

POWER COMMANDER 6

Installation Guide for: PC6-22046-PTI

Model Coverage: 2006-2014 Yamaha Raptor 700

YAMAHA
POWER COMMANDER 6

PARTS LIST

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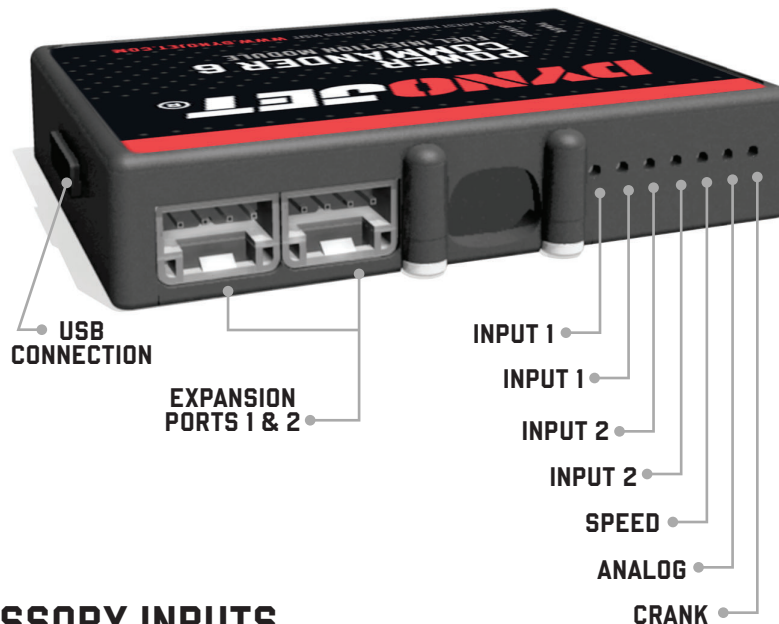
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|----------------------|--------------------------|
| 1 POWER COMMANDER 6 | 2 POWER COMMANDER DECALS |
| 1 INSTALLATION GUIDE | 2 VELCRO STRIPS |
| 1 USB CABLE | 1 ALCOHOL SWAB |
| 2 DYNOJET DECALS | |

**PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION.
THE IGNITION MUST BE TURNED OFF BEFORE INSTALLATION.**

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IPC6-22046-PTI.01

INPUT ACCESSORY GUIDE



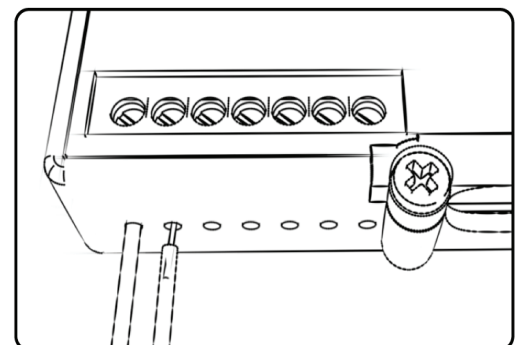
OPTIONAL ACCESSORY INPUTS

- Map** (Input 1 or 2) The PC6 has the ability to hold 2 different base maps. You can switch on the fly between these two base maps when you hook up a switch to the MAP inputs. You can use any open/close type switch. The polarity of the wires is not important.
- Shifter** (Input 1 or 2) Used for clutch-less full throttle upshifts. Insert the wires from the Dynojet quick shifter into either Input 1 or Input 2. The polarity of the wires is not important. Set to Input 2 by default.
- Speed** If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent kill times when using a quick shifter.
- Analog** This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the Power Core software.
- Launch** You can connect a wire to either Input 1 or Input 2 and then the other end to a switch. This switch when engaged (continuity) will only allow the RPM to be raised to a certain limit (set in the software). When released, you will have full RPM.

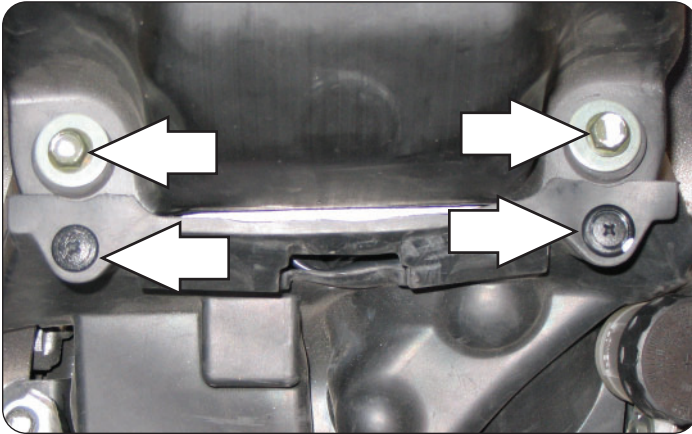
WIRE CONNECTIONS

To input wires into the PC6 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 PC6 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.

