GP7128-4100 Repair Instructions

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

Special tools required
The following special tools are required for assembly:
- Extraction tool (07662)
- Pull-out tool size 3
- Snap-ring tongs

Suction and Discharge Valves
Loosen screws (58C), take plugs (58) out of valve casing with two screws.
Take out tension spring (57) and complete valve (51, 52) using either tool (15.0038) or stud bolt (size M16).
Valve seats (51C and 52C) are pressed out of spacer pipe (51F, 52F) by hitting the valve plate (51D, 52D) with a bolt.
Check surfaces of valve plate, valve seat, O-rings (51B, 58A) and support ring (58B) for damage.
Replace worn parts.

When reassembling:
The suction valve seat (51C) is 1 mm smaller in diameter than the discharge valve seat (52C). Suction valve seats are marked “S” and always have to be installed first.
Discharge valve seats are marked “P” and are always to be installed on top of suction valve.

Plugs (58) are to be tensioned down evenly with screws (58C) and crosswise to the required torque.

Seals and Plunger
Loosen nuts (49A), pull off pump head.
Remove the cover plate (30).
Using an open-end spanner SW27, separate the plunger (36) from the crosshead (25).
Pull the sealing sleeve (39) out of the fits of the drive housing.
Pull the seal cartridge (38) out of the seal sleeve (39).
Remove the tension spring (45) and seal assembly (41,42,43, 43A) from the seal sleeve.
Check plunger (36) and seals (39A, 42).
Replace worn parts; tighten tensioning screw (36C) at to the required tightening torques.
When replacing the plunger (36), tighten the new plunger to the specified torque.
Apply silicone grease to the seals before installation.

Don’t loosen the 3 plungers (36, 36A) before the valve casing has been removed.
Otherwise the plunger (36) could hit against the spacer pipe (51F) when the pump is being turned.

Seal life can be increased if the pre-tensioning allows for a little leakage.
This assists lubrication and keeps the seals cool.
It is therefore not necessary to replace seals before the leakage becomes too heavy and causes output and operating pressure to drop.

Mounting Valve Casing:
Check O-rings (38A,) and support rings (38B) on seal case (38).
Clean surfaces of seal sleeves in gear box and sealing surfaces of valve casing.
Push valve casing carefully onto O-rings of seal case and centring studs (50A).
Tighten nuts (49A) to the required torque.

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

Malfunctions / Remedy
For informations, see assembly instructions Giant Industries, Inc.

Materials Used

Valve Casing:	AISI 303
Plunger:	metal-coated stainless steel
Valves:	High-Grade Stainless Steel
Seals:	Nitrile with fabric reinforcing
O-Rings:	Nitrile / Viton

Paint
The pump drive is painted in RAL 3001 as standard.