INSTALLATION INSTRUCTIONS





KAWASAKI NINJA 650 | 2012-2015 Q446

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.

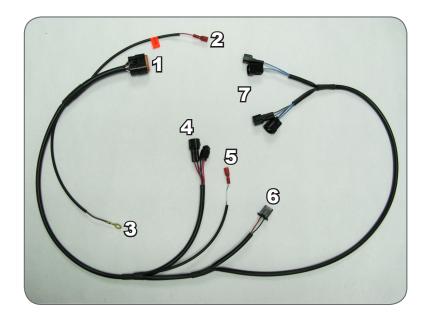
2>IDENTIFY

INCLUDED PARTS

- 1. QS4 USB control unit
- 2. QS4 harness
- 3. Shift Switch and mounting hardware
- 4. Scotchlok (2)
- 5. USB cable
- 6. Swingarm stickers
- 7. Velcro
- 8. Download Bazzaz software from bazzaz.net/index.php/software-overview

QS4 HARNESS

- 1. Main
- 2. +12v SW Power
- 3. Ground
- 4. Speed
- 5. Neutral
- 6. Shift Switch
- 7. Coils

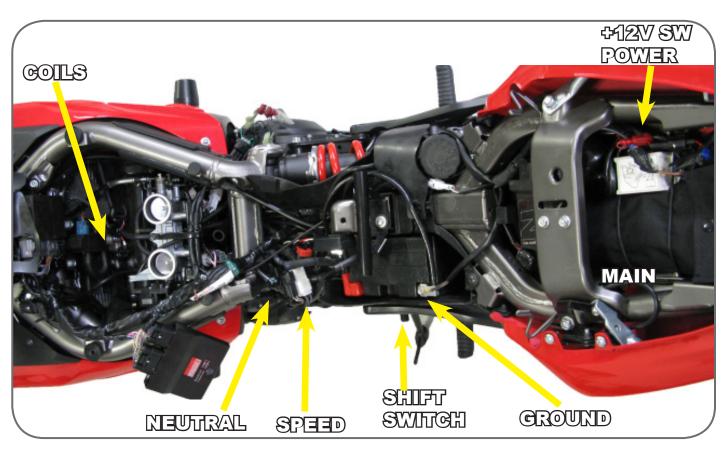


3>REMOVE

- 1. Rider seat
- 2. Passenger seat
- 3. Fuel tank
- 4. Air box

4>SECURE

- 1. Mount the Bazzaz control unit on top of the tool kit using the tool kit straps.
- 2. Connect the main connector of the Bazzaz harness to the control unit and begin to route the harness along the left side of the bike, up to the valve cover.



5>CONNECT

5.1

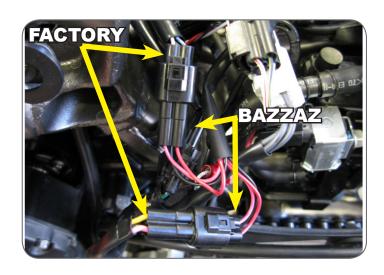
- 1. Locate the factory three-pin, black speed connectors, which can be found near the factory fuel pump connector (on the left side of the bike).
- Disconnect the factory speed connectors, and connect the Bazzaz SPEED connectors in-line with the factory connectors.

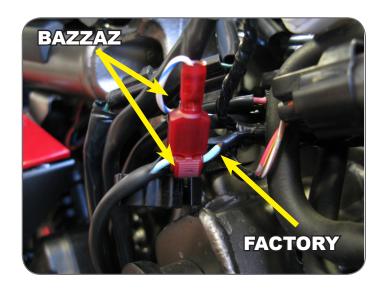


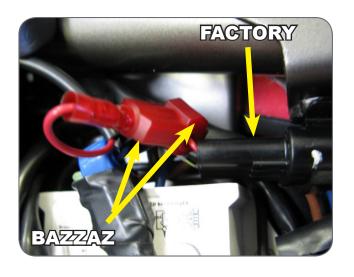
- 1. Locate the factory light green neutral sensor wire, which can be found by removing the front sprocket cover (wire is beneath the front sprocket).
- 2. Trace the wire up to where it joins in with the main harness near the factory speed connector. You will need to cut back a small portion of the main harness sheathing to expose the light green wire. Once exposed, use a supplied skotchlok and crimp onto the light green wire. Now insert the Bazzaz NEUTRAL connector into the scotchlok.

5.3

- 1. Locate the factory tail light connector, which can be found in the tail section under the passenger seat.
- 2. Cut back the sheathing of the connector to expose the red wire of the factory tail light connector.
- Crimp a supplied Scotchlok onto the exposed red wire and insert the Bazzaz + 12V SWITCHED POWER connector into the Scotchlok.





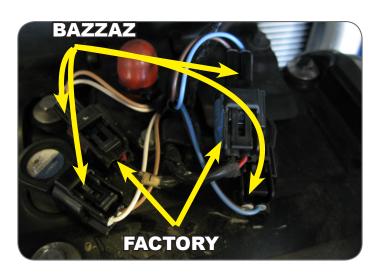


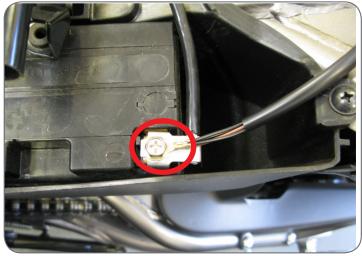
5>CONNECT (CONT.)

5.4

1. Install the Bazzaz ground lug to the negative side of the battery.

5.5





1. Locate and disconnect the factory coil connectors from each coil and plug the Bazzaz coil connectors (right to left) in-line with the factory coil and coil connector. The Bazzaz coil connectors with the blue and brown wires will go to coil #2 (right coil).

6>QUICKSHIFT

AFTERMARKET REAR SETS ARE REQUIRED

- Measure and note your shift pedal height, so that you may reposition the shift pedal once complete.
- 2. Remove the factory shift rod and both heim joints.
- 3. Install the Bazzaz heim joints and shift switch using one of the supplied allen stud bolts and tighten.
- 4. Install the Bazzaz shift rod. (The shift rod may need to be cut to obtain your original shift pedal height.
- 5. Ensure to retighten all lock nuts on the shift linkage.



7>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).

8>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 preprogrammed 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. Flyby-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.

13>NEXT LEVEL SHIFT LIGHT (Sold Separately)

Illuminates white to identify pre-determined, optimal shift points.

Used to improve forward drive and momentum for faster drag passes and lap times.

Comes pre-programmed with suggested values that can be easily adjusted as desired.

*For use with the QS4 USB stand-alone quick shift only.





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