[POWER COMMANDER V]

FUEL AND IGNITION

2017 Suzuki SV650

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

Dynojet

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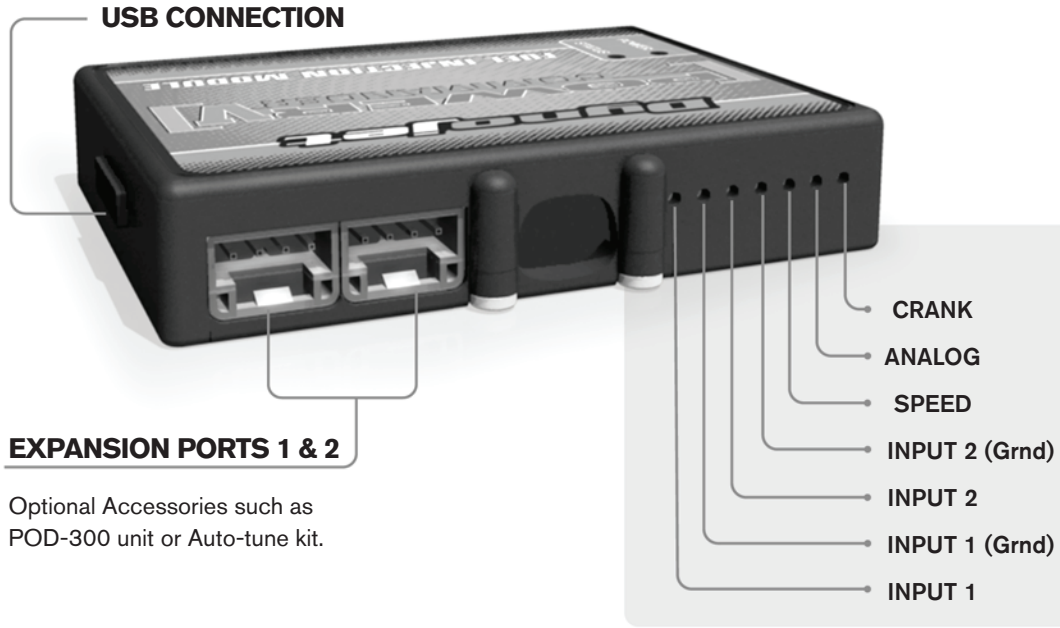
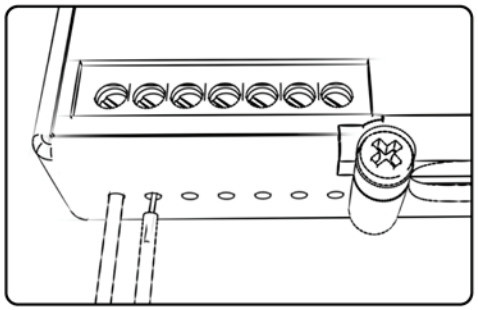
POWER COMMANDER V
INPUT ACCESSORY GUIDE



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

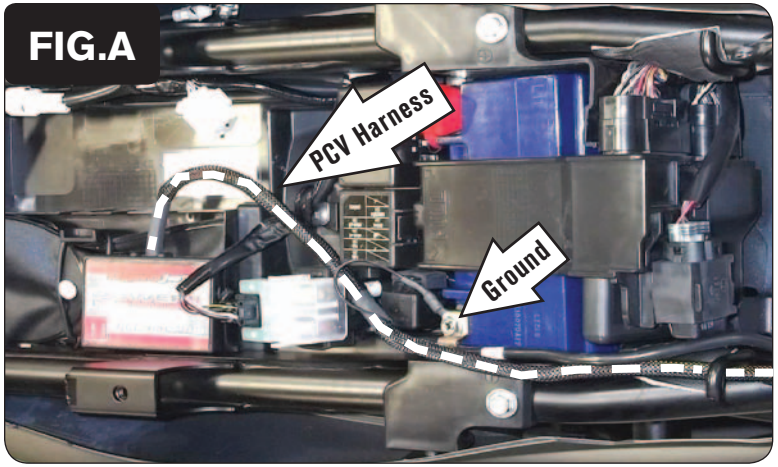
Map - (Input 1 or 2) The PCV has the ability to hold 2 different base maps. You can switch on the fly between these two base maps when you hook up a switch to the MAP inputs. You can use any open/close type switch. The polarity of the wires is not important. When using the Autotune kit one position will 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.)

