

1 = Coarse filter  
 2 = Booster pump  
 3 = Fine-particle filter  
 4 = Gauge to check input pressure

5 = High pressure pump  
 6 = High pressure gauge  
 7 = Excess, Safety valves

## 7. Maintenance and Servicing

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

### 7.1 Special tools required

The following special tools are required for assembly:

- Pull-out tool  $\varnothing 24$  mm
- Seal extractor tool  $\varnothing 22.4$  mm

### 7.2 Suction and Discharge Valves

Remove hexagon screw (58) and remove valve casing (54). Pull seal case (38) out of valve casing (54). Pull valve body (52) and seal case (38) apart. Using pliers, pull spring guide (55) out of the valve casing. Remove discharge valve plate (57) together with spring (56) from spring guide (55). Check sealing surfaces of the valve body (52) and discharge valve plate (57). Check discharge valve spring (56) and border seal ring (53) and replace where necessary.



A damaged border seal ring (53) must be replaced before reassembling.

### Suction Valves

Remove suction valve spring (50) with valve plate (51) from seal case (38). Check sealing surfaces of the valve plate (51) and valve body (52). Check O-rings (38/A/B/C) and support ring (38D) before reassembling. Worn parts must be replaced.

### To Check Seals and Plungers

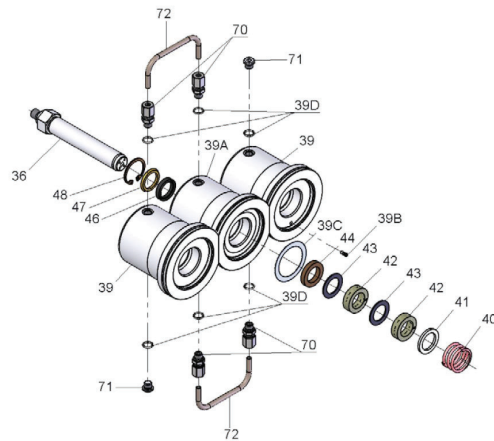
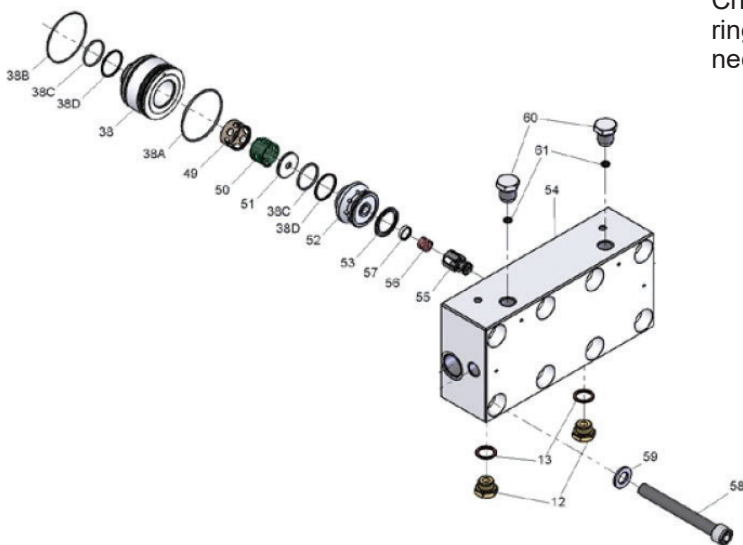
Unscrew hexagon screws (58), and take off valve casing (54). Remove the screw-in joints (70) and take off the elbow pipes (72). Pull seal sleeve (39/39A) out of the crankcase.

Take the seal tension spring (40) out of seal sleeve (39/39A).

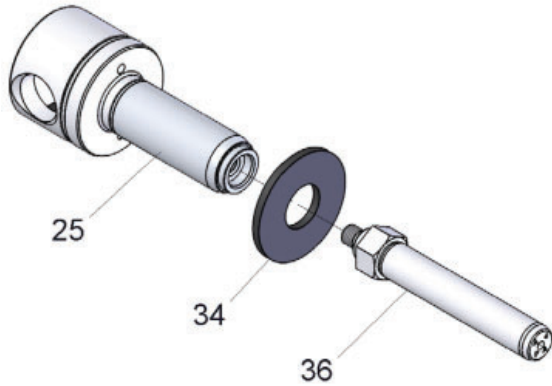
Using a pliers, remove the clip ring (48) situated on the other side of the sleeve; then take out support ring (47) and grooved ring (46) using an extractor tool ( $\varnothing 24$ ).

