

# IGNITION MODULE

FOR USE WITH

**2006-2016 Yamaha R6**

**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
- 1 Posi-tap



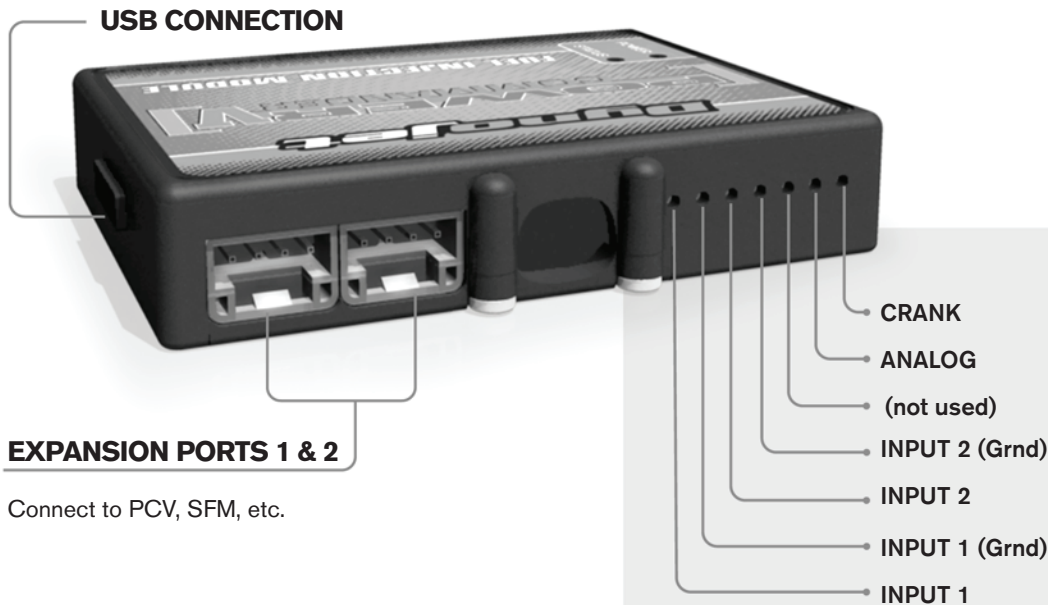
**THE VEHICLE'S IGNITION MUST BE TURNED OFF  
DURING THIS INSTALLATION!  
BEFORE THIS MODULE CAN BE USED THE  
POWER COMMANDER 5 MAY NEED TO BE UPDATED.  
(SEE INCLUDED INSTRUCTIONS.)**

**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



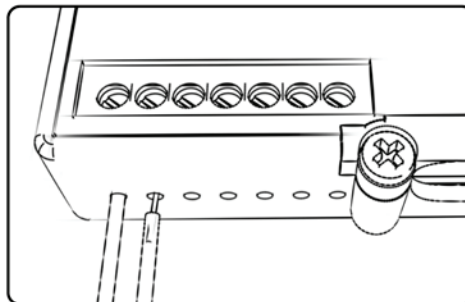
## EXPANSION PORTS 1 & 2

Connect to PCV, SFM, etc.

