

# INSTALLATION INSTRUCTIONS



# UNLEASH.

THE SMARTEST PERFORMANCE TUNING TECHNOLOGY

## ZFi TC

FUEL + QUICKSHIFT + TRACTION CONTROL

**TRIUMPH SPEED TRIPLE 2012 - 2013  
T1591S, T1591R (ABS MODEL)**

## 1 > READ

### WARNINGS > INSTALLING



- We strongly suggest that an experienced technician install this product.
- Read through all instructions before beginning installation.
- This document is intended for use by qualified technicians.
- This is not a replacement for the factory Engine Control Unit (ECU).
- Refer to a factory service manual for more specific stock component identification/location information and removal/assembly procedures.

### WARNINGS > USING



- Use only in race or other closed-course applications and never on public roads.
- Z-Fi products are not certified by the California Air Resource Board (CARB) for use on CA public lands.

### GETTING HELP



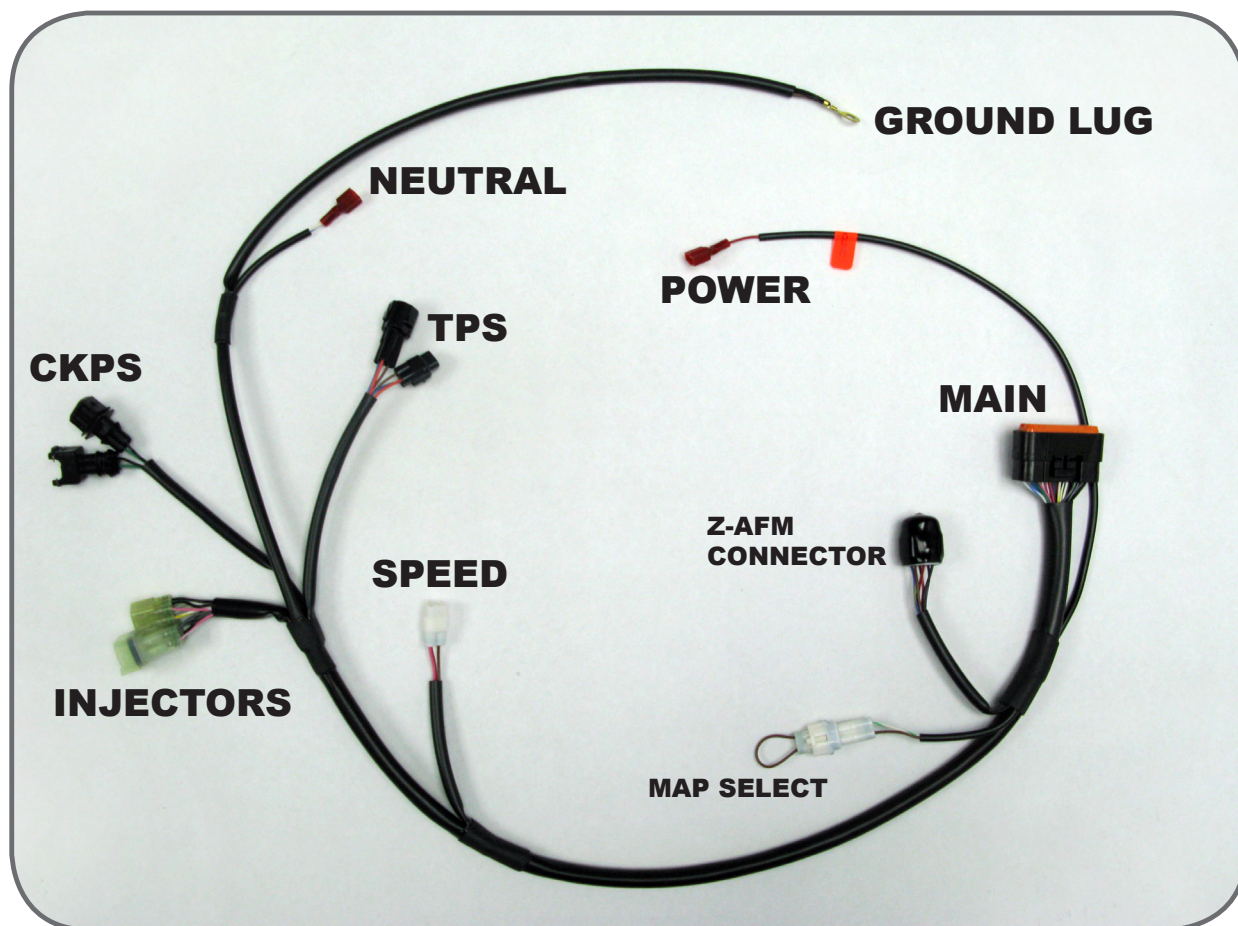
- Factory support is available in the US at 909-597-8300.
- For fastest support outside of the US, find your local importer at [bazzaz.net](http://bazzaz.net).