Using a seal extractor tool ( $\varnothing 22.4$ ), carefully press the seal unit comprising guide ring (44), spiral ring (42) and support ring (41/43) out of the seal sleeve (39/39A) from the side (39/39A) closest to the drive.

Check spiral ring (42), Support ring (43), guide ring (44) and grooved ring (46) and replace where necessary.



Check surface of plunger (36) for damage. A worn plunger (36) must be removed (27 mm wrench) and replaced. Due to reasons of precision, the ceramic plunger alone cannot be exchanged. Coat the threads of the plunger lightly with an appropriate bonding agent and tighten plunger to the required torque.



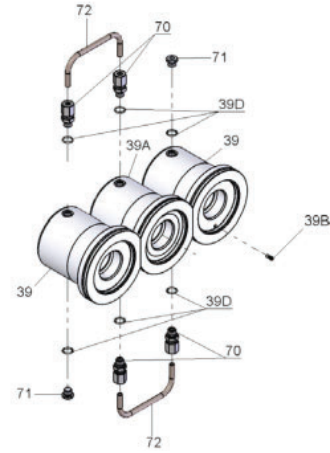
Check the leakage bores  $\varnothing 4$ mm of the seal sleeves (39/39A) and seal cases (38) for dirt and clean if necessary.

The elbow screw-in joints (70/71) and elbow pipes (72) must also be checked for dirt and cleaned if necessary.



For the right sealing sleeve, the leakage hole  $\varnothing 4$  mm must be closed by a nozzle (39B) to improve water circulation from sealing sleeve 1 to sealing sleeve 3.

Fit the drip-return unit (46/47/48), the high-pressure seal unit (41/42/43/44) and tension spring (40) into the seal sleeve.



Then push the assembled seal sleeves (39/39A) carefully on to the plungers and into the drive; thereafter, mount elbow pipes (72) as per the exploded view and tighten the screw-in joints (70/71) carefully.

Push the valve casing (54) with the seal sleeves (38) onto the sealing sleeves (39/39A). Tighten the screws (58) for fastening the valve housing evenly to the specified torque.

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

## 8. Materials Used

Valve Casing: AISI CA-6-NM  
 Plunger: AISI 329 hard metal coated  
 Valves: Duplex-Steel / 1.4460 / 1.4462  
 Seals: Aramid Packing with Teflon  
 O-Rings: Nitrile

## 9. Paint

The pump drive is painted in RAL 3001 as standard.

## GP7622 TORQUE SPECIFICATIONS

Position	Item #	Thread	Description	Lubrication Info	Torque Amount
1	05769		Crankcase	Molycote Cu-Paste	
5	05798		Seal for Crankcase Cover	Loctite 5910	
10	22706	M10	Hexagon Screw		33 ft.-lbs. (45 Nm)
12	07109	1/2" BSP	Drain Plug		30 ft.-lbs. (40 Nm)
15	05771		Radial Shaft Seal	Loctite 403	
17	05642	M12	Hexagon Socket Screw		33 ft.-lbs. (45 Nm)
24	05770	M10	Connecting Rod Assembly		22 ft.-lbs. (30 Nm)
32	07624		Radial Shaft Seal	Loctite 403	
36	06748	27mm	Plunger		33 ft.-lbs. (45 Nm)
38	03452		Seal Sleeve	Copper Paste/ Crankcase outside	
58	03464	M16	Hexagon Socket Screw		173 ft.-lbs. (235 Nm)
60	04061		Plug, 1/2" BSP	Anti Seize 350	
63	05373		Plug, 1/2" BSP	Anti Seize 350	
64	12249		Plug, 1" BSP	Anti Seize 350	
69	03141		Connection Nipple	Anti Seize 350	