

INSTALLATION INSTRUCTIONS

SUBJECT: UNDER BED FUEL FILTER ASSEMBLY FOR 2013-2024 RAM 2500/3500

FPE-2025-139
Revised January, 2026
Page 1 of 6

FITMENT: 2013-2024 RAM 2500/3500 with 6.7L Cummins (pickup models only)

KIT P/N: FPE-CUMM-UBFA-1324

INSTALL TIME: 30 minutes

TOOLS REQUIRED: Flat blade screwdriver, 7/8" socket or wrench, 13mm socket or wrench, torque wrench.

KIT CONTENTS:

Item	Description	Qty
1	Fuel filter base assembly	1
2	Donaldson fuel filter P551329 (FPE-DON-P551329)	1
3	Water-in-fuel sensor w/ drain (FPE-DON-SEN-1324)	1
4	M8-1.25 x 20mm bolts	2
5	3/8" quick connect fitting (FPE-34551-A)	1
6	2013-2018 Install Kit - WIF Sensor Harness (FPE-HAR-CUMM-WIF-1318) 90°, 3/4-16 to 3/8" Swivel Quick Connect (FPE-APT-34-90-Q38)	1
7	2019-2024 Install Kit - WIF Sensor Harness (FPE-HAR-CUMM-WIF-1924) 1/2" Quick Connect to 3/4-16 (FPE-34900-A)	1



APPLICATION NOTES:

For model years 2013-2018, this kit is a direct replacement Mopar 68268285AC and superseded part numbers 68197866AA, 68197866AB, 68197866AC, 6826885AB. This is also a direct replacement for MOPAR 68358393AA in model years 2019-2024.

An optional fuel heater is available for all model years:

For Model Years 2013-2018 use: [FPE-FH-CUMM-1318](#)

For Model Years 2019-2024 use: [FPE-FH-CUMM-1924](#)

WARNINGS:

- 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 cause by the use or installation of this product.

INSTALLATION INSTRUCTIONS

PROCEDURE:

STEP 1: Preassemble filter base before removing stock filter housing. Remove the Fleece filter base from its packaging. For proper assembly, it is important that the base remains in the orientation that is shown to the right. (*Figures 1 and 2*).

Build Procedure for Model Years 2013-2018: Using the appropriate installation kit for your application, install the inlet and outlet fittings onto the Fleece filter base. Using the image to the right (*figure 1*), note the locations of the inlet and outlet ports on the filter base. Starting with the outlet port, thread the 3/8th fitting included in the main hardware kit into place. Use a 7/8" socket or wrench to torque the fitting to 22ft-lbs. Moving on to the inlet port, thread the 90-degree fitting into place. Use a socket or wrench to torque the fitting to 22ft-lbs.

Build Procedure For Model Years 2019-2024: Using the appropriate installation kit for your application, install the inlet and outlet fittings onto the Fleece filter base. Referring to the image to the right (*figure 2*), note the locations of the inlet and outlet ports on the filter base. Starting with the outlet port, thread the 1/2" fitting included in the 2019-2024 installation kit into place. Using a mm socket or wrench, torque the fitting to 22ft-lbs. Next, thread the 3/8th fitting included in the main hardware kit into place. Use a 7/8" socket or wrench to torque the fitting to 22ft-lbs.

Please Note: Tightening the fittings beyond the specified torque can result in damage to the pre-installed O-rings.