# 2>IDENTIFY

## INCLUDED PARTS

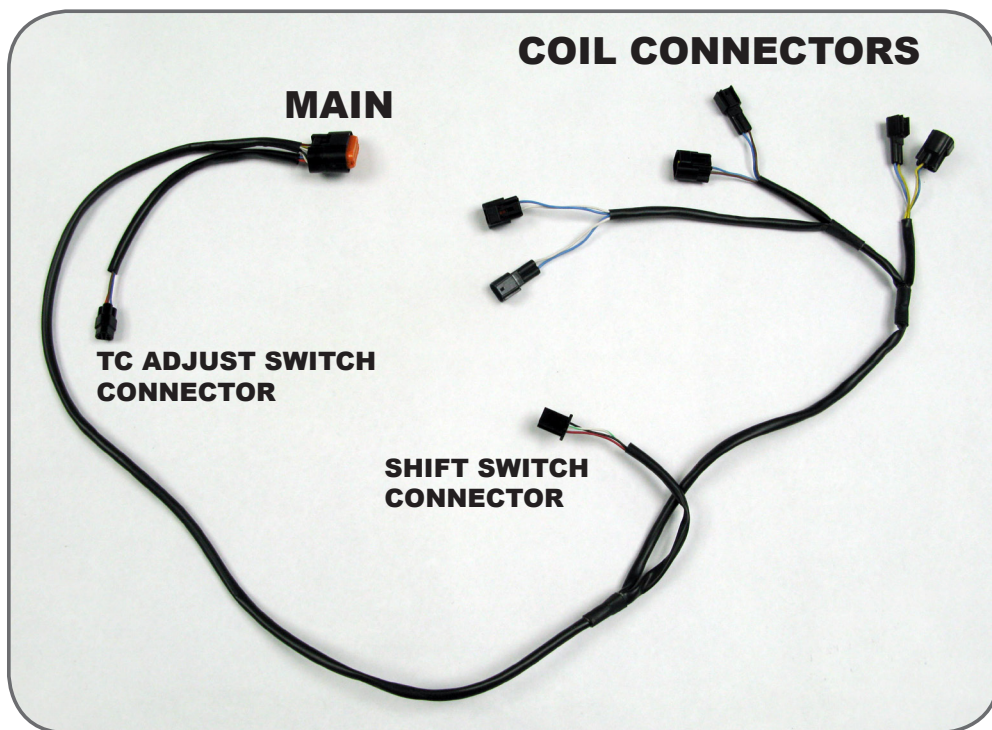
1. Z-Fi TC control unit
2. Fuel harness
3. Coil harness
4. Shift switch
5. USB cable
6. O2 eliminator
7. Scotchlok (2)
8. Zip ties
9. Velcro

## FUEL HARNESS



# 2>IDENTIFY (CONT.)

## COIL HARNESS



# 3>REMOVE

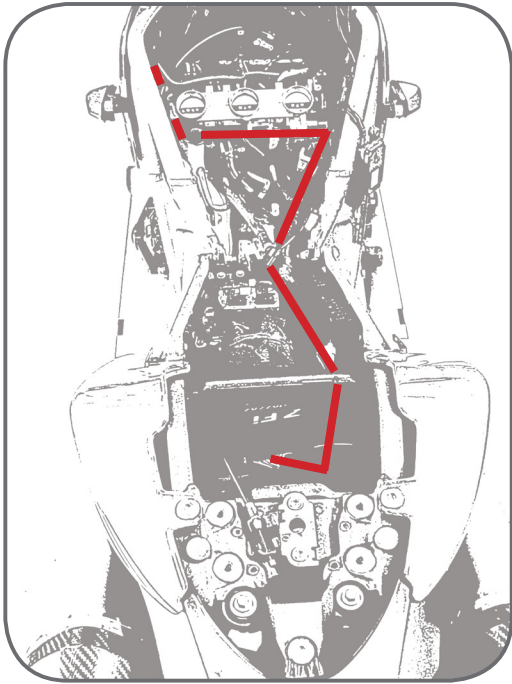
1. Rider seat
2. Tail light
3. Battery
4. Airbox

