[POWER COMMANDER V]

2014 Harley Davidson Sportster 1200

Installation Instructions

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2	Dynojet Decals
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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

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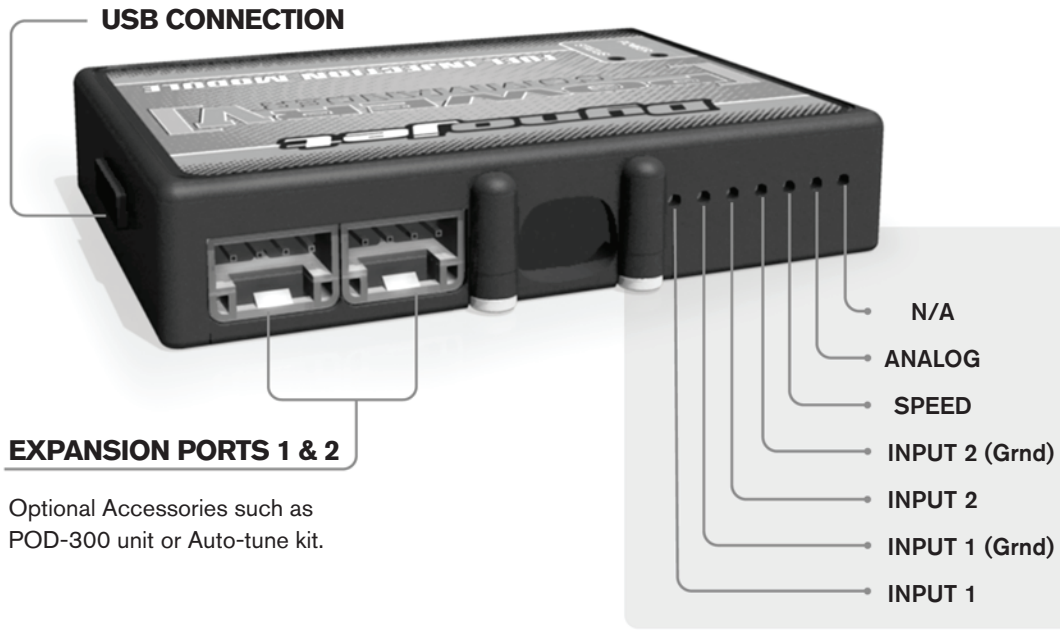
POWER COMMANDER V
INPUT ACCESSORY GUIDE

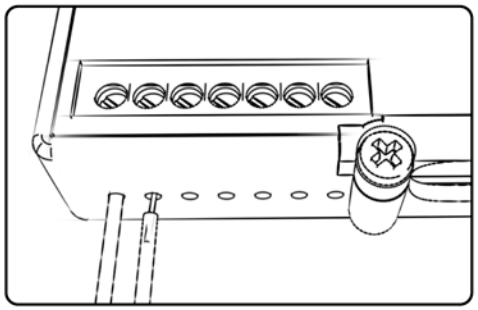


Optional Accessories such as POD-300 unit or Auto-tune kit.

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 is 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.)

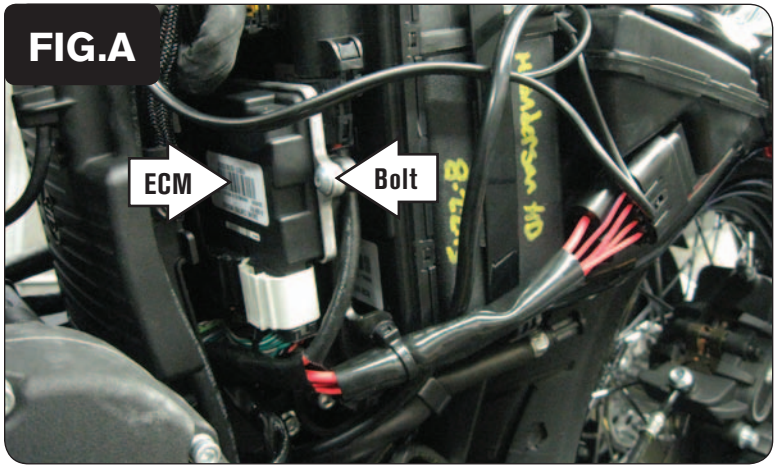
Shifter- (Input 1 or 2) Used for clutch-less full throttle upshifts. Insert the wires from the Dynojet quickshifter into either INPUT 1 or INPUT 2. The polarity of the wires is not important. (Set to Switch Input #2 by default.)

