

[POWER COMMANDER V]

2004-2005 Harley Davidson Dyna

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 Zip-tie

**THE IGNITION MUST BE TURNED
OFF BEFORE INSTALLATION!**

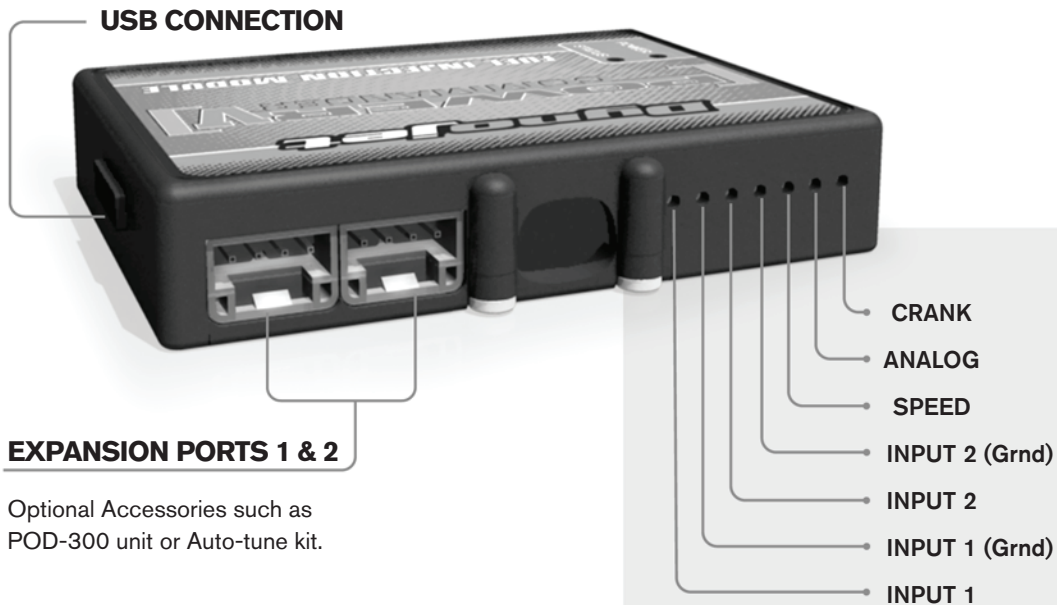
THE LATEST POWER COMMANDER
SOFTWARE AND MAP FILES CAN BE
DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

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-

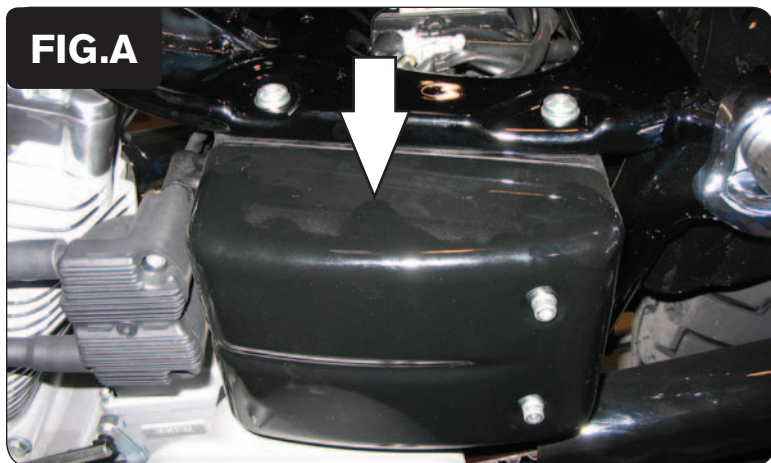
Not needed on Harley applications as the speed signal wire is built into the main wiring harness of the PCV.

Analog-

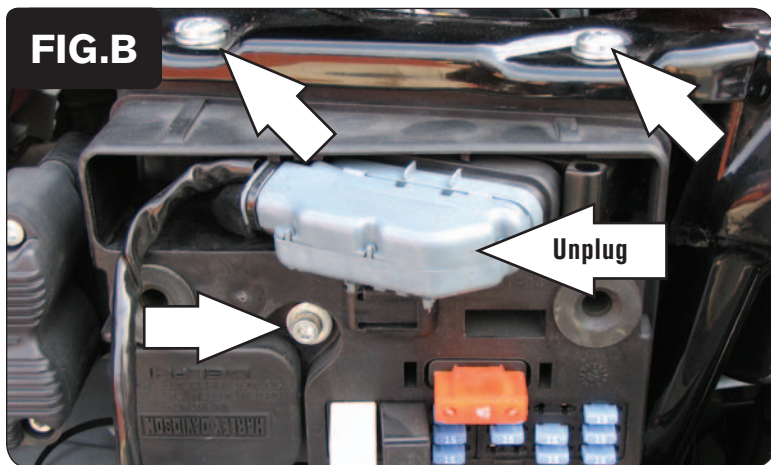
This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

