

[POWER COMMANDER V]

2016 Kawasaki ZX-10R

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

THE IGNITION MUST BE TURNED OFF BEFORE INSTALLATION!

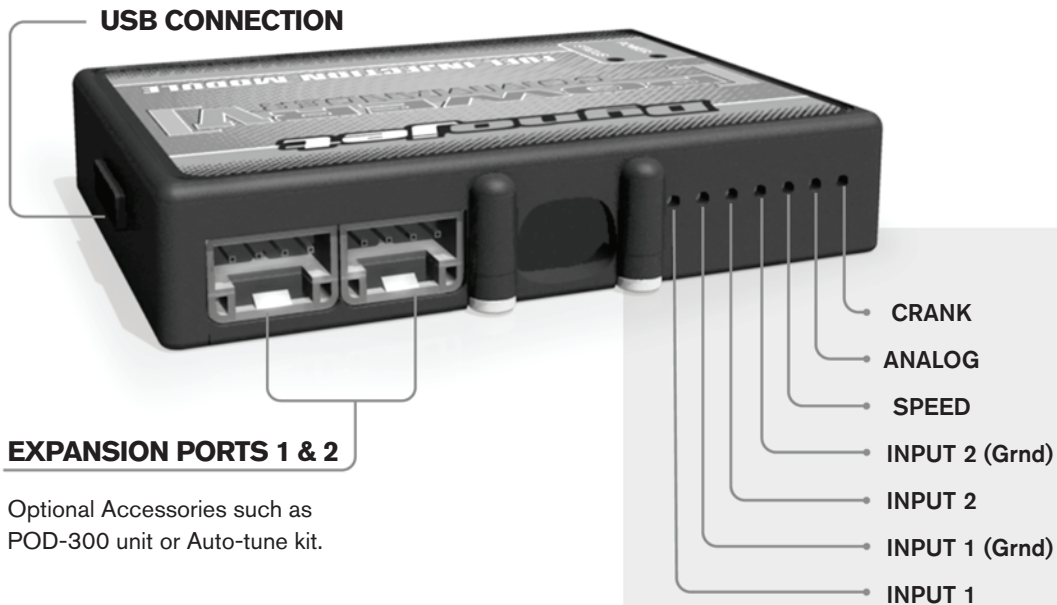
THE LATEST POWER COMMANDER SOFTWARE AND MAP FILES CAN BE DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

