

Installation Guide

X900167 3µm High Efficiency Diesel Fuel Filter Kit With Priming Pump Suitable for flow rates up to 220lph



Micron Rating: 3um @ 99% efficient Operating Temperature: -40°C to 121°C Operating Pressure: 80 psi / 550 kPa / 5.5 bar

Kit contents:

1x P576614 M14 x 1.5 NPT Ports with Priming Pump

2x P581681 spin-on filter (one spare)

1x P569758 Drain Bowl

2x P506150 Straight Fitting

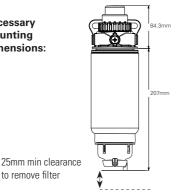
Installation

We recommend that additional filtration should be considered as the primary filter and installed before the factory filter, which should be retained as originally fitted. It can also be installed as a final filter. Identify a suitable location to mount the filter assembly that:

- Allows access to replace the filter
- Allows access to the twist and drain valve, to drain separated water
- Provides visibility of the clear water collection bowl
- Is located away from heat sources

Necessary Mounting **Dimensions:**

to remove filter



- 38 8mn
- The filter head should be securely fixed vertically to a bulkhead or mounting bracket using suitable screws or bolts.
- There is an inlet and outlet port on each side of the head assembly. Note, the flow direction is indicated on the head casting with an arrow. Install the threaded fuel line fittings into the head. as best suits your installation. Use the two blank plugs provided to block the unused inlet and outlet ports. Tighten all fittings firmly with a suitable tool. Do not over tighten! These fittings use an O-Ring seal, no additional sealant is required.
- Run the fuel supply line (from the fuel tank) and connect onto the fuel line fitting in the inlet port of the filter head. Secure with a suitable hose clamp.
- Run the fuel feed line (to the engine) and connect onto the fuel line fitting in the outlet port of the filter head. Secure with a suitable hose clamp.
- Check there are no tight bends or kinks in the fuel lines, and route them away from heat sources and sharp surfaces. Secure fuel lines to prevent excessive movement.

Installation Guide



1. Lubricate the threads.

Lubricate threads of filter head with clean oil or fuel

Failure to do this could result in thread galling.



2. Apply thin film of clean motor oil or fuel to gasket.

Lubricate seal(s) with clean oil. Do not use grease or rubber grease.



3. Align threads. Spin filter until gasket contacts.

Spin the new filter on until the top of the gasket first contacts the sealing surface.



4. Hand tighten the filter.

Tighten per the guidance of the icons which appear on the

filter element. Do not over-tighten. Ensure the drain valve is firm hand tight.



5. Install water collection bowl (if applicable)

Unscrew the Twist&Drain valve from the base of the filter. Screw the water collection bowl into the base of the filter and tension firm hand tight, then refit the Twist&Drain valve into the base of the bowl and tension firm hand tight.



📭 🔑 6. Prime fuel system per **manufacturer**

The air bleed valve on the top of the head is only used for pressurised fuel systems to allow excess air out of the system. It should remain closed for vacuum fuel systems.



7. Start engine and check for leaks

Starting may take longer than normal for the first start.



8. Stop engine

Stop engine and recheck for leaks



9. Drain water daily

1/4 twist of the Twist&Drain valve. Once any water has

been drained, re-tighten the valve until firm hand tight. A tube may be pushed over the drain spigot to aid collection of drained fluid.





Disconnect WIF sensor if present and reconnect



after servicing



Apply thin film of clean motor oil to gasket



Prime fuel system per manufacturer



Unscrew and remove old filter and gasket



Align threads; spin filter on until gasket contact



Start engine and check for

leaks



Wipe filter head with clean cloth



Follow icons on filter to tighten



Drain water daily



Fill with fuel on the dirty side per engine manufacturer recommendations



Replace water collection bowl gasket if applicable

This manual is the property of the owner. Donaldson Company reserves the right to change design and specifications without prior notice. Do not make any system modifications or adjustments that would alter the original design. Modifications may result in denial of warranty coverage. Consult your Donaldson dealer if you have questions regarding the assembly, operation, maintenance or warranty. Illustrations are for reference only as actual product may vary.