

# INSTALLATION INSTRUCTIONS



# UNLEASH.

THE SMARTEST PERFORMANCE TUNING TECHNOLOGY

**ZFI** FUEL MANAGEMENT

**ZFI TC** FUEL + QS + TRACTION CONTROL

**KTM 1290 SUPER DUKE R**  
**F592 | T592**

## 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 highways.

### GETTING HELP



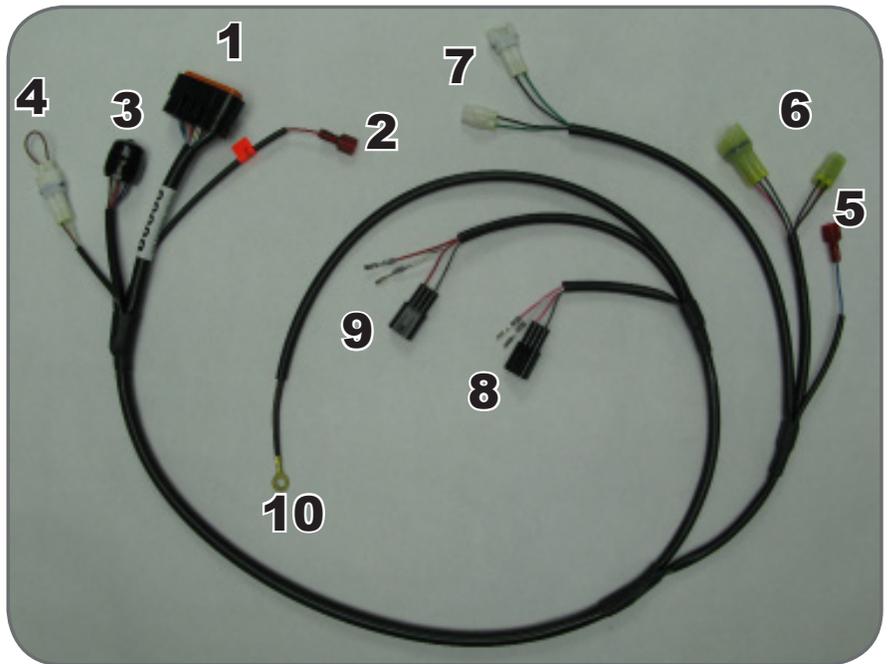
- Factory support is available in the US at 909-597-8300.
- For fastest support outside of the US, find your local importer at [bazzaz.net](http://bazzaz.net).

# 2>IDENTIFY INCLUDED PARTS

1. Z-Fi or Z-Fi TC control unit
2. Fuel harness
3. Coil harness (For use with Z-Fi TC only)
4. Shift Switch and mounting hardware (For use with Z-Fi TC only)
5. USB cable
6. Scotchlok (2)
7. Zip ties
8. Velcro
9. Download Z-Fi Mapper Software from [Bazzaz.net](http://Bazzaz.net)
10. Swingarm Stickers

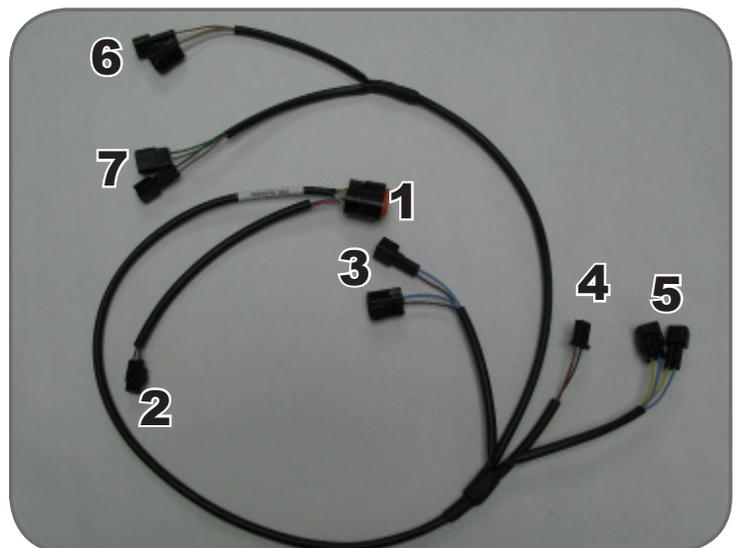
## FUEL HARNESS

1. Main Connector
2. +12v Sw Power
3. Z-AFM Connector
4. Map Select
5. TPS
6. Gear
7. CKPS
8. Front Injector
9. Rear Injector
10. Ground