Dynojet

2191 Mendenhall Drive North Las Vegas, NV 89081 (800) 992-4993 www.powercommander.com

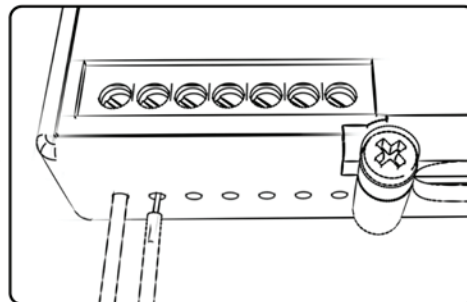
POWER COMMANDER V INPUT ACCESSORY GUIDE



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-

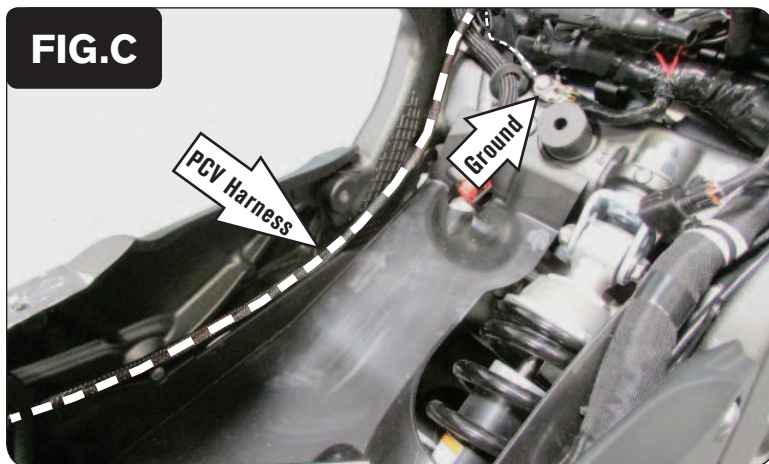
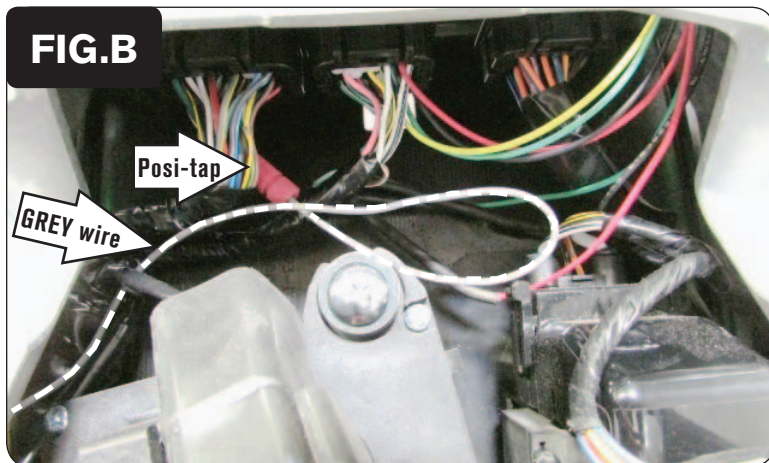
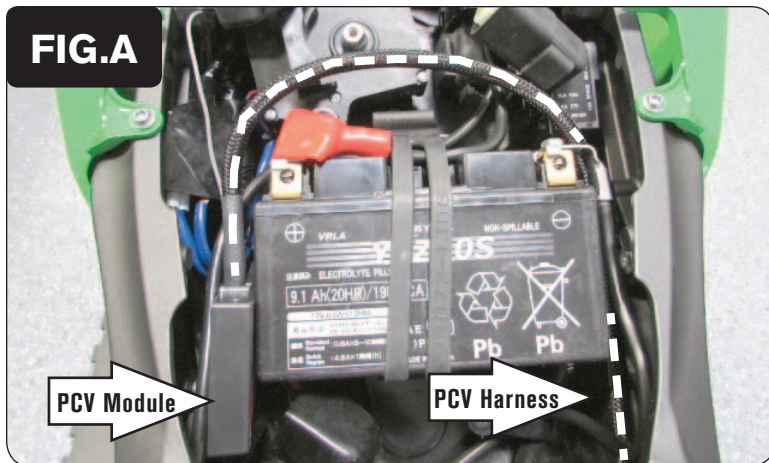
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent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

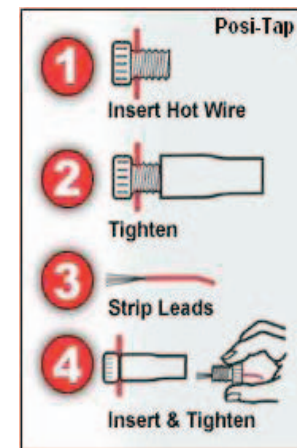
Crank-

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.

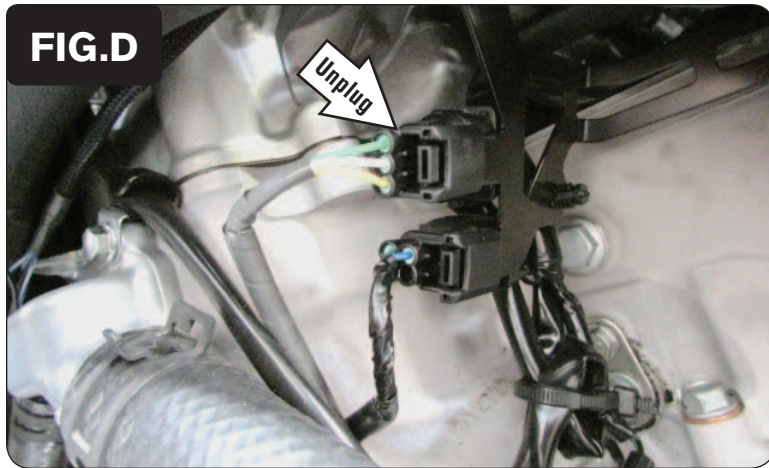


- 1 Remove both of the seats and the bodywork at the top of the tail section.
- 2 Remove the bodywork around the fuel tank and the fuel tank itself.
- 3 Secure the PCV to the right side of the battery using the supplied Velcro.
Clean both surfaces with the supplied alcohol swab prior to applying the Velcro.
- 4 Route the PCV wiring harness around the back of the battery and then forward towards the engine following inside the frame on the left hand side (Fig. A).

