

Lethal Performance Dual FPDM Harness Kit Installation

The Lethal Performance Dual FPDM Harness Kit is a plug-and-play modification. Depending on whether you are using the Lethal Performance wire upgrade with this some steps may vary. **We recommend that this installation be done by a professional.**

The first part of the installation is to run the wire upgrade from the battery to the rear of the car. The next several steps will walk you through how to do that.

1. Remove the Negative (Black) wire from the Battery
2. Remove driver's side and rear felt insulation panels from inside the truck area.
3. Time to run the 10awg power wire from the trunk to the battery.

-Run the 10ga power wire from the trunk passing it into the vehicle under the rear seat on the drivers side of the vehicle. Continue to run the power wire along the drivers side underneath the carpet and door sill plate.

4. Run the power wire from the cabin into the engine bay.

-Here are different 2 procedures that can be utilized for running the Red 10 awg wire through the firewall.

Option 1: Using a big screwdriver, gently work the top edge of the 2" diameter rubber grommet on the firewall outwards until you have enough room to feed the Red 8awg wire through to the interior. From under the dash, carefully pull the wire through to the interior. Wrap several layers of electricians tape around the Red 8-awg wires that is in contact with the firewall sheet metal for extra protection for the wire insulation. Reinstall the rubber grommet onto the firewall.

Option 2: Using a very sharp razor blade, carefully put a cut into the grommet on the topside. Be carefully not to go too deep and cut any of the factory wires. Use a metal coat hanger and tape the Red 8-awg wire to it. Make sure you use enough tape so that when you pull the coat hanger from inside the car through the grommets you do not pull the coat hanger out of the tape. You can use WD-40 or a silicone spray lubricant on the grommet and electricians tape to help in this process.

5. Once the power wire is in the engine bay you run it along the drivers side of the engine compartment to the power distribution box.
6. Attach the fusible link with ring terminal on it to the positive lug on the power distribution box.
7. Attach the red 10awg power wire to the fusible link. We recommend soldering this connection however if crimped well it will still work fine as long as the connection is secure. Use the heat shrink to seal the fusible link.

