

Oil and Spiders

More transmissions than you might believe get returned to BAKER Drivetrain for repair because the end user forgot to put oil in the unit. The complaint is usually excessive noise and difficulty shifting gears. Upon disassembly we find gear teeth with beautiful hues of blue, gold, and purple. When we notify the customer of our findings, quite often they will swear up and down that they put oil in the transmission. But there are only two ways that gear teeth turn blue, gold, and purple. The first way is to closely examine the gear teeth in bright sunlight about two hours after dropping three hits of acid. The second way is for gears to run without oil. Gear teeth turning blue, gold, and purple bathed in oil is as likely as President Obama having one of those special cone shaped white hoods in his closet.

The gears, shift system, and bearings in a Harley-Davidson transmission are splash lubricated, which means the churning action of the constant mesh gears kicks up and distributes oil when the transmission is in operation. The oil distribution and transmission function can be viewed with one of our Voyeur see-through top covers; pretty cool stuff. It is a very simple but very effective way to distribute the oil in the proper order of importance. That is, the shift system and bearings get lubricated by splash oil and oil mist which is more than adequate to keep them running smoothly. The gears, on the other hand, get continually coated by fresh oil and that's a good thing because the points of contact between two gears in mesh are subjected to very high stresses.

Look up "involute gear" in Wikipedia to view an animated simulation of two gears in mesh. As shown, the gear teeth come together in a mesh as the involutes (gear tooth profiles) of a gear and its mate roll together. The full torque of the engine (plus torque multiplication through the primary drive) is transmitted up and down the gear teeth, in a point-contact fashion, as gears roll together in mesh. In the world of machinery and mechanisms, this is referred to as "point loading"; it shears and fornicates the heck out of the poor little oil polymers over and over.

Modern oils are complicated, and transmission oils are no exception. Gear lubes carry a GL rating, which defines how much pressure (load between gears) they can withstand. The most common ratings today are GL-1 and GL-5.

GL-1 lubes have a much lower pressure rating than GL-5 oils.

Gear lubes come in many viscosities (weights), with the most common being 75w90, 75w140, and 85w140. Imagine these oil polymer molecules looking like a spider... when the oil is cold the spider's legs contract (like a dead spider), which lets the polymers bounce off each other, creating easier flow. Flow in oil is measured as viscosity, so when the oil is cold the viscosity is lighter (the 75 part of 75w140). As temperature increases, the spider's legs open up and connect with the "legs" of other polymer molecules, making the oil thicker and increasing viscosity. This is how oil can change weight from 75 to 140 with a change in temperature. When oils are sheared with miles of use, the "legs" are cut off, preventing the poly-

mer molecules from linking together and making the oil unable to change viscosity.

Besides pressure ratings, chemistry is different between GL ratings, and normally they don't interchange. Most GL-5 rated lubes are not compatible with GL-1 applications because GL-5 oils contain high pressure additives that attack "bright metals" such as copper, brass, and bronze that can be found in some transmissions. Oils such as Spectro 6 Speed contain special buffers that allow this GL-5 rated oil to be used in GL-1 applications without fear of bright metal damage. GL-1 oils should never be used in GL-5 applications. They won't cause any physical damage to met-

als but they also won't stand up to the intense pressure found in a GL-5 environment.

Syn3 is nothing more than 20w50 synthetic motor oil. It will work in a transmission if there is nothing else available but there's no good reason to use it when there are better choices. Motor oils are designed to lubricate motors, not transmissions, and they have totally different chemistry. Gear lubes use generous amounts of Zinc (zddp), phosphorus, and other extreme pressure anti wear additives not found in motor oils. They don't need much in the way of detergents (no fuel, carbon or ash contamination in transmissions).

So if you don't want the gear teeth in your transmission to turn blue, gold, and purple, do the following:

Keep your transmission filled with a quality GL-5 rated oil and change it every 5000 miles or once a year to keep fresh legs on the spiders.

