



## Toyota Land Cruiser 70 Series Direction-Plus™ PreLine-Plus Installation Guide

This document is to be used as a guide for the installation of the Direction-Plus™ Land Cruiser 70 Series PreLine® 150 pre-filter to a 2007+ Toyota Land Cruiser 70 Series V8 Diesel. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

### Important Before Starting

- Ensure you have the correct tools to complete the fitment
- Read the instructions in full and familiarize yourself with the installation, before commencing any work

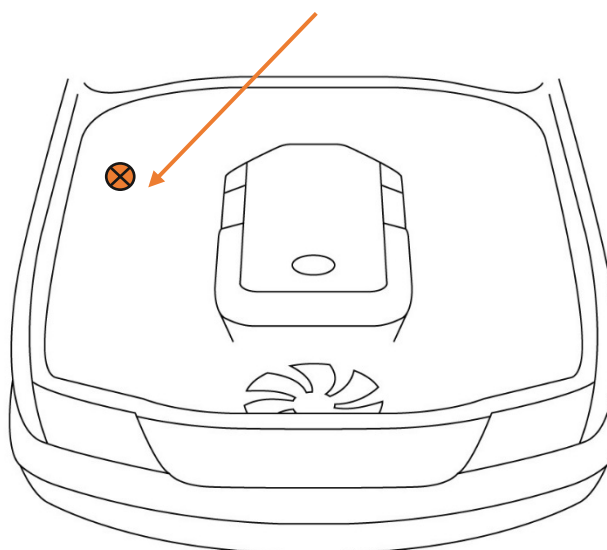
### Maintenance / servicing

- It is recommended to drain the PL150 element every 5,000 – 10,000km
- PL150DP element is to be replaced every 40,000km or as per your vehicles service interval

### Included in the kit

- 1 x Mounting Bracket
- 8 x Cable Ties
- 2 x M8x25 Bolts
- 1 x M8x16 Bolt
- 3 x M8 Flat Washers
- 1x MANN+HUMMEL™ PL150DP + sensor
- 2x M10 Bolts
- 4x M10 Washers
- 2X M10 Nyloc Nuts
- 2x M6x16 Bolts
- 4x M6 Flat Washers
- 2x M6 Nyloc Nuts
- 2x M16 Straight Adapters
- 2x M16 Alloy Washers
- 2x 12mm Straight Push Lock Hose Fitting
- 1x 3m Length of 12mm Fuel Hose
- 2x 1.5m Length of 35mm Heat Sleeve
- 2x 12mm Fuel Hose Clamps
- 1x Water Alarm Kit

