# POWER COMMANDER V

2021 Yamaha MT-09 Installation Guide

## **PARTS LIST**

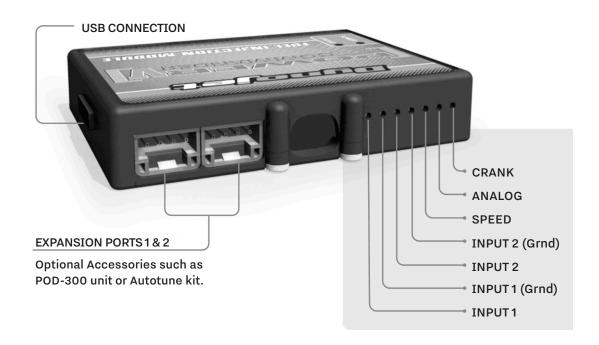
- 1 POWER COMMANDER V
- 1 INSTALLATION GUIDE
- 1 USB CABLE
- 2 DYNOJET DECALS

- 2 POWER COMMANDER DECALS
- 3 VELCRO STRIPS
- 1 ALCOHOL SWAB
- 1 POSI-TAP

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



### INPUT ACCESSORY GUIDE



#### **ACCESSORY INPUTS**

Map (Input 1 or 2) The PCV 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. When using the Autotune kit, one position will hold a base map and the other position will let you activate the learning mode. When the switch is "CLOSED" Autotune will be activated.

Shifter (Input 1 or 2) These inputs are for use with the Dynojet quick shifter. Insert the wires from the Dynojet quick shifter into the SHIFTER inputs. The polarity of the wires is not important.

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 Power Core 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.

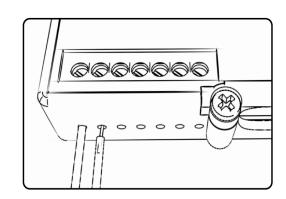
Do NOT connect anything to this port unless instructed to do so by Dynojet. It is used to transfer crank trigger data from one module to another.

#### **WIRE CONNECTIONS**

Crank

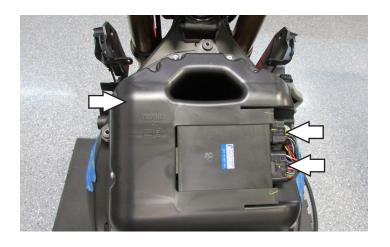
To input wires into the PCV first remove the rubber plug on the backside of the unit and loosen the screw for the corresponding input. Using a 22-24 gauge wire, strip about 10mm from its end. Push the wire into the hole of the PCV until is stops and then tighten the screw. Make sure to reinstall the rubber plug.

NOTE: If you tin the wires with solder it will make inserting them easier.



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## INSTALLING THE POWER COMMANDER V



- 1 Remove the seat.
- 2 Remove the fuel tank.
- 3 Unplug the ECM.
- 4 Remove the air box.



- Lay the PCV in tail section. Route the PCV harness down the left side of the frame going towards the throttle bodies.
- Attach the ground wire of the PCV to the negative (-) side of the battery.



- 7 Locate and unplug the stock Crank Position Sensor connectors.
  - This connection is behind the throttle bodies on the right side of the frame.



8 Plug the pair of PCV connectors with BROWN colored wires in-line of the stock Crank Position Sensor connectors.

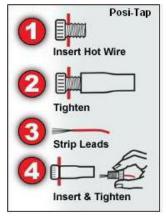


9 Unplug the stock Throttle Position Sensor (TPS) connector.

This is a BLACK 4-pin connector on the right side of the throttle bodies.



- 10 Use the supplied Positap to attach the PCV's
  GREY wire to the stock
  WHITE wire of the bike's
  TPS. Reconnect the stock
  wiring harness to the TPS
  after attaching the GREY
  wire.
- 11 Continue routing the PCV wiring harness across the top of the fuel rail.





12 Unplug the stock wiring harness from all three of the bike's Fuel Injectors.

The cylinder #3 (right-most) injector cannot be seen from this picture. It is in the vicinity of the dashed circle.



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13 Plug the PCV wiring harness in-line of each Fuel Injector and the stock wiring harness.

The pair of PCV leads with GREEN colored wires go in-line of the cylinder #3 (right-most) Fuel Injector and the stock wiring harness.

The pair of PCV leads with YELLOW colored wires go in-line of the cylinder #2 (middle) Fuel Injector and the stock wiring harness.

The pair of PCV leads with ORANGE colored wires go in-line of the cylinder #1 (left-most) Fuel Injector and the stock wiring harness.

14 Using one of the supplied Velcro strips, secure the PCV module in the tail section.

Use the supplied alcohol swab to clean the surface area prior to applying the Velcro.

15 Reinstall the air box. Plug in the ECM. Reinstall the fuel tank and the seat.

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

#### **Optional Inputs:**

12v source for Autotune - BLUE wire of WHITE 3-pin tail light connector.



# PUSH THE LIMIT