

[POWER COMMANDER V]

FUEL AND IGNITION

2009-2014 Yamaha XV950

Installation Instructions



PARTS LIST

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

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

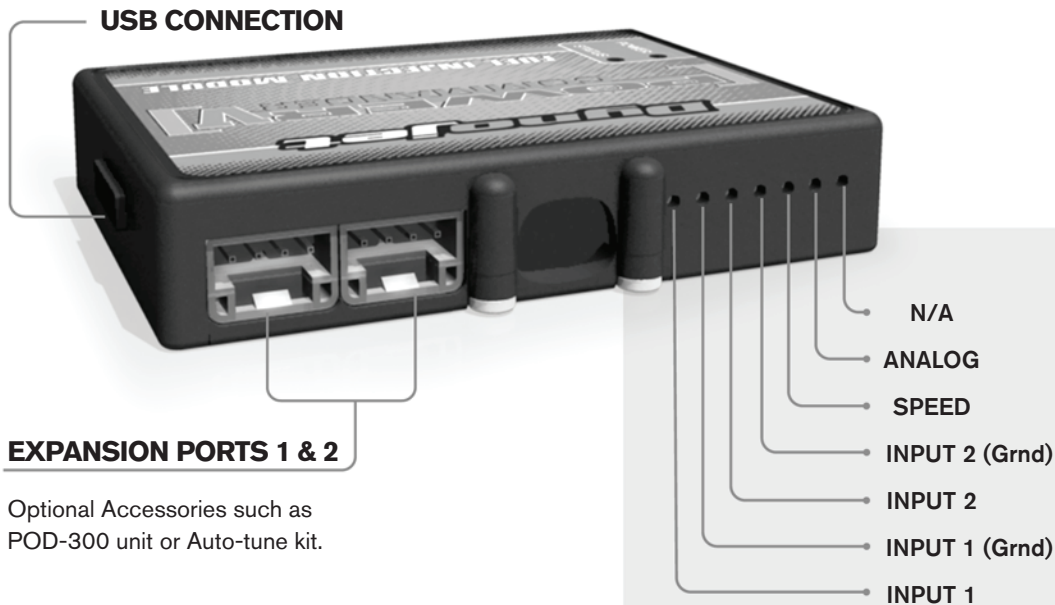
THE LATEST POWER COMMANDER
SOFTWARE AND MAP FILES CAN BE
DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

Dynojet

2191 Mendenhall Drive North Las Vegas, NV 89081 (800) 992-4993 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-

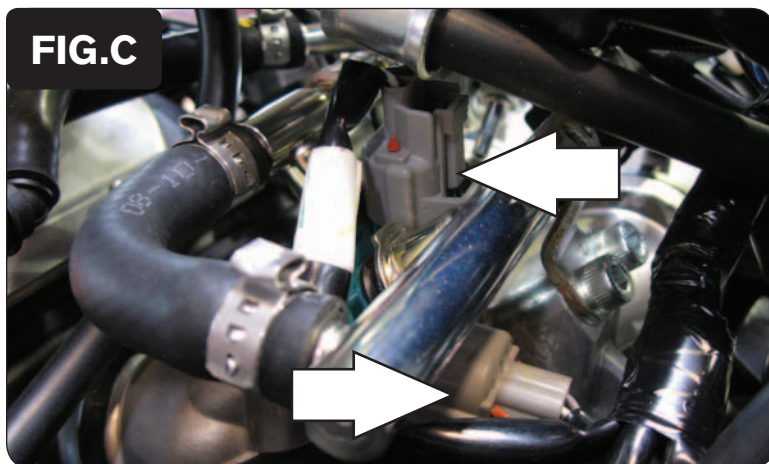
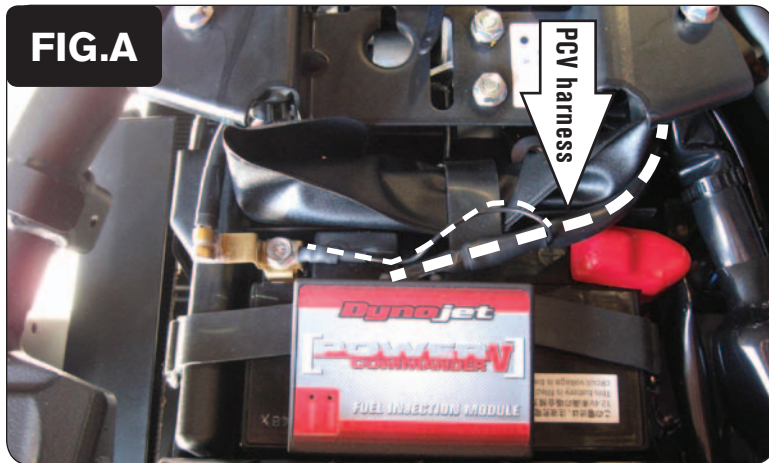
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent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



