

IGNITION MODULE

FOR USE WITH

2008-2016 Yamaha Raider

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



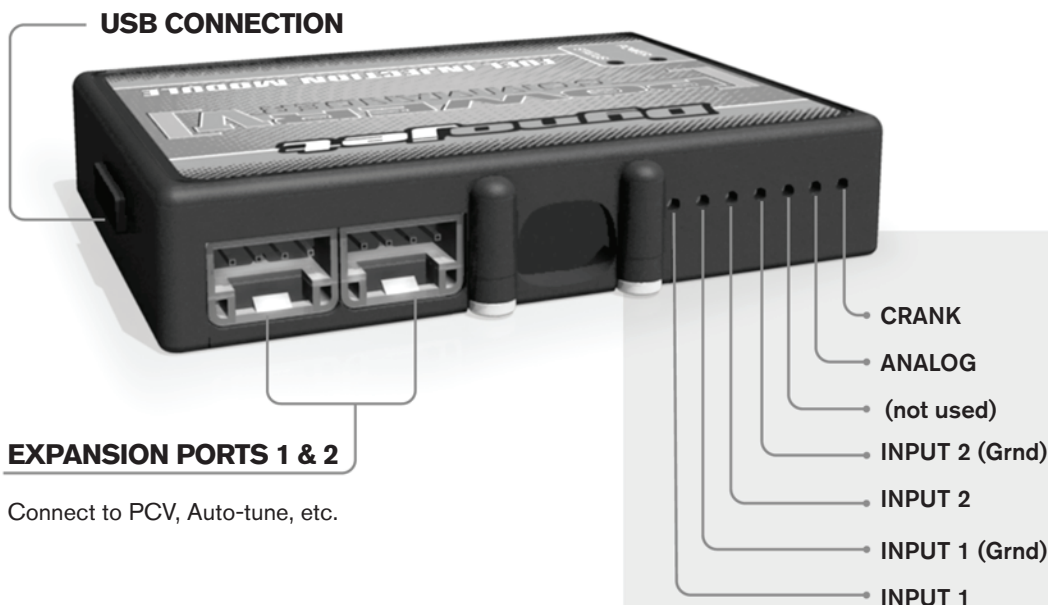
**THE VEHICLE'S IGNITION MUST BE TURNED OFF
DURING THIS INSTALLATION!
BEFORE THIS MODULE CAN BE USED THE
POWER COMMANDER 5 MAY NEED TO BE UPDATED.
(SEE INCLUDED INSTRUCTIONS.)**

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

Dynojet

2191 Mendenhall Drive North Las Vegas, NV 89081 (800) 992-4993 www.powercommander.com

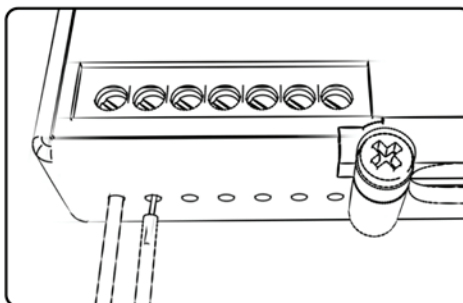
IGNITION MODULE V INPUT ACCESSORY GUIDE



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.

