat chisel

**4605-7** – 1/4" cape chisel

**4605-8** – 1/8" taper punch

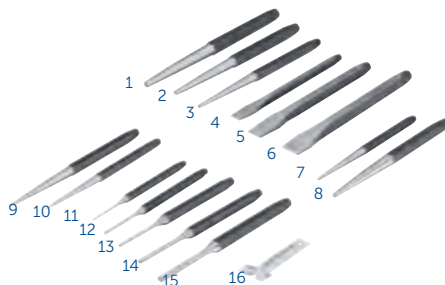
**4605-9** – 1/4" taper punch

**4605-10** – 3/16" pin punch

**4605-11** – 1/4" pin punch

**4605-12** – 1/8" center punch

**4605-13** – 3/16" center punch



## 4600

### Punch and Chisel Set (16 piece)

- Durable set of heat-treated chrome vanadium steel punches and chisels. Storage tray included.

Contents of set:

3 – Cold chisels (with gauge): 3/8" x 5-1/2"; 1/2" x 6"; 5/8" x 6-1/2"

2 – Center punches: 1/8" x 5"; 3/16" x 6"

5 – Pin punches: 3/32" x 4-1/4"; 1/8" x 4-3/4"; 5/32" x 5"; 3/16" x 5-1/4"; 1/4" x 5-3/4"

5 – Taper punches: 3/32" x 5-1/4"; 1/8" x 5-3/4"; 5/32" x 6"; 3/16" x 6-1/4"; 1/4" x 6-3/4"

1 – Chisel gauge



## 4576

### Universal C-Frame Nut Splitter

- Forged and heat-treated frame with offset handle works where ordinary nut splitters may fail. Smooth action cracks nuts without damaging bolt threads.
- Chisel rotates to line up parallel to bolt. Splits non-heat-treated nuts of 7/16" (11mm) through 3/4" (19mm) diameter. Tool is 6-3/4" in length.

No.	Part No.	Description
1	<b>4600-15</b>	Taper Punch, 1/4" x 6-3/4"
2	<b>4600-14</b>	Taper Punch, 3/16" x 6-1/4"
3	<b>4600-13</b>	Taper Punch, 5/32" x 6"
4	<b>4600-3</b>	Cold Chisel, 3/8" x 5-1/2"
5	<b>4600-2</b>	Cold Chisel, 1/2" x 6"
6	<b>4600-1</b>	Cold Chisel, 5/8" x 6-1/2"
7	<b>4600-4</b>	Center Punch, 3/16" x 8"
8	<b>4600-5</b>	Center Punch, 1/8" x 5"
9	<b>4600-12</b>	Taper Punch, 1/8" x 5-3/4"
10	<b>4600-11</b>	Taper Punch, 3/32" x 5-1/4"
11	<b>4600-10</b>	Pin Punch, 3/32" x 4-1/4"
12	<b>4600-9</b>	Pin Punch, 1/8" x 4-3/4"
13	<b>4600-8</b>	Pin Punch, 5/32" x 5"
14	<b>4600-7</b>	Pin Punch, 3/16" x 5-1/4"
15	<b>4600-6</b>	Pin Punch, 1/4" x 5-3/4"
16	<b>4600-16</b>	Chisel Gauge



## 4550

### Scraper Set

- Scrapers feature polished, heat-treated, stiff, stainless steel blades. Handles are ergonomic two-component plastic and feature a non-slip grip and steel bolstered end. Packaged in a storage tray. Includes: 1-1/4" straight blade, 1-1/4" bent blade, and 2" straight blade tips.



## 6613

### Variable Pin Spanner Wrench

- Universal design fits many different types of pulleys having slots or holes, including camshaft pulleys and crankshaft pulleys.
- Wrench is adjustable from 1-1/4 inch to 5 inches; works with a 1/2 inch ratchet or breaker bar.

Set Includes:

**526908-1** – 3.5 mm pin

**526908-5** – 6 mm pin

**526908-2** – 4 mm pin

**526908-6** – 7 mm pin

**526908-3** – 4.5 mm pin

**526908-7** – 10 mm pin

**526908-4** – 5 mm pin

**526908-8** – Handle



## 4514

### Mini Snap Ring Pliers Set (4 Piece)

- Small-size pliers for work in tight areas. Service S-ring and R-ring clips, internal or external, straight or angled. Ruggedly built of heat-treated chrome molybdenum steel.
- Set includes two internal snap ring pliers (one straight, one 45°) and two external snap right pliers (one straight, one 45°).
- All pliers have .038" (1.0mm) diameter tips.



## 4651

### Screw Extractor Set

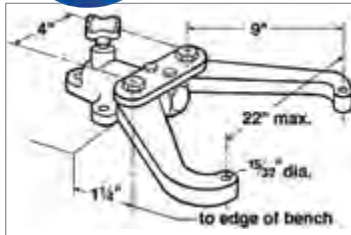
- Removes broken studs and bolts.
- Includes ten guide bushings, five drill bits and five screw extractors with extractor nuts.
- Drill bits are left handed to help removal.

# GENERAL SERVICE MOTORCYCLE TOOLS



## 4650 Mirror and Magnet Set

- Handles telescope from 6-1/2" to 25". Swivel heads allow access to tight areas.
- Large, rectangular swivel mirror is 2" x 3-1/2", and is attached to one telescoping handle; small mirror is 1-1/4" in diameter, and is interchangeable with magnets on the other handle.
- Magnets can lift up to 8 lbs.



## 7020 Bench-Mounted Holding Fixture

Securely hold and rotate small engines, transmissions, and other components while you're working on them.

- This holding fixture will handle pieces weighing up to 250 lbs., and it offers 360° of rotation with positive stops at 90° increments.
- Three sides of the mounted unit remain fully exposed.

**34607** – Base assembly only.



## Universal Outside Thread Chaser

This thread chaser will quickly restore threads on fork tubes, steering stems, axles, etc. to near original condition without the use of expensive thread-cutting equipment.

- Replaceable V-pads and dies.
- 1-1/4" to 5" O.D.

**7402**  
Thread chaser with 6 dies: threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.

**216884**  
Standard die set. Includes 6 dies, in the sizes listed above.

**202817**  
Metric die set. Includes three dies: 1 mm- 1.25 mm-1.5 mm-1.75 mm, 2 mm-2.5 mm-3.0 mm-3.5 mm; 4 mm pitch dies.

**206803**  
V-pad

## 5550 Spectrum Solar10W LED Work Light with UV Top Light



## 5551 Spectrum Trio9W LED Work Light with 3W LED Top Light



## 5552 Spectrum 30+430 Pc. LED Work Light with 4 Pc. LED Top Light



- AC/DC Rechargeable
- Li-Ion battery
- Magnetic base
- Bright LEDs - 50,000 hour life
- Adjustable 60° angle
- Slip resistant textured body
- Impact and water resistant
- Limited Lifetime Warranty

### 5550 Specifications

10W LED Work light with UV Top Light  
LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC  
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V  
Power Output: 5.0V 1000 mAh  
Charger Time: 3.5 ~ 4.0 hours  
Active Time: 2.5 hours  
Storage Temperature: -4°F to 158°F; -20°C to 70°C  
Operating Temperature: 23°F to 122°F; -5° to 50°C  
PS: LED Sector: 170°  
At 50 cm: 350 LUX (750 LM)  
Waterproof Grade IP65

### 5551 Specifications

9W LED Work light with 3W LED Top Light  
LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC  
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V  
Power Output: 5.0V 1000 mAh  
Charger Time: 3.5 ~ 4.0 hours  
Active Time: 3.0 hours  
Storage Temperature: -4°F to 158°F; -20°C to 70°C  
Operating Temperature: 23°F to 122°F; -5° to 50°C  
PS: LED Sector: 25°  
At 50 cm: 4000 LUX  
Waterproof Grade IP65

### 5552 Specifications

30 Piece LED Work light with 4 Piece LED Top Light  
LI-ION Rechargeable Battery – 3.6V 2250 mAh, AC/DC  
Charger Input AC 100 ~ 240V; 50/60Hz; DC12V ~ 24V  
Power Output: 5.0V 1000 mAh  
Charger Time: 3.5 ~ 4.0 hours  
Active Time: 4.0 to 5.0 hours  
Storage Temperature: -4°F to 158°F; -20°C to 70°C  
Operating Temperature: 23°F to 122°F; -5° to 50°C  
PS: LED Sector: 15°  
At 50 cm: 2250 LUX  
Waterproof Grade IP65





# DIESEL COMPRESSION TESTERS HEAVY DUTY TOOLS & EQUIPMENT

## 3642 12V-24V Truck Circuit Tester

### Product Features:

- Works on 12-24 volt systems.
- Features 7" stainless steel probe.
- 24' coil cord.
- Extra large clamp.

## 3903 24' jumper leads

From headlight to taillight, this extra long test lead stretches to over 24 feet in length.

Constructed from high quality polyurethane, high visibility coil cord test lead has superior memory retention and resistance to grease and oil.



## 3673 Diesel Glow Plug Tester

Glow Plug Tester provides fault detection thru LED's for a quick analysis; Short Circuit, Over Current, Normal Operation, Open Circuit/ Under Current.

- Glow Plug Tester allows for testing without removing glow plug from engine.
- Powers the glow plug to test the plug in it's operating state.
- Much more accurate test than a cold resistance test, which can miss short circuits.
- Tester uses a current measurement to accurately determine proper operation and check for short circuits.



## 3674 Diesel Fuel Pressure Tester

- Simple one wire connectivity to the fuel pressure sensor signal wire. Designed for diesel engines that have a fuel pressure sensor reading used by vehicle computer.
- Displays pressure in PSI or BAR.
- Range 0-22,000 PSI (0-1500 BAR).
- Read diesel fuel pressure in vehicle.
- No fittings required.
- Readings alternate between current and max pressure.

Use with OTC's No. 3398 to find clogged/dirty fuel injectors.

Pinpoints worn power steering pumps or racks.

PSI reading for hydrostatic drives and high pressure hydraulics.

Finds blocked intake ports and plugged catalytic converters.

Checks transmission cooler efficiency and catalytic converter temperatures.

**No need to have fuel or transmission hoses inside vehicle during a road test.**  
**No makeshift taping of gauges to the windshield.**

## Multi-Application Digital Pressure and Temperature Analyzer

Combining the functions of vacuum, oil pressure, hydraulic system pressure, fuel pressure, transmission pressure, compression, and air conditioning—all in one!

### 3492

Heavy-duty digital pressure/temperature analyzer with four pressure input receptacles and protective boot. Set includes: No. 3491-02 (5,000 psi) transducer, No. 3491-13 20' cable, No. 3500-05 bead-type temperature probe, assorted fittings, No. 3491-31 plastic storage case, instruction manual.

## Diesel Compression Tester with Adapters

This easy-to-use compression tester is designed for light- and medium-duty diesel engines equipped with glow plugs. A dual-reading gauge, featuring a push-button release valve, measures compression to 1000 PSI and 7000 kPa. The hose end has quick disconnect fittings. The tester comes with glow plug and nozzle adapters in a handy storage case.

Tester services these engines:

- Cummins B and C
- Navistar DT466/DT360
- Ford/Navistar 6.9L & 7.3L
- Detroit 6.2L & 6.5L
- Hino diesel and Mitsubishi Fuso truck engines

### 5020 – Diesel compression tester with adapters

### 5021 – Universal diesel engine compression gauge

### 304802 – Replacement gauge

Replacement Adapters (available separately)

### 47484 – Hino diesel truck engines with 12 mm x 1.25 thread

### 209633 – Ford 6.6L & 7.8L diesels

### 217791 – Cummins B 3.9L 4 cyl. & 5.9L 6 cyl. '89-'98

### 308472 – Mitsubishi Fuso truck 4D & 6D engines with 10 mm x 1.25 thread

### 310810 – Cummins C 8.3L 6 cyl. '88-'96

### 310832 – Ford/Navistar 6.9L & 7.3L, Detroit 6.2L & 6.5L with 10 mm x 1.0 thread

### 310840 – Navistar DT466/DT360



Similar to Ford 303-D103

### 6076

### Ford Diesel Compression Test Adapter

- Use with OTC No. 5021 diesel engine compression gauge.
- Remove glow plug; this adapter is used to connect the No. 5021 gauge to perform a compression test.
- Application: 1994-2003 Ford vans and pickups with 7.3L direct-injected turbocharged (DIT) diesel engine.



"Min/Max" pinpoints:

- Fuel restrictions
- Plugged filters
- Weak fuel pumps
- Transmission pressure spikes

"Delta Zero" monitors fuel pressure dropcaused by faulty check valves.

Displays readings in BAR for checking European specs.

See Scope/Meter accessories for temp probes.

Permits comparison of ABS brake pressures at each wheel.



Accessory:

### 3491-01 – 500 psi transducer

**3491-02 – 5,000 psi transducer.** Required for ABS and power steering pressure readings.

### 3491-03 – 10,000 psi transducer.

(Note: For No. 3492 only.) **3491-11 – 6' cable,** **3491-12 – 12' cable,** **3491-13 – 20' cable.**



5020

Similar to Ford 303-D091 (D93T-6000-A)



5021

Similar to Ford 303-D092 (D93T-6000-B)



Similar to Ford 303-757

### 6660

### Ford Diesel Compression Test Adapter

- Use with OTC No. 5021 diesel engine compression gauge.
- Works on 2003-2006 Ford vans and trucks—with 6.0L diesel engines.



### 6005A Glow Plug Remover

Set includes 10 mm and 12 mm split nuts, three spacers (3/16", 1/4", and 5/16"), plastic storage/organizer case and instructions. The 10 mm split nut will work on Ford 6.9L and 7.3L diesels; GM 6.2L, and 6.5L diesels; and various diesels in import vehicles. The 12 mm split nut works on various diesels in import vehicles, plus many agricultural and construction diesel applications.



### 6088 Ford 5-pin Connector Harness for Glow Plug Testing

- Provides an easy way to check glow plug resistance without having to remove the valve cover of 1994-98 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engines.
- Used with any standard digital volt ohmmeter to check glow plug resistance.

Similar to Ford 303-625



### 6595 Ford High Pressure Oil Line Disconnect Tool

- Use to disconnect the high pressure oil line from the cylinder head.
- Works on 1998-2003 Ford vans and trucks with 7.3L direct-injected, turbo-charged (DIT) diesel engines.



### 7835 Ford Rear Main Oil Seal Kit

- Works on 1994-2003 7.3L diesel engine in Ford 3/4- and 1-ton trucks.
- A complete kit with the tools you need to correctly remove and install the rear main oil seal and wear ring on the crankshaft.
- Eliminates makeshift methods of seal removal and installation that could damage the new seal or crankshaft.



### GM Duramax Injector Pullers

- Designed to pull injectors on a GM Duramax 6.6L engines.

6778 - From 2001 - 2004, Similar to J-44639.

6779 - From 2005 - 2011, Similar to J-46594.

### 6754 Diesel Fuel Pressure Gauge

- Designed to test fuel pressure on GM Duramax diesel engines.
- Similar to J-44638.



### 5060 Detroit Diesel Injector Socket

Used on GM 6.2L and 6.5L engines. This 30 mm socket ensures proper fit during nozzle removal and installation. The 3/8" square drive and 7/8" hex permit easy access in tight quarters, and prevent damage to nozzle and related components.



### 6067 Ford Injector Remover / Installer Kit

- Removes and installs injectors without damaging the injector or cylinder head.

Application: 1994-2003 Ford 3/4- and 1-ton trucks, Super Duty trucks, and vans with 7.3L direct-injected turbocharged (DIT) diesel engine.

Similar to Ford No. 303-491/No. 303-492

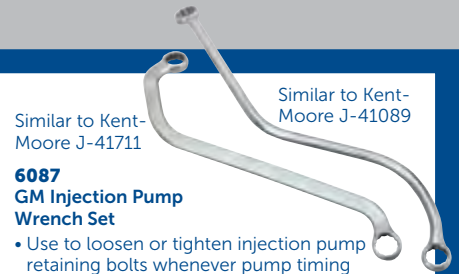


### 6069 Cummins Diesel Fuel Injector Remover Kit

Kit contains a fuel injector connector tube remover and fuel injector puller. The fuel injector connector tube must be removed before removal of the injector, or both will be damaged.

Application: 1998-1/2-2002 Dodge pickups and vans with 5.9L 24-valve Cummins diesel turbo engine.

Similar to Miller 8318



Similar to Kent-Moore J-41711

Similar to Kent-Moore J-41089

### 6087 GM Injection Pump Wrench Set

- Use to loosen or tighten injection pump retaining bolts whenever pump timing adjustment or pump service is required. Services 1996-1999 GM full-size 2- and 4-wheel drive trucks, vans, and Suburbans with 6.5L diesel engine.
- Two specially bent wrenches are needed, due to the location of the throttle, cruise control, T.V. cable bracket, cooling system crossover pipe and bracket, and the thermostat housing on vans and pickups.
- Wrenches are 15 mm, 12-point, double box-end type.



Designed for the diesel truck market, this tool will work for just about any injector you need to remove for service or replacement.

### 6752 - Fuel Injector Storage Rack with Protective Cups

Compartment are marked to help keep the injectors organized by the cylinder they came from in order to keep the injector calibration in sync with the vehicles ECM. Similar to Ford No. 303-D113.

### 6753 - Protector Cups

A set of eight replacement cups for 6752 Fuel injector storage rack. Similar to Ford No. 303-D115.

### 6749 Diesel Engine Barring Socket

- Designed to rotate engine on a Mack E7 and Cat 3208.
- Similar to J-38587-A.



### 7471A Cummins Engine Barring Tool

Insert the tool into the flywheel housing until it engages the ring gear, then attach a 1/2" square drive ratchet or breaker bar and turn. The tool's load-bearing collar provides friction-free operation while rotating the tool in the housing.

- Works on Cummins B and C series diesel engines and 5.9L liter diesels used in Dodge pickups.



# OIL FILTER WRENCHES HEAVY DUTY TOOLS & EQUIPMENT



## 7248 C-Frame Press

- The C-Frame used in conjunction with OTC Ball Joint Adapters. Can also be used for removing/installing; universal joints with needle bearings, pressed in wheel studs, and brake anchor pins on heavy-duty vehicles. Suitable for general pressing operations.

## 6935 U-Joint Service Adapter

For use with the 7248 C-Frame to service the u-joints found on Dana 60 4WD front drive axles.

Application:

- 1977-1991 Chevrolet and GMC 1 Ton
- 1975-2010 Dodge ¾ & 1 Ton
- 2000-2002 Ford Excursion
- 1999-2010 F250
- 1985-2010 F350
- 1999-2008 F450
- 1999-2004 F550



## Heavy-Duty Oil Filter Wrenches

- Features a 1/2" wide steel band that can stand up to the high torque needed to remove filters from trucks, tractors, and other heavy equipment.
- Use with a 1/2" drive ratchet or breaker bar.



- 4555** – Heavy-Duty Oil Filter Wrench for filter dia. of 4-1/8" to 4-21/32" (104 mm to 118 mm).
- 4556** – Heavy-Duty Oil Filter Wrench for filter dia. of 4-21/32" to 5-5/32" (118 mm to 131 mm).
- 4557** – Heavy-Duty Oil Filter Wrench for filter dia. of 5-5/32" to 5-21/32" (131 mm to 144 mm).



## Adjustable Oil Filter Pliers

- Forged jaws with sure-grip teeth grab the filter for easy removal.
- Slip-joint ratchet and lock mechanism allows a secure grip on filters.

**4560** – Small Adjustable Oil Filter Pliers. Plier is 13-1/2" long and fits filters ranging from 2-1/4" to 5" (57 mm to 127 mm) in diameter.

**4561** – Large Adjustable Oil Filter Pliers. Plier is 18" long and fits filters ranging from 3-3/4" to 7" (95 mm to 178 mm) in diameter.

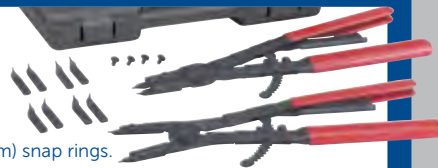
**4562** – Adjustable Oil Filter Pliers Set. Includes both the No. 4560 and No. 4561 listed above.

## 4513 Heavy-Duty Snap Ring Pliers Set (2 piece)

- Heat treated steel "circlip" pliers for large equipment repair.
- Replaceable tips and spring ratchet locking mechanism to securely hold against snap ring tension.
- Internal pliers' capacity 3-1/16" to 6-1/4" (78 mm to 159 mm) snap rings.
- External pliers' capacity 3-1/2" to 6-1/2" (89 mm to 165 mm) snap rings.
- Blow-molded storage case includes extra sets of replaceable tips.
- Overall length 16"; handle length 12-1/2".

### 4513 includes:

Tool No.	Description	Tool No.	Description
4513-1	Internal snap ring pliers	4513-4	(2) .12" (3 mm) 45° tips
4513-2	External snap ring pliers	4513-5	(2) .12" (3 mm) 90° tips
4513-3	(2) .12" (3 mm) straight tip	4513-6	4 tip retaining screws



## Retaining Ring Pliers

**7300** – Internal, straight tip retaining ring pliers. 16" long.

**7301** – External, straight tip retaining ring pliers. 16" long. See page 116 for replacement tips.



7300  
Internal tip



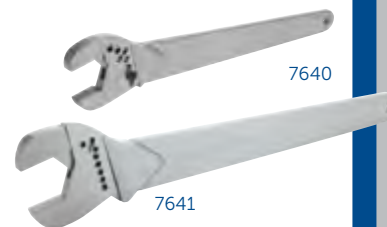
7301  
External tip

## Giant Adjustable Wrenches

The really big jobs call for really big tools. These wrenches will handle 42 bolt sizes from 1-3/8" to 4-3/4". Together, both wrenches weigh just 41 lbs., but can replace over 1,000 lbs. of fixed-size wrenches.

**7640** – Giant adjustable wrench. Rated to withstand 2,000 ft. lbs. of torque. Nut/bolt size 1-3/8" to 2-7/8". Increments of Jaw adjustment 1/8", length 24". Head thickness 7/8".

**7641** – Giant adjustable wrench. Rated to withstand 5,000 ft. lbs. of torque. Nut/bolt size 2-3/4" to 4-3/4". Increments of Jaw adjustment 1/8", length 36". Head thickness 1-1/8".



## 7463 Gland Nut Wrench

This wrench is fully adjustable to fit hydraulic cylinders on vehicles having gland nuts from 1" to 3-3/4" in diameter. It also reverses to work on either 1/4" or 7/32" pinholes.

- Accommodates a 1/2" drive ratchet.



**215128** – Replacement pin.

## 1266 Adjustable Gland Nut Wrench

Here's a wrench designed to fit hydraulic cylinders on most farm and construction equipment. It fits gland nuts from 2" to 6" diameter pin to pin. Includes reversible pins, sizes 1/4" and 5/16" diameter.

- Accommodates a 3/4" drive ratchet or breaker bar.



**204928** – Replacement pin.

Similar to Ford D79L-6731-A

## 7062A Universal Filter Wrench

This filter wrench will stand up to the job of removing nearly any spin-on filter (up to 6"). Universal design permits use on most vehicles. The tough 2" wide nylon strap holds firmly. The more leverage applied, the tighter it grips.

- Accommodates a 3/8" drive ratchet.



## 5028 Slide Hammer Puller

Just 8-1/2" long to fit into tight spots, but its 1-1/2 pound hammer gives you a little extra muscle for stubborn jobs. It's perfect for pulling injector nozzles. The shank is threaded 1/2" – 20 and has a 5/8" – 18 threaded adapter included. Works with many OTC pulling attachments.



## 5961HD Heavy-Duty Drain Plug Pro™

- For Agricultural, Commercial, and Heavy-Duty Vehicle Applications
- Remove fluid drain plugs without touching the plug or hot fluids!
- NO touching HOT plugs.
- NO HOT fluids on hands.
- Removable attachment permits use with common 3/8" square drive sockets. Great for starting bolts in hard-to-reach places.
- Just magnetically attach heavy-duty drain plug pro™ to pre-loosen drain plugs and rotate to remove.
- Magnetic attachment for internal 1/2" square drive drain plugs.
- Magnetic attachment for large drain plugs.



1200

### Sleeve Puller / Installer Sets

These sets work on a wide array of truck, bus, and tractor engines, as well as those in other vehicles. They'll handle wet and dry sleeves – and you won't need to remove head studs. Save time, effort, and money.

- Choice of two sets: manual or 17-1/2 ton hydraulic powered.
- Wide range of adapter plates available to fit most engines.

### 1200

#### Manual Sleeve Puller Set

This manually operated, screw-powered device removes cylinder sleeves from most truck, bus, and tractor engines. Adapter plates (not included in the set) accommodate a wide range of bore sizes. See application chart on next page. The puller enables one technician to handle sleeve-pulling tasks.

Not recommended for Mack engines (use No. 1202 set).

### 1201

#### Installing Conversion Kit for 1200 Set

Permits the No. 1200 sleeve puller to handle both removing and installing operations. Use plate Nos. 1253–1256 for installing, and plate Nos. 1219–1250 for removing. Plates are not included with kit.

1201



1203

### Sleeve puller plate application chart

The puller plates listed here work with manual and 17-1/2 ton hydraulic sleeve pullers	Bore Dia.	Plate No.
J.I. CASE – 207 Diesel	4"	<b>1227</b>
CATERPILLAR – 1673C; 1674; 3304; 3306; D330C; D333C; D334, D326, D337	4-3/4" 5-1/8"	<b>1240</b> <b>1246</b>
CUMMINS – V Series 903 NT855	5-1/2"	<b>1250</b>
H & NH	4-7/8"	<b>1242</b>
GENERAL MOTORS – 53 Series	3-7/8"	<b>1225</b>
71 Series	4-1/4"	<b>1232</b>
INT'L HARVESTER – C-221, C-263	3-9/16"	<b>1221</b>
D-166, D-188, D-236, D-282, C-248, D-248, D-310, D-358, D-155	3-11/16"	<b>1222</b>
D-179, D-206, D-239	3-7/8"	<b>1225</b>
C-281, D-281, D-361	4-1/8"	<b>1230</b>
D-691, D-461	4-3/4"	<b>1240</b>
D-407	4-5/16"	<b>1233</b>
JOHN DEERE – 4-270, 6-404	4-1/4"	<b>1232</b>
6-531	4-3/4"	<b>1240</b>
6-619	5.12"	<b>1246</b>
8-955	5.512"	<b>1250</b>
MACK – END(T) 673, 675, 676	4-7/8"	<b>1243</b>
672	4-7/8"	<b>1242</b>
END (T) 711, 707	5"	<b>1245</b>
PERKINS – AD3.152, AG3.152, AD4.203	3.6"	<b>1219</b>
AG4.212, A4.236, AG4.236, A6.354, A6.3541, ATC6.3541, AT6.354, AT6.3541	3-7/8"	<b>1223</b>

**Universal puller for wet-type sleeves, see 1205.**



**24824** Thrust washer



**37592** Three-way head

**27908** 13" risers (3 required)

**22205** Forcing nut

**208675** Swivel assembly

**10088** Cap screws, hex hd. (3)

**10586** Flat washers (3)

**11466** Thrust bearing

**32976** Pulling screw

1202 shown



**1205**

#### Universal Puller for Wet-Type Sleeves

This tool will remove cylinder sleeves faster than ordinary pullers because it requires very little setup time. Cone adjustment positions the puller jaws quickly, locking bar is tightened. To aid in breaking "frozen" sleeves loose, adjustable bridge is positioned on the cylinder block and the bearing-mounted forcing nut is tightened. Next, bridge is removed and slide hammer assembly is attached. With a few sharp hammer blows, sleeve is pulled. In most cases, job time will average less than two minutes per cylinder. The puller features a 5 lb. slide hammer to help bust loose even the most stubborn sleeves.

- Special adapters are unnecessary.
- Adjustable jaws fit sleeves 3" to 6-1/2" in diameter.

No. 1201	Description
<b>33769</b>	Screw extension
<b>41291</b>	Installing bar
<b>302340</b>	Yoke assembly

4180

#### 17-1/2 Ton Hydraulic Sleeve Puller Set

Removes and installs sleeves of many makes and models of trucks, buses, and tractors. See chart at left and on next page.

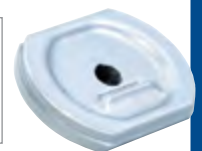
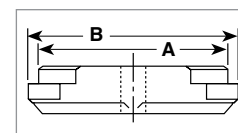
**1202** – 17-1/2 ton hydraulic sleeve puller set.

**1203** – Sleeve puller without hydraulic assembly.

No. 1202	Description (includes 1203 and 4180)
<b>37592</b>	Three-way head
<b>33769</b>	Screw extension
<b>302482</b>	Speed nut
<b>302340</b>	Yoke assembly
<b>10088</b>	Cap screws, hex hd (3)
<b>32976</b>	Pulling screw
<b>4180</b>	Hyd. ram/pump assy.
<b>27908</b>	13" risers (3 req'd)
<b>41291</b>	Installing bar
<b>10221</b>	Hex safety nut
<b>208675</b>	Swivel assembly
<b>10586</b>	Flat washers (3)
<b>21714</b>	Insert

#### Sleeve Removal Plates

Designed to work with set Nos. 1200, 1202, and 1203, these removal plates fit the full spectrum of cylinder sleeve sizes. Determine engine bore size ("A" dimension) and O.D. of sleeve to be pulled ("B" dimension). Then consult chart to the right.

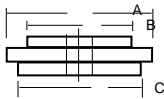


Bore Inches	A I.D. +.010 -.000	B I.D. +.010 -.000	OTC Plate Number
3.600"	3.585	3.657	<b>1219</b>
3-9/16"	3.547	3.663	<b>1221</b>
3-11/16"	3.671	3.792	<b>1222</b>
3-7/8"	3.840	4.047	<b>1223</b>
3-7/8"	3.859	4.093	<b>1225</b>
4"	3.984	4.218	<b>1227</b>
4-1/8"	4.109	4.229	<b>1230</b>
4-1/4"	4.235	4.470	<b>1232</b>
4-5/16"	4.302	4.450	<b>1233</b>
4-3/4"	4.734	5.171	<b>1240</b>
4-7/8"	4.860	4.980	<b>1242</b>
4-7/8"	4.860	5.045	<b>1243</b>
5"	4.977	5.120	<b>1245</b>
5-1/8"	5.093	5.593	<b>1246</b>
5-1/2"	5.484	5.718	<b>1250</b>



# HEAVY DUTY TOOLS

## HEAVY DUTY TOOLS & EQUIPMENT



### Sleeve Installation Plates

Each of these dry-sleeve installation plates covers a range of bore sizes. Their reversible design makes both sides usable. The plates work with our manual or 17-1/2 ton hydraulic puller/ installers.

(Nos. 1200, 1202, and 1203). Check chart at below to ensure correct sleeve selection.

Fits Sleeves From	A	B	C	No.
3-3/16" to 3-7/16"	3-7/8"	3.171"	3.421"	<b>1252</b>
3-9/16" to 3-7/8"	4-1/4"	3.546"	3.859"	<b>1253</b>
4-1/8" to 4-3/8"	4-3/4"	4.109"	4.359"	<b>1254</b>
4-3/8" to 4-3/4"	5-1/4"	4.390"	4.734"	<b>1255</b>
4-13/16" to 5-3/4"	6-3/8"	4.797"	5.734"	<b>1256</b>



### 5022 Oil Seal and Wear Ring Installer

This two-piece tool makes the difficult job of correctly installing the rear crankshaft seal and wear ring on most Navistar DT-360 and DT-466 engines thru 1996 an easy task. Bolt the adapter to the crankshaft and wrench the component home.

- Eliminates damage to seals or wear ring that can occur when driving them into place.



### 7106 Cylinder Liner Height Gauge with Hold-Down Bar

This set lets you meet those exacting specifications necessary for optimum diesel engine performance. It accurately measures cylinder bore flatness and depth. The hold-down bar correctly seats the liner for accurate measurement of liner protrusion. The easy-to-read dial is in .001 inch graduations, 1.000" range.



### 7161 Cummins Engine Turning Tool

This tool makes easy work of manually rotating a Cummins 855 cubic inch engine. It's essential hardware when you're bringing pistons to top dead center to adjust injector timing.

### 5039 Charged Air Cooler Tester

This is the easy way to find air leaks in the charged air cooler systems used on class 7 & 8 truck engines. The tester features a large 2-1/2", 0-60 PSI pressure gauge, regulator and relief valve, and two safety cables. It also has quick disconnect air fittings that attach to a 3", 3-1/2", or 4" cooler hose.



### 5071 Cummins Water Pump Pulley Tool

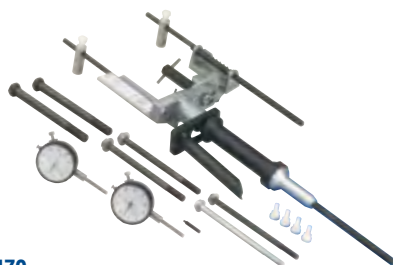
This heavy-duty tool is designed to remove or install water pump pulleys on Cummins L10 and M11 engines, 1991 and newer. The installer has a rugged thrust bearing that allows for friction-free pulley installation without damaging pump components.



### 7119 Compressor Drive-Gear Coupling Puller

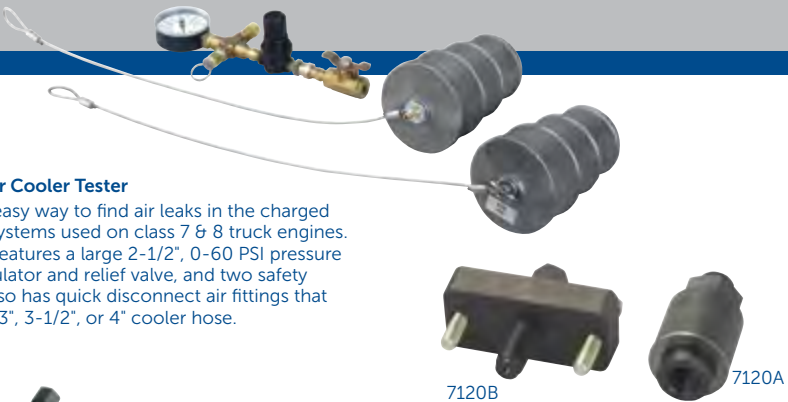
Here's the solution for removing the coupling from the Cummins Compact and Bendix air compressors found on many Cummins 855 cubic inch engines. The split collet design fits over the coupling, and mechanical force does the work.

- Works on compressors with 1-3/4" O.D. shaft.



### 7470 Cummins Diesel Injector Timing Kit

Measures static timing on Cummins J, K, N, NH, V-12, N-14, and L-10 series diesel engines. With this tool you can determine the injector push tube travel in relation to piston travel. Tool is installed with one dial indicator in the injector bore and the other on the injector push tube. Turn the engine over manually to find top dead center. By checking the gauges, you can determine if timing is within factory specifications, then make adjustments to the cam followers.



### 7120 Cummins Drive-Pulley Tool Set

This two-piece set is designed to remove and install the drive pulley on Cummins NH and NTC 855 cubic inch engines. The 7120B remover simply bolts into the tapped holes for pulling. The 7120A installer threads onto the pulley accessory drive shaft for easy installation.

- 7120A** – Drive-pulley installer.
- 7120B** – Drive-pulley remover.



### 5044 Self-Adjusting Clutch Rotating Tool

This handy tool replaces the self-adjuster mechanism on Spicer self-adjusting clutches, allowing you to manually adjust them with a wrench or socket.

- 3/4" hex drive.



### Pilot Bearing Pullers

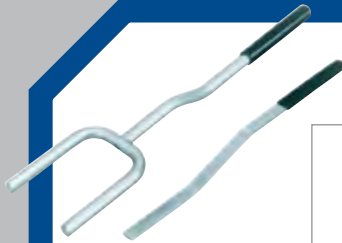
These tools make quick work of pulling stubborn, rusted pilot bearings. No. 5048 fits 1-1/4" I.D. bearings, and No. 5049 fits 1" I.D. bearings. The puller's forcing screw expands the jaws inside the bearing and simultaneously pushes against the crankshaft.

- 5048** – Pilot bearing puller for 1-1/4" I.D.
- 5049** – Pilot bearing puller for 1" I.D.



### 7028 Clutch-Adjusting Wrench

This clutch-adjusting wrench will solve the difficult, time-consuming job of internally adjusting heavy-duty Spicer clutches. Using this wrench is much quicker and easier than makeshift methods such as pry bars, which often result in component damage, poor job performance, or extra downtime.

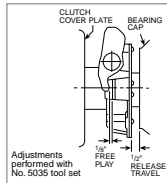


Similar to Ford 308-D008 (D93L-4201-A)

### 5035 Truck Clutch Adjustment Set

The gauges in this set enable you to check the adjustment of pull-type, heavy-duty clutches, ensuring their correct operation. One gauge checks the amount of free play between the yoke and the bearing's wear pad. The other gauge lets you determine the amount of travel between the release bearing and transmission bearing cap.

- Release bearing travel gauge.
- Clutch pedal free play gauge.



Adjustments performed with No. 5035 tool set



### 5190A Heavy-Duty U-Joint Puller

The ideal tool for disassembling drivelines.

- May be used with up to a one-inch impact wrench.
- Quickly and easily removes sealed U-joint cups without the need for hammering or heat.
- Will not damage the driveshaft, yoke, bearing cups, or joints.
- Fits practically all Class 7 and 8 trucks, including: Spicer driveline 1610, 1710, 1760, 1810, 1880 Spicer SPL 140, 170, and 250 "Life Series" Meritor (Rockwell) 16N, 17N, 18N, 1710 Meritor RPL 20 and 25 "Permalube" Series.



### 5192 Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on bolt-retained universal joints. Fits series 1610 to 1880 and nearly all other heavy-duty truck and machine type u-joints with bolt-retained bearing cups.

- Automatically aligns bearing cups during installation.
- Eliminates the possibility of damage to the needle bearing.

Similar to Ford 308-D009 (D93L7025-A)

### Truck Clutch Alignment Shafts

These 10-spline clutch alignment shafts are available in the three most popular sizes: 1-1/2", 1-3/4", 2" O.D., and are designed for use on heavy-duty single, two-plate, push/pull, manual, and self-adjust clutches. The shafts are constructed of lightweight fiberglass-reinforced nylon that won't hang up in clutch disc splines. Yet, they're rugged and will easily support the weight of heavy pressure plates.



**5070** – Truck clutch alignment shaft. 1-1/2" O.D., 30 mm pilot.

**7072A** – Truck clutch alignment shaft. 1-1/2" O.D., 1" pilot, 10 splines, 3.25" long. Similar to Ford 308-D001 (D79T-7550-A).

**7073A** – Truck clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 3.75" long. Similar to Ford 308-D002 (D79T-7550-B).

**7074A** – Truck clutch alignment shaft. 2" O.D., 1-1/4" pilot. 10 splines, 3.6" long. Similar to Ford 308-D003 (D79T-7550-C).

**7480** – Truck clutch alignment shaft. 1-3/4" O.D., 1" pilot. Similar to Ford 308-D010 (D93T-7550-A).

**5029** – Clutch alignment shaft. 2" O.D., 1-1/4" pilot. 10 splines, 7.3" long. Similar to Ford 308-D011 (D93T-7550-B).

**5030** – Clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 7.375" long. Similar to Ford 308-D012 (D93T-7550-C).



### 5191 Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on Dana/Spicer SPL "Life Series" quick-disconnect universal joints.

- Three individual adapters press bearings to the manufacturer's recommended depths.
- Adapters fit Spicer SPL 140, 170, and 250 series drivelines.



### 7490 U-Joint Tool

Designed for a 1/2" impact wrench, this U-joint tool removes even the most stubborn U-joints with ease. It's compact and easily set up, making it ideal for service calls. And it can be used at different angles and in tight places, eliminating those damaging makeshift methods. The puller's legs have holes for bolt storage.

- Bolts included: 5/16"-24 x 1-1/2", 3/8"-24 x 1-1/2", 7/16"-20 x 1-1/2", M8-1.25 mm x 35 mm.
- Works on most Dana Spicer and Meritor U-joints – except Spicer's Life series model SPL250X.



### 5043 Clutch Service Set

Here's an ideal companion set to the clutch handler. Designed for Spicer heavy-duty clutches, the nine tools in this set help with a variety of jobs, from clutch installation and removal to flywheel drive-pin installation to clutch adjustment.

- Includes handy plastic carrying case.

OTC No.	Description
5044*	Self-adjust clutch rotating tool. Rotates adjusting ring.
5045*	Flywheel drive pin installing tool. Aligns and installs drive pins in 14" heavy-duty truck pot-type flywheels.
5046*	Clutch release tool. Removes shipping blocks from between clutch housing and release bearing.
7028*	Adjusting wrench. For internal adjustment of multiple lever and angle-spring clutches.
7073A*	Clutch alignment tool. 1-3/4" O.D. Provides perfect fit to spline of clutch disc.
7074A*	Clutch alignment tool. 2" O.D. Provides perfect fit to spline of clutch disc.
213013	Pair of 3/8" flywheel to clutch guide pins.
213014	Pair of 7/16" flywheel to clutch guide pins.
213015	Hex key Wrench. Removes/installs flywheel drive pin set screws.

\* Tool is available separately.

### 7057 U-Joint Puller

This service tool easily removes stubborn, corroded bearings without damaging U-joint components, even in limited space. The tool applies up to 7 tons of force to separate yoke assemblies and remove bearings. Far superior to sledgehammer methods.

- Works on Meritor 16N, 17N, 18N, and 1710 series U-joints and Spicer 1600/1610 to 1880 series U-joints.
- Includes plastic storage box, No. 1036 2-jaw puller, and instructions.



# HEAVY DUTY LOCKNUT SOCKETS HEAVY DUTY TOOLS & EQUIPMENT

Wheel bearing locknuts are easy to remove or install with these specially designed sockets. They're made of high-strength steel and resist rounding out.

NOTE: Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids sockets' warranty.

1902 – Similar to Ford No. 205-039 (T70T-4252-B)

1904 – Similar to Ford No. 205-040 (T70T-4252-D)

1905 – Similar to Ford No. 205-041 (T70T-4252-E)

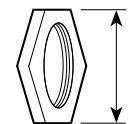
1910 – Similar to Ford No. 205-042 (T70T-4252-K)

1928 – Similar to Ford No. 205-043 (T70T-4252-W)

Measure from flat to flat to determine size of locknut, then consult chart to find the correct socket.



Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size
1901	2-3/32" (6 pt.)	1923	2-3/4" (6 pt.)	1924	3-3/8" (8 pt.)	1940	4-1/8" (8 pt.)
1920	2-1/4" (6 pt.)	1937	2-3/4" (8 pt.)	1910	3-1/2" (6 pt.)	1916	4-3/8" (6 pt.)
1902	2-3/8" (6 pt.)	1932	2-7/8" (6 pt.)	1911	3-1/2" (8 pt.)	1917	4-3/8" (8 pt.)
1936*	2-3/8" (6 pt.)	1933	2-7/8" (8 pt.)	1925	3-3/4" (8 pt.)	1938	4-1/2" (8 pt.)
1903	2-3/8" (8 pt.)	1906	3" (6 pt.)	1926	3-3/4" (6 pt.)	1941	4-13/16" (8 pt.)
1921	2-1/2" (6 pt.)	1907	3" (8 pt.)	1927	3-13/16" (8 pt.)	1918	4-7/8" (6 pt.)
1904	2-9/16" (6 pt.)	1934	3-1/8" (6 pt.)	1912	3-7/8" (6 pt.)	1919	4-7/8" (8 pt.)
1905	2-9/16" (8 pt.)	1935	3-1/8" (8 pt.)	1913	3-7/8" (8 pt.)	1939	5-1/4" (6 pt.)
1928*	2-9/16" (6 pt.)	1908	3-1/4" (6 pt.)	1914	4" (6 pt.)	7795	2-1/2" (6 pt.)
1922	2-5/8" (6 pt.)	1909	3-1/4" (8 pt.)	1915	4-1/8" (6 pt.)	7796	2-3/4" (6 pt.)



Measure from flat to flat to determine size of locknut, then consult chart to select a socket. Warranty is void if tool is subjected to impact wrench use.



\* Fits special "rounded" hex nut found on Dana axles of some Ford trucks.

\* Depth of locknut sockets is 5".

## Metric Truck Wheel Bearing Locknut Sockets

Socket No.	Opening Size	Socket No.	Opening Size	Socket No.	Opening Size
1950M	54 mm (6 pt.)	1955M	80 mm (6 pt.)	1962M	100 mm (8 pt.)
1951M	55 mm (6 pt.)	1956M	82 mm (8 pt.)	1959M	106 mm (8 pt.)
1952M	60 mm (6 pt.)	1957M	90 mm (8 pt.)	1960M	110 mm (8 pt.)
1953M	70 mm (6 pt.)	1958M	94 mm (8 pt.)	1961M	120 mm (6 pt.)
1954M	71 mm (6 pt.)				

## 5059 Hubcap Installer

Truckers like chrome, and many of them accent their truck's drive axle with chrome hubcaps designed to snugly fit around the axle-shaft bolts. Unfortunately for service shops, these hubcaps are often tricky to install without causing damage. That's where our hubcap installer comes in handy. Constructed of high-density polyethylene, this tool guides the cap into place over the axle nuts, protecting it from unwanted and costly dents.



## 5047 Lug Nut Cap Remover

Chrome-plated lug nut caps found on many heavy-duty trucks and trailers can be tough to remove, and they're easily damaged if you pry them off or use an ordinary cap remover. This tool avoids those problems. It is ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing force you apply.

- Features cushioned handles.



## 9850 Truck Wheel Bearing Locknut Sockets (6-pt.)

21 wheel bearing locknut sockets with tool board. **62908** – Display board only.

