

[POWER COMMANDER V]

2010 MV Agusta Brutale 990

Installation Instructions



PARTS LIST

- 1 Power Commander
- 1 USB Cable
- 1 Installation Guide
- 2 Power Commander Decals
- 2 Dynojet Decals
- 2 Velcro strips
- 1 Dual Lock strip
- 1 Alcohol swab
- 1 O2 Optimizer
- 2 4" Zip ties

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

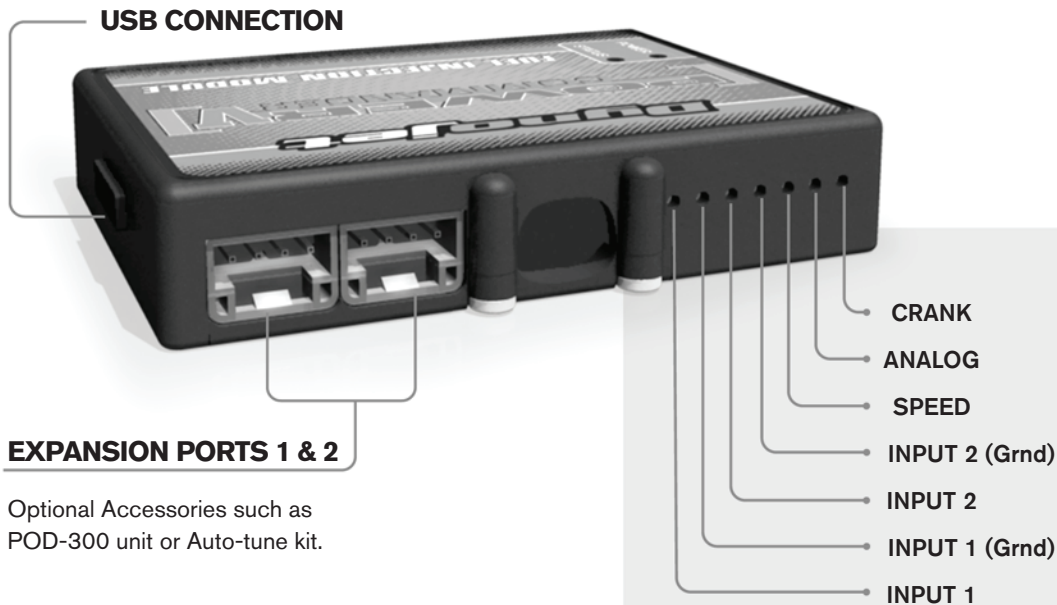
THE LATEST POWER COMMANDER
SOFTWARE AND MAP FILES CAN BE
DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

Dynojet

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 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 -

(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-

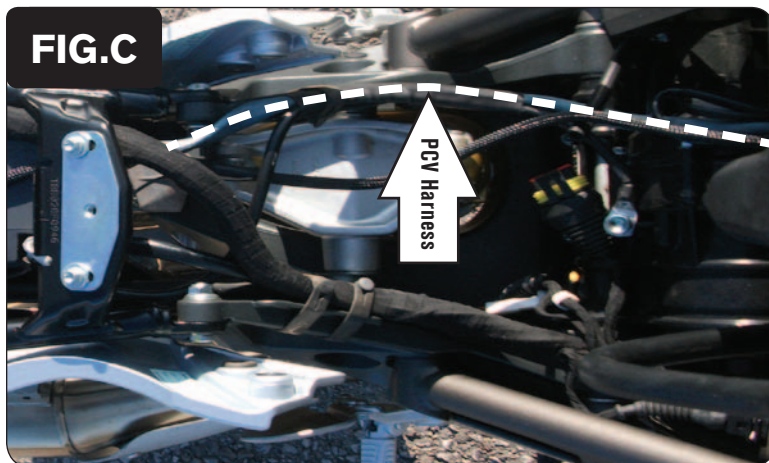
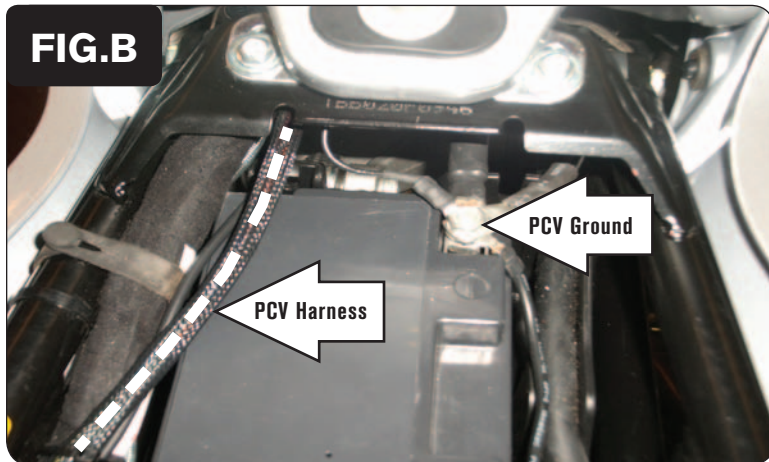
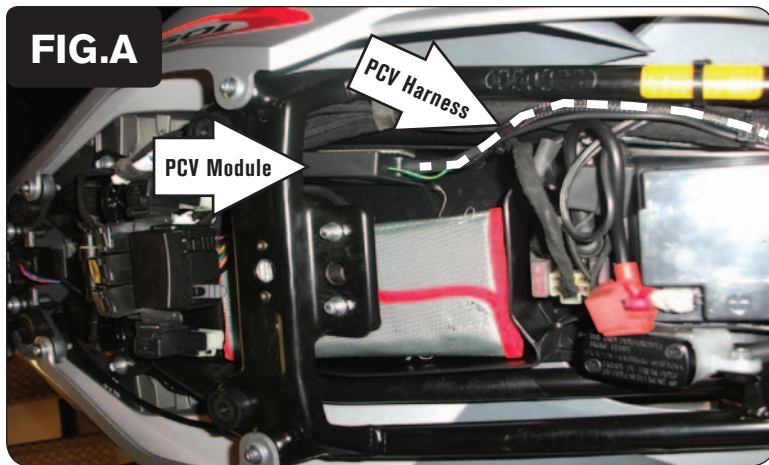
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent kill times when using a quickshifter.

