

[POWER COMMANDER V]

FUEL AND IGNITION

2014-2015 Yamaha Bolt 950

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!

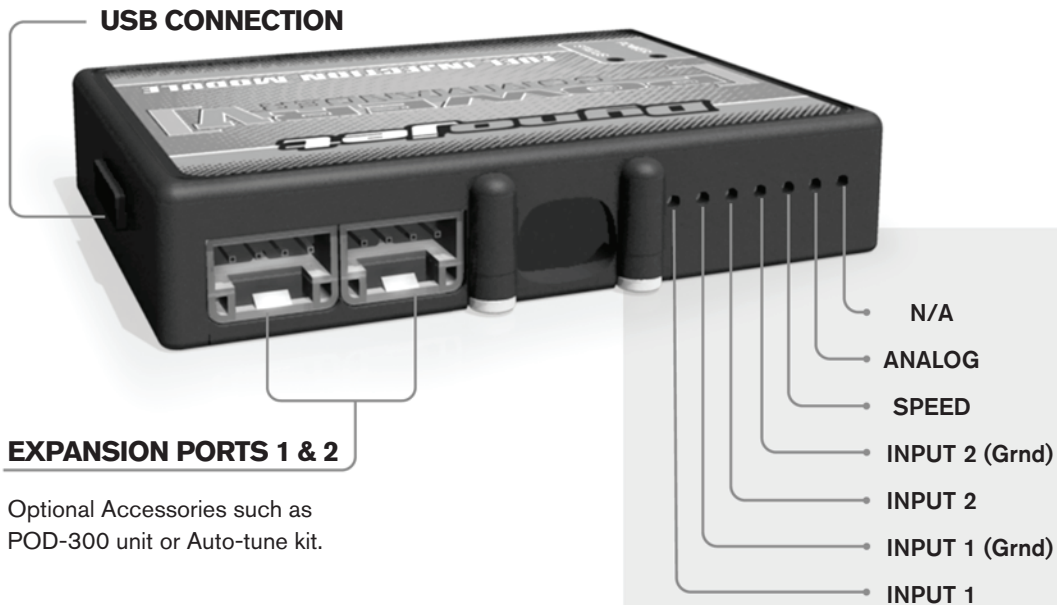
THE LATEST POWER COMMANDER SOFTWARE AND MAP FILES CAN BE DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

Dynojet

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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-

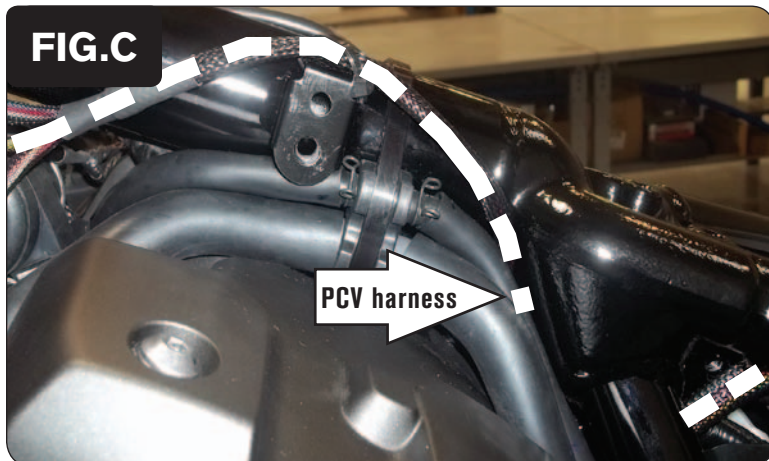
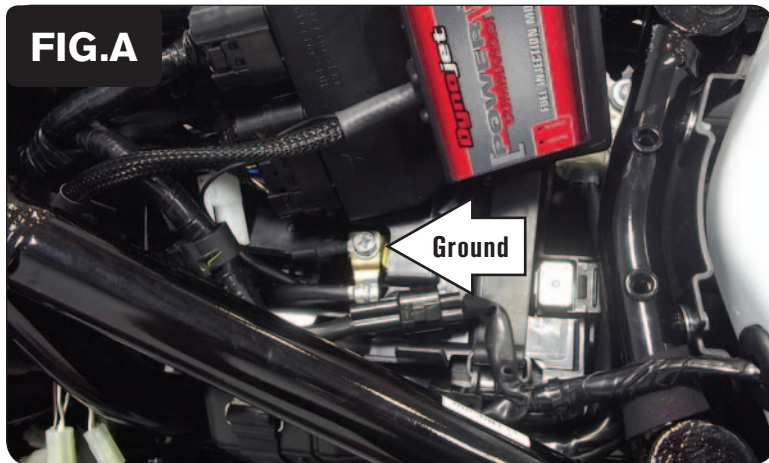
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent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

