

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

Indian Scout – All Models (2015-2016)

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

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 2 x OX-025 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.

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

- 1. Before installing the EFI you must first disconnect the negative lead from the battery.
- 2. Determine a location for the EFI unit. We suggest under the seat or behind a side cover.
- 3. Making sure that your motorcycle is cold (be sure to disconnect the fuel line using the quick disconnect feature on the fuel fitting, DO NOT UNSCREW THE FITTING) and remove the rear tank mounting bolt (under the seat) loosen and lift up the fuel tank (make sure not to come in contact with the steering with the front of the fuel tank when propping it up). You will need something to hold the fuel tank up (block of wood or a towel) from the frame to gain access to the injectors. Removing the air cleaner assembly can also help with gaining access to the injectors.

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- 4. Underneath the fuel tank you will locate the fuel injectors. (See owners' manual for help if needed).
- 5. Disconnect the factory injector connectors from the fuel injectors and replace with the EFI injector connectors from the EFI unit. It does not matter which order they are hooked up. For reference though the connector pair with a double pinned RED and YELLOW wires is the EFI's channel #1. IMPORTANT: Make sure all connections are firmly secure and allow a little slack at the connections to prevent engine vibration from damaging/breaking a wire on the harness.
- 6. Replace the fuel tank. (Making sure that all bolts are in place and fuel connections are correct).
- 7. Connect the EFI ground lead to negative terminal of battery along with factory ground lead. (See owner's manual for help if needed).
- 8. Locate both factory O2 sensors on the bike. Follow up the O2 sensor harnesses to find the sub-connections. Two of O2 bypass OX-025 are included with the unit. Disconnect the connectors and install the O2 bypasses. Zip tie the connectors going back to the sensor out of the way.
- 9. Make sure you can view the EFI and START your bike up. On initial start up the unit will scroll green LEDs across the controller face plate and then go to a solid green or slowly blinking green LED. This means the unit is installed correctly and functioning properly. If you get flashing LEDs in the 1st and 8th position, please verify your connections and try to start the bike again. Re-check the wires from the EFI and make sure they are connected to the proper wire of your bike's stock harness. The EFI unit only needs power and a proper ground to show this error display. If the bike fails to start then you will also need to re-check the wiring. If you have not connected the ground wire to the negative post of the battery then make sure you have attached the wire to a proper grounding source on the frame.

IMPORTANT: The flashing 1st LED GREEN and the 8th LED RED is common for a proper installation during deceleration because the stock fuel map shuts off the fuel injectors on most models during this process.

### **Final Installation Note**

Re-check your wire routing and the EFI location to make certain that in no way the wires can come into contact with any moving parts or high heat source. The EFI should be mounted in a way as to not cause a handling problem with the machine.

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## **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.

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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 1<sup>st</sup>, shifting, running to red line in 2<sup>nd</sup>, 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 – Green zone engagement switch point

Represents transition between STOCK FUELING and the GREEN zone. Light settings correspond to RPM values. The 1st LED will very slowly blink GREEN when no zone is engaged. Use this mode to determine if the standard GREEN zone should affect fuel at idle or just above idle. A flashing green LED should appear somewhere on the display along with a solid blue LED on the right.

#### Tuning for mode 5 - YELLOW / BLUE - Green to Yellow switch point

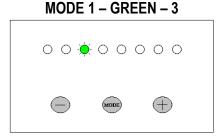
The lowest LED setting (1) represents the lightest load to switch on the yellow fuel and the highest LED setting (8) represents the heaviest load to switch on the yellow fuel. A flashing yellow LED should appear somewhere on the display along with a solid blue LED on the right. The YELLOW zone is load based and engages differently between gears and riding conditions.

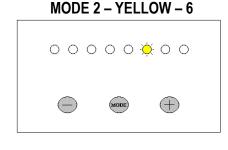
#### Tuning for mode 6 – RED / BLUE – Yellow to Red switch point

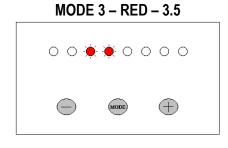
The red LED should be engaged during any full throttle period. The lowest LED setting (1) represents the lightest full throttle load to switch on the red fuel and the highest LED setting (8) represents the heaviest full throttle load to switch on the red fuel. A flashing red LED should appear somewhere 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.

- 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**







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