

180R9162

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This document comprises instructions for changing the internal pump elements of the axial piston pumps APP0.6-1.0Compact

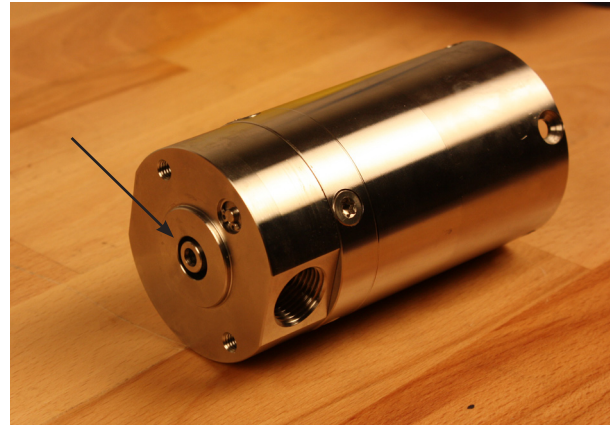
**Please note: It is essential that the pump is serviced in conditions of absolute cleanliness**

Tools required:  
Tool set (see parts list 521B0941)  
Screw driver  
Rubber hammer  
Spring ring pliers not supplied for removing the flush valve

To understand the pump design better, please see exploded view on last page

### Dismantling

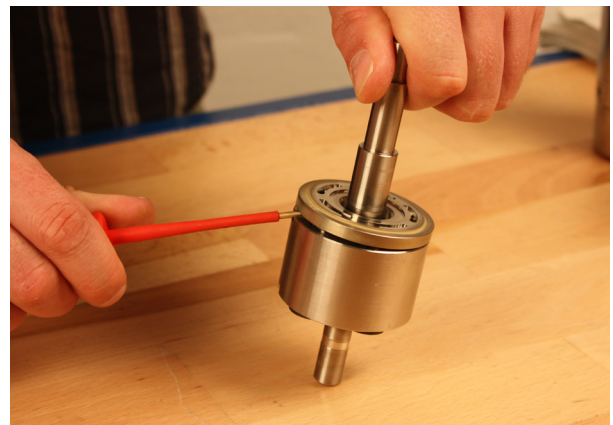
1. Unscrew the 5 screws on opposite side of the shaft, holding the swash plate and press on the shaft so that the swash plate is pressed out
3. Continue pressing the shaft into the pump to get the cylinder barrel out



2. Remove the pistons, retainer plate, retainer guide and spring.



4. Gently lever the valve plate assembly free with the aid of a screw-driver



- Remove the 5 screws holding the house attached to the port flange.



Pull the house and port flange parts apart.

- Remove the port plate and the pin attached to the port flange.



**Warning**  
This operation might break the shaft seal/bearing; this should thus only be done if it is broken and/or you have a new shaft seal set.

Place the port flange on the house again for the next operation. This is easier done if the O-ring is removed.

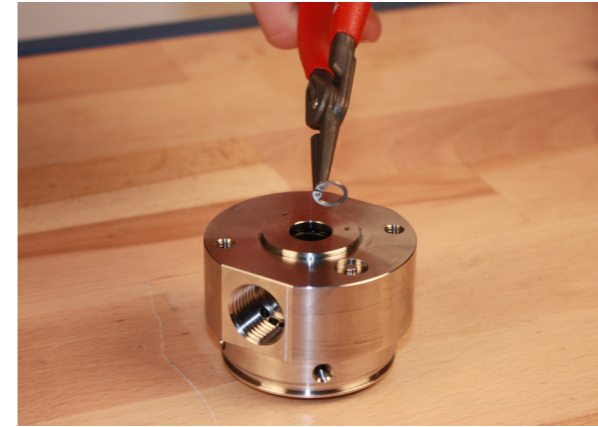
- Use a rubber hammer and the drift provided with the tool set to remove the shaft seal and bearing.



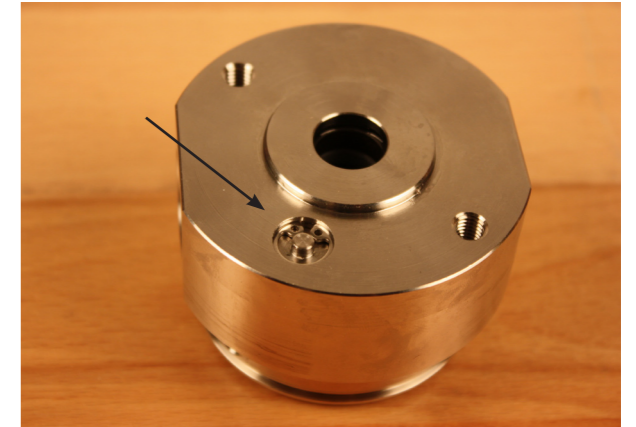
Clean the port flange very carefully in clean filtered water.

### For changing/servicing the flushing valve

- Remove the spring ring using a spring ring plier.



- Secure it with the spring ring.



- Use a small tool to push out the flush valve. (not sharp or pointed)



If broken, replace part/O-rings

- Remount it in the correct order as shown on the photo

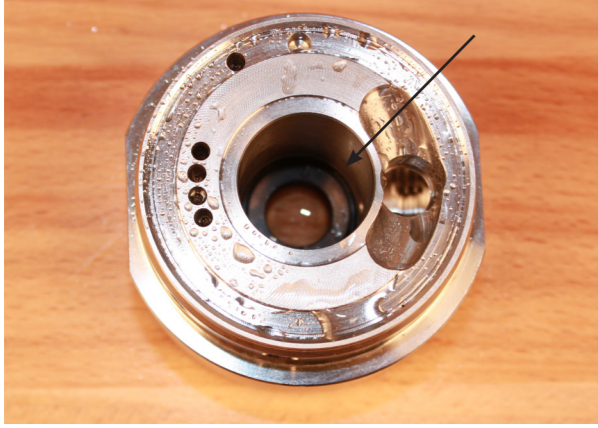


## Assembly

### Warning

Parts may be left from removing the shaft seal/bearing. Make sure that the port flange is clean from particles before assembly.

