

# IGNITION MODULE

FOR USE WITH

**2015-2016 Yamaha R1**

**Installation Instructions**

**[POWER  
COMMANDER V]**

## **PARTS LIST**

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



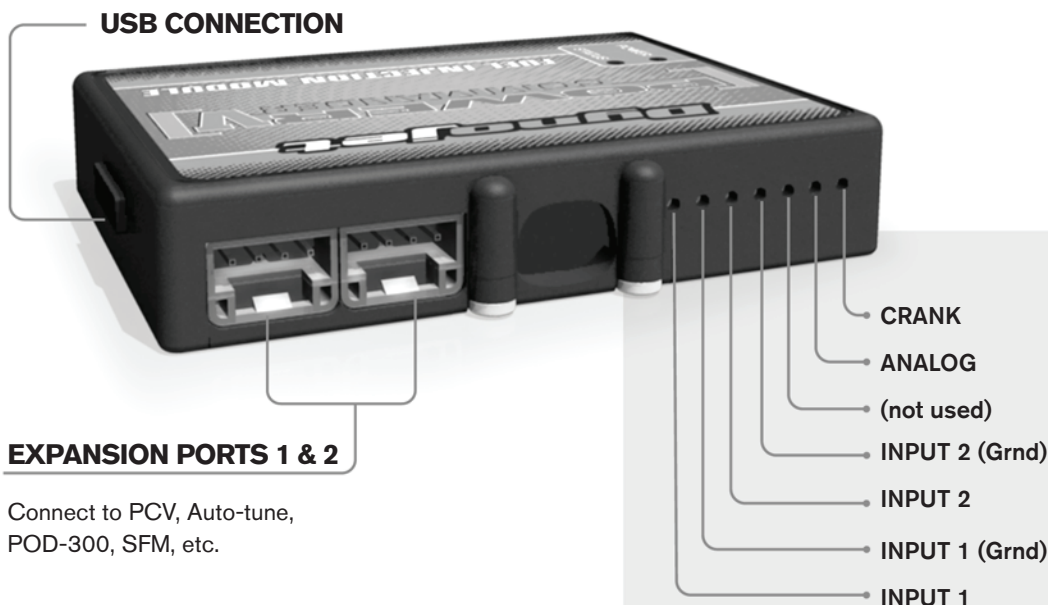
**THE VEHICLE'S IGNITION MUST BE TURNED OFF  
DURING THIS INSTALLATION!  
BEFORE THIS MODULE CAN BE USED THE  
POWER COMMANDER 5 MAY NEED TO BE UPDATED.  
(SEE INCLUDED INSTRUCTIONS.)**

**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)

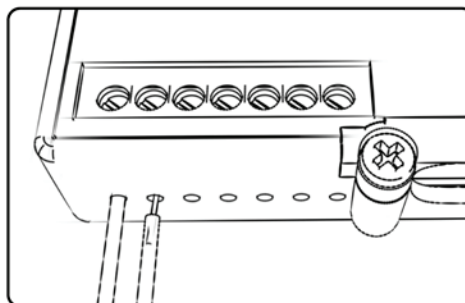
# IGNITION MODULE V INPUT ACCESSORY GUIDE



## Wire connections:

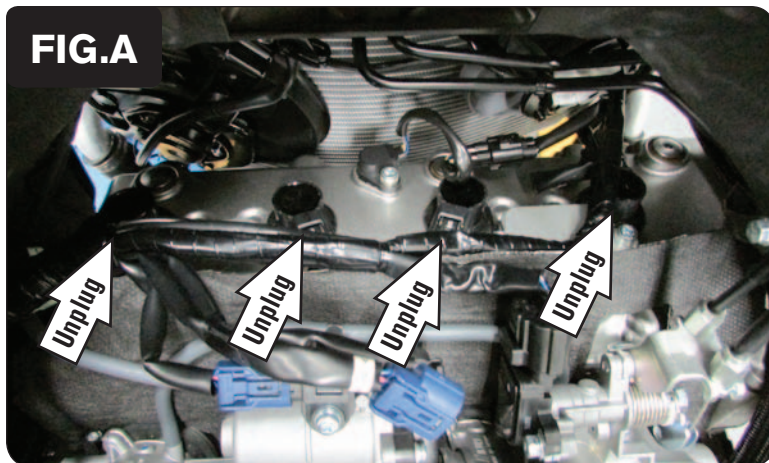
To input wires into the IM first remove the rubber plug on the backside of the unit and loosen the screw for the corresponding input. Using a 22-24 gauge wire strip about 10mm from its end. Push the wire into the hole of the IM until it stops and then tighten the screw. Make sure to reinstall the rubber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