# 4>SECURE

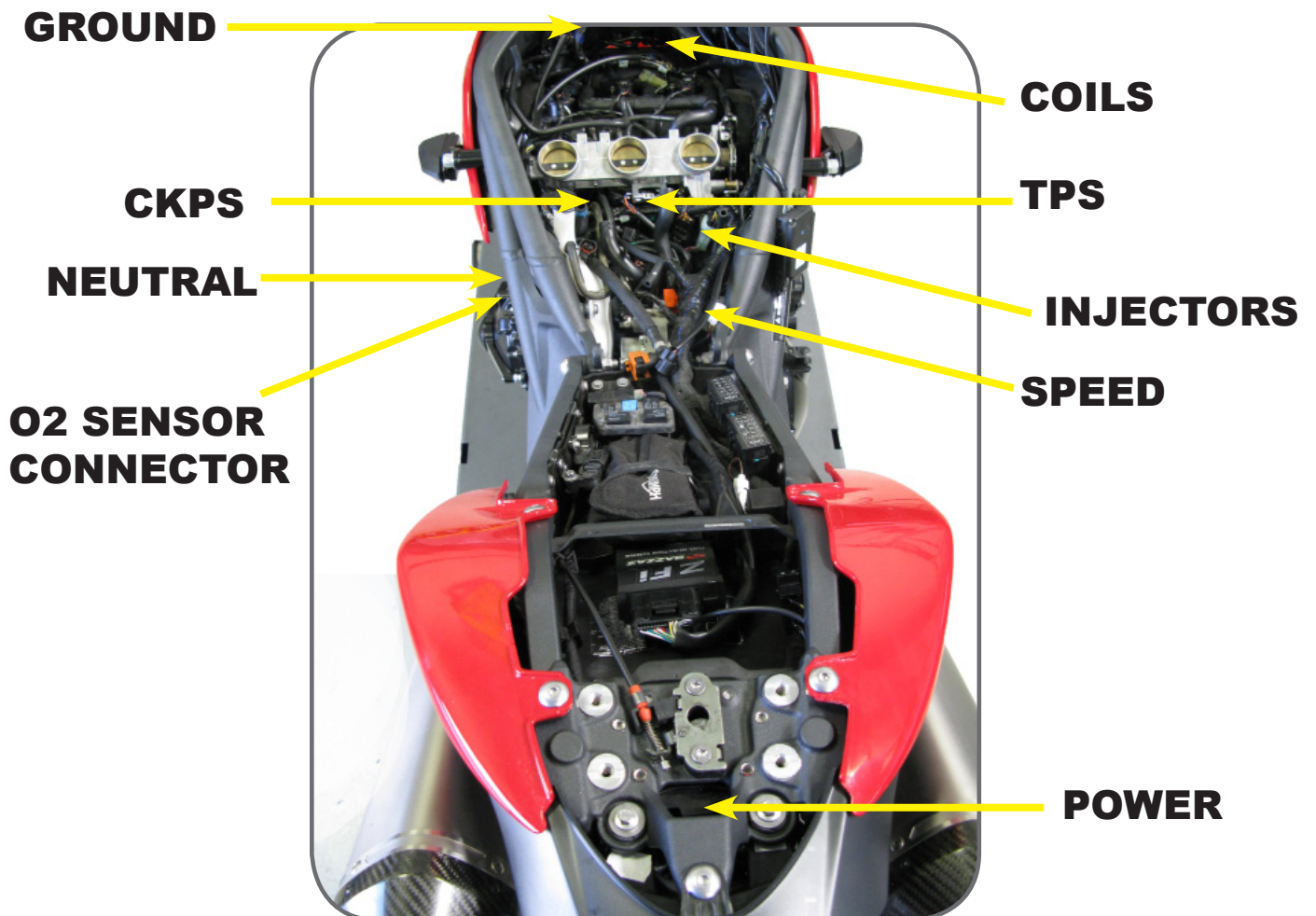
1. Mount the control unit in the tail section of the motorcycle.