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.

FIG.A

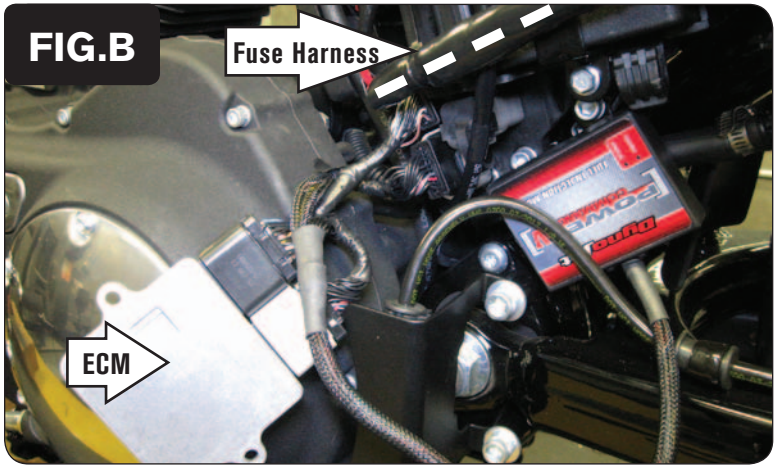


1 Remove the left side cover.

2 Remove the single bolt holding the ECM in place.

3 Unplug and remove the ECM (Fig. A).

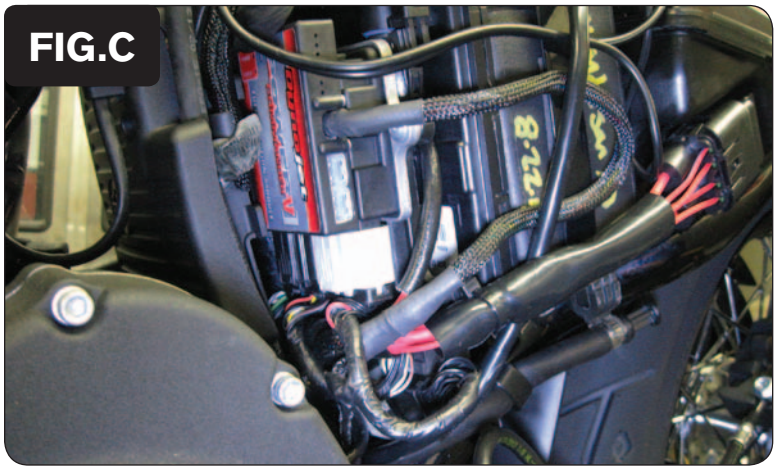
FIG.B



4 Push the stock ECM connectors below the stock fuse harness.

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

FIG.C

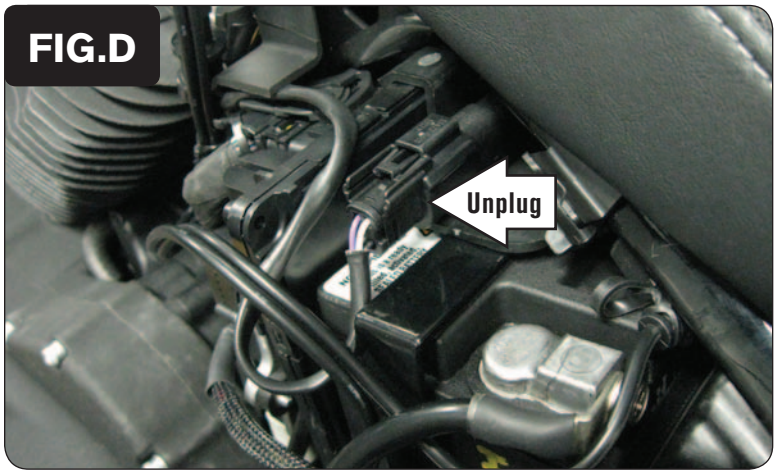


6 Bolt the ECM back into place.

7 Using the supplied Velcro, secure the PCV module to the ECM (Fig. C).

Clean the surface with the supplied alcohol swab prior to applying the Velcro.

