

Applicable Model(s)/VINs:

Gen 1 and 2 ROUSH CleanTech vehicles with either a Metal Frame Fuel Pump or a Plastic Frame Fuel Pump.

Description:

How to remove and replace the fuel pump motor from the ROUSH CleanTech Metal Frame (below) and Plastic Frame (starts on page 6) fuel pump assemblies for service.

Metal Frame Fuel Pump

Disassembly:

1. Remove the old sock filter from the pump using a trim tool and discard.



2. Remove the connector from the side of the top mounting bracket using trim tool.





3. Using an Allen wrench, remove the 3 bolts that attach the bottom to the top mounting bracket.

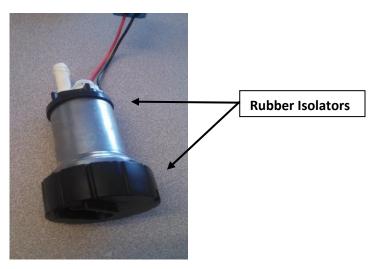


4. Remove the pump motor from the bracket for replacement.



Assembly

1. Install the new insulators provided by ROUSH CleanTech to the top and bottom of the fuel pump.





2. Feed the connector and through the top bracket and position the motor properly in the brackets. **NOTE**: the rubber isolators will only allow the pump to be positioned one way in the brackets properly due to their shape.

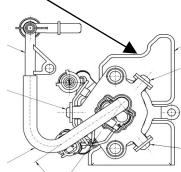


3. Install the three Allen bolts into the bracket and torque them to 10Nm.



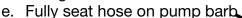
- 4. Install the new sock filter to the bottom of the pump by pressing it on until it is fully seated to the motor.
 - a. Make note of the position/ orientation for sock filter prior to installing on pump.



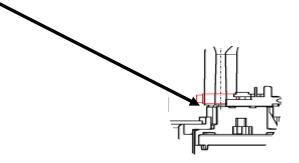




- 5. Install the new hose provided by ROUSH CleanTech to the top of the fuel pump outlet.
 - a. Attach to pump assembly
 - b. Do not attach to jet pump if present
 - c. Slide 2 supplied clamps over hose
 - d. Use glass cleaner to aid installation







6. For Jet Pump application- Reuse jet pump

assembly Use razor to cut hose from jet pump

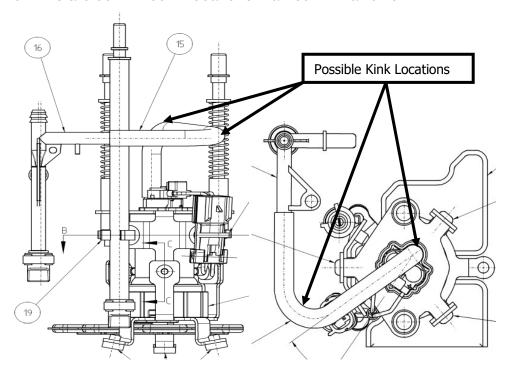
assembly

- a. Remove clamp and cut only hose, do not cut barbs on jet pump
- b. Inspect barbs for damage and replace if jet pump damaged
- c. Cut supplied bulk rubber hose to 9.5 inches length

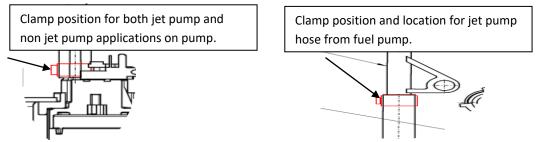




Prior to installing hose clamps rotate and bend hose in position as if it was installed in tank using the natural bend of hose to rotate and clamp hose when no kinks are confirmed in locations marked with arrows.



2. Install clamps as shown with 1/16" of hose showing only at end.



3. Attach the supplied zip tie push pin to connector and install into the bracket as shown.



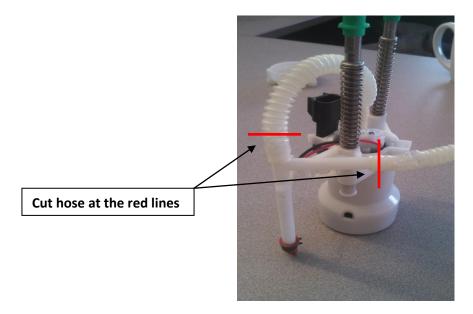


ROUSH® Fuel Pump Motor Replacement Procedure

Plastic Frame Fuel Pump

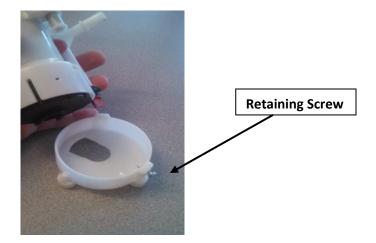


1. Cut the corrugated hose from the plastic jet pump tube at the locations shown below. (Note: The plastic jet pump fitting will not be used with the replacement pump motor)



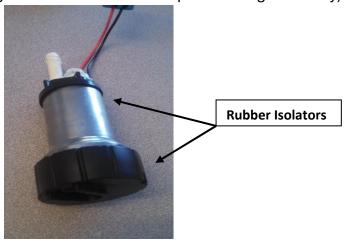


2. Remove the retaining screw from the bottom plastic housing, remove the pump motor electrical connector from the clip in the plastic housing and slide the pump motor along with the top/bottom rubber isolators out of the housing.



3. Install the new rubber isolators to the new fuel pump and re install it into the plastic housing noting the orientation of the isolators, reinstall the electrical connector into the clip and the bottom plastic housing with the retaining screw.

(Note: If the (3) rubber pump feet do not stay into the bottom of plastic housing, apply a small dab of super glue to the feet to hold in place during assembly)



4. The new rubber hose with the quick connect fitting will attach directly to the intank filter the same way the previous corrugated hose did and the plastic jet pump tube will remain on the spring rod unused.