

# Operating instructions for the fogging system.

*Before starting work, carefully read the instructions for the pumping equipment. (Instructions are included.)*

## 1. Before starting the system, make sure:

- a) absence of visible mechanical damage to the inlet-outlet water line, electrical wiring and starting valves;
- b) the presence of water at the inlet of the high-pressure pump (the supply valve is open);
- c) that the inlet water filters are within the permissible contamination limits (visually light); otherwise, replace the contaminated cartridge.  
First filter – 20 microns  
The second filter is 10 microns.  
The third filter is 5 microns.

## 2. The system is started by pressing button A (the main switch on the pump unit). When

When starting a combined operation, it is necessary to ensure that **all** main switches on all pump units used are in the ON position.

## 3. A properly functioning fogging system does not require any adjustment or additional participation

It is required and operates autonomously, provided that the power supply is turned on and there is a continuous supply of water to the pump with a minimum pressure of 1.8 atm.

## 4. If a visual inspection (or a decrease in the efficiency) of the fogging system reveals that one

or several nozzles produce an insufficient water spray, then such nozzles must be dismantled and serviced;

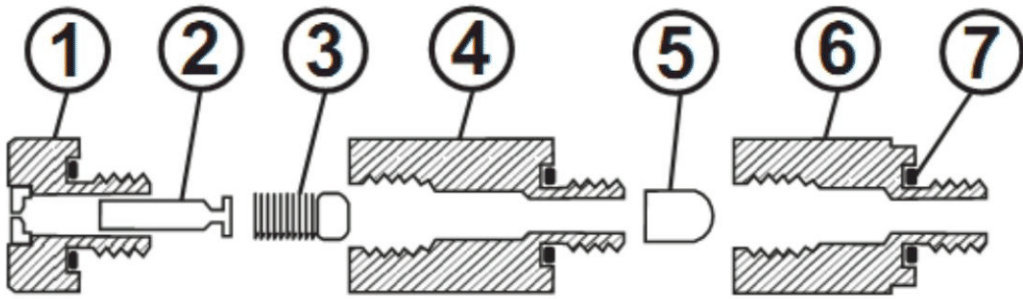
a) the injectors are removed by disconnecting the 10/24" threaded connection, which, due to the small diameter of the thread, must be carried out with the utmost care to avoid breaking the injector at the connection point;

b) During servicing, the removed injectors must be replaced with similar ones or a plug must be screwed in their place. All the above manipulations are performed with the engine turned off.

power supply of high pressure pumps;

c) Each spray nozzle is equipped with a 0.25 µm nylon filter (see figure, item 5). If the nozzle's atomization performance deteriorates, the microfilter must be replaced. To do this, unscrew the back of the nozzle (10/24" threaded connection), remove the minifilter, replace it with a new one, and reassemble the nozzle. Afterwards, it can be returned to its original position.

Injector diagram.



- 1 – Spray head
- 2 – Anti-drip piston.
- 3 – Anti-drip spring with rubber seal.
- 4 - Body
- 5 - Filter
- 6 - Body
- 7 – Sealing ring.

**5. Every 800-1000 hours of pump operation, the oil must be changed.**

The pumps use SAE 20 automotive mineral oil.

To change the oil, disconnect the pump from the power supply, water supply, and high-pressure line. Next, remove the pump housing cover (unscrew the four mounting screws on each end of the pump). Then, unscrew the plastic portion of the pump oil level dipstick (Figures 1-4).

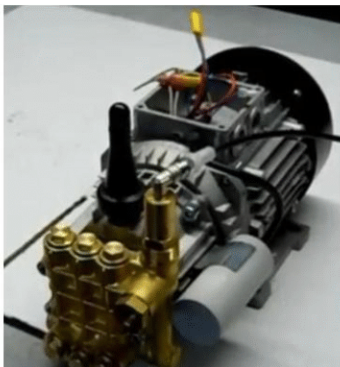


Fig. 1

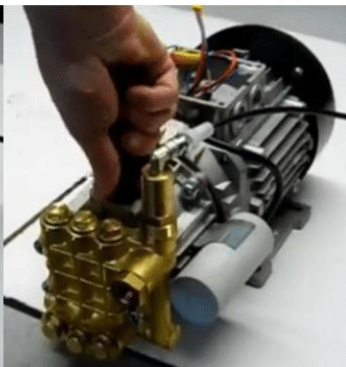


Fig. 2

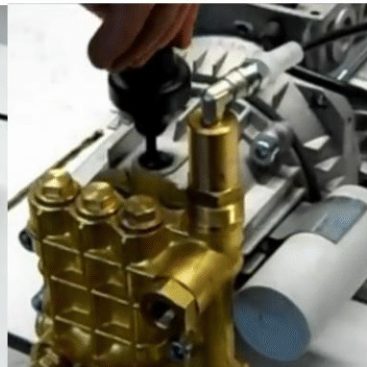


Fig. 3



Fig. 4

Use a syringe with a tubular attachment or a vacuum suction device to extract the used oil from the pump. To do this, insert the nozzle into the hole and, while rotating the tube, lower it downward until it reaches maximum submersion. Remove the used oil (Figures 5-7).

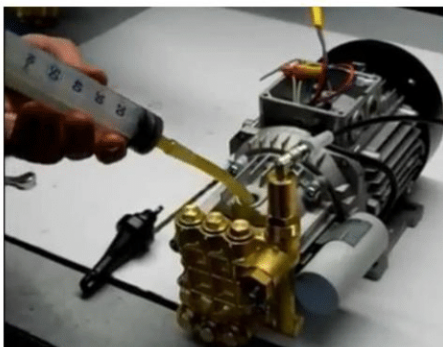


Fig. 5

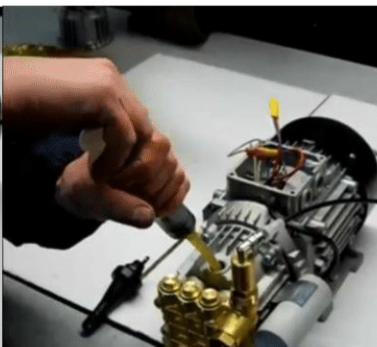


Fig. 6

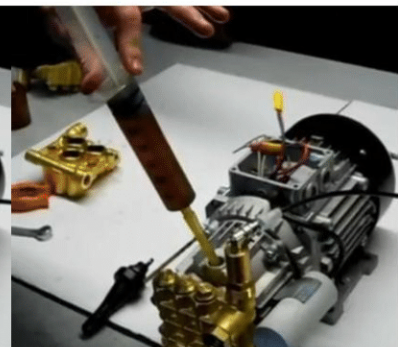


Fig. 7

Then pour the same amount of fresh oil back into the pump (Fig. 8).

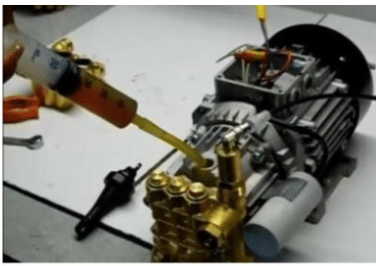


Fig. 8

Assemble the pump in reverse order.

#### **6. Preservation of the system for the winter period.**

To store the system for the winter, disconnect the high-pressure pumps from the water supply and high-pressure systems, drain the water from the pumps' internal tanks, and store them in a warm location. Then, remove one or more nozzles from the bottom of the misting system and purge the system with compressed air or an inert gas. Then, remove the remaining nozzles and install special plugs in their places to prevent threaded connections from becoming clogged and causing damage to the misting system components.

**The pump protection level is indicated in the operating instructions.**