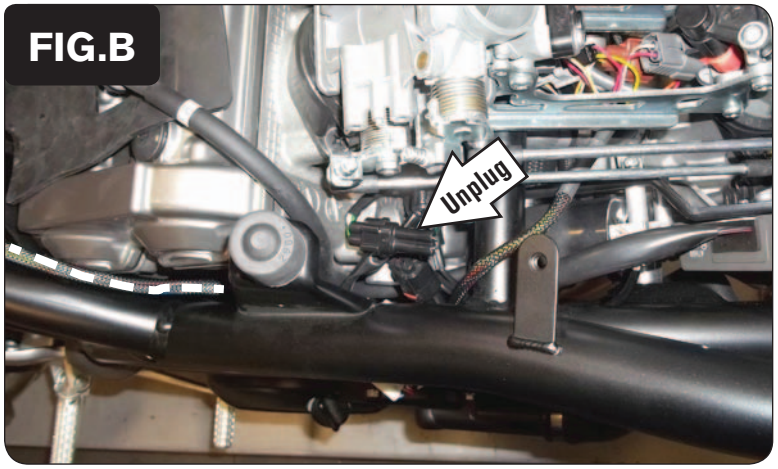
Shifter- (Input 1 or 2) These inputs are for use with the Dynojet quickshifter. Insert the wires from the Dynojet quickshifter into the SHIFTER inputs. The polarity of the wires is not important. (Set to Switch Input #2 by default.)

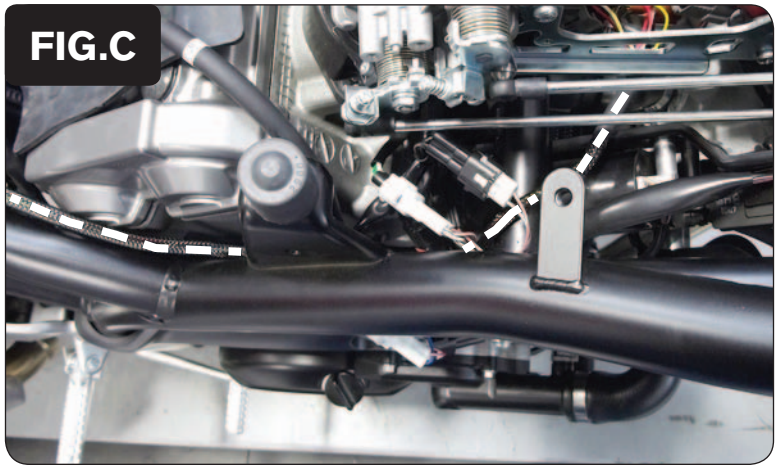
Speed- If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent 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, the plastics below the seat and fuel tank on both sides of the bike, and the fuel tank.

2 Remove the air box.

3 Store the PCV module in the tail section below the seat (Fig. A).

Use the supplied Velcro to secure the module. Clean both surfaces with the supplied alcohol swab prior to applying the Velcro.

