

# GP8076 PUMP REPAIR INSTRUCTIONS

## 7. Maintenance and Servicing

Based on the thread type and the required tightening torques, observe the table on page 6.

### 7.1 Special tools required

The following special tools are required for assembly:  
- Assembling tool (code no. 15.0038)

### 7.2 Suction and Discharge Valves

Loosen screws (58), lift discharge valve casing (50B) up and away.

Take out pressure springs (57).

Pull out the complete valves (51) together with the pressure valve holder (56) using an assembly tool (order no. 07662).

#### To dismantle valves:

The spring tension cap (51A) is screwed together with the valve seat (51B).

Screw off spring tension cap, take out springs (51E) and valve plate (51C).

Check sealing surfaces and O-rings (51D, 51F).

Replace worn parts.

Before re-fitting the valves, clean the sealing surfaces in the casing and check for any damage.

Tighten screws (58) to the required torque.

Check torque tension after 8-10 operating hours.

### 8.3 Seals and Plunger

Screw off hexagon nuts (49A) and hose coupling (K11 and K15), remove pump head together with seal case (38) from crankcase (1).

If necessary, carefully tap the valve casing (50) past the centring stud (50A) using a rubber hammer.



If necessary, support the pump head by resting it on wooden blocks or by using a pulley.

Remove tension screw (36C) and take seal sleeve (39) together with all mounted parts out of the drive.

Pull plunger pipe out of seal assembly and check for any damage.

Pull out spiral rings (42), guide rings (41) and support rings (40) and check for any damage.



Be careful not to damage seal sleeve (39) and guide ring (41).

Check the inner diameter of the guide ring for wear and if necessary replace together with spiral ring (42) and support ring (40).  
Clean all parts.

New parts should be lightly coated with silicon grease before installation.

Insert the seal unit (40, 41, 42, 43) into the sleeve.

Push the ceramic plunger carefully through the seals from the crankcase side. If necessary, the seals can be held tightly using a suitable pipe support held on the other side of the seal sleeve.

Take out the seal case (38) from the valve casing (50) and check O-rings (38A) (if necessary secure 2 screwdrivers in the front O-ring groove to extract seal casing from valve casing).

Coat seals with silicon grease before installing.



Mounting surfaces of the crankcase and valve casing must be clean and free of damage.

The components must lie exactly and evenly on one another.

The same exactness applies for all centring positions in the crankcase, intermediate casing, pressure- and valve casing.

They must stand vertically on each other.

Coat the seal sleeve lightly with anti-corrosive grease (e.g. molycode no. Cu-7439) in its fitted area towards the crankcase.

Insert seal sleeves into their crankcase fittings.

Coat the threads of the tension screw (36C) lightly with thread glue and insert it together with a new copper ring (36D) through the ceramic pipe.

Turn the pump by hand until the plunger (25) rests against the plunger pipe.

Tighten tension screw to the required torque.



Thread glue must never come between the plunger pipe (36B) and centring sleeve (36E).

Overtensioning of the plunger pipe by excessive tightening of the tension screw and/or dirt or damage on the mounting surfaces can lead to plunger pipe breakage.

Insert the seal tension spring (45) and O-rings (38A, 39A) in to the seal sleeve (39).

### Mounting Valve Casing:

Put seal cases (38) in the centring holes of the valve casing, then push valve casing carefully onto centring studs (50A).

Tighten hexagon nuts evenly and crosswise to the required torque.



The torque tension on the screws (49A) must be checked after 8-10 operating hours; the pump must be at zero pressure.

Thereafter the tension is to be checked every 200 operating hours.

**If required, supplementary assembly instructions can be requested from the manufacturer Giant Industries.**