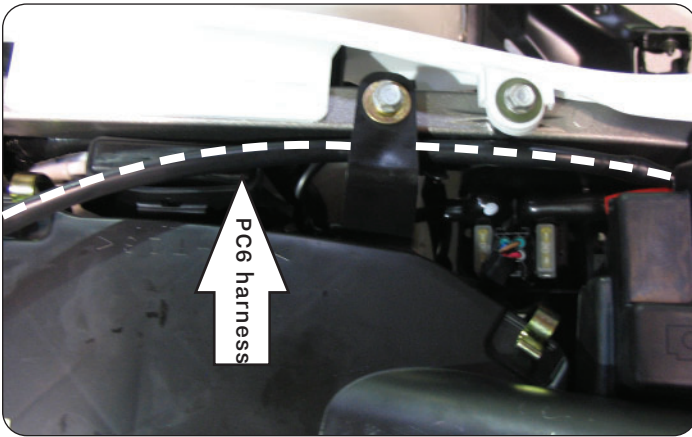


INSTALLING THE POWER COMMANDER 6



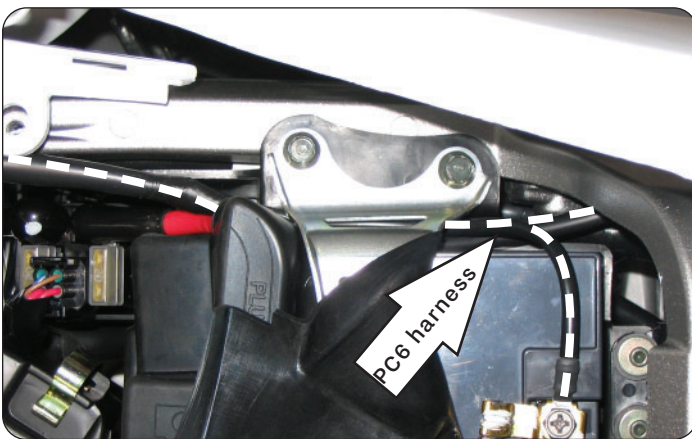
- 1 Remove seat.
- 2 Remove the fuel tank cover and the front shroud over the radiator.
- 3 Remove the 4 fuel tank mounting bolts and 2 push pins (this image shows the rear 2 mounting bolts and the two push pins).

The fuel tank needs to be raised up to access the throttle body. You do NOT have to disconnect the wiring harness or the fuel line from the fuel tank.



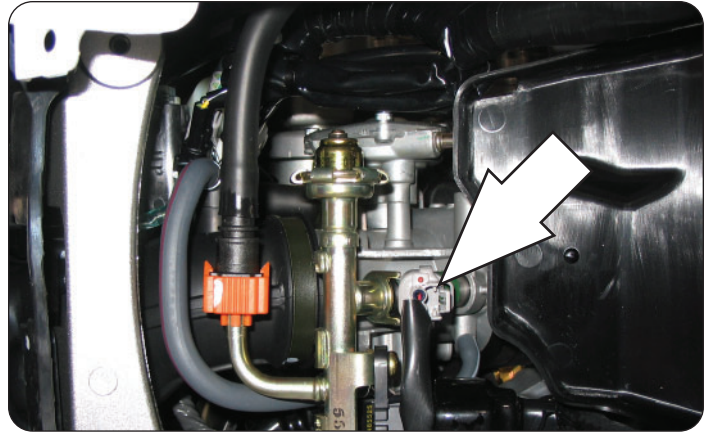
- 4 Route the PC6 wiring harness from the rear of the quad to the throttle body going along the left hand side of the frame.

Route the harness behind the air box mounting tab.

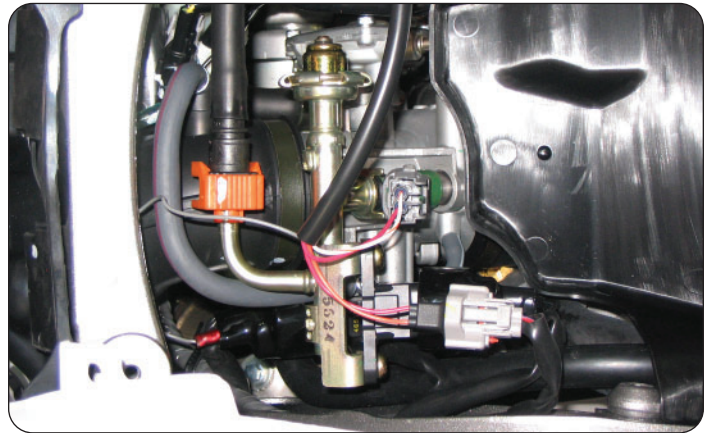


- 5 Route the PC6 wiring harness between the battery and the battery bracket. Continue routing the PC6 harness underneath the frame and go to the throttle body.
- 6 Attach the ground wire of the PC6 to the negative side of the battery

- 7 Unplug the stock wiring harness from the fuel injector.