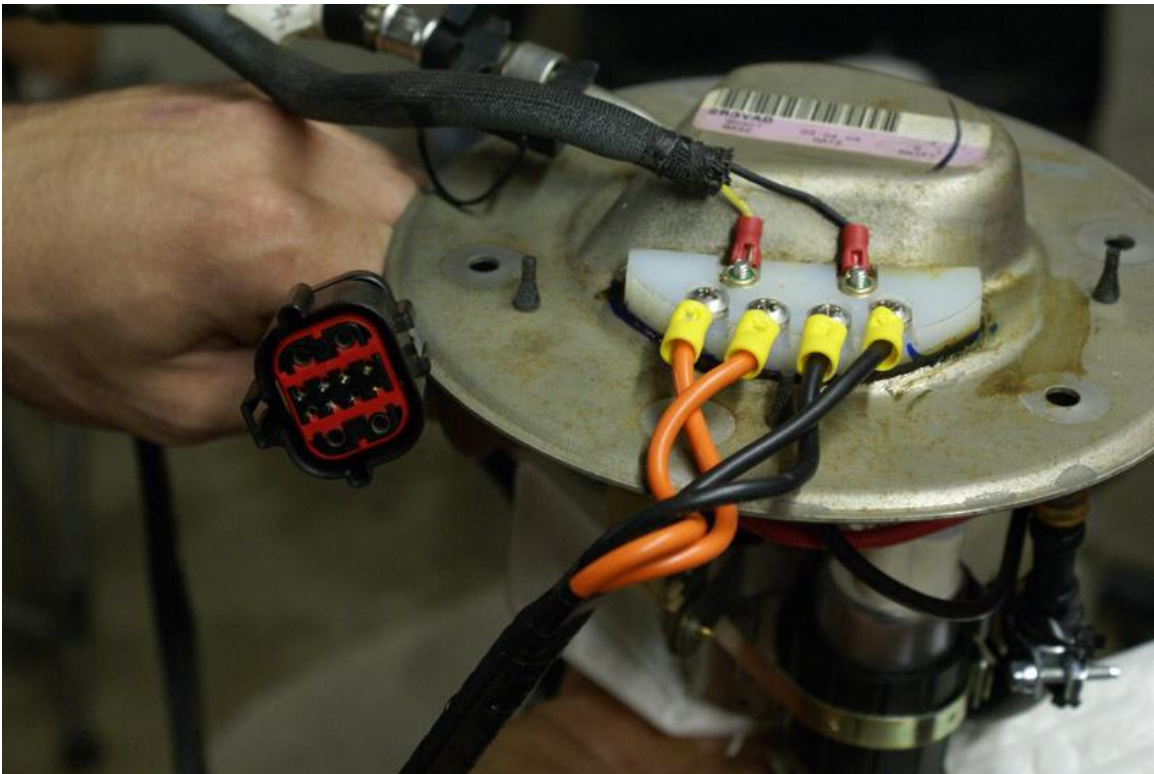
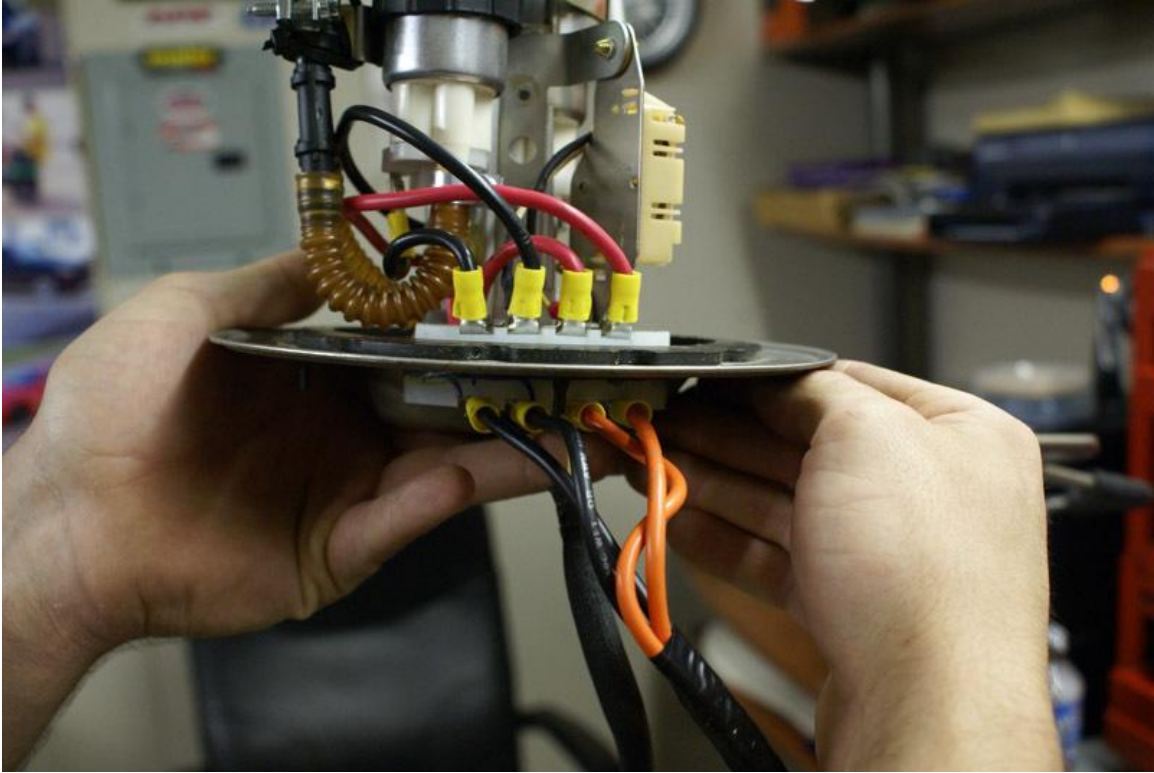
8. Back to the trunk we're going to disconnect the stock FPDM from the stock wiring at it's connector. Plug the stock wiring into the dual FPDM harness.

- Find a suitable place for you to mount the additional FPDM.
- On the relay ground the (Black) wire with ring terminal to where the stock FPDM was ground before.
- Connect the (Blue) wire on the relay to the main Red 8ga wire coming from the battery. Solder and and heat shrink the connection.
- Now it's time to run the Red (+) and Black (-) wires from each FPDM to each pump. If you are using the new Fore Precision or DivisionX Billet Fuel hat all you'll have to do is run the black/red wires from each FPDM to the Black/Red Wires coming out of the FPW/Lethal Fuel Hat. Make sure that you wire the Red/Black from each FPDM to each pump individually and not to mix match the wiring from the FPDM's.



If you are installing the Dual FPDM Kit on an OEM Fuel Hat we suggest you try to modify it using a method similar to the one located in this thread. It's the most efficient and safest way to do so and avoid any fuel leaks.

