

Tightening Torques in kpm

Hex. bolt on crankshaft	25–27
Fastening bolts for pulley and vibration damper on hub	3,5

Special Tools

Torque wrench	001 589 31 21 00
Socket wrench SW 27 mm	000 589 610 900

Removal

- 1 Remove radiator and viscosity fan (20.1–420).
- 2 On vehicles with air-conditioning system remove additional electric fan.
- 3 Remove all V-belts.

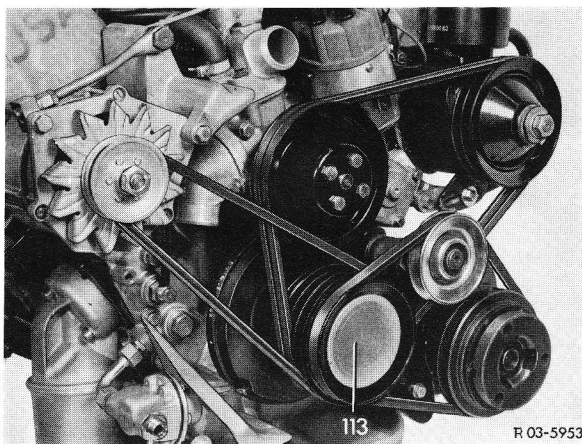


Fig. 1
113 Cover

- 4 Push out cover (113) with screw driver (Fig. 1).
- 5 Unscrew hex. bolt (107) (Fig. 2). Place a self-made 8 mm steel bolt into bores in circumference of vibration damper for counterholding (Fig. 3).

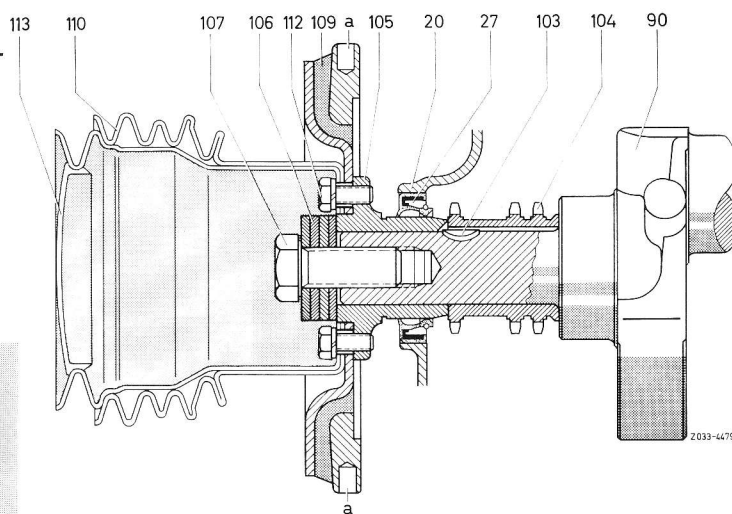


Fig. 2

a 8-mm holes for turning crankshaft

20 Timing housing cover	106 Plate springs
27 Sealing ring	107 Hex. bolt
90 Crankshaft	109 Vibration damper
103 Plate spring	110 Pulley
104 Crankshaft gear	112 Hex. bolt
105 Hub	113 Cover

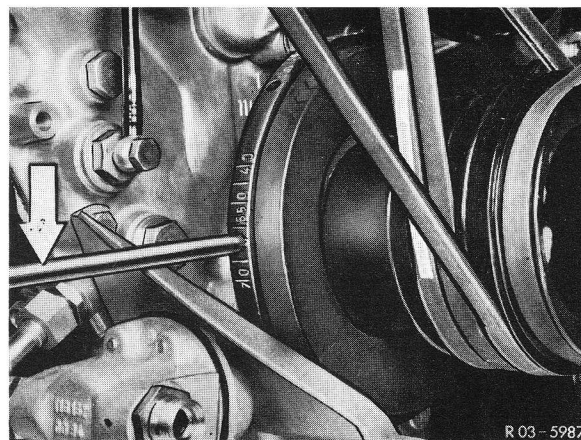


Fig. 3

03.1 Removal and Installation of Hub, Vibration Damper and Pulley

A steel bolt may also be inserted into the recesses of the vibration damper (Fig. 4).

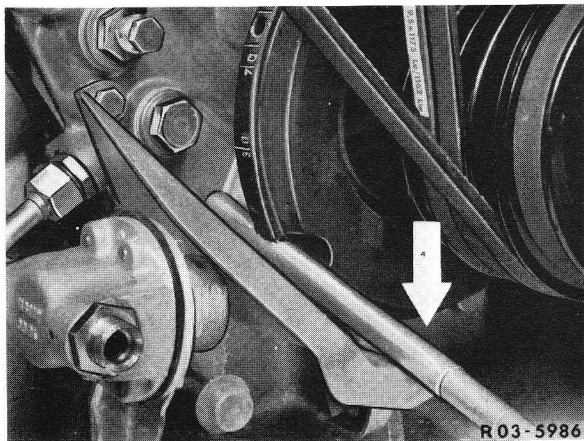


Fig. 4

6 Mark hub and crankshaft in relation to each other with paint or chalk. Then pull off vibration damper (109) with pulley (110) and hub (105) manually (Fig. 2).

Note: The markings are required because the hub is located at the rear with the plate spring which cannot be seen during installation.

7 On vehicles with air-conditioning system (Fig. 1) be sure to loosen the pulley and the vibration damper first from hub and remove. For this purpose, loosen the six hex. bolts (112) and remove pulley (110) with vibration damper (109) from hub (105) (Fig. 2).

8 Clean all parts.

Installation

9 Slightly lubricate hub and crankpins.

10 On vehicles with air-conditioning system, slide hub on crankpin first. Then screw vibration damper and pulley to hub.

Caution! One of the six fastening holes in the hub (105) is **eccentric** to bolt hole circle. As a result, the vibration damper and the pulley can be mounted in one position only (Fig. 2).

11 Slide vibration damper — hub — pulley assembly manually on crankpin and **check** by light, rotary movements **whether the hub is seated on the plate spring** (103) (Fig. 2).

12 Insert hex. bolt (107) and spring plates (106) in such a manner that the crown of the spring plates faces the bolt head. Tighten hex. bolt with torque wrench.

13 For installation continue vice versa to sequence of removal.

14 Tension V-belts (13.1—340).

15 Check firing point (07.5.1—515).

If the firing point has changed, the assembly has not been done correctly. This fault will occur only when the hub (105) is not seated on plate spring (103) and the hub-vibration-damper assembly has been tightened in the wrong position.