No.	Qty.	Description
1901	1	Locknut socket (2-3/32")
1902	1	Locknut socket (2-3/8")
1904	1	Locknut socket (2-9/16")
1906	1	Locknut socket (3")
1908	1	Locknut socket (3-1/4")
1910	1	Locknut socket (3-1/2")
1912	1	Locknut socket (3-7/8")
1914	1	Locknut socket (4")
1915	1	Locknut socket (4-1/8")
1916	1	Locknut socket (4-3/8")
1918	1	Locknut socket (4-7/8")
1920	1	Locknut socket (2-1/4")
1921	1	Locknut socket (2-1/2")
1922	1	Locknut socket (2-5/8")
1923	1	Locknut socket (2-3/4")
1926	1	Locknut socket (3-3/4")
1928	1	Locknut socket (2-9/16" rounded)
1932	1	Locknut socket (2-7/8")
1934	1	Locknut socket (3-1/8")
1936	1	Locknut socket (2-3/8" rounded)
1939	1	Locknut socket (5-1/4")



## 5047LP Lug Nut Cap Remover Locking Pliers

- Designed to remove lug nut caps found on heavy duty truck and trailers quickly and easily without damage. Caps can be easily damage by prying or using standard cap removers.
- Locking plier design with specially coated jaws apply maximum grip on the lug nut caps without damage.

## 9851

### Wheel Bearing Locknut Sockets (8 pt.)

18 wheel bearing locknut sockets with tool board.

**62909** – Display board only

No.	Qty.	Description
1903	1	Locknut socket (2-3/8")
1905	1	Locknut socket (2-9/16")
1907	1	Locknut socket (3")
1909	1	Locknut socket (3-1/4")
1911	1	Locknut socket (3-1/2")
1913	1	Locknut socket (3-7/8")
1917	1	Locknut socket (4-3/8")
1919	1	Locknut socket (4-7/8")
1924	1	Locknut socket (3-3/8")
1925	1	Locknut socket (3-3/4")
1927	1	Locknut socket (3-13/16")
1929	1	Locknut socket (2-5/8")



No.	Qty.	Description
1930	1	Locknut socket (2-7/8")
1931	1	Locknut socket (3-5/8")
1933	1	Locknut socket (2-7/8")
1935	1	Locknut socket (3-1/8")
1937	1	Locknut socket (2-3/4")
1938	1	Locknut socket (4-1/2")

## 9852

### Wheel Bearing Locknut Sockets

A selection of popular sizes in 6- or 8-point.

**62910** – Display board only.

No.	Qty.	Description
1904	1	Locknut socket (2-9/16" hex)
1908	1	Locknut socket (3-1/4" hex)
1909	1	Locknut socket (3-1/4" 8 pt.)
1910	1	Locknut socket (3-1/2" hex)
1913	1	Locknut socket (3-7/8" 8 pt.)
1914	1	Locknut socket (4" hex)
1915	1	Locknut socket (4-1/8" hex)
1921	1	Locknut socket (2-1/2" hex)
1922	1	Locknut socket (2-5/8" hex)



No.	Qty.	Description
1923	1	Locknut socket (2-3/4" hex)
1928	1	Locknut socket (2-9/16" hex rounded)
1932	1	Locknut socket (2-7/8" hex)

## 9814

### Truck Pinion Sockets

We've designed and built these sockets to have the correct clearance for yoke and locknut assemblies on a variety of truck transmissions and differentials. The sockets have 3" of usable depth and are 4" long. Using the right tools saves time and effort, eliminating the need to destroy standard sockets by grinding them down to fit tight pinion clearances.

No. 1981\* – Socket only, not included in set.

**62911** – Tool Board only

Socket No.	Opening Size	Socket No.	Opening Size
1975	2" (6 pt.)	1980	2-3/4" (6 pt.)
1976	2-1/8" (6 pt.)	1981*	2-1/2" (6 pt.)
1977	2-1/4" (6 pt.)	NOTE: Use sockets with 3/4" square-drive, manually powered handles only. Warranty void if tool is subjected to impact wrench use.	
1978	2-3/8" (6 pt.)		
1979	2-5/8" (6 pt.)		



## 1944

### Budd Wheel Sockets

- Metric sizes for Isuzu, Hino, Mitsubishi Fuso, and import trucks; fit front and rear axle wheels.

- 1-1/2" hex Budd wheel socket for American-made trucks with dual rear wheels.

These sockets work on the import truck Budd wheels. Their extra deep design lets you remove both nut and stud with just the one socket. Usable with a 1" square drive impact wrench.

1944 – Consists of 1945A, 1946A, 1947A, 1948A, and 1949A, in a blow molded organizer case.

**1945A** – 35 mm hex socket with 17 mm sq.

**1946A** – 38 mm hex socket with 20 mm sq.

**1947A** – 41 mm hex socket with 21 mm sq.

**1948A** – 33 mm hex Budd wheel socket. For Mack Midliners, White Volvo, and other import trucks w/dual rear wheels.

**1949A** – 1-1/2" hex Budd with 13/16" square wheel socket. For American-made trucks with dual rear wheels.

### Tubular Spanner Wrenches

- Six-lug, spanner-type wrenches remove and install rear wheel bearing locknuts. They're built for use with a 3/4" square-drive ratchet or breaker bar.



**1929** – Wrench for servicing Chevrolet and GMC 5,200 and 7,200 lb. axles. Socket O.D. is 2-5/8".

**1930** – Wrench for servicing Chevrolet and GMC 11,000 to 13,500 lb. axles. Socket O.D. is 2-7/8".

**1931** – Wrench for servicing Chevrolet and GMC 15,000 lb. axles; 17,000 lb. 2-spd. axles; 15,000 lb. trailing axles. Socket O.D. is 3-5/8".

### Jimmy Bars

We've forged these bars from chrome alloy steel, then heat-treated them to resist bending and breaking.

**7166** – 5/8" diameter, 18" long

**7167** – 3/4" diameter, 24" long

**7168** – 7/8" diameter, 30" long

**7420** – 7/8" diameter, 46" long

**7421** – 1" diameter, 54" long



# STEERING / SUSPENSION TOOLS HEAVY DUTY TOOLS & EQUIPMENT



4240

## Kingpin & Brake Anchor Pin Pusher

With this pin remover, hydraulic force and precision tooling replace torch-and-hammer methods for getting the job done quickly and easily. Five special collars and two pins allow this unit to work on both straight and tapered kingpins and accommodates sizes from 7/8" to 2" in diameter and up to 11-1/4" long. The tool delivers 30 tons of hydraulic force to push out even the most corroded kingpins. A job that could consume the better part of a day is done in minutes. The anchor pin can be removed quickly by using the special adapter installed in the pusher's base block and the unit positioned over the brake's spider.

- Works on many models of trucks and buses.
- 27-1/2" high x 8-1/2" wide.
- 30-ton capacity.
- Set includes No. 4002 hydraulic hand pump, No. 9767 hose, No. 9798 hose-half coupler, No. 4121 Power Twin 30-ton ram, and No. 29424 anchor pin adapter.

**4240 – Complete kingpin and anchor pin pusher set with hydraulics**

**4241 – King- and anchor-pin pusher with anchor pin adapter without hydraulics**

**29424 – Anchor pin adapter only**



4241

29424



5079

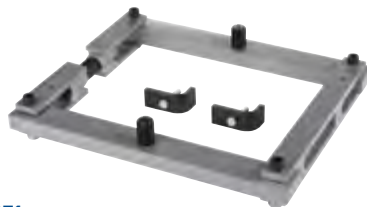
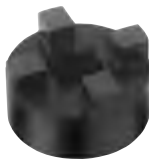
## Heavy-Duty Power Steering Pump Analyzer

- There is only one way to troubleshoot problem components in a heavy-duty power steering system: a flow and pressure reading meter. OTC's new No. 5079 measures both: 1 to 10 gallons oil flow and up to 3,000 psi of pressure.
- When connected in line, this universal analyzer will isolate the failed components in just minutes. There is no wasted time as in trial and error methods.
- The set is complete with high pressure hoses, 9/16"-18 standard fittings, and quick disconnect couplers to handle Eaton/Vickers, TRW, Ross, and Shepard power steering systems.

## 5053 Mack Kingpin Socket

Here is a socket that makes life a little easier for anyone who works on Mack trucks. Designed for 1/2" square drive ratchet or breaker bar, the socket fits the slotted adjusting screw in tapered kingpins used on most Mack front axles (12,000 to 20,000 lbs.).

- Socket O.D. 1.8"



## 7071 Differential Housing Spreader

Removing and installing differential ring gear assemblies is typically a difficult, time-consuming chore – that is, unless you're using this differential housing spreader. This device uses mechanical screw power to spread the housing. Allowing easy removal of the differential assembly while eliminating damage often caused by makeshift methods.

- Works on Dana axle models 30 through 70.

## 5065 Tie Rod Socket for Medium-Duty Trucks

Services GM-, Ford-, and Chrysler-built 1-ton 2WD and 4WD trucks. Also works on medium-duty Class 2 through Class 6 trucks. Use with a 1/2" drive impact wrench to easily remove the tie rod ends from the tie rod.

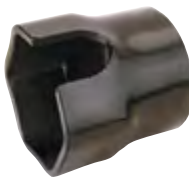
- Socket I.D. 2-1/8"



## 5068 Truck Tie Rod Socket

Designed to withstand the force of a 3/4" drive impact wrench, this rugged socket makes truck tie-rod end removal quick and simple.

- Works on inner and outer tie rod ends on 12,000 to 16,000 lb. truck axles.
- Socket I.D. 2-3/4"



## 5052 Slack Check

This tool enables you to quickly check the brake adjustment on class 7 and 8 trucks and trailers having S-cam brakes. It features a sturdy, four-position handle to provide the leverage you need at the proper angle.

- Works on manual or automatic slack adjusters.



## 4295 Wheel Stud Service Kit

- Works on most hubs for installation and removal.
  - All sizes of studs.
- Installation done by pushing on the head, eliminating the need for threaded adapters.
  - Reduces number of adapters required
  - Reduces damage to studs
  - Increases ease of use
- Remove and install 10 studs in only 10-15 minutes (compare to 20-30 minutes for more expensive competitive products).
- Can be powered with an impact wrench, no hydraulic power source required.
- No need to remove hub from vehicle.
- Reduces risk of damage to hubs, studs, and bearings when using tool.
- Weighs only 12 lbs., assembled to remove studs and 14 lbs., assembled to install studs.





### 7180 Universal Bearing Cup Installer

This handy, adjustable tool is designed to install wheel-bearing cups in a wide range of heavy-duty axles. Simply adjust and lock the jaws to the cup I.D., slip on the new cup, set it in the bore, and drive it in with a hammer. The tool helps eliminate the damage caused by makeshift methods.

- Works on axles from 11,000 to 50,000 lb. capacity.
- Adjusts to fit 3-5/8" to 6-1/2" O.D. bearing cups, which adds up to as many as 30 individual drivers.

**52038** – Replacement jaw.

**207561** – Replacement retaining spring.



### 5038 Brake Anchor Pin and Bushing Service Set

With the No. 5038, there's no need to remove the bearing hub assembly just to replace the pins and bushings on 16-1/2" S-cam trailer and tractor "Q" brake systems. Much less complicated and time consuming!

- Special tooling and our C-frame press get you past the hub assembly, so you can do the job quickly and professionally without damaging other parts.
- Includes everything needed for removal and replacement.



### 5081 S-Cam Air Brake Spring Tool

- Eliminate makeshift, unsafe methods of unhooking and reconnecting retaining springs when replacing brake shoes on heavy-duty tractors and trailers.
- Simply hook the retaining spring loop and press down. Lever action against the axle makes the job a snap!

**314548** – Replacement hook kit.



### 5080 Truck Front Leaf Spring, Pin, and Bushing Service Set

- Delivers 10 tons of hydraulic force to remove and install truck front spring eye bushing assemblies quickly and easily.
- Services bushings with diameters from 1-1/4" through 1-7/8", and pin diameters from 7/8" through 1-1/8". Handles all popular OE and aftermarket components, including Horton pin and bushing assemblies.
- Service bushing assemblies, in many cases, without removing leaf spring hangers and spring assemblies from the vehicle.
- All accessories are included except the hydraulic hand pump and hydraulic hose which must be purchased separately.



### 5085 Hub Oil Seal Puller

- Eliminates bearing and hub damage that can occur when a punch and hammer is used to remove the seal.
- Extra long 28" handle provides leverage, unique pulling head design quickly and easily removes the seal in one piece.
- Built from the highest quality heat-treated steel.
- Removes hub seals on trailer and truck axles, including truck steering axles.



### Slack Adjuster Pullers

These pullers will yank even the most corroded slack adjuster off the S-cam— and do so in just a fraction of the time needed with "heat and beat" methods. Plus, they won't damage components. Both pullers have a rugged forcing screw and cast steel body. Puller No. 5055 fits many manual types, and the No. 5056 works on Rockwell, Haldex, Gunit, and Bendix automatic adjusters.

**5055** – Manual slack adjuster puller.

**5056** – Automatic slack adjuster puller.



### 5054 Air Brake Service Kit

This kit has the tools needed to remove slack adjusters and push-rod clevis pins used in the S-cam brake systems of class 7 and 8 vehicles.

- Works on manual or automatic slack adjusters.
- Includes Nos. 5055 and 5056 slack adjuster pullers, 5057 brake clevis pin press, and a plastic storage case.



### 5057 Clevis Pin Press

Removing corroded clevis pins from a brake air-chamber push rod can be a maddening and time-consuming task— unless you're using our clevis pin press. This handy screw-operated tool applies the force just where it's needed. The pin is easily removed from its hole without damaging nearby components.



### 7077 Axle-Stud Cone Pliers

Now you can easily remove the tapered cone from studs used on the rear axles of medium and heavy-duty trucks. This specially designed tool gives you the leverage needed to expand the cone and remove it from the stud for axle wremoval.

# BRAKE / TRANSMISSION TOOLS HEAVY DUTY TOOLS & EQUIPMENT



## 4592 Truck Brake Spring Pliers

- Designed to remove and install the brake shoe return springs on medium-duty and heavy-duty drum brakes.

**4592-1** – Replacement tip.



## 7069A Heavy-Duty Brake Spring Pliers

Save time and effort when removing and installing return springs on the brake shoes of heavy-duty vehicles. This specially designed pliers works for hydraulic wedge-type and "S" cam air brakes. Its 26-1/4" length gives you the leverage to do the job more easily, and the huge jaw opening accommodates even the widest brake shoes.

**202621** – Wedge-type replacement tip

**204141** – "S" cam replacement tip



Positioned for bearing installation.



Positioned for main shaft timing.



## Transmission Timing Block Sets

These sets enable one-man installation of front and rear countershaft bearings on Fuller twin-countershaft transmissions. The set positions the upper countershaft, yet lets you slide it aside to insert the main shaft. When the main shaft is in place and timing marks line up, turn the tool vertically to engage and position the countershaft to main shaft.

**7108** – Timing block set for Fuller RTO 610/613 transmissions.

**7109** – Timing block set for Fuller RT and RTO 910, 915, 9513, 12509, 12510, 12513, and 12515 transmissions.



## 5063 Timing Tool

- Designed to support the main-case upper countershaft during transmission assembly and timing.
- Works on Eaton® Fuller® 2 Series Roadranger® transmissions.

## Truck Transmission Bearing Service Set

The set is designed to help you remove input shaft bearings and countershaft bearings, in both the main and auxiliary boxes of heavy-duty Fuller transmissions. It will also remove end yokes from 1600/1610-1810 series transmissions. The puller delivers 10 tons of mechanical power—essential force for working on big gearboxes.

- Works on Fuller twin-countershaft transmissions: 125, 600, 660, 900, 9500, 1100, 12500, 12600, 13000, 14600, 15600, and 8600 series, 910-913, 915, and 9513.

**7070A** – Truck transmission bearing service set

**7075** – Transmission output shaft end yoke remover only

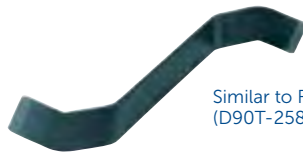
**7207** – Collet only



## 7462 Hydraulic Brake Spring Tool

Here's a tool to remove and install the return springs in Lucas Girling hydraulic brake systems. The tool's machined tip cradles the return spring securely, and its sliding fulcrum gives you all the leverage needed to do the job. A knurled handle helps prevent slipping.

- Works on 1984 to current Ford F600, F700, and F800 series having Lucas Girling hydraulic brakes.



Similar to Ford 206-D005 (D90T-2588-A)

## 5072 Lucas Rear Brake Adjusting Tool

If you're working on a lot of medium-duty hydraulic brake systems, you need our adjusting tool. It enables you to easily adjust Lucas Girling hydraulic brake systems (popular in Ford F700, F800, and F900 series). The tool's offset design and extra handle length get the job done quickly.



## 205776 Bearing Puller Set

This puller set, designed for use with our No. 7070A transmission service set (sold separately), is designed to remove front countershaft and input shaft bearings on Fuller RT, RTO 610/613 twin countershaft transmissions.



## 5051 Bearing Puller Set

When teamed with our No. 7070A puller, this puller set will remove front and rear countershaft bearings from the main case of Eaton® Fuller® 2 Series Roadranger® transmissions.

- Includes pulling collet, sleeve, and a pair of puller legs.

## 5064 Countershaft Pushing Tool

Replacing rear countershaft bearing snap rings in Eaton Fuller transmissions. With this tool, you can easily move the countershaft rearward to expose the snap ring.

- Works on Eaton® Fuller® Roadranger® transmissions (series 2, 5, 6, and 7).



## 5065 Countershaft Bearing Driver

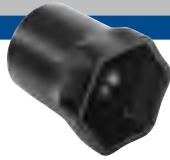
- Eases the task of installing a main-case countershaft bearing.
- Works on Eaton® Fuller® 2 Series Roadranger® transmissions.



## 5066 Bearing Driver

This tool is designed to install the bearing on 2" diameter input shafts used in Eaton® Fuller® Roadranger® transmissions.





## 1982M 70 mm Hex Socket

Attach this heavy-duty socket to your 3/4" drive ratchet or breaker bar, and you'll be able to easily remove the end-yoke locknut on Eaton® Fuller® 2 Series Roadranger® transmissions.



## 5040 Cummins® Injector Remover/ Installer

This is our best tool for removing or installing fuel injectors on Cummins L10 and N14 Celect electronically controlled engines. The large slide hammer and pin-type pulling adapter easily—and safely—handle injector jobs.

- Includes storage case.
- Two installing adapters help prevent damage to an injector's electronic solenoid.



## 5042 Cummins® Injector Puller

This helpful puller will handle a variety of injectors found in Cummins engines: mechanical L-10, PDT, and PTD top-stop 855NH. Its two-jaw design firmly grips the injector while it is being removed by the slide hammer.

- Includes storage case and special adapter for pulling STC injectors.



## 5062 Auxiliary Countershaft Shim Tool

When you're working on Eaton® Fuller® 2 Series Roadranger® transmissions, this tool holds the auxiliary countershaft in place while you set the bearing end play.

- Includes a support strap for .100 and .125 shim settings, and metric and standard mounting bolts.



## 7455 Mack Fuel Injector Nozzle Tool

Here's a handy tool for removing or installing injector nozzles on Mack E-6 4 VH and E-9 4 VH four-valve engines. The puller threads directly into the nozzle holder, and mechanical screw power does the pulling while a cylindrical guide holds the injector steady.

- Includes gauge to ensure correct injector depth during installation.



## Cummins® Fuel Injector Puller Adapter

When combined with our No. 5028 injector puller or a slide hammer with a 1/2"–20 threaded shaft, this adapter gives you an easy, damage-free way to remove fuel injectors from Cummins B and C series engines.

**217793** – Cummins fuel injector puller adapter for B and C series engines with 12 mm x 1.5 injector threads.

**215844** – Cummins fuel injector puller adapter for B and C series engines with 14 mm x 1.5 injector threads.



## 7117 Caterpillar Fuel Injector Nozzle Puller

We've designed this nozzle puller to remove pencil nozzles on Cat engines. The tool applies straight, even pulling power through a bridge assembly and mechanical forcing screw. The job is done quickly—and without damage.

- Works on Caterpillar 1100/3208 diesel engines.



## 7121 Fuel Injector Nozzle Puller

We've designed this puller to remove the pencil-type fuel injector nozzles used in many agricultural and construction engines. The slide hammer action gives a straight, even pull without damaging components.

- Works on Case, Caterpillar, GM, John Deere, Waukesha, and White diesel engines.



## 7458 Bosch Nozzle Socket

Removes or installs injector nozzles. You use the inner socket to hold the nozzle stationary, and the outer socket to loosen or tighten the nozzle's gland nut.

- Works on Bosch KDEL 21 mm injector nozzles used in John Deere engines.



## 218163 Ford Fuel Injector Puller Adapter

Designed to work with the No. 5028 slide-hammer puller, this adapter removes injectors from Ford 6.6L and 7.8L diesel engines without damage.

- Slide-hammer threads are 1/2" x 20. Threaded end for injector is 14 mm x 1.5.



## 5024 Injector Sleeve Set

Here are the ideal tools for removing and installing the injector sleeves of International DT466 engines. The removing tool threads onto a slide hammer with 5/8" - 18 threads to remove sleeves quickly. The installer seats new sleeves equally fast, without damage.

Similar to Ford 303-230(T83T-9396-A)



## Diesel Fuel Line Wrenches

Fuel line nuts are often hard to reach, but these unique 3/8" square-drive tools solve that problem. With them, you can loosen or tighten fuel lines at the fuel injector nozzle or fuel injection pump without damaging the nut.

**7453A** – Fuel line wrench, 2.6" long. For International DT466 and 9L diesel engines. Fits 19 mm fuel line nuts.

**7460** – Fuel line wrench, 2.6" long. For International 6.9L and 7.3L diesel engines. Fits 5/8" hex nut.



Similar to Ford 303-228 (T83T-9000-C)

## 7461 Fuel Injector Pump Rotating Tool

Maximum fuel economy requires precise injector timing. The tool securely grips the front of the fuel injection pump so you can rotate it while fine-tuning the system.

- Works on Stanadyne rotary fuel pumps found on International's 6.9 and 7.3 liter engines.



# NOZZLE TESTERS HEAVY DUTY TOOLS & EQUIPMENT

## 4201

### Nozzle-Tester Adapter Set

This is our universal adapter set for testing injection nozzles on the most popular automotive, agricultural, and construction diesel engines. The set has 17 adapters that connect to our No. 4200 Nozlrater testing unit.

- Includes handy metal storage box.
- 23622— used on 1989–95 Cummins 5.9L, 1983–94 Ford 6.9L and 7.3L.
- 23623— used on 1996–2000 Cummins 5.9L and Navistar 6.6L and 7.8L.



Adapter No.	Description	I.H. Truck	I.H. Farm Construction	John Deere	Oliver & Allis	Waukesha	Case, Ford Tractor, Massey, & Perkins	White	Mack	Caterpillar Pencil Nozzles	Deutz	GM Autos	VW, Audi, & Mercedes Autos	Mercedes & Magaris Truck
36352	Fuel line assembly, 9/16"–18 R.H. thd. with 24° on pipe.	•	•	•	•	•	•	•	•	•	•	•	•	•
23622	Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•		•	•	•	•	•			•	•	•	
23623	Adapter nut, 14 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•		•		•			•
23624	Adapter nut, 18 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.		•		•	•	•							
201917	Adapter nut, 9/16"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•	•				•		
23626	Adapter nut, 5/8"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•		•	•	•							
201912	Adapter nut, 3/4"–16 internal R.H. thd. to 1/2"–20 internal					•								
201913	Adapter nut, 9/16"–24 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•											
23693	Straight adapter, 1/2"–20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"–18 external R.H. thd. (E201917°).	•	•	•	•	•	•	•				•		
23692	Straight adapter, 3/8"–24 external R.H. thd. to 9/16"–18 external R.H. thd. (internal Ermeto 24°).	•	•											
23617	90° adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 9/16"–18 internal R.H. thd. (Ermeto 24°).	•	•	•	•		•		•		•	•	•	•
23621	Straight adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 1/2"–20 external L.H. thd. (60° seat).	•	•	•			•	•	•		•	•	•	•
208370	Banjo adapter, 9/16"–18 external R.H. thd. (24° seat).		•	•										
201916	Adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd. ferrule.			•										
208369	90° adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd.	•												
38279	Straight adapter, 14 X 1.5 mm external R.H. thd. (Ermeto 60°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).			•										
43468	Straight adapter, 1/2"–20 external R.H. thd. (Ermeto 24°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).							•						
<b>Additional Accessories Available (not included in 4201 Set)</b>														
44026	Straight adapter, 9/16"–18" R.H. thd. (Ermeto 24°) to Caterpillar 1100 & 3200 series pencil nozzle.									•				
201920	Adapter nut, 14 X 1.5 mm external thd. to o"–18 internal R.H. thread													Connects OTC 4200 Nozlrater to other fittings used in the industry.



### Nozzle Tester Manifold/Adapter Sets

These adapter sets expand our No. 4200 Nozlrater to troubleshoot a wide range of diesel engine injector nozzles.

**4202** – Adapters for servicing Audi, GM, Mercedes-Benz, Nissan/Datsun, Toyota, and VW Rabbit diesel engines.

**4203** – Manifold/adapter set. Tests Caterpillar high- and low-pressure, capsule-type nozzles, and high-pressure, pencil-type nozzles on 1100 and 3200 series engines. Complete with Nos. 39870 and 206168 adapters, low-pressure gauge (up to 1,000 PSI), cap plug and mounting brackets.

No. 4202 set includes:

Adapter No.	Description	Chevy Chevette & GM 1980 and newer C.A.V. nozzles	GM 1979 & newer pencil nozzles	GM 1978 pencil nozzles	Nissan, Toyota, and VW Rabbit Diesels	Audi & Mercedes-Benz
<b>36352</b>	Fuel line assy., 9/16"-18 R.H. thd. with 24° on pipe.	•	•	•	•	•
<b>23617</b>	90° adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 9/16"-18 internal R.H. thd. (Ermeto 24°).	•	•	•	•	•
<b>23621</b>	Straight adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 1/2"-20 external L.H. thd. (60° seat).	•	•	•	•	•
<b>23622</b>	Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"-20 internal L.H. thd.	•	•	•	•	•
<b>201917</b>	Adapter nut, 9/16"-18 internal R.H. thd. to 1/2"-20 internal L.H. thd.	•	•	•	•	•
<b>23693</b>	Straight adapter, 1/2"-20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"-18 external R.H. thd. (Ermeto 24°).	•	•	•	•	•

### 4200

#### Nozlrater Diesel Injector Nozzle Tester

Here is the ultimate tool for diagnosing a number of problems that affect diesel fuel injector nozzles. The Nozlrater tester enables you to check for leakage, pop-off pressure, spray pattern, and chatter. This tool will accommodate a wide range of injectors. We also offer adapters so you can troubleshoot nozzles used in popular automotive, agricultural, and construction engines. Nozlrater features a rugged, lightweight reservoir that holds 7/10 of a gallon of fuel. It is equipped with a replaceable 2-micron filter. The large, dual-scale, high-pressure gauge is protected by a guard and includes an indicator needle to record maximum pressure reached. The tester is light enough to be easily carried for field use. Or you can bench-mount it, using the holes in its base.

• Not designed for Cummins or Detroit injectors.

**17169** – Replacement filter.

**11565** – Gauge.



#### Specifications

Overall width	5-3/4"
Overall length (includes handle)	26"
Overall height	11-1/4"
Weight (empty)	15 lbs., 10 oz.
Max. pressure	5000 PSI (350 bar)
Max. reservoir cap.	.692 gal. of diesel fuel (160 cu. in.)
Usable reservoir cap.	.628 gal. of diesel fuel (145 cu. in.)
Outlet port	For 3/8" tube
Gauge	Calibrated 0-5000 PSI (350 bar) Has 3-1/2" dial face with maximum reading indicator needle.
Gauge connection	1/4" NPT internal
Stroke of 1/2" dia. piston	3/4"
Volume per full stroke	.147 cu. in. (2.4 cc)
Intake filter	2 micron

### 208629

#### Calibration Fluid

• For use in diesel injection pump testers and injector nozzle testers.

• 1 gallon



#### Davco Diesel Filter Wrenches

• Found on Caterpillar, Cummins, Detroit Diesel, International, Mack, Mercedes-Benz, Volvo and other engines.

• Durable, stainless steel construction.

• Precise, laser-cut angles.

• Opens vent cap also.

• Soft, ergonomic handle.

**6914** – Fits Davco Diesel filter models, 232-233-234.

**6915** – Fits Davco Fuel filters 382 & 384.



### 6916

#### Duramax Water Sensor Wrench

• Used to remove and install the water sensor on the fuel filter.

• Works on 2001 and Newer 6.6L Duramax Diesel found in Chevrolet and GMC Trucks and Vans.

• 3/8" square drive hole.

# OIL FILTER CRUSHERS / FLUID RECEIVERS HEAVY DUTY TOOLS & EQUIPMENT



## 1821 10-Ton Capacity, Air-operated Automotive Oil Filter Crusher

- Crushes up to four automotive filters (3-7/8" dia. x 9" high) at one time, in approximately 20 seconds. Engineered and built for dependable operation. Covered by OTC Lifetime Marathon Warranty®.
- 100% air operation eliminates electrical connections. Generous size of crushing chamber easily accommodates the largest automotive spin-on filters.
- Includes mounting stand. No wall mounting or time consuming installation required.



## 1877 25-Ton Capacity Heavy-Duty Oil Filter Crusher

- Handles the big filters (up to 6" dia. and 12-1/2" long) found in trucks, construction equipment, farm implements, etc. May also be used for automotive and light truck filters. It does it all!
- Crushes filters to 1/4 of original size, removing up to 95% of filter's oil capacity. Automatic cycle feature: load the filter, push a button, and walk away.
- Air/hydraulic pump works on standard shop air (requires 9 CFM at 100 psi). Special valving returns ram automatically at the end of each cycle. No electrical connections needed.
- Built-in floor stand (completely assembled). Whole unit requires just 5 square feet of floor space.
- Covered by OTC Lifetime Marathon Warranty®.



Shipped assembled

## 1896 25-Ton Capacity High-Speed Heavy-Duty/Automotive Oil Filter Crusher

- Automotive and heavy-duty filters up to 15-1/4" long and 6" diameter are crushed in approximately 8 to 16 seconds. Filters are reduced to 20% of original size, with 95% of residual oil removed.
- Automatic cycle feature lets you load the filter, push a button, and walk away.
- Powered by 2 hp electric/hydraulic pump, 230 volt, 20 amp, 60 cycle, single phase, 3,450 rpm. Has a 2-gallon reservoir.
- Built-in, heavy-duty floor stand with leveling pads is designed to accept a 30-gallon drum for oil drainage. Comes assembled. Covered by OTC Lifetime Marathon Warranty®.



SEE PAGE 35  
FOR OIL FILTER  
WRENCHES

### Oil Filter Crusher Comparison Chart

No.	Tonnage	Pump	Crushing Time	% Oil Removed	Filter Size	Stand Dimensions
1821	10-ton	Air	20 Seconds	95%	Chamber: 8" x 8" x 9" H.	18-1/2" W x 24" D x 63-1/2" H
1877	25-ton	Air/Hyd.	80 Seconds	95%	6" Dia. - 12-1/2" Long	18-1/2" W x 30" D x 74-1/2" H
1896	25-ton	Elec./Hyd.	16 Seconds	95%	6" Dia. - 15-1/4" Long	27" W x 30" D x 78" H

Note: Crushing times are approximate; crushing times may vary depending on air pressure available, size of filter, type of filter, etc.

### Transfer Tankers

- Draining oil from a large displacement engine and getting it to your bulk storage container is a snap with OTC's Transfer Tankers.
- Used oil is collected in a reservoir, and then rolls smoothly on 4" free-wheeling casters to your storage location.
- Pump moves five gallons a minute through the 8-foot transfer hose to the a 15-gallon reservoir.
- Handle is removable for easy storage.
- Screen attached to reservoir allows assembly to be stored on its side.
- Can also be used for transferring antifreeze.

**5077A** – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with an electric pump (No. 528093).

**5097** – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with a pneumatic pump (No. 529966).



5077A



5097



## 1577 Low Profile Fluid Receiver

- Designed for receiving waste fluid during a wide range of repair jobs.
- Fluid capacity: 7.5 gallons.
- Constructed of polyethylene plastic for heavy-duty use—yet, only weighs 13 pounds.
- Low profile, only 5" high, it easily slides under passenger cars.
- Designed with four casters to provide efficient maneuverability.
- Suitable for cooling system repair jobs—can be used for antifreeze.
- Includes splash screen to prevent spillage and splashing.
- Two-year warranty.



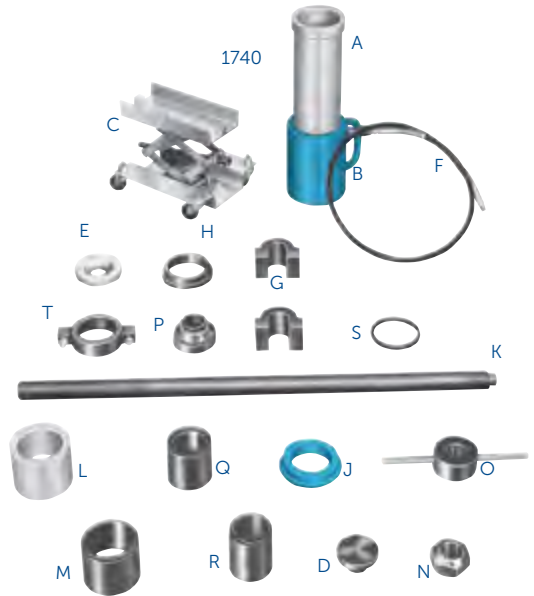
1740 tooling setup for end bushing installation.

**1740  
Basic Tooling Set**

This is the basic tooling set for servicing center and end beam bushings. It does not include the hydraulic pump or gauge. If you are already equipped with hydraulics, you can be replacing bushings right away! (Does not include tooling for hanger tube or end plug adapter removal.)

**For 340 thru 450 Series Hendrickson Suspensions**

Item No.	Description	Item No.	Description
A 44119	Receiving tube	L 302026	Installing adapter
B 51678	80-ton cylinder	M 302027	Removing adapter
C 51695	Jack cart	N 302028	Hex nut
D 206457	Press adapter	O 302029	Speed nut
E 206459	Clamp plate	P 302030	Removing adapter
F 9780	Hydraulic hose	Q 302031	Installing adapter
G 302018	Spacer (2)	R 302032	Removing adapter
H 302019	Receiving adapter	S 302401	Spacer ring (3)
J 302021	Receiving adapter	T 42052	Inst. adapter clamp
K 302023	Pulling screw		



**HENDRICKSON SERVICE SETS  
WITH HYDRAULICS**

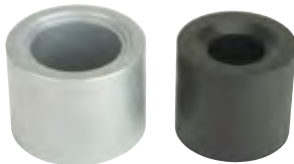
**FOR 340 – 450 SERIES HENDRICKSON SUSPENSIONS**

**1742  
Basic Tooling Set with hydraulics (Hydraulic pump 4031)**

The preferred method for servicing center and end beam bushings. You get the complete No. 1740 basic set, plus OTC's No. 4031 two-stage electric/hydraulic pump with remote hand switch, a No. 9654 pressure gauge, hose half coupler, and 80-ton single-acting ram. (Tooling for hanger tube or end plug adapter removal not included.)

**1741  
Basic Tooling Set with hydraulics (Hydraulic pump 4062)**

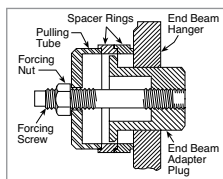
The method Hendrickson recommends for suspension service. You get the No. 1740 basic set, plus OTC's No. 4062 two-stage electric/hydraulic pump with remote hand switch, a No. 9653 pressure gauge, hose half coupler, and 80-ton single-acting ram. (Tooling for hanger tube or end plug adapter removal not included.)



**1746  
R400 Center Bushing Adapter Set**

For R400 series Hendrickson suspensions having center bushing No. 49400 or field service center bushing No. 49600.

Used with OTC's No. 1740 suspension tool set, these adapters let you remove and install the new style R400 center bushings on Hendrickson suspensions. Set includes one No. 310248 removing adapter and one No. 310249 installing adapter.



**1745  
End Bushing Adapter Puller Set**

Set contains everything needed to remove end bushing adapter plugs in 380 thru 440 series suspensions. The plugs have to be removed prior to end bushing replacement.

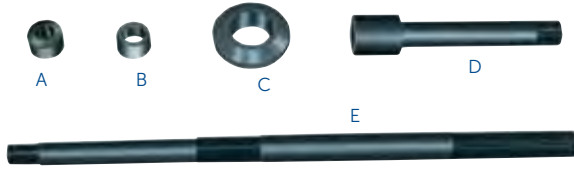
The set is complete in a handy plastic case.

For use with 1740 series tooling sets (order separately).



Item No.	Description
A 207025	Spacers (3)
B 302592	Screw (7/8"-14)
C 302593	Screw (15/16"-12)
D 207027	Screw
E 207026	Plug gauge
F 207030	Hand tap (7/8"-14)
G 207031	Hand tap (15/16"-12)
H 207039	Nut assembly
I 302595	Receiving cup

# BUSHING SERVICE HEAVY DUTY TOOLS & EQUIPMENT



## 1743 End Bushing Hanger Tube/RU Series Center Bushing Service Set

Required for servicing RU340 series center bushings. The long puller screw is used to remove the beam cross tube. The 1743 also removes end bushing hanger tube assemblies. For use with 1740 tooling (order separately).

Item	No.	Description
A	25417	Nut
B	206455	Removing adapter
C	302015	Receiving adapter
D	302119	Special screw
E	302023	Pulling screw



Hanger tube removal with No. 1743 set.



Cross tube removal with No. 1743 set.

## 1744 Bronze Center Bushing Service Set

Designed for replacing bronze center bushings on 340, 380, 440, and 460 Hendrickson suspensions. Also installs bronze center bushing grease seals. For use with 1740 series tooling set (order separately).

For 340, 380, 440, & 460 series suspensions.

Item	No.	Description
A	28536	Installing adapter
B	28538	Installing adapter
C	302024	Removing/installing adapter
D	302025	Removing/installing adapter



Installing center bushing with No. 1744 set.



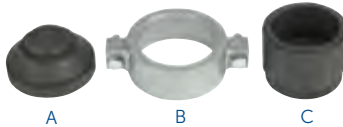
Removing center bushing with No. 1744 set.

## 1763 Center and End Bushing Service Set

This set is required for bushing service on 500 and 700 series heavy-duty suspensions. It is intended for use with a 100-ton capacity shop press. It allows replacement of center and end bushings.

For 500 & 700 series suspensions. Use with a shop press.

Item	No.	Description	Item	No.	Description
A	208350	Adapter	C	28541	Adapter
B	208349	Adapter clamp			

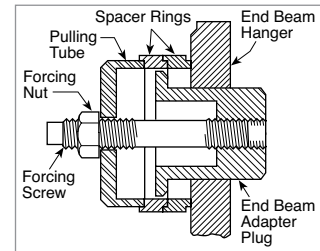
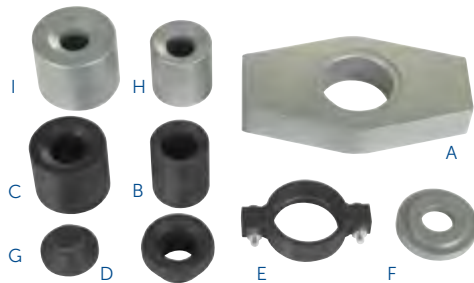


## 1764 Center and End Bushing Tool Set

This set is the answer for replacing center and end bushings on Hendrickson 340 and 380/440 series suspensions. The 1764 is for use with a 100-ton or larger hydraulic press. The press plate sits on the press bolster to provide a level, cradle-like surface for the beam to rest on during pressing.

For 340 and 380/440 series suspensions. Use with a shop press.

Item No.	Description	Item No.	Description	Item No.	Description
A	51100	Press plate	D	302030	Removing adapter
B	302032	Removing adapter	E	42052	Inst. adapter clamp
C	302031	Installing adapter	F	206459	Clamp plate
			G	206457	Press adapter
			H	302027	Removing adapter
			I	302026	Installing adapter



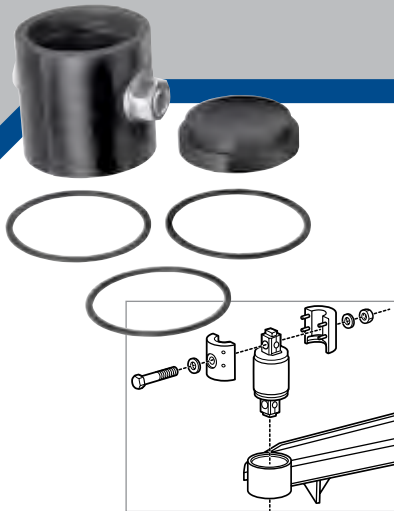
## 1748 End Bushing Adapter Puller Set for Hendrickson Truck Suspensions

This set contains everything needed to remove end bushing adapter plugs used on 400 series and the larger 460–520 series suspensions. The plugs have to be removed prior to end bushing replacement. The set is complete in a handy plastic case. For use with 1740 series tooling sets (order separately).

For servicing the 400 and larger 460–520 series suspensions.

Item	No.	Description
A	207025	Spacers (3)
B	302592	Screw (7/8"–14)
C	302593	Screw (15/16"–12)
D	207027	Screw
E	207026	Plug gauge
F	207030	Hand tap (7/8"–14)
G	207031	Hand tap (15/16"–12)
H	207039	Nut assembly
I	302595	Receiving cup
J	*221378	Hand tap (M30 x 2)
K	*313342	Screw (M30 x 2)

\*For use on 460–520 series adapter plugs (can be purchased separately and used with set No. 1745).



**1757  
Hendrickson Bar Pin Adapter Set**

Servicing bar pin end bushings used on Hendrickson equalizing beam tandem truck suspensions requires the use of special tooling. OTC's No. 1757 adapter set is used with the beam removed from the truck, and in conjunction with OTC No. 51100 press plate and a 100-ton hydraulic shop press.

The 1757 set, which replaces the No. 1747 set, includes an adapter for installing bushings in older forged beams as well as the fabricated beams introduced in 1999.

To remove bushings, use OTC's previously introduced No. 302030 removing adapter and No. 206457 press adapter, both of which may be ordered separately. Reinstall bushings following procedures recommended by the suspension manufacturer.

**1767  
Hendrickson Primaax Quick Alignment Socket**

- Hendrickson – Approved tool.
- Used to adjust axle alignment on the Primaax air suspension.
- Works on Primaax models 230, 460, and 690 rear suspensions.



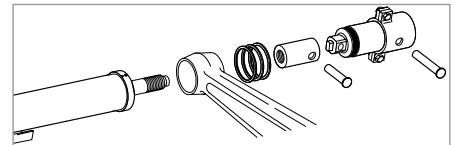
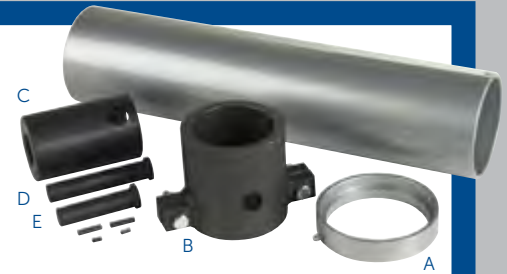
**1768  
Hendrickson PRIMAAX® Quick Wrench**

- Hendrickson - Approved tool.
- Used to torque cross tube end cap bolts and longitudinal torque rod top pad bolts.
- Reduces maintenance time by eliminating the need to remove the tires to gain access to the end cap bolt.
- Use with the following Hendrickson PRIMAAX suspensions:
  - Type A - PAX 230/460/690 and FMX 240/480 with 8-1/2" ride height
  - Type B - PAX 230/460/690 with 10" ride height.

**1749  
Hendrickson Suspension Bar Pin End Bushing Adapter Set**

Extend your No. 1741 and No. 1742 bushing service equipment sets. You can now remove and install worn end bushings on the Hendrickson new style bar pin end bushings without removing the equalizing beam from the vehicle. The No. 1749 works in conjunction with OTC's No. 1741 and No. 1742 80-ton portable service equipment to do the job quickly, using procedures recommended by the manufacturer.

Item	No.	Description
A	314557	Receiving tube
B	49050	Installer
C	314556	Receiving adapter
D	314558	Pin
E	314559	Pin



**Freightliner Rear Suspension Tool**

- Removes and installs single-wrapped FAS II Airliner Freightliner Rear Suspension bushings in a fraction of the time of traditional methods.
- Saves an average 45 minutes per bushing (4 per vehicle) on flat rate of 1.5 hours per bushing.
- 15 ton Capacity cylinder

**4244 – Freightliner Rear Suspension Tool**

**4245 – Freightliner Rear Suspension Tool Master Kit** includes 2510A Air/Hydraulic Pump.



**Hydraulic Flow Testers**

50 and 75 GPM hydraulic oil flow testers accurately measure oil flow, temperature, and pressures against manufacturers' specifications.

Troubleshoot hydraulic circuits and isolate faulty components on mobile equipment, machine tools, fork lifts, agricultural and industrial tractors, and equipment (open or closed) hydraulic systems with capabilities up to 75 GPM at pressures to 5,000 PSI. Models include features such as an automatic pressure compensating load valve that lets you increase flow without affecting the pressure settings. Temperature flow and RPM readings are displayed in metric or English, and accurate to within plus or minus 2% of full scale. Each tester is protected by a safety disc, which ruptures automatically if pressures exceed the upper limits.

**4221 – 75 GPM hydraulic circuit tester.** Comes with two pressure gauges and three 9-volt batteries.

**4235 – 50 GPM hydraulic circuit tester with single liquid-filled pressure gauge.** Includes two adapter unions for 3/4" NPTF fittings.



