

Disassembly/ Assembly of cutting system with end-face seal at TES 174+162



Disassembly of cutting system with end-face seal at TES 174+162



- Wear safety goggles and protective gloves
- Clean the pump from heavy soiling
- Place the pump with the intake upwards in a suitable device

Additionally for the disassembly with end-face seal

- Drain the oil
- Completely remove the oil screw and collect it in a suitable container

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- Remove the fixing screws 4x M6x16 DIN 6912

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- Evenly screw in 2 opposite studs M8x12 DIN 913
- Thereby the knife is lifted out of the pump housing
- Screw until the knife can be removed by hand

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- Remove the knife by hand
- Be sure to wear protective gloves

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- Slide the lever with claw 14x14 length 390 into the discharge port, minimum 200 mm
- Turn the cutter until the lever clamps in the impeller channel

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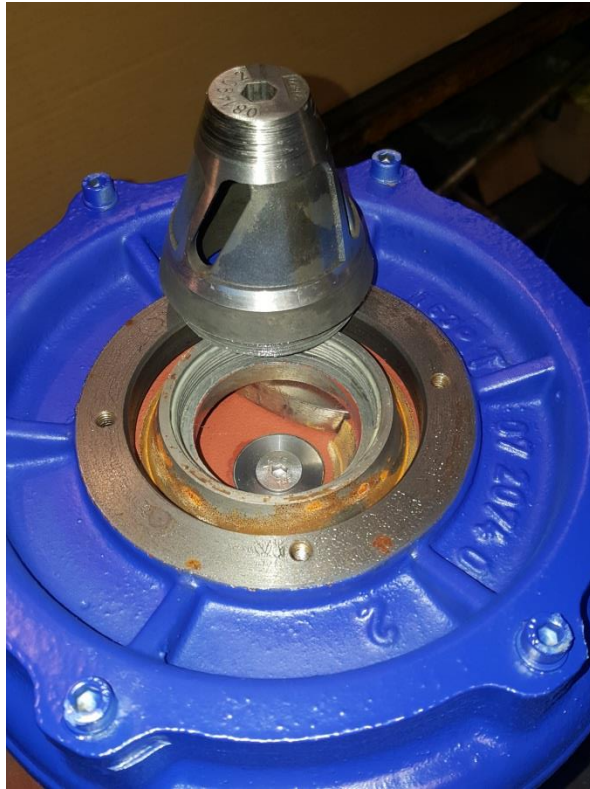


- Loose the cutter with an Allen key 8 mm
- If necessary, hit the cutter with a hammer (wear protection goggles)
- if the cutting can not yet be loosened, smooth separation can be caused by heating
- For this purpose heat the cutter evenly in the area of the impeller
- After heating the cutter can be loosened
- Allow the cutter to cool down and disassemble

Note:

The more the cutter is worn out the more complicated is the disassembly

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- Disassembled cutter
- In the intake of the single-channel impeller the lever can be seen

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- After dismantling the cutting system the end-face seal can be dismantled if necessary
- The end-face seal has to be changed if water was detected in the oil during the oil control (turbidity of the oil)
- Remove the housing cover by loosening the 6 hexagon socket screws M6x20 DIN 912
- The lever stays in the single-channel impeller

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- Disassembly of the impeller retaining washer by loosening the countersunk screw with a hexagon socket
- After loosening, the countersunk screw M8x20 DIN 7991 and the impeller retaining washer need to be removed
- Remove the lever from the impeller now

Demontage Schneideinrichtung mit Gleitringdichtung bei der TES 174+162



- Pull of the impeller with dismantling tool ORPU order number 170002
- Insert the pressure piece in the hole M8 of the shaft
- Screw the dismantling tool into the impeller

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- Hold the dismantling tool with a spanner 36
- Screw in the pressure screw by using an Allen key 14 mm
- The impeller is pulled by the shaft
- The end-face seal is now accessible

Important:

The assembly iron must not be in the impeller, otherwise it will be destroyed.

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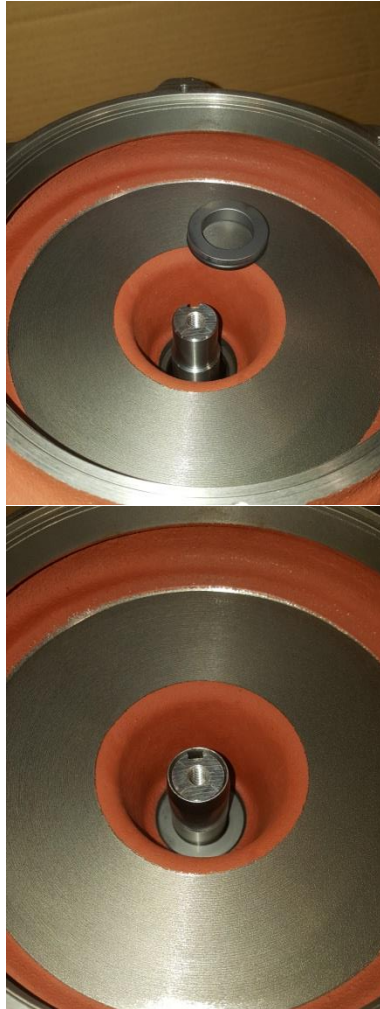
- The single-channel impeller is disassembled now
- The parallel key needs to be removed from the groove to dismantle the end-face seal
- With a sharp punch it is no problem

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- The end-face seal is pulled from the shaft by a suitable tool
- The use of 2 stable slot screwdrivers has proven to be successful
- Remove the counter ring from the pump housing

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- Clean the sealing surface thoroughly with a suitable cleaner (brake cleaner has proven its reliability)
- For an easier installation of the counter ring, moisten the O-ring with detergent
- Use an assembly sleeve (170021) to assemble the end-face seal

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- Press down the counter ring with ORPU tool 170017
- Place the thrust ring in the center of the end-face seal
- Insert the parallel key in the shaft groove

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- Slide the impeller onto the shaft with the tool 170013
- Consider the alignment of the parallel key
- Moisten the countersunk screw with screw locking medium strength



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- Guide the countersunk screw through the impeller retaining washer and screw it in the shaft
- Hold the impeller with the help of the lever
- Screw the cutter into the impeller and tighten it with an Allen key



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- Place the knife with O-ring 80x3 in the housing cover and grease with graphite grease
- Screw the studs 8x12 into the knife
- Place spring lock washers 6 mm DIN 127 with screws DIN 6912 6x16
- Place the housing cover with pre-assembled knife on the cutter – thus the housing cover is centred
- Tighten the fastening screws M6x20
- By lifting the knife the cutting gap of 0,10-0,15 mm is adjusted
- The knife is lifted by the studs M8x12
- Tighten the fastening screws after adjustment

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- The adjustment must be carried out very conscientiously
- The cutting system is set well if a distance of 0.1-0.15 mm is set on all webs of the knife
- Only a cutting system, which is set according to the specifications, ensures a safe operation

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If you have any questions or comments about this manual during disassembly, please contact:

ORPU Pumpenfabrik GmbH
Lehnitzschleuse 11
16515 Oranienburg
+49 3301/858-0
info@orpu.de