

# [POWER COMMANDER V]

## 2005-2011 Yamaha MT-01

### 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 O2 Optimizer

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

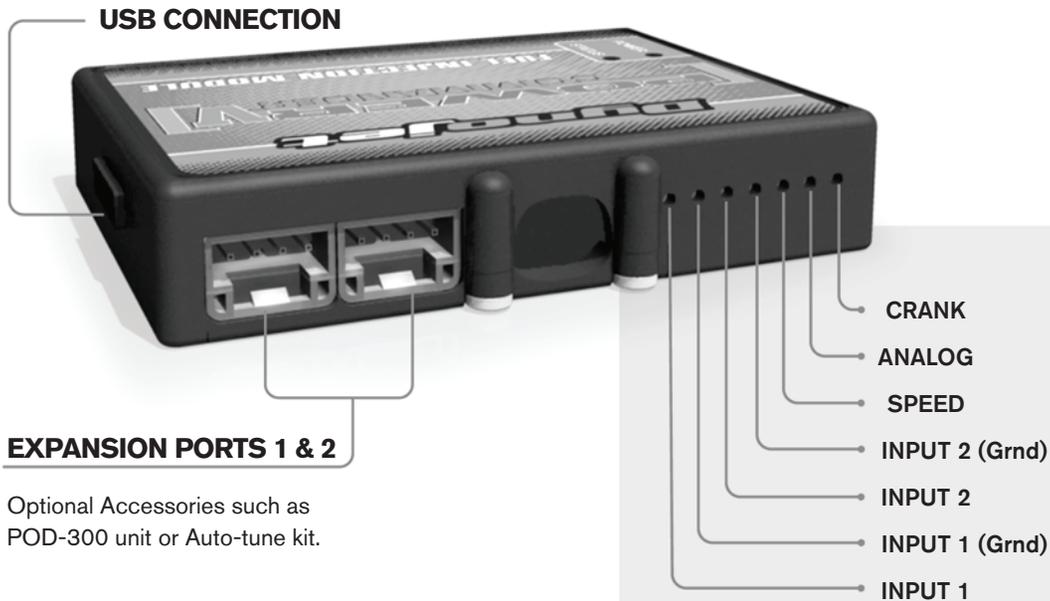
THE LATEST POWER COMMANDER SOFTWARE AND MAP FILES CAN BE DOWNLOADED FROM OUR WEB SITE AT:  
[www.powercommander.com](http://www.powercommander.com)

**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)

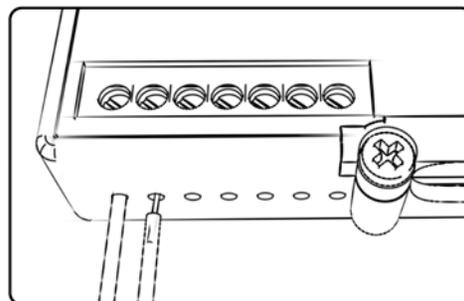
# POWER COMMANDER V INPUT ACCESSORY GUIDE



## 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-

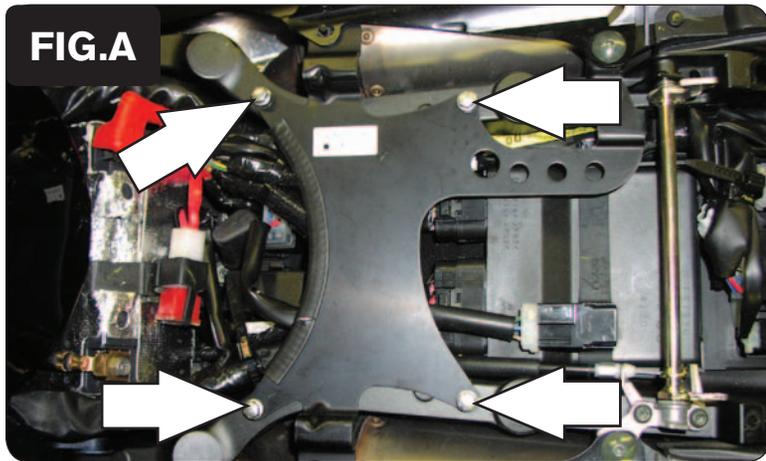
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent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