4235

# POWER TRAIN LIFTS / TRANSMISSION JACKS HEAVY DUTY TOOLS & EQUIPMENT



## 5078 Air-Assisted 2,000 lb. Capacity High-Lift Transmission Jack... or Trucks & Buses

- Foot-operated air pump enables the operator to effortlessly raise the transmission into place.
  - Rugged, heavy wall tubing and oversized base for stability.
  - A dedicated adapter for Allison 500- and 600-series automatic transmissions is included.
  - Covered by OTC Lifetime Marathon Warranty®.
- Specifications:
- |                          |                                  |
|--------------------------|----------------------------------|
| Min. height is 41-1/2"   | Max. side tilt (side/side) – 14° |
| Max. height is 65"       |                                  |
| Max. forward tilt – 50°  | Leg width – 46"                  |
| Max. backward tilt – 38° |                                  |



## 5130 1,000 lb. Capacity DriveMaster™ Driveline Lift

- Low profile of 6" and a lift range: 24" to 30".
  - Pivoting pump handle +/- 15° tilt in each direction
  - Includes 553516 Differential Adapter
  - ANSI/PALD
- Specifications:
- |                         |                  |
|-------------------------|------------------|
| Overall Length – 43"    | Min. Height – 6" |
| Overall Width – 30-1/4" |                  |
| Max. Height – 30"       |                  |



## 5019A 2,200 lb. Capacity Low-Lift Transmission Jack

- Special mounting adapter fits popular Eaton® Fuller® RoadRanger® transmissions used on nearly all Class 7 and 8 heavy-duty trucks. Mounting plate angle is adjusted with the turn of a wrench.
  - Swiveling pump handle permits ease of operation in restricted working spaces. Fast-acting pump quickly raises lifting arm.
  - Includes No. 49611 adapter for Eaton® Fuller® RoadRanger® transmissions (also available separately).
- Specifications:
- |                          |                                    |
|--------------------------|------------------------------------|
| Min. height is 8-1/4"    | Max. side tilt (either side) – 12° |
| Max. height is 36-1/2"   |                                    |
| Max. forward tilt – 15°  | Overall length – 52"               |
| Max. backward tilt – 20° | Overall width – 32-1/2"            |

### Power Train Lifts

- These lifts will handle engine and transmission assemblies, gas tanks, drive axle assemblies, engine/transaxle assemblies, electric vehicle batteries, and more.
- Scissors-type design allows access to all four sides of a component.
- Two independent adjusting screws tilt the table ±15° side-to-side, or fore and aft. Can be operated manually or with non-impact air wrench.
- 20" x 32" table.
- 8" swivel casters provide enhanced mobility under heavy loads.
- ANSI/PALD compliant.

### 5285 Power train lift (1,650 lb. Capacity)

- Air / hydraulic operation – Foot control pump with hose allows movement around lift.
- Min. height is 31-1/2"; Max. height is 74-1/2".
- Footprint 33" wide x 48" long.

### 1595 Power train lift (2,500 lb. Capacity)

- Powered by a quiet, 110V electric/hydraulic pump.
- Smooth, steady lifting and lowering motion controlled by hand-held remote.
- A 30 ft. long retractable extension cord is mounted to the frame.
- Min. height is 29"; Max. height is 80"
- Footprint 31" wide x 50" long.

### 1522A

### Heavy-Duty 2,000 lb. Capacity Low-Lift Transmission Jack...for Class 7 and 8 Trucks

- Includes No. 220492 adapter for Eaton® Fuller® RoadRanger® transmissions.
- Pump handle rotates 360° for operator convenience; ball bearing 3.5" diameter swivel casters provide easy positioning of jack.
- Safety overload system prevents use of jack beyond its rated capacity, and a safety bypass protects the hydraulic cylinder from damage.

### Specifications:

Min. height is 6-7/8"	Max. side tilt (either side) – 11°
Max. height is 35-1/4"	Overall length – 43-1/2"
Max. forward tilt – 24°	Overall width – 26"
Max. backward tilt – 18°	

### Accessories for 5019A / 5078 / 1522A Transmission Jacks and 5130 Driveline Lift

- 558382** – Auxiliary box adapter. Used with all.
- 561949** – Light duty transmission adapters. Used with all.
- 528150** – Eaton® "Lightning" adapter. Used with the No. 5019A transmission jack.
- 543284** – Roadranger transmission Model series FRO-11210C to FRO-18210C that is equipped with an internal cooler. Used with the No. 5019A transmission jack.
- 49611** – Eaton® Fuller® RoadRanger® auxiliary housing adapter. Bolts directly to the countershaft bearing caps to provide a stable platform for removing and installing the auxiliary housing.
- 553516** – Differential Mounting Adapter. Mounts easily using existing bolt patterns. Fits the most common differentials currently in use on Category 7 and 8 Heavy Duty Trucks. Including: Eaton, Fuller, Rockwell, Meritor, Spicer, International, and Mack. For use on OTC (5019A – 553516 requires 565188 adapter) 5078 and Stinger 1522A Transmission Jacks.
- 314729** – Allison 500/600 series automatic transmission adapter used with No. 5078 transmission jack.
- 540231** – Eaton® Fuller® RoadRanger® transmission adapter
- 540232** – Mack transmission mounting brackets. Provides a stable platform for Mack T200 series transmissions.



5285 extended

Casters provide a 9-1/2" clearance on lower frame



5285 collapsed



1522A



558382

561949



553516

528150



540231



543284



49611



314729



540232



**5018A**  
**Truck Clutch & Flywheel Handler**

- Replaces 14" & 15-1/2" clutch assemblies weighing up to 250 lbs.
- 13" low point enables access below side faring.
- Linkage raises load from horizontal to vertical position.
- 360 degree swivel head.
- Covered by OTC Lifetime Marathon Warranty®.

**516160 – Optional flywheel handling attachment**

**515686 – Optional splined shaft, 1-3/4" dia. with 1-1/4" pilot**

**516159 – Optional splined shaft, 1-3/4" dia. with 1" pilot**



**5015A**  
**Truck Clutch & Flywheel Handler**

- Handles 14" and 15-1/2" clutch assemblies weighing up to 150 lbs.
- Lifting range of 9" to 37". Swivel casters provide easy maneuverability.
- Includes a 2" spline shaft with a 1-1/4" pilot to aid in alignment.

**218174 – Flywheel handling attachment for use on No. 5015 and 5015A only.**

**48625 – Optional splined shaft, 1-3/4" dia. with a 1-1/4" pilot.**

**440533 – Optional splined shaft, 1-3/4" dia. with a 1" pilot. Needed for clutch service on some Navistar 466 series engines.**

**314386 – Optional 1-3/4" dia. alignment shaft extension. Used for 2-plate clutch of Navistar 466 series engine.**



**1520**  
**10-Ton Capacity Lifting System (Includes two lifts)**

- Mobile, tandem system is air-operated. This will handle your class 7 and 8 tractor lifting needs. No need to waste time re-blocking and making additional lifts for the clearance you need for under-vehicle service. Roll the system to the vehicle anywhere in the shop or outside on a level surface.

- Unique design provides lift from the tires, not the frame or axle members. Ideal for situations where limited ground clearance or a lack of clear access complicates lifting.

- Single controller operates both sides of the system for a smooth, level lift up to two full feet from the bottom of the tires to the ground. Units can double as support stands when retention pin is inserted.

- Covered by OTC Lifetime Marathon Warranty®.

Specifications:

Capacity – 10-tons (20,000 lbs.) (pair)  
Air pressure – 150 psi  
Lifting range – 0"-24"  
Saddle width – 19-1/2" – 24" dia. rim sizes  
Height – 53-1/4"  
Width – 41-1/2"  
Length – 39-1/2"



**1591B**  
**10-Ton Combination Air Lift & Support Stand**

- 40" removable handle and 8' air hose.
- Covered by OTC Lifetime Marathon Warranty®.

Specifications:

Capacity – 10 tons (at 200 PSI air)  
Minimum height (unpinned, no extension) – 18-3/4"  
Maximum height (pinned in top hole, with extension) – 50-1/2"  
Stroke – 10-7/8"



**1590**  
**10-Ton Air Lift**

- Adjustable lifting saddles and an extra-wide stance for extra stability.
- Automatic mechanical safety catch engages in five height positions.
- Two large swivel casters and pneumatic tires make it easy to maneuver, even on loose gravel.
- Covered by OTC Lifetime Marathon Warranty®.

Specifications:

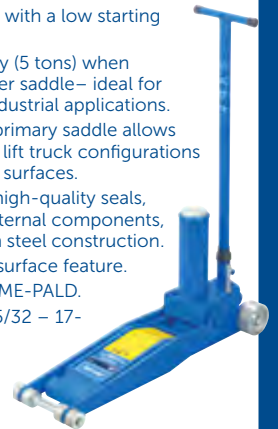
Capacity – 10 tons (at 200 psi air)  
Air pressure – 100–200 psi  
Lifting range – 13"–52"  
Saddle spread – 29" – 41-3/4"  
Saddle – 4" X 5-1/4"  
Height – 67-1/2"  
Width – 41"  
Length – 36"  
Distance from lift arm to floor support – 12-1/2"

**572913 – Optional saddle set for 1590. Saddle – 4" X 5-5/8"**



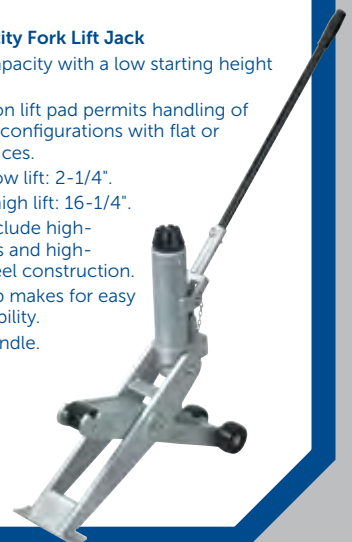
**5214**  
**4-Ton Capacity Fork Lift Jack**

- 8,000 lb. capacity with a low starting height of 2-5/32".
- 10,000 lb. capacity (5 tons) when lifting from cylinder saddle– ideal for agriculture and industrial applications.
- Unique shape of primary saddle allows for handling of all lift truck configurations with flat or edged surfaces.
- Features include high-quality seals, chrome-plated internal components, and high-strength steel construction.
- Secondary lifting surface feature.
- Complies with ASME-PALD.
- Lifting Height: 2-5/32 – 17-15/16".



**1540**  
**4-Ton Capacity Fork Lift Jack**

- 8,000 lb. capacity with a low starting height of 2-5/8".
- Two-position lift pad permits handling of all lift truck configurations with flat or edged surfaces.
- Minimum low lift: 2-1/4".
- Maximum high lift: 16-1/4".
- Features include high-quality seals and high-strength steel construction.
- Handle stop makes for easy maneuverability.
- 30" long handle.





# UNDER AXLE JACKS HEAVY DUTY TOOLS & EQUIPMENT



Convenient and secure storage space for large adapter & saddle.



Maximum extended height

Saddle

Large adapter

## 5292 27.5-Ton Under Axle Jack

- Features class-leading 27.5 ton capacity
- Robust design with completely sealed piston.
- New lever design and pneumatic release valve for more precise release control.
- Power return allows lowering with no load.
- Includes two height adapters for flexibility.
- PALD compliant.
- Minimum retracted height (with saddle only): 8-1/4".
- Maximum extended height (with screw extended and large adapter): 21-3/8".
- Stroke: 4.9375".
- PSI range: 90 to 175.

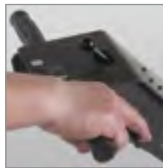
## 5093B 3-Stage Under-Axle Jack

Three-stage lift capacity 20T, 35T, and 65-tons. Ideal for lifting loaded trailers, buses, and other Class 7 & 8 vehicles.

- Piston and cylinders are made from chromium molybdenum vanadium steel for durability and then liquid nitrided to prevent rust and seizing.
- Features a high load-approach speed.
- Air-driven cylinder with pressure control knob for maximum user safety.
- 4-position handle: horizontal, 45 degrees, vertical, or collapsed.
- 7-inch minimum height for low clearance vehicles.
- Comes complete with a 3-15/16 in. (100 mm) lifting extension.
- Complies with ASME / PALD test requirements.



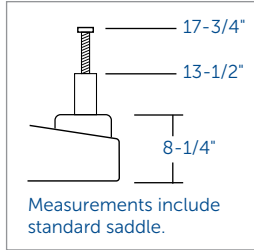
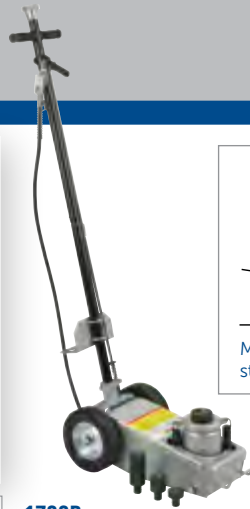
Single control switch, handy and easy to use.



4 positions: horizontal, 45 degrees, vertical, or collapsed for easier transport.



8-1/4" width for easy access to the lifting point.



## 1788B 22-Ton Capacity Under-Axle Jack

- Improvements include advanced seal ring material and one-piece air piston air pump
- Long 49-1/2" T-handle lets you easily position jack under vehicles with long overhangs.
- One pull of the handle activates the self-retracting 22-ton capacity ram without having to crawl underneath the vehicle.
- Jack has large rubber-tired wheels.
- Lifting range:
  - 3/4" saddle Max. height 17-3/4"
  - 1-15/16" saddle Max. height 18-15/16" 3-7/8" saddle Max. height 20-5/8"
- Cylinder stroke, 4-1/2"; extended screw length, 4-1/4"; PSI range, 90-145.

### 215009\* – In-line oil lubricator.

Add to air line to meter precise flow of lubricant to air motor. Has 1/4" NPT fitting. \*Not included, order separately. Prevents harmful contamination caused by moisture in the air line!

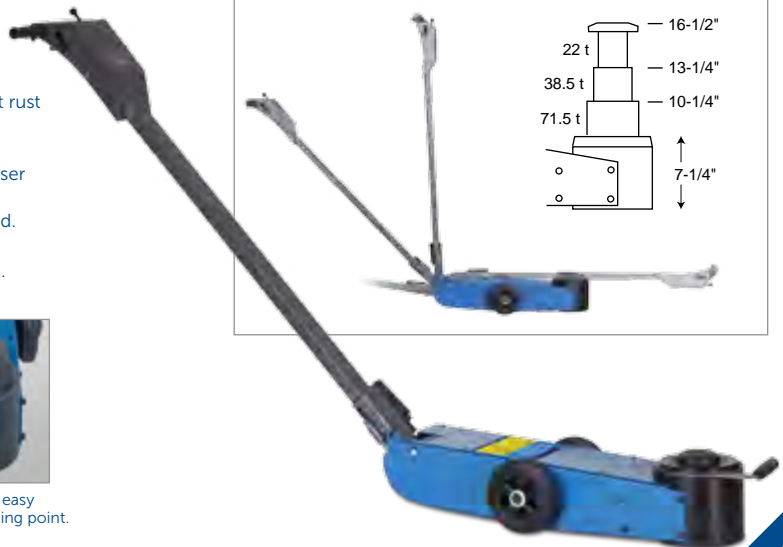
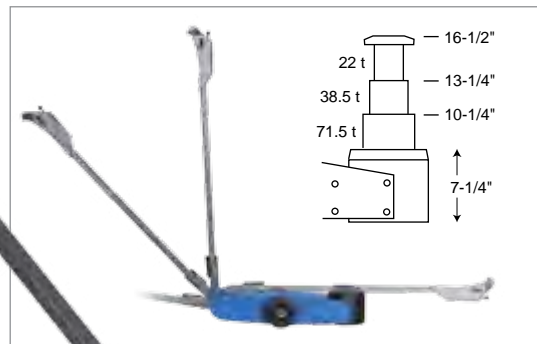


5110

## 6- & 10-Ton Capacity Air/Hydraulic Service Jack

- Huge steel front wheels are mounted in bearings for trouble-free service life. Rear swivel casters make spotting the jack easy.
  - Spring-loaded handle can be locked in three positions.
  - Covered by OTC Lifetime Marathon Warranty®.
- 5106** – 6-Ton Air/Hydraulic Service Jack. Lifting range 4-3/4" to 23-1/4", reach 87", 45" handle.
- 5110** – 10-Ton Air/Hydraulic Service Jack. Lifting range 6-3/4" to 26-7/8", reach 93", 47" handle.

Specifications	5106	5110
Capacity	6-ton	10-ton
Air pressure	90-175 PSI	90-175 PSI
Lifting range	4-3/4" to 23-1/4"	6-3/4" to 26-7/8"
Saddle dia.	7"	7-3/8"
Overall reach	87"	93"
Frame height	8"	10"
Handle length	45"	47"





**6- & 10-Ton Heavy-Duty Service Jack**

- Ergonomic handle for user comfort and easy mobility.
- Foot pedal for quick approach of the lifting saddle to load. Built-in tray for fasteners and tools.
- CE marked – ASME/PALD tested.
- Covered by OTC Lifetime Marathon Warranty®.

**5206 – 6-ton HD service jack.** Lifting range 6-11/16" to 22-13/16".

**5210 – 10-ton HD service jack.** Lifting range 6-11/16" to 23-13/16".

Specifications	5206	5210
Capacity	6-ton	10-ton
Min. Height	6-11/16"	6-11/16"
Max. Height	22-13/16"	23-13/16"
Overall length	87"	99-1/2"
Overall width	16-5/8"	16-5/8"
Handle length	39-3/8"	39-3/8"

**5-Ton and 10-Ton Service Jacks**

- A built-in safety overload prevents using the jack beyond its rated capacity.
- Convenient foot pedal speeds the lifting operation. Handle lock and release control are located on top of the handle. Handle can be locked into any position from vertical to horizontal.
- Both models have a spring-loaded 40" handle.

**1505B – 5-ton service jack**

**1510B – 10-ton service jack**

**20-Ton Capacity Service Jack**

- Low-profile stance and extended height add to versatility.
- Wheels and swivel casters feature internal bearings.
- Either the foot pedal or jack handle may be used for pumping action. Counter-balanced, spring-assisted handle has a three-position lock.

**1512 – 20-ton service jack**

Specifications	1505B	1510B	1512
Capacity	5-ton	10-ton	20-ton
Lifting range	6" to 22"	6-1/4" to 22"	7-1/2" to 24"
Saddle dia.	5-1/8"	6"	7-1/2"
Overall reach	47"	51"	97"
Frame height	7-3/4"	9-3/4"	10-1/4"
Handle Length	43"	43-1/4"	42"
Floor space	14-3/4" to 56"	18" to 60"	18-1/8" to 61-3/8"



**5-Ton and 10-Ton Air/Hydraulic Service Jacks**

- Bring the versatility of air-assist operation to your shop's lifting tasks.
- Huge front wheels mounted in bearings provide trouble-free service life. Rugged steel frame members.
- Rear swivel casters make spotting the jack easy. Spring-loaded handle may be locked in three positions, from horizontal to vertical.

**1507B – 5-ton air/hydraulic service jack**

**1511B – 10-ton air/hydraulic service jack**

Specifications	1507B	1511B
Capacity	5 ton	10 ton
Air pressure	80–120 PSI	80–120 PSI
Lifting range	5-7/8" to 22"	6-3/8" to 22"
Saddle dia.	6-5/8"	5-3/4"
Overall reach	87"	90"
Frame height	8"	10"
Handle length	40"	45"



**SEE ADDITIONAL PRODUCTS IN THE EQUIPMENT SECTION OF THIS CATALOG. PAGES 209 – 248.**

# ENGINE STANDS / ADAPTER PLATES HEAVY DUTY TOOLS & EQUIPMENT

## 6000 lb. Revolver® Diesel Engine Stand

- 96-to-1 ratio worm and gear set rotates components 360°; handle locks in any position.
- Integral 12-ton jack raises the work to provide the swing radius needed for clearance. Two front wheels and two rear casters provide mobility.
- Universal adapter assembly permits use with a wide variety of mounting plates.
- Covered by OTC Lifetime Marathon Warranty®.

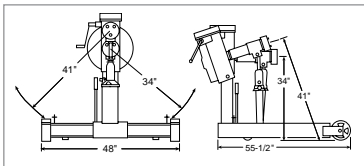


**1750A** – Revolver diesel engine stand with No. 205061 universal engine adapter assembly.

**1750** – Engine stand without universal engine adapter assembly.

### Revolver® Engine Adapter Plates

You can order only those plates you need for the engines you work on. The universal adapter assembly is required for mounting all plates to the stand.



**205061 Universal Adapter Plate Assembly.** Included with 1750A engine stand. (Must be used with all plates below.)

**J-29109-J Adapter plate to accommodate adapters for Kent-Moore engine stand.**

### Detroit Diesel

**205058\*** For Detroit engines: 53 series in-line 6 cyl., 6V & 8V; 71 series in-line 6 cyl., 6V, 8V, & 12V; 92 series 6V & 8V; 8.2 liter V-8.

**52871\*** For coach 6V and 8V series 71 Detroit Diesel.

**218504\*** For Detroit series 60 in-line 6-cylinder engines.

### Detroit Allison

**208160\*** Allison transmission mounting plate for transmission Nos. AT500, MT600, MT 6-speed, VH, VS, and V730.

**61373\*** Allison transmission adapter plate for transmission series HT-750, CLBT, HT-740D, CR/DR, and HT-750CT.

### Cummins

**205059\*** For Cummins engines: All NH, NTC, NTE, N14 855 series in-line 6 cyl; 378 series V6; 504, 555, & 903 series V8; KT 1150 series in-line 6 cyl., L10.

**61405\*** For Cummins L-10 and M11 series engines. Plate attaches to the left side of engine for complete tear down.

**218098** For Cummins "B" series 5.9L in-line 6 cyl. engines.

**218099\*** For Cummins "C" series 8.3L in-line 6 cylinder engines.

### Caterpillar

**205060\*** For Caterpillar engines: Nos. 1673, 1674, 1693, 3306, & 3406 in-line 6 cyl.; Nos. 1100, 3208, and 3408 V8.

**217687\*** For Caterpillar 3114, 3116, and 3176 in-line 6 cylinder and C12 engines.

### Mack

**205101\*** For Mack engines: All 672, 673, 675, & 711 series in-line 6 cyl.

**206629\*** For Mack engines: V8 1000, E6, & E7 in-line 6 cyl.

**528858\*** For Mack 865, and 868.

### International Harvester

**206386\*** For International Harvester engines: DT-466, DT-360, DT408, and 530 in-line 6 cylinder; DV-550, MV-404, MV-446, V304, V345, V392, 4-152, 4-196, 4-194; 9.0 liter and T444E V8; and Ford 6.9L, and 7.3L DIT.

**528856\*** For IH300 & 400 Series.

**528868\*** For International VT365.

### Ford

**61681\*** For mounting Ford 6.6L/7.8L engines.

**206386\*** For Ford 7.3 engines.

### Volvo

**528853\*** For Volvo TD67 and TD71 engines.

### John Deere

**528859\*** For JD 400 and 500 engines.

**528861\*** For JD Powertech 4.5L & 6.8L.

**528863\*** For JD 8995 V6, must be used with 528859.



205061 – Universal Adapter Plate Assembly



52871 Detroit



205058 Detroit



61373 Allison



208160 Allison



61405 Cummins



218504 Detroit



218099 Cummins



205060 Caterpillar



218098 Cummins



205059 Cummins



206629 Mack



217687 Caterpillar



205101 Mack



61681 Ford 303-DO61 (Same as D87T-6000-A)

528853 Volvo



206386 International Harvester, Ford



528861 John Deere



528856 IH



528859 John Deere



528863 John Deere



528868 IH

**\*NOTE: Must be used with 205061 univ. adpt. plate assembly. Each engine mounting plate includes all the necessary hardware and an engine application chart.**



1735B

**1735B**  
**2,000 lb. Capacity Heavy-Duty Motor-Rotor® Repair Stand**

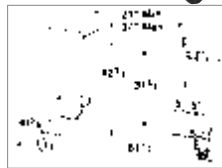
- Handles a wide variety of engines, transmissions, torque converters, and rear axles from trucks, tractors, and construction machinery.
- The 50:1 ratio gearbox allows full rotation of mounted unit with just a turn of the crank and locks in position. Easily maneuvered when loaded.
- To ensure engine stability in all positions, this repair stand is equipped with a positive-crank handle locking mechanism.
- Twin-post design, featuring laterally adjustable, 3 position outboard support; provides an extremely stable work-holding unit.
- Locking rear wheels anchor stand in position.
- Covered by OTC Lifetime Marathon Warranty®.

**206391 – 6.0L and 6.4L Ford engine adapters.** (Works with both the OTC 1735, 1735A and 1735B.)

**206392 – Ford 6.7L Engine Adapter for 1735B HD Rotor Repair Stand.**



1735B with engine



206391



206392



**3- and 6-Ton Capacity Ratcheting Jack Stands**

- Jack stands feature a formed steel frame for strength and long life, and rolled base edges that resist sinking into soft ground or asphalt.
- Recessed column saddle for acceptance of vehicle panel rail (pinch weld).
- Dual purpose handle serves as carrying handle and column release.
- Investment cast rack bar for long life strength.
- Covered by OTC Lifetime Marathon Warranty®.

**1736A – Pair of 6-Ton Jack Stands.** Height Range of 15-1/2" to 24-1/2".

**1733A – Pair of 3-Ton Jack Stands.** Height Range of 12-1/2" to 18-1/2".



**1774B**  
**10-Ton Capacity Ratcheting Jack Stands (pair)**

- These ratcheting jack stands are highest quality steel and factory tested to ANSI PALD standards.
- The form-fit saddle design and 12" x 14" base ensures stability.
- Height range is 20" to 31-1/2".



**OTC Stinger 3-Ton, 6-Ton and 12-Ton Jack Stands**

- Formed and welded steel base for strength; self-locking ratchet handle cannot be released under load. Durable baked enamel finish resists corrosion.
- Stands conform to ANSI PALD load rating standard; factory tested before shipment.

**5372 Pair of 3-ton jack stands.** Base: 8-1/4" x 7-1/2". Height range: 12" to 17-11/16".

**5373 Pair of 6-ton jack stands.** Base: 11-9/16" x 10-3/8". Height range: 15-5/8" to 23-11/16".

**1784D Pair of 12-ton jack stands.** Base: 12-1/8" x 10-7/8". Height range: 17-1/2" to 27-1/2".



5373

**1783**  
**Heavy-Duty 20-Ton Capacity Adjustable Support (One only)**

- Designed for the really big service jobs. Rugged steel construction, and large 15-1/2" square base will satisfy support requirements up to 40,000 lbs.
  - Features include 4-point adjustment. Height range is 15-1/4" to 24". Saddle diameter is 6".
  - Covered by OTC Lifetime Marathon Warranty®.
- Note: Recommend use in pairs.



**1778B**  
**12-Ton Capacity Low profile Jack Stand (One only)**

- Spun steel base won't dig or sink into asphalt or sand.
  - Height range of 19" to 29-1/2".
- Covered by OTC Lifetime Marathon Warranty®.
- Note: Recommend use in pairs.



**1779B**  
**12-Ton Capacity High profile Jack Stand (One only)**

- Spun steel base won't dig or sink into asphalt or sand.
  - Height range of 33-3/4" to 44-1/4".
- Covered by OTC Lifetime Marathon Warranty®.
- Note: Recommend use in pairs.



**Extension Tubes for 1778B and 1779B Jack Stands**

**543751 – Extension Tube** Height range of 19" to 29-1/2"

**543752 – Extension Tube** Height range of 33-3/4" to 44-1/4"

543751

543752



**1780**  
**22-Ton Capacity Jack Stands**

- Height range is 13-7/8" to 19-7/8".
- Saddle size 3" x 3-3/4".
- Pin-style (non-ratchet) three positions, 3" intervals.
- Reinforced collar to meet newest ANSI PALD test standards.
- 11" flat base prevents sinking into the surface.

# BOTTLE JACKS HEAVY DUTY TOOLS & EQUIPMENT

## OTC 9300 STINGER SERIES BOTTLE JACKS GIVE YOU LIFTING RANGE FROM 2 TO 50 TONS.

- Forged base and cylinder to ensure strength and eliminate leaks.
- Chromed pump piston and ram for additional rust resistance.
- In-line design for increased ease of use in positioning and operation.
- Includes free seal kit with each unit to extend product life.
- ANSI/PALD compliant.



### OTC 9300 Stinger Series Bottle Jacks

Cap. (tons)	Stroke	OTC No.	Retracted Height min.	Length of Screw Extension	Height with Screw Extension	Pump Strokes to Extend Piston One Inch	Saddle Dia.	Base Size	Carry Handle	Weight
2	4-5/8"	<b>9302</b>	7"	2-3/8"	14"	8	13/16"	4-5/16" x 2-9/16"	No	5 lbs.
3	4-1/2"	<b>9303</b>	7-1/2"	2-9/16"	14-9/16"	13	15/16"	4-9/16" x 2 7/8"	No	6.2 lbs.
5	4-13/16"	<b>9305</b>	7-13/16"	3"	15-5/8"	20	1-1/8"	5-3/16" x 3"	No	8.4 lbs.
8	4-15/16"	<b>9308</b>	7-13/16"	3"	15-3/4"	21	1-3/8"	6" x 3-9/16"	No	12.6 lbs.
12	6"	<b>9312</b>	9-3/8"	3-1/4"	18-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	17.4 lbs.
12	3-11/16"	<b>9314</b>	7-1/16"	2-7/8"	13-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	15.1 lbs.
20	6-7/8"	<b>9320</b>	10-5/8"	2-15/16"	20-7/16"	28	2-1/8"	7" x 4-11/16"	Yes	27.2 lbs.
20	3-7/16"	<b>9322</b>	7-3/16"	1-11/16"	12-5/16"	25	2-1/8"	7" x 4-11/16"	Yes	20.9 lbs.
30	6-5/8"	<b>9330</b>	11"	N/A	17-5/8"	41	2-1/2"	7-11/16" x 6"	Yes	41 lbs.
50	7-3/16"	<b>9350</b>	11-3/4"	N/A	18-15/16"	74	2-1/2"	8-11/16" x 7"	Yes	76.5 lbs.



5221



5213



5213T

#### Bottle Jacks

- Base, pressure cylinder, and oil reservoir form one internal part, which results in a stronger jack.
- Piston never contacts cylinder, so pressure will be absorbed and not damage jack if vehicle tilts.
- The No. 5213T is telescopic, allowing for very low initial height with high lifting.

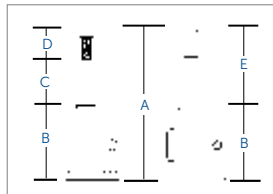
**5213** – 12-Ton Bottle Jack.

**5221** – 20-Ton Bottle Jack.

**5213T** – 12-Ton Telescopic Bottle Jack.

#### Bottle Jack Dimensions

Jack	A	B	C	D	E
<b>5213</b>	17-3/4"	8-7/8"	5-7/8"	2-15/16"	
<b>5221</b>	18-1/16"	9-1/4"	5-7/8"	2-15/16"	
<b>5213T</b>	22-1/2"	9-5/8"			12-13/16"



#### Air/Hydraulic Bottle Jacks

- Operate manually or pneumatically, 100 PSI minimum air pressure required.

**4313C** – 12-ton air-assist bottle jack; lift range 9-1/2" to 18-3/8", stroke 6-1/8".

**4321C** – 20-ton air-assist bottle jack; lift range 9-7/16" to 17-11/16", stroke 5-7/8".



4313C

#### 1734A Heavy-Duty Wheel Step

- Tire-mounted wheel step provides quick, easy access to under-hood components.
- Fits heavy-duty vehicles (Class 7/8).
- Installs in seconds; adjusts to fit 22-1/2" to 24" wheel sizes and folds for easy storage.
- 300 pound capacity.
- Non-skid platform surface.



Shown folded

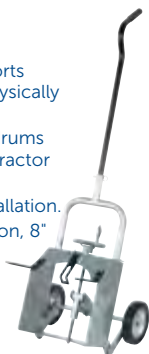


**5017A  
Brake Drum Dolly**

- Remove, install, and transport truck brake drums without physically having to lift them.
- Works on 15" and 16-1/2" drums found on most Class 7 and 8 tractor and trailer brake systems.
- Heavy-gauge steel construction, ten-inch pneumatic tires, and adjustable handle.
- Covered by OTC Lifetime Marathon Warranty®.

**1543  
Brake Drum Dolly**

- Removes, installs, and transports truck brake drums without physically having to lift them.
- Works on all 15" and 16-1/2" drums found on most class 7 and 8 tractor and trailer brake systems.
- 6" height adjustment aids installation.
- Heavy-gauge steel construction, 8" tires, and 36" handle.



**5090  
Back Buddy™ II**

- Remove, transport, service, and install heavy truck brake drums and hub assemblies.
- Fast-motion ratcheting jack with 14" of vertical lift.
- Pneumatic rear tires.
- Tilting mechanism to achieve the exact angle necessary for precise reassembly.
- Fold-down handle for open access to the work area.
- Onboard lube tray and toolbox.
- An array of optional adapter sets capable of grabbing almost any truck hub assembly or brake drum, inboard or outboard.



**513926** – 10 stud inboard hub & drum assemblies – 335 mm.

**513927** – 10 hole outboard drums – 3/4" thick back plates

Adapter Sets (sold separately)

**513925** – 5 and 6 spoke wheels

**514644** – 8 stud inboard hub & drum assemblies

**514645** – 8 hole outboard drums

**514646** – 6 stud inboard hub & drum assemblies

**514647** – 6 hole outboard drums

**514648** – Humvee/ Hummer geared hubs



**5105B  
1,100 lb. Capacity High-Lift DualWheel Dolly**

- Effortless air-powered hydraulic lift system for a variety of applications.
- 0 to 42" lifting range.
- Six-inch lateral adjustment.
- Tilt adjustment of +15° to -8° ensures easy alignment.
- Features four swivel casters, two locking, for enhanced mobility.



**Easy Lever Wheel Dollies**

- Gives technicians the leverage they need to easily remove or install truck tire-and-wheel assemblies.
- Heavy-duty construction capable of toting 300 pounds.
- Onboard rollers that make stud-hole alignment a snap.
- Spring-loaded kickstand for handy parking.
- Two models that, together, can accommodate tire diameters from 24 to 48 inches.
- Rugged tubular steel construction.

**5096A** – Heavy-duty Easy Lever wheel dolly. With a width of 26", this dolly handles tire diameters of 36" to 48".

**5095A** – Easy Lever wheel dolly. With a width of 22", this dolly handles tire diameters of 24" to 36".

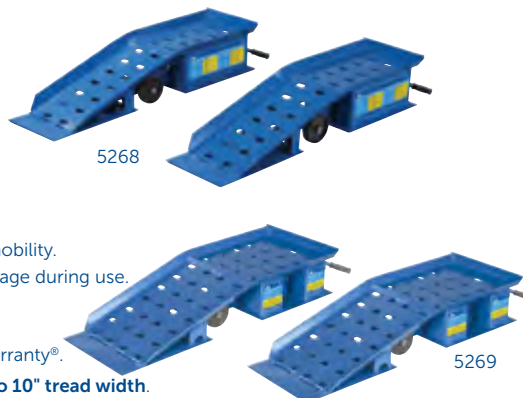


**20-Ton Truck Ramps**

- Long, retractable T-handle enhances mobility.
- Non-skid rubber matting prevents slippage during use.
- Durable, heavy-duty rubber wheels.
- Capacity per pair is 20 tons
- Covered by OTC Lifetime Marathon Warranty®.

**5268** – 20-ton truck ramps handle up to 10" tread width.

**5269** – Wide 20-ton truck ramps handle up to 16" tread width



**1770A  
1,500 lb. Dual Wheel Dolly**

- Hydraulic jack provides almost 5" of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Independent lifting rack provides maximum stability; rollers won't catch on load.
- Swivel casters for easy maneuverability.
- Floor space is 45" by 41".
- 6' chain holds load in place.
- Covered by OTC Lifetime Marathon Warranty®.



**1769A  
Truck Dual Wheel Dolly**

- This 1,500 capacity dolly will remove, transport, and replace dual wheel and tire assemblies without strain or struggle.
- Swivel casters, 3-1/2" front and 3" rear, provide easy maneuverability.
- Floor space is 43" by 42".
- No. 1769A hydraulic jack provides over 6-1/2" of lift and tilts wheel assembly 7° to prevent damage to wheel seal.
- Includes a 6' support chain to hold load in place.

Model	Frame Height	Frame Width	Frame Length	Wheel Diameter	Handle Length
<b>5268</b>	9-1/4" (23.5 cm)	13-1/2" (34.29 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)
<b>5269</b>	9-1/4" (23.5 cm)	18-1/4" (46.36 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)

# TIRE SERVICE HEAVY DUTY TOOLS & EQUIPMENT

## 5789-PACK Tire Service Display

Includes 23 popular tools for changing a tire:



Part Number	Qty
5716	1
5720	1
5724	1
5728	1
5729	1
5731	1
5732	1
5733	1
5735-35	2
5735-42	2
5735-42K	1
5736-24	1
5736-30	1
5737-30	1
5739-24	1
5739-30	1
5758	2
5047LP	1
5789ID-520	1
5789ID-1032	1
5700-DISPLAY	1

## 5700-DISPLAY HAMMER & TIRE SERVICE DISPLAY RACK

- Designed to display various products in the framed rack, complete with removable rear sign holder.
- Sturdy display framed with heavy 5/16" rod with heavy steel base eliminates tipping.
- Black powder coat finish for a rust free, durable finish.
- Contains 2" x 2" = 52 slots and 2" x 4" = 6 slots.
- Includes 4 side hooks (not pictured).
- Assembled dimensions; W 18.5", D 19", H 44".
- Weighs approx. 35 lbs.



## 5700A Accessory Tire Bead Seater

- Provides the ability to control the blast with both hands firmly on the nozzle assembly, increasing effectiveness and safety.
- Includes all the fittings to adapt the hose to most surge tanks found on tire changers. A tank hook is also included to hang the nozzle when not in use.
- Long 6-1/2' hose will reach all positions on the tire.



## 5702 Tire Bead Seater

The 5702 OTC Tire Bead Seater provides many of the great features of it's 5713 big brother, at a more economical price!

- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the tank/valve assembly, critical for effective and safe use.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of tire sizes and wheel diameters.
- Inline design allows for a comfortable distance from the tire and wheel while seating.
- ASME approved 2-gallon tank with inlet valve, pressure gauge, and relief pressure valve for safety.



## 5715 Tire Spoon Rack

- Designed to hold OTC Tire Spoons by the handle upset.
- Also holds tools with 3/4" or smaller diameter shafts.
- Can be hung on end of tool box or mounted to the wall via holes on 16" center.



## 5727 Sliding Bead Breaker

- The 5727 Sliding Bead Breaker has a split head, unique wedge design and slide hammer to reduce bead friction. Foot loops and tipping slots provide leverage and ease of transferring force to the tire.
- Sliding Bead Breaker, 47" extends to 81", 21 lbs.



## 5713 Tire Bead Seater

The Tire Bead Seater is used when a tire, new or used, is mounted on a wheel and the tire bead does not touch both sides of the wheel, making inflation possible. The air trigger on this tool expels a tremendous burst of air that inflates the tire to seat it to the wheel rim. This allows the tire to be inflated to the recommended pressure through the tire valve.



- The Tire Bead Seater is equipped with unique configurations that enhance ease of use, productivity and safety for technicians looking to get the job done right every time.
- Unlike other options out there, the Tire Bead Seater's ASME certified 13-gallon tank is designed with a nozzle and valve connected via hose assembly, giving the user more control rather than requiring them to hold the weight of the tank.
- The trigger style discharge valve allows for optimum airflow control while allowing both hands to firmly hold the nozzle/valve assembly, critical for effective and safe use. Wheels and handle function in either the vertical or horizontal position for easy mobility and storage.
- Unique nozzle design significantly reduces "blowback recoil" and contains discharge holes strategically placed for optimum inflation of a wide range of the tire sizes and wheel diameters.
- Air valve included for filling tank, which also provides compressed air for filling the tire while seating the bead, optimum for on-the-road service.





**Convex Slip Head** - Unique "Convex Slip Head" curved design allows the spoon to slide easily into the tire bead while the spoon bump limits the depth for quick-and-easy operation.



**Grip grooves** - Eliminate spoon slippage on the wheel rim while mounting or demounting the tire. The grooves also limit the depth of the spoon to help eliminate pinching tire tube applications.

**5716** **HD Sliding Tire Spoon** - 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.



**5716G** **HD Sliding Tire Spoon with Grip Grooves** 38" extends to 52", 3/4" diameter. Inner slide bar provides hammer action to easily insert and remove the spoon.



**5720** **Sliding Dual Tire Spoon** 35" and 3/4" diameter. Unique configuration provides mount and demount heads on either end with the aid of a slide hammer mounted mid bar, allowing for hammering either end in or out of the tire bead. Twist-lock feature locks 3.5 lb. slide weight in position.



**5724** **Extending Tire Spoon** 22" extends to 34", 3/4" diameter. Twist-lock feature allows the spoon to be extended to any length and locked into position with a twist of the collar.



**5734-18** **Tire Machine Spoon, Double End, 18"** Has a curved end and a bent tip end for starting the bead on a tire changing machine.



**5734-18G** **Tire Machine Spoon, Double End with Grip Grooves, 18"** Has a curved end and a bent tip end for starting the bead on a tire changing machine.



**5735-18** **Double End Curved & Flat Tip Curved Tire Spoon, 18"** Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-18G** **Double End Tire Spoon with Grip Grooves, 18"** Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-35** **Double End Curved & Flat Tip Curved Tire Spoon, 35"** Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-35G** **Double End Tire Spoon with Grip Grooves, 35"** Double end curved tire spoon. Handle knob enables easier spoon pick up. 3/4" diameter.



**5735-42** **Double End Curved & Flat Tip Curved Tire Spoon, 42"** Same great design as the original double end mount/demount tire spoon, but in a 42" length for added leverage. 3/4" diameter.



**5735-42K** **Double End Tire Spoon with Kick Start, 42"** Includes kick loops to allow the spoon to be forced into tight bead locations with the help of foot pressure. 3/4" diameter.



**5736-18** **Curved Tire Spoon, 18"** Handle knob enables easier spoon pick up. 3/4" diameter.



**5736-18G** **Curved Tire Spoon with Grip Grooves, 18"** Handle knob enables easier spoon pick up. 3/4" diameter.



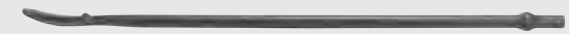
**5736-24** **Curved Tire Spoon, 24"** Handle knob enables easier spoon pick up. 3/4" diameter.



**5736-24G** **Curved Tire Spoon with Grip Grooves, 24"** Handle knob enables easier spoon pick up. 3/4" diameter.



**5736-30** **Curved Tire Spoon, 30"** Handle knob enables easier spoon pick up. 3/4" diameter.



**5737-30** **Flat Tip Curved Tire Spoon, 30"** Handle knob enables easier spoon pick up. 3/4" diameter.



**5739-24** **Curved Shank Tire Spoon, 24"** The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.



**5739-30** **Curved Shank Tire Spoon, 30"** The curved shank allows improved access for the spoon head around the tire bead or wheel rim. Handle knob enables easier spoon pick up. 3/4" diameter.





# HEAVY DUTY TOOLS HEAVY DUTY TOOLS & EQUIPMENT



5789ID-1032

5789ID-520

## Tire Service Hammers, Indestructible Handle

- Indestructible handle - never needs replacement!
- Ergonomic rubber grip handle reinforced with steel bars resists breaking while absorbing impact and vibration.
- Drop-forged head is induction-hardened for long life, and contains steel locking plates that are specially bonded to ensure the head never becomes loose.
  - Use top hook as a wheel tipper; sledge end hook to drag tire into position.
  - Bead breaking wedge has grooves and a convex shape to help drive tire lube into the bead.

**5789ID-520** – 5 lb. head, handle length 20", total weight 7.3 lbs.

**5789ID-1032** – 10 lb. head, handle length 32", total weight 14.4 lbs.



## 5729 Inside Dual Wheel Bead Breaker

- Breaks the inner bead on the outside tire without removing the wheel from the truck.
- Unique design places pressure in the exact location required to quickly and easily break the inner bead.
- Simply pull up on the handle and the bead is forced off the wheel rim.



## 5747 Tire Valve Stem Punch Kit

- Quickly and easily remove old valve stems from a wheel with a swing of a hammer.
- Simply place the punch tip on the inside of the valve stem and strike the punch to force the old valve stem out of the wheel.
- The unique punch tip is heat treated and shaped to remove all types of valve stems, including 10mm nickel plated, steel, and brass valve stems.
- Includes hand protecting grip with interchangeable 5" and 8" punch adapters for car and truck wheel applications.



## 5752 Wheel Loader & Tipper

- The new ergonomic wheel loader and tipper integrates two very helpful tools into one.
- The wheel loader feature allows a technician to lift various sizes and types of wheels and tires in and out of a truck bed.
- The wheel tipper feature allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Both of these features allow the technician to easily and safely service and lift wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.



## 5750 Wheel Tipper

- This ergonomic wheel tipper allows the technician to flip a wheel over during tire service, or just tip up a wheel and tire to move.
- Allows the technician to easily and safely service wheels by eliminating the need to bend over to lift, dramatically reducing the risk of back injury.
- Works on steel or aluminum wheels, inflated or deflated.



## 5728 Tire Bead Breaker

- Unique head is designed to provide a large striking area for all angles, while providing the mass needed to break the tire bead.
- This design puts the force exactly where it's required and eliminates the possibility of accidentally hitting the wheel, problems typically encountered while using larger swing hammer style bead breakers.



## 5745 Hands Free Air Chuck

- Perfect for applications where the tire valve is facing the floor while seating the tire bead, such as most dual wheel configurations.
- Hooks on the top bead seat of the wheel and the spring pressure holds the chuck on the tire valve pointing to the opposite side.
- Ball valve included to allow inflation only when needed.



## 5047LP Lug Nut Cap Remover Locking Pliers

- Designed to remove lug nut caps found on heavy duty truck and trailers quickly and easily without damage. Caps can be easily damaged by prying or using standard cap removers.
- Locking plier design with specially coated jaws apply maximum grip on the lug nut caps without damage.

## 5047 Lug Nut Cap Remover

- Chrome-plated lug nut caps found on many heavy-duty trucks and trailers can be tough to remove, and they're easily damaged if you pry them off or use an ordinary cap remover. This tool avoids those problems. It is ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing force you apply.
- Features cushioned handles.



