



**Complete Line of Adjustable and Auto-Tuning  
Fuel Injection Controls, Performance Ignition Systems,  
Tuning Aids, and Diagnostic Tools**



**Performance  
Ignition  
Systems**





# Twin Tuner Fuel Injection Controller



Fits most 2001-2015 Twin-Cam® and 2007-2015 Sportster® models with Delphi® system and 2003-2010 Buell® models with DDFI system. Easily add or subtract fuel by means of switch settings or advanced mapping with PC link. Low cost and very compact size.

The Twin Tuner allows you to easily adjust your fuel injection to match the requirements of performance parts including camshafts, free flowing exhausts, and low restriction air filters. You can add up to +30% or subtract down to -20% fuel.

Installation takes only 10-15 minutes and is very easy - cutting, splicing, and crimping is required on several applications. A crimping tool is required for best connection. All access is at the Delphi® ECM. Just disassemble the ECM connector using a small flat screwdriver, remove a few wires from the ECM connector, insert these wires into our small mating connector, insert new wires from the Twin Tuner into the ECM connector, and connect one ground wire. That's all there is to it.

The unit is completely encapsulated and impervious to moisture. With a very low profile of only 1/2" and occupying a fraction of the space required by competitive products, you won't have a problem finding a place to mount the unit.

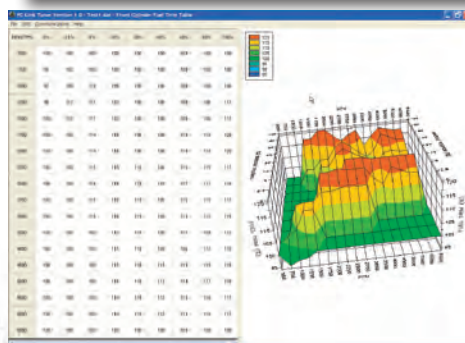
The user interface consists of up/down pushbuttons and a bright daylight readable LED display to select and change the fuel trim and spark retard in the RPM and throttle position ranges required by most applications. We provide tuning recommendations and initial setup tables for common applications.

- Increases horsepower
- Improved throttle response
- Eliminates spark knock
- Can use your Dynojet® Power Commander® maps
  - Easy plug-in installation and setup
- Very compact size - only 4"L x 2"W x 1/2"H
- Compatible with Twin Scan Tuning Aids
  - Low cost

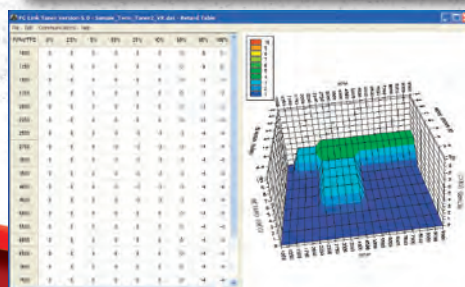
16100



*Real Time Data Display*



*Fuel Trim Table*



*Ignition Retard Table*



# ...and Twin Tuner II Fuel Injection and Ignition Controller



16200



The Twin Tuner II has all the features of the original Twin Tuner and includes ignition timing control capability. You can retard spark timing up to 10 degrees to eliminate spark knock in engines with increased displacement and high compression pistons/heads.

The Twin Tuners also have an advanced mode, where you can use the optional USB interface and PC Link Tuner software to make precise fuel and spark retard adjustments. You can make independent adjustments to the front and rear cylinders.

Our Tuner Log software allows real time display of system operation. Real time engine data is displayed on an instrument panel type layout with a round tach gauge and bar graph type gauges for all other parameters. Status messages are displayed in a separate window. In addition to monitoring fuel corrections, you can check proper RPM signal pickup and operation of the throttle position sensor (TPS).

The Twin Tuners work great in combination with our Twin Scan tuning aids for precise tuning. All you have to do is temporarily install the Twin Scan with WEGO wide-band exhaust gas oxygen sensor accessory. The system can be used for tuning on a dyno or under actual riding conditions on a closed course or race track. You can then export the air/fuel ratio corrections calculated by the Twin Scan into the PC Link Tuner software.

For complete details, please visit the Twin Tuner and Twin Tuner II pages on our website.

Part #	Description
18014	USB Interface (provides USB connectivity for all Twin Tec engine controls. Includes 6 foot USB cable and software on CDROM)



Part #	Description
16100*	Twin Tuner Fuel Injection Controller for 2001-2011 H-D® Twin-Cam with 36 pin Delphi® system and 2008-2010 Buell® with DDFI including new 1125IR (Use TWIN-TUNER-SPT for 2011 Softail® with CAN data bus)
16101*	Twin Tuner Fuel Injection Controller (for 2003-2007 Buell® with DDFI fuel injection system)
16103	Twin Tuner EX Fuel Injection Controller (for 2001-2008 H-D® Twin-Cam with 36 pin Delphi® system. ARB E.O. No. D-641)
16102*	Twin Tuner Fuel Injection Controller (for CAN bus models including 2012-2015 Dyna® and Softail® and all (2014 except touring models)
16104*	Twin Tuner Fuel Injection Controller (for 2008-2013 H-D® Twin-Cam touring models with 73 pin Delphi® system)
16105*	Twin Tuner Fuel Injection Controller (for 2011 Softail® with CAN data bus and 2007-2013 Sportster® with 36 pin Delphi® system)
16106*	Twin Tuner Fuel Injection Controller for 2014-15 Touring Models with CAN bus.
16200*	Twin Tuner II Fuel Injection and Ignition Controller (for 2001-2011 Harley-Davidson® Twin-Cam and 2007-2013 Sportster- with 36 pin Delphi® system)
16201*	Twin Tuner II Fuel Injection and Ignition Controller for CAN bus models including 2012-2015 Dyna® and Softail® and all 2014 except touring models
16202*	Twin Tuner II Fuel Injection and Ignition Controller (for 2008-2013 Harley-Davidson® Twin-Cam touring models with 73 pin Delphi® system)
16203*	Twin Tuner II Fuel Injection and Ignition Controller (for 2002-2015 V-Rod™ with 36 pin Delphi® system)
16204*	Twin Tuner Fuel II Injection Controller for 2014-15 Touring Models with CAN bus.



# DAYTONA TWIN TEC



# TCFI and VRFI Gen 4 Auto-Tuning Fuel Injection Controllers



TCFI version fits most 2001-2013 Harley-Davidson® except 2008-2013 touring models. VRFI version fits 2002-2015 V-Rod™. For models with J1850 data bus. Auto-tuning using dual wide-band oxygen sensors. Ideal for highly modified engines. Powerful Windows software for engine mapping and data logging/diagnostics. Special versions available for turbo/supercharged applications.

- Quickly auto-tune fuel curves for front and rear cylinders on a dyno or on-road with WEGO IIID dual channel wide-band oxygen sensor interface
- Fully programmable plug-in replacement for 36 pin Delphi® controller with J1850 data bus. Not compatible with 2008 and later touring models with electronic throttle control. Not compatible with 2011 and later models with CAN data bus
- Robust alpha-N (throttle position and RPM based) fuel control eliminates problems with long duration/high overlap camshafts. Also available in 100 and 300kpa speed density systems. 300kpa SD is designed for use with boosted engine applications along with our 3bar map sensor.\*\*
- Powerful Windows software for custom programming and data analysis
  - Full support for J1850 data bus used for communications with turn signal/security module (TSM/TSSM) and instrument cluster on 2004 and later models

4

- Support for 6th gear indicator on 2007 and later models
- Extended data logging and diagnostics.

DataFLASH memory stores full 60 minutes of operating data at 10 samples/sec.

