



**CAUTION: CAREFULLY READ INSTRUCTIONS BEFORE PROCEEDING.  
NOT LEGAL FOR USE OR SALE ON POLLUTION CONTROLLED VEHICLES.**

### INTRODUCTION

Daytona Twin Tec can supply specially programmed TCFI units with firmware that allows conversion of fuel injected motorcycles originally equipped with the Delphi® system back to a carburetor fuel system. No modifications are required to the wire harness. Unused fuel injection components can be removed. No other systems are adversely affected. The original equipment instrument module (speedometer and optional tachometer) and turn signal/security module continue to function normally.

The WEGO system can be used for tuning and diagnostic purposes but is not required for normal operation.

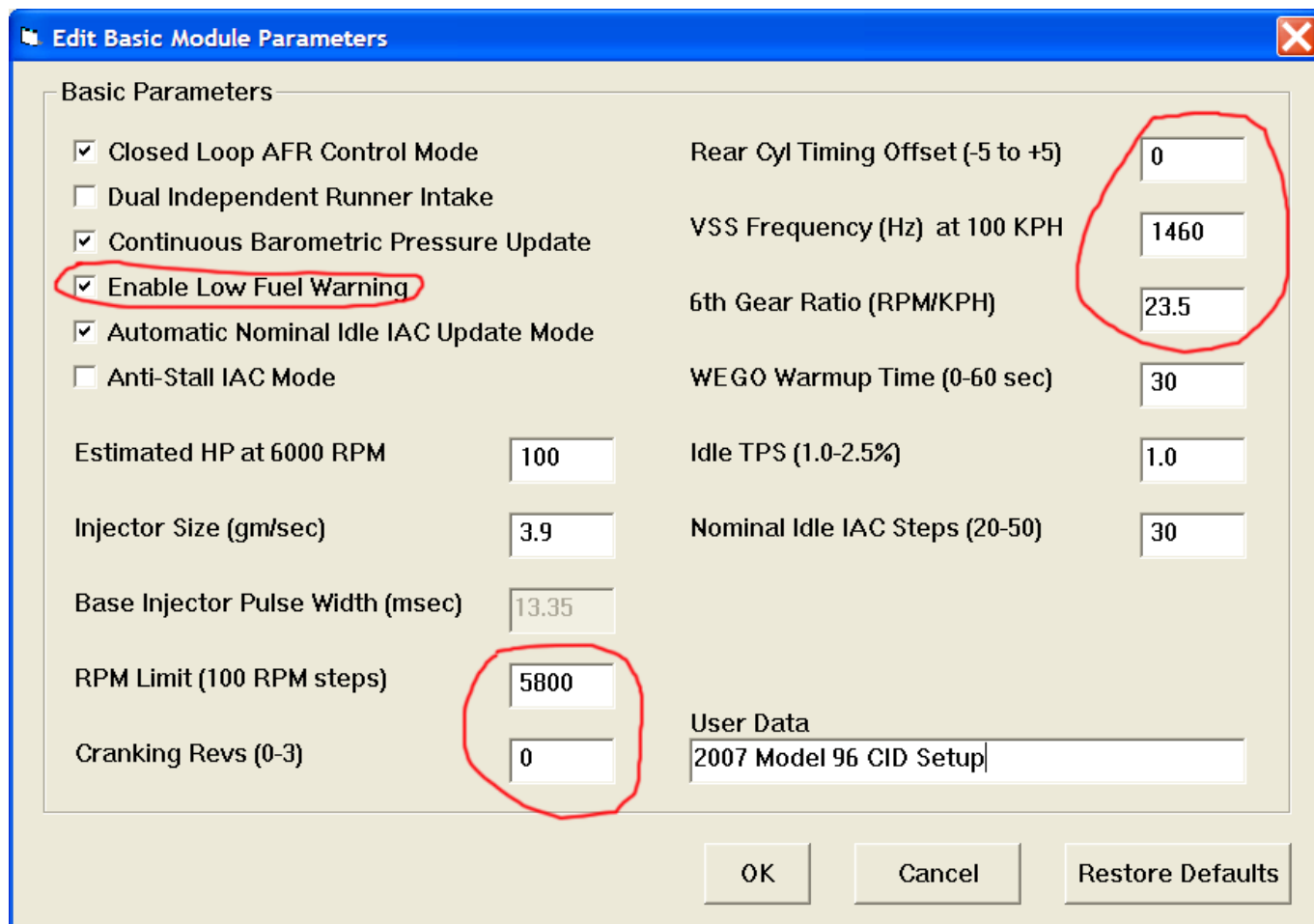
### INSTALLATION

1. Refer to the TCFI Installation & Tuning Manual. Follow the standard TCFI installation instructions.
2. If you are using the WEGO, follow the WEGO installation instructions.
3. Throttle body removal. You can remove the original equipment throttle body. Tape up the connectors for the fuel injectors, idle air control (IAC) motor, intake air temperature (IAT) sensor, and throttle position (TPS) sensor. These connections will not be required after the carburetor conversion.
4. Carburetor and intake installation. You must reinstall and reconnect the manifold pressure (MAP) sensor. The system will not function without the MAP sensor.
5. Other sensors and ignition coil. You must retain the original equipment crankshaft position (CKP) sensor and ignition coil. We recommend that you retain the engine temperature (ET) sensor. You must also retain the vehicle speed sensor (VSS) for proper operation of the instrument module.
6. Fuel system. The fuel pump must be removed from the tank. Pingel ([www.pingelonline.com](http://www.pingelonline.com)) sells a Delphi® fuel injection to carburetor conversion kit (Pingel P/N 62054) that allows retrofitting a standard Pingel fuel valve. Pingel can provide tech support on any fuel system issues.
7. **Read the introductory sections on pages 1-3 of the TCFI Installation & Tuning Manual.** The kit includes our USB interface and PC Link TCFI software on CDROM for initial setup. Refer to page 17 for USB driver installation. Refer to page 19 for PC Link software.
8. The TCFI parts bag includes a green PC link jumper wire with a male Deutsch terminal on one end and a small female Delphi Micro-Pack terminal on the other end. Install this wire between pin 9 of the Delphi connector that mates with the TCFI module and pin 1 of the OE data link connector (four terminal Deutsch). Refer to the factory service manual for connector location and disassembly techniques. **Remove and tape up any existing wires at these pins.**