## 5082 Wheel Tipper

This heavy-duty wheel tipper makes handling those hard-to-manage truck tires easy. To use the wheel tipper, simply deflate the tire and break the bead, then hook the wheel tipper to the rim of the wheel. The wheel tipper makes an otherwise tough task effortless.

- Designed for both aluminum and steel wheels won't damage wheel rim.



## 5731 Tire Bead Locking Pliers

- Prevents the tire from slipping while mounting the top bead.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.
- Prevents tire from contacting costly TPM Sensors.



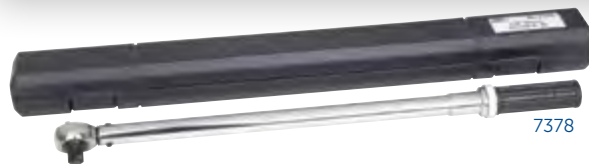
## 5732 Tire Spoon Holding Pliers

- Tire Spoon Holding Pliers is the 3rd hand needed to ease mounting and demounting of tires with tire spoons.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



## 5733 Tire Bead Wedge Pliers

- Tire Bead Wedge Pliers keeps the tire in the bead drop area to ease mounting and demounting of larger truck and agricultural tires.
- Quick and easy universal clamping design.
- Rugged rubber coated jaw to protect wheel finish.



7378



7379

## Accutorq™ Klikker Torque Wrenches

These precision torque wrenches make a loud click when you've reached the torque setting. They feature ratcheting heads, all-metal construction, permanently roll-marked scales, and soft-grip rubber handles that enable you to firmly grasp the wrench for right- or left-hand torquing.

- Includes molded plastic case.
- One-year warranty.

Tool No.	Torque Range	Graduations	Square Drive	Length
7378	50–250 in. lbs. (68–339 N•m)	2 ft. lbs.	1/2"	19-3/8"
7379	100–600 in. lbs. (136–813 N•m)	10 ft. lbs.	3/4"	42-1/4"



## 7367 Torque Multiplier, 1000 lb-ft

- Drive Input; 1/2", 365 lb-ft Max
- Drive Output; 3/4", 1100 lb-ft Max
- Head Width; 2.9", 3.3:1 Ratio
- Reaction Bar; 13-3/4"
- Includes reaction foot.
- Note; frictional gear loss = 6%



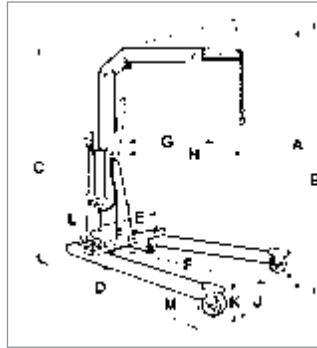
## 7368 Torque Multiplier, 2000 lb-ft

- Drive Input; 3/4", 730 lb-ft Max
- Drive Output; 1", 2200 lb-ft Max
- Head Width; 3.6", 3.3:1 Ratio
- Reaction Bar; 15-5/8"
- Includes reaction foot.
- Note: frictional gear loss = 6%

# FLOOR CRANES HEAVY DUTY TOOLS & EQUIPMENT



1819, 1820



Specifications	1819	1820
Cap., boom retracted	2,200	4,400
Cap., boom extended	1,650	3,300
A Max. boom height, boom retracted	107"	111"
B Max. boom height, boom extended	117"	122"
C Overall height, boom horizontal	80"	82"
D Overall length	83"	89"
E Minimum throat width	24"	25"
F Inside leg length	54"	57-1/2"
G Effective boom reach (retracted)	33"	35-1/2"
H Effective boom reach (extended)	48"	50-1/2"
J Inside leg width (3-position)	24", 36" 48"	26", 40" 52-1/2"
K Leg height	8"	9-1/2"
L Dolly wheel diameter	5"	5"
M Wheel diameter	6"	8"
Height, folded	79"	86"
1819 Floor space folded	27" x 38"	
1820 Floor space folded	31" x 42"	

## 2,200 and 4,400 lb. Capacity Heavy-Duty Floor Cranes

- To conserve valuable floor space, crane folds into a compact package for storage.
- For "close-in" work, leg spread adjusts to clear vehicle's wheels, telescoping boom extension gives additional reach. Roller bearing mounted wheels and steering dolly provide ease of mobility.
- A two-speed hydraulic hand pump provides fast boom travel; descent of boom is under precise control of operator.
- Covered by OTC Lifetime Marathon Warranty®.

**1819** – 2,200 lb. Capacity Crane. Has hydraulic hand pump and 16-7/8" lifting chain.

**39610** – 1/4" steel chain grade 43, 18-3/8" long, 2,200 lb. capacity. Has safety hook on end. Use with 1819.

**1820** – 4,400 lb. Capacity Crane. Has hydraulic hand pump and 18-3/8" lifting chain.

**39611** – 5/16" steel chain grade 70, 19-3/4" long, 4,400 lb. capacity. Has safety hook on end. Use with 1820.



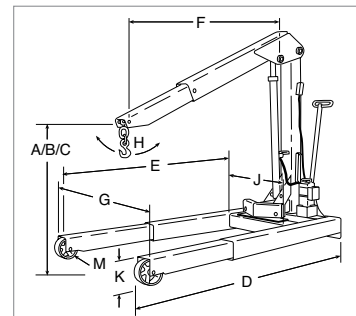
1813

No. 1812 Load-Rotor (not included)

Boom Capacity (lbs.) Description	Extended 4,000	Centered 5,000	Retracted 6,000
A Maximum boom height	161-7/8"	150-11/16"	139-1/2"
B Minimum boom height	6"	17-3/8"	28-3/4"
C Overall height (boom horizontal)	87"	87"	87"
D Overall length*	129-1/8"	113-7/8"	98-1/4"
E Inside leg length	91-11/16"	76-1/8"	43-1/4"
F Effective boom horizontal reach	94-1/4"	78-3/4"	63-1/4"
G Outside leg width**	59-3/4"	57-3/4"	55-3/4"
H Boom swing	36"	31"	26"
J Inside leg width	35-3/4"		
K Leg height	9-1/16"		
M Wheel diameter	8"		
Dolly wheel diameter	5"		

\* Legs in storage position: 80-7/8"

\*\* Legs in storage position: 53-1/2"



## 6,000 lb. Capacity Heavy-Duty Mobile Floor Cranes

- Three boom positions give capacities of 4,000, 5,000, and 6,000 lbs. to handle the biggest engines, and often the transmission right along with the engine! Usable reach is almost 92".
- Boom swivels for vertical and lateral positioning; legs extend to straddle the biggest tires.

**1814** – 6,000 lb. capacity crane with electric/ hydraulic pump (115V) with remote motor control.

**1813** – 6,000 lb. capacity crane with two-speed hydraulic hand pump.



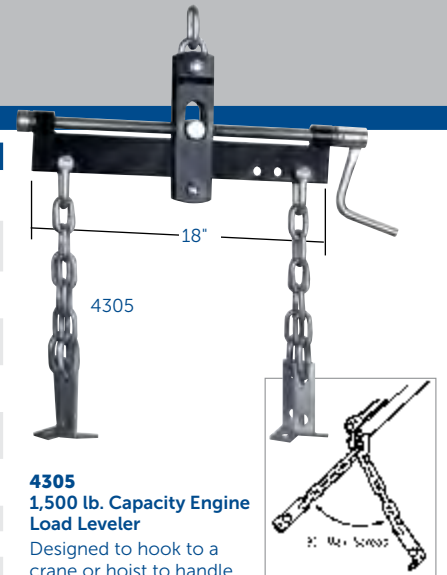
**2,000 and 4,000 lb. Capacity Folding Floor Cranes**

- Both of these cranes fold up for compact storage.
- Front wheels are 3-1/2"; rear casters 5-7/8".

**2002** – 2000 lb. capacity crane with a reach of 24" to 36"

**2004** – 4000 lb. capacity crane with a reach of 25" to 46"

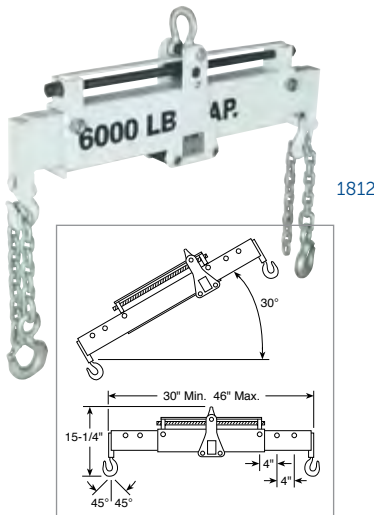
Specifications	2002	2004
Maximum capacity, boom extended	500 lbs.	1,000 lbs.
Maximum capacity, boom retracted	2,000 lbs.	4,000 lbs.
Maximum height, boom extended	94"	104"
Maximum height, boom retracted	87"	81"
Effective boom reach, boom extended	36"	48"
Effective boom reach, boom retracted	24"	26"
Leg width @ front wheels	32-1/2"	25"
Leg height	6-1/2"	7-3/4"
Floor space folded	57" x 38"	16" x 17-1/2"
Floor space unfolded	70" x 32"	33" x 33-1/2"



**4305**  
**1,500 lb. Capacity Engine Load Leveler**

Designed to hook to a crane or hoist to handle and position large, bulky components.

- The horizontal tilt can be adjusted to compensate for off-center loads, or adjusted to a certain angle for a component being positioned.



**Load Leveler**

- Improved design over conventional spreader bars.
- Carriage on main support beam moved by turning lead screw; this permits fine adjustment of the tilt angle of component being lifted.
- Turn lead screw manually or with air-powered tools.
- Spreader bar adjustment secured with locking bolts.
- Chain grade is 80.
- Covered by OTC Lifetime Marathon Warranty®.

**1812** – Load Leveler. Max. lifting capacity: 6,000 lbs.; distance between hooks: min. 30", max. 46".

**1822** – Load Leveler. Max. lifting capacity: 10,000 lbs.; distance between hooks: min. 36", max. 56".



**1806**  
**4,000 lb. capacity Load-Rotor® Positioning Sling**

- Use with a floor crane. Engine, transmission, or other component is tilted or leveled by turning sling's 5/8" hex drive end with a common speed handle and socket.
- Has 65-3/4" long chain (5/16") and hook assembly with forged hook on each end. Pair of special lifting brackets included.
- Makes engine removal and installation a snap, even in close quarters.
- For use with floor cranes only; not to be used with overhead hoists or lifts.



**Heavy-Duty Adjustable Slings**

- For lifting and positioning engines, transmissions, etc. Each chain can be adjusted independently for length; plate design enables chain to be "short-hooked" for correct tilt.

**205049** – 2,000 lb. capacity sling with 1/4" chain, 56" long

**205050** – 4,000 lb. capacity sling with 5/16" chain, 65" long

**38841** – Plate only, use with any 1/4" or 5/16" alloy steel chain



**Alloy Chains for Overhead Lifts and Hoists**

**302941** – 5/16" alloy chain, 26-13/16" long, 4,000 lb. capacity. With safety hook on one end. Use on No. 1812.

**302249** – 3/8" alloy chain, 28-3/8" long, 6,000 lb. capacity. With safety hook on one end.



**7100**  
**4,000 lb. Capacity Lifting Brackets (pair)**

- Attach directly to component for easy lifting; will take 1/2" diameter bolts.



# PRESSES HEAVY DUTY TOOLS & EQUIPMENT



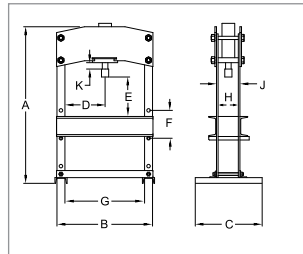
## 5180 10-Ton Portable Hydraulic C-Frame Press

- Weighing less than 28 lbs, this durable press is portable for various applications, i.e., roadside maintenance services, industrial applications, marine, general automotive.
- For clamping, pressing and bending. Ideal for welding and metal fabrication.
- 9" Open-Throat® design.
- Couples to any 4- or 10-ton Porta Power pump.
- The base can be assembled to position the press either vertically or horizontally and can also be mounted to a bench.

Set includes: C-Frame press with base, adapters: V-pushing and ram pushing (9/16" and 3/4" dia. shanks), receiving insert, flat insert, storage case.



A	B	C	D	E	F	G	H
21-1/4"	13-3/4"	9"	8-1/2"	2-1/2"	1-1/2"	4"	4-1/4"

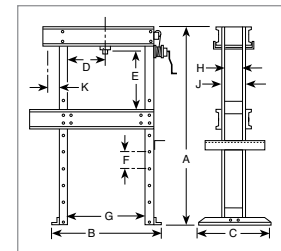


## 5230 16-1/2 Ton Capacity Bench Press

This innovative press integrates all the hydraulic elements within the chassis. The compact and functional design saves workshop space and ensures protection during transport.

- Bolster is adjustable for height.
- Automatic spring return piston.
- Pressure gauge with damper to extend its working life— positioned at eye level for easy reading.
- Includes set of two V-blocks and legs with bolt-holes for fixing to bench.

A	B	C	D	E	F	G	H	J	K
37"	16-1/2"	23-7/8"	9-1/2"	5-7/8"-17-5/8"	6"	19-5/8"	4-3/4"	5-1/2"	3"

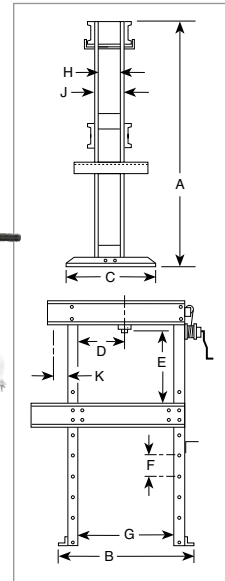


## 1825 17-1/2 Ton Capacity Heavy-Duty "Open Throat" Press

- Ram head moves side to side for off-center pressing; ram-to-work distance is adjusted by a forcing screw that is extended or retracted by a speed crank.
- "Open-throat" frame extensions make handling of bulky jobs possible outside of the press frame.
- This press does not have a lifting mechanism. If a lifting mechanism is needed, order 211407.
- Covered by OTC Lifetime Marathon Warranty®.
- Has No. 201832 hydraulic ram with 2" stroke, No. 4002 hydraulic hand pump, No. 9650 gauge, No. 9767 hose, adjusting screw, speed crank, ram cap, and pump mounting bracket.

211407 – 17-1/2 ton winch kit.

A	B	C	D	E	F	G	H	J	K	Floor Space
64"	28"	28"	17-7/8"	34-7/8"	3-3/8"	20"	4-1/4"	5"	4-3/8"	28" x 28"



## 25-Ton Capacity Heavy-Duty "Open Throat" Press

- "Open throat" feature enables ram to be positioned outside of press frame for fast axle bearing removal and installation, as well as other tasks. Rugged press is covered by OTC Lifetime Marathon Warranty®.
- Press bed is raised or lowered with a hand crank, and a spring-return hydraulic ram is laterally adjustable for off-center work at full capacity.

**1826 – 25-ton press.** Includes No. 4016 hydraulic hand pump; No. 52025 hydraulic ram with 14" stroke; No. 9652 gauge; No. 303563 hose (3/8" ID x 8'); and pump mounting bracket.

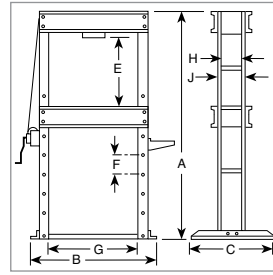
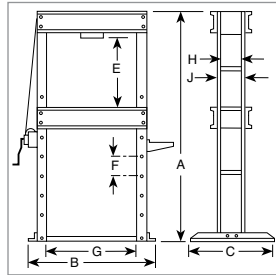
**1826A – 25-ton press.** Includes No. 4020 air/hydraulic pump; equipped the same as 1826.

A	B	C	D	E	F	G	H	J	K	Floor Space
68"	43"	28"	3"-29"	6-7/8"-4-3/8"	4-1/2"	32"	5-1/2"	6-1/2"	7"	28" x 25-1/4"

\*Lateral head movement. Frame shipped assembled.



1833



1850

**25-Ton Capacity Shop Presses**

- Tough, economical press is ideal for pressing rear axle bearings, piston pins, and much more.
- Large 30" x 46" work area under ram makes positioning of even bulky work easy. Press bed is easily raised and lowered by a dependable lifting mechanism. Choice of model with hand- or air-driven hydraulic pump.

**1833 – 25-ton press.** complete with No. 4002 hydraulic hand pump; No. 9652 gauge; No. 24815 tee; No. 9767 hose (1/4" ID x 6"); hydraulic ram No. 51426 with 6-1/4" stroke; and 42733-WH2 pump mounting bracket.

**1834 – 25-ton press.** complete with air-driven No. 4020 hydraulic pump; No. 9652 gauge; No. 24815 tee; No. 9768 hose (1/4" ID x 8") and hydraulic ram with 6-1/4" stroke.

**55-Ton Capacity Economy Shop Presses**

- Durable steel frame resists buckling and bending. Covered by OTC Lifetime Marathon Warranty®.
- Hand-operated winch and cable mechanism adjusts lower press bolster.

**1850 – 55-ton press.** Includes No. 52457 hydraulic ram with 6-1/4" stroke; No. 4016 hydraulic hand pump; No. 9651 gauge; No. 9767 hose (1/4" ID x 6"); and pump mounting bracket.

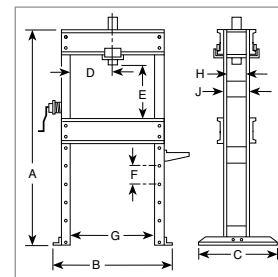
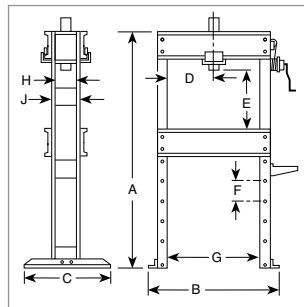
**1851 – 55-ton press.** Includes No. 52457 hydraulic ram with 6-1/4" stroke; No. 4020 air/ hydraulic pump; No. 9651 gauge; No. 9767 hose (1/4" ID x 6"); and pump mounting bracket.

A	B	C	D	E	F	G	H	J	Floor Space
69-1/2"	40-1/2"	28"	5-3/4"-46"	4"	30"	5-1/2"	6-1/2"	41-1/2"	56-1/2" x 36" x 28"

A	B	C	E	F	G	H	J	Floor Space
70-3/4"	47-1/2"	28"	6-1/8"-41-1/8"	5"	35"	7-1/16"	10"	55-1/2" x 28"



1845



1854

**55-Ton Capacity Heavy-Duty Presses**

- Side-to-side positioning of ram allows full capacity pressing along entire bolster length without buckling or bending. Covered by OTC Lifetime Marathon Warranty®.
- Hydraulic ram features 13" of stroke. Choice of hydraulic power units.

**1845 – 55-ton press.** Includes single-acting ram No. 52380 with 13" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 303563 hose (3/8" ID x 8"); and pump mounting bracket.

**1846A –** Same as No. 1845 except has No. 4016 hydraulic hand pump and single acting ram No. 65458 with 10-1/8" stroke.

**1847 –** Same as No. 1845 except has a No. 4022 air/hydraulic pump and a No. 9781 hose (3/8" ID x 10').

**1872 – 55-ton press.** Includes double-acting ram No. 51682 with 13" stroke; No. 4046 electric/hydraulic pump; No. 9651 gauge; No. 36887 hoses; and pump mounting bracket.

**100-Ton Capacity Economy Shop Press**

- Large 35" opening between press uprights allows easy handling of large gears, shafts, sprockets, and other components serviced in truck, construction, and agricultural equipment shops. Covered by OTC Lifetime Marathon Warranty®.
- Hand-operated winch and cable mechanism gives operator precise control in adjustment of lower press bolster to any height.

**1854 – 100-ton press.** Includes hydraulic ram No. 52434 with 10" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 9768 hose (1/4" ID x 8"); and pump mounting bracket.

A	B	C	D	E	F	G	H	J	Floor Space
72"	48-1/2"	36"	3-1/4"-32-3/4"	6"-42"	6"	36"	6-3/4"	8"	56-1/2" x 36"

A	B	C	D	E	F	G	H	J	Floor Space
86-5/8"	47-1/2"	28"	17-1/2"	9-5/8"-49-5/8"	8"	35"	6-3/8"	10"	55-1/2" x 28"

\*Lateral head movement.

# PRESSES / ACCESSORIES HEAVY DUTY TOOLS & EQUIPMENT



1857



1858

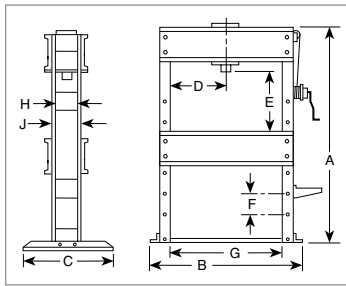
## 100-Ton Capacity Heavy-Duty Shop Presses

- Wide open uprights allow easy positioning of bars and shafts for straightening or bending.
- Upper bolster can be lowered for convenient positioning during repetitive jobs.
- Ram head glides smoothly on rollers for easy horizontal adjustments; rugged press frame will withstand a full capacity load with the ram head in any position across the upper bolster.
- Covered by OTC Lifetime Marathon Warranty®.

**1857 – 100-ton press.** Includes single-acting No. 52434 ram with 10" stroke; No. 4008 hydraulic hand pump; No. 9651 gauge; No. 9781 hose (3/8" ID x 10'); and pump mounting bracket.

**1858 – Same as No. 1857,** except has double-acting No. 51683 ram with 13" stroke; No. 61217 3-phase, 220V, 3450 rpm electric/hydraulic pump; and two No. 9769 hoses.

**1858-1P – Same as No. 1858,** except it has a No. 4064 2-stage, 1-phase hydraulic pump.



A	B	C	D	E	F	G	H	J	Floor Space
77-1/4"	64"	36"	7"-43"	2"-42"	8"	50"	8"	10"	36" x 78-1/4"

\*Lateral head movement. Frame shipped assembled.

## Accessories for 100-Ton Capacity Presses

**50392 – Straightening fixtures (pr.)**

**1893 – V-blocks, 14" long (pr.)**

**21332 – Pushing adapter** (must be used with reducing adapter).

**36469 – V-pushing adapter** (must be used with reducing adapter).

**43563 – Reducing adapter** (for double-acting ram).

**43562 – Reducing adapter** (for single-acting ram, not pictured).



50392

21332

43563

36469



1123

201923

210454

34806

1890

## 1880

### 17-1/2-Ton Press Accessory Set

- Adapters and accessories attach to ram's forcing screw or are used on press bed to support work.

Set includes:

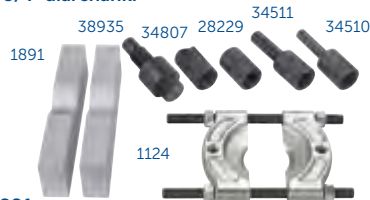
**1123 – Bearing pulling attachment**

**34806 – V-pushing adapter**

**201923 – Ram pushing adapter with a 1/2" dia. shank**

**1890 – V-blocks (pair)**

**210454 – Ram pushing adapter with a 3/4" dia. shank.**



1891

38935

34807

28229

34511

34510

1124

## 1881

### 25-Ton Press Accessory Set

- Adapters and accessories attach to ram's forcing screw or are used on press bed to support work.

Set includes:

**1124 – Bearing pulling attachment**

**34807 – V-pushing adapter**

**34510 – Ram pushing adapter with 3/4" dia. shank**

**1891 – 11-1/2" long V-blocks (pr.)**

**34511 – Ram pushing adapter with 1" dia. shank**

**28229 – Ram forcing cap**

**38953 – Threaded adapter**



1892

34808

28230

34756

34755

37368

1126

## 1882

### 55-Ton Press Accessory Set

- Accessories attach to ram's forcing screw or support work on press bed.

Set includes:

**1126 – Bearing pulling attachment**

**1892 – 14" long V-blocks (pr.)**

**34755 – Ram pushing adapter with 1" dia. shank**

**28230 – Ram forcing cap**

**34756 – Ram pushing adapter with 1-1/4" dia. shank**

**37368 – Threaded adapter – for single acting only**

**34808 – V-pushing adapter**

**38954 – For 1872 double acting press**





### Universal Outside Thread Chaser

Damaged bolt or nut threads can be an annoying, costly problem—unless you have one of our thread chasers. It will quickly restore threads to near original condition without the use of expensive thread-cutting equipment.

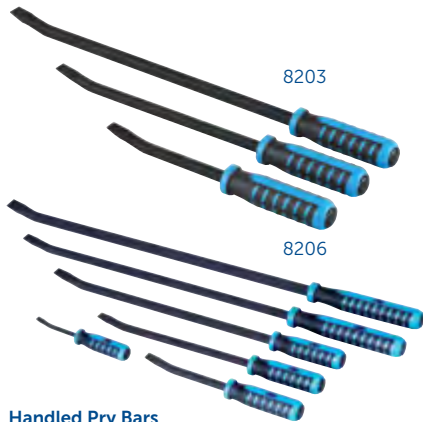
- Replaceable V-pads and dies.
- 1-1/4" to 5" O.D.

**7402 – Thread chaser with 6 dies:** threads per inch - 4, 5, 6, 7, 7-1/2, 8, 9, 10, 11, 11-1/2, 12, 14, 16, 18, 20, and 24.

**216884 – Standard die set.** Includes 6 dies, in the sizes listed above.

**202817 – Metric die set.** Includes three dies: 1 mm- 1.25 mm-1.5 mm-1.75 mm, 2 mm-2.5 mm-3.0 mm-3.5 mm; 4 mm pitch dies.

**206803 – V-pad.**



### Handled Pry Bars

Heavy-duty pry bar made of tempered square steel that you can hit without damaging the handle.

- Black chrome striking cap allows hitting the bar without damage to the handle.
- Ergonomic handle – dual durometer composite handle for user comfort; reduces hand fatigue.
- Polished tip with black oxide finish.
- Long-life finish resists rust and wear during use.
- OTC Lifetime Warranty.

**8203 – 3-piece handled pry bar set.** Includes 12", 18", and 24" sizes.

**8206 – 6-piece handled pry bar set.** Includes 8", 12", 18", 24", 32" and 36" sizes.

**8208 – 8" handled pry bar**

**8212 – 12" handled pry bar.**

**8218 – 18" handled pry bar.**

**8224 – 24" handled pry bar.**

**8232 – 32" handled pry bar.**

**8236 – 36" handled pry bar.**



### 6492

#### Engine Preluber Kit

- Ensures oil is present to internal engine components on the first start of a new or rebuilt engine, or after major engine work is performed.
- Required to prime the oil pump and fill the oil galleries and internal engine components with clean, new oil.
- Connects to engine oil system at the oil pressure sensor on a variety of domestic and import engines.
- Oil pressure sensor adapters included.



### 5086

#### 10-Ton Collision Repair Set

- Exert hydraulic force just where it's needed to lift, spread, bend, or straighten. Handles the high-force jobs you face daily in trailer maintenance or other applications.
- Includes reliable components including 10-ton, 10-1/8" stroke hydraulic ram; air/hydraulic pumping unit; hydraulic hose; four snap-together extension tubes; extension tube coupling; serrated saddle; flat base; 90° wedge head; flex head; storage case.
- All set components are covered by OTC Lifetime Marathon Warranty®.



### 1515B

#### 10-Ton Collision Repair Sets

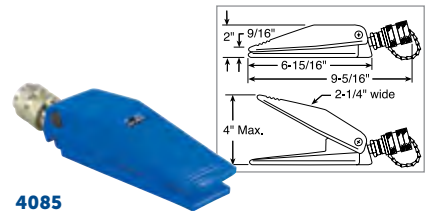
- Components snap together for quick setups to apply pushing, spreading, or pulling force.
- Components include: hydraulic pump, hose, and ram; ram flat base; extension tubes (4); 1/2-ton spreader; tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case has wheels for mobility.
- Single speed hydraulic hand pump and ram with 6" stroke.



### 4020

#### Air/Hydraulic Pump

- Ideal all-around power source develops 10,000 PSI at 100 PSI air.
- Two-stage release mechanism; internal relief valve.
- 98 cu. inches of usable oil.
- Covered by OTC Lifetime Marathon Warranty®.



### 4085

#### 1-ton Capacity Hydraulic Spreader

This hydraulic spreader is rated at a full 1-ton capacity at 10,000 PSI and that's enough for a wide variety of jobs. Working in tight spots is no problem—it needs only a 9/16" clearance to engage the jaws. With a big 4" spread, it's ready for a variety of applications: straightening work, removing dents and creases from sheet metal, or as a clamp. The device's spring-return jaws are made of high-strength alloy steel. It can be dead-ended at 4" spread under full load. Ideally suited to work with No. 4012 hand pump (not included).

### 4180

#### Power Twin Ram and Pump Set

- Center-hole feature permits extending adjusting screws, cables, puller screws, etc., straight through the ram.
- This spring return unit is compact and lightweight.
- Ideal for jobs having restricted working space.
- Set includes 4120 17-1/2 ton, 2" stroke single-acting hydraulic ram; 4002 pump; 9650 gauge; 24815 tee; 9767 hose; and 9798 hose half coupler.



#### Pumps and Rams

**9110B – 10-Ton Ram with 6" stroke.** Use with the snap-together components of OTC Stinger's collision repair sets, or with most similar competitive products.

**9107B – Single Speed Hydraulic Pump.** Ideal for single acting rams. Developing up to 10,000 psi operating pressure, the pumps operate horizontally or vertically in the "head down" position. Finger tip control provides instant release or pumping action. Has a built-in safety overload valve.





5286

## Portable Diesel Particulate Filter Cleaner

The Diesel Particulate Filter (DPF) Cleaner was designed with shop service in mind. Its portability allows the unit to be placed as close to the vehicle as possible and to be stored wherever needed in the service facility. The advent of the 2010 Tier 4 cleaning requirements created the need for a lighter, more portable cleaning system which can be taken into the field to clean filters at the point of service.

### Diesel Particulate Filter features

- Lightweight and Highly Portable - ideal cleaning system for use in the shop or on a service truck.
- Flexibility - clean DPF's from 6" to 15.5" in diameter using shop or compressed air of at least 100 PSI and 20 CFM sustained airflow.
- Fully Automated Operation - once started, the cleaning process can be completed with minimal operator oversight, freeing up the technician to simultaneously do other work in the shop.
- Focused Air Jet Technology™ - concentrates a precise high pressure stream of air directly into every cell.
- Easy Maintenance - contains no internal filters that require user maintenance.
- Rugged design provides maximum durability.
- Operates on 12-24 volt DC, or 110-220 Volt AC.

### Efficiency by the Numbers\*

- Cleans up to 20% more efficiently than traditional pulse based systems.
- Cleans up to 5% more efficiently than other more expensive "air knife" systems.

\*Based on third party OE test data using Pin-gauge measurement.

### Unique floating puck prevents "splash back"

- Features Focused Air Jet Technology™ with a unique floating puck that prevents splash back.
- Includes three nozzles: two straight (short and long), for standard "open face" DPFs; and one curved for the angled-flange DPFs.
- Ensures quiet operation.

### Ash disposal System and Shield

- Innovative ash disposal system enables technician to quickly and easily remove and dispose of particulate matter in accordance with local environmental requirements.



5286 kit includes:

- Cleaning unit
- Three neoprene rings fit filters from 6 in. (165 mm) to 15.5 in. (400 mm) in diameter
- Wet / dry HEPA vacuum
- Short, long, and curved-flange filter nozzles
- Adjustment feet for standard and flanged filters
- Ash disposal kits
- AC and DC adapter cables

Accessories

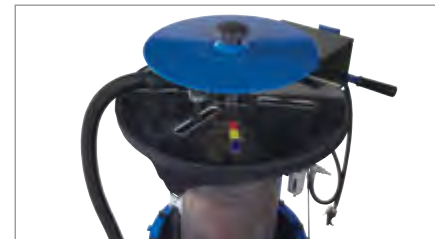
**563197** (Set of 5) – Ash disposal system enables technician to quickly and easily remove and dispose of particulate matter in accordance with local environmental requirements.



Curved neck nozzle with floating puck for angled-flange DPFs.



Long nozzle with floating puck for standard open face DPFs.



Includes innovative shield to protect cleaning area from moisture.



CE

**5280**

**OTC 5280 Diesel Particulate Filter Cleaner**

The Diesel Particulate Filter (DPF) Cleaner was designed with shop service in mind. The cleaning process allows the DPF to be cleaned as part of a general maintenance schedule at the service location with minimal time away from the vehicle. It's portability allows the unit to be placed as close to the vehicle as possible and to be stored wherever needed in the service facility.

**DPF Cleaner Features**

- OE tested and Dealer recommended – By many major diesel engine manufacturers. Robust design – For long shop life. Can be used as part of a preventative maintenance program.
- High Pressure cleaning process for thorough cleaning of ash from DPF – produces 10 times the burst energy of competitive low pressure units.
- Initial Burst Quick check – To identify filters too plugged for proper cleaning.
- Movable with locking wheels – For placement throughout the shop.
- Computer Controlled Process Based on OE Requirements – for "Start to End" cleaning without constant technician monitoring.
- Containment of hazardous ash – For easy disposal.
- HEPA Filter Air Exhaust System – To exceed environmental air standards for shop.
- Operates on standard 115V outlet.
- Proven to clean to over 92% efficiency. (3)

(3) Third-party OEM test results using pin gauge measurement with approved OTC adapters and burst cycles. Actual results may vary.

DPF Cleaner Includes:

OTC Diesel Particulate Filter (DPF) Cleaner

- 535936** – Small Cone
- 543887** – Medium Cone
- 543885** – Large Cone
- 553913** – CAT Adapters
- 553915** – Cummins Adapters



**Upgrade kits for other OEM's are sold separately:**

- 556889** – Detroit Diesel upgrade kit
- 553990** – UD TRUCK (with Hino Engine) upgrade kit
- 553991** – Isuzu upgrade kit
- 553993** – Volvo/Mack upgrade kit
- 558181** – Navistar upgrade kit\*
- \* Requires use of 5281 DPF Thermal Processing Unit.
- 554654** – Includes all upgrade kit shown above.
- 558569** – 12" HEPA filter
- 558571** – 30" air filter cartridge

**5281**

**OTC DPF Thermal Processing Unit**

The 5281 DPF Thermal Processing Unit is a device which will thermally regenerate a DPF unit at a controlled, pre-programmed rate. Sometimes, the DPF cannot be regenerated on the truck due to a failure with the vehicle's own regeneration system, or in the case of retrofit applications, a lack of an on-vehicle regeneration system. Thermal regeneration of DPFs is used in conjunction with the OTC 5286 DPF Cleaner.

Designed to facilitate the cleaning of dirty filters – especially those with high amounts of wet soot, and unburned hydrocarbons.

- Pre-programmed thermal profile controls temperature 'ramp up' and 'cool down' to protect the DPF from thermal shock, reducing the risk of cracking the DPF.
- Holds temperature constant for two hours to ensure complete regeneration of filter.
- Includes both standard cycle and "pre-treat" cycle for oil-soaked filters.
- Built-in electronic safety lock prevents unauthorized opening of the door when temperatures exceed 200 degrees F.
- Large chamber accommodates various DPF sizes and shapes. Front access door allows for easy access to the thermal chamber.
- 220VAC / 60Hz / Single phase / 50 Amp.
- 1-year warranty.
- CE, UL201, UL499.
- Internal chamber dimension: 24" (L) x 24" (W) x 26" (H).



Electronic safety lock.



**J-47399  
Horizontal DPF Handler**

- The Universal mounting assembly adjusts front to back and side to side for easy DPF handling
- The height range of 6-1/2" to 29-1/2" is ideal for most of today's trucks
- Safety strap holds the load securely while moving about the shop

Specifications:

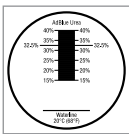
Overall Length: 34-1/2"  
Overall Width: 19-3/8"  
Max. Height: 29-3/4"  
Min. Height: 7-1/2"  
Side tilt: 30°, Front tilt: 15°, Back tilt: 15°

# GENISYS EVO® HD STANDARD HEAVY DUTY TOOLS & EQUIPMENT

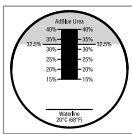


## 5025 OTC DEF Refractometer

Kit includes: Refractometer, dropper, lens wipe cloth, instructions and quick guide, screwdriver and case.



The scale without any liquid on the prism.



The scale with liquid on the prism. The reading is taken at the point the shadow line crosses the scale.

## 5025 DEF Refractometer SCR and EPA 2010

**EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.**

- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This Includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.
- SCR-equipped engines require the periodic addition of Diesel Exhaust Fluid (DEF, a urea solution) to enable the process. DEF is available in a bottle from most truck stops, and some have installed bulk DEF dispensers near the Diesel Fuel pumps. However, to ensure the proper operation of the SCR system, operators must ensure the DEF in their vehicle consists of a 32.5% Urea / Water solution.
- The OTC 5025 makes this a simple and quick process for an operator or technician.

### Application:

The refractometer is a portable, precision, optical instrument used for measuring the Diesel Exhaust Fluid (DEF) concentration. When a liquid sample is placed on the prism, the light passing through it is bent. The more concentrated the liquid, the more the light will bend. The refractometer contains a reticle, or scale, that is enlarged through the eyepiece to measure this light. The values on the scale have been established to evaluate the DEF condition.

### Scale:

- 0.5% line graduations
- 32.5% Indicated
- Scale 15-40%
- Waterline & 20 Deg C



## 3095 Digital DEF Tester SCR and EPA 2010

**EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.**

- Ensure the proper operation of Class 7-8 trucks utilizing the SCR system with accurate Diesel Exhaust Fluid solution displayed on screen.
- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This Includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.
- SCR-equipped engines require the periodic addition of Diesel Exhaust Fluid (DEF, a urea solution) to enable the process. DEF is available in a bottle at most truck stops, and some have installed bulk DEF dispensers near the Diesel Fuel pumps. However, to ensure the proper operation of the SCR system, operators must ensure the DEF in their vehicle consists of a 32.5% Urea / Water solution.
- The OTC 3095 makes this a simple and quick process for an operator or technician.
- Features:
  - Digital Display
  - Displays % UREA
  - Displays washer fluid freeze point



## 3421-79 Genisys Heavy-Duty Starter Kit

Genisys Heavy-Duty Standard software includes J1587/1708 and J1939 CAN communications.

Kit includes 9-pin Deutsch cable, 6-pin Deutsch cable, Smart Card, and PC software CD.

NOTE: System 4.0. 4GB card minimum required to install; see No. 3421-138.



## 3895-07 Genisys Touch Heavy-Duty Standard

OTC Genisys Touch HD supports two Society of Automotive Engineers (SAE) standards for the heavy-duty industry, J1587 / J1708 and J1930 CAN. Features Class 4 - Class 8 truck coverage, View and clear diagnostic trouble codes and live vehicle data.

Heavy-Duty Standard Starter Kit. Includes 9-pin Deutsch cable, 6-pin Deutsch cable, and heavy-duty security card.



## 3874HD Genisys EVO® USA Deluxe with Heavy Duty Standard Kit

Includes Genisys EVO® featuring the NEW System 5.0 with Code-Assist™ experienced-based Confirmed Fixes™ from Identifix®, NEW USA 2012 Domestic / Asian with ABS and European 2011 software including Pathfinder, Repair-Trac®, Fast fixes™ information, Heavy-Duty Standard software with cables, InfoTech Component Information software, Automated System Test™, OBD II Smart Cable, USA Domestic OEM vehicle cables (for GM, Ford, Chrysler, Jeep, Saturn), manuals, and carrying case.

NOTE: OEM cables may be required for certain vehicle system functions. Additional OEM cables are available individually or in convenient kits - Asian OEM Cable Kit 3421-94, European OEM Cable Kit 3421-75 and ABS/Airbag OEM Cable Kit 3421-54. One time scan tool registration required.

# HEAVY-DUTY WIRELESS DIAGNOSTIC SYSTEM



## PC PROGRAM FOR HD STANDARD DIAGNOSTICS

- RP1210 compatible and will work with any RP1210 VCI.
- SAE J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage.
- Read and clear diagnostic trouble codes.
- Live vehicle data of HD Standard Engine parameters.
- Vehicle data communication and live data stream.
- Demo mode permits operation without vehicle connection.
- On-screen definitions of diagnostic trouble codes.
- PC & CD user's manual.
- Customizable line graphs .
- Automatic recording of data.
- Print screen data or save reports to print later.
- Ez-Tap Kits Available.

### 3070

#### HD Scan Software

- Stand-alone software.
- Works with any RP1210 interface (VCI).

### 3076

#### HD Scan with Ez-Tap

- In-shop wireless capability.
- Ez-Tap Wireless Vehicle Communication Interface (VCI) works with OEM diagnostic software.
- One wireless VCI for all your diagnostic software.
- Eliminate cables and cable replacement costs.



Ez-Tap 3076

### 3086

#### HD Scan with Ez-Tap Extended Range

- 300 ft. wireless range to scan trucks anywhere on facility grounds.
- Scan trucks and preform initial diagnosis before you bring them into the shop.
- One wireless VCI for all your diagnostic software.
- Eliminate cables and cable replacement costs.



Ez-Tap 3086

# HEAVY DUTY SCAN HEAVY DUTY TOOLS & EQUIPMENT



## 3075 Ez-Tap Wireless Diagnostic Hardware Kit

- The EZ Tap Diagnostic kit enables a Heavy-Duty facility to use their OEM software for direct diagnostic mode operation.
  - Kit includes: Ez-Tap wireless (non-locking) VCI, Ez-Base wireless adapter, Ez-Tap 9-pin to 6-pin adapter, USB cable and Ez-Tap CD.
- Note: OEM diagnostic software not included.



## 3075-05 Ez-Base Wireless Adapter

- The Ez-Base allows a PC or host computer to communicate with Ez-TAP using our AirBridge® 2 wireless technology.
- 100+ foot range.
  - Built in indicator lights.
  - Allows full wireless throughput for direct diagnostics.
  - Allows a single PC to connect to any Ez-TAP in range.



## 3940-HD Heavy Duty Digital Multimeter

OTC 550 Series Auto Ranging Multimeter

- Powerful professional grade test functions
  - Frequency
  - Duty Cycle
  - Diode & Continuity Tests

Mid-Range Amp Probe

- Non-intrusive AC/DC current measurement
- Measurement range of 2–600 amps AC/DC
  - Covers HD truck components and electric motors

Extended Length Test Leads

- 5 ft. test leads to provide improved reach
- Detachable probes allow use with amp probe



Non-Locking

Ez-TAP Wireless VCI



Locking

## 3075-01 9-pin non-locking

## 3075-02 9-pin locking

Note: For your PC to communicate with the Wireless Ez-TAP, you will need an OTC EZ-Base (3075-05) or OTC EZ-Base ER (3075-06).



## 3075-06 Ez-Base Extended Range Wireless

- Ez-Base Extended Range allows even more range and flexibility for your truck yard or service environment.
- 300+ foot range with the included antenna.
  - 1000+ foot range with optional remote mounted antenna. (3075-07) sold separately.
  - Built-in Wireless signal strength indicator lights.
  - Plus all the features of Ez-Base.

## Ez-TAP USB VCI



Non-Locking

## 3075-03 9-pin non locking, 16 foot USB cable and Ez-TAP CD



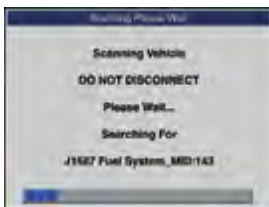
Locking

## 3075-04 9-pin locking, 16 foot USB cable and Ez-TAP CD



## 3075-08 Ez-TAP Adapter

9-pin to 6-pin adapter cable.



"Automatic Protocol Search"



### 3417 OTC Heavy-Duty Scan Tool

For Heavy-Duty shops that need a second tool in the shop and for their mobile repair trucks.

Product Features:

- Brilliant Color Display
- Class 4 – Class 8 truck coverage featuring "Automatic Protocol Search".
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more!
- Live vehicle data such as: Engine speed, Engine ECU temperature, Percent acceleration pedal position, Engine intercooler temperature, Engine coolant temperature, Battery volts, Alternator volts, Ambient air temperature, Air inlet temperature
- Read and clear diagnostic trouble codes.
- Global OBD II – All 9 Modes.
- English, Spanish, and French support
- Battery powered for off vehicle use.
- Trilingual Quick Start Guide included to help technicians get started fixing cars FAST.
- CD-based manuals in Spanish, French, and English.
- Customize data views in line graph, LED, or digital format with the push of a button.
- Three record modes – marker frame, freeze data history, and code triggered record.

3417 HD Scan Kit Includes: HD scan tool, 9-Pin deutsch cable, 6-Pin deutsch cable, OBD II cable, heavy duty cable, USB cable, ScanMate software operations manual, carrying case and 3-year warranty.



### 3418 OTC Heavy-Duty Code Reader

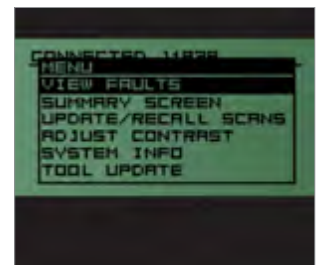
- Class 4 – 8 truck coverage.
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more for diagnostic trouble codes!
- Read and clear diagnostic trouble codes.
- Provides on screen DTC definitions for heavy-duty standard codes.
- Battery powered for off vehicle use.
- Internet update capable.

#### Applications:

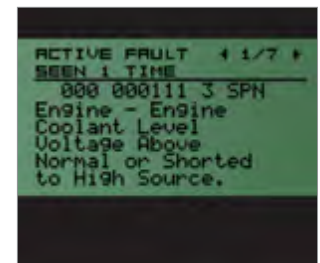
Tow trucks, recreational vehicles, cement trucks, dump trucks, garbage trucks, buses, step vans, municipal vehicles, refrigerated trucks, and conventional trucks.  
Heavy-Duty Standard compliant construction, marine, agriculture, and industrial diesel power plant configurations!

#### 3418 HD Reader Kit Includes:

HD reader tool, 9-Pin deutsch cable, 6-Pin deutsch cable, operations manual, 3-year warranty, and soft nylon carrying case.



