

# [POWER COMMANDER V]

## 2009 Yamaha Raider

### Installation Instructions



#### PARTS LIST

- 1 Power Commander
- 1 USB Cable
- 1 CD-ROM
- 1 Installation Guide
- 2 Power Commander Decals
- 2 Dynojet Decals
- 1 O2 eliminator
- 2 Velcro
- 1 Alcohol swab

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

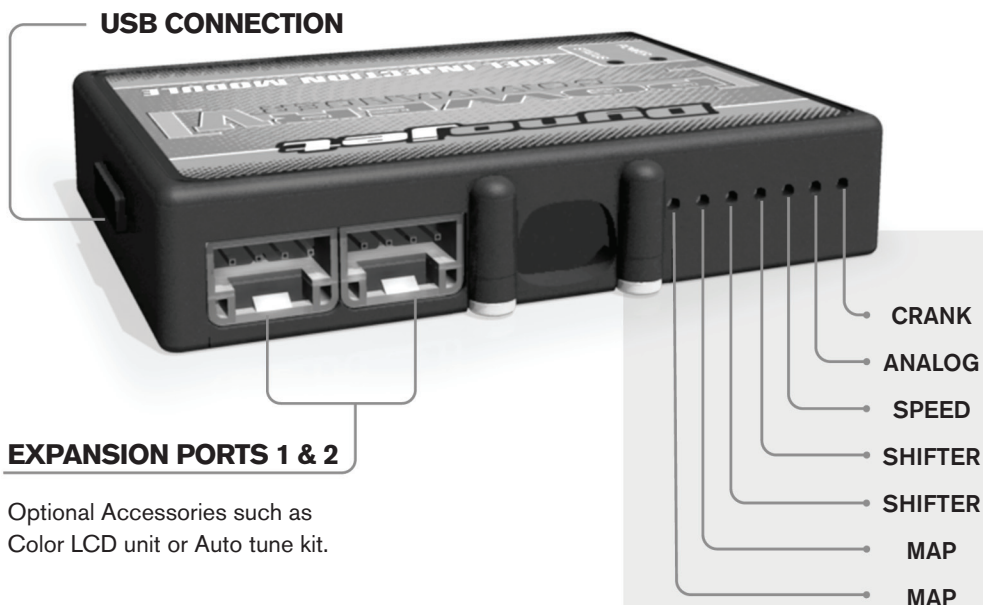
YOU CAN ALSO DOWNLOAD THE  
POWER COMMANDER SOFTWARE AND  
LATEST MAPS FROM OUR WEB SITE AT:  
[www.powercommander.com](http://www.powercommander.com)

**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)

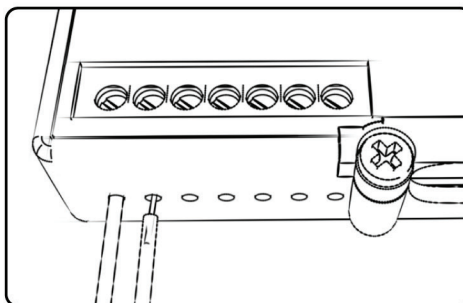
# POWER COMMANDER V INPUT ACCESSORY GUIDE



## 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 -

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.

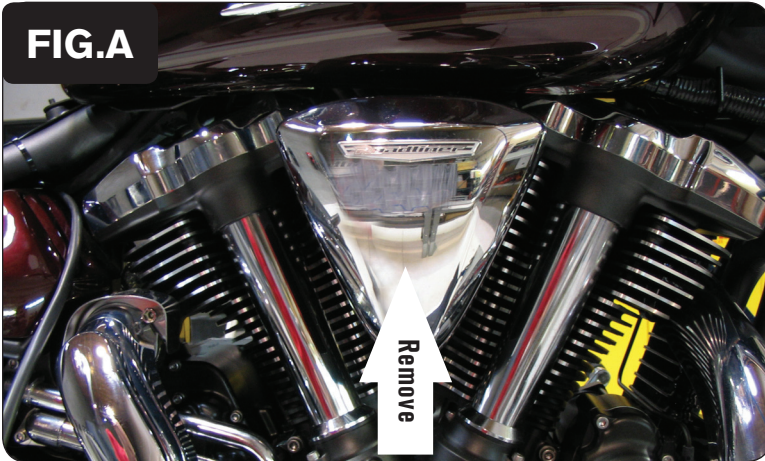
### Analog-

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.

**FIG.A**



- 1 Remove the seat.
- 2 Remove the right hand cosmetic engine cover (Fig. A). There is a bolt at the front and rear of this cover.

