

# [POWER COMMANDER V]

**2008-2014 Yamaha Road Star**

**Installation Instructions**



## **PARTS LIST**

- 1 Power Commander
- 1 USB Cable
- 1 Installation Guide
- 2 Power Commander Decals
- 2 Dynojet Decals
- 2 Velcro strips
- 1 Alcohol swab
- 2 O2 Optimizers

**THE IGNITION MUST BE TURNED  
OFF BEFORE INSTALLATION!**

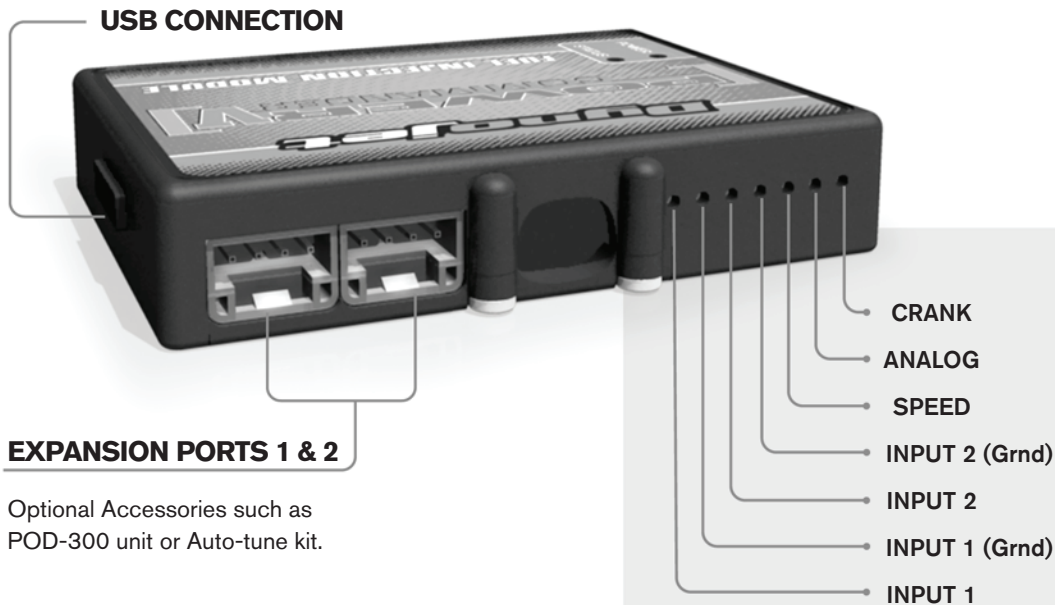
THE LATEST POWER COMMANDER  
SOFTWARE AND MAP FILES CAN BE  
DOWNLOADED FROM OUR WEB SITE AT:  
[www.powercommander.com](http://www.powercommander.com)

**PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION**

**Dynojet**

2191 Mendenhall Drive North Las Vegas, NV 89081 (800) 992-4993 [www.powercommander.com](http://www.powercommander.com)

# 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 it 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 -

(Input 1 or 2) 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. (Set to Switch Input #1 by default.)

### Shifter-

(Input 1 or 2) 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. (Set to Switch Input #2 by default.)

