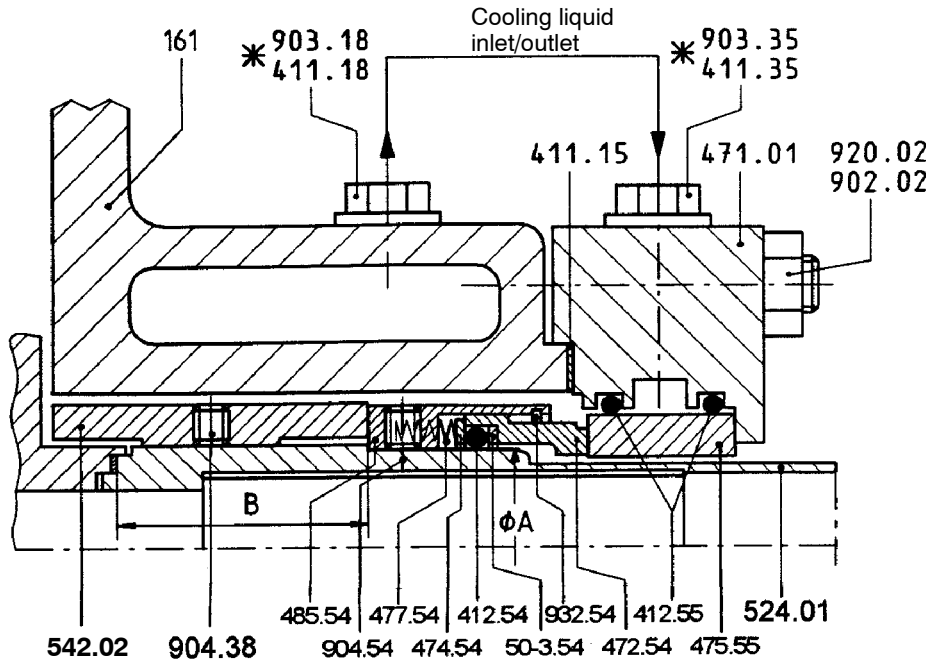


Dismantling and installation instructions for single-acting mechanical seals Type: Crane 57B-D

Dismantling:

Undo the hex nuts 920.02 and push the seal cover 471.01 back against the thrower 507.01. Remove casing cover 161. Take the complete rotating assembly of the mechanical seal with bush 542.02, shaft protecting sleeve 524.01 and gasket 411.32 off the shaft.

Undo the grub screws 904.54 and push the rotating assembly of the mechanical seal off the shaft protecting sleeve 524.01. If necessary, undo the grub screws 904.38 and pull the bush 542.02 off the shaft protecting sleeve 524.01. Take the seal cover 471.01 with gasket 411.15 and the thrower 507.01 off the shaft. Remove the seat ring 475.55 and the O-rings 412.55 from the seal cover 471.01.



- 524.01 Shaft protecting sleeve
- 542.02 Throttlebush
- 904.38 Grub screw
- 412.54 O-ring
- 412.55 O-ring
- 472.54 Spring-loaded ring
- 474.54 Thrust ring
- 475.55 Seat ring
- 485.54 Torque-transmitting element
- 904.54 Grub screw
- 932.54 Circlip
- 50-3.54 Support ring

P 08	95	
P 06	75	55,5
P 05	65	75,8
P 04	53	49,3
P 03	43	60,8
P 02	33	46,3
Bearing bracket	A	B
	(mm)	(mm)

* Remove when connecting pipes

Installation:

The mechanical seal should preferably be fitted with the shaft in vertical position. Pay attention to the following points:

Absolute cleanliness and utmost care are essential when fitting mechanical seals. Make sure not to damage the contact faces. Do not remove the protective cover from the seal faces until immediately before installation. The surface of the shaft protecting sleeve 524.01 must be perfectly clean and smooth, the leading edge (bevelled end of shaft protecting sleeve) must be chamfered. Make sure that the surface of the shaft protecting sleeve cannot be damaged when the rotating assembly is pushed onto the shaft protecting sleeve. The rotating assembly must not be turned when pushed onto the shaft protecting sleeve. Check the close sliding fit of the shaft protecting sleeve 524.01 on the shaft 210. Push the rotating assembly of the mechanical seal onto the shaft protecting sleeve 524.01 as far as it will go and fasten with grub screws 904.54.

Caution Check control dimension "B" against the sectional drawing of the mechanical seal. The required control dimension must be achieved after the rotating assembly has been pushed onto the shaft protecting sleeve 524.01 as far as it will go. If the bush 542.02 has been dismantled, push it against the mechanical seal and fix with grub screws 904.38. Pre-assemble the seal cover 471 with the seat ring 475.55 and the O-rings 412.55.

Caution After inserting the seat ring, check whether it is plane-parallel with the seal cover (max. admissible deviation 0.02 mm).

Use studs 902.02 and nuts 920.02 to fasten the pre-assembled seal cover 471.01 on casing cover 161 in such a way that the connection holes (for cooling liquid) are located in the upper half. Slip the fully assembled casing cover 161 carefully onto the shaft and into the bearing bracket lantern 344. Push the pre-assembled shaft into the seal chamber until resistance can be felt from the springs 477.54 of the mechanical seal. Install pipe 710.06 (cooling line from seal cover 471.01 to casing cover 161) and proceed with installation as described in the pump's operating manual.

