

[POWER COMMANDER V]

FUEL AND IGNITION

2008-2011 Harley Davidson V-Rod

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
- 2 O2 Optimizers

The ignition MUST be turned OFF before installation!

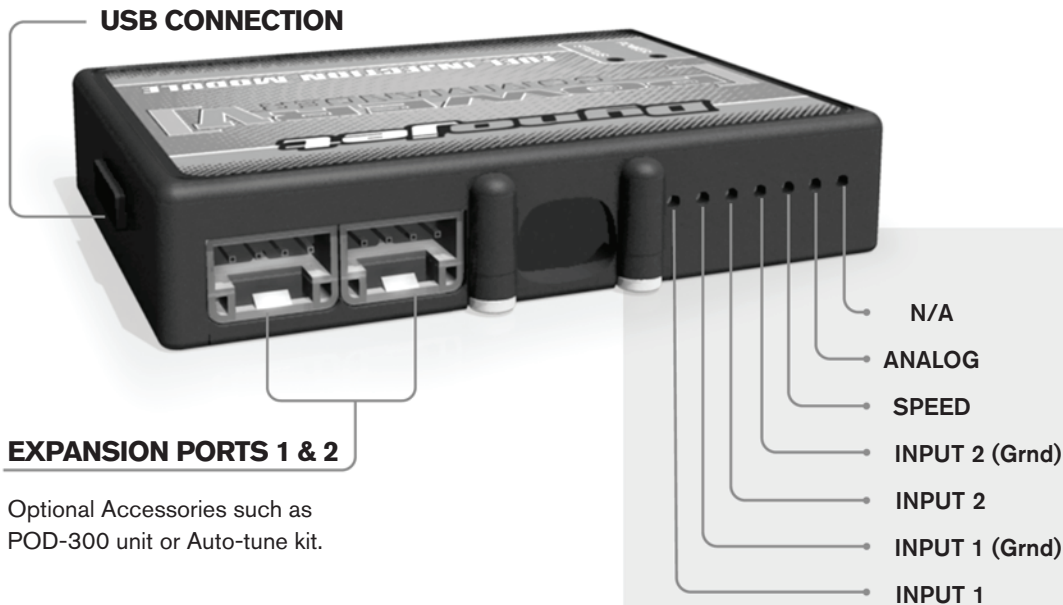
THE LATEST POWER COMMANDER SOFTWARE AND MAP FILES CAN BE DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

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) Used for clutch-less full throttle upshifts. Insert the wires from the Dynojet quickshifter into either INPUT 1 or INPUT 2. The polarity of the wires is not important. (Set to Switch Input #2 by default.)

Speed-

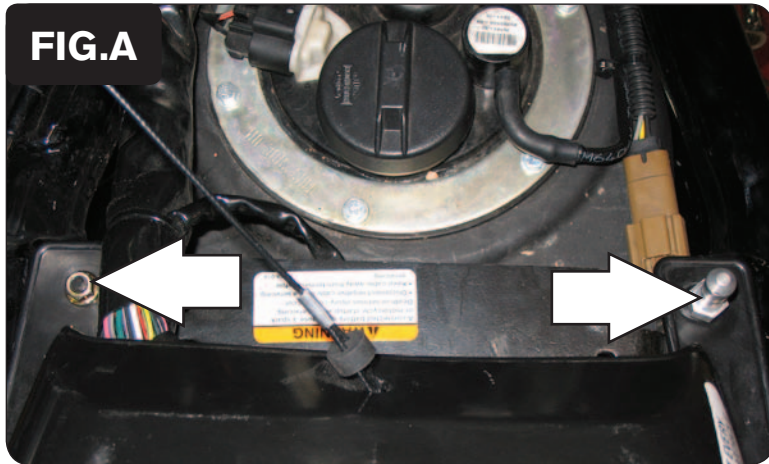
Not needed on Harley applications as the speed signal wire is built into the main wiring harness of the PCV.