Don't drop acid. **IV**



1990-2006 6-SPEED BIG TWIN BULDER'S KITS

FACT SHEET



REFERENCE TRANSMISSIONS	COUNTRY OF ORIGIN	80 MPH 6-SPEED RPM DROP FROM STOCK 5TH GEAR (25/36 VS. 24/37 WITH 32/70 REAR)	MACHINING (AND EASE-OF-INSTALL DETAILS)	RETAIL PRICE (As of 12-07)	ADDITIONAL PARTS REQUIRED	WARRANTY YR./MI.	GEAR RATIO OPTIONS	GEAR COMMENTS	SHIFT SYSTEM	TRAP DOOR	COMMENTS	
DD6 BABY BROT & SISTER BAKER DD6	USA	362	518	No clearing required with the standard 3.45 ratio 1st gear. Some clearing may be required with optional 3.77 1st gear depending on case casing variations.	\$2,486.00	Recal unit on all electronic speedometer models (#135)	5-Year/50,000 Miles	Internal: 3.77 or 3.45 (1st), 2.56 (2nd), 1.87 (3rd), 1.44 (4th), 1.15 (5th), 1.00 (6th) Effective: 3.24 or 2.97 (1st), 2.30 (2nd), 1.61 (3rd), 1.24 (4th), .90 (5th), .86 (6th) Overall: 16.80 or 8.65 (1st), 7.19 (2nd), 6.25 (3rd), 4.05 (4th), 3.23 (5th), 2.81 (6th)	Spur Cut 1st-3rd Gear, Helical Cut 4th-6th	Roller detent Redundant neutral detent to aide neutral finding 1-degree dogs with lead-in ramps to assist in 4-out of gear transitions Ratched panel with anti-overshift feature and 2000-tip style scissor spring Steel CNC milled shift drum precisely indexes on fixed spindle Dead stop shift pattern in 1st and 6th	Chrome, polished, or black billet trap door Wider than stock, no exhaust clearance issues Speed sensor in stock location in case Compatible with all stock and aftermarket side covers	Good shift quality Designed for Twin Cam's but applicable back to 1990 1st gear ratio no coast option 6th gear is 93% efficient Silent operation Spur gears in 1st-3rd for strength and performance Helical gears in 4th-6th for silent smooth operation
IMS	USA	474	510	Case clearance checks required in the 6th gear and the auxiliary fork rod areas.	\$2,157.00 (8085) \$2,195.00 (8085A)	Recal unit on all electronic speedometer models (#135)	6-Year/60,000 Miles on complete transmissions 6 months on gear sets	Internal/Effective: 2.94 (1st), 2.21 (2nd), 1.60 (3rd), 1.23 (4th), 1.0 (5th), .86 (6th) Overall: 9.26 (1st), 6.96 (2nd), 5.04 (3rd), 3.87 (4th), 3.15 (5th), 2.71 (6th)	All Spur Cut Gears	Roller detent Drum shimming required Live spindle drum	Chrome billet trap door Wider than stock, potential exhaust clearance issues Speed sensor in door Compatible with all stock and most aftermarket side covers	Design based on venerable 5-speed Based on previous generation BAKER design licensed to IMS in 1999 Overdrive design has great potential for noise in 4th and 6th in TwinCam applications 6th gear is 93% efficient
SCREAMING EAGLE	USA	373	400	Machining required in several locations in case and top cover, including complete amputation of the right fork rod boss.	\$1995.95	1yr if installed at local dealership	1990-2000 models require purchase of cable side cover release kit (\$199.95). Note: Hydraulic side cover release kit is not compatible with 1990-98 touring models 38752-04 Side cover, cable type (\$199.95) 38753-04A Side cover, hydraulic type (\$299.95)	Internal/Effective: 3.21 (1st), 2.21 (2nd), 1.57 (3rd), 1.23 (4th), 1.0 (5th), .89 (6th) Overall: 10.11 (1st), 6.96 (2nd), 4.95 (3rd), 3.87 (4th), 3.15 (5th), 2.80 (6th)	All Spur Cut Gears	Roller detent Cast drum Live spindle drum	Chrome billet trap door Same width as stock with special Harley side cover Speed sensor in top of door Must use Screaming Eagle side cover	Good shift quality Overdrive design has great potential for noise in 4th and 6th in TwinCam applications No gear ratio options 6th gear is 93% efficient
SAS	USA	200	223	Several areas require case and top cover clearing including the shift fork, shift lever, and 1st gear on the countershaft. Inner primary and Dyna exhaust bracket also require modification for a successful installation.	\$2,185.00	Recal unit on all electronic speedometer models (#135) Oil spout spacer on FL models (#61.95) Longer belt for 34 tooth pulley (\$207.00)	12 month from date of purchase	Internal: 3.88 (1st), 2.66 (2nd), 1.94 (3rd), 1.48 (4th), 1.18 (5th), 1.00 (6th) Effective: 3.65 (1st), 2.50 (2nd), 1.82 (3rd), 1.28 (4th), 1.11 (5th), .94 (6th) Overall: 11.44 (1st), 7.87 (2nd), 5.74 (3rd), 4.38 (4th), 3.49 (5th), 2.96 (6th)	All Helical Cut Gears	Roller detent 7-dog shift rings yields light and precise shifting Live spindle drum	Polished, black or raw billet trap door Wider than stock, potential exhaust clearance issues Must use SAS polished side cover	Good shift quality Does not achieve a true overdrive-style RPM reduction with 34 tooth pulley No gear ratio options 6th gear is 93% efficient Silent operation 1st overall gear ratio too short for performance applications