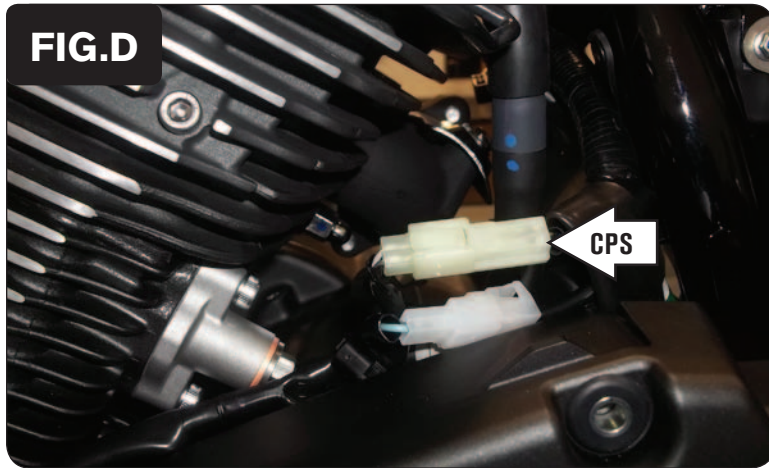


- 1 Remove the seat.
- 2 Remove the fuel tank.
- 3 Remove both side covers beneath the seat.
- 4 Loosen the ECM strap and lift the ECM out of place to access the battery.
- 5 Attach the ground wire of the PCV to the negative side of the battery (Fig. A).

- 6 Reinstall the ECM back into place.
- 7 Secure the PCV module to the top of the ECM (Fig. B).

You can secure the PCV module under the stock ECM strap or use the supplied Velcro to secure the module to the top of the ECM. If using the Velcro, clean the surface with the supplied alcohol swab prior to applying the Velcro.

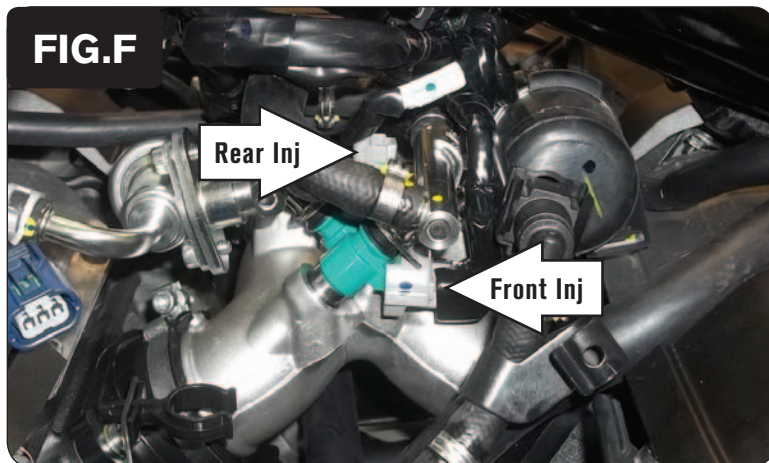
- 8 Route the PCV harness forward going under the frame tubes directly under the seat, and then upward along the backbone of the frame and towards the engine (Fig. C).



- 9 Locate and unplug the stock Crank Position Sensor connectors (Fig. D).
This connector pair is located just above the front sprocket cover.



