

[POWER COMMANDER V]

2007-2008 Yamaha R1

Installation Instructions



PARTS LIST

- 1 Power Commander
- 1 USB Cable
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- 2 Power Commander Decals
- 2 Dynojet Decals
- 2 Velcro strips
- 1 Alcohol swab
- 1 Posi-tap

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

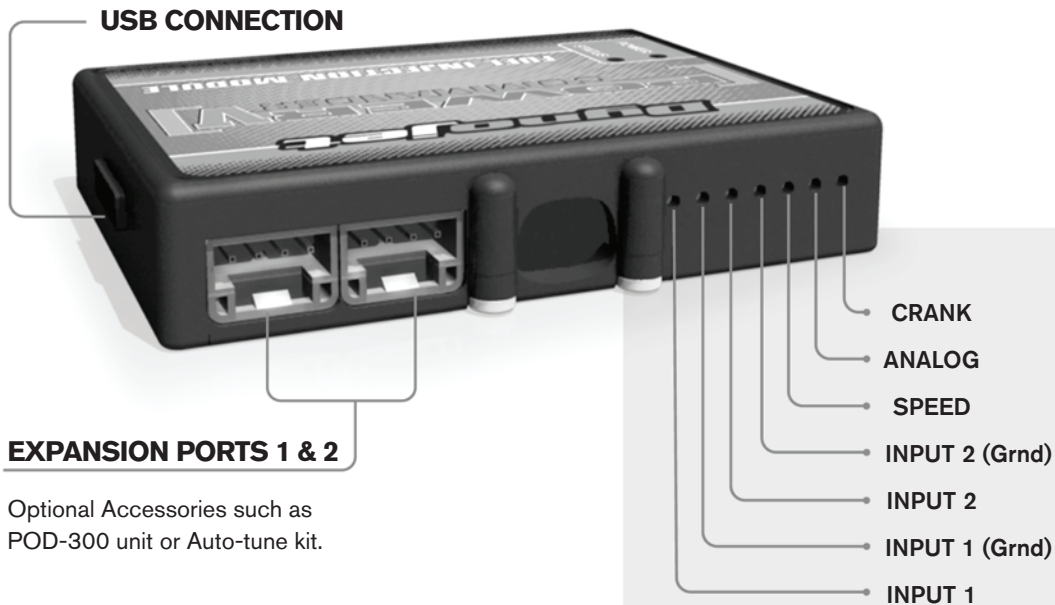
THE LATEST POWER COMMANDER
SOFTWARE AND MAP FILES CAN BE
DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

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-

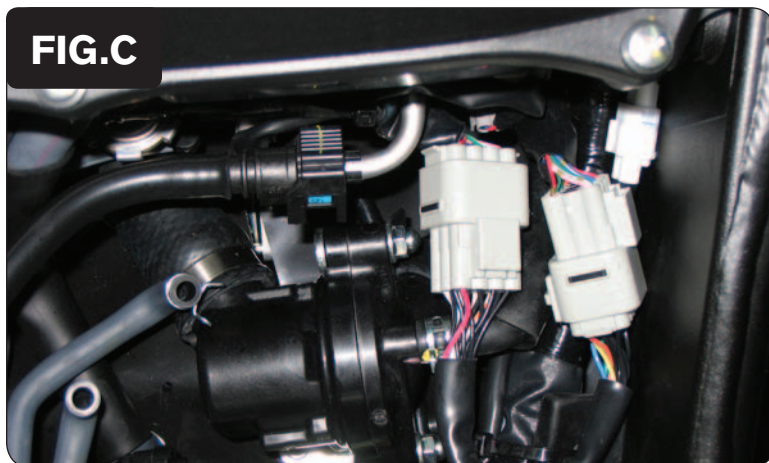
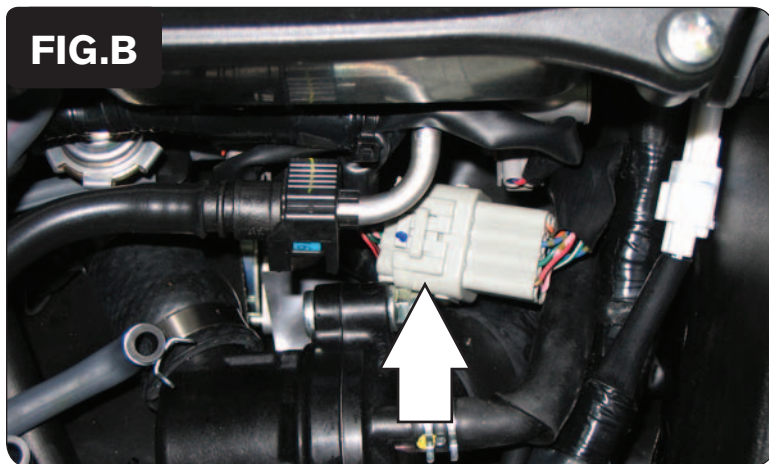
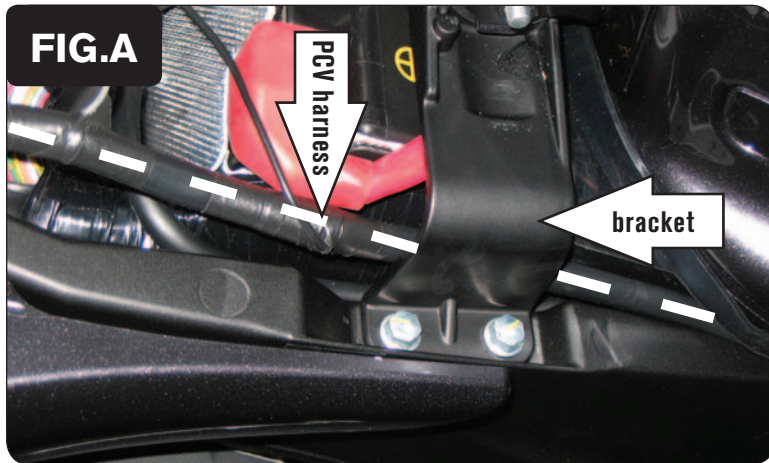
If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent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



