

[POWER COMMANDER V]

2009-2010 Hyosung GV650/GT650

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!**

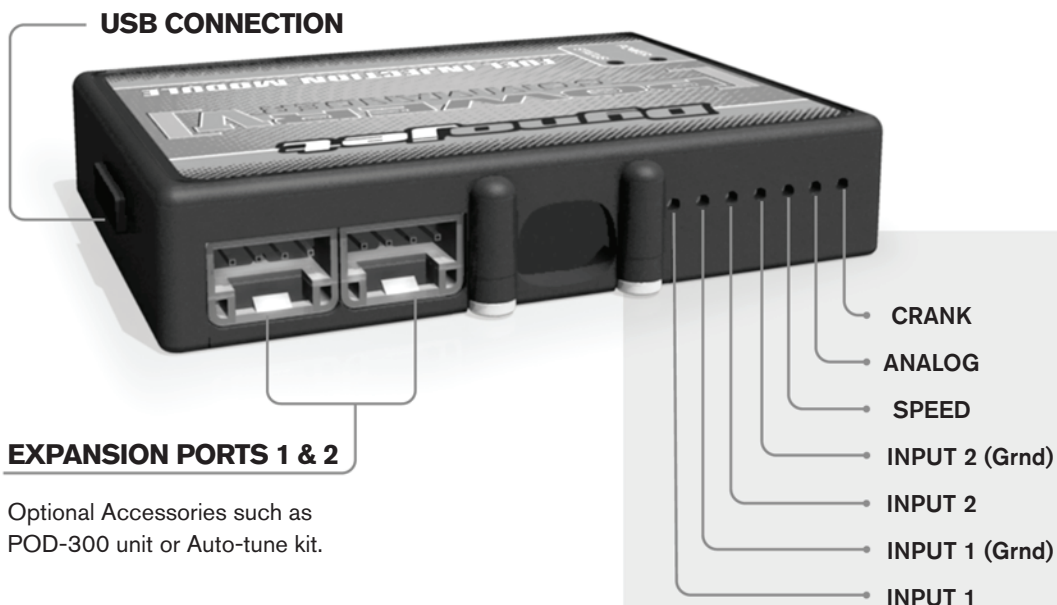
THE LATEST POWER COMMANDER
SOFTWARE AND MAP FILES CAN BE
DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

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

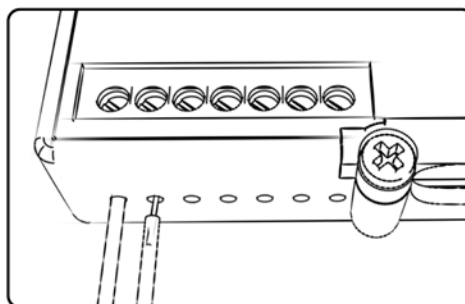


Optional Accessories such as
POD-300 unit or Auto-tune kit.

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-

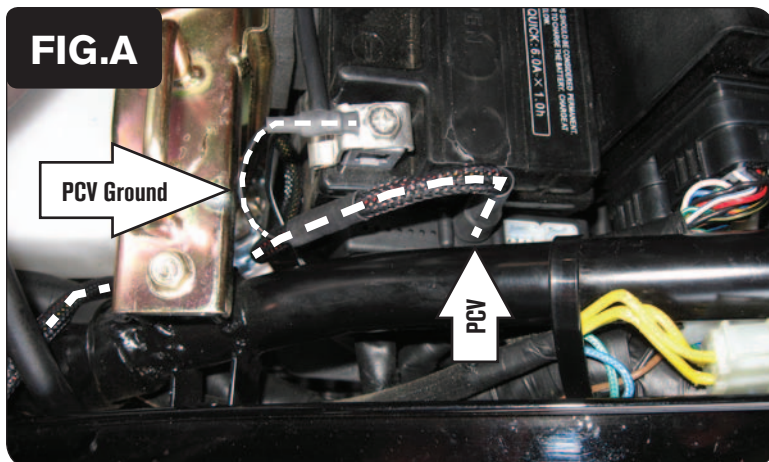
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent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

Analog-

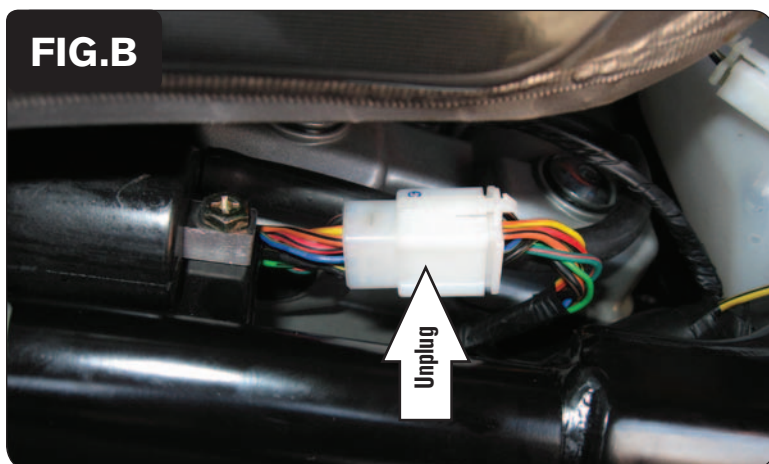
This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

