

# [POWER COMMANDER V]

**2004-2010 Yamaha XT660-R**

**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
- 1 Zip tie

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

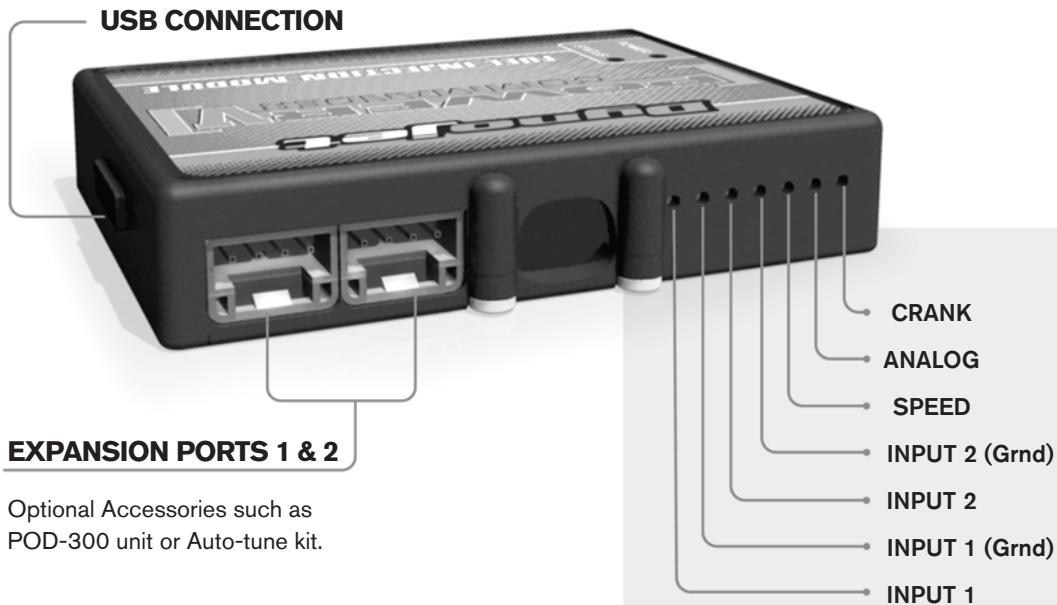
THE LATEST POWER COMMANDER  
SOFTWARE AND MAP FILES CAN BE  
DOWNLOADED FROM OUR WEB SITE AT:  
[www.powercommander.com](http://www.powercommander.com)

**PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION**

**Dynojet**

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# POWER COMMANDER V INPUT ACCESSORY GUIDE

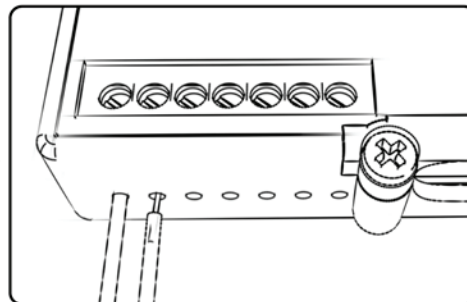


Optional Accessories such as  
POD-300 unit or Auto-tune kit.