Menu



Fault



Summary

# HEAVY DUTY SCAN HEAVY DUTY TOOLS & EQUIPMENT



## SMARTER—EASIER—ESSENTIAL, THE RECOGNIZED STANDARD IN DIAGNOSTIC SCAN TOOLS.

Pro-Link iQ is designed to help diagnose engine, brake, and transmission failures. This easy-to-use, advanced tool is engineered to support today's commercial vehicles as well as the more complex vehicles of tomorrow. Using clear menus and message screens, the Pro-Link iQ guides technicians through the most complicated vehicle tests.

Available iQ Applications

- Generic
- HDS | Medium- and heavy-duty trucks
- OBD II | Light- and medium-duty trucks

OEM

- Caterpillar | ACERT
- Detroit Diesel | DDEC III, IV, V
- International | Engine
- Allison | 1K and 2K, WTEC, CEC1
- WABCO | Air and hydraulic

3110 Pro-Link kit includes: PRO-LINK iQ scan tool, iQ Heavy-Duty Standard application, Power and data cable, 6-pin Deutsch adapter, 9-pin Deutsch adapter, 2-cell battery pack, CD manual/driver, Stylus pen and Carrying case.

### 3110

#### Pro-Link® iQ

- Easy-to-use common user interface across all OEM applications
- Free trial period for all OEM software
- Software easily updated via the Internet
- Large capacity hard drive for future updates
- Light-weight and durable for the shop area
- 8.4" color screen for use in any light
- Touch screen for easy activation of on-screen tabs
- PC and printer connectivity via USB ports
- Can print to most USB printers
- Power from either the vehicle or internal battery for continuous use
- 2 USB ports
- 1 compact flash port
- Protective carrying case

### Optional Software, Cables & Accessories

<b>3110-01</b>	Pro-Link IQ software, ALLISON Suite
<b>3110-02</b>	Pro-Link IQ software, ALLISON GEN 4 Update
<b>3110-04</b>	Pro-Link IQ software, WABCO Suite
<b>3110-05</b>	Pro-Link IQ software, DDEC Suite (DDEC III, IV, V)
<b>3110-07</b>	Pro-Link IQ software, OBD II (AUTO)
<b>3110-08</b>	Pro-Link IQ software, Detroit Diesel Mercedes Benz
<b>3110-09</b>	Pro-Link IQ software, Heavy Duty J1939
<b>3110-10</b>	Pro-Link IQ Adapter, J1962 HD
<b>3110-11</b>	Pro-Link IQ Adapter, OBD II/J1962
<b>3110-12</b>	Pro-Link IQ Adapter, 6-pin
<b>3110-13</b>	Pro-Link IQ Adapter, 9-pin
<b>3110-14</b>	AC Adapter for Pro-Link IQ
<b>3110-15</b>	Pro-Link IQ software, CAT electronic engines
<b>3110-16</b>	Pro-Link IQ software, BENDIX ABS
<b>3110-17</b>	IQ LCD touchscreen protector
<b>3110-18</b>	Pro-Link IQ case with logo
<b>3110-19</b>	Pro-Link IQ DDEC VI kit with software
<b>3110-20</b>	Maxx Force
<b>3110-21</b>	Light and medium truck
<b>3110-23</b>	Pro-Link IQ International 2.0 software
<b>3110-24</b>	Pro-Link IQ International 2.0 upgrade software
<b>3110-25</b>	Pro-Link IQ Caterpillar ACERT 2.0 software
<b>3110-26</b>	Pro-Link IQ Caterpillar ACERT 2.0 upgrade software
<b>3110-27</b>	Pro-Link Brake Link V8.4.0.0 kit

### 3110-22

#### Pocket iQ™

The versatile Pocket iQ reports both engine and transmission functions—and it covers brakes, too.

Gather data quickly and easily. Smart and handy, compact and lightweight, the Pocket iQ puts data at your fingertips.

Pocket iQ key functions and features:

- Monitors all vehicle data
- Checks engine speed/load, pressures, temperatures, other data
- Reads and clears active and inactive fault codes
- Displays trip data
- Collects and stores vehicle data from multiple vehicles
- Stores vehicle data in PDF or text format
- Provides J1587 and J1939 data



### 3110-27

#### Brake-Link™

No more working under the trailer watching for blink codes. Brake-Link™ is the low-cost full-service ABS brake scan tool that:

- Connects to trailers and tractors utilizing the SAE J1587 communication protocol
- Includes a built-in PLC converter
- Comes with J560 (7-way) cable that allows direct connection to trailer without tractor
- Provides ABS coverage for a wide range of applications

Brake-Link™ ABS Coverage

Bendix EC-17, EC-30, EC-30T, EC (60) ABS 6, and TABS 6

Meritor WABCO Trailer Support

Wabash National MBS-1P and MBS-2

Eaton GEN4 and GEN5

Haldex PLC, PLC Plus, and PLC Select



### 3940-HD

#### HD Digital Multimeter

OTC 550 Series Auto Ranging Multimeter

- Powerful professional grade test functions
  - Frequency
  - Duty Cycle
  - Diode & Continuity Tests

Mid-Range Amp Probe

- Non-intrusive AC/DC current measurement
- Measurement range of 2–600 amps AC/DC
  - Covers HD truck components and electric motors

Extended Length Test Leads

- 5 ft. test leads to provide improved reach
- Detachable probes allow use with amp prob



6522



## EVAP – LEAK DETECTION SYSTEM

- Vacuum Leak Testing
- Exhaust Leaks
- Crankcase Oil
- Cooling System Testing
- Wind and Water Leaks
- 1-Year Warranty

LeakTamer is the latest generation of leak detection systems, providing more smoke and better control. Solid-state circuitry improves reliability and ensures more consistent smoke output. A wide assortment of accessories make the LeakTamer versatile tools for quickly locating different kinds of leaks.

### LeakTamer Evap offers:

- Densest smoke in the industry.
- Newly redesigned smoke chamber and control system.
- More complete line of accessories.
- User refillable.
- Includes smoke producing solution for 500 tests.
- Non-toxic, non-corrosive smoke.

### Product Features:

- OEM approved technology
  - Contains STAR Technology; the ONLY OEM-Approved smoke technology anywhere in the world
- Large full range flow meter
  - Detects Microleaks™ down to and below 0.10
  - Flow-test components with full range of flow values
- Pinpoint leaks with Smoke and dye
  - UltraTraceUV® dye deposits at exact location of a leak
  - Finds leaks that smoke alone won't find
  - Introduce to an engine before disassembly to find internal leaks
  - It's the only OEM-Approved dye solution
- Variable Smoke Flow
  - Helps pinpoint smoke exiting a leak
  - Directional knob shows exact flow position
- Compact light weight design
  - More powerful diagnostics in smaller package
- Can be used with air or nitrogen
  - Use any inert gas for safer EVAP testing and shop air for all other tests

### 6522

Includes: Leak Tamer unit, White/UV combination light with laser pointer, UV glasses, EVAP adapter tool, exhaust cone, cap plug adapters, removal tool, smoke producing solutions enough solution for 500 tests.



### Accessory / Replacement Parts

**6522-1** UltraTraceUV® (8 oz. / 236 ml) patented solution is the only Automaker-approved smoke-producing solution in the world. Contains a special dye that deposits at the exact location of a leak. Each bottle will perform approximately 300 tests. Part No. is for one bottle, two bottles included with 6522.



**6522-2** Inert Gas Pack Kit connects directly to fitting on back of LeakTamer 6522. Includes preset CO2 regulator with cylinder fitting, 20 oz. liquid CO2 cylinder, pressure gauge, universal push-on female coupler accommodates both automotive and industrial male fittings (Cylinder arrives empty) Performs approx. 25-50 full cycle EVAP tests per 20 liquid oz. cylinder.



**6522-3** Combination Light for easier smoke location and ultraviolet (UV) light, to highlight the fluorescent dye deposited at the exact location of a leak. Also has laser pointer. Includes batteries and glasses.



**6522-4** Standard Size Service Port Adapter.



**6522-5** Schrader® Removal/Installation Tool.



**6522-6** Cap Plugs Kit. Used for sealing some systems during leak testing.



**6522-7** Universal Fuel Neck Adapter fits the majority of vehicles. Allows access to fuel tank for evaporative system testing.



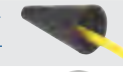
**6522-8** BMW and MINI Fuel Neck Adapter. Allows access to fuel tank for evaporative system testing.



**6522-9** Smoke Diffuser locates leaks around doors, windows, sunroofs, trunk compartment seals, EV vehicles' battery modules, or any closed system that can be pressurized from the inside and observe the smoke disturbance from the outside.



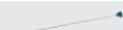
**6522-10** Cone Adapter (standard) for introducing smoke into induction or exhaust system. 1" x 3.5" & 6" long (25.4 mm x 89 mm x 152 mm).



**6522-11** Cone Adapter (Large) for introducing smoke into induction or exhaust system. 3.5" x 6" & 4.6" long (89 mm x 152 mm x 144 mm).



**6522-12** Replacement Dipstick (for 6522).



**6522-13** Replacement smoke supply hose and Delrin® Nozzle



**6522-14** Delrin® Nozzle



**6522-15** Flow meter red pointer flag. For easy viewing of flow meter measurements.





# DIESEL EMISSION TESTER HEAVY DUTY TOOLS & EQUIPMENT

## Smoke Check 1667 Diesel Emission Tester

In some states, failing the on-road emission test can result in a "must appear in court" citation, and up to an \$1,800 fine. Add the downtime, missed delivery, rescheduling, and the potential for lost business. More states are adopting emissions standards and testing programs.

This can cost time and money for local and interstate fleets.

- Fleets can determine immediately if the truck will pass state standards and interstate emission programs.
- Completely portable; all components in one case; there is no PC. One person can do the entire test. Windows-based, PC downloadable program transfers up to 100 stored tests.
- No warm-up time needed; perfect for random roadside testing or in your PM Service Program.
- The partial flow meter clips inside any smokestack; testing can be performed in any weather.
- Digital LCD screen walks you through each step; when testing is complete, a printout of results is produced for verification.
- This is the same meter used for enforcement in California, New York, Illinois, and the majority of states that test for diesel emissions compliance.
- Meets the latest SAE J1667 specifications.

### SPECIFICATIONS

Range.....	0-100%
Accuracy .....	+/-1.0% Light Source
	Green LED
Power .....	12 VDC battery (built-in)
Battery Life .....	40 hrs./charge
Warm-up Time .....	5 sec.
Response Time .....	0.01 sec.
Control Unit .....	14" x 10" x 8"
Maintenance .....	Clean lens w/cotton swab
Weight:	
Control Unit .....	15.5 lbs.
Sensor.....	3.5 lbs.

### ORDERING INFORMATION:

#### RM1020CPCL

Smoke Check 1667 diesel smoke opacity tester. Includes partial flow meter, base unit with hand-held display, built-in printer, ambient sensors, two battery chargers – one for vehicle or shop, 20 ft. cable, telescoping rod, spring clamp, neutral density filter, and sensor head case.

#### OPTIONAL ITEMS:

#### OTC3020CPCL

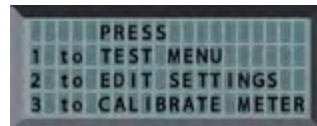
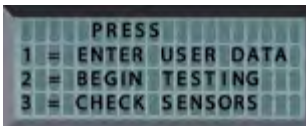
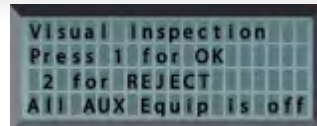
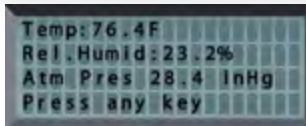
Standard meter listed above with OIL/RPM software and accessories. These options are required for state approval testing in New York and New Jersey.

#### OTCSH

Sensor head with quick detach release.



RM1020CPC



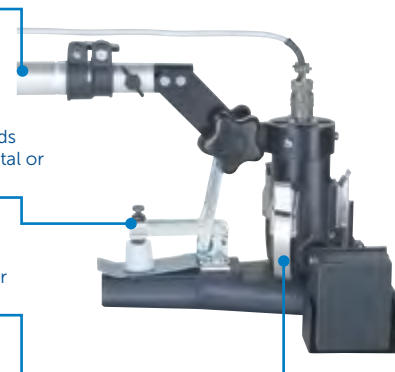
Scrolling instructions walk you through the entire testing procedure.

Aluminum rod telescopes from 3 ft. to 8 ft.; reaches all stacks.

Optional pinch clamp holds head securely, on horizontal or downward facing stacks.

Three-point detachment quickly releases the sensor head for easy cleaning.

One person can run the entire test, even in the wind, since the sensor measures smoke inside the stack.



## Sabre Heavy-Duty Battery & Electrical System Diagnostic Tester

- Heavy-duty for 24-volt battery and electrical systems.
- Diagnoses battery packs in series, parallel, or series/parallel.
- Tests AGM/gel-cell batteries.

HIGHEST CCA capacity ranges (50–4000 CCA – 24V).

LARGE DISPLAY for less scrolling, more detailed instructions. It's also backlit for all light conditions.

INDUSTRY FIRST amp-clamp connection ports for live amperage readings using optional external amp-clamp.

15 FT. Cable to perform tests from the cab of the vehicle.

FIELD UPDATEABLE to accommodate new battery types, system updates, feature additions.

### Battery Testing

- Tests the following battery pack configurations:
  - One battery (6V or 12V).
  - Two batteries in series (24V); 2, 3, or 4 batteries in parallel (12V).
  - Two banks in parallel, each bank having 2 batteries in series (24V).
- Uses pack configuration in algorithm design.
- Step-by-step user instructions for easy test completion.
- Tester-applied loads used on all pack combinations.

### Electrical System Testing

- 12V and 24V charging/starting system tests.
- 12V and 24V diode tests.
- Amp-clamps available (not included) for starting/charging and current draw tests.

### Product Features:

- Amp-Clamp Connection – allows current drain tests and starting/charging analysis.
- Tests Both FLA (flooded lead acid) and AGM (absorbed glass mat) battery types.
- Scales – CCA, CA, AHR, MCA, JIS, DIN
- User Definable – print header and footer.
- Removable Test Cables – easily field replaceable.
- PC Interface Port – allows for field updateable software.
- IR Compatible – allows optional infrared wireless printer.
- Readout Display – backlit for low light conditions, easy to view data in direct sunlight (4 x 20 character display).
- Security Cable Connection – protects against stolen or dropped units.
- Over-molded Surround with Soft-touch Keys – ruggedly built, easy to use, even with gloves.

### 3167-HD – Sabre HD deluxe kit

Includes 24-volt heavy-duty battery tester, 15' test leads, instruction manual, molded-plastic carrying case.

### 3168-HD – Sabre HD deluxe kit with printer

Same as No. 3167-HD above, but also includes an infrared wireless printer.

Accessories:

### 3172-15 – 15' lead set

### 3169 – Infrared wireless printer



3168-HD

### 3181

### 130-Amp Heavy-Duty Battery Load Tester

Applying an industry-leading 130-amp load, this ergonomically designed, heavy-duty battery tester provides accurate, reliable test results in just 10 seconds. It includes uniquely designed clamps for a positive grip on top- and side-post batteries and an extra-large, easy-to-read display.

Product Features:

- 130-amp load capacity for accurate results.
- 0–16 volt range.
- Uniquely designed clamps for both top- and side-post batteries.
- Extra-large display with zero adjust.
- Works on both 6V and 12V batteries.
- Side tabs for on-tool clamp storage.
- Back brackets for tool storage on wall or toolbox.



34288



34788NI



**34288** – Combines simple operation with superior accuracy. It recovers, recycles, evacuates, leak tests, and recharges R-134A quickly and accurately. Meets SAE J-2788 standards for accuracy: 95% refrigerant recovery and charging to +/- 1/2 oz.

**34788NI** – Recover, recycle, evacuate, leak-test and recharge R-134a vehicle A/C systems. Features a larger graphical display, leak testing, automatic refrigerant refill and automated oil drain/inject – putting A/C lubricant back into the system. 34788NI boasts an ability to add a printer and refrigerant identifier. An optional refrigerant charge and oil capacities database is available for North American market vehicles.

Features:	34288	34788NI
Fully-Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves.		X
Automatic Oil Drain: A display reminds you to empty the graduated container to show the amount of oil to replace.	X	X
Oil Inject: Less than 1% cross-contamination.		X
Refrigerant & Oil Database: For North American market vehicles 1994 - 2007 (updates available mid-2008).		Optional
Visual & Audible Alarm: Notifies the user when service is complete, or if a problem has occurred.		X
Vacuum Leak Test: Monitors level after evacuation, informs of possible leak.	X	X
Automatic Air Purge: Eliminates damaging air without monitoring gauges or opening valves.	X	X
Automatic Refrigerant Refill: Maintains a user-selectable amount of refrigerant in an internal vessel and signals with it's time to change supply tank, no monitoring required.		X
Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	X	X
Display: Multilingual	X	X
Refrigerant Charging: Select a charge mode from high or low side.		X
Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	X	X

# A/C & COOLANT SERVICE HEAVY DUTY TOOLS & EQUIPMENT



**Recovers, Recycles, Evacuates, and Recharges R-12, R-134a, R-22, R-502, MP and HP Blends— and many more!**

**Design certified by UL to meet SAE J-1770.**

**One piece of equipment is all you need for A/C and refrigeration service. Also great for in-plant maintenance!**

## 17800B

### Multiple Refrigerant Recovery, Recycling, and Recharging Machine

The 17800B recovers, recycles, evacuates and recharges — all in one fast, continuous operation through one hook-up. It's ideal for refrigerated trailers, buses, RVs, and other vehicles that use more than one refrigerant. The Multi RRR machine is also great for fleet maintenance, covering a variety of makes and models since it has both R-12 and R-134a capabilities. In-plant maintenance departments will find it can handle the different types of refrigerants used in various systems.

### Proven technology simplifies service!

**Microprocessor** — Controls functions; prompts lead you through programming and also signal when it's time to change the filter-drier, vacuum pump oil, and compressor oil.

**Float Chamber** — Automatically adjusts from liquid to vapor for most efficient recovery.

**Electronic Scale** — Makes it simple to recharge to factory specifications; also weighs recovered refrigerant and provides tank overflow protection.

**CoolTech Vacuum Pump** — 6 CFM has the capacity to thoroughly evacuate the system, readying it for recharging.

Versatility for many types of systems!

**Lockout Panel** — Prevents mixing of refrigerants; rotates to one side for 1/4" fittings and to the other for 1/2" Acme fittings.

**Single-Pass Recycling** — Makes an initial pass through the filter-drier; additional recycling can be programmed in case of compressor burn-out, or other conditions.

**Heavy-Duty Filter-Drier** — Removes moisture and acid from the refrigerant; can handle up to 200 pounds between change-overs. Comes with two 50 pound tanks, one with 1/4" fittings and the other with 1/2" Acme fittings. Also three sets of charging hoses are included — one for R-12, one for automotive R-134a (with field service couplers), and one for other refrigerants using 1/4" SAE fittings.

### International Models

**17801B** — 220–240V 50 Hz, readout in kilograms

### Replacement Parts

**19776** — Recycling filter-drier

**17506** — 50 lb. (23 kg) refillable tank, 1/4" fittings

**34750** — 50 lb. (23 kg) refillable tank, 1/2" ACME fittings

### Specifications

Voltage	115V 60 Hz
Tanks	Two 50 lb. (23 kg) refillable
Operating Range	50° to 105° F (11° to 41° C)
Recovery Rate	Vapor — 1/2 lb/min. (.2 kg/min.) Liquid — 1 lb/min. (.4 kg/min.)
Recycling Rate	4 lbs/min. (1.8 kg/min.) flow rate
Recycling Filter-Drier	1150 g XH-9
Pump Free Air Displacement	6 cfm (142 l/m) at 50 Hz
Dimensions	47" H x 26" W x 30" D (119 cm x 66 cm x 77 cm)
Weight	256 lbs. (116 kg) without tank



19776



**Works on both pressurized and non-pressurized cooling systems.**

**Increase Your Profits**  
**Our 10-minute exchange process means no more waiting for the engine to warm up!**



75700

### Coolant Exchange Unit

Designed with the user in mind.

### Safety First

- Our "engine off" feature removes pulleys, belts, and fan blades from the safety equation.
- No additional ventilation required.
- Vacuum mode creates a "push/pull" exchange process allowing the technician to safely remove high pressure in a hot system.
- "Hands-off" transfer of used coolant to a bulk tank prevents spills and helps protect the technician.

### Simple to Operate

- Two clearly marked valves and an easy-to-read gauge make this machine very simple to use.
- Sight glass clearly shows the amount of coolant in the waste tank.
- One valve controls the flow of coolant; process is easy to understand—no special training needed.
- No electricity required. 90 psi shop air drives the exchange process, as well as the 2 gpm pump on the waste tank.

### Designed to Survive

- Impact-resistant polypropylene cabinet will not scratch or dent vehicle.
- Cabinet is impervious to chemicals commonly used in the shop.
- Large, inflatable tires carry a well-balanced platform easily across any shop floor.
- Easy to maneuver between bays and vehicles.

### Extra Design Features

- Two external new coolant supply tanks allow on-board storage of two different coolant types.
- Graduations on tanks show user the amount of new coolant on board.
- On-board storage of step adapters.
- Adapter kit included.
- No hoses to cut.
- 96" hoses can be neatly stored on unit.
- One-year warranty.

### Replacement Parts and Accessories

**75360** — Heavy-duty adapter kit. Links the two tanks for 14 gal. capacity to service class A vehicles. (Note: must have 7-gallon tank No. 75370).

**75370** — Replacement coolant 7-gallon tank

**17490** — Protect your investment with a heavy-duty vinyl dust cover.  
**Specifications**

Power Supply	— 90 psi shop air
Tanks	— Internal waste — 15-gallon capacity — External supply (2) 7-gallon capacity (removable)
Dimensions	47" H x 26" W x 33" D (119 cm x 66 cm x 84 cm)
Medium Step Adapter	Two included; fits hose size 1-1/4", 1-3/8", and 1-1/2"
Large Step Adapter	Two included; fits hose size 1-3/4", 2", and 2-1/4"



Back View: 7-gallon capacity supply tanks allow storage of different coolants.



75360



# POWER TRAIN LIFTS SHOP EQUIPMENT



## 5078 Air-Assisted 2,000 lb. Capacity High-Lift Transmission Jack... or Trucks & Buses

- Foot-operated air pump enables the operator to effortlessly raise the transmission into place.
- Rugged, heavy wall tubing and oversized base for stability.
- A dedicated adapter for Allison 500- and 600-series automatic transmissions is included.
- Covered by OTC Lifetime Marathon Warranty®.

### Specifications:

Min. height is 41-1/2"      Max. side tilt (side/side)  
Max. height is 65"      – 14°  
Max. forward tilt – 50°      Leg width – 46"  
Max. backward tilt – 38°



## 5130 1,000 lb. Capacity DriveMaster™ Driveline Lift

- Low profile of 6" and a Lift range: 24" to 30".
- Pivoting pump handle +/- 15° tilt in each direction
- Includes 553516 Differential Adapter
- ANSI/PALD

### Specifications:

Overall Length – 43"      Min. Height – 6"  
Overall Width – 30-1/4"  
Max. Height – 30"



## 5019A 2,200 lb. Capacity Low-Lift Transmission Jack

- Special mounting adapter fits popular Eaton® Fuller® RoadRanger® transmissions used on nearly all Class 7 and 8 heavy-duty trucks. Mounting plate angle is adjusted with the turn of a wrench.
- Swiveling pump handle permits ease of operation in restricted working spaces. Fast-acting pump quickly raises lifting arm.
- Includes No. 49611 adapter for Eaton® Fuller® RoadRanger® transmissions (also available separately).

### Specifications:

Min. height is 8-1/4"      Max. side tilt (either  
Max. height is 36-1/2"      side) – 12°  
Max. forward tilt – 15°      Overall length – 52"  
Max. backward tilt      Overall width – 32-1/2"  
– 20°

### Power Train Lifts

- These lifts will handle engine and transmission assemblies, gas tanks, drive axle assemblies, engine/transaxle assemblies, electric vehicle batteries, and more.
- Scissors-type design allows access to all four sides of a component.
- Two independent adjusting screws tilt the table ±15° side-to-side, or fore and aft. Can be operated manually or with non-impact air wrench.
- 20" x 32" table.
- 8" swivel casters provide enhanced mobility under heavy loads.
- ANSI/PALD compliant.

### 5285 Power train lift (1,650 lb. Capacity)

- Air / hydraulic operation – Foot control pump with hose allows movement around lift.
- Min. height is 31-1/2"; Max. height is 74-1/2".
- Footprint 33" wide x 48" long.

### 1595 Power train lift (2,500 lb. Capacity)

- Powered by a quiet, 110V electric/hydraulic pump.
- Smooth, steady lifting and lowering motion controlled by hand-held remote.
- A 30 ft. long retractable extension cord is mounted to the frame.
- Min. height is 29"; Max. height is 80"
- Footprint 31" wide x 50" long.

### 1522A

### Heavy-Duty 2,000 lb. Capacity Low-Lift Transmission Jack...for Class 7 and 8 Trucks

- Includes No. 220492 adapter for Eaton® Fuller® RoadRanger® transmissions.
- Pump handle rotates 360° for operator convenience; ball bearing 3.5" diameter swivel casters provide easy positioning of jack.
- Safety overload system prevents use of jack beyond its rated capacity, and a safety bypass protects the hydraulic cylinder from damage.

### Specifications:

Min. height is 6-7/8"      Max. side tilt (either side) – 11°  
Max. height is 35-1/4"      Overall length – 43-1/2"  
Max. forward tilt – 24°      Overall width – 26"  
Max. backward tilt – 18°

### Accessories for 5019A / 5078 / 1522A Transmission Jacks and 5130 Driveline Lift

**558382** – Auxiliary box adapter. Used with all.

**561949** – Light duty transmission adapters. Used with all.

**528150** – Eaton® "Lightning" adapter. Used with the No. 5019A transmission jack.

**543284** – Roadranger transmission Model series FRO-11210C to FRO-18210C that is equipped with an internal cooler. Used with the No. 5019A transmission jack.

**49611** – Eaton® Fuller® RoadRanger® auxiliary housing adapter. Bolts directly to the countershaft bearing caps to provide a stable platform for removing and installing the auxiliary housing.

**553516** – Differential Mounting Adapter. Mounts easily using existing bolt patterns. Fits the most common differentials currently in use on Category 7 and 8 Heavy Duty Trucks. Including: Eaton, Fuller, Rockwell, Meritor, Spicer, International, and Mack. For use on OTC (5019A – 553516 requires 565188 adapter) 5078 and Stinger 1522A Transmission Jacks.

**314729** – Allison 500/600 series automatic transmission adapter used with No. 5078 transmission jack.

**540231** – Eaton® Fuller® RoadRanger® transmission adapter

**540232** – Mack transmission mounting brackets. Provides a stable platform for Mack T200 series transmissions.



5285  
extended

Casters provide a 9-1/2" clearance on lower frame



5285 collapsed



1522A



558382

561949



553516

528150



540231



543284

49611



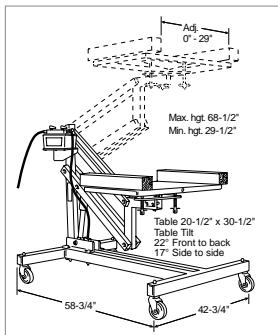
540232

314729



**1585A**  
**Power Train Lift – 1,250 lb. Capacity**

- For easy removal and installation of engine/transaxle assemblies on FWD vehicles. Also handy for pulling rear ends, leaf springs, and more.
- Includes 4020 air/hydraulic pump.
- Your shop air supply is the only thing you need to get the precise control.
- Width between wooden support blocks is adjustable from 0–29". Load is secured with a tough nylon strap.
- Covered by OTC Lifetime Warranty®.



**1521A**  
**1,000 lb. Capacity Low-Lift Transmission Jack**

- Universal mounting head, with adjustable brackets, tilts front to back and side to side for easy transmission alignment.
- Safety chains hold the load securely, even while moving about the shop.
- Wide, stable wheel base with four swivel casters, and two handle grips make it easy to position under the vehicle.
- Safety overload prevents jack from being used beyond its rated capacity.
- Pump handle rotates a full 360° for use in any position.

**Specifications:**

Min. height is 7-1/2" Max. side tilt (either side) – 30°  
Max. height is 29-3/4" Max. forward tilt – 67°  
Max. backward tilt – 17° Overall length – 34-1/2"  
Overall width – 19.3/8"



Head adjustable to 19-1/2" x 18".

**1728**  
**Air-Assisted 1,000 lb. Capacity High-Lift Transmission Jack**

- Unique foot pedal design gives you complete control over the air-driven first stage to rapidly raise the mounting head to the transmission; second stage is hydraulically actuated — permitting precise operator control during removal and installation.
- Transmission mounting head features four ratcheting brackets that adjust to fit a wide range of transmissions. Four-wheel base with locking swivel casters provides stability and portability.
- Safety bypass prevents damage caused by a system overload.
- Carries OTC Lifetime Marathon Warranty®.

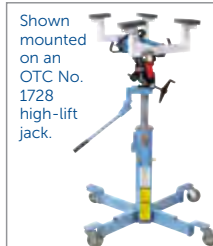
**Specifications:**

Min. height is 34-1/2" Max. height is 75"  
Max. forward tilt – 50° Max. backward tilt – 20°  
Max. side tilt (either side) – 10°  
Leg width – 41"



**1758**  
**Fuel Tank Handler**

- Provides safe and efficient handling of fuel tanks. Adjustable from 24" to 38" horizontally, and 7" to 11" vertically, to service tanks up to 40 gallons.
- Universal adapter plate fits all OTC and virtually all competitive transmission jacks and power train lifts in the market.
- Gearing mechanism ensures equal extension of lift arms to ensure load is properly balanced over jack.
- Four adjustable support risers can be individually adjusted to ensure a perfect fit to any fuel tank design.
- Cross-link polyethylene foam pads protect tank from damage.



Folding foot pedal.

**5237**  
**1,000 lb. Capacity High-Lift Transmission Jack**

- Universal mounting head provides wide fore and aft tilt range.
- Two-stage hydraulic cylinder design.
- Innovative folding foot pedal and release provides precise ease of control when positioning or removing a transmission. - Significantly reduces force required to lift extremely heavy transmissions.
- Upgraded ergonomic handles for adjustment.
- ANSI/PALD compliant.

**Specifications:**

Min. height is 34-1/2"  
Max. height is 75"  
Max. forward tilt – 50°  
Max. backward tilt – 20°  
Max. side tilt (either side) – 10°  
Leg width – 41"

**223196**  
**Transmission Jack Mounting Adapter Set**

- Used with No. 1728 transmission jack. Ideal for use on larger standard transmissions with irregularly shaped oil pans.
- Four adjustable arms help stabilize transmissions that have rounded bottom surfaces.



# TRANSMISSION JACKS / LIFTS SHOP EQUIPMENT



**1794A**  
**Air-Assisted 1,000 lb. Capacity High-Lift Transmission Jack**

- Air-assist primary stage for rapidly raising the mounting head, activated by depressing foot pedal.
- Hydraulic secondary stage for precise operator control, activated by a hand pump to raise the load, and a release knob to lower the load.
- Big, easy-to-grip knobs that make mounting head adjustments simple, and a safety chain for securing the load.
- Wide leg base with 4" polyurethane swivel wheels that provide stability and easy maneuvering. (Brakes on two of the wheels.)
- Safety overload system to prevent jack from being used beyond its rated capacity.

**Specifications:**

Min. height is 37-5/8"  
 Max. height is 76-1/2"  
 Max. forward tilt – 42°  
 Max. backward tilt – 46°  
 Max. side tilt (either side) ± 12°  
 Leg width – 37-1/8"



**1793A**  
**1,000 lb. Capacity High-Lift Transmission Jack**

- Universal saddle tilts front to back and side to side; features adjustable corner brackets and safety chain for optimum positioning of the load.
- Flash-chromed rams inhibit rust from entering the hydraulic system.
- Foot-operated pump and lowering pedal for ease of control when positioning or removing a transmission.
- Wide leg base with 4" polyurethane swivel wheels that provide stability and easy maneuvering. (Brakes on two of the wheels.)
- Safety overload system to prevent jack from being used beyond its rated capacity.

**Specifications:**

Min. height is 35"  
 Max. height is 71-5/8"  
 Max. forward tilt – 24°  
 Max. backward tilt – 19°  
 Max. side tilt (either side) ± 20°  
 Leg width – 37-1/8"



**1520**  
**10-Ton Capacity Lifting System (Includes two lifts)**

- Mobile, tandem system is air-operated. This will handle your class 7 and 8 tractor lifting needs. No need to waste time re-blocking and making additional lifts for the clearance you need for under-vehicle service. Roll the system to the vehicle anywhere in the shop or outside on a level surface.
- Unique design provides lift from the tires, not the frame or axle members. Ideal for situations where limited ground clearance or a lack of clear access complicates lifting.
- Single controller operates both sides of the system for a smooth, level lift up to two full feet from the bottom of the tires to the ground. Units can double as support stands when retention pin is inserted.
- Covered by OTC Lifetime Marathon Warranty®.

**Specifications:**

Capacity – 10-tons (20,000 lbs.) (pair)  
 Air pressure – 150 psi  
 Lifting range – 0"-24"  
 Saddle width – 19-1/2" – 24" dia. rim sizes  
 Height – 53-1/4"  
 Width – 41-1/2"  
 Length – 39-1/2"



**1591B**  
**10-Ton Combination Air Lift & Support Stand**

- 40" removable handle and 8' air hose.
- Covered by OTC Lifetime Marathon Warranty®.

**Specifications:**

Capacity – 10 tons (at 200 PSI air)  
 Minimum height (unpinned, no extension) – 18-3/4"  
 Maximum height (pinned in top hole, with extension) – 50-1/2"  
 Stroke – 10-7/8"

**1590**  
**10-Ton Air Lift**

- Adjustable lifting saddles and an extra-wide stance for extra stability.
- Automatic mechanical safety catch engages in five height positions.
- Two large swivel casters and pneumatic tires make it easy to maneuver, even on loose gravel.
- Covered by OTC Lifetime Marathon Warranty®.

**Specifications:**

Capacity – 10 tons (at 200 psi air)	Saddle – 4" X 5-1/4"
Air pressure – 100–200 psi	Height – 67-1/2"
Lifting range – 13"–52"	Width – 41"
Saddle spread – 29" – 41-3/4"	Length – 36"
	Distance from lift arm to floor support – 12-1/2"

**572913 – Optional saddle set for 1590. Saddle – 4" X 5-5/8"**



572913



### 5018A Truck Clutch & Flywheel Handler

- Replaces 14" & 15-1/2" clutch assemblies weighing up to 250 lbs.
- 13" low point enables access below side faring.
- Linkage raises load from horizontal to vertical position.
- 360 degree swivel head.
- Covered by OTC Lifetime Marathon Warranty®.

### 516160 – Optional flywheel handling attachment

**515686** – Optional splined shaft, 1-3/4" dia. with 1-1/4" pilot

**516159** – Optional splined shaft, 1-3/4" dia. with 1" pilot



### 5015A Truck Clutch & Flywheel Handler

- Handles 14" and 15-1/2" clutch assemblies weighing up to 150 lbs.
- Lifting range of 9" to 37". Swivel casters provide easy maneuverability.
- Includes a 2" spline shaft with a 1-1/4" pilot to aid in alignment.

**218174** – Optional Flywheel handling attachment for use on No. 5015 and 5015A only.

**48625** – Optional splined shaft, 1-3/4" dia. with a 1-1/4" pilot.

**440533** – Optional splined shaft, 1-3/4" dia. with a 1" pilot. Needed for clutch service on some Navistar 466 series engines.

**314386** – Optional 1-3/4" dia. alignment shaft extension. Used for 2-plate clutch of Navistar 466 series engine.



7020 Similar to Ford T57L-500-B, 307-003



### 7020 Bench-Mounted Holding Fixture

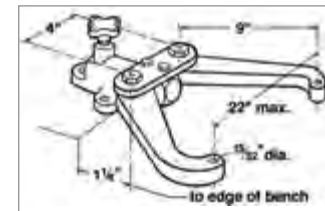
Here's a helpful device that enables you to securely hold and rotate small engines, transmissions, and other components while you're working on them.

- This holding fixture will handle pieces weighing up to 250 lbs., and it offers 360° of rotation with positive stops at 90° increments.
- Three sides of the mounted unit remain fully exposed.

### 34607

Base assembly only.

34607 Similar to Ford D83L-500-B1, 300-D041

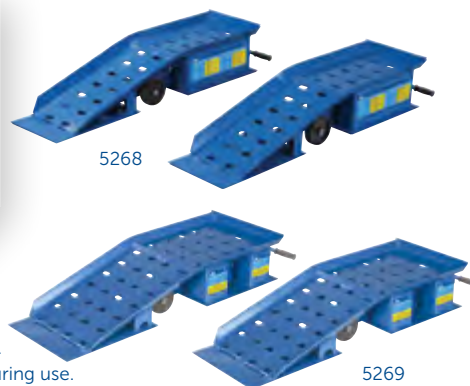


### 20-Ton Truck Ramps

- Long, retractable T-handle enhances mobility.
- Non-skid rubber matting prevents slippage during use.
- Durable, heavy-duty rubber wheels.
- Capacity per pair is 20 tons
- Covered by OTC Lifetime Marathon Warranty®.

**5268** – 20-ton truck ramps handle up to 10" tread width.

**5269** – Wide 20-ton truck ramps handle up to 16" tread width



### 7118 Transmission Adapter Kit

Converts your OTC engine stand into a transmission service stand.

- Kit replaces the adjustable arms of the stand to hold and position the transmission at workbench height for repair.
- The transmission is held with three sides fully exposed for working convenience, and can be rotated a full 360° for complete access to all parts.



Model	Frame Height	Frame Width	Frame Length	Wheel Diameter	Handle Length
5268	9-1/4" (23.5 cm)	13-1/2" (34.29 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)
5269	9-1/4" (23.5 cm)	18-1/4" (46.36 cm)	47" (119.38 cm)	5" (12.7 cm)	33" (83.82 cm)



# UNDER AXLE SERVICE JACKS SHOP EQUIPMENT



Convenient and secure storage space for large adapter & saddle.



Maximum extended height

Saddle

Large adapter

## 5292 27.5-Ton Under Axle Jack

- Features class-leading 27.5 ton capacity
- Robust design with completely sealed piston.
- New lever design and pneumatic release valve for more precise release control.
- Power return allows lowering with no load.
- Includes two height adapters for flexibility.
- PALD compliant.
- Minimum retracted height (with saddle only): 8-1/4".
- Maximum extended height (with screw extended and large adapter): 21-3/8".
- Stroke: 4.9375".
- PSI range: 90 to 175.

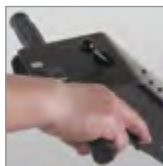
## 5093B 3-Stage Under-Axle Jack

Three-stage lift capacity 20T, 35T, and 65-tons. Ideal for lifting loaded trailers, buses, and other Class 7 & 8 vehicles.

- Piston and cylinders are made from chromium molybdenum vanadium steel for durability and then liquid nitrided to prevent rust and seizing.
- Features a high load-approach speed.
- Air-driven cylinder with pressure control knob for maximum user safety.
- 4-position handle: horizontal, 45 degrees, vertical, or collapsed.
- 7-inch minimum height for low clearance vehicles.
- Comes complete with a 3-15/16 in. (100 mm) lifting extension.
- Complies with ASME / PALD test requirements.



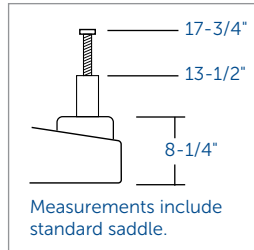
Single control switch, handy and easy to use.



4 positions: horizontal, 45 degrees, vertical, or collapsed for easier transport.



8-1/4" width for easy access to the lifting point.



## 1788B 22-Ton Capacity Under-Axle Jack

- Improvements include advanced seal ring material and one-piece air piston air pump
- Long 49-1/2" T-handle lets you easily position jack under vehicles with long overhangs.
- One pull of the handle activates the self-retracting 22-ton capacity ram without having to crawl underneath the vehicle.
- Jack has large rubber-tired wheels.
- Lifting range:
 

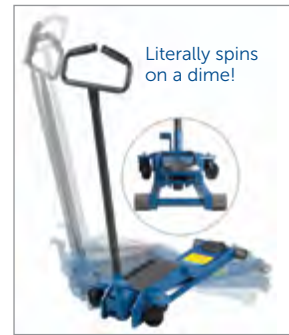
3/4" saddle	Max. height 17-3/4"
1-15/16" saddle	Max. height 18-15/16"
saddle	Max. height 20-5/8"
- Cylinder stroke, 4-1/2"; extended screw length, 4-1/4"; PSI range, 90-145.

### 215009\* – In-line oil lubricator.

Add to air line to meter precise flow of lubricant to air motor. Has 1/4" NPT fitting. \*Not included, order separately. Prevents harmful contamination caused by moisture in the air line!



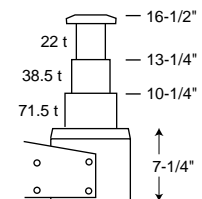
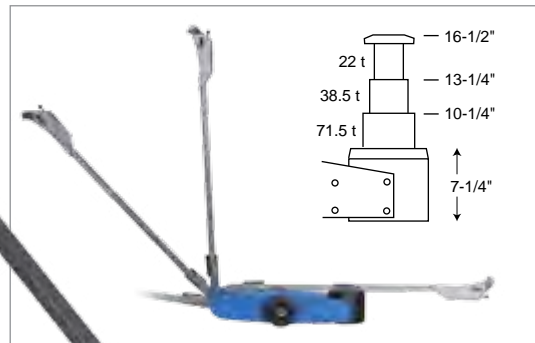
1-7/8" Low Profile



Literally spins on a dime!

## 5200 Ultra-Low Profile 2-Ton Service Jack

- Minimum saddle height of just 1-7/8".
- Unique, fifth-wheel design provides effortless 360° maneuverability – literally spins on a dime!
- Featuring Polyamide casters – superior to cast wheels due to their high mechanical strength and thermal properties.
- Foot pedal for quick approach of saddle to lifting point. Ergonomic handle for user comfort and enhanced mobility.
- Lifting range of 1-7/8" to 20-1/2".
- CE marked – ASME / PALD tested.





5202

**2- & 3-Ton Service Jack**

- Ergonomic handle for user comfort and easy mobility.
- Foot pedal for quick approach of the lifting saddle to load. Built-in tray for fasteners and tools.
- CE marked – ASME/PALD tested.
- Covered by OTC Lifetime Marathon Warranty®.

**5202 – 2-ton service jack.** Min. height 3"; Max. height 18-1/4".

**5203 – 3-ton service jack.** Min. height 5-1/2"; Max. height 20-1/2".

Specifications	5202	5203
Capacity	2-ton	3-ton
Min. height	3"	5-1/2"
Max. height	18-1/4"	20-1/2"
Overall length	34-5/8"	42-1/4"
Overall width	14-3/16"	14-3/16"
Handle length	39-1/2"	39-1/2"

**SEE PAGE 193 FOR  
JACKS STANDS  
3-TON, 6-TON AND  
12-TON STANDS.**



**Aluminum Racing Jack – Lifts 2-Tons and Weighs only 43 lbs.!**

- Low profile makes it perfect for ground hugging, high performance cars.
- Five pumps to max. height.
- Min. height 3-1/2"; max. height 18".
- Includes side-mounted handles for quick and easy carrying.
- Made from aircraft-grade aluminum.
- Two-piece, 45" long handle snaps together for quick setup.
- Removable, rubber saddle pad protects vehicle and prevents slipping.

**1532 – 2-ton aluminum racing jack  
2-Ton Aluminum Jack Stands**

- 10-1/4" min. height.
- 15-1/4" max. height.
- The pair weighs only 11 lbs.!
- Made from aircraft-grade aluminum.

**1582 – A pair of 2-ton  
aluminum jack stands  
2-Ton Racing Jack Pack**

- Includes 2-ton aluminum racing jack and a pair of 2-ton aluminum jack stands.

**552650 – Aluminum racing  
jack wall mount**



1532 Jack & stands

1582 Stands

1532 Jack

552650



**2-1/4 / 3-Ton Hydraulic Service Jacks**

- Flanged upper body edge increases strength to resist twisting.
- Light, compact design makes them easy and convenient to use.
- Built-in safety overload system protection prevents use beyond their rated capacity.
- Rear swivel casters, for easy maneuvering and positioning.
- These jacks have 4" saddle dia., 21" overall reach, 6-1/2" frame height,
- 39-1/2" handle length, and a floor space of 13-1/2" x 24-1/2".
- **5302** – 2-1/4-ton capacity with a lifting range of 5" to 18".
- **5303** – 3-ton capacity with a lifting range of 5-3/4" to 18-1/2".



5302

Specifications	5302	5303
Capacity	2-1/4 ton	3-ton
Lifting range	5" to 18"	5-3/4" to 18-1/2"
Saddle dia.	4"	4"
Frame height	6-1/2"	6-1/2"
Handle Length	39-1/2"	39-1/2"
Floor space	13-1/2" x 24-1/2"	13-1/2" x 24-1/2"



5303

# SERVICE JACKS SHOP EQUIPMENT



## 5300 OTC Stinger 3-Ton Jack Pack

This jack pack includes (5303) 3-ton service jack and (5372) Pair of 3-ton jack stands.

### 5303 – 3-Ton Service Jack

- Flanged upper body edge increases strength to resist twisting.
- Light, compact design makes them easy and convenient to use.
- Built-in safety overload system protection prevents use beyond their rated capacity.
- Rear swivel casters, for easy maneuvering and positioning.
- Lifting range of 5-3/4" to 18-1/2"
- 4" saddle dia., 21" overall reach, 6-1/2" frame height.
- 39-1/2" handle length, and a floor space of 13-1/2" x 24-1/2".

### 5372 – Pair of 3-ton jack stands

- Base: 8-1/4" x 7-1/2".
- Height range: 12" to 17-11/16".
- 11 adjustment positions.
- Welded foot pads resists sinking into soft ground or asphalt.



