

# [POWER COMMANDER V]

**2014 Arctic Cat 450cc/500cc ATV**

## 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
- 1 Posi-tap
- 1 O2 Optimizer

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

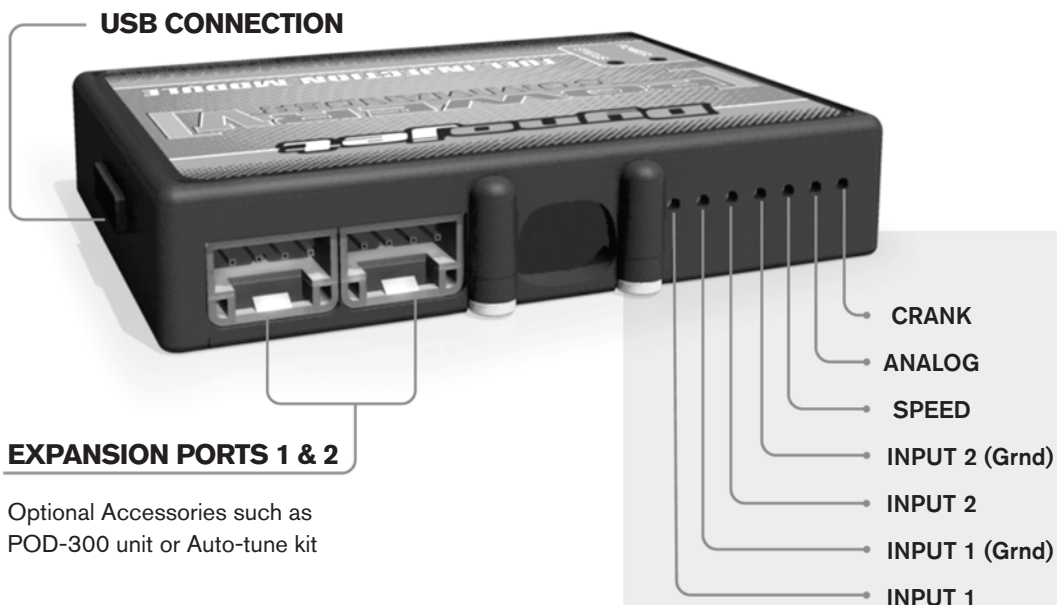
THE LATEST POWER COMMANDER  
SOFTWARE AND MAP FILES CAN BE  
DOWNLOADED FROM OUR WEB SITE AT:  
[www.powercommander.com](http://www.powercommander.com)

**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



Optional Accessories such as  
POD-300 unit or Auto-tune kit

## 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-

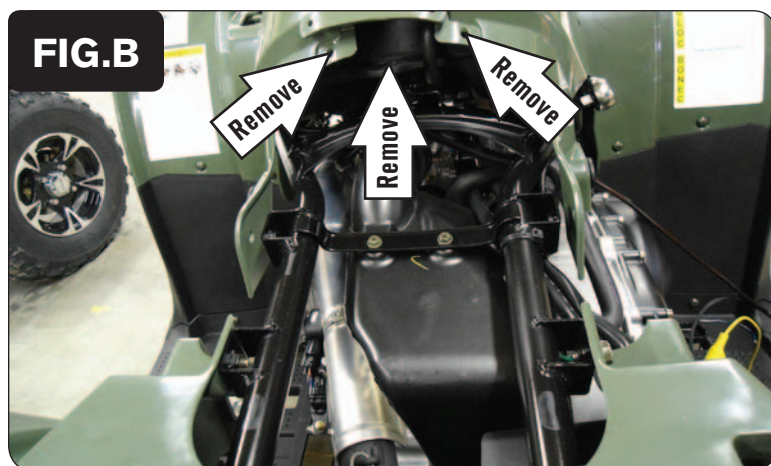
Do **NOT** connect anything to this port unless instructed to do so by Dynojet. It is used to transfer crank trigger data from one module to another.