## COIL HARNESS (FOR USE WITH Z-FI TC ONLY!)

1. Main Connector
2. TC Adjust Switch
3. Black Coil Rear
4. Shift Switch
5. White Coil Rear
6. Black Coil Front
7. White Coil Front



## 3>REMOVE

1. Rider and passenger seat.
2. Factory charcoal canister.
3. Fuel tank.
4. Airbox.

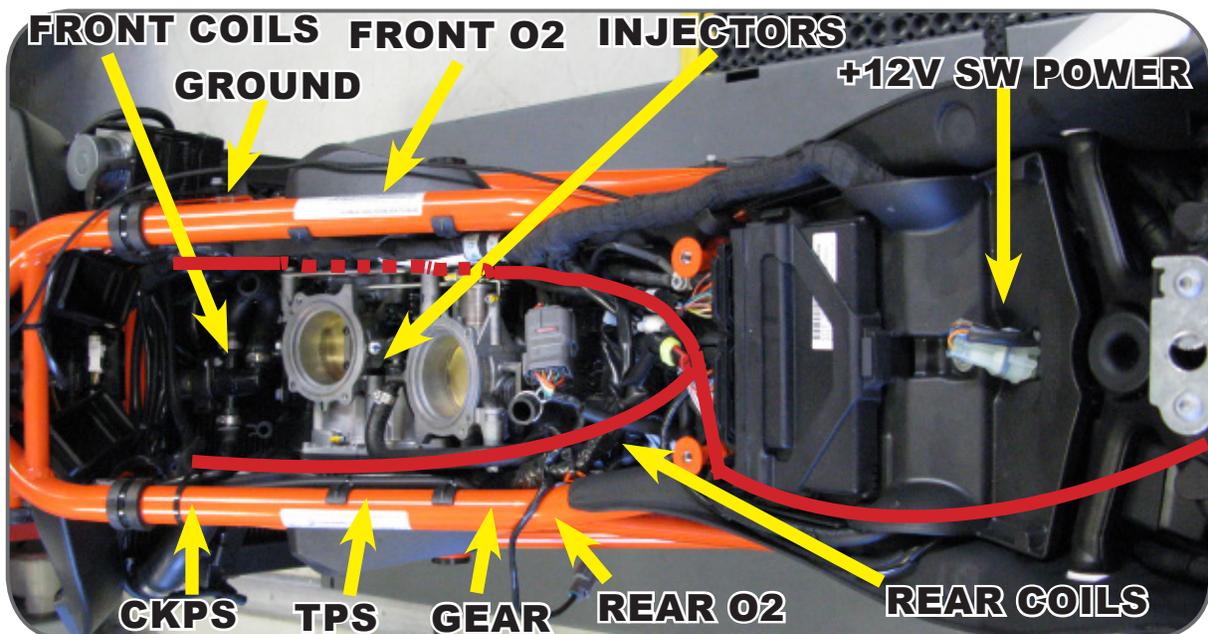
## 4>SECURE

1. Mount the control unit under the passenger seat in the tail section.

## 5>CONNECT

### 5.1

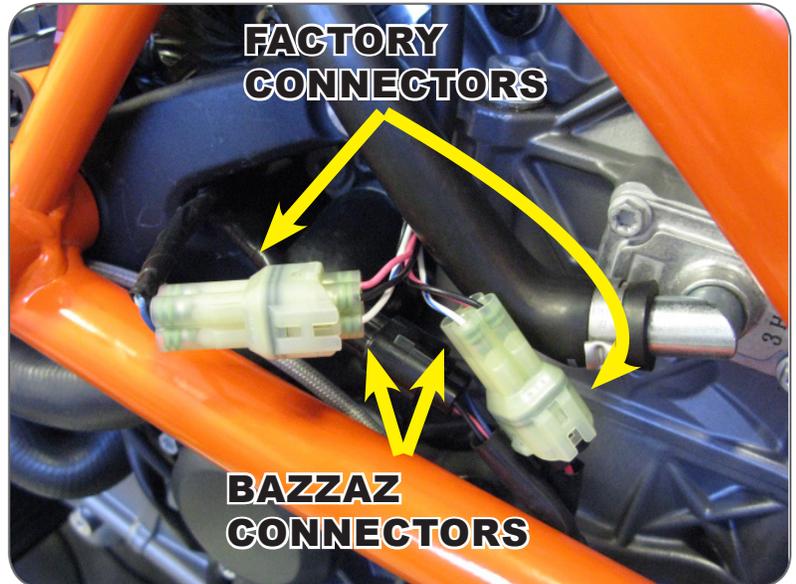
1. Connect the main connector of the Bazzaz fuel harness to the control unit.
2. Route the harness along the left hand side of the bike towards the engine compartment.
3. Route the Bazzaz harness lead for the GPS, TPS, and CKPS along the left hand side of the bike.
4. The remaining leads of the Bazzaz harness will be routed along the right hand side of the bike.



