# INSTALLATION INSTRUCTIONS

## SUBJECT: GM DURAMAX L5P FUEL FILTER UPGRADE KIT



**FITMENT:** 2017–2019 GM Silverado/Sierra 2500/3500 6.6L L5P Duramax (Short and Long Bed) – use P/N: FPE-L5P-FFBA-1719
2020-2024 GM Silverado/Sierra 2500/3500 6.6L L5P Duramax Short Bed – use P/N: FPE-L5P-FFBA-20
2020-2024 GM Silverado/Sierra 2500/3500 6.6L L5P Duramax Crew Cab Long Bed – use P/N: FPE-L5P-FFBA-1719
2024 GM Silverado/Sierra 2500/3500 6.6L L5P Duramax Crew Cab Long Bed – use P/N: FPE-L5P-FFBA-20
2020-2022 LM2 3.0L Duramax; 4 Door, Crew Cab and Extended Cab Pickup as well as Tahoe and Yukon use P/N: FPE-L5P-FFBA-20
(NOTE: Due to the extended filter capacity, the filter will extend ~2" inches below the frame rail)
2022.5-2024 LZ0 3.0L Duramax; Silverado and Sierra pickup models use P/N: FPE-L5P-FFBA-20

**KIT P/N:** FPE-L5P-FFBA-1719, Replaces GM Part # 23149526, 84711317, 84996837, and 364721126
FPE-L5P-FFBA-20, Replaces GM Part # 13539109 and 13543066

**EST INSTALL TIME:** 1 hour

**TOOLS REQUIRED:** 18mm socket, 13mm wrench/socket, 15mm wrench or deep well socket, 22mm wrench, T40 torx bit (2020), T30 torx bit, 5/32 bit, flat head screwdriver/pick.

**KIT CONTENTS:**

| Item | Description | Qty |
|---|---|---|
| 1 | LP5 Fuel Filter Base | 1 |
| 2 | Donaldson Fuel Filter / Water Separator | 1 |
| 3 | 1/2" Quick Connect to 3/4-16 Short Style | 2 |
| 4 | SS M6x1x20mm Button Head Screw | 3 |
| 5 | Pipe Fitting with O-ring, Solid Plug (pre-installed) | 1 |
| 6 | O-rings | 2 |


**WARNINGS:**

- Use of this product may void or nullify the vehicle's factory warranty.
- User assumes sole responsibility for the safe & proper use of the vehicle at all times.
- 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 caused by the use or installation of this product.

**PROCEDURE:**

**STEP 1:** Disconnect the vehicle batteries.

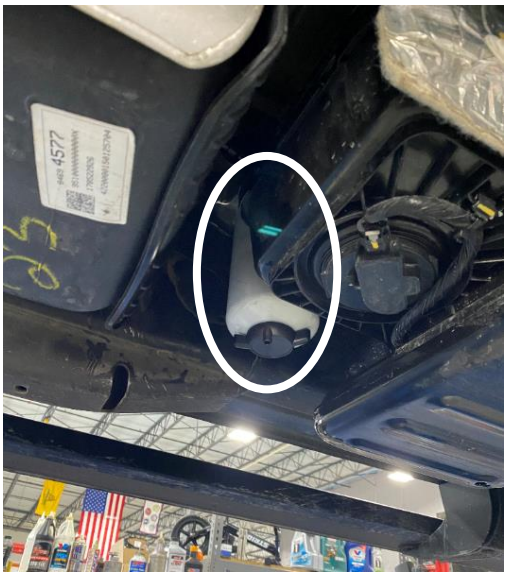
**STEP 2:** Locate the OEM fuel filter base.
For 2017-2019 model year trucks, the filter base is located on the driver's side frame rail, directly in front of the fuel tank.

**MY 2017 - 2019**


For 2020-2024 model year trucks, the filter base is located on the driver's side frame rail, in front of the fuel tank and behind the DEF tank.

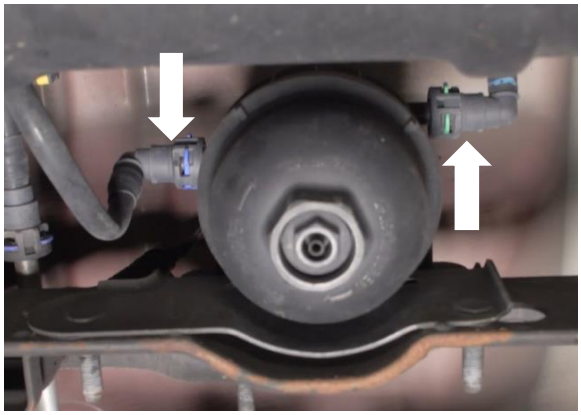
*NOTE: The installation procedures for 2017-2019 and 2020-2024 model year trucks are identical, however, accessibility of the fuel filter base on 2020-2024 vehicles is more limited.*

**MY 2020-2024**

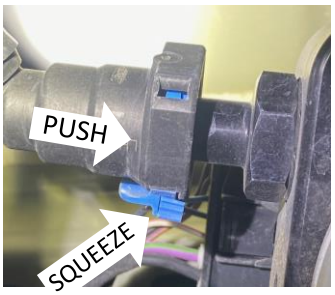


**STEP 3:** Place a pan or a container below the OEM fuel filter.
For 2017-2019 model trucks, use an 18mm socket to loosen the water in fuel sensor.
For 2020+ model trucks, use a T40 to loosen the water in fuel sensor.
Drain the fuel/water from the OEM filter.

