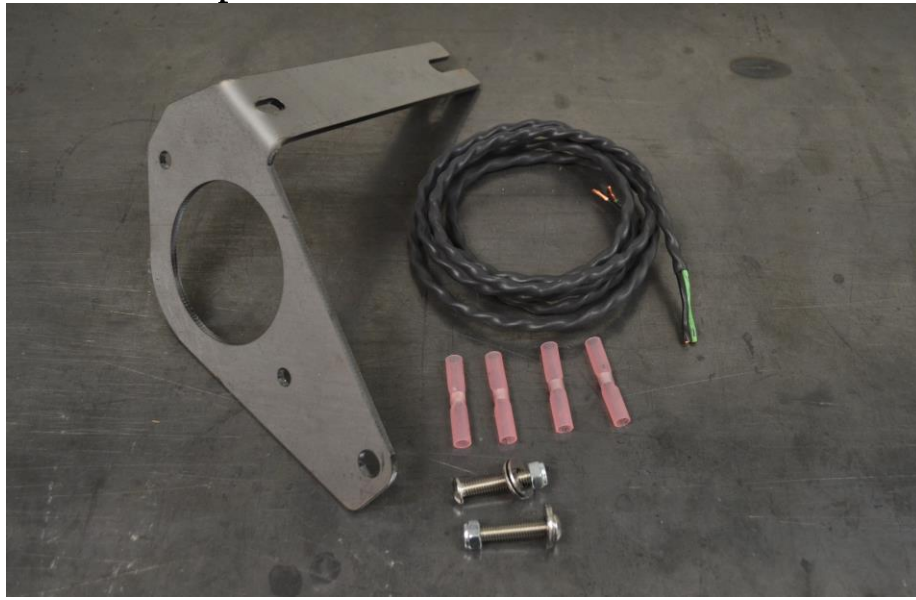




FULL METAL FABWORKS

Vacuum Pump Relocation Bracket Installation Instructions



Please read these instructions in their entirety before proceeding with installation. If you are not confident in your ability to perform this installation, or lack the necessary tools, please consult the help of a professional.

What Is Included:

Before beginning the installation, please make sure that all parts and hardware are included in your package and that no damage has been done to the product during shipping. If you are missing parts or the product is damaged please give us a call at (909)-792-9777 and we will make sure that any problems are taken care of.

- 1.) (1) Vacuum pump relocation bracket
- 2.) (2) M6-1.00x30 SS button head allen screws
- 3.) (2) M6 Nylock nuts

- 4.) 6 ft of green and black 16ga wire
- 5.) (4) 18-20 ga solder seal splice butt connector

Tools Needed:

- Safety glasses
- cutoff wheel or dremel tool
- 10 mm open ended box wrench
- 10 mm socket
- 13 mm socket
- 5/32 allen key
- wire cutter/stripper/ crimper
- 7/32" drill bit
- electric/ pneumatic drill
- heat gun

After verifying all parts, tools, and skills are accounted for and reading these instructions, you are ready to start the installation.

Installation Procedure:

- 1) Begin by parking your vehicle on a level surface and setting the parking brake.
- 2.) Disconnect the battery
- 3.) Disconnect the 2 vacuum lines and remove the electrical connector from its bracket and unplug the connection. Using your 10 mm wrench and socket remove the pump from its bracket.
- 4.) Follow the vacuum line up to its retainer clips on the fender well and frame, remove the clips so that the line is free and then disconnect the large hose at the push in coupler near the AC line fill port as shown in Figure 3.

Figure 3:



- 5.) Remove the vacuum line as an assembly. Set aside
- 6.) Using your cutoff wheel or dremel tool, cut off the factory bracket from the frame to make room for your new bumper/winch. Apply touch up paint to the raw metal areas where cutting has occurred to prevent future oxidation issues.
- 7.) Re-route the large vacuum hose towards the master cylinder as shown in figure 5.

Figure 5:



- 8.) Install the vacuum pump into the relocation bracket with the small intake vacuum line port facing the front of the Jeep as shown in figure 6a if your Jeep is a 2007 to 2013 model year; For 2014-current model Jeeps, Chrysler added an additional horn that is mounted in the location where our kit relocates the vacuum pump to. If you wish to keep this additional horn there is a slot on the back of the vacuum pump relocation bracket for your horn. You will need to remove the horn from its stock mounting bracket and then relocate it to the back of the relocation bracket using the factory hardware as shown in figure 6b. Using your 5/32nd allen key and a 10 mm wrench fully tighten the bolts holding the vacuum pump to the bracket.

