

Seal Kit Assembly Instructions for Coolant Pumps: U4814, U4816, U4817 and U4851

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Revised Seal Kits (P/N 50906084A & P/N 5000153A) for Circulation Pumps with Axial Face Seals.

Seal Replacement Kit Contents:

- 1 Pump impeller
- 1 Pump housing base with integrated seal.
- 1 *Pump cover
- 1 Sliding seal ring with date of manufacturing (in protective container)
- 1 Nut
- 1 O-ring seal
- 4 *Screws
- 4 *Spring washers
- 1 Washer
- 1 Splash guard
- 1 Bottle of lubricating oil
- 1 Replacement part label
- 1 Service Information Bulletin (P/N 907634)

*not included in seal kit P/N 50906084A

General Information

A new sliding seal ring is included in the replacement kit 50906084A for maintenance work on circulation pumps U4814, U4816, U4817 and U4851. Care should be taken when installing the sliding seal ring. When replacing parts, the entire seal set must be replaced, not just the sliding unit.

ATTENTION!

Before using a replacement part, check date of manufacture on the sliding seal protective container. Maximum shelf life is 4 years after date of manufacture.

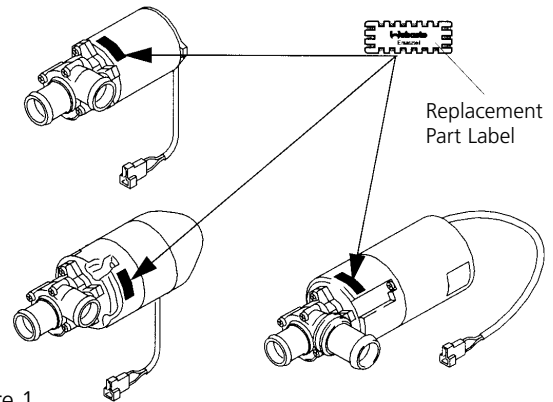


Figure 1

Disassembly (See Figure 2)

1. Remove screws (item 1).
2. Remove pump cover (item 2), check for damage and discard if necessary (replacement part P/N 5097664A).
3. While pressing against pump impeller (item 4) remove nut (item 3) from motor shaft and discard.
4. Pull off pump impeller (item 4), washer (item 5) from motor shaft and discard.
5. Remove screws (item 8) together with spring washers (item 9) from pump base (item 10) and discard.
6. Pull off pump base (item 10) with axial seal (item 6), base axial seal (item 13) and the O-ring seal (item 7) from motor shaft and discard.
7. Pull off washer (item 11) and splash guard (item 12) from the motor shaft and discard.
8. Check motor for smooth running. If damaged or an unbalanced state or noise is noticed, replace motor.

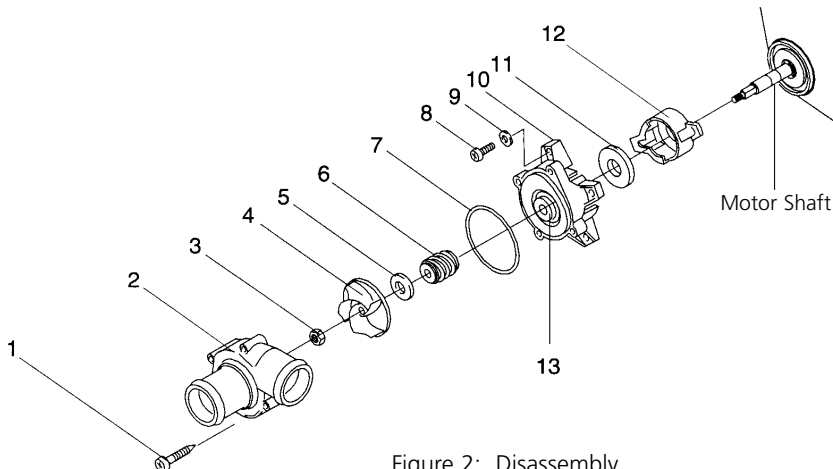


Figure 2: Disassembly

Legend for Figure 2

- 1 Screw (4)
- 2 Pump cover
- 3 Nut
- 4 Pump impeller
- 5 Washer
- 6 Axial face seal
- 7 O-ring seal
- 8 Screw (4)
- 9 Spring washer (4)
- 10 Pump base
- 11 Washer
- 12 Splash guard
- 13 Base axial seal

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Assembly (See Figure 3)

ATTENTION!

Do not damage the motor shaft's surface during the following procedures. Prevent liquid solvents from penetrating into the motor bearing.

