

INSTALLATION INSTRUCTIONS

Operation and Maintenance

Check oil level prior to starting and ensure trouble-free medium supply.

Oil: Use only 2.4 gallons (9.0 litres) of SAE 80W-90 gear oil (Giant's part number 01154) or ISO VG220 Industrial Gear oil.

Initial change after 50 operating hours and then after every 1000 operating hours.

Caution: When operating in damp places or with high temperature fluctuations. If condensate (frothy oil) occur in the gear box, oil must be changed immediately.

**Maximum input pressure 145 PSI (10 bar).
Maximum suction head -4.35 PSI (-0,3 bar).
(These values might vary depending on the viscosity of the medium).**

Important! To avoid any incrustation of the medium on the plungers (36B), screw cover plate (30) off after every operation and rinse the plunger area with clear non-pressurized water (at maximum water main pressure, never use high pressure).

Important! If recycled bentonite is being pumped, the pump must be rinsed for 3 - 5 minutes with clear water after usage to flush out dirt particles (sand) in the bentonite. The service life of the seals, ceramic plungers and valves depends largely on how fine the recycled bentonite is filtered.

Important! The service life of the seals is maximized if a minimal amount of leakage is present. A few drops of medium should drip from each plunger every minute. If leakage increases, the spiral rings can be tightened by turning the pressure sleeve (44) to the right. Leakage has to be examined every day. The plunger seals must be changed should leakage become excessive i.e., constant dripping.

Important! Only turn the sleeve past one or maximum two hole spaces. Otherwise friction will be too strong. Coat the seal by putting silicone grease in the grease nipples (47).

Safety Rules

A safety valve is to be installed in accordance with the guidelines for liquid spraying units so that the admissible operating pressure cannot be exceeded by more than 10%.

Pump operation without a safety valve as well as any excess in temperature or speed limits automatically voids the warranty.

Pressure in the discharge line and in the pump must be a zero before any maintenance to the pump takes place. Before work is performed on the pump, close off the suction line.

Take necessary precautions to ensure that the driving motor cannot get switched on accidentally (by disconnecting the fuses, for example).

In order to prevent air or an air/water mixture being absorbed and to prevent cavitation occurring, the pump positive suction head (NPSHR) and water temperature must be respected.

Cavitation and/or compression of gases lead to uncontrollable pressure kicks which can ruin the pump and unit parts and also be dangerous to the operator or anyone standing nearby.

The BP7170/BP7171 pumps are suitable for pumping clean water as well as water containing bentonite in a concentration of maximum 55 lbs (25 kg) of bentonite diluted in 264 gallons (1 m³) of water.