### Analog-

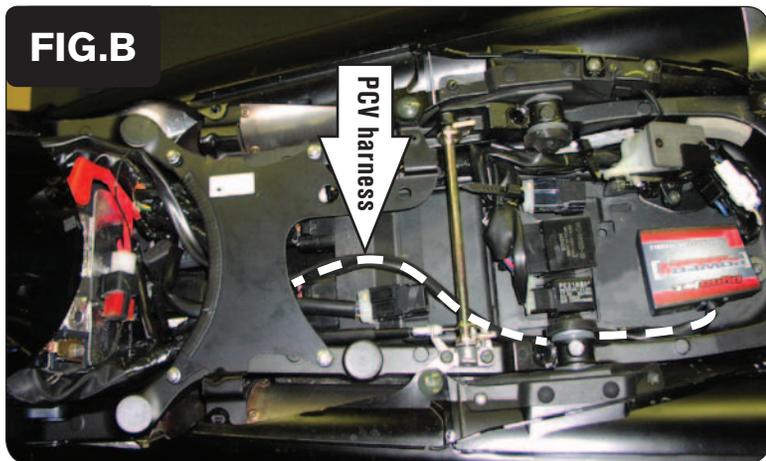
This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

### Crank-

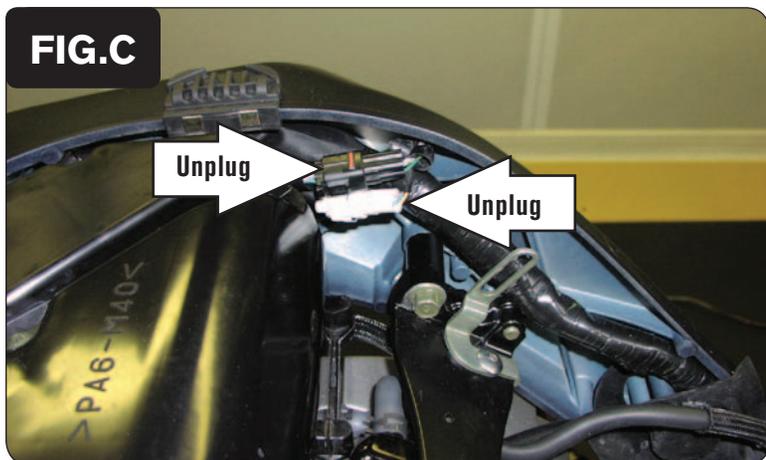
Do **NOT** connect anything to this port unless instructed to do so by Dynojet. It is used to transfer crank trigger data from one module to another.



- 1 Remove the main seat.
- 2 Remove the cover in front of the fuel tank.
- 3 Lift the front of the fuel up.
- 4 Loosen the 4 bolts that hold down the frame crossover bracket (Fig. A).



- 5 Route the PCV harness from the tail section towards the front of the bike. Route the harness under the frame bracket that you just loosened (Fig. B).



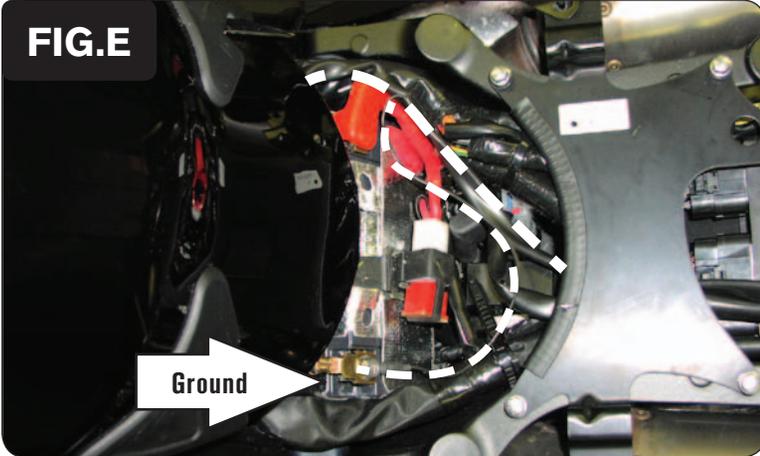
- 6 Locate the two sets of connectors shown in Fig. C. One is a BLACK 4-pin connector and the other is a WHITE 3-pin.
- 7 Unplug both sets of connectors.

