

# IGNITION MODULE

FOR USE WITH

**2004-2006 Yamaha R1**

**Installation Instructions**

**[POWERV  
COMMANDER V]**

## **PARTS LIST**

- 1 Ignition Module
- 1 Installation Guide
- 2 Velcro strips
- 1 Alcohol swab
- 1 CAN link cable
- 1 USB cable



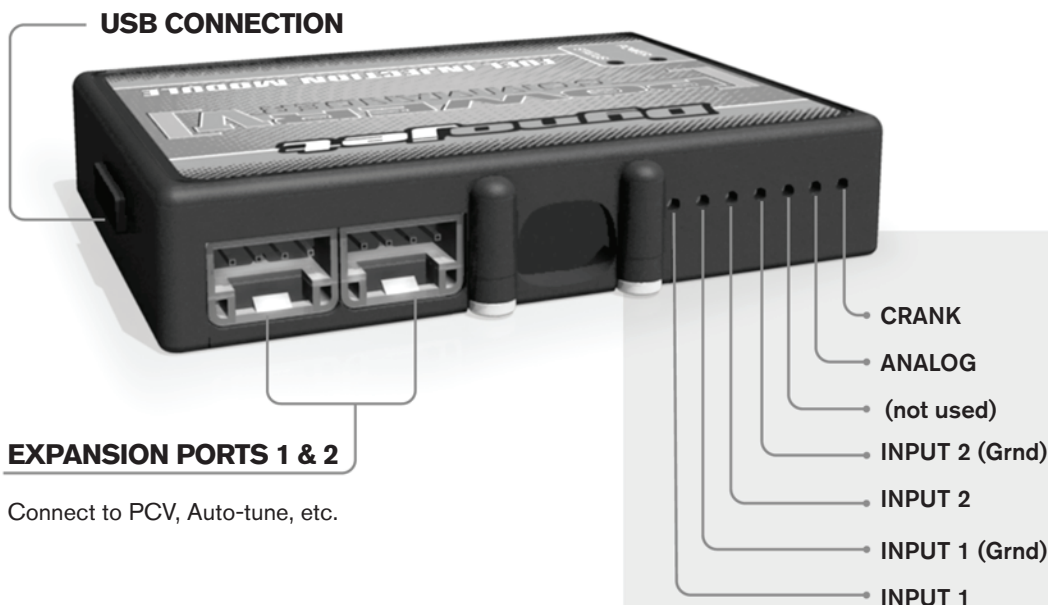
**THE VEHICLE'S IGNITION MUST BE TURNED OFF  
DURING THIS INSTALLATION!  
BEFORE THIS MODULE CAN BE USED THE  
POWER COMMANDER 5 MAY NEED TO BE UPDATED.  
(SEE INCLUDED INSTRUCTIONS.)**

**PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION**

**Dynojet**

2191 Mendenhall Drive North Las Vegas, NV 89081 (800) 992-4993 [www.powercommander.com](http://www.powercommander.com)

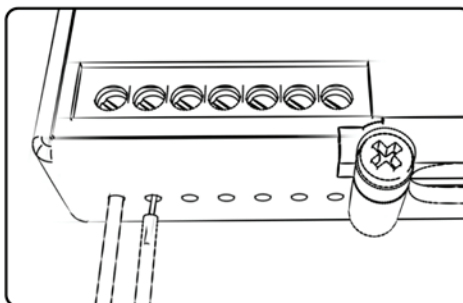
# IGNITION MODULE V INPUT ACCESSORY GUIDE



## Wire connections:

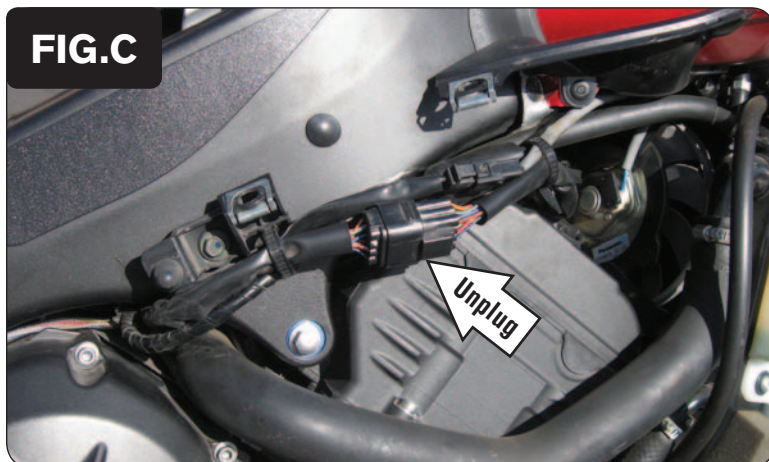
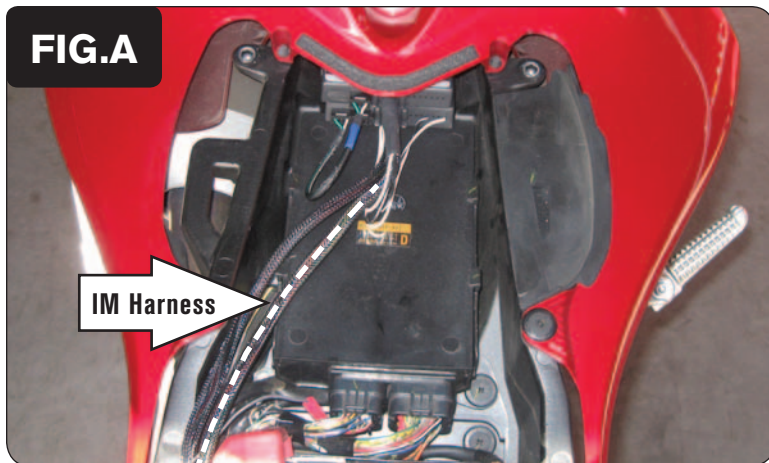
To input wires into the IM first remove the rubber plug on the backside of the unit and loosen the screw for the corresponding input. Using a 22-24 gauge wire strip about 10mm from its end. Push the wire into the hole of the IM until it stops and then tighten the screw. Make sure to reinstall the rubber plug.