Analog-

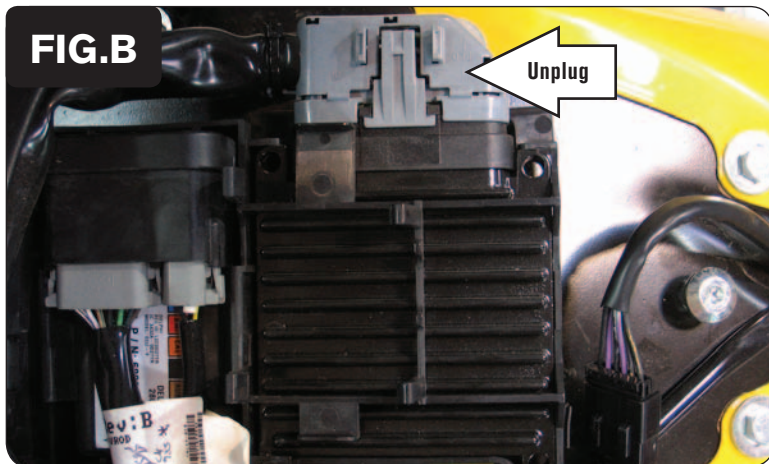
This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

Launch-

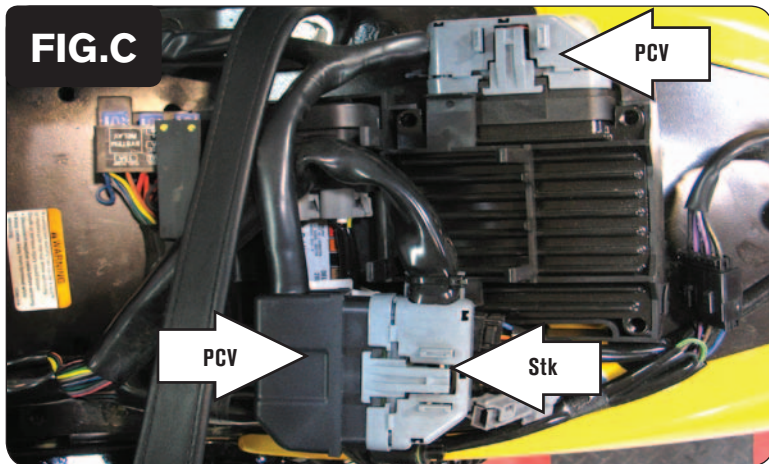
You can connect a wire to either input 1 or 2 and then the other end to a switch. This switch when engaged (continuity) will only allow the RPM to be raised to a certain limit (Set in the software). When released you will have full RPM.



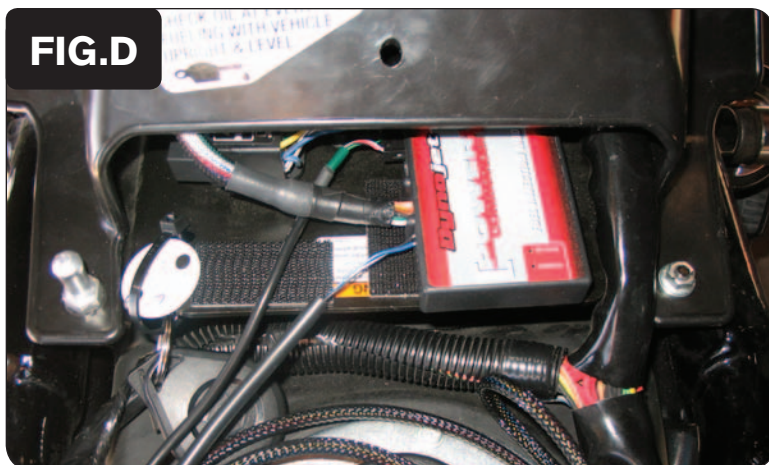
- 1 Open the main seat compartment.
- 2 Remove the rear seat by removing the two nuts (Fig. A).



- 3 Unplug the stock wiring harness from the ECM (Fig. B).

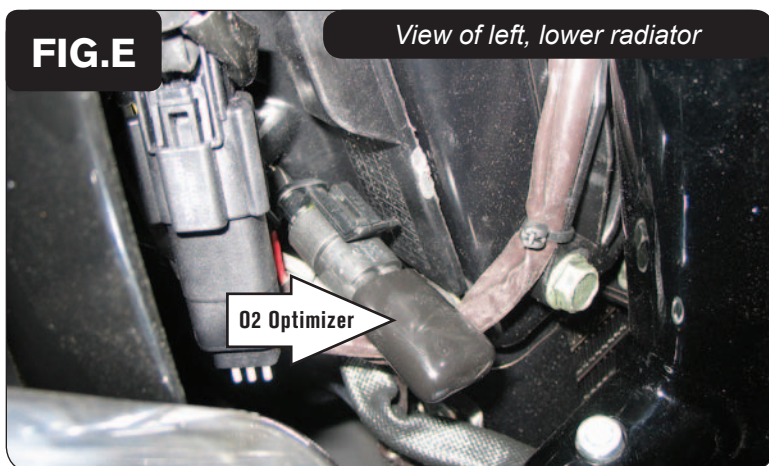


- 4 Connect the PCV wiring harness in-line of the stock harness and ECM (Fig. C)