### Speed-

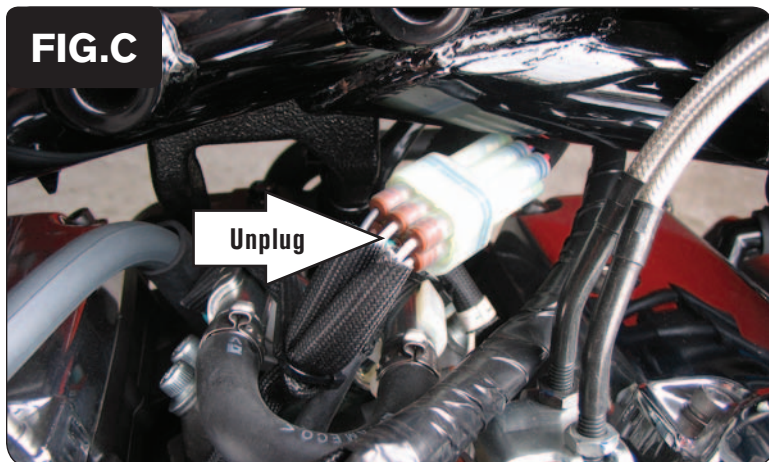
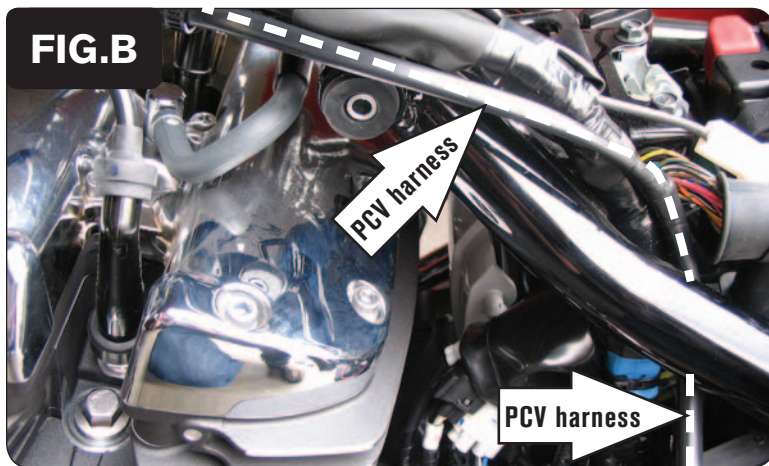
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent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

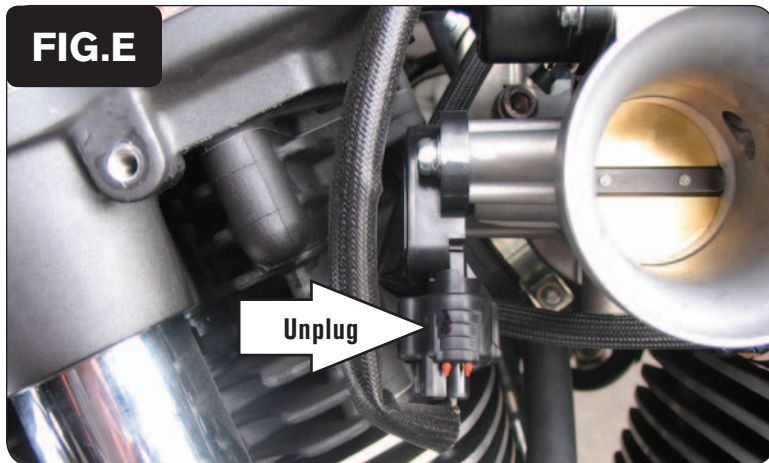
- 5 Lay the PCV under the left hand side cover next to the fuse box.
- 6 Route the PCV harness behind the left hand frame tube and follow the main wiring harness towards the front of the bike (Fig. B).

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

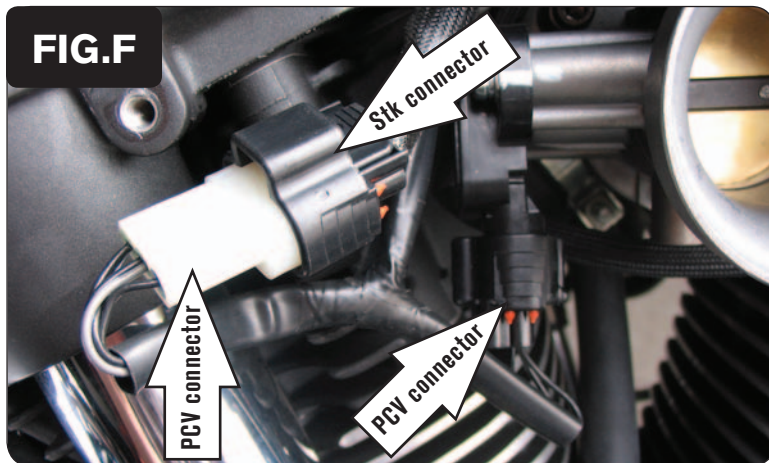
- 7 Locate and unplug the CLEAR 6-pin connector under the main frame spar from the bike's throttle bodies (Fig. C).



