INSTALLATION INSTRUCTIONS

BAZZAZ®

UNLEASH.
THE SMARTEST PERFORMANCE TUNING TECHNOLOGY

QS4 USB STAND ALONE QUICK SHIFT

HARLEY DAVIDSON TOURING | 2008-2013
Q251

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. QS4-USB control unit
2. QS4-USB harness
3. Shift Switch and mounting hardware
4. USB cable
5. Zip ties
6. Download software from Bazzaz.net.

HARNESS

COIL

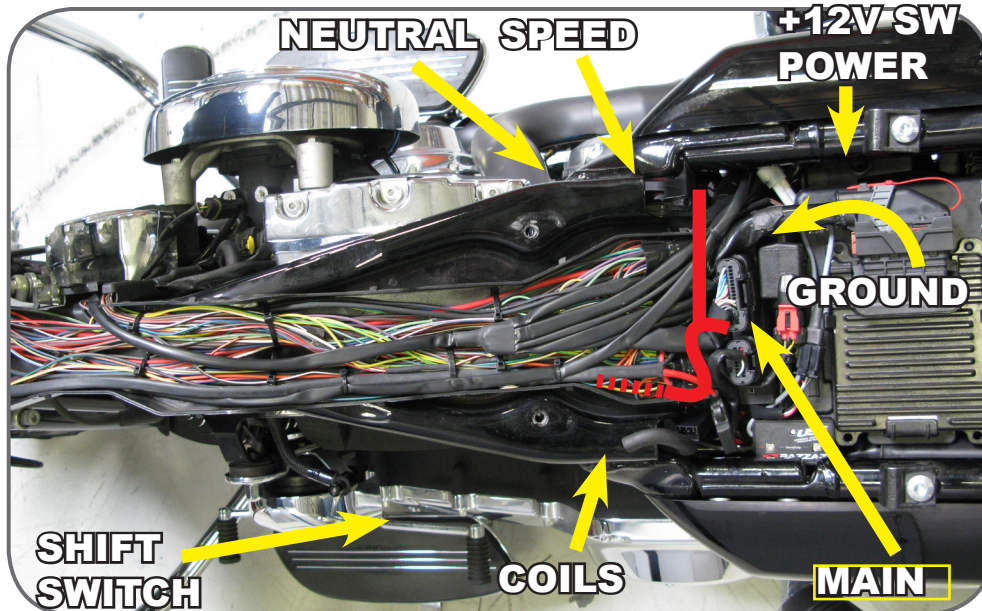SHIFT SWITCH

MAIN

NEUTRAL

SPEED

+12V SW PWR

GROUND
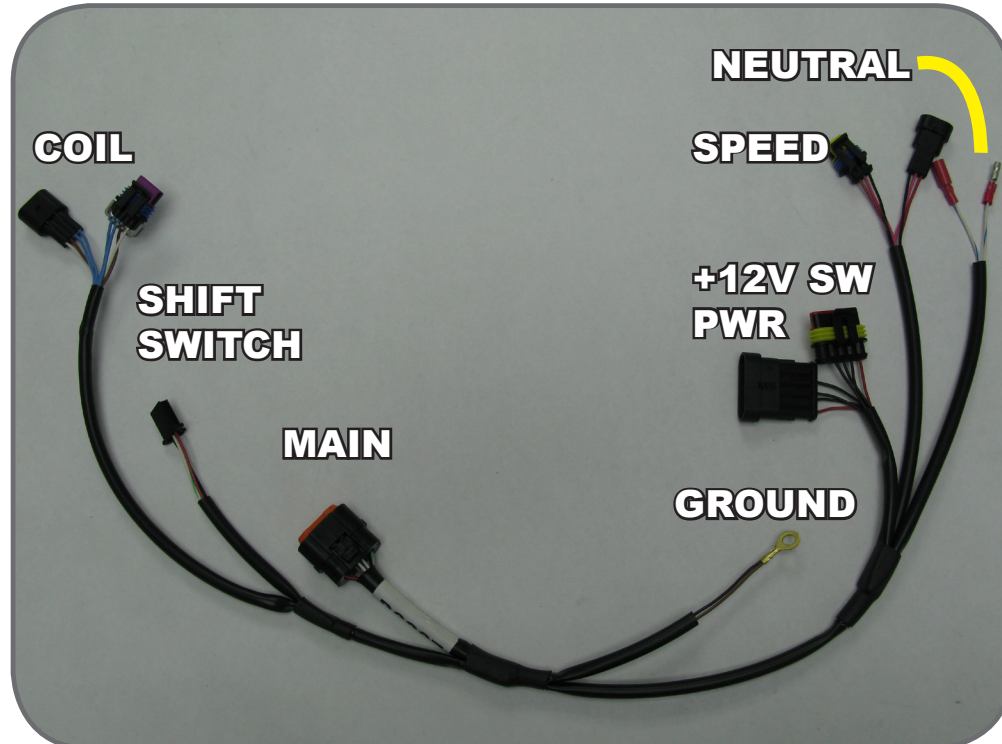
3>REMOVE

1. Rider seat
