

Service guide

## APP pumps

APP 1.5 - 3.5

Disassembling and assembling



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**Introduction**

**NOTE: If the pump is disassembled within the warranty period, the pump is no longer covered by the warranty.**

This document covers the instructions for disassembling and assembling the axial piston pump APP 1.5-3.5

Tools needed:

- Shaft seal tool (code no. 180B4148)
- Press bush
- Allen key 5mm
- 2 Screwdrivers

**Important: It is essential that the pump is serviced in conditions of absolute cleanliness. WARNING: Do not reuse disassembled O-ring or shaft seal as they might be damaged.**

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



1. Disassembling and assembling the pump

1. Unscrew the 4 mounting screws and remove seal SAE flange.  
**Do not yet unscrew the 2 lower screws.**

2. Wet the shaft and shaft seal with clean (filtered) soap water. Gently lever the shaft seal assembly free using 2 screwdrivers.

3. Unscrew the 2 lower screws.

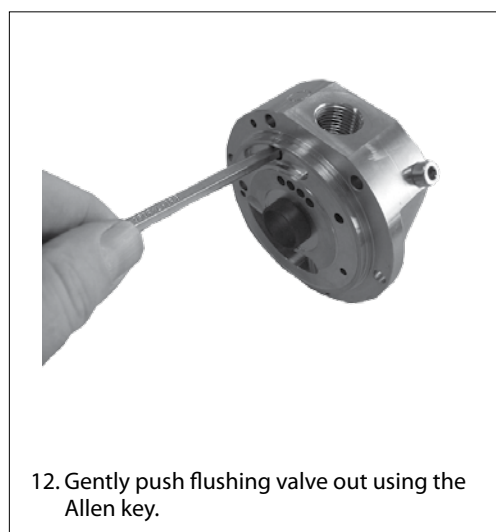
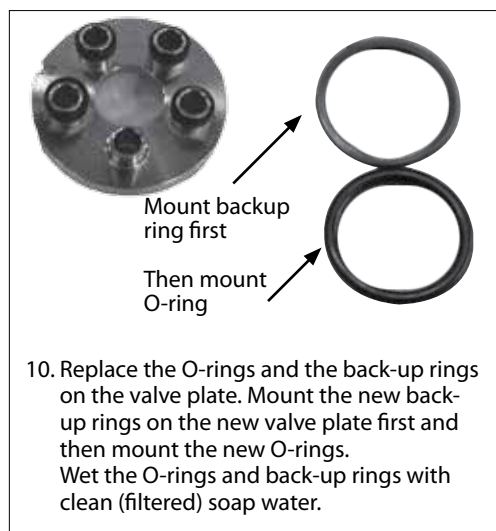
4. Carefully turn the whole pump over so that the shaft is facing down. Support the pump in a suitable hollow base so that the pump is not supported by the shaft.

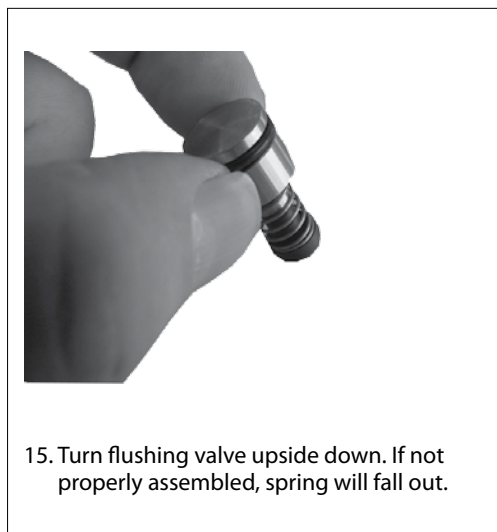
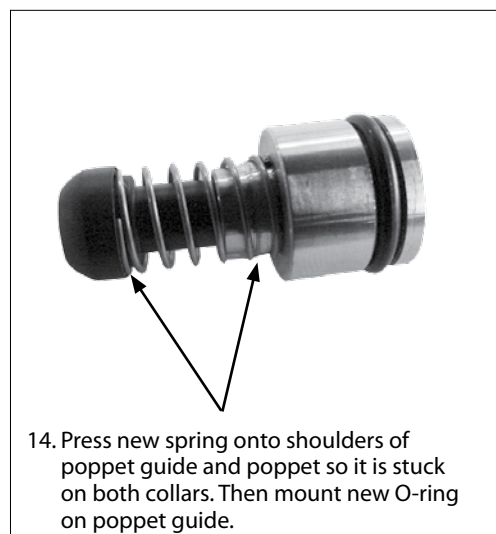
5. Remove the housing.

