POWER COMMANDER 6

Installation Guide for: PC6-19052

Model Coverage: 2019-2023 Polaris 850 Patriot

Snowmobiles

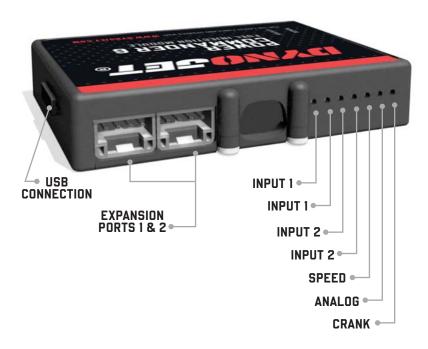
PARTS LIST

- 1 POWER COMMANDER 6
- 1 INSTALLATION GUIDE
- 1 USB CABLE
- 2 DYNOJET DECALS

- 2 POWER COMMANDER DECALS
- 2 VELCRO STRIPS
- 1 ALCOHOL SWAB

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

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.

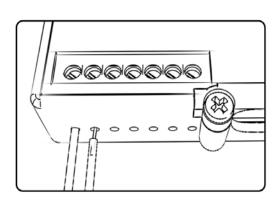
Analog This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the Power Core software.

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



- Remove both side panels.
- Remove the hood.



- 3 Locate the ECU.
- Reaching under the intake Plenum, unplug the rear 34-pin ECU connector from the ECU.
- Attach the connectors from the PC6 harness to the 5 ECU and the factory connector.



- Using the supplied velcro, secure the PC6 to the oil 6 tank.
 - Make sure to clean both surfaces with the alcohol swab before attaching.

- 7 Attach the ground wire from the PC6 harness to the common ground location.
- 8 Using the included zip ties, secure the PC6 harness away from hot or moving parts.
- 9 Reinstall the hood and side panels.

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



EFI TUNING WITH THE POWER COMMANDER

The Power Commander makes fueling changes off of the numbers in the map stored in the Power Commander. The snowmobile Power Commanders are shipped with a Zero Map. With a Zero Map, the snowmobile will run the stock fueling programmed in the ECU. When a map is loaded into the Power Commander, the snowmobile will be fueled according to the numbers in the map. The Power Commander does not make changes to the ECU programming.

The numbers in the Power Commander map add or subtract a percentage of the fuel the ECU is supplying for a particular load condition. For example, if the Power Commander map shows a 10 in a given cell, the Power Commander increases the amount of fuel the ECU is supplying by 10%. If the Power Commander map shows a -10 in a given cell, the Power Commander reduces the amount of fuel the ECU is supplying by 10%.

When tuning, always start with a setting where the motor runs rich. Slowly trim fuel out to find the desired exhaust gas temperature (EGT) or air-to-fuel ratio (A/F).

The Power Commander gives you the freedom to subtract up to 99% and add up to 250% of the fuel the ECU is supplying for a particular condition. When adding fuel with the Power Commander, the injector duty cycle may reach 100% (always open) before the Power Commander value reaches 100%. For example, if the ECU is running the injectors at 67% duty cycle (injectors open 67% of the time) then adding 50% fuel with the Power Commander will max out the injectors. In this case, the amount of fuel that can be added will be limited by the injectors.

FUEL SUBTRACTION

The Power Commander gives you the ability to trim fuel out of the map to correct rich conditions.

Caution: Engine failure can result from running the engine in a lean state.

