

[POWER COMMANDER V]

2009 Kawasaki Z1000

Installation Instructions



PARTS LIST

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- 1 Installation Guide
- 2 Power Commander Decals
- 2 Dynojet Decals
- 2 Velcro strips
- 1 Dual Lock strip
- 1 Alcohol swab
- 1 O2 Optimizer
- 1 Posi-tap

THE IGNITION MUST BE TURNED OFF BEFORE INSTALLATION!

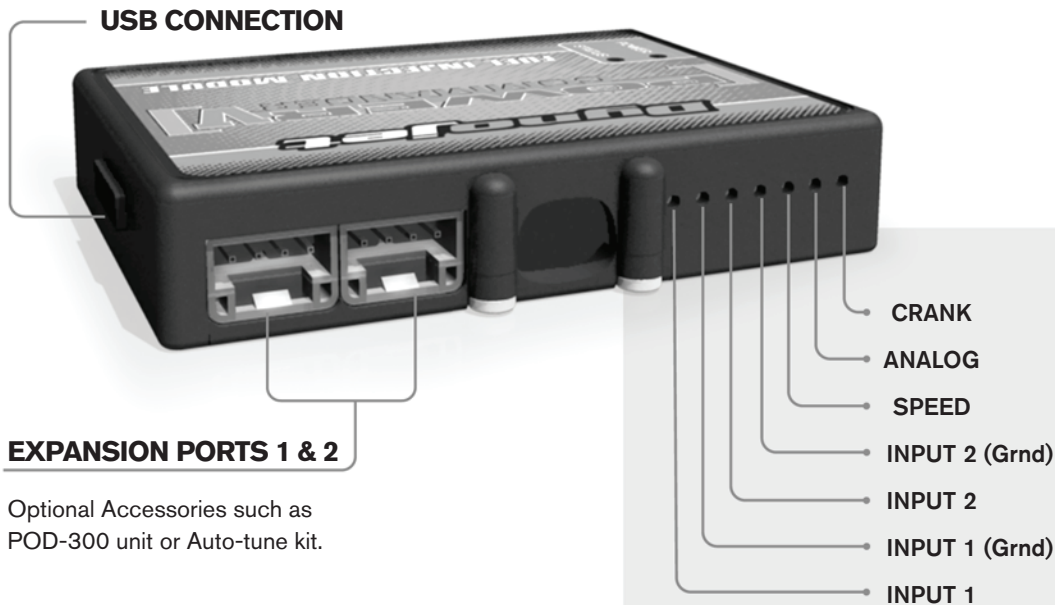
THE LATEST POWER COMMANDER SOFTWARE AND MAP FILES CAN BE DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

