

Removal and Installation of Shift Tube Bearing Assembly

Job-No.

26 — 12

Removal:

1. Disconnect the ground cable at the negative terminal of the battery and disconnect the electric cables at the cable connector (steering) at the left wheel arch assembly.
2. Loosen and remove the upper clamping screw at the steering coupling. Unscrew the grub screw in the steering column jacket (Fig. 26 — 12/1). Pull the steering tube out of the steering coupling.

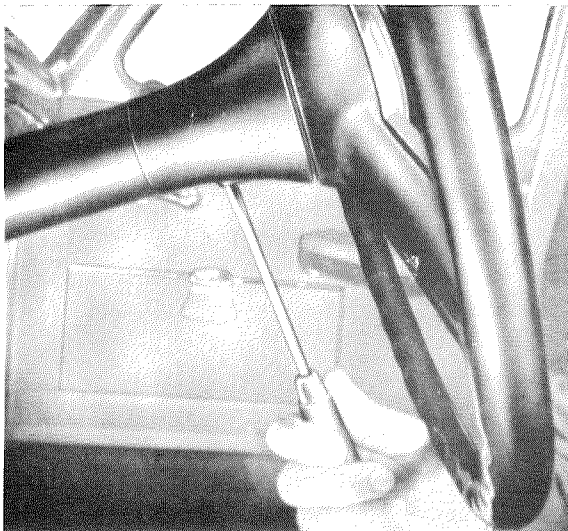


Fig. 26 — 12/1

3. Disconnect the oil pressure gage line at the oil filter.
4. Remove the spring clips from the ball cup connectors (7) and (8) and then detach the selector rod and shift rod ball cup connectors at the bearing assembly (see Fig. 26 — 12/2).
5. Unscrew cable connector (5) and dust cover (4) from the bearing. Remove the clamping screw from the selector lever (3) at the shift tube; then push the selector lever (6) together with selector lever shaft toward the engine and remove selector lever (3) at the shift tube (see Fig. 26 — 12/2).

6. Loosen and remove the clamping screw of the lever (10). Then remove the lever (10) from the shift tube.

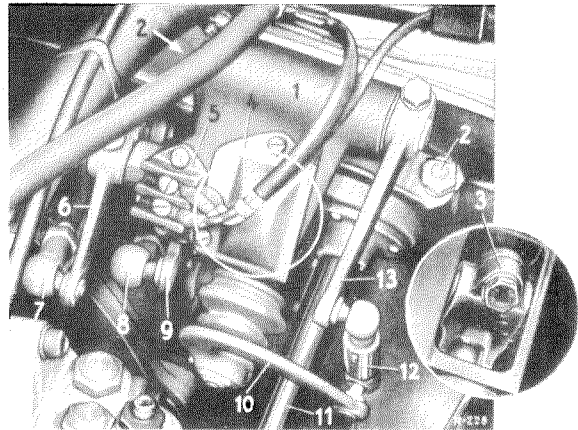


Fig. 26 — 12/2

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|-----------------------------------|-------------------------------------|
| 1 Bearing assembly | 8 Shift rod ball cup connector |
| 2 Hexagon screw | 9 Relay shaft lever |
| 3 Selector lever at shift tube | 10 Lever at shift tube |
| 4 Dust cover | 11 Steering tube |
| 5 Cable connector | 12 Spring-loaded ball cup connector |
| 6 Selector lever | 13 Relay lever |
| 7 Selector rod ball cup connector | |

7. Unscrew the two hexagon screws (2) attaching the bearing assembly to the steering column jacket and remove the bearing assembly downward (see Fig. 26 — 12/2).

Installation:

8. Install the bearing assembly and screw it to the steering column jacket, making sure that the nose of the bearing assembly engages in the recess of the steering column jacket.
9. Insert the claws of the selector lever (3) at the shift tube in the shift tube recess. Push the selector lever (6) toward the bearing assembly and at the same time insert the serrated end of the selector lever shaft in the selector lever (3). Tighten up the clamping screw of the selector lever (3).

10. Check whether the selector lever (3) at the shift tube is functioning properly. To do this, proceed as follows:

Pull the shift lever from its neutral position up to the reverse gear stop and release it. After releasing, the shift lever must automatically drop down. If during this movement the selector lever moves toward the left or the right, the claws of the selector lever (3) are binding in the shift tube recess. If that is the case, the selector lever (3) must be removed again and the chafed spots now visible at the claws must be carefully removed by means of a fine-grain emery disk. If the end play between selector lever and the shift tube is too great, the selector lever (3) at the shift tube must be replaced. When new, the parts should have a maximum end play of 0.2 mm; when repairs are being made, a play of approx. 0.4 mm is permissible.

The play is measured by means of a narrow tolerance feeler band.

For a rough check of the end play it is sufficient to move the selector lever (6) to and fro.

This check should be made whenever the bearing assembly is re-installed or the selector lever (3) is replaced.

11. To facilitate the installation of the ball cup connectors, loosen the clamping screw of the selector lever (6).

Attach the ball cup connectors (7) and (8) (see Fig. 26—12/2).

Install the spring clips on the ball cup connectors.

12. Insert the steering tube in the steering coupling with the front wheels in the straight fore and aft position, making sure that the steering wheel is also in the center position. Install the upper clamping screw of the steering coupling and the grub screw for the steering column jacket and tighten them up (see Fig. 26—12/1).

Note: If necessary, replace clamping screw, nut, and lock washer. Only specified clamping screws may be used to fix the steering coupling to the steering tube.

These screws should be so tightened that the steering coupling is firmly seated on the steering worm and on the steering tube. Excessive tightening should be avoided in order to prevent the screws from being stretched and from snapping.

13. Connect the flash direction signal and horn cables to the steering tube cable connector at the left wheel arch assembly.

When connecting up the cables, pay attention to the color coding of the individual cables:

The individual cables must be so connected that the color coding of the cables of the steering tube wiring harness corresponds to the color coding of the main wiring harness cables (see also Job No. 54—1, Section A, Diagram of the Main Wiring Harness, Cable Sheaf **28** and Job No. 54—3, Section A, Diagram of the Steering Tube Wiring Harness).

14. Screw the cable connector (5) for the reversing light switch and the dust cover (4) to the bearing assembly (see Fig. 26—12/2).

15. Connect the ground cable to the negative terminal of the battery.

16. Connect the oil pressure gage line to the oil filter.

17. Install lever (10) on the shift tube serrations in such a way that, when the gears are shifted, lever (10) does not foul the shift tube (11) and that lever (9) of the relay shaft does not foul the bearing assembly. Then tighten up the clamping screw of lever (10) (see Fig. 26—12/2).

18. Adjust the gearshift mechanism (see Job No. 26—3).