

Direction-Plus Fuel Manager Pre-Filter Installation Guide for Toyota Land Cruiser 300 Series

This document is to be used as a guide for the installation of the Direction-Plus Fuel Manager pre-filter kit (FM635DPK) to a Toyota Land Cruiser 300 Series V6 Diesel F33A-FTV (2022). It is recommended that the installation of the product be carried out by a competent qualified mechanic.

Included in the kit



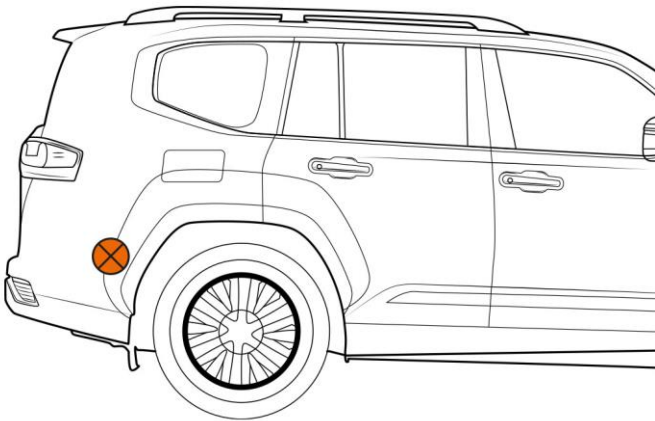
<i>Pre-assembled</i>	<i>Hardware Bag</i>	<i>Fuel Filter Mounting Kit Bag</i>
1 x Fuel Manager Pre-Filter	1 x Bracket (LC300PL150.1)	2 x M10x30 Bolts
2 x M16x1.5 to -8 Adaptors	1 x Bracket (LC300PL150.2)	2 x M10 Flat Washers
2 x -8 to ½" Hose Straight Fittings	1 x Bracket (LC300FM100.3)	2 x M10 Spring Washers
4 x M16 Alloy Washers	3 x M8x16 Bolts	
2 x M16x1.5 Plugs	3 x M8 Spring Washers	1 x M10 x 90mm Bolt
	3 x M8 Flat Washers	2 x M10 Flat Washers
	2 x 18-20mm Fuel Clamps	1 x M10 Nyloc Nut
	1 x 1500mm ½" Fuel Hose	1 x Inline hand pump
	10 x 200mm Cable Ties	



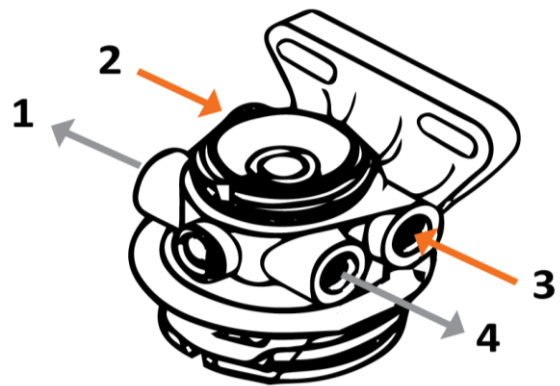
Tools Needed:

- Spanners
- Sockets
- Screw Drivers
- Pliers
- Snips/Cutter
- Rags
- Small container for priming
- We suggest using a thread sealant like Loctite 567 or equivalent.

APPROXIMATE MOUNTING LOCATION
FM635DPK
(driver side)



Fuel Manager Pre-Filter Normal Flow Header Connection



Ports 2 and 3 = INLET
Ports 1 and 4 = OUTLET

Installation Guide

1. Begin by removing the spare tire, this will make kit installation much simpler as it provides more access.
2. Using the **M10x90mm bolt**, **two flat washers** and **M10 nyloc nut**, Bolt the fuel filter bracket to the outside of the chassis rail under the driver's rear quarter panel. It uses the **LC300PL150.2 bracket** to locate the fuel filter bracket to the slots in the chassis rail.



