

Repair of Bearing Assembly

(With bearing assembly removed from the vehicle)

Job-No.

26—14

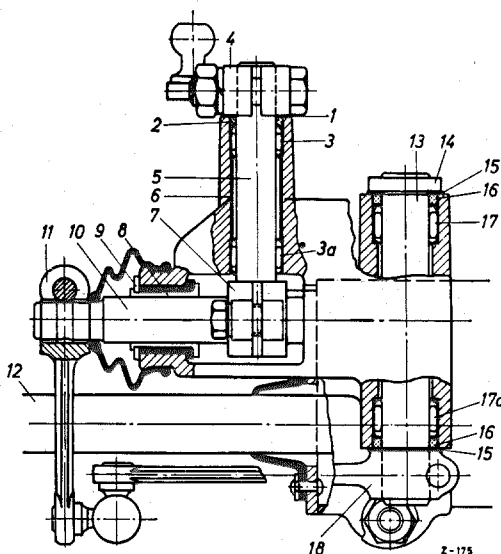


Fig. 26 — 14/1

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|-------------------------|--------------------------------|--------------------------|
| 1 Washer | 7 Selector lever at shift tube | 14 Relay shaft lever |
| 2 Sealing ring | 8 Rubber bearing | 15 Washer |
| 3 Outer needle bearing | 9 Snap ring | 16 Sealing ring |
| 3a Inner needle bearing | 10 Shift tube | 17 Outer needle bearing |
| 4 Selector lever | 11 Lever at shift tube | 17a Inner needle bearing |
| 5 Selector lever shaft | 12 Steering tube | 18 Relay lever |
| 6 Spacer sleeve | 13 Relay shaft | |

A. Removal and Installation of Selector Lever Shaft and Needle Bearings

Removal:

1. Pull selector lever shaft (5) together with the sealing ring (2) out of the bearing assembly. If on removal of the selector lever shaft the sealing ring is not removed automatically, it should be pried out with a screw driver.

Note: The selector lever (7) at the shift tube was already removed when the bearing assembly itself was removed.

2. Apply a suitable drift to the outside needle bearing (3) and drive out the needle bearing toward the inside together with the spacer sleeve (6) and the inside needle bearing (3a).
3. Clean all parts and check whether they are still serviceable.

Installation:

4. Liberally coat the two needle bearings with roller bearing grease.

5. Drive in the inside needle bearing (3a) from the outside until the needle bearing is flush with the inside wall of the bearing assembly.
6. Install the spacer sleeve (6) and drive in the outside bearing.
7. Install the sealing ring (2) in the bearing assembly and slide a Spring Washer 12 N 55a and the washer (1) onto the selector lever shaft.
Smear the selector lever shaft with roller bearing grease and insert it in the bearing assembly.

Note: No washers or sealing rings are installed between the selector lever at the shift tube (7) and the bearing assembly.

On earlier models, Spring Washer 12 N 55a was not used; it should, however, be installed subsequently (see Job No. 26—3, Paragraph 9, Note).

B. Removal and Installation of Relay Shaft and Needle Bearings

Removal:

1. Loosen the clamping screw for the relay lever (1) and remove the relay lever (Fig. 26 — 14/2).
2. Pull the relay shaft out of the bearing assembly.
3. Take a suitable drift and carefully drive out toward the outside first the left needle bearing (17) and then the right needle bearing (17a) (Fig. 26 — 14/1).
4. Clean all parts and check whether they are still serviceable.
Check the lever (3) to see whether it is firmly seated on the relay shaft (2) and, if necessary, weld the lever to the shaft (Fig. 26 — 14/2).

Installation:

5. Liberally coat the two needle bearings with roller bearing grease.
6. Drive or press the left and right needle bearings into the bearing assembly. The needle bearings must fit snugly against the collar of the bearing assembly (see Fig. 26 — 14/1).
7. Slide a washer (15) and a sealing ring (16) onto the relay shaft, smear the relay shaft with roller bearing grease, and install it in the bearing assembly.

8. Then slide a sealing ring (16) and a washer (15) together with a spring washer (Part No. 121 990 00 48) onto the free end of the relay shaft (see Fig. 26 — 14/1).

Note: On earlier models, the spring washer (Part No. 121 990 00 48) was not used; it should, however, be installed subsequently.

9. Install the relay lever (1) on the relay shaft (2) serrations in such a way that the relay lever (1) is at right angles to the stationary shaft lever (3) (Fig. 26 — 14/2). Then tighten up the clamping screw of the relay lever (1). Make sure that the spring washer (Part No. 121 990 00 48) is not fastened too tightly.

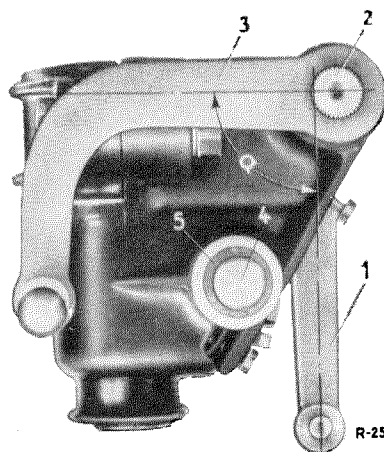


Fig. 26 — 14/2

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|------------------------|------------------------|
| 1 Relay lever | 4 Selector lever shaft |
| 2 Relay shaft | 5 Sealing ring |
| 3 Lever on relay shaft | a = 90° angle |

C. Removal and Installation of Shift Tube Rubber Bearing

Removal:

1. Use suitable pliers to remove the snap ring (9) (see Fig. 26 — 14/1).
2. Press out the rubber bearing (8) toward the inside by means of a suitable drift.
Do not drive it out! (see Fig. 26 — 14/1).

Installation:

3. Wet the outside of a new rubber bearing with water, and press in the rubber bearing.

Note: The tolerances of new rubber bearings have been modified to ensure that the shift tube has a radial play of 0.04—0.06 mm (see Job No. 26 — 3, Paragraph 9, Note).

4. Install the snap ring.
5. Check the shift tube for ease of movement and, if necessary, re-finish the bore of the brass bushing in the rubber bearing. Diameter of bore 14.006—14.024 mm.