9. You can use one of the existing setup files listed in Table 3 on page 16 of the manual. On step 11 of the initial setup (page 1 of the manual), you can use ignore the estimated horsepower and injector flow rating parameters. **However, you must set the correct VSS frequency before uploading the setup file to the TCFI module.**
10. You can use PC Link TCFI software for editing or creating a custom advance table. In general all fuel injection related parameters and tables are ignored. Basic module parameters applicable to carburetor conversion systems are circled in Figure 1. All other basic module parameters are ignored and should be left at the default values. All advanced module parameters and 2D tables are ignored and should be left at the default values. All 3D tables except for the advance table are ignored and should be left at the default values. The user functions operate normally, except that any TPS percent values must be set to zero (since no TPS signal is available).

11. You can use TCFI Log software for data logging and diagnostics. Data from sensors and actuators not available in a carburetor conversion application will appear as zero. Examining data logged from a

WEGO that is temporarily attached during the installation process will prove very helpful for establishing the correct carburetor jetting.

Figure 1 – Basic Module Parameters Applicable to Carburetor Conversion



### **SPECIAL CONSIDERATIONS**

1. 2007 and later models with 6<sup>th</sup> gear indicator light. With the carburetor conversion firmware, manifold pressure is used in place of throttle position to help determine 6<sup>th</sup> gear. The 6<sup>th</sup> gear indicator may not come on immediately under light load or decel conditions. Follow the instructions for Final Checks on page 8 of the TCFI Installation & Tuning Manual for setup of the 6<sup>th</sup> gear ratio parameter.

2. 2006 and later models with original equipment oxygen sensors. The oxygen sensors can remain in

place, however, air/fuel ratio data logged by the TCFI will not be scaled correctly and should be ignored.

3. Since there is no initialization for a fuel pump and engine priming, the check engine light will not illuminate after the run/stop switch is turned on. The check engine light will only illuminate if the engine stalls or if a diagnostic code is set.