- Programmable user output for functions such as shift light, nitrous activation and electric shifter
- Billet aluminum housing with black anodized finish
- Plug-in installation
- Supports all sensors including theft/security module

## Major TCFI Advantages over Competitive Systems

- Real-time and continuous auto-tuning with monitoring, control and override capability. No other commercially available system offers all these capabilities. For a more in-depth explanation of what this means and why it's so important, please visit the TCFI Tech FAQ on our website.
- User friendly PC Link software with 3-D graphics and easy spreadsheet editing capabilities. For example, changing a block of cells in our advance table takes only a few mouse clicks. But don't take our word for it, check it out yourself. Download and play around with our PC Link TCFI software. Then try the same editing in any competitive software and draw your own conclusions.
- Built-in data logging. Competitive systems lack built-in data logging. Without this data logging, it is almost impossible to diagnose real-world problems. Download our TCFI Log software and look at the sample data logging file.
- Knowledgeable and prompt technical support. At Daytona Twin Tec, you can always reach a technician during normal business hours. You won't be told to send an email and wait for a response. We may ask you to email us data, but an initial conversation is always with a technician.

\*\*TCFI systems in 100kpa and 300kpa speed density formats designed specifically for boosted engine applications.





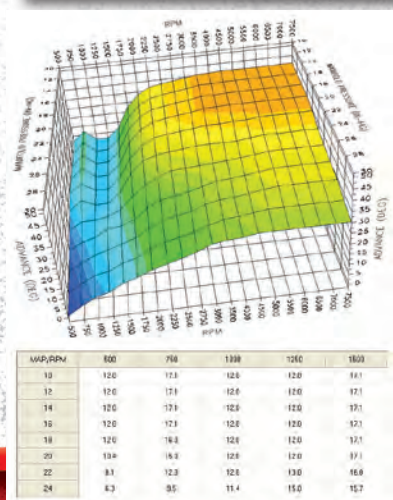
17500

High-end automotive racing systems use alpha-N (throttle position and RPM based) fuel control. Alpha-N eliminates any dependence on manifold pressure and is unaffected by long duration/high overlap camshafts. The TCFI brings this proven technology to the H-D® marketplace.

The TCFI has the same ignition control as our proven TC88/TC88A Twin Cam ignition systems with fully programmable advance curves. Idle air control including idle RPM and cold start characteristics are also fully programmable. This facilitates the use of throttle bodies modified for higher airflow.

Also available in 100 and 300kpa speed density systems. 300kpa SD is designed for use with boosted engine applications along with our 3bar map sensor.

The TCFI fully supports the J1850 data bus. The TCFI also has built-in data logging that stores data for the last 60 minutes of operation at 10 samples/second. A USB interface and Windows compatible software allow the use of a laptop PC for programming and data analysis. The USB interface plugs into the existing H-D® diagnostic connector on the motorcycle wiring harness.



**Part #**  
17400\*

### Description

TCFI Gen 4 Fuel Injection Kit (for 2001-2011 Twin-Cam using 36 pin Delphi® system with J1850 data bus. Includes TCFI Gen 4 plug-in fuel injection controller, USB interface for PC link, software, WEGO IIID dual channel wide-band exhaust gas oxygen sensor interface, two Bosch LSU 4.2 wide-band exhaust gas oxygen sensors, and two 18 x 1.5mm weld nuts for exhaust pipes). Not compatible with 2008 and later touring models or any 2011 and later models with CAN data bus

17401\*

TCFI Gen 4 Fuel Injection Kit (for 2007-2013 Sportster® using 36 pin Delphi® system with J1850 data bus. Includes TCFI Gen 4 plug-in fuel injection controller, USB interface for PC link, software, WEGO IIID dual channel wide-band exhaust gas oxygen sensor interface, two Bosch LSU 4.2 wide-band exhaust gas oxygen sensors, and two 18 x 1.5mm weld nuts for exhaust pipes)

17402\*

TCFI GEN 4 Fuel Injection Kit same as 17400 except it is a 300 KPA Speed-Density Version

17500\*

VRFI Gen 4 controller for VRSC engines. VRFI Gen 4 Fuel Injection Kit (for 2002-2015 V-Rod™. Same contents as TCFI Gen 4 kit listed)

18012

Bluetooth Interface (provides wireless connectivity for TCFI/VRFI series engine controls. Requires PC with Bluetooth capability. Windows 7/10 recommended. Required when using TwinView application on Android tablets.





# TCFI Gen 5 Auto-Tuning Fuel Injection Controllers



Fits CAN data bus models including 2012-2013 Dyna® and Softail® and all 2014 (except touring models). Auto-tuning using dual wide-band oxygen sensors. Ideal for highly modified engines. Powerful Windows software for engine mapping and data logging/diagnostics. Special versions available for turbo/supercharged applications.

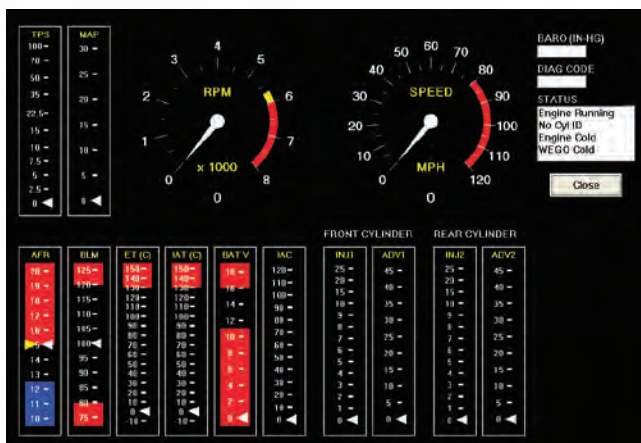
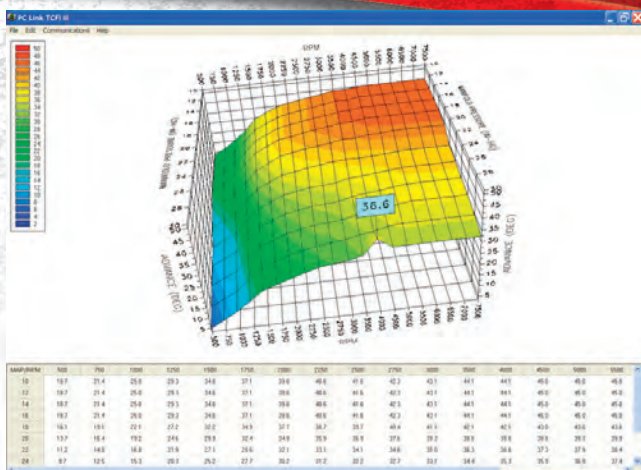
High-end automotive racing systems use alpha-N (throttle position and RPM based) fuel control. Alpha-N eliminates any dependence on manifold pressure and is unaffected by long duration/high overlap camshafts. The TCFI brings this proven technology to the H-D® marketplace.

The TCFI Gen 5 has the same fuel and ignition control as our proven TCFI Gen 4 for models with J1850 data bus. Idle air control including idle RPM and cold start characteristics are also fully programmable. This facilitates the use of throttle bodies modified for higher airflow.

The TCFI fully supports the CAN data bus used on 2012 and later models for communications between the engine control module (TCFI), instrument cluster, and body control module (BCM).

The TCFI also has built-in data logging that stores data for the last 60 minutes of operation at 10 samples/second. A USB interface and Windows compatible software allow the use of a laptop PC for programming and data analysis.





Instrument panel display showing all engine parameters. Facilitates initial tuning and diagnostics, especially on motorcycles without a tachometer. GPS speed display allows quick speedometer calibration. Requires Android tablet, such as the new low cost Google Nexus 7 shown above, and our Bluetooth interface. TwinView is third party Android application available on Google Play.

- Fully programmable plug-in replacement for the 36 pin controller with CAN data bus used on 2012 and later except touring models. Not compatible with 2011 Softail® that uses a different size controller.
- Quickly auto-tune fuel curves for front and rear cylinders on a dyno, or on-road with WEGO IIID dual channel wide-band oxygen sensor interface
- Robust alpha-N (throttle position and RPM based) fuel control eliminates problems with long duration/high overlap camshafts
- Extended data logging and diagnostics. DataFLASH memory stores full 60 minutes of operating data at 10 samples/second
- Powerful Windows software for custom programming and data analysis
- Programmable user input for functions such as two stage RPM limiter, nitrousM retard, and shift kill
- Programmable user output for functions such as shift light, nitrous activation, and electric shifter
- Billet aluminum housing with black anodized finish
- Easy plug-in installation

**Part #**  
17600\*

#### Description

TCFI Gen 5 Fuel Injection Kit (for 2012-2015 Dyna® and Softail® models with CAN data bus. Includes TCFI Gen 5 plug-in fuel injection controller, USB interface for PC link, software, WEGO IIID dual channel wide-band exhaust gas oxygen sensor interface, two Bosch LSU 4.2 wide-band exhaust gas oxygen sensors, and two 18 x 1.5mm weld nuts for exhaust pipes).