COVER DRIVE OD6 BABER OD6	USA	474	510	Case clearance checks required in the 6th gear and the auxiliary fork rod areas.	\$2280.00 (Softail/Dyna) \$2365.00 (FL)	Recal unit on all electronic speedometer models (#135)	5-Year/50,000 Miles	Internal/Effective: 2.94 (1st), 2.21 (2nd), 1.60 (3rd), 1.23 (4th), 1.00 (5th), .86 (6th) Overall: 9.26 (1st), 6.96 (2nd), 5.04 (3rd), 3.87 (4th), 3.15 (5th), 2.71 (6th)	All Spur Cut Gears	Roller detent Drum shimming required Live spindle drum Redundant neutral detent to aide neutral finding	Chrome, polished, or black billet trap door Wider than stock, potential exhaust clearance issues Speed sensor in door Compatible with all stock and most aftermarket side covers	Design based on venerable 5-speed Highly evolved since introduced in 1998 Overdrive design has great potential for noise in 4th and 6th in TwinCam applications Many no coast gear ratio options Many shift pattern options 6th gear is 93% efficient
COVER DRIVE OD6 BABER DEEP OD6	USA	677	727	Case clearance checks required in the 6th gear and the auxiliary fork rod areas.	\$2280.00 (Softail/Dyna) \$2365.00 (FL)	Recal unit on all electronic speedometer models (#135)	5-Year/50,000 Miles	Internal: 2.94 (1st), 2.28 (2nd), 1.53 (3rd), 1.24 (4th), 1.00 (5th), .89 (6th) Overall: 9.26 (1st), 6.55 (2nd), 4.82 (3rd), 3.91 (4th), 3.15 (5th), 2.80 (6th)	All Spur Cut Gears	Roller detent Drum shimming required Live spindle drum Redundant neutral detent to aide neutral finding	Chrome, polished, or black billet trap door Wider than stock, potential exhaust clearance issues Speed sensor in door Compatible with all stock and most aftermarket side covers	Design based on venerable 5-speed Highly evolved since introduced in 1998 Overdrive design has great potential for noise in 4th and 6th in TwinCam applications Many no coast gear ratio options Many shift pattern options 6th gear is 93% efficient
REV TECH	Korea	373	400	No modifications required on most cases.	\$999.00 to \$1228.00	Recal unit (\$63.00 for 1509.99) and neutral switch (30459 switch for \$14.99 plug for \$20.30) on most units Trap Door (new 5-speed door or purchase new)	5-Year/50,000 Miles	Internal: 2.94 (1st), 2.08 (2nd), 1.53 (3rd), 1.24 (4th), 1.00 (5th), .89 (6th) Overall: 9.26 (1st), 6.55 (2nd), 4.82 (3rd), 3.91 (4th), 3.15 (5th), 2.80 (6th)	Thinner width than stock spur gears Smaller journals than stock	Plunger style detent Live spindle drum	No trap door included Speed sensor in stock location in case	Korean quality at a Korean price 6th gear is 93% efficient
REFERENCE TRANSMISSIONS												
H-D CRUISE DRIVE	USA	392	392	Standard Equipment of 2006-UP	N/A	N/A	2-year/Unlimited Miles	Internal: 3.34 (1st), 2.30 (2nd), 1.71 (3rd), 1.41 (4th), 1.18 (5th), 1.00 (6th) Effective: 2.95 (1st), 2.04 (2nd), 1.52 (3rd), 1.25 (4th), 1.04 (5th), .89 (6th) Internal: 9.31 (1st), 6.42 (2nd), 4.77 (3rd), 3.93 (4th), 3.28 (5th), 2.79 (6th)	1st-2nd Spur Cut, 3rd-4th Helical, 5th Spur Cut, 6th Helical	Cast steel shift drum 1-degree dogs	Stock cast door in wrinkle black or silver	6th gear is 99% efficient 5th gear has a common complaint of noise due to it's spur cut design
H-D 5-SPEED	USA	N/A	N/A	Standard Equipment of 2006-Earlier	Consult Dealer	N/A	90 days	Internal: 3.21 (1st), 2.21 (2nd), 1.57 (3rd), 1.23 (4th), 1.00 (5th) Overall: 10.11 (1st), 6.96 (2nd), 4.95 (3rd), 3.88 (4th), 3.15 (5th)	All Spur Cut Gears	4-degree dogs	Stock cast door in wrinkle black or silver Compatible with all stock and aftermarket side covers	5th gear is 99% efficient Tried and true design goes back to 1980 3400 rpm @ 80 mph is hard on the engine and the rider Chunky shift quality

