

[POWER COMMANDER V]

2006-2011 Harley Davidson Dyna

Installation Instructions



PARTS LIST

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- 2 Dual Lock strips
- 1 Alcohol swab
- 2 O2 Optimizers
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THE IGNITION MUST BE TURNED OFF BEFORE INSTALLATION!

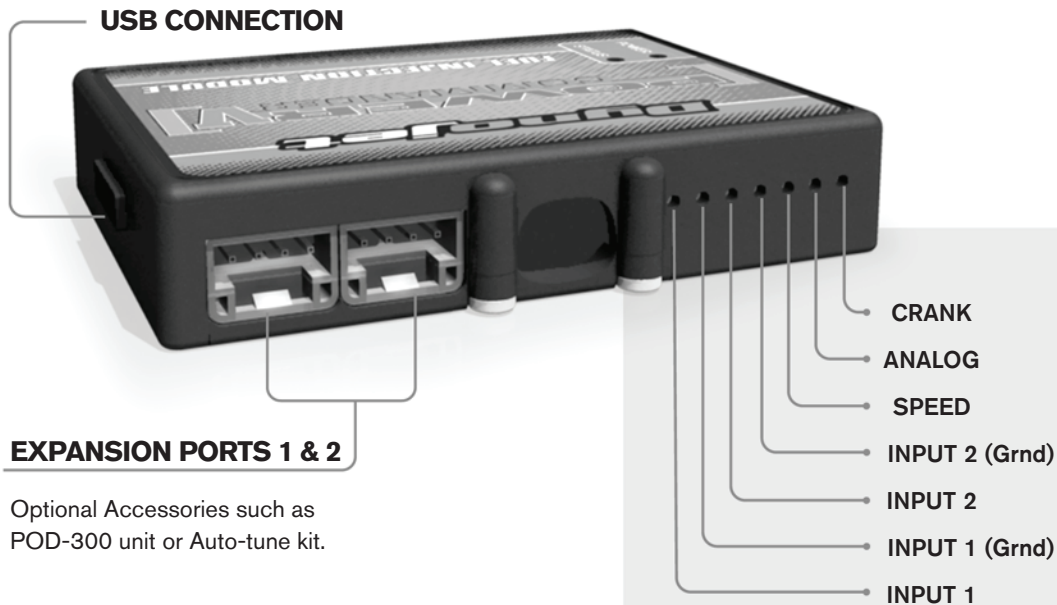
THE LATEST POWER COMMANDER SOFTWARE AND MAP FILES CAN BE DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

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-

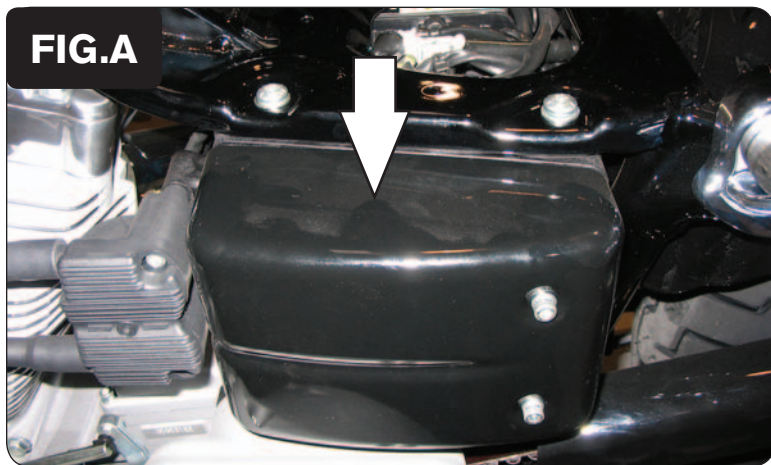
Not needed on Harley applications as the speed signal wire is built into the main wiring harness of the PCV.