2. Fuel tank
3. Right side battery box cover
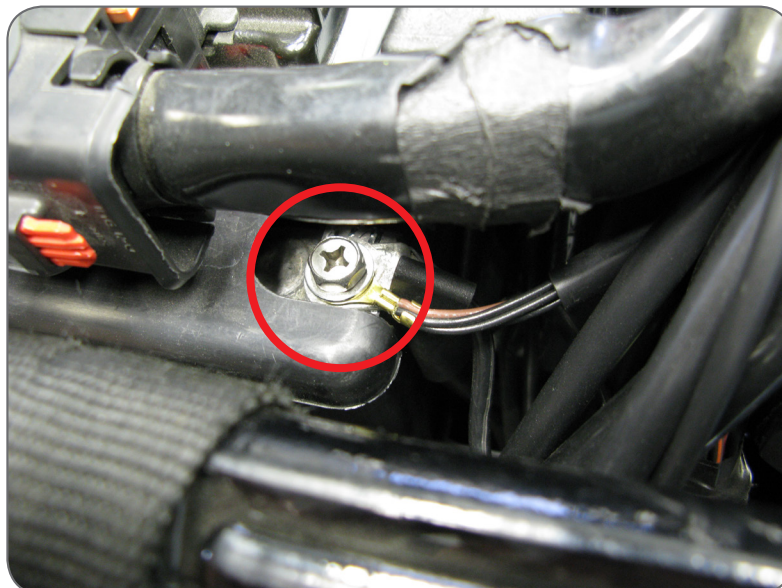4. Black plastic wiring cover

4>SECURE

1. Place the control unit in front of the battery.
2. Connect the main connector of the Bazzaz QS4 harness to the control unit and begin to route accordingly.
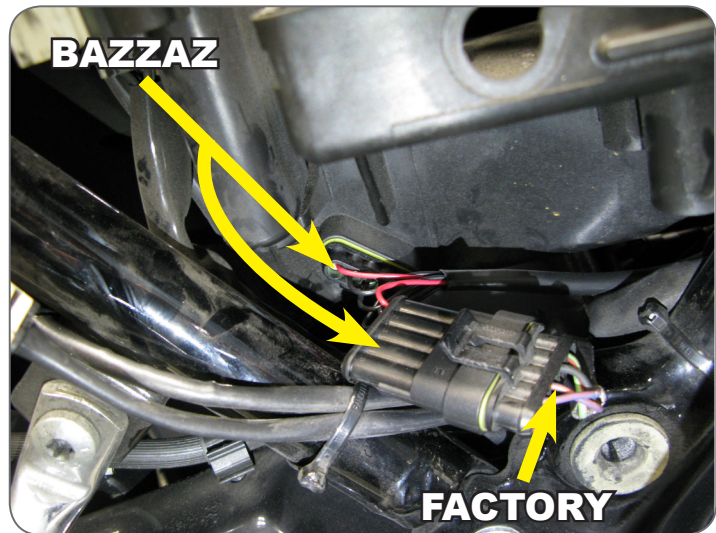

5>CONNECT

5.1

1. Route the Bazzaz ground lead toward the factory negative battery terminal.
2. Connect the Bazzaz ground lug to the negative battery terminal.
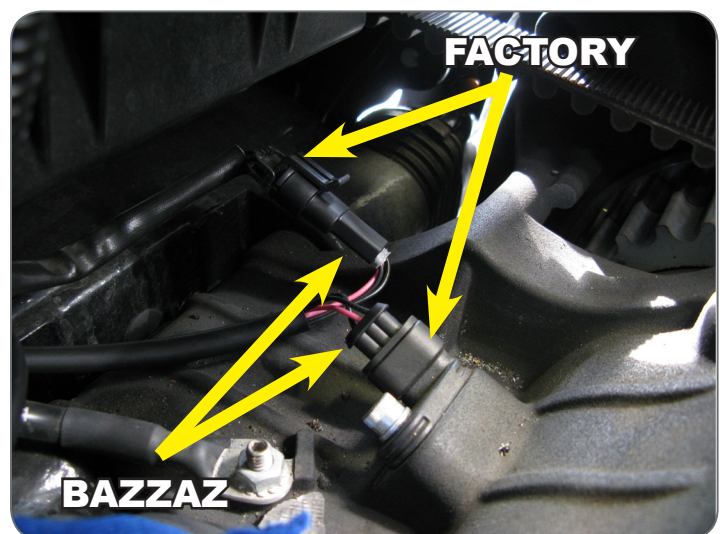
5>CONNECT (CONT.)