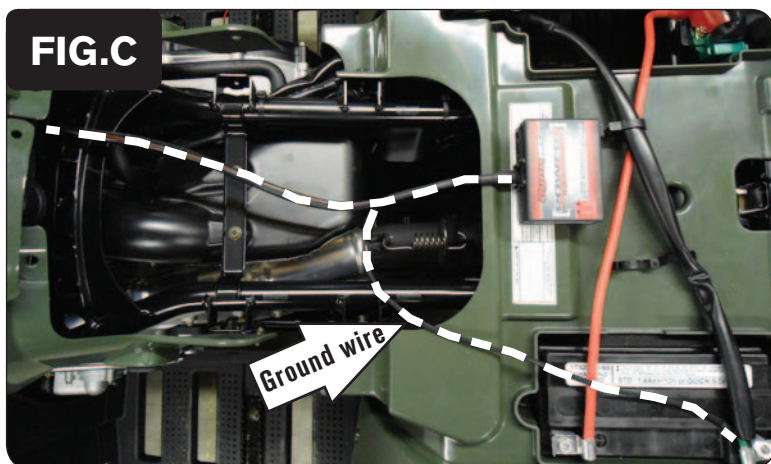
## 2014 Arctic Cat 450cc Installation

Use the following instructions to install the PCV to a 2014 Arctic Cat 450cc ATV. For 2014 Arctic Cat 500cc models use the alternate instructions starting on page 5.

- 1 Remove the seat and side panels as shown in Figure A.



- 2 Remove the two screws securing the gas tank shroud and the single bolt securing the gas tank to the frame (Fig. B).
- 3 Prop the fuel tank up slightly to gain access to the fuel injector connection.



- 4 Using the supplied Velcro, secure the PCV module under the seat at the location shown in Figure C.  
*Clean both surfaces with the supplied alcohol swab before attaching the Velcro.*
- 5 Attach the ground wire from the PCV harness to the negative (-) terminal of the battery.
- 6 Route the PCV harness under the gas tank towards the front of the machine.

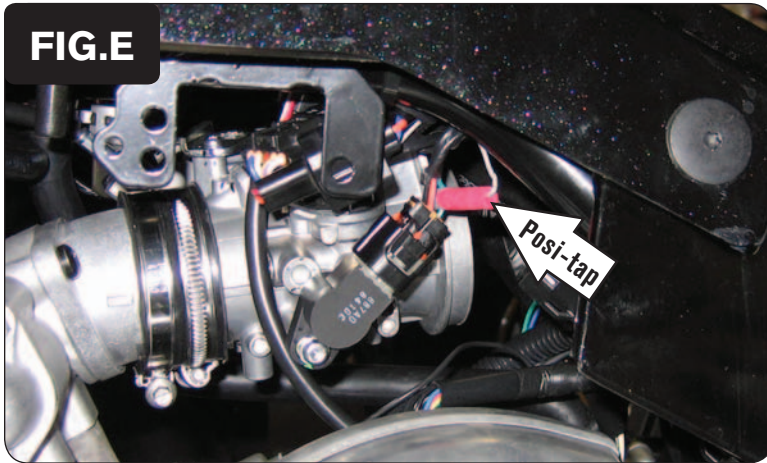


**FIG.D**

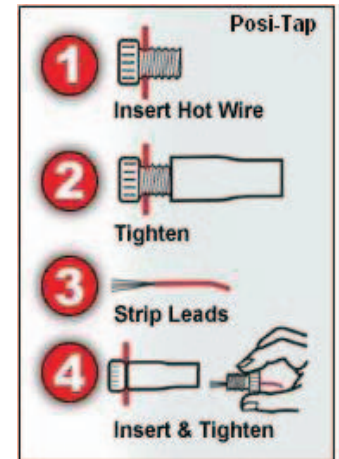


- 7 Locate the fuel injector on top of the throttle body from the right hand side of the ATV (Fig. D).
- 8 Unplug the stock wiring harness from the fuel injector.
- 9 Plug the connectors from the PCV wiring harness in-line of the fuel injector and the stock wiring harness.