# 5>CONNECT (CONT.)

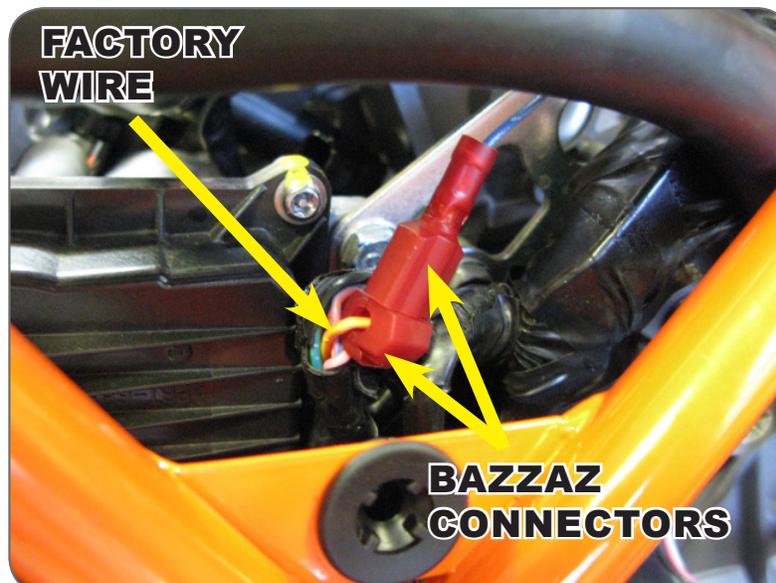
## 5.2

1. Locate the factory four pin gear position connectors.
2. Disconnect the factory gear position connectors.
3. Connect the Bazzaz gear position connectors inline.



## 5.3

1. Locate the factory TPS, which is located on the left hand side of the throttle body.
2. Trace the factory wiring loom from the TPS connector to where it ties into the factory harness.
3. Create a small cut in the factory harness sheathing to access the factory wires.
4. Separate the factory orange/yellow wire.
5. Using the supplied scotchlok, crimp onto the factory orange/yellow wire, and connect the Bazzaz TPS connector.



# 5>CONNECT (CONT.)

## 5.4

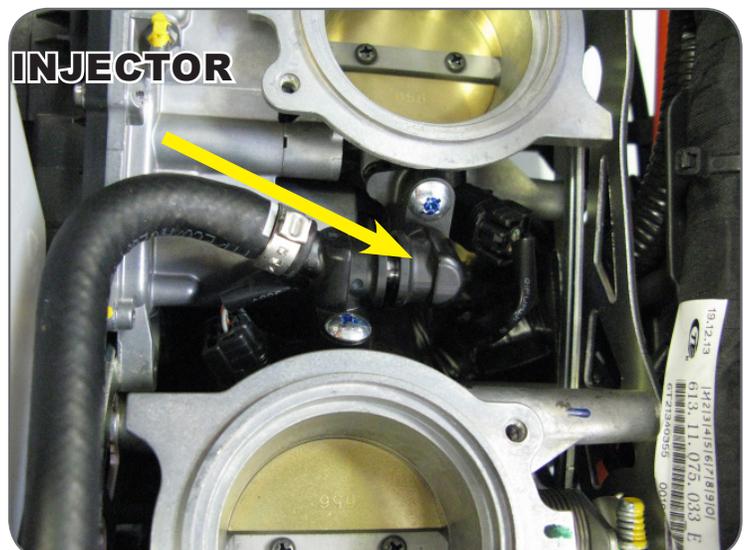
1. Locate the factory blue CKPS connector, which can be found towards the front cylinder secured to the frame.
2. Disconnect the factory CKPS connectors.
3. Install the Bazzaz CKPS connectors inline.