2013-2018

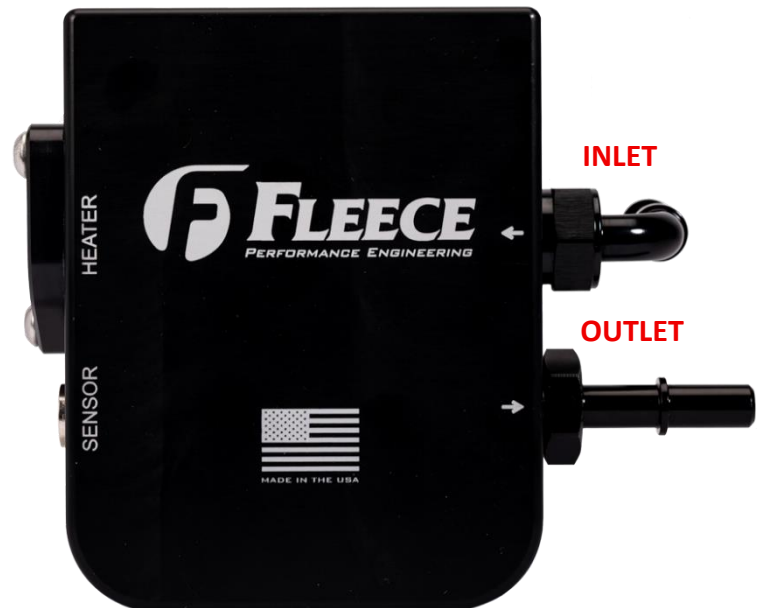


Figure 1: Filter base assembled to accommodate model years 2013-2018.

2019-2024

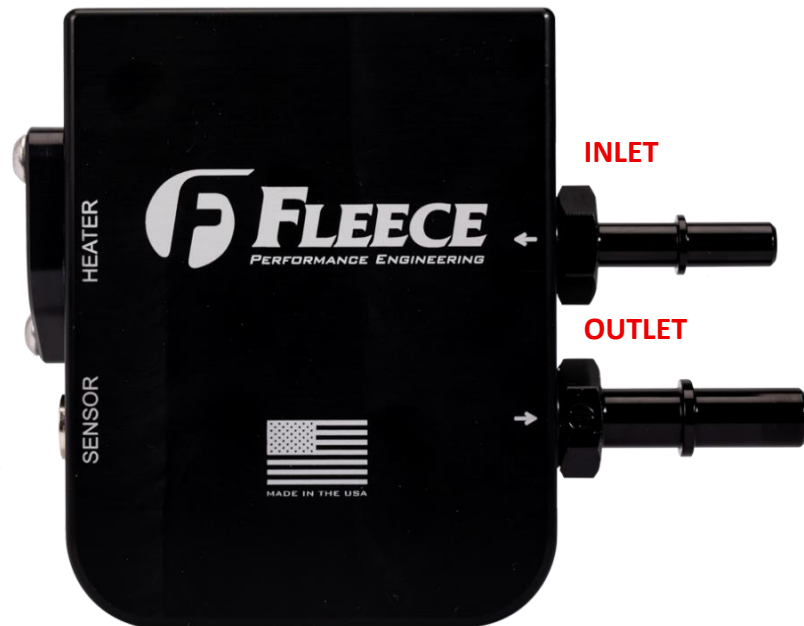


Figure 2: Filter base assembled to accommodate model years 2019-2024.

INSTALLATION INSTRUCTIONS

STEP 2: Begin disassembly of stock filter housing.

Note: Before beginning work, ensure vehicle is parked on a flat and level surface, then disconnect the batteries.

STEP 3: Locate the under-bed fuel filter assembly.

Place a clean bucket or drain pan underneath the filter assembly and twist the drain knob counterclockwise as shown at right to drain the fuel from the filter assembly. (Figure 3)

STEP 4: Disconnect the chassis harness connector for the water-in-fuel (WIF) sensor. To remove, disengage the red locking tab by pulling it towards the front of the vehicle. Depress the tab on the connector, then disconnect it from the filter assembly. (Figure 3)

STEP 5: Disengage the locking tabs on the two quick-disconnect fuel lines. The two fittings are located on the top of the driver's side of the fuel filter assembly. Using the reference images to the right (Figure 4 and Figure 5), please note the proper configuration for your application and verify that the Fleece filter base has been assembled to accommodate this. See descriptions on the next page for the removal of each QD fitting.



Figure 3: Stock filter housing 2019-2024



Figure 4: Fuel line configuration 2019-2024



Figure 5: Fuel line configuration 2013-2018

INSTALLATION INSTRUCTIONS

For Model Years 2019-2024:

LOCKING TAB #1 – This lock is white or gray in color (*Figure 6*). To disengage the locking tab, spread the two tabs outwards from the center of the fitting. With the tabs spread, push the ends of the tabs inwards towards the middle of the fitting (towards the right in the image shown). Pull the fitting from the filter housing to disconnect.

LOCKING TAB #2 – This lock is blue in color (*Figure 7*). To disengage the locking tab, spread the two protruding tabs outwards from the fitting, then push the locking tabs toward the middle of the fitting (towards the left in the image shown). With the tab in the unlocked position, squeeze the push button (shown on the right side of the fitting). Push the fitting towards the filter assembly to release tension on the lock, then pull the fitting away to disengage.

