with transmission removed

M 116, M 117

Tightening of Anti-Fatigue Bolts (Expanding Bolts)

Flywheel or driven plate on crankshaft	Initial torque	3 + 1 kpm
	Angle of rotation torque	90° + 10°
Special Tools		
Cone sleeve for installing crankshaft sealing ring		116 589 03 43 00
Angle of rotation tightening tool for tightening flywheel or driven plate bolts		115 589 02 13 00

Removal

1 Remove flywheel or driven plate. Watch out for both spacing washers (125) when removing driven plate (03.1–410).

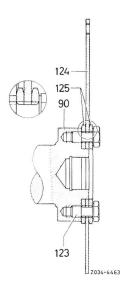


Fig. 1

90 Crankshaft 123 Fastening bolt 124 Driven plate125 Spacing washer

2 Unscrew intermediate flange with cover plate.

3 Loosen cover (73) and remove (Fig. 4), by positioning two screw drivers against the recesses provided for this purpose (Fig. 2 and 3).

Note: The cover is centered with two set pins (refer to arrow in Fig. 4).

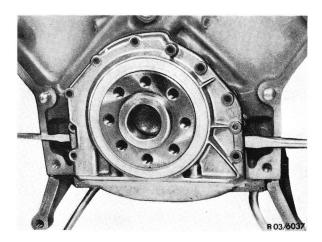


Fig. 2

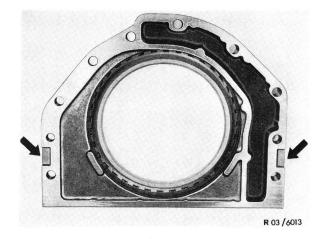


Fig. 3

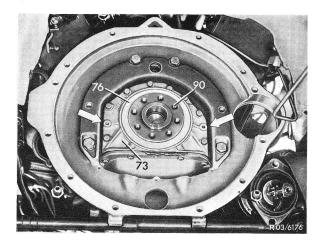


Fig. 4 73 Cover 76 Sealing ring

90 Crankshaft

- 4 Remove sealing ring (76) from cover (Fig. 4).
- 5 Clean all parts.

Installation

- **6** Insert new sealing ring into cover on press. Coat sealing lip of sealing ring slightly with oil or molykote.
- **7** Coat cover with sealing compound at its flat surface.
- **8** Place cone sleeve on crankpin (Fig. 5) and fit cover with sealing ring on top. Watch out for oil pan seal.

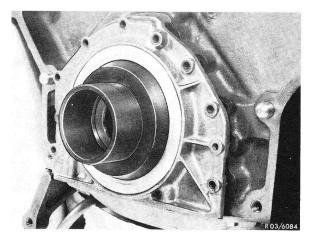


Fig. 5

- 9 Screw-on cover.
- 10 Screw-on intermediate flange with cover plate.
- **11** Screw-on flywheel or driven plate. Tighten fastening bolts according to initial tightening torque and angle of rotation torque (03.1–410).