# TFI Installations Instructions

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

Part #: TFI-2052ST / 950142052

Yamaha Raider/Roadliner/Stratoliner



Thank you for choosing the Techlusion Electronic Jet Kit. The TFI is usable for all 2008 Yamaha Raider

This product is a great fit for stock bikes with exhaust and intake mods. It is also capable of handling the fuel needs of cubic inch 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.

Due to the wide variety of applications we try to be very generic with our instructions, so if you need further assistance with an install call technical support at 877-764-3337 or see our web site at:

http://www.dobeckperformance.com

# 2 - Year Unlimited Mileage Warranty

Dobeck Performance warrants that this product carries a warranty for 2 years from date of purchase against original defects in materials and workmanship. Should this product fail to perform for either of the above reasons, Dobeck Performance will repair or replace it with an equivalent product at no charge, except for postage, (1) Fuel Controller to the original retail purchaser.

\* \* Important \* \* Important \* \*

To obtain the benefits of this warranty, the retail purchaser must send the product with proof of purchase and postage prepaid to:

> 157 Progressive Belgrade, MT 59714 PH: 877-764-3337 FAX: 406-388-2455

Email: info@techlusion.com http://www.dobeckperformance.com

## **INSTALLATION PREP:**

Required tools to remove the seat, side panel and chrome ignition coil cover

#### KIT CONTENTS:

- (1) Set of Installation Instructions
- (1) Velcro Strip
- (3) Zip-ties

### **INSTALLATION**

(During the install or tuning please call for any or all help, we can't help if you don't call.)

- Remove the seat.
- 2. Remove the right hand side panel.
- 3. Remove the two bolts from the right hand chrome ignition coil cover.
- 4. Route the TFI harness under the right hand side of the frame and up above the cylinder head following the frame towards the center of the engine mount/ignition bracket.
- Locate and disconnect the CLEAR 6 pin injector sub-harness located behind the ignition coils bracket.
- 6. Plug the TFI 6 pin connector into the bike's 6-pin connector so that the TFI is now in between the bikes original connection.
- 7. Attach the ground to the stock grounding location next the oil fill cap.
- 8. Disconnect the BLACK O2 sensor connector, which is located under the seat, on the Right Hand side of the bike right next to the fuse holder.
- 9. Reassembly is the opposite of disassembly.
- 10. Start the motorcycle. The TFI is programmed "not" to add fuel at idle. This "may" cause the LED's to flash at idle, this is normal. Some models "may" have a solid green LED at idle, this is also normal. If the green or red LEDs continue flashing after startup, an injector wiring error is indicated. Re-check the wire's from the TFI and make sure they are connected to the proper wire of your motorcyle's stock harness. MAKE SURE you have the correct wires selected in the stock harness.

#### **TUNING:**

We suggest that you set your pots to the setting that best matches your bikes modification. Further adjustments can be made by first having your Motorcycle fully warmed up. Then with a screwdriver in hand, locate the green light and the pot right below it. Raise the RPM up to a high idle or about 1800-RPM if you have a Tach. Once there, slowly turn the green pot clockwise from the 1:00 position (or off) until you achieve the highest RPM and smoothest running sound (just like you would if you had a mixture screw on a carburetor). You should find that the best setting is between 1:30 and 3:30.

Next locate the yellow light and the pot below it. This pot adjustment acts as an accelerator pump adjustment. Anytime you see the light on, it means that this pot is adding fuel. You will notice that you can take the RPM slowly up to 3000-4000 in neutral and see no yellow light. But whack the throttle wide open quickly and you see the yellow light come on. Try to add as much as you can until the bike says it is too much then back off two clock positions. This yellow pot adds most of its fuel below 4000 RPM and full throttle acceleration.

The red light pot is for your main jet. It adds about 3 jet sizes per clock position. For example: One clock position is the same as 170 to a 185 main jet. All we can say about setting up this pot is use the base setting that comes closest to your bikes modifications. Then use the same method you used, setting up your carbureted bikes.

The RPM switch controls when the red light comes on. The more you turn it from the one 'o clock position the higher the RPM before the red turns on.

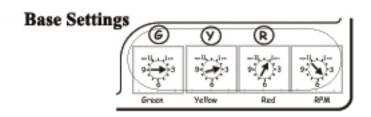
#### **SETTINGS:**

#### TROUBLESHOOTING:

#### Problems:

First it is important that you understand that all modern day fuel injected Motorcycle's have a big advantage over carbureted Motorcycle's. Fuel injected Motorcycle's all have the same exact fuel curve and is corrected everyday by the on board weather station. Which means your Motorcycle fuel map is either ideal or it needs a little. Just like jet kits did for you for years. If you find that anything you do with the pots make it worse, stop and check these possibilities:

- 1. Engine not fully warmed up.
- 2. A vacuum leak on the intake.



# **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.

Some vehicles modifications with the Dobeck 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.