



# Ford Ranger / Mazda BT-50 2011-2017 Direction-Plus™ Pre-Line Plus Filter Kit Installation Guide

This document is to be used as a guide for the installation of the Direction-Plus™ Fuel Manager™ PL150DP pre-filter Kit to a Ford Ranger / Mazda BT-50 2011-2017. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

## Important before starting

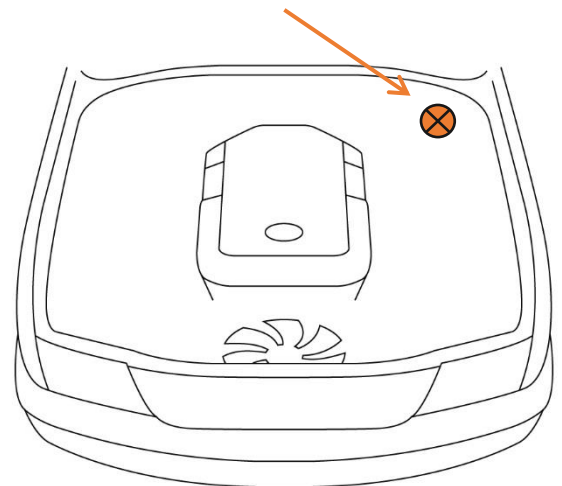
- Ensure the engine bay is clean and free from contaminants
- The fuel manager filter head has direction arrows indicating the direction of flow
- You have the correct tools to complete the fitment
- Read the instructions in full and familiarize yourself with the installation before commencing any work

## Kit contents

M16X1.5 ADAPTER – 10MM	2
2 BOLTS 2 NUTS 4 WASHERS	1
9.89 ELBOW 8MM BARB	2
BRACKET - FORD RANGER/BT50 3.2lt	1
DFL10 - FUEL LINE RUBBER (10MM)	1
WATER ALARM KIT	1
ENGINE BAY LABEL	1
PL150DP ASSEMBLY	1
HOSE CLAMP - 10MM	2
16MM FLAT WASHERS	1
PUSH ON 90 DEG - 10MM	2
HOSE CLAMP – 10MM	2
WINDSCREEN LABEL	1

\*Kit contents are subject to change based on component availability and/or refinement

Pre-filter mounting location



## Installation Guide

1. Remove the 10mm head bolt from behind the fuse box (looking towards the rear of the vehicle) ref, figure 2
2. Place bracket in the engine bay with as per the image in figure 2.
3. Reinstall the removed nut from the fuse box and using the supplied M8 nut secure the other end of the bracket between the A/C lines. It is recommended to use Loctite for this M8 nut.

4. Install the M16x1.5 adapters and M16 flat washers to the inlet and outlet ports that are facing outward, towards the inner guard and tighten. **Note: depending on installation you may need to remove and reposition the already installed plugs**
5. Mount the PL150DP Pre-filter assembly to the mounting bracket using the 2 x 10mmx30mm bolts, 2 x 10mm flat washers. Ref figure 1

