

GP6145-3100 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:

- Pull-out tool size 5
- Clip ring pliers

Suction and Discharge Valves

Loosen plugs (56).

Take out complete valve (51) with pull- out tool size 5.

The O-rings (52) between the suction and discharge valve and under the suction valve, can be taken out with a bent piece of wire.

Dismantle valves:

The valve seat (A) is pushed out of the spacer pipe (D) by hitting the valve plate (B) carefully with a bolt. Check sealing surfaces and replace worn parts.

Check O-rings.

When reinstalling the valve, particular care must be taken that the O-rings sit properly in their fittings in the valve casing.

Tighten plugs (56) to the required torque.

Seals and Plunger

Loosen nuts (49A) and remove pump head.

Separate plunger connection (36) from crosshead assembly (25) by means of an open-end wrenches (size 27).

Pull seal sleeves (40) out of their fittings in the crankcase.

Take seal case (41) out of seal sleeve (40).

Remove tension spring (42).

Remove the clip ring (48) from the seal sleeve (40) using clip ring pliers.

Examine plunger parts (36-39), seals (44,46) and O-rings. Replace worn parts.

When replacing plunger pipe (37), tighten tension screw (38) to the required torque.

Grease seals with Silicone before installing.



Don't loosen the 3 plunger screws (36) before the valve casing has been removed.

Otherwise the tension screw (38) could hit against the spacer pipe (51D) when the pump is being turned.

Seal unit (43, 44, 44A) is pretensioned by spring (42). Seal life can be increased if the pretensioning 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.

When reassembling, tighten plunger screws (36) to the required torque.

Mounting Valve Casing:

Check O-rings on seal case (41).

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 (49C).

Tighten nuts (49A) 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 parts order number**.

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

Malfunctions / Remedy

For informations, see assembly instructions Giant Industries, Inc.

Materials Used

Valve Casing: Cast Bronze

Plunger: Solid ceramic

Valves: High-Grade Stainless Steel

Seals: Nitrile with fabric reinforcing

O-Rings: Viton

Paint

The pump drive is painted in RAL 3001 as standard.