

INSTALLATION INSTRUCTIONS



UNLEASH.

THE SMARTEST PERFORMANCE TUNING TECHNOLOGY

ZFI FUEL MANAGEMENT

ZFI TC FUEL + QS + TRACTION CONTROL

SUZUKI SV650 | 2017 - 2019
F649 | T649

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.

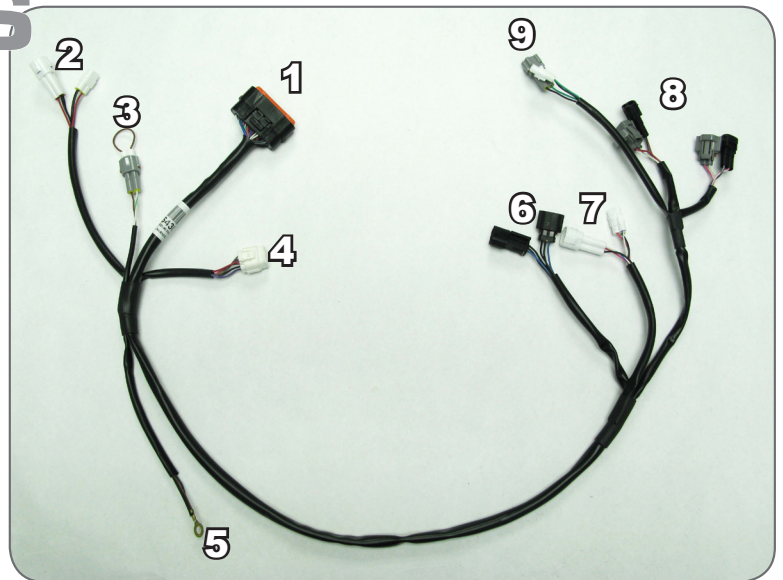
2>IDENTIFY

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. Scotchloks (2)
6. USB cable
7. Swingarm stickers
8. Download Bazzaz software from bazzaz.net/index.php/software-overview

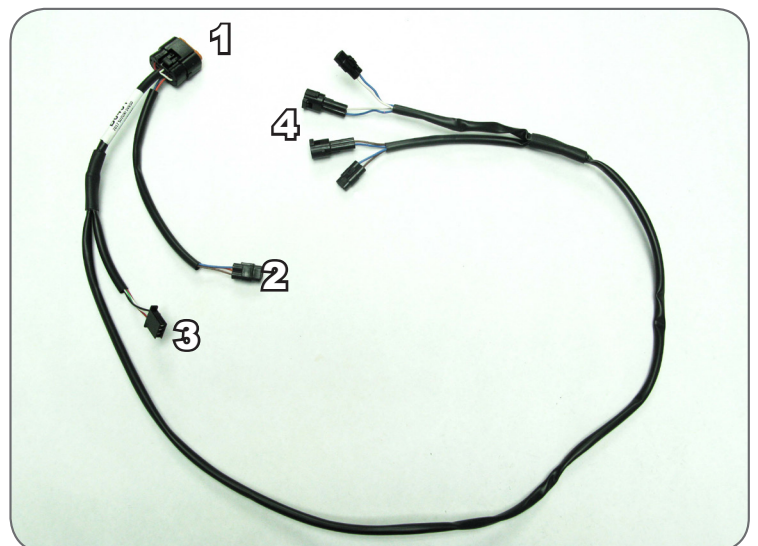
FUEL HARNESS

1. Main
2. +12v SW Power
3. Map Select
4. ZAFM
5. Ground
6. TPS
7. Gear
8. Injectors
9. CKPS



COIL HARNESS (Z-FI TC ONLY)

