

TFI™ Instructions



Thank you for choosing the Techlusion Electronic Jet Kit, the TFI. The TFI is usable for sequential fuel injection 4-cylinder Honda, Kawasaki, Suzuki, Yamaha motorcycles**.

**** Honda:** 1998-2006 VFR800/ 2002-07 919/ 2000-2001 CBR929RR/ 2002-03 CBR954RR
2004-06 CBR1000RR/ 1999-05 CBR1100XX/ 2002-07 ST1300

Kawasaki: 2004-07 Z1000/ 2004-07 ZX10R/ 2000-05 ZX12R/ 2006-07 ZX14R

Suzuki: 2001-08 GSXR1000/ 1999-2008 Hayabusa/ 2002-04 GSX1400

Yamaha: 2002-07 R1/ 2006-07 FZ1/ 2003-06 FJR1300

Photo installs for many applications are available at www.dobeckperformance.com in the support forum.

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 visit our web site at www.dobeckperformance.com

**Note: If your model is equipped with a 02 sensor in the exhaust, you will need to disable it or leave the first dial (green) at the 1:00 o'clock position. Any questions call tech support.
Due to the complexity of the newer motorcycles, dealer install may be required. If you have any questions about this installation please call tech support.**

INSTALLATION PREP

- **Install Time:** 45 minutes
- **Recommended Tools:** Needle nose pliers
Wire strippers with crimp
Small screwdriver
- **Required Tools for:** Disconnecting the negative terminal of the battery
Removing your seat and/or side cover and/or bags

INSTALLATION

(For any and all help during install or tuning please call us, we can't help if you don't call)

1. Before installing the TFI you must first disconnect the negative lead from the battery.
2. Determine a location for the TFI box, we recommend under seat, or behind a side cover.
3. Locate a switched power lead. We recommend taillight power source. All other power sources "MUST" be carefully considered to avoid any damage to bike or TFI. Locate the power wire and attach T-tap to the lead as described on the recommended settings page. Cut the red wire (TFI) to length, slide insulator onto red wire (TFI) then crimp the spade connector onto red wire (TFI). Now connect the red wire (TFI) to the T-tap. Our information covers the most common applications. If your bike does not appear try our web site for additional applications or try calling tech support.
4. Locate ECU. In the ECU harness, locate the injector wires as described in the illustrations on the recommended settings page, then attach T-taps to those leads. Connect the blue and gray leads (TFI) to the T-taps using insulators and spades as before. It does not matter which order the blue or gray leads attach to the injector leads as long as they are the leads described on the recommended settings page.
5. Locate grounding point. We recommend the negative side of the battery, or a common grounding lug, that the stock wire harness is using. Crimp the ring terminal supplied with the TFI to the black wire (TFI). You may cut a section of the ring out, allowing the terminal to slide around the bolt without removing it.
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.
7. Connect the TFI ground lead to the negative terminal of the battery along with the factory ground lead.
8. Turn the key on and check for a flashing green LED. If yes, go to step 9. If no flashing green LED, re-check/confirm connections then retry and/or call tech support.
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 is "FLASHING" by itself (See troubleshooting TFI).

Tuning

(For any and all help during install or tuning please call us(8-5M.T. m-f), we can't help if you don't call)

Green LED pot (1st): Air fuel mixture screw adjustment (idle/cruise fuel). 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 LED pot (2nd): Acceleration fuel adjustment (bottom to mid range fuel). 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 ½ clock position at a time until the bike says too much (hesitation) then back off 1 clock position, if worse go the opposite direction. 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. The yellow pot adds its fuel below 70% of maximum RPM.

Red LED pot (3rd): Main jet fuel adjustment (top end fuel). 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 ½ clock position at a time until the bike says too much (hesitation) then back off 1 clock position, if worse go opposite direction. The red pot adds its fuel above 70% of maximum RPM.