## 1526 Two-Speed 3-1/2 Ton Service Jack

The ideal floor jack for both a large automotive service center or a one person shop.

- Gets to the load quickly.
- One pump to load; three pumps to full height unloaded.
- Extra wide lift range – from 4" to 21".
- A long 48" spring-loaded handle provides rapid return after each pump.
- Heavy-duty construction – rolled edges add strength and resist twisting.
- With a wheel base of 23", the front wheels are 3-1/2" diameter and rear casters are 2-1/8".
- Pinned 4-3/4" saddle will not lift off during use.
- 2-year limited warranty.



1511B

### 5-Ton and 10-Ton Air/Hydraulic Service Jacks

- Bring the versatility of air-assist operation to your shop's lifting tasks.
- Huge front wheels mounted in bearings provide trouble-free service life. Rugged steel frame members.
- Rear swivel casters make spotting the jack easy. Spring-loaded handle may be locked in three positions, from horizontal to vertical.

### 1507B – 5-ton air/hydraulic service jack

### 1511B – 10-ton air/hydraulic service jack

Specifications	1507B	1511B
Capacity	5 ton	10 ton
Air pressure	80–120 PSI	80–120 PSI
Lifting range	5-7/8" to 22"	6-3/8" to 22"
Saddle dia.	6-5/8"	5-3/4"
Overall reach	87"	90"
Frame height	8"	10"
Handle length	40"	45"



5206



5210

### 6- & 10-Ton Heavy-Duty Service Jack

- Ergonomic handle for user comfort and easy mobility.
- Foot pedal for quick approach of the lifting saddle to load. Built-in tray for fasteners and tools.
- CE marked – ASME/PALD tested.
- Covered by OTC Lifetime Marathon Warranty®.

**5206 – 6-ton HD service jack.** Lifting range 6-11/16" to 22-13/16".

**5210 – 10-ton HD service jack.** Lifting range 6-11/16" to 23-13/16".

Specifications	1507B	1511B
Capacity	6-ton	10-ton
Min. height	6-11/16"	6-11/16"
Max. height	22-13/16"	23-13/16"
Overall length	87"	99-1/2"
Overall width	16-5/8"	16-5/8"
Handle length	39-3/8"	39-3/8"



5106



5110

**6- & 10-Ton Capacity Air/Hydraulic Service Jack**

- Huge steel front wheels are mounted in bearings for trouble-free service life. Rear swivel casters make spotting the jack easy.
- Spring-loaded handle can be locked in three positions.
- Covered by OTC Lifetime Marathon Warranty®.

**5106** – 6-Ton Air/Hydraulic Service Jack. Lifting range 4-3/4" to 23-1/4", reach 87", 45" handle.

**5110** – 10-Ton Air/Hydraulic Service Jack. Lifting range 6-3/4" to 26-7/8", reach 93", 47" handle.

Specifications	5106	5110
Capacity	6-ton	10-ton
Air pressure	90–175 PSI	90–175 PSI
Lifting range	4-3/4" to 23-1/4"	6-3/4" to 26-7/8"
Saddle dia.	7"	7-3/8"
Overall reach	87"	93"
Frame height	8"	10"
Handle length	45"	47"



1505B



1512

**5-Ton and 10-Ton Service Jacks**

- A built-in safety overload prevents using the jack beyond its rated capacity.
- Convenient foot pedal speeds the lifting operation. Handle lock and release control are located on top of the handle. Handle can be locked into any position from vertical to horizontal.
- Both models have a spring-loaded 40" handle.

**1505B** – 5-ton service jack

**1510B** – 10-ton service jack

**20-Ton Capacity Service Jack**

- Low-profile stance and extended height add to versatility.
- Wheels and swivel casters feature internal bearings.
- Either the foot pedal or jack handle may be used for pumping action. Counter-balanced, spring-assisted handle has a three-position lock.

**1512** – 20-ton service jack



1510B

Specifications	1505B	1510B	1512
Capacity	5-ton	10-ton	20-ton
Lifting range	6" to 22"	6-1/4" to 22"	7-1/2" to 24"
Saddle dia.	5-1/8"	6"	7-1/2"
Overall reach	47"	51"	97"
Frame height	7-3/4"	9-3/4"	10-1/4"
Handle Length	43"	43-1/4"	42"
Floor space	14-3/4" to 56"	18" to 60"	18-1/8" to 61-3/8"

# FORK LIFT JACKS / STANDS SHOP EQUIPMENT

## 5214

### 4-Ton Capacity Fork Lift Jack

- 8,000 lb. capacity with a low starting height of 2-5/32".
- 10,000 lb. capacity (5 tons) when lifting from cylinder saddle—ideal for agriculture and industrial applications.
- Unique shape of primary saddle allows for handling of all lift truck configurations with flat or edged surfaces.
- Features include high-quality seals, chrome-plated internal components, and high-strength steel construction.
- Secondary lifting surface feature.
- Complies with ASME-PALD.
- Lifting Height: 2-5/32 – 17-15/16".



## 1540

### 4-Ton Capacity Fork Lift Jack

- 8,000 lb. capacity with a low starting height of 2-5/8".
- Two-position lift pad permits handling of all lift truck configurations with flat or edged surfaces.
- Minimum low lift: 2-1/4".
- Maximum high lift: 16-1/4".
- Features include high-quality seals and high-strength steel construction.
- Handle stop makes for easy maneuverability.
- 30" long handle.



### OTC Stinger 3-Ton, 6-Ton and 12-Ton Jack Stands

- Formed and welded steel base for strength; self-locking ratchet handle cannot be released under load. Durable baked enamel finish resists corrosion.
- Stands conform to ANSI PALD load rating standard; factory tested before shipment.

**5372 Pair of 3-ton jack stands.** Base: 8-1/4" x 7-1/2". Height range: 12" to 17-11/16".

**5373 Pair of 6-ton jack stands.** Base: 11-9/16" x 10-3/8". Height range: 15-5/8" to 23-11/16".

**1784D Pair of 12-ton jack stands.** Base: 12-1/8" x 10-7/8". Height range: 17-1/2" to 27-1/2".



### 3- and 6-Ton Capacity Ratcheting Jack Stands

- Jack stands feature a formed steel frame for strength and long life, and rolled base edges that resist sinking into soft ground or asphalt.
- Recessed column saddle for acceptance of vehicle panel rail (pinch weld).
- Dual purpose handle serves as carrying handle and column release.
- Investment cast rack bar for long life strength.
- Covered by OTC Lifetime Marathon Warranty®.

**1736A – Pair of 6-Ton Jack Stands.** Height Range of 15-1/2" to 24-1/2".

**1733A – Pair of 3-Ton Jack Stands.** Height Range of 12-1/2" to 18-1/2".



## 1774B

### 10-Ton Capacity Ratcheting Jack Stands (pair)

- These ratcheting jack stands are highest quality steel and factory tested to ANSI PALD standards.
- The form-fit saddle design and 12" x 14" base ensures stability.
- Height range is 20" to 31-1/2".



## 1780

### 22-Ton Capacity Jack Stands

- Height range is 13-7/8" to 19-7/8".
- Saddle size 3" x 3-3/4".
- Pin-style (non-ratchet) three positions, 3" intervals.
- Reinforced collar to meet newest ANSI PALD test standards.
- 11" flat base prevents sinking into the surface.

## 1783

### Heavy-Duty 20-Ton Capacity Adjustable Support (One only)

- Designed for the really big service jobs. Rugged steel construction, and large 15-1/2" square base will satisfy support requirements up to 40,000 lbs.
- Features include 4-point adjustment. Height range is 15-1/4" to 24". Saddle diameter is 6".
- Covered by OTC Lifetime Marathon Warranty®.

Note: Recommend use in pairs.



## 1778B

### 12-Ton Capacity Low profile Jack Stand (One only)

- Spun steel base won't dig or sink into asphalt or sand.
- Height range of 19" to 29-1/2".
- Covered by OTC Lifetime Marathon Warranty®.

Note: Recommend use in pairs.



## 1779B

### 12-Ton Capacity High profile Jack Stand (One only)

- Spun steel base won't dig or sink into asphalt or sand.
- Height range of 33-3/4" to 44-1/4".
- Covered by OTC Lifetime Marathon Warranty®.

Note: Recommend use in pairs.



### Extension Tubes for 1778B and 1779B Jack Stands

**543751 – Extension Tube**  
Height range of 19" to 29-1/2"

**543752 – Extension Tube**  
Height range of 33-3/4" to 44-1/4"



543751

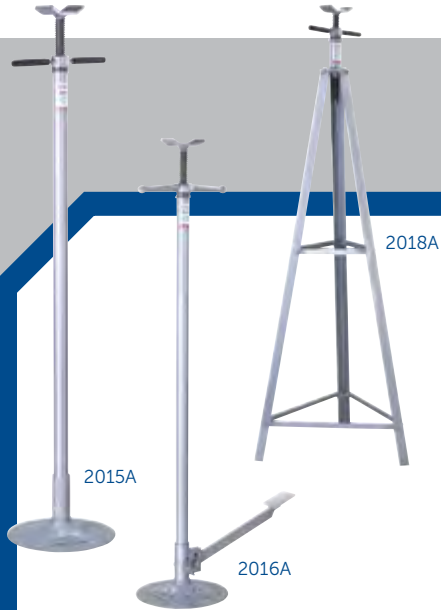
543752

## 1781B

### 4,000 lb. Capacity Underhoist Tripod Stand

- Ideal for undercar maintenance. An ACME take-up screw precisely positions and secures the support stand in place.
- Height range of 65-3/4" to 74-5/8".





### Tripod and Underhoist Stands

#### 2018A – 4,000 lb. Capacity Underhoist Tripod Stand

- Lifting height of 58-7/8" to 91-5/8"; saddle measures 3-1/4" x 3-1/4".
- 24" x 24" x 24" tripod base.

#### 2015A – 1,500 lb. Capacity Underhoist Stand

- Lifting height of 54-1/4" to 80-3/4"; saddle measures 5-1/4" x 1-1/4".
- 11-7/8" dia. base.

#### 2016A – 1,500 lb. Capacity Underhoist Stand with Foot Pedal

- Foot pedal actuated lifting mechanism.
- Lifting height of 54-1/4" to 80-3/4"; saddle measures 5-1/4" x 1-1/4".



#### 1572 Car Dolly (3,600 lbs., capacity pair)

- Innovative patent-pending design — clamps directly to pinch welds to prevent slippage during use.
- Independent units eliminate the need to adjust dolly width for different vehicle designs.
- Each unit has an independently adjustable threaded lift saddle with rubber pads to protect the vehicle frame.
- Universal design for use on all vehicle types without additional adapters.
- Provides easy movement of FWD vehicle after removal of drive train.
- The material on the 5" casters is polypropylene.
- Each unit has 1,800 lbs. capacity (3,600 lbs., pair) with low height of 9" and high of 14".
- May be used with or without tires on vehicle.



Shown folded

#### 1734A

#### 300 lb. Capacity Heavy-Duty Wheel Step

- Tire-mounted wheel step provides quick, easy access to under-hood components.
- Fits heavy-duty vehicles (Class 7/8).
- Adjusts to fit 22-1/2" to 24" wheel sizes.
- Non-skid platform surface.



Shown folded

#### 1534A

#### 300 lb. Capacity Passenger/Light Truck Wheel Step

- Provides quick, easy access to your vehicle's roof for loading/unloading cargo.
- Fits passenger and light trucks.
- Adjusts to fit 14" to 20" wheel sizes.
- Non-skid platform surface.
- Two-year warranty.



1580 (sold individually)

#### 1580

#### 1,500 lb. Capacity Easy Roller™

- Provides simple and efficient method of moving a disabled vehicle around a shop environment.
- Fits tread widths up to 12".
- 4 heavy-duty phenolic casters.
- 1,500 lbs. capacity per unit.
- Hydraulic lift mechanism with locking pin.



#### 1545

#### Motorcycle/ATV Lift

- 1,500 lb. capacity and 17" long skids that will lift the largest, widest cruisers.
- Lowest clearance available, 3-1/2" at lowest level, with a wide lift range of 3-1/2" to 16-3/4".
- Removable handle provides 360° access to load.
- Features also include foot pedal release, locking rear casters, automatic safety lock, and two ratcheting tie down straps for safety.



#### 5090 Back Buddy™ II

- Remove, transport, service, and install heavy truck brake drums and hub assemblies.
- Fast-motion ratcheting jack with 14" of vertical lift.
- Pneumatic rear tires.
- Tilting mechanism to achieve the exact angle necessary for precise reassembly.
- Fold-down handle for open access to the work area.

#### 513926 – 10 stud inboard hub & drum assemblies – 335 mm.

#### 513927 – 10 hole outboard drums – 3/4" thick back plates Adapter Sets (sold separately)

#### 513925 – 5 and 6 spoke wheels

#### 514644 – 8 stud inboard hub & drum assemblies

#### 514645 – 8 hole outboard drums

#### 514646 – 6 stud inboard hub & drum assemblies

#### 514647 – 6 hole outboard drums

#### 514648 – Humvee/Hummer geared hubs

# BRAKE DRUM / WHEEL DOLLIES SHOP EQUIPMENT

## 5017A Brake Drum Dolly

- Remove, install, and transport truck brake drums without physically having to lift them.
- Works on 15" and 16-1/2" drums found on most Class 7 and 8 tractor and trailer brake systems.
- Heavy-gauge steel construction, ten-inch pneumatic tires, and adjustable handle.
- Covered by OTC Lifetime Marathon Warranty®.



## 1543 Brake Drum Dolly

- Removes, installs, and transports truck brake drums without physically having to lift them.
- Works on all 15" and 16-1/2" drums found on most class 7 and 8 tractor and trailer brake systems.
- 6" height adjustment aids installation.
- Heavy-gauge steel construction, 8" tires, and 36" handle.



## 5105B 1,100 lb. Capacity High-Lift DualWheel Dolly

- Effortless air-powered hydraulic lift system for a variety of applications.
- 0 to 42" lifting range.
- Six-inch lateral adjustment.
- Tilt adjustment of +15° to -8° ensures easy alignment.
- Features four swivel casters, two locking, for enhanced mobility.

## Easy Lever Wheel Dollies

- Gives technicians the leverage they need to easily remove or install truck tire-and-wheel assemblies.
- Heavy-duty construction capable of toting 300 pounds.
- Onboard rollers that make stud-hole alignment a snap.
- Spring-loaded kickstand for handy parking.
- Two models that, together, can accommodate tire diameters from 24 to 48 inches.
- Rugged tubular steel construction.

**5096A – Heavy-duty Easy Lever wheel dolly.** With a width of 26", this dolly handles tire diameters of 36" to 48".

**5095A – Easy Lever wheel dolly.** With a width of 22", this dolly handles tire diameters of 24" to 36".



## 5100 Wheel Mate™

- Enables truck technicians to easily remove, install, rotate, and transport single tire-wheel assemblies.
- Internal ratcheting jack with 14 inches of vertical travel—almost a foot higher than conventional dollies.
- U-shaped chassis that provides close, unhindered access to work area.
- A design that accommodates—and securely holds—almost any truck wheel, including wide-based singles, without restraining chains.
- Heavy-duty ball-bearing wheels mounted under ball-bearing swivel casters for maximum maneuverability.
- Foot-operated wheel lock.
- Rugged structural steel tubing construction that meets the demands of the toughest shop environments.



## 5082 Wheel Tipper

This heavy-duty wheel tipper makes handling those hard-to-manage truck tires easy. To use the wheel tipper, simply deflate the tire and break the bead, then hook the wheel tipper to the rim of the wheel. The wheel tipper makes an otherwise tough task effortless.

- Designed for both aluminum and steel wheels won't damage wheel rim.



## 1770A 1,500 lb. Dual Wheel Dolly

- Hydraulic jack provides almost 5' of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Independent lifting rack provides maximum stability; rollers won't catch on load.
- Swivel casters for easy maneuverability.
- Floor space is 45" by 41".
- 6' chain holds load in place.
- Covered by OTC Lifetime Marathon Warranty®.



## 1769A Truck Dual Wheel Dolly

- This 1,500 capacity dolly will remove, transport, and replace dual wheel and tire assemblies without strain or struggle.
- Swivel casters, 3-1/2" front and 3" rear, provide easy maneuverability.
- Floor space is 43" by 42".
- No. 1769A hydraulic jack provides over 6-1/2" of lift and tilts wheel assembly 7° to prevent damage to wheel seal.
- Includes a 6' support chain to hold load in place.



## 6000 lb. Revolver® Diesel Engine Stand

- 96-to-1 ratio worm and gear set rotates components 360°; handle locks in any position.
- Integral 12-ton jack raises the work to provide the swing radius needed for clearance. Two front wheels and two rear casters provide mobility.
- Universal adapter assembly permits use with a wide variety of mounting plates.
- Covered by OTC Lifetime Marathon Warranty®.

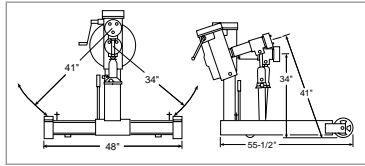


**1750A** – Revolver diesel engine stand with No. 205061 universal engine adapter assembly.

**1750** – Engine stand without universal engine adapter assembly.

## Revolver® Engine Adapter Plates

You can order only those plates you need for the engines you work on. The universal adapter assembly is required for mounting all plates to the stand.



**205061** Universal Adapter Plate Assembly. Included with 1750A engine stand. (Must be used with all plates below.)

**J-29109-J** Adapter plate to accommodate adapters for Kent-Moore engine stand.

### Detroit Diesel

**205058\*** For Detroit engines: 53 series in-line 6 cyl., 6V & 8V; 71 series in-line 6 cyl., 6V, 8V, & 12V; 92 series 6V & 8V; 8.2 liter V-8.

**52871\*** For coach 6V and 8V series 71 Detroit Diesel.

**218504\*** For Detroit series 60 in-line 6-cylinder engines.

### Detroit Allison

**208160\*** Allison transmission mounting plate for transmission Nos. AT500, MT600, MT 6-speed, VH, VS, and V730.

**61373\*** Allison transmission adapter plate for transmission series HT-750, CLBT, HT-740D, CR/DR, and HT-750CT.

### Cummins

**205059\*** For Cummins engines: All NH, NTC, NTE, N14 855 series in-line 6 cyl; 378 series V6; 504, 555, & 903 series V8; KT 1150 series in-line 6 cyl., L10.

**61405\*** For Cummins L-10 and M11 series engines. Plate attaches to the left side of engine for complete tear down.

**218098** For Cummins "B" series 5.9L in-line 6 cyl. engines.

**218099\*** For Cummins "C" series 8.3L in-line 6 cylinder engines.

### Caterpillar

**205060\*** For Caterpillar engines: Nos. 1673, 1674, 1693, 3306, & 3406 in-line 6 cyl.; Nos. 1100, 3208, and 3408 V8.

**217687\*** For Caterpillar 3114, 3116, and 3176 in-line 6 cylinder and C12 engines.

### Mack

**205101\*** For Mack engines: All 672, 673, 675, & 711 series in-line 6 cyl.

**206629\*** For Mack engines: V8 1000, E6, & E7 in-line 6 cyl.

**528858\*** For Mack 865, and 868.

### International Harvester

**206386\*** For International Harvester engines: DT-466, DT-360, DT408, and 530 in-line 6 cylinder; DV-550, MV-404, MV-446, V304, V345, V392, 4-152, 4-196, 4-194; 9.0 liter and T444E V8; and Ford 6.9L, and 7.3L DIT.

**528856\*** For IH300 & 400 Series.

**528868\*** For International VT365.

### Ford

**61681\*** For mounting Ford 6.6L/7.8L engines.

**206386\*** For Ford 7.3 engines.

### Volvo

**528853\*** For Volvo TD67 and TD71 engines.

### John Deere

**528859\*** For JD 400 and 500 engines.

**528861\*** For JD Powertech 4.5L & 6.8L.

**528863\*** For JD 8995 V6, must be used with 528859.



205061 – Universal Adapter Plate Assembly



52871 Detroit



205058 Detroit



61373 Allison



218504 Detroit



61405 Cummins



208160 Allison



205060 Caterpillar



218098 Cummins



218099 Cummins



206629 Mack



205059 Cummins



217687 Caterpillar



61681 Ford 303-DO61 (Same as D87T-6000-A)



205101 Mack

528853 Volvo



206386 International Harvester, Ford



528861 John Deere



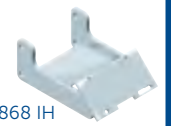
528859 John Deere



528863 John Deere



528856 IH



528868 IH

**\*NOTE: Must be used with 205061 univ. adpt. plate assembly. Each engine mounting plate includes all the necessary hardware and an engine application chart.**



# ENGINE STANDS / ENGINE SUPPORT BARS SHOP EQUIPMENT

## 1735B

### 2,000 lb. Capacity Heavy-Duty Motor-Rotor® Repair Stand

- Handles a wide variety of engines, transmissions, torque converters, and rear axles from trucks, tractors, and construction machinery.
- The 50:1 ratio gearbox allows full rotation of mounted unit with just a turn of the crank and locks in position. Easily maneuvered when loaded.
- To ensure engine stability in all positions, this repair stand is equipped with a positive-crank handle locking mechanism.
- Twin-post design, featuring laterally adjustable, 3 position outboard support; provides an extremely stable work-holding unit.
- Locking rear wheels anchor stand in position.
- Covered by OTC Lifetime Marathon Warranty®.

## 206391 –

**6.0L and 6.4L Ford engine adapters** (Works with both the OTC 1735, 1735A and 1735B.)

**206392 – Ford 6.7L Engine Adapter for 1735B HD Rotor Repair Stand.**



206391

206392

1735B with engine



1735B



## 4324

### Engine Support Bar

- 1,100 pound capacity.
- Rubber padded support legs ensure stability during use.
- Tubular steel construction for long life.
- Adjustable width: 57" x 27".
- Features two hook assemblies for ease of use.
- Includes two 36" chain assemblies.

## 1726A

### 1,000 lb. Capacity Engine Stand

- A timesaver for passenger car and light truck engine rebuilding or repair. Four adjustable attachment arms make engine mounting fast and easy.
- Engine can be rotated a full 360° with a turn of the handle; a locking pin secures the work in any of eight positions.
- Two rear wheels lock tightly to anchor the stand in place.
- Easy one-bolt disassembly for transport of stand.
- Covered by OTC Lifetime Marathon Warranty®.

Specifications:

Height to center line – 28"

Length – 46"

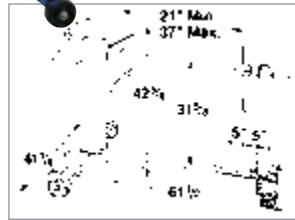
Width – 35-1/2"

Handle length – 24"

**60796 – Drip pan (ABS material) for No. 1726A.**



60796



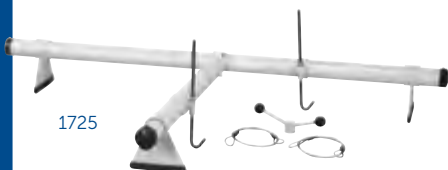
## Engine Support Bars

Unique, innovative design featuring...

- Cutting edge, design self-centers load to prevent tipping on inclined surfaces.
- Smooth sliding legs adjust easily to different vehicle widths.
- PVC-coated support legs don't scratch vehicle surfaces.
- "Quick Connect" third-point bar (No.1725) makes setup a snap.
- Spinner handle enables lightning fast adjustment.

**1723 – Engine support bar (2-Point), 500 lb. capacity**

**1725 – Engine support bar (3-Point), 700 lb. capacity**

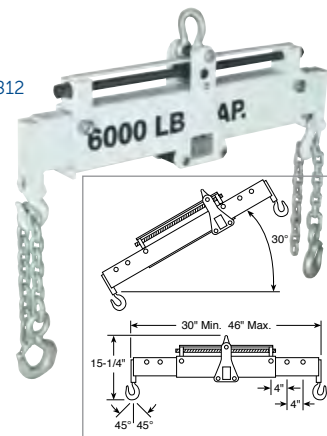


1725



1723

1812



## Load Leveler

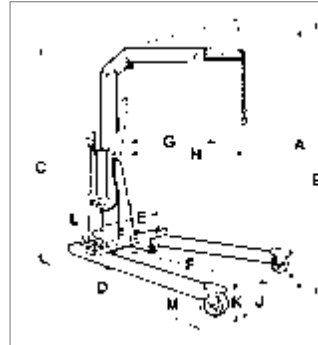
- Improved design over conventional spreader bars.
- Carriage on main support beam moved by turning lead screw; this permits fine adjustment of the tilt angle of component being lifted.
- Turn lead screw manually or with air-powered tools.
- Spreader bar adjustment secured with locking bolts.
- Chain grade is 80.
- Covered by OTC Lifetime Marathon Warranty®.

**1812 – Load Leveler.** Max. lifting capacity: 6,000 lbs.; distance between hooks: min. 30", max. 46".

**1822 – Load Leveler.** Max. lifting capacity: 10,000 lbs.; distance between hooks: min. 36", max. 56".



1819, 1820



### 2,200 and 4,400 lb. Capacity Heavy-Duty Floor Cranes

- To conserve valuable floor space, crane folds into a compact package for storage.
- For "close-in" work, leg spread adjusts to clear vehicle's wheels, telescoping boom extension gives additional reach. Roller bearing mounted wheels and steering dolly provide ease of mobility.
- A two-speed hydraulic hand pump provides fast boom travel; descent of boom is under precise control of operator.
- Covered by OTC Lifetime Marathon Warranty®.

**1819 – 2,200 lb. Capacity Crane.** Has hydraulic hand pump and 16-7/8" lifting chain.

**39610 – 1/4" steel chain grade 43, 18-3/8" long, 2,200 lb. capacity.** Has safety hook on end. Use with 1819.

**1820 – 4,400 lb. Capacity Crane.** Has hydraulic hand pump and 18-3/8" lifting chain.

**39611 – 5/16" steel chain grade 70, 19-3/4" long, 4,400 lb. capacity.** Has safety hook on end. Use with 1820.

Specifications	1819	1820
Cap., boom retracted	2,200	4,400
Cap., boom extended	1,650	3,300
A Max. boom height, boom retracted	107"	111"
B Max. boom height, boom extended	117"	122"
C Overall height, boom horizontal	80"	82"
D Overall length	83"	89"
E Minimum throat width	24"	25"
F Inside leg length	54"	57-1/2"
G Effective boom reach (retracted)	33"	35-1/2"
H Effective boom reach (extended)	48"	50-1/2"
J Inside leg width (3-position)	24", 36" 48"	26", 40" 52-1/2"
K Leg height	8"	9-1/2"
L Dolly wheel diameter	5"	5"
M Wheel diameter	6"	8"
Height, folded	79"	86"
1819 Floor space folded	27" x 38"	
1820 Floor space folded	31" x 42"	



1813

No. 1812 Load-Rotor (not included)

Boom Capacity (lbs.)	Extended	Centered	Retracted
<b>Description</b>	<b>4,000</b>	<b>5,000</b>	<b>6,000</b>
A Maximum boom height	161-7/8"	150-11/16"	139-1/4"
B Minimum boom height	6"	17-3/8"	28-3/4"
C Overall height (boom horizontal)	87"	87"	87"
D Overall length*	129-1/8"	113-7/8"	98-1/4"
E Inside leg length	91-11/16"	76-1/8"	43-1/4"
F Effective boom horizontal reach	94-1/4"	78-3/4"	63-1/4"
G Outside leg width**	59-3/4"	57-3/4"	55-3/4"
H Boom swing	36"	31"	26"
J Inside leg width	35-3/4"		
K Leg height	9-1/16"		
M Wheel diameter	8"		
Dolly wheel diameter	5"		

\* Legs in storage position: 80-7/8"

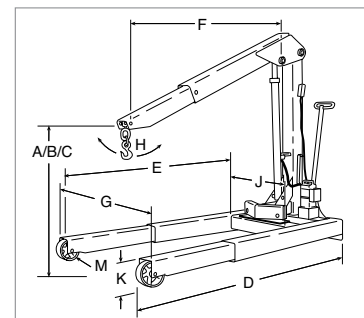
\*\* Legs in storage position: 53-1/2"

### 6,000 lb. Capacity Heavy-Duty Mobile Floor Cranes

- Three boom positions give capacities of 4,000, 5,000, and 6,000 lbs. to handle the biggest engines, and often the transmission right along with the engine! Usable reach is almost 92".
- Boom swivels for vertical and lateral positioning; legs extend to straddle the biggest tires.

**1814 – 6,000 lb. capacity crane with electric/ hydraulic pump (115V) with remote motor control.**

**1813 – 6,000 lb. capacity crane with two-speed hydraulic hand pump.**



# FLOOR CRANES / LIFTING CHAINS SHOP EQUIPMENT



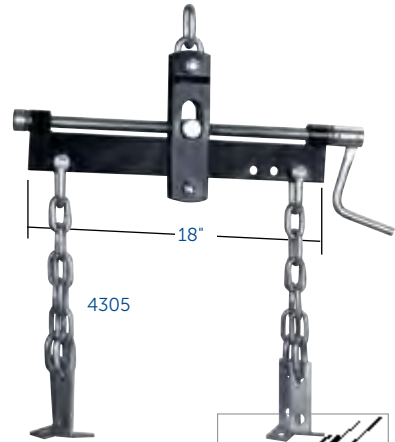
## 2,000 and 4,000 lb. Capacity Folding Floor Cranes

- Both of these cranes fold up for compact storage.
- Front wheels are 3-1/2"; rear casters 5-7/8".

**2002** – 2000 lb. capacity crane with a reach of 24" to 36"

**2004** – 4000 lb. capacity crane with a reach of 25" to 46"

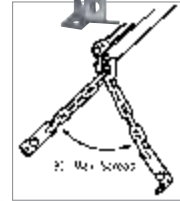
Specifications	2002	2004
Maximum capacity, boom extended	500 lbs.	1,000 lbs.
Maximum capacity, boom retracted	2,000 lbs.	4,000 lbs.
Maximum height, boom extended	94"	104"
Maximum height, boom retracted	87"	81"
Effective boom reach, boom extended	36"	48"
Effective boom reach, boom retracted	24"	26"
Leg width @ front wheels	32-1/2"	25"
Leg height	6-1/2"	7-3/4"
Floor space folded	57" x 38"	16" x 17-1/2"
Floor space unfolded	70" x 32"	33" x 33-1/2"



## 4305 1,500 lb. Capacity Engine Load Leveler

Designed to hook to a crane or hoist to handle and position large, bulky components.

- The horizontal tilt can be adjusted to compensate for off-center loads, or adjusted to a certain angle for a component being positioned.



## Lifting Chains for Floor Cranes

- For use with floor cranes only; not recommended for overhead hoists or lifts.

**38839** – 1/4" steel chain, 56-1/2" long, 2,000 lb. capacity. Has safety hook on both ends. Use with No. 205049. **38840** – 5/16" steel chain, 65-3/4" long, 4,000 lb. capacity. Has safety hook on both ends. Use with No. 205050.

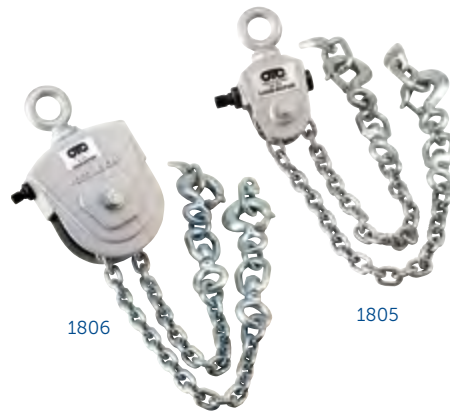
**31609** – 1/4" steel chain, 56-1/2" long, 2,000 lb. capacity. With swiveling safety hooks on both ends. Use with No. 1805.

**31800** – 5/16" steel chain, 65-3/4" long, 4,000 lb. capacity. With swiveling safety hooks on both ends. Use with No. 1806.

## Alloy Chains for Overhead Lifts and Hoists

**302249** – 3/8" alloy chain, 28-3/8" long, 6,000 lb. capacity. With safety hook on one end.

**302941** – 5/16" alloy chain, 26-13/16" long, 4,000 lb. capacity. With safety hook on one end. Use on No. 1812.



## Load-Rotor® Positioning Slings

- Use with a floor crane. Engine, transmission, or other component is tilted or leveled by turning sling's 5/8" hex drive end with a common speed handle and socket.
- Makes engine removal and installation a snap, even in close quarters.
- For use with floor cranes only; not to be used with overhead hoists or lifts.

**1805** – 2,000 lb. capacity Load-Rotor®. Has 56-1/2" long chain (1/4") and hook assembly with forged swiveling hook on each end. Pair of special lifting brackets included.

**1806** – 4,000 lb. capacity Load-Rotor®. Has 65-3/4" long chain (5/16") and hook assembly with forged hook on each end. Pair of special lifting brackets included.



## 7100 4,000 lb. Capacity Lifting Brackets (pair)

- Attach directly to component for easy lifting; will take 1/2" diameter bolts.



## Heavy-Duty Adjustable Slings

- For lifting and positioning engines, transmissions, etc. Each chain can be adjusted independently for length; plate design enables chain to be "short-hooked" for correct tilt.

**205049** – 2,000 lb. capacity sling with 1/4" chain, 56" long

**205050** – 4,000 lb. capacity sling with 5/16" chain, 65" long

**38841** – Plate only, use with any 1/4" or 5/16" alloy steel chain

# OIL FILTER CRUSHERS / FLUID RECEIVERS SHOP EQUIPMENT



**1821**  
**10-Ton Capacity, Air-operated Automotive Oil Filter Crusher**

- Crushes up to four automotive filters (3-7/8" dia. x 9" high) at one time, in approximately 20 seconds. Engineered and built for dependable operation. Covered by OTC Lifetime Marathon Warranty®.
- 100% air operation eliminates electrical connections. Generous size of crushing chamber easily accommodates the largest automotive spin-on filters.
- Includes mounting stand. No wall mounting or time consuming installation required.



**1877**  
**25-Ton Capacity Heavy-Duty Oil Filter Crusher**

- Handles the big filters (up to 6" dia. and 12-1/2" long) found in trucks, construction equipment, farm implements, etc. May also be used for automotive and light truck filters. It does it all!
- Crushes filters to 1/4 of original size, removing up to 95% of filter's oil capacity. Automatic cycle feature: load the filter, push a button, and walk away.
- Air/hydraulic pump works on standard shop air (requires 9 CFM at 100 psi). Special valving returns ram automatically at the end of each cycle. No electrical connections needed.
- Built-in floor stand (completely assembled). Whole unit requires just 5 square feet of floor space.
- Covered by OTC Lifetime Marathon Warranty®.



**1896**  
**25-Ton Capacity High-Speed Heavy-Duty/Automotive Oil Filter Crusher**

- Automotive and heavy-duty filters up to 15-1/4" long and 6" diameter are crushed in approximately 8 to 16 seconds. Filters are reduced to 20% of original size, with 95% of residual oil removed.
- Automatic cycle feature lets you load the filter, push a button, and walk away.
- Powered by 2 hp electric/hydraulic pump, 230 volt, 20 amp, 60 cycle, single phase, 3,450 rpm. Has a 2-gallon reservoir.
- Built-in, heavy-duty floor stand with leveling pads is designed to accept a 30-gallon drum for oil drainage. Comes assembled. Covered by OTC Lifetime Marathon Warranty®.

Shipped assembled



**SEE PAGE 35  
FOR OIL FILTER  
WRENCHES**

**Oil Filter Crusher Comparison Chart**

No.	Tonnage	Pump	Crushing Time	% Oil Removed	Filter Size	Stand Dimensions
1821	10-ton	Air	20 Seconds	95%	Chamber: 8" x 8" x 9" H.	18-1/2" W x 24" D x 63-1/2" H
1877	25-ton	Air/Hyd.	80 Seconds	95%	6" Dia. - 12-1/2" Long	18-1/2" W x 30" D x 74-1/2" H
1896	25-ton	Elec./Hyd.	16 Seconds	95%	6" Dia. - 15-1/4" Long	27" W x 30" D x 78" H

Note: Crushing times are approximate; crushing times may vary depending on air pressure available, size of filter type of filter, etc.

**Transfer Tankers**

- Draining oil from a large displacement engine and getting it to your bulk storage container is a snap with OTC's Transfer Tankers.
- Used oil is collected in a reservoir, and then rolls smoothly on 4" free-wheeling casters to your storage location.
- Pump moves five gallons a minute through the 8-foot transfer hose to the a 15-gallon reservoir.
- Handle is removable for easy storage.
- Screen attached to reservoir allows assembly to be stored on its side.
- Can also be used for transferring antifreeze.

**5077A** – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with an electric pump (No. 528093).

**5097** – Low profile Transfer Tanker is only 7-1/2" from floor to top of reservoir. Comes equipped with a pneumatic pump (No. 529966).



5077A



5097



**1577**  
**Low Profile Fluid Receiver**

- Designed for receiving waste fluid during a wide range of repair jobs.
- Fluid capacity: 7.5 gallons.
- Constructed of polyethylene plastic for heavy-duty use—yet, only weighs 13 pounds.
- Low profile, only 5" high, it easily slides under passenger cars.
- Designed with four casters to provide efficient maneuverability.
- Suitable for cooling system repair jobs—can be used for antifreeze.
- Includes splash screen to prevent spillage and splashing.
- Two-year warranty.

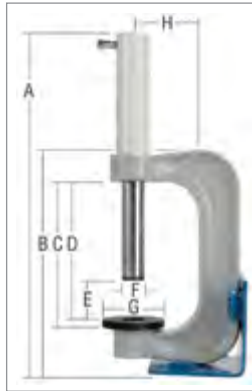
# PRESSES SHOP EQUIPMENT



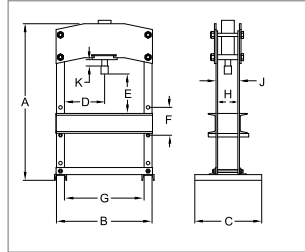
## 5180 10-Ton Portable Hydraulic C-Frame Press

- Weighing less than 28 lbs, this durable press is portable for various applications, i.e., roadside maintenance services, industrial applications, marine, general automotive.
- For clamping, pressing and bending. Ideal for welding and metal fabrication.
- 9" Open-Throat® design.
- Couples to any 4- or 10-ton Porta Power pump.
- The base can be assembled to position the press either vertically or horizontally and can also be mounted to a bench.

Set includes: C-Frame press with base, adapters: V-pushing and ram pushing (9/16" and 3/4" dia. shanks), receiving insert, flat insert, storage case.



A	B	C	D	E	F	G	H
21-1/4"	13-3/4"	9"	8-1/2"	2-1/2"	1-1/2"	4"	4-1/4"



## 5230 16-1/2 Ton Capacity Bench Press

This innovative press integrates all the hydraulic elements within the chassis. The compact and functional design saves workshop space and ensures protection during transport.

- Bolster is adjustable for height.
- Automatic spring return piston.
- Pressure gauge with damper to extend its working life— positioned at eye level for easy reading.
- Includes set of two V-blocks and legs with bolt-holes for fixing to bench.



A	B	C	D	E	F	G	H	J	K
37"	16-1/2"	23-7/8"	9-1/2"	5-7/8"-17-5/8"	6"	19-5/8"	4-3/4"	5-1/2"	3"

## Hydraulic Bottle Jack Presses

- All bottle jacks have an overload valve built into them.

### 1823A – 12-ton capacity press with a OTC bottle jack.

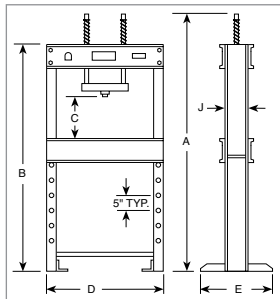
Stroke 6-1/4", 19 pump stroke to extend piston 1 inch.

Height with screw extension 19".

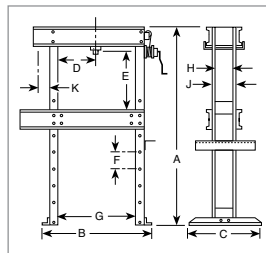
### 1824A – 20-ton capacity press with a OTC bottle jack.

Stroke 7-1/2", 30 pump stroke to extend piston 1 inch.

Height with screw extension 20-1/2".



OTC No.	A	B	C	D	E	J
1823A	84-1/2"	72"	2" – 42"	28-3/4"	28"	4-3/8"
1824A	85-7/8"	72"	2" – 37"	37-1/2"	28"	7-3/8"



## 1825 17-1/2 Ton Capacity Heavy-Duty "Open Throat"® Press

- Ram head moves side to side for off-center pressing; ram-to-work distance is adjusted by a forcing screw that is extended or retracted by a speed crank.
- "Open-throat"® frame extensions make handling of bulky jobs possible outside of the press frame.
- This press does not have a lifting mechanism. If a lifting mechanism is needed, order 211407.
- Covered by OTC Lifetime Marathon Warranty®.
- Has No. 201832 hydraulic ram with 2" stroke, No. 4002 hydraulic hand pump, No. 9650 gauge, No. 9767 hose, adjusting screw, speed crank, ram cap, and pump mounting bracket.

211407 – 17-1/2 ton winch kit.



A	B	C	D	E	F	G	H	J	K	Floor Space
64"	28"	28"	17-7/8"	34-7/8"	3-3/8"	20"	4-1/4"	5"	4-3/8"	28" x 28"



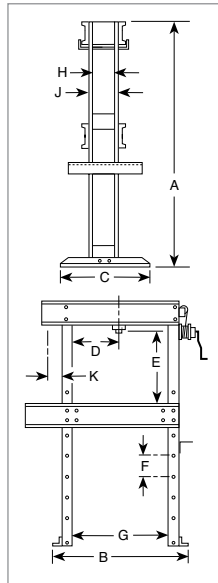
1826

**25-Ton Capacity Heavy-Duty "Open Throat" Press**

- "Open throat" feature enables ram to be positioned outside of press frame for fast axle bearing removal and installation, as well as other tasks. Rugged press is covered by OTC Lifetime Marathon Warranty®.
- Press bed is raised or lowered with a hand crank, and a spring-return hydraulic ram is laterally adjustable for off-center work at full capacity.

**1826** – 25-ton press. Includes No. 4016 hydraulic hand pump; No. 52025 hydraulic ram with 14" stroke; No. 9652 gauge; No. 303563 hose (3/8" ID x 8"); and pump mounting bracket.

**1826A** – 25-ton press. Includes No. 4020 air/hydraulic pump; equipped the same as 1826.



A	B	C	D	E	F	G	H	J	K	Floor Space
68"	43"	28"	3"-29"	6-7/8"-4-3/8"	4-1/2"	32"	5-1/2"	6-1/2"	7"	28" x 25-1/4"



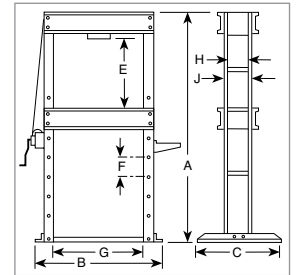
1833

**25-Ton Capacity Shop Presses**

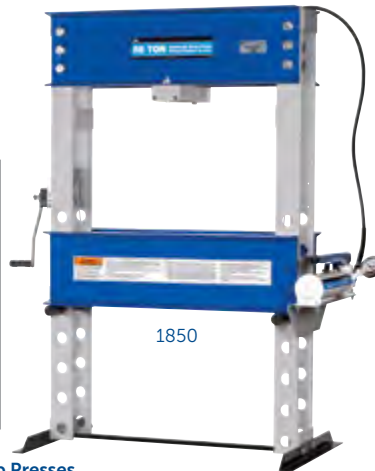
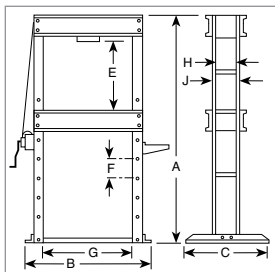
- Tough, economical press is ideal for pressing rear axle bearings, piston pins, and much more.
- Large 30" x 46" work area under ram makes positioning of even bulky work easy. Press bed is easily raised and lowered by a dependable lifting mechanism. Choice of model with hand- or air-driven hydraulic pump.

**1833** – 25-ton press, complete with No. 4002 hydraulic hand pump; No. 9652 gauge; No. 24815 tee; No. 9767 hose (1/4" ID x 6'); hydraulic ram No. 51426 with 6-1/4" stroke; and 42733-WH2 pump mounting bracket.

**1834** – 25-ton press, complete with air-driven No. 4020 hydraulic pump; No. 9652 gauge; No. 24815 tee; No. 9768 hose (1/4" ID x 8') and hydraulic ram with 6-1/4" stroke.



A	B	C	D	E	F	G	H	J	Floor Space
69-1/2"	40-1/2"	28"	5-3/4"-46"	4"	30"	5-1/2"	6-1/2"	41-1/2"	56-1/2" x 36" x 28"



1850

**55-Ton Capacity Economy Shop Presses**

- Durable steel frame resists buckling and bending. Covered by OTC Lifetime Marathon Warranty®.
- Hand-operated winch and cable mechanism adjusts lower press bolster.

**1850** – 55-ton press. Includes No. 52457 hydraulic ram with 6-1/4" stroke; No. 4016 hydraulic hand pump; No. 9651 gauge; No. 9767 hose (1/4" ID x 6'); and pump mounting bracket.

**1851** – 55-ton press. Includes No. 52457 hydraulic ram with 6-1/4" stroke; No. 4020 air/hydraulic pump; No. 9651 gauge; No. 9767 hose (1/4" ID x 6'); and pump mounting bracket.

A	B	C	E	F	G	H	J	Floor Space
70-3/4"	47-1/2"	28"	6-1/8"-41-1/8"	5"	35"	7-1/16"	10"	55-1/2" x 28"



1845

**55-Ton Capacity Heavy-Duty Presses**

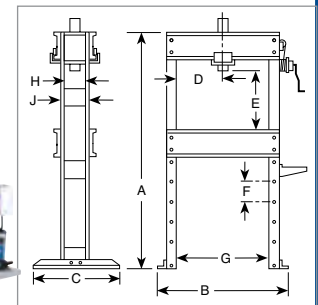
- Side-to-side positioning of ram allows full capacity pressing along entire bolster length without buckling or bending. Covered by OTC Lifetime Marathon Warranty®.
- Hydraulic ram features 13" of stroke. Choice of hydraulic power units.