1. Main
2. TC Active Conn.
3. Shift Switch
4. Coils

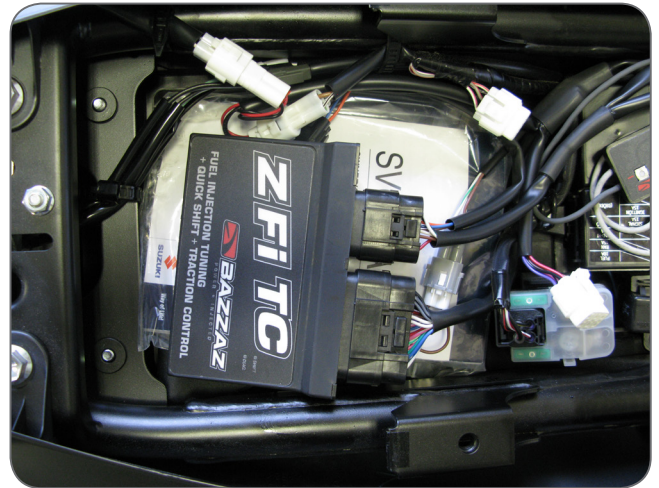


3>REMOVE

1. Rider seat.
2. Both fuel tank fairings.
3. Fuel tank.
4. Air box.

4>SECURE

1. Secure the Bazzaz control unit beneath the rider seat in the tail section of the bike.
2. Connect the Bazzaz fuel harness to the control unit and begin routing the harness as shown in the below picture.