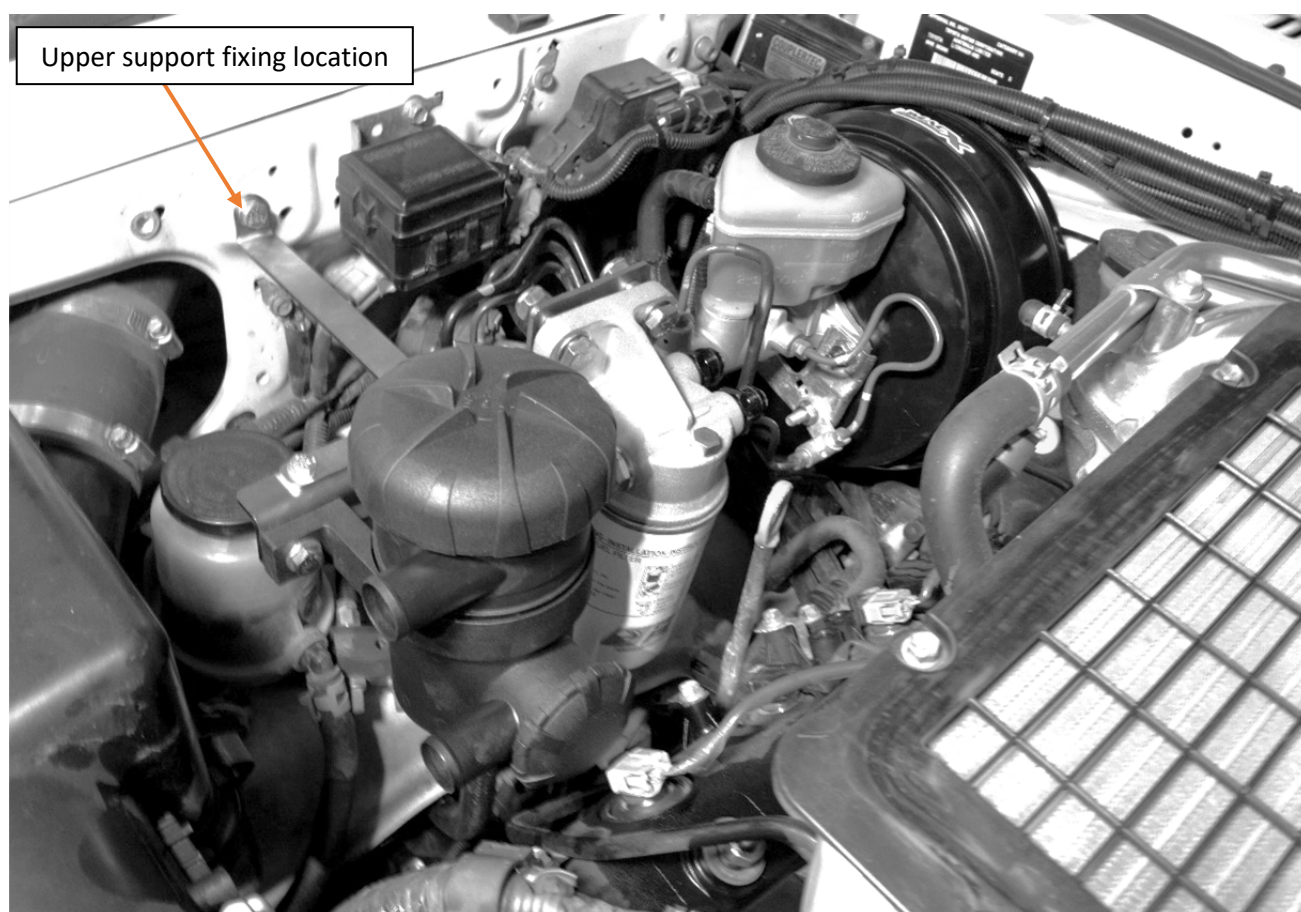
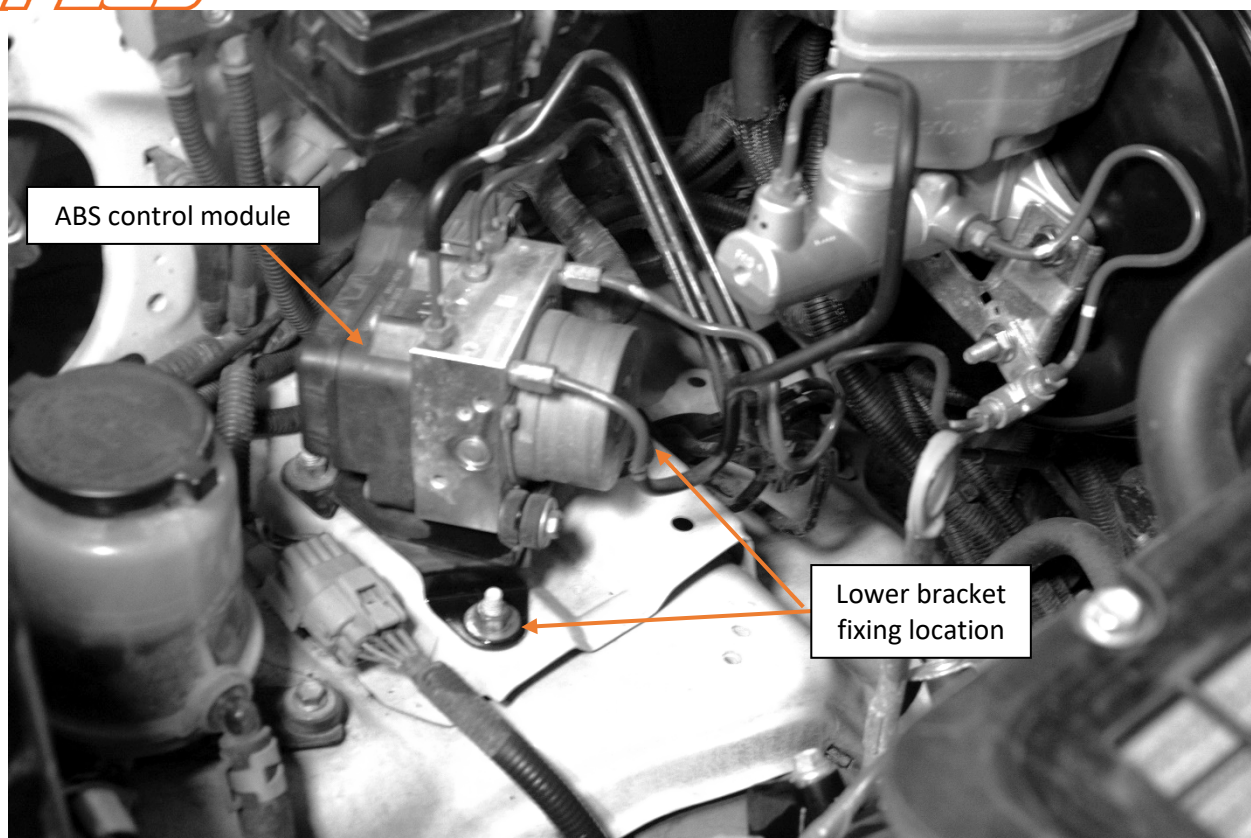
Approximate mounting location