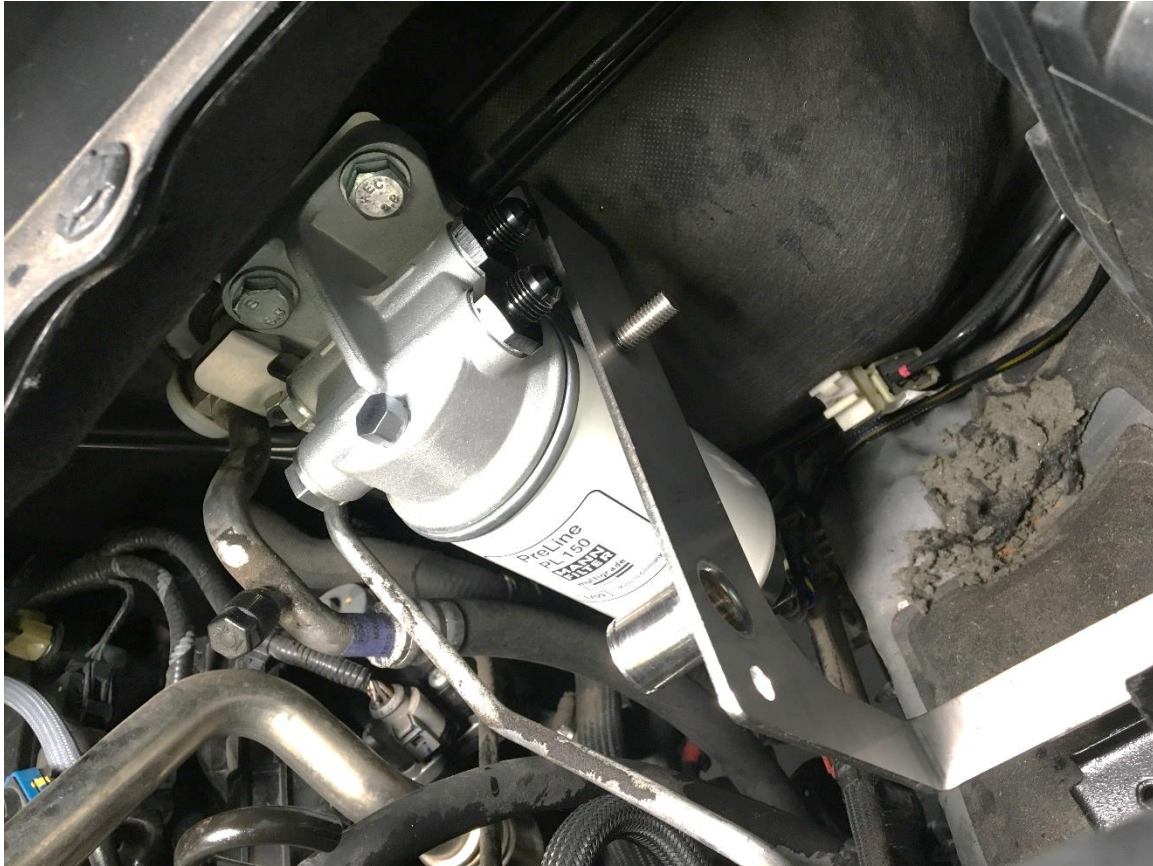


Figure 1