17601\*

TCFI Gen 5 Fuel Injection kit (for 2015 Sportster®. Includes same contents as P/N 17600 listed above)

18012

Bluetooth Interface (provides wireless connectivity for TCFI/VRFI series engine controls. Requires PC with Bluetooth capability. Windows 7/10 recommended. Required when using TwinView application on Android tablets).



# DAYTONA TWIN TEC



# TCFI Gen 6 Auto-Tuning Fuel Injection Controllers



Fits  
2008-2013  
touring models with  
electronic throttle control and  
J1850 data bus. Auto-tuning using dual wide-band oxygen  
sensors. Ideal for highly modified engines. Powerful Windows  
software for engine mapping and data logging/diagnostics.  
Special versions available for turbo/supercharged applications.

- Quickly auto-tune fuel curves for front and rear cylinders on a dyno, or on-road with WEGO IIID dual channel wide-band oxygen sensor interface
- Fully programmable plug-in replacement for 73 pin Delphi® controller with J1850 data bus used on 2008-2013 touring models with electronic throttle control.
- Robust alpha-N (throttle position and RPM based) fuel control eliminates problems with long duration/high overlap camshafts
- Powerful Windows software for custom programming and data analysis
- Full support for J1850 data bus used for communications with turn signal/security module (TSM/TSSM) and instrument module
- Support for gear indication on accessory speedometers
- Extended data logging and diagnostics. DataFLASH memory stores full 60 minutes of operating data at 10 samples/second.
  - Programmable user input and output
    - Billet aluminum housing with black anodized finish
    - Easy plug-in installation
    - Supports all sensors including theft/security module

## Major TCFI Advantages over Competitive Systems

- Real-time and continuous auto-tuning with monitoring, control and override capability. No other commercially available system offers all these capabilities. For a more in-depth explanation of what this means and why it's so important, please visit the TCFI Tech FAQ on our website.
- User friendly PC Link software with 3-D graphics and easy spreadsheet editing capabilities. For example, changing a block of cells in our advance table takes only a few mouse clicks. But don't take our word for it, check it out yourself. Download and play around with our PC Link TCFI software. Then try the same editing in any competitive software and draw your own conclusions.
- Built-in data logging. Competitive systems lack built-in data logging. Without this, it is almost impossible to diagnose real-world problems. Download our TCFI Log software and look at the sample data logging file.

**Part #**  
17700\*

### Description

TCFI Gen 6 Fuel Injection Kit (for 2008-2013 touring models with J1850 data bus. Includes TCFI Gen 6 plug-in fuel injection controller, USB interface for PC link, software, WEGO IIID dual channel wide-band exhaust gas oxygen sensor interface, two Bosch LSU 4.2 wide-band exhaust gas oxygen sensors, and two 18 x 1.5mm weld nuts for exhaust pipes).

18012

Bluetooth Interface (provides wireless connectivity for TCFI/VRFI series engine controls. Requires laptop PC with Bluetooth capability. Windows 7/8 recommended. Required when using TwinView application on Android tablets).



# TCFI Gen 7 Auto-Tuning Fuel Injection Controllers



17800

## Major TCFI Advantages over Competitive Systems

Fits 2014-15 touring models with electronic throttle control and CAN data bus. Auto-tuning using dual wide-band oxygen sensors. Ideal for highly modified engines. Powerful Windows software for engine mapping and data logging/diagnostics. Special versions available for turbo/supercharged applications.

- Quickly auto-tune fuel curves for front and rear cylinders on a dyno, or on-road with WEGO IIID dual channel wide-band oxygen sensor interface
- Fully programmable plug-in replacement for 54 pin Delphi® controller with CAN data bus used on 2014-15 touring models with electronic throttle control.
- Robust alpha-N (throttle position and RPM based) fuel control eliminates problems with long duration/high overlap camshafts
- Powerful Windows software for custom programming and data analysis
- Full support for CAN data bus used for communications with turn signal/security module (TSM/TSSM) and instrument module
- Support for gear indication on accessory speedometers
- Extended data logging and diagnostics. DataFLASH memory stores full 60 minutes of operating data at 10 samples/second.
- Programmable user input and output
- Billet aluminum housing with black anodized finish
- Easy plug-in installation
- Supports all sensors including theft/security module

- Real-time and continuous auto-tuning with monitoring, control and override capability. No other commercially available system offers all these capabilities. For a more in-depth explanation of what this means and why it's so important, please visit the TCFI Tech FAQ on our website.
- User friendly PC Link software with 3-D graphics and easy spreadsheet editing capabilities. For example, changing a block of cells in our advance table takes only a few mouse clicks. But don't take our word for it, check it out yourself. Download and play around with our PC Link TCFI software. Then try the same editing in any competitive software and draw your own conclusions.
- Built-in data logging. Competitive systems lack built-in data logging. Without this, it is almost impossible to diagnose real-world problems. Download our TCFI Log software and look at the sample data logging file.

Part #	Description
17800*	TCFI Gen 7 Fuel Injection Kit (for 2014-15 touring models with CAN data bus. Includes TCFI Gen 7 plug-in fuel injection controller, USB interface for PC link, software, WEGO IIID dual channel wide-band exhaust gas oxygen sensor interface, two Bosch LSU 4.2 wide-band exhaust gas oxygen sensors, and two 18 x 1.5mm weld nuts for exhaust pipes).
18012	Bluetooth Interface (provides wireless connectivity for TCFI/VRFI series engine controls. Requires laptop PC with Bluetooth capability. Windows 7/8 recommended. Required when using TwinView application on Android tablets).



# DAYTONA TWIN TEC



# Twin Scan II ABS



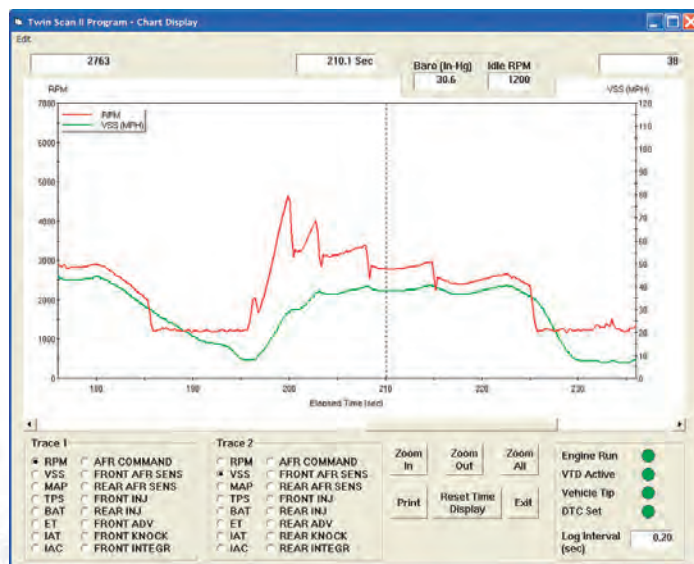
15202

Twin Scan II ABS is compatible with 2001-2014-15 H-D® fuel injected models using Delphi® system (including V-Rod™) with J1850 data bus and 2004-2006 carbureted models with 12 pin ignition module. Includes ABS diagnostics and brake bleeding capability. Available as scan tool only for diagnostic use or as complete kit that includes a WEGO IIID dual channel wide-band oxygen sensor system for logging front and rear cylinder air/fuel ratio (AFR) data along with engine data. Twin Scan software analyzes logged data and displays AFR and the required fuel correction with the same RPM rows and throttle position sensor (TPS) or manifold pressure (MAP) columns used by Screamin Eagle® Pro Super Tuner, Screamin Eagle® Race Tuner (SERT), Dynojet® Power Commander®, and Daytona Twin Tec Twin Tuner.