# 6>INJECTORS

## 6.1

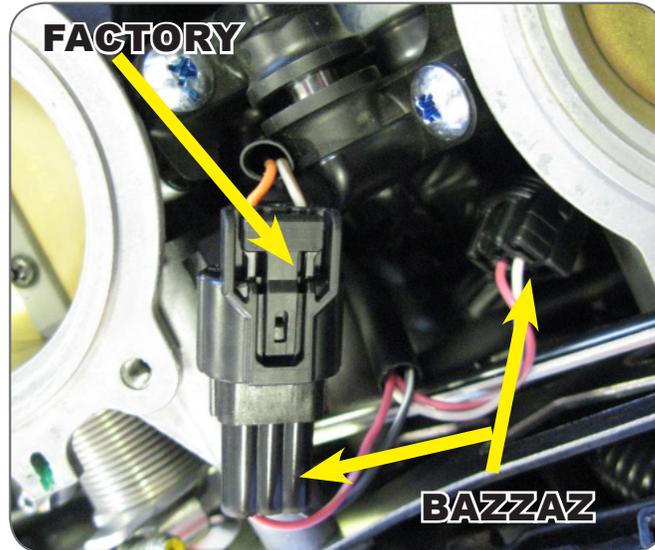
1. Locate the factory injector connectors, which can be found between the two throttle bodies.



# 6>INJECTORS (CONT.)

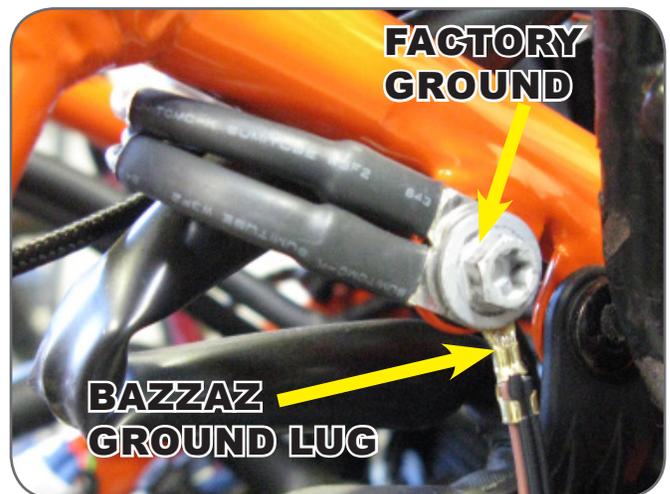
## 6.2

1. Disconnect the factory injector connector from the injector.
2. Connect the Bazzaz injector connector inline with the factory harness and injector.



