

[POWER COMMANDER V]

FUEL AND IGNITION

2012-2014 Yamaha T-Max 530

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!

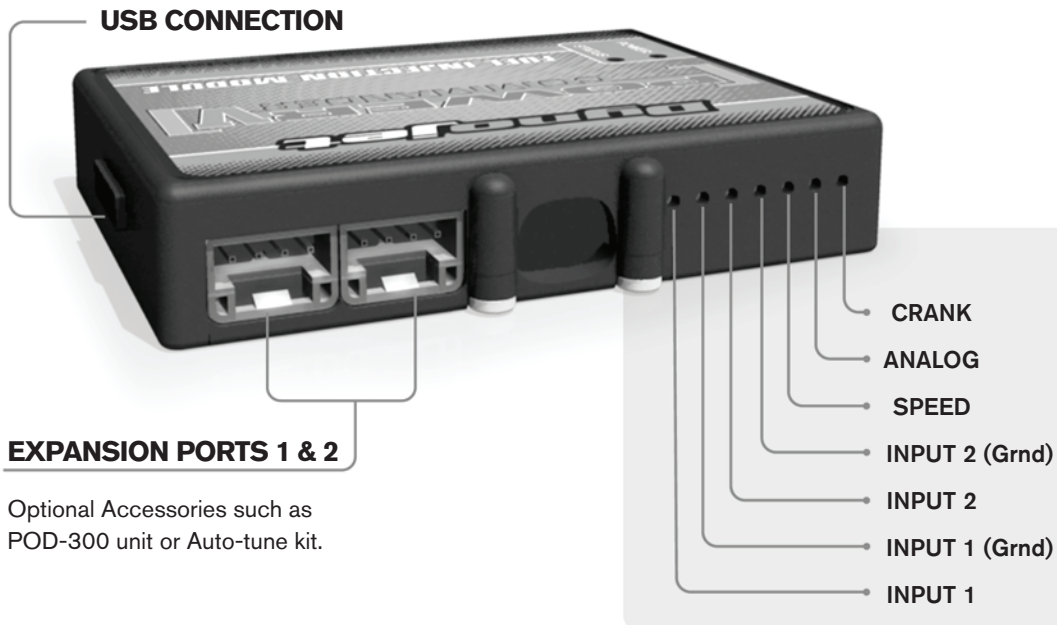
THE LATEST POWER COMMANDER SOFTWARE AND MAP FILES CAN BE DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

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-

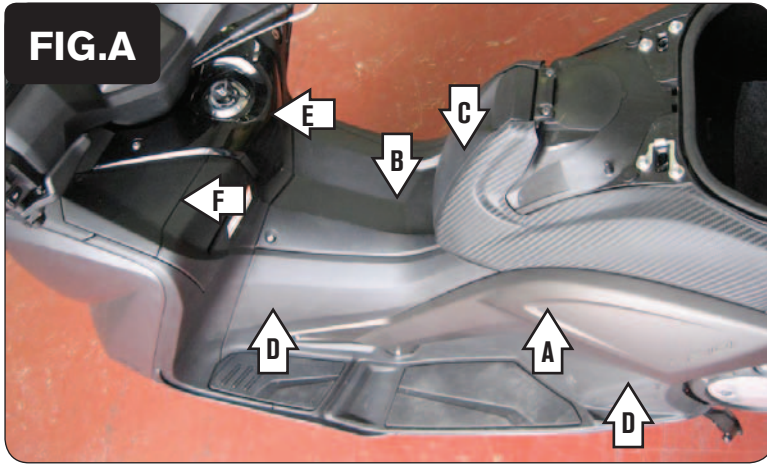
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent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

Analog-

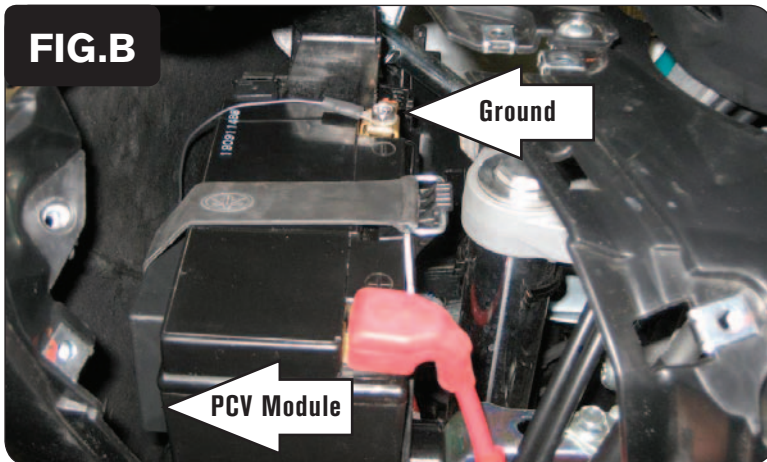
This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