- Compatible with 2001-2015 H-D® fuel injected models using Delphi® system (including V-Rod™) with J1850 data bus and 2004-2006 carbureted models with new 12 pin ignition module. Note: Not compatible with 2011 and later models with CAN data bus. Also works with power vision.
- Anti-skid brake system (ABS) brake bleeding functions for 2008-2013 touring models. For more information, refer to the Twin Scan II Tech FAQ
- Support for new 2006 and later closed loop fuel injection systems. Displays throttle position and twist grip sensor data on 2008-2013 touring models with electronic throttle control
- Uses laptop PC for display. Includes Windows software. Reads and clears diagnostic trouble codes from engine control module (ECM), turn signal/security module (TSM/TSSM), speedometer, tach, and anti-skid braking system (ABS) Real time display of engine data on instrument panel type display
- Built-in data logging. Stores up to 45 minutes of data. Automatically triggers when a trouble code is set. Shows data before and after code is set
- Includes two analog inputs for air/fuel ratio (AFR).

The new Twin Scan II ABS provides diagnostic capabilities not found in any other available tools. The Twin Scan II ABS is especially useful for diagnosing hard to find intermittent trouble codes. The motorcycle can be operated while the unit is installed. Under normal conditions (no trouble code), the unit will store data for the last hour of operation. If a trouble code is set, the unit automatically stops logging data 30 minutes after the code is set. This allows you to examine data before and after the code was set, even days later. You have a range of capabilities for analyzing and printing out logged data that is displayed in a chart recorder format.

The Twin Scan II ABS interfaces to a laptop PC. Minimum PC requirement is a 300 MHz Pentium running Windows XP/Vista/7/8/10 with SVGA display (1024 x 768 pixels) and available USB port.



**Part #**  
15202

## Description

Twin Scan II ABS Scan Tool (for 2001-2015 fuel injected models using Delphi® system with J1850 data bus and 2004-2006 carbureted models with 12 pin ignition module. Includes USB cable and software on CDROM)



# Twin Scan 3 ABS

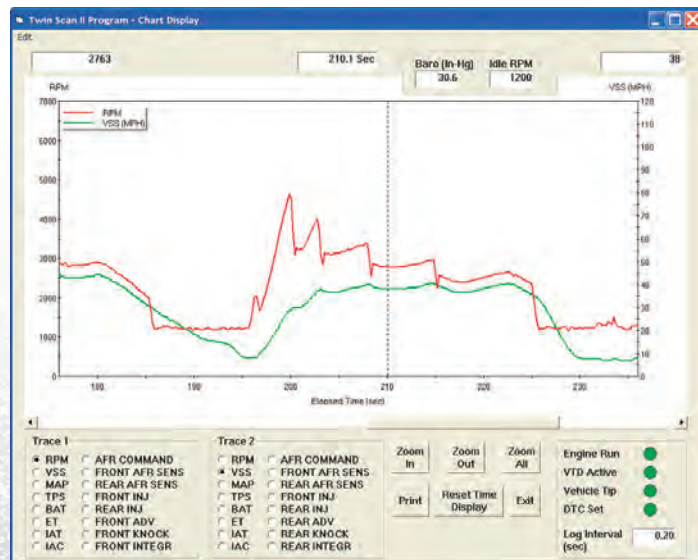


Twin Scan 3 ABS is compatible with new 2011-2015 Softail®, 2012-2015 Dyna®, and 2015 Sportster® and touring models with CAN data bus. Includes ABS diagnostics and brake bleeding capability. Available as scan tool only for diagnostic use or as complete kit that includes a WEGO IIID dual channel wide-band oxygen sensor system for logging front and rear cylinder air/fuel ratio (AFR) data along with engine data. Twin Scan software analyzes logged data and displays AFR and the required fuel correction with the same RPM rows and throttle position sensor (TPS) or manifold pressure (MAP) columns used by Screamin Eagle® Pro Super Tuner, Screamin Eagle® Race Tuner (SERT), Dynojet® Power Commander®, and Daytona Twin Tec Twin Tuner. The Twin Scan 3 ABS includes a scopemeter feature that allows display of two signal waveforms and is very useful for diagnostic purposes, such as looking at coil and injector drive signals to determine why a cylinder isn't firing. In scopemeter mode, the Twin Scan 3 ABS can be used on earlier models and other makes of motorcycles.

- Compatible with new 2011-2015 Softail®, 2012-2015 Dyna®, and 2015 Sportster® and touring models with CAN data bus.
- Anti-skid brake system (ABS) brake bleeding functions. For more information, refer to the Twin Scan 3 Tech FAQ
- Uses laptop PC for display. Includes Windows software Reads and clears diagnostic trouble codes from engine control module (ECM), BCM (body control module), speedometer, tach, and anti-skid braking system (ABS)
- Real time display of engine data on instrument panel type display
- Built-in data logging. Stores up to one hour of data Automatically triggers when a trouble code is set. Shows data before and after code is set
- Includes two analog inputs with 0-20V or  $\pm 200V$  range. Twin Scan 3 features two channel scopemeter capability for waveform display. The analog inputs can also be used for air/fuel ratio (AFR).

The new Twin Scan 3 provides diagnostic capabilities not found in any other available tools. The Twin Scan 3 is especially useful for diagnosing hard to find intermittent trouble codes. The motorcycle can be operated while the unit is installed. Under normal conditions (no trouble code), the unit will store data for the last hour of operation. If a trouble code is set, the unit automatically stops logging data 30 minutes after the code is set. This allows you to examine data before and after the code was set, even days later. You have a range of capabilities for analyzing and printing out logged data that is displayed in a chart recorder format.

The unit includes a scopemeter feature that allows display of two signal waveforms and is very useful for diagnostic purposes, such as looking at coil and injector drive signals to determine why a cylinder isn't firing. In scopemeter mode, the Twin Scan 3 can be used on earlier models and other makes of motorcycles. Refer to the Tech FAQ on our website for details including diagnostic tips. The Twin Scan 3 interfaces to a laptop PC. Minimum PC requirement is a 300 MHz Pentium running Windows XP/Vista/7/8/10 with SVGA display (1024 x 768 pixels) and available USB port.



Part #	Description
15300	Twin Scan 3 ABS Scan Tool (for 2011- 2015 models with CAN data bus. Includes USB cable and software on CDRom)
15302	Twin Scan 3 Probe Kit (for scopemeter feature. Two insulation piercing probes and 12 volt power adapter)