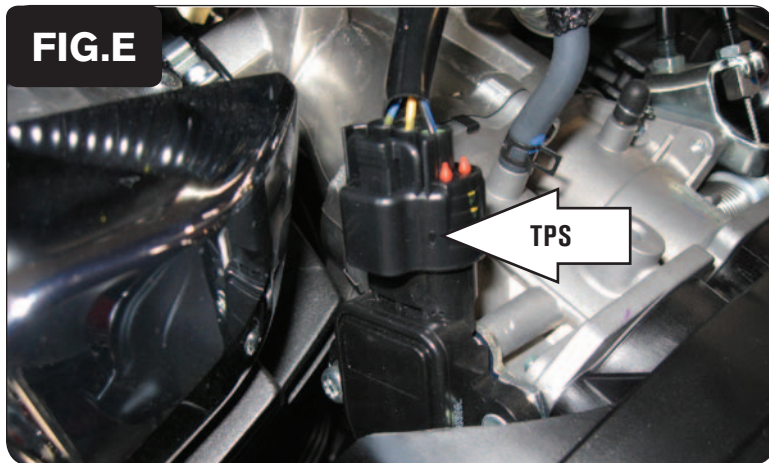
- 1 Remove the seat.
- 2 Remove the fuel tank.
- 3 Lay the PCV near the battery.
- 4 Route the PCV harness under the seat bracket and go towards the front of the bike (Fig. A).
- 5 Attach the ground wire of the PCV to the negative side of the battery.
- 6 Route the PCV harness along the right hand side frame tube (Fig. B).
- 7 Unplug the stock wiring harness from each injector (Fig. C).



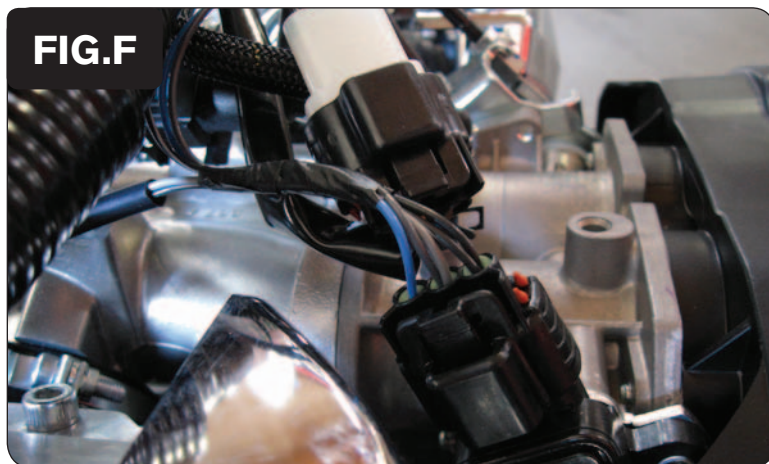
- 8 Plug the PCV harness in-line of the stock wiring harness and each injector (Fig. D).

The connector pair of the PCV wiring harness with ORANGE colored wires go to the FRONT cylinder injector.