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 Lift up the seat.
- 2 Remove bodywork panels shown in Figure A.
 - Side panels (A) on both left and right side
 - Central tunnel cover (B)
 - Fuel tank cover (C)
 - Rubber footrest and central tunnel side covers (D) on both left and right side
 - Ignition key cover (E)
 - Left storage compartment and battery cover (F)



- 3 Connect the ground wire from PCV to the negative side of the battery (Fig. B).
- 4 Route the PCV crank pick-up coil connectors (2-pin clear connectors with WHITE/BROWN and BROWN/WHITE colored wires) down to the front left side of the fairing.
- 5 Secure the PCV to the left side of the battery using the stock rubber elastic battery strap (Fig. B).



- 6 Locate the clear 2-pin crank pickup coil connector. It is located near the big white 3-pin connector of the regulator/rectifier on the left side of the scooter (Fig. C).

Note: The picture is taken with front screen and fairing removed but it is not necessary to remove these parts. It is possible to access the connector from the bottom side of the scooter.

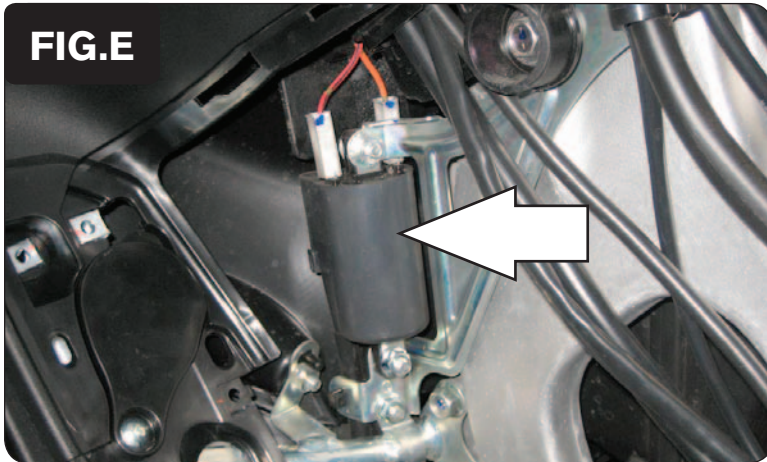
FIG.D



- 7 Plug the PCV in-line of the stock crank pickup coil connectors (Fig. D).

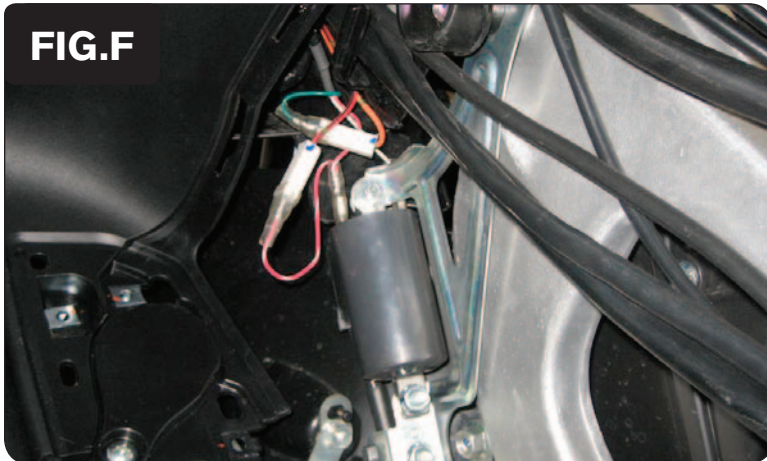
Note: This picture is taken from the bottom looking upwards at the crank pickup coil connectors.

