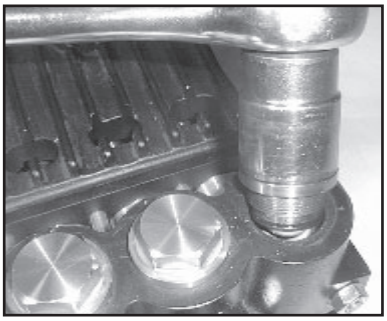
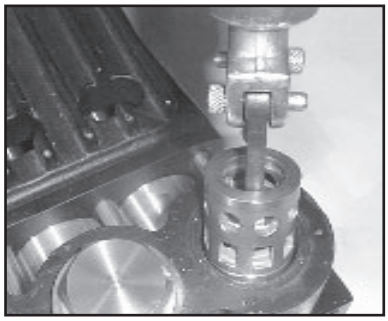
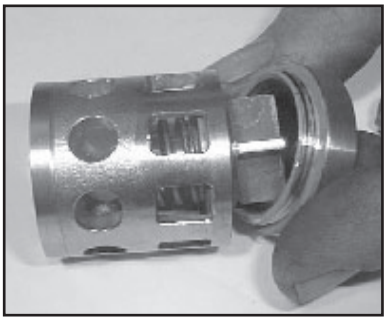
BP5236 - Repair Instructions



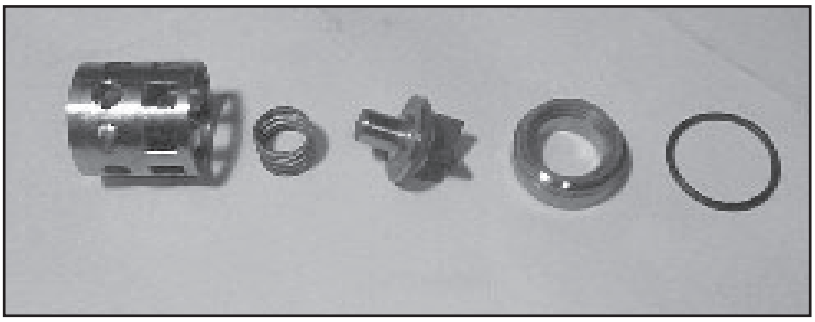
1. Remove plugs (48) with a 36mm wrench and check o-ring (44A) and support ring (44B) take out spring (45).



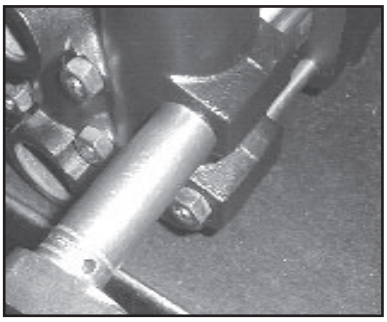
2. Remove discharge and suction valves (46), by pulling them upwards out of the valve casing with a valve puller.



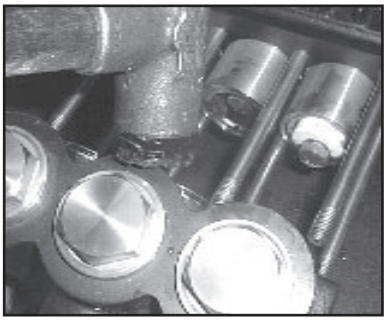
3. The spacer pipe (46D) is screwed together with valve seat (46A).



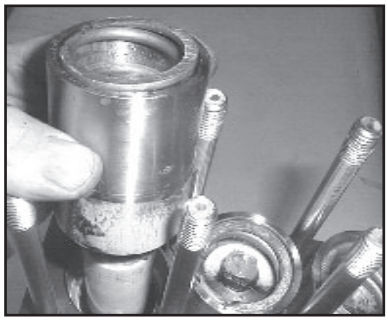
4. Unscrew the valve seat, remove the valve plate (46B) and spring (46C). The seal ring (46E) is snapped onto the valve plate. Check all sealing surfaces and replace worn parts. Tighten plugs (48) to 107 ft-lbs. (145 Nm).



5. Remove hexagon nuts (49A)



6. Remove pump head by tapping from the back with a rubber mallet.



7. Remove seal unit (36, 39, 40) out of seal sleeve (35).

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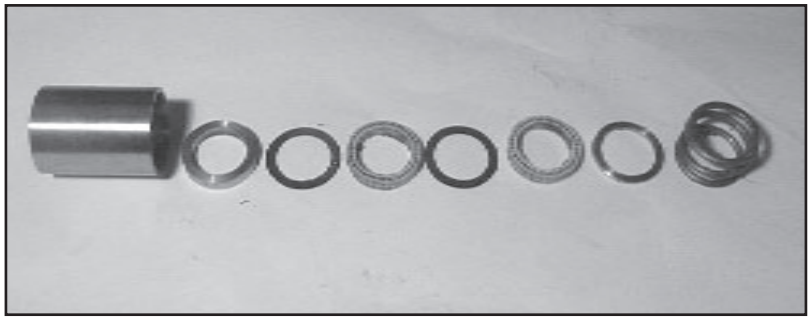
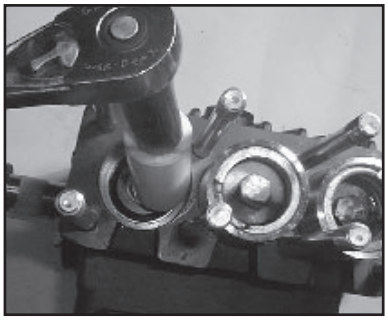
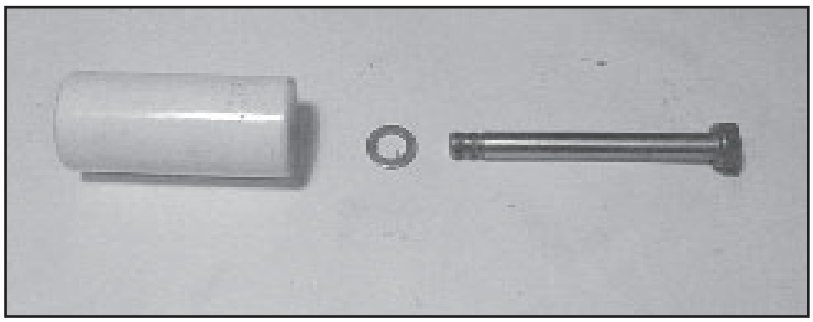


9. Examine spiral rings (40) and guide ring (36). Remove seal case (37) from valve casing and check O-rings (38). Replace worn parts; apply silicon grease on seals and o-rings before installing.

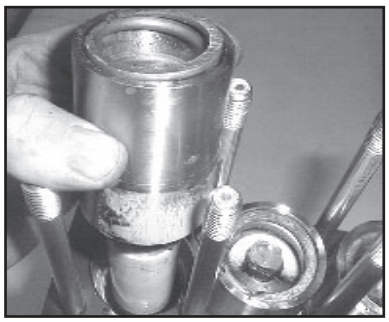


10. Remove tension screw (29C) and remove the plunger pipe from centering sleeve (29A)

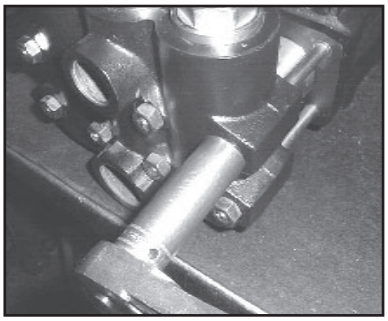


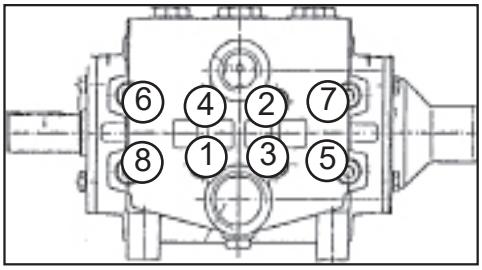
11. Clean plunger surface (25); using the tension screw, put the new plunger pipe and a new copper gasket (29D) onto the centering sleeve. Cover the threads of the tension screw (29C) lightly with lock tight and tighten to 26 ft.-lbs. (35 Nm).

    IMPORTANT: Care must be taken that no lock tight gets between the plunger pipe (29B) and the centring sleeve (29A). The plunger pipe should not be strained by over tightening of the tension screw or through damage to front surface of plunger, otherwise it will probably break.



12. Check o-rings (38) on seal cases (37). Clean mounting surfaces of the seal cases as well as sealing surfaces in valve casing. Put seal cases (37) in the centring holes of the valve casing, then push valve casing carefully onto stud bolts (49).





13. Tighten hexagon nuts (49A) in a crossing pattern shown to the right to 59 ft.-lbs. (80 Nm).

BP5236 - Repair Instructions

To Dismantle Gear End

14. After removing valve casing and plunger pipes (29B) drain oil by removing drain plug (12). Remove crancase cover (4) and bearing cover (14). Remove connecting rod screws and push the front of the connecting rods as far as possible into the crosshead guide.

IMPORTANT: Connecting rods are marked for identification. Do not twist connecting rod halves. Connecting rods to be reinstalled in their exact original position on shaft journals.

15. Turning the crankshaft slightly, hit it out carefully to the side with a rubber hammer.

IMPORTANT: Do not bend the connecting rod shanks. Check shaft and connecting rod surfaces, shaft seals and taper roller bearings.

To Reassemble

16. Using a soft tool, press in the outer bearing ring till the outer edge line up with the outer edge of the bearing hole. Screw on bearing cover together with shaft seal and o-ring. Fit shaft through bearing hole on the opposite side. Press in outer bearing ring and tension it inwards with the bearing cover, keeping the shaft in vertical position and turning slowly so that the taper rollers of the bearings touch the edge of the outer bearing ring. Adjust axial bearing clearence to at least 0.1mm and maximum 0.15mm by placing fitting discs (20A) under the bearing cover.

IMPORTANT: After assembly has been completed, the shaft should turn easily with very little clearence. Tighten connecting rod screws to 22 ft.-lbs. (30 Nm).

Pump Mounting Selection Guide

Bushings **01065** - 18 mm Tapered H Bushing	**Rails** **01034** - Steel Box Rails (L=9.25” x W=1.18” x H=1.62”) **01075** - Plated Steel Channel Rails (L=9.00” x W=2.12” x H=2.50”)
Pulley & Sheaves **01061** - 7.75” Cast Iron 1 gr. - AB Section **01062** - 7.75” Cast Iron - 2 gr. - AB Section **01066** - 18 mm - 8” Steel Pulley - 1 gr.	

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