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

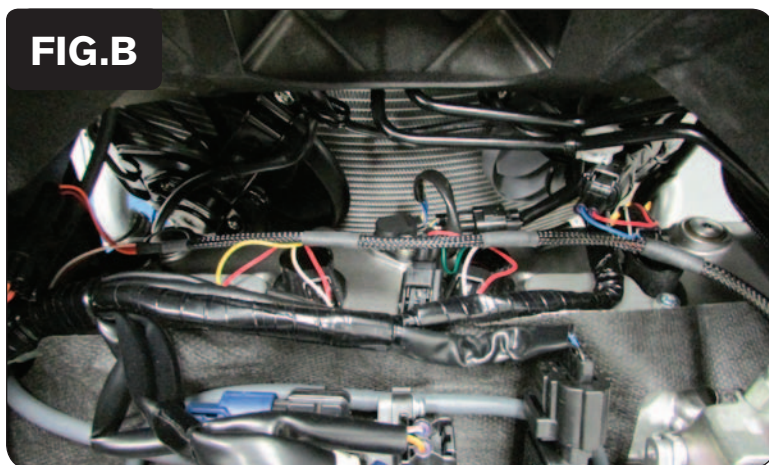


## ACCESSORY INPUTS

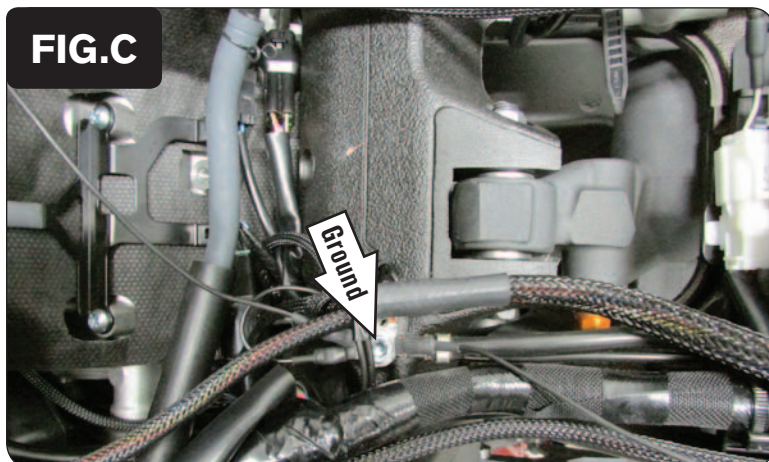
- Speed -** The Speed Limiter feature uses Switch Input #1 or #2. This feature gives the ability to activate a limiter based on vehicle speed. This is intended to be used as a pit lane speed limiter. You can use any OPEN / CLOSED type switch to activate this feature. The feature is configured to Switch 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.
- Ground -** These are constant digital grounds. The BLACK/WHITE wire from the SFM unit would go to either of these, if installed.
- Analog -** Not currently used - updates to follow
- Crank -** The WHITE wire from the SFM unit would go here, if installed.



- 1 Remove the main seat.
- 2 Remove the fuel tank and airbox.
- 3 Place the ignition module next to the PCV and route the harness towards the front of the bike going down the right side of the bike.  
*Make sure the harness does not interfere with the throttle linkage*
- 4 Unplug the stock wiring harness from each coil stick (Fig. A)

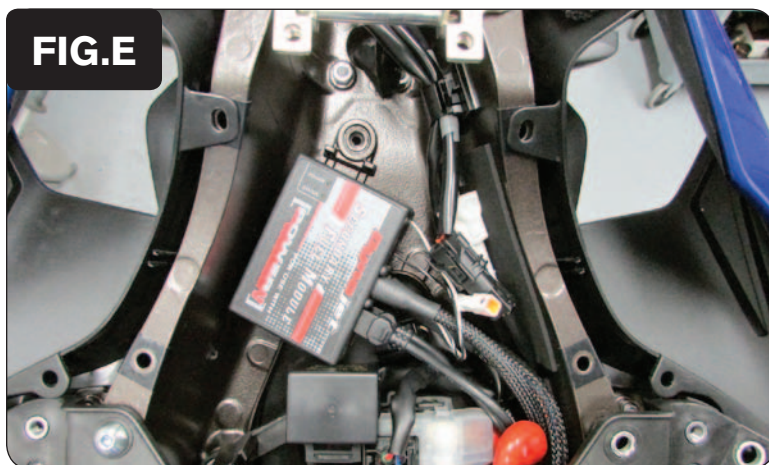
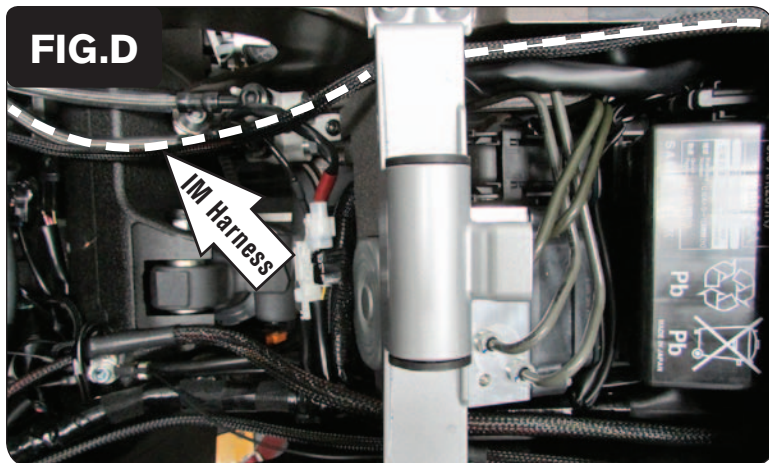


- 5 Plug the Ignition Module in-line of the stock wiring harness and each coil stick (Fig. B).



