

# [POWER COMMANDER V]

## FUEL AND IGNITION

**2016 Victory Crossroads / Crosscountry**

**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!**

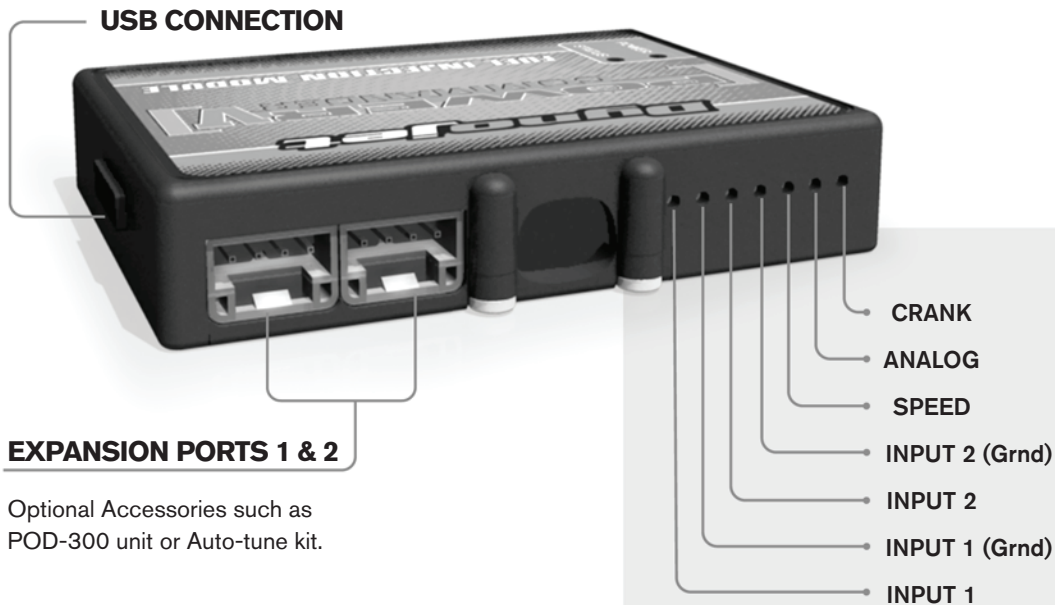
THE LATEST POWER COMMANDER SOFTWARE AND MAP FILES CAN BE DOWNLOADED FROM OUR WEB SITE AT:  
[www.powercommander.com](http://www.powercommander.com)

**PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION**

**Dynojet**

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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 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-