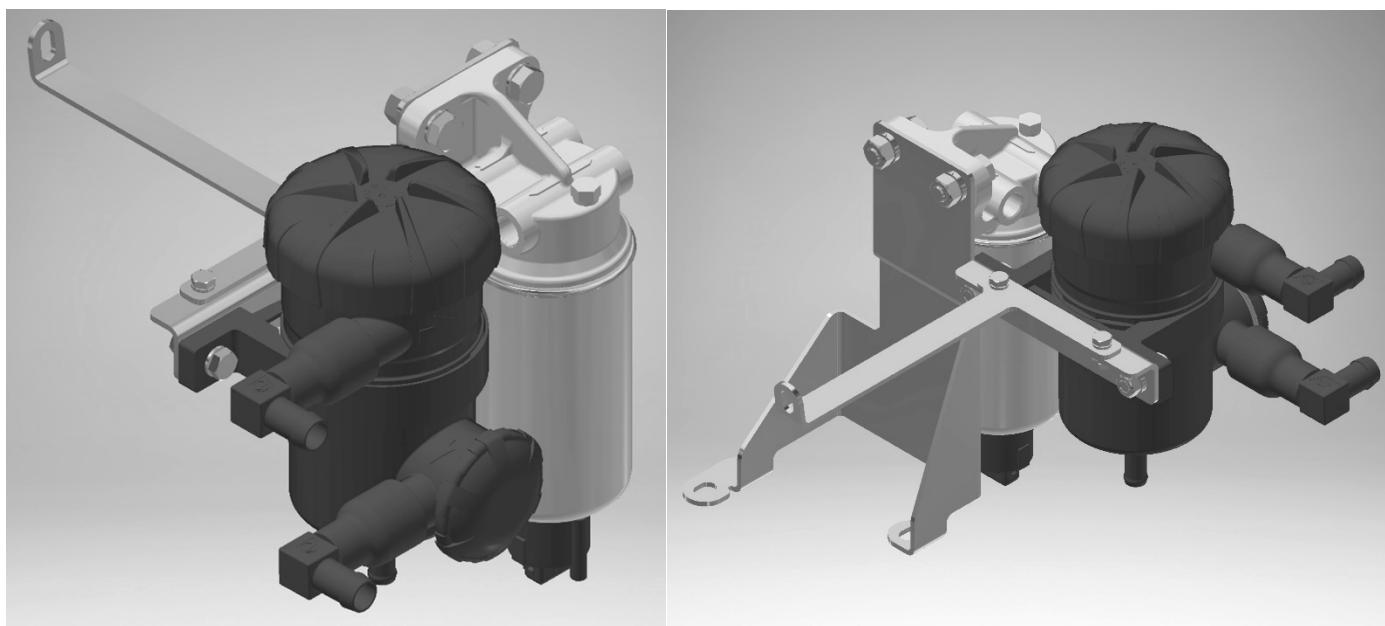


\*Kit contents are subject to change based on component availability and/or refinement

### Installation Guide – PreLine

1. On the ABS control unit, remove the nut closest to the engine and the nut closest to the rear of the vehicle. Install the bracket on top of the ABS control unit mounting bracket, loosely securing reusing the original nuts. Next, bolt the ProVent® 200 to the bracket using the supplied bolts and washers.
2. Using 1x M8x16 bolt and 2x M6x16 bolts and nuts, loosely install the upper reinforcing brace.
3. Adjust bracket as required and tighten all nuts and bolts securing the bracket

