

## Direction-Plus Volkswagen Amarok V6 Fuel Manager Pre-Filter Installation Guide

This document is to be used as a guide for the installation of the Direction-Plus Volkswagen Amarok V6 Fuel Manager FM100 diesel pre-filter kit to a 2016+ Volkswagen Amarok V6 Diesel. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

\*Images are for reference purposes; actual product may differ.

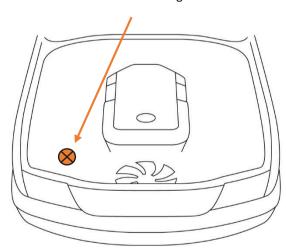
#### **Important before starting**

- · Ensure the engine bay is clean and free from contaminants
- The 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

### Included in the kit

- 1 x Fuel Manger FM100
- 1 x Bracket PART B
- 1 x Bracket PART A
- 1 x 3m 10mm Fuel Hose
- 1 x M8x25 Bolt
- 2 x M8 Flat Washers
- 1 x M8 Nyloc Nut
- 2 x M6x16 Bolts
- 2 x M6 Nyloc Nuts
- 4 x M6 Flat Washers
- 4 x Fuel Clamps
- 2 x M16 Alloy Washers
- 2 x M16 to -6 Adaptors
- 2 x -6 90° Push Lock Fittings
- 8 x 100mm Cable Ties
- 2 x M10x30 Bolts
- 2 x M10 Nyloc Nuts
- 4 x M10 Flat Washers
- 1 x Engine bay decal
- 1 x Windscreen decal

Pre-filter mounting location

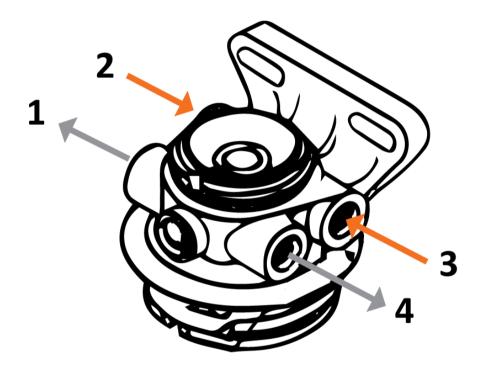


1

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



# Fuel Manager Pre-Filter Normal Flow Header Connection



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

Direction-Plus™ FM643DPK Install 2



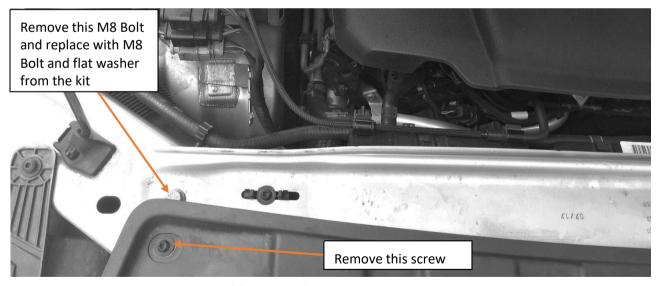
### **Installation Guide**

1. Begin by removing the engine cover to give access to the area in the front driver's side behind the radiator.



Amarok V6 Engine Bay - Overall View

2. Remove the torx head screw holding down the driver's side corner of the plastic radiator cooling panel. Once removed, remove the M8 Bolt partially obscured by the panel. Replace the M8 Bolt with the new longer bolt in the kit, ensuring there is an M8 flat washer under the head of the bolt. Once in place and tightened the torx head screw can be reinstalled into the radiator cooling panel.



Detail of front Driver's side or radiator support panel

- 3. Install the main bracket to the underside of the radiator support panel, picking up the new longer bolt that was just installed. Use a flat washer and nyloc nut to secure in place. Do not fully tighten yet!
- 4. Install the second bracket to the body earth stud, making sure to sit the bracket on first, then the earth strap, then the factory dome nut. Use the M6x16 bolts, flat washers and nyloc nuts to secure the two brackets together it firmly in place.

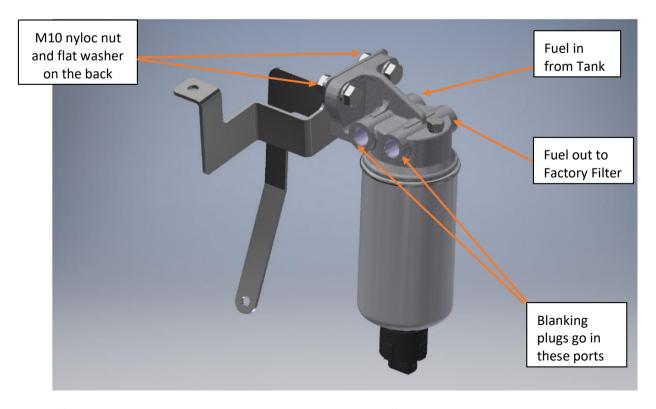


5. Now you can tighten all the mounting bolts to secure the whole assembly in place.



Mounting Bracket installed in engine bay

6. Connect the supplied wiring harness to the water sensor in the bottom of the fuel filter. Check to make sure the water sensor and the filter are snug on the assembly, do not over tighten as the thread can strip.