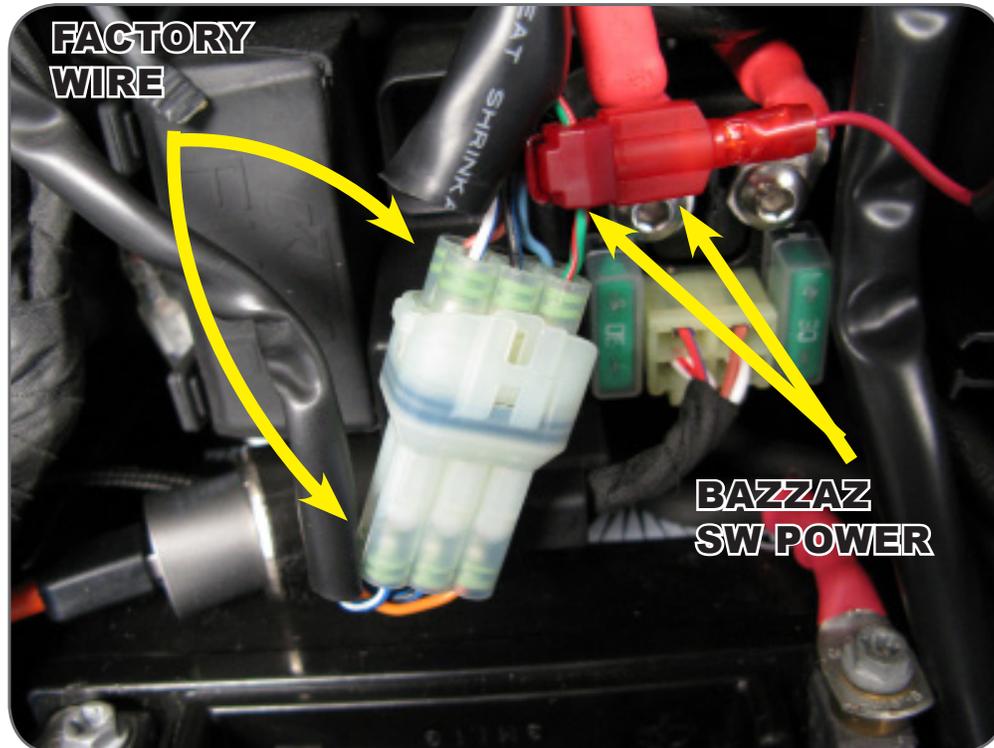
# 7>GROUND

1. Locate the factory 8mm ground bolt located on the right side of the frame, or an 8mm bolt on the motor.
2. Connect the Bazzaz ground lug.



# 8>+12V SW POWER

1. Locate the factory diagnostic connector in the tail section of the bike.
2. Separate the factory green/red wire.
3. Use the supplied scotchlok to crimp onto the factory green/red wire.
4. Connect the Bazzaz +12v sw power connector.

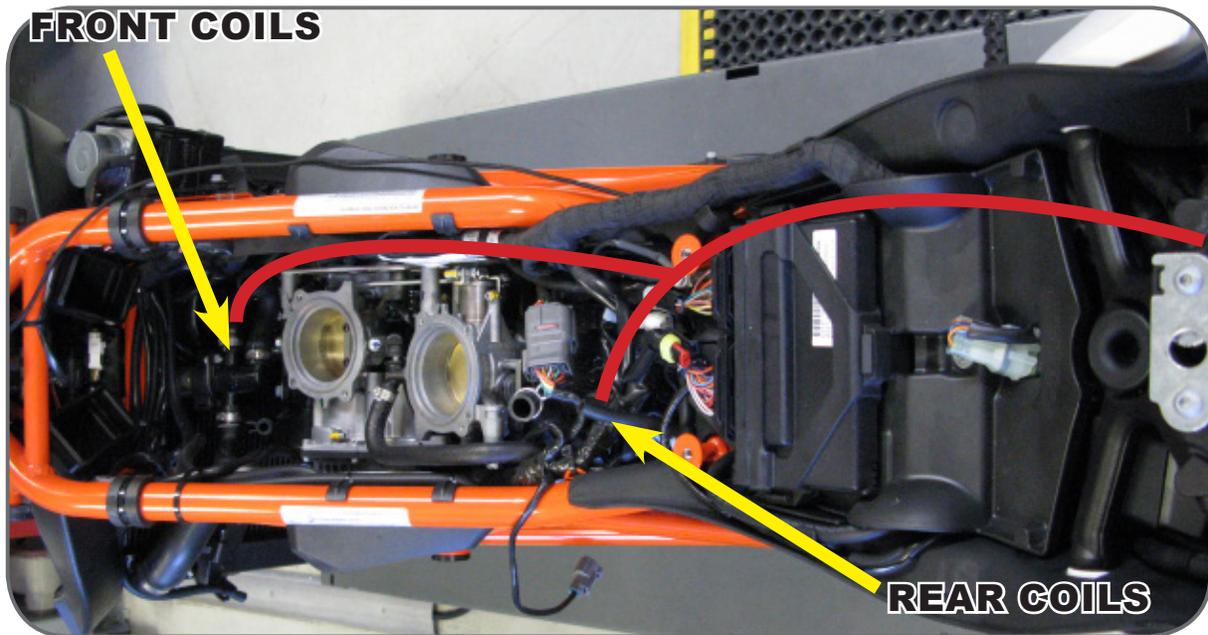


# 9>O2 ELIMINATOR

1. Locate the factory front O2 sensor and connector, which can be found on the right hand side of the bike secured to the frame rail.
2. Disconnect the factory O2 sensor connectors.
3. Install the Bazzaz O2 eliminator in place of the factory sensor.
4. Secure the Bazzaz O2 eliminator ground lug to an 8mm engine bolt.
5. Repeat these steps for the rear O2 sensor as well.



