# IGNITION MODULE

FOR USE WITH

2005-2006 Kawasaki ZX6R/RR

Installation Instructions



#### **PARTS LIST**

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



DURING THIS INSTALLATION!

BEFORE THIS MODULE CAN BE USED THE

POWER COMMANDER 5 MAY NEED TO BE UPDATED.

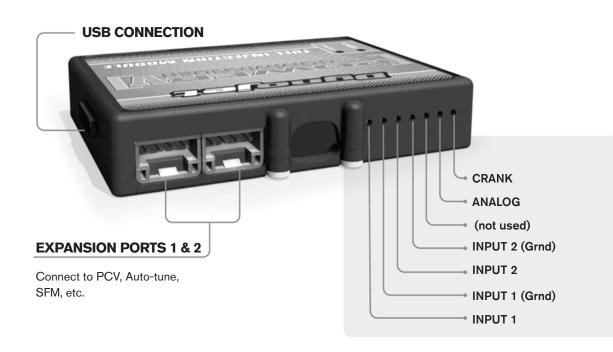
(SEE INCLUDED INSTRUCTIONS.)

### PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION



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

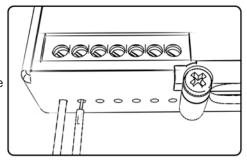
## IGNITION MODULE V INPUT ACCESSORY GUIDE



#### Wire connections:

To input wires into the 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 is 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**

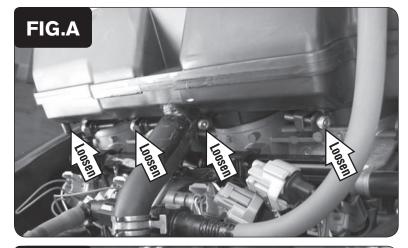
The Speed Limiter feature uses Switch Input #1 or #2. This feature gives the ability to activate a limiter based on vehicle speed. This is intended to be used as a pit lane speed limiter. You can use any OPEN / CLOSED type switch to activate this feature. The feature is configured to Switch Input #1 by default.

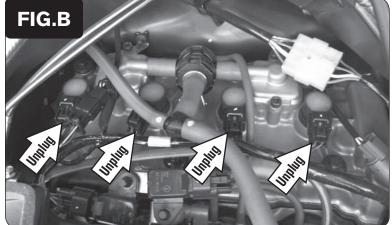
Launch - The Launch Control feature also uses Switch Input #1 or #2. This feature is intended to be used as a two stage rev-limiter. You can set a target RPM to limit the bike to when the clutch lever is activated. Once the clutch lever is released full RPM can be achieved. This requires a wire be connected 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.

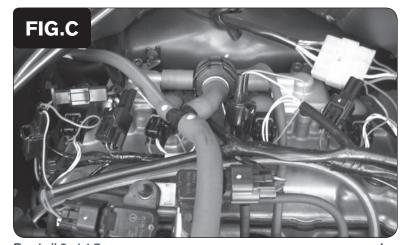
Ground - These are constant digital grounds. You can connect the BLACK/WHITE crank wire of the SFM (if installed) to either of these locations if necessary.

Analog - Not currently used - updates to follow

Crank - Connect the WHITE crank wire from the SFM (if installed) to this input. This is only needed if you are going to use the Rev Xtend feature.







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- 2 Loosen and prop the front of the fuel tank.
- 3 Loosen the 4 allen screws that hold the airbox to the throttle bodies (Fig. A).
- 4 Remove the bolt at the front of the airbox.

The airbox does NOT need to be completely removed from the bike, but it will needed to be lifted far enough to access the coil sticks on the top of the engine.

5 Place the Ignition Module in the tail section next to the PCV module and route the harness forward following inside the left side frame rail.

6 Unplug the stock wiring harness from each coil stick (Fig. B).

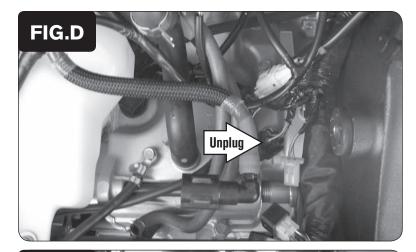
Plug the Ignition Module harness in-line of the stock wiring harness and the coil sticks (Fig. C).

Plug the pair of Ignition Module leads with ORANGE colored wires in-line of the cylinder #1 (left most) coil stick.

Plug the pair of Ignition Module leads with YELLOW colored wires in-line of the cylinder #2 coil stick.

Plug the pair of Ignition Module leads with GREEN colored wires in-line of the cylinder #3 coil stick.

Plug the pair of Ignition Module leads with BLUE colored wires in-line of the cylinder #4 (right most) coil stick.



8 Locate and unplug the stock Crank Position Sensor connectors (Fig. D).

This is a BLACK 4-pin connector pair, located under the fuel tank and above the gear box. You can trace the harness from this connector to the right side engine cover.

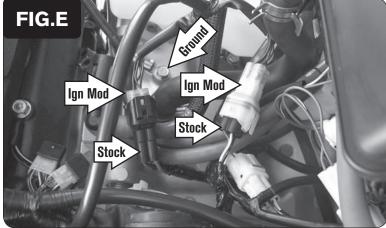


FIG.F

- 9 Plug the pair of connectors of the Ignition Module wiring harness in-line of the stock Crank Position Sensor connectors.
- Secure the ground wire of the Ignition Module wiring harness with the small ring terminal to the common ground location at the top of the engine case (Fig. E).
- 11 Use the supplied CAN link cable to link one of the expansion ports of the Ignition Module to an available expansion port on 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

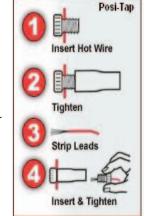
higher do NOT require CAN termination plugs.

12 Using the supplied Velcro, secure the Ignition Module to the PCV module and secure both in the tail section (Fig. F).

Clean the surfaces with the supplied alcohol swab prior to applying the Velcro.

#### **Optional Input:**

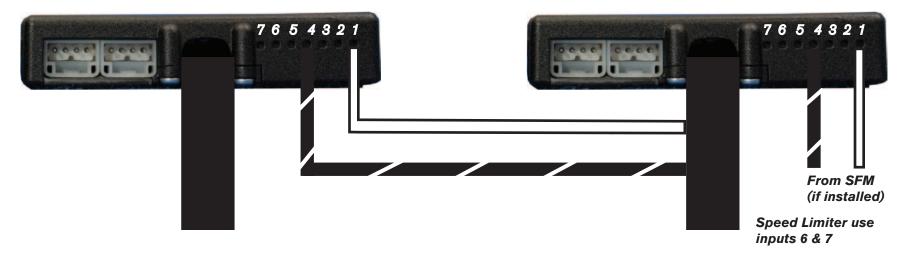
**Launch Control -** Use the BLACK wire on the clutch switch. You can use the supplied Posi-tap to tap into it.



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PCV Ignition Module



Connecting the Ignition Module to the PCV:

Launch Control use input 5

- 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.
- 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.
- 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.