Helical Gear has a higher contact pattern to the gear is quieter. Spur Gear is straight cut and has a lower contact pattern so it creates more gear noise. Internal Gear Ratio is the physical number derived by dividing two gears by themselves. Effective Gear Ratio is the overall outcome of a gear with an "offset". For example, with a primary sprocket change the overall output of the transmission will be affected by the primary gearing change. Overall Gear Ratio is the (Primary Ratio) x (Internal Ratio) x (Final Drive Ratio). This value is what Harley-Davidson uses as standard measure. Softail, FXR, FLT, Dyna, Cruise Drive, Harley H-D, and Harley Davidson are all trademarks of the Harley-Davidson Motor Company. IMS, SAS, RevTech, and Screaming Eagle are all trademarks of their respective companies. BAKER Drivetrain, BAKER Six-Speed Overdrive, Function-Formed, OD6, DD6, DD5, Drivetrain Authority and BAKER are trademarks of BAKER Inc., Heslett, Michigan.

"RIDING FREE" MEANS BEING WORRY FREE

DD6 DIRECT DRIVE 6-SPEED

The BAKER DD6™ is the ultimate transmission for serious touring, bagger, Softail, or Dyna riders. The ones who really put the miles on appreciate the silent smoothness with our helical highway gears and direct drive engineering. All steps have been taken to dampen vibration so you, your motor, and the rest of the bike can go the long haul for years to come.

Owning an American made BAKER DD6™ will give you peace of mind in your travels. You'll know that you have the premium drivetrain transmission that strictly is built to endure. You'll have comfort in knowing that your investment is also supported passionately by BAKER Drivetrain with our hefty 5-year/50,000 warranty. No worries. Ride on.

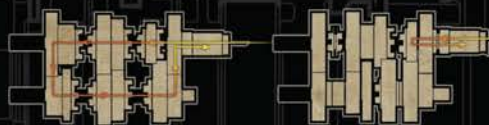
Now get the hell out there, ride hard and far, and know that you're in good company with the award-winning DD6™ from the drivetrain authority. We'll take you farther.

WHAT YOU GET WITH THE DD6:

- ✘ Pre-assembled gearset, ready to easily install. Helical 4th, 5th and 6th, for a smooth and quiet ride in your cruising gears. Install on a Saturday and ride on Sunday!
- ✘ 28-tooth compensating sprocket included. Necessary to maintain 1st - 5th stock gearing. Overdrive is obtained through the primary, so this ratio reduces strain on the starter with 14% more torque. The lower RPM in the primary drive reduces resonant noise found in Twin Cam transmission cases at higher primary RPM's.
- ✘ Roller detent shift drum, with fixed spindle, eliminates shimming and misalignment.
- ✘ Finding neutral is very easy with a redundant neutral detent. It also makes installation simpler and less risky to screw up.
- ✘ Inner primary race/spacer included.
- ✘ 3-point contact shift forks, hard chrome plated for extended life.
- ✘ Shifter pawl assembly with improved geometry for a perfect response. Includes a built in overshift protection for smooth, precise shifting.
- ✘ Primary chain included with kit.
- ✘ 1st, 2nd, and 3rd gears are straight cut to prevent lateral tension in those high torque, short-used gear ranges.
- ✘ Stiff, precise billet aluminum bearing door that offers more bearing-protecting lateral rigidity than any other helical gearset available.
- ✘ Proprietary fork rod made to bearing grade specifications which eliminates hang-ups.

WHAT YOU GET FROM THE DD6:

- ✘ **THE FEEL OF A NEW BIKE:** The end-all, proven and perfected helical gear design for smooth and silent operation in the cruising gears (4th-6th).
- ✘ **THE OPTION TO RIDE HARD:** Conventional gear shape for strength in the high-torque ranges (1st-3rd) so you can get on it and wick that throttle!
- ✘ **OPTIMIZED USE OF HORSEPOWER:** 99% efficient in 6th gear with a 400-500 rpm reduction depending on application.
- ✘ **CERTAIN AND POSITIVE SHIFTING:** Fixed spindle shift drum for smooth, low inertia, drum indexing. Anti-overshift ratchet pawl prevents mis-shifts.
- ✘ **CONFIDENCE IN THE RIDE:** Full width BAKER ground gears finished on diamond-coated tooling are strong and dependable.
- ✘ **A GOOD FEELING ABOUT YOUR INVESTMENT:** 5 year / 50,000 mile BAKER limited warranty keeps you worry free!
- ✘ **AN AMERICAN SOUL:** It's made in the USA! It's designed here too. You'll have a leg up on those riders with cheap, foreign junk.
- ✘ **EASY INSTALLATION:** No grinding to the case required (with very, very rare exceptions). Many competitor's 6-speed builder's kits do require grinding.
- ✘ **NO EXHAUST CLEARANCE ISSUES:** The trap door is the same width as stock.



