

INSTALLATION INSTRUCTIONS



UNLEASH.

THE SMARTEST PERFORMANCE TUNING TECHNOLOGY

ZFI FUEL MANAGEMENT

ZFI TC FUEL + QS + TRACTION CONTROL

APRILIA RSV4RF | 2015-2016
F941 | T941

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.

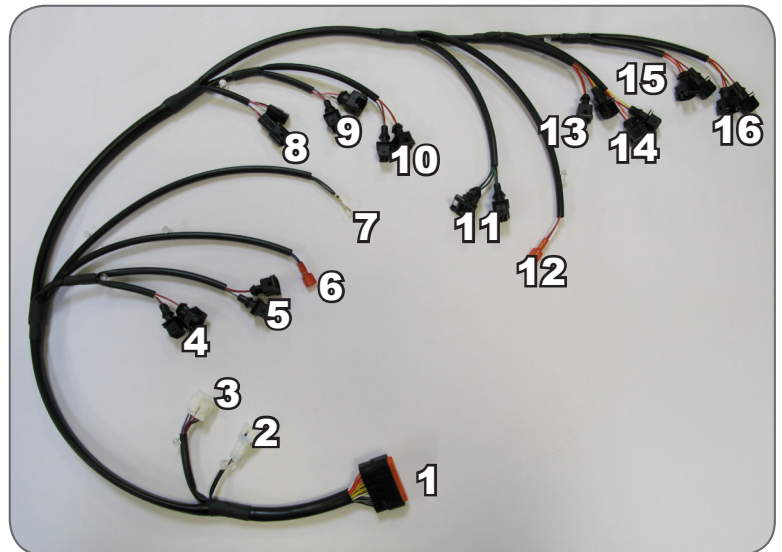
2>IDENTIFY

INCLUDED PARTS

1. Z-Fi/Z-Fi TC control unit
2. Fuel harness
3. Coil harness (For Z-Fi TC only)
4. Shift Switch and mounting hardware (For Z-Fi TC only)
5. USB cable
6. Swingarm stickers
7. Download Bazzaz software from bazzaz.net/index.php/software-overview

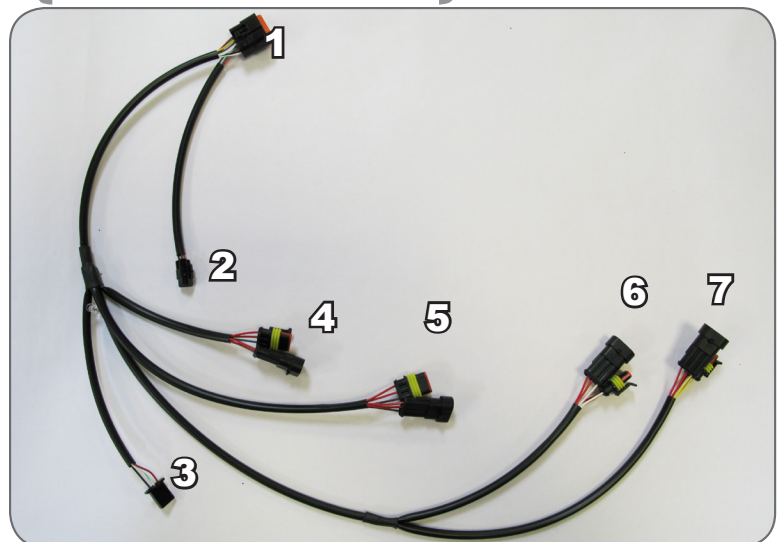
FUEL HARNESS

1. Main
2. Map Select
3. ZAFM
4. Primary Inj. Front Cyl. 2
5. Primary Inj. Front Cyl. 4
6. TPS
7. Ground
8. GPS
9. Primary Inj. Rear Cyl. 1
10. Primary Inj. Rear Cyl. 3
11. CKPS
12. +12v Sw. Power
13. Secondary Inj. Rear Cyl. 3
14. Secondary Inj. Rear Cyl. 1
15. Secondary Inj. Front Cyl. 4
16. Secondary Inj. Front Cyl. 2



COIL HARNESS (Z-FI TC ONLY)

