

JMS POWERMAX V2 FUELMAX FUEL PUMP VOLTAGE BOOSTER (05-10 GT, V6)

Time Necessary: Approximately 2.5-hours

Tools Required:

- 10mm socket
- ¼" socket
- Impact Drill
- Ratchet
- Side Cutters
- Additional Zip Ties (Optional)
- Flat Head Screwdriver
- Lug Wrench
- Floor Jack
- (1) Jack Stand
- (2) wheel chocks or bricks

Note:

- The PowerMax unit has been designed to be mounted inside the vehicle cabin or in the trunk. Install the unit so it does not come into direct or prolonged exposure to water or extreme engine heat (+250°F).
- Cable routing and wire connections will vary upon unit placement and activation settings. Refer to Figure P for activation settings.

Before Installation Picture(s):



Figure A – Before Installation Picture

Installation Procedures:

1. Verify the vehicle is turned off (no key in ignition).

2. Utilize wheels chocks or bricks to secure the rear wheels.
3. Raise the vehicle (front driver side only) in accordance with your owner's manual.
4. Remove the front driver side wheel in accordance with your owner's manual.
5. Remove the front driver side wheel well cover, rear only. (Figure B)



Figure B – Wheel Well Cover

Note: Steps 2 through 5 are only necessary if installing a Hobbs switch in the engine compartment.

6. Remove the plastic cover in the rear of the trunk. (Figure C)



Figure C – Rear Trunk Plastic Cover

7. Remove the driver side trunk side wall carpeting.

Note: This step is optional depending upon unit placement and wire harness routing.

8. Remove the spare tire.
9. Locate the fuel pump driver module. (Figure D)
 - a. Fuel pump driver module is located to the rear and left of the spare.

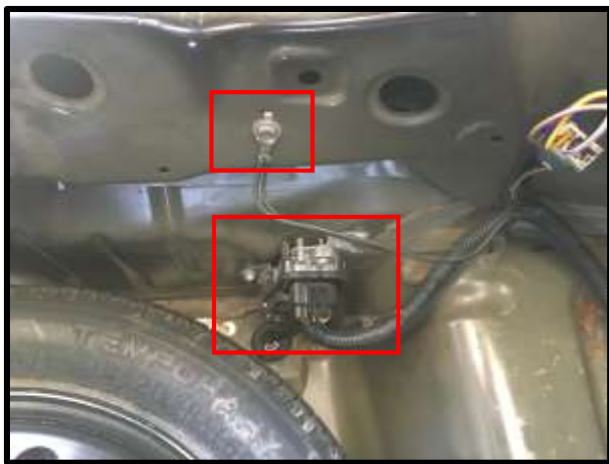


Figure D – Fuel Pump Driver Module and Factory Point Ground Wire (Spare tire left in for orientation)

10. Disconnect the factory harness and the fuel pump driver module.
 - a. Press and hold the tab to remove the connector plug.
11. Install the JMS plug & play fuel pump driver module harness in-between the factory harness and the fuel pump driver module. (Figure E)



Figure E – JMS Plug & Play Fuel Pump Driver Module Harness (Spare tire left in for orientation)

12. Connect the two pin connector to the PowerMax.
13. Utilize the 10mm socket and ratchet to secure the ground wire to the factory point. (Figure D)
 - a. Located in the rear of the trunk, above the fuel pump driver module.
14. Mount the PowerMax unit. (Figure E)
 - a. Utilize the self-tapping screws, ¼” socket and impact drill to mount the PowerMax unit.

Note:

- Ensure unit switches and knobs can be easily seen and accessed.
- Avoid drilling the self-tapping screws into factory fuel lines, brake lines and wire harnesses.
- Mount the unit away from extreme heat and direct contact with water.
- Unit can be mounted in vehicle cabin or trunk.
- Ensure mounting location provides enough slack in the PowerMax harnesses to avoid strain on the connections.

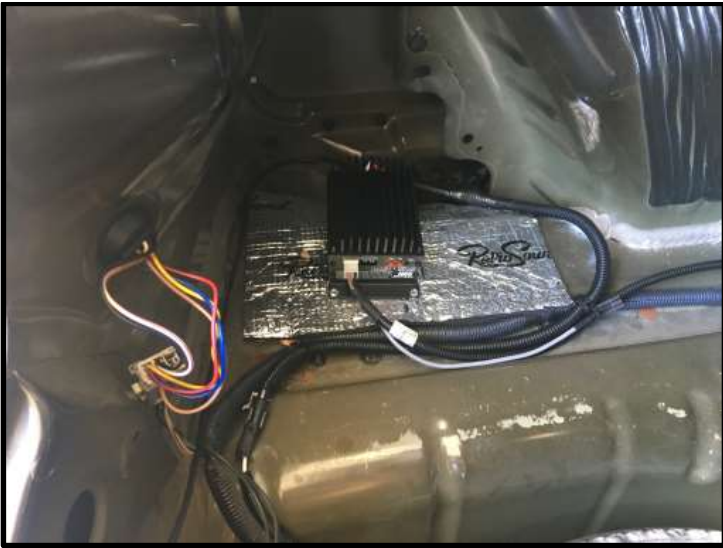


Figure E – PowerMax Unit Mounting Location

15. Route the control cable. (Figures F, G, H, I, J and K)

Note:

- Control cable routing will vary upon unit placement and activation settings. Refer to Figure P for different activation settings.
- These instructions will outline the procedures for installing the Hobbs switch (Provided by JMS) from a boost source.
- Control cable is routed from the trunk, through vehicle cabin (driver side) and into the engine compartment.
 - a. Remove the rear seat, driver side door sill and kick paneling located near the pedals.
 - b. Lift the carpeting to expose the factory harness near the driver's seat.
 - c. Route the control cable by following the factory harness from the trunk into the vehicle cabin.