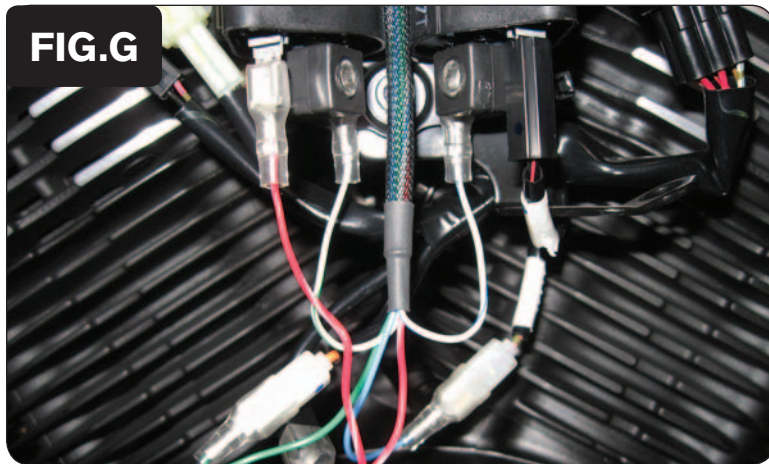
The connector pair of the PCV wiring harness with YELLOW colored wires go to the REAR cylinder injector.



- 9 Locate the Throttle Position Sensor on the right hand side of the bike to the rear of the throttle body.
- 10 Unplug the TPS connector from the throttle body (Fig. E).



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



- 12 Locate the ignition coils on the left side of the motorcycle.

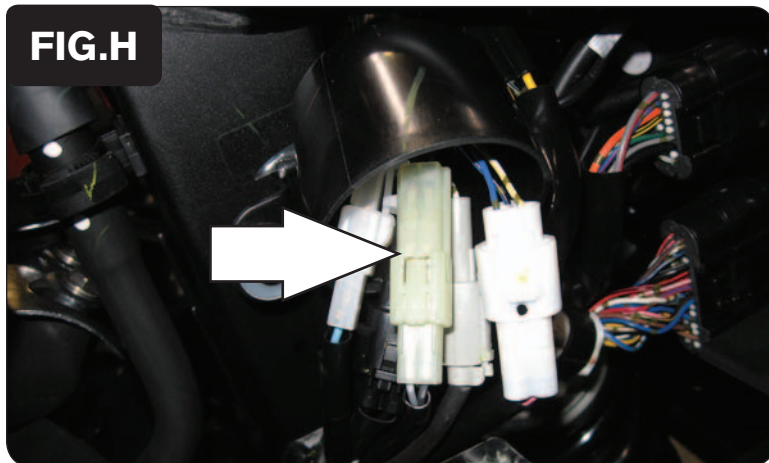
The coil is located under the chrome cover.

- 13 Plug the PCV wires in-line of the stock wiring harness and coils (Fig. G).

The pair of PCV wiring harness leads with RED colored wires should be plugged in-line of either one of the stock BLACK/RED wires and the coil.

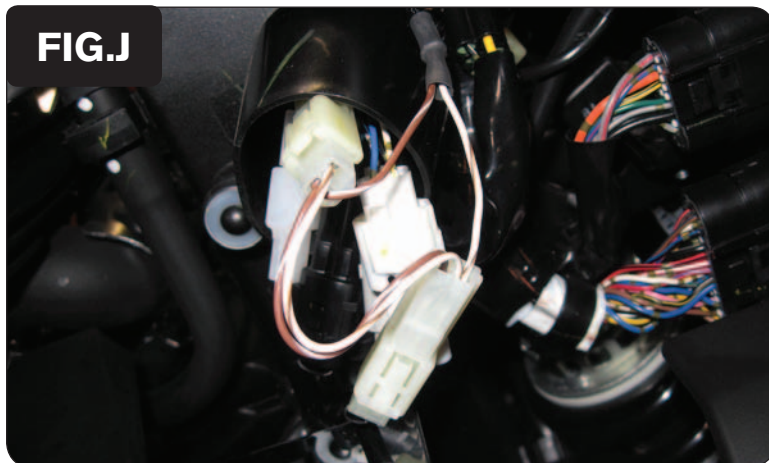
The pair of PCV wiring harness leads with GREEN colored wires should be plugged in-line of the stock ORANGE wire and the coil front cylinder coil.

