



Thank you for choosing the Techlusion Electronic Jet Kit, the TFI. The TFI is usable with Harley V-Rod manufactured before 08/2004 and Japanese Cruisers, and it will also work with a variety of twins such as Victory's, 05 and earlier Ducati and most other twins.

This technology interfaces with your fuel injected bikes. The result is injection with carb tuning logic. Giving you the equivalent of enriching the pilot jet and mixture screw, (pot under the green light) raising the needle, (pot under the yellow light) and then install a larger main jet, (pot under the red light).

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 www.dobeckperformance.com

This product is a perfect fit for stock bikes with all 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. If you find that your modification requires you to max out our pot adjustment, contact us and we can get you a custom chip.

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 dobeckperformance.com will better help you in high horsepower tuning.

#### **TOOLS REQUIRED**

- > This is about a 15-minute install time.
- ➤ The tools required to remove your seat, side cover and bags if it applies to your bike.



- ➤ You will then require a 10 mm wrench for the negative battery terminal.
- A needle nose pliers, for grabbing the wires and clamping the T-Tap.
- A wire stripper with crimp, for attaching the wire terminals.
- And last but not least a small screwdriver.



**Dobeck Performance** 

401 Jackrabbit Lane Belgrade, Mt 59714

**Phone**: 877-764-3337 Fax: 406-388-2455 E@mail info@techlusion.com

Site: www.dobeckperformance.com



- 1. Determine a location for the TFI box. Once the TFI location has been established, layout and cut the wires to length.
- 2. Locate the switch power lead. We try most often to use the tail light switch power. If you locate the tail light connector we give you the color of the power wire within that connector. (Check the base settings page). Our information covers the most common application. If your bike does not appear try our web site for additional information at www.dobeckperformance.com
- 3. The black wire from our box is the ground. Again you have flexibility. You might choose the negative side of the battery, or a common grounding lug, which your stock wire harness is using. Use the ring terminal for the ground, supplied in the kit. You may cut a section out of the ring out, allowing you to slip the terminal around the bolt without removing it.
- 4. Locate the ECU. In the ECU harness, locate the injector wires and attach T-taps to these leads as shown in the illustrations on the suggested settings page. Connect the blue and gray leads from the TFI to these T-taps using insulators and spades as before, also, it does not matter which of the blue or gray leads attach to the injector leads.
- 5. Turn the key on and check for a flashing green LED. If yes, go to step 5. If you have no flashing green LED, re-check power and ground wiring.
- 6. Start the bike. This unit is programmed to not add fuel at idle, this "may" cause all the LED's to flash at idle, this is normal. If just the green or red LED's continue flashing after startup, an injector wiring error is indicated. If the green LED is flashing re-check the blue wire from the TFI is connected to the proper wire of your bikes stock harness. If the red LED is flashing re-check the gray wire from the TFI is connected to the proper wire of your bikes 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 bike 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 2:30 and 4:30.

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 5 points of a main jet for every clock position. Example: one clock position is the same as 170 to 175 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. Good Luck

#### **Troubleshooting**

#### **Problems**

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. Which means your bikes 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.
- 3. The loss of TPS and ECU sync.
- 4. Cylinder head temp sensor malfunction.

(Order from most common to less 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.
- 2. The RPM pot is adjusted too low. Make sure it's at least at the 4:00 setting, this means the main comes in at around 4000 rpm.

  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

#### 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.



#### 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.

# $\star$ $\star$ Important $\star$ $\star$ Important $\star$ $\star$ To obtain the benefits of this warranty, the retail purchaser must

send the product with proof of purchase and postage prepaid to:

Dobeck Performance

401 Jackrabbit Lane Belgrade, MT 59714

Phone 877-764-3337 or email info@techlusion.com

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**<u>E@mail</u>** info@techlusion.com **Site**: www.dobeckperformance.com

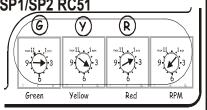


1025 07/06



Injector Wires Pink/Green Pink/Yellow Power Wire

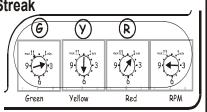
Brown - From the tail light



## Kawasaki 2002-06 Mean Streak

Injector Wires Blue/Red Blue/Green Power Wire

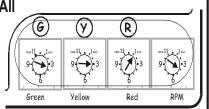
Red - From the tail light



## Honda 2002-06 VTX1800 All

Injector Wires
Pink/Blue
Pink/Yellow
Power Wire

Brown - From the tail light



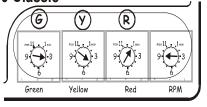
**(**Y**)** 

(R)

#### Kawasaki 2003-06 VN1600 Classic

Injector Wires
Blue/Red
Blue/Green
Power Wire

Red - From the tail light



#### Honda 2002-06 VTX1800 All

with O2 Sensor

Injector Wires

Pink/Blue

Pink/Yellow

Power Wire

Brown - From the tail light

Alternate Setup: With the O2 sensor disconnected (this will cause the FI light to stay on) the bike can be setup just like the non O2 sensor models.