5.2

1. Locate the factory 5 pin connector, plugged into the dummy plug on the right hand side of the bike at the bottom of the factory battery box.
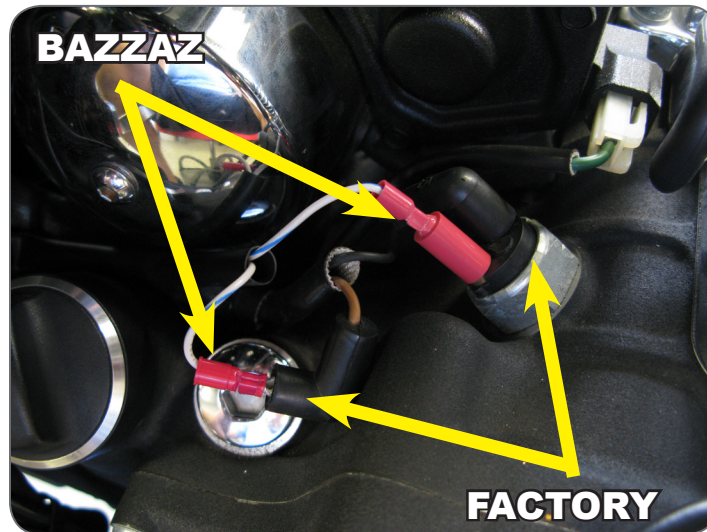2. Disconnect and install the Bazzaz +12v SW connector inline.

5.3

1. Disconnect the factory negative battery terminal.
2. Remove the engine oil filler cap/dipstick, and cover with a clean shop cloth to keep dirt and debris out.
3. Remove the battery cable from the top of the starter motor, and then remove the front and rear mounting bolts.
4. Carefully remove the starter, and use caution to avoid losing the ring dowels.
5. Once removed, locate the factory speed sensor connector and install the Bazzaz speed sensor connector inline.
6. Before reinstalling the starter, verify that the two ring dowels are installed on the primary chaincase, or starter flange.
7. Apply a drop of blue Loctite tread locker onto the threads of the starter mounting bolts. Move the starter into position, and start both mounting bolts. Tighten the starter mounting bolts to 25-27 ft-lbs (33.9-36.6 nm).
8. Remove the shop cloth from the engine oil filler cap-dipstick, and reinstall the cap.
9. Install the battery cable back onto the starter and tighten it to 70-90 in-lbs (7.9-10.2 nm).
10. Reconnect the factory negative ground terminal and Bazzaz ground lug to the negative battery terminal.
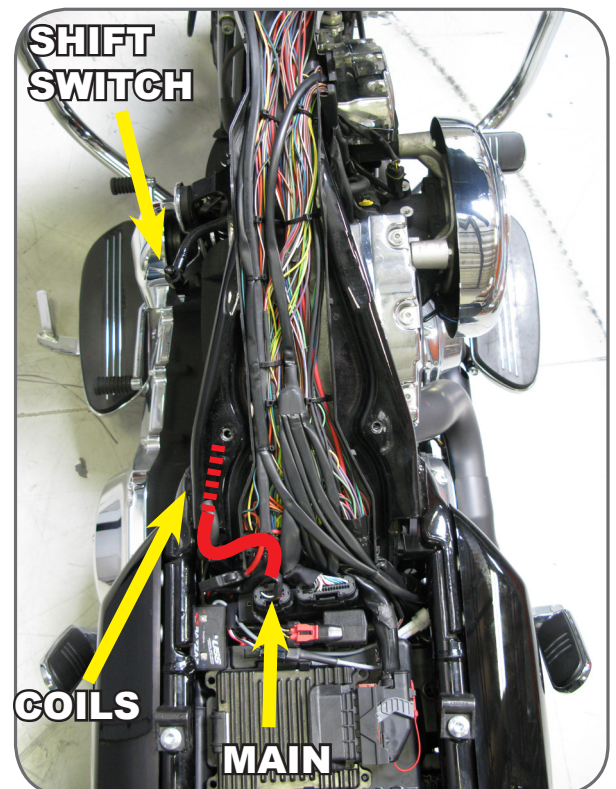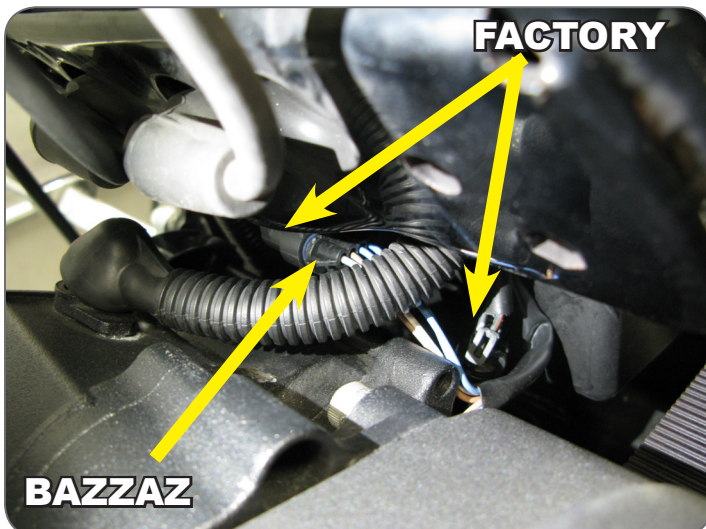
5>CONNECT (CONT.)