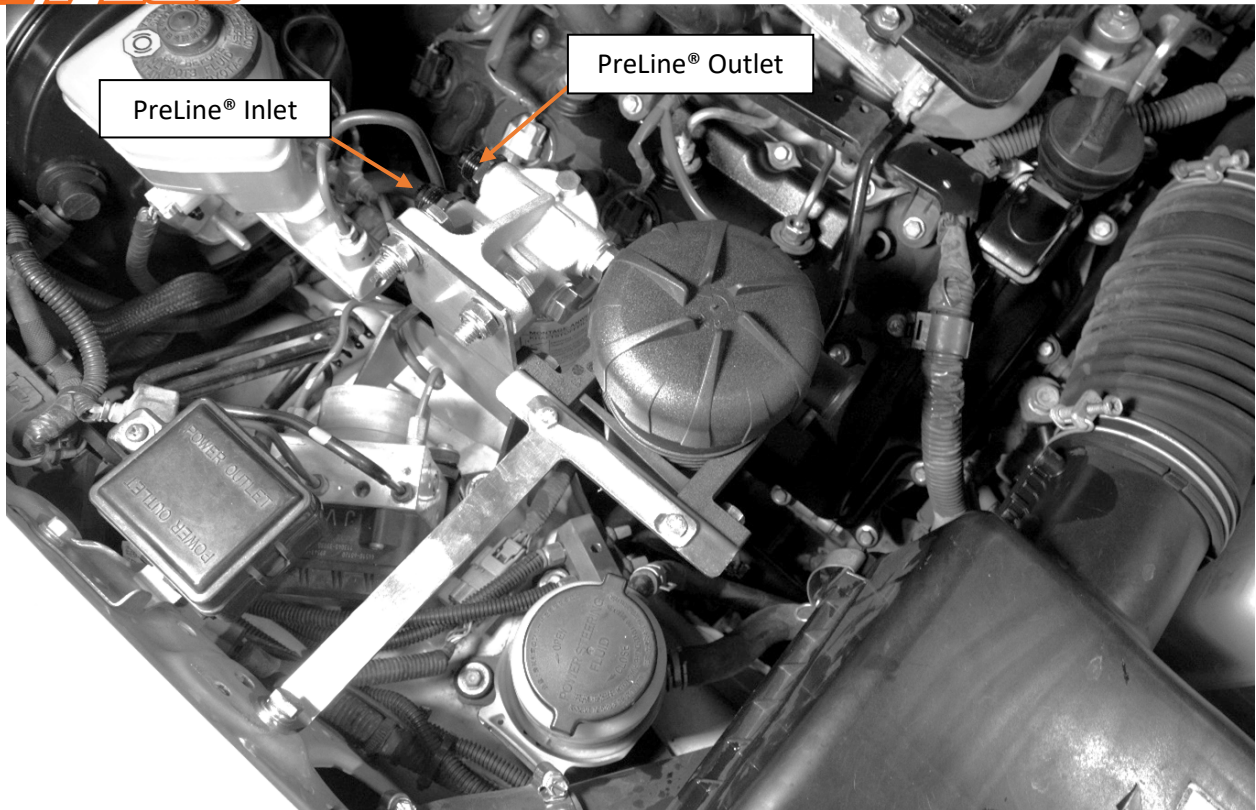




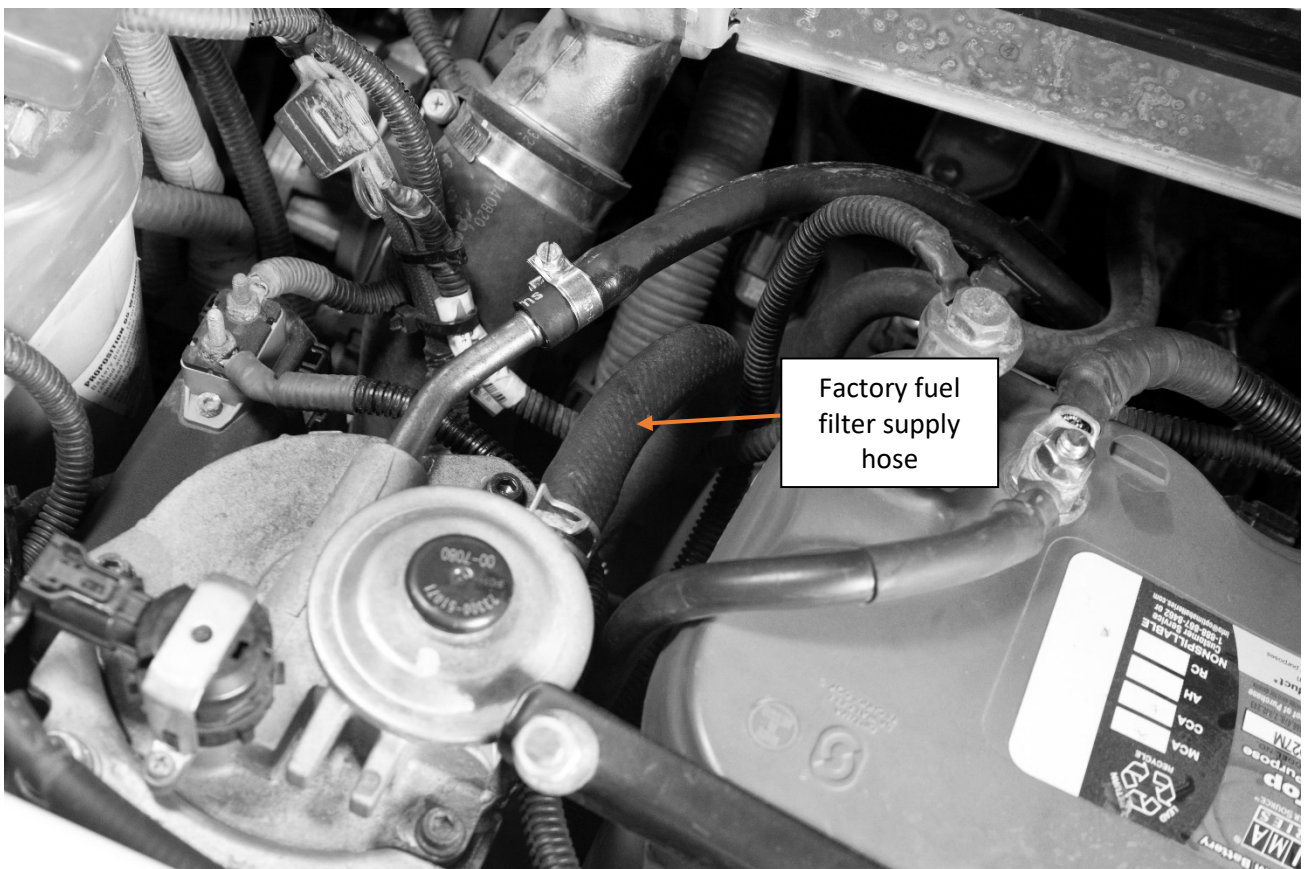
*PreLine 150 Assembled onto LC70 Dual Bracket*

4. Mount the other end of the 850mm long 16mm hose to the 16mm 90° joiner fitting on the hose connected to the hose running to the black air intake pipe on the front passenger side, using a 16mm spring clamp to secure it in place.
5. Mount one end of the 750mm 16mm hose to the Upper 16mm 90° joiner fitting on the ProVent® 200. Use a 16mm spring clamp to secure it in place.
6. Mount the other end of the 750mm 16mm hose to the 16mm 90° joiner fitting on the hose connected to the hose running to the black box in front of the intercooler on the front passenger side, using a 16mm spring clamp to secure it in place.
7. Using the supplied 10mm bolts, washers and nuts, mount the PL150DP pre-filter assembly filter to rear mounting location of the bracket
8. Install the two M16 flat washers and straight adapters to the filter head, so that when the filter is mounted on the bracket they will both be facing toward the rear of the vehicle **Note: you may need to remove and reposition the two M16 plugs pre-installed into the filter head**





