

[POWER COMMANDER V]

2008-2009 Yamaha R6

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 Posi-tap
- 1 O2 Optimizer

THE IGNITION MUST BE TURNED OFF BEFORE INSTALLATION!

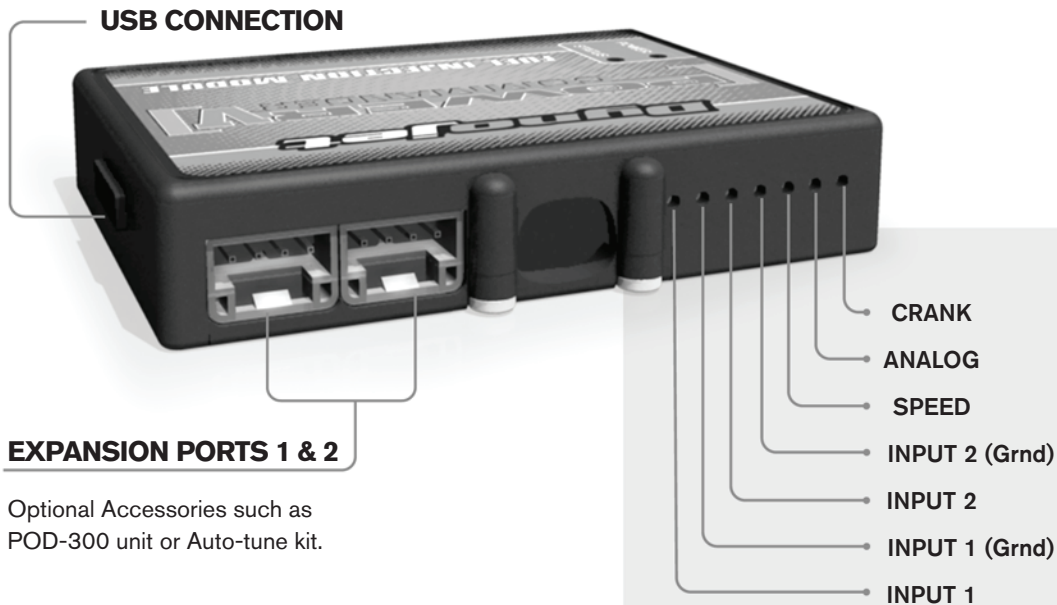
THE LATEST POWER COMMANDER SOFTWARE AND MAP FILES CAN BE DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

Dynojet

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-

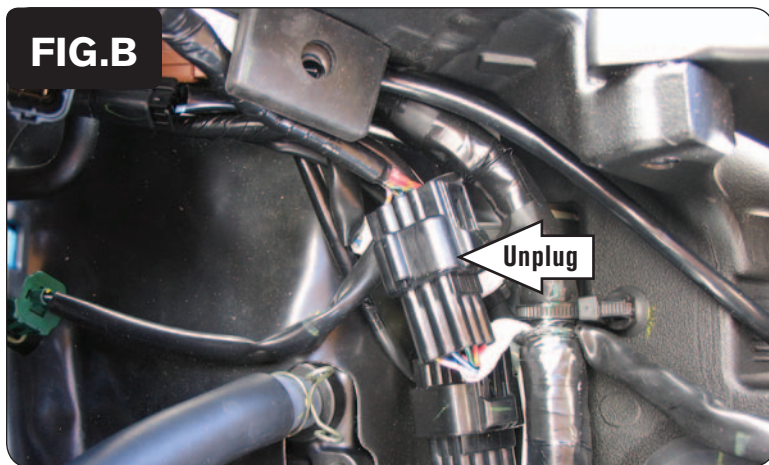
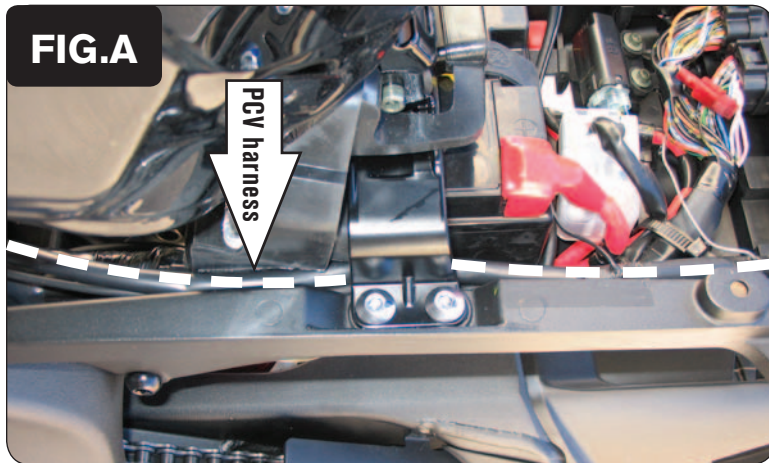
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent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

