

INSTALLATION INSTRUCTIONS

PRODUCT: SUREFLO SENDING UNIT FOR RAM WITH 50 GALLON FUEL TANK

FPE-2023-100
August, 2023

FITMENT: 2020–2024 Dodge Ram with Cummins 6.7 and 50 gallon factory installed fuel tank.
Replaces OE pump part number 68490266AA used in 50 gallon tank 68534612AB
Not for use with cab & chassis applications.

KIT P/N: FPE-PF-CUMM-2024-50

TOOLS REQUIRED: 1/4" drive ratchet, 1/4" drive 8mm socket, 1/4" drive - 9/32" socket, 1/4" drive 10mm socket, 1/2" drive impact or ratchet, 15mm 1/2" drive swivel or box end wrench, 1/2" drive 16mm deep socket, large hammer, large pry bar, punch and/or chisel.

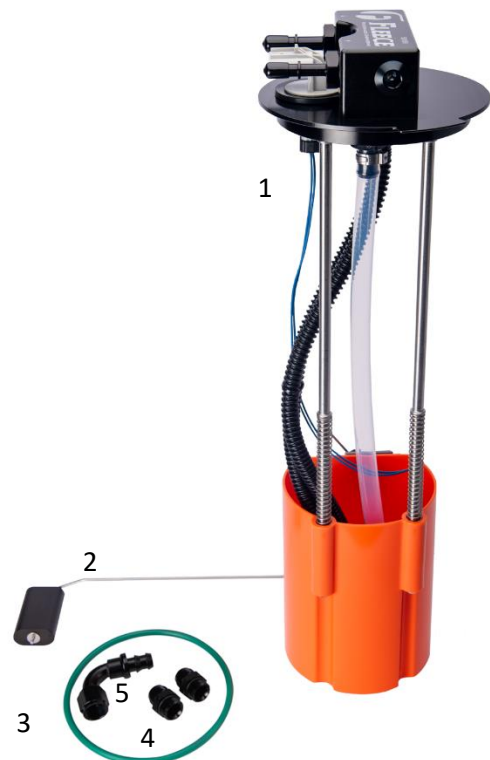
IMPORTANT: SureFlo performance sending units are designed for use in conjunction with an aftermarket externally mounted fuel pump OR as a replacement sending unit for trucks originally equipped without an in-tank low pressure lift pump.

KIT CONTENTS:

Item	Description
1	SureFlo sending unit
2	Fuel level float arm
3	O-ring
4	-8 to 3/4"-16 straight male fitting w/ o-ring
5	90 degree -8AN to 1/2" pushlock

WARNINGS:

- Fuel Lines must be clean before installation.
- Use of this product may void or nullify the vehicle's factory warranty.
- 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.



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INSTALLATION PROCEDURE:

STEP 1: Disconnect batteries and block the tires.

STEP 2: Remove the rear drivers side inner fender retained with (11) - 8mm screws. One fastener in the front of the wheel well is hidden behind the fender flare, if equipped. Pull back the fender flare to expose the fastener.



STEP 3: Remove the rear driveshaft. On short wheelbase trucks only remove the (4) - 15mm bolts on the yoke of the rear end. On long wheel base trucks, the carrier bearing mount must be removed as well.



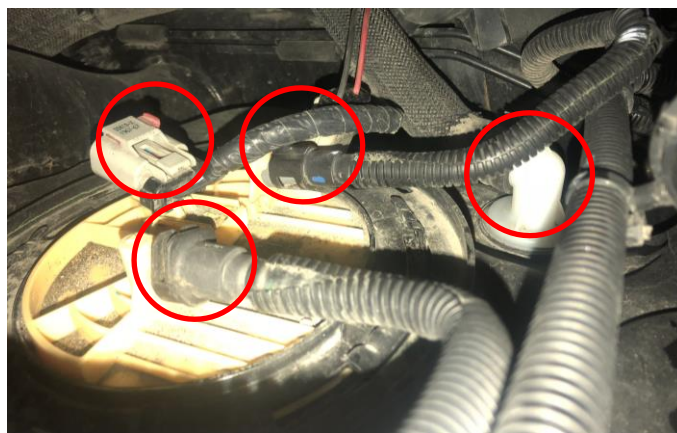
STEP 4: Support the fuel tank with a lift jack. Loosen the front and rear fuel tank straps using a 16mm deep socket. Remove the front strap first, and leave the rear strap loose and attached at this time. Lowering the front of the fuel tank downward will allow access to unplug the sending unit and remove the fuel line quick disconnects.

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STEP 5: Release the retaining clip securing the DEF lines located at the front of the fuel tank if so equipped (model years 2013+)



STEP 6: Remove the fuel line quick disconnects. Disconnect the sending unit electrical connector.



STEP 7: Remove the tank vent located toward the rear of the fuel tank. The vent line is attached to a 3/8" barb fitting.



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STEP 8: Remove the filler neck hose at the tank with a 9/32" socket to loosen the clamp. Access the clamp through the fender well. Remove the filler neck hose from the fuel tank. Remove the rear fuel tank strap and lower the complete fuel tank to the ground. Move the tank to an area where you have clear access the tank.



STEP 9: Clean the area around the sending unit with pressurized air to remove debris. Wipe the area around it with a clean rag.

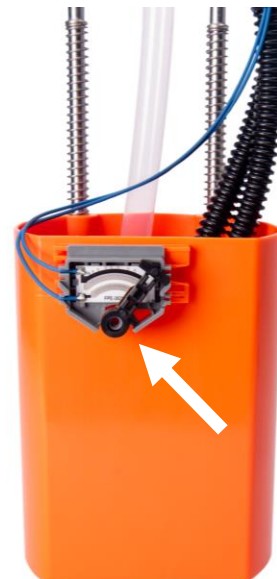
NOTE: Take note of the orientation of the sending unit relative to the tank to ensure proper orientation of the SureFlo during installation.

Using a hammer and punch, rotate the retaining ring counter clockwise. Remove the retaining ring that holds the OEM pump into the tank and remove the sending unit from the tank by lifting it upward. Remove and discard the sealing o-ring from the tank.



STEP 10: Clean the tank sealing surface and place your new o-ring supplied in the kit for the SureFlo sending unit onto the top of the tank.

STEP 11: Install the fuel level float arm onto the SureFlo by gently clipping the arm into the fuel level sensor.



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STEP 12: Install the SureFlo sending unit into the tank and reinstall the retaining ring using your hammer and punch or chisel by rotating it clockwise to the fully engaged position. Ensure proper orientation of the pump and fittings matches the orientation of the original unit.

NOTE: Use caution when installing the SureFlo to not place stress on the float arm or electronic sending unit.

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 ¼-16 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.

STEP 13: Reinstall the fuel tank, leaving the front hanger off and loosely installing the rear hanger first to provide better access to the electrical and fuel connections on the top of the fuel tank. Make the proper connections for the fuel lines, vent, fill tube, and electrical connector. Make sure the quick disconnect fuel lines are fully seated with retaining clips in place. When the quick disconnect fitting is fully seated you will not be able to pull it back off the pump fitting without releasing the retaining clip.



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



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