4 Route the PCV harness from the tail section towards the engine following along the right side frame rail.

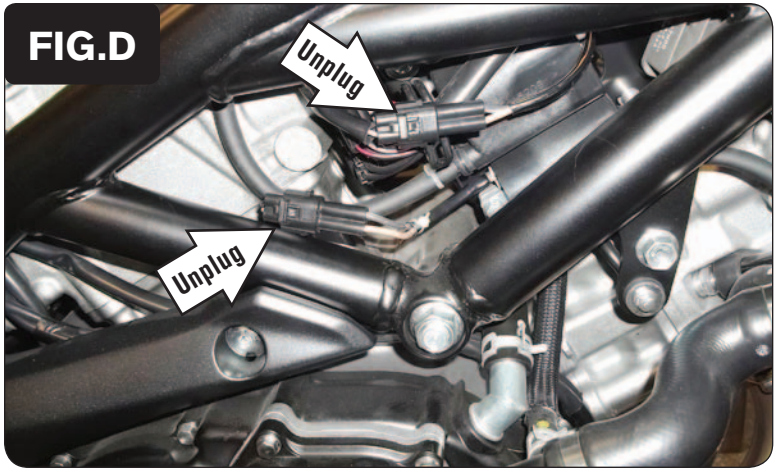
5 Secure the ground (BLACK) wire with the small ring lug to the negative (-) terminal of the bike's battery.

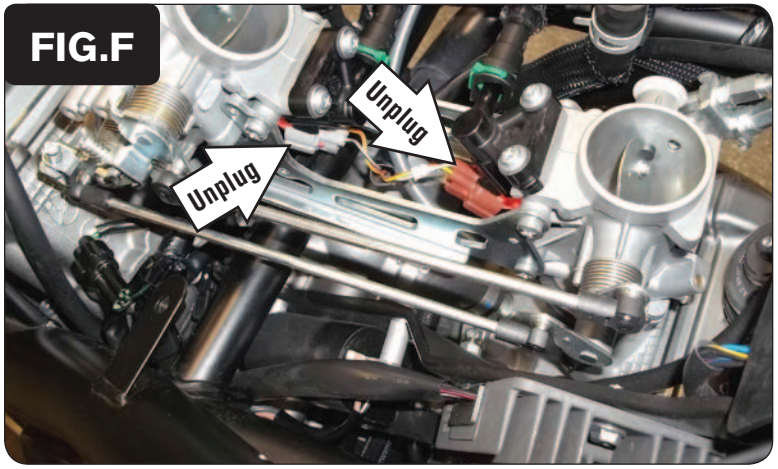
6 Unplug the stock Crank Position Sensor connectors (Fig. B).

This is a BLACK 2-pin connector pair. It is located to the right of the rear cylinder throttle body.

The stock wire colors in this pair of stock connectors is solid GREEN and solid WHITE on one connector, and BLACK/BLUE and BLACK/BROWN on the other connector.

7 Plug the pair of PCV connectors with BROWN colored wires in-line of the stock Crank Position Sensor connectors (Fig. C).





8 Locate and unplug both of the stock connector pairs for both of the bike's Ignition Coils (Fig. D).

These are both BLACK 2-pin connector pairs. They are both located on the right side of the engine. You can trace the wires from the ignition coils to these connectors.

9 Plug the pair of PCV connectors with GREEN colored wires in-line of the stock Ignition Coil connectors for the front cylinder.

10 Plug the pair of PCV connectors with BLUE colored wires in-line of the stock Ignition Coil connectors for the rear cylinder (Fig. E).

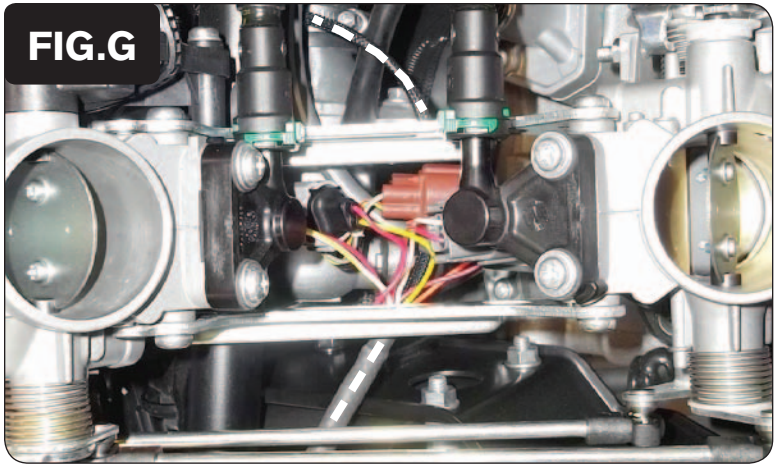
11 Continue routing the rest of the PCV wiring harness towards the left side of the bike. Go between the cylinders and beneath the throttle linkage of the two throttle bodies. Make sure the PCV wiring harness does not interfere with throttle linkage movement.