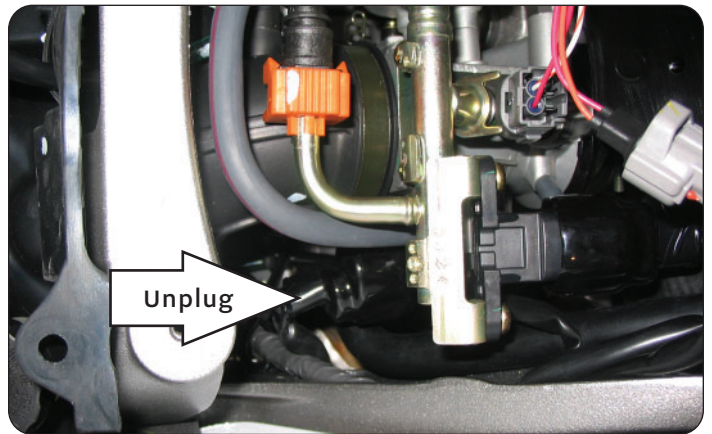
- 8 Plug the PC6 wiring harness in-line of the fuel injector and stock wiring harness.



- 9 Unplug the Throttle Position Sensor connector from the right hand side of the throttle body.

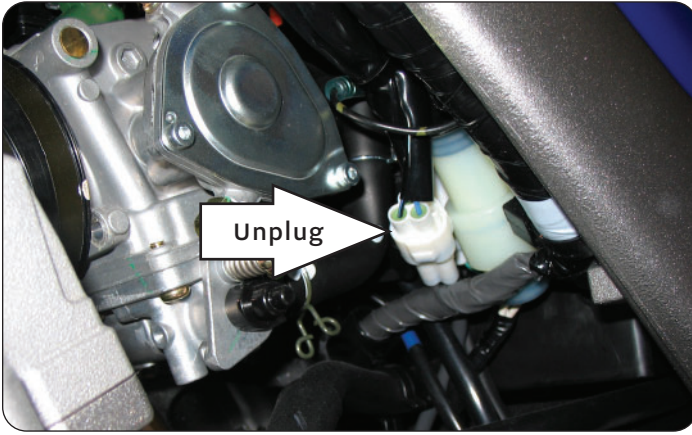
This connector is covered with a BLACK rubber boot.

There is the same style electrical connector attached to a sensor secured to the fuel rail. Do NOT connect the PCV in-line with the sensor on the fuel rail.



- 10 Connect the PC6 wiring harness in-line of the stock TPS and wiring harness.

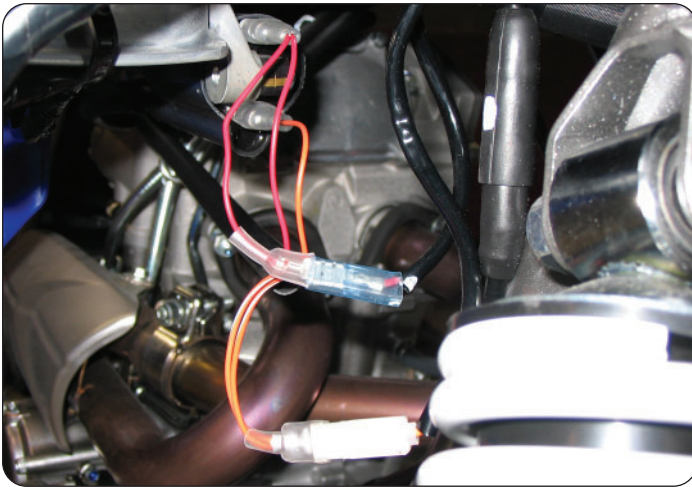




- 11 Locate the crank pickup coil connector. This connector is located on the left hand side of the ATV near the throttle body.
- 12 Unplug the crank connector.



- 13 Plug the connectors from the PC6 in-line of the stock wiring harness and crank connector.



- 14 Locate the ignition coil on the right hand side. Plug the PC6 in-line of the stock wiring harness and coil.
Plug the RED/WHITE colored wires of the PC6 harness in-line of the stock RED/BLACK wire and the coil.

