

20.1 Reconditioning of Water Pump

M 116, M 117

Disassembly

- 1 Pull off fan hub (1) with a conventional puller.
- 2 Knock out hollow dowel pin (7) with a mandrel of 3.8 mm dia.
- 3 Support bearing housing (3) on fan end and force out water pump shaft with compact bearing (2) by means of a mandrel. The impeller (6) is supported against the pump housing and need not be separately pulled off.
- 4 Knock sliding seal ring (4) out of pump housing from fan end by means of a mandrel.
- 5 Force counter ring (5) out of impeller (6) by means of a pointed tool (e. g. a ground screw driver).

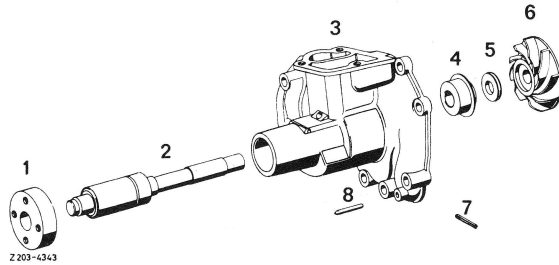


Fig. 2

Assembly

- 6 Press new compact bearing (2) up to stop into bearing housing (3) by means of the tube held against outer race.

Do not exert force against water pump shaft.

- 7 Knock in hollow dowel pin (7).

- 8 Coat sliding ring seal (4) at pressing-in surface slightly with sealing compound "Hylomar" and press in up to stop.

While pressing in, hold sliding ring seal outside on bead and take care not to damage the sealing surface.

- 10 Press on impeller for flush fit while supporting water pump shaft.

- 11 Heat fan hub (1) to approx. 200°C (annealing color turning to a bright yellow) and install flush with water pump shaft.

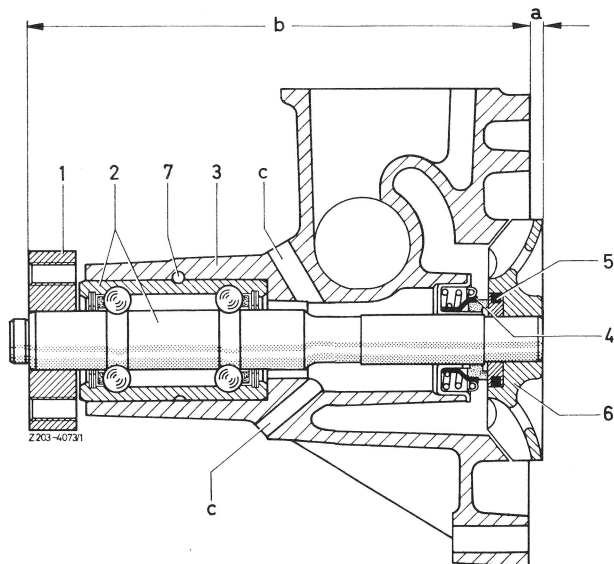


Fig. 1

- a = 5.3–5.7 mm
- b = 165.4 mm
- c = Venting holes
- 1 Fan hub
- 2 Water pump shaft with compact bearing (cannot be disassembled)
- 3 Bearing housing
- 4 Sliding ring seal
- 5 Counter ring with O-ring
- 6 Impeller
- 7 Hollow dowel pin
- 8 Adjusting indicator