The pair of PCV wiring harness leads with BLUE colored wires should be plugged in-line of the stock GREY/RED wire and the coil rear cylinder coil.



- 14 Locate the crank pickup coil sensor connector (Fig. H).

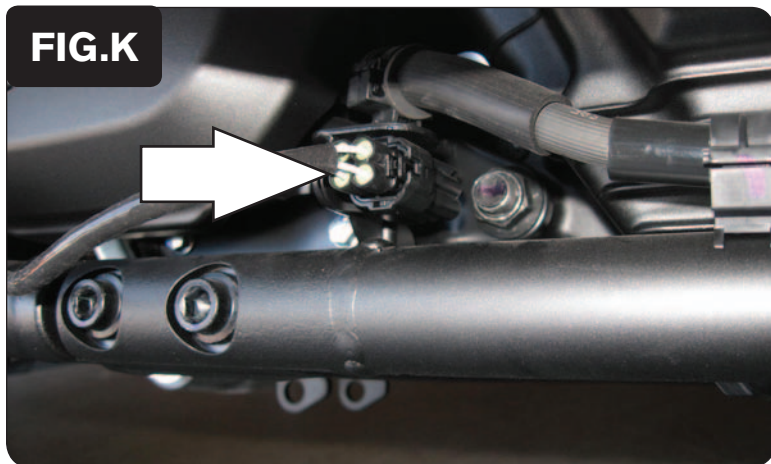
This connector is located under the left hand side cover.



- 15 Plug the connectors from the PCV in-line of the stock wiring harness and stock sensor (Fig. J).

- 16 Use the supplied Velcro to secure the PCV module to the top side of the bike's battery.

Clean both surfaces with the supplied alcohol swab prior to applying the Velcro adhesive.



- 17 Locate the stock O2 sensor connection (Fig. K).
This is located on the lower right hand side frame rail.
- 18 Plug the Dynojet O2 Optimizer in-line of the stock O2 sensor and wiring harness.
- 19 Secure the O2 Optimizer with the supplied Velcro under the BLACK cosmetic engine cover.
- 20 Reinstall the fuel tank, seat, and bodywork.

Optional inputs:

Speed input location - PINK wire of sensor over the front drive pulley

12v for Auto-tune - RED/WHITE wire of 6-pin connector for tail light

	0	2	5	10	15	20	40	60	80	100
500	0	0	0	0	0	0	0	0	0	0
750	0	0	0	0	0	0	0	0	0	0
1000	0	0	0	0	0	0	0	0	0	0
1250	0	0	0	0	0	0	0	0	0	0
1500	0	0	0	0	0	0	0	0	0	0
1750	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0
2250	0	0	0	0	0	0	0	0	0	0
2500	0	0	0	0	0	0	0	0	0	0
2750	0	0	0	0	0	0	0	0	0	0
3000	0	0	0	0	0	0	0	0	0	0
3250	0	0	0	0	0	0	0	0	0	0
3500	0	0	0	0	0	0	0	0	0	0
3750	0	0	0	0	0	0	0	0	0	0
4000	0	0	0	0	0	0	0	0	0	0
4250	0	0	0	0	0	0	0	0	0	0
4500	0	0	0	0	0	0	0	0	0	0
4750	0	0	0	0	0	0	0	0	0	0
5000	0	0	0	0	0	0	0	0	0	0
5250	0	0	0	0	0	0	0	0	0	0
5500	0	0	0	0	0	0	0	0	0	0
5750	0	0	0	0	0	0	0	0	0	0
6000	0	0	0	0	0	0	0	0	0	0

The O2 Optimizer for this model controls the stock closed loop area. This area is represented by the highlighted cells shown in Figure L. The optimizer is designed to achieve a target AFR of 13.6:1. To use this O2 Optimizer you must retain your stock O2 sensor (even if using Auto-tune).

Input values of 8 in all cells of your PCV map in the highlighted area of your fuel table. If using the Auto tune system do NOT input values in this area of your Target AFR table.

The O2 Optimizer will blink while the sensor is being heated up. The unit is not functioning until the light is lit up solid.