# 5 > CONNECT

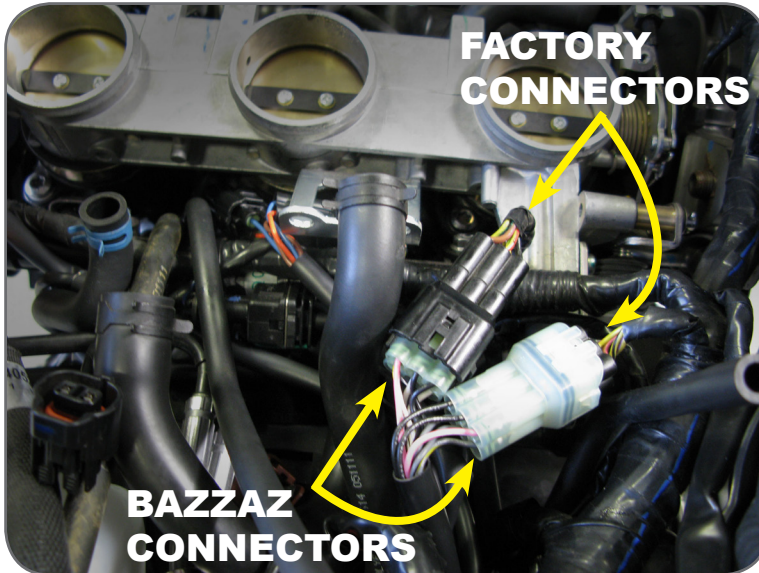


1. Connect the main connector of the Bazzaz fuel harness to the control unit.
2. Begin routing the fuel harness down the right side of the bike, following along with the factory harness routing.



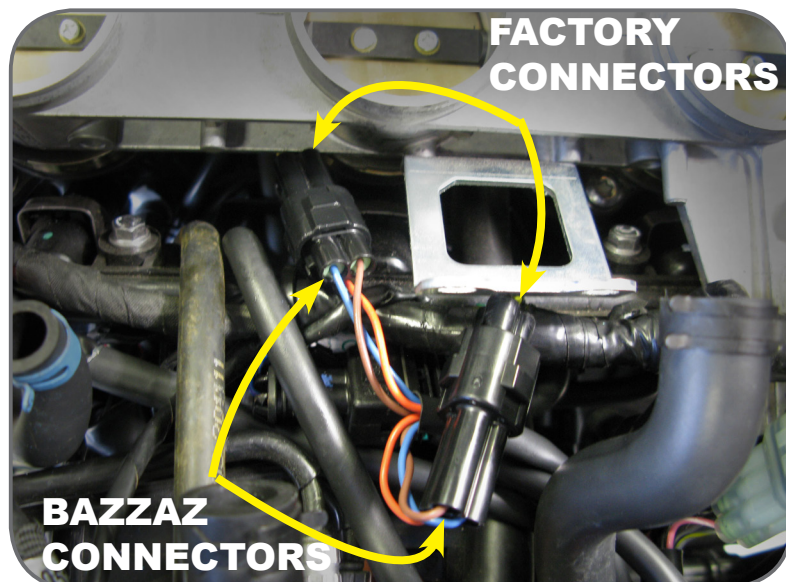
# 5>CONNECT (CONT.)

- 5.1**
1. Locate the factory black six-pin injector subharness connectors.
  2. Disconnect the six-pin injector sub harness connectors.
  3. Connect the Bazzaz injector connectors in-line with the factory connectors.