Figure 6a:



Figure 6b:



9.) Remove the 10mm upper fender bolt and loosen the 13mm outer master cylinder nut enough that the leg of the bracket will slide in behind it.

10.) Install the bracket as shown in figure 7 and tighten the fender bolt and the 13mm nut on the

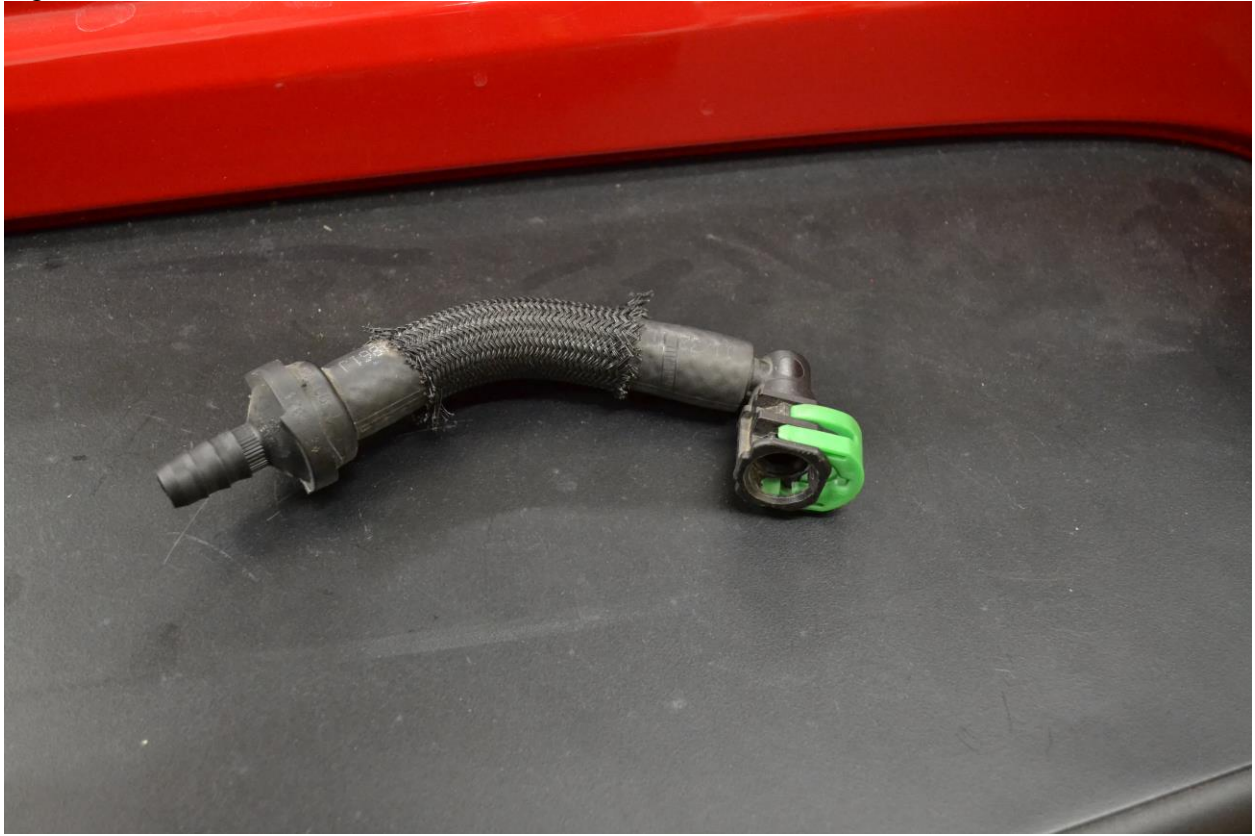
master cylinder.

Figure 7:



11.) Take the vacuum line assembly you removed in step 5 and cut the zip ties to separate it into 2 hoses. Remove the check valve and green quick disconnect from the assembly as show in figure 8.

Figure 8:



12.) Reconnect the quick disconnect and route it around the back of the master cylinder and reconnect it to the booster vacuum line that you re-routed in step 6 as shown in figure 9a. If you have a 2014 to current model year Jeep and are keeping the factory horn you will route this line over the top of the master cylinder to the front of the vacuum pump as shown in figure 9b.

