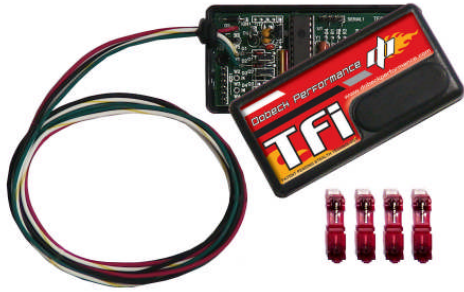


Electronic Jet Kit™ Instructions



Thank you for choosing the Techclusion Electronic Jet Kit, the TFI. The TFI is usable for sequential fuel injection 2 cylinder Honda, Kawasaki, Suzuki, V-Rod, Victory, Yamaha motorcycles **.

**** Honda:** 2000-06 RC51/ 2002-09 VTX1800

Kawasaki: 2006-09 Ninja 650R/ 2006-09 VN900/ 1999-03 VN Drifter/ 2000-09 VN1500 Nomad, Classic
2002-09 Meanstreak/ 2003-09 VN1600 Nomad, Classic/ 2004-09 VN2000

Suzuki: 2005-09 C50, M50/ 2005-09 C90/ 2004-06 1600 Marauder, M95/ 2006-09 M109R
2003-09 SV650, V-Strom 650/ 2003-09 SV1000, V-Strom1000/ 2002-03 DL 1000
1998-2002 TL1000R/ 1997-01 TL1000S

V-Rod: 2002-04 *: **V-rod models 2002-04 that have received a download after 08/2004 must use the FI-1046ST.**

Victory: 1999-09 Victory all models

Yamaha: 2008-09 Raider/ 2002-09 Road Warrior/ 2006-09 Roadliner, Stratoliner/ 2002 TDM 900/ 2007-09 V-Star 1300

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

Note: If your model is equipped with a O2 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(8-5M.T. m-f), 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 you have no flashing green LED, re-check/confirm connections then retry and/or call tech support.**
- 9. 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 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. 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-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 (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 yellow 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 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 150 to 152.5 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 pot(4th): All V-twins. Sets the RPM that the red pot fuel (main jet fuel) turns on. 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). Some dual plug systems (Kawasaki, Suzuki) need to double the RPM clock position to have the same results. Verify setting by raising the RPM in neutral, look for green and yellow LED to shut off and the red LED to turn on 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 (8-5 M.T. M-F), we can't help if you don't call)

TFI

When the **green** LED is flashing by itself there is an incomplete connection with the injector lead (motorcycle) and blue lead (TFI). If the **red** LED is flashing by itself there is an incomplete connection with the injector lead (motorcycle) and gray lead (TFI). Confirm the injector leads as shown in the illustrations on the suggested settings page and the T-taps/connections are firmly in place and secure.

Motorcycle

(Order from most common to least common)

1. Engine not fully warmed up.
2. A vacuum leak on the intake.
3. High lift cams affecting map at light loads and low RPM.
4. Cylinder head temp sensor malfunction.
5. The loss of TPS and ECU sync.

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 2000-RPM test at the beginning of the troubleshooting chapter. If you still have mileage issues call tech support at 877-764-3337

**:

- 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.

1025 3/07

Honda 2000-06 VTR1000 SP1/SP2 RC51*

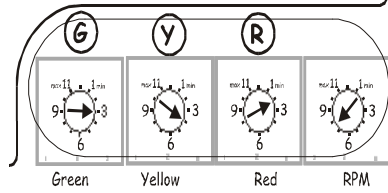
Injector Wires

Pink/Blue
Pink/Yellow

Power Wire

Brown - From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Kawasaki 2000-07 VN1500 Classic & Nomad*

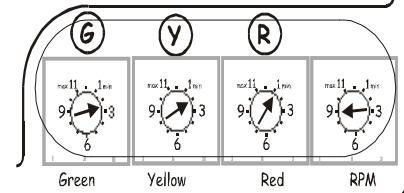
Injector Wires

Blue/Red
Blue/Green

Power Wire

Red - From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Honda 2002-07 VTX1800 All*

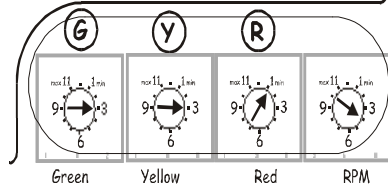
Injector Wires

Pink/Blue
Pink/Yellow

Power Wire

Brown - From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Kawasaki 2002-07 Mean Streak*

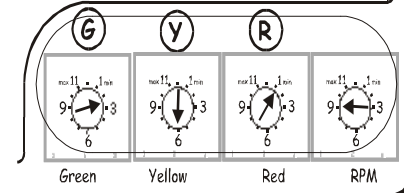
Injector Wires

Blue/Red
Blue/Green

Power Wire

Red - From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Kawasaki 2006-07 Ninja 650R*

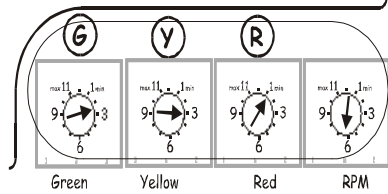
Injector Wires

Blue/Red
Blue/Green

Power Wire

Red - From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Kawasaki 2003-07 VN1600 Classic & Nomad*

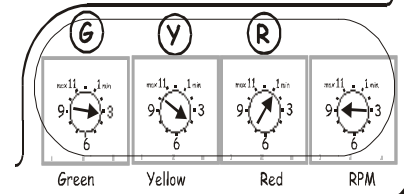
Injector Wires

Blue/Red
Blue/Green

Power Wire

Red - From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Kawasaki 2006-07 Vulcan 900*

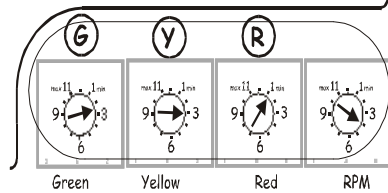
Injector Wires

Blue/Red
Blue/Green

Power Wire

Red - From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



Kawasaki 2004-07 VN2000*

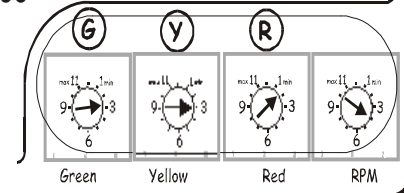
Injector Wires

Blue/Red
Blue/Green

Power Wire

Red - From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



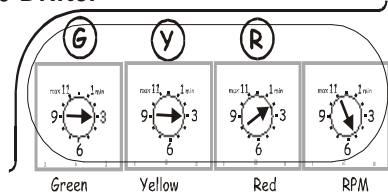
Kawasaki 1999-03 VN1500 Drifter

Injector Wires

Blue/Red
Blue/Green

Power Wire

Red/Blue - From R/H Fuse panel



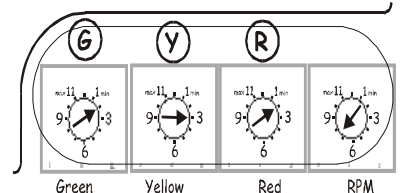
Polaris 1999-01 Victory

Injector Wires

White/Blue
White/Grey

Power Wire

Brown - From tail light "ONLY"



RECOMMENDED SETTINGS

Adjustments

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

1025 3/07

Polaris 2002-06 Victory

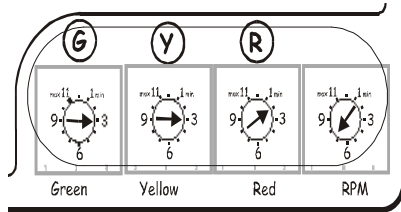
Injector Wires

White/Blue

White/Grey

Power Wire

Brown - From tail light "ONLY"



Suzuki 2003-07 SV 650/V-Strom 650*

Injector Wires

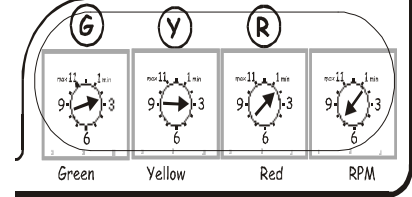
Grey/White

Grey/Black

Power Wire

Brown - From tail light "ONLY"

*:o2 sensor not present, disconnected or bypassed



Suzuki 2005-07 C50/M50*

Injector Wires

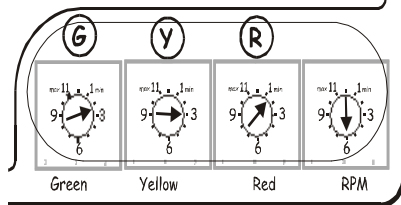
Grey/White

Grey/Black

Power Wire

Brown - From tail light "ONLY"

*:o2 sensor not present, disconnected or bypassed



Suzuki 2003-07 SV1000/V-Strom 1000*

Injector Wires

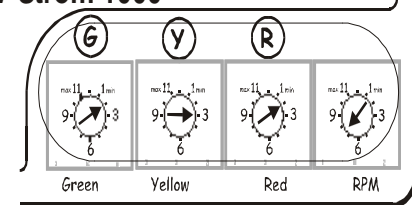
Grey/White

Grey/Black

Power Wire

Brown - From tail light "ONLY"

*:o2 sensor not present, disconnected or bypassed



Suzuki 2005-07 C90*

Injector Wires

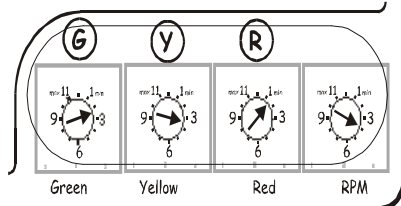
Grey/White

Grey/Black

Power Wire

Brown - From tail light "ONLY"

*:o2 sensor not present, disconnected or bypassed



Suzuki 2002-03 DL1000*

Injector Wires

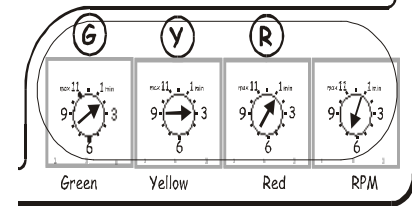
Grey/White

Grey/Black

Power Wire

Brown - From tail light "ONLY"

*:o2 sensor not present, disconnected or bypassed



Suzuki 2004-06 1600 Marauder/ M95*

Injector Wires

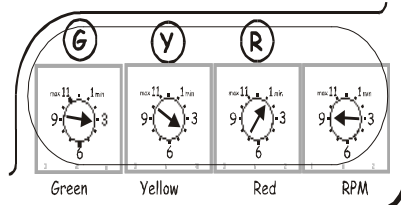
Blue/Red

Blue/Green

Power Wire

Red - From tail light "ONLY"

*:o2 sensor not present, disconnected or bypassed



Suzuki 1998-2002 TL 1000R

Injector Wires

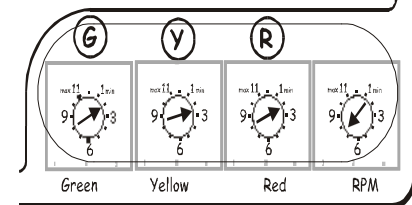
Green/White

Green/Black

Power Wire

Brown - From tail light "ONLY"

Must be connected to the "PRIMARY INJECTORS"



Suzuki 2006-07 M109R*

Injector Wires

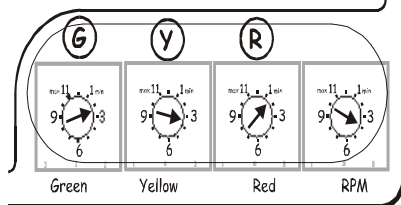
Grey/White

Grey/Black

Power Wire

Brown - From tail light "ONLY"