**FIG.B**



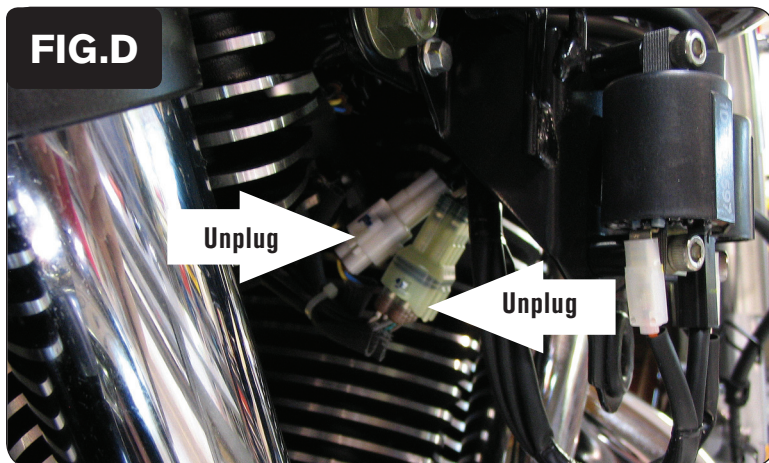
- 3 Lay the PCV in the area of the ECU.
- 4 Route the PCV harness underneath the seat latch plate and under the right hand side of the frame (Fig. B).

**FIG.C**

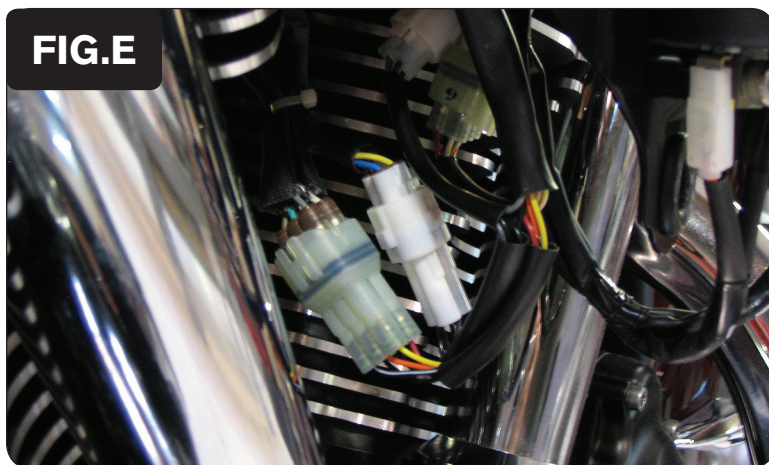


- 5 Route the PCV harness above the cylinder head following the frame. Route the PCV harness behind the engine mount bracket (Fig. C).

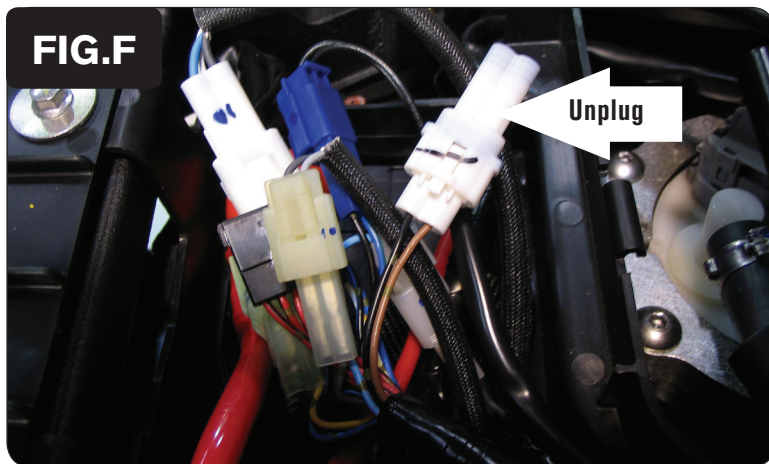




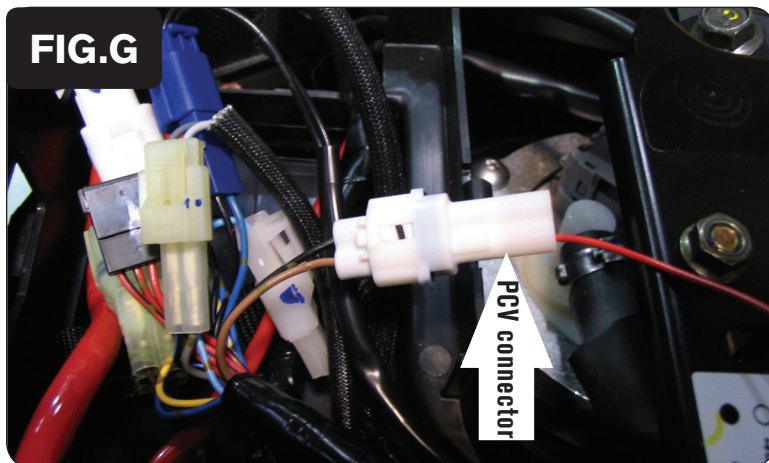
- 6 Unplug the WHITE 3 pin connector and the CLEAR 6 pin connector (Fig.D).  
These connectors are located behind the ignition coils and lead to the throttle bodies.