Figure 9a:



Figure 9b:

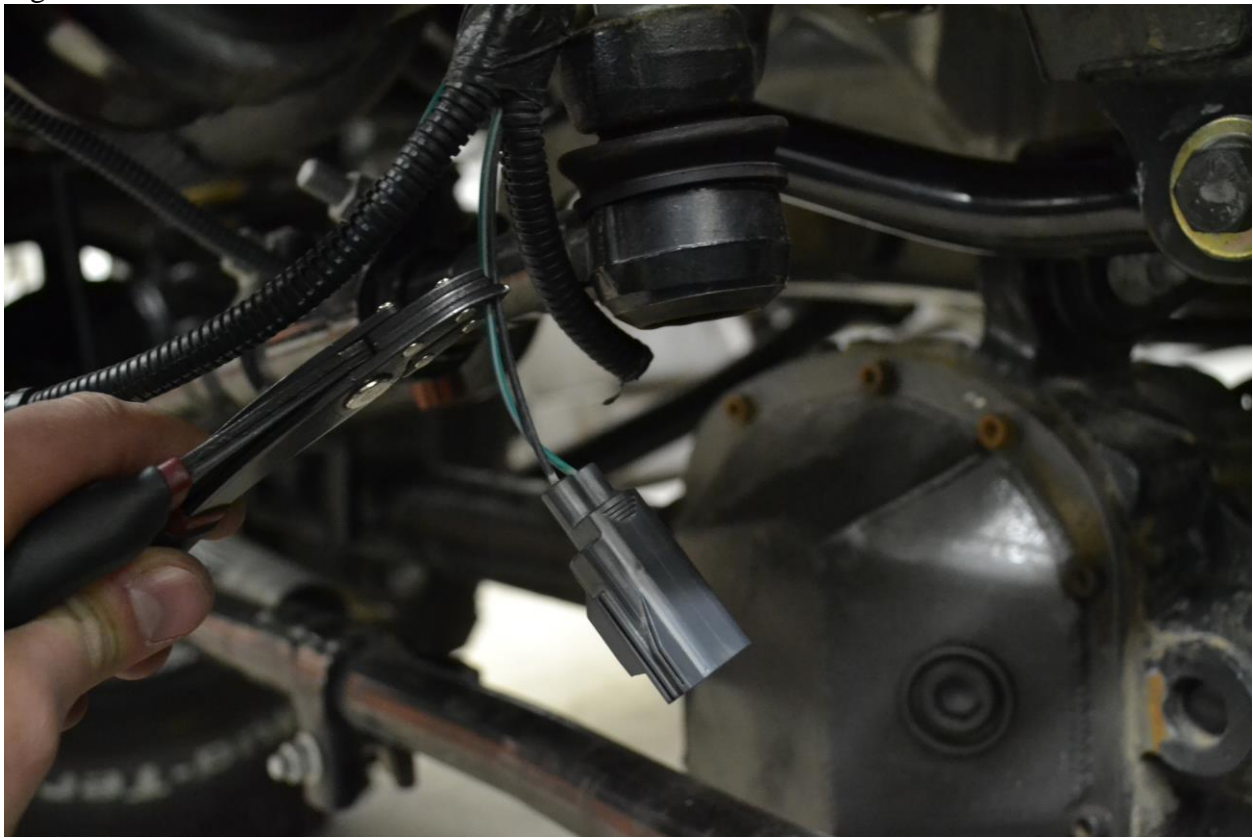


13.) Take the smaller intake hose from the vacuum line assembly and push the side with the gradual bend onto its port on the front of the vacuum pump, route the excess line along the fire

wall so that the side with the sharp bend points downward. Zip-tie the hose to the firewall.

14.) Return to the original mounting location of the vacuum pump and use your wire cutters to cut the electrical connector off of the original wiring harness. Make sure when cutting the connector that you leave enough wiring on both the connector and the original harness so that you can splice in the provided wiring to extend harness. See figure 9.

Figure 9:



15.) Using the provided wire and solder seal butt connectors splice in the provided wiring and heat the butt connectors using a heat gun to seal the connectors. Be sure to match the colors at both ends of the harness.

16.) Route the newly extended harness safely, to avoid any potential damage, up to the vacuum pump at its new location. Drill a 7/32 hole approximately 3/4" forward (hole center to hole center) of the existing hole in the black plastic computer mount. See figure 10.

Figure 10:



17.) Re-connect battery

18.) Congratulations your install of the Vacuum Pump Relocation Bracket is now complete.



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