FIG.D



8 Locate and unplug the stock connector for the bikes rear O2 sensor (Fig. D).

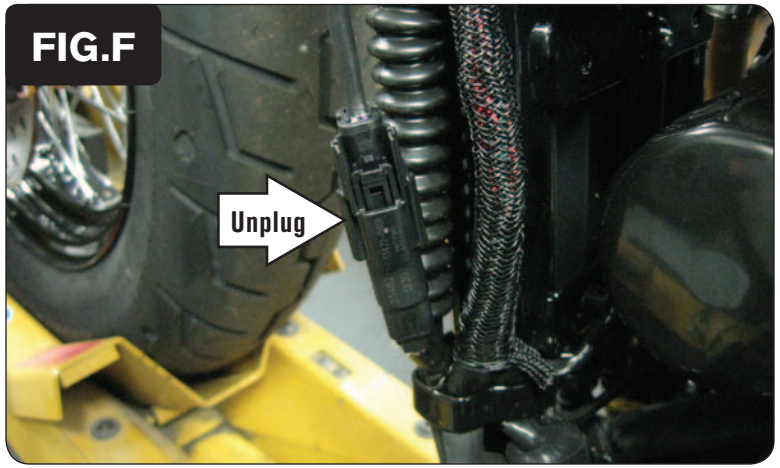
This connector is located above the battery on the left hand side. You can trace the wiring harness from the O2 sensor in the rear cylinder head pipe to this connector.

FIG.E

9 Plug one of the supplied O2 Optimizers into the stock wiring harness in place of the stock O2 sensor (Fig. E).

The stock O2 sensors will no longer be used. They can be removed from the exhaust if desired and if you have a way to plug the empty bung.

FIG.F



10 Locate and unplug the stock connector for the bikes front O2 sensor (Fig. F).

This connector is located near the oil filter on the forward left hand side. You can trace the wiring harness from the O2 sensor in the front cylinder head pipe to this connector.

FIG.G

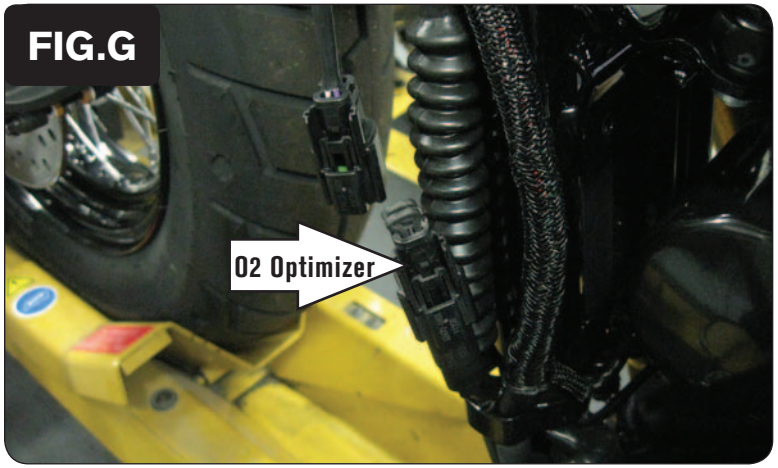


FIG.Ha

FIG.Hb

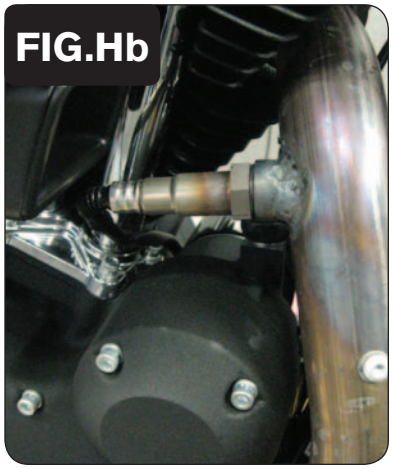
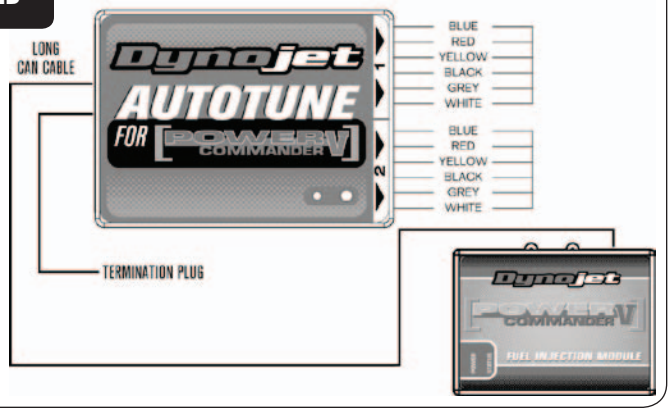


FIG.J



11 Plug the other supplied O2 Optimizer into the stock wiring harness in place of the stock O2 sensor (Fig. G).

The stock O2 sensors will no longer be used. They can be removed from the exhaust if desired and if you have a way to plug the empty bung.