Analog-

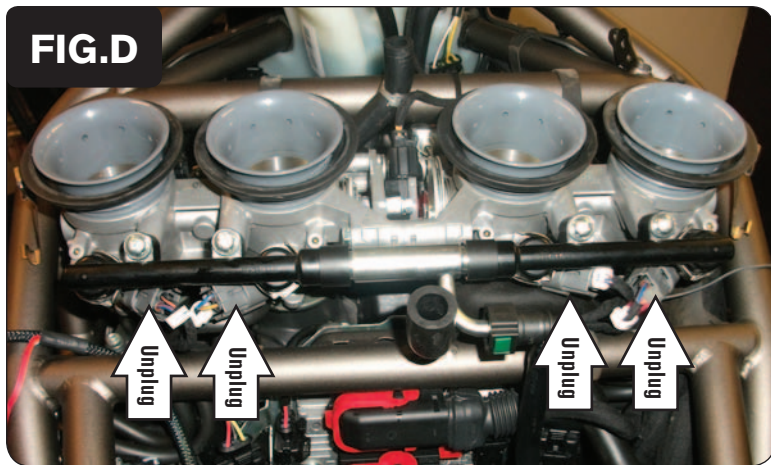
This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

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 fuel tank and the lower right side panel.
- 3 Secure the PCV in the tail section using the supplied velcro.
- 4 Route the wiring harness from the PCV along the left side of the tail and go towards the engine (Fig. A).
- 5 Attach the PCV ground wire with the small ring eyelet to the negative (-) terminal of the bike's battery (Fig. B).
- 6 Route the PCV harness along the left side of the frame (Fig. C). Use the stock wire ties to secure the PCV harness in place.



- 7 Unplug the stock wiring harness from each fuel injector (Fig. D).



- 8 Plug the PCV in-line of the stock fuel injectors and wiring harness (Fig. E).

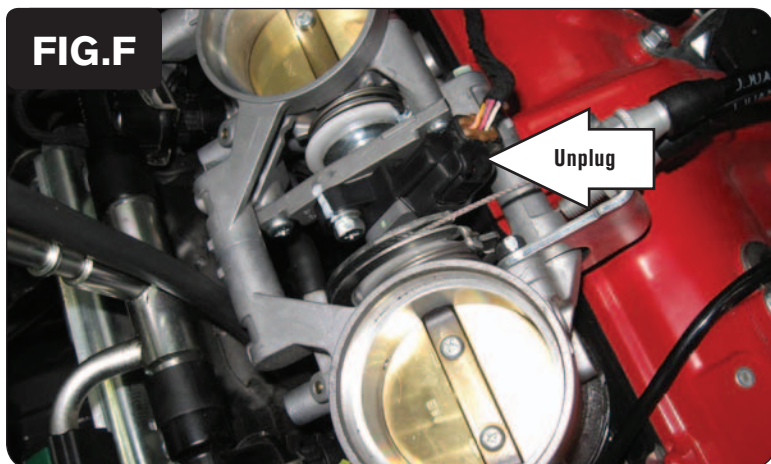
PCV harness:

ORANGE - cylinder #1

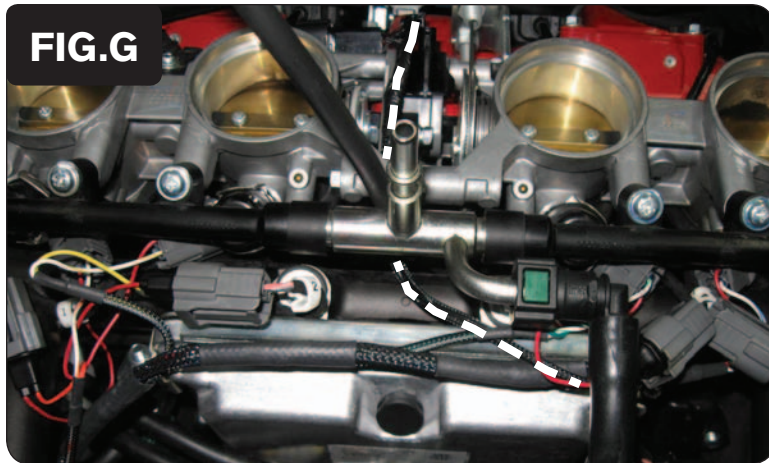
YELLOW - cylinder #2

GREEN - cylinder #3

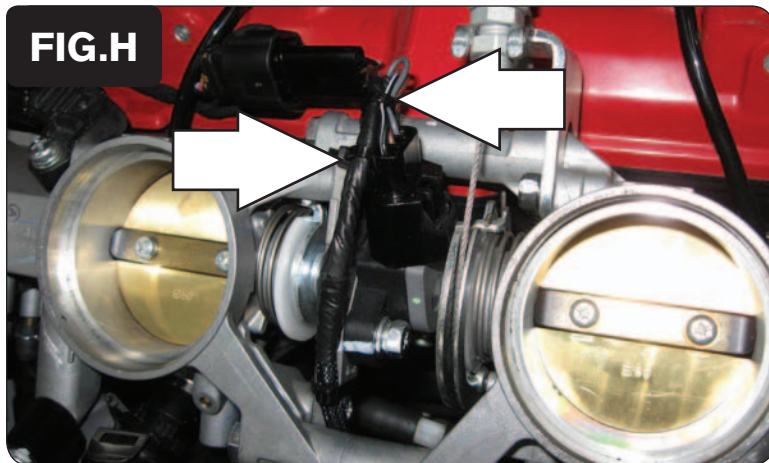
BLUE - cylinder #4



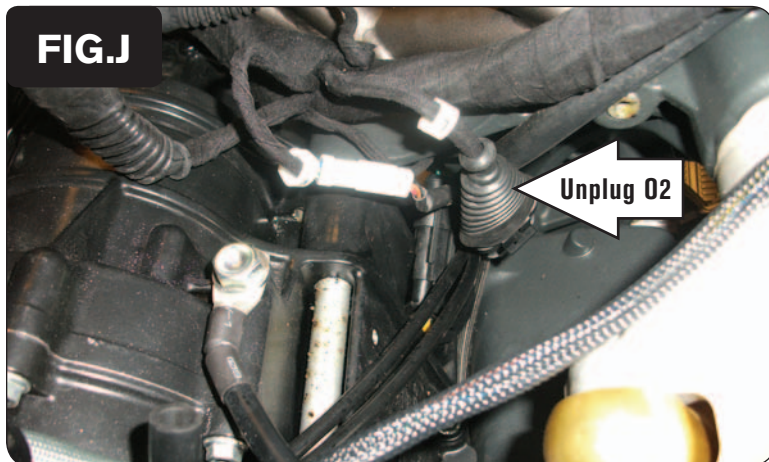
- 9 Locate and unplug the bike's Throttle Position Sensor between the 2nd and 3rd throttle bodies (Fig. F).



- 10 Route the pair of 3-pin TPS connectors of the PCV harness under the fuel rail and throttle body connecting bolt and up to the bike's TPS (Fig. G).

