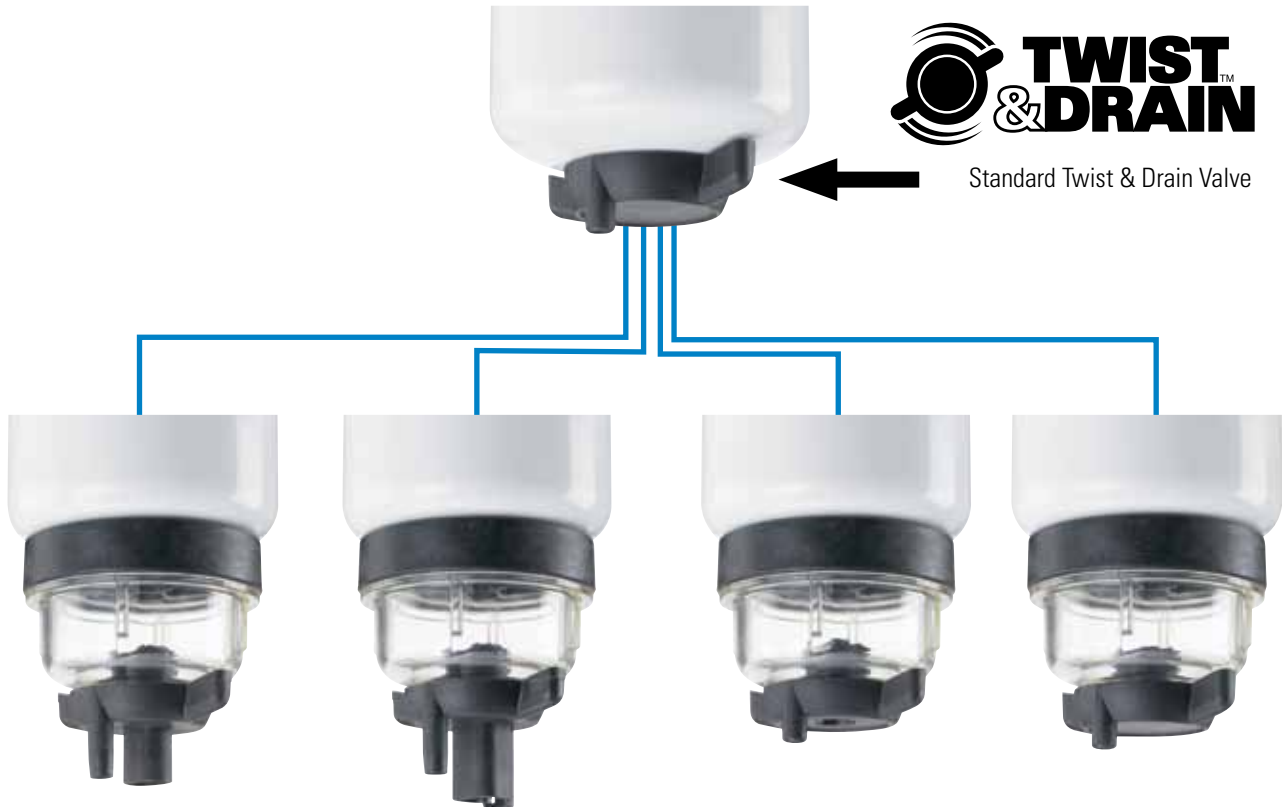


Accessory Line (Valves & Bowl)

For water drain flexibility, Donaldson Twist&Drain spin-on filters have a connection that accommodates multiple drain valve types and one clear bowl (80ml capacity).

All Twist&Drain™ filters ship with a specific drain valve. Drain valves can be ordered separately. The water collection bowl (item P569758) is a separate add-on component.



Standard Twist & Drain Valve

Clear Bowl (P569758) with Water-In-Fuel Packard Sensor with seal (P570618)

Added Length if standard valve replaced.
Bowl adds 1.98" / 50 mm to length
Packard Sensor adds: .35" / 8.8 mm

Clear Bowl (P569758) with Water-In-Fuel Deutsch Sensor with seal (P570619)

Added Length if standard valve replaced.
Bowl adds 1.98" / 50 mm to length
Deutsch Sensor adds: .71" / 18.1 mm

Clear Bowl (P569758) with 1/2-20 UNF Threaded Port Sensor (P550865)

Added Length if standard valve replaced.
Bowl adds 1.98" / 50 mm to length
Threaded Port Sensors adds no length

Clear Bowl (P569758) with Standard Valve

Added Length if standard valve replaced.
Bowl adds 1.98" / 50 mm to length
Threaded Port Sensors adds no length

Replacement Seals for Bowl



The drain bowl ships with a single round, square cut seal. If seal shows signs of wear or deterioration, it should be replaced. The placement of the seal is between the bowl and filter connection.