## 5.2

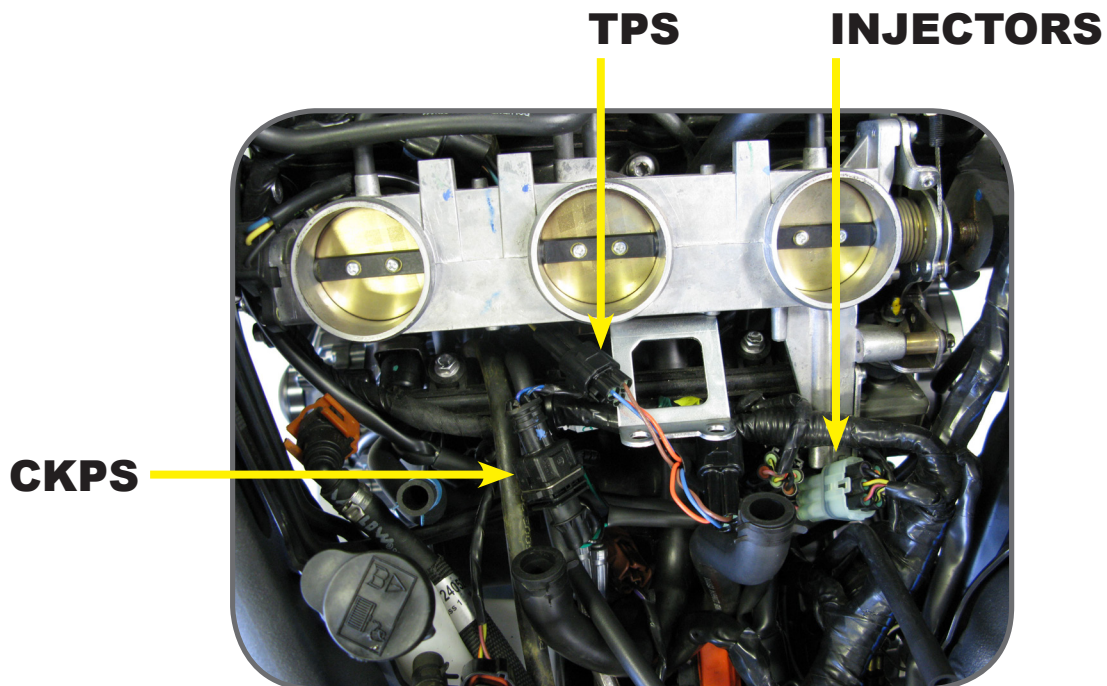
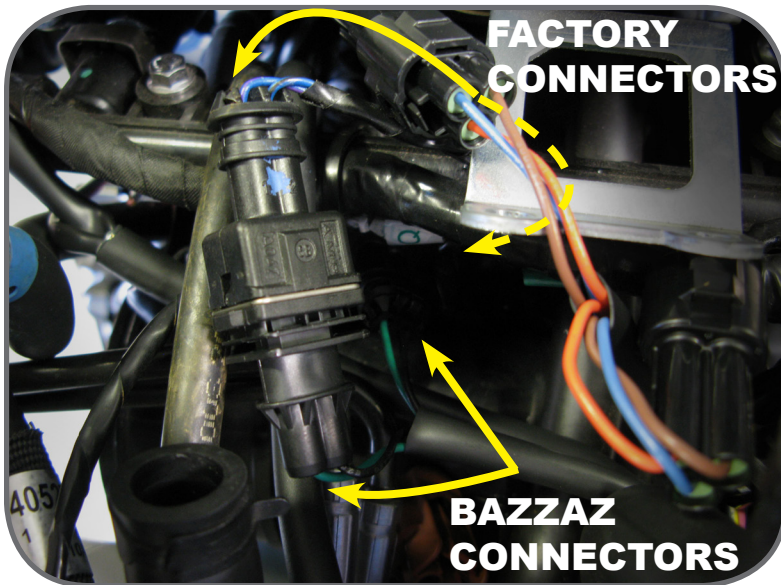
1. Route the Bazzaz fuel harness along the factory fuel rail, towards the left side of the bike.
2. Locate the factory black three-pin Throttle Position Sensor (TPS) connectors, which can be found near the airbox bracket mount.
3. Disconnect the factory TPS connectors.
4. Connect the Bazzaz TPS connectors in-line with the factory connectors.



# 5>CONNECT (CONT.)

## 5.3

1. Locate the factory black two-pin Crank Position Sensor (CKPS) connectors located near the TPS connectors.
2. Disconnect the factory CKPS connectors.
3. Connect the Bazzaz CKPS connectors in-line with the factory connectors.