1. Main
2. TC Adjust
3. Shift Switch
4. Cyl. 2 Coil
5. Cyl. 4 Coil
6. Cyl. 1 Coil
7. Cyl. 3 Coil

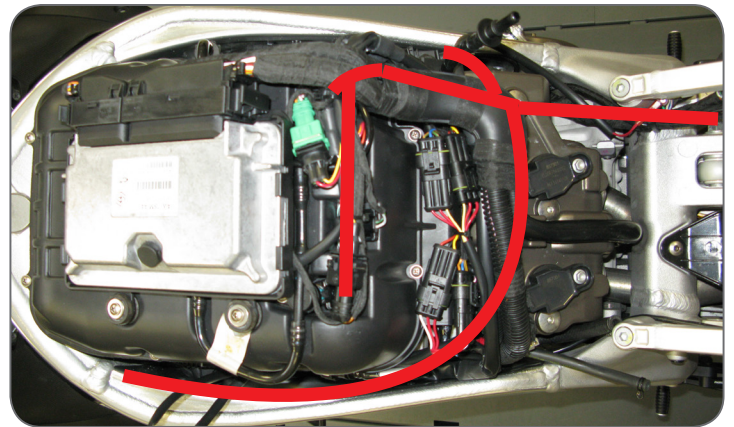


3>REMOVE

1. Seat
2. Fuel tank
3. Left side fairing
4. Air box

4>SECURE

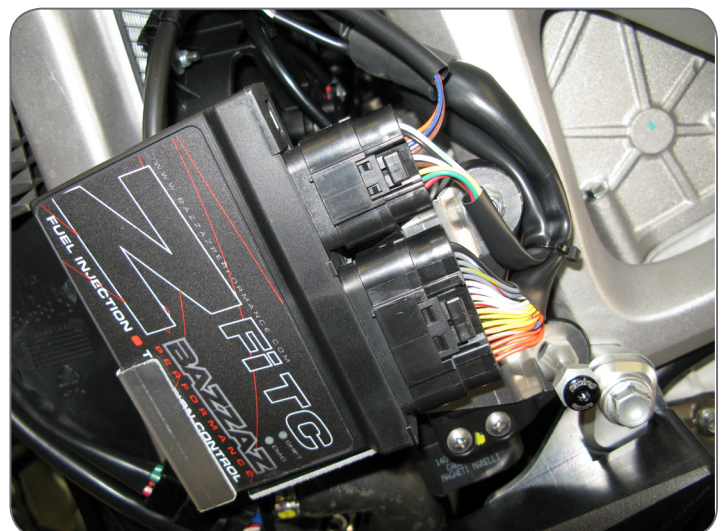
1. Locate the throttle control unit, found bolted to the front left frame spar near the radiator.
2. Remove the mounting hardware and install the Bazzaz control unit mounting bracket over the throttle control unit.
3. Secure by reinstalling the existing hardware. Attach supplied velcro to the back side of the control unit and also the mounting bracket to secure the control unit within the mounting bracket.



5>CONNECT

5.1

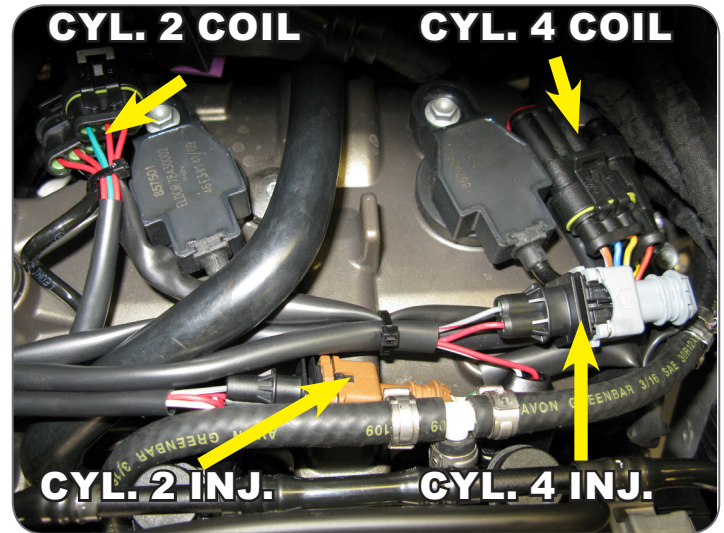
1. Route the Bazzaz harness through the engine compartment in front of the engine down to the control unit mounted in the bracket on the frame.
2. Connect the harness to the control unit, and secure the harness using supplied cable ties.
3. Secure the harness away from any hot or moving components that may cause damage to the harness



5>CONNECT (CONT.)