Launch-

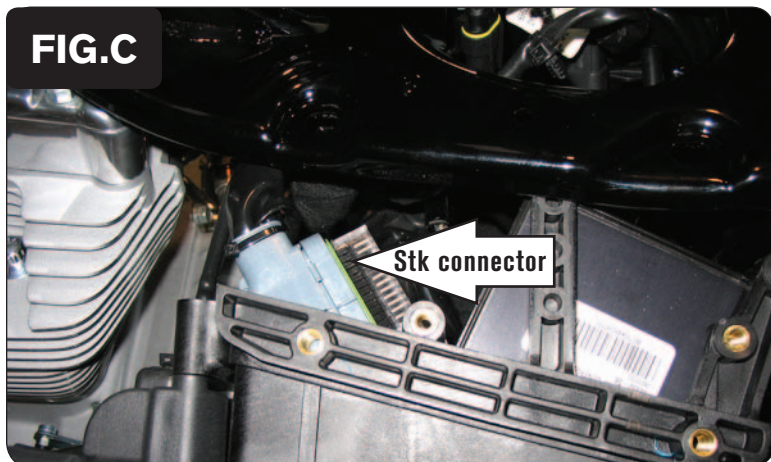
You can connect a wire to either input 1 or 2 and then the other end to a switch. This switch when engaged (continuity) will only allow the RPM to be raised to a certain limit (Set in the software). When released you will have full RPM.



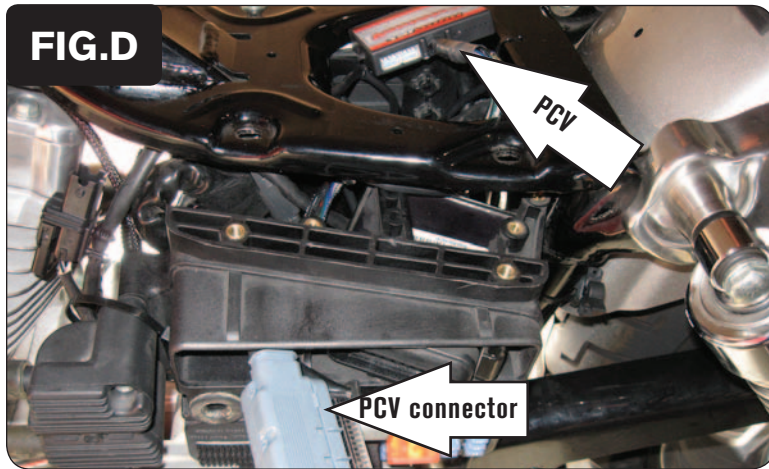
- 1 Remove the seat
- 2 Remove the left hand side cover (Fig. A).



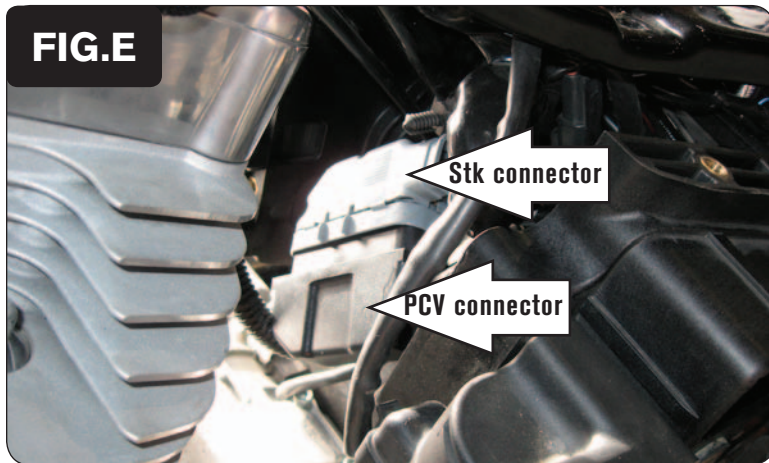
- 3 Unplug the stock wiring harness connector from the ECM (Fig. B).
- 4 Move the data plug out of the way to access the bolt.
- 5 Remove the 3 bolts that hold the electrical box in place (Fig. B).



- 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 frame spar at the front of the electrical box (Fig. E).
Make sure they are situated away from the rear exhaust pipe and engine head.
- 12 Reinstall the electrical box using the stock bolts.
If installing the Autotune kit skip this step until the Autotune kit is fully installed.



- 13 Install the PCV in the opening of the frame under the seat (Fig. F).
You can use the supplied Velcro or a zip tie to secure the unit, if desired. Clean both surfaces with the supplied alcohol swab prior to applying the Velcro.
- 14 Reinstall the left hand side cover and the seat.

Follow these instructions when using the Auto-tune kit - (PN: AT-100B)

Note: Assuming the bike has an exhaust system designed for a 2004-2005 model year Dyna, it should NOT have M18 x 1.5 O2 sensor bungs in the header pipes to accommodate the Auto-tune kit's wideband O2 sensors. In this case, you will need to weld bungs into the header pipes to use Auto-tune. The Auto-tune kits with a part number ending in "B" come with weld-in mild steel bungs supplied.

