BPK7180 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:
-Fitting Tool (03906)
-Tool for valve mounting (03852)

Suction and Discharge Valves
Remove plugs (54-58)
Pull out the complete pressure valve (52), valve holder (53) and suction valve (51) using fitting tool 03852 .

Dismantle valves:
The spring tension cap (51G ; 52G) is screwed together with valve seat (51A or 52A).
Screw off spring tension cap.
Remove spring (51E ; 52 E) and valve plate (51D ; 52D)
Check the valve plate (51D; 52D) for free movement in the guide bushing (51F; 52F).
Examine sealing surfaces and o-rings.
Replace worn parts.

Seals and Cylinder liner
Screw off hexagon nuts (49A), remove pump head together with centering ring (38) from intermediate casing (48).
If necessary, carefully tap the valve casing (50) past the centring stud (50A) using a rubber hammer.
Pull the centerring ring case (38) out of the valve casing (50) (if necessary using two screwdrivers placed into the front groove).
Examine o-rings (38A) and coat with silicon grease before fitting.


Pay attention to avoid any injury due to the heavy weight of the parts when removing these from the stud screws (49).
If necessary, secure the valve casing by supporting it with w ooden blocks or using a hoist.

Remove Flat Seal (41). Remove tension screw (36C) and take the cylinder liner (40) together with all mounted parts out of the drive.
Press the complete piston (36B, 36F, 36G, 36H, 36J) out of the cylinder liner and check for any damage. Clean parts from pos. 36A to pos. 41, examine them and replace if necessary.
Coat new parts generously with silicone grease before fitting. Press the complete piston (36B, 36D, 36G, 36H, 36J) into the cylinder liner.
Push the cylinder liner (40) with piston assembly (36B, 36F, 36G, 36H, 36J) into the intermediate housing (48).
If necessary, the seals can be held on the other side of the seal sleeve using a suitable pipe support. Position the complete piston (36B, 36F, 36G, 36H , 36J) using assembly tool 03906.


Pay attention that the sealing surfaces on the intermediate casing, crankcase and valve casing are clean and without damage.
The components must lie exactly and evenly on one another.
The same exactness applies to all centering positions in the crankcase, intermediate and valve casing.

Lightly coat tension screw (36C) with screw glue and, together with seal ring (36D), place into the piston.
Tighten tension screw to the required torque.


Overtensioning of the piston by excessive tightening of the tension screw and/or dirt or damage can lead to increased wear of the piston seal (36D).

Mounting the Valve Casing
Put centering ring (38) in the centring holes of the valve casing, then push valve casing carefully onto centring studs (50A).
Tighten hexagon nuts evenly and crosswise to the required torque.


The torque tension on the screws (49A) must be checked after 8-10 operating hours; the pump must be at zero pressure. Thereafter the tension is to be checked every 200 operating hours.

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