

Removal and Installation of Vibration Damper

Types 220 and 220a

Operation No.
M 18

The vibration damper is held in position between the front counterweight on crankshaft and the pulley, which is provided with a friction ring.

When removing or installing the vibration damper, slip the two clamps 187 589 04 31 over the damper rings (see Fig. M 18/7). If this is not done, the vibration damper will fall apart.

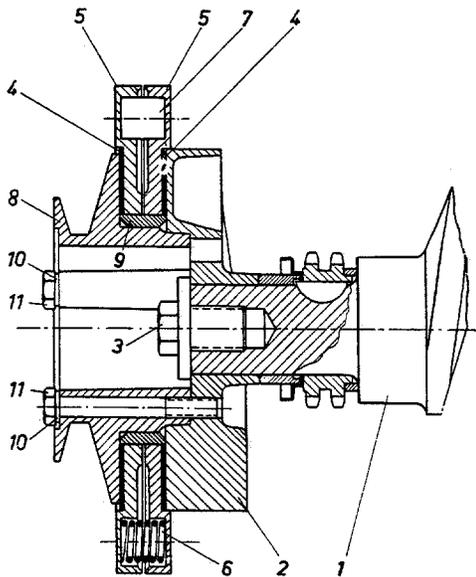


Fig. M 18/00

- | | |
|-----------------------|---------------------------|
| 1 Crankshaft | 7 Rubber block |
| 2 Front counterweight | 8 Pulley |
| 3 Collar screw | 9 Friction ring on pulley |
| 4 Friction facing | 10 Spring washer |
| 5 Damper ring | 11 Fastening screw |
| 6 Pressure spring | |

- Loosen the wing screws of the two clamps evenly and take vibration damper apart.
- Check all parts and test pressure springs against the below table.

Table 10

Outer dia. mm (in.)	Wire thickness mm (in.)	Length unloaded mm (in.)	Length mm (in.)	when loaded with kg (lb.)
17.5 (0.69)	2.5 (0.098)	27.3 (1.075)	19 (0.75)	20 ± 1.5 (44 ± 3.3)

- Grind friction surfaces of damper rings, counterweight and pulley carefully with No. 50 emery cloth.
- Assemble vibration damper. Insert the eight pressure springs and two new rubber blocks into the respective holes in the damper rings and press the rings together with the two clamps (Fig. M 18/7).

Special Tools:

2 clamps for vibration damper 187 589 04 31

Procedure:

- Drain cooling water and remove radiator. Unscrew fan. Loosen belt tensioner at generator and take off V-belt.
- Slip the two clamps 187 589 04 31 over damper rings of vibration damper and tighten evenly (see Fig. M 18/7).
- Turn out pulley fastening screws, then take off pulley and vibration damper.

Note: In Type 220a the front engine suspension must be loosened. When removing the vibration damper, lift the engine a little.

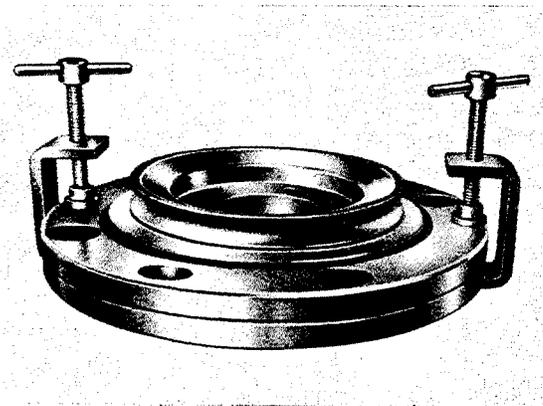


Fig. M 18/7

Note: The vibration dampers of the first design had a larger outer diameter and were provided with larger rubber blocks.

- When mounting the vibration damper in reverse order of removal, install new friction facings.