For Model Years 2013-2018:

NOTE: Both tabs for this model year are red in color (*Figure 8*). Both can be removed in the exact same fashion as model years 2019-2024.

LOCKING TAB #1: Start by pulling each of the protruding tabs out while sliding the entire tab downward. The tab can then be fully removed or left in the unlocked position. Next, squeeze the push button and pull away from the assembly.

LOCKING TAB #2: Pull each of the protruding tabs out while sliding the entire tab out toward the right when facing the assembly. The tab can then be fully removed or left in the unlocked position. Next, squeeze the push button and push up toward the assembly to release tension, then pull away from the assembly.

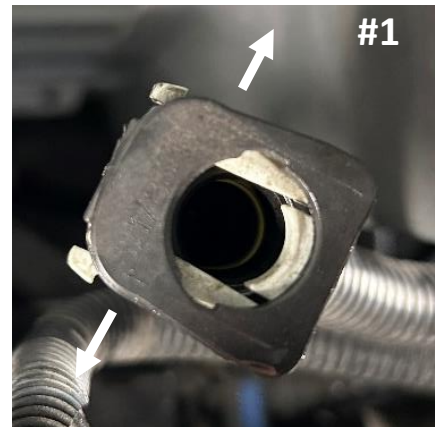


Figure 6: Outlet fuel line 2019-2024

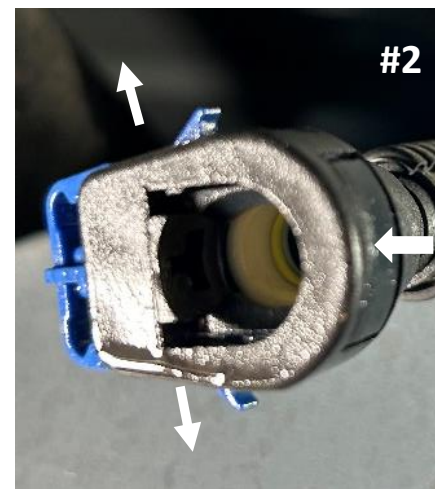


Figure 7: Inlet fuel line 2019-2024

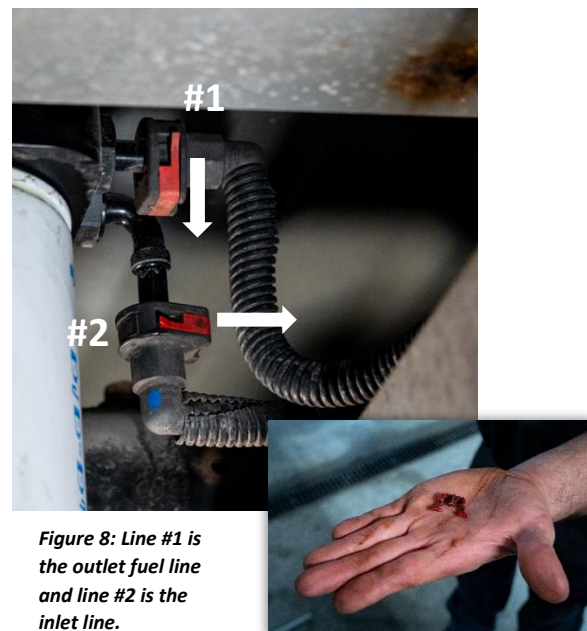


Figure 8: Line #1 is the outlet fuel line and line #2 is the inlet line.

INSTALLATION INSTRUCTIONS

STEP 5: Remove the two nuts retaining the filter assembly to the mounting bracket using a 13mm socket or wrench. The nuts are located on the rear-facing side of the filter assembly mounting bracket (*Figure 9*).



Figure 9: Mounting bracket, rear-facing view.

STEP 6: Install the Fleece Performance Fuel Filter Base. On the base there are two sets of mounting holes which are labeled “19+” or “13-18” (*See Figure 10*). Utilizing the two included M8-1.25 bolts, mount the base onto the OE bracket. Thread the bolts through the mounting bracket and into the appropriate mounting holes on the filter base assembly. Using a 13mm socket or wrench torque the bolts to 18 ft-lb.