<http://www.modularfords.com/forums/showthread.php?t=88266&highlight=dual+fpdm+questions>



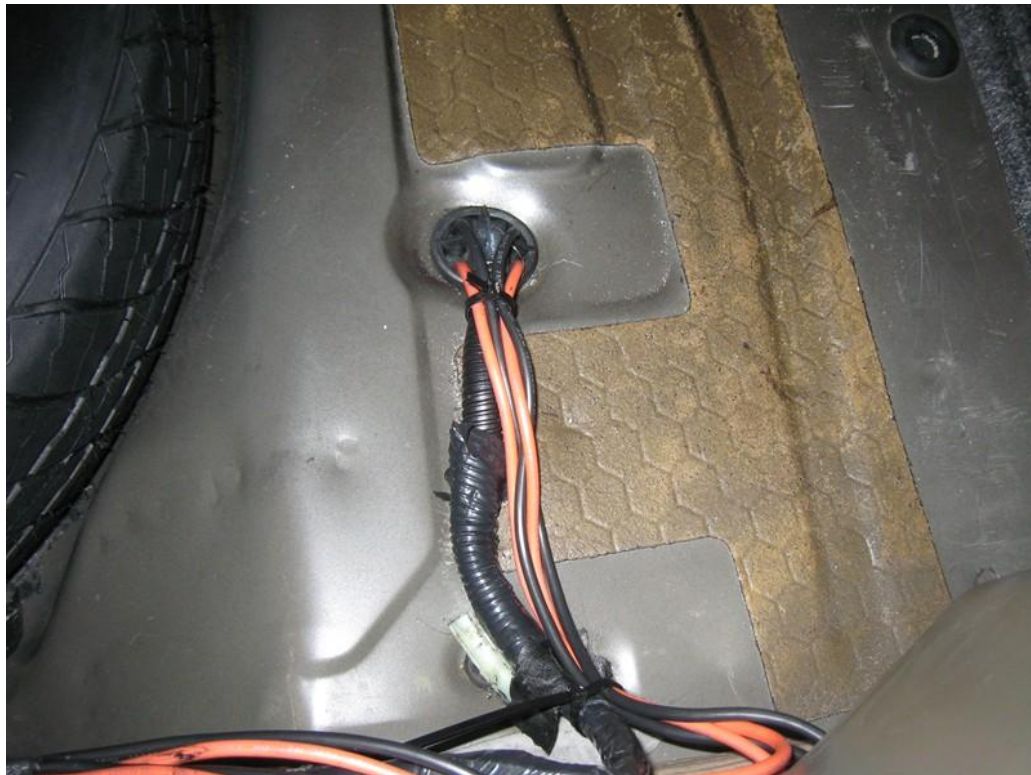
1. Machine two blocks out of nylon on a milling machine.

2. Cut a hole out of the hat about 1/4" smaller than my nylon blocks and clamped the 2 halves together with Stainless Steel machine screws and locking nuts that transfer the power into the pumps.

3. Use Seal All sealant to form a leak proof seal.

With the 12ga lines installed properly reinstall the pump assembly into the tank. Be very careful not to break the level sender by taking your time. Once the assembly is reinstalled run the wires coming off the hat into the trunk right above the fuel assembly where the stock power wires come from. Some modification to the rubber grommet may be needed to fit the 4 12ga power wires. The grommet actually has 4 sections to it where you can carefully use a drill bit to make holes for the wires coming from the top hat.

NOTE: Some have installed the Dual FPDM setup by drilling 2 holes into the fuel hat to pass the power wires through which is not the safest, most recommended or efficient way to do so. If you decide to install the power wires this way make sure to properly seal and secure all wires from any type of leaks.



After pushing the wires from the underside of the car into the trunk reconnect the 12ga wires to the wires coming from both #1 and #2 FPDMs.(Make sure that you connect the the correct wires from each fuel pump to each FPDM) The best way to make sure you do this correctly is from each FPDM tape together the black and red lines coming off it as well as the wires coming from each individual pump. This ensures that you have 1 FPDM hooked up to 1 pump and aren't mixing up the wires. After this is done solder and heat shrink them.

- Using zip ties you can now run the (4) 12ga power wires along the same route as the stock wiring which runs at the rear of the trunk. Secure them good as this is the best way to avoid them being moved around or damaged.



- Make sure all connections with the entire system are in place and correct before reinstalling the felt panel.



- Reinstall the felt paneling on the trunk.
 - At the front of the car looking at the fuse box from the drivers side quarter panel remove the top left 20amp fuse and replace it with a 30amp fuse. This fuse runs the fuel system. We replace it with the 30amp because of the extra load that the 2nd FPDM will draw.
 - Reconnect the negative battery terminal and you're all set.