NOTE: If you tin the wires with solder it will make inserting them easier.



## ACCESSORY INPUTS

- Speed** - The Speed Limiter feature uses Switch Input #1 or #2. This feature gives the ability to activate a limiter based on vehicle speed. This is intended to be used as a pit lane speed limiter. You can use any OPEN / CLOSED type switch to activate this feature. The feature is configured to Switch Input #1 by default.
- Launch** - The Launch Control feature also uses Switch Input #1 or #2. This feature is intended to be used as a two stage rev-limiter. You can set a target RPM to limit the bike to when the clutch lever is activated. Once the clutch lever is released full RPM can be achieved. This requires a wire be connected to the grounding side of the clutch switch and the other end into this input. The feature is configured to Switch Input #2 by default.
- Grounds** - These are constant digital grounds.
- Analog** - Not currently used - updates to follow
- Crank** - Not used in this application.



- 1 Remove the main seat. Prop the fuel tank up. Remove the right hand side mid fairing.
- 2 Attach the Ignition Module on top of the PCV with the supplied Velcro and route the harness down the right side towards the front of the bike. Route the harness underneath the fuel tank bracket and to the right side of the battery (Fig. A).

*Clean surfaces with the supplied alcohol swab before attaching the Velcro.*

- 3 Plug the CAN link cable into one of the expansion ports of the Ignition Module and the other end into one of the expansion ports of the PCV.

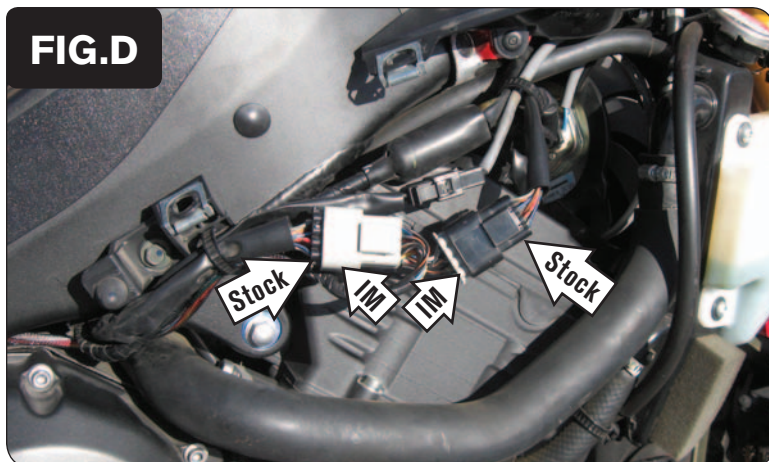
*It doesn't matter which ports you use.*

*Older Ignition Modules with a serial number beginning with 14 or less might also require a CAN termination plug to be installed in an empty port. Newer Ignition Modules with a serial number starting with 15 or higher do NOT require CAN termination plugs.*

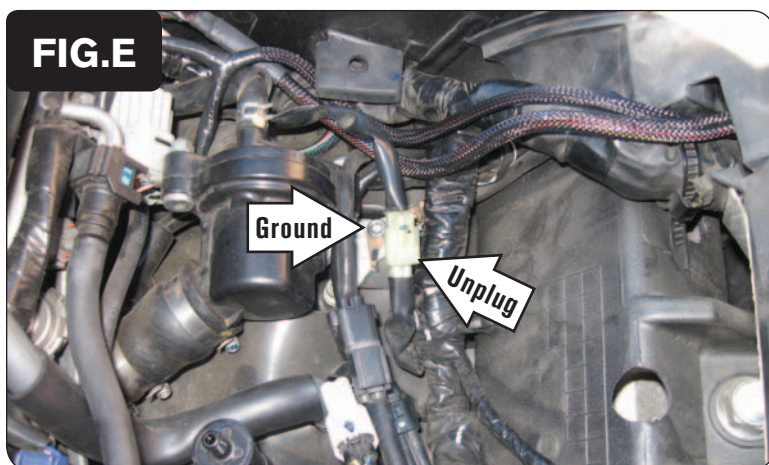
- 4 Route the harness from the inside of the frame by the cam chain tensioner (Fig. B).