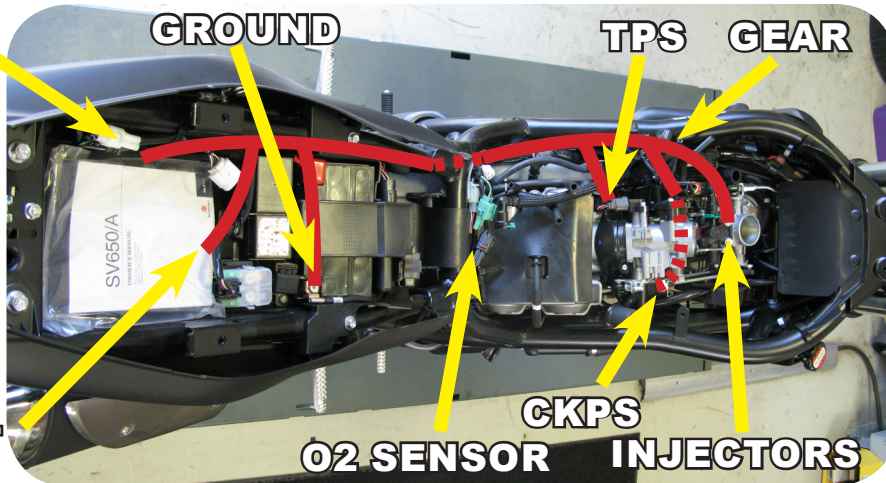
+12V SW
POWER

GROUND

TPS

GEAR

CONTROL
UNIT



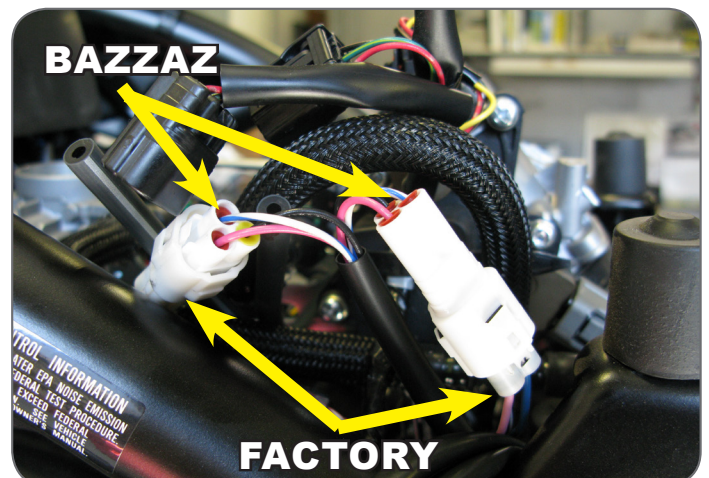
O2 SENSOR

CKPS
INJECTORS

5>CONNECT

5.1

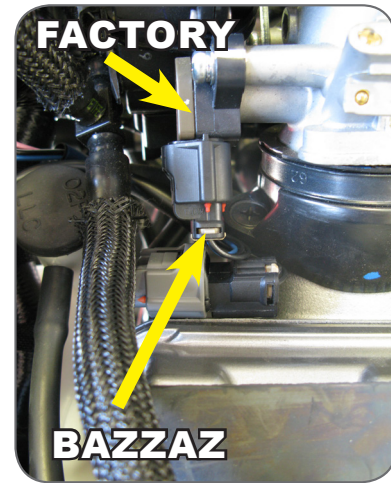
1. Locate the factory white gear position connector, which can be found on the left hand side of the bike along the frame.
2. Disconnect the factory gear position connector and connect the Bazzaz gear position connectors inline.



5>CONNECT (CONT.)

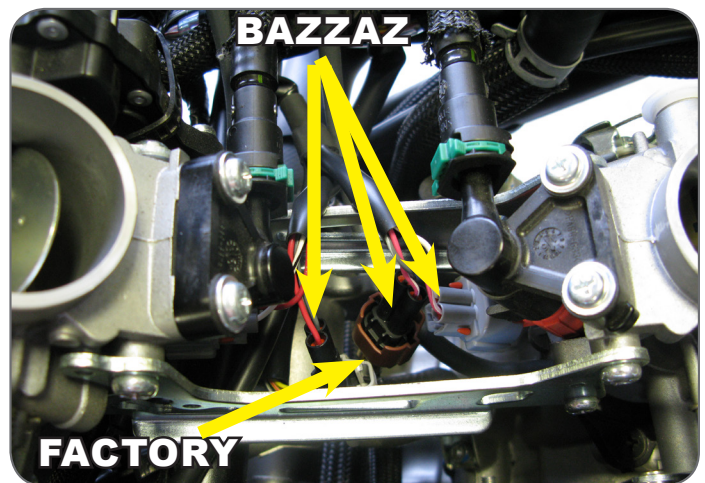
5.2

1. Locate the factory grey TPS connector, which can be found on the rear throttle body near the cylinder head.
2. Disconnect the factory TPS connector and install the Bazzaz inline.



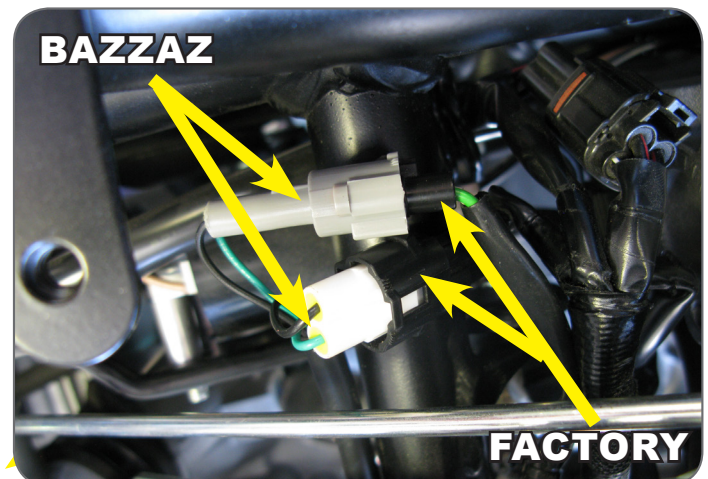
5.3

1. Locate the factory front and rear injector connectors, which can be found between the two throttle bodies. The front injector connector is brown and the rear injector connector is grey.
2. Disconnect the factory injector connectors and install the Bazzaz injector connectors inline as labeled on the harness.