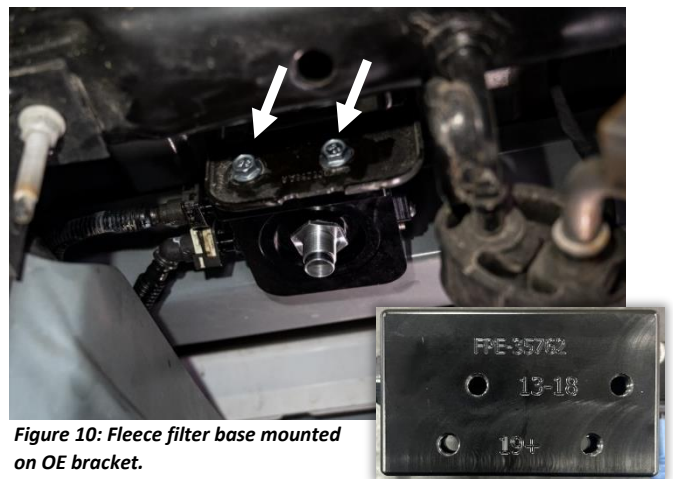


Figure 10: Fleece filter base mounted on OE bracket.

STEP 7: Connect the quick disconnect fuel line fittings to the adapter fittings on the Fleece Performance filter base (*Figure 11*). Once the fittings are connected, engage the locking tabs by pressing them into the fittings until seated.

NOTE: For model years 2019-2024, the fitting with the white locking tab will need to be installed with the tab pressed halfway into its locked position. Once the fitting is connected, fully seat the tab into the fitting. See image at right.

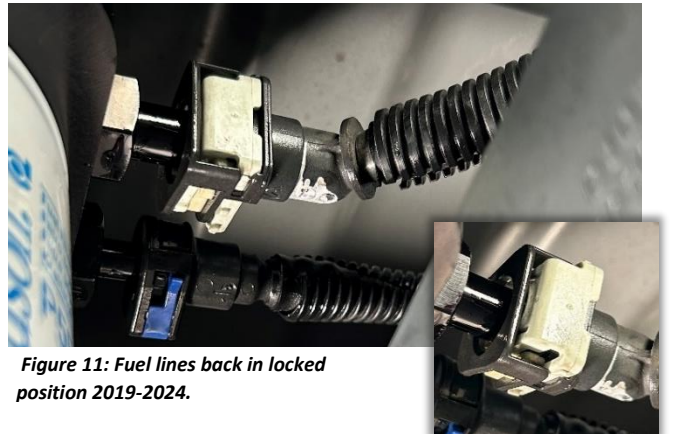


Figure 11: Fuel lines back in locked position 2019-2024.

STEP 8: Lubricate the square-cut O-ring included with the fuel filter with fresh fuel and install it onto the snout on the underside of the filter base as shown at right (*Figure 12*).



Figure 12: Fleece filter base with square cut O-ring.

INSTALLATION INSTRUCTIONS

STEP 9: Remove the water drain adapter that is pre-installed on the bottom of the Donaldson fuel filter. Turn the adapter counterclockwise to remove. **Lubricate the flat O-ring that sits underneath the drain adapter.** Install the included water-in-fuel (WIF) sensor and water drain onto the bottom of the filter. Turn the WIF sensor clockwise until tight. (Figure 13)



Figure 13: Donaldson fuel filter without WIF sensor (left), and Donaldson filter with WIF sensor installed (right).

STEP 10: Lubricate the sealing O-ring on the fuel filter with fresh fuel. Install the filter onto the filter base. Twist the filter clockwise until tight. (Figure 14)



Figure 14: Donaldson fuel filter installed onto Fleece filter base.

STEP 11: Install the appropriate WIF Sensor Harness. Each year specific installation kit includes their own WIF sensor harness. Connect one end to the truck-side harness, then the other to the WIF sensor on the bottom of the fuel filter. (Figure 15)

STEP 12: Connect the batteries. Prime the fuel system by cycling the ignition to the “on” position (without starting the vehicle) and wait for 5-6 seconds. Cycle the ignition to the “off” position. Repeat this process 2-3 times, then start the vehicle. Check for fuel leaks.

STEP 13: IMPORTANT NOTICE FOR CALIFORNIA RESIDENTS: For California customers: An E.O. identification label is required for Smog Check inspection. The E.O. identification label included with this kit **MUST** be placed in the engine compartment so that smog check technicians can verify the E.O. number.



Figure 15: Fully installed Fleece fuel filter kit.