- 5 Locate and unplug the stock wiring harness connector for the ignition coils (Fig. C).





- 6 Plug the Ignition Module connectors in-line of the stock wiring harness (Fig. D).



- 7 Attach the ground wire of the Ignition Module with the small ring terminal to the stock common ground bolt underneath the Crank Position Sensor connectors.
- 8 Unplug the Crank Position Sensor connectors (Fig. E).

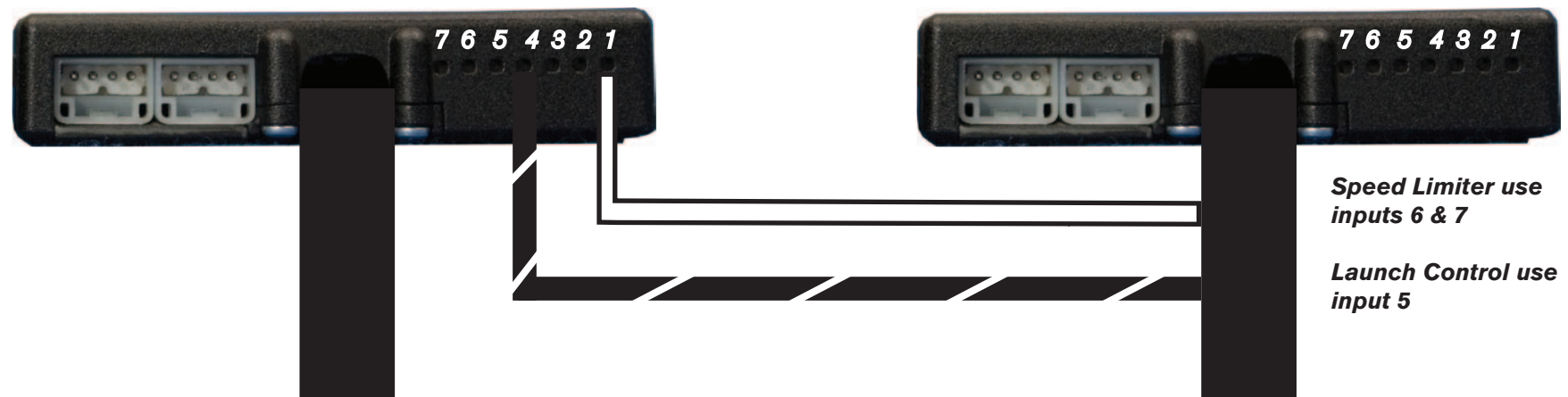
*This is a 2-pin connector pair. If you are not sure of this connector, follow the wires coming out of the right side engine cover.*



- 9 Plug the Ignition Module connectors in-line of the stock Crank Position Sensor connectors (Fig. F).
- 10 Reinstall the seat and right side mid fairing; and lower the fuel tank back into place and secure.

## PCV

## Ignition Module



### Connecting the Ignition Module to the PCV:

- The WHITE and the BLACK/WHITE wires from the Ignition Module are used ONLY if you want to use the Rev Xtend feature of the PCV. If you do NOT plan on using this feature, than just tape the wires out of the way.
- If you DO plan on using the Rev Xtend feature, than connect the WHITE wire from the Ignition Module to the #1 input position of the PCV. Connect the BLACK/WHITE wire to the #4 input position of the PCV. The BLACK/WHITE wire can also be connected to the #6 input position of the PCV, if necessary. If both inputs on the PCV are already occupied, you can splice the BLACK/WHITE wire to either wire currently occupying the #6 or #4 PCV inputs.

### Adding the Ignition Module to the PCV network:

- First download and install the latest version of the PCV Control Center Software (which is version 1.0.6.4.) from the PCV - Downloads page of [www.powercommander.com](http://www.powercommander.com).
- To use the Ignition Module you may need to update your firmware in the PCV. Make sure the PCV and Ignition Module are all updated to PCV firmware version 0.1.10.6 or newer. Go to View -> Device Information in the software to see the current versions. If you need to update the firmware, go to Power Commander Tools -> Update Firmware. The latest version of the PCV firmware and software can be found on the PCV - Downloads page of [www.powercommander.com](http://www.powercommander.com).
- Connect a USB cable to the PCV and another USB cable to the Ignition Module. The software will ask you to add the Ignition Module to the network. Click OK. Go to Power Commander Tools -> Manage Network and click on Sync Devices Utility. Follow the on screen instructions.