# POVVER COMMANDER FC

2008-2012 BMW F650 GS

Installation Instructions



## **Parts List**

- 1 Power Commander FC
- 1 USB Cable
- 1 Installation Guide
- 2 Dynojet Decals
- 2 Velcro
- 1 Alcohol swab

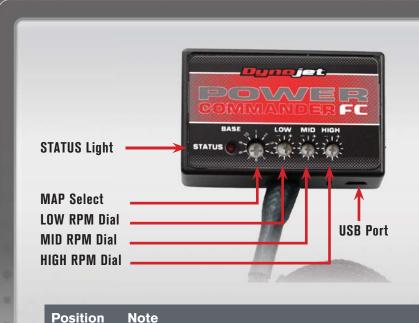
THE IGNITION MUST BE TURNED OFF BEFORE INSTALLATION!

YOU CAN ALSO DOWNLOAD THE PCFC CONTROL CENTER SOFTWARE AND LATEST MAPS FROM OUR WEB SITE AT: www.powercommander.com

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION



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



2008-2012 BMW F650 GS

Stock exhaust

Stock air filter

Position 1

#### **SELECTING THE MAP POSITION**

The Dynojet Power Commander Fuel Controller (PCFC) comes loaded with up to ten maps. Using a #1 Phillips screwdriver, turn the map select dial to toggle between the loaded maps. Refer to the map position table for the maps included in your PCFC.

#### **USING THE RPM RANGE DIALS**

The Low, Mid, and High RPM Dials refer to the RPM range, in thirds, of your vehicle. Each dial allows +/- 10% fuel adjustment on top of what fuel changes are done in the map. With the dial facing straight up, there is no additional fuel change.

For example, if your vehicle revs to 6000 RPM:

- The low RPM dial will adjust 0-2000 RPM
- The mid RPM dial will adjust 2001-4000 RPM
- The high RPM dial will adjust 4001-6000 RPM

#### USING PCFC CONTROL CENTER

Take your tuning to the next level with the PCFC Control Center software.

- 1 Using your web browser, navigate to www.powercommander.com.
- 2 Click Enter Race Ready.
- 3 Click Downloads.
- 4 Click Access Downloads for Power Commander FC.
- 5 Click the PCFC software Download button.
- 6 Open the zip folder.
- 7 Double-click the install file and follow the on-screen instructions to install the PCFC Control Center software. The PCFC Control Center software and maps will be stored in C:\Program Files\PCFC Control Center.
- 8 Return to the Downloads or Home page where you can enter the make, model, and year of your bike to check for and download additional maps.

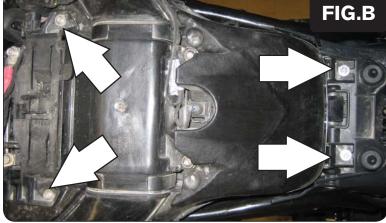
### LOADING ADDITIONAL MAPS

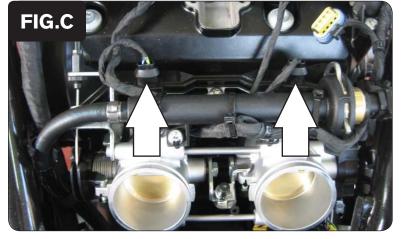
- 1 Connect the USB cable from the computer to the PCFC. Verify the cable is fully seated in the PCFC.
- 2 Run the Control Center software by double-clicking the program icon installed on your desktop or on your start menu.
- 3 Click Open Map File and select a map file.
- 4 Click Send Map. You can send the map to any of the ten map positions.

#### **ALTERING MAPS USING SOFTWARE**

The values in the map represent a percentage of fuel change over stock. A value of 10 in the map indicates at that throttle position and RPM range the vehicle will be 10% richer than stock. If the value is -10, then it would be 10% leaner than stock. You have the ability to fine tune your fuel curve by altering these values. The Control Center software allows a value of +250 to -100 in each cell.







- 1 Remove the seat.
- 2 Remove the left and right hand fairings and the middle cover as shown in Figure A.

- 3 Remove the battery.
- 4 Remove the air box by removing the bolts at the front (under battery) and rear of the air box as shown in Figure B.

- 5 Lay the PCFC near the fuel pump (under seat) temporarily.
- Route the PCFC harness along the right hand side of the bike and go towards the throttle bodies.
- 7 Unplug the stock wiring harness from each injector as shown in Figure C.



Attach the connectors from the PCFC harness to the stock wiring harness and injectors as shown in Figure D.

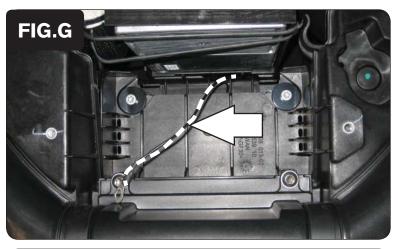


9 Remove the small black plastic cover on the right hand of the bike.

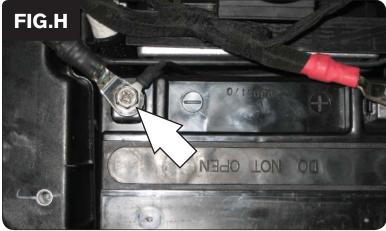
Locate the Throttle Position Sensor (TPS) and unplug the wiring harness from the sensor as shown in Figure E.



1 Attach the connectors from the PCFC harness to the stock wiring harness and Throttle Position Sensor as shown in Figure F.



Reinstall the airbox while routing the ground wire from the PCFC through the battery location as shown in Figure G.



13 Reinstall the battery.

14 Attach the ground wire from the PCFC to the negative side of the battery as shown in Figure H.



Using the supplied velcro, secure the PCFC as shown in Figure J.Make sure to clean both surfaces with the alcohol swab before attaching.



16 Remove the regulator/rectifier to access the O2 sensor connection as shown in Figure K.



- Unplug the O2 sensor from the main wiring harness as shown in Figure L.

  The stock O2 sensor will no longer be connected to anything. It can be removed from the exhaust if desired.
- 18 Reinstall the regulator/rectifier and bodywork.