

P430-3100 and P435-3100

Maintenance and Servicing

For the type of threadlocker used and the required tightening torques, observe the table on page 3.

Special tools required

The following special tools are required for assembly:
- Pull-out tool size 2 (Ø18.5)

Suction and Discharge Valves

Suction Valve:

Remove plugs (42A). Take out spacer pipe (51) and suction valve adaptor (52).

Press the valve parts and if necessary also the spacer pipe (51) out of the suction valve adaptor using a soft tool.

Check and replace worn parts.

Check O-rings (42B, 44A, 53) and replace if necessary.

Discharge Valve:

Remove plugs (48).

Remove spring tension cap (47), valve spring (46) and valve plate (45) from the exposed discharge valve.

Take out valve seat (44) with a size 2 pull-out tool.

Check and replace worn parts.

Check O-rings (44A, 48A) and replace as necessary.

Tighten plugs (42A, 48) to the required torque.

Take care to reassemble in correct sequence.

Seals and Plunger

Remove plugs (42A). Take off nuts (50) and remove valve casing (43) by pulling out to the front, past the plungers. Take out spacer pipe (51), suction valve adaptor (52), tension spring (42) and seal unit (39, 40, 41).

Check plunger surfaces (29B).

Damaged surfaces cause hard wear on seals.

Lime deposits or similar on the plunger must be removed.



Plunger surface must not be damaged in the process.

Check O-rings (42B, 44A, 53) and replace if necessary.

Wet new seals and O-rings thinly with silicone grease or mineral oil and insert carefully.

Pay attention to the installation position of the seals.

Examine leakage return seal (40) after having removed snap ring (36) and replace if necessary.

If the plunger pipe (29B) has to be replaced, remove tension screw (29C), taking it off together with the plunger pipe and the extension (29E) as well.

Check and clean plunger (25) surfaces and put the new plunger pipe onto the centring sleeve (29A).

Cover thread of tension screw (29C) with a thin coat of threadlocker and tighten carefully to the required torque.



Under no circumstances should threadlocker get between the plunger pipe (29B) and the centring sleeve (29A) nor the extension (29E) if the latter is present.

Tensioning of the plunger pipe due to eccentric tightening of the tensioning screw or due to dirt or damage to the contact surface can lead to breakage of the plunger pipe.

Install tension spring (42), spring tension disc (54), suction valve adaptor (52) and spacer pipe (51).



Then tighten plugs (42A) to the required torque.

Fix the valve casing (43) by tightening the nuts (50) evenly and crosswise to the required torque.

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

MP4130-3100 and MP4135-3100 Series Torque Specifications			
Position	Thread	Lubrication Info.	Torque Amount
10	M8		18 ft.-lbs. (25 Nm)
12	1/2" BSP		30 ft.-lbs. (40 Nm)
15		Loctite 403	
17	M8		18 ft.-lbs. (25 Nm)
24	M6		106 in.-lbs. (12 Nm)
29C	M8	Loctite 243	21 ft.-lbs. (28 Nm)
29D		Loctite 577	
31		Loctite 403	
42A	M42x1.5		107 ft.-lbs. (145 Nm)
44		Hylomar	
48	M36x1.5		107 ft.-lbs. (145 Nm)
49	M12	Loctite 638 crankcase side	
50	M12		59 ft.-lbs. (80 Nm)