

[POWER COMMANDER V]

2013 Harley Davidson Touring Model

Installation Instructions



PARTS LIST

- 1 Power Commander
- 1 USB Cable
- 1 CD-ROM
- 1 Installation Guide
- 2 Power Commander Decals
- 2 Dynojet Decals
- 2 Velcro
- 1 Alcohol swab

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

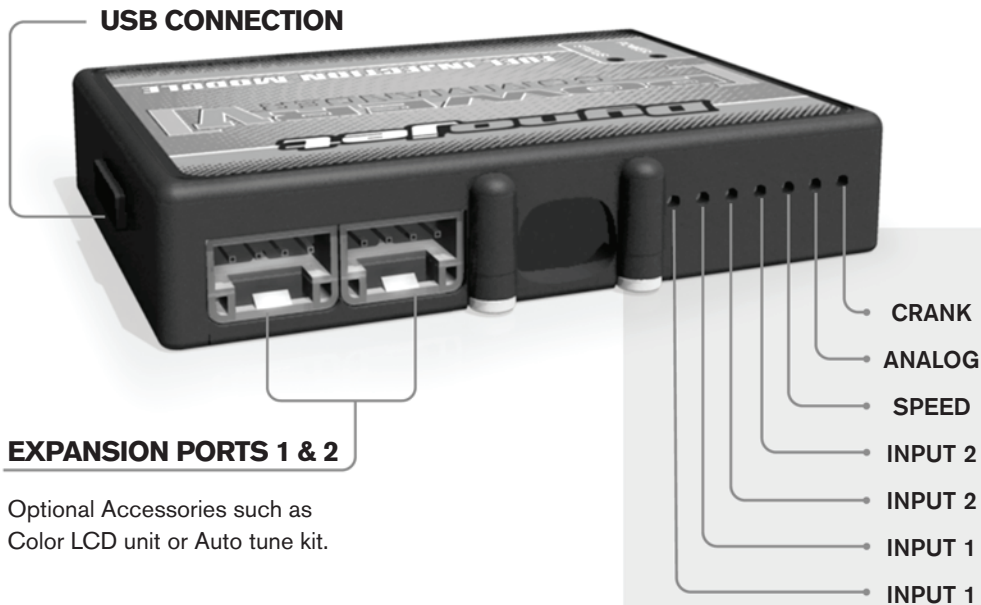
YOU CAN ALSO DOWNLOAD THE
POWER COMMANDER SOFTWARE AND
LATEST MAPS FROM OUR WEB SITE AT:
www.powercommander.com

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

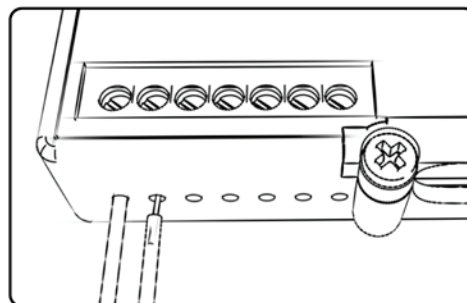


Optional Accessories such as Color LCD unit or Auto tune kit.

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 -

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 input 1 or 2. 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.

Shifter-

Wire to input 1 or 2 for use with the Dynojet quickshifter. Insert the wires from the Dynojet quickshifter into the input. The polarity of the wires is not important.

Speed-

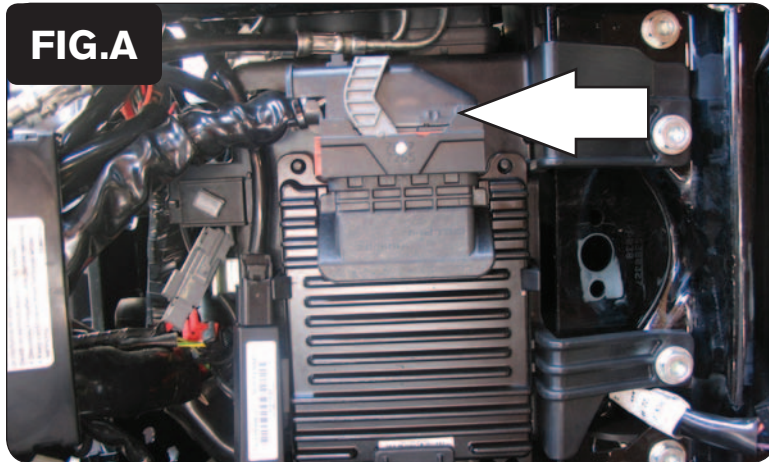
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent kill times when using a quickshifter. NOTE: Harley Davidson models have this feature enabled internally - do NOT use this input for HD models.