- 1 Remove the seat and the left hand side cover.
- 2 Remove the rubber plug for the stock diagnostic plug. Plug the power lead from the Autotune module into the diagnostic plug (Fig. G).
- 3 Using the supplied Velcro, install the Auto-tune module inside the electrical box next to the ECM (Fig. H).

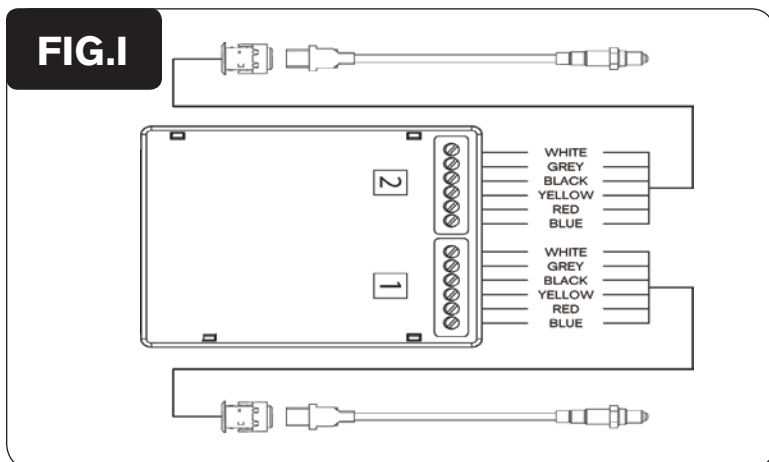
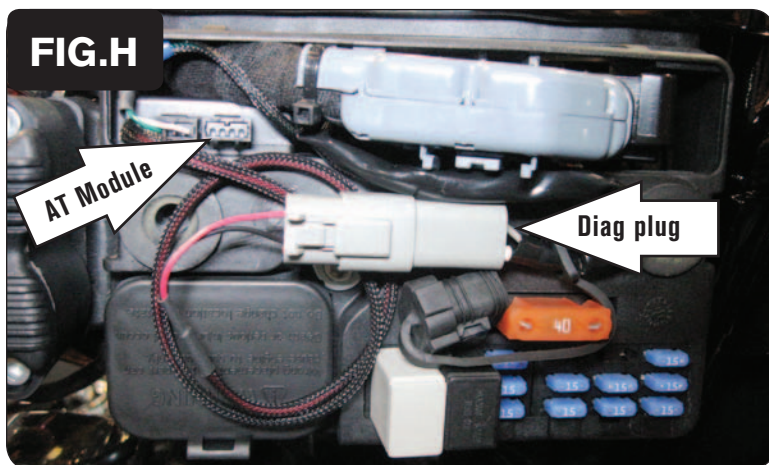
Make sure the Velcro does not cover the designation of the sensor inputs on the back (#1 or #2). The inputs are coded to the front and rear cylinders.

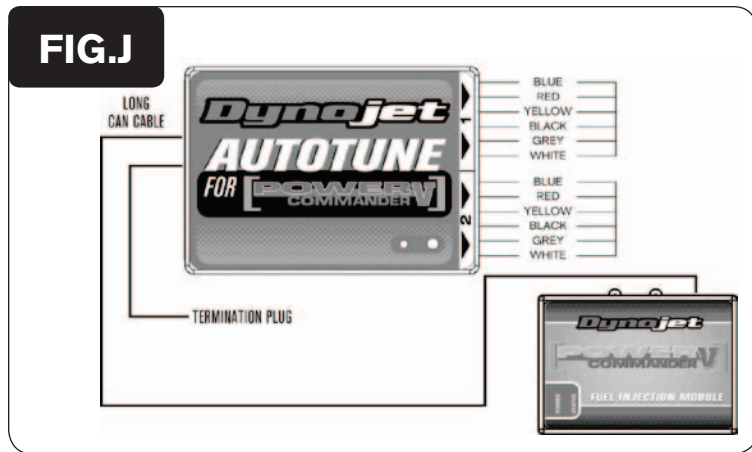
- 4 Connect the longer harness to the front O2 sensor. Route the harness along the front down tube and along the backbone of the frame to Autotune input #1. Wire the harness to the module per Figure I.

The harness can be cut to length if desired.

- 5 Repeat step 4 for the rear cylinder. Wire the harness to Autotune input #2.

The harness can be cut to length if desired.





- 6 Use the CAN bus cable to connect the Autotune module to the PCV. It does not matter what ports are used.
- 7 Install the CAN termination plug into the open port of the Autotune module. ***This is the BLACK plastic connector in the kit.***
- 8 Secure the harnesses in place as to not contact the exhaust or any other hot or moving parts.
- 9 Reinstall the seat and left hand side cover.

In the PCV software go to Power Commander Tools - Configure - Auto tune to enable the unit.

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