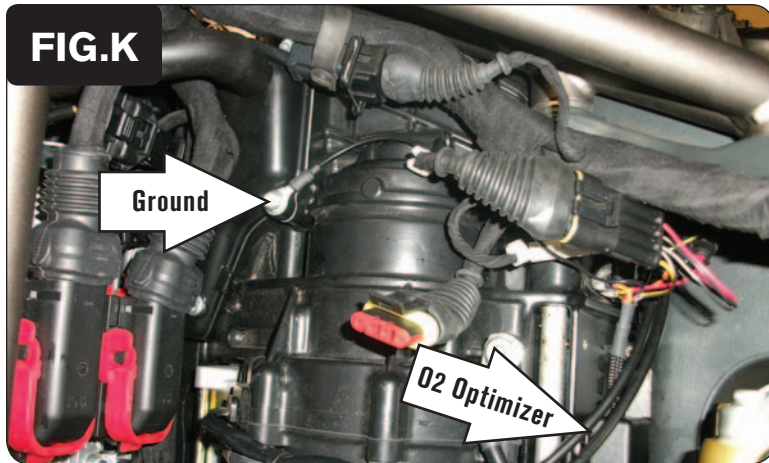


- 11 Plug the PCV wiring harness in-line with the bike's TPS and stock wiring harness. Use the 2 small zip ties to secure the wiring harness to the throttle bodies at the pointed locations (Fig. H). Check the throttle movement to ensure there isn't any interference.



- 12 Unplug the stock O2 sensor from the wiring harness (Fig. J).

This connection is under the fuel tank and can be found by tracing the wires coming out of the exhaust.



- 13 Plug the supplied O2 Optimizer in-line with these stock O2 connectors and secure the ground wire of the O2 Optimizer to the engine case bolt.
- 14 Secure the Optimizer in place using the supplied Dual Lock strip (Fig. K).

Tuning Notes:

- The O2 Optimizer will control the stock closed loop area of the motorcycle. To use this O2 Optimizer you must retain your stock O2 sensor (even if using Auto-tune). The closed loop area is 0-15% throttle and 0-6250 RPM. The module is designed to achieve an AFR target of around 13.6:1 in this closed loop range.
- Make sure to input a value of 8 in the GREY area of your fuel table/tables shown in Figure L (except 0% throttle). If you are using an Auto-tune module do NOT input target AFR values in this same area.
- The light on the O2 Optimizer will blink while the O2 sensor is heating up. The unit is NOT working until the light goes solid GREEN.

	% Throttle										
	0	2	5	10	15	20	40	60	80	100	
500	0	0	0	0	0	0	0	0	0	0	0
750	0	0	0	0	0	0	0	0	0	0	0
1000	0	0	0	0	0	0	0	0	0	0	0
1250	0	8	8	8	8	0	0	0	0	0	0
1500	0	8	8	8	8	0	0	0	0	0	0
1750	0	8	8	8	8	-8	-10	-15	-3	-15	
2000	0	8	8	8	8	1	1	-4	8	-15	
2250	0	8	8	8	8	1	1	-5	-10	-13	
2500	0	8	8	8	8	1	-4	-10	-11	-19	
2750	0	8	8	8	8	1	1	-5	0	-15	
3000	0	8	8	8	8	1	1	-4	-4	-5	
3250	0	8	8	8	8	2	2	-5	-3	-6	
3500	0	8	8	8	8	2	5	-1	1	-9	
3750	0	8	8	8	8	2	6	1	-1	-6	
4000	0	8	8	8	8	2	6	-3	0	-9	
4250	0	8	8	8	8	2	2	-5	1	-2	
4500	0	8	8	8	8	2	0	-4	2	-6	
4750	0	8	8	8	8	0	-1	-2	4	-2	
5000	0	8	8	8	8	0	-1	-2	4	0	
5250	0	8	8	8	8	0	-1	-2	1	-3	
5500	0	8	8	8	8	-8	0	-1	1	-11	
5750	0	8	8	8	8	-8	-1	-4	0	-6	
6000	0	8	8	8	8	-8	-2	-5	-3	-11	
6250	0	8	8	8	8	-8	-3	-5	-6	9	
6500	0	0	0	3	-7	-7	-2	-4	-6	15	
6750	0	0	0	0	-7	-6	0	-5	-8	-4	
7000	0	0	0	-4	-6	-7	-1	-5	-12	-8	
7250	0	0	0	-8	-9	-8	-1	-6	-11	1	
7500	0	0	0	-9	-10	-8	-3	-6	-8	-5	
7750	0	0	0	-6	-8	-7	-3	-5	-5	-8	
8000	0	0	0	-6	-7	-8	-4	-3	-5	-6	
8250	0	0	0	-4	-7	-4	-1	-2			
8500	0	0	0	-4	-7	-3	-2	0			
8750	0	0	0	0	-5	-1	-3	0			

FIG.L