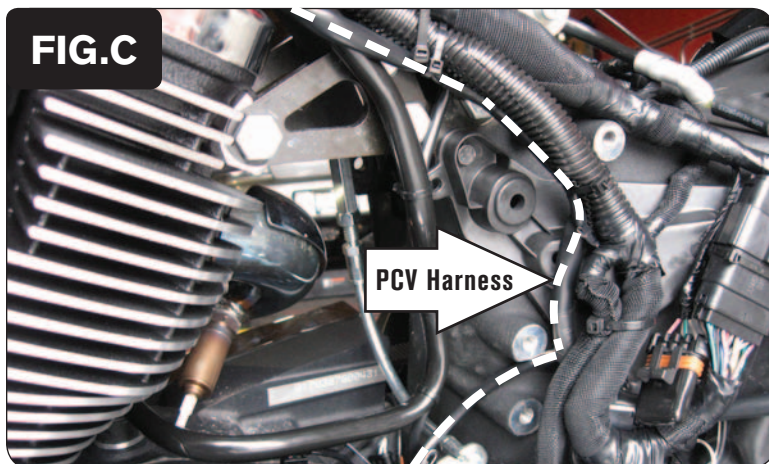
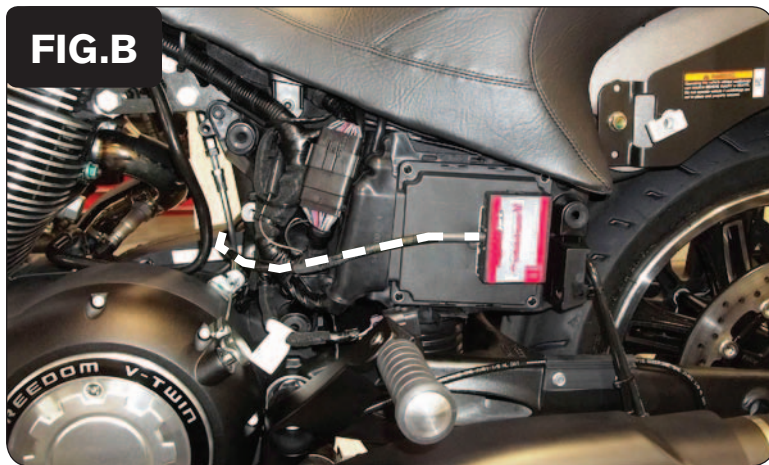
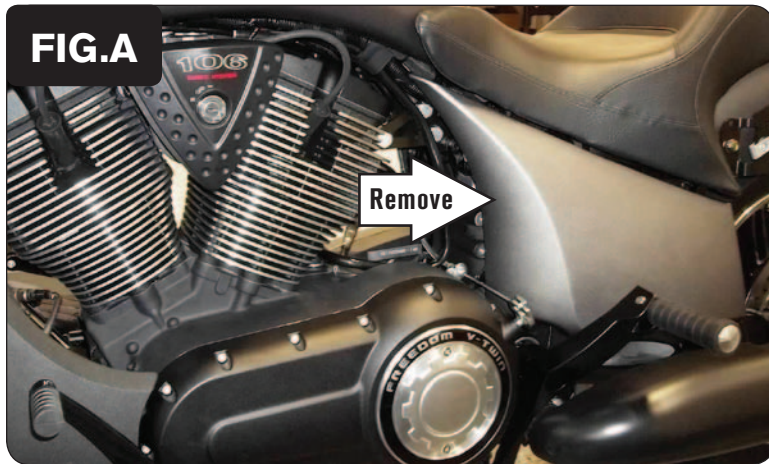
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent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

### Analog-

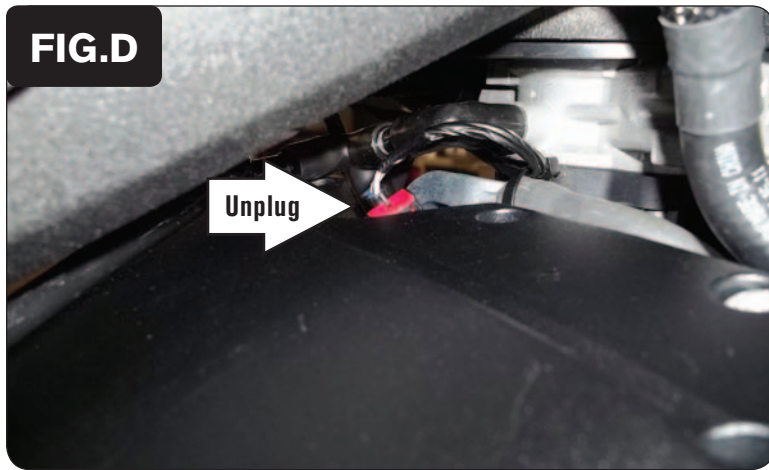
This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

### Crank-

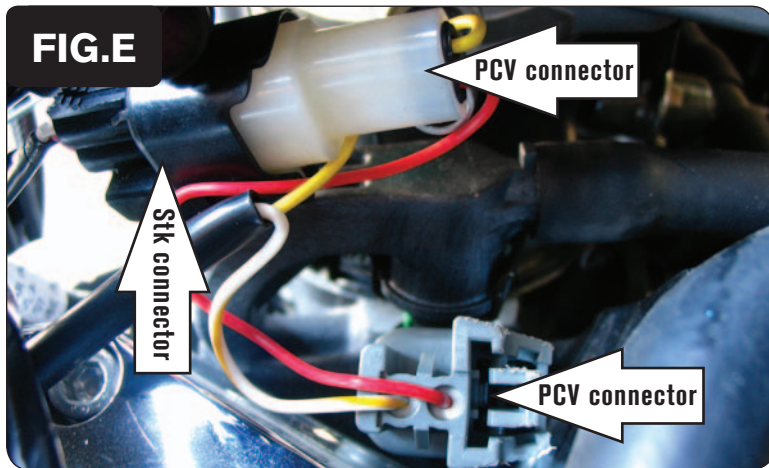
Do **NOT** connect anything to this port unless instructed to do so by Dynojet. It is used to transfer crank trigger data from one module to another.



