Adjustment of Gear Shift Mechanism

1. Check the selector lever and relay shafts in the bearing for freedom of movement.
   The shift lever at the steering wheel must drop easily when it is lifted up to the reverse stop and released.

2. The end play of the selector lever claw (3) does not exceed 0.2 mm when new. At the repair stage a maximum play of 0.4 mm is admissible (see Fig. 26 — 3/1).

   If the play is too great, shifting may become difficult. In that case the selector lever (3) should be replaced.

Note: For a quick check of the end play it is sufficient to move the selector lever (6) back and forth. For an accurate check the dust cover (4) at the bearing must be removed and the end play measured with a feeler gage.

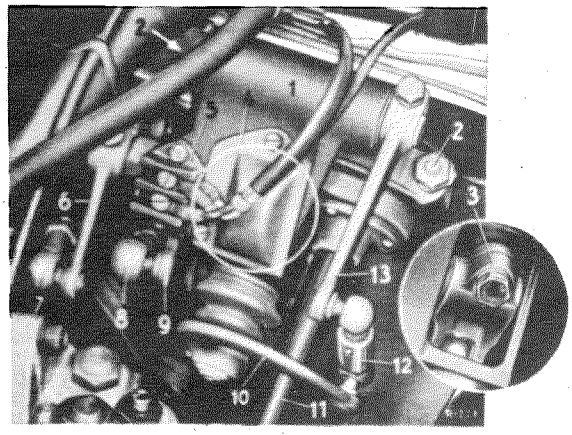

Fig. 26 — 3/1

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

3. Put the shift lever at the steering wheel in neutral, loosen the clamp screw at the selector lever (6), pull the selector lever (6) forward in the direction of travel, and press the relay lever (13) down. This engages the third gear (see Fig. 26 — 3/1).

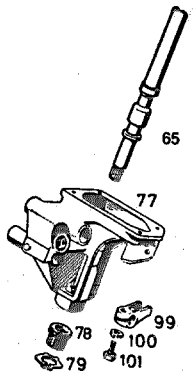

Fig. 26 — 3/2

65 Shift tube
77 Bearing body
78 Rubber mounting
79 Circlip
99 Selector lever (at shift tube)
100 Lock washer B 6 DIN 127
101 Hexagon screw M 6×8

4. Retighten clamp screw at selector lever (6) (see Fig. 26 — 3/1).

   In the process push up the shift tube until there is a distance of approx. 1—1.5 mm between shift tube collar and rubber mounting (78) (Fig. 26 — 3/2).

5. Use the shift lever at the steering wheel to engage the various gears. All gears must be easy to shift. Always declutch when shifting the individual gears. When shifting into reverse the mechanical resistance must be evident.

Note: If this is not the case the reverse gear stop in the transmission case top cover must be checked.

6. Check the position of the shift lever at the steering wheel. In neutral the upward deviation of the lever from the horizontal should be approx. 80 mm (Fig. 26 — 3/3).

In the second or fourth gear the shift lever should be 22 mm below the horizontal.

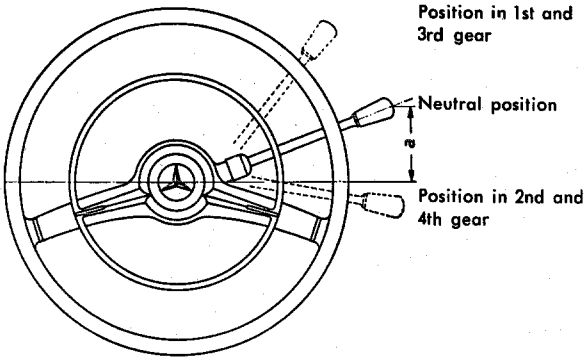

Fig. 26—3/3
a = 80 mm

7. If the deviation is larger than specified above, engage the 4th gear, and after removing the clamp screw pull the lever (10) from the splines (see Fig. 26—3/1).

   Now hold the selector lever in a position approx. 20 mm below the horizontal, slide the lever (10) back on the shift tube, insert the clamp screw and tighten (see Fig. 26—3/1).

8. Make sure that the lever (10) does not foul the steering tube (11) when the 1st and 3rd gears are engaged. If this should be the case the position of the levers (10) and (13) on the splines must be changed (see Fig. 26—3/1).

   Roll back the rubber sleeve on the shift lever. Use the shift lever at the steering wheel to engage the individual gears, making sure that the shift lever does not touch the recess in the steering column jacket. Always declutch when engaging the individual gears.

Note: Small corrections for changing the position of the shift lever and preventing the lever (10) from fouling the steering tube can be made by shortening or lengthening the shift rod for the lever (9). To do this, screw the ball cup connector of the shift rod either in or out.

9. In neutral and in all shift positions the spring-loaded ball cup connector (1) must be in its center position, that is the cylindrical pin (3) must be in the middle of the slot (2) in order to prevent the end movements of the engine from being transmitted to the shift lever (see Figure 26—3/4).

Note: On recent models the cylindrical pin (3) is insulated by Vulkollan bushings in order to prevent knocking.

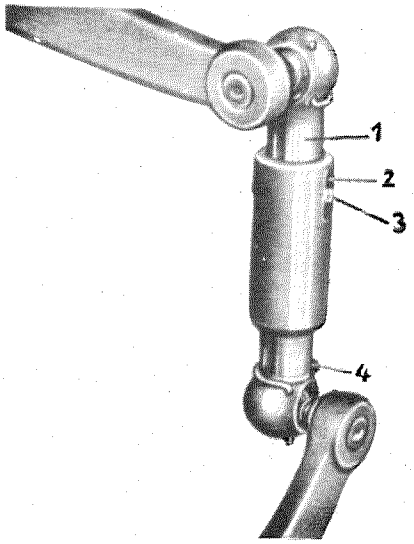

Fig. 26—3/4

1 Spring-loaded ball cup connector
2 Slot
3 Cylindrical pin
4 Spring clip

In order to prevent rattling of the shift lever on uneven or bad roads, the selector lever shaft is now provided with a spring washer 12 N 55 a, and the relay shaft with a spring washer, part No. 121 