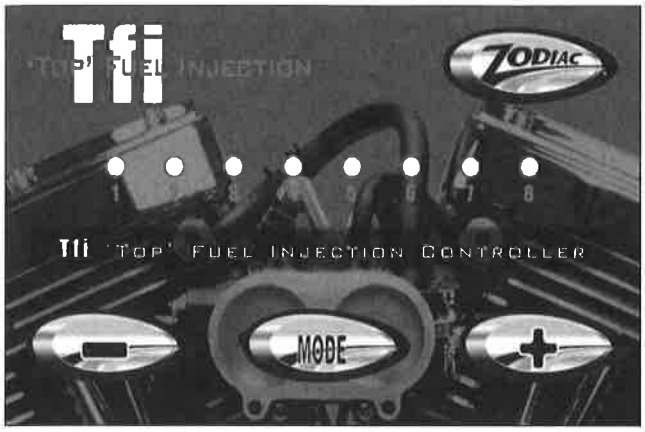
P/N 742348 (MFG P/N 9120463)

Patent Numbers: 7,000,599 & 7,124,742



Thank you for choosing the ZODIAC TOP FUEL INJECTION CONTROLLER. This controller is usable only for the following fuel injected models:

- **HD Street 500 / 750 (2015-16)**

This product is capable of handling the fuel needs for your vehicle from stock, to pipes and air intakes, and beyond. This is an Electronic Jet Kit. Like jet kits in the past the more you modify the more responsibility you take in getting your fuel curve right.

Product Features:

- **Plug and Play Installation** – Minutes to install. Base Settings are preset.
- **NO Computer Needed, NO Dyno Required** – Make adjustments on the vehicle with the engine running.
- **Simple Push Button Adjustment Interface**
- **Water-Resistant**

Product Note:

DO NOT TURN ALL THE SETTINGS UP TO 8. The higher the setting DOES NOT mean more power. You are making fuel adjustments where the proper fuel tuning will achieve the best power and torque.

YOUR PACKAGE SHOULD INCLUDE OX-016 and OX-017 O2 BYPASSES TO INSTALL

IMPORTANT – PLEASE READ CAREFULLY
Some vehicles modifications with Zodiac products must not be used on public roads and in some cases may be restricted to close course competition. Those products not identified as emissions legal are intended for off-road or marine applications only. Not intended for use on emission controlled vehicles.

WARRANTY:
This product is warrantied for 1 year from original date of purchase against defects in materials or workmanship. The customer must provide a valid proof of purchase to obtain the benefits of the warranty. Any modifications of the controller (cut wires, soldered wires, extensive abuse, etc.) will void the warranty. Please contact the Zodiac to obtain a RMA number in order to return the product.

Zodiac International B.V., Industrieweg 44, 3641 RM Mijdrecht **Phone**: +31 (0)297 28 86 21 **Fax**: +31 (0)297 28 82 26
E-mail: sales@zodiac.nl Internet: www.zodiac.nl