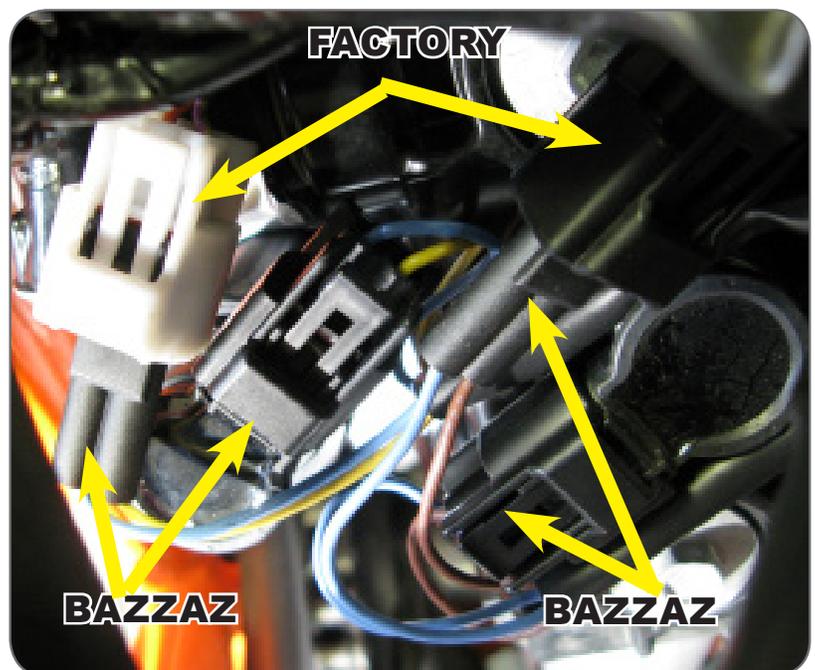
**SECTION 10>CONNECT, AND 11>QUICKSHIFT ARE FOR USE WITH THE BAZZAZ Z-FI TC ONLY!! FOR Z-FI, PLEASE SKIP FORWARD TO SECTION 10>CONNECT.**



# 10>CONNECT

## 10.1

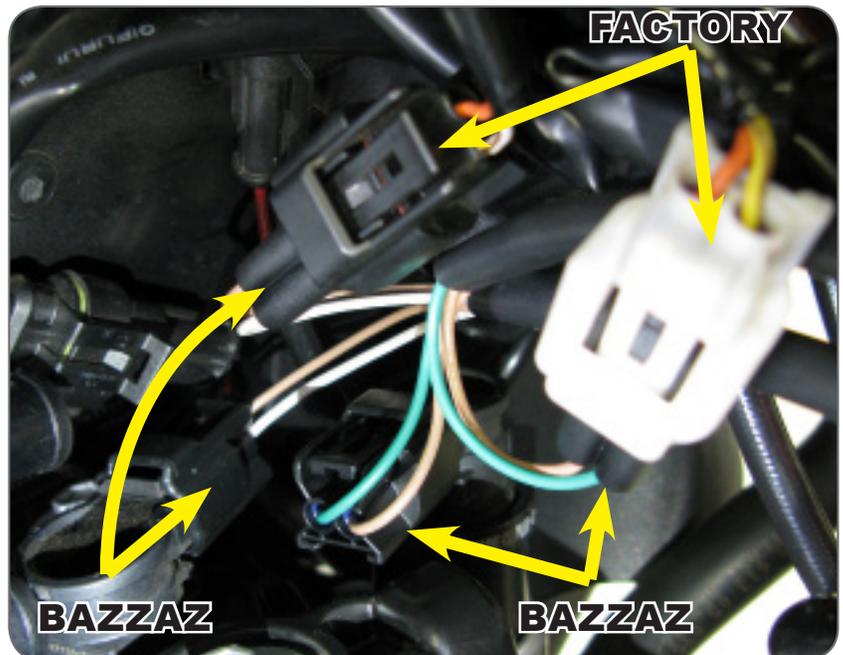
1. Connect the main connector of the Bazzaz coil harness to the control unit.
2. Route the harness down the right hand side of the bike towards the engine compartment.
3. Locate the rear cylinder coil connectors.
4. Disconnect the factory coil connectors, one at a time, and connect the Bazzaz connectors inline. The white coupler will have the Bazzaz yellow wire, and the factory black connector will receive the Bazzaz brown wire.