Analog-

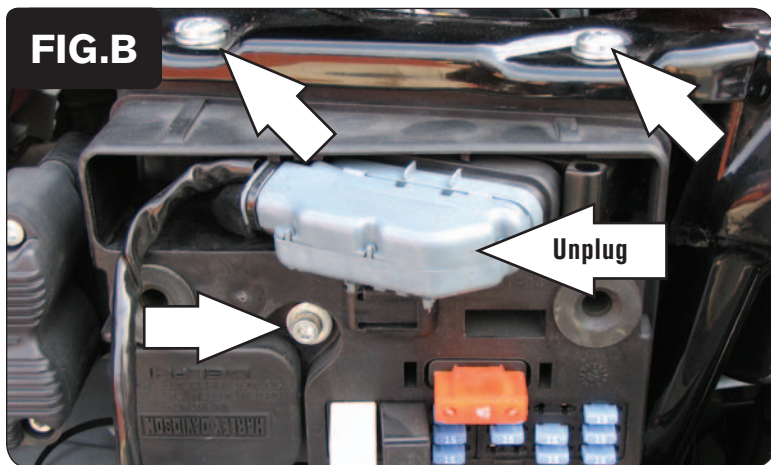
This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

Launch-

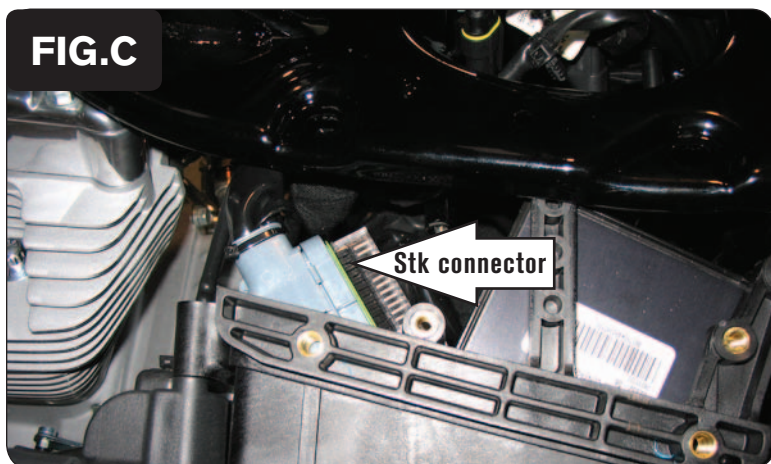
You can connect a wire to either input 1 or 2 and then the other end to a switch. This switch when engaged (continuity) will only allow the RPM to be raised to a certain limit (Set in the software). When released you will have full RPM.



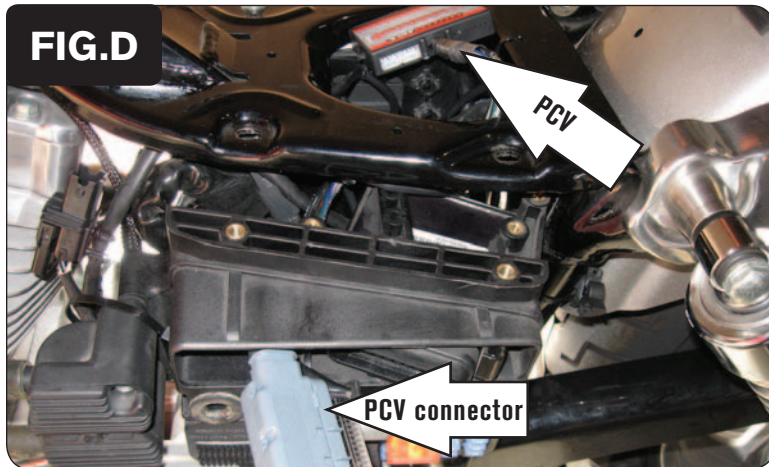
- 1 Remove the seat
- 2 Remove the left hand side cover (Fig. A).



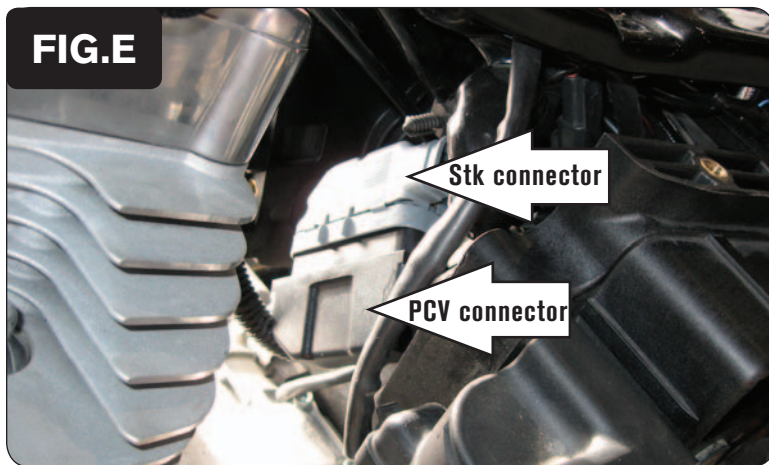
- 3 Unplug the stock wiring harness connector from the ECM (Fig. B).
- 4 Move the data plug out of the way to access the bolt.
- 5 Remove the 3 bolts that hold the electrical box in place (Fig. B).