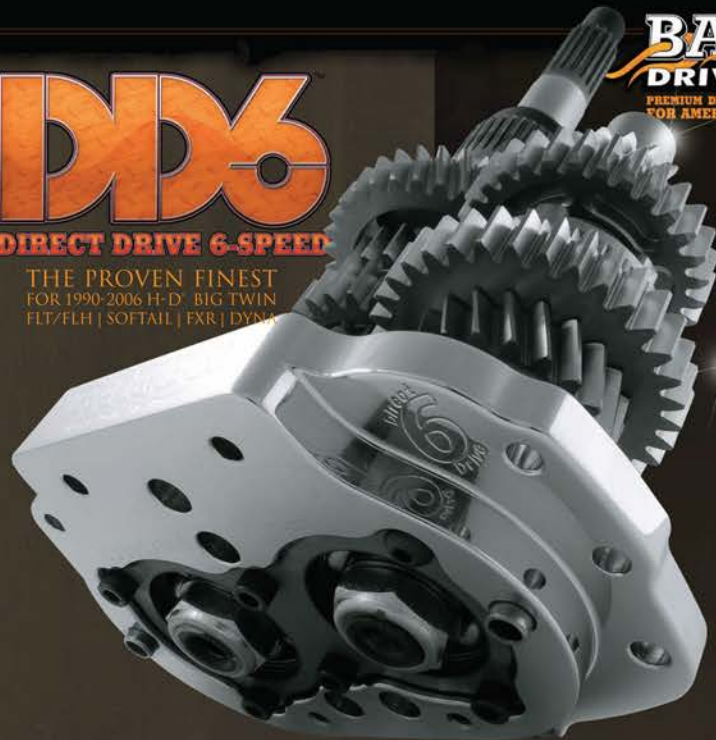
Conventional Overdrive Power Flow: 92% efficient | Direct Drive Power Flow: 99% efficient. Waste less horsepower!



DD6

DIRECT DRIVE 6-SPEED

THE PROVEN FINEST FOR 1990-2006 H-D® BIG TWIN FLT/FLH | SOFTAIL | EXR | DYNA



5 YEAR / 50,000 MILE WARRANTY
Up to 50,000 miles!

WE ARE BAGGER-DRIVETRAIN

We're just going to get straight to the point: all 1999-2006 baggers ought to have a BAKER DD6 transmission. It's specifically designed with these bikes in mind. Harley acknowledged the need for a 6 speed with the release of their Cruise Drive a few years ago. There are millions of bikes of this vintage on the fast-moving modern highways that can have a brand new existence with the installation of our Direct Drive 6-Speed.

Our DD6 is finessed for touring model bikes, especially for the later Twin Cam powertrains, as the DD6 mitigates noise amplified in the hollow space between the motor and the tranny. It is the perfect blend of gear ratio, gear type, noise reduction advancements, shift system technology, bearing upgrades and ease of installation. Since the release of the

BAKER DD6 in 2003, there have been thousands of satisfied customers world-wide with American touring Big Twins who will attest that it is the premium transmission of choice.

We'll sell you our normal BAKER Overdrive 6-Speed (OD6) and you'll enjoy it, but we'd be doing you a disservice as the Drivetrain Authority if we don't convince you that the DD6 is the best value for your buck. Check out the 6-Speed Builder's Kit Fact Sheet on the other side of this page to see for yourself how the BAKER DD6 beats the competition hands down. Comparing the cost of time, labor, and additional accessories and factoring in our 5 year warranty, proven dependability, the number of years on the road and our reputation the choice will be clear.

STANDARD RATIOS (w/6 28T Comp Sprocket)
3.77, 2.56, 1.87, 1.44, 1.15, 1.00

NOTE:
28-tooth comp sprocket supplied with DD6.

GEAR RATIO:
3.45 1st Gear, effectively 2.94

STANDARD TRAP DOOR:
(Shown Above)

OPTIONAL FINISHES:
1) Wrinkle Black
2) Polished
3) Raw

OPTIONAL DOOR CONFIGURATIONS:
1) Ear Type (all finishes)
2) No Ear (all finishes)

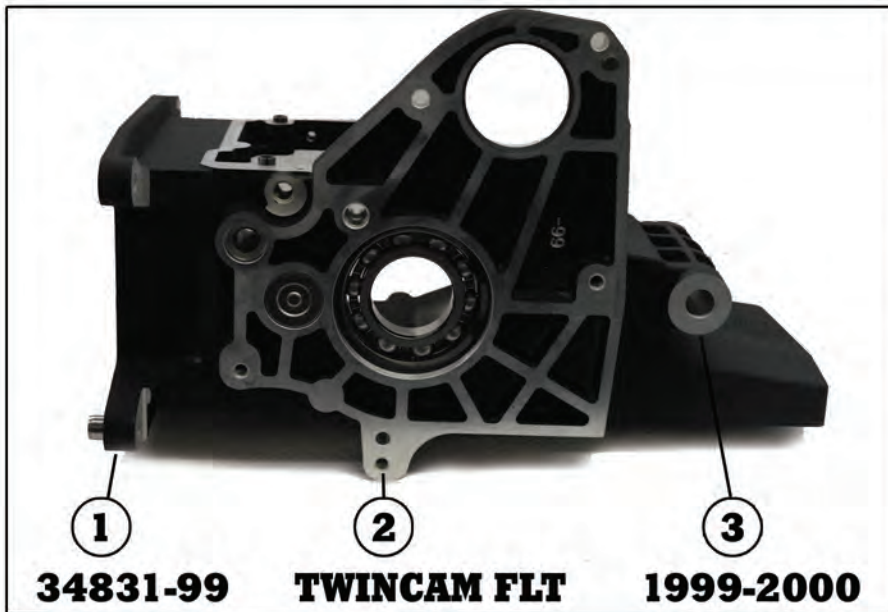
DD6 doors have the same outer profile as stock 5-speed doors so exhaust brackets, torque arms, etc... fit up to the door like stock.