5.4

1. Locate the factory neutral switch near the starter.
2. Remove the brown wire from the sensor, and connect the Bazzaz neutral connectors inline.


5.5

1. Route the coil lead down towards the starter motor on the left hand side of the bike.
2. Disconnect the factory coil connector, and install the Bazzaz coil connector inline.

6>QUICKSHIFT

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 up towards the factory battery.
6. Connect the shift switch to the mating coil harness connector.
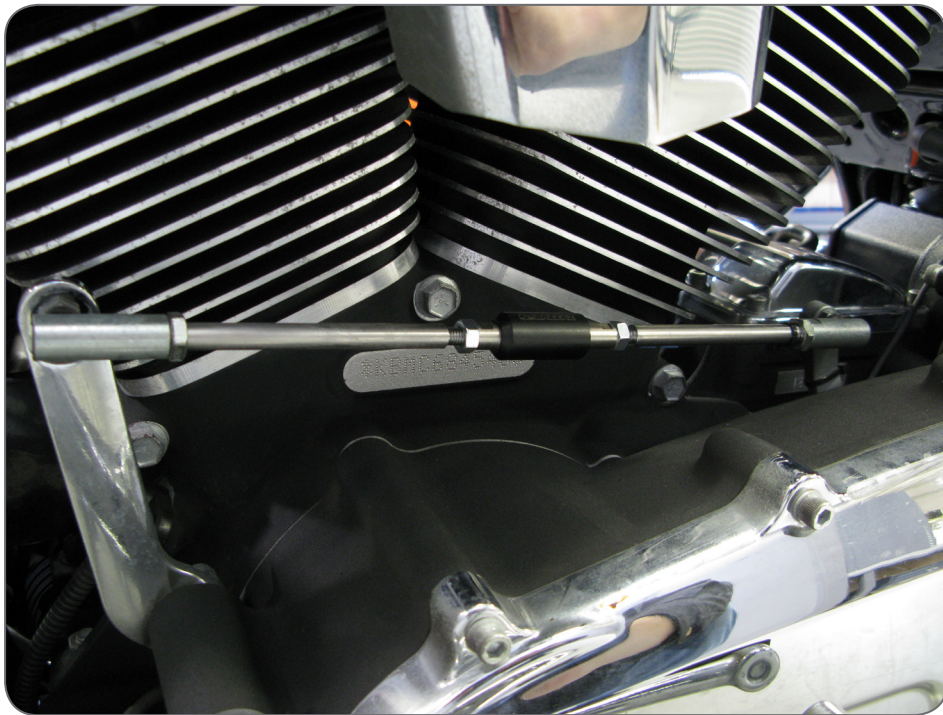
8>SECURE

⚠ 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).

9>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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10>REINSTALL

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

12>NEXT LEVEL

QS4 USB SHIFT LIGHT
79.95

Purchased separately.

Illuminates to identify pre-determined, optimal shift points. Comes pre-programmed with suggested figures that can be easily adjusted as desired.

NOTES:

NOTES:

BAZZAZ

POWER · INJECTED

THE SMARTEST PERFORMANCE TUNING TECHNOLOGY

Proudly made in the
United States

Q251