- 6 Slide the plastic box out from the frame.
- 7 Route the stock connector through to the back side of the electrical box (Fig. C).



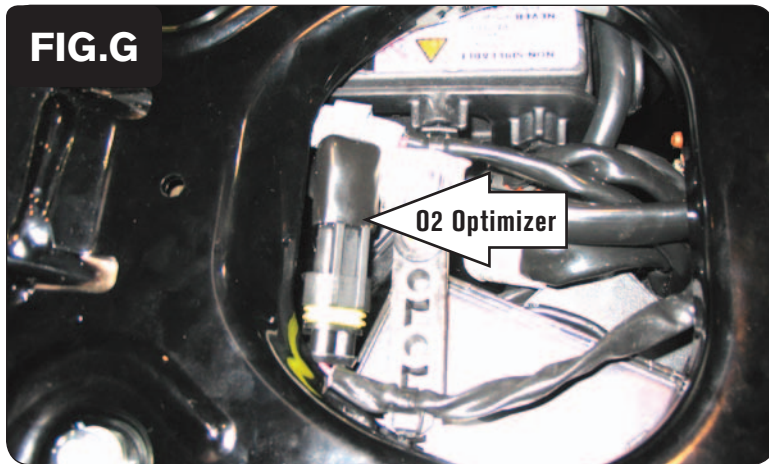
- 8 Lay the PCV in the opening of the frame under the seat and route the harness underneath the frame and into the back of the battery box (Fig. D).
- 9 Route the GREY connector from the PCV through the back of the electrical box and plug it into the ECM (Fig. D).



- 10 Connect the stock wiring harness to the BLACK connector of the PCV.
- 11 Zip tie these connectors to the front side of the electrical box (Fig E). Make sure they are situated away from the rear exhaust pipe.
- 12 Reinstall the electrical box using the stock bolts.
If installing the Auto-tune kit skip this step until the Auto-tune kit is fully installed.



- 13 Unplug the front O2 sensor from the stock wiring harness. This connector is located near the front head pipe.
- 14 Plug the Dynojet O2 Optimizer into the stock wiring harness (Fig. F).
The stock O2 sensors will not be connected to anything at this time. If using the Auto-tune kit (part #AT-100) remove the stock sensor and replace with the Auto-tune's wideband O2 sensor.

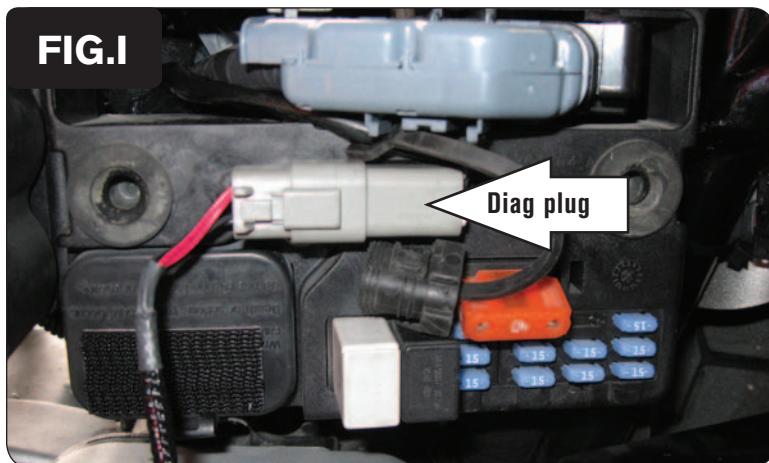


- 15 Unplug the rear O2 sensor from the stock wiring harness. This connector is located in the opening of the frame under the seat.
- 16 Plug the Dynojet O2 Optimizer into the stock wiring harness (Fig. G).

The stock O2 sensors will not be connected to anything at this time. If using the Auto-tune kit (part #AT-100) remove the stock sensor and replace with the Auto-tune's wideband O2 sensor.

