

INSTALLATION INSTRUCTIONS

SUBJECT: POWERFLO® LIFT PUMP FOR 2011 – 2024 RAM CAB & CHASSIS

FPE-2024-131
January, 2025
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FITMENT: 2011–2024 RAM 3500/4500/5500 Cab & Chassis models equipped with 6.7L Cummins engine

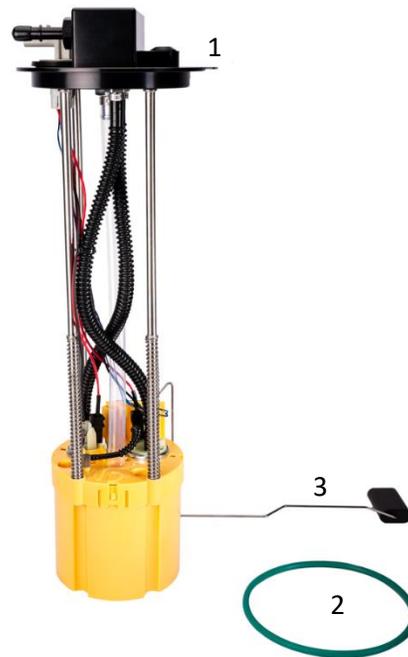
KIT P/N: FPE-PF-CUMM-1124-CCOA and FPE-PF-CUMM-1124-CCMS

EST. INST. TIME: 3 hours

TOOLS REQ'D: 16mm socket or wrench, 7/8" socket or wrench, flathead screwdriver, hammer, punch/chisel

KIT CONTENTS:

Item	Description	Qty
1	PowerFlo lift pump	1
2	Tank flange o-ring	1
3	Level sender float	1
4	5/16" quick disconnect fitting (not shown)	1



IMPORTANT: Due to the large number of applications and configurations of cab & chassis vehicles, additional steps may be required to complete this installation. This document is to serve as a base guide for installation of the Fleece Performance PowerFlo in-tank lift pump into a cab & chassis model RAM truck.

WARNINGS:

- Fuel system, including fuel tank, fuel supply, and fuel return 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.

OVER-AXLE TANK PROCEDURE:

STEP 1: Ensure that the fuel tank is at most $\frac{1}{4}$ full. If necessary, drain the tank to $\frac{1}{4}$ full and then proceed to step 2.

STEP 2: Park the vehicle on a flat and level surface. Disconnect the battery terminals.

STEP 3: Loosen the hose clamps on the fuel filler and breather tubes. Disconnect both tubes from the fuel tank.

NOTE: The image at right is pointed rearwards from the axle.



STEP 4: Place a floor jack or transmission jack underneath the fuel tank. Remove the 8 bolts retaining the saddle tank using a 16mm socket or wrench. There are four bolts on the front and four bolts on the rear of the tray retaining the tank.

NOTE: Additional disassembly may be required to remove the saddle tank depending on your specific configuration/application

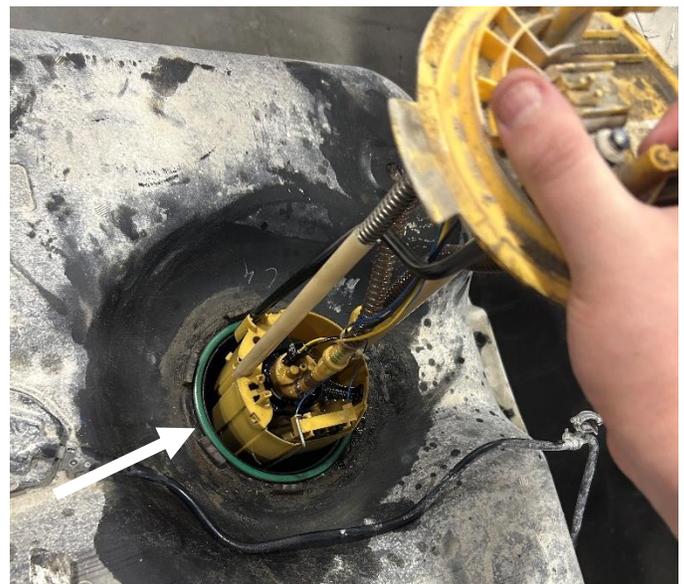


STEP 5: Lower the tank five to six inches and disconnect the electrical harness connector for the OE lift pump. Disconnect the fuel feed and return fittings. If your vehicle is equipped with a midship auxiliary fuel tank, disconnect the transfer fuel line.

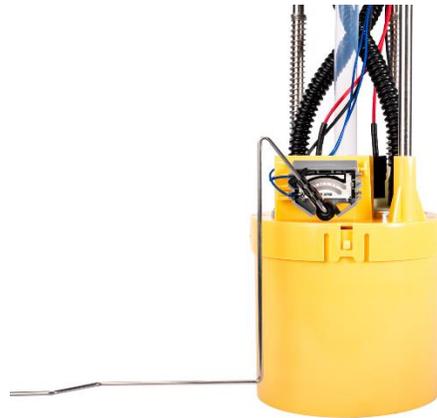
STEP 7: Fully lower the tank and remove it from underneath the vehicle.

STEP 8: Thoroughly clean off the top side of the tank around the lift pump cap to avoid getting any debris inside the fuel tank when the OE unit is removed.

STEP 9: Using a hammer and punch, remove the locking ring from the top of the fuel tank. Remove the OE sending unit and the OE tank flange o-ring.