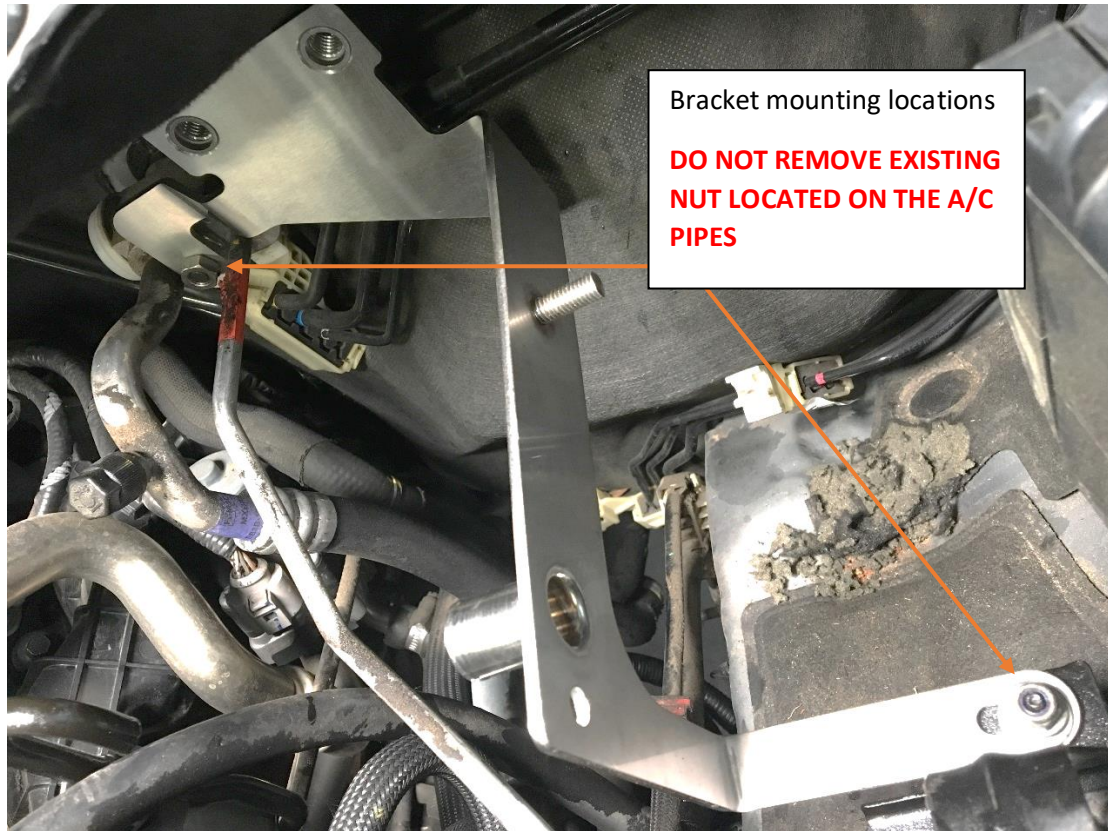
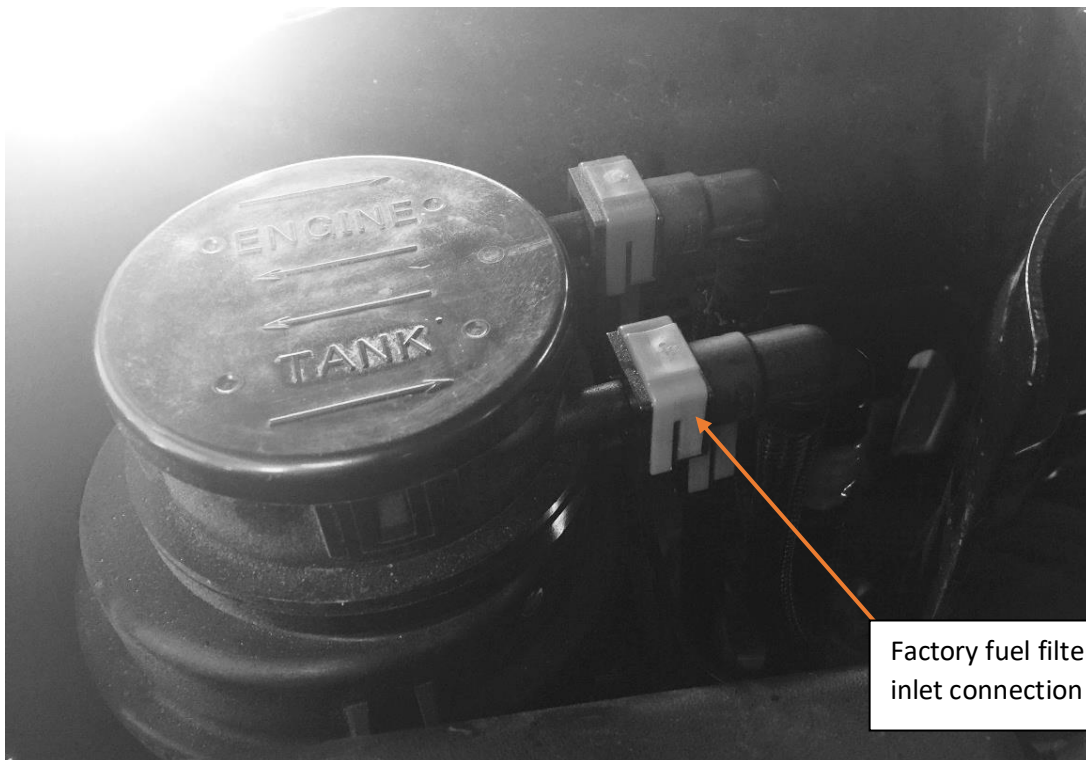