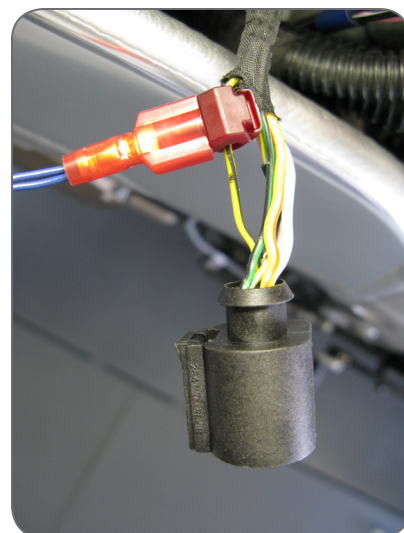
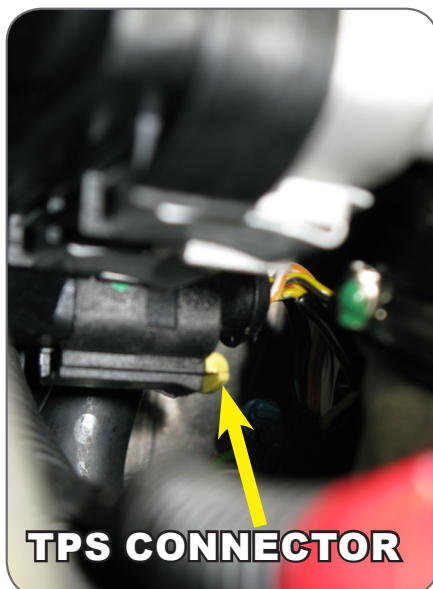
5.2

1. Route the remaining harness inside of the left frame spar.
2. With the air box removed, connect the Bazzaz harness inline with the corresponding injectors and / or coils for the front two cylinders.
3. Secure the harness routing neatly with cable ties and reinstall the air box.



5.3

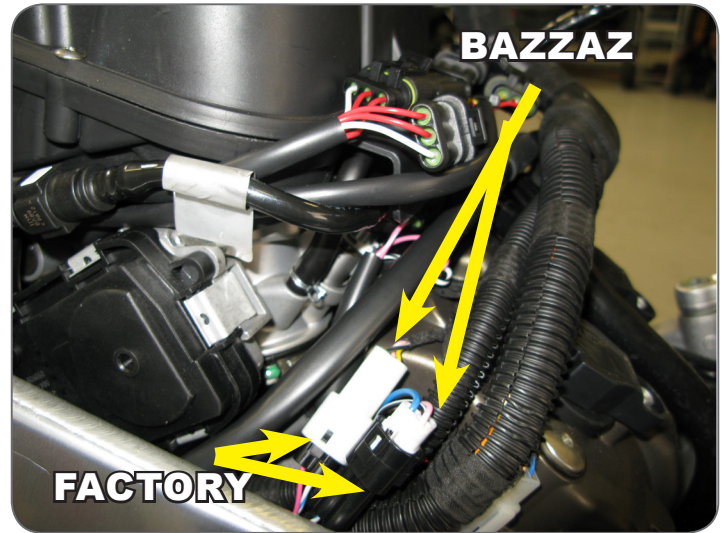
1. Following the flow of the harness from the front of the bike to the rear, connect the Bazzaz harness to the Throttle Position Sensor (TPS).
2. This connector is located under the rear cylinder throttle bodies on the left side of the bike, behind the throttle valve actuator motor.
3. Disconnect this connector in order to gain access to its wires in the rear of the connector. Locate the yellow/black wire (pin #1) and using the supplied scotchlok connector in the Bazzaz kit, crimp onto this wire.
4. Next insert the T-Tap connector attached to the blue wire of the Bazzaz harness. Now reconnect stock TPS connector



5>CONNECT (CONT.)