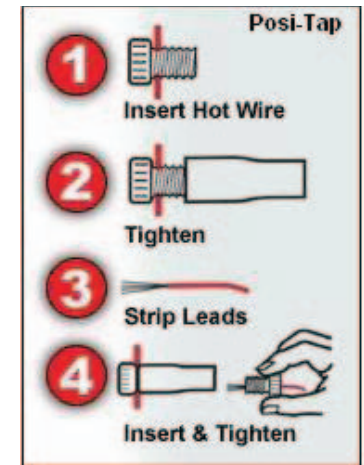
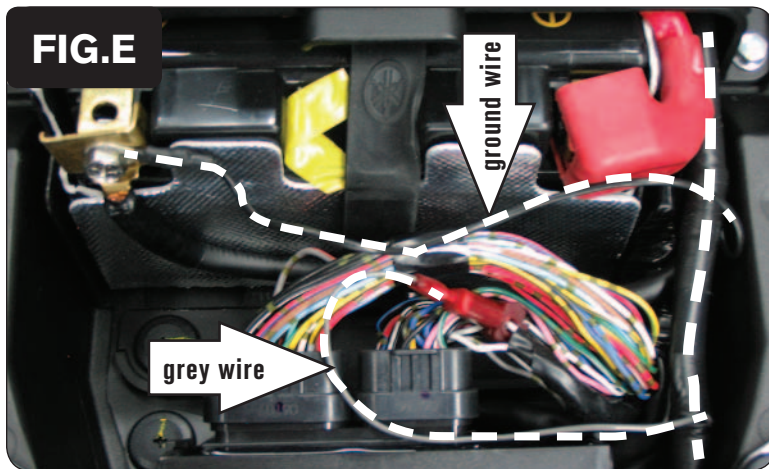
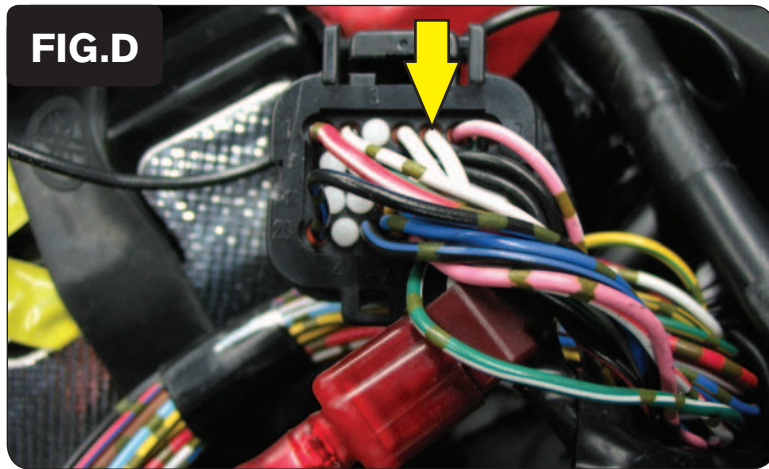
- 1 Remove the main seat.
- 2 Prop the front of the fuel tank up.
- 3 Route the PCV harness down the right hand side of the bike.
- 4 Loosen the bolts securing the fuel tank bracket to allow room for the PCV harness to fit underneath.
- 5 Route the PCV harness underneath the fuel tank bracket as shown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

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

This is the grey 12-pin connector.

- 7 Attach the connectors from the PCV wiring harness to the stock connector as shown in Figure C.

Verify these connectors are positioned to not interfere with the fuel line when the fuel tank is installed back into position.



- 8 Using the supplied Posi-tap, secure the GREY wire from the PCV to the WHITE wire of the ECU as shown in Figure D.

This wire is from the smaller of the two ECU connectors in position five. The wire location is numbered on the back of the connector.

- 9 Attach the ground wire from the PCV to the negative side of the battery as shown in Figure E.
- 10 Using the supplied velcro, secure the PCV to the top, rear part of the ECU as shown in Figure F.

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

- 11 Tighten the fuel tank bracket bolts.
- 12 Lower the fuel tank and reinstall the seats.

Tuning Notes

This bike uses a fly-by wire system, so 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. Therefore when setting the throttle position in the PCV software we recommend 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 9000 RPM.

You will notice that in the maps there are no detailed values below 7000 RPM at 100% throttle and below 5250 RPM at 60-80%. 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.