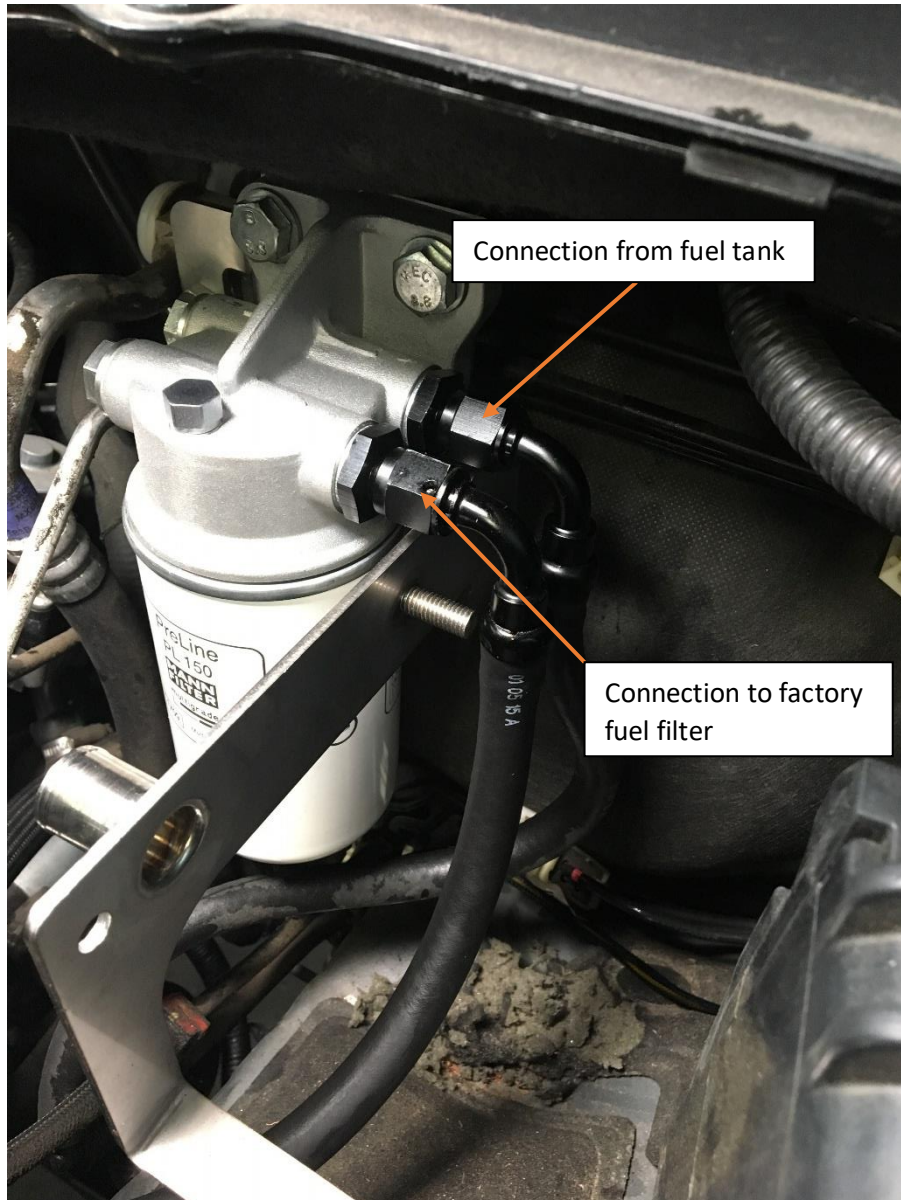
Figure 1

6. Remove the RED quick disconnect fitting from the original filter head (the larger lower fitting) and the other end of the pipe coming from the tank. Remove the factory piece of pipe. Keep this pipe in a safe place as it will be needed if the vehicle needs to be return to factory specification.





7. With one end of the supplied 10mm fuel hose, Lubricate the inside portion of one end using diesel fuel or WD40
8. Install one of the 10mm 90° push-lock fittings into the pre-lubricated end of the 10mm fuel hose, ensuring that the hose stops firmly against the inside of the bell cover.
9. Connect the 10mm 90° push-lock fitting to the inlet of the pre-filter housing. Adjust the angle of the fitting tail to clear any obstructions.
10. Route the 10mm fuel hose down to the steel fuel pipe that was connected to inlet of the factory fuel filter and cut the hose to length approximately 25mm past the end of the steel fuel pipe
11. In the end of the same piece of fuel hose, install one of the 9.89mm female quick disconnect fitting and secure with a hose clamp. Connect this hose to the supply line from the tank.
12. With the remaining length of 10mm fuel hose Lubricate the inside portion of one end using diesel fuel or WD40.
13. Install the last 10mm 90° push-lock fitting into the pre-lubricated end of the 10mm fuel hose, ensuring that the hose stops firmly against the inside of the bell cover.
14. Connect the 10mm 90° push-lock fitting to the outlet of the pre-filter housing. Adjust the angle of the fitting tail to clear any obstructions.
15. Route the 10mm fuel hose to the inlet of the factory fuel filter and cut the hose to length, approximately 25mm past the end of the inlet barb
16. Install the last 9.89mm female quick disconnect fitting in the end of the same fuel hose and secure with a hose clamp. Connect this hose to the inlet of the factory fuel filter and secure with a supplied hose clamp.



17. Using the supplied nylon cable ties carefully secure both fuel hoses, ensuring they are not kinked and cannot contact any hot components.
18. Remove any loose tools from the work area
19. To prime the fuel manager assembly with fuel turn the ignition key to the ON position and wait 5 seconds, then switch the ignition OFF. Repeat this process another 3 times.
20. Start the vehicle and allow to run for 5-10 minutes whilst checking for any possible leaks.
21. Refer to supplementary instruction for water alarm connection

END OF GUIDE