

Diesel Purifiner





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Machine Instructions for type WFP-200 single diesel purifier.

Diesel Purifier is a small machine, designed to clean particles and water out of diesel.

The machine consist of the actual filter, that clean out the debris and water. It is built on a steel frame with a suction pump, and a pre-filter filter which removes the coarse before the diesel gets to the pump.

Diesel Purifiner has a cleaning capacity of 200 liters (52,83 Usg) Max lifting height on the pump is 3 meter (9,8ft) (Measurement taken at 18` Celsius (64,4`F)) Capacity decreases slightly at lower temperatures.

Diesel purifiner is built for continuous purification of diesel, and is therefore intended for placing on a fuel tank. Where it sucks the contaminated fuel from the bottom of the tank.

The diesel will then be taken through the cyclone filter where it takes the largest particles.

Then, through the filter and the pump. The filter is based on the principle of cyclone, that 95 to 97% of the particles folded out to the bottom of the filter.

Moreover, the same thing happens with the water that enters the fuel, the cyclone flow that occurs in the filter allows the water to be separated and 96 to 98% of water remains in the bottom of the cleaning filter.

The filter have a manual valve at the bottom and a breather in the top. When emptying the contaminations open the valve at the bottom and the breather at top.

Good luck with clean diesel. Make your big savings in taking care of your diesel.

Further described / documented every part and build WFP-200 single diesel filter.



(Number refers to technical drawing)

No. 01 Start-/ control device.

In this control cabinet there is mounted starter equipment for the pump.

No. 02 Electrical Suction Pump.

The vacuum pump unit described in a drawing that shows the structure and the various parts.

The suction pump is a small gear pump and are titled B/AJ6.

This electrical engine is 250 watts

Valve for diesel cleaner is tuned for a capacity of 200 lit. pr. hour.

This is the optimal throughput diesel filter will be needed to obtain the optimum cleaning effect.

No. 03 Pre-filter

There is a pre-filter installed; WP-110T60 It is to filter out the coarsest particles before the fuel is going into the suction pump. One should regularly service this filter, and change it to achieve optimal effect of diesel cleaner. It is a screw on filter so it's easy to switch. Twist counterclockwise to loosen.

There is pressure gauge installed, showing vacuum between -0.5 to -0.6 kg when all the filters are clean.

When the gauge shows - 1.0 kg, pre-filter should be replaced, it is about to dense.

(At very low temperatures, diesel viscosity cause low pressure and may give the wrong impression of filter quality)

No.04 Diesel purifiner

The fuel purifiner device, which is mounted vertically, has an ingesting for diesel (No.05) where you connect a hose to a dimmer board of 3/8 "(10 mm) and a suitable length, as needed. (Max 5m/16,4 ft)

Diesel purifiner is equipped with inspection glass pos.(Nr. 07) To see the particles/water separated from the fuel.



No.05 Steel frame

Diesel purifier is built on a steel frame that has following dimensions in centimeters
Height 580, length 480 and width 370,
Complete with all equipment assembled, weighs a cleaner diesel only 25 kg.

Steel frame is built in a rugged design, all welded and well braced.

Steel Type is the type of black steel, is first treated with a primer, and then powder coated in a green color RAL 6000.

No.06 Manometer to control system pressure

Service:

See the attached drawing of the pump. Pos.4 This drawing shows a washable fine filter of mesh and this must periodically be removed and washed.

Over this small filter is a filter housing (No.05) which has 4 screws (No.06) which must be unscrewed to release the washable filter.

Between the filter and the pump is where a paper gasket (No.03)

Ensure that this is correct when installing the filter housing, if it is damaged it must be replaced to get the filter housing closed.

The diesel fuel purifier is only designed to purify normal diesel.

Diesel fuel used in diesel engines.

It may NOT be used for any other purpose.

It is NOT possible to purify the heavy fuel oil or other combustible fuel for engines.

Ask us for other varieties of purifiners.

Purifiner Technology AS is a technology company that specializes in the cleaning and maintenance of all types of oils, hydraulic lubricants motor oil and diesel fuel now.

We have 15 years experience in cleaning and maintaining hydraulic lubricating oil. The oil gets a quality that is better than many new oils.

Should you be interested and have questions about clean oil and diesel, are very welcome to contact us.