**1845** – 55-ton press. Includes single-acting ram No. 52380 with 13" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 303563 hose (3/8" ID x 8'); and pump mounting bracket.

**1846A** – Same as No. 1845 except has No. 4016 hydraulic hand pump and single acting ram No. 65458 with 10-1/8" stroke.

**1847** – Same as No. 1845 except has a No. 4022 air/hydraulic pump and a No. 9781 hose (3/8" ID x 10').

**1872** – 55-ton press. Includes double-acting ram No. 51682 with 13" stroke; No. 4046 electric/hydraulic pump; No. 9651 gauge; No. 36887 hoses; and pump mounting bracket.



A	B	C	D	E	F	G	H	J	Floor Space
72"	48-1/2"	36"	3-1/4"-32-3/4"	6"-42"	6"	36"	6-3/4"	8"	56-1/2" x 36"

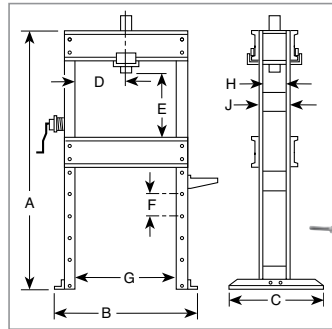
\*Lateral head movement.

# PRESSES SHOP EQUIPMENT

## 100-Ton Capacity Economy Shop Press

- Large 35" opening between press uprights allows easy handling of large gears, shafts, sprockets, and other components serviced in truck, construction, and agricultural equipment shops. Covered by OTC Lifetime Marathon Warranty®.
- Hand-operated winch and cable mechanism gives operator precise control in adjustment of lower press bolster to any height.

**1854 – 100-ton press.** Includes hydraulic ram No. 52434 with 10" stroke; No. 4044 electric/hydraulic pump; No. 9651 gauge; No. 9768 hose (1/4" ID x 8'); and pump mounting bracket.



1854

A	B	C	D	E	F	G	H	J	Floor Space
86-5/8"	47-1/2"	28"	17-1/2"	9-5/8"-49-5/8"	8"	35"	6-3/8"	10"	55-1/2" x 28"



1857



1858

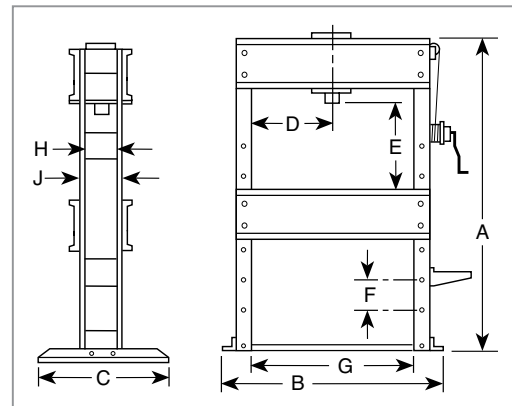
## 100-Ton Capacity Heavy-Duty Shop Presses

- Wide open uprights allow easy positioning of bars and shafts for straightening or bending.
- Upper bolster can be lowered for convenient positioning during repetitive jobs.
- Ram head glides smoothly on rollers for easy horizontal adjustments; rugged press frame will withstand a full capacity load with the ram head in any position across the upper bolster.
- Covered by OTC Lifetime Marathon Warranty®.

**1857 – 100-ton press.** Includes single-acting No. 52434 ram with 10" stroke; No. 4008 hydraulic hand pump; No. 9651 gauge; No. 9781 hose (3/8" ID x 10'); and pump mounting bracket.

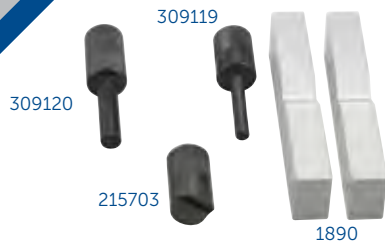
**1858 –** Same as No. 1857, except has double-acting No. 51683 ram with 13" stroke; No. 61217 3-phase, 220V, 3450 rpm electric/hydraulic pump; and two No. 9769 hoses.

**1858-1P –** Same as No. 1858, except it has a No. 4064 2-stage, 1-phase hydraulic pump.



A	B	C	D	E	F	G	H	J	Floor Space
77-1/4"	64"	36"	7"-43"	2"-42"	8"	50"	8"	10"	36" x 78-1/4"

\*Lateral head movement. Frame shipped assembled.



**Accessory Set for Bottle Jack Presses**

- 1879** – Accessory set for 12-ton and 20-ton bottlejack presses. Includes;
- 1890** – 9" long V-block set
- 215703** – 1-1/2" dia. V-pushing adapter
- 309119** – 3/4" dia. pushing adapter
- 309120** – 1" dia. pushing adapter



**25-Ton Press Accessory Sets**

- 8075** – Step plate adapter set
  - 8076** – Step plate adapter set
  - 1889** – V-throat press plate. Dimensions are 11-5/8" x 14-1/2" and 3/4" thick.
- Note: See page 135 for sizes of step plate adapters in sets.



**17-1/2 Ton Press Accessory Sets**

- 8075** – Step plate adapter set
  - 8076** – Step plate adapter set
  - 1888** – V-throat press plate. Dimensions are 9-1/4" x 10" and 3/4" thick.
- Note: See page 135 for sizes of step plate adapters in sets.

**Accessories for 100-Ton Capacity Presses**

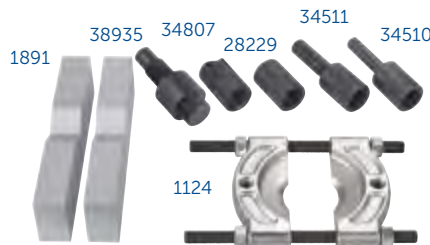
- 50392** – Straightening fixtures (pr.)
- 1893** – V-blocks, 14" long (pr.)
- 21332** – Pushing adapter (must be used with reducing adapter).
- 36469** – V-pushing adapter (must be used with reducing adapter).
- 43563** – Reducing adapter (for double-acting ram).
- 43562** – Reducing adapter (for single-acting ram, not pictured).



**1880  
17-1/2 -Ton Press Accessory Set**

- Adapters and accessories attach to ram's forcing screw or are used on press bed to support work.
- Set includes:

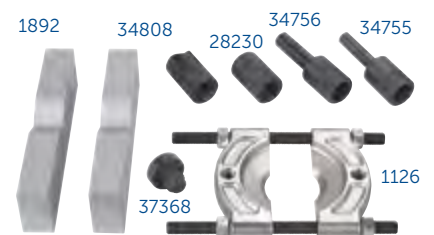
- 1123** – Bearing pulling attachment
- 201923** – Ram pushing adapter with a 1/2" dia. shank
- 201454** – Ram pushing adapter with a 3/4" dia. shank.
- 34806** – V-pushing adapter
- 1890** – V-blocks (pair)



**1881  
25-Ton Press Accessory Set**

- Adapters and accessories attach to ram's forcing screw or are used on press bed to support work.
- Set includes:

- 1124** – Bearing pulling attachment
- 34510** – Ram pushing adapter with 3/4" dia. shank
- 34511** – Ram pushing adapter with 1" dia. shank
- 34807** – V-pushing adapter
- adapter**
- 1891** – 11-1/2" long V-blocks (pr.)
- 28229** – Ram forcing cap
- 38953** – Threaded adapter



**1882  
55-Ton Press Accessory Set**

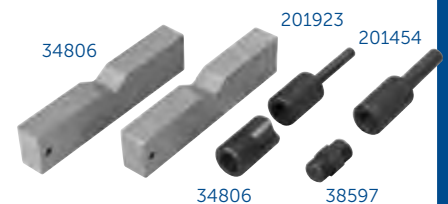
- Accessories attach to ram's forcing screw or support work on press bed.
- Set includes:

- 1126** – Bearing pulling attachment
- 34755** – Ram pushing adapter with 1" dia. shank
- 34756** – Ram pushing adapter with 1-1/4" dia. shank
- 34808** – V-pushing adapter
- 1892** – 14" long V-blocks (pr.)
- 28230** – Ram forcing cap
- 37368** – Threaded adapter – for single acting only
- 38954** – For 1872 double acting press



**Accessories for 150-ton Capacity Shop Presses**

- 44458** – Pushing adapter with 2-1/4" dia. shank
- 44457** – V-pushing adapter



**1899  
10-Ton Capacity Press Accessory Set**

- Adapters and accessories are attached to the ram's forcing screw or used on the press bed to support the work. Set includes:

- 201923** – Ram pushing adapter with a 1/2" dia. shank
- 201454** – Ram pushing adapter with a 3/4" dia. shank
- 34806** – V-pushing adapter
- 1890** – V-blocks (pair)
- 38597** – Adapter



# BOTTLE JACKS SHOP EQUIPMENT

## OTC 9300 STINGER SERIES BOTTLE JACKS GIVE YOU LIFTING RANGE FROM 2 TO 50 TONS.

- Forged base and cylinder to ensure strength and eliminate leaks.
- Chromed pump piston and ram for additional rust resistance.
- In-line design for increased ease of use in positioning and operation.
- Includes free seal kit with each unit to extend product life.
- ANSI/PALD compliant.



### OTC 9300 Stinger Series Bottle Jacks

Cap. (tons)	Stroke	OTC No.	Retracted Height min.	Length of Screw Extension	Height with Screw Extension	Pump Strokes to Extend Piston One Inch	Saddle Dia.	Base Size	Carry Handle	Weight
2	4-5/8"	<b>9302</b>	7"	2-3/8"	14"	8	13/16"	4-5/16" x 2-9/16"	No	5 lbs.
3	4-1/2"	<b>9303</b>	7-1/2"	2-9/16"	14-9/16"	13	15/16"	4-9/16" x 2 7/8"	No	6.2 lbs.
5	4-13/16"	<b>9305</b>	7-13/16"	3"	15-5/8"	20	1-1/8"	5-3/16" x 3"	No	8.4 lbs.
8	4-15/16"	<b>9308</b>	7-13/16"	3"	15-3/4"	21	1-3/8"	6" x 3-9/16"	No	12.6 lbs.
12	6"	<b>9312</b>	9-3/8"	3-1/4"	18-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	17.4 lbs.
12	3-11/16"	<b>9314</b>	7-1/16"	2-7/8"	13-5/8"	21	1-3/4"	6-9/16" x 4-3/16"	Yes	15.1 lbs.
20	6-7/8"	<b>9320</b>	10-5/8"	2-15/16"	20-7/16"	28	2-1/8"	7" x 4-11/16"	Yes	27.2 lbs.
20	3-7/16"	<b>9322</b>	7-3/16"	1-11/16"	12-5/16"	25	2-1/8"	7" x 4-11/16"	Yes	20.9 lbs
30	6-5/8"	<b>9330</b>	11"	N/A	17-5/8"	41	2-1/2"	7-11/16" x 6"	Yes	41 lbs
50	7-3/16"	<b>9350</b>	11-3/4"	N/A	18-15/16"	74	2-1/2"	8-11/16" x 7"	Yes	76.5 lbs.



5221



5213



5213T



4313C



4321C

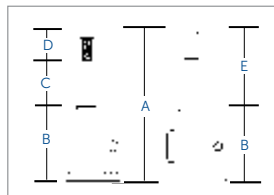
#### Bottle Jacks

- Base, pressure cylinder, and oil reservoir form one internal part, which results in a stronger jack.
- Piston never contacts cylinder, so pressure will be absorbed and not damage jack if vehicle tilts.
- The No. 5213T is telescopic, allowing for very low initial height with high lifting.

**5213** – 12-Ton Bottle Jack.

**5221** – 20-Ton Bottle Jack.

**5213T** – 12-Ton Telescopic Bottle Jack.



#### Bottle Jack Dimensions

Jack	A	B	C	D	E
<b>5213</b>	17-3/4"	8-7/8"	5-7/8"	2-15/16"	
<b>5221</b>	18-1/16"	9-1/4"	5-7/8"	2-15/16"	
<b>5213T</b>	22-1/2"	9-5/8"			12-13/16"

#### Air/Hydraulic Bottle Jacks

- Operate manually or pneumatically, 100 PSI minimum air pressure required.

**4313C** – 12-ton air-assist bottle jack; lift range 9-1/2" to 18-3/8", stroke 6-1/8".

**4321C** – 20-ton air-assist bottle jack; lift range 9-7/16" to 17-11/16", stroke 5-7/8".

No.	Cap.	Min. Height	Max. Height	Stroke	Screw/Adapter	Airpressure	Base Area
4313C	12	9-1/2"	18-3/8"	6-1/8"	2-3/4"	100-200 psi	6-3/8" x 7-5/8"
4321C	20	9-7/16"	17-11/16"	5-7/8"	2-5/16"	100-200 psi	8-1/32" x 7-1/16"



1513B – 4-Ton



1515B – 10-Ton

### Stinger Series 4- and 10-Ton Collision Repair Sets

- Very competitively priced, yet high quality sets include single-speed hydraulic hand pump, hose, and ram.
- Components snap together for quick setups to apply pushing, spreading, or pulling force.
- Components include: hydraulic pump, hose, and ram; ram flat base; extension tubes (4); 1/2-ton spreader; tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

**1513B – 4-ton collision repair set.** Has single speed hydraulic hand pump and ram with 4" stroke.

**1515B – 10-ton collision repair set.** Has single speed hydraulic hand pump and ram with 6" stroke.



1517A – 4-Ton



1519A – 10-Ton

### OTC Series 4- and 10-Ton Collision Repair Sets

- We've matched our OTC hydraulics with versatile tooling.
- Components snap together, permitting you to apply pushing, spreading.
- Components include: hydraulic pump, hose, and ram; ram flat base; 1/2-ton hydraulic spreader; extension tubes (4); tube coupling; ram toe; wedge head; serrated saddle; flex head; plunger toe; 90° wedge head; storage case. The case for the 10-ton set has wheels for mobility.

**1517A – 4-ton collision repair set.** Has single speed hydraulic hand pump (4000) and ram (4082B) with 5" stroke.

**1519A – 10-ton collision repair set.** Has two-speed hydraulic hand pump (4004) and ram (4083B) with 6-1/8" stroke.

**504888 – Replacement quick coupler (external).**

**504889 – Replacement quick coupler (internal).**



### 5086 10-Ton Collision Repair Set

- Exert hydraulic force just where it's needed to lift, spread, bend, or straighten. Handles the high-force jobs you face daily in trailer maintenance or other applications.
- Includes reliable components including 10-ton, 10-1/8" stroke hydraulic ram; air/hydraulic pumping unit; hydraulic hose; four snap-together extension tubes; extension tube coupling; serrated saddle; flat base; 90° wedge head; flex head; storage case.
- All set components are covered by OTC Lifetime Marathon Warranty®.



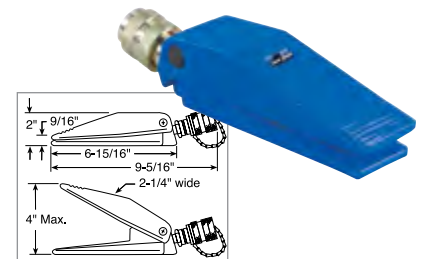
### Hydraulic Spreaders

Included as standard equipment with our collision sets, these versatile hydraulic spreader tools are also available individually. Ideal for removing dents and creases, performing straightening jobs, or for use as a clamp. Makes working in tight spots easy.

- Maximum spread is 3-1/4".

**9101B – 1/2-ton spreader with 1/4" NPT ram half coupler**

**9102 – 1/2-ton spreader with 3/8" NPT ram half coupler**



### 4085 1-ton Capacity Hydraulic Spreader

This hydraulic spreader is rated at a full 1-ton capacity at 10,000 PSI and that's enough for a wide variety of jobs. Working in tight spots is no problem—it needs only a 9/16" clearance to engage the jaws. With a big 4" spread, it's ready for a variety of applications: straightening work, removing dents and creases from sheet metal, or as a clamp. The device's spring-return jaws are made of high-strength alloy steel. It can be dead-ended at 4" spread under full load. Ideally suited to work with No. 4012 hand pump (not included).

## THE OTC NEW SERIES OF FLOW METERS

Unparalleled accuracy in testing hydraulic oil flow circuits for vehicles and machinery. All are protected by a durable steel case. Pressure accuracy is at +/- 1.6% of full scale. Due to their standard burst disc protection system, overpressure conditions prevent spillage of hydraulic fluid. All devices accommodate bi-directional flow and are CE marked as appropriate.



### **4277**

#### **50 gpm Mechanical Hydraulic Flow Meter**

- Flow Accuracy to +/- 4% of full scale
- Measures flow from 4 to 54 gpm
- Pressure up to 6000 psi
- Fluid filled analog gage that dampens vibration
- Temperatures up to 230 deg F
- Reads flow in one direction
- No batteries required
- Port is 1-5/16" - 12 UN JIC Male
- 12.25" x 4.125" x 4.875"
- 14.5 lbs



### **4278**

#### **100 gpm Digital Hydraulic Flow Meter**

- Flow Accuracy to +/- 1% of indicated value
- Measures flow from 2.5 to 100 gpm
- Pressure up to 6000 psi
- Digital display for flow, temperature, analog for pressure
- Temperatures up to 250 deg F
- Reads flow in both directions, pressure on the high side of valve
- Requires 1 9V battery (included)
- Port is 1-5/16" - 12UN #16 SAE ORB
- 9.45" x 7.87" x 7.87"
- 14 lbs



### **4285**

#### **100 gpm Digital Hydraulic Flow Test Kit**

- Includes OTC 4292 Digital Readout and OTC 4291 Flow Block with Loading Valve
- Flow Accuracy to +/- 1% of indicated value
- Measures flow from 2.5 to 100 gpm
- Pressure up to 6000 psi
- Digital display for flow, temperature, analog for pressure
- Reads flow in both directions, pressure on the high side of valve
- Require 1 9V battery (included)
- Port is 1-5/16" - 12UN #16 SAE ORB
- 12.99" x 12.4" x 10.24"
- 17lbs



**4290**

**16 gpm Flow Block**

- Can be used with Digital Flow Meter Readout OTC 4292 included in OTC 4285 and OTC 4294
- Port is 1-1/16" -12UN #16 SAE ORB
- Flow range from 1 to 16 gpm
- Max pressure 6000 psi



**4291**

**Flow Block with Loading Valve**

- Can be used with Digital Flow Meter Readout OTC 4292 included in OTC 4285 and OTC 4294
- Knob allows for pressure loading/restriction
- Port is 1-5/16" -12UN #16 SAE ORB
- Flow range from 2 to 100 gpm
- Max pressure 6000 psi



**4294**

**Deluxe 100 gpm Hydraulic Flow Measurement Set**

- Comprised of OTC 4290, OTC 4291, OTC 4292, Long Cable and Hose Set and Short Cable
- Case included



**4292**

**Hydraulic Flow Measurement Digital Readout**

- For remote flow measurement by using Flow Blocks OTC 4290 or OTC 4291
- Included in OTC 4285 and OTC 4294
- Digital display for flow, temperature, analog for pressure



**573295**

**Long Cable and Hose Set**

- 20 feet long
- Flow, Temperature & Pressure



**573296**

**Short Cable**

- 6 1/2 feet long.
- Flow & Temperature

# HYDRAULIC PUMPS & RAMS SHOP EQUIPMENT



9110B

9104B

## Hydraulic Rams for Collision Repair Sets

These premium quality rams are designed for long, trouble-free service. Backed by a two-year warranty, they feature a special piston rod that permits their use with the snap-together components of OTC Stinger's new collision repair sets, or with most similar competitive products.

**9104B** – 4-ton ram with 4" stroke and special piston rod end designed to fit most collision repair set components.

**9110B** – 10-ton ram with 6" stroke and special piston rod end designed to fit most collision repair set components.

Specifications	9104B	9110B
Min. height	10-3/8"	15"
Max. height	14-3/8"	21"
Spring return	Yes	Yes
Rod end dia.	.874"	1.310"
Max. operating. Pressure	8,950	8,950
Oil cap. (cu. in.)	4.97	13.69
Oil port	1/4" NPT	1/4" NPT



4083B

4082A

## Hydraulic Rams for Collision Repair Sets

These premium quality rams are designed for long, trouble-free service. Backed by a life-time warranty, they are ideal replacements for worn-out, leaky rams. They feature a special piston rod that permits their use with the snap-together components of OTC's collision repair sets, or with most similar competitive products.

**4082A** – 4-ton ram with 5" stroke and special piston rod end designed to fit most collision repair set components.

**4083B** – 10-ton ram with 6-1/8" stroke and special piston rod end designed to fit most collision repair set components.

Specifications	4082A	4083B
Min. height	10-7/8"	14-5/8"
Max. height	15-7/8"	20-3/4"
Spring return	Yes	Yes
Rod end dia.	.874"	1.310"
Max. operating. Pressure	8,950	8,950
Oil cap. (cu. in.)	4.97	13.69
Oil port	1/4" NPT	3/8" NPT



## 4000 Single-Speed Hydraulic Hand Pump

This single-speed pump is ideal for single-acting rams. Developing up to 10,000 psi operating pressure, the pump operates horizontally or vertically in the "head down" position. Fingertip control provides instant release or pumping action. Has a built-in safety overload valve. Ideal for use with OTC single-acting rams, or similar competitors' rams.

Specifications	4000
Max. operating pressure	10,000 psi
Volume per stroke	.160 cu. in.
Reservoir capacity	45 cu. in.
Oil port	3/8" NPT



## 4002 Single-Speed Hydraulic Hand Pump

This single-speed pump is ideal for single-acting rams. Developing up to 10,000 psi operating pressure, the pump operates horizontally or vertically in the "head down" position. Fingertip control provides instant release or pumping action. Has a built-in safety overload valve. Ideal for use with OTC single-acting rams, or similar competitors' rams.

Specifications	4002
Max. operating pressure	10,000 psi
Volume per stroke	.160 cu. in.
Reservoir capacity	45 cu. in.
Oil port	3/8" NPT



9106B

9107B

## Single-Speed Hydraulic Hand Pumps

These single-speed pumps are ideal for single-acting rams. Developing up to 10,000 psi operating pressure, the pumps operate horizontally or vertically in the "head down" position. Finger tip control provides instant release or pumping action. Has a built-in safety overload valve. Ideal for use with OTC Stinger single-acting rams, or similar competitive rams.

**9106B** – Hand pump only

**9107B** – Hand pump only.

Specifications	9106B	9107B
Max. operating pressure	10,000 psi	10,000 psi
Volume per stroke	0.17 cu. in.	0.17 cu. in.
Reservoir capacity	18 cu. in.	30 cu. in.
Oil port	1/4" NPT	1/4" NPT



## 4004 2-Speed Hydraulic Hand Pump

Use with single-acting hydraulic rams. Rugged all-metal construction. Maximum handle effort is 90 lbs. Two-speed action provides rapid approach of ram piston to the work. An appropriate and economical power source for applications in which 20 cu. in. of usable oil is adequate.

Specifications	4004
Max. operating pressure	10,000 psi
Volume per stroke (first stage)	.305 cu. in.
Volume per stroke (second stage)	.091 cu. in.
Reservoir capacity	24.4 cu. in.
Oil port	3/8" NPT

## 4042 Hydraulic Ram, Pump, and Hose Set

This versatile set is usable in a wide variety of hydraulic power applications. Combines our No. 4026 air/hydraulic power unit, hose, and hose half coupler with the No. 4105 10-ton hydraulic ram with 10-1/8" stroke. Ram has threaded collar, internal base threads, and threaded piston rod end for mounting adaptability.

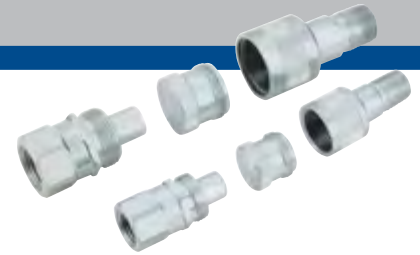




## 4026 Air/Hydraulic Power Unit

Features a heavy-duty, one-piece, aluminum body for durability and light weight. A perfect replacement pump for body and frame straightening equipment. Performs in either vertical or horizontal positions. Has a time-tested motor design. All internal moving parts are constructed of metal, not plastic! Unique external relief valve ensures damage-free operation should oil reservoir be overfilled. Internal vent eliminates external oil leakage. Rotary-style pressure release provides superior operator control. Carries OTC's unsurpassed Lifetime Marathon Warranty®.

Specifications	4026
Oil delivery	10 cu. in. of oil @ 9,500 psi
Reservoir capacity	39 cu. in. (34 cu. in. usable)
Internal relief setting	10,000 PSI
Air operating pressure	40-120 PSI
Dimensions	16-15/16" L x 6-3/8" H x 5-5/8" W



## Automotive-Style Quick Couplers

Precision designed and built for high pressures. Permits disconnecting hose without loss of oil.

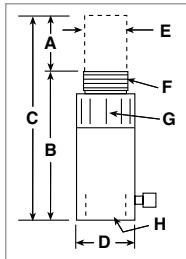
- Ideal for use in body shop equipment applications.
- Works with OTC No. 1515B and 1513B collision repair sets.

**9195** – Complete quick coupler, 1/4" NPT

**9196** – Complete quick coupler, 3/8" NPT

## Single-Acting, Spring-Return Rams

Available in capacities of 5 to 100 tons and for maximum working pressures up to 10,000 PSI; 2 to 1 safety factor on material yield; designed and tested to meet ANSI B30.1. Standard stroke lengths of 5/8" to 14-1/4", these compact rams require a minimum of mounting space. Several of the rams feature threaded ram collars and internal base threads to simplify mounting. Also, some of the models have threaded piston rod ends. OTC's design ensures positive, leak-resistant sealing throughout all pressure ranges, yet full piston return characteristics are maintained. Additional bearing surface has been designed into these units, to effectively resist the punishing stress exerted by off-center loads. Depending on capacity, these rams can handle a variety of bending and straightening jobs, construction maintenance applications, pressing operations, body and frame straightening, and rear housing and axle correction.



OTC No.	Capacity in Tons	Stroke "A"	Oil Cap. (cu. in.)	Effective Ram Area (sq. in.)	Tons at 10,000 PSI	Spring Return	Height		Piston Protrusion at Collapsed Height	Diameter		Piston Thread (N.P.T.) "F"	Collar Thread (Straight) "G"	Internal Base Thread (N.P.S.M.) "H"	Wt. (lbs./oz.)
							Collapsed "B"	Extended "C"		"D"	"E"				
<b>SINGLE-ACTING, SPRING-RETURN RAMS</b>															
<b>4100</b>	5	3"	3.0	.994	4.97	No	5-11/16"	† 8-11/16"	1/4"	1-1/2"	7/8"	None	None	None	3 / 5
<b>4101</b>	5	5-1/4"	5.2	.994	4.97	Yes	10-1/2"	15-3/4"	1-1/8"	1-1/2"	1-1/16"	3/4"	1-1/2"-16	3/4"-14	5
<b>4108</b>	5	5/8"	.62	.994	4.97	Yes	1-5/8"	2-1/4"	1/8"	2-9/16" x 1-5/8"	5/8"	None	None	None	2 / 5
<b>4103</b>	10	2-1/8"	4.8	2.236	11.2	Yes	5-9/16"	7-11/16"	1-1/16"	2-1/4"	1-5/8"	1-1/4"	2-1/4"-14	None	5 / 14
<b>4104</b>	10	6-1/8"	13.9	2.236	11.2	Yes	11-1/2"	17-5/8"	1-1/16"	2-1/4"	1-5/8"	1-1/4"	2-1/4"-14	1-1/4"-11-1/2	11 / 10
<b>4105</b>	10	10-1/8"	22.9	2.236	11.2	Yes	15-1/2"	25-7/8"	1-1/16"	2-1/4"	1-5/8"	1-1/4"	2-1/4"-14	1-1/4"-11-1/2	14 / 13
<b>4106</b>	25	6-1/4"	32.2	5.157	25.8	Yes	13-3/8"	19-5/8"	1-7/8"	3-3/8"	2-3/8"	2"	3-5/16"-12	2"-11-1/2	26
<b>4107</b>	25	14-1/4"	73.5	5.157	25.8	Yes	21-3/8"	35-5/8"	1-7/8"	3-3/8"	2-3/8"	2"	3-5/16"-12	2"-11-1/2	42 / 10
<b>4110</b>	55	6-1/4"	69.0	11.04	55.2	Yes	11-1/8"	17-3/8"	1/8"	5"	3-1/8"	None	None	None	60
<b>4115</b>	100	6-5/8"	137.0	20.62	103.1	Yes	13-1/4"	19-7/8"	1/8"	6-1/4"	4-1/8"	None	None	None	105
<b>ALUMINUM RAMS (See listing on page 244)</b>															
<b>4111</b>	55	6-1/8"	67.6	11.04	55.2	Yes	10-3/4"	16-7/8"	1/4"	5-1/4"	3-1/8"	None	None	None	25 / 10
<b>4116</b>	100	6-1/4"	129.0	20.62	103.1	Yes	11-3/4"	18"	1/8"	7-3/8"	4-1/8"	None	None	None	64

† No. 4100 has a piston "screw-extension" (1-1/2"), which will extend the maximum height to 10".

See ram accessories listed on the next page. These accessories thread onto the ram's piston rod end, collar, or into the ram base.

All rams include No. 9796 3/8" NPTF half coupler; oil port threads are 3/8" NPTF.

# HYDRAULIC RAMS SHOP EQUIPMENT

## Single-Acting Ram Accessories

These versatile attachments let you "harness" OTC hydraulic force and put it to work exactly where it's needed to handle various maintenance tasks. Accessories thread onto the ram's piston rod end or into the ram base.

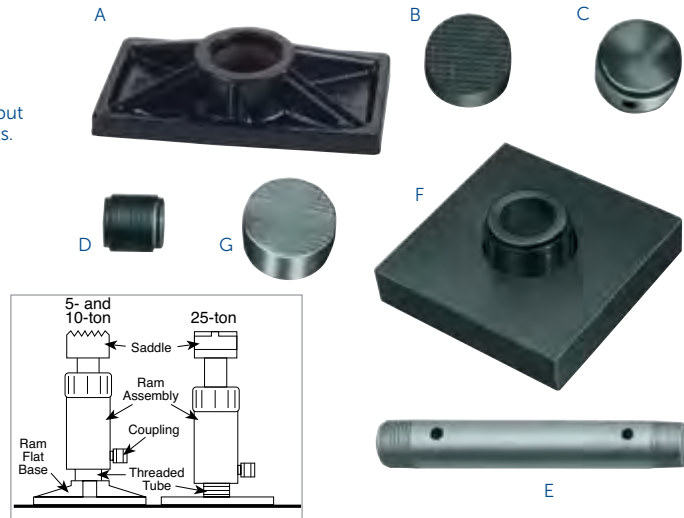
Use with 10-ton hydraulic rams, Nos. 4103, 4104, and 4105

Item	No.	Description	Item
A	32325*	Ram flat base	
B	31772	Serrated saddle	
C	24016	Smooth saddle	
D	25664*	Threaded tube coupling	
E	38909	10" Extension tube	

\* NOTE: 32325 and 25664 cannot be used on No. 4103 hydraulic ram.

Use with 25-ton hydraulic rams, Nos. 4106 and 4107

Item	No.	Description	Item
F	25653	Ram flat base	
G	31776	Serrated saddle with coupling	



## 55- and 100-Ton Aluminum Rams

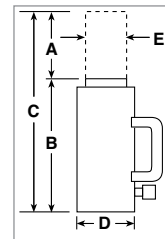
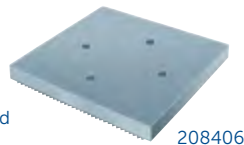
Get the strength of a steel ram but about half the weight. Easily carry these single-acting, spring-return rams around the garage, shop, or into the field for on-the-vehicle repairs. They are ideal for truck axle correction, trailer frame straightening, general vehicle maintenance, and heavy-duty lifting.

**4111** – 55-ton aluminum ram. 6-1/8" stroke.

**4116** – 100-ton aluminum ram. 6-1/4" stroke.

### Ram Base

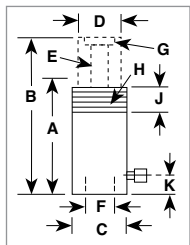
**208406** – Ram base. Attaches directly to bottom of ram by means of two 3/8"-16 screws, included. Serrated base provides extra support and stability. 7" square. For use on 55-ton ram only.



NOTE: See chart on page 233 for specifications.

## Spring-Return Hollow Center Hydraulic Rams

Ideal for push/pull applications found in off-highway, construction, mining, and other industries where heavy equipment is maintained. Center hole permits extending screws, cables, etc., straight through the ram for versatility of application. Rams withstand full "dead-end" loads. Chrome-plated piston rods resist wear, and superior packings and seals provide high cycle life without leakage. Piston head inserts are interchangeable for versatility, and tapped base mounting holes provide easy installation in fixed applications.



For Use With	Threaded Insert No.	Inside Dia. of Plain Insert *
4131	<b>28632</b> 3/4"-16 **	49/64"
4132	<b>28612</b> 1"-8 **	1-3/64"
4139	<b>38904</b> 1-1/4"-7 **	1-19/64"
4140	<b>34251</b> 1-5/8"-5-1/2 **	2-1/8"

\* Plain insert comes standard with rams.  
\*\* Internal thread size.

Cylinder Cap. (tons)	Stroke (in.)	OTC No.	A	B	C	D	E	F	G	H	J	Oil Cap. (cu. in.)	Int. Press. at Cap. (PSI)	Tons at 10,000 PSI	K	Mounting Holes (in.)	Base Cyl. Eff. Area (sq. in.)	Prod. Wt. (lbs.)
10	2-1/2	<b>4131</b>	5-5/16	7-13/16	3	2-1/16	49/64	2-3/8	1-3/4-12	None	None	5.52	9,054	11	1	1/4-20	2.21	9
20	3	<b>4132</b>	6-1/8	8-1/8	3-7/8	2-1/8	1-5/64	3-1/4	1-9/16-16	None	None	9.45	8,466	23.6	1	3/8-16	4.72	20.0
30	2-1/2	<b>4139</b>	6-1/4	8-3/4	4-3/4	3-1/4	1-19/64	3-5/8	2-3/4-12	4-3/4-12	1-1/2	15.85	9,457	31.7	1-5/32	7/16-20	6.34	25.6
60	6	<b>4140</b>	12-1/4	18-1/4	6-1/4	3-19/32	2-1/8	5-1/8	3-12	6-1/4-12	2-1/2	73.86	9,750	61.6	1	1/2-13	12.31	78

## Center-Hole, Power Twin Rams

In capacities of 17-1/2, 30, 50, and 100 tons and for operating pressures up to 10,000 PSI; use these rams on Grip-O-Matic® pullers, Push-Pullers, and shop presses. OTC's center-hole rams are ideal for jobs that require a great deal of force and a relatively short stroke. Compared to the force it develops, each center-hole Power Twin ram is lightweight, compact, and easy to handle, permitting its use in confined quarters. Center-hole feature permits extending jacking screws, cables, puller screws, etc., straight through the ram.

### Quick change inserts

For added job versatility, Power Twin rams also feature a basic head which allows the operator to change from a tapped hole to a plain hole by merely changing the head insert (held in place by a socket-head set screw). In certain applications, the use of a plain insert is desired, since it permits using a speed nut for necessary readjustment after the ram has been extended, rather than turning the screw with a speed crank.



Quick change inserts. See accessory chart below.

### DIMENSIONS FOR REFERENCE ONLY



Single-Acting, Spring-Return Rams



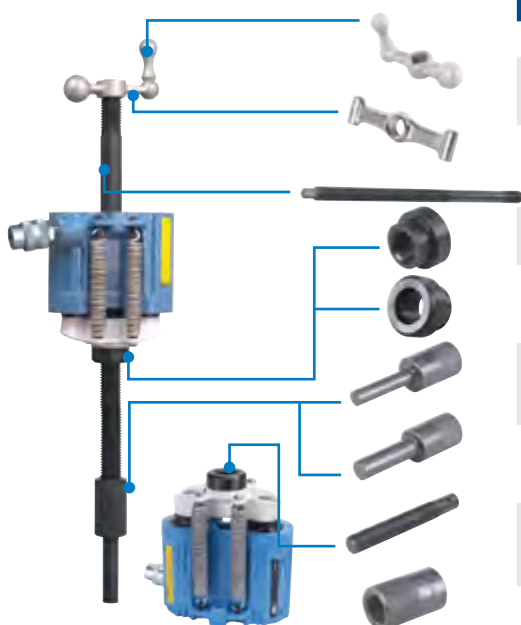
Double-Acting Ram

- 4120 – 17-1/2-ton Power Twin single-acting hydraulic ram.** Complete with No. 21669 threaded ram head insert, ram attaching screws, and No. 9796 ram half coupler.
- 4121 – 30-ton Power Twin single-acting hydraulic ram.** Complete with No. 21873 threaded ram head insert, ram attaching screws, and No. 9796 ram half coupler.
- 4122 – 50-ton Power Twin single-acting hydraulic ram.** Complete with No. 22274 threaded ram head insert, ram attaching screws, and No. 9796 ram half coupler.
- 4130 – 100-ton Power Twin double-acting hydraulic ram.** Complete with No. 24197 threaded ram head insert and two No. 9796 ram half couplers.

OTC No.	Capacity (tons)		Stroke	Oil Capacity	Eff. Area (sq. in.)	Internal PSI at Capacity	A	B	C	D	E	F	G	H	J	K
	Push	Pull														
4120	17-1/2	–	2"	7.06	3.53	10,000	6-7/8"	1-3/4"	1-1/16"	1"-8	1-1/2"	3-3/4"	5-3/4"	–	–	11/32"
4121	30	–	2-1/2"	15.7	6.28	10,000	8-7/16"	2-1/4"	1-19/64"	1-1/4"-7	1-13/16"	4-1/2"	7-1/2"	–	–	15/32"
4122	50	–	3"	29.4	9.81	10,000	10-9/16"	2-7/8"	1-43/64"	1-5/8"-5-1/2	2-3/8"	5-7/8"	9-3/8"	–	–	21/32"
4130	100	5	4-7/8"	93.8	19.24*	10,000	15-1/8"	4-3/4"	2-9/16"	2-1/2"-8	2-7/8"	10-1/8"	13-1/4"	4"	3/4"-16	25/32"

\* Push side only. Passes ANSI B30.1 Static and Dynamic Tests.

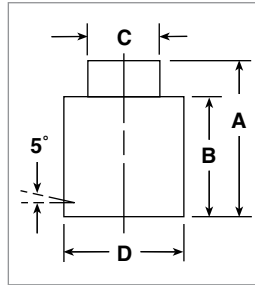
## Power Twin Ram Accessories



Description	17-1/2 Ton	30-Ton	50-Ton	100-Ton
Speed crank	<b>24814</b>	<b>27198</b>	<b>29595</b>	<b>303785</b>
Speed nut	<b>302482</b> 1"-8 thread	<b>302483</b> 1-1/4"-7 thread	<b>33439</b> 1-5/8"-5-1/2 thread	<b>34136</b> 2-1/2"-8 thread
Adjusting screw	<b>32118</b> 1"-8 thread, 20" long	<b>34758</b> 1-1/4"-7 thread, 24" long	<b>32698</b> 1-5/8"-5-1/2 thread, 30" long	<b>32699</b> 2-1/2"-8 thread, 36" long
Threaded insert	<b>21669</b> 1"-8 thread	<b>21873</b> 1-1/4"-7 thread	<b>22274</b> 1-5/8"-5-1/2 thread	<b>24197</b> 2-1/2"-8 thread
Plain-hole insert	<b>21714</b> 1-1/16" dia. hole	<b>21872</b> 1-5/16" dia. hole	<b>22275</b> 1-11/16" dia. hole	<b>24196</b> 2-9/16" dia. hole
Pushing adapter	<b>201923</b> 1"-8 thread, 1/2" dia. shank	<b>34510</b> 1-1/4"-7 thread, 3/4" dia. shank	<b>34755</b> 1-5/8"-5-1/2 thread, 1" dia. shank	–
Pushing adapter	<b>201454</b> 1"-8 thread, 3/4" dia. shank	<b>34511</b> 1-1/4"-7 thread, 1" dia. shank	<b>34756</b> 1-5/8"-5-1/2 thread, 1-1/4" dia. shank	–
Jack screw	<b>24813</b> 1"-8 thread, 7" long	<b>25931</b> 1-1/4"-7 thread, 9" long	–	–
Ram cap	<b>28228</b> 1"-8 thread, 1-1/2" dia.	<b>28229</b> 1-1/4"-7 thread, 1-3/4" dia.	<b>28230</b> 1-5/8"-5-1/2 thread, 2-1/4" dia.	–



# HYDRAULIC PUMPS & RAMS SHOP EQUIPMENT



## "Shorty" Rams, Single-Acting, Spring-Return

Forcing a gravity return ram to retract wastes both time and money. This OTC series of single-acting, spring-return rams eliminates that waiting. With their low collapsed height and the stroke you really need, these rams are ideal for a variety of applications. You can choose from capacities of 10 to 100 tons and strokes from 1-1/2" to 2-7/16", with the largest ram being only 7-3/8" high! Bronze-plated piston rods resist scoring, and each ram can be "dead-ended" at full capacity for maximum safety. Each "Shorty" ram has an angled coupler port (5°) for easy hook-up. So, if you're tired of waiting for your rams to retract, these OTC "Shorty" rams are just the answer to your problems!

OTC No.	Capacity (tons)	Stroke No.	(A) Extended Height (in.)	(B) Retracted Height (in.)	(C) Piston Rod Dia. (in.)	(D) Outside Dia. (in.)	Cyl. Eff. Area (sq. in.)	Oil Capacity (cu. in.)	Int. Pressure at Capacity (PSI)	Tons at 10,000 (PSI)	Oil Port Return	Type Piston NPTF	Wt. (lbs./oz.)
4141	10	1-1/2	5	3-1/2	1-1/2	2-3/4	2.24	3.4	8,943	11.2	3/8"-18	Spring	6
4142	20	1-3/4	5-1/2	3-3/4	2-5/32	3-9/16	4.43	7.7	9,029	22.1	3/8"-18	Spring	9 / 9
4143	30	2-7/16	7-1/16	4-5/8	2-1/2	4	6.49	15.8	9,243	32.5	3/8"-18	Spring	14 / 7
4144	50	2-3/8	7-3/8	5	3-1/8	4-7/8	9.62	22.8	10,393	48.1	3/8"-18	Spring	23 / 2
4145	100	2-1/4	7-3/8	5-1/2	4-3/8	6-5/8	19.63	44.2	10,186	98.2	3/8"-18	Spring	47 / 3



### 4175 "Shorty" Ram and Pump Set

- Shorty rams provide lifting or pushing force in limited working space. Visual centering of load is simplified by a concentric ring pattern on piston top.
- Single-acting, spring-return.
- Two-speed hand pump gives fast piston approach. (See chart below for specifications.)
- Set includes 4143 30-ton, 2-7/16" stroke single-acting spring-return hydraulic ram; 4016 pump; 9767 hose; and 9798 hose half coupler.



### Air/Hydraulic Ram and Pump Sets

- Ideal for applications where an air supply of 40–120 PSI is available. Internal relief valve protects hydraulic system components regardless of air pressure, and two-stage release mechanism allows fast or metered ram return.
- The perfect replacement pump for hand pumps on body and frame straightening equipment.
- 4185** – Set includes 4104 10-ton, 6-1/8" stroke single-acting hydraulic ram; 4020 air/hydraulic pump; 9767 hose; and 9798 hose half coupler.
- 4186** – Set includes 4105 10-ton, 10-1/8" stroke single-acting hydraulic ram; 4020 air/hydraulic pump; 9767 hose; and 9798 hose half coupler.



### 4180 Power Twin Ram and Pump Set

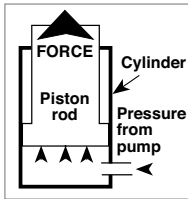
- Center-hole feature permits extending adjusting screws, cables, puller screws, etc., straight through the ram.
- This spring return unit is compact and lightweight.
- Ideal for jobs having restricted working space.
- Set includes 4120 17-1/2 ton, 2" stroke single-acting hydraulic ram; 4002 pump; 9650 gauge; 24815 tee; 9767 hose; and 9798 hose half coupler.

OTC Set No.	Capacity (tons)	Ram Stroke	Ram Collapsed Height	Strokes to Obtain Full Ram Stroke	Pump Speed
4175	30	2-7/16"	4-5/8"	55*	Two

\* Based on 50% of the stroke being made in low-pressure stage, 50% in high-pressure stage.

OTC Set No.	Capacity (tons)	Ram Stroke	Ram Collapsed Height	Pump Speed
4185	10	6-1/8"	11-1/2"	Multiple
4186	10	10-1/8"	15-1/4"	Multiple

OTC Set No.	Capacity (tons)	Ram Stroke	Ram Collapsed Height	Strokes to Obtain Full Ram Stroke	Pump Speed
4180	17-1/2	2"	6-7/8"	48	Single



Push-type rams apply force in a single direction. Spring or gravity return is featured.



4170

### Hydraulic Push-Type Ram and Pump Sets

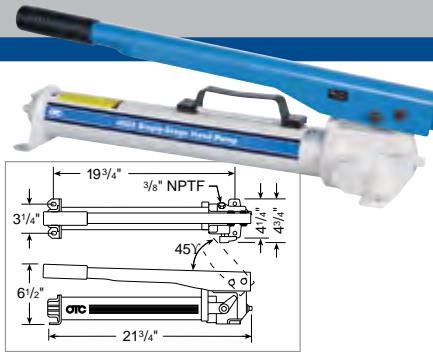
Compact and lightweight, these ram and pump sets are ideal for use in a wide variety of lifting and pushing applications. They feature a single-acting ram with a single-speed hydraulic hand pump. Requiring a minimum of mounting space, their remote operation is facilitated by a 6-foot, high-pressure hose.

