

Dismantling the Pump



Pumps which convey hazardous liquids must be decontaminated before dismantling the pump. The appropriate personal protection equipment should be used.

Tools required: Torque wrench with socket - across flats 28mm (M16 locknut), 34mm (M24 locknut), 46mm (M36 locknut), Engineers pliers, Hide mallet, Seal extractor tool, Seal tolerance ring.



1) Isolate the motor (1) from the power supply.

2) Disconnect the inlet and outlet connections.



Risk of contact with liquid being pumped.

3) Unscrew the clamp ring handle(s) (8) by several turns and lift the clamp ring (7) over the flanged adaptor (5).

4) Remove the cover (18).

5) Unscrew the impeller locknut (22) with the spanner (right hand thread).

6) Slide the impeller vane plate (20) and (where fitted) the back plate (19) forward off the shaft (14) by maintaining an even pressure. Hitting the impeller can cause serious damage.

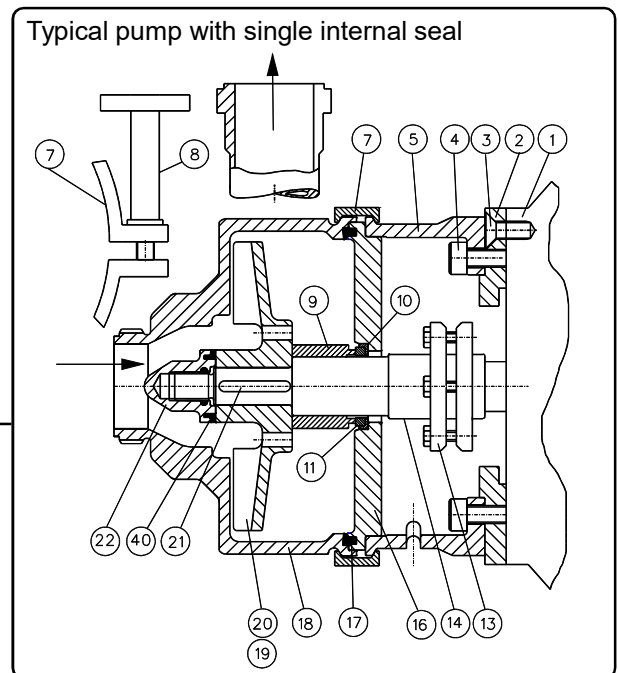
7) The mechanical seal (9) is now accessible. Using the Seal extractor tool, pull the seal forwards off the shaft.



Removing the mechanical seal may damage the seal tolerance ring, so EagleBurgmann recommend that it is replaced.

8) The face of the seal is now exposed and can be inspected.

9) To remove the seal seat assembly (10,11), unscrew the housing plate screws (where fitted) and take out the housing plate (16). The seal seat (11) and seat ring (10) can both be inspected.



Reassembling the Pump

1) Fit the mechanical seal (9) (see page S2).

2) Screw on the impeller locknut (22) (right hand thread) and finally tighten to the specified torque (see table).

3) Refit the cover (18).

4) Fit the clamp ring (7) into position and tighten the clamp ring handle(s) (8), ensuring that the clamp ring is correctly located.

5) Connect the inlet and outlet connections.

6) Before start-up, the pump should be flooded with liquid at the seal faces as dry running will cause overheating and will damage the mating surfaces.

Pump model	Locknut torque (Nm)
H & CH	90 (M16 locknut)
	140 (M24 locknut)
	180 (M36 locknut)

Replacing the Seal - EagleBurgmann SHJ

ATTENTION

Mechanical seals are precision products. Installation should be carried out to the laid down procedure. Seals should be installed in a clean environment with particular care given to the lapped and polished seal faces.


Note: - For information on the seal fitted in your pump, please refer to the data sheet.

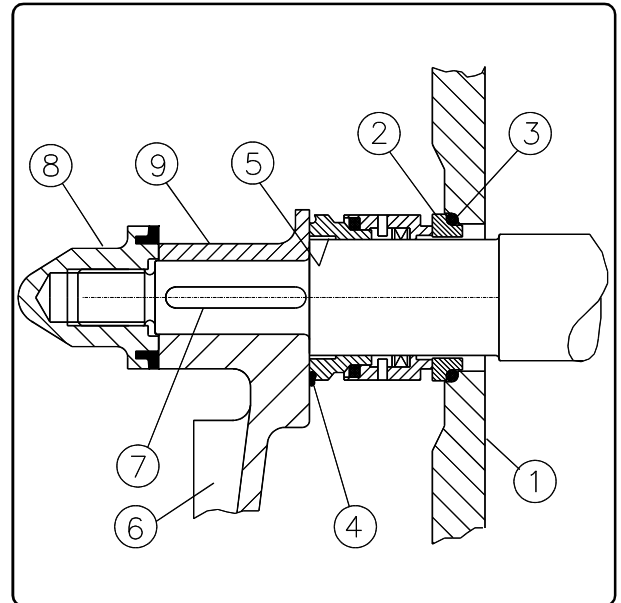
Tools required: Small amount of water (for lubricating the seal), Seal sleeve (9).

Removing the old seal:

Dismantle the pump and seal as described on page S1.

Fitting the new seal:

- 1) Ensure all components are clean. Any sharp edges on the shaft shoulder or keyway should be removed.
- 2) Fit the seat (2) into the seat ring (3) to form the seat assembly.
- 3) Lubricate the seat assembly with water and press it fully down into the recess in the housing plate (1). Ensure that it is at right angles to the axis of the shaft and that the lapped sealing surface will face **towards** the mechanical seal assembly.
- 4) Fit the housing plate (1) into the flanged adaptor. Take care during assembly that the seal seat does not contact the shaft and become chipped.
- 5) If necessary, refit the key into the pump stub shaft (7).
- 6)  To ensure that the seal is correctly positioned, it is important that the loose rear 'O' ring (4) is temporarily removed.
- 7) Slide the seal unit onto the shaft (7) until the tolerance ring (5) contacts the shoulder of the shaft.
- 8) Slide the seal sleeve (9) onto the shaft and tighten the impeller locknut (8). This will push the seal to its correct working position.



- 9) Unscrew the impeller locknut (8) and remove the seal sleeve (9).
- 10) Fit the rear 'O' ring (4) and check it is correctly seated.
- 11) Slide the impeller back plate (where fitted) and the impeller vane plate (6) onto the pump stub shaft.
- 12) Reassemble the pump as described on page S1.
- 13) Before start-up, the pump should be flooded with liquid at the seal faces as dry running will cause overheating and will damage the mating surfaces.