**FIG.D**



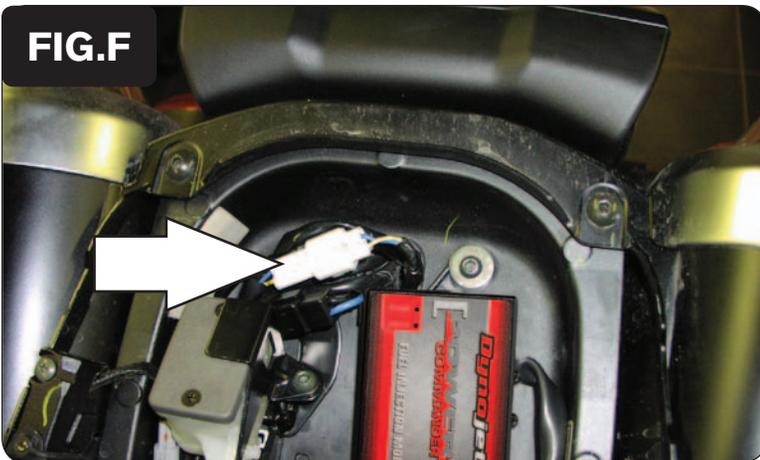
- 8 Plug the connectors from the PCV in-line of the stock wiring harness (Fig. D).

**FIG.E**



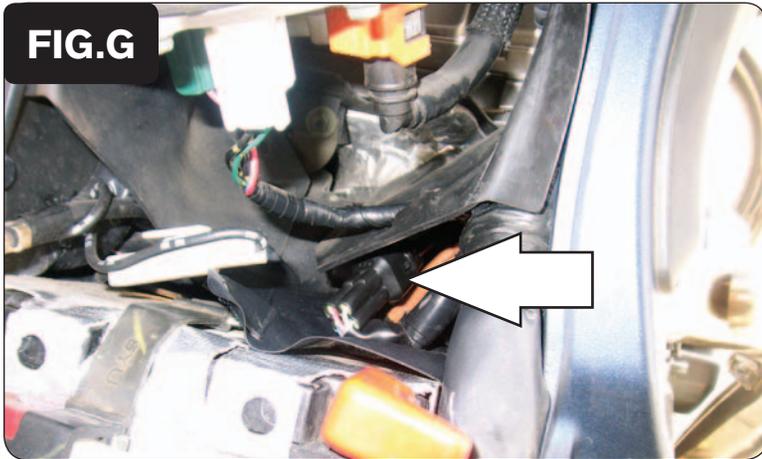
- 9 Attach the ground wire from the PCV to the negative side of the battery (Fig. E).

**FIG.F**

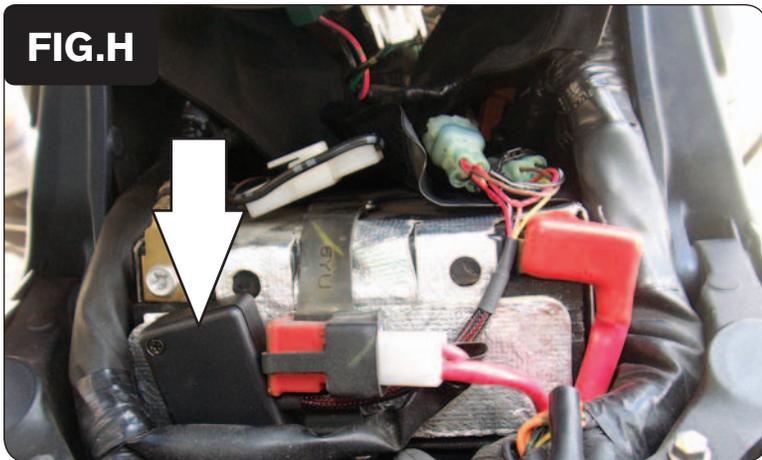


- 10 Plug the white 3-pin connectors from the PCV in-line of the stock connector shown in Figure F.
- 11 Install the PCV in the tail section using the supplied Velcro.

*Make sure to clean both surfaces with the supplied alcohol swab before attaching the Velcro.*



- 12 Locate the O2 sensor connection in front of the battery (Fig. G). This is a BLACK 4-pin connector. Unplug the O2 sensor.



- 13 Connect the O2 Optimizer in-line of the stock wiring harness and O2 sensor.
- 14 Secure the O2 Optimizer on top of the battery (Fig. H).
- 15 Tighten the bracket and fuel tank back into place.

	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

### Tuning notes:

The O2 Optimizer for this model controls the stock closed loop area. This area is represented by the highlighted cells shown in Figure J. The O2 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).

It is not necessary to alter the values 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.