

2006-2014 Suzuki M109R / C109R

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!

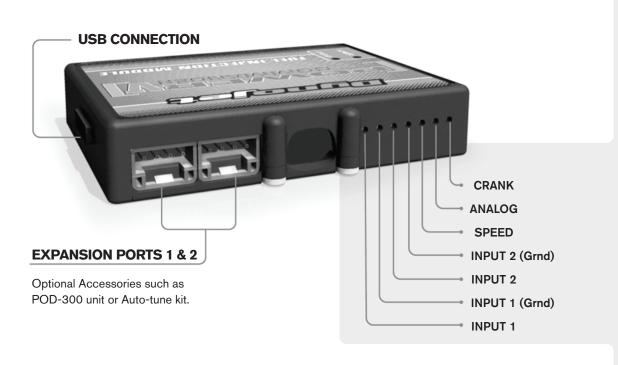
THE LATEST POWER COMMANDER
SOFTWARE AND MAP FILES CAN BE
DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION



2191 Mendenhall Drive North Las Vegas, NV 89081 (800) 992-4993 www.powercommander.com

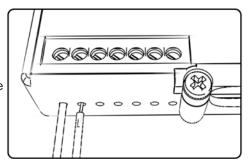
POWER COMMANDER V INPUT ACCESSORY GUIDE



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 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) These inputs are for use with the Dynojet quickshifter. Insert the wires from the Dynojet quickshifter into the SHIFTER inputs. The polarity of the wires is not important. (Set to Switch Input #2 by default.)

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.

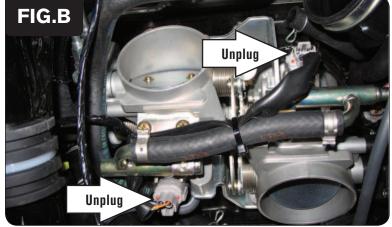
Analog-

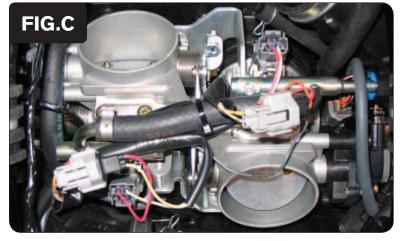
This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

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 main seat and both side covers.
- 2 Remove the fuel tank.
- 3 Remove the air box.

There are several hoses going into the air box. We recommend referring to the service manual for proper removal and installation.

Route the wiring harness from the PCV behind the left hand side of the frame and go towards the throttle bodies (Fig. A).

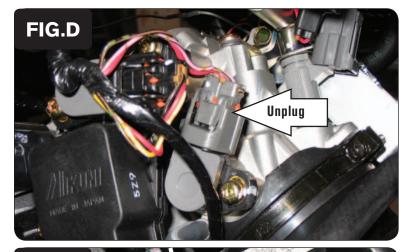
5 Unplug the stock wiring harness from each fuel injector (Fig. B).

Plug the connectors from the PCV in-line of the fuel injectors and the stock wiring harness connectors (Fig. C).

Orange - cylinder 1- front

Yellow - cylinder 2 - rear

7 Using the supplied zip-tie, secure the PCV wiring harness to the high pressure fuel tube between the throttle bodies such that the PCV harness will not interfere with reinstalling the intake plenum or interfere with throttle blade movement.







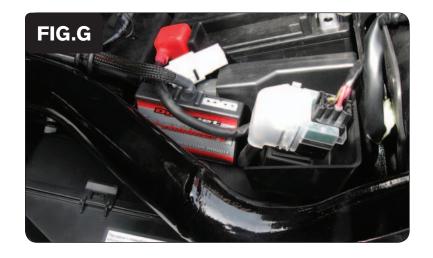
- 8 Unplug the Throttle Position Sensor connector (Fig. D).
 - This connector is located on the right hand side of the throttle bodies and is GREY in color. Do NOT unplug the BLACK 3-pin connector for the upper secondary throttle plates.
- 9 Plug the connectors from the PCV in-line of the TPS and the stock wiring harness.

- 10 Route the ground wire from the PCV thru the front hole in the battery box.
- 11 Secure the ground wire from the PCV wiring harness with the small ring lug to the negative (-) terminal of the bike's battery (Fig. E).

FOR THE M109R

Install the PCV to the face of the metal bracket under the left hand sidecover using the supplied Velcro (Fig. F).

Make sure to clean both surfaces with the alcohol swab before attaching the Velcro.



FOR THE C109R

12 Install the PCV to the face of the ECU using the supplied Velcro (Fig. G).

Make sure to clean both surfaces with the alcohol swab before attaching the Velcro.

13 Reassemble the bike.

When reinstalling the intake plenum, be sure the rubber boots are completely over and around the top of the throttle bodies. This piece can be very difficult going back on.

To see a video of this installation, visit our channel (DynojetResearch) on YouTube.

Optional inputs:

Speed input - PINK wire of BLACK 3-pin connector. Sensor is located behind the left sidecover near the ignition switch.

Temperature input - BLUE/BLACK wire from temp sensor behind right side dummy air box cover.

12v source for Auto-tune - BROWN wire in 6-pin connector for tail light. Located under the driver seat.