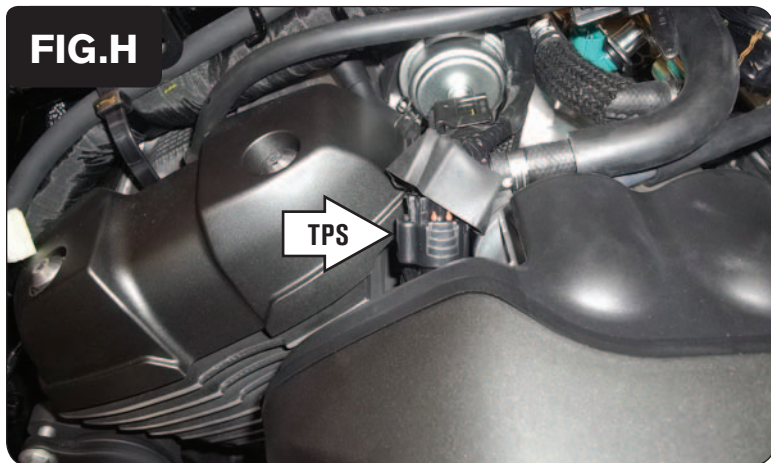
- 10 Plug the pair of matching PCV connectors in-line of the stock CPS connectors (Fig. E).



- 11 Locate and unplug the stock wiring harness from the Front and Rear Cylinder Fuel Injectors, located directly on top of the intake manifold (Fig. F).



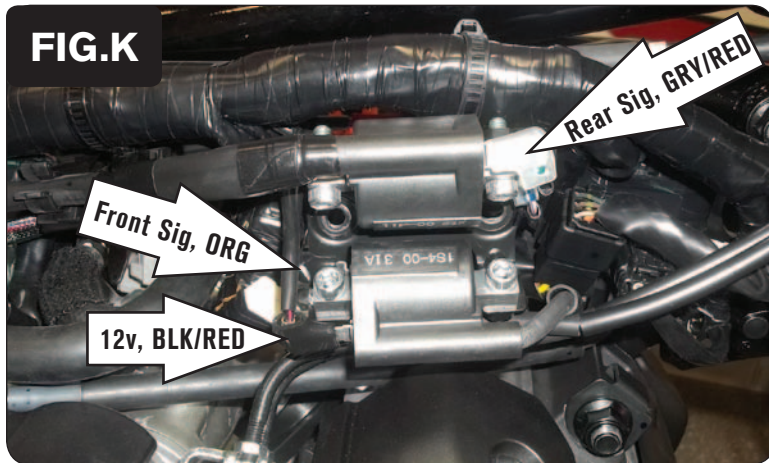
- 12 Plug the matching pair of PCV Injector leads with the **ORANGE** colored wires in-line of the **FRONT** Cylinder Fuel Injector and stock wiring harness.
- 13 Plug the matching pair of PCV Injector leads with the **YELLOW** colored wires in-line of the **REAR** Cylinder Fuel Injector and stock wiring harness (Fig. G).



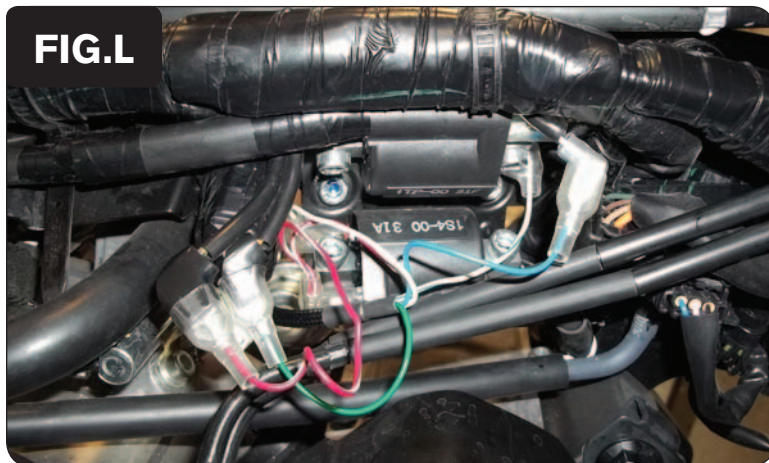
- 14 Locate and unplug the Throttle Position Sensor connector (Fig. H).
This connector is located on the rear of the throttle bodies.