- 5 Unplug the right most ECU connector.
The bike's ECU is in the back of the tail section. This connector can be unplugged without removing the plastic around the top of the ECU, but it does help.
- 6 Use the supplied Posi-tap to attach the GREY wire of the PCV wiring harness to the stock PURPLE wire (pin #20) of the right most ECU connector.
- 7 After attaching the GREY wire, plug the connector back on to the ECU (Fig. B).

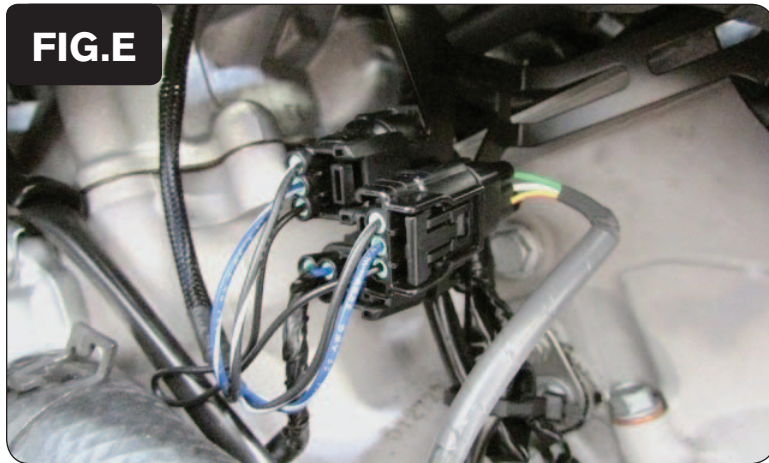


- 8 Secure the PCV ground wire with the small ring terminal to the stock common ground bolt on the frame near the upper shock mount (Fig. C).

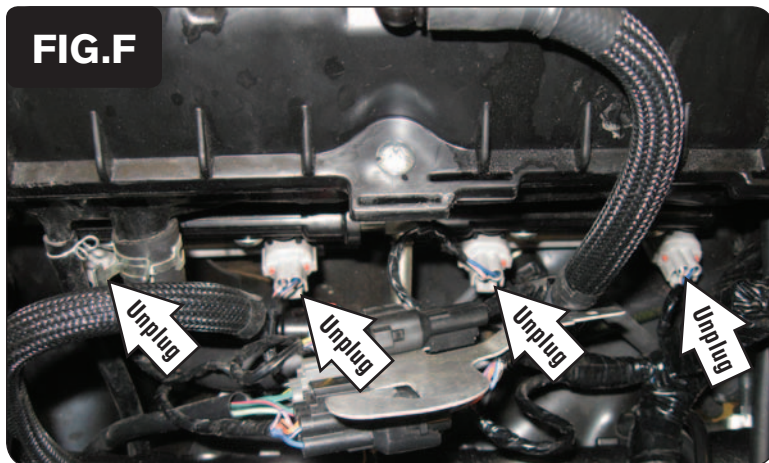


- 9 Unplug the stock Gear Position Sensor connectors (Fig. D).

These connectors are located on the left side of the engine. This is a BLACK 3-pin connector pair.



- 10 Plug the PCV wiring harness in-line of the stock Gear Position Sensor connectors (Fig. E).



- 11 Loosen the small metal bracket from the back side of the airbox.
- 12 Unplug the stock wiring harness from all four of the lower primary Fuel Injectors (Fig. F).

These are the lower injectors that have the GREY connectors; NOT the upper secondary injectors that have the BROWN connectors.



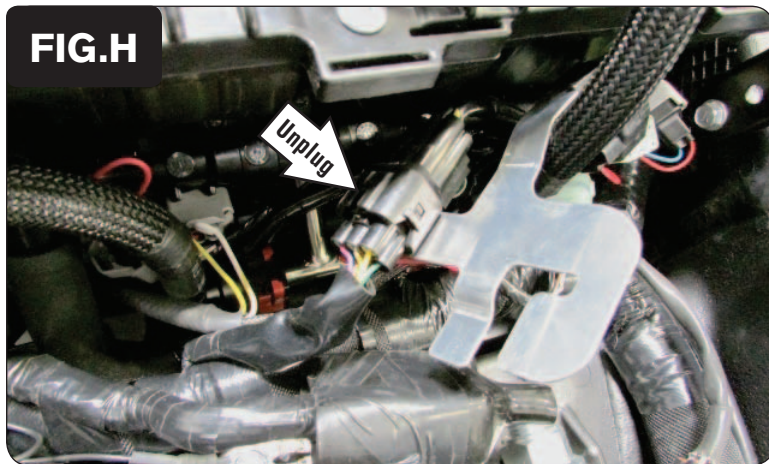
- 13 Plug the PCV wiring harness in-line of the each Fuel Injector and each of the stock wiring harness connectors (Fig. G).