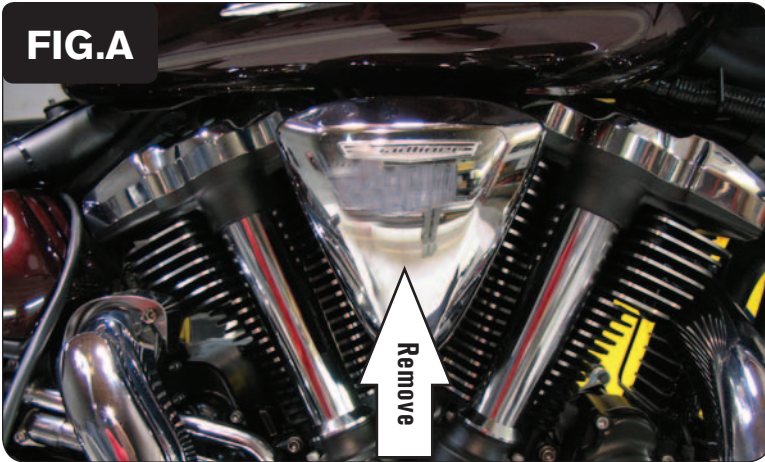
Analog-

Not currently used - updates to follow

Crank-

Not used in this application

FIG.A



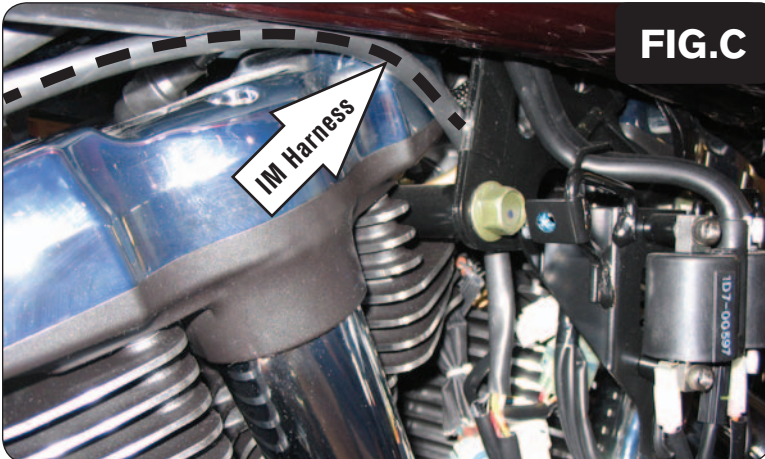
- 1 Remove the seat.
- 2 Remove the right and left hand cosmetic engine covers (Fig. A).
There is a bolt at the front and rear of this cover.

FIG.B

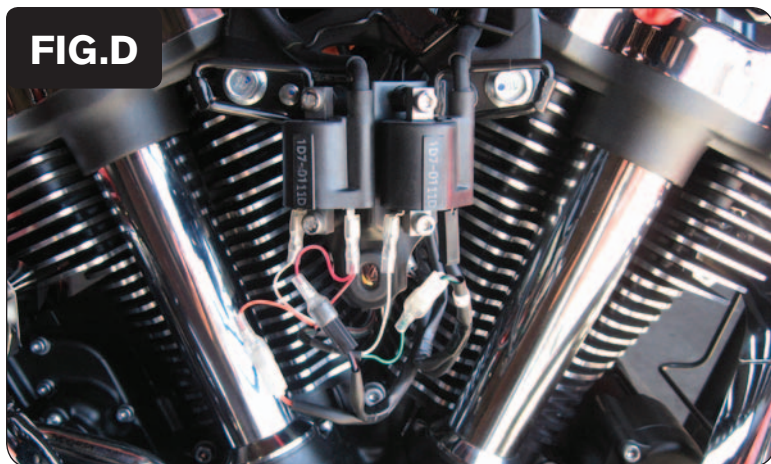


- 3 Lay the Ignition Module in the area of the ECU under the seat.
- 4 Route the Ignition Module harness underneath the seat latch plate and under the right hand side of the frame (Fig. B).

FIG.C



- 5 Route the Ignition Module harness above the cylinder head following the frame. Route the Ignition Module harness behind the engine mount bracket (Fig. C).



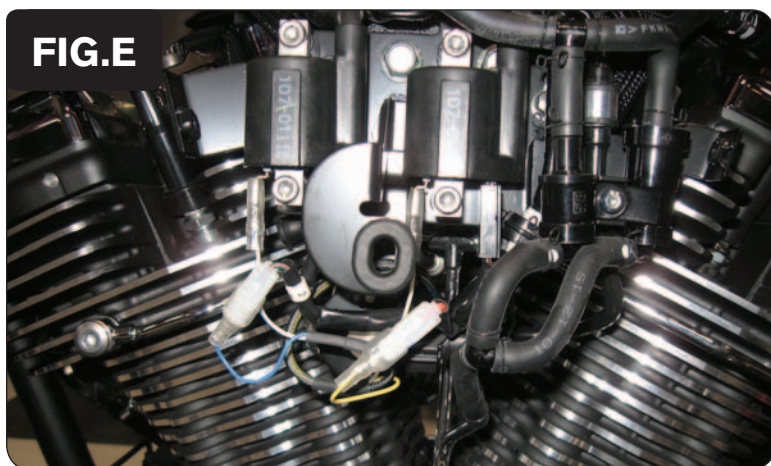
- 6 Connect the Ignition Module in-line of the stock wiring harness and ignition coils (Fig. D).