12 Reinstall the left side cover (unless you are installing Auto-tune).

IF INSTALLING THE AUTO-TUNE KIT (PN: AT-101B) FOLLOW THESE STEPS

13 Install the wideband O2 sensors into the exhaust (see Auto-tune install guide).

The stock O2 sensor bung size is not the same size that the Auto-tune wideband O2 sensors require (18mm x 1.5). You will likely need to weld the supplied bungs into the exhaust to use Auto-tune (Fig H a&b).

14 Plug the O2 sensor cables from the kit into each O2 sensor and route the cables towards the PCV module.

Preferred sensor harness routing can vary, depending on exhaust type and sensor location. The front sensor cable can be routed along the backbone of the frame under the tank. Then route both cables under the seat before going behind the side cover. This makes it easier to reinstall the side cover afterwards.

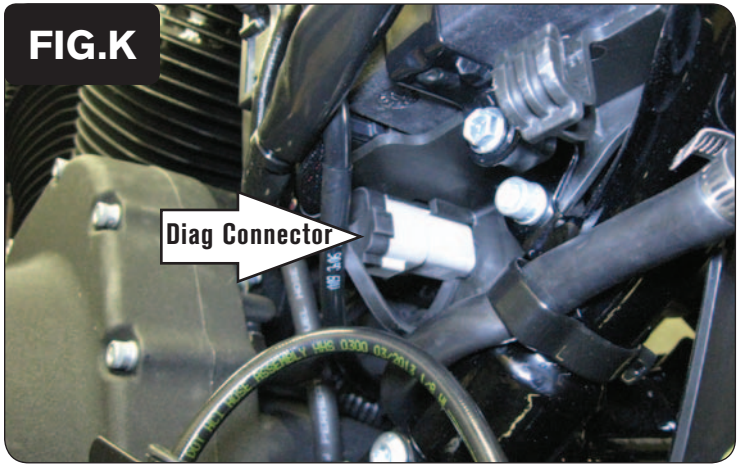
15 Install the supplied CAN termination plug into one of the expansion ports on Auto-tune module

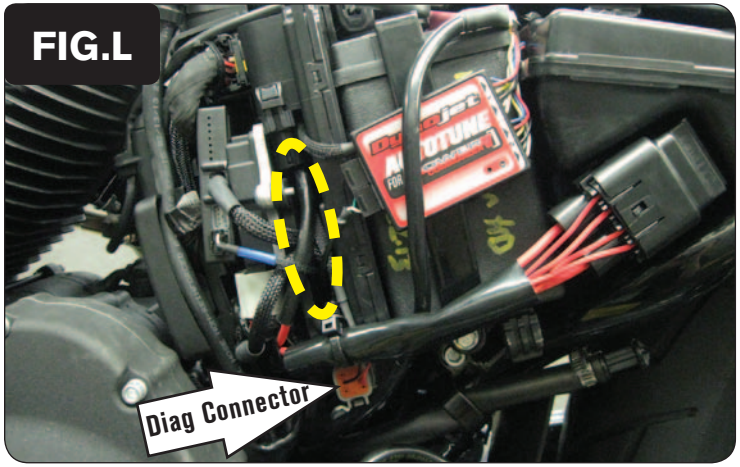
This is a small BLACK hard plastic plug supplied in the kit (PN: 76423025). It is important that this be installed. It is often overlooked.

16 Insert the CAN link cable into the other expansion port of the Auto-tune module and either of the available expansion ports on the PCV module.

17 Connect the wires from the wideband O2 sensors into the Auto-tune module (Fig. J).

Make sure to wire the front O2 sensor to input #1 on the Auto-tune module. Likewise, the rear O2 sensor to input #2.





18 Plug the 12-volt power supply cable from the Auto-tune module into the bike's diagnostic connector (Fig. K).

The bike's diagnostic connector is located directly below the ECM. It has a rubber dust cover.

19 Use the supplied Velcro to secure the Auto-tune module to the side of the battery (Fig. L).

Clean the surface with the supplied alcohol swab prior to applying the Velcro.

All of the excess cable can be tucked in the area highlighted in Figure L between the ECM and BCM.

20 Reinstall the side cover.