

# REPAIR INSTRUCTIONS - CP460-4053

## 8. Maintenance and Servicing

For the type of threadlocker used and the required tightening torques, observe the table in the exploded view.

### 8.1 Special tools required

The following special tools are required for assembly:

- Fitting Sleeve (TOOL-20)
- Blind hole seal puller/slide hammer

### 8.2 Suction and Discharge Valves

#### Suction Valves:

Remove screws (34) and pull the valve casing (26) off to the front.

Take out seal case (25) out of the valve casing (26). Remove the exposed suction valve with a pair of flat nose pliers and valve seat (27) with an extractor tool size 01.

Disassemble parts and examine valve plate (28), valve seat (27) and O-ring (31).

Replace worn parts.

Tighten screws (34) to the required torque.

#### Discharge Valves:

Remove valve plugs (32) with socket wrench size 32.

Remove the exposed discharge valve with a pair of flat nose pliers and the valve seat (27) with an extractor tool size 01.

Disassemble parts and examine valve plate (28), valve seat (27), O-rings (31, 33).

Replace worn parts.

Take care to reassemble in correct sequence.

Tighten the plugs (32) to the required torque.

### 8.3 Seals

Remove oil drain plug (5) and drain oil.

Remove screws (34) and pull off the valve casing (26) to the front, past the plungers.



If the seal casing (20A) does not separate from the valve casing (26), press both casings apart by placing two flat screwdrivers in the side notches on the seal casing (20A).

Be careful not to damage casing surfaces.

Remove seal cases (25) situated either in the valve casing (26) or seal casing (20A).

Separate the seal casing (20A) from seal retainers (20).

Using an extractor tool size 1, remove double coiled ring (23B) and guide ring (24) from the seal casing (20A).

Examine O-rings (25B) and support rings (25A) attached to seal cases (25).

Then remove seal retainers (20) from crankcase.

Pull grooved ring (23) out of the seal retainer (20). Check O-ring (21).

Wet new seals thinly with silicone grease or mineral oil, o-rings with vaseline and insert carefully with a mounting tool (TOOL-20).



Seal casing (20A) has a notched pin to ensure correct fitting.

Reassemble parts in the proper sequence. The grooved seal (23) on the high-pressure side is to be carefully fitted into the seal casing (20A) using a  $\varnothing$  22 mm plastic rod. Under no circumstances must the surface in the seal casing or the grooved seal lip be damaged.

Check surfaces on the plunger (16).

Damaged surfaces cause accelerated seal wear. Deposits of all kinds must be removed from the plungers.



The plunger surfaces are not to be damaged.

If there are lime deposits in the pump, care must be taken that the drip-return bore in parts (20A) and (26) ensure trouble-free drip-return.

If the plunger (16) is worn, the complete plunger must be changed.

The ceramic pipe alone cannot be changed due to reasons of precision.

For replacement please contact manufacturer.

When assembling, tighten the screws (34) to the required torque.

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