*:o2 sensor not present, disconnected or bypassed



Suzuki 1997-2001 TL 1000S

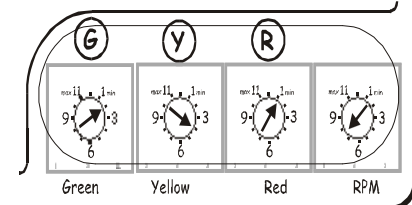
Injector Wires

Green/White

Green/Black

Power Wire

Brown - From tail light "ONLY"



RECOMMENDED SETTINGS

Adjustments

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

1025 3/07

Yamaha 2002-07 Road Warrior*

Injector Wires

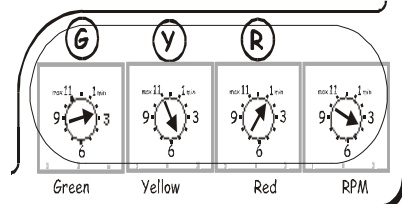
Aqua Green

Grey

Power Wire

Blue - From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



V-Rod -All stock

2002-2004 only*

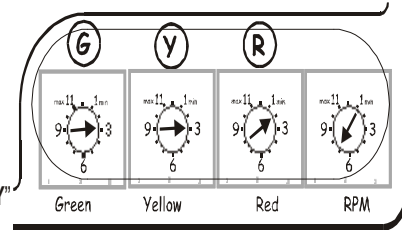
Injector Wires

White/Yellow

Green/Grey

Power Wire

Grey wire from Data Port "ONLY"



Yamaha 2006-07 Roadliner/ Stratoliner*

Injector Wires

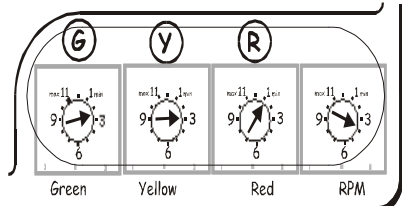
Aqua Green

Grey

Power Wire

Blue - From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



V-Rod - Aftermarket air cleaner, exhaust, No downloads

2002-2004 only*

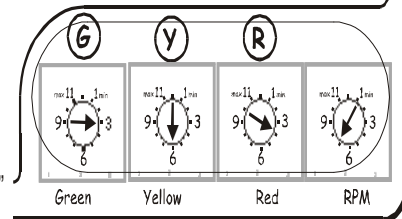
Injector Wires

White/Yellow

Green/Grey

Power Wire

Grey wire from Data Port "ONLY"



Yamaha 2007 V-Star 1300*

Injector Wires

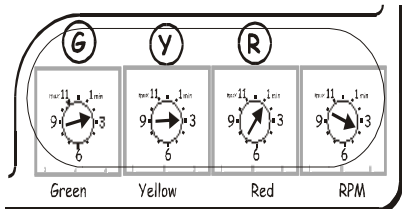
Aqua Green

Grey

Power Wire

Blue - From tail light "ONLY"

*:o2 sensor not present,
disconnected or bypassed



V-Rod - Aftermarket air cleaner, exhaust, #1 Download

2002-2004 only*

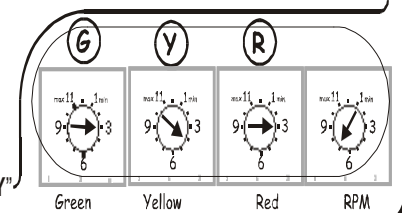
Injector Wires

White/Yellow

Green/Grey

Power Wire

Grey wire from Data Port "ONLY"



Yamaha 2002 TDM900

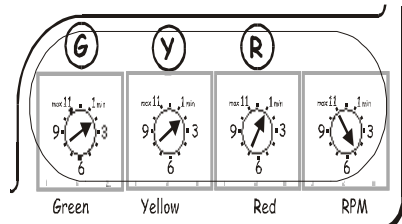
Injector Wires

Red/Blue

Green/Blue

Power Wire

Blue - From tail light "ONLY"



*: V-rod models from 2002-04 that have received a download after 08/2004 must use the FI-1046ST.