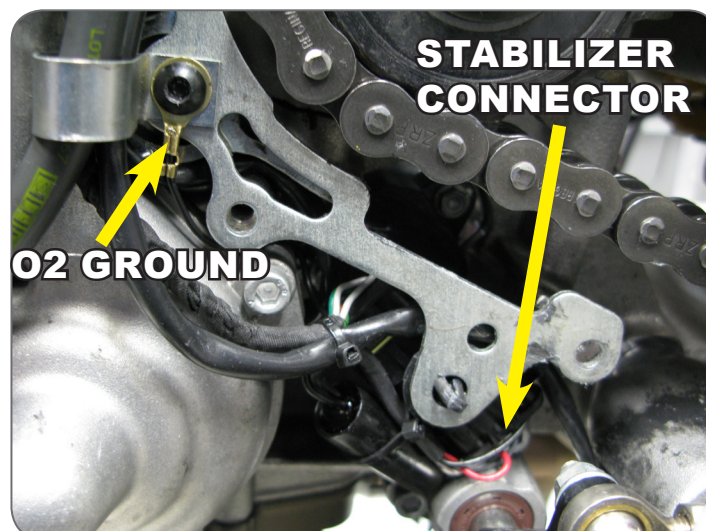
5.4

1. Locate the Gear Position Sensor connectors found between the left side frame spar and the left rear cylinder head.
2. Connect the mating Bazzaz connectors inline with the sensor and stock harness connectors.



5.5

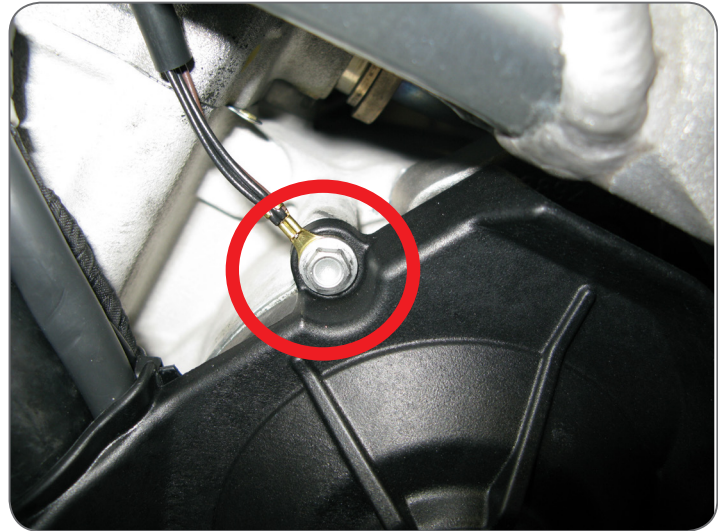
1. Remove the countershaft sprocket cover.
2. Disconnect the existing O2 sensor from the harness. This sensor will no longer be used; the wires should be neatly secured away from any moving components, or the sensor may be removed and the remaining port / bung in the exhaust can then be plugged.
3. Next, connect the Bazzaz O2 stabilizer supplied with the kit in place of this sensor and secure it to the same location made available due to the removal of the sensor connector.
4. The O2 stabilizer requires an external ground source through the use of a ground lug. Attach the O2 stabilizer ground lug to the stock wire routing bracket using the existing hardware.



5>CONNECT (CONT.)

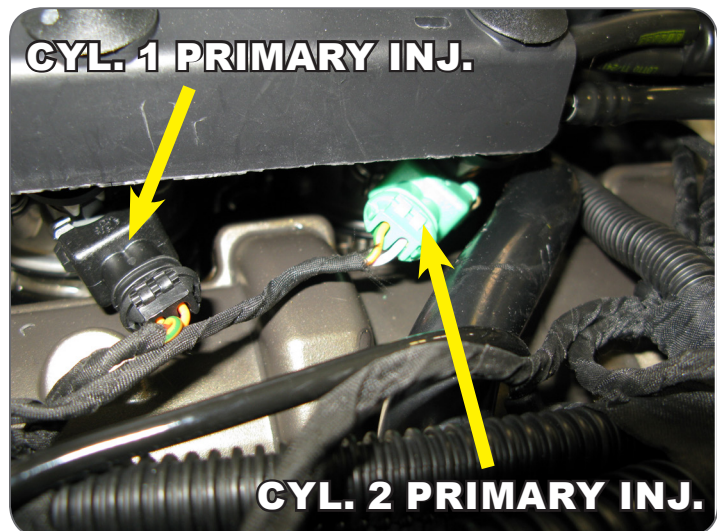
5.6

1. Route the Bazzaz ground lug between the frame and engine, and connect it to the countershaft sprocket cover using the existing mounting hardware. *Note: Any solid chassis ground may be used for mounting the ground lug.*