Analog-

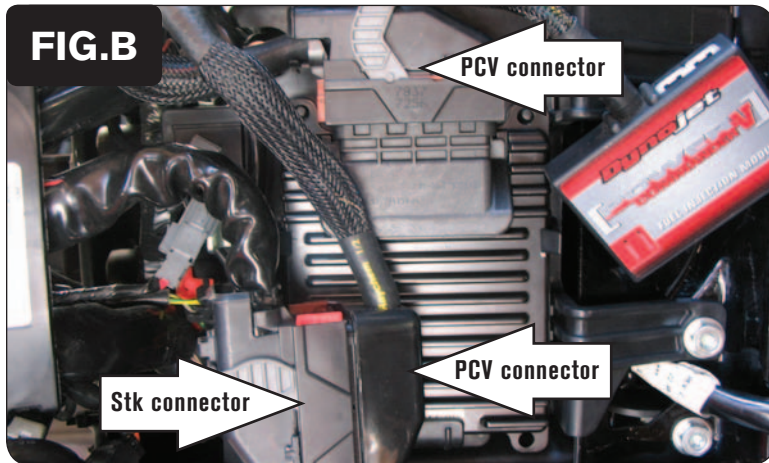
This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

Crank-

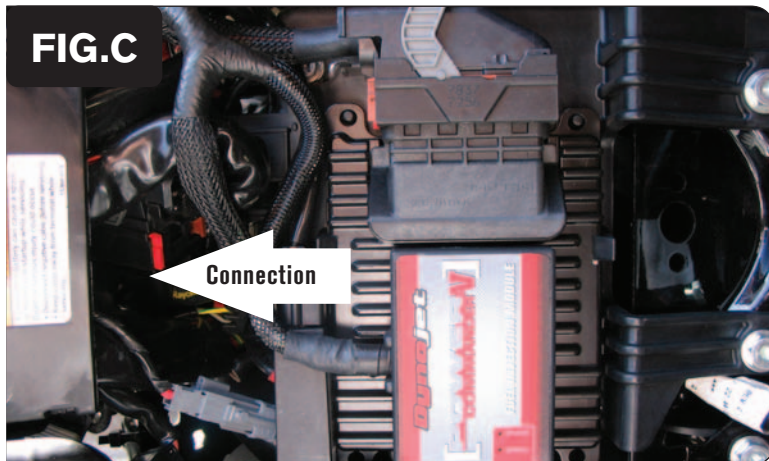
Do **NOT** connect anything to this port unless instructed to do so by Dynojet. It is used to transfer crank trigger data from one module to another.



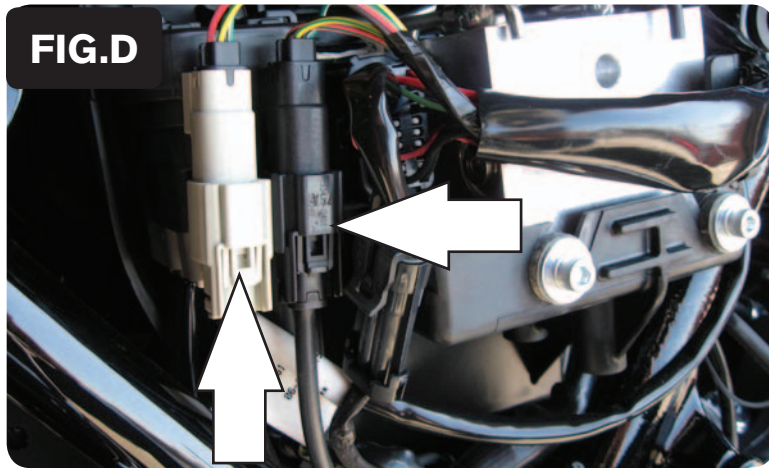
- 1 Remove the stock seat.
- 2 Unplug the stock wiring harness from the ECM (Fig. A) .



- 3 Plug the PCV connectors in-line of the stock ECM and wiring harness (Fig.B).



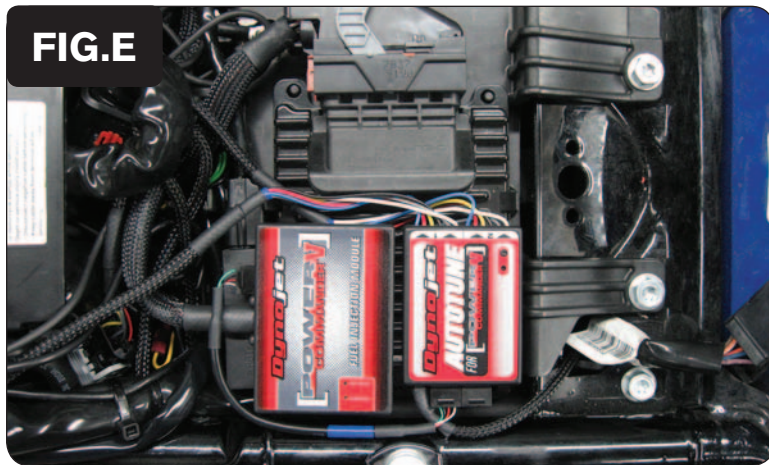
- 4 Tuck the PCV to wiring harness connection into the opening in front of the battery box (Fig. C).
- 5 Using the supplied velcro attach the PCV to the top of the ECM (Fig. C)



