Repair Instructions
P201-4120, P201-4121, P201-4123, P201-4125 and P201-4127

Additional repair instructions shown on Giant's website:
(https://www.giantpumps.com/wp-content/uploads/2019/06/P202-P204-4020_4021-repair-instructions.pdf).

1. Suction and Discharge Valves
Remove hexagon socket screws (42), pull off discharge casing (41) towards the front. Pull valve seat (37) out of suction casing (32). The complete valve (38) which was pressed into place must be removed by carefully drilling it out of the valve seat (37) or plunger (16) with a ø7.8 drill. Examine o-rings (39,40) on valve seat and replace if necessary.

The new valve (38) must be inserted into the bore so that it is level. The holding pin must then be pressed in to be level with the help of a tool (hammer or insert tool-see fig. 1). When reassembling tighten hexagon socket screw (42) to 88-106 in-lbs. (10-12 Nm).

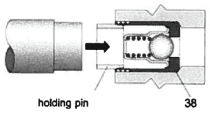

Fig. 1

2. Grooved Seal
Remove hexagon socket screws (42), pull off discharge casing (41), valve seat (37), suction casing (32) and intermediate casing (21) towards the front. Pull valve seat (37) out of suction casing (32). Remove intermediate casing (21) from guide sleeve (28), then pull out seal adaptor (31) from suction casing (32). Pry seal rings (22/22A) as well as rod seals (30) out of the guide sleeve (28), the spacer ring (20), the guide sleeve (31) and suction casing (32).

Important! Examine surfaces of plungers (16). Damaged surfaces lead to rapid seal wear. If the plunger(s) (16) is (are) worn, the complete plunger must be replaced -see 3b.

Important! New seals must be installed with utmost care. Even minute scratches on the inner/outer seal surface can cause leakage. Carefully note the sequence and position of seal rings. Place the cases holding the seals onto the plungers.

When reassembling tighten hexagon socket screw (42) to 88-106 in-lbs. (10-12 Nm).

3.Gear and Plunger
If oil leaks where the plunger (16) protrudes out of the gear, gear seals (19) and plungers have to be examined and replaced if necessary.

a) Oil Seal
Remove plug (3A) and drain oil. Pull off discharge casing (41), valve seat (37), suction casing (32), guide sleeve (28) and intermediate casing (21) towards the front. Take spacer ring (20) off plunger, remove plunger as described under 3b and pry out gear seal (19) with a screwdriver. Note the exact sequence of assembly.

b) Plungers
Remove plug (3A) and drain oil. Remove gear cover (3). To dismantle crankshaft (13), use an insert tool to remove bearing cover (7). Carefully move the crankshaft axialwise using a rubber hammer or insert tool at the same time threading it carefully through the connecting rods (15), taking care not to force the crankshaft or bend the connecting rods. Remove and dismantle connecting rods and plungers. Replace worn parts. Put crankshaft in again through the connecting rods and press in bearings (12A,12B) on each side. Then install radial shaft seal (11), oil sight glass (8 not shown) and bearing cover (7).

4. To Change Crankshaft Side
The crankshaft end is on the left side of the pump when viewed from behind. Should the crankshaft have to be on the right side, proceed as follows:
Switch stopper plugs (33/35) and seals (34/36) into the opposite connection. The suction line should always run to the pump from below and the discharge line from above to ensure the pump is optimally vented.
The leakage holes in the spacer rings (20) must be open and facing downward so that leakage liquid can drain.
Close upper holes with plastic plugs (20A).
Interchange plug (5) and oil filler plug (2) and turn gear cover (3) 180° around.