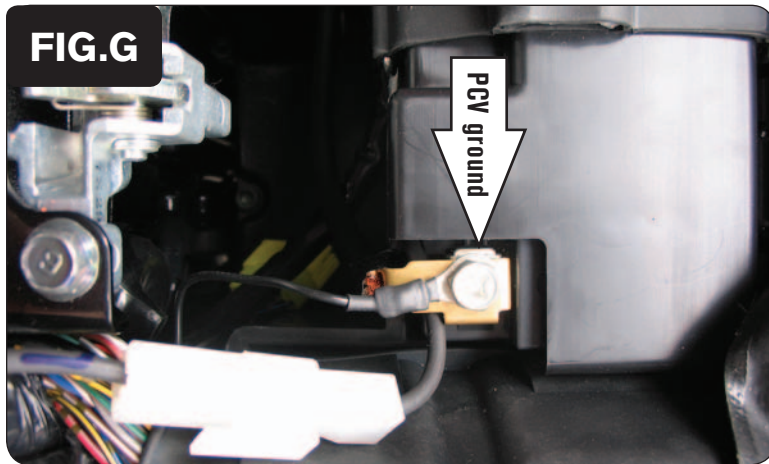
- 8 Plug the connectors from the PCV in-line of the stock wiring harness and the throttle bodies (Fig. D).



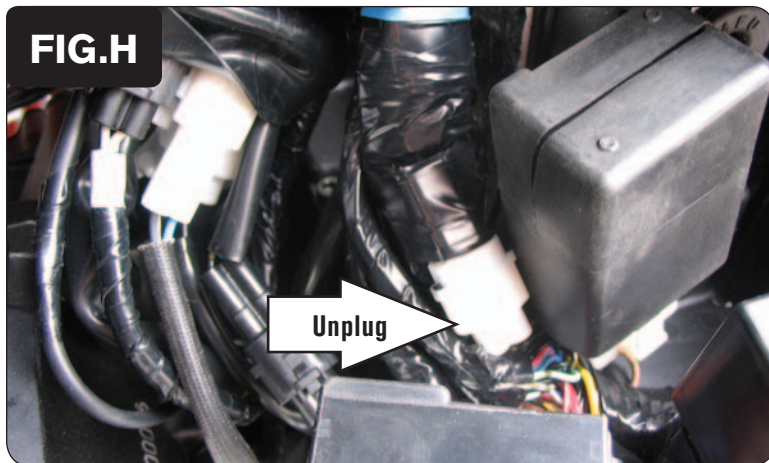
- 9 Locate and unplug the stock Throttle Position Sensor connector (Fig. E).  
*This connector is on the right side of the bike to the rear of the throttle body.*



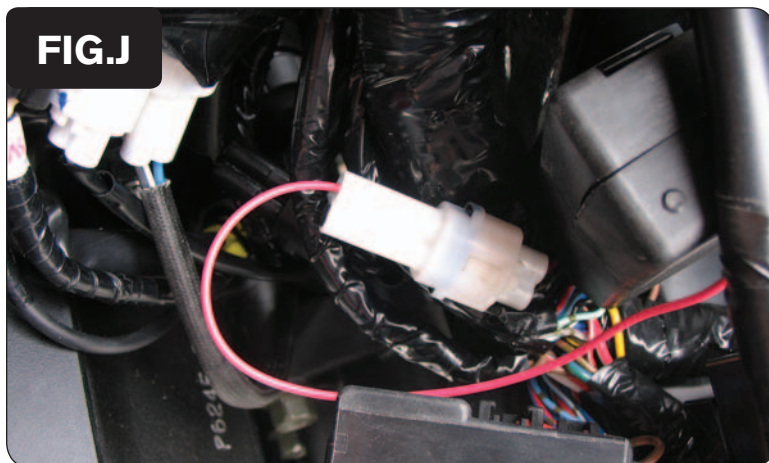
- 10 Plug the connectors from the PCV in-line of the stock TPS and stock wiring harness (Fig. F).