The pair of PCV connectors with the ORANGE colored wires go to the #1 (left most) fuel injector.

The pair of PCV connectors with the YELLOW colored wires go to the #2 fuel injector.

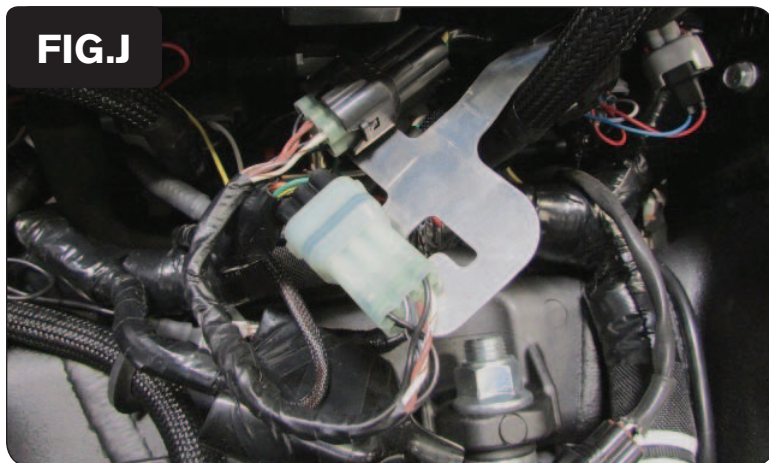
The pair of PCV connectors with the GREEN colored wires go to the #3 fuel injector.

The pair of PCV connectors with the BLUE colored wires go to the #4 (right most) fuel injector.



- 14 Unplug the stock Crank Position Sensor connectors (Fig. H).

This is a BLACK 6-pin connector pair located on the small metal bracket at the backside of the airbox that was loosened in step 11.



- 15 Plug the PCV wiring harness in-line of the stock Crank Position Sensor connectors (Fig. J).
- 16 Secure the small metal bracket back to the airbox.
- 17 Reinstall the fuel tank.
- 18 Reinstall the removed bodywork and the seats.

FIG.K

		% Throttle								
		2	5	10	15	20	40	60	80	100
500	0	0	0	0	0	0	0	0	0	0
750	8	0	0	0	0	0	0	0	0	0
1000	8	0	0	0	0	0	0	0	0	0
1250	8	0	0	0	0	0	0	0	0	0
1500	8	0	0	0	0	0	0	0	0	0
1750	8	10	0	0	0	0	0	0	0	0
2000	8	10	0	0	0	0	0	0	0	0
2250	0	10	0	0	0	0	0	0	0	0
2500	0	10	0	0	0	0	0	0	0	0
2750	0	10	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
8250	0	0	0	-2	-2	-4	-2	-8	-14	-9

Tuning Notes:

This bike uses a “throttle-by-wire” system. So conventional tuning can not be performed for all RPM and throttle ranges.

The PCV is attached to the throttle blade angle sensor of the throttle bodies which is NOT directly correlated to the throttle grip position. Because of this when setting the throttle position in the PCV software, we recommend on resetting only the closed throttle position after the bike has completely warmed up. Use the arrow key (<) next to MINIMUM VOLTAGE to perform this step and then click OK. Do not try to set the MAXIMUM VOLTAGE position unless you are on a dyno in gear and above 9000 RPM.

The bike's stock O2 sensor controls the fueling in the closed loop range of the engine. This closed-loop area is represented by the darker grey table cells shown in Figure K. If any fuel changes are attempted in this stock closed-loop range of the Power Commander map, the bike's stock ECU has the capability to essentially “learn” how to override them while riding at lower RPMs. You will notice that in the maps there are not detailed values below 8000 RPM at 5%-100% throttle.

Some owners might prefer to disable the stock O2 sensor by reflashing the bike's stock ECU. If so, fine tuning the map can be done in this range.