9. Remove the factory fuel filter supply hose. Retain this hose if you wish to remove the kit at any point.

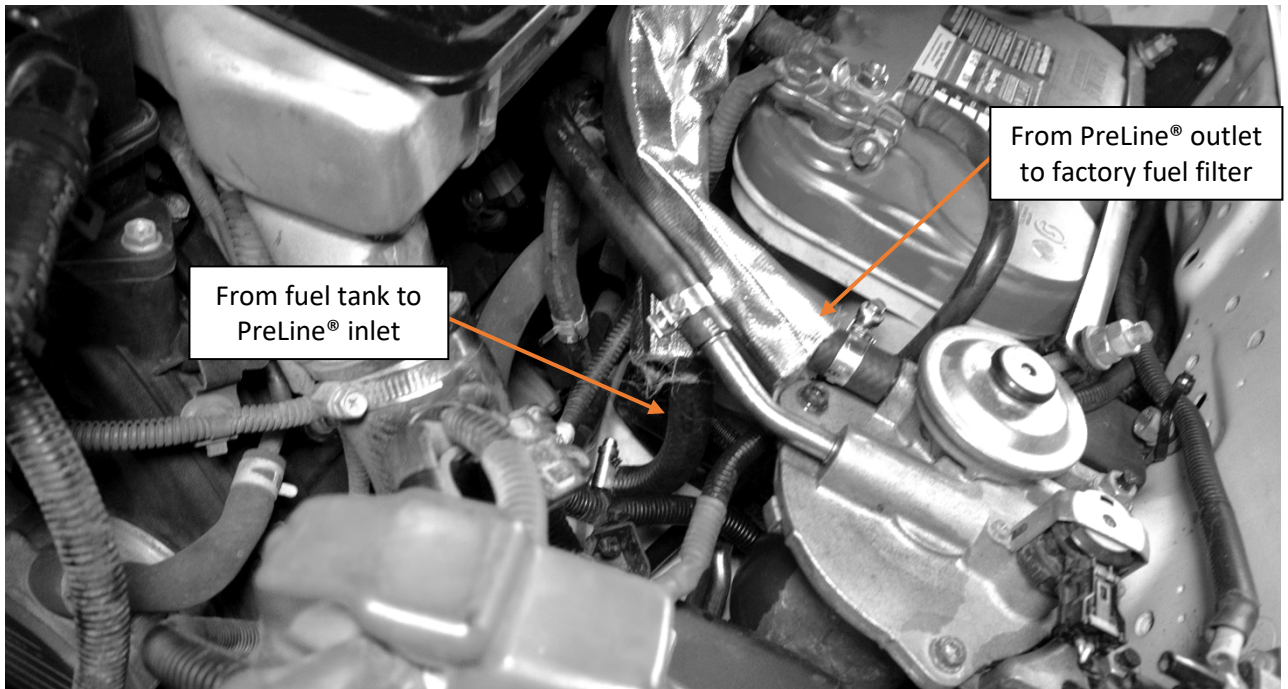


10. Measure from the steel pipe (this pipe comes from the tank) to the inlet port of the PL150DP head (the arrows on the head indicate direction of flow) and cut to length a piece of the supplied 12mm hose





11. Lubricate the barbed end of one push-lock fitting and the inside portion of the hose to be fitted with a push-lock fitting with diesel fuel or WD40
12. Insert the barbed end of one push-lock fittings into the pre-lubricated end of the hose. Ensuring that the hose stops firmly against the inside of the bell cover.
13. Install a length of the supplied heat shield over the hose – trim to length if required
14. With the assembled hose, screw the push-lock fitting on to the inlet port of the pre-filter. Routing the hose along the firewall, Connect the other end of the same hose to the steel fuel line coming from the tank and secure using a supplied 12mm fuel hose clamp



15. Lubricate the barbed end of the remaining push-lock fitting and the inside portion of the remaining hose to be fitted with a push-lock fitting with diesel fuel or WD40
16. Insert the barbed end of the remaining push-lock fittings into the pre-lubricated end of the hose. Ensuring that the hose stops firmly against the inside of the bell cover



17. Install a length of the supplied heat shield over the hose – trim to length if required
18. With the now assembled hose, screw the push-lock fitting on to the outlet port of the pre-filter
19. Routing the hose along the firewall, measuring the hose in place between the outlet port of pre-filter the inlet of the factory fuel filter. Cut the hose to length
20. Connect the 12mm fuel hose to the inlet of the factory fuel filter and secure with a supplied 12mm fuel hose clamp
21. Using the supplied nylon cable ties, secure any loose hose from rubbing on any other components
22. Bleed the fuel system by pumping the hand primer on the factory filter until firm – **note it is easier to prime the system if the PreLine® element is filled with clean diesel before using the hand primer.**
23. Start vehicle and run the vehicle, whilst checking all connections for leaks
24. Refer to supplementary instruction for water alarm connection

[End of PreLine Installation Guide](#)