- 1 Remove the seat.
- 2 Remove the left hand side cover (Fig. A).
- 3 Install the PCV on the left side of the motorcycle using the supplied Velcro (Fig. B).  
*Make sure to clean both surfaces with the alcohol swab before attaching the Velcro adhesive.*
- 4 Route the PCV harness to the left side of the bike. Keep the PCV harness as close to the frame as possible (Fig. B).
- 5 Route the PCV harness along the backbone of the frame along the left side of the bike and go towards the throttle body (Fig. C).

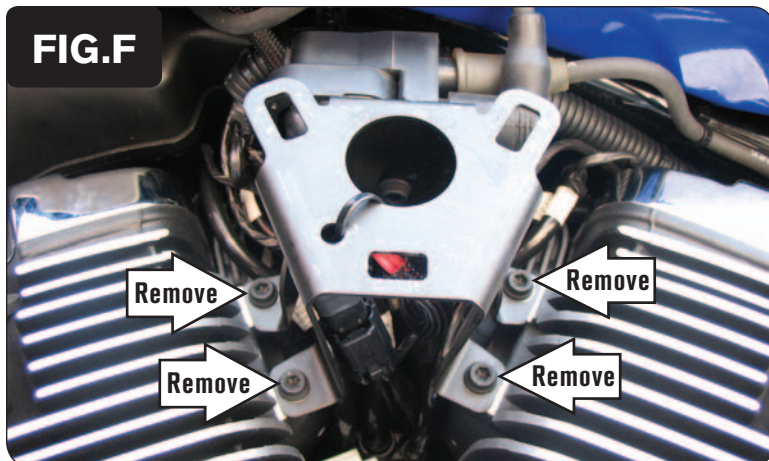


- 6 Locate the stock wiring harness at the rear injector (Fig. D). Lift the RED clip up and unplug the injector connector.

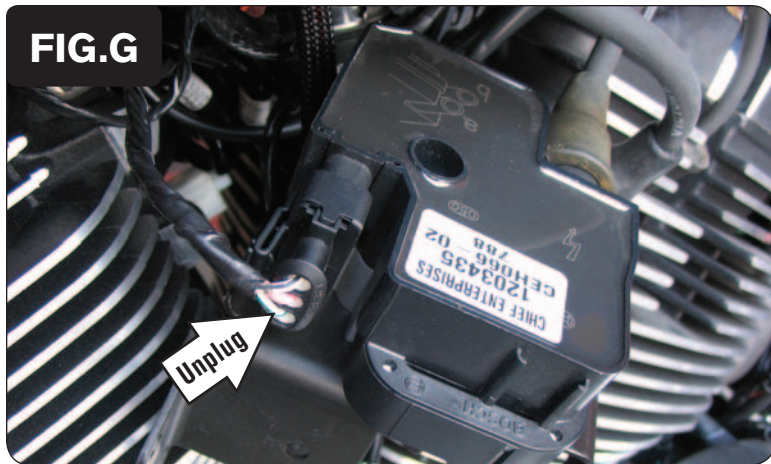


- 7 Plug the pair of leads with YELLOW colored wires from the PCV in-line of the stock wiring harness and the rear fuel injector (Fig. E)
- 8 Repeat steps 7&8 for the front injector using the pair of leads with ORANGE colored wires from the PCV.