## 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-

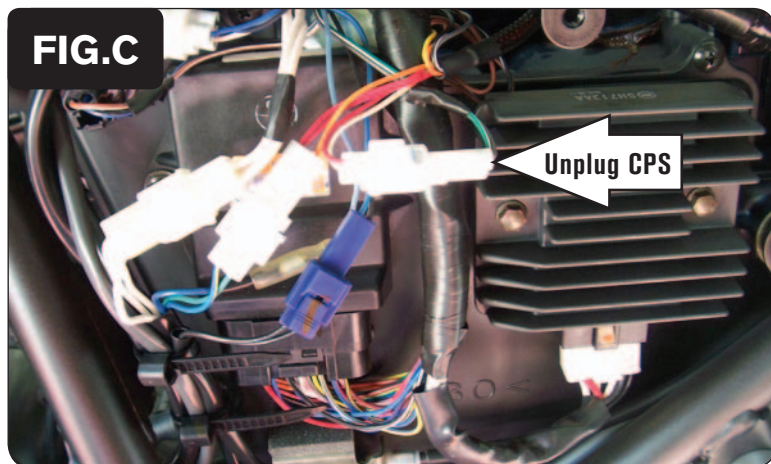
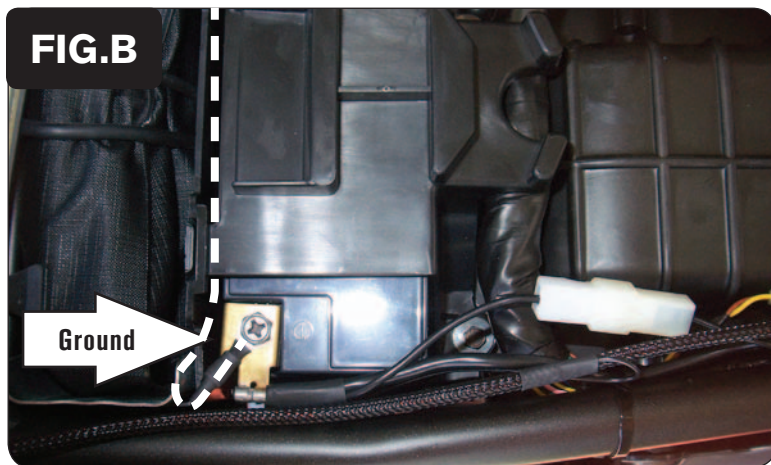
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent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



- 1 Remove the seat.
- 2 Remove the fuel tank.
- 3 Install the PCV in the tail section of the motorcycle (Fig. A). Use the supplied Velcro to secure the PCV in place.

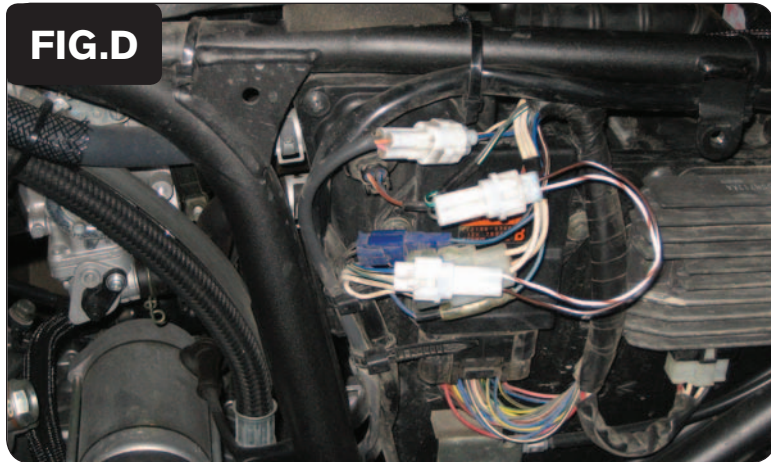
*Clean both surfaces with the supplied alcohol swab prior to applying the Velcro adhesive.*

- 4 Attach the ground wire of the PCV to the negative side of the battery (Fig. B).
- 5 Route the PCV harness to the left side of the bike and go towards the throttle bodies.

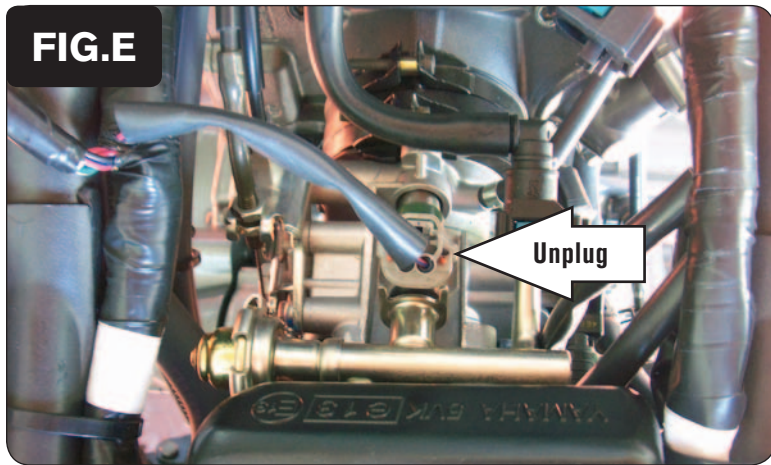
- 6 Locate the Crank Position Sensor connector under the left hand side cover. Unplug this connector (Fig. C).