- 6 Remove the right hand saddlebag and sidecover.
- 7 Locate the stock O2 sensor connections and unplug both connectors (Fig. D)

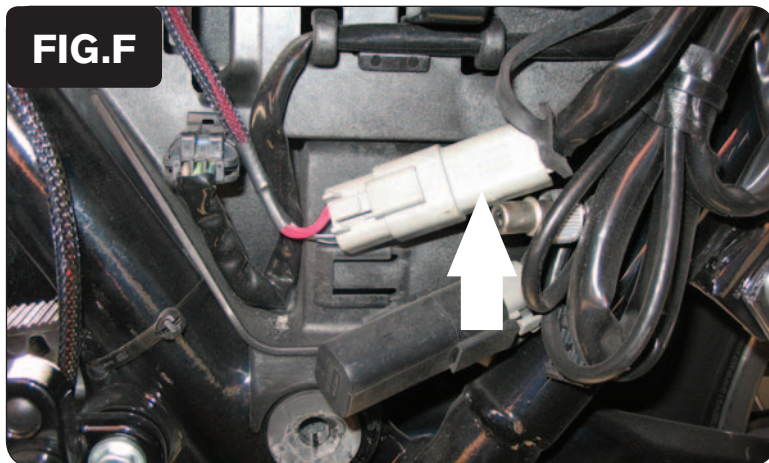
The stock O2 sensors will NOT be connected to anything at this time. The sensors can be removed from the exhaust if you have a way to plug the hole.

Unplugging the sensors does NOT cause an engine light but will cause a historic code in the ECM for non-active O2 sensor. This is not causing any issues with the running of the bike.

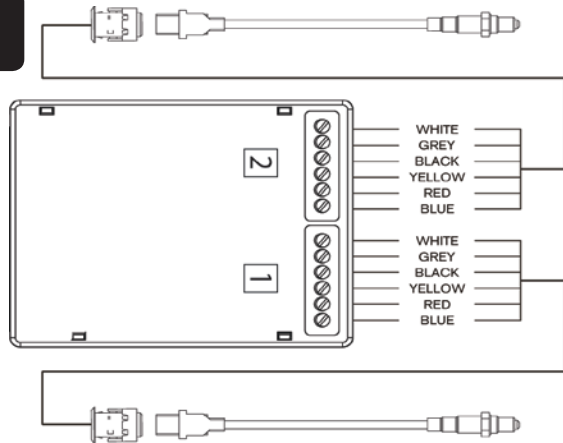


Follow these instructions when using the Auto tune kit - part #AT-100B

- 1 Remove the left hand side cover.
- 2 Place the Autotune module next to the PCV as shown in Figure E.

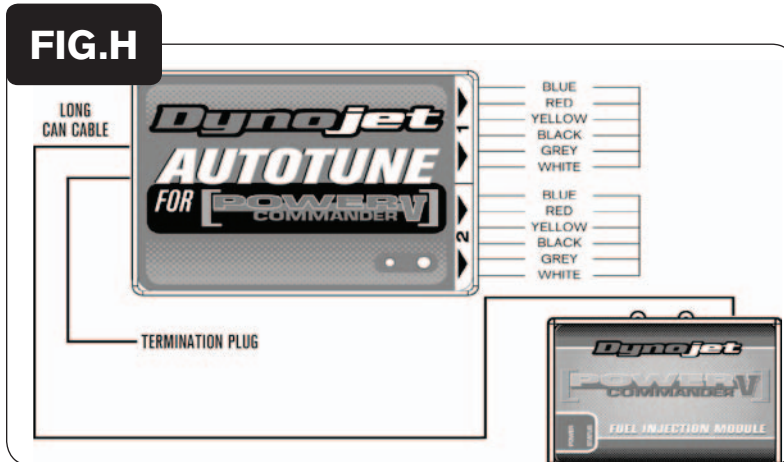


- 3 Remove the rubber plug for the diagnostic connector. Plug the lead from the Autotune kit into the stock diagnostic connector (Fig. F). This connection is under the LH sidecover. DO NOT connect to the accessory connection in front of the battery.
- 4 Reinstall the sidecover.

FIG.G

- 5 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 module AT#1. Wire the harness to the module per Figure G. The harness can be cut to length if desired.
- 6 Repeat step 4 for the rear cylinder. Wire the harness to Autotune Module AT#2. The harness can be cut to length if desired.

If your exhaust does not accept the M18x1.5mm O2 sensor you will need to install the supplied O2 bungs with the Auto tune kit into your exhaust. See Auto tune instructions for more information.

FIG.H

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