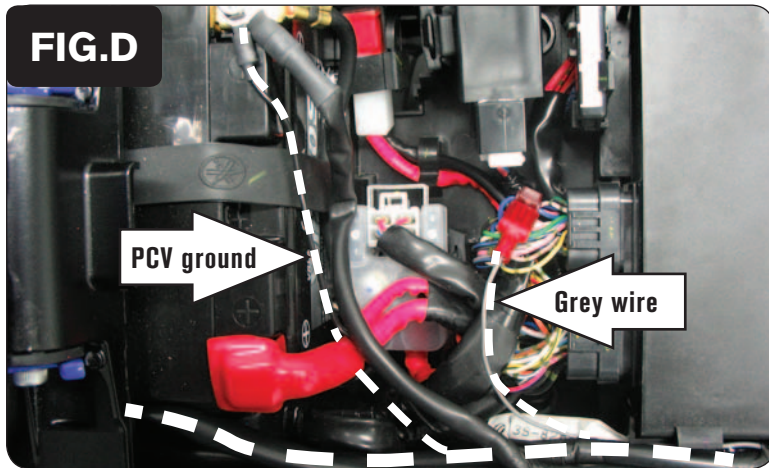
Do **NOT** connect anything to this port unless instructed to do so by Dynojet. It is used to transfer crank trigger data from one module to another.



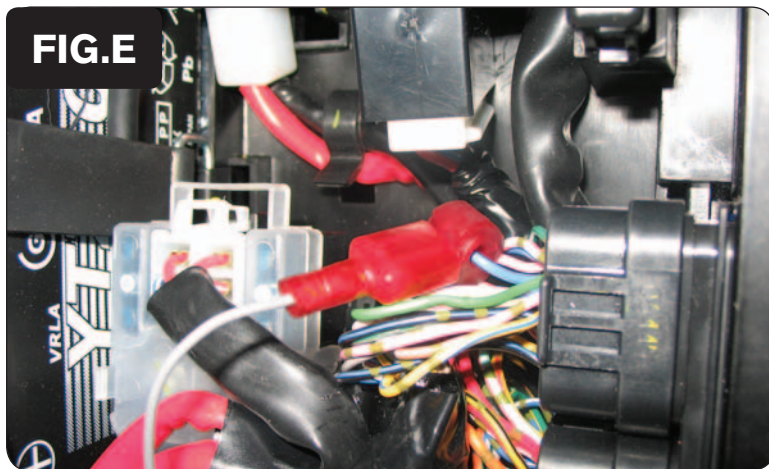
- 1 Remove the main seat.
- 2 Prop the front of the fuel tank in the up position.
- 3 Route the PCV harness down the left hand side of the bike.
- 4 Loosen the bolts securing the fuel tank bracket to allow room for the PCV harness to fit underneath.
Tighten these bolts once the installation is complete.
- 5 Route the PCV harness underneath the fuel tank bracket as shown in Figure A.

- 6 Unplug the BLACK 9-pin connector from the throttle bodies to the main wiring harness as shown in Figure B.

- 7 Attach the connectors from the PCV to the stock connector as shown in Figure C.
Verify these connectors do not interfere with the fuel line when the fuel tank is installed back into position.



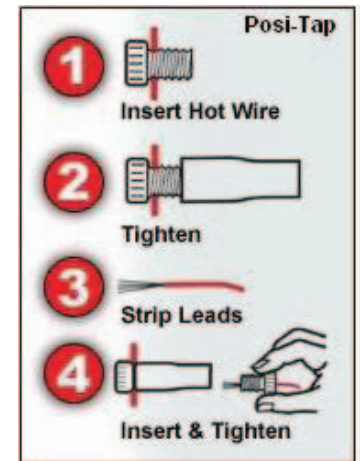
- 8 Attach the ground wire from the PCV to the negative (-) terminal of the bike's battery, as shown in Figure D.



- 9 Using the supplied posi-tap, attach the GREY wire of the PCV to the BLUE wire on the ECU.

