

03-3420 Removing and installing belt pulley of vibration damper and hub

Preceding work:

Model 124: radiator removed (20-4200).

Viscous fan clutch removed (20-3120).

Tensioning device removed (13-3450).

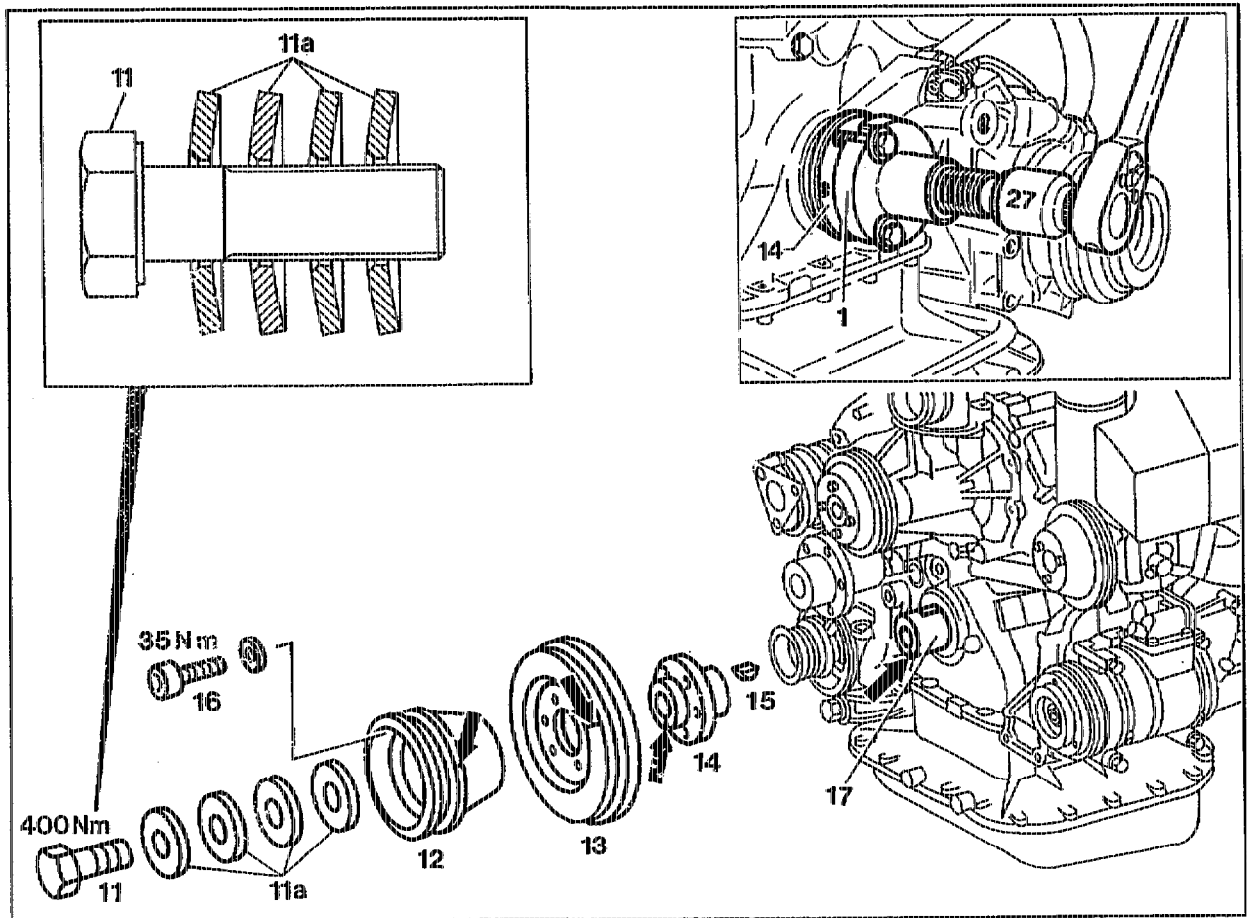
Reservoir with coolant drain line removed (20-2120).

Retaining lock for crankshaft/ring gear installed (03-5000).

Operation no. of operation texts and work units or standard texts and flat rates

03-1320-1911

A. Engine 119.960 119.97 up to 8/1994



P03-5261-57

If AC fitted: guard plate

attach to condenser.

Belt pulley (12)

mark relative to vibration damper (13) with coloured marking (arrows).

Installation note

The belt pulley (12), the vibration damper (13) and the hub (14) must be bolted together in a particular position as one of the 6 holes is positioned off-center.