LC300 Fuel Manager mounting brackets and mounting hardware



Fuel Manager bracket secured in place, note how smaller bracket lock in to prevent movement from the main bracket



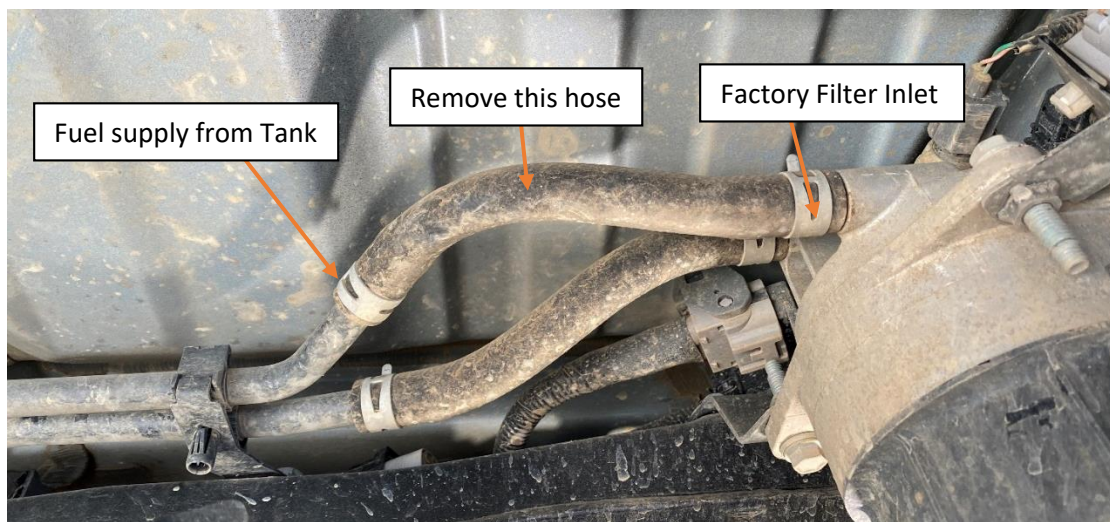
Inside view of new bracket secured in place

3. Install the threaded adaptors onto the Fuel Manager, using the **M16 washers** between the filter head and the **M16 adaptors**. Apply thread sealant like Loctite 567 or equivalent. Keep the exposed -8 thread clean when installing.



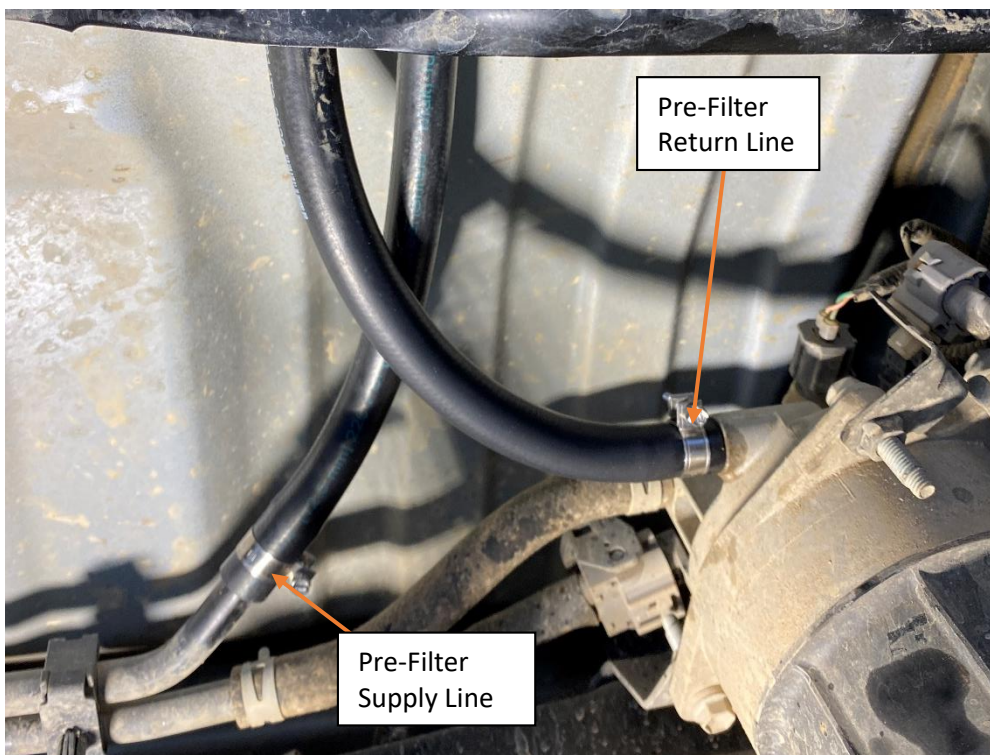
Fuel Manager Pre-Filter in place on bracket, fuel fittings face rear of vehicle

