### 2004-2005 Kawasaki ZX-12R

Installation Instructions

### **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.)

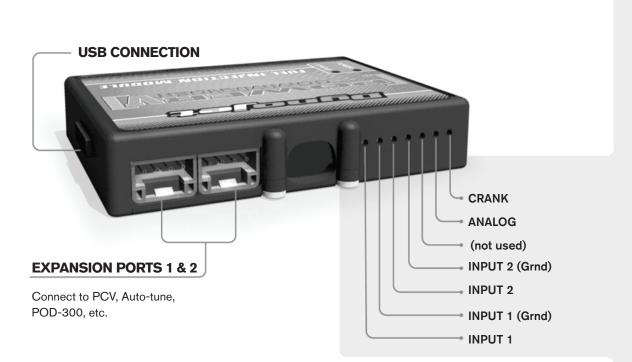
USE WITH

# PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

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FOR

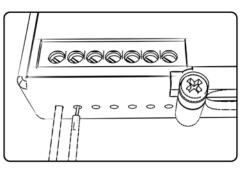
### IGNITION MODULE V INPUT ACCESSORY GUIDE



#### 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.

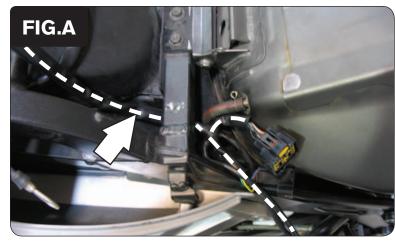


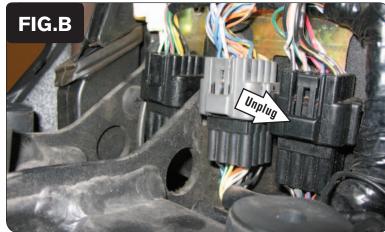
## ACCESSORY INPUTS

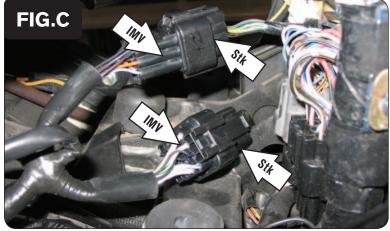
**Speed -** The Speed Limiter feature uses Switch Input #1 or #2. This feature gives the ability to activate a limiter based on vehicle speed. This is intended to be used as a pit lane speed limiter. You can use any OPEN / CLOSED type switch to activate this feature. The feature is configured to Switch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







- 1 Remove the seats.
- 2 Remove the fuel tank shroud.
- 3 Prop the front of the fuel tank up.
- 4 Remove the battery cover.
- 5 Place the Ignition Module next to the PCV and route the harness towards the front of the bike going down the right hand side of the frame. Route the harness underneath the subframe crossover (Fig. A).

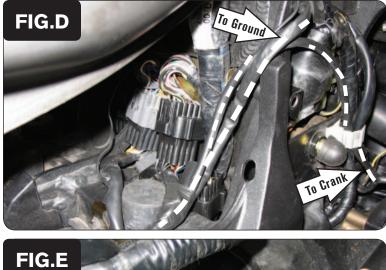
This is a tight fit but the connectors will go through, assuming there are not any other accessory wires routed in this area.

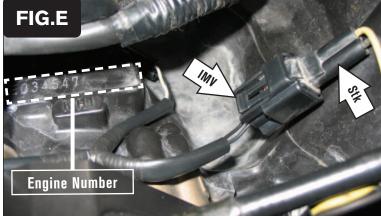
6 Unplug the stock sub-harness connector for the bikes Ignition Coils (Fig. B).

Make sure to disconnect the 16-pin BLACK connector towards the right hand side of the bike. This connector is located right next to the connector that the PCV is plugged into.

To help unplug the stock connector push down on the assembly to release it from the bracket.

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







- 8 Slide one set of connectors back onto the stock bracket. Tuck the other set of connectors below the other set.
- 9 Route the harness as shown in Figure D.

#### 10 Unplug the Crank Position Sensor connector.

This connector is located on the right hand side of the engine near the engine number. You can follow the wires coming out of the right hand engine cover. These wires are YELLOW and BLACK.

- 11 Plug the connectors from the Ignition Module wiring harness in-line of the stock CPS connectors (Fig. E).
- 12 Attach the ground wire from the Ignition Module to the negative side of the battery (Fig. F).
- 13 Secure the Ignition Module in the tail section using the supplied Velcro.

Make sure to clean the surface with the alcohol swab before attaching.

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

It doesn't matter which ports you use.

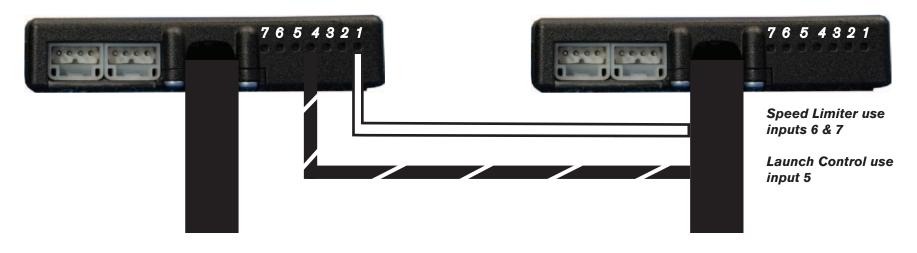
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Older Ignition Modules with a serial number beginning with 14 or less might also require a CAN termination plug to be installed in an empty port. Newer Ignition Modules with a serial number starting with 15 or higher do NOT require CAN termination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

Lower the fuel tank back into place and reinstall seats. 2004-2005 Kawasaki ZX-12R - Ignition Module - 4

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#### **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 (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.