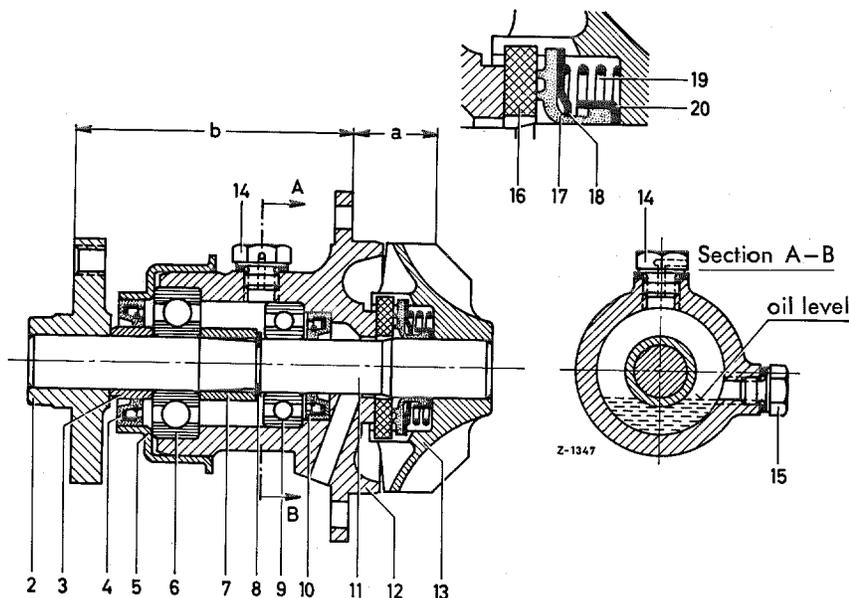


B. OM 621

On the OM 621 four water pump versions are used:

- x a) Water pump having a hub with 4 mounting holes for the fan (installed up to engine No. 621.910-10-95 15234).
Part No. 121 200 09 01
- b) Water pump having a hub with 3 mounting holes for the fan and water pump housing 127 201 02 01 (installed as from engine No. 621.910-10-000 001 and 621.914-10-000 001).
Part No. 621 200 01 01
- x c) Water pump with water pump housing 127 201 03 01, provided with a water outlet pipe and an integrally cast connection for the by-pass line (installed as from engine No. 621.913-10-000 001).
Part No. 621 200 03 01
- x d) Water pump with water pump housing 127 201 04 01, provided with a water outlet pipe and an integrally cast connection for the by-pass line. In addition, the distance of the two annular grooved bearings on the water pump shaft was enlarged to provide for a rigid support of the water pump shaft. This results in increasing the width of the bearing housing and elongation of the water pump shaft and the spacer sleeve. The belt pulley hub with the intermediate washer for the sealing ring (oil-seal ring) is made of one part which improves its fit on the water pump shaft. The pulley has a deep pot shape so that the Vee-belt moves in the same plane, as usual, in spite of the somewhat enlarged water pump. (Installed as from engine No. 621.912-10-000 001).
Part No. 121 200 13 01

Similar repair procedure for all 4 water pump versions.



Water pump bearing housing with water pump shaft and pressed-on hub with 4 mounting holes for the water pump part No. 121 200 09 01

distance $a = 23 \pm 0.2$
distance $b = 72.7 \pm 0.1$

Water pump bearing housing with water pump shaft and pressed-on hub with 3 mounting holes for the water pump part No. 621 200 01 01

distance $a = 23 \pm 0.2$
distance $b = 75.6 \pm 0.2$

- 2 Hub
- 3 Spacer ring 15×20 mm dia., 11.4 mm long
- 4 Seal ring (oil seal) 20×35 mm dia., 7 mm wide
- 5 Seal ring holder
- 6 Annular grooved bearing 15×42×13 mm 6302 DIN 625
- 7 Spacer sleeve 15.5×20 mm dia., 15.5 mm long
- 8 Lock ring 15×1 DIN 471
- 9 Annular grooved bearing 15×35×11 mm 6202 DIN 625
- 10 Seal ring (oil seal) 15×30 mm dia., 7 mm wide

- 11 Water pump shaft 15 mm dia., 127 mm long
- 12 Bearing housing
- 13 Impeller
- 14 Filler plug with vent bore
- 15 Oil level check screw
- 16 Slip ring
- 17 Seal ring Part No. 312 201 03 18
- 18 Slip ring cage Part No. 312 201 06 58
- 19 Pressure spring Part No. 180 993 11 01
- 20 Cover Part No. 312 201 03 59

Disassembly:

1. Unscrew the water pump housing from the bearing housing (12).
2. Use puller, part No. 000 589 17 33 to pull the hub (2) from the shaft (11). To do this, retain the shaft with impeller (13) in a vise (see Figure 20-8/15 and 20-8/9).
3. Carry out operations according to Section A. OM 636 II, items 2 to 8.

Assembly:

4. Carry out operations according to Section A. OM 636 II, items 9 to 19.

5. Press the hub (2) onto the water pump shaft. The hub should be flush with the shaft end (see Figure 20-8/15).

Check the distance "a" from flange of bearing housing to chamfering edge of impeller and the distance "b" from flange of bearing housing to the hub (see Figure 20-8/15).

6. Screw the bearing housing to the water pump housing using a new gasket.

Note: New or replacement water pumps have no oil filling.

7. Test water pump on a test stand or on the installed engine. Neither water nor oil should flow out.

x Venting of Water Pump

To prevent oil loss due to insufficient venting of water pump housing, the vent bore in the filler plug (14) was enlarged on models 180 Db as from engine No. 636.930-10-010 675 and 190 Db as from engine No. 621.910-10-020 006 (Figure 20-8/15). The now installed standard filler plug with enlarged vent bore has the Part No. 127 997 00 30; it can also be subsequently mounted. If no new filler plug is available, drill the longitudinal bore of the formerly used filler plug from 3 mm to 6 mm dia. and the crosswise bore on the hexagon from 1.5 to 2 mm dia.