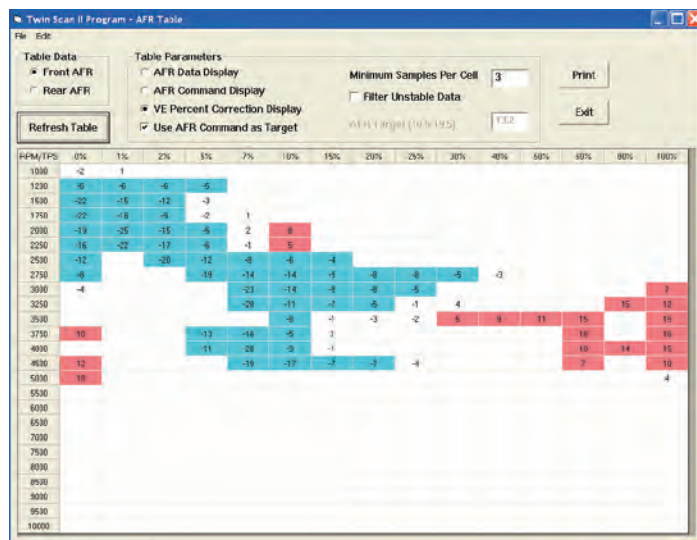
# DAYTONA TWIN TEC



# Twin Scan II ABS and Twin Scan III ABS Tuning Kits



- Ideal tuning aid for Screamin Eagle® Pro Super Tuner (SEST), Dynojet® Power Commander® (PC), and Twin Tec Twin Tuner. Twin Scan software analyzes logged data and displays front and rear cylinder air/fuel ratio (AFR) and the required volumetric efficiency (VE) correction (in percent) using the same RPM rows and throttle position sensor (TPS) or manifold pressure (MAP) columns used in the Super Tuner, PC and Twin Tuner tables
  - Includes all features of the standard Twin Scan units
  - Sold as a complete kit including the WEGO IIID dual channel wide-band exhaust gas oxygen sensor interface for logging AFR data along with engine data
  - When the WEGO IIID is connected, the Twin Scan will log engine data along with the actual air/fuel ratio (AFR). Logged AFR data will be displayed in same table format used by the Super Tuner, PC, and Twin Tuner for Twin-Cam or V-Rod™ applications with Delphi® system
- You can also display and print out the required volumetric efficiency (VE) correction (in percent) based on the AFR command. You can add data from an unlimited number of files that you previously saved. The data will be analyzed and incorporated into the table. Cells that vary more than  $\pm 0.5$  AFR from the target value are shaded blue for rich or red for lean. You can easily make the required corrections in the Super Tuner, PC, or Twin Tuner program by directly copying and pasting correction tables using provided Excel spread-sheets (refer to website for details).



An upgrade kit is available for customers who already own a Twin Scan II or Twin Scan 3.

**Part #**  
15400

## Description

Twin Scan Complete Kit (includes both Twin Scan II ABS and Twin Scan 3 ABS units, WEGO IIID Interface, two Bosch LSU 4.2 wide-band oxygen sensors, two 18 x 1.5 mm weld nuts, two 18 x 1.5 mm hex socket plugs, USB cable, probe kit, and software on CDROM)

*Dynojet® and Power Commander® are registered trademarks of Dynojet Research Inc.*



# Daytona Twin Tec Software



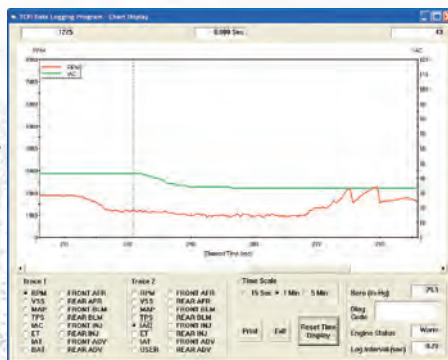
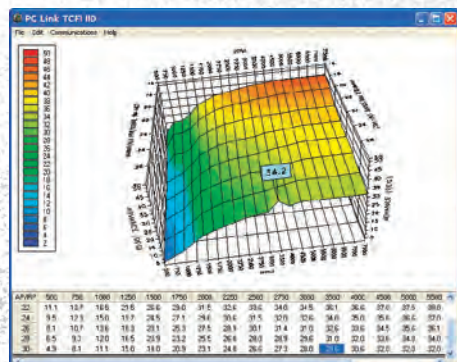
Part #	Description
18014	USB Interface (provides USB connectivity for all Twin Tec engine controls. Includes 6 foot USB cable and Windows software on CDROM)
1005-ADAPT	Model 1005 Power Adapter (12 volt power supply for bench top programming. 110-240 VAC multi-plug international compatibility)
18005	TC88 Power Adapter (12 volt power supply for bench top programming. 110-240 VAC multi-plug international compatibility)
18006	TC88A Power Adapter (12 volt power supply for bench top programming. 110-240 VAC multi-plug international compatibility)
18007	TCFI/VRFI Series Power Adapter (12 volt power supply for bench top programming. 110-240 VAC multi-plug international compatibility)
18009	Twin Tuner Power Adapter (12 volt power supply for bench top programming. 110-240 VAC multi-plug international compatibility. Not compatible with Twin Tuner II)
18015	TCFI 5 and 7 Power Adapter (12 volt power supply for bench top programming. 110-240 VAC multi-plug international compatibility)
18016	TCFI 6 Power Adapter (12 volt power supply for bench top programming. 110-240 VAC multi-plug international compatibility)

PC Link software, in combination with the optional USB interface allows the user to program Daytona Twin Tec engine control modules with custom ignition advance curves, fuel curves (TCFI and Twin Tuner only), and other engine parameters. Each product family has a specific PC Link program.

TC88A and TCFI systems include extensive data logging capability. During dyno testing, you can display real time engine data on an instrument panel type screen. These units also store data for the last 15-60 minutes of operation. You can download and display this data on a chart recorder type screen. Data is available for all sensor inputs and output functions. This data logging capability greatly facilitates fine tuning and diagnosis of driveability issues.

Operating Statistics software allows engine manufacturers and tuners to download operating data including total hours and elapsed time in various RPM and engine temperature bands (Model 1005 only). Our customers have found this data very useful in administering warranty programs and reducing claim disputes.

We periodically post software updates incorporating new features on our website. You can always download the latest version for free.



Operating Statistics

File Edit Help

Ignition Module Data

Total Hours 20.35 Total Hours at WOT 1.54 Maximum Engine RPM 5750

ID Twin Tec Model 1005 Program Rev 7.8 CFS 2005 Seconds at RPM Limit 5.31

User Data Sample User Data Engine Starts 57

RPM Band	Idle	1000-1499	1500-1999	2000-2499	2500-2999	3000-3499	3500-3999
Hours	5.21	3.54	5.81	5.27	1.36	0.43	0.34

RPM Band	4000-4499	4500-4999	5000-5499	5500-5999	6000-6499	6500-6999
Hours	0.21	0.10	0.07	0.03	0.00	0.00

Temp Band	<105 C	105-114 C	115-124 C	125-134 C	135-144 C	145-154 C
Hours	6.70	2.66	7.15	3.61	0.00	0.00

Status

Read Statistics Print Statistics

Break in RPM Limit Enabled Port COM1

Histogram Clear Data

Engine Rebuild

Write User Data

13



# DAYTONA TWIN TEC



# WEGO III Wide-Band Air/Fuel Ratio (AFR) Tuning Aids



112001

WEGO units are available as complete air/fuel ratio display system with built-in data logging or basic interface (without display and data logging). All units share the following features:

- Use Bosch LSU4.2 5-wire wide-band oxygen sensor.
- Versatile tuning aid for all carbureted and fuel injected engines.
- Can be used for on-road or dyno testing.
- Suitable for automotive, motorcycle, and other small engine applications.
- Measurement range is 10.3 to 19.5 gasoline AFR or 0.70 to 1.33 Lambda.
- Highly accurate with less than  $\pm 0.10$  AFR or  $\pm 0.007$  Lambda error over entire range.
- Easy free-air calibration procedure corrects for sensor aging effects.
- 0-5V analog AFR output(s) for interface to dyno instrumentation. All WEGO units can easily be interfaced to Dynojet®, Superflow®, and other leading dyno systems. Refer to our website for details.
- Fully encapsulated and water-proof.
- Wide supply voltage range from 11-16V allows operation from battery on small engines or race vehicles without an alternator. Current draw is approximately 1 amp per channel.
- Compact size: 4"L x 2"W x 0.5"H (WEGO III Dual Display is 5.6"L x 3.2"W x 0.9"H).

WEGO units with LED display offer the following additional features:

- Display air/fuel ratio (AFR) and log over 2 hours data including AFR, engine RPM, and a spare 0-5V analog input for sensors such as throttle position or manifold pressure.
- Ultra-bright daylight readable blue LED display with automatic dimming under low light conditions.
- Built-in USB interface.
- Data analysis. WEGO Log software allows you to analyze the data logged by the WEGO unit, not just print out a chart display.