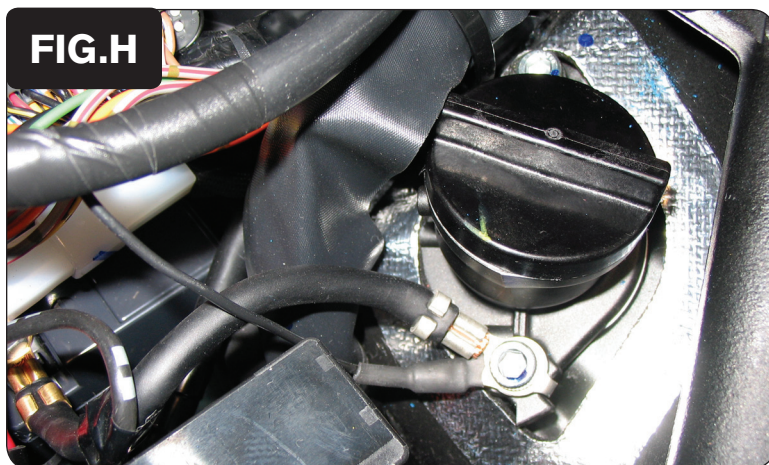
- 7 Plug the connectors from the PCV inline of the stock wiring harness and the throttle bodies (Fig. E).



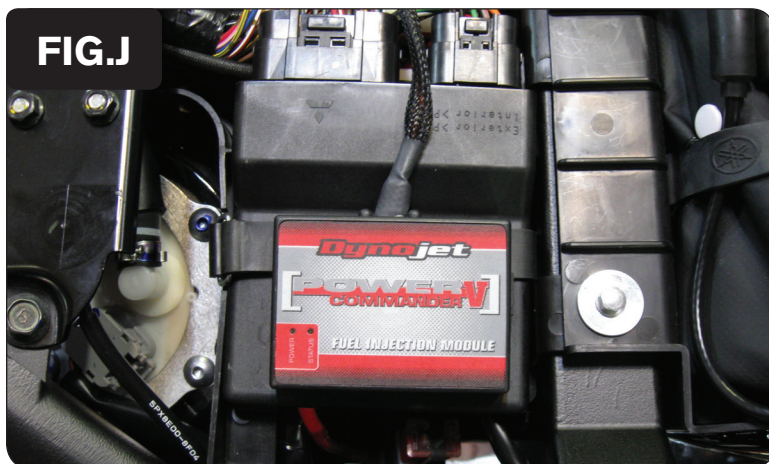
- 8 Remove the strap from the ECU and move the ECU out of the way to access the wires underneath.
- 9 Locate the WHITE 2 pin connector that has a BROWN and a BLACK wire. Remove the blank end of this connection (Fig. F).



- 10 Plug the RED wire from the PCV to the stock wiring harness (Fig. G).
- 11 Reinstall the ECU back into its stock position.

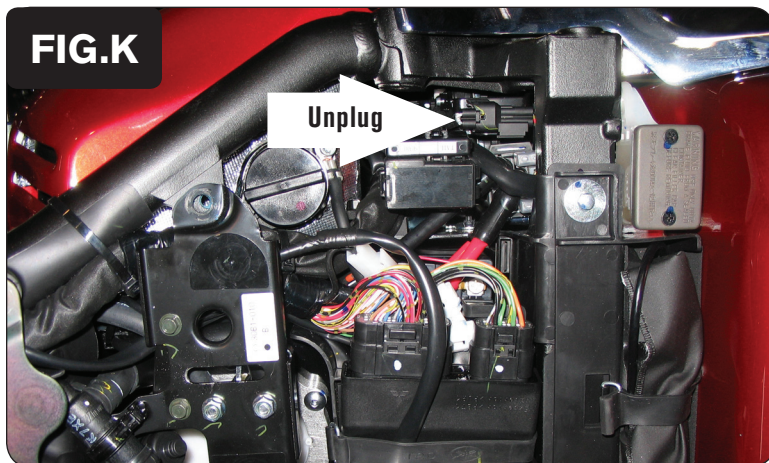


- 12 Locate the stock ground. Follow the negative battery cable to the frame.  
Remove the allen bolt that secures the ground cable to the frame. Reinstall the allen bolt thru the stock ground cable, then thru the ground wire for the PCV into the frame (Fig. H)



- 13 Use the supplied velcro to attach the PCV on top of the ECU (Fig. J).  
Make sure to clean both surfaces with the alcohol swab first.





- 14 Follow the wire harness from the O2 sensor to the connection under the seat. Locate the BLACK 4 pin O2 sensor connector (Fig. K).
- 15 Unplug this connection.



- 16 Connect the Dynojet O2 eliminator to the stock wiring harness. The O2 sensor does NOT need to be connected to anything at this time.
- 17 Reinstall the cover and the seat.

**Speed input** - WHITE wire of WHITE 3 pin connector under ECU. Colors of the wires in this connector are WHITE/BLUE/BLACK.