- 6 Attach the ground wire of the Ignition Module to the common ground location on the top of the engine case (Fig. C).  
*This is the same ground location as the PCV.*





- 7 Route the Ignition Module harness underneath the fuel tank bracket (Fig. D).

*You will need to remove the 2 bolts on the right side and loosen the 2 bolts on the left side of the bracket to get the harness underneath it.*

- 8 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 module.

*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.*

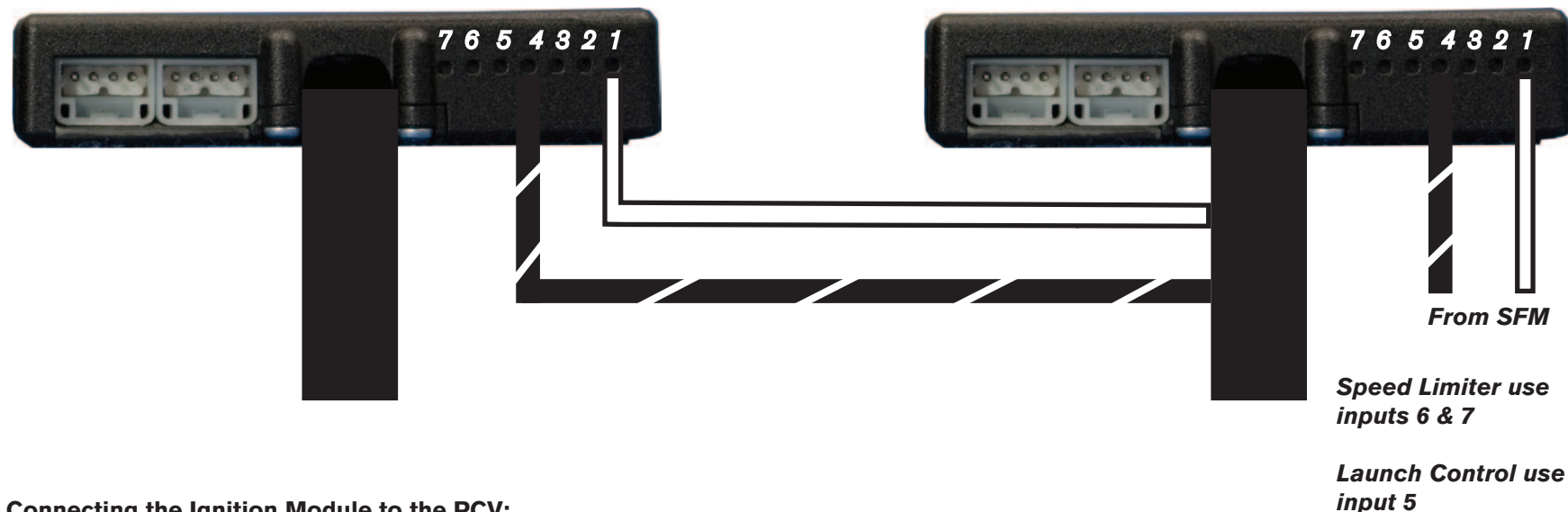
- 9 Install the Ignition Module next to the PCV. Connect the WHITE and BLACK/WHITE wires of the Ignition Module to the PCV module wire terminal strip, as described on Page 5. Use the supplied velcro to secure the unit in place. Make sure to clean both surfaces before attaching with the alcohol swab.

*Due to limited room on this motorcycle the installation is shown where the stock exhaust servo motor would normally be. When this is removed it allows ample room. You can use Dynojet part # ESRM-1 to eliminate the servo motor. If you are keeping the servo motor in place then there is room on the right side of the battery to install either the PCV or Ignition Module.*

- 10 Reinstall the airbox and fuel tank.

## PCV

## Ignition Module



### Connecting the Ignition Module to the PCV:

- The WHITE and the BLACK/WHITE wires from the Ignition Module MUST be connected to the PCV module.
- 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 #4 and #6 inputs are already occupied, you can splice the BLACK/WHITE wire to the wire that is currently occupying either of these inputs.

*To make it easier to insert the wires into the wire terminal strip you might first pierce through the foam seal with a pin or pointed instrument.*

- If you are also using the SFM (Secondary Fuel Module) then you will need to connect the WHITE and BLACK/WHITE wires from the SFM into the Ignition Module. Connect the WHITE wire from the SFM to the #1 input position of the Ignition Module. Connect the BLACK/WHITE wire to the #4 input position of the Ignition Module. The BLACK/WHITE wire can also be connected to the #6 input position of the Ignition Module, if necessary. If both #4 and #6 inputs are already occupied, you can splice the BLACK/WHITE wire to the wire that is currently occupying either of these 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 (and SFM if being used). Make sure the PCV, SFM, 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.