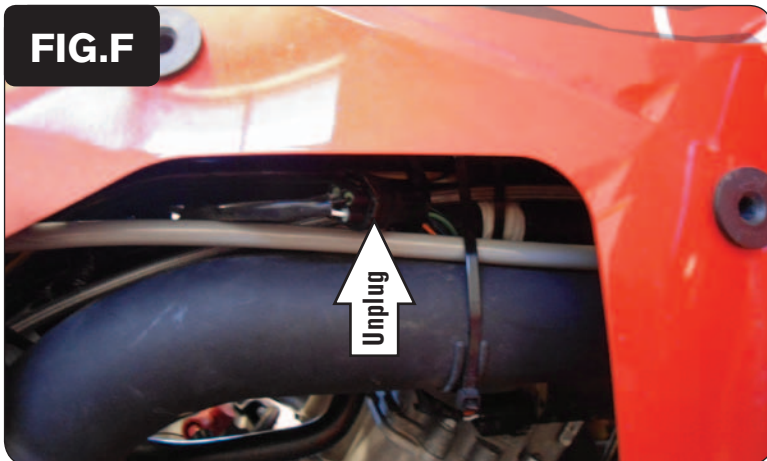
**FIG.E**



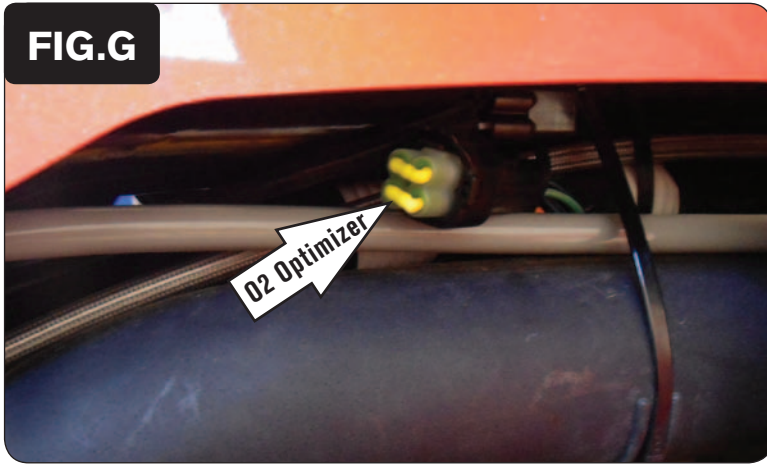
- 10 Locate the Throttle Position Sensor (TPS) on the left hand side of the throttle body.
- 11 Using the supplied Posi-tap, attach the GREY wire from the PCV to the stock GREEN/BLACK wire from the TPS.



**FIG.F**



- 12 Locate the stock O2 sensor connector behind the right side panel. You can trace the sensor wires from the exhaust header pipe to this connection.
- 13 Unplug this connector.

**FIG.G**

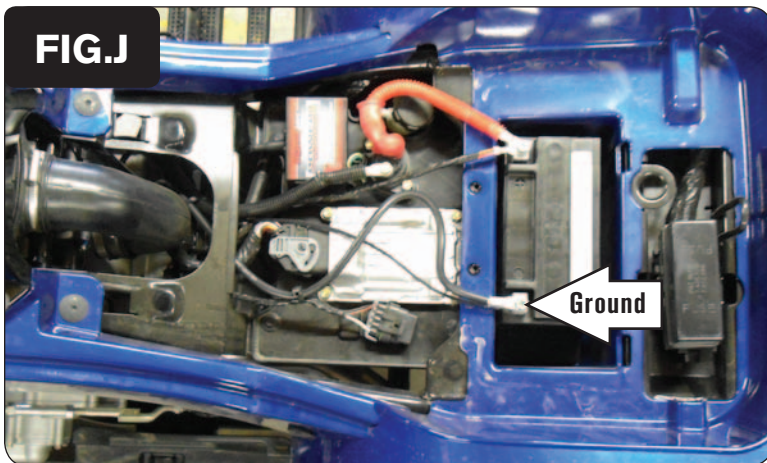
- 14 Plug the supplied O2 Optimizer into the stock wiring harness (Fig. G). The stock O2 sensor will no longer be used it can be removed from the exhaust if desired and if you have a way to plug the hole in the exhaust.
- 15 Reinstall the fuel tank, the side panels, and the seat.

**FIG.H**

### 2014 Arctic Cat 500cc Installation

*Use the following instructions to install the PCV to a 2014 Arctic Cat 500cc ATV.*

- 1 Remove the seat and the side panels.
- 2 Remove the two screws securing the tool kit to expose the battery.
- 3 Using the supplied Velcro, secure the PCV under the seat at the location shown in Figure J.  
  
*Clean both surfaces with the supplied alcohol swab before attaching the Velcro.*
- 4 Route the PCV harness under the frame spar toward the front of the machine.
- 5 Attach the ground wire from the PCV harness to the negative (-) terminal of the quad's battery (Fig. J).