Part #  
112001

## Description

Single Channel WEGO III System with display (includes standard length harness for motorcycle applications, Bosch LSU 4.2 oxygen sensor, 18 x 1.5 mm weld nut for exhaust pipe, and software on CDROM)

112005

Dual Channel WEGO III System with display (includes standard length harness for motorcycle applications, two Bosch LSU 4.2 oxygen sensors, 18 x 1.5 mm weld nut for exhaust pipe, and software on CDROM)

115005

WEGO Tach Adapter (required when using WEGO III on motorcycles with CD type ignition)

111006

Single Channel WEGO IIIS Wide-band Exhaust Gas Oxygen Sensor Interface Kit (with 0-5V analog AFR output. Includes Bosch LSU 4.2 oxygen sensor and 18 x 1.5mm weld nut)

111004

Dual Channel WEGO IIID Wide-band Exhaust Gas Oxygen Sensor Interface Kit (with 0-5V analog AFR outputs. Includes two Bosch LSU 4.2 oxygen sensors and two 18 x 1.5mm weld nuts)

111005

Dual Channel WEGO IIID Kit for Superflow Dyno (with 0-5V analog AFR outputs with connectors for dyno. Includes 120-240VAC power supply, two Bosch LSU 4.2 oxygen sensors, and two 18 x 1.5mm weld nuts)



112005

111006

111004



# Software for WEGO Systems with Data Logging

WEGO units with data logging have a built-in USB interface for easy connection to newer laptop PCs. Data logging greatly facilitates engine tuning and diagnosis of driveability issues. Regardless of LED display calibration (gasoline, methanol, or Lambda) on the WEGO unit, the software has a fuel type command that allows selection and proper program display for gasoline, methanol, ethanol, or a user defined fuel type.

You can use our WEGO Log software to download and display logged data on a chart recorder type screen. WEGO units automatically start logging data once the sensors have warmed up and can store data for over 2 hours of operation. Available data includes one or two channels of air/fuel ratio (AFR), RPM, and a 0-5V analog input. The RPM input can be connected to a tachometer signal or driven from an ignition coil for 1-12 cylinder engines. The analog input can be connected to sensors such as throttle position or manifold pressure and data can be scaled to display the correct units.

WEGO Log software runs under Microsoft Windows XP/ Vista/7/8. Minimum PC requirement is a 300 MHz Pentium with super VGA display (SVGA with 1024 x 768 pixel resolution). The PC must have a free USB port.

When used on a fuel injected vehicle with a throttle position sensor (TPS), WEGO data can be analyzed to display an AFR table or percent fuel correction table with the same RPM rows and TPS columns used by many industry standard engine

mapping systems. You can add data from an unlimited number of files that you previously saved. The data will be analyzed and incorporated into the table. Cells that vary more than  $\pm 0.5$  AFR from the command value are shaded blue for rich or red for lean.

You can use two approaches to make the required corrections in the your engine mapping software. If you have Microsoft Office with Excel, you can directly copy and paste data from the WEGO software to an Excel spreadsheet and then copy and paste from the Excel spreadsheet into the engine mapping software. In the WEGO software, you can select a range of cells with the mouse and right click to bring up a copy menu. You can also left click on the upper left legend cell to select the entire table and then right click to bring up the copy menu. For more details on using Excel, including sample spreadsheets, please visit the WEGO Tech FAQ. Alternately, you can manually enter the required corrections in your engine mapping software by referring to the printed fuel percent correction table and marking off cells as you edit them.



**WEGO  
Log -  
Chart  
Display**

**WEGO Log -  
AFR Table  
with AFR  
Values**

**WEGO Log - AFR Table  
with Fuel Correction Values**





# WEGO

## Accessories and Replacement Parts



All WEGO systems use the Bosch LSU 4.2 wide-band exhaust gas oxygen sensor. Accessories and replacement parts listed below are suitable for use with all our WEGO systems.

Part #	Description
115001	Wide-band Exhaust Gas Oxygen Sensor (replacement Bosch LSU 4.2 sensor with Deutsch connector for WEGO series)
115003	18 x 1.5 mm Weld Nut (for mounting wideband sensor on exhaust pipe)
115002	18 x 1.5 mm Hex Socket Plug (mates with 18 x 1.5 mm weld nut. Allows removing oxygen sensor)
115007	18 x 1.5 mm Stainless Steel Weld Nut (for mounting wide-band sensor on exhaust pipe)
115008	18 x 1.5 mm Stainless Steel Hex Socket Plug (mates with 18 x 1.5 mm weld nut. Allows removing oxygen sensor)
115004	12 Foot Extension Cable (for WEGO Series. Extends distance to Bosch LSU 4.2 sensor for dyno room installations)
115009	18 Foot Extension Cable (for WEGO Series. Extends distance to Bosch LSU 4.2 sensor for dyno room installations)
115010	12 x 1.25 mm Hex Socket Plug (allows removing oxygen sensor)

## Additional Products Available from Daytona Sensors

WEGO IV Series Single and dual channel WEGO IV units have the same features and capabilities as the WEGO III Series except that the WEGO IV units are intended for use in dyno lab environments.



113003



114001

### Nitrous Controllers

NC-1 requires external relays and is limited to on/off control. NC-2 can drive two stages with progressive control.



116001



116002

### Programmable Shift Light

Features ultra high brightness red/green/blue LED display with launch, multi-stage shift and alarm functions.



117001



# High Performance Fuel Injectors for H-D® Applications

- 10 Different Flow Rates with Part Numbers for 2001 and Later Models
- Made in the USA Using the Latest Injector Technology
- Sold in Flow Matched Sets (Two Injectors)
- Detailed Test Report Included with Each Set

## Injectors for 2001-2005 Models

Part #	Flow Rating (gm/sec at 58 psi)	Max HP for E10 at 60% Duty Cycle	Max HP for E85 at 80% Duty Cycle	Spray Angle (degrees)
19045	4.5	95		25
19054	5.4	115		25
19062	6.2	130	95	25
19071	7.1	150	110	25
19078	7.8	165	120	25
19085	8.5	180	130	25
19092	9.2	195	140	18
19099	9.9	210	155	18
19106	10.6	225	165	18



## Injectors for 2006 and Later Throttle Cable Models (Except V-Rod™ and Sportster®)

Part #	Flow Rating (gm/sec at 58 psi)	Max HP for E10 at 60% Duty Cycle	Max HP for E85 at 80% Duty Cycle	Spray Angle (degrees)
20039*	3.9	85		25
20054	5.4	115		25
20062	6.2	130	95	25
20071	7.1	150	110	25
20078	7.8	165	120	25
20085	8.5	180	130	25
20092	9.2	195	140	18
20099	9.9	210	155	18
20106	10.6	225	165	18

\*Replacement for OE 27709-06A)



## Injectors for 2008 and Later Electronic Throttle Control Models

Part #	Flow Rating (gm/sec at 58 psi)	Max HP for E10 at 60% Duty Cycle	Max HP for E85 at 80% Duty Cycle	Spray Angle (degrees)
21054	5.4	115		18
21062	6.2	130	95	18
21071	7.1	150	110	18
21078	7.8	165	120	18
21085	8.5	180	130	18
21092	9.2	195	140	18
21099	9.9	210	155	18
21106	10.6	225	165	18



Except P/N 20039, not legal for sale or use in California or on any pollution controlled vehicles.

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# DAYTONA TWIN TEC



# VT-i V-Twin Electronic Ignition System



118001

- Ultra reliable dual fire electronic ignition system for 1970-1999 Harley-Davidson® V-Twin engines. Requires customer supplied mechanical advance mechanism. Will not fit early magneto, Twin-Cam, or 1999-03 Sportster® applications.
- Includes special trigger rotor for use with traditional mechanical advance mechanism.
- Precise digitally set RPM limiter (200 RPM steps from 5,200 to 7,000 RPM).
- Status LED for easy static timing.
- Electronic dwell control for maximum ignition energy at high RPM and reduced current draw at low RPM.
- Compatible with most original equipment and aftermarket dual fire ignition coils (3-5 ohms primary resistance).

- Easy installation. Simple two wire hookup to coil.
- Hall effect sensor detects teeth on special trigger rotor and provides very stable spark timing.
- Operates down to below 6 volts for reliable starting under all conditions, including kick start.
- Fully encapsulated construction using surface mount electronics. Waterproof and highly resistant to vibration and shock.
- Over-temperature protection. Rated to operate at 125° C (260° F).