IM ORANGE to stock ORANGE

IM RED to stock BLACK/RED

IM GREEN to stock GREEN/RED

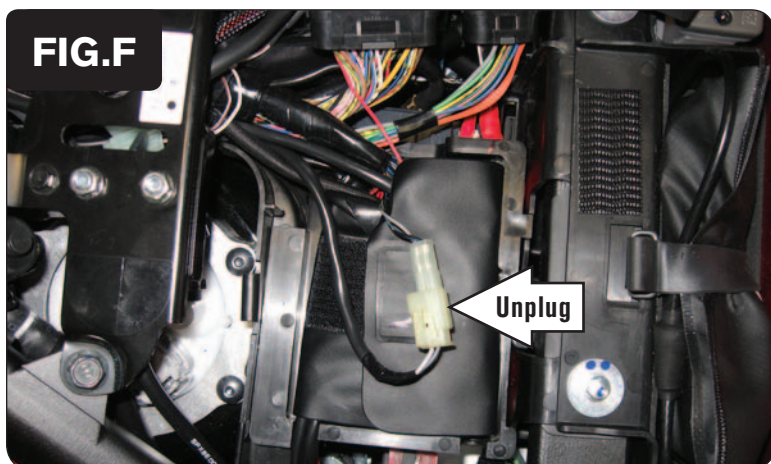
- 7 Route the other Ignition Module wires to the left side of the motorcycle.



- 8 Connect the Ignition Module in-line of the stock wiring harness and ignition coils (Fig. E).

IM YELLOW to stock ORANGE

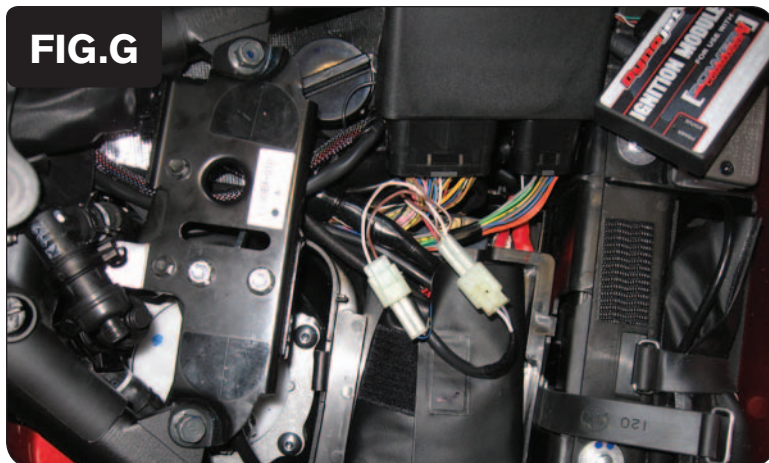
IM BLUE to stock GREEN/RED



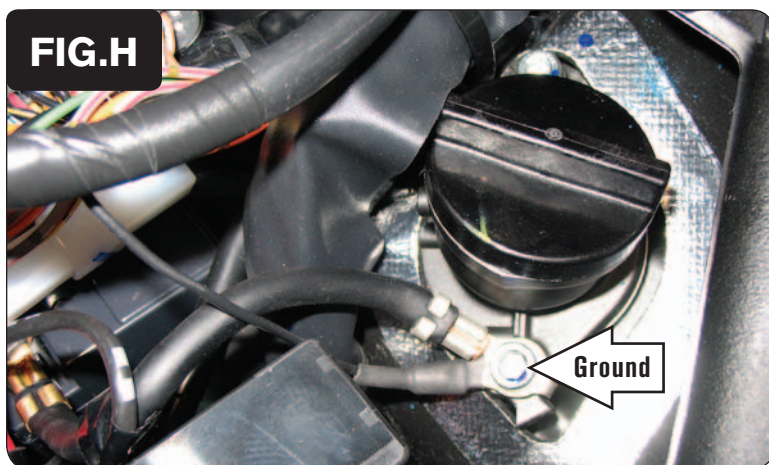
- 9 Remove the strap from the ECU and move the ECU out of the way to access the wires underneath.