- 11 Attach the ground wire of the PCV to the negative (-) terminal of the bike's battery (Fig. G).



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



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

**FIG.K**

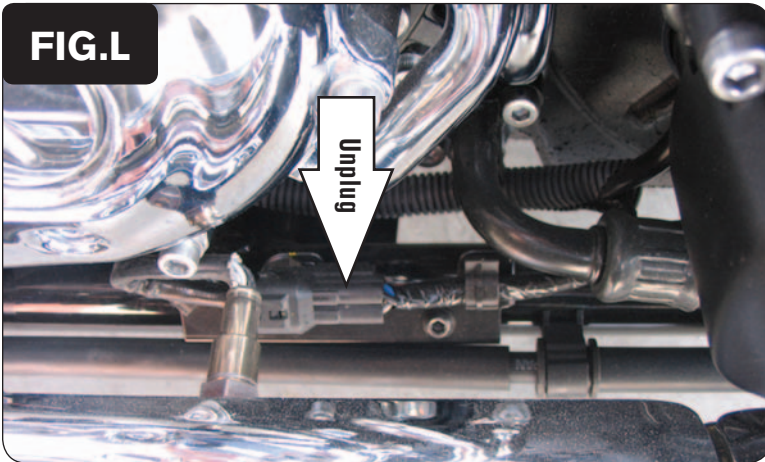


- 15 Install the PCV module next to the fuse box, behind the right hand sidecover (Fig. K).

*The supplied Velcro can be used to secure the module in place, if desired. Use the supplied alcohol swab to clean the surface prior to applying the Velcro.*

- 16 Reinstall the sidecover, fuel tank, and airbox.

**FIG.L**



- 17 Unplug the stock O2 sensor from the front exhaust pipe (Fig. L).

- 18 Plug one of the supplied O2 Optimizers into the stock wiring harness, in-place of the stock O2 sensor.

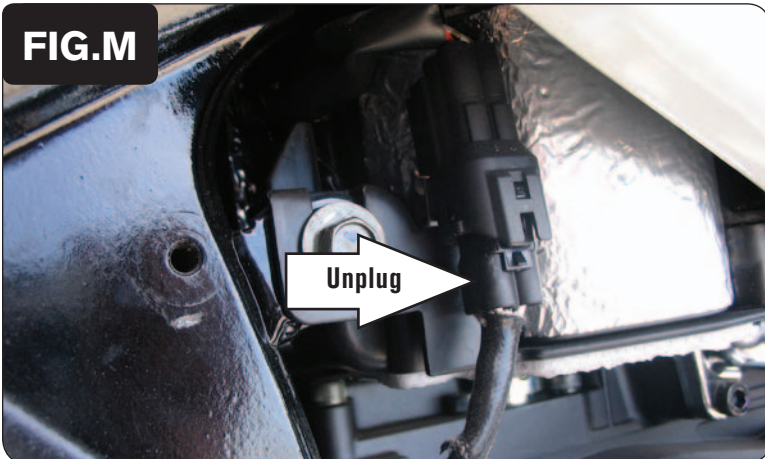
- 19 Unplug the stock O2 sensor from the rear exhaust pipe (Fig. M).

*This connector is located behind the right hand side cover.*

- 20 Plug the other supplied O2 Optimizer into the stock wiring harness, in-place of the stock O2 sensor.

*The stock O2 sensors will no longer be connected to anything. They can be removed from the exhaust if desired and if you have a way to plug the holes in the exhaust pipes.*

**FIG.M**



#### **Optional Inputs:**

**Speed** - WHITE wire of WHITE 3-pin connector behind the left hand sidecover (WHITE - BLUE - BLACK)

**12v source for Auto-tune** - BLUE wire in 6-pin connector for the taillight. Under the seat to the left of the toolkit.