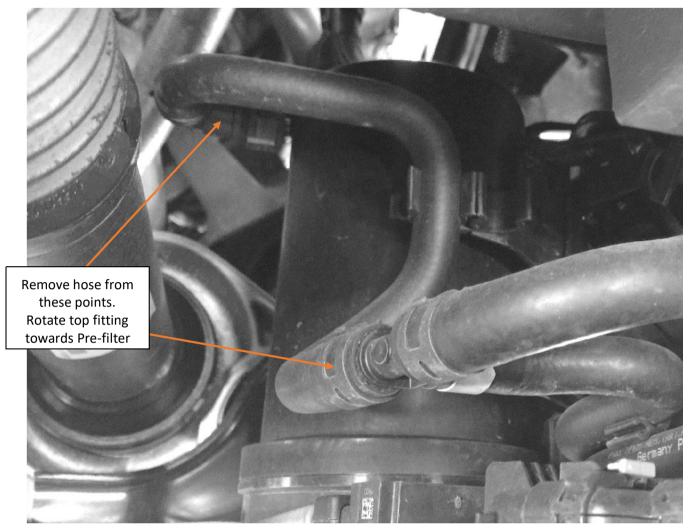


Pre-assembled pre-filter with bracket (fuel fittings not shown)

## Note: it may be required to remove the pre-installed plugs and reinstall them based on the specific installation.

- 7. Install the M16 to -6 Adaptors to the ports on the Pre-filter, then need to be on the same side as the engine. The blanking ports should be on the other side.
- 8. Bolt the fuel filter assembly into place, using the M10x30mm bolts and nyloc nuts, making sure to use a flat washer under each bolt head and nut. Adjust the position of the fuel filter assembly to make sure there is clearance from hoses and the wiring harness. Once you are happy with the location, tighten the bolts and nuts to retain in place.
- 9. Install two of the -6 to 10mm 90° push lock fittings to the -6 adaptors just installed. Face the fittings down, use Loctite to seal the threads and stop leaks.
- 10. Cut the supplied hose in half, push the hose supplied in the kit onto the inlet 10mm hose tail on the Prefilter assembly, when it is all the way home, secure with a clamp.
- 11. Disconnect the fuel supply line to the factory fuel filter and remove the hose showed in the picture below. Connect the newly installed Pre-filter supply line to this point. Use a clamp to secure in place.

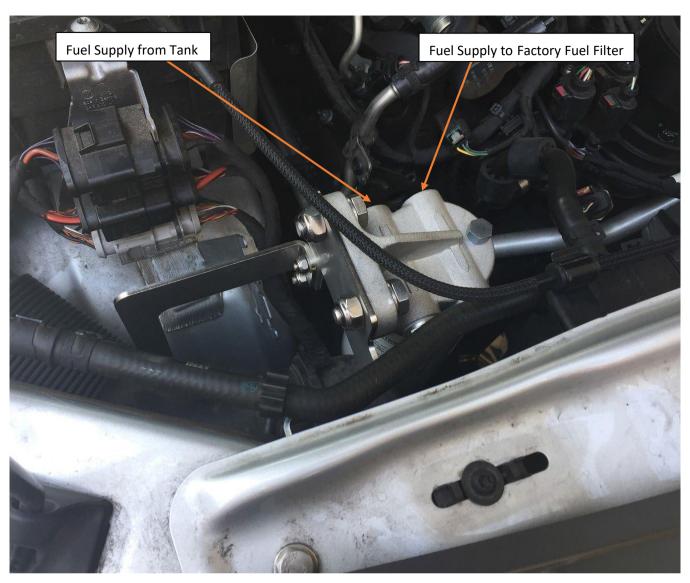




Driver's side under vehicle – Factory Fuel Filter location

- 12. Use the second length of fuel hose to connect the outlet port of the Pre-filter to the factory fitting on the fuel filter housing left vacant by hose removal in earlier step.
- 13. Bleed the system of air (on the Amarok a scan tool may be required). If additional bleeding is required (and after a filter change) there is a bleed screw on top of the Pre-filter unit to remove air.
- 14. Once complete start the vehicle, carefully and toughly checking for leaks.
- 15. Run the vehicle for at least 20 minutes to ensure there are no air pockets in the fuel system.





Finished Pre-filter installed in place

**End of Installation Guide**