G

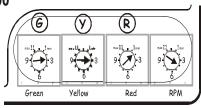
# Kawasaki 2004-06 VN2000

Injector Wires Blue/Red

Blue/Green

Power Wire

Red - From the tail light



#### Kawasaki 1999-03 VN1500 Drifter

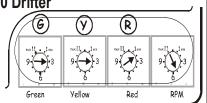
Injector Wires

Blue/Red

Blue/Green

Power Wire

Red/Blue - From R/H Fuse panel



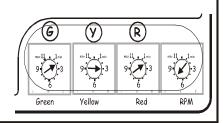
## Polaris 1999-01 Victory

Injector Wires

White/Blue White/Grey

Power Wire

Brown - From the tail light



## Kawasaki 2000-06 VN1500 Classic & Nomad

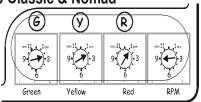
Injector Wires

Blue/Red

Blue/Green

Power Wire

Red - From the tail light

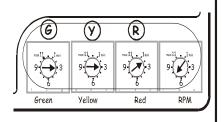


## Polaris 2002-06 Victory

Injector Wires White/Blue

White/Blue White/Grey

Power Wire Brown - From tail light



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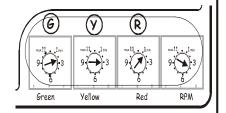
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1025 07/06

## Suzuki 2005-06 C50

Injector Wires Grey/White Grey/Black Power Wire Brown - From tail light



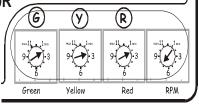
#### Suzuki 1998-2002 TL 1000R

Injector Wires Green/White

Green/Black Power Wire

Brown - From tail light

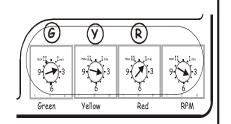
Because the TL1000R only fires the secondary injectors at high rpm the TFi box must be connected to the wires for the primary injector for each cylinder



(R)

#### Suzuki 2005-06 C90

Injector Wires Grey/White Grev/Black Power Wire Brown - From tail light



#### Suzuki 1997-2001 TL 1000S

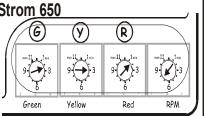
Injector Wires Green/White Green/Black Power Wire



# Suzuki 2003-06 SV 650/V-Strom 650

Injector Wires Grey/White Grey/Black Power Wire

Brown - From tail light



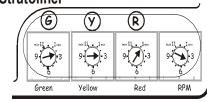
## Yamaha 2006 Roadliner/ Stratoliner

o2 sensor disconnected Iniector Wires

Aqua Green Grey

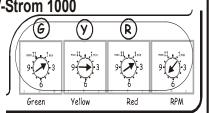
Power Wire

Blue - From the tail light



## Suzuki 2003-06 SV1000/V-Strom 1000

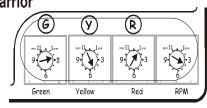
Injector Wires Grey/White Grey/Black Power Wire Brown - From tail light



#### Yamaha 2002-06 Road Warrior

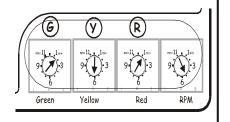
Injector Wires Agua Green Grey

Power Wire Blue - From the tail light



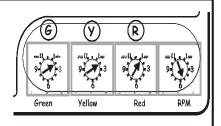
#### Suzuki 2002-03 DL1000

Injector Wires Grey/White Grev/Black Power Wire Brown - From tail light



#### Yamaha 2002 TDM900

Injector Wires Red/Blue Green/Blue **Power Wire** Red - Wire at the ECU



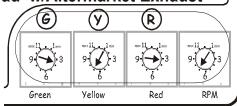
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Harley V-Rod - No Download w/Aftermarket Exhaust

Injector Wires
White/Yellow
Green/Gray
Power Wire
Grey wire from the Data Port



# Harley V-Rod - #1 Download w/Aftermarket Exhaust

Injector Wires
White/Yellow
Green/Gray
Power Wire
Grey wire from the Data Port