**4169** – Set includes 4103 single-acting hydraulic ram, 4002 pump, 9767 hose, and 9798 hose half coupler.

**4170** – Set includes 4104 single-acting hydraulic ram, 4002 pump, 9767 hose, and 9798 hose half coupler.

See page 243 for ram specs., and this page for hand pump specs.

OTC Set No.	Capacity (tons)	Ram Stroke	Ram Collapsed Height	Strokes to Obtain Full Ram Stroke	Pump Speed
4169	10	2-1/8"	5-9/16"	32	Single
4170	10	6-1/8"	11-1/2"	93	Single



### 4002 Single-Speed Hydraulic Hand Pump

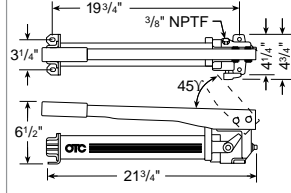
This single-speed pump is ideal for single-acting rams. Developing up to 10,000 psi operating pressure, the pump operates horizontally or vertically in the "head down" position. Fingertip control provides instant release or pumping action. Has a built-in safety overload valve. Ideal for use with OTC single-acting rams, or similar competitors' rams.

Specifications:

Maximum operating pressure – 10,000 psi  
Volume per stroke – 160 cu. in.

Piston dia. – 1/2"  
Piston stroke – 13/16"  
Reservoir capacity – 55 cu. in. (45 cu. in. usable)

Oil port – 3/8" NPT



### 4012 Two-Speed Hand Pump

The 4012 two-speed hand pump's all-metal construction almost eliminates the chance of leaking, or damage to the pump from regular use or accidents. It's the perfect pump for use with single-acting rams or combinations where 45 cu. in. of usable oil capacity will do the job. Has 2-way valve; welded steel carrying handle; automatic switching from low to high pressure mode; handle effort under 140 lbs. at 10,000 PSI; unique fill cap to prevent over-filling and over-pressurization; non-vented reservoir; fingertip control valve with 180° throw for on/off control.

Specifications:

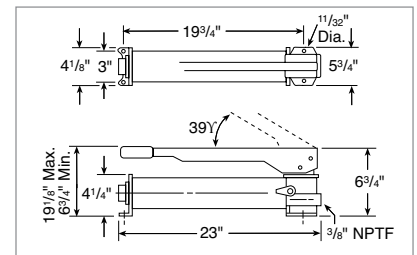
Maximum Operating pressure – 1st 325 psi / 2nd- 10,000 psi  
Volume per stroke – 1st- .662 cu. in. / 2nd- .160 cu. in.

Piston stroke – 13/16"  
Reservoir capacity – 55 cu. in. (45 cu. in. usable)  
Oil port – 3/8" NPT

Piston dia. – 3/8"



4016



### Dualmaster Jr. Two-Stage Hand Pumps

Here's two-stage flexibility at a popular price! These pumps have extra-large reservoirs (125 cu. in. usable oil) and permit use with large hydraulic rams or in multiple small ram applications. Compact and lightweight, Dualmaster Jr. provides maximum flexibility with minimum effort in a portable pump. The 4016 and 4017 deliver... providing high oil volume (2.6 cu. in. per stroke) for rapid ram approach and return. Then they automatically switch at 300 PSI to the high pressure, low volume stage (.16 cu. in. per stroke) for high force applications. Both have a large, non vented reservoir with safety relief valve to prevent over-pressurization of the reservoir. Piston stroke is 3/4", maximum handle effort is 130 lbs. at 10,000 PSI. The 4016 is equipped with a 2-way valve for use with single-acting rams. The 4017 has a 4-way valve for use with double-acting rams. Two versatile hydraulic pumps...dependable power for automotive, heavy-duty truck, agricultural, and construction maintenance needs.

**4016** – Pump with a 2-way valve for use with single-acting rams. Delivers 2.6 cu. in. of oil per stroke in low pressure stage.

**4017** – Pump with a 4-way valve for use with double-acting rams. Delivers 2.6 cu. in. of oil per stroke in low pressure stage.

4016 and 4017 Specifications:

Maximum

Operating pressure – 1st- 300 psi / 2nd- 10,000 psi

Volume per stroke – 1st- 2.6 cu. in. / 2nd- .16 cu. in.

Piston dia. – 1st- 2" / 2nd- 1/2"

Piston stroke – 3/4"

Reservoir capacity – 125 cu. in. usable

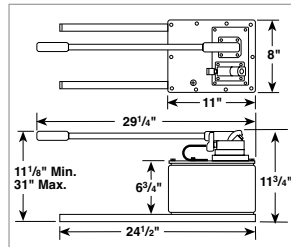
Oil port – 3/8" NPT

# HYDRAULIC PUMPS SHOP EQUIPMENT



## Dualmaster® Two-Stage Hand Pumps

Our finest hand-operated power units! These fast acting, two-stage pumps not only handle high force, high pressure requirements up to 10,000 PSI, but deliver extremely high volume at low pressure (7.35 cu. in. per stroke from 0 to 200 PSI) to quickly move the ram piston to and from the work! Pumps have a built-in relief valve, pre set at the factory for 10,000 PSI. Maximum handle effort is 90 lbs. Two basic Dualmaster models are offered: No. 4008 for use with single-acting rams, and No. 4009 for use with double acting rams. For information on pressure gauges, hoses, and other accessories for your Dualmaster, see pages 252 and 253.



Pump and valving mount on common cover plate; permits use on other than standard OTC reservoirs.



**4008** – Hydraulic hand pump with No. 9584 2-position, 3-way control valve (for operating single-acting rams), and No. 4006 BL2 2-gallon reservoir with legs.

**4009** – Hydraulic hand pump with No. 9500 3-position, 4-way control valve (for operating double-acting rams), and No. 4006 BL2 2-gallon reservoir with legs.

### Performance Example

Pump No.	Maximum Pressure	Piston Dia.	Piston Stroke	Reservoir Capacity	Oil Port	Job: To fully extend an OTC 4105 ram (has 10-1/8" stroke)	4008/4009 Pump	4016 Pump	4002 Pump
4008 and 4009	1st stage 200 PSI 2nd stage 10,000 PSI	2-1/2" 1/2"	1-1/2"	460 cu. in. usable	3/8" NPTF	5" of ram travel is under no load, 5" is under load	37 strokes	74 strokes	141 strokes

## Air / Hydraulic Pump

With shop air as the energy source, these pumps have the power and oil capacity (80 cu. in. usable oil) to drive even the large 55-ton rams. They are ideal all-around power sources for dozens of body, frame, and alignment applications. They can be used with a variety of rams, presses, and hydraulic pullers operating at up to 10,000 PSI. An internal relief valve protects the hydraulic components regardless of hydraulic pressure. In addition, a two-stage release mechanism gives fast or metered ram return while reducing hydraulic shock. In addition to all the features and performance characteristics of the 4020/4025, the 4021 is equipped with a 15 ft. remote control cord. The 4022 is equipped with a 2-gal. reservoir. These pumps require 9 cfm at 100 PSI air pressure at the pump.

**4020** – Air/hydraulic pump. Develops 10,000 PSI at 100 PSI air pressure. 3/8" NPTF oil port. 98 cu. in. usable oil capacity in plastic reservoir.

**4021** – Air/hydraulic pump with a remote control actuator, 15 ft. cord. Develops 10,000 PSI at 100 PSI air pressure. 3/8" NPTF oil port. 105 cu. in. capacity plastic reservoir.

**4022** – Air/hydraulic pump with a 2-gallon (442 cu. in.) plastic reservoir.

**4025** – Air/hydraulic pump. Develops 10,000 PSI at 100 PSI air pressure. 3/8" NPTF oil port. 98 cu. in. usable oil capacity in metal reservoir.

**213896** – Metal reservoir. 98 cu. in. usable oil capacity. Includes gasket and fasteners.

**61243** – Replacement plastic reservoir for 4020 pump, 98 cu. in. usable oil capacity.

**33853** – Replacement gasket for 4020 pump reservoir

**300871** – Repair kit for 4020 pump



4020



4021



## 2510A Air/Hydraulic Pump

- 10,000 PSI air/hydraulic pump.
- Internal relief valve.
- Two-stage release mechanism.
- Pump, hold, or release load with pedal control.
- 98 cu. in. useable capacity.
- 3/8 NPT oil port.

**538592** – Seal kit for 2510A

### Performance @ 100 PSI Hydraulic Pressure\* Oil Delivery

0 PSI	59 cu. in./min.
5,000 PSI	30 cu. in./min.
10,000 PSI	4 cu. in./min.

\* Oil delivery based on 20 cfm air supply at the pump.

## Vanguard® Two-Stage, High-Pressure Power Units

Thousands of users have put Vanguard to work in a variety of hydraulic power applications. And the reputation for trouble-free performance this pumping unit has earned is a proven, documented fact, not just a sales claim! Vanguard is a fast-acting, precision-built, two-stage pumping unit consisting of a gear pump for the low-pressure stage and an axial-piston pump for the high-pressure stage, the latter being "supercharged" by the gear pump. Vanguard delivers low volume at high pressure, yet provides high volume at low pressure for fast cylinder piston approach and return. Units feature a 10,000 PSI universal motor, which starts under full load. They are suitable for operation up to 10,000 PSI. Motor is 1-1/8 h.p., 12,000 RPM, (27 amp draw). Rated for intermittent duty.

**4062** – Vanguard 2-stage hydraulic pump with 2-position/ 3-way valve and 6 ft. remote motor control (115V). 2 gal. of oil supplied.

**4064** – Vanguard 2-stage hydraulic pump with 3-position/ 4-way valve and 6 ft. remote motor control (115V). 2 gal. of oil supplied.

### Speed Comparison Chart

The job – Fully extend a 10-ton ram with a 10-1/8" stroke:

Pump No.	5" travel No load	5" travel Under load	Total Time
4062 Power	1.5 sec.	12 sec.	13.5 sec.
4002 Hand Pump	141 strokes of pump handle		4 to 5 min.*

\* Handle effort at max. pressure is 140 lbs.

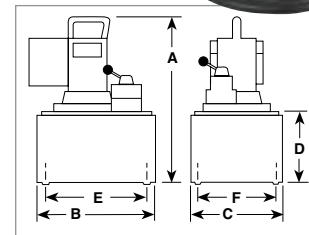
### Performance Oil Delivery

100 PSI	1,000 PSI	5,000 PSI	10,000 PSI
650 cu. in./min.	80 cu. in./min.	70 cu. in./min.	55 cu. in./min.

Pump No.	For use with:	Control Valve	Reservoir	Motor Control	Voltage
<b>4062</b>	Single-acting rams	2-pos., 3-way	2 gal.	Remote 6 ft. cord	1-1/8 H.P., 115V*
<b>4064</b>	Double-acting rams	3-pos., 4-way	2 gal.	Remote 6 ft. cord	50/60Hz, Sgl. Phase

\* For 230 volt, please specify.

**WITH A REPUTATION FOR TROUBLE-FREE PERFORMANCE THESE PUMPS WORK IN A VARIETY OF HYDRAULIC POWER APPLICATIONS.**



Universal Motor Version



### Specifications

A	B	C	D	E	F
18-1/4"	12-1/2"	10-1/2"	7"	10"	8"



### Two-Gallon Reservoir

Increase the oil capacity of your 4020, 4021, or 4025 air/hydraulic pumps with this kit. It gives you a two-gallon reservoir and everything else needed to make those pumps ideal for large, single-acting rams or for multiple ram applications.

**207436** – 2-gallon reservoir kit for 4020, 4021, or 4025 air/hydraulic pumps. Includes reservoir, gasket, top mounting plate, bolts, and fittings. Gives 442 cu. in. usable oil capacity. 11-1/2" x 9-1/2" x 6-1/2".

**40063BL2** – 2-gallon (462 cu. in. usable) "standard" reservoir only for Vanguard® pumps. Size: 12-1/2" x 10-1/2" x 6-1/2" high.

# HYDRAULIC PUMPS SHOP EQUIPMENT

4044



## Two-Stage Electric / Hydraulic Pumps

They're called "RamRunners" and that's just what they do...run large single- or double-acting rams for fast frame straightening, wheel alignment, etc. They deliver up to 45 cu. in./min. at max. operating pressure of 10,000 PSI. The 4044 has a 2-position/2-way valve with "advance" and "return" positions and is for use with single-acting rams. The 4046 and 4057 have a 3-position/4-way valve with "advance," "hold," and "return" positions; for use with double-acting or multiple single-acting rams. Nos. 4044 and 4046 are equipped with a 1/2 h.p. single-phase, 60 Hz, 115 volt thermal protected electric motor and are designed to start under load. No. 4057 has a 1-1/2 h.p. electric motor. The RamRunners also feature a 6 ft. remote control cord for "on/off" control. One gallon and two quarts of oil are supplied.

**4044** – RamRunner two-stage hyd. pump with 2-position/2-way manual valve and a 6 ft. remote control cord. Supplied with one gallon and two quarts of oil.

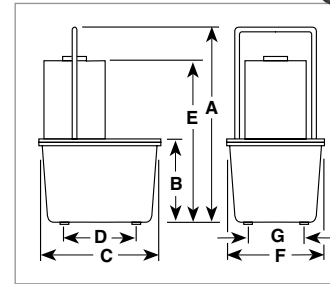
**4046** – RamRunner two-stage hydraulic pump with 3-position/4-way manual valve for double-acting rams, and a 6 ft. remote control cord. Supplied with one gallon and two quarts of oil.

**4057** – RamRunner two-stage hydraulic pump with 3-position/4-way valve for double-acting rams, and a 6 ft. remote control cord. Supplied with one gallon and two quarts of oil.

## Speed Comparison Chart

The job – Fully extend a 10-ton ram with a 10" stroke:

Pump No.	5" travel No Load	5" travel Under Load	Total Time
4044 / 4046	3 sec.	39 sec.	42 sec.
4057	1.2 sec.	14 sec.	15.2 sec.



Pump No.	Max. Press. Output	RPM	Oil Del.* (cu. in./min. @)			Voltage	Reservoir		A	B	C	D	E	F	G
			0 PSI	100 PSI	10,000 PSI		Cap.	Usable							
4044 / 4046	10,000 psi	3,450	290	240	17	1/2 h.p., 115 volt** 60 Hz, Sgl. Phase	1.9 gal.	295 cu. in.	18-1/2"	7"	11-3/8"	7-1/8"	14-7/8"	9-1/4"	5-1/8"
4057	10,000 psi	3,450	525	490	45	1-1/2 h.p., 115 volt** 60 Hz, Sgl. Phase	1.9 gal.	315 cu. in.	20"	7"	11-3/8"	7-1/8"	14-7/8"	9-1/4"	5-1/8"

\* Typical delivery, actual flow will vary with field conditions. \*\* For 230 volt, please specify.

## OTC'S CONTROL VALVES WORK IN A VARIETY OF AUTOMOTIVE AND INDUSTRIAL APPLICATIONS.



## Control Valves

**9582** – This is a 2-position/3-way, lever operated, detent positioned valve for use with single-acting rams. It has "advance" and "hold" positions..

**9500** – A 3-position/4-way, lever operated, detent positioned valve for use with double-acting rams. Has "advance," "neutral," and "return" positions. Cylinder ports are blocked in "neutral" and pump flow is directed back to the reservoir.

## Vanguard Jr.® Two-Stage, High-Pressure Power Units

Combines compact size and light weight with 2-stage high performance. Choose from several models with electric motors and many options. Designed for operating pressures up to 10,000 PSI. Vanguard Jr. gives you just what you need: 2-stage flexibility with high performance, and a selection of units and options that lets you tailor the pump to your needs. Refer to the performance and speed tables below, and you'll see how these pumps cut down the time needed for almost any job. The 2-stage operation automatically matches pump performance to the job requirements. The low-pressure, high-volume stage provides fast ram approach and return. Then at approximately 200 PSI, the high-pressure, low-volume stage takes over to handle high force requirements. These pumps are ideal for hundreds of hydraulic applications such as clamping, bending, straightening, pressing, forming, testing, pushing, and pulling. Each is equipped with a relief valve factory-set at 10,000 PSI (the maximum operating pressure of the pump). Choose from models with electric (115 or 220 volt) motors and options that include remote hand- and foot-operated motor controls, adjustable pressure regulator, and pressure switch. Vanguard Jr. starts easily under load and has been thoroughly field-tested for high cycle reliability.

**4031** – Vanguard Jr. two-stage hydraulic pump 115V with 2-position/3-way valve and 6 ft. remote motor control. 1 gal. of oil supplied.

**4031-220V** – Vanguard Jr. two-stage hydraulic pump 220V with 2-position/3-way valve and 6 ft. remote motor control. 1 gal. of oil supplied.

**4033** – Vanguard Jr. two-stage hydraulic pump 115V with 3-position/4-way valve and 6 ft. remote motor control. 1 gal. of oil supplied.

**4033-220V** – Vanguard Jr. two-stage hydraulic pump 220V with 3-position/4-way valve and 6 ft. remote motor control. 1 gal. of oil supplied.

**4036** – Vanguard Jr. two-stage hydraulic pump 115V with 3-position/4-way valve and run/off/jog motor control. 2 gal. of oil supplied.

**4036-220V** – Vanguard Jr. two-stage hydraulic pump 220V with 3-position/4-way valve and run/off/jog motor control. 2 gal. of oil supplied.

### Speed Comparison Chart

The job — Fully extend a 10-ton ram with a 10-1/8" stroke:

Pump No.	5" travel No Load	5" travel Under Load	Total Time
4031	4 sec.	34 sec.	38 sec.
4002 Hand pump	141 strokes of pump handle		4 to 5 min. *

\* Handle effort at max. pressure is 140 lbs.

## THOUSANDS OF USER'S HAVE PUT VANGUARD JR. PUMPS TO WORK IN A VARIETY OF HYDRAULIC POWER APPLICATIONS.



Universal Motor Version



### Universal Motor Version and Large Reservoir Models

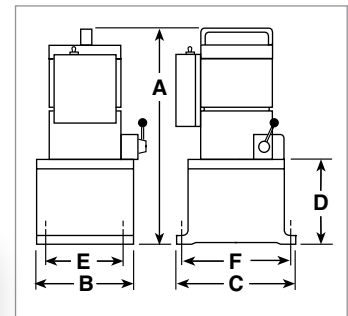
These all have a 10,000 PSI pump and universal motor: 1/2 h.p., 12,000 RPM, 115 or 230 volt (specify), 60/50 cycle A.C. single phase. No. 4036 has an extra-large 2-gallon (462 cu. in.) reservoir to permit full stroke of large displacement rams. Also suited for applications where several rams are used.

Pump No.	For use with	Control Valve	Reservoir	Motor Control
4031 / 4031-220V	Single-acting rams	2-position, 3-way	.45 gallon, 104 cu. in.	Remote 6 ft. cord
4033 / 4033-220V	Double-acting rams	3-position, 4-way	.45 gallon, 104 cu. in.	Remote 6 ft. cord
4036 / 4036-220V	Double-acting rams	3-position, 4-way	2 gallon, 462 cu. in.	Run / off / jog

### Specifications

Note: Dimensions shown apply to pumps with 104 cu. in. reservoir.

A	B	C	D	E	F
16"	6"	8"	4-3/4"	5-1/8"	7-1/8"


















### Performance

The low-pressure, high-volume stage provides fast ram approach. When high force is needed, the high-pressure, low-volume stage takes over. The figures below indicate oil delivery of the electric power unit at various pressure levels.

- 170 cu. in./min. at 100 PSI
- 32 cu. in./min. at 1,000 PSI
- 25 cu. in./min. at 5,000 PSI
- 18 cu. in./min. at 10,000 PSI

# HYDRAULIC ACCESSORIES SHOP EQUIPMENT

## Pressure Regulator/Check Valves and Accessories

OTC No.	Description
 <b>9623</b>	Pressure regulator valve. For remote location in a hydraulic system. Adjusts from 1,000 to 10,000 PSI.
 <b>9575</b>	Needle valve for fine metering. Use several for controlling multiple single-acting rams simultaneously, yet independently. 3/8" NPTF ports.
 <b>9596</b>	Load lowering valve. 3/8" NPTF ports, 10,000 PSI max. operating pressure.
 <b>7312</b>	O-ring/oil seal pick. An extremely handy little tool! Makes removal and installation of oil seals and o-rings a snap. Pick has a metal shaft.
 <b>10461</b>	Remote control foot switch, 10 ft. cord. Press for "on," release for "off."
 <b>25017</b>	Remote control hand switch, 10 ft. cord. Press for "on," release for "off." (Replacement rocker switch only, No.16772)
 <b>9625</b>	Pressure switch. 1/4" NPTF external thread.
<b>Gauges - All gauges have 1/4" NPTF threads</b>	
 <b>9650</b>	Pressure and tonnage gauge. Four scales: 0-10,000 PSI, 0-17-1/2-ton, 0-30 ton, and 0-50 ton. 3-1/2" dia. face (Dry)
 <b>9651</b>	Pressure and tonnage gauge. Four scales: 0-10,000 PSI, 0-55 ton, 0-75 ton, and 0-100 ton. 3-1/2" dia. face (Dry).
 <b>9652</b>	Pressure and tonnage gauge. Four scales: 0-10,000 PSI, 0-5 ton, 0-10 ton, and 0-25 ton. 3-1/2" dia. face (Dry).
 <b>9653</b>	Pressure gauge. Two scales: 0-10,000 PSI, and 0-689 BAR. 3 -1/2" dia. face. Use with any OTC pump or ram (Dry)
 <b>9654</b>	Pressure gauge. Two scales: 0-10,000 PSI, and 0-689 BAR. 2 -1/2" dia. face. Use with any OTC pump (Dry).
 <b>9655</b>	Pressure gauge. One scale: 0-6,000 PSI. 3 -1/2" dia. face (Dry).
 <b>9658</b>	Pressure gauge. Two scales: 0-10,000 PSI, and 0-689 BAR. 2 -1/2" dia. face. Gauge is filled with glycerin or silicone to dampen vibration and fluid pulsation. Use with any OTC pump or ram.
 <b>9659</b>	Pressure gauge. Same as 9658 except is liquid filled and has 3-1/2" diameter face.

OTC No.	Description
<b>Adapters and Fittings</b>	
 <b>24815</b>	Tee adapter. For installing gauge between pump and hose coupling. Has 1/4" and 3/8" NPTF internal and 3/8" NPTF external.
 <b>25919</b>	Double tee adapter. Permits use of more than one ram in series with one pump. Three 3/8" NPTF ports.
 <b>9617</b>	Manifold block. For use when a multiple-ram system is required. Has six 3/8" NPTF ports.
 <b>9691</b>	"Y" manifold. Useful when connecting two rams to a single line. Three 3/8" NPTF ports.
 <b>10645</b>	45° fitting. Used when mounting gauge at an angle on connection such as 24815. External and internal 1/4" NPTF ends.
 <b>10469</b>	Swivel connector. 3/8" NPTF external, 3/8" NPSM internal.
 <b>10682</b>	Coupling. Both ends 3/8" NPTF internal.
 <b>10474</b>	Street elbow. Internal and external 3/8" NPTF ends.
 <b>10673</b>	Short nipple. 1-1/2" long, 3/8" NPTF external ends.
 <b>13828</b>	Long nipple. 2" long, 3/8" NPTF external ends.
 <b>10647</b>	90° elbow. 3/8" NPTF internal ends.
 <b>13888</b>	Coupling. Ends - 3/8" NPTF internal and 1/2" NPTF external.
<b>Quick Couplers Precision built and designed for high pressure. Permits disconnecting hose without loss of oil. 3/8" NPTF</b>	
 <b>9795</b>	Complete quick coupler and rubber dust cap.
 <b>9796</b>	Ram half coupler and rubber dust cap.
 <b>9797</b>	Ram half coupler steel dustcap only.
 <b>9798</b>	Hose half coupler only.
 <b>9799</b>	Hose half coupler steel dust cap only.
 <b>9866</b>	Hose or ram rubber half cap.



### Hydraulic Oil

Ensure dependable performance of rams and pumps by using this high-grade, specially prepared oil. Contains foam suppressant additives; high viscosity index.

OTC No.	Size	Viscosity	Recommended for use with
<b>9636</b>	1 quart	215 SSU @ 100°F	4000, 4002, 4016, 4017, 4020, 4021
<b>9637</b>	1 gallon		Vanguard, RamRunner and Stinger pumps



### Hydraulic Hose

Lightweight, rugged hose in lengths to 20 ft. Choose from 1/4" I.D. or 3/8" I.D. high flow hose. All have 3/8" NPTF ends. Operating pressure is 10,000 PSI. Hoses comply with MHI Std. IJ100.

OTC No.	Hose Length	Hose Inside Dia.	Hose Type
<b>9765</b>	2 ft.	1/4"	
<b>9766</b>	3 ft.	1/4"	
<b>9767</b>	6 ft.	1/4"	Braid
<b>9768</b>	8 ft.	1/4"	(2-ply Rating)
<b>9769</b>	10 ft.	1/4"	
<b>9770</b>	12 ft.	1/4"	
<b>9780</b>	6 ft.	3/8"	Nylon Core
<b>9781</b>	10 ft.	High	Synthetic Fiber
<b>9782</b>	20 ft.	Flow	Reinforced *

\* Note: This hose is not recommended for use where heat or weld spatter conditions exist.

### 80-Ton Capacity Truck Center and End Bushing Service Equipment

For fast, easy bushing replacement on 340, 380, 440, and 450 series Hendrickson suspensions. Recommended by Hendrickson as the only correct method for bushing replacement—eliminates "torching"!

Knock off about six to eight hours when replacing center and end bushings. Center bushings, which often require more frequent service, can be replaced in under two hours, and the beam and wheels stay in place! The No. 1741 and 1742 sets include a hydraulic pump and ram to deliver up to 80 tons of force!

If center bushings are allowed to wear from lack of maintenance, the end bushings may soon fail, which can also lead to excessive tire wear. Correct bushing maintenance with one of OTC's heavy-duty service sets can save needless parts costs and downtime.

#### Center Bushing Service

Two hours. That's about what it takes to replace center bushings with this equipment. Best of all, the beam and wheels are not removed.

#### End Bushing Removal & Installation

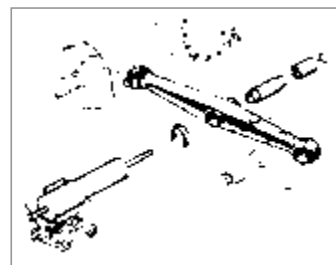
This is almost as easy as center bushing replacement. Of course, the wheels have to be removed first, then the hanger tubes or end beam adapter plugs. (See page 255 for 1743 hanger tube service set and 1745 end bushing adapter service set.) After that, the procedure is much like center bushing replacement. Typically save six to eight hours because the beams are not removed from the truck.

NOTE: Hendrickson Mfg. Co. has changed the numerical designations on the following suspension models. These numerical changes DO NOT affect service procedures or tooling required to service their suspensions.

Original Model Number	New Model Number
380	400
440	460
450	480
500	650



Order information for center and end beam bushing service sets is below and on the following pages.



OTC No. 1740 tooling set up for center bushing replacement.





1740 tooling setup for end bushing installation.

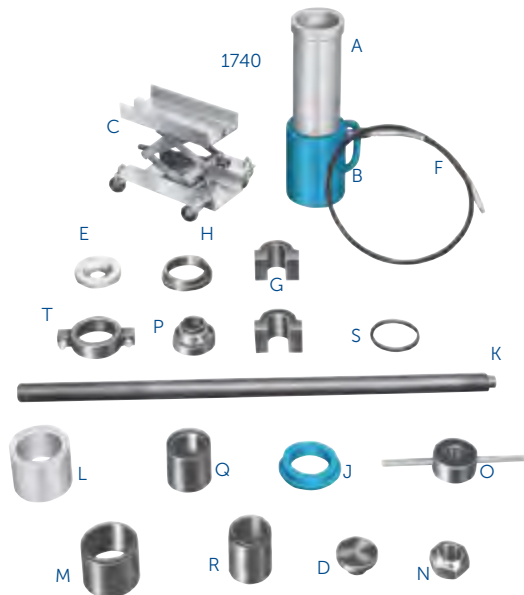
## 1740

### Basic Tooling Set

This is the basic tooling set for servicing center and end beam bushings. It does not include the hydraulic pump or gauge. If you are already equipped with hydraulics, you can be replacing bushings right away! (Does not include tooling for hanger tube or end plug adapter removal.)

### For 340 thru 450 Series Hendrickson Suspensions

Item No.	Description	Item No.	Description
A 44119	Receiving tube	L 302026	Installing adapter
B 51678	80-ton cylinder	M 302027	Removing adapter
C 51695	Jack cart	N 302028	Hex nut
D 206457	Press adapter	O 302029	Speed nut
E 206459	Clamp plate	P 302030	Removing adapter
F 9780	Hydraulic hose	Q 302031	Installing adapter
G 302018	Spacer (2)	R 302032	Removing adapter
H 302019	Receiving adapter	S 302401	Spacer ring (3)
J 302021	Receiving adapter	T 42052	Inst. adapter clamp
K 302023	Pulling screw		



## HENDRICKSON SERVICE SETS WITH HYDRAULICS

### FOR 340 – 450 SERIES HENDRICKSON SUSPENSIONS

#### 1742

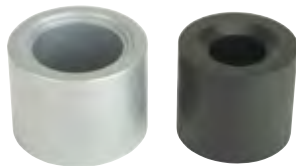
#### Basic Tooling Set with hydraulics (Hydraulic pump 4031)

The preferred method for servicing center and end beam bushings. You get the complete No. 1740 basic set, plus OTC's No. 4031 two-stage electric/hydraulic pump with remote hand switch, a No. 9654 pressure gauge, hose half coupler, and 80-ton single-acting ram. (Tooling for hanger tube or end plug adapter removal not included.)

#### 1741

#### Basic Tooling Set with hydraulics (Hydraulic pump 4062)

The method Hendrickson recommends for suspension service. You get the No. 1740 basic set, plus OTC's No. 4062 two-stage electric/hydraulic pump with remote hand switch, a No. 9653 pressure gauge, hose half coupler, and 80-ton single-acting ram. (Tooling for hanger tube or end plug adapter removal not included.)

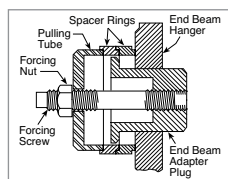


#### 1746

#### R400 Center Bushing Adapter Set

For R400 series Hendrickson suspensions having center bushing No. 49400 or field service center bushing No. 49600.

Used with OTC's No. 1740 suspension tool set, these adapters let you remove and install the new style R400 center bushings on Hendrickson suspensions. Set includes one No. 310248 removing adapter and one No. 310249 installing adapter.



#### 1745

#### End Bushing Adapter Puller Set

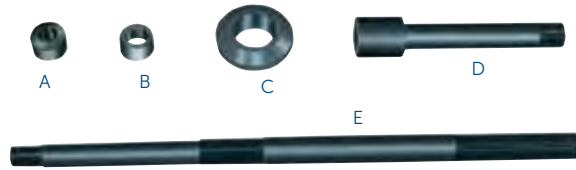
Set contains everything needed to remove end bushing adapter plugs in 380 thru 440 series suspensions. The plugs have to be removed prior to end bushing replacement.

The set is complete in a handy plastic case.

For use with 1740 series tooling sets (order separately).



Item No.	Description
A 207025	Spacers (3)
B 302592	Screw (7/8"–14)
C 302593	Screw (15/16"–12)
D 207027	Screw
E 207026	Plug gauge
F 207030	Hand tap (7/8"–14)
G 207031	Hand tap (15/16"–12)
H 207039	Nut assembly
I 302595	Receiving cup



**1743**

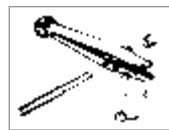
**End Bushing Hanger Tube/RU Series Center Bushing Service Set**

Required for servicing RU340 series center bushings. The long puller screw is used to remove the beam cross tube. The 1743 also removes end bushing hanger tube assemblies. For use with 1740 tooling (order separately).

Item	No.	Description
A	<b>25417</b>	Nut
B	<b>206455</b>	Removing adapter
C	<b>302015</b>	Receiving adapter
D	<b>302119</b>	Special screw
E	<b>302023</b>	Pulling screw



Hanger tube removal with No. 1743 set.



Cross tube removal with No. 1743 set.

**1744**

**Bronze Center Bushing Service Set**

Designed for replacing bronze center bushings on 340, 380, 440, and 460 Hendrickson suspensions. Also installs bronze center bushing grease seals. For use with 1740 series tooling set (order separately).

**For 340, 380, 440, & 460 series suspensions.**

Item	No.	Description
A	<b>28536</b>	Installing adapter
B	<b>28538</b>	Installing adapter
C	<b>302024</b>	Removing/installing adapter
D	<b>302025</b>	Removing/installing adapter



Installing center bushing with No. 1744 set.



Removing center bushing with No. 1744 set.

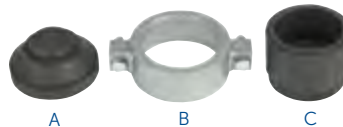
**1763**

**Center and End Bushing Service Set**

This set is required for bushing service on 500 and 700 series heavy-duty suspensions. It is intended for use with a 100-ton capacity shop press. It allows replacement of center and end bushings.

**For 500 & 700 series suspensions. Use with a shop press.**

Item	No.	Description	Item	No.	Description
A	<b>208350</b>	Adapter	C	<b>28541</b>	Adapter
B	<b>208349</b>	Adapter clamp			



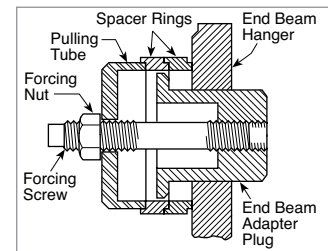
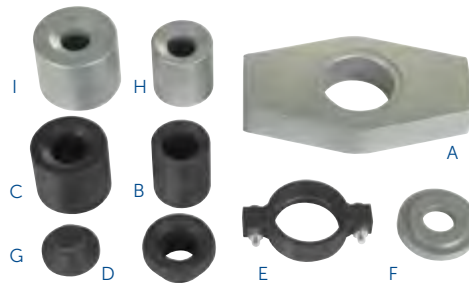
**1764**

**Center and End Bushing Tool Set**

This set is the answer for replacing center and end bushings on Hendrickson 340 and 380/440 series suspensions. The 1764 is for use with a 100-ton or larger hydraulic press. The press plate sits on the press bolster to provide a level, cradle-like surface for the beam to rest on during pressing.

**For 340 and 380/440 series suspensions. Use with a shop press.**

Item No.	Description	Item No.	Description	Item No.	Description
A	<b>51100</b> Press plate	D	<b>302030</b> Removing adapter	G	<b>206457</b> Press adapter
B	<b>302032</b> Removing adapter	E	<b>42052</b> Inst. adapter clamp	H	<b>302027</b> Removing adapter
C	<b>302031</b> Installing adapter	F	<b>206459</b> Clamp plate	I	<b>302026</b> Installing adapter



**1748**

**End Bushing Adapter Puller Set for Hendrickson Truck Suspensions**

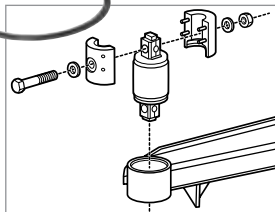
This set contains everything needed to remove end bushing adapter plugs used on 400 series and the larger 460–520 series suspensions. The plugs have to be removed prior to end bushing replacement. The set is complete in a handy plastic case. For use with 1740 series tooling sets (order separately).

**For servicing the 400 and larger 460–520 series suspensions.**

Item	No.	Description
A	<b>207025</b>	Spacers (3)
B	<b>302592</b>	Screw (7/8"–14)
C	<b>302593</b>	Screw (15/16"–12)
D	<b>207027</b>	Screw
E	<b>207026</b>	Plug gauge
F	<b>207030</b>	Hand tap (7/8"–14)
G	<b>207031</b>	Hand tap (15/16"–12)
H	<b>207039</b>	Nut assembly
I	<b>302595</b>	Receiving cup
J	<b>*221378</b>	Hand tap (M30 x 2)
K	<b>*313342</b>	Screw (M30 x 2)

\*For use on 460–520 series adapter plugs (can be purchased separately and used with set No. 1745).

# BUSHING SERVICE SHOP EQUIPMENT



## 1757 Hendrickson Bar Pin Adapter Set

Servicing bar pin end bushings used on Hendrickson equalizing beam tandem truck suspensions requires the use of special tooling. OTC's No. 1757 adapter set is used with the beam removed from the truck, and in conjunction with OTC No. 51100 press plate and a 100-ton hydraulic shop press.

The 1757 set, which replaces the No. 1747 set, includes an adapter for installing bushings in older forged beams as well as the fabricated beams introduced in 1999.

To remove bushings, use OTC's previously introduced No. 302030 removing adapter and No. 206457 press adapter, both of which may be ordered separately. Reinstall bushings following procedures recommended by the suspension manufacturer.

## 1767 Hendrickson Primaax Quick Alignment Socket

- Hendrickson – Approved tool.
- Used to adjust axle alignment on the Primaax air suspension.
- Works on Primaax models 230, 460, and 690 rear suspensions.



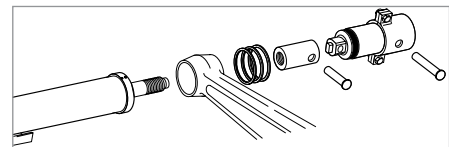
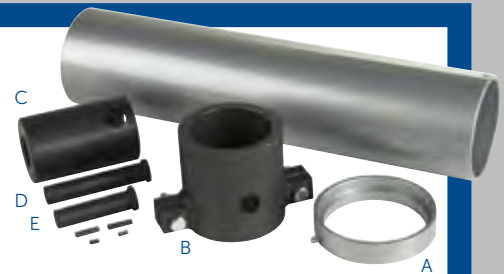
## 1768 Hendrickson PRIMAAX® Quick Wrench

- Hendrickson - Approved tool.
- Used to torque cross tube end cap bolts and longitudinal torque rod top pad bolts.
- Reduces maintenance time by eliminating the need to remove the tires to gain access to the end cap bolt.
- Use with the following Hendrickson PRIMAAX suspensions:
  - Type A - PAX 230/460/690 and FMX 240/480 with 8-1/2" ride height
  - Type B - PAX 230/460/690 with 10" ride height.

## 1749 Hendrickson Suspension Bar Pin End Bushing Adapter Set

Extend your No. 1741 and No. 1742 bushing service equipment sets. You can now remove and install worn end bushings on the Hendrickson new style bar pin end bushings without removing the equalizing beam from the vehicle. The No. 1749 works in conjunction with OTC's No. 1741 and No. 1742 80-ton portable service equipment to do the job quickly, using procedures recommended by the manufacturer.

Item	No.	Description
A	314557	Receiving tube
B	49050	Installer
C	314556	Receiving adapter
D	314558	Pin
E	314559	Pin



## Freightliner Rear Suspension Tool

- Removes and installs single-wrapped FAS II Airliner Freightliner Rear Suspension bushings in a fraction of the time of traditional methods.
- Saves an average 45 minutes per bushing (4 per vehicle) on flat rate of 1.5 hours per bushing.
- 15 ton Capacity cylinder

### 4244 – Freightliner Rear Suspension Tool

4245 – Freightliner Rear Suspension Tool Master Kit includes 2510A Air/Hydraulic Pump.



## Hydraulic Flow Testers

50 and 75 GPM hydraulic oil flow testers accurately measure oil flow, temperature, and pressures against manufacturers' specifications.

Troubleshoot hydraulic circuits and isolate faulty components on mobile equipment, machine tools, fork lifts, agricultural and industrial tractors, and equipment (open or closed) hydraulic systems with capabilities up to 75 GPM at pressures to 5,000 PSI. Models include features such as an automatic pressure compensating load valve that lets you increase flow without affecting the pressure settings. Temperature flow and RPM readings are displayed in metric or English, and accurate to within plus or minus 2% of full scale. Each tester is protected by a safety disc, which ruptures automatically if pressures exceed the upper limits.

**4221 – 75 GPM hydraulic circuit tester.** Comes with two pressure gauges and three 9-volt batteries.

**4235 – 50 GPM hydraulic circuit tester with single liquid-filled pressure gauge.** Includes two adapter unions for 3/4" NPTF fittings.



**5286**

## Portable Diesel Particulate Filter Cleaner

The Diesel Particulate Filter (DPF) Cleaner was designed with shop service in mind. Its portability allows the unit to be placed as close to the vehicle as possible and to be stored wherever needed in the service facility. The advent of the 2010 Tier 4 cleaning requirements created the need for a lighter, more portable cleaning system which can be taken into the field to clean filters at the point of service.

### Diesel Particulate Filter features

- Lightweight and Highly Portable - ideal cleaning system for use in the shop or on a service truck.
- Flexibility - clean DPF's from 6" to 15.5" in diameter using shop or compressed air of at least 100 PSI and 20 CFM sustained airflow.
- Fully Automated Operation - once started, the cleaning process can be completed with minimal operator oversight, freeing up the technician to simultaneously do other work in the shop.
- Focused Air Jet Technology™ - concentrates a precise high pressure stream of air directly into every cell.
- Easy Maintenance - contains no internal filters that require user maintenance.
- Rugged design provides maximum durability.
- Operates on 12-24 volt DC, or 110-220 Volt AC.

### Efficiency by the Numbers\*

- Cleans up to 20% more efficiently than traditional pulse based systems.
- Cleans up to 5% more efficiently than other more expensive "air knife" systems.

\*Based on third party OE test data using Pin-gauge measurement.

### Unique floating puck prevents "splash back"

- Features Focused Air Jet Technology™ with a unique floating puck that prevents splash back.
- Includes three nozzles: two straight (short and long), for standard "open face" DPFs; and one curved for the angled-flange DPFs.
- Ensures quiet operation.

### Ash disposal System and Shield

- Innovative ash disposal system enables technician to quickly and easily remove and dispose of particulate matter in accordance with local environmental requirements.



5286 kit includes:

- Cleaning unit
- Three neoprene rings fit filters from 6 in. (165 mm) to 15.5 in. (400 mm) in diameter
- Wet / dry HEPA vacuum
- Short, long, and curved-flange filter nozzles
- Adjustment feet for standard and flanged filters
- Ash disposal kits
- AC and DC adapter cables

Accessories

**563197** (Set of 5) – Ash disposal system enables technician to quickly and easily remove and dispose of particulate matter in accordance with local environmental requirements.



Curved neck nozzle with floating puck for angled-flange DPFs.



Long nozzle with floating puck for standard open face DPFs.



Includes innovative shield to protect cleaning area from moisture.



**5280**

**OTC 5280 Diesel Particulate Filter Cleaner**

The Diesel Particulate Filter (DPF) Cleaner was designed with shop service in mind. The cleaning process allows the DPF to be cleaned as part of a general maintenance schedule at the service location with minimal time away from the vehicle. It's portability allows the unit to be placed as close to the vehicle as possible and to be stored wherever needed in the service facility.

**DPF Cleaner Features**

- OE tested and Dealer recommended – By many major diesel engine manufacturers. Robust design – For long shop life. Can be used as part of a preventative maintenance program.
- High Pressure cleaning process for thorough cleaning of ash from DPF – produces 10 times the burst energy of competitive low pressure units.
- Initial Burst Quick check – To identify filters too plugged for proper cleaning.
- Movable with locking wheels – For placement throughout the shop.
- Computer Controlled Process Based on OE Requirements – for "Start to End" cleaning without constant technician monitoring.
- Containment of hazardous ash – For easy disposal.
- HEPA Filter Air Exhaust System – To exceed environmental air standards for shop.
- Operates on standard 115V outlet.
- Proven to clean to over 92% efficiency. (3)
- (3) Third-party OEM test results using pin gauge measurement with approved OTC adapters and burst cycles. Actual results may vary.

DPF Cleaner Includes:

OTC Diesel Particulate Filter (DPF) Cleaner

- 535936** – Small Cone
- 543887** – Medium Cone
- 543885** – Large Cone
- 553913** – CAT Adapters
- 553915** – Cummins Adapters



**Upgrade kits for other OEM's are sold separately:**

- 556889** – Detroit Diesel upgrade kit
- 553990** – UD TRUCK (with Hino Engine) upgrade kit
- 553991** – Isuzu upgrade kit
- 553993** – Volvo/Mack upgrade kit
- 558181** – Navistar upgrade kit\*
- \* Requires use of 5281 DPF Thermal Processing Unit.
- 554654** – Includes all upgrade kit shown above.
- 558569** – 12" HEPA filter
- 558571** – 30" air filter cartridge

**5281**

**OTC DPF Thermal Processing Unit**

The 5281 DPF Thermal Processing Unit is a device which will thermally regenerate a DPF unit at a controlled, pre-programmed rate. Sometimes, the DPF cannot be regenerated on the truck due to a failure with the vehicle's own regeneration system, or in the case of retrofit applications, a lack of an on-vehicle regeneration system. Thermal regeneration of DPFs is used in conjunction with the OTC 5286 DPF Cleaner.

Designed to facilitate the cleaning of dirty filters – especially those with high amounts of wet soot, and unburned hydrocarbons.

- Pre-programmed thermal profile controls temperature 'ramp up' and 'cool down' to protect the DPF from thermal shock, reducing the risk of cracking the DPF.
- Holds temperature constant for two hours to ensure complete regeneration of filter.
- Includes both standard cycle and "pre-treat" cycle for oil-soaked filters.
- Built-in electronic safety lock prevents unauthorized opening of the door when temperatures exceed 200 degrees F.
- Large chamber accommodates various DPF sizes and shapes. Front access door allows for easy access to the thermal chamber.
- 220VAC / 60Hz / Single phase / 50 Amp.
- 1-year warranty.
- CE, UL201, UL499.
- Internal chamber dimension: 24" (L) x 24" (W) x 26" (H).



**J-47399  
Horizontal DPF Handler**

- The Universal mounting assembly adjusts, front to back and side to side for easy DPF handling
- The height range of 6-1/2" to 29-1/2" is ideal for most of today's trucks
- Safety strap holds the load securely while moving about the shop

Specifications:

- Overall Length: 34-1/2"
- Overall Width: 19-3/8"
- Max. Height: 29-3/4"
- Min. Height: 7-1/2"
- Side tilt: 30°, Front tilt: 15°, Back tilt: 15°