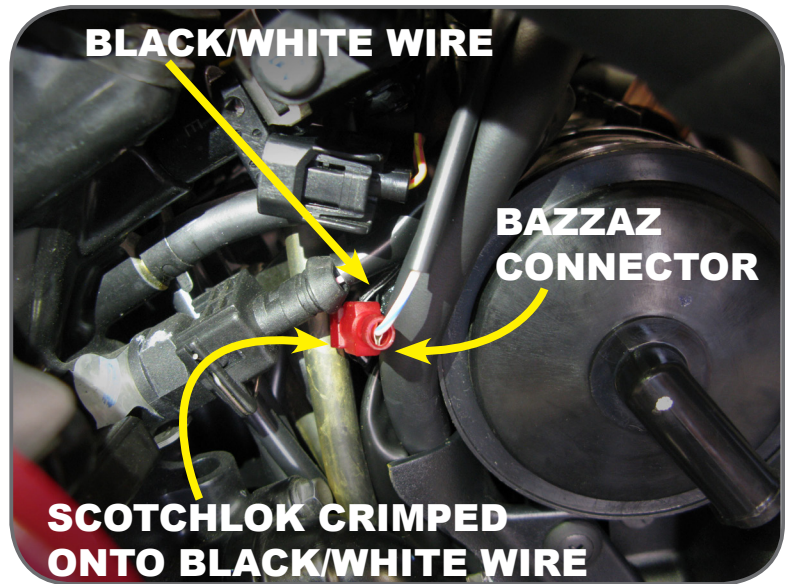


*Photo shows connections of the injector, TPS and CKPS for reference.*

# 5>CONNECT (CONT.)

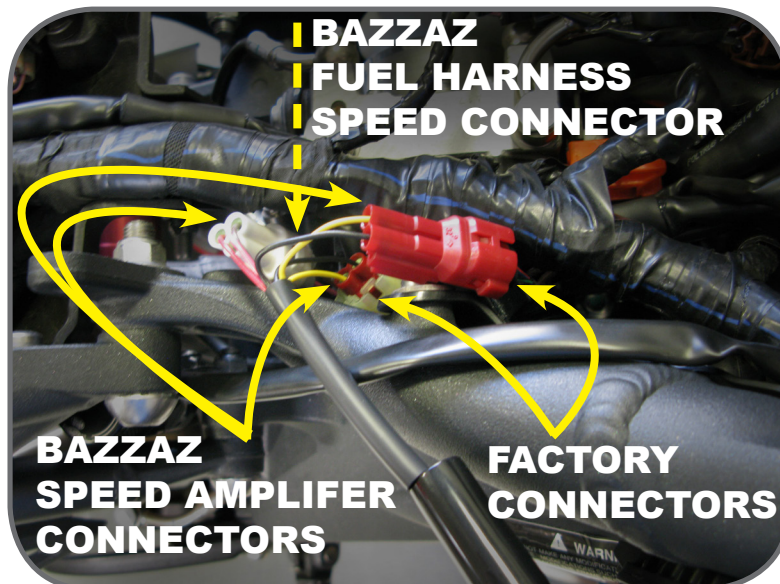
## 5.4

1. Locate the factory neutral single-pin connector which can be found on the left side of the motor, near the factory shift shaft and below the front sprocket cover.
2. Trace the factory neutral wire up, close to where it connects to the factory harness.
3. Make a small cut into the sheathing to expose the black/white wire of the neutral connector.
4. Crimp a supplied Scotchlok onto the **black/white** wire.
5. Connect the Bazzaz neutral connector into the Scotchlok.



## 5.5

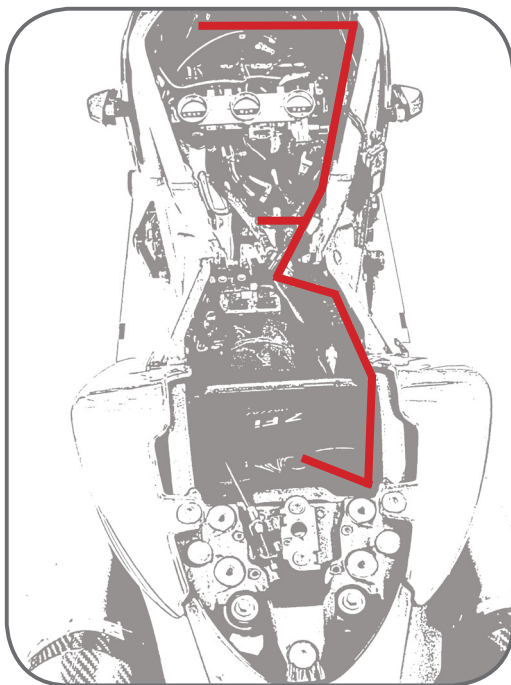
1. Locate the factory speed connectors on the right side of the bike, between the factory harness and frame.
2. Disconnect the factory speed connectors.
3. Connect the two mating connectors of the supplied Bazzaz speed amplifier in-line with the factory speed connectors.
4. The remaining connector on the Bazzaz speed amplifier will connect to the speed connector of the Bazzaz fuel harness.