Central bolt (11) with 4 dished washers (11a) . . . unscrew, screw on (400 Nm).

Installation note

Oil bolt thread and the 4 belleville spring washers (11a).

Fit on spring washers (11a) with curved side facing bolt head.

Bolts (16) unscrew, screw on (35 Nm).

Belt pulley (12) and vibration damper (13) remove, install.

Crankshaft and hub (14) mark relative to each other with chisel punch (arrow).

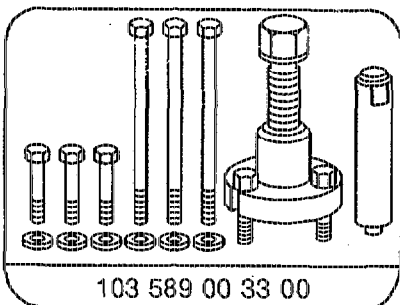
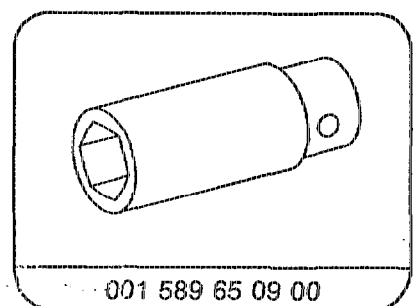
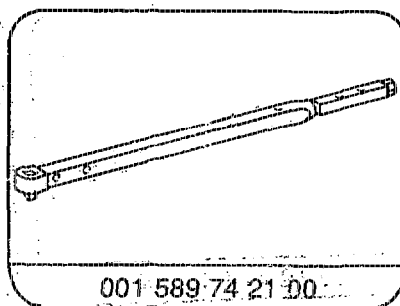
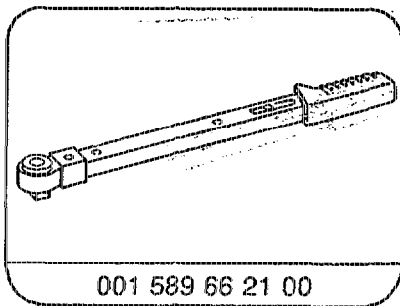
Hub (14) remove with puller, special tool
103 589 00 33 00.

Installation note

Heat hub (14) to approx. 50 °C so that it slips easily onto the crankshaft. Determine by turning whether the groove in the hub (14) is aligned with the woodruff key (15) in the crankshaft.

Belt pulley (12) examine.

Special tools



Commercially available tool

3/4" internal square to
1/2" external square adaptor

e. g. Hazet
D-42853 Remscheid
Order no. 1058 RI

Shop-made tool

Guard plate for radiator at condenser

Dimensions approx. 680 × 400 × 1 mm

Data in mm

Permissible deviation at vibration damper

from radial runout 0.3

from axial runout 0.5

Tightening torques in Nm

M18 bolt of vibration damper

400

M8 bolts of belt pulley

35

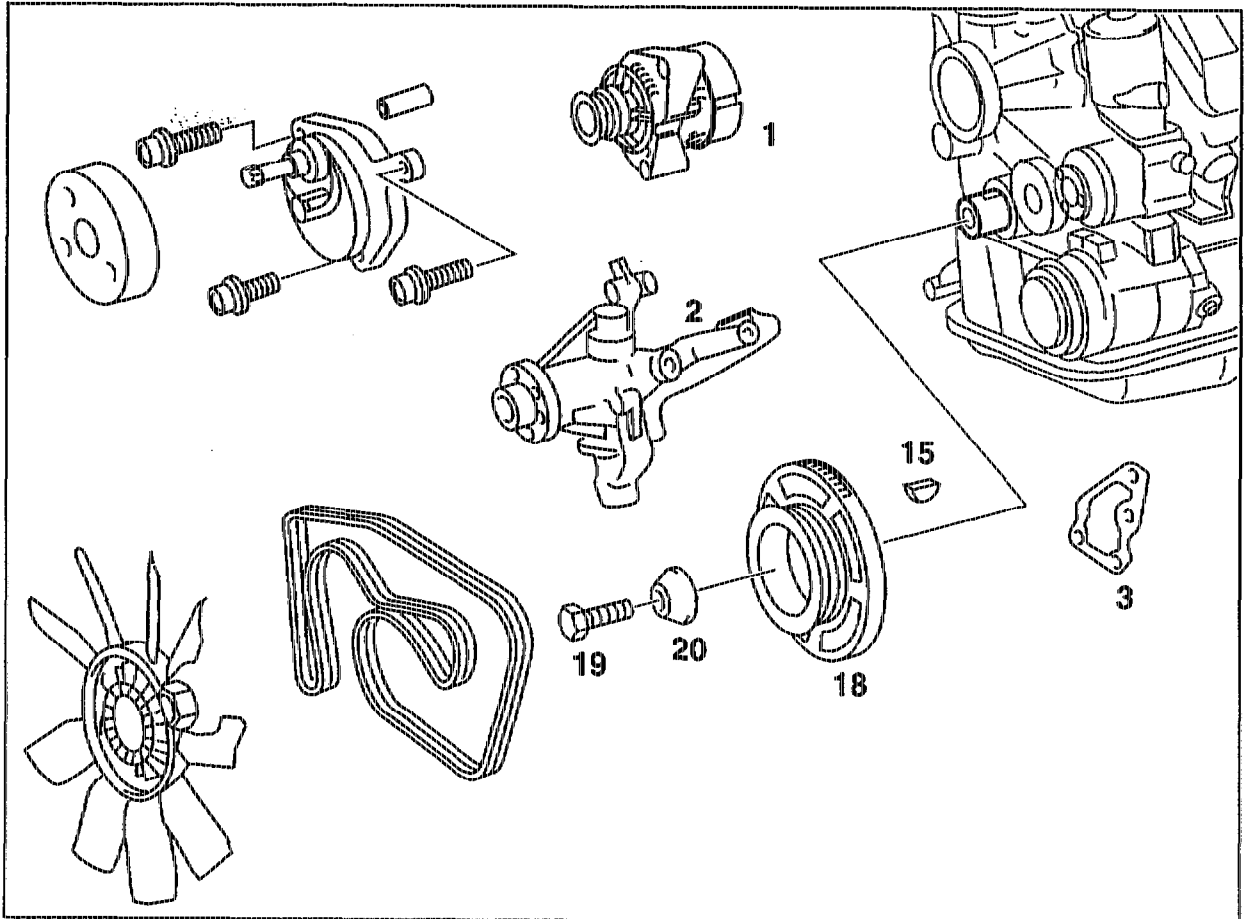
Note

Engine 119.96/97: if the vibration damper is replaced, the TDC sensor should be set (03-3450).

B. Engine 119.97/98 ab 8/1994

Preceding work:
Viscous fan coupling removed (20-3120).
Tensioning device removed (13-3450).

Operation no. of operation texts and work units or standard texts
and flat rates
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P03.30-0254-57

Ground cable at battery	disconnect, connect (AR54.10-0003A).
Generator (1)	remove, install.
Guard plate	attach at radiator, take off.
Viscous fan coupling bearing bracket (2)	remove, install (20-3140).
Bracket of A/C compressor carrier (3)	unbolt, bolt on.
Piston of cylinder 1	turn to TDC so that Woodruff key (15) in crankshaft is facing vertically up.
Retaining lock for crankshaft/ring gear	install, remove (03-5000).
Central bolt (19) with tapered washer (20)	unscrew, screw on (200 Nm + \angle 90°).

Note

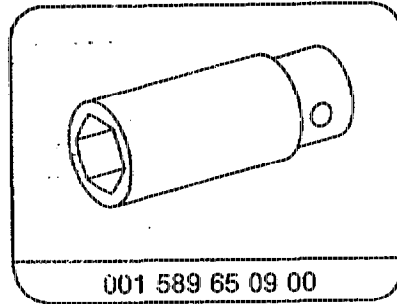
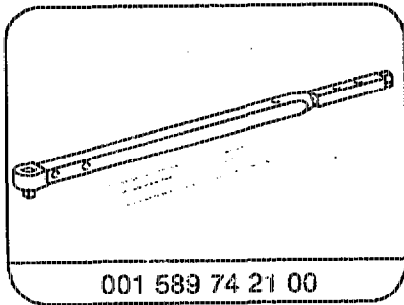
Conical washer (20) replaces dished washers;
the different parts of the 2 versions must not be
interchanged.

Vibration damper (18) pull off, remove upward, fit on.

Note

Align Woodruff key (15), fit on vibration damper (18) and turn in order to determine whether the slot is aligned with the Woodruff key (15) in the crankshaft.

Special tools



Commercially available tool

3/4" female to 1/2" male
4-point adapter

e. g. Firma Hazet
D-42853 Remscheid
Order no. 1058 RI

Shop-made tool

Guard plate for radiator and condenser

Dimensions: approx. 680 × 400 × 1 mm

Tightening torques in Nm

M18 × 1.5 × 44 bolt of vibration damper
(with conical washer)

Initial torque	Nm	200
Tightening angle	∠	90°