Part #	Description
1010*	VT-i Electronic Ignition System for Harley-Davidson® V-Twin Engines.

*\*Not legal for sale or use in California or on any pollution controlled vehicles*

## 3005-IH Special Kit for 1999-2003 American IronHorse® Motorcycles

The Model 1005-IH version of our proven internal ignition that can be easily retrofit to 2003 and earlier American IronHorse® models. The Model 1005-IH has a special tach output that will correctly drive the American IronHorse® instrument cluster. Note: for 2004-2007 American IronHorse® models with crankshaft position sensor, we recommend

our TC88A-IH system. Please refer to the Model 1005-IH Installation Instructions on our website for details.

Part #	Description
3005-IH*	Internal Ignition Kit for 1999-2003 American IronHorse® Motorcycles (includes the special Model 1005-IH ignition, timing rotor, VOES switch, two 3 ohm mini-coils that must be used to replace the existing low resistance Gill coils, and all required electrical terminals)



# Model 1005 Internal (Nose Cone) Ultra Performance Billet Ignition

## 1970-1999 Big Twin® and 1971-2003 Sportster®

The Model 1005 internal ignition unit is triggered from the stock timing rotor at the end of the camshaft and mounted within the "nose cone" of the engine. The Model 1005 ignition replaces all the H-D® OE ignition components including the bulky wiring harness and external module. The resulting clean appearance is especially desirable on custom motorcycles. Model 1005S directly plugs into the OE wiring harness.

- Wide timing advance adjustment range accommodates stock to highly modified engines
- Digitally set RPM limit (100 RPM steps)
  - Selectable single or dual fire mode
  - Selectable kick start mode
  - Selectable multi-spark mode for quick starting and smooth cruise
- Coil outputs protected against short circuits
- Optional USB Interface and software for programming custom advance curve
- Billet aluminum housing

1005S EX

Part #	Description
1005*	Model 1005 Internal Ignition (for 1970-99 Big-Twin® and 1971-97 Sportster®)
1005-EX	Model 1005 EX Internal Ignition (ARB E.O. No. D-641-1 for 1984-99 Evolution®, 1986-93 883 XLH Sportster®, and 1986-87 1100 XLH Sportster®. Also fits 1970-84 Shovelhead®)
1005S-EX	Model 1005S EX Internal Ignition (ARB E.O. D-641-3 for 1998-2003 Sportster® except 1200S)
1005-T*	Model 1005-T* Model 1005T Internal Ignition (for 1970-99 Big-Twin® and 1971-97 Sportster®. Special version with stage RPM limiter for drag racing. Requires USB-INTF for programming.)
2005	High Output Single Fire Coil (3 ohm primary compatible with all Twin Tec and most aftermarket single fire ignitions. ARB E.O. No. D-641-2)
3003	Universal Spark Plug Wire Set (8.2 mm black silicone with 40 ohm/ft spiral core. For all applications except Twin-Cam. Includes both 90° and 115° spark plug boots and assorted coil boots and terminals)
3005-EX	Model 1005 EX Internal Ignition Kit (includes Model 1005 EX ignition, P/N 2005 coil, and P/N 3003 wire set. ARB E.O. No. D-641-1 & D-641-2)
3005S-EX	Model 1005S EX Internal Ignition Kit (includes Model 1005S EX ignition, P/N 2005 coil, and P/N 3003 wire set. With ARB E.O. No. D-641-2 & D-641-3 for 1998-2003 Sportster® except 1200S)

Part #	Description
18014	USB Interface (provides USB connectivity for all Twin Tec engine controls. Includes 6 foot USB cable and Windows XP-8 drivers on CDROM)
18004	Timing Rotor (replacement for stock P/N 32402-83. Includes mounting screw and washer)
18010	VOES Kit (vacuum switch with higher switching level of 6-7 In-Hg vacuum helps eliminate spark knock under light load and throttle roll-on. Includes mounting bracket and electrical terminals. ARB E.O. No. D-641-3)
1030*	Ignition Power Relay Kit (recommended when converting high compression and large displacement engines to single fire)

3005S EX

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# DAYTONA TWIN TEC



# External (Plug-In) Ultra Performance Billet Ignition

- Wide timing advance adjustment range accommodates stock to highly modified engines
- Digitally set RPM limit (100 RPM steps)
- Selectable single or dual fire mode
- Selectable multi-spark mode for quick starting and smooth cruise
- Coil outputs protected against short circuits
- Optional USB Interface and software for programming custom advance curve
- Billet aluminum housing with black anodized finish
- Easy plug-in installation

## 1990 and Later Evolution® Big-Twin® and 1990-1993 Sportster®

Two part numbers are available with different mating connectors. Model 1006 has a 7 pin connector and is intended for 1990-1994 models. Model 1007 has an 8 pin connector and is intended for 1995-98 models. The external module offers easy plug-in installation and is ideal as a do-it-yourself item. Models 1006 and 1007 are for electric start applications only. The units are constructed with low profile machined billet aluminum housings. All other features are the same as the Model 1005 internal ignition. Four rotary switches are used to set the operating modes (such as single or dual fire), adjust the timing advance, and select the RPM limit. Two diagnostic LEDs indicate status and the state of the vacuum switch (VOES). The status LED is also used for static timing, as it will flash when the engine reaches top dead center (TDC).

You can adjust the slope of the advance curve. The user can optimize the timing advance for a wide range of applications - from stock to highly modified engines. Switch selectable single or dual fire mode lets you easily upgrade to single fire by adding an appropriate coil.



Part #	Description
1006-EX	Model 1006 EX External ignition (for 1990-94 Evolution® Big-Twin® and 1990-93 883 XLH Sportster® with 7 pin Cannon plug. ARB E.O. No. D-641-1)
1007-EX	Model 1007 EX External Ignition (for 1995-98 Evolution® Big-Twin® with 8 pin Deutsch plug. ARB E.O. No. D-641-1)
2005	High Output Single Fire Coil (3 ohm primary compatible with all Twin Tec and most aftermarket single fire ignitions. ARB E.O. No. D-641-2)
3003	Universal Spark Plug Wire Set (8.2 mm black silicone with 40 ohm/ft spiral core. For all applications except Twin-Cam. Includes both 90° and 115° spark plug boots and assorted coil boots and terminals)
3006-EX	Model 1006 EX External Ignition Kit (includes Model 1006 EX ignition, P/N 2005 coil, and P/N 3003 universal wire set. ARB E.O. No. D-641-1 & D-641-2)
3007-EX	Model 1007 EX External Ignition Kit (includes Model 1007 EX ignition, P/N 2005 coil, and P/N 3003 wire set. ARB E.O. No. D-641-1 & D-641-2)
18014	USB Interface (provides USB connectivity for all Twin Tec engine controls. Includes 6 foot USB cable and Windows XP-8 drivers on CDROM)
18010	VOES Kit (vacuum switch with higher switching level of 6-7 In-Hg vacuum helps eliminate spark knock under light load and throttle roll-on. Includes mounting bracket and electrical terminals. ARB E.O. No. D-641-3)
1030*	Ignition Power Relay Kit (recommended when converting high compression and large displacement engines to single fire)

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# TC88

## Ultra Performance Billet Ignition Module



1008

- Wide timing advance adjustment range accommodates stock to highly modified engines
- Digitally set RPM limit (100 RPM steps)
- Selectable multi-spark mode for quick starting and smooth cruise
- Coil outputs protected against short circuits
- Optional USB Interface and software for programming custom advance curve
- Billet aluminum housing with black anodized finish
- Easy plug-in installation
- Supports all sensors including theft/security module

### 1999-2003 Carbureted Big-Twin 88® Engines

A single part number provides coverage for all 1999-2003 carbureted Twin Cam 88® engines. The TC88 is constructed with a low profile machined billet aluminum housing.