1. Lubricate the rubber and shaft seal hole in port flange with clean filtered soap water. Mount the ceramic ring from the shaft seal. Ensure that the rubber seal is positioned against the shoulder in the port flange. See next photo.

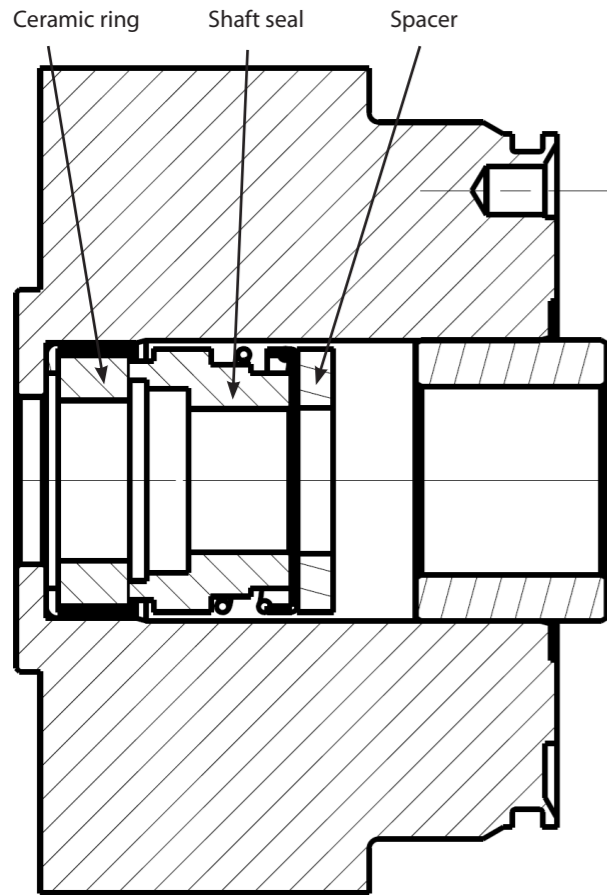


2. Mount the other part of the shaft seal. Make sure that the carbon ring is pointing towards the ceramic ring.

### Important:

Mount the spacer

Sectional view of shaft seal area.



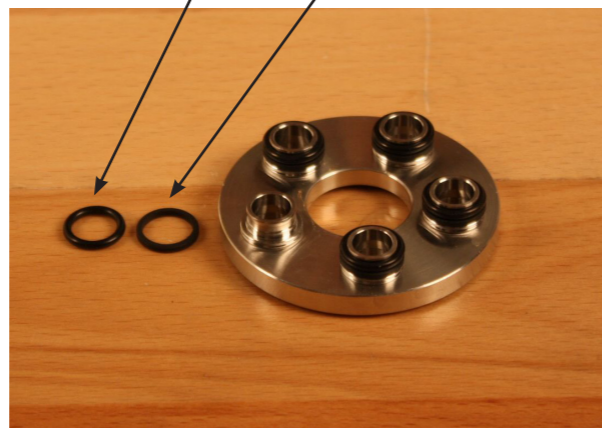
3. Mount the new bearing as straight downwards as possible. Use the special tool for mounting the bearing. The bearing must be 3mm above the port flange when mounted. The shoulder on the special tool must point downwards to give the bearing the correct height. Gently lower the bearing into the port flange with a rubber hammer. Please see previous picture of sectional view of shaft seal area.



4. Mount the pin and the port plate. Replace the O-ring, if required.



5. Replace the O-rings and the back-up rings on the valve plate. Mount first the new back-up rings on the valve plate and then mount the O-rings.



6. Wet the liners and O-rings/back-up rings with clean filtered soap water. Place the valve plate on top of the cylinder barrel and press gently downwards.



7. Lubricate the shaft with filtered soap water. Mount the cylinder barrel in the port flange. Use the torpedo in order not to damage the shaft seal by the sharp edge on the shaft.



8. Lubricate the O-ring on the port flange with clean filtered soap water. Place the house on top of the port flange. Make sure to orient the port flange towards the holes in the house. Be careful not to squeeze the O-ring. Press down until it slides into place. Do not press on the shaft, as the cylinder barrel will be pressed out.



9. Mount the 5 screws. Lubricate the screw thread with grease. Tighten with firm torque. Make sure not to over-tighten the screws.



10. Mount the spring, retainer guide, retainer plate and pistons. Please confer with the exploded view at the end of this instruction for correct orientation.

**Warning:** Ensure that the slant surface of the retainer plate is placed against the cylinder barrel.



11. Mount the new O-ring on the swash plate and lubricate with clean filtered soap water. Place the swash plate on top of the pistons. Turn the pump upside down and place it on the tool for mounting the bearing while holding on to the swash plate. Make sure to orient the swash plate threads towards the holes in the house. Be careful not to squeeze the O-ring. Press down until it slides into place. Mount the 5 screws while pressing downwards.



12. Tighten with firm torque. Make sure not to over-tighten the screws.

**Exploded View  
APP0.6-1.0Compact**

