## Electronic Jet Kit<sup>TM</sup> Instructions





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

2008-2013 GSX 1300 Hayabusa 2008-2010 B-King 2007-2013 GSXR1000

This product is a perfect 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. Going to www.dobeckperformance.com will help you obtain better high horsepower tuning.

Note: If your model is equipped with a 02 sensor in the exhaust, you will need to bypass it or leave the first dial (green) at the 1:00 o'clock position. Any questions call tech support @ 877-764-3337

# **TOOLS REQUIRED**

- > This is about a 30-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.

**\*\*:** Due to the complexity of the newer motorcycles, dealer install may be required.



- 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. The TFI comes with a harness with injector connectors that match the factory injector connectors.
- Locate the factory fuel injectors (see owners manual if you are not sure).\*\*
  \*\*: some models are equipped with two sets of injectors(primary and secondary) the unit is designed to interface with the primary injectors. If the TFI harness does not match your injectors do not proceed and call tech support @ 877-764-3337.
- 5. Disconnect the factory injector connectors from the fuel injectors and replace with the TFI injector connectors from the TFI unit, basically unhook the factory injector connector and plug the matching TFI connector (female) to the injector and then connect the factory injector connector to the TFI connector that simulates the injector (male). There is no order to hook up the TFI harness to the factory harness just make sure the original factory connector goes to its' original cylinder. It is a good idea to make sure there is a little slack in the harness to prevent engine vibration from damaging/breaking a wire on the connectors.
- 6. Connect the TFI ground lead to the negative terminal of the battery along with the factory ground lead.
- 7. 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.
- 8. Start the motorcycle. The green LED should now be on steady and the yellow will flash rapidly for about 15 seconds, and then go out. If the green or red LEDs continue flashing after startup please check all connections and retry, if there is still a problem call 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 light pot (1<sup>st</sup>): 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 2000-2500 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 2:00 and 4:00 o'clock. If you turn the green pot clockwise from 1:00 o'clock and the engine does not accept any more fuel (RPM drops when adding fuel) you may have one or more of these problems (See troubleshooting Motorcycle).

Yellow light pot (2<sup>nd</sup>): 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.

Fine tuning: Start with the suggested setting and then add one clock position at a time until the bike says too much (hesitation) then back off 2 clock positions, if adding makes it worse go opposite direction. The yellow pot adds its fuel below 70% 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 light pot (3<sup>rd</sup>):** 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 124 to 126.5 main jets. Fine tuning: Start with the suggested setting and then add one clock position at a time until the bike says too much (hesitation) then back off 1 clock position, if adding makes it worse go opposite direction. The red pot adds most of its fuel above 70% of maximum RPM.

**RPM** switch pot (4<sup>th</sup>): All 4 cylinder (except non-sequential injection) Sets the rpm that the green fuel turns off. This adjustment is achieved by setting the pot to 4:30 o'clock for 600cc and above multi cylinder sport bikes. Each clock position of this pot equates to about 1000 rpm's, so 4,500 rpm's would be half way between 4 and 5 o'clock. Verify this setting by raising the RPM in neutral and watching for the green light to go out at the chosen rpm and adjust if necessary.

### 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 RPMs 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. Cylinder head temp sensor malfunction. (Order from most common to least common)



#### **Problem poor mileage**

Solution:

- 1. Check your green pot settings. In the hundreds of installs performed, we have never gone beyond the 4:00 settings. Try backing down the settings slightly. Also, make sure your engine passes the 2000-2500 RPM test at the beginning of the "tuning" chapter.
- 2. The RPM pot is adjusted too high. Make sure it's no higher than the 5:00 setting, this means the green should turn off at around 5000 rpm. Verify this setting by slowly revving the bike in neutral and watching for the green light to go out at the chosen rpm.

If you still have mileage issues call tech support at 877-764-3337

#### 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 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.

# **RECOMMENDED SETTINGS**

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

2:00
3:00
1:00
4:30



2-Year Unlimited Mileage Warranty

To obtain the benefits of this warranty, the retail purchaser must first call 1-877-764-3337 to obtain an Return Authorization Number, then send the product with proof of purchase and postage prepaid to: Dobeck Performance 157 Progressive Drive

Belgrade, MT 59714