12 Unplug the stock wiring harness from both of the bike's Fuel Injectors (Fig. F).

The front cylinder fuel injector has a BROWN connector.

The rear cylinder fuel injector has a GREY connector.

FIG.G

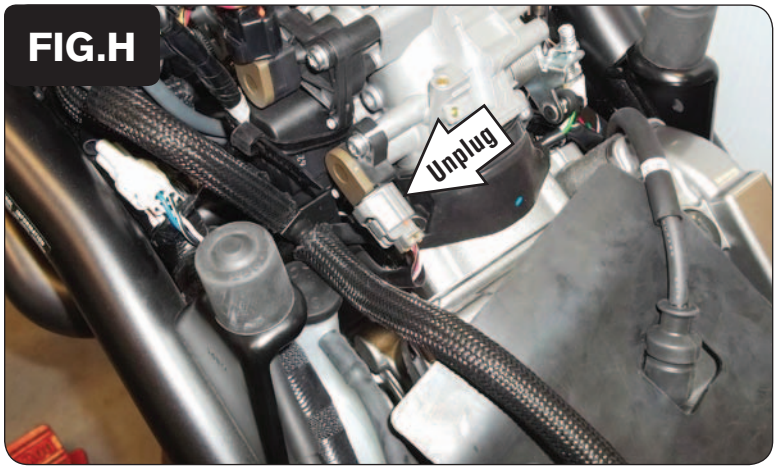


13 Plug the pair of PCV wiring harness connectors with ORANGE colored wires in-line of the FRONT cylinder fuel injector and the stock wiring harness.

14 Plug the pair of PCV wiring harness connectors with YELLOW colored wires in-line of the REAR cylinder fuel injector and the stock wiring harness (Fig. G).

15 Continue routing the PCV wiring harness branch with the pair of 3-pin connectors rearward and towards the left side of the rear throttle body.

