

Maintenance Notes

for Forest See-saw Pump, order No. 5.27020/5.27025/5.27026 (with valve combination)

A Once or twice per year open the pump cylinders to grease using special tap grease. Also check bearings and gaskets.

1. Check bearings for wear and tear and replace if necessary. Remove the bearing covers from the see-saw beam bearings.
2. Lift and remove the see-saw beam and at the same time pull the pump pistons upward.
3. Also loosen the pivot bolts of the piston rods in turn.
4. If necessary, replace and grease piston rings and bearings.

B Opening the service lid located next to the see-saw pump

1. Loosen the bolts of the side panels used to cover the pump base (6 bolts each).
2. Lift vertically by holding Allen keys into the bolt holes of the sheets.
3. The lid parts can then be pulled diagonally upward and removed.
4. The supply and spraying head connections are located on the side of the valve station. The valve combination with surge tank is located on the other side.
5. Here, all connection and pump parts can be serviced or replaced as necessary.

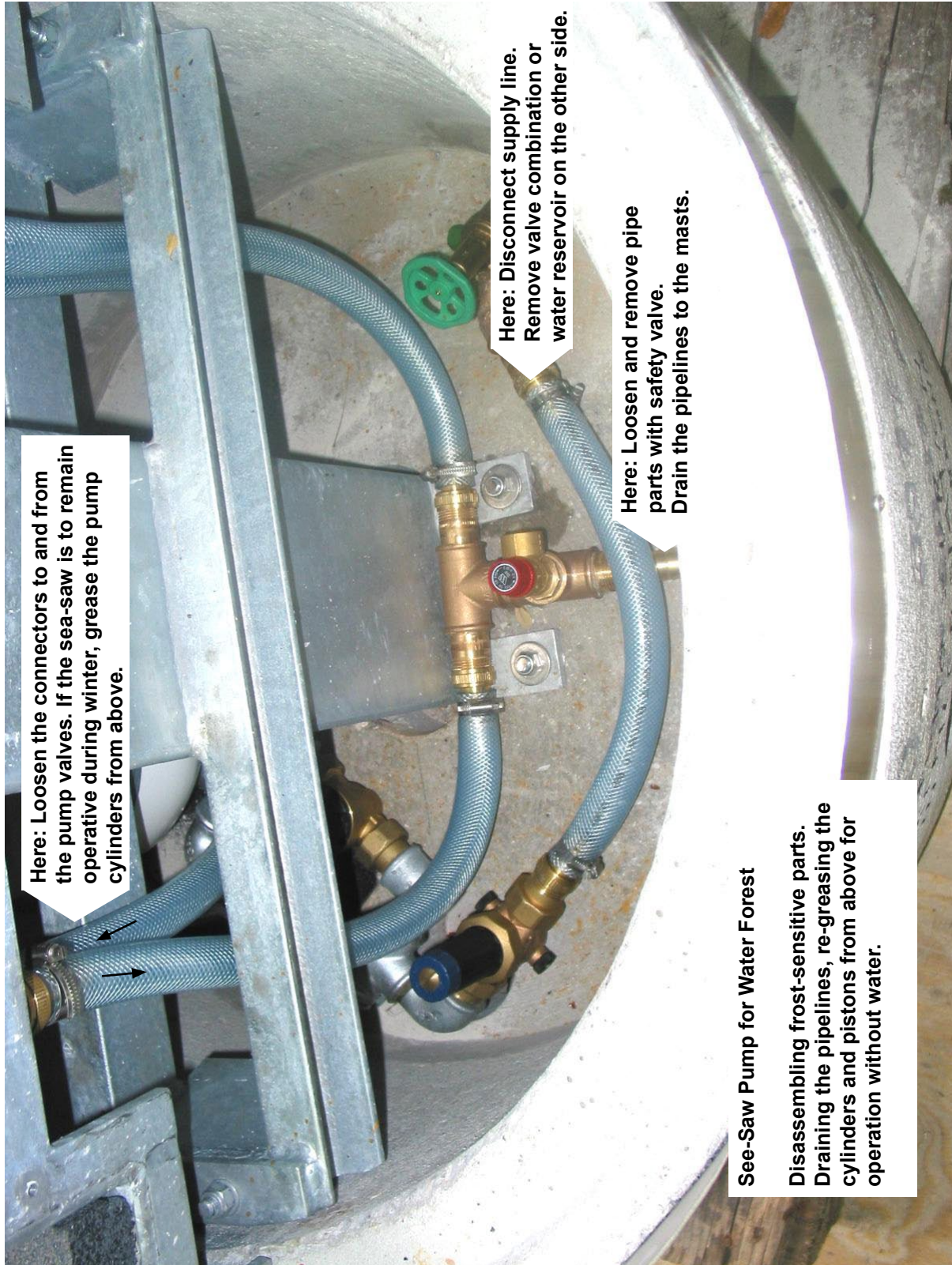
C Maintaining the valve combination

1. Check the water in-flow (pipe disconnecter and check valve).
The minimum amount of water required is 45 l/min.
If there is not enough water, there will be reverse flows in the line and pumping will be exhausting.
2. Clean the sieves in the pressure control valve and membrane valves if necessary.
3. Check that all screw fittings are tight.
4. Check surge tank for proper operation. The pressure in the rubber bladder must be 1.4 bars.
All parts must be re-assembled in the original direction, therefore mark accordingly.

D Taking the equipment out of service during the period of frost

The see-saw operation can remain enabled. Before operating the equipment without water, the pump cylinders must be greased using special tap grease. If the equipment cannot be dismantled, remove the pump cylinders and cover the flanges with lids. The valve combination with surge tank must be removed and stored protected from frost in any case.

1. Open the service lid and turn off the water supply.
2. Loosen the screw fittings and the connections to the check valves at the pump cylinders.
3. Loosen the bolts used to fasten the valve combination and remove the valve combination.
4. Loosen the screw fittings of the pipes to the masts in the duct casing. Turn the handles on the valve stations in order to completely drain them.



Here: Loosen the connectors to and from the pump valves. If the sea-saw is to remain operative during winter, grease the pump cylinders from above.

Here: Disconnect supply line. Remove valve combination or water reservoir on the other side.

Here: Loosen and remove pipe parts with safety valve. Drain the pipelines to the masts.

See-Saw Pump for Water Forest
Disassembling frost-sensitive parts.
Draining the pipelines, re-greasing the cylinders and pistons from above for operation without water.