5.4

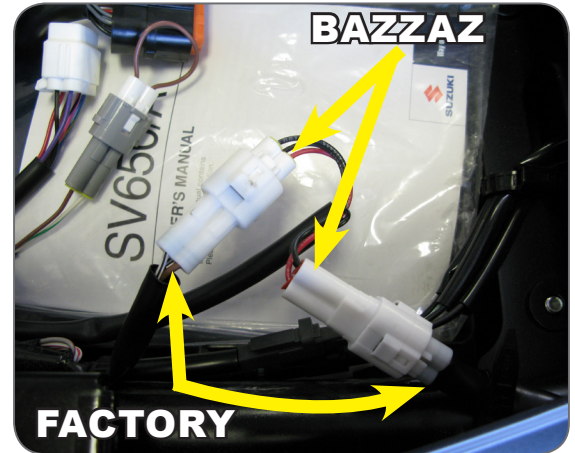
1. Locate the factory black CKPS connectors, which can be found on the right hand side of the bike near the rear throttle body.
2. Disconnect the factory CKPS connector and install the Bazzaz CKPS connectors inline.



5>CONNECT (CONT.)

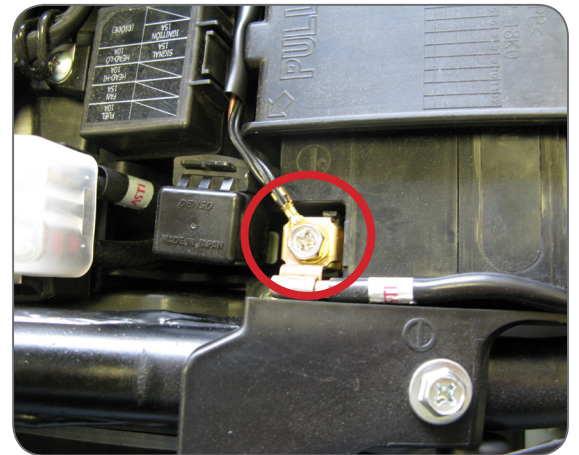
5.5

1. Locate the factory white three pin tail light connector in the tail section on the left hand side of the bike.
2. Disconnect the factory tail light connectors and install the Bazzaz switched power connectors inline.



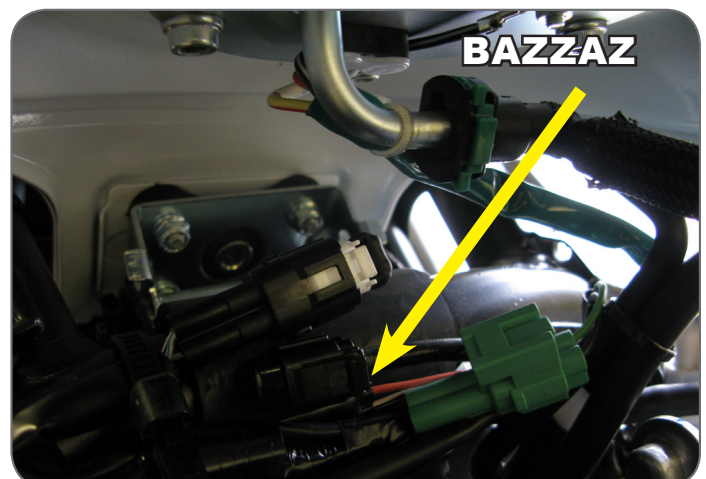
5.6

1. Locate the Bazzaz ground lug and install the Bazzaz onto the negative ground post of the battery.



6>O2 STABILIZER

1. Locate the factory O2 sensor connector, which can be found along the frame directly beneath the fuel tank.
2. Disconnect the factory O2 sensor connector and install the Bazzaz O2 stabilizer.