TOP GEAR RPM@5-SPEED VS. DD6

MPH	5-speed RPM in 5th	DD6 RPM in 6th
65	2945	2528
70	3172	2723
75	3398	2917
80	3625	3112

Calculated data based on a 24/37 primary, a 32/70 secondary, and a 25' rear tire

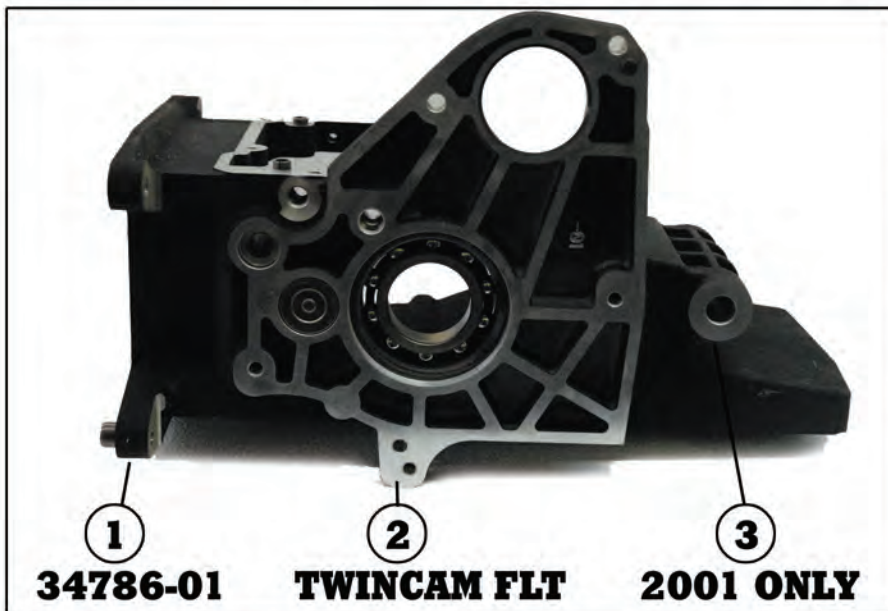
FLT CASE DIFFERENTIATIONS



**1. SQUARE BOLT
PATTERN**

**2. HOLES IN LINE WITH
EACH OTHER**

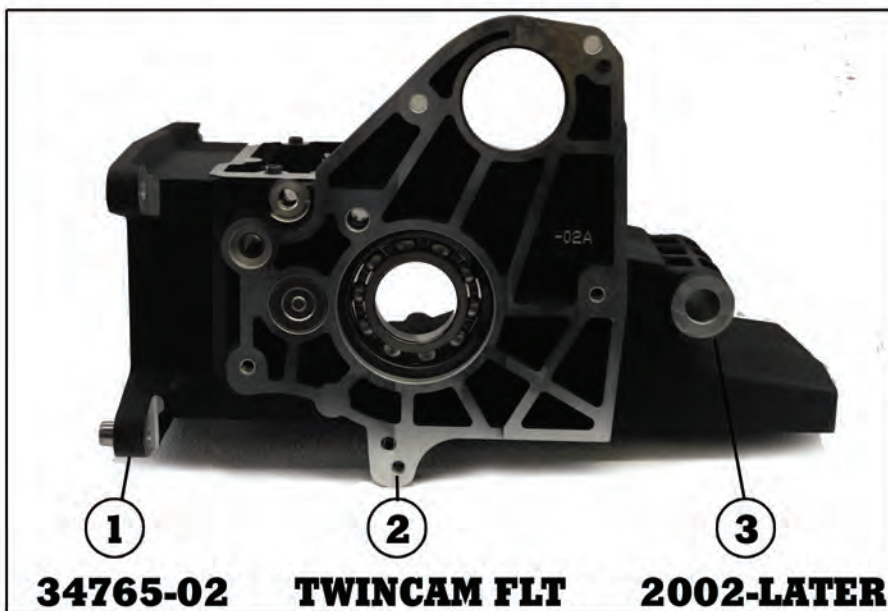
3. 5/8" SWINGARM BORE



**1. SQUARE BOLT
PATTERN**

**2. TOP HOLE OFFSET
FROM BOTTOM HOLE**

3. 5/8" SWINGARM BORE



**1. SQUARE BOLT
PATTERN**

**2. TOP HOLE OFFSET
FROM BOTTOM HOLE**

3. 3/4" SWINGARM BORE

Bearing Door

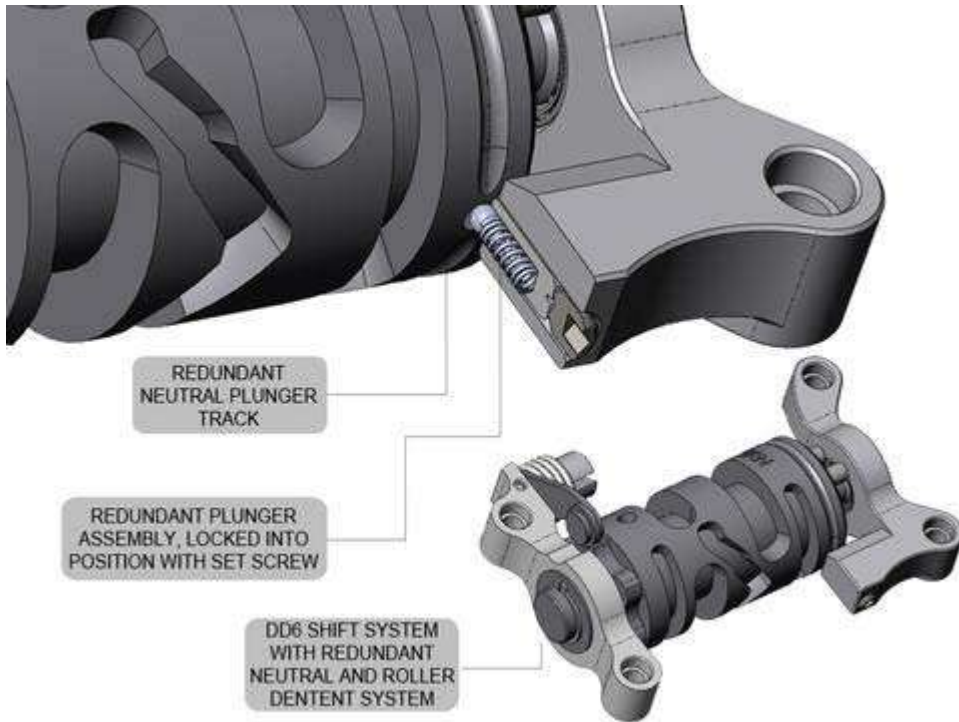
All DD6 bearing doors have the same outer profile as a stock 5 speeds so exhaust brackets, torque arms etc. fit like stock. The DD6 door comes with or without an ear. The ear door is for exhaust bracket mounting and **does not** fit 1993-2006 FL applications. Note the images below. The DD6 door bearings are larger providing 25% more dynamic load capacity than stock bearings used through 1998, also uses a 1/8" bearing retainer plate instead of stock style snap rings.