Crank-

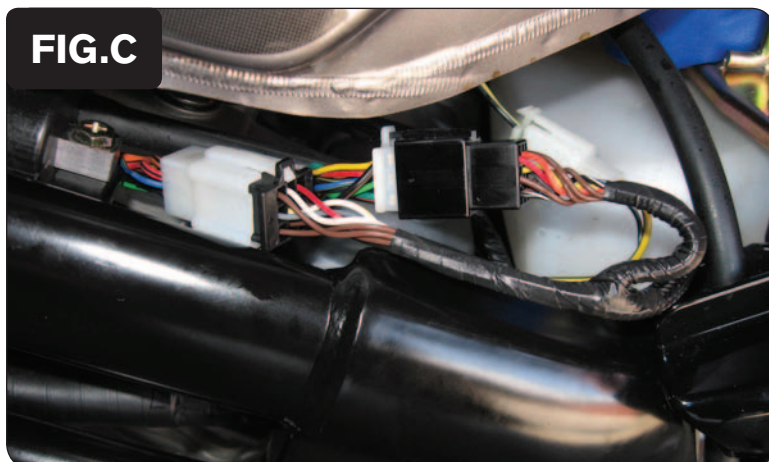
Do **NOT** connect anything to this port unless instructed to do so by Dynojet. It is used to transfer crank trigger data from one module to another.



- 1 Remove the main seat.
- 2 Prop the front of the fuel tank up.
- 3 Install the PCV to the left side of the battery (Fig. A). Use the supplied velcro to secure the unit in place. Use the alcohol swab to clean both surfaces before attaching.
- 4 Attach the ground wire of the PCV to the negative (-) side of the battery.

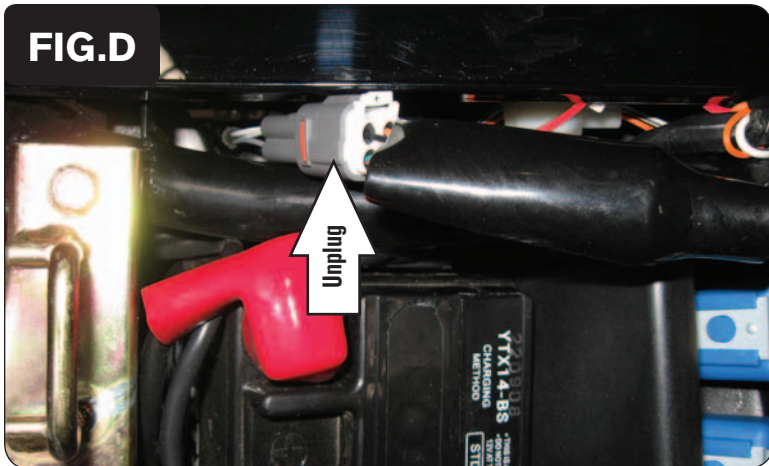


- 5 Route the PCV harness down the left side of the frame towards the rear cylinder.
- 6 Locate the WHITE 9-pin connector on the left side of the bike near the ignition coil (Fig. B).
- 7 Unplug this connector.



- 8 Plug the PCV connectors in-line of the stock wiring harness (Fig. C).

FIG.D



- 9 Locate the stock O2 sensor's 4-pin connection to the right side of the battery (Fig. D).

This connection is inside a BLACK rubber boot.

- 10 Unplug this connection.

FIG.E



- 11 Plug the supplied O2 Optimizer in-line of the stock O2 sensor and wiring harness (Fig. E).

FIG.F



- 12 Place the O2 Optimizer inside the tail section on the right side of the bike.
- 13 Reinstall the fuel tank and the seat.

	0	2	5	10	15	20	40	60	FIG.G	
500	0	0	0	0	0	0	0	0		
750	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	8	8	8	8	8	0	0	0	0
1750	0	8	8	8	8	8	-4	-11	-15	-13
2000	0	8	8	8	8	8	-10	-12	-16	-11
2250	0	8	10	8	8	8	4	-2	-4	2
2500	0	12	11	8	8	8	4	2	0	4
2750	0	13	14	8	8	8	2	0	-3	-3
3000	0	13	13	8	8	8	3	-3	-7	-5
3250	0	12	11	14	8	8	1	-3	-11	-7
3500	0	9	10	11	8	8	3	-2	-5	-1
3750	0	16	14	17	8	8	6	-1	-7	-2
4000	0	16	15	18	8	8	5	-1	-7	-4
4250	0	16	13	15	8	8	7	1	-6	-3
4500	0	13	11	13	8	8	7	3	-6	-1
4750	0	8	10	13	8	8	7	2	-7	-2
5000	0	7	9	16	8	8	10	1	-8	-5
5250	0	5	7	16	15	18	8	1	-8	-6
5500	0	5	9	14	16	18	8	4	-7	-4
5750	0	7	10	13	15	17	7	2	-7	-4
6000	0	0	12	7	10	11	6	0	-8	-5

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 G. The O2 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 necessary to input values in the highlighted area of your fuel table/tables. If using the Auto-tune system do NOT input values in this area of your Target AFR table/tables.