

## **FUEL AND IGNITION**

## 2017-2018 Suzuki GSX250R

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 O2 Optimizer

## THE IGNITION MUST BE TURNED OFF BEFORE INSTALLATION!

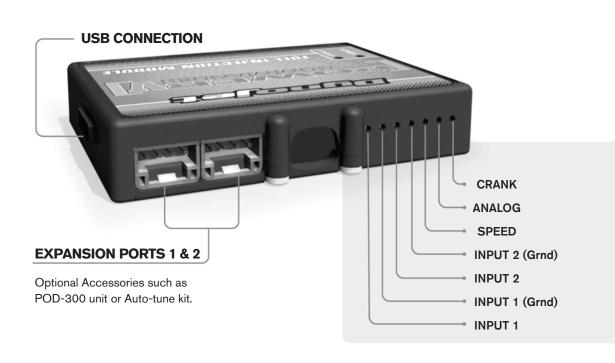
THE LATEST POWER COMMANDER
SOFTWARE AND MAP FILES CAN BE
DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

## PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION



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

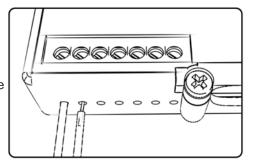
# POWER COMMANDER V INPUT ACCESSORY GUIDE



#### 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 seat.
- 2 Remove the side covers below the seat and mid-fairings on both sides of the bike.
- 3 Remove the fuel tank (Fig. A).

4 Remove PAIR valve and its bracket (Fig. B).

Loosen the bolt. Slide the stock MAP sensors off of the bracket. Unplug the electrical connector from the front of the PAIR valve. Loosen the hoses from both sides of the PAIR valve.

This will allow access to the bike's Ignition Coils.

- 5 Using the supplied Velcro, secure the PCV module to the right side of the battery at the location shown in Figure C.
  - Clean the surface with the supplied alcohol swab prior to applying the Velcro.



- 6 Secure the PCV ground wire with the small ring lug to the negative (-) terminal of the bike's battery (Fig. D).
- Route the PCV wiring harness forward along the right side frame rail. Go beneath any frame cross-members.

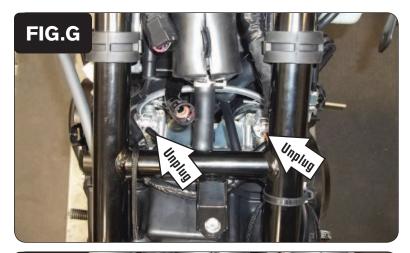


8 Locate and unplug the stock connectors for the bike's Crank Position Sensor (Fig. E).

This a pair of BLACK 2-pin connectors with GREEN and BLACK wires. It is located on the right rear corner of the airbox.



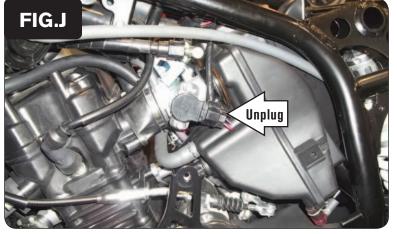
Plug the pair of RED 2-pin PCV connectors with BROWN colored wires in-line of the stock Crank Position Sensor connectors (Fig. F).



10 Locate and unplug the stock connectors from both Fuel Injectors at the top of the throttle bodies (Fig. G).



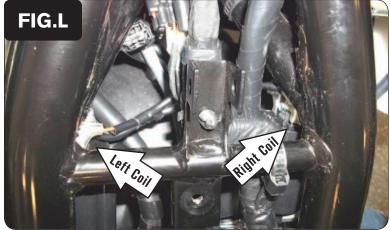
- 11 Plug the pair of PCV connectors with ORANGE colored wires in-line of the LEFT Fuel Injector and the stock wiring harness.
- Plug the pair of PCV connectors with YELLOW colored wires in-line of the RIGHT Fuel Injector and the stock wiring harness (Fig. H).



Locate and unplug the stock wiring harness from the bike's Throttle Position Sensor on the left side of the throttle bodies (Fig. J).



14 Plug the pair of 3-pin connectors of the PCV wiring harness in-line of the bike's TPS and the stock wiring harness (Fig. K).

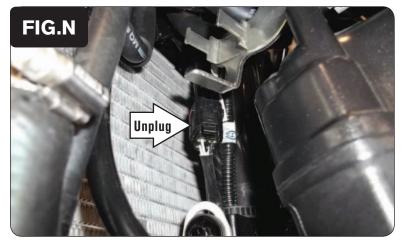


- 5 Locate and unplug the stock ORANGE/WHITE wire and the stock BLACK wire from the left side Ignition Coil.
- Locate and unplug only the stock GREY wire from the right side Ignition Coil (Fig. L).



- 17 Plug the pair of PCV leads with RED/WHITE wires in-line of the stock ORANGE/WHITE wire and the left Ignition Coil.
- 18 Plug the pair of PCV leads with GREEN and WHITE/GREEN wires in-line of the stock BLACK wire and the left Ignition Coil.
- 19 Plug the pair of PCV leads with BLUE and WHITE/BLUE wires in-line of the stock GREY wire and the right Ignition Coil (Fig. M).

Be sure to slide the insulators on all spade connectors at the Ignition Coils over the connectors such that the metal is protected from shorting to chassis ground.





This is a BLACK 4-pin connector on the left side of the frame downtube directly behind the radiator. You can trace the wiring harness from the stock O2 sensor in the exhaust to this connector.



21 Plug the supplied O2 Optimizer into the bike's wiring harness in-place of the stock O2 sensor (Fig. O).

The stock O2 sensor will no longer be used. You can remove it from the exhaust if desired and if you have a way to plug the hole in the exhaust.

22 Reinstall the PAIR valve, the fuel tank, the body work, and the seat.

### **Optional Input:**

Speed - BLUE/YELLOW wire of the vehicle speed sensor