*This is the WHITE 2-pin connector.*

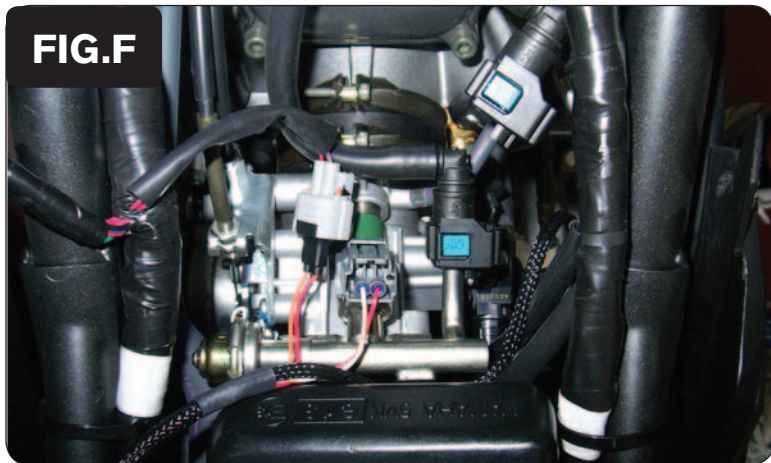




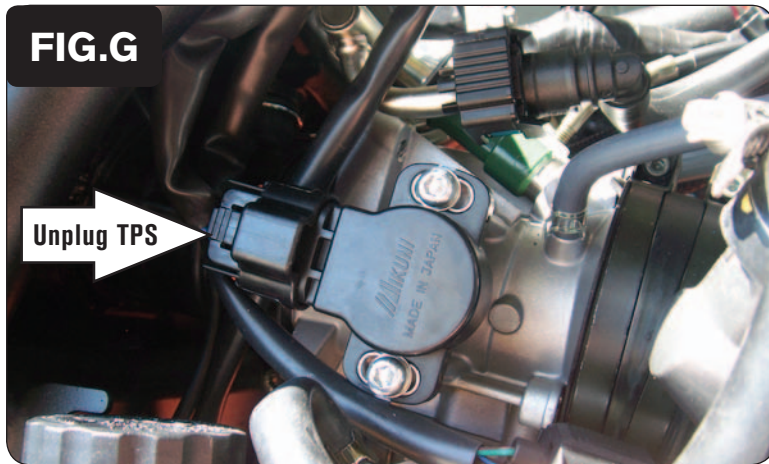
- 7 Plug the WHITE 2-pin connectors from the PCV in-line of the stock Crank Position Sensor connectors (Fig. D).



- 8 Unplug the stock wiring harness from the fuel injector (Fig. E).



- 9 Plug the PCV in-line of the fuel injector and the stock wiring harness (Fig. F).



- 10 Locate the Throttle Position Sensor on the right side of the throttle body. Unplug the stock wiring harness from the TPS (Fig. G).



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



- 12 Locate the O2 sensor connection. Unplug this connection (Fig. J)  
*Follow the wires from the exhaust up to this location.*





- 13 Plug the Dynojet O2 Optimizer in-line of the stock O2 sensor and wiring harness (Fig. K).
- 14 Secure the O2 Optimizer in place using a zip tie.

	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
6250	0	0	0	0	0	0	0	0	0	0
6500	0	0	0	0	0	0	0	0	0	0
6750	0	0	0	0	0	0	0	0	0	0
7000	0	0	0	0	0	0	0	0	0	0
7250	0	0	0	0	0	0	0	0	0	0
7500	0	0	0	0	0	0	0	0	0	0
7750	0	0	0	0	0	0	0	0	0	0
8000	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).

It is not recommended to alter the values in the highlighted area of your Fuel tables unless instructed to do so by a Dynojet technician.

If using the Auto-tune system do NOT input values in this area of your Target AFR table.

The light on the O2 Optimizer will blink while the sensor is being heated. It is not active until the light is lit solid.

**FIG.L**