DD6 Bearing Doors



DD6 vs. Stock Comparison



Redundant Neutral System

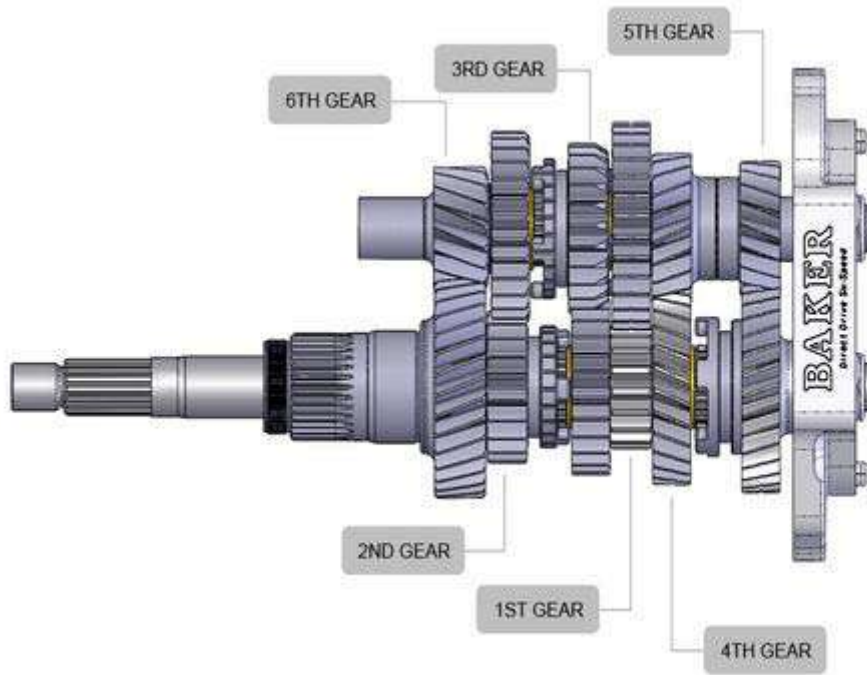
Shift System

Our 6 Speed shift system with roller detent guarantees smooth shifts every time and our redundant neutral ensures that finding neutral is a easy chore. We mount a plunger detent on the left side pillow block and cut a plunger track into the shift drum itself. The plunger follows this track during operation (shifting) and when shifting into neutral pops

into a pocket. This system lets you feel that you're shifting into neutral. No more guessing. Shift drum features more aggressive timing on the fork groove profiles and is case hardened to 58 Rockwell for wear resistance and crisp shifts. We built our reputation on smooth shifting 6-speed transmissions; our drum designs benefit from the engineering lessons learned.