- 10 Locate and unplug the CLEAR 2-pin connector pair for the bike's Crank Position Sensor.

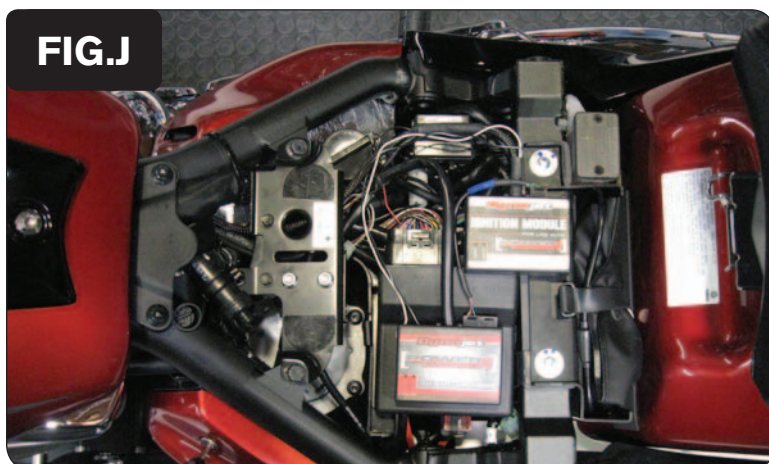
This connector has a LIGHT GREY and a DARK GREY wire.



- 11 Plug the Ignition Module in-line of the stock Crank Position Sensor connectors (Fig. G).
- 12 Put the ECU back into place.



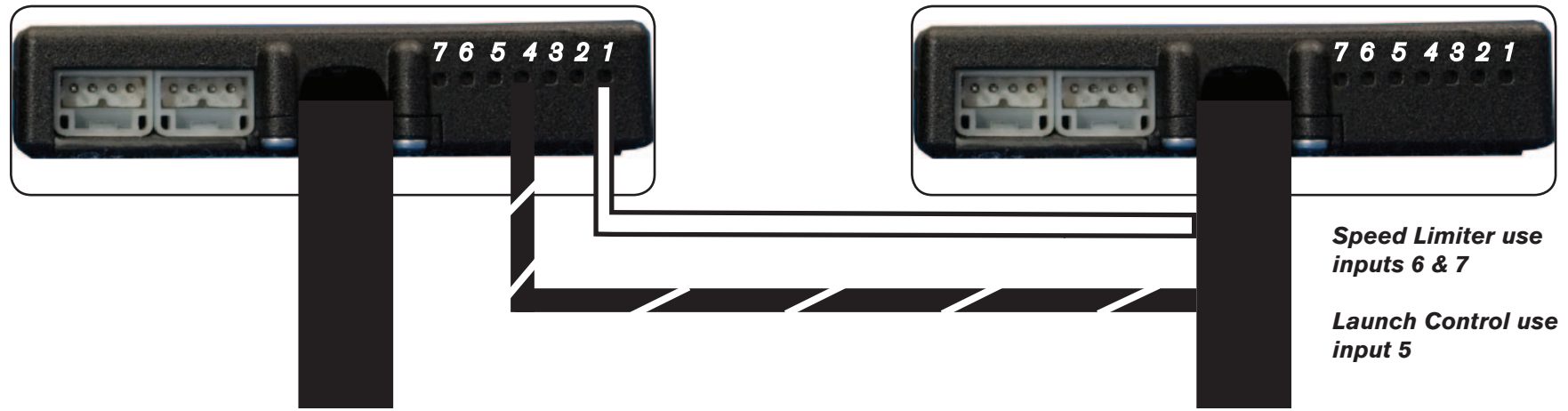
- 13 Locate the stock ground. Follow the negative battery cable to the frame. Remove the allen bolt that secures the ground cable to the frame. Reinstall the allen bolt through the stock ground cable, then through the ground wire for the Ignition Module and PCV into the frame (Fig. H).



- 14 Install the Ignition Module next to the PCV using the supplied Velcro (Fig. J).
Clean surfaces with the supplied alcohol swab before attaching the Velcro.
- 15 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.
- 16 Reinstall the seat and side covers.

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.
- To use the Ignition Module you may need to update your firmware in the PCV. Make sure the PCV and Ignition Module are both 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.
- 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.