RPM switch pot (4th): All 4 cylinder (except non-sequential injection). Sets the RPM that the green fuel turns off. All mass produced street legal 4-cylinder sport bikes are EPA compliant (lean) from idle up to 4500-5000 RPM cruise. This adjustment is achieved by setting the pot 4:30 o'clock for 600cc and up, 4-cylinder sport bikes. Each clock position of this pot equates to about 1000 RPM, so 4500 RPM would be half way between 4 and 5 o'clock. Verify this setting by raising the RPM in neutral and watching for the green LED to go out at the chosen RPM or refer to suggested settings if you have no tachometer.

Troubleshooting

(For any and all help during install or tuning please call us(8-5M.T. m-f), we can't help if you don't call)

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.

Problem poor mileage

Solution:

1. Check your green pot settings. In the hundreds of installs performed, we have never gone beyond the 4:00 setting. 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 and adjust if necessary.

If you still have mileage issues call tech support for further assistance.

**: Some engine setups can dictate a higher or lower setting on the RPM pot.

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.



2-year Unlimited Mileage Warranty

Techlusion 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, Techlusion will repair or replace it with an equivalent product at no charge, except for postage, to the original retail purchaser.

*****IMPORTANT*****

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

Dobeck Performance
157 Progressive Dr.
Belgrade, MT 59714

RECOMMENDED SETTINGS

Adjustments

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

1020pg1-03/07

Honda 1998-07 VFR800/Interceptor

Injector Wires

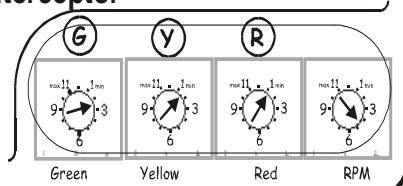
Pink/Green Pink/Black

Pink/Yellow Pink/Blue

Power Wire

Brown/White-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Honda 2002-07 919

Injector Wires

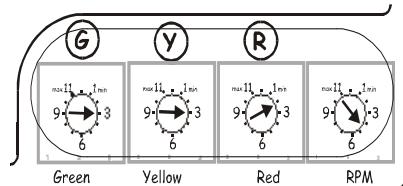
Pink/Green Pink/Black

Pink/Yellow Pink/Blue

Power Wire

Brown/White-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Honda 2000-01 CB929RR

Injector Wires

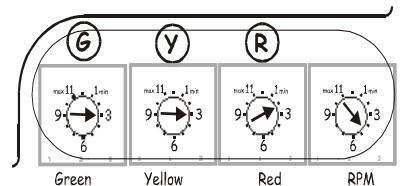
Pink/Green Pink/Black

Pink/Yellow Pink/Blue

Power Wire

Brown/White-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Honda 2002-03 CB954RR

Injector Wires

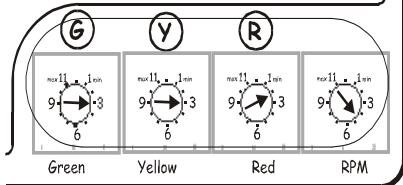
Pink/Green Pink/Black

Pink/Yellow Pink/Blue

Power Wire

Brown/White-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Honda 2004-05 CBR1000RR

Injector Wires

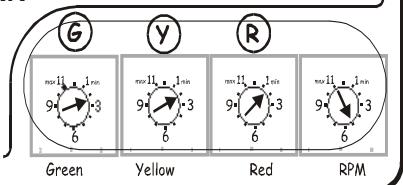
Yellow/Red Red/White

Pink/Yellow Pink/Blue

Power Wire

Brown/White-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Honda 2006-07 CBR1000RR

Injector Wires

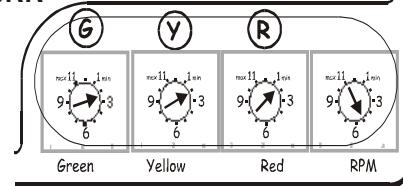
Yellow Yellow/Green

Yellow/Blue Yellow/Black

Power Wire

Brown/White-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Honda 1999-02 CBR1100X

Injector Wires

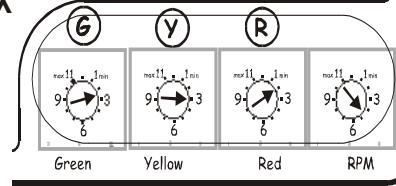
Pink/Green Pink/Black

Pink/Yellow Pink/Blue

Power Wire

Brown/White-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Honda 2002-07 ST1300