FIG.E

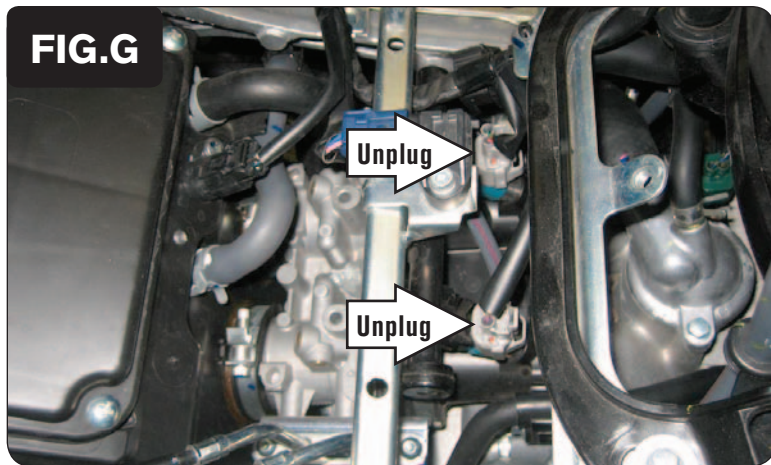


- 8 Route the PCV harness down to the left side of the frame and toward the throttle body following the stock harness.
- 9 Locate the ignition coil on the left side of the frame (Fig. E).

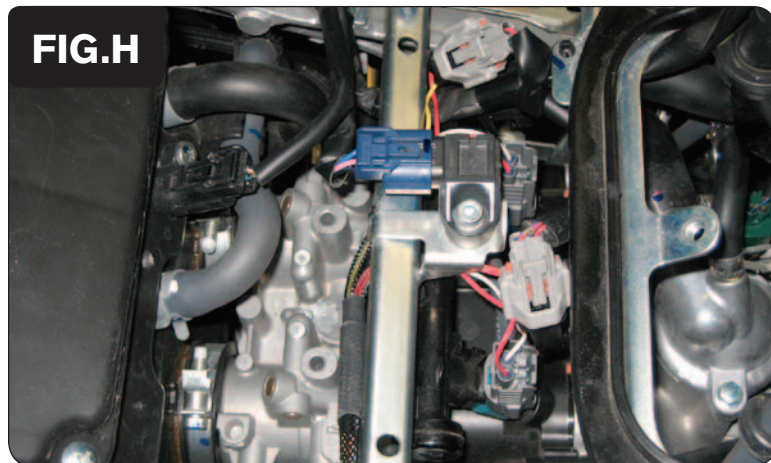
FIG.F



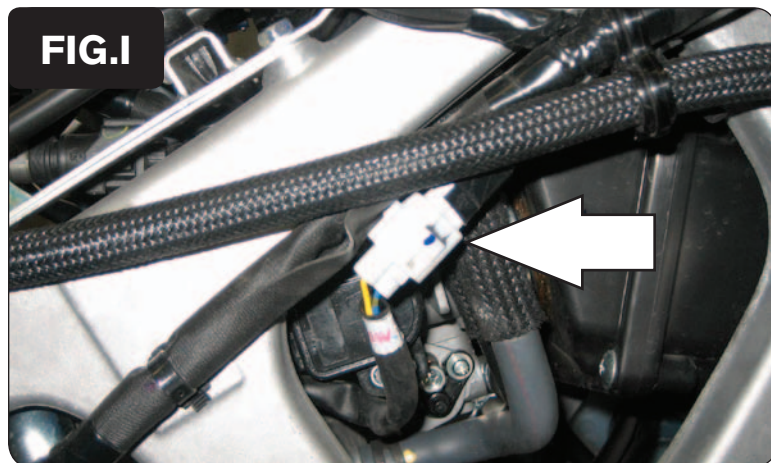
- 10 Unplug the ORANGE wire from the ignition coil and plug the GREEN colored wires from the PCV in-line of the stock wiring harness and coil.
Unplug the RED/BLACK wire from the ignition coil and plug the RED colored wires from the PCV in-line of the stock wiring harness and coil (Fig. F).



- 11 Locate the fuel injectors (Fig. G).
Unplug the stock wiring harness from the fuel injectors.



- 12 Plug the PCV connectors in-line with the fuel injectors and stock wiring harness (Fig. H).
ORANGE PCV colored wires for the cylinder #1
YELLOW PCV colored wires for the cylinder #2



- 13 Locate the 3-pin white sub-connector of the Throttle Position Sensor on the external right side of the frame (Fig. I).



- 14 Plug the PCV wiring harness in-line of the stock TPS connectors (Fig. J).



- 15 Locate the stock O2 sensor connection and unplug it (Fig. K).
It is a BLACK 4-pin connector. You can follow the wires coming out of the exhaust to this location.



- 16 Plug the O2 Optimizer in-line of the stock O2 sensor and wiring harness.
Secure the O2 optimizer to the frame using the supplied Velcro (Fig. N).
- 17 Reinstall all bodywork.

	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

FIG.M

Tuning Notes:

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

It is not necessary to input values in the highlighted area of the fuel table. If using Auto-tune do NOT input values in this area of the Target AFR table.

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