The TC88 offers easy plug-in installation and all the switches are accessible from the top - a significant advantage for most installations. Five rotary switches are used to set the operating modes, adjust the initial timing and timing advance, and select the RPM limit. Since the new Twin Cam 88® engine uses a non-adjustable crankshaft position sensor, mechanical timing adjustments are no longer possible. The TC88 solves this problem with a switch for setting the initial timing. A second switch sets the slope of the advance curve. The combination of these two switches allows the user to optimize the timing advance for a wide range of applications - from stock to highly modified engines. For details, including advance curves, you can download the installation instructions from our website. H-D® motorcycles with the Twin Cam 88® engine have a check engine warning LED on the instrument cluster. The TC88 communicates basic diagnostic information by blinking codes on the check engine LED. This eliminates the need for an expensive scan tool. Typical diagnostic codes include failed sensors or low/high battery voltage.

3002



Part #	Description
1008*	TC88 Plug-in Ignition (for 1999-2003 carbureted Twin-Cam 88®)
1008-EX	TC88 EX Plug-in Ignition (for 1999-2003 carbureted Twin-Cam 88®. ARB E.O. No. D-641-1)
1008-T*	TC88T Plug-in Ignition (for 1999-2003 carbureted Twin-Cam 88®. Special version with stage RPM limiter for drag racing. Note: requires USB-INTF for programming)
2008	High Output Twin-Cam Coil (0.5 ohm primary resistance for most 1999 and later carbureted Twin-Cam 88®. Replaces stock P/N 31655-99. Will not fit in place of P/N 31639-99)
3002	Twin-Cam Universal Spark Plug Wire Set (8.0 mm black silicone with 350 ohm/ft spiral core. For Twin-Cam applications with 90° spark plug boots and straight coil boots)
3008*	TC88 Ignition Kit (for 1999-2003 carbureted Twin-Cam 88®. Includes TC88 ignition, P/N 2008 coil, and P/N 3002 universal wire set)
3008-EX	TC88 EX Ignition Kit (for 1999-2003 carbureted Twin-Cam 88®. Includes TC88 EX ignition, P/N 2008 coil, and P/N 3002 universal wire set. ARB E.O. No. D-641-1)
18014	USB Interface (provides USB connectivity for all Twin Tec engine controls. Includes 6 foot USB cable and Windows software drivers on CDROM)

3008



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# DAYTONA TWIN TEC



# TC88A Ultra Performance Billet Ignition Module



1009

## 2004-2006 Carbureted Twin-Cam 88® and Sportster® Models with Single 12 Pin Connector

A single TC88A part number

provides coverage for all 2004 and later H-D® carbureted models using the new 12 pin ignition module. Four rotary switches are used to set the advance characteristics and RPM limit. Since the new engines use a non-adjustable crankshaft position sensor, mechanical timing adjustments are no longer possible. The TC88A solves this problem with a switch for setting the initial timing. A second switch sets the slope of the advance curve. The combination of these two switches allows the user to optimize the timing advance for a wide range of applications - from stock to high modified engines.

- Wide timing advance adjustment range accommodates stock to highly modified engines
- Digitally set RPM limit (100 RPM steps)
- Full support for J1850 data bus used for communications with instrument cluster and turn signal/security module (TSM/TSSM)
- Built-in data logging. Stores last 30 minutes of engine operation

- Extensive diagnostics.
- Optional USB Interface and software for programming custom advance curve
- Billet aluminum housing with black anodized finish
- Easy plug-in installation

Part #	Description
1009*	TC88A Plug-in Ignition (for 2004-2006 carbureted Twin-Cam 88® and Sportster® with new 12 pin ignition)
1009-EX	TC88A EX Plug-in Ignition (for 2004-2006 carbureted Twin-Cam 88®. ARB E.O. No. D-641-1)
2008	High Output Twin-Cam Coil (0.5 ohm primary resistance for most 1999 and later carbureted Twin-Cam 88®. Replaces stock P/N 31655-99. Will not fit in place of P/N 31639-99)
3002	Twin-Cam Universal Spark Plug Wire Set (8.0 mm black silicone with 350 ohm/ft spiral core. For Twin-Cam applications with 90° spark plug boots and straight coil boots)
3088*	TC88A Ignition Kit (includes TC88A ignition, USB-INTF USB interface, P/N 2008 coil, and P/N 3002 universal wire set)
3088-EX	TC88A EX Ignition Kit (includes TC88A EX ignition, USB-INTF USB interface, P/N 2008 coil, and P/N 3002 universal wire set. ARB E.O. No. D-641-1)
18014	USB Interface (provides USB connectivity for all Twin Tec engine controls. Includes 6 foot USB cable and Windows software drivers on CDROM)



3088

## Special Kit for 2004-2007 American IronHorse® Motorcycles

American IronHorse® motorcycles use a non-adjustable ignition system manufactured in England by Gill. The TC88A-IH is a special version of our TC88A ignition that is compatible with 2004-2007

American IronHorse® models.

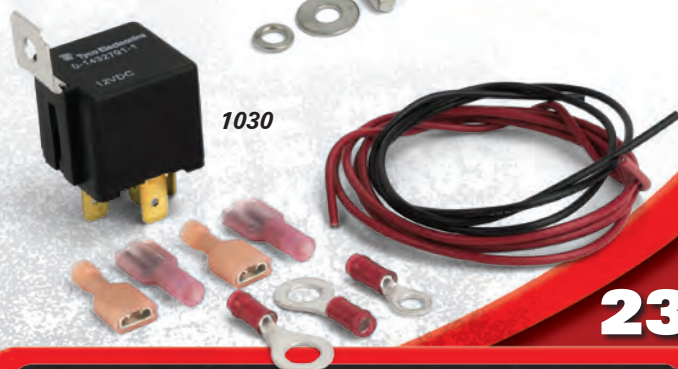
Installation involves cutting off the original equipment 18 terminal AMP connector used with the Gill module and replacing it with a 12 terminal Deutsch connector supplied with the TC88A-IH kit.

Part #	Description
1009-IH*	TC88A-IH Plug-in Ignition Kit (for 2004- 2007 American IronHorse® Motorcycles)



# Miscellaneous Ignition Coils and Accessories

Part #	Description
2005	High Output Single Fire Coil (3 ohm primary compatible with all Twin Tec and most aftermarket single fire ignitions. ARB E.O. No. D-641-2)
2006	3 Ohm Mini Coil (for custom applications. Same size and electrical specs as Nology Profire® PFC-30-S coil. Compatible with Twin Tec Models 1005-1007 and most aftermarket single fire ignitions. Note: two required or purchase kit. ARB E.O. No. D-641-2)
2006-KIT	3 Ohm Mini Coil Kit (for custom applications. Compatible with Twin Tec Models 1005-1007 and most aftermarket single fire ignitions. Includes two coils and universal spark plug wire set. ARB E.O. No. D-641-2)
2008	High Output Twin-Cam Coil (0.5 ohm primary resistance for most 1999 and later carbureted Twin-Cam 88®. Replaces stock P/N 31655-99. Will not fit in place of P/N 31639-99)
2009	Twin-Cam Coil for 2001-2006 models with Delphi fuel injection (Replaces stock P/N 31743-01)
3002	Twin-Cam Universal Spark Plug Wire Set (8.0 mm black silicone with 350 ohm/ft spiral core. For Twin-Cam applications with 90° spark plug boots and straight coil boots)
3003	Universal Spark Plug Wire Set (8.2 mm black silicone with 40 ohm/ft spiral core. For all applications except Twin-Cam. Includes both 90° and 115° spark plug boots and assorted coil boots and terminals)
18004	Timing Rotor (replacement for stock P/N 32402-83. Includes mounting screw and washer)
18010	VOES Kit (vacuum switch with higher switching level of 6-7 In-Hg vacuum helps eliminate spark knock under light load and throttle roll-on. Includes mounting bracket and electrical terminals. ARB E.O. No. D-641-3)
1030*	Ignition Power Relay Kit (recommended when converting high compression and large displacement engines to single fire)





**Adjustable  
and Auto-Tuning  
Fuel Injection  
Controls**



**\*Not legal for sale or use in California or on pollution controlled vehicles.**