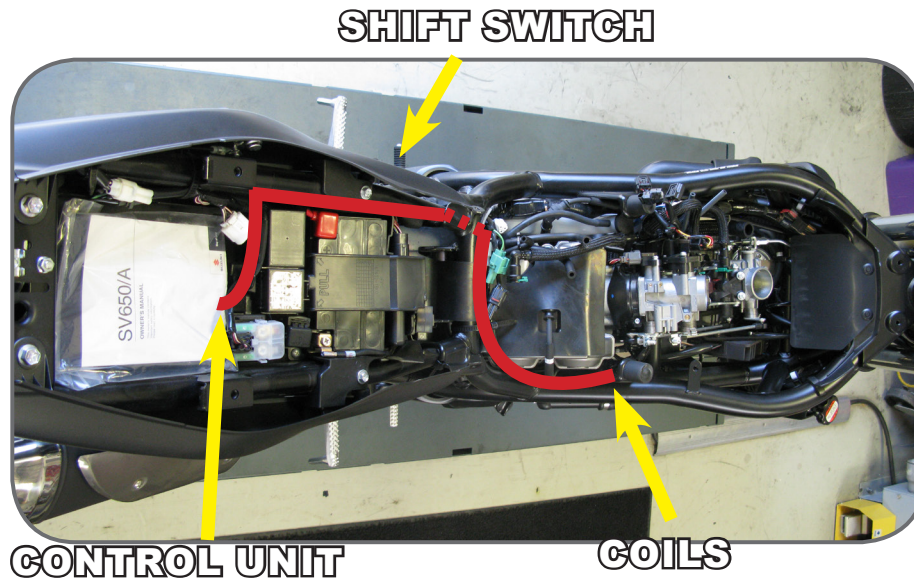
SECTION 7>CONNECT, AND 8>QUICKSHIFT ARE FOR USE WITH THE BAZZAZ Z-FI TC ONLY!! FOR Z-FI, PLEASE SKIP FORWARD TO SECTION 9>SECURE

7>CONNECT

(FOR USE WITH Z-FI TC ONLY!)

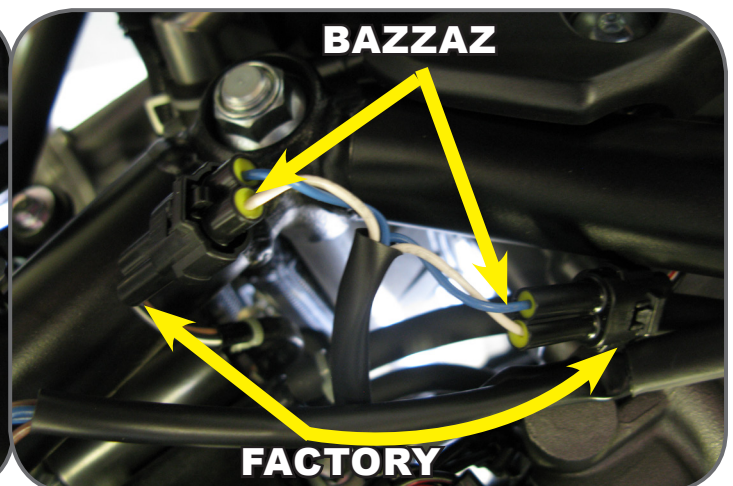
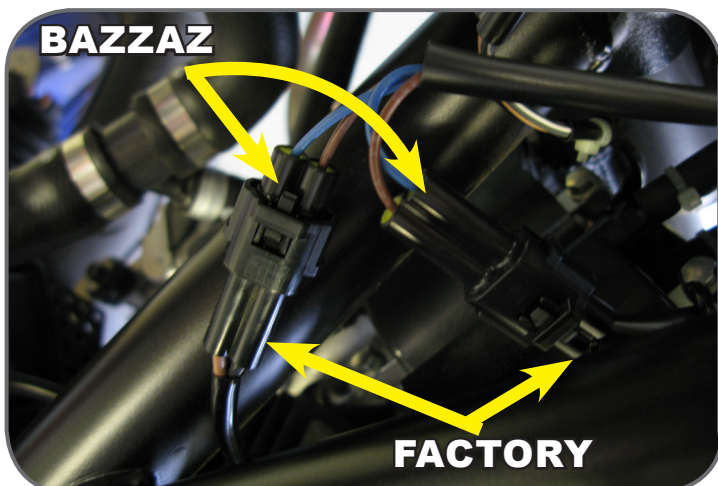
7.1