4. Install the Fuel Manager to the fuel filter bracket using the **two M10x30 bolts, 2 x spring washers and 2 x flat washers**.

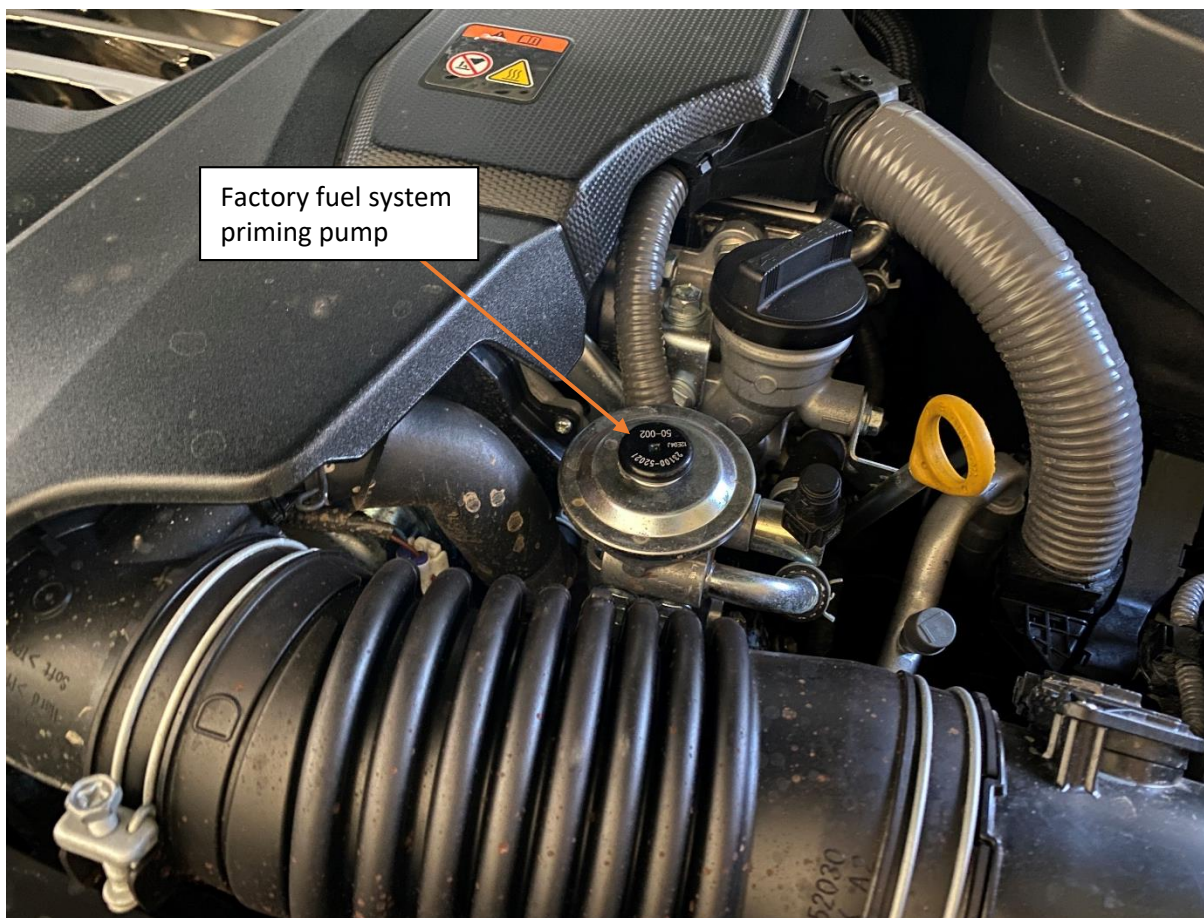


Factory Fuel Filter hose locations

5. Cut the **supplied ½" fuel line** in half. Install the **straight° -8 hose fittings** to one end of each of two hoses. Make sure the hose is seated all the way on the push lock fitting. Finally, apply **Loctite 567** to the -8 thread on the adaptor in the fuel filter ports before securing the straight -8 hose fitting in place.
6. Find the factory fuel hose that supplies the factory fuel filter. Remove the hose completely. To the hardline side, measure, cut and install other end of the new fuel filter supply hose and secure with one of the new **stainless EFI hose clamps**.
7. Measure and cut the **new fuel filter return hose** to the inlet to the factory fuel filter do not secure yet.
8. Temporarily install the **inline priming pump** to the end of the pre-filter return hose, pump until there is fuel just about to come out of the pre-filter outlet hose. *This is done to minimize any air locks in the system.*