Figure F – Cable Routing from Trunk into Vehicle Cabin

- d. Continue to follow the factory harness from the rear seat, left of the driver's seat up to the fire wall under the dashboard, left of the pedals.



Figure G – Cable Routing in Rear Seat



Figure H – Cable Routing Left of Driver's Seat



Figure I – Cable Routing Underneath Dashboard

Optional: Utilize zip ties when routing along factory harness.

- e. Route the control cable into the engine compartment. (Figures J and K)
 - a. Access point located in the firewall, within the drive's side wheel well.

- b. Left of the factory harness, cut a hole in the rubber seal.
- c. Push the control cable through the rubber seal.
- d. Follow the factory harness up into the engine compartment.



Figure J – Cable Routing through Engine Firewall and Up Into Engine Compartment



Figure K – Cable Routing Into Engine Compartment (Looking Down)

16. Install Hobbs Switch. (Figure L, M and N)

- a. Connect to boost source.
 - i. Cut boost source tube.
 - ii. Install T-Fitting between factory tubing.
 - iii. Install tubing (Provided by JMS) from T-Fitting to Hobbs switch.



Figure L – Boost Source T-Fitting

Note:

- There are multiple options for boost source.
 - Fuel Rail Sensor or
 - Intake Manifold Accessory Port(s)
- These instructions utilize Intake Manifold Accessory Port
- Utilize the appropriate sized T-Fitting for boost source.
 - JMS provides (3) T-Fitting sizes.

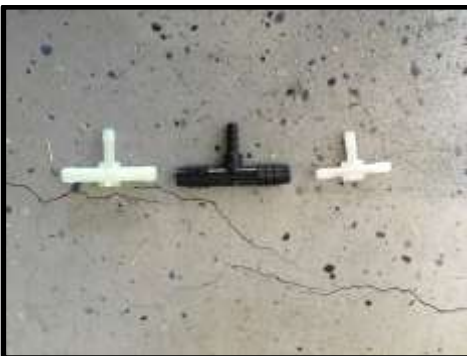


Figure M – JMS Provided T-Fittings

- b. Connect Hobbs switch to control cable.
 - i. Connect the control cable Grey wire to one side of the Hobbs switch.
 - ii. Connect the control cable Black wire to the other side of the Hobbs switch.



Figure N – Hobbs Switch Control Cable

17. Upgrade the Fuel Pump Fuse. (Figure O)

- a. Refer to your owner’s manual for the location of the Fuel Pump fuse.
- b. Remove the fuse box cover.
- c. Remove the stock fuse.
- d. Install JMS provided fuse.
- e. Replace the fuse box cover.



Figure O – Fuel Pump Fuse Replacement

18. Verify PowerMax unit powers on.

- a. Green LED will illuminate ON (solid) when the ignition key is set in the ON position.

19. Adjust the Boost Voltage and Range

- a. Turn the ignition key to ON (Power ON = PowerMax Green LED is ON)
- b. Set Dip Switch 1 – ON
 - i. Switch 1 ON enables the configuration of the front panel switches and knobs)
- c. Change Switches 2-5, adjust input trigger and output voltage in accordance with Figure P.
- d. Set Dip Switch 1 – OFF
 - i. Front panel switches and voltage settings are saved.
 - ii. Green LED twinkles.



Dip Switch 1	Dip Switch 2	Dip Switch 3	Dip Switch 4	Dip Switch 5
Configure Unit	Set Voltage Range	Choose Ramp Type	Depends on SW 3	Depends on SW 3
OFF = Save Settings	OFF = 18V Range	OFF = Time Based	See Tables Below	See Tables Below
ON = Set Settings	ON = 22V Range	ON = 0-5V Range	See Tables Below	See Tables Below

Time Based Voltage Ramp Works with either GND or 0-5V	Dip Switch 3	Dip Switch 4	Dip Switch 5	Ground Enable	Voltage Enable
Time – Immediate Ramp	OFF	OFF	OFF	YES	YES
0.75 second Ramp 1	OFF	ON	OFF	YES	YES
1.50 second Ramp 2	OFF	OFF	ON	YES	YES
2.25 second Ramp 3	OFF	ON	ON	YES	YES

0-5V Based Voltage Ramp Works ONLY with 0-5V enable	Dip Switch 3	Dip Switch 4	Dip Switch 5	Ground Enable	Voltage Enable
0-5V – Immediate Ramp	ON	OFF	OFF	NO	YES
Base enable V + 0.4V Ramp	ON	ON	OFF	NO	YES
Base enable V + 0.8V Ramp	ON	OFF	ON	NO	YES
Base enable V + 1.2V Ramp	ON	ON	ON	NO	YES

Figure P – PowerMax Front Control Panel Activation Settings

20. Start the Engine to ensure the PowerMax unit turns on and the engine starts.
21. Install the wheel well cover.
22. Install the driver side front wheel.
23. Safely remove the jack stand and lower the vehicle.
24. Remove the wheel chocks or bricks.

After Installation Picture:

