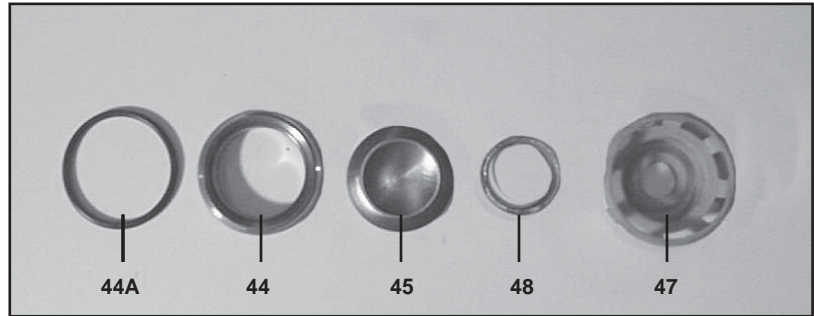


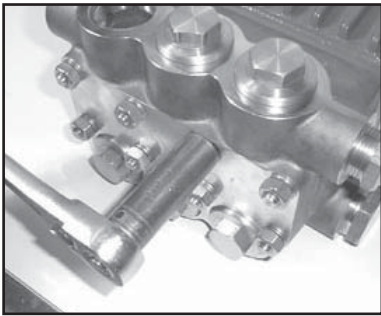
LP122A-4000 & LP122A-5100 - Repair Instructions



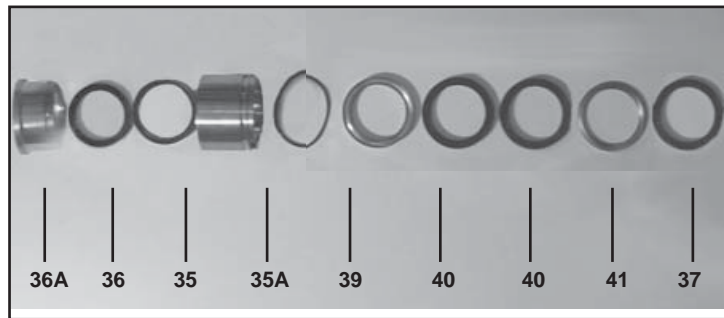
1. With a 30mm wrench, remove the six (6) plugs (48) from the valve casing (43). Inspect the O-rings (48A) and replace if necessary. Remove the complete valve assembly (46A) by threading a 12mm bolt into the spring retainer and pulling straight out.



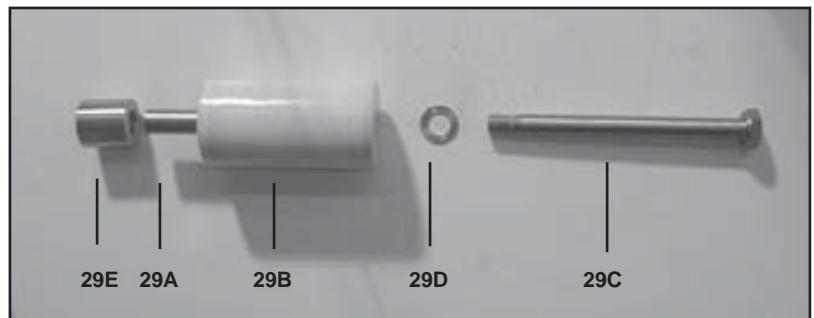
2. To disassemble the valve, screw the bolt into the retainer until the valve plate (45) presses the valve seat (44) out of the spring retainer. Examine all parts and replace if necessary. If the seat doesn't come out, use a valve puller to remove.



3. Remove the eight (8) hex nuts (49A) with a 19mm wrench. Tap the back of the manifold (43) with a rubber mallet to dislodge and slide off the studs.
5. If there are signs of oil leaking through the plunger oil seals, then replacement is necessary. Dissassemble the gear end and push out the seals from the back of the pump.



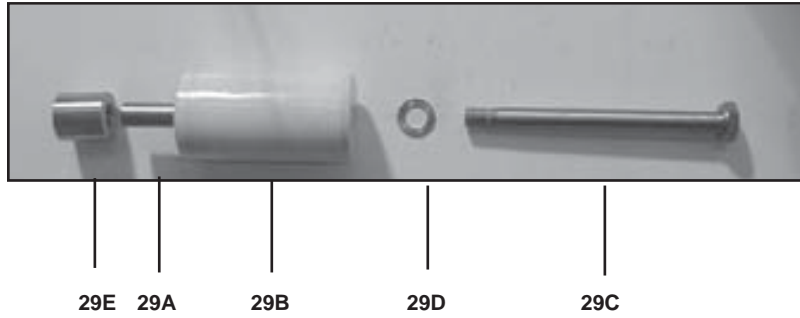
4. Remove the seal sleeve (35) from the manifold and/or crankcase. Remove the pressure rings (39&36A), v-sleeves (40&36), support ring (41) and O-rings from the manifold and seal sleeve, respectively. Examine seals carefully and replace if worn. Clean all parts.



