# P55-5121 and P56-5121 PUMP REPAIR INSTRUCTIONS

# **Maintenance and Servicing**

For the type of threadlocker used and the required tightening torques, observe the table below.

# Special tools required

The following special tools are required for assembly:

- Pull-out tool Size 1 Ø15 / Ø12 mm

#### **Suction and Discharge Valves**

Screw out plugs (41).

Take out suction valve adaptor (39) together with suction valve.

Push valve parts out of suction valve adaptor using a soft tool. Check and replace worn parts.

Check O-rings (38,40,42) and replace as necessary. Tighten plugs (41) to the required torque.

Take care to reassemble in correct sequence.

### **Seals and Plunger**

Screw out plugs (41).

Loosen nuts (46) and remove valve casing from plungers, pulling it out to the front.

Take out suction valve adaptor (39), tension spring (33) and seal-unit (30, 31, 32).

Check surfaces of plunger pipes as damaged surfaces cause fast wear to the seals.

Check O-rings (40, 42) and V-sleeve (31) and replace as necessary.

When replacing, 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.

If plunger pipe (24A) has to be replaced, loosen tension screw (24B) and remove it together with the plunger pipe. Check and clean plunger (22) surfaces and install new plunger pipe.

Cover thread of tension screw (24B) with a fine film of thread-locker and tighten carefully to the required torque.



Under no circumstances should threadlocker get between the plunger pipe (24A) and the centering neck on the plunger (22). 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 (33) and suction valve adaptor (39), then tighten plug (41) to the required torque. Fix valve casing by tightening nuts (46) evenly to the required torque.

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

#### **Spare Parts**

When ordering spare parts, please specify pump type, pump number, year of manufacture, and spare parts code no.

This data can be found on the nameplate and in the spare parts list.

#### **Materials Used**

Valve Casing: AISI 316L Plunger: Solid ceramic

Valves: High-Grade Stainless Steel

Seals: Teflon O-Rings: Viton

#### **Paint**

The pump drive is painted in RAL 3001 as standard.

P55-5121 and P56-5121 Series Torque Specifications				
Position	Description	Thread	Lubrication Info.	Torque Amount
7	Oil Sight Glass	1" BSP	Loctite 5910	106 inlbs. (12 Nm)
9	Screw, Crankcase cover	M6		89 inlbs. (10 Nm)
11	Oil Drain Plug w/Gasket	1/4" BSP		22 ftlbs. (30 Nm)
16	Screw, Bearing Cover	M8		133 inlbs. (15 Nm)
20	Screw, Connecting Rod	M6		106 inlbs. (12 Nm)
24B	Tension Screw, Plunger	M8	Loctite 243	17 ftlbs. (22.5 Nm)
24C	Steel Ring		Loctite 577	
41	Plug, Manifold	M30x1.5		52 ftlbs. (70 Nm)
46	Stud Nuts	M10		35 ftlbs. (47.5 Nm)