Plug the GREEN colored wires of the PC6 harness in-line of the stock ORANGE wire and the coil.

- 15 Mount the PC6 into the tail section using the supplied Velcro.

Use the supplied alcohol swab to clean both surfaces before applying the Velcro.

- 16 Mount the fuel tank back into place.
- 17 Make sure the wiring harness is routed in a manner that it will not get damaged by any hot or moving parts.
- 18 Reassemble the ATV.

Download the latest map files from our web site at dynojet.com/tunes.



Pressure Values

The pressure values shown in the PC5 Pressure table are absolute pressure.

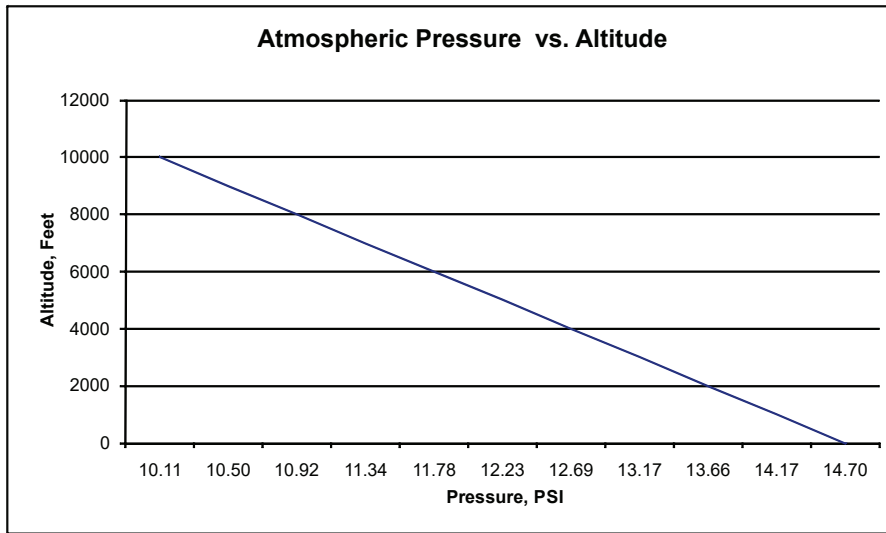
Most boost gauges display relative pressure. Relative pressure is the pressure in the manifold minus atmospheric pressure. A relative pressure gauge will read zero when powered up, but with the engine not running.

Absolute pressure is the total pressure acting on the pressure sensor. The total pressure is atmospheric pressure and the vacuum generated by the engine when the turbo compressor is not generating positive pressure, or atmospheric pressure plus the pressure generated by the compressor. An absolute pressure sensor will display higher values than a relative sensor.

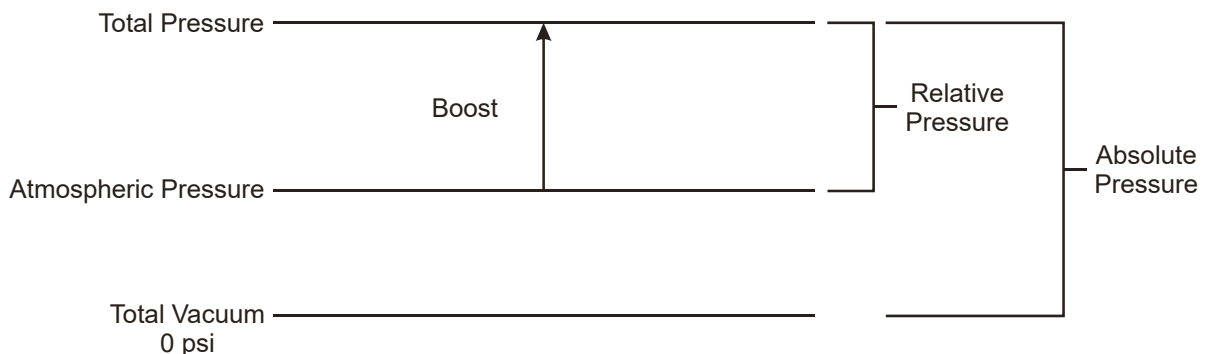
If you know the atmospheric pressure at the present time, relative pressure can be calculated by subtracting atmospheric pressure from the absolute pressure reading.


The advantage to using absolute pressure is that it compensates for changes in atmospheric pressure that occur due to changes in altitude or weather.

Below is a chart showing the approximate change in absolute atmospheric pressure for changes in altitude.



Altitude (feet)	Pressure (psi)
10000	10.11
9000	10.50
8000	10.92
7000	11.34
6000	11.78
5000	12.23
4000	12.69
3000	13.17
2000	13.66
1000	14.17
0	14.70





TRUTH IN PERFORMANCE

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