

## Removal and Installation of Water Pump Pulley

Job No.
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20-7
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The water pump pulley is either screwed on the hub which is pressed on the water pump shaft (see Figure 20-8/9) or the pulley itself is pressed on the water pump shaft (see Figure 20-8/8 and 20-8/14) or it is slid on the water pump shaft and fastened with a hex. nut (see Figure 20-8/1). **For replacement of a pressed on pulley, it is necessary to remove the water pump, because pressing on is not possible when it is installed.**

### Removal:

#### a) Screwed on pulley:

On the OM 636, remove the V-belt (see Job No. 20-5, Paragraph A. OM 636, item 5). Unscrew the four hex. hd. screws and remove the pulley from the hub.

On the **OM 621**, remove the fan and the V-belt (see Job No. 20-5, paragraph A. OM 636, items 1-4, and paragraph B. OM 621, item 2). Remove the pulley from the hub.

**Note:** Up to engine No. 621.910-10-95 15234, the pulley part No. 121 205 00 10 (with 4 mounting holes) is installed, whereas from engine No. 621.910-10-000001 (190 Db version), the pulley part No. 121 205 01 10 (with 3 mounting holes) is installed.

#### b) Pressed on pulley:

Remove the water pump (see Job No. 20-5), Par. A. OM 636, items 5 through 7). Pull the pulley with the puller part No. 136 589 06 33 or 136 589 32 33 or 000 589 17 33 depending on the design (see Figure 20-8/2).

#### c) Slided on pulley:

Remove the V-belt (see Job No. 20-5, Par. A. OM 636 item 5). Remove the locking plate of the hex. nut and unscrew the hex. nut. For loosening the hex. nut, counterhold with the hook spanner part No. 136 589 12 07 (see Figure 20-8/1). Pull the pulley, if too tightly seated use the puller part No. 136 589 06 33 (see Figure 20-8/2).

### Installation:

#### a) Screwed on pulley:

On the OM 636, screw the pulley onto the hub with the 4 hex. hd. screws and lock washers. Place the V-belt on the pulley and tension (see Job No. 20-6, Par. A. OM 636, items 3 and 4).

On the **OM 621**, screw the pulley and the fan onto the hub with 4 or 3 hex. hd. screws. Place the V-belt on the pulley and tension (see Job No. 20-6, Par. B. OM 621, item 2).

Mount the radiator ensuring that there exists a distance of  $a = 20$  mm and  $b = 14$  mm between fan and radiator (see Figure 20-5/2).

#### b) Pressed on pulley:

Press the V-belt pulley on the water pump shaft ensuring that pulley and shaft are flush (see Figure 20-8/8 and 20-8/14).

Install the water pump (see Job No. 20-5, items 8 to 10). Place the V-belt on the pulley and tension (see Job No. 20-6, Par. A. OM 636, items 3 and 4).

#### c) Slided on pulley:

Slide the pulley on the water pump shaft observing the correct seat of the Woodruff key (8) (see Figure 20-8/7). Install the locking plate (19) and screw on the hex. nut (20) for mounting the pulley, then tighten with 3 mkg and lock (see Figure 20-8/1 and 20-8/7).

Place the V-belt on the pulley and tension (see Job No. 20-6, Par. A. OM 636, items 3 and 4).