Cleaning of Contaminated Diesel with Diesel Purifiner Installed on fuel tank

- 1. Fill the fuel tank with diesel.
- 2. Let the diesel settle for 24 hours.
- In case of any visible water and solid contamination is reaching up to or above the inlet/bottom of the suction strainer, drain the water and solid contamination out from the tank before starting the Diesel Purifiner.
- 4. When the contamination level is well below the inlet pipe/suction strainer, start the Diesel Purifiner and let it run for an initial period of:

a. 200 litres : 1 hour b. 200 – 400 litres : 2 hours c. 400 – 1,000 litres : 3 hours

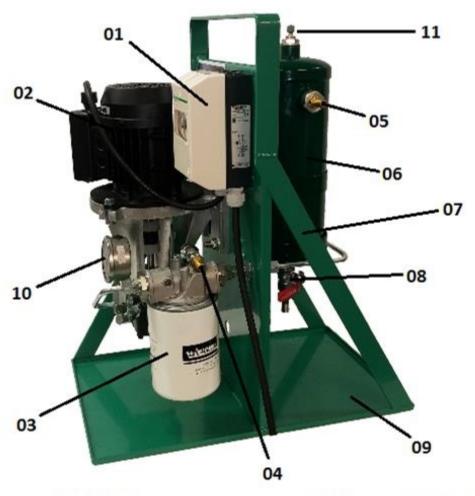
- 5. After the initial period, stop the filter and open the valve in the bottom of the cyclone filter to drain out water and solid contamination extracted from the diesel.
- 6. Close the filter valve and start the filter again. Let run for 4 to 6 hours before again emptying the cyclone filter.
- 7. Continue the cleaning and drainage intervals until no more contaminants can be drained from the cyclone filter. The cleaning process is now complete.
- 8. Pump the diesel from the fuel tank to any clean storage unit. Make sure not to stir up any contaminants left in the bottom of the fuel tank during the process. For units fitted with a three-way valve, just switch the valve and let the Diesel Purifiner pump the clean diesel directly into the storage unit.
- 9. Solid contamination and water drained from the fuel tank, and contamination extracted through the cyclone filter must be deposited as hazardous waste.

Note:

The optimum intervals for running the filter between each filter drainage might differ from the above depending on the amount of water and other contaminants in the diesel. In normal use, the pre-filter cartridge should be replaced twice a year.



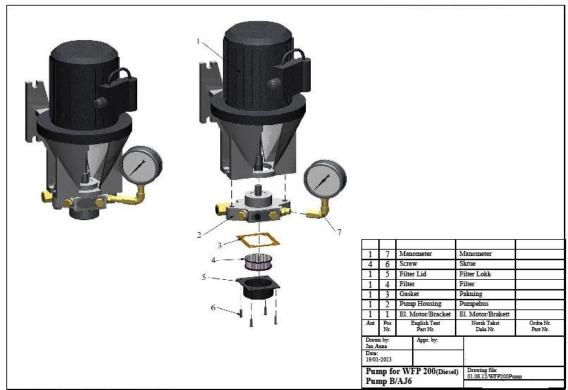
WFP-200 Single Diesel filter



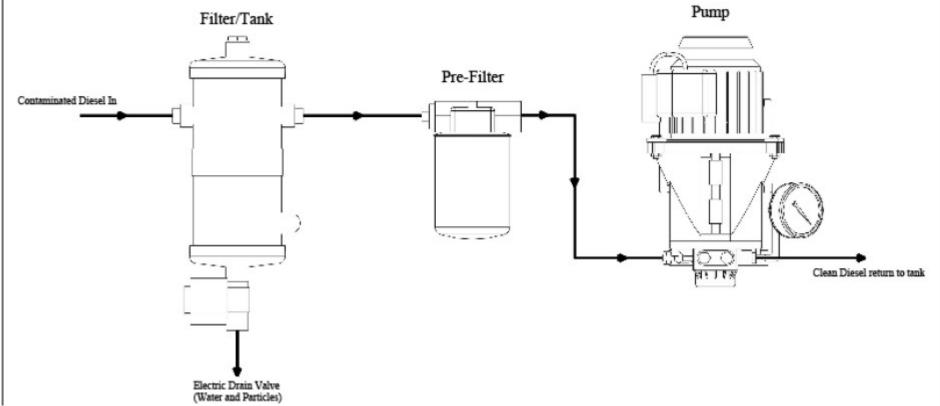
- 01. El. Box
- 02. El. Motor/pump
- 03. Pre-Filter
- 04. Diesel return to tank
- 05. Diesel in
- 06. Diesel Filter

- 07. Inspection glass
- 08. Manual valve
- 09. Chassis
- 10. Gauge
- 11. Breather





Flow Diagram Wågene Diesel Purifiner WFP-200



Troubleshooting and Solutions

Problem	Control / Perform
Purifiner will not start	Power cord plugged into the powersupply? Check motor protection has turned out, reset it. (Available inside the terminal box on the unit) Press the red button. (If problem persists, please contact us)
There is no diesel up to pump	Is the vacuum hose down the fuel in the tank? Is the filter OK? (Max pressure on the gauge = -1kg)
There is no Diesel/contamination out of drainage	The valve may be clogged. Turn off the system and remove valve for cleaning. The valve should be dismounted completely.
Only pure/clean diesel out of the drainage	The diesel is fully cleaned Increase the time pump runs between each drainage for further purification