INSTALLATION - **Please call technical support for any installation questions.**

1. Before installing the EFI you must first disconnect the negative lead from the battery and make sure your motorcycle is cold.
2. Determine a location for the EFI unit. Use the Velcro provided to mount the EFI unit. We suggest under the seat, on top of the ECM or behind a side cover.
3. Remove necessary components to locate the fuel injectors underneath the fuel tank. Most models require removing the seat, side panels and the fuel tank. (See owners' manual for help if needed).
4. Route the controller's injector connections along the frame with the OEM engine harness to the injectors.
5. Connect the Black controller ground wire to the negative terminal of the battery along with factory ground lead.
6. Disconnect the factory injector connectors from the fuel injectors and replace with the EFI injector connectors from the EFI unit. **Note: The connector pair with a double pinned RED and YELLOW wires is channel 1 and should be connected to the front cylinder. The controller is powered up through this connection. Make sure there is a little slack in the harness to prevent engine vibration from damaging or breaking the wiring at the connectors.**
7. Remove necessary components to locate the two (2) factory O2 connections. Both O2 connections need to be disconnected and an O2 bypass put in place. The supplied O2 bypasses, OX-016 and OX-017, are different connectors which will just match the OEM connector color. The O2 bypasses allow full range tuning within the Green / Cruise zone. (See owners' manual for help if needed).
8. Make sure you can view the EFI and **START** your bike up. The LEDs on the EFI will energize and may scroll back and forth for several seconds. With a proper installation the EFI will stop scrolling the LEDs and go to a steady or slow flashing GREEN LED to the far left. With an improper installation the LED display will consist of a flashing 1st LED GREEN and a flashing 8th LED RED. This occurs when the EFI is not receiving a proper injector signal. Re-check the wire connections for any defects.
   IMPORTANT: The flashing 1st LED GREEN and 8th LED RED is common for a proper installation during de-acceleration because the stock fuel map may shut off the fuel injectors during this process.
9. Replace removed components to complete the installation.

Zodiac International B.V., Industrieweg 44, 3641 RM Mijdrecht **Phone**: +31 (0)297 28 86 21 **Fax**: +31 (0)297 28 82 26
E-mail: sales@zodiac.nl Internet: www.zodiac.nl

TUNING ADJUSTMENTS

IMPORTANT: Your controller already comes pre-programmed with our recommended stage 1 settings. We highly suggest installing the controller and going for a test ride before making any adjustments.

The controller has six (6) programmable features available. To begin this process press the MODE button and to enter each successive mode, just press the MODE button again. The unit comes with pre-programmed settings which should match the recommended starting settings on the following page.

Tuning for mode 1 - GREEN – Fuel modification during cruise/steady throttle.
This adjustment deals with adding fuel during all steady throttle conditions. When the LED display shows solid GREEN lights then the GREEN zone is active and fuel is modified by this mode. **Mode has the largest affect on fuel mileage.** A flashing green LED should appear somewhere on the LED display. A light setting of 0.5 is running on the stock ECU map. All other settings are adding fuel.

Tuning for mode 2 – YELLOW **- Fuel modification during acceleration**
Represents fuel modification under acceleration conditions. When the LED display shows solid YELLOW lights then the YELLOW zone is active and fuel is modified by this mode. A flashing yellow LED should appear somewhere on the LED display. A light setting of 0.5 is running on the stock ECU map. All other settings are adding fuel.

Tuning for mode 3 – RED - Fuel modification during full throttle
This adjustment deals with adding fuel for primarily 4000 RPM and up to red line. For example, running to red line in 1st, shifting, running to red line in 2nd, shifting, and continuing this all the way through the gear range, you would have been engaging the red zone all the time. When the LED display shows solid RED lights then the RED zone is active and fuel is modified by this mode. **Mode has the largest affect on tuning for the vehicle's top horsepower value.** A flashing red LED should appear somewhere on the LED display. A light setting of 0.5 is running on the stock ECU map. All other settings are adding fuel.

Tuning for mode 4 – GREEN / BLUE – Fuel modification during de-acceleration
Represents fuel modification under slowing down conditions. When the LED display shows a solid BLUE light in the 8th position then the YELLOW/BLUE is active and fuel is modified by this mode. **This mode can help tune for backfiring and popping conditions.** A flashing yellow LED should appear somewhere on the display along with a solid blue LED on the right. A light setting of 0.5 is running on the stock ECU map. All other settings are adding fuel.

Tuning for mode 5 – YELLOW **/ BLUE – Green to Yellow switch point**
The lowest LED setting (1) represents the lightest load to switch on the yellow fuel and the highest LED setting (8) represents the heaviest load to switch on the yellow fuel. A flashing yellow LED should appear somewhere on the display along with a solid blue LED on the right. The YELLOW zone is load based and engages differently between gears and riding conditions.