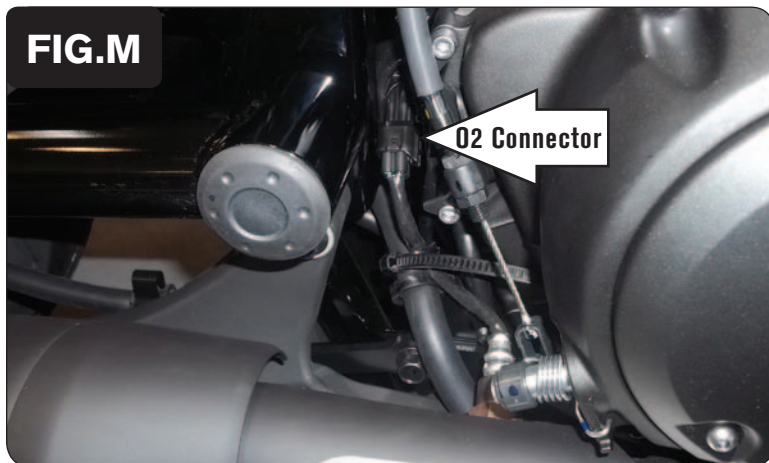
- 15 Plug the matching pair of connectors from the PCV in-line of the stock wiring harness the bike's TPS (Fig. J).



- 16 Locate and unplug the 12 volt wire (BLACK/RED) from the Front Cylinder Ignition Coil, the signal wire (GREY/RED) from the Rear Cylinder Ignition Coil, and the signal wire (ORANGE) from the Front Cylinder Ignition Coil (Fig. K).

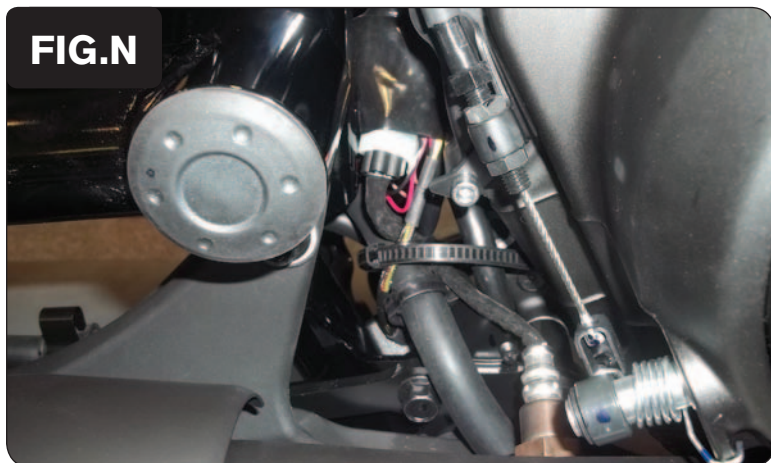


- 17 Plug the pair of RED/WHITE wires with spade terminals of the PCV in-line of the Front Ignition Coil spade and the stock BLACK/RED wire.
- 18 Plug the pair of BLUE & WHITE/BLUE leads with spade terminals of the PCV in-line of the Rear Ignition Coil spade and the stock GREY/RED wire.
- 19 Plug the pair of GREEN & WHITE/GREEN leads with spade terminals of the PCV in-line of the Front Ignition Coil spade and the stock ORANGE wire (Fig. L).



- 20 Locate and unplug the stock O2 sensor connection (Fig. M).

This connector is located just in front of the pivot shaft of the swingarm on the right side of the bike. You can trace the wires from the stock O2 sensor (in the exhaust) to this connector.



- 21 Plug the Dynojet O2 Optimizer in-line of the stock O2 sensor and wiring harness.

To use this O2 Optimizer, the stock O2 sensor must remain in the exhaust and active (even if using Auto-tune).

- 22 Use the stock wire tie at this location to secure the O2 Optimizer to the rear brake line and away from the hot exhaust (Fig. N).
- 23 Reinstall the fuel tank, bodywork, and seat.

Optional Inputs:

Speed input location - WHITE/YELLOW wire of vehicle speed sensor rear of the front drive sprocket

12v for Auto-tune - BLUE wire of 3-pin connector for tail light

	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

The O2 Optimizer for this model controls the stock closed loop area. This area is represented by the highlighted cells shown in Figure O. 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 if using Auto-tune).

Input values of 8 in all cells of the fuel table/tables of your PCV map in the highlighted area. If using the Auto-tune accessory do NOT input values in this area of your Target AFR table.

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