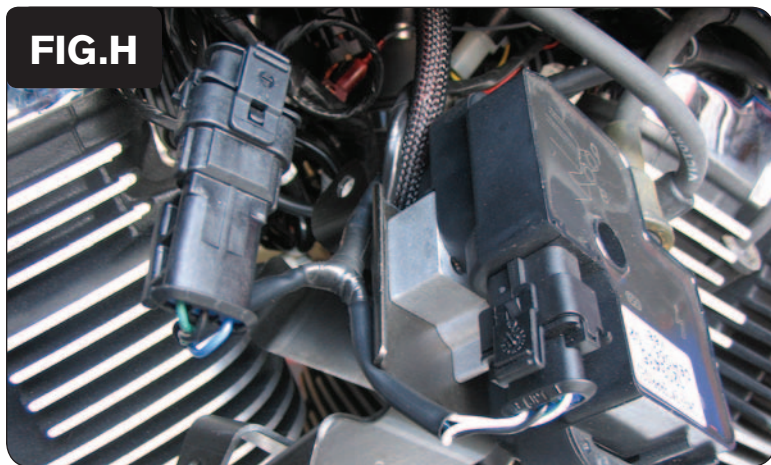
*The front injector is very difficult to access but it can be done without removing the air box. Using a set of long hemostats aids in this process.*



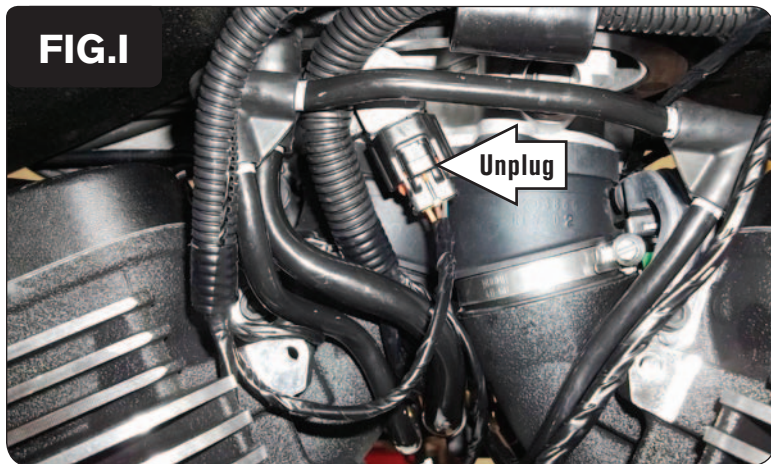
- 9 Remove the 4 bolts that hold the Ignition Coil bracket to the engine (Fig. F).



- 10 Unplug the stock wiring harness from the Ignition Coil (Fig. G).

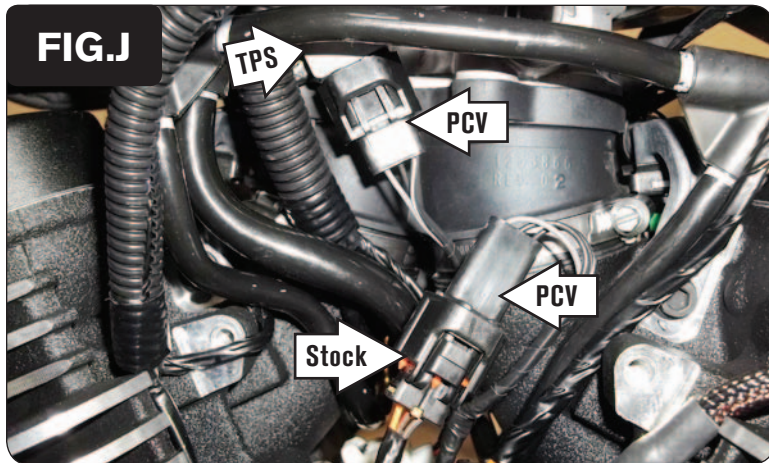


- 11 Plug the PCV wiring harness in-line of the stock wiring harness and Ignition Coil (Fig. H).