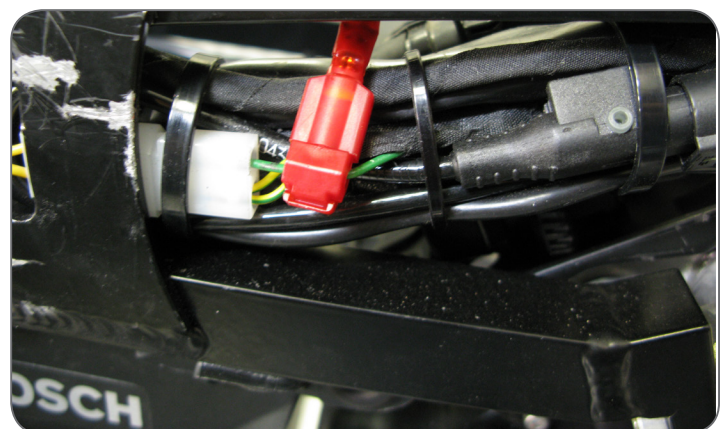
5.7

1. Connect the Bazzaz rear cylinder lower injector connectors inline with the rear cylinder lower injectors.



5.8

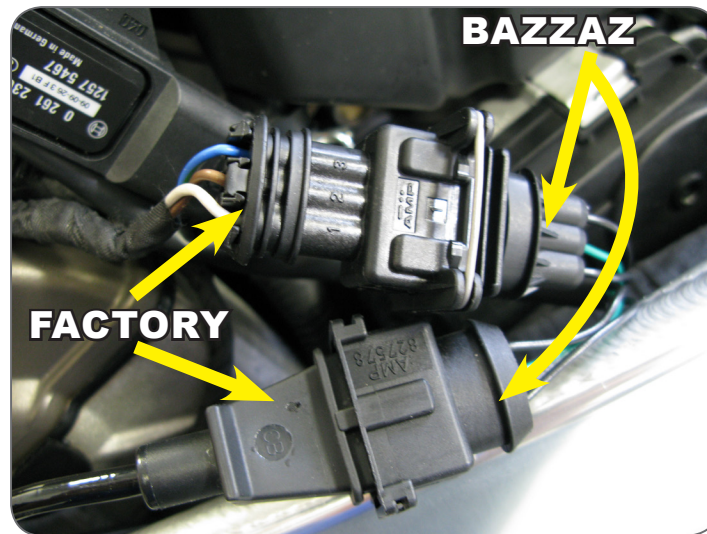
1. Locate the speed sensor connector, located just inside the right side sub frame rail under the fuel tank.
2. Using the supplied scotchlok connector, crimp onto the green wire.
3. Insert the T-Tap connector on the Bazzaz harness with the red wire attached.



5>CONNECT (CONT.)

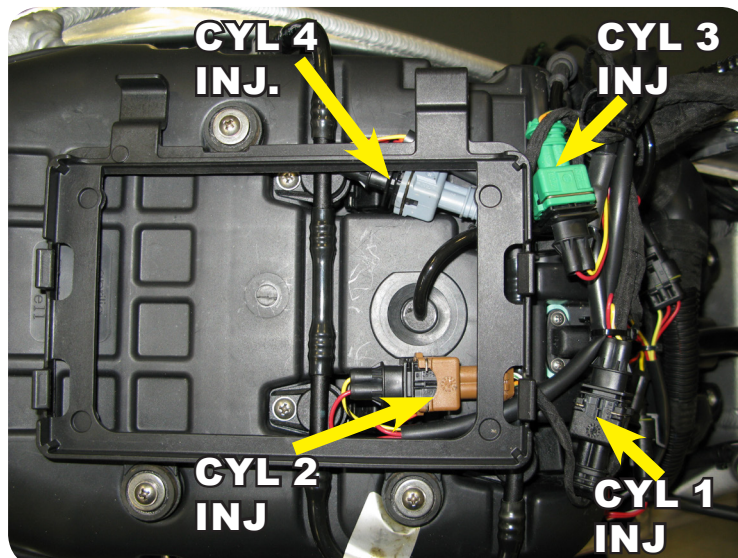
5.9

1. Connect the mating Bazzaz connectors inline with the Crank Position Sensor (CPS) and stock harness connectors. These connectors can be found between the engine and the right frame spar.