**STEP 4:** With the pan or container still under the filter, remove both quick disconnect fittings from the OEM filter base from either side of the filter housing.



To unseat the **blue** locking tab, FIRST push the body of the connector toward the filter housing to release pressure on the locking tab. SECOND – squeeze either side of the top of the blue locking tab, with the tabs squeezed, the quick disconnect can be pulled from the housing.



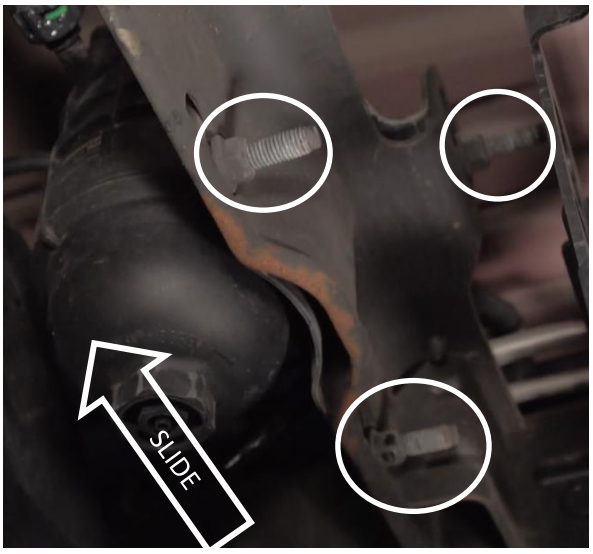

To unseat the **white** locking tab, FIRST release the locking tab on either side of the connector body, then SECOND gently lift or pry it upward to release.

*NOTE: If the locking tab breaks, NAPA Part Number 730-7380 is a suitable replacement.*



Disconnect the electrical connector from the fuel heater.

**STEP 5:** Loosen, but do not remove the 3 retaining nuts.
For 2017-2019 model trucks, use a 15mm ratcheting wrench or deep well socket.
For 2020+ model trucks, access these nuts though holes in the driver's side of the frame from outside of the frame.
Once they are loose, the OEM filter base assembly can slide towards the center of the vehicle and then removed.



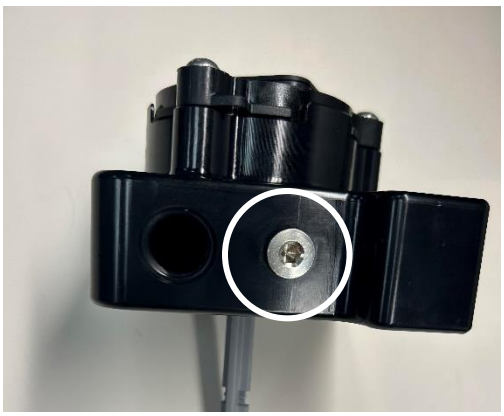
**STEP 6:** Remove the 3 cap screws securing the fuel heater to the OEM filter base using a T30 torx bit. **Discard the OEM cap screws.**
Using a small flat head screwdriver, carefully pry between the base and the heater to unseat the heater from the base.

**Remove and discard the OEM O-rings on the fuel heater.** Install the new O-rings included with the kit and lubricate the O-rings with assembly lube or clean diesel fuel.

Using the new cap screws supplied in the kit, reinstall the heater on the new Fleece filter base. It can only be installed one way.


Install the 2 supplied AN fittings to the Fleece filter base using a 22mm wrench. These fittings need to be tight but do not overtighten.

If the pressure sensor port on the filter housing is to be used in your application, remove the plug, and install the sensor now. If not, the supplied plug is to remain installed.



**STEP 7:** Using a 13mm wrench or socket, remove the 2 cap screws that secure the OEM filter base to the mounting bracket.
Transfer the OEM mounting bracket to the new Fleece filter base, reusing the OEM hardware.

**STEP 8:** Install the new Fleece filter base and mounting bracket onto the vehicle in the OEM location. Slide the assembly over into the slots. Secure the 3 nuts and make sure they are tight. Make the electrical connection to the fuel heater. Reconnect the fuel lines and make sure the locking tabs are engaged. Press them firmly in place and check for retention by pulling outward from the filter housing.

**STEP 9:** Install the included square-cut o-ring on the filter snout. See arrow at right.

**STEP 10:** Screw the new Donaldson filter onto the filter base.

**STEP 11:** Re-connect the vehicle batteries.

**STEP 12:** Prime the fuel system by turning the key (or cycling the start button to “RUN” without your foot on the brake) to “RUN” (not “START”). This will turn the lift pump on.
Let the lift pump run for 10-15 seconds or until it turns off.
Repeat this process 3-4 times to prime the system.
Start the truck (it may crank a little longer than usual before starting). Check for leaks.