

INSTALLATION INSTRUCTIONS

PRODUCT: SUREFLO® PERFORMANCE SENDING UNIT FOR 1998-2002 DODGE RAM

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FITMENT: 1998 – 2002 12v and 24v 5.9L Cummins equipped Dodge Ram 2500/3500 pickups

KIT P/N: FPE-SF-CUMM-9802

ESTIMATED INSTALLATION TIME: 2-3 Hours – Installation completed with the use of a vehicle hoist

TOOLS REQUIRED: 1/4" drive ratchet, 1/4" drive 7mm socket, 1/2" drive impact or ratchet, 1/2" drive 10, 13 and 15mm sockets, 11/16" wrench, large hammer, and punch or chisel, strap wrench, needle nose pliers.

IMPORTANT: SureFlo performance sending units are designed for use in conjunction with an aftermarket externally mounted fuel pump OR as a replacement sending unit for trucks originally equipped without an in-tank low pressure lift pump.

For MY 1998 trucks, this sending unit will work for both 12-valve and 24-valve models. The stock sending unit should have a range between 20-220 ohms.

KIT CONTENTS:

| Item | Description | Qty |
|------|---|-----|
| 1 | SureFlo sending unit assembly | 1 |
| 2 | Fuel float arm (not pre-installed) | 1 |
| 3 | Seal ring | 1 |
| 4 | -8 to 3/4"-16 straight male fitting w/ o-ring | 2 |
| 5 | 5/16" fuel line retainer clip | 1 |
| 6 | 3/8" fuel line retainer clip | 1 |
| 7 | 90 degree -8AN to 1/2" pushlock fitting | 1 |



WARNINGS:

- Fuel lines must be clean before installation.
- The purchaser and end user releases, indemnifies, discharges, and holds harmless Fleece Performance Engineering, Inc. from any and all claims, damages, causes of action, injuries, or expenses resulting from or relating to the use or installation of this product that is in violation of the terms and conditions on this page, the product disclaimer, and/or the product installation instructions. Fleece Performance Engineering, Inc. will not be liable for any direct, indirect, consequential, exemplary, punitive, statutory, or incidental damages or fines cause by the use or installation of this product.

INSTALLATION PROCEDURE:

STEP 1: With the truck on a hoist, disconnect the fuel filler hose and vent with a 7 mm socket.



STEP 2: Reaching over the top side of the tank, disconnect the fuel lines and electrical connection for the OEM sending unit.

NOTE: A quick disconnect tool such as M&D part number 4918878 can be used in this step.



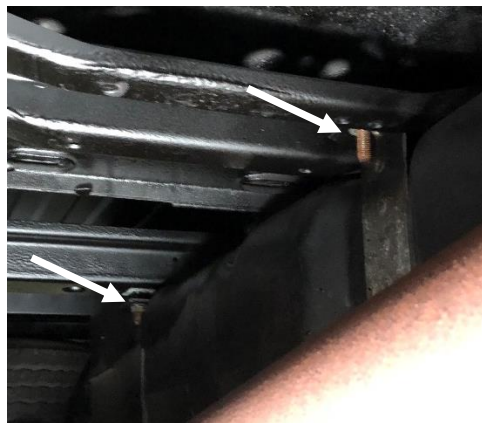
STEP 3: If present on your application, remove the cross-member located at the front of the fuel tank. There will be four 15mm bolts to remove.



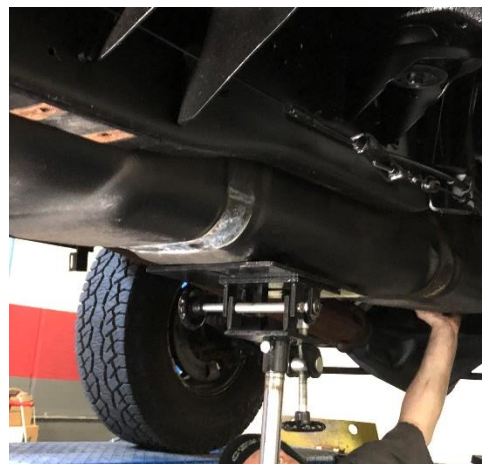
STEP 4: Secure the tank with a lift or jack to lower the tank down to the ground.



STEP 5: Remove the 15 mm nuts that retain the fuel tank hanger brackets at the front and rear of the tank. Remove the hangers.



STEP 6: Slowly lower the tank.



STEP 7: With the tank on the ground, make note of the orientation of the OEM sending unit in the tank. The SureFlo sending unit will be oriented in the same manner during installation.



Using a strap wrench, Lisle 63000, or MATCO tool #FTR730, rotate the sending unit's retaining ring (OE P/N: 52005389) counterclockwise. MATCO tool shown at right for reference.



Remove the retaining ring and remove the sending unit assembly from the tank. Have a bucket nearby to catch fuel from the OE unit when removed.



STEP 8: Remove and discard the original seal ring from the tank.



STEP 9: Install the new seal ring included in the kit onto the fuel tank. Clean the original retaining ring of debris and prepare it for re-use onto the new SureFlo sending unit.



STEP 10: Install the fuel level float arm onto the SureFlo sending unit by gently clipping the arm into the fuel level sensor.



STEP 11: Install the SureFlo assembly into the tank. Check that the gasket is fully seated.

NOTE: Use caution when installing the SureFlo to not damage the float arm. DO NOT rotate the pump once installed in the tank, you may damage the float arm or sending unit – align it before you place it into the tank.



STEP 12: Ensure proper orientation of the SureFlo by matching the orientation of the original sending unit. Reinstall the retaining ring and tighten using a Lisle 63000, MATCO #FTR730, or a strap wrench by rotating it clockwise to the fully engaged position.



STEP 13: Remove the protective shipping caps from the fittings and install the new fuel line locking tabs that are included in your kit onto the return side fitting.



STEP 14: For aftermarket pumps that have a fuel return from the pump: remove the hex plug located on the side of the sending unit cap and install the -8 to 3/4-16 o-ring fitting and 90-degree push-lock fitting. This will allow you to run your injector return fuel and pump return fuel directly to the SureFlo bucket, ensuring optimal performance. This step must be performed AFTER the retaining ring is in place. Alternatively, you may run your injector return fuel and pump return fuel together prior to the SureFlo head port, thereby requiring the use of only one port. In that case, you will not remove the hex cap.

If your truck has an aftermarket pump previously installed and is returning fuel to the filler neck from the pump, it is required that you re-route this to the pump return fitting on the SureFlo.

NOTE: There is a spring and poppet located under the hex cap. These components must remain installed when using the port as a secondary return.

Remove the hex cap to allow for pump return fuel to feed the bucket



STEP 15: Lift the fuel tank into place. Re-install the two strap hangers that secure the tank with the two 15mm nuts. Install the center support (if equipped) with the four 15mm bolts that were removed.



STEP 16: From the driver's side rear wheel-well, connect the electrical wiring harness to the SureFlo lift pump connector. Key on the vehicle and ensure the fuel level is reading appropriately. Start the engine and check for any fuel leaks before operating the vehicle.