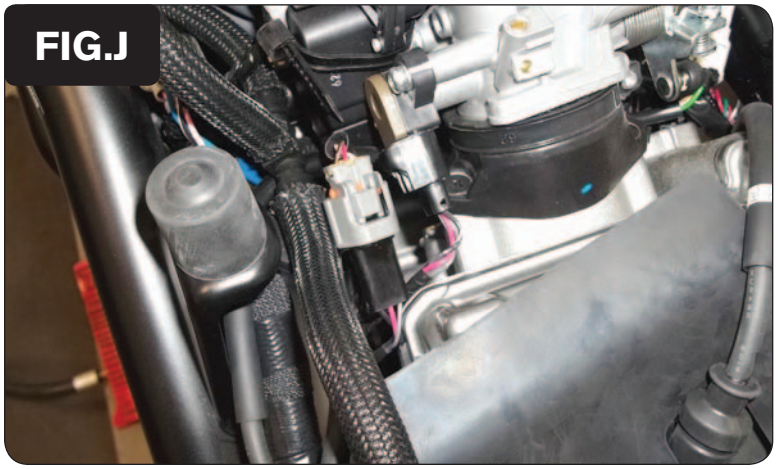
FIG.H



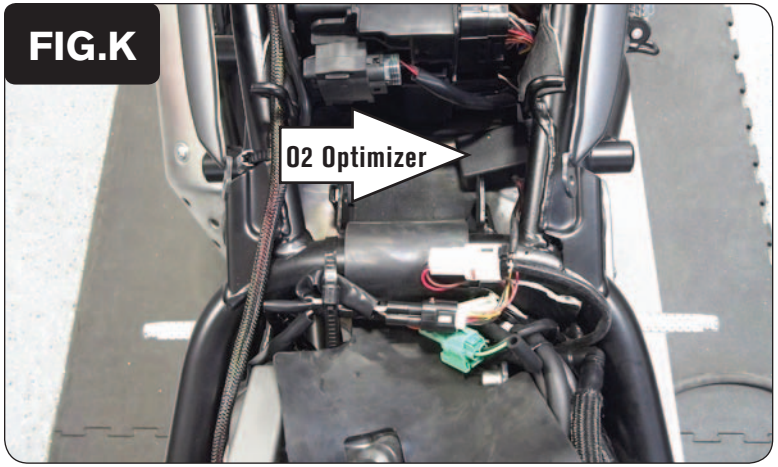
16 On the left side of the rear throttle body, locate and unplug the lower primary Throttle Position Sensor (Fig. H).

This is the one with the GREY connector. Do NOT unplug the upper secondary TPS with the stock BLACK connector.

FIG.J



17 Plug the pair of 3-pin PCV connectors in-line of the lower primary Throttle Position Sensor and the stock wiring harness (Fig. J).



	0	2	5	10	15	20	45	60
500	0	0	0	0	0	0	0	0
750	0	0	0	0	0	0	0	0
1000	0	0	0	0	0	0	0	0
1250	0	0	0	0	0	0	0	0
1500	0	0	0	0	0	0	0	0
1750	0	8	8	8	8	8	0	0
2000	0	8	8	8	8	8	-7	-5
2250	0	8	8	8	8	8	-8	-9
2500	0	8	8	8	8	8	-6	-5
2750	0	8	8	8	8	8	-7	-7
3000	0	8	8	8	8	8	-7	-8
3250	0	8	8	8	8	8	-6	-7
3500	0	8	8	8	8	8	-5	-5
3750	0	8	8	8	8	8	-4	-4
4000	0	8	8	8	8	8	-5	-4
4250	0	0	0	8	8	8	-4	-4
4500	0	0	0	8	8	8	-4	-5
4750	0	0	0	8	8	8	-5	-4
5000	0	0	0	8	8	8	-4	-3
5250	0	0	0	8	8	8	-4	-5
5500	0	0	0	8	8	8	-6	-6
5750	0	0	0	8	8	8	-5	-6
6000	0	0	0	8	8	8	-6	-5
6250	0	0	0	8	8	8	-4	-4
6500	0	0	0	8	8	8	-4	-5
6750	0	0	0	0	8	8	-3	-4
7000	0	0	0	0	8	8	-3	-5
7250	0	0	0	0	0	-2	-3	-7
7500	0	0	0	0	0	-2	-3	-5
7750	0	0	0	0	0	-2	-5	-7
8000	0	0	0	0	0	-2		
8250	0	0	0	0	0	0		
8500	0	0	0	0	0	0		

FIG.L

18 Locate and unplug the stock connectors for the bike's stock O2 sensor.

This is a BLACK 4-pin connector pair located on the frame just behind the rear cylinder head.

19 Plug the supplied O2 Optimizer module in-line of the stock O2 sensor connectors. Store the module in the location shown in Figure K.

20 Reinstall the airbox, the fuel tank, bodywork, and the seat.

Optional input:

Gear Voltage - PINK wire of the Gear Position Sensor. This sensor is located on the left side of the bike below the front sprocket.

Tuning Notes:

The O2 Optimizer for this model controls the fueling in the stock closed loop area. The RPMs and throttle positions of the stock closed loop area are represented by the highlighted cells shown in Figure L. The O2 Optimizer is designed to achieve a target AFR of 13.6 : 1 in this stock closed loop range. To use this O2 Optimizer you must retain your stock O2 sensor (even if you are using the Auto-tune accessory).

It is recommended to input values of 8 the highlighted area of the fuel tables in your map file. If using the Auto-tune accessory do NOT input values in this range of your Target AFR table/tables.

The O2 Optimizer will blink while the stock O2 sensor is being heated up. The unit is not functioning until the light is lit solid.