STEP 10: Install the included float arm onto the PowerFlo lift pump by carefully clipping the arm into the resistor card as shown at right



STEP 11: Place the included tank flange o-ring onto the tank as shown at right. Insert the PowerFlo unit into the tank in the same orientation as the OE unit.

NOTE: Ensure that the float arm does not get pinched or damaged during install. A damaged float arm or resistor card can result in an incorrect fuel level reading.



STEP 12: Using a hammer and punch/chisel, install the locking ring to retain the PowerFlo unit.

STEP 13 (MIDSHIP TRANSFER TANK EQUIPPED VEHICLES ONLY): Remove the hex plug shown at right using a 3/8" allen wrench or socket and install the included 5/16" quick disconnect fitting for your fuel transfer line using a 7/8" socket or wrench.



STEP 14: Place the fuel tank back under the truck and lift it about six to eight inches below its normal position. Reconnect the fuel lines and the harness connection. If the vehicle is equipped with a fuel transfer tank, connect the transfer fuel line to the port installed in step 13.

STEP 15: Lift the fuel tank and install the 8 bolts retaining the tank to the frame using a 16mm socket or wrench.

STEP 16: Reconnect the fuel filler and breather tubes to the tank and tighten the hose clamps.

NOTE: If your vehicle is not equipped with a midship fuel transfer tank, proceed to step 17. If your vehicle does have a midship tank, proceed to step 18:

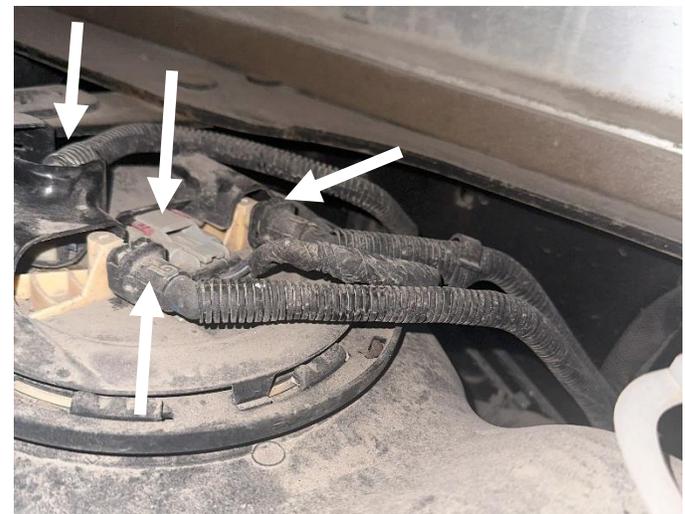
STEP 17: Reconnect the battery terminals. Turn the ignition to the on position and wait five to six seconds. Turn the ignition to the off position. Repeat this process two to three more times to ensure that the fuel system is fully primed. Start the vehicle and check for leaks.

MIDSHIP TRANSFER TANK PROCEDURE:

STEP 18: Ensure that the tank is at most $\frac{1}{4}$ full of fuel and disconnect the fuel breather and fill tubes.

STEP 19: Place a transmission jack or floor jack underneath the tank to support it. Remove the two tank strap bolts retaining the tank to the vehicle using a 16mm socket or wrench.

STEP 20: Lower the tank five to six inches and disconnect the fuel feed, return, and transfer lines. Disconnect the electrical harness from the OE unit.



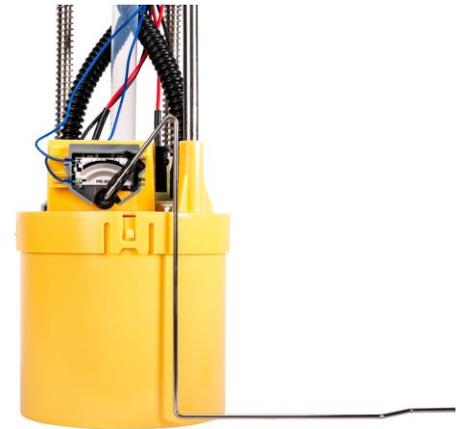
STEP 21: Lower the tank to the ground and remove it from underneath the vehicle.

STEP 22: Using a hammer and chisel or punch, remove the locking ring retaining the OE lift pump unit.

STEP 23: Remove the OE unit from the tank and discard of the o-ring on the tank flange. Clean any debris or dirt around the tank flange or any sealing areas on the tank.



STEP 24: Install the included float arm onto the PowerFlo lift pump by carefully clipping the arm into the resistor card as shown at right



STEP 25: Place the included tank flange o-ring onto the tank and install the Powerflo unit into the tank. Use a hammer and punch or chisel to install the locking ring removed in step 22. If your vehicle is equipped with a fuel transfer system, install the included 5/16" quick disconnect fitting onto the cap of the PowerFlo using a 7/8" socket or wrench.



STEP 26: Lift the tank about five to six inches below its installed height and reconnect all fuel lines and the electrical connector.

STEP 27: Raise the tank to its installed height and install the tank straps using a 16mm socket or wrench. Connect the fuel tank breather and filler tubes and tighten the hose clamps.

STEP 28: Reconnect the battery terminals. Turn the ignition to the on position and wait five to six seconds. Turn the ignition to the off position. Repeat this process two to three more times to ensure that the fuel system is fully primed. Start the vehicle and check for leaks.