Gearset

All DD6 gearsets are made out of 8620 steel, gears are shaper cut before heat treat then precision ground with diamond coated tooling after heat treat (58-62 Rockwell 'C'). This extra steps ensures not only a quieter gear pair, but enables much tighter backlash control. The gearset is a combination of helical and spur gears to yield silent gear operation. The dog teeth are backcut at a 1° angle to optimize the smooth shift possible, while standard gearsets are cut to a 4° angle. The mainshaft is unique with 1st main gear being incorporated as part of the shaft, the countershaft also features a unique 1-piece design with 6th gear.



DD6 Gearset Layout



Gears and Shafts Design



DD6 Shift Forks

Shift Forks

Our investment cast shift forks are made out of 4140 then dipped in a hard chrome plate bath for wear resistance, also designed with oil reliefs to ensure proper lubrication and wear resistance on fork blades and shift dogs.

Available No Cost Options

- Standard Shift Drum (1-N-2-3-4-5-6)
- N1 Shift Drum (N-1-2-3-4-5-6)

Available at an Additional Cost

27T Comp Sprocket, available on FL models for a more aggressive primary ratio. **Not compatible on Softails or Dyna models due to the inner primary design.**

The DD6 comes in a standard 3.24 or optional 2.94 1st gear

Standard Ratios	Effective Ratios
1st Gear 3.77	1st Gear 3.24
2nd Gear 2.56	2nd Gear 2.20
3rd Gear 1.87	3rd Gear 1.61
4th Gear 1.44	4th Gear 1.24
5th Gear 1.15	5th Gear .99
6th Gear 1.00	6th Gear .86

Standard Ratios- shown above are without the 28 tooth comp sprocket

Effective Ratios- shown above are with the 28 tooth comp sprocket

Builder's Kit Part Numbers

All Part Numbers Listed Are Standard (Effective) Gear Ratios

PN	Description	Fitment
DD411L	DD6 Builder's Kit	1990-97 Softail 1991-97 Dyna

DD411 DD6 Builder's Kit 1990-94 FXR1990-97 FLT-FLH
DD411SL DD6 Builder's Kit 1998-99 Softail1998-00 Dyna
DD411S DD6 Builder's Kit 1999 FXR1998-00 FLT-FLH
DD411PL DD6 Builder's Kit 2000-06 Softail2001-05 Dyna
DD411P DD6 Builder's Kit 2001-06 FLT-FLH

Builder's Kit Notes

- The DD6 is available with a 2.94 optional 1st gear ratio for higher horsepower applications. Change the middle numeral '1' to a '0'. example: DD401P
- The DD6 is not designed to be used in conjunction with belt drive primaries, auto chain tensioners or easy pull clutch kits.
- Upgrade the DD6 builder's kit

Complete Build Notes

- The DD6 is available with a 2.94 optional 1st gear ratio for higher horsepower applications. Change the middle numeral '1' to a '0'. example: DD401P
- The DD6 is not designed to be used in conjunction with belt drive primaries, auto chain tensioners or easy pull clutch kits.



BAKER Case vs. Aftermarket

Case Design

The BAKER Softail case design had all leak potentials in mind during the design. We added stud pads to the inside of the case so that the thread holes for the transmission studs were blind holes, NOT through holes like some aftermarket brands. Looking at the image on the right you can see the difference.



Recalibration Box PN 95E-56B

Special Note

- Speedo recalibration unit is required for electric speed sensor applications; PN 95E-56B.
- A + 12MM mainshaft length is available for wide tire applications. (Call us to ensure ordering accuracy)

Compare the DD6

See the difference between other transmission kits and our DD6 and OD6.

Recommended Upgrade

Recommended Fluid / Level

Picking the right transmission fluid ensures the life and durability of your transmission, that's why BAKER recommends a fully synthetic GL-5 rated gear weight oil of 75W-140. If a GL-5 rated gear lube is not available, these commonly carried viscosities (weights) will work 75W-90, 75W-140 and 85W-140. BAKER does not recommend the use of Syn3 (20W-50).

- BAKER DD6 Fluid Capacity Dry: 22-24fl-oz
- BAKER DD6 Fluid Capacity Wet: 18-22fl-oz