

TERAFLEX

PRODUCT INSTALLATION GUIDE

TeraFlex, Inc.

2012 JK Vacuum Pump Relocator

Part #4403100



Important Notes:

Prior to beginning this or any installation read these instructions to familiarize yourself with the required steps and evaluate if you are experienced and capable to personally perform these modifications.

Refer to the parts list to ensure that all necessary components and hardware has been included. If any parts are missing please contact your local retailer for assistance.

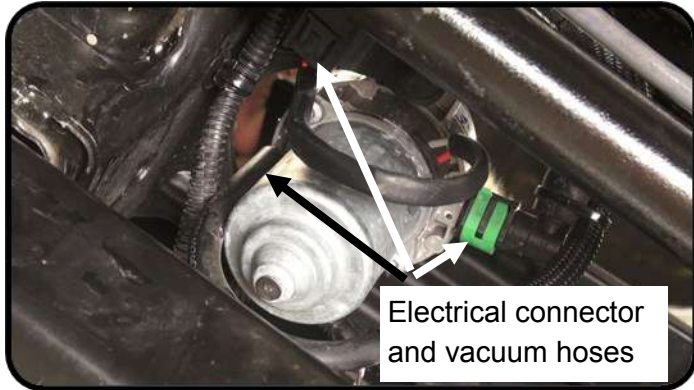
Kit Contents		
Item ID	Item Name	Quantity
403100	2012 JK Vacuum Pump Relocation Bracket	1
172	1/4" Lock Washer	2
195	Zip Tie	3
381	Fully Threaded M6 Hex Head Bolt	2
382	M6 Nut	2
383	Butt Connector	4
384	Green 14 Gauge Wire	1
385	Black 14 Gauge Wire	1
458	1/4" Flat Washer	2
600193	Instructions	1
600255	Black 1/4" Split Wire Loom	1

Tools needed:

- 10mm socket
- Wire strippers/crimpers
- 10mm box wrench
- Ratchet
- 13mm deep socket
- Heat gun for heat shrink connectors
- 3/16 drill bit and drill
- Razor knife
- Diagonal cutters

Installation:

1. Disconnect the electrical connector, vacuum connector, and small intake hose from the auxiliary vacuum pump. Remove the two nuts that fasten the pump to the frame bracket, and remove the pump.



2. Before installing the bracket to the vehicle, fit the Teraflex pump relocation bracket to the pump by passing the top to the pump upward through the bracket and aligning the bolt holes so that the nipple of the pump points roughly toward the vehicle coolant reservoir cap when the bracket is in its installed position.
3. Install the 6mm bolts, washer, lock washer, and nuts onto the bracket and pump assembly and tighten.
4. Remove the fender bolt shown using a 10mm socket.



5. Loosen the 13mm nut on the driver's side brake booster stud far enough to enable the slotted section of the bracket to be slid behind the nut.



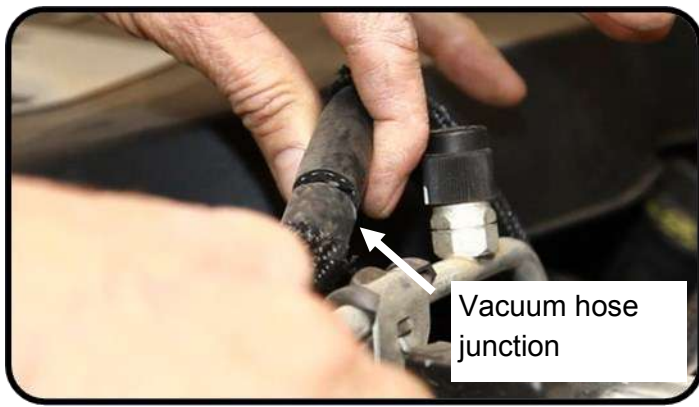
6. Position the pump/bracket assembly such that the hole in the bracket lines up with the threaded fender hole as shown, and slide the slotted portion of the bracket behind the previously loosened nut and over the stud.



7. Re-install the bolt through the bracket into the fender.
8. Tighten the brake booster stud nut.

Vacuum Hose Routing:

9. Cut the plastic ties that hold the pump hose in place, and pull the hose upward past the radiator and into the engine compartment.
10. Note the point (next page) where the two sections of the vacuum hose join together near the front of the driver's cylinder head. Separate the hoses at this point. It is ok to use a razor knife to cut the tip of the hose for easier removal.



11. Remove the 90 degree plastic vacuum connector, short section of hose, and check valve from the hose to which they are connected. A razor knife may be helpful for cutting the tip of the hose to get the check valve out.



12. Install the 90 degree vacuum connector/hose/check valve into the end of the hose that remains connected to the intake manifold.
13. Route the new hose assembly beneath the brake master cylinder and connect the vacuum connector to the pump.
14. Re-install the smaller intake hose to the pump, route it across the firewall alongside the existing wire loom, and secure it in place using the supplied zip ties.