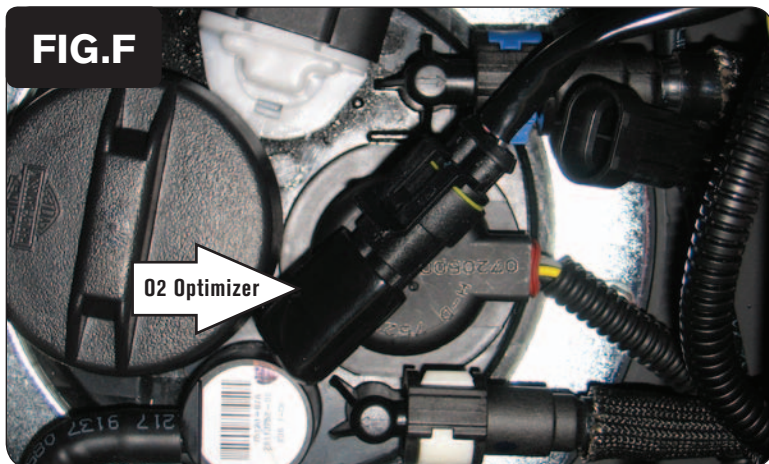
- 5 Install the PCV near the fuse box (Fig. D).

Use the supplied Velcro to secure the PCV in place. Make sure to clean both surfaces with the alcohol swab before attaching.



- 6 Locate the front O2 sensor connection (Fig. E). To locate this connection you will need to remove the bolt for the left hand side radiator cover and pull outwards.
- 7 Unplug the stock O2 sensor from the main wiring harness and connect the Dynojet O2 Optimizer in place of the stock O2 sensor. The stock O2 sensor will not be connected to anything at this time.

If using the Auto-tune kit remove the stock O2 sensor from the exhaust and install the Auto-tune's wideband O2 sensor in its place.

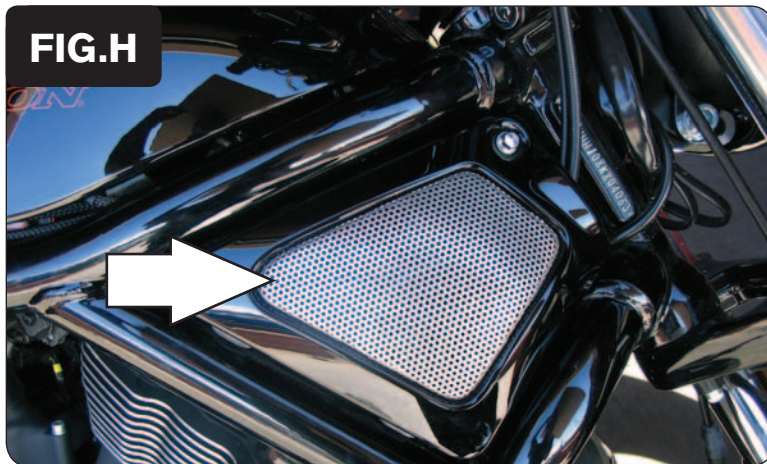


- 8 Locate the rear O2 sensor connection (Fig. F). This connection is under the main seat near the fuel tank.
 - 9 Unplug the stock O2 sensor from the main wiring harness and connect the Dynojet O2 Optimizer in place of the stock O2 sensor. The stock O2 sensor will not be connected to anything at this time.
- If using the Auto-tune kit remove the stock O2 sensor from the exhaust and install the Auto-tune's wideband O2 sensor in its place.*
- 10 Reinstall the seats.