6. Remove the pistons, retaining plate, retaining ball, spring guide, and spring from the cylinder barrel.

APP 1.5-2.5

APP 3.0-3.5



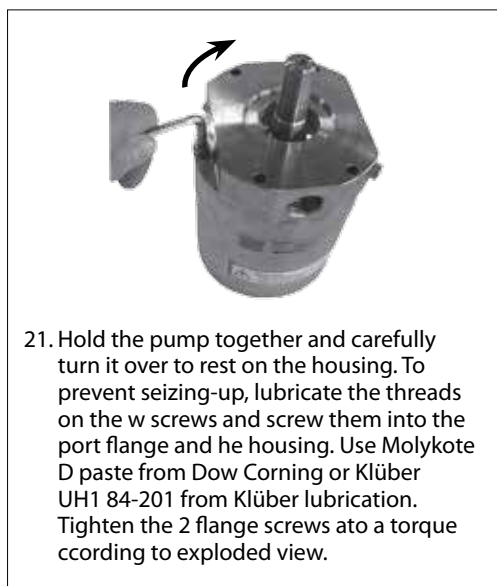




19. Position the new spring, new spring guide, new retainer guide, new retainer plate and new pistons.



20. Position the housing on the port flange and over the guide pin.



21. Hold the pump together and carefully turn it over to rest on the housing. To prevent seizing-up, lubricate the threads on the w screws and screw them into the port flange and the housing. Use Molykote D paste from Dow Corning or Klüber UH1 84-201 from Klüber Lubrication. Tighten the 2 flange screws to a torque according to exploded view.

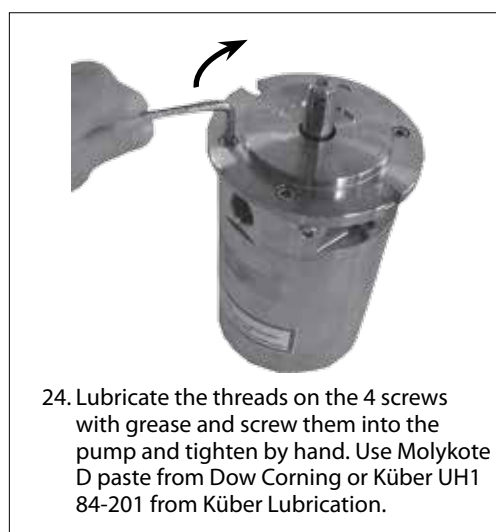


22. Mount the new shaft seal following the instructions on the next pages.

**Wet torpedo and new shaft seal with soap. Do not use silicone grease.** Slide the shaft seal over the torpedo with carbon seal free face pointing upwards. **Be careful not to damage the carbon seal face on the shaft seal.**



23. Replace the O-ring on the SAE flange.

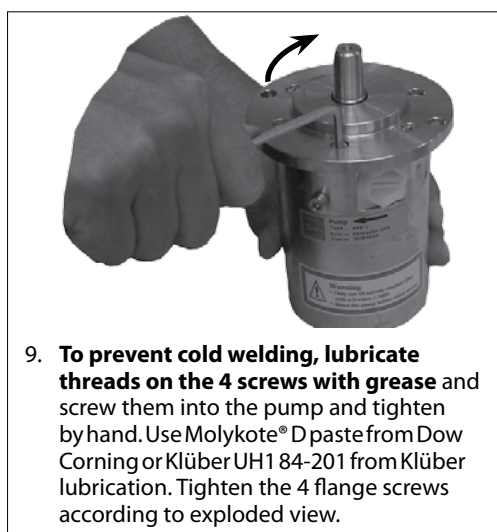
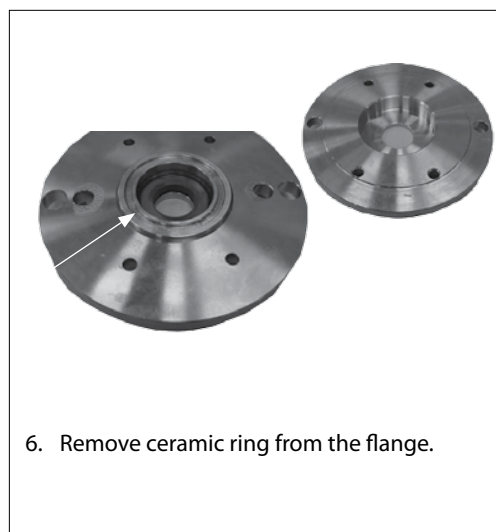