Dynojet

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

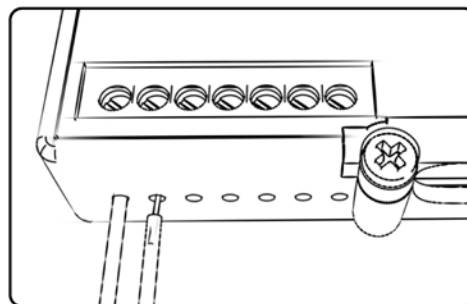
POWER COMMANDER V INPUT ACCESSORY GUIDE



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-

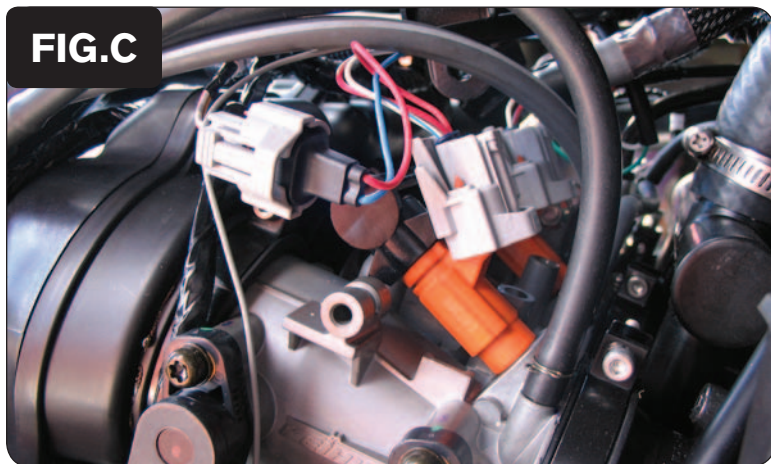
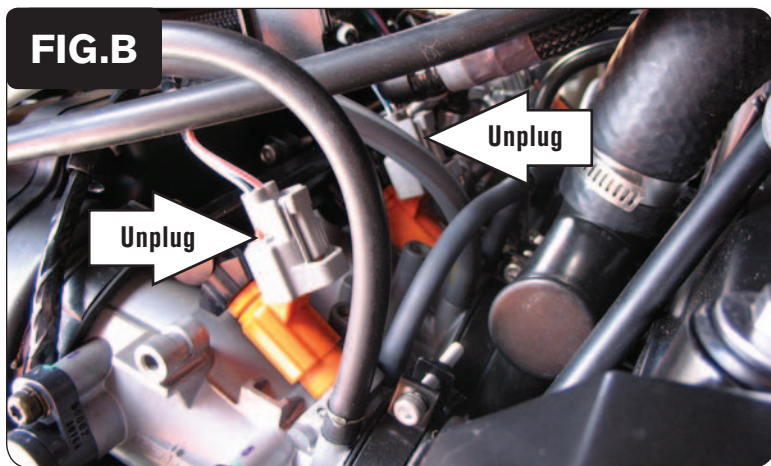
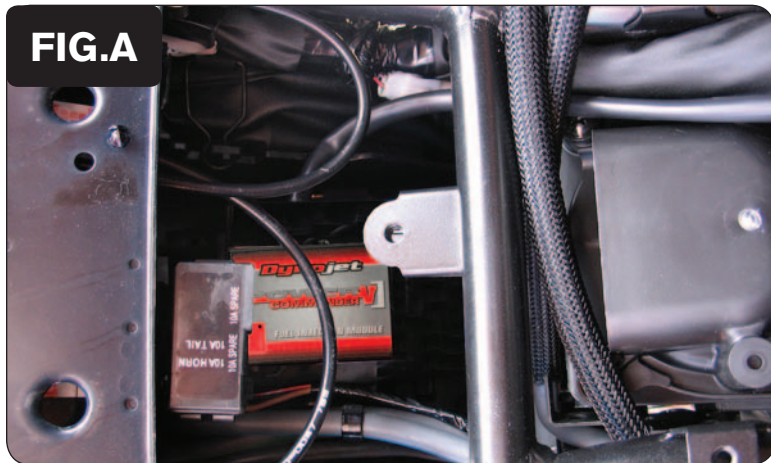
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent 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 the main seat and the passenger seat.
The installation can be done without removing the fuel tank, but it may make the installation easier by doing so.
- 2 Mount the PCV to the inner rear fender, behind the air box (Fig. A).
The supplied Velcro can be used to secure the module, if necessary. Clean both surfaces with the supplied alcohol swab prior to attaching the Velcro.
- 3 Route the harness towards the front of the bike along the left hand frame tube.

- 4 Unplug the stock wiring harness from each of the 4 fuel injectors (Fig. B).

Figure B only shows the #3 and #4 injector. You will need to also remove the harness from #1 and #2.

- 5 Plug the PCV wiring harness in-line of the stock harness and injectors (Fig. C).

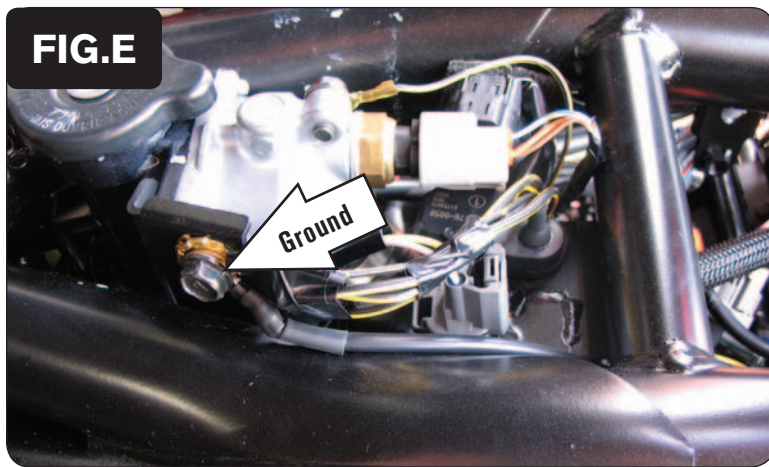
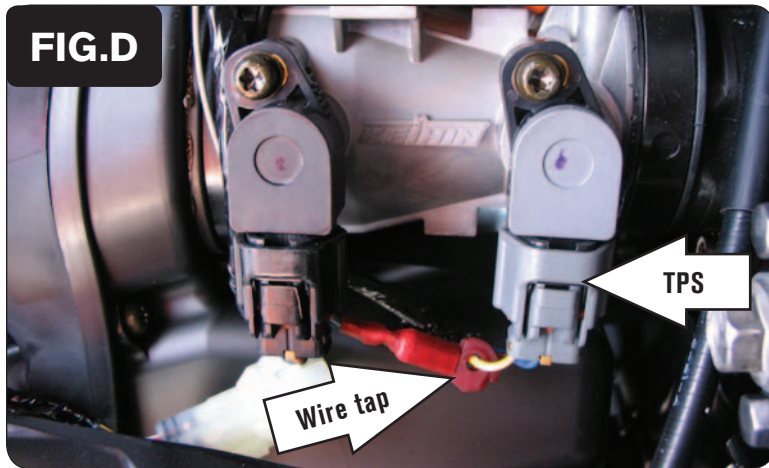
PCV harness:

ORANGE - cylinder #1 (left)

YELLOW - cylinder #2

GREEN - cylinder #3

BLUE - cylinder #4 (right)



6 Locate the Throttle Position Sensor connector (Fig. D).

This connector is located on the right hand side of the throttle bodies and is GREY in color.

7 Attach the supplied Posi-tap to the YELLOW/WHITE wire of the TPS.

This connection can be made further up the harness to make it less noticeable if desired.

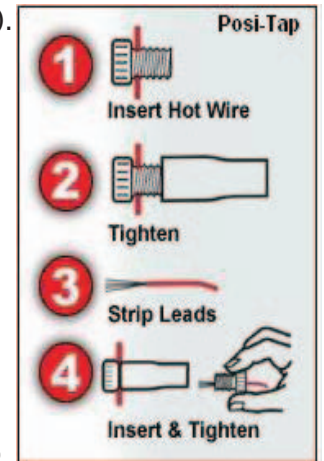
The wire tap used in Figure D is not a Posi-tap. It is an older crimp-on style t-tap.

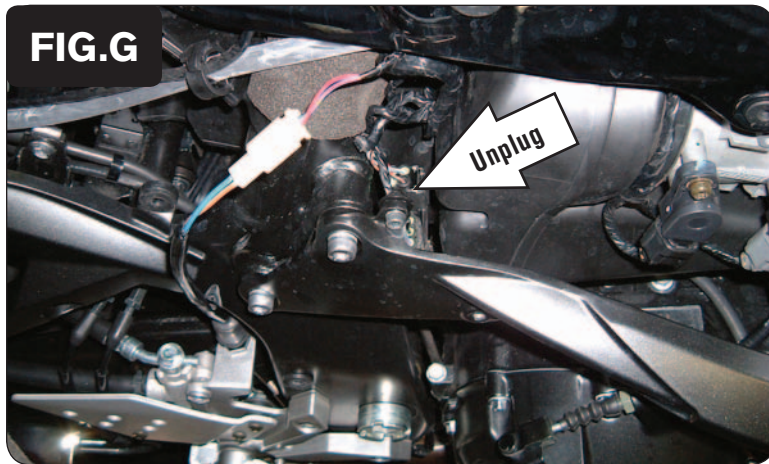
8 Connect the GREY wire from the PCV to the Posi-tap (Fig. D).

9 Attach the ground wire from the PCV to the stock ground wire next to the thermostat housing (Fig. E).

10 Reinstall fuel tank.

11 Remove the frame cover on the right hand side (Fig. F).





- 12 Locate the stock O2 sensor connection. This is a BLACK 4-pin connector.
- 13 Unplug this connection (Fig. G) and plug the Dynojet O2 Optimizer in-line of the stock O2 sensor connectors.
- 14 Secure the O2 Optimizer module to frame with the supplied Dual Lock strip.

Clean both surfaces with the supplied alcohol swab prior to applying the Dual lock strip adhesive.

Optional inputs:

Speed - PINK wire of speed sensor. Located on engine case above the front sprocket cover.

Engine Temperature - BLUE/WHITE wire of temp sensor on thermostat housing located under fuel tank (seen in Figure E).

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 H. The O2 Optimizer is designed to achieve a target AFR of 13.6:1 in the stock closed loop range. To use the O2 Optimizer you must retain your stock O2 sensor (even if using Auto-tune). If you prefer a different AFR than 13.6:1 in this range call tech support at 1-800-992-4993 or e-mail tech@powercommander.com.

It is NOT necessary to input detailed fuel change values in this range of the fuel tables. Generally a blanket fuel change of 8 will suffice for this range. If using Auto-tune, do NOT input Target AFR values in this same range.

On this model closed loop is only active in 5th & 6th gear. Because of this it is recommended to put the PCV fuel tables (and Target AFR Tables, if using Auto-tune) in Gear Advanced mode. This will allow full control of the fuel curve in 1st - 4th gear. The optional speed input is required for Gear Advanced mapping.

The O2 Optimizer will blink while the stock O2 sensor is being heated up. The unit is not functioning until the light is lit up solid.

	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

FIG.H