Retain hand pump in vehicle for future filter servicing & replacement.
9. Remove the inline priming pump and connect the hose from the pre-filter assembly outlet to the factory fuel filter. Secure in place with an **18-20mm clamp**. Use the factory priming pump in the engine bay to draw the fuel the rest of the way.

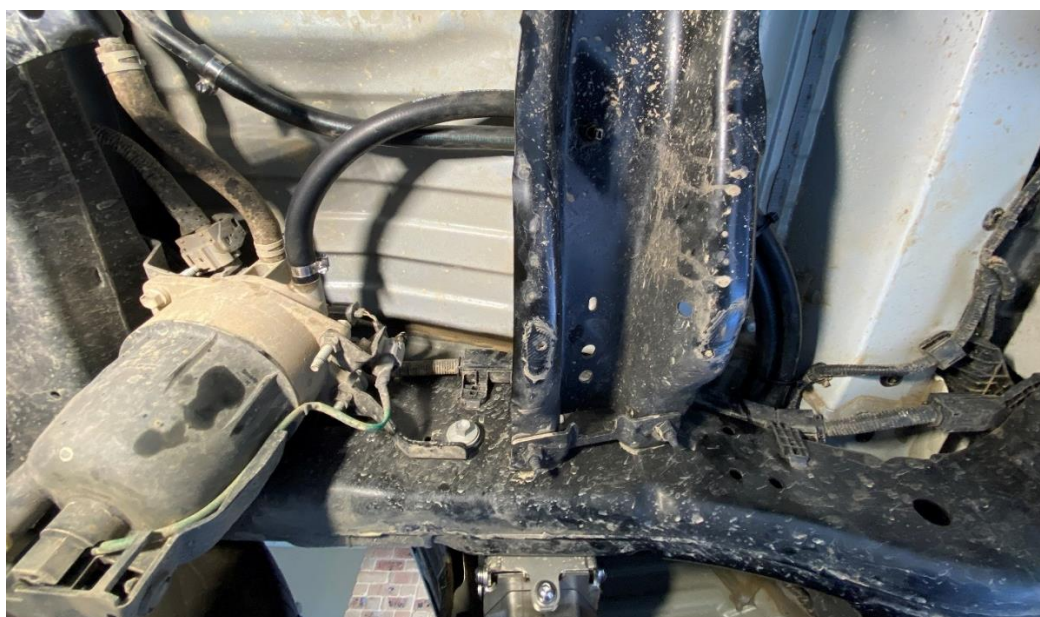


LC300 Fuel Manager Pre-filter fuel hose installed



LC300 factory fuel system priming pump

10. Bolt the Fuel Manager filter cover into place (**bracket LC300PL150.3**), using the **3x M8x16mm bolts**, **3x M8 spring washers** and **3x M8 flat washers**.



Fuel hose routing for Fuel Manager pre-filter on LC300



Fuel Manager filter cover (LC300FM1000.3) bolted in place

11. Once complete start the vehicle, carefully and thoroughly checking for leaks.
12. Run the vehicle for at least 20 minutes to ensure there are no air pockets in the fuel system.
13. Reinstall the spare tire that you removed in step 1.

End of Installation Guide