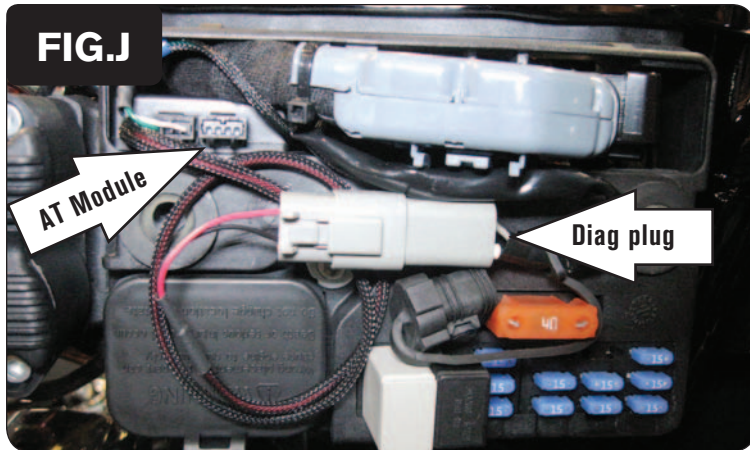


- 17 Install the PCV in the opening of the frame under the seat. You can use the supplied Velcro or a zip tie to secure the unit if desired.



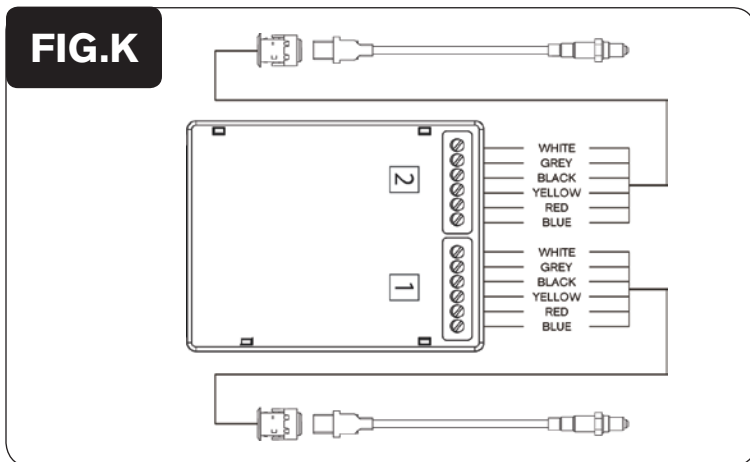
Follow these instructions when using the Auto tune kit - part #AT-100

- 1 Remove the left hand side cover.
- 2 Remove the rubber plug for the stock diagnostic plug. Plug the power lead from the Auto-tune module into the diagnostic plug (Fig. I).

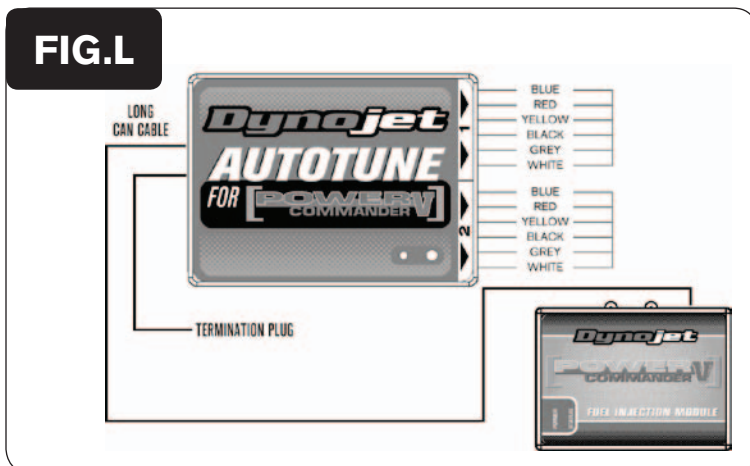


- Using the supplied Velcro install the Auto-tune module inside the electrical box next to the ECM per Figure J.

Make sure the Velcro does not cover the designation of the sensor inputs on the back (#1 or #2). The inputs are coded to the front and rear cylinders.



- 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 Auto-tune input #1. Wire the harness to the module per Figure K. The harness can be cut to length if desired.
- Repeat step 4 for the rear cylinder. Wire the harness to Auto-tune input #2. The harness can be cut to length if desired.



- Use the CAN bus cable to connect the Auto-tune module to the PCV. It does not matter what ports are used.
- Install the CAN termination plug into the open port of the Auto-tune module. ***This is the BLACK plastic connector in the kit***
- Secure the harnesses in place as to not contact the exhaust.
- Reinstall the side cover.

In the PCV software go to Power Commander Tools - Configure - Features, Enables, and Input Selections to enable the feature.

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