## 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

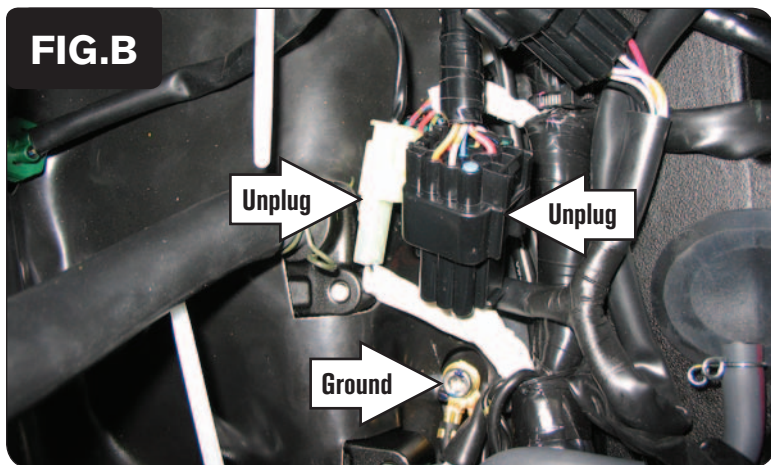
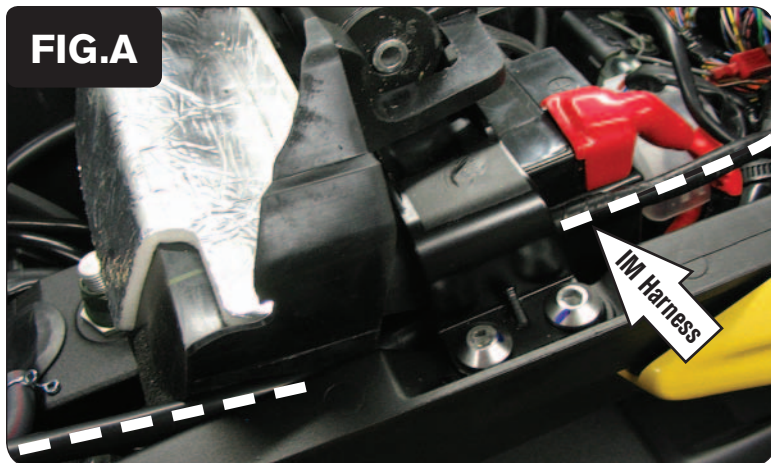
These are constant digital grounds. You can connect the BLACK/WHITE crank wire of the SFM (if installed) to either of these locations, if necessary.

### Analog-

Not currently used - updates to follow

### Crank-

Connect the WHITE crank wire from the SFM (if installed) to this input. See page 5 for more details.



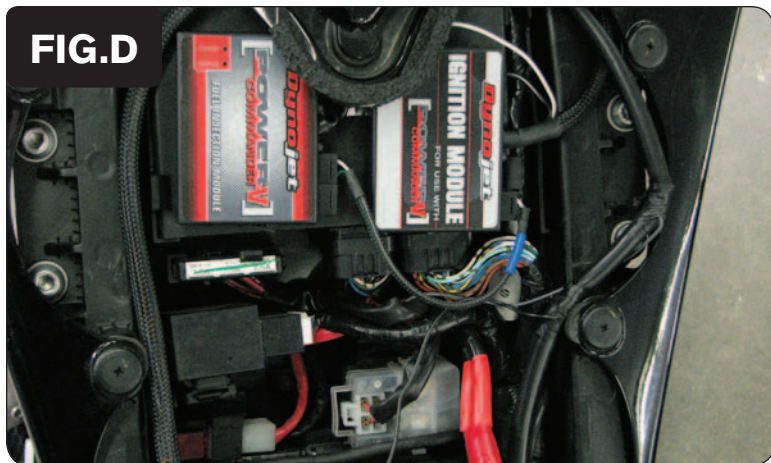
- 1 Remove the main seat.
- 2 Prop the front of the fuel tank up.
- 3 Place the Ignition Module next to the PCV and route the harness towards the front of the bike.
- 4 Route the harness underneath the fuel tank bracket and to the left hand side of the battery (Fig. A).

*These pictures are taken with the fuel tank removed but the fuel tank does NOT have to be removed to perform this installation.*

- 5 Unplug the stock 12-pin connector next to the crank case breather.
- 6 Unplug the WHITE 2-pin connector from the Crank Position Sensor.
- 7 Attach the ground of the Ignition Module with the small ring terminal to the stock common ground wire on the top of the engine (Fig. B).

*This is where the cable from the negative (-) battery post connects to.*

- 8 Plug the Ignition Module wiring harness in-line of the stock wiring harness (Fig. C).



- 9 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.*

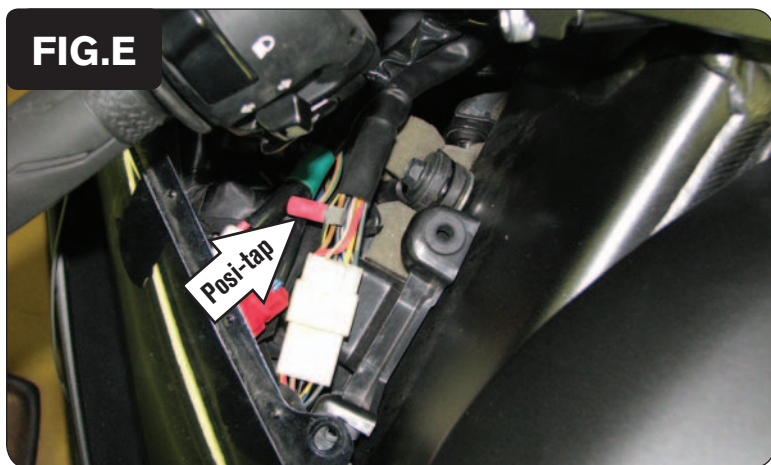
*Older Ignition Modules with a serial number beginning with 14 or less might also require a CAN termination plug to be installed in an empty port. Newer Ignition Modules with a serial number starting with 15 or higher do NOT require CAN termination plugs.*