**FIG.J**

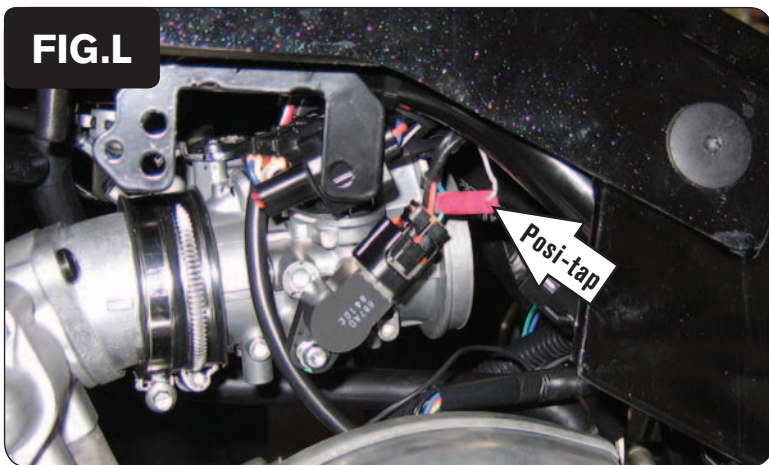


**FIG.K**

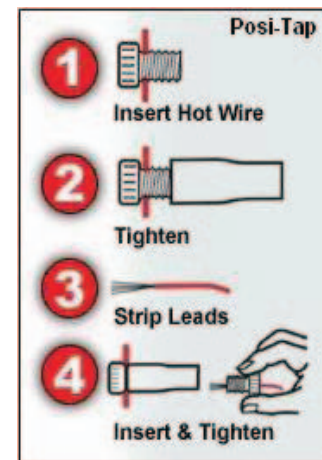


- 6 Locate the injector on top of the throttle body from the right hand side of the ATV (Fig. K).
- 7 Unplug the stock wiring harness from the fuel injector.
- 8 Plug the connectors from the PCV wiring harness in-line of the fuel injector and the stock wiring harness.

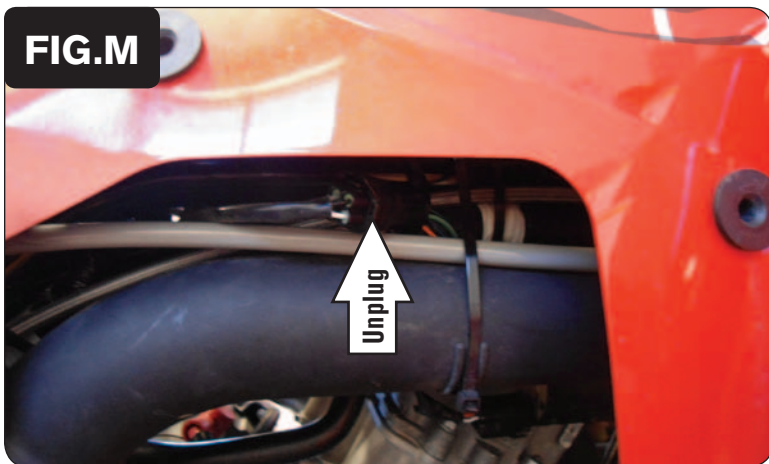
**FIG.L**



- 9 Locate the Throttle Position Sensor (TPS) on the left hand side of the throttle body.
- 10 Using the supplied Posi-tap, attach the GREY wire from the PCV to the stock GREEN/BLACK wire from the quad's TPS.

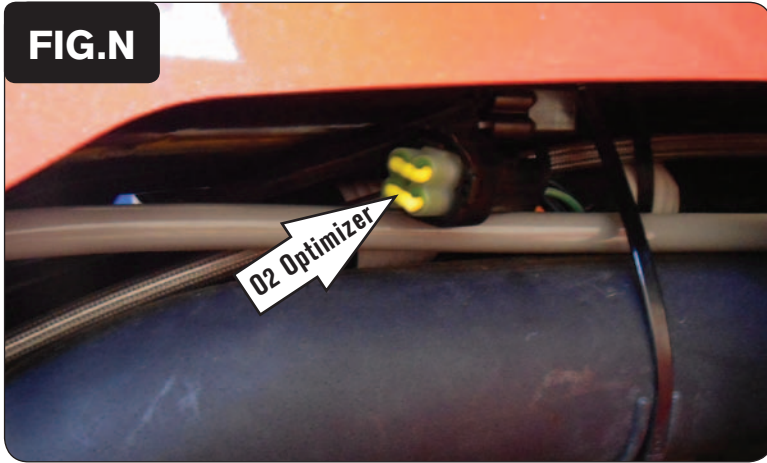


**FIG.M**



- 11 Locate the stock O2 sensor connector behind the right side panel. You can trace the sensor wires from the exhaust header pipe to this connection.
- 12 Unplug the connector.

**FIG.N**



- 13 Plug the supplied O2 Optimizer into the stock wiring harness (Fig. N). The stock O2 sensor will no longer be used it can be removed from the exhaust if desired and if you have a way to plug the hole in the exhaust.
- 14 Reinstall the tool kit, side panels, and the seat.