# 10>CONNECT (CONT.)

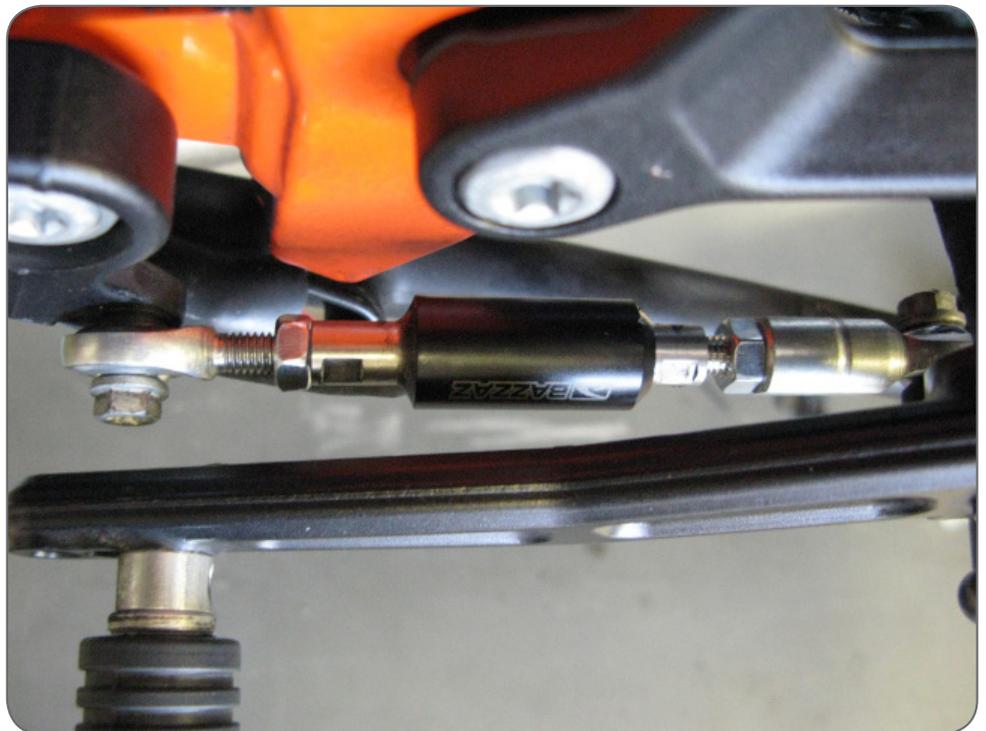
## 10.2

1. Route the Bazzaz coil harness toward the front cylinder.
2. Disconnect the factory coil connectors, one at a time, and connect the Bazzaz connectors inline. The white coupler will have the Bazzaz green wire, and the factory black connector will receive the Bazzaz white wire.



# 11>QUICKSHIFT

1. Measure and note your shift pedal height so you may reposition the shift pedal once installation is complete.
2. Remove the factory shift rod.
3. Install the Bazzaz shift switch using one of the supplied allen stud bolts and tighten.
4. Install the Bazzaz shift rod. **Note: The Bazzaz shift rod may need to be cut to get your original shift pedal height.**
5. Retighten all lock nuts.



# 12>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)**.

# 13>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)

## 14>REINSTALL

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

## 15>USE

### SELECT A MAP

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).



**MAP 1**



**MAP 2**

# 16>NEXT LEVEL

\*\*Accessories purchased separately.

## MAP SELECT/ TC ADJUST SWITCH

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.



**129.95**

## MAP SELECT SWITCH

Switch maps on the fly with this handlebar-mounted switch. Weatherproof toggle and easy installation.



**79.95**

## ZAFM SELF MAPPER

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**

## TC ACTIVE LIGHT

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



**79.95**

# NOTES:

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**THE SMARTEST PERFORMANCE TUNING TECHNOLOGY**



Proudly made in the  
**United States**

**F592 | T592**