# 5>CONNECT (CONT.)

## COIL HARNESS

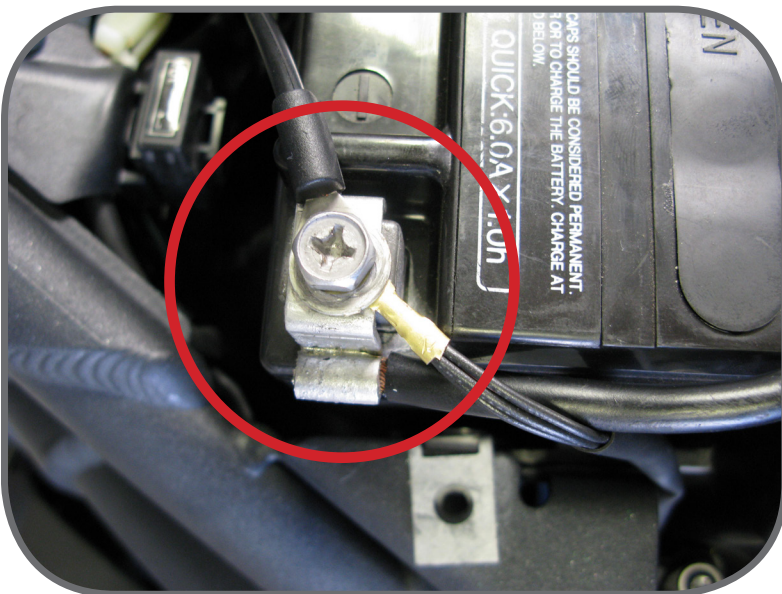
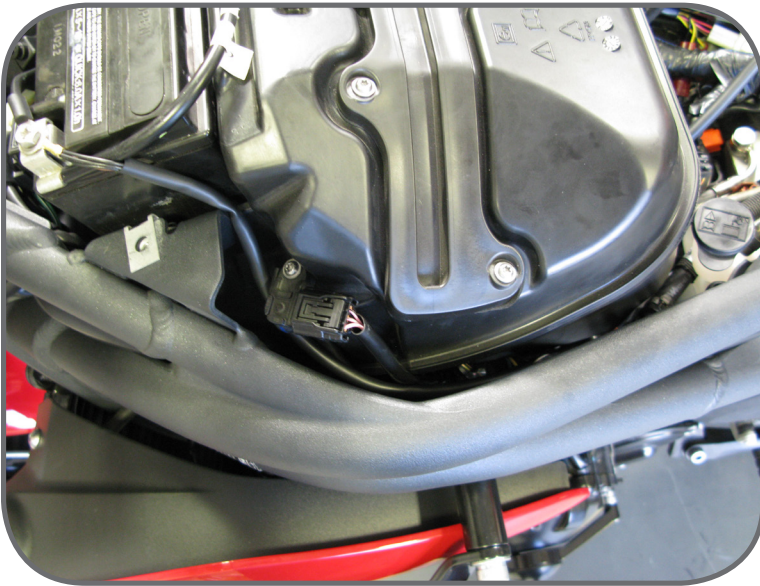
- 5.6**
1. Route the Bazzaz coil harness along the right side of the bike, towards the factory coils and on top of the valve cover.
  2. Connect the main connector of the Bazzaz coil harness to the control unit.
  3. From right to left, disconnect each factory coil connector from each coil.
  4. Connect the Bazzaz coil connectors in-line, between each factory connector and coil.





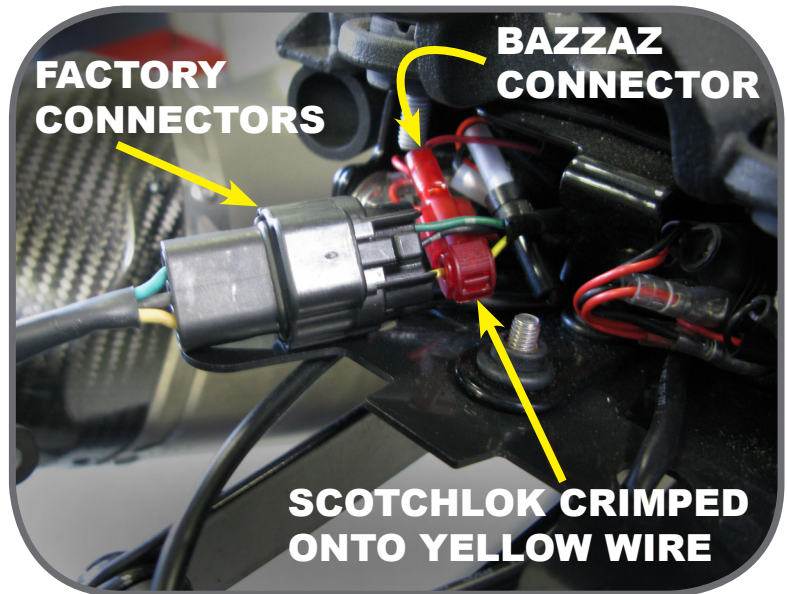
# 6>GROUND

1. Begin to reinstall the airbox.
2. Keep the Bazzaz ground lug (of the Bazzaz fuel harness) free and clear.
3. Once the airbox is reinstalled (with factory battery reinstalled), connect the Bazzaz ground lug to the negative battery terminal.



# 7>CONNECT

1. Locate the factory black tail light connectors found in the tail section, behind the factory tail light.
2. Separate the yellow wire of the factory tail light connector from the other wires.
3. Crimp a supplied Scotchlok onto the exposed **yellow** wire.
4. Connect the Bazzaz switched power connector into the Scotchlok.