Tuning for mode 6 – RED / BLUE – Yellow to Red switch point
The red LED should be engaged during any full throttle period. The lowest LED setting (1) represents the lightest full throttle load to switch on the red fuel and the highest LED setting (8) represents the heaviest full throttle load to switch on the red fuel. A flashing red LED should appear somewhere on the display along with a solid blue LED on the right. The RED zone is load based and engages differently between gears and riding conditions.

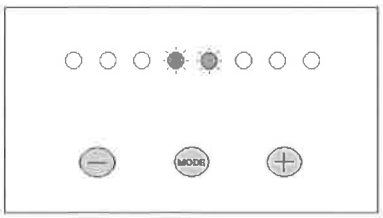
Zodiac International B.V., Industrieweg 44, 3641 RM Mijdrecht **Phone**: +31 (0)297 28 86 21 **Fax**: +31 (0)297 28 82 26
E-mail: sales@zodiac.nl Internet: www.zodiac.nl

CONTROLLER FUNCTIONALITY

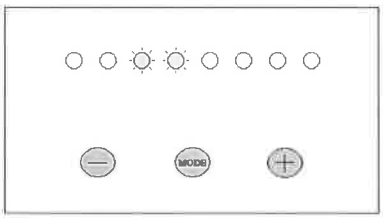
- To program your controller the vehicle must be running in order to supply power to the box.
- If at any time you stay in an adjusting mode for longer than five (5) seconds without pressing any buttons, the controller will exit adjusting mode and will return to the ready state.
- Settings are saved for all modes after the controller exits back to the ready state.
- Settings in each mode are adjusted by pressing the PLUS (+) and MINUS (-) buttons located on the right and left side of the MODE button. For easy reference the LED's are numbered 1 through 8. However, the LEDs can be adjusted to the following positions: 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8. For example, in a particular mode, if LED 4 is flashing then the LED display is set to 4 in that mode. If the PLUS (+) button is pressed once then LEDs 4 and 5 will flash simultaneously and the LED display is set to 4.5. If the PLUS (+) button is pressed once again, only LED 5 will flash and the LED display is set to 5. The LED display can also be set to 0.5 by pressing the MINUS (-) button and scrolling the colored LED to position 1 and then pressing the (-) button once more until the LED in position 1 is flashing twice as fast as normal.
- Always make sure your vehicle is at normal operating temperature when making tuning adjustments.

RECOMMENDED BASE SETTINGS

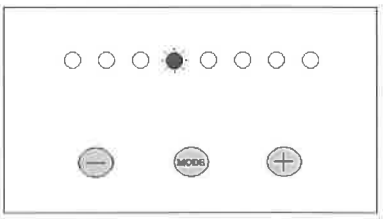
MODE 1 – GREEN – 4.5



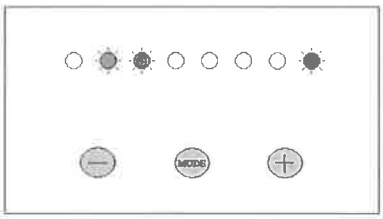
MODE 2 – YELLOW – 3.5



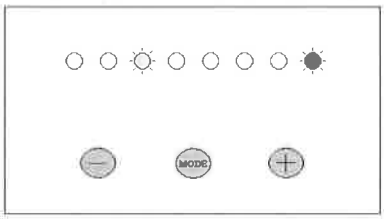
MODE 3 – RED – 4



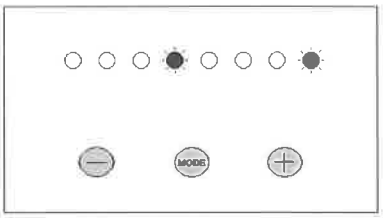
MODE 4 – GREEN/BLUE – 2.5



MODE 5 – YELLOW/BLUE – 3



MODE 6 – RED/BLUE – 4



Zodiac International B.V., Industrieweg 44, 3641 RM Mijdrecht **Phone**: +31 (0)297 28 86 21 **Fax**: +31 (0)297 28 82 26
E-mail: sales@zodiac.nl Internet: www.zodiac.nl