24. Lubricate the threads on the 4 screws with grease and screw them into the pump and tighten by hand. Use Molykote D paste from Dow Corning or Klüber UH1 84-201 from Klüber Lubrication.

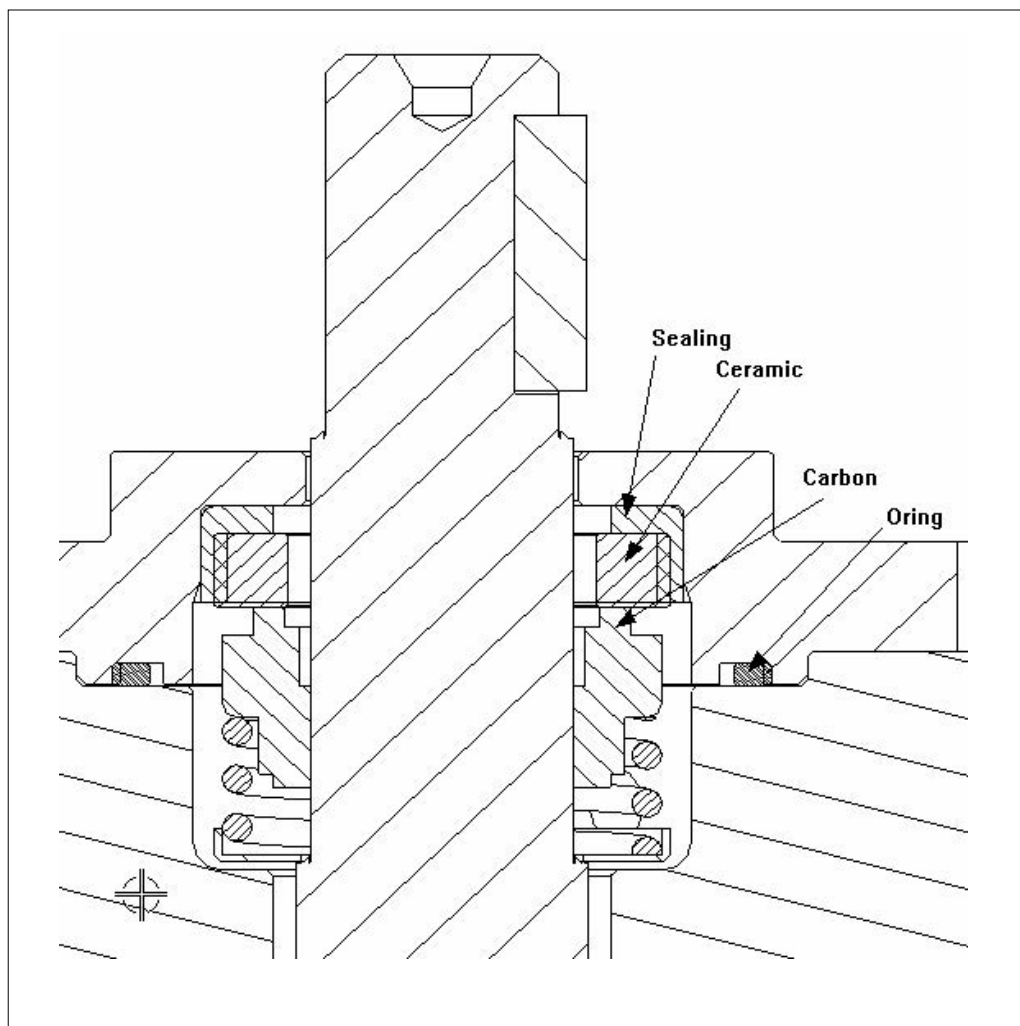
## 2. Change of shaft seal





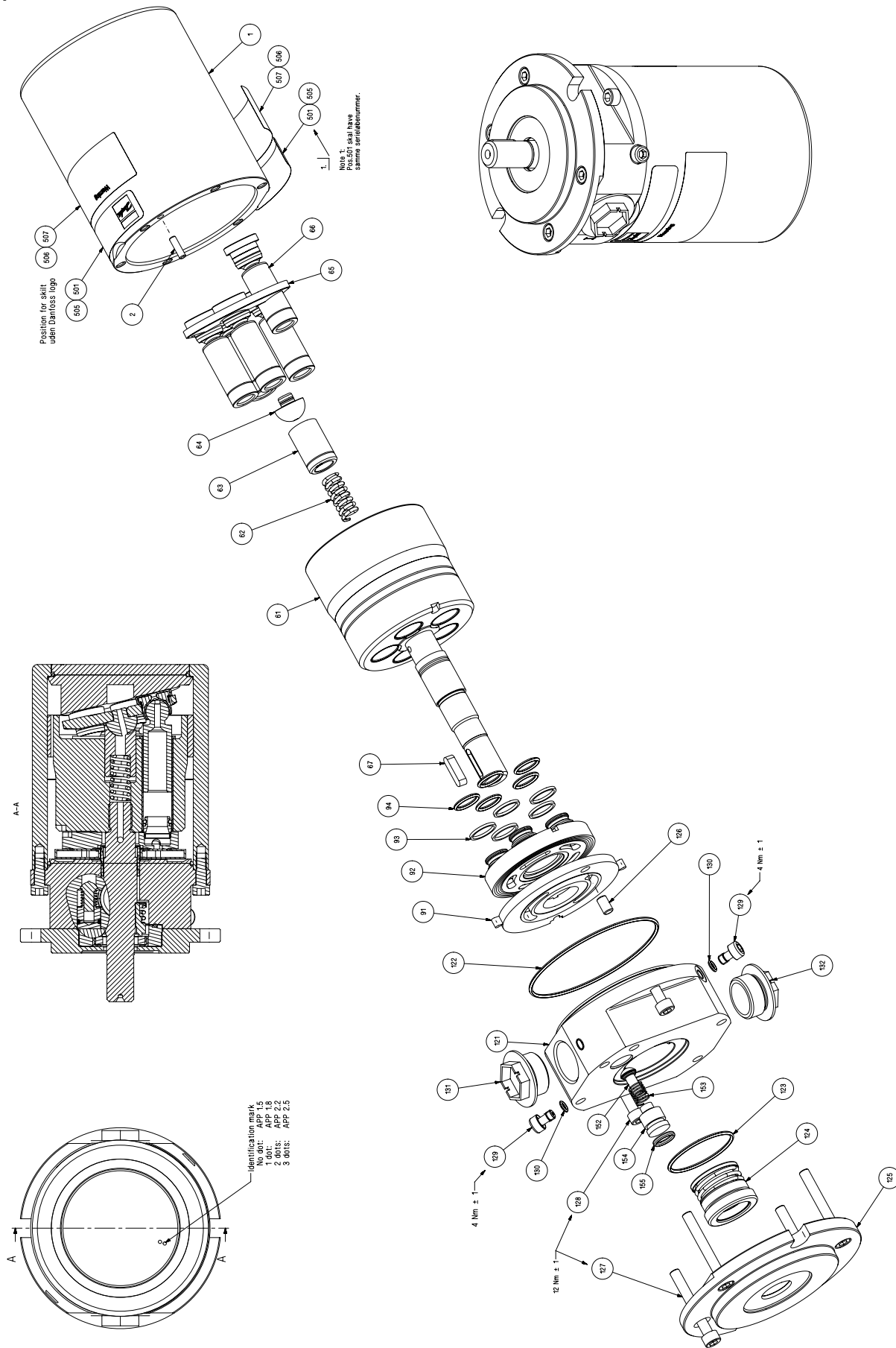






3. Exploded views

3.1 APP 1.5-2.5





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