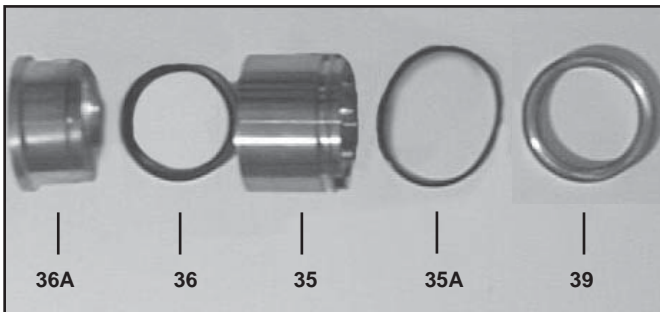
6. Inspect surface of plunger pipe (29B) carefully. Remove any chemical or mineral deposits taking care not to damage the surface of the plunger. If plunger pipe is worn, remove the plunger bolt (29C), plunger pipe (29B) and spacer (29E). Replace worn parts necessary. **Note: Always use a new copper gasket (29) when repairing the plunger assembly.**

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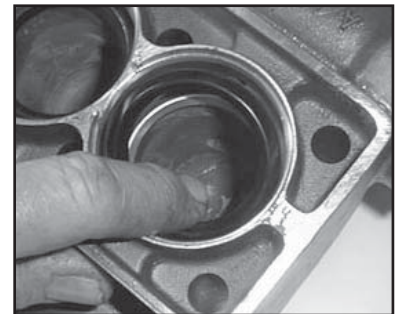
TO REASSEMBLE PROCEED AS FOLLOWS:



7. If previously disassembled thoroughly clean all exposed surfaces on the spacer (29E) and all exposed threads on the plunger bolt (29C) and the steel plunger base (25). Threads **MUST** be free of old loc-tite and any other material such as oil, grease, etc. This is necessary to ensure proper curing of new loc-tite. Giant recommends cleaning the threads with acetone or other suitable cleaner. Reassemble plunger assembly parts (29A, 29B, & 29E) using a new copper gasket (29D) and the cleaned plunger bolt (29C). Slide the bolt through the center of the four (4) pieces so that the threaded end is exposed. Apply several drops of loc-tite 243 (or equivalent) adhesive to the threads. Thread into steel plunger base and tighten to 26 ft.-lbs. (35 NM). **BE CERTAIN ALL PARTS ARE CENTERED WITH THE BOLT!**



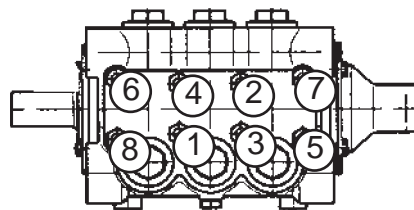
8. Lubricate weep seal (36). Place, weep seal (36), and pressure rings (36A & 39) into the seal sleeve (35). Assemble the O-ring (35A) onto seal sleeve and lubricate.



9. Place support ring (41) and v-sleeves (40) into valve casing.

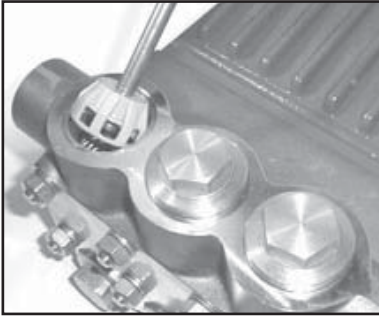


10. Place entire manifold/seal sleeve assembly over the studs and push firmly until seated against the crankcase.



11. Tighten hex nuts (49A) in a crosswise pattern (shown above) to 60 ft.-lbs. (80 NM)

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12. Next, place valve assemblies (46A) into manifold after first lubricating the O-ring (44A). Seat firmly into manifold.



13. Replace plug with O-ring (48, & 48A) and tighten to 160 ft.-lbs. (217 NM).

14. Fill crankcase with approximately 116 fluid ounces of Giant oil or equivalent SAE 90 industrial gear oil and check oil level of the crankcase with the dipstick. Proper level is center of two lines. Reinstall your Giant LP pump into your system.

LP122A-4000 & LP122A-5100 TORQUE SPECIFICATIONS

<u>Item #</u>	<u>Part #</u>	<u>Description</u>	<u>Torque Amount</u>
10	01010 / 01010-0100	Screw, Cover	125 in.-lbs. (14 NM)
17	07114 / 07114-0100	Hex Screw, Bearing Cover	125 in.-lbs. (14 NM)
24A	13277	Hex Screw, Connecting Rod	250 in.-lbs. (28 NM)
29C	07737 / 07737-0100	Plunger Bolt	26 ft.-lbs. (35 NM)
48	06089	Plug, Valve	160 ft.-lbs. (217 NM)
49A	07158	Nut, Stud Bolt	60 ft.-lbs. (81 NM)

Contact Giant Industries or your local distributor for maintenance of the gear end of your pump. Phone: 419/531-4600

**Contact Giant Industries for service school information.
Phone: (419) 531-4600**