Electrical Wiring:

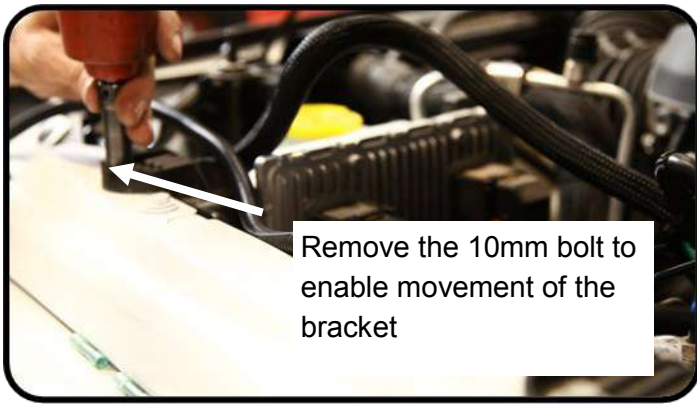
15. Cut the factory electrical connector from the main chassis harness, leaving enough wire on both the connector and factory harness for butt connectors to be installed. The wires to be cut are green and black. Do not cut the red and white wires of the pump harness.



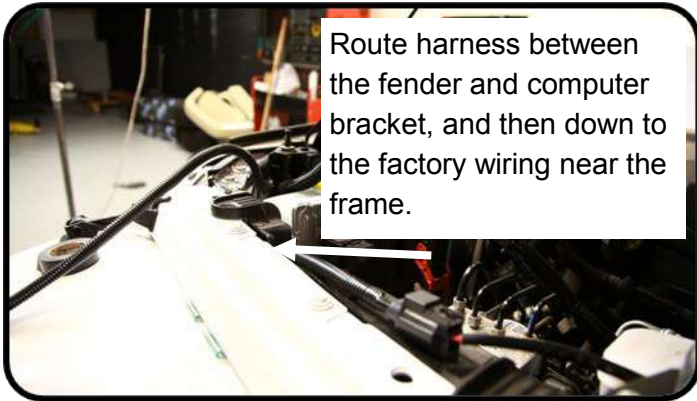
16. Strip 3/8" of the insulation from the two wires protruding from the factory connector and attach the supplied green and black wires to the factory connector using the supplied heat-shrink butt connectors.



17. Plug the factory connector into the pump harness plug.
18. Slide the supplied wire loom over the lengths of wires, and route the wires as shown (next page). It may be necessary to remove the fender bolt from the plastic bracket as shown to allow for movement of the bracket, so that the new harness can pass between it and the fender.

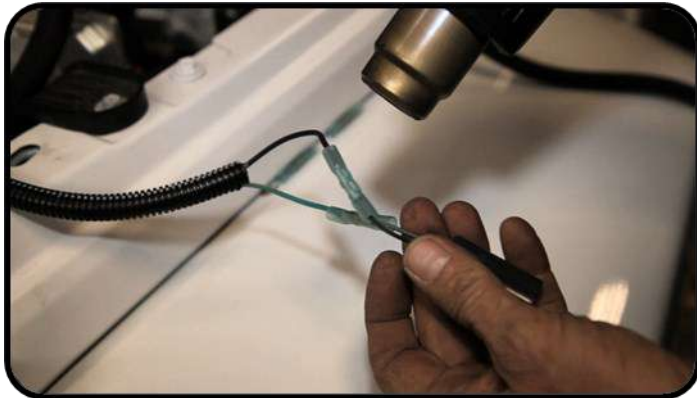


Remove the 10mm bolt to enable movement of the bracket



Route harness between the fender and computer bracket, and then down to the factory wiring near the frame.

19. Strip 3/8" of insulation from the green and black wires protruding from the main harness, and crimp a supplied butt connector on each stripped wire.
20. Attach the supplied kit wires to the other ends of the butt connectors, making sure to match wire colors.
21. Using a heat gun or equivalent, apply heat to the butt connectors to shrink and seal them.



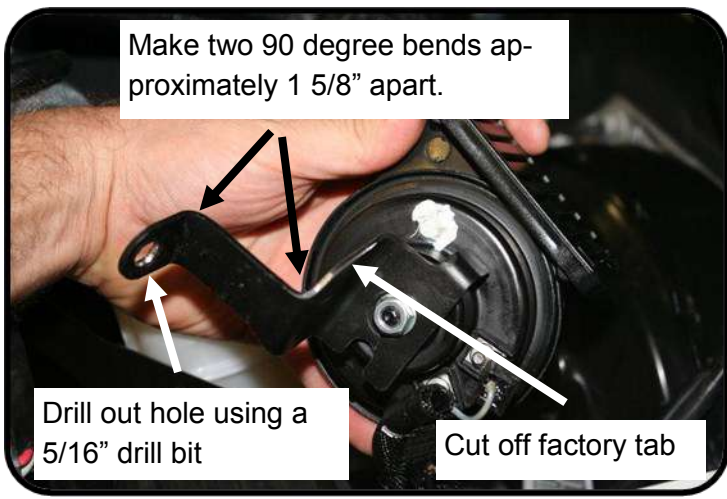
22. Drill a 3/16" hole next to the existing hole as shown, and attach the connector to the 2 holes as shown.



The installation is complete.

Relocating the Secondary Horn on 2013 Models:

1. Remove the horn and bracket from the fender of the vehicle.
2. Separate the horn from the bracket and disconnect the electrical connectors.
3. Modify the bracket as shown (next page). The horn is shown attached to the bracket for reference.



4. Re-attach the horn to the bracket using the factory nut in the orientation shown in the above photo.
5. Remove the nut from the component carrier mount stud shown.



6. Install the horn with bracket onto the stud as shown, re-install the factory nut, and attach the electrical connectors.