5.10

1. Route the remaining Bazzaz harness up the right side of the air box, along with the stock wiring harness.
2. Connect the corresponding Bazzaz connectors inline with the secondary injectors for all four cylinders.



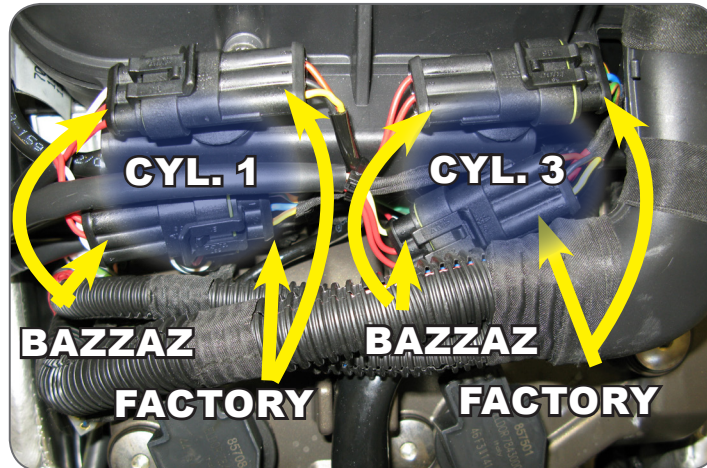
SECTION 7>CONNECT, AND 8>QUICKSHIFT ARE FOR USE WITH THE BAZZAZ Z-FI TC ONLY!! FOR Z-FI, PLEASE SKIP FORWARD TO SECTION 9>SECURE

7>CONNECT

(FOR USE WITH Z-FI TC ONLY!)

7.1

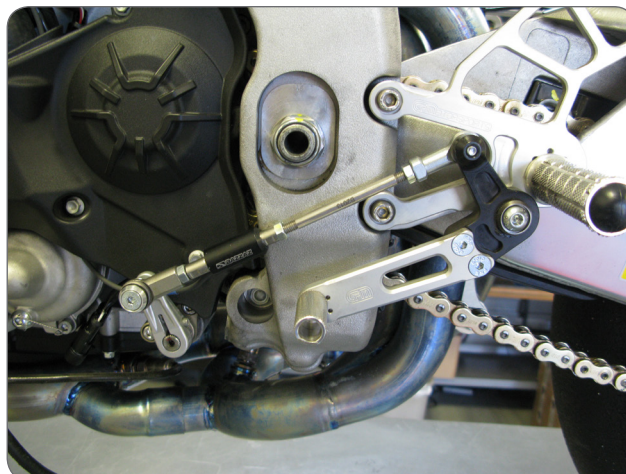
1. Connect the Bazzaz rear cylinder lower coil connectors inline with the rear cylinder lower coils.



8>QUICKSHIFT

(FOR USE WITH Z-FI TC ONLY!)

1. Measure and note your shift pedal height, so that you may reposition the shift pedal once complete.
2. Remove the factory shift rod.
3. Install the Bazzaz shift switch and shift rods. The shift switch will be mounted between the two supplied shift rods.
4. Tighten each lock nut once your desired shift pedal height is obtained.
5. Route the Bazzaz sensitivity box and wires into the engine compartment.
6. Connect the shift switch to the mating coil harness connector.



11>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).**

12>CHECK



1. In order to check that the system is installed correctly, download the Bazzaz Z-Fi Mapper software at 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

13>REINSTALL

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

14>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).

15>NEXT LEVEL

**Accessories purchased separately.

MAP SELECT/ TC ADJUST SWITCH

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



79.95

Z AFM 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



THE SMARTEST PERFORMANCE TUNING TECHNOLOGY



Proudly made in the
United States

F253 | T253