This is pin #5 on the smaller ECU connector. The pin locations are numbered on the back of this connector for reference.

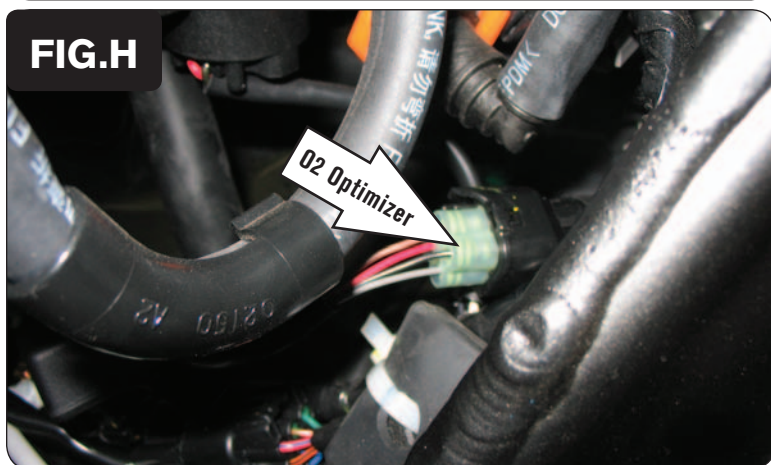
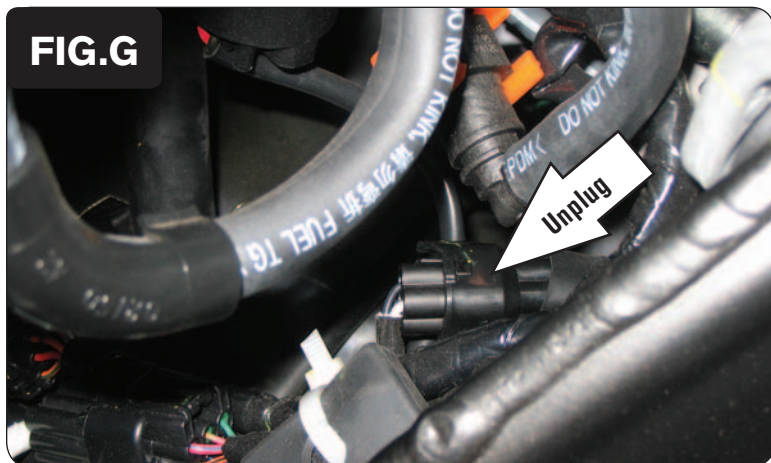
The wire tap used in Figure E is NOT a posi-tap. This is an older crimp-on style wire tap.



- 10 Using the supplied Velcro, secure the PCV in the tail section of the bike as shown in Figure F.

It is recommended to route the PCV harness underneath the sub-frame bracket.

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



- 11 Locate the stock O2 sensor connection.

This connection is located under the fuel tank near the right hand side of the frame. This is a black 4-pin connector.

- 12 Unplug the stock O2 sensor from the main wiring harness.

- 13 Plug the Dynojet O2 Optimizer to the main wiring harness in place of the stock O2 sensors, as shown in Figure H.

The controller can lay on top of the engine or be securely fastened to the harness.

Verify the controller does not come into contact with the fuel tank when it is in place.

- 14 Reinstall the main seat and the passenger seat.

Optional Inputs:

Temperature input - The temperature sensor is located on the back of the cylinder near the #3 throttle body. GREEN/WHITE wire to ECU. Pin #25 on small ECU connector.

Auto-tune 12v source - BLUE/RED wire of tail light connector.

Speed input - Top of engine case on left hand side. PINK wire on sensor side - WHITE/YELLOW wire on ECU side.

Tuning Notes:

This bike uses a fly-by wire system; conventional tuning can not be performed for all RPM and throttle ranges.

The GREY wire from the PCV is attached to the throttle blade angle sensor of the throttle bodies which is NOT directly correlated to the throttle grip position. Because of this when setting the throttle position in the PCV software we recommend on resetting only the closed position after the bike has completely warmed up. Use the arrow key (<) next to CLOSED to perform this step and then click OK. Do not try to set the OPEN position unless you are on a dyno and above 11000 RPM.

You will notice that in the maps there are not detailed values below 10500 RPM at 60-100%. This is because the throttle blades will not open more than 60% below this RPM range no matter how much throttle input is given. Therefore this area can not be tuned.