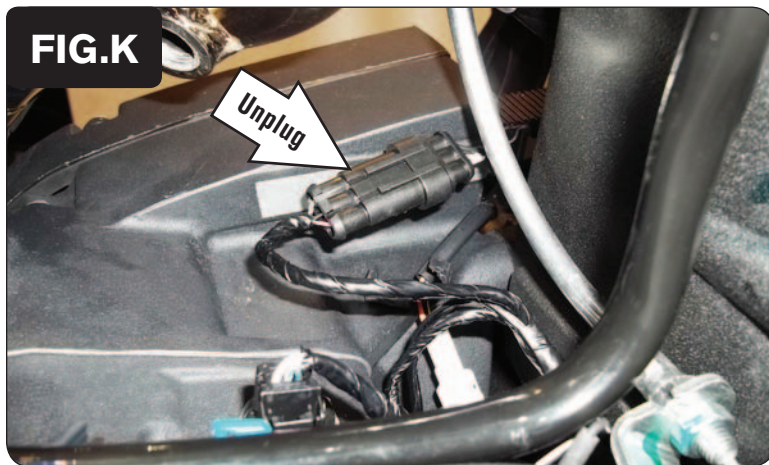


- 12 Locate the Throttle Position Sensor wiring harness on the left hand side of the throttle bodies. Unplug the stock wiring harness from the TPS (Fig. I).

*This is located behind the Ignition Coil.*



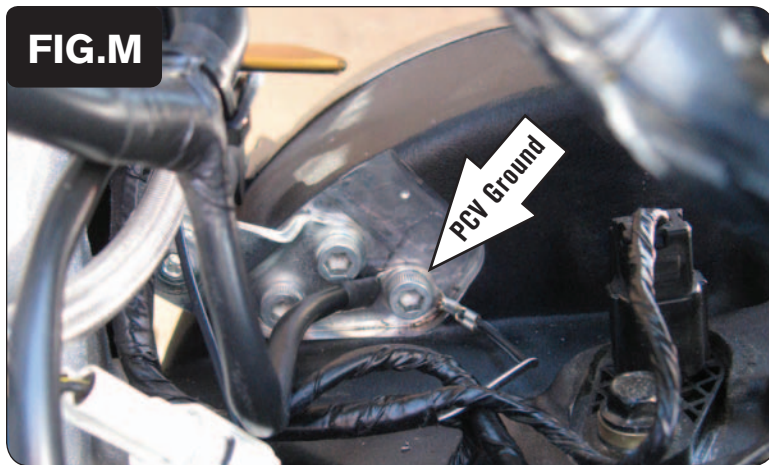
- 13 Plug the PCV wiring harness in-line of the TPS and the stock wiring harness (Fig. J).
- 14 Reinstall the Ignition Coil and bracket.



- 15 Locate the stock Crank Position Sensor connectors. They are above the engine case behind the rear cylinder near the engine number (Fig. K).  
*This is a BLACK 3-pin connector pair.*
- 16 Unplug these connectors.



- 17 Plug the pair of PCV wiring harness connectors with BROWN colored wires in-line of the stock Crank Position Sensor connectors (Fig. L).



- 18 Attach the ground wire from the PCV to the stock ground location which is on the inside of the left engine case near the bolts that hold that clutch cable bracket (Fig. M).

*This is near the rear exhaust and speed sensor.*

*It is highly recommended to use this exact grounding location. Grounding the PCV anywhere else can cause performance problems.*



- 19 Locate and unplug the stock rear O2 sensor connectors.
- 20 Plug one of the supplied O2 Optimizers into the stock wiring harness in-place of the stock O2 sensor (Fig. N).
- 21 Locate and unplug the front O2 sensor connectors.



- 22 Plug the other supplied O2 Optimizer into the stock wiring harness in-place of the front stock O2 sensor (Fig. O).

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

- 23 Reinstall the sidecovers and the seat.

#### **Optional inputs:**

**Speed input** - sensor is behind rear cylinder on top of engine case - the GREEN/RED wire is the signal wire.

**Temperature input** - ORANGE/BLUE wire of sensor on backside of front cylinder.