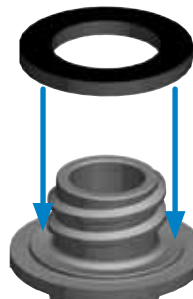
O.D. 1.38" / 35 mm
ID: .86" / 22 mm
Thickness: .13" / 3.2mm

Item Number: P570771

Replacement seal kits are available in packages of 12

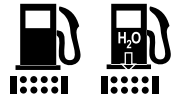
Bowl Seal Replacement

1 Push seal down onto thread stem



2 Ensure seal is fully seated





Water & Draining Fuel Filters

Most primary fuel filters have drains that allow the operator to drain the water that has been separated by the filter. The frequency that the primary fuel filter needs to be drained is ultimately dependent on the quality of fuel that is being used. Most OEMs recommend draining your water separator daily. It is also recommended to pay attention to how much water is removed at each drain and adjust your frequency accordingly.

Why Remove Water in Fuel?

Water in fuel can prematurely wear and oxidize the steel components within the fuel injectors and lead to:

- Rusting and corrosion of components
- Governor/metering component failure
- Sticky metering components (both pump and nozzle)
- Injection component wear and seizure

Free or emulsified water must be removed from the fuel to prevent corrosion and damage to the fuel system. Fuel additives may claim they remove water, what they do is dissolve the water, which will pass through the filter and enter fuel injectors.

Types of water contamination in diesel fuel:

- 1) Emulsified water (water is suspended in the fuel)
- 2) Free water, (water separates from the fuel and generally collects at the bottom of the fuel or fuel storage tank)
- 3) Dissolved water (water is chemically dissolved in the fuel)

Donaldson spin-on style fuel filter water separators have water drain instructions on the can.

Maintenance Recommendations & Guidelines

- Drain water from your primary filter daily when refueling
- Carry a spare set of fuel filters in case you receive a "bad" load of fuel
- Never switch to more open filter to get longer filter life, you are trading away fuel pump and injector life
- Never use fuel to lube up the gasket. Fuel isn't as slick as oil and if you use fuel it could cause your gaskets not to slide but to bunch or pinch when it is tighten causing the filter to leak.
- If using biodiesel:
 - make sure your fuel supplier meets current fuel standards
 - make sure your engine is compatible with the concentration (or percent) biodiesel you wish to use
- When using your own fuel storage tank, remember that removing contaminants before they reach the vehicle is the first part of the best practices process. So, ensure you have effective bulk storage tank filtration.

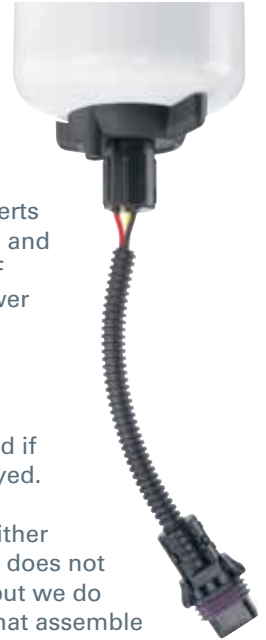
Water-in-Fuel Sensors (WIFs)

Water-In-Fuel sensors are typically chosen and installed by the engine manufacturer.

The WIF sensors connect to the fuel filter and routed to a display on the dashboard. A WIF sends an electrical signal to the in-cab display when it alerts the operator when water is in the fuel and should be drained from the filter. WIF sensors are more common in the newer common rail injection systems.

During filter service, WIF sensors are disconnected and reused on the new filter. Sensors are likely to be replaced if connectors are damaged or wires frayed.

The most common WIF sensors are either Packard or Deutsch styles. Donaldson does not offer sensors as a replacement part, but we do have filters with Twist&Drain valves that assemble into these existing popular sensors.



Twist&Drain™ Icons Installation & Water Drain

Installation



Filter will indicate if you should fill with fuel before installation.



Apply a thin film of clean motor oil to the new gasket. Do Not use Grease.

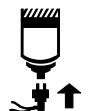


Line up the filter threads to the threaded port carefully. Screw on and tighten until gasket makes contact with base.



Number of turns

For final tightening of the filter, turn the can to the number of turns (+) indicated on the can.



Reconnect the WIF sensor.

Water Drain

Three easy steps with standard drain valve.



Turn to open drain valve



Let water drain



Retighten drain valve