

### 2009 Yamaha Roadstar

Installation Instructions



#### **PARTS LIST**

- 1 Power Commander
- 1 USB Cable
- 1 CD-ROM
- 1 Installation Guide
- 2 Power Commander Decals
- 2 Dynojet Decals
- 2 Velcro
- 1 Alcohol swab

## THE IGNITION MUST BE TURNED OFF BEFORE INSTALLATION!

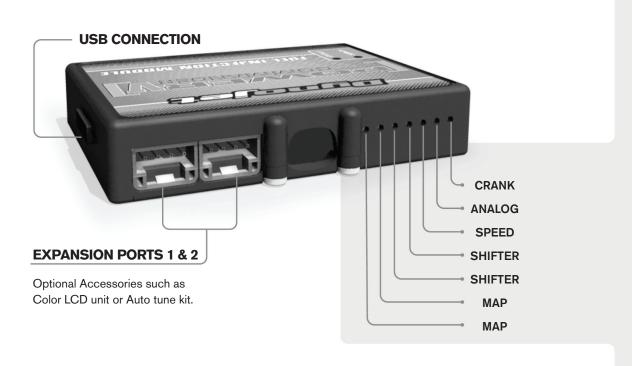
YOU CAN ALSO DOWNLOAD THE POWER COMMANDER SOFTWARE AND LATEST MAPS FROM OUR WEB SITE AT: www.powercommander.com

## PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION



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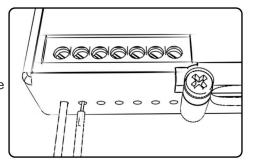
# POWER COMMANDER V INPUT ACCESSORY GUIDE



#### Wire connections:

To input wires into the PCV first remove the rubber plug on the backside of the unit and loosen the screw for the corresponding input. Using a 22-24 gauge wire strip about 10mm from its end. Push the wire into the hole of the PCV until is stops and then tighten the screw. Make sure to reinstall the rubber plug.

NOTE: If you tin the wires with solder it will make inserting them easier.



## **ACCESSORY INPUTS**

Map -

The PCV has the ability to hold 2 different base maps. You can switch on the fly between these two base maps when you hook up a switch to the MAP inputs. You can use any open/close type switch. The polarity of the wires is not important. When using the Autotune kit one position will hold a base map and the other position will let you activate the learning mode. When the switch is "CLOSED" Autotune will be activated.

Shifter-

These inputs are for use with the Dynojet quickshifter. Insert the wires from the Dynojet quickshifter into the SHIFTER inputs. The polarity of the wires is not important.

Speed-

If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent kill times when using a quickshifter.

Analog-

This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

Crank-

Do **NOT** connect anything to this port unless instructed to do so by Dynojet. It is used to transfer crank trigger data from one module to another.







- 1 Remove the seat.
- 2 Remove the fuel tank.
- 3 Remove the right hand side air box (Fig. A).
- 4 Remove the left hand side cover.

- 5 Lay the PCV under the left hand side cover next to the fuse box.
- Route the PCV harness behind the left hand frame tube and follow the main wiring harness towards the front of the bike (Fig. B).

Use the stock wire tie to secure the PCV harness in place.

Locate the clear 6 pin connector under the main frame spar (Fig. C).Unplug this connector.

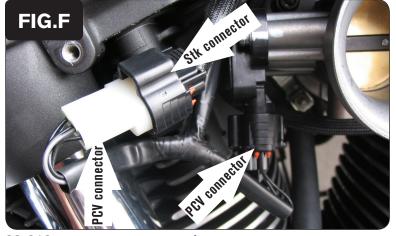


Plug the connectors from the PCV inline of the stock wiring harness and the throttle bodies (Fig. D).



9 Locate the stock Thottle Position Sensor connector. This connector is on the right side of the bike to the rear of the throttle body.

10 Unplug this connector (Fig. E).



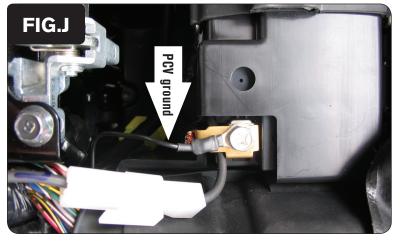
Plug the connectors from the PCV inline of the stock TPS and stock wiring harness (Fig. F).



- 12 Locate the WHITE 2 pin connector that is taped to the main wiring harness under the left hand side cover.
- 13 Untape this connector from the main wiring harness and remove the cap (Fig. G).

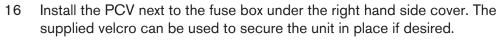


14 Plug the RED wire from the PCV into the stock wiring harness (Fig. H)

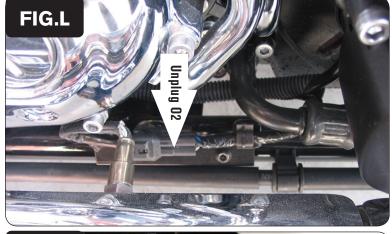


Attach the ground wire from the PCV to the negative side of the battery (Fig. J).









18 Unplug the O2 sensor from the front exhaust pipe (Fig. L).



19 Unplug the O2 sensor from the rear exhaust pipe (Fig. M). This connection is located under the right hand side cover.

To get the most performance out the bike and the PCV the stock O2 sensors must be disconnected.

**Speed input** - WHITE wire of WHITE 3 pin connector behind the left side cover (WHT-BLU-BLK)

**12v source for Auto tune** - BLUE wire in 6 pin connector for tail light. Under seat to the left of the tool kit.