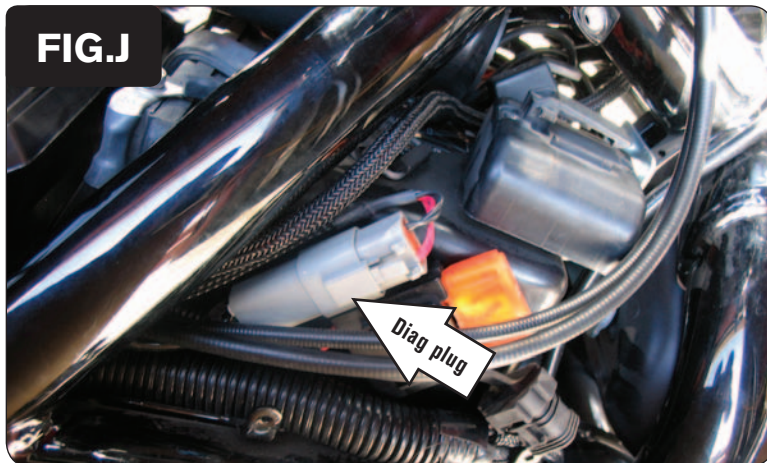


Follow these instructions when installing the Auto-tune kit (part #AT-100)

- 1 Lift the main seat up. Remove the cosmetic cover over the air box.
- 2 Using the supplied Velcro install the Auto-tune module (Fig G.)



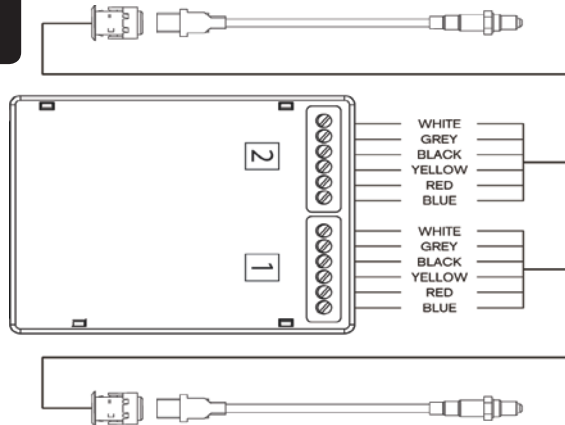
- 3 Remove the right hand side cover by the steering stem (Fig. H).



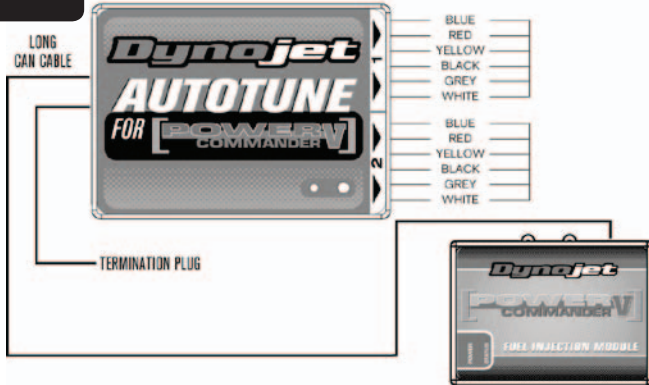
- 4 Remove the rubber plug for the diagnostic connector. Using the **OPTIONAL (76950159)** V-rod extension lead plug one end of the lead into the stock diagnostic connector (Fig. J).
- 5 Route the Auto-tune harness along the right side of the airbox and plug the other end into the Auto-tune kit.

ATTENTION

If you do not have the **OPTIONAL (76950159)** Power Extension Lead cut off the connector from the Auto-tune module. Connect the **RED** wire to a switched 12v source. Connect the **BLACK** wire to Ground.

FIG.K

- 6 Connect the longer harness to the front O2 sensor. Route the harness along the front down tube and along the backbone of the frame to the Auto-tune module. Wire the harness to the #1 input on the module per Figure K. The harness can be cut to length if desired.
- 7 Repeat step 6 for the rear cylinder. Wire the harness to Auto-tune Module sensor input #2. The harness can be cut to length if desired.

FIG.L

- 8 Use the CAN bus cable to connect one Auto-tune module to the PCV. It does not matter what ports are used.
- 9 Install the CAN termination plug into the open port of the Auto-tune module.
- 10 Secure the harnesses in place as to not contact the exhaust.
- 11 Reinstall the side cover.

Go to www.powercommander.com for maps and software updates.