1. Remove dirt and deposits from the motor shaft.

NOTE:

On circulation pump U4814, check screws on the bearing end plate for a tight fit and tighten to 2 Nm. (17.7 lb-in.)

2. Slide the splash guard (item 11) and the washer (item 10) to the limit stop on the motor shaft.
3. Cut the top of the lubricating oil bottle open. Cover the motor shaft completely with a film of lubricating oil, while the shaft is in a horizontal position, as shown in figure 3.

NOTE:

Cover the motor shaft completely with lubricating oil in order to ensure a correct assembly (self-adjustment) of the sliding unit and to prevent leakage.

ATTENTION!

The lubricating film on the sealing surface of the base axial seal should not be damaged or removed. Avoid impurities on the sealing surface!

4. Remove pump base (item 9) with integrated axial seal (item 12) from its individual packaging.
5. Slip pump base (item 9) onto the motor shaft towards splash guard (item 11) and align it with the mounting holes on the motor flange.
6. Attach the pump base with screws (item 7) and spring washers (item 8) and tighten screws to 4 Nm. (35.4 lb-in.).
7. Remove sliding seal unit (item 5) from protective cover (item 13).
8. Align sliding unit (item 5) with motor shaft (flat regions) and slide it onto the shaft until it touches the limit stop.
9. Slide pump impeller (item 4) onto the motor shaft (sliding seal is self adjusting).
10. Install nut (item 3), adjust pump impeller (item 4) and tighten the nut to 1.5 Nm (13.2 lb-in.).
11. Install O-ring seal (item 6) on pump base (item 9) twist-free over the edge.
12. Place pump cover (item 2) over pump base (item 9), fasten with screws (item 1) and tighten screws to 2 Nm.
13. Punch out the dates of initial operation (month/year) on the "Webasto-replacement part" label and attach the label to the motor body, as shown in figure 1 on previous page.
14. Install the circulation pump in the vehicle.
15. Check for smooth operation without leakage.

ATTENTION!

If the replacement part label is not attached or the dates on the label are not punched out, the warranty is void. Do not paste anything over old labels, should parts be replaced several times during the motor's service life.

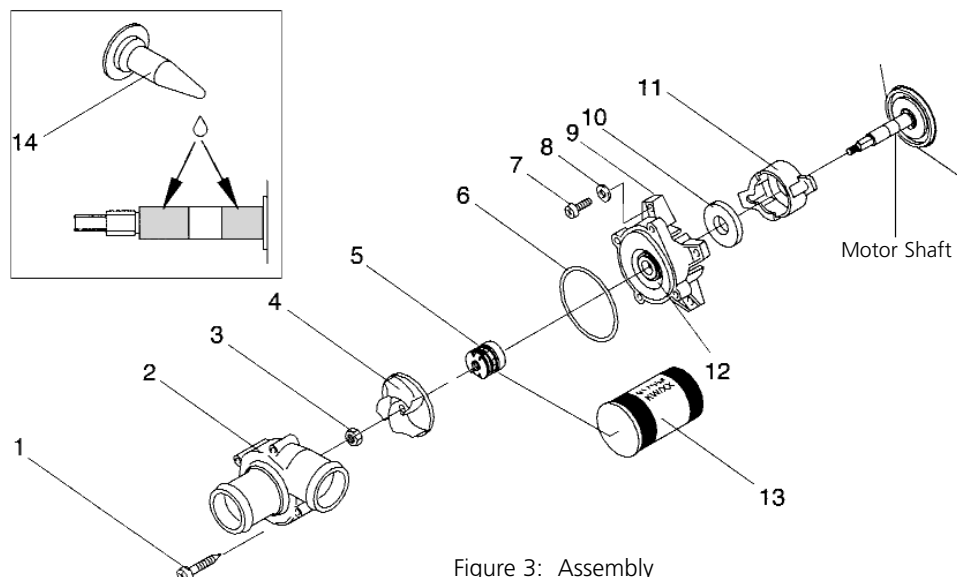


Figure 3: Assembly

Legend for Figure 3

- 1 Screw (4)
- 2 Pump cover
- 3 Nut
- 4 Pump impeller
- 5 Sliding unit
- 6 O-ring seal
- 7 Screw (4)
- 8 Spring washer (4)
- 9 Pump base
- 10 Washer
- 11 Splash guard
- 12 Integrated axial seal
- 13 Protective container for sliding seal with manufacturing date
- 14 Bottle of lubricating oil