# 8>O2 SENSOR

1. Locate the factory O2 sensor and begin to follow the lead up to the four-pin factory O2 sensor connector.
2. The connector can be found on the left side of the bike, behind a black plastic cover.
3. Remove the black plastic cover.
4. Disconnect the factory O2 sensor connector from the factory harness, as it no longer will be used.
5. The wires should be neatly secured away from any moving components, or the sensor may be removed, and the remaining port/bung in the exhaust can then be plugged.
6. Connect the Bazzaz O2 eliminator into the factory harness.
7. Reinstall the black plastic cover.

# 8>O2 SENSOR (CONT.)



# 9>QUICKSHIFT

**Aftermarket rearsets required to use quick shift function.**

1. Remove the factory shift rod from the motorcycle's shift linkage.
2. Install the supplied shift switch and shift rod in-line.
3. Adjust the foot pedal to preferred height and secure components by tightening the 10mm nuts (Bazzaz shift rods are manufactured to fit multiple applications and can be cut at 10mm intervals on either end to shorten for proper positioning).
4. Route the Bazzaz shift switch connector to the mating connector of the Bazzaz coil harness and plug in-line.

# 10>SECURE



Use the supplied cable ties to secure the harness neatly along the routing path **free of any moving or hot components** (which could cause damage or failure of the system).

# 11 > CHECK



1. In order to check that the system is installed correctly, download the Bazzaz Z-Fi Mapper software at [bazzaz.net](http://bazzaz.net).
2. Plug the USB cable into the control unit and computer.
3. Locate and open the Z-Fi Mapper software.
4. Check that the pre-programmed map matches the model of your bike on the fuel map page within the software. You can switch from map 1 to map 2 by unplugging the map select jumper on the Bazzaz fuel harness. Map 1 will be pre-programmed; depending on your model, there may be a pre-programmed map in the map 2 slot. If map 2 is blank, stock ECU settings are used. Make sure that the jumper is left plugged in or unplugged, depending on which map you choose.
5. Start the vehicle and begin to check that the following inputs read correctly on the fuel map page.
  - RPM - Make sure that the RPM is reading near what the vehicle is idling at.
  - GPS - The vehicle should read neutral (or whichever gear it is in). For motorcycles that use a Gear Position Sensor, the bike does not need to be running to do this. For motorcycles that use a speed sensor, the wheel must be spinning to read gear properly. This can be checked on a dynamometer or by using a rear stand. Use caution when testing componentry.
  - TPS - When throttle is applied, the TPS should read accordingly. Fly-by-wire models must be running to check TPS. Normal cable operated throttles can be checked with just the key on, not running.

## Also use software to:

- View and/or make adjustments to fuel maps
- Activate Z-AFM self mapper (sold separately)
- Save and load new fuel maps
- Re-calibrate throttle position sensor after throttle modifications
- View diagnostics for troubleshooting
- Change quickshift settings
- Make traction control adjustments



If any problem is found, please carefully follow through the installation steps again.



If problem still persists, please contact Bazzaz tech support

- Factory support is available in the US at 909-597-8300.
- For fastest support outside of the US, find your local importer at [bazzaz.net](http://bazzaz.net)

## 12>REINSTALL

After it is determined that everything is correct, reinstall the components removed in step 3.

## 13>USE



**MAP 1**



**MAP 2**

### MAPS

The Bazzaz controller is capable of storing two maps.

Switch maps by connecting or disconnecting the map select jumper supplied with the kit.

Or use the optional handlebar-mounted switch to switch maps on the fly (sold separately).

# 14>NEXT LEVEL



## **ZAFM** SELF MAPPER

Purchased separately.

Build race-level fuel maps for your specific modifications, fuel type, engine, and atmospheric conditions simply while riding.

O2 sensor mounts into exhaust and control box easily plugs in to any Bazzaz Z-Fi product.

**299.95**

# MAP SELECT/ TC ADJUST SWITCH

Purchased separately.

**129.95**

Switch maps on the fly with this handlebar-mounted switch. Quickly adjust traction control settings using a 10-point dial. Weatherproof toggle and easy installation.



## TC ACTIVE LIGHT

Purchased separately.

Illuminates when traction control is engaged. Helpful in determining when and where traction control is being actuated.

**79.95**



**THE SMARTEST PERFORMANCE TUNING TECHNOLOGY**



Proudly made in the  
**United States**

**T1591S, T1591R**