1. Connect the Bazzaz coil harness to the control unit and begin routing the harness as shown in the photo.



7.2

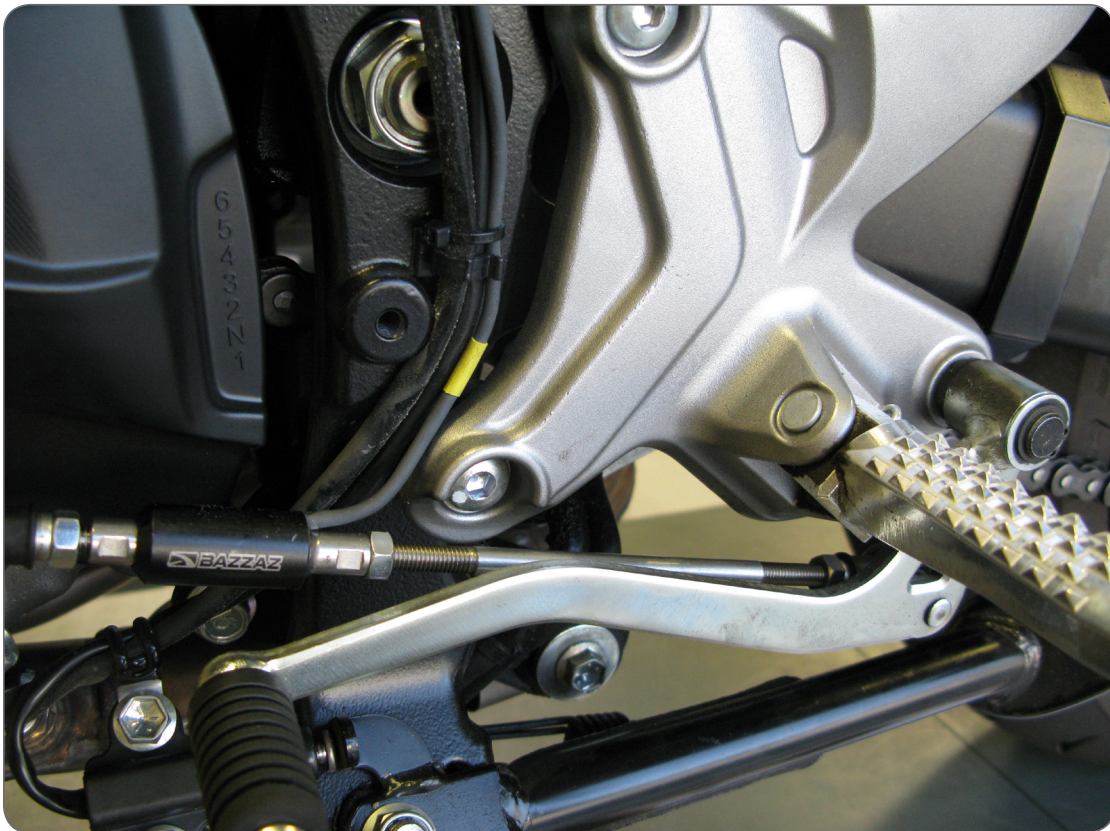
1. Locate the factory front and rear coil connectors on the right hand side of the bike.
2. Disconnect the factory coil connectors and install the Bazzaz coil connectors inline according to the proper labeling.



8>QUICKSHIFT

(FOR USE WITH Z-FI TC ONLY!)

1. Measure and note your shift pedal height so you may reposition the shift pedal once complete.
2. Remove the factory shift rod and begin to install the Bazzaz shift switch using one of the supplied allen stud bolts and tighten.
3. Begin to install the Bazzaz shift rod. Note: The shift rod may need to be cut to get your original shift pedal height.
4. Ensure to retighten all lock nuts on the shift linkage.



9>SECURE



To complete the installation, 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).

10>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

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11>REINSTALL

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

12>USE

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).



MAP 1



MAP 2

13>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

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

NOTES:



THE SMARTEST PERFORMANCE TUNING TECHNOLOGY



Proudly made in the
United States

F649 | T649