Electronic Jet KitTM Instructions





Thank you for choosing the Techlusion Electronic Jet Kit, the TFI. This TFI is usable for the following models:

• Polaris Victory 1999-2007 - ALL MODELS

This product is a perfect fit for stock bikes with exhaust and intake mods. It is also capable of handling the fuel needs of big bore kits, light cams, and a variety of head porting.

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. Visit www.dobeckperformance.com for more information about the controller.

Due to the complexity of the newer motorcycles, dealer install may be required. Call for more installation help if needed 877-764-3337 or 406-388-2377

INSTALLATION/TOOLS REQUIRED

- > This is about a 45 minute install time.
- > The tools needed to disconnect the negative terminal of the battery.
- > The tools needed to remove your seat, fuel tank and/or side cover (if necessary).
- > The tools needed to gain access to the injectors (located at/or near the throttle bodies on the intake).
- Last but not least a small screwdriver.

Some vehicles modifications with Techlusion Inc. products must not be used on public roads and in some cases may be restricted to close course competition. Those products not identified as US EPA legal are intended for off-road or marine applications only. Not intended for use **On** emission controlled vehicles.

WARRANTY:

This product is warrantied for 2 years 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 manufacturer to obtain a RMA number in order to return the product.

Phone: 877-764-3337 Fax: 406-388-2455

INSTALLATION

Please call tech support with any questions.

- 1. Before installing the TFI you must first disconnect the negative lead from the battery.
- 2. Determine a location for the TFI unit. Suggested locations are as follows: Under the seat, behind a side cover or tail section.
- 3. Remove gas tank as per service manual procedure.
- 4. Locate rear injector. Disconnect factory connection using care not to break it. The red tab must be lifted first and then push the release to remove plug. Plug it into the female end of the TFI, then plug the male end of the TFI onto the injector.
- 5. Locate the sub-connection for the front injector. It is located on the right side of frame in the center of air box. Disconnect and plug in corresponding TFI connectors in place.
- 6. Be sure to check the wires are not in direct contact with any sharp edges, exhaust and/or other objects, which could result in long term wear and/or damage. Use supplied zip ties to attach harness where necessary.
- 7. Connect the TFI ground lead to the negative terminal of the battery along with the factory ground lead.
- 8. With the rubber plug removed from the TFI, turn the motorcycle key switch to the "ON" position. As the bikes electrical system goes through initial start up mode you may see LED's flashing on the TFI.
- 9. Start the motorcycle. The green LED should now be on steady and the yellow will flash rapidly for up to 15 seconds, and then go out. If the green or red LED's continue flashing after startup please check all connections and retry, if there is still a problem call tech support at 877-764-3337.

Tuning

(At any time during install or tuning please call us for any and all help, we can't help if you don't call) Green LED pot(1st): Air fuel mixture screw adjustment. With TFI installed and the bike fully warmed up, screwdriver in hand, locate the green LED and the pot right below it. Using the throttle raise the RPM to a high idle or about 1800-2000 RPM. Once there, slowly turn the green pot clockwise from the 1:00 position (off) until you achieve the highest RPM and smoothest running sound (like a mixture screw on a carburetor). You should find the best setting between 2:30 and 4:00 o'clock. If you turn the green pot clockwise and the engine does not accept any more fuel (RPMs drop when adding fuel) you may have one or more of these problems (See troubleshooting Motorcycle).

Yellow LED pot(2nd): Acceleration fuel adjustment. Anytime the LED is on, this pot is adding fuel. In neutral raise the RPM slowly up through the mid range and see no yellow LED. However, opening the throttle quickly from idle you "should" see the yellow LED come on. Add until the bike says too much (hesitation) then back off 2 clock positions, if worse go opposite direction. The yellow pot adds most of its fuel below 75% of maximum RPM. If no yellow LED there is not enough load to turn it on. At that point the street or dyno will be able to show the difference.

Red LED pot(3rd): Main jet fuel adjustment. It adds about 2.5 points of main jet fuel with every clock position. For example, one clock position is the same as 150 to 152.5 main jets. Start with the suggested setting and then use the same method used for tuning carbureted bikes or refer to (Full Throttle) section.

RPM pot(4th): Sets rpm that the red LED pot (main jet fuel) turns on. All Metric V-twins/ Metric Triples/ Harley. One clock position is roughly 1000 RPM. This pot should be set to about 70% of redline. (For example: Suzuki M109R redlines at 5800 rpm and 4000 is roughly 70% of redline which would be 4:00 o'clock). On "some" dual plug systems (Kawasaki, Suzuki) you will need to double the rpm clock position to have the same results. Verify setting by revving the bike in neutral, look for green and yellow LEDs to shut off and the red to turn on at the chosen rpm or refer to suggested settings.

Troubleshooting

First it is important that you understand that all modern day fuel injected bikes have a big advantage over carbureted bikes. Fuel injected bikes all have the same exact fuel curve and is corrected everyday by the on board weather station. Nothing is leaner than a stock fuel injection map, 1800-2000 RPM in neutral. So with our box on and the bike fully warmed up, if you slowly turn on the green pot and the engine does not accept any more fuel (RPMs drop when adding fuel) then you have one or more of these problems. Solution:

- 1. Engine not fully warmed up.
- 2. A vacuum leak on the intake.
- 3. High lift cams affecting map at light loads and low RPMS.
- 4. The loss of TPS and ECU sync. Sensor malfunction. (Order from most common to least common)

POOR MILEAGE

Solution:

- 1. Check your green pot setting. This setting is generally responsible for 90% of your mileage. In the hundreds of installs performed, we have never gone beyond the 4:00 setting. Try backing down the green setting slightly. You can slightly lower the yellow and red settings also.
- 2. RPM pot adjusted too low. Make sure the red LED is turning on no lower than 70-75% of the maximum rpm.
- 3. Make sure your engine passes the 1800-RPM test at the beginning of the troubleshooting chapter. If you still have mileage issues call tech support at 877-764-3337 or 406-388-2377

FULL THROTTLE

Simply add or subtract fuel with the red light pot to determine if the problem is better or worse. This lets the engine dictate additional adjustments or call tech support at 877-764-3337.

RECOMMENDED SETTINGS

The dials are to be adjusted like a wall clock. Range is from 1:00 -11:00.