- 10 Install the Ignition Module to the top of the ECU. Use the supplied Velcro to secure the unit in place (Fig. D).

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

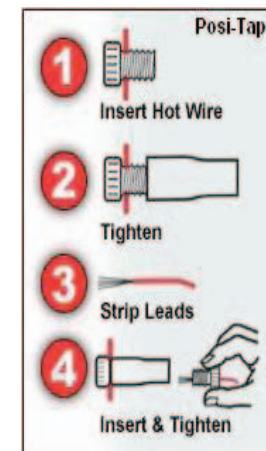
*The harness is intentionally left long so the unit can be installed in the tail section if desired.*

- 11 Reinstall the fuel tank and the seat.



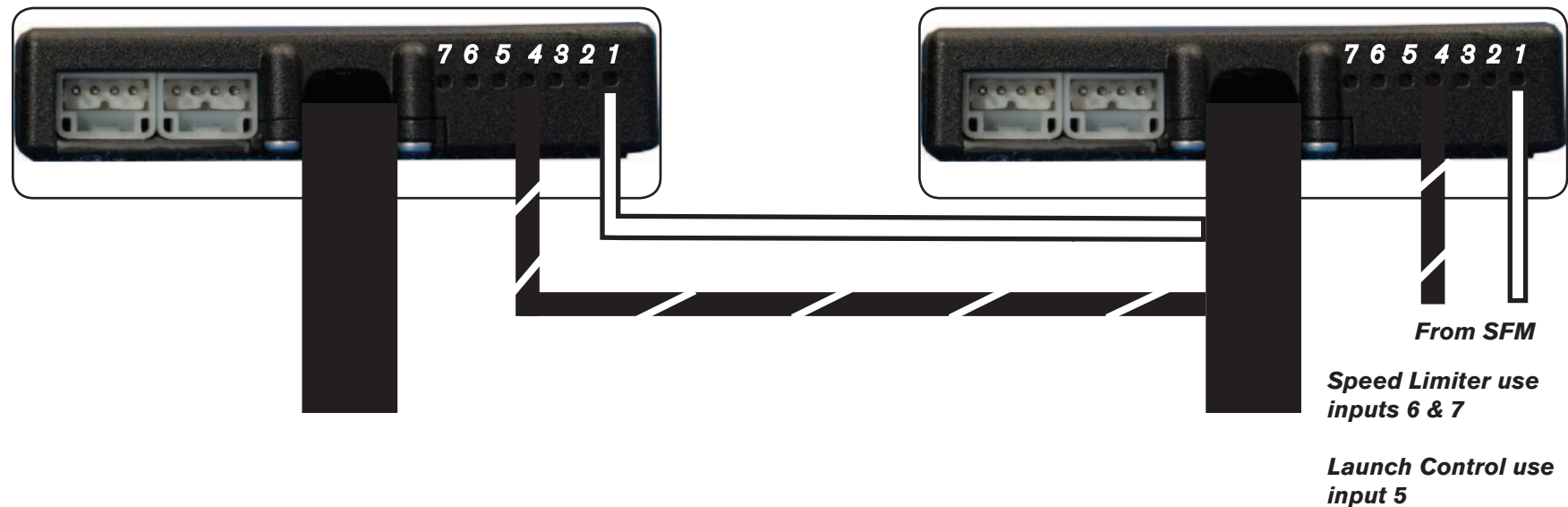
#### Connecting to the clutch wire for launch control (optional):

Remove the inner left hand fairing panel. Locate the sub-connector for the left handlebar switch assembly. Connect a 22-24 gauge wire to wire input #5 of the Ignition Module and the other end to the stock BLACK/YELLOW wire of the left handlebar switch assembly using the supplied Posi-tap (Fig. E).



**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.
- If you are also using the SFM (Secondary Fuel Module), than 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.

#### **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.