Injector Wires

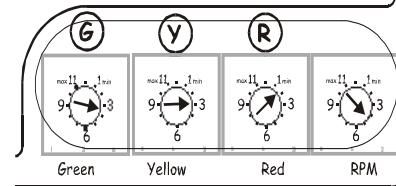
Pink/Black Pink/Green

Pink/Blue Red/Yellow

Power Wire

Brown/White-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Kawasaki 2004-07 Z-1000

Injector Wires

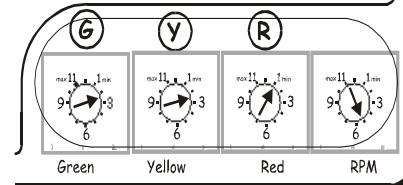
Blue/Green Blue/Black

Blue/Yellow Blue/Red

Power Wire

Red-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Kawasaki 2004-07 ZX10R

Injector Wires

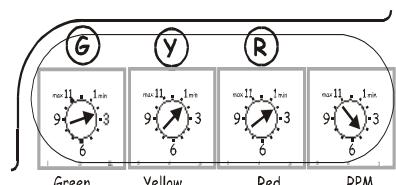
Blue/Green Blue/Black

Blue/Yellow Blue/Red

Power Wire

Red-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



RECOMMENDED SETTINGS

Adjustments

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

Kawasaki 2000-05 ZX-12

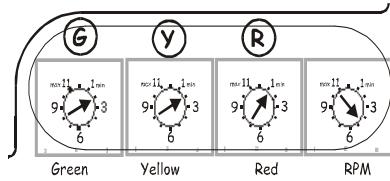
Injector Wires

Blue/Green Blue/Black
Blue/Yellow Blue/Red

Power Wire

Red-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Kawasaki 2006-07 ZX14

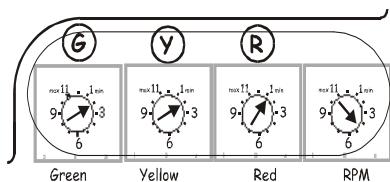
Injector Wires

Blue/Green Blue/Black
Blue/Yellow Blue/Red

Power Wire

Red-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Suzuki 2001-02 GSXR1000

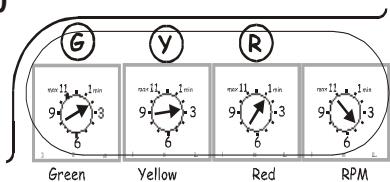
Injector Wires

Grey/White Grey/Black
Grey/Yellow Grey/Red

Power Wire

Grey-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Suzuki 2003-07 GSXR1000

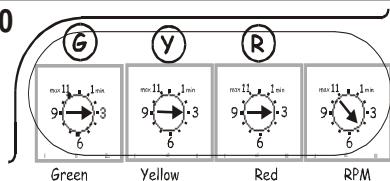
Injector Wires

Grey/White Grey/Black
Grey/Yellow Grey/Red

Power Wire

Grey-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Suzuki 1999-07 Hayabusa

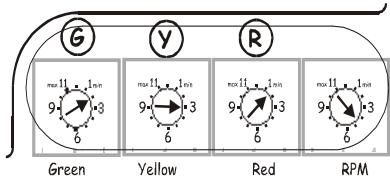
Injector Wires

Grey/White Grey/Black
Grey/Yellow Grey/Red

Power Wire

Grey-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Yamaha 2006-07 FZ1

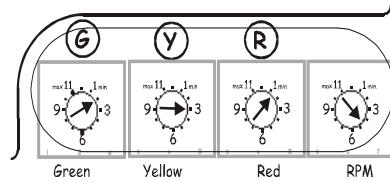
Injector Wires

Blue/Black Green/Black
Orange/Black Red/black

Power Wire

Blue/Red-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Yamaha 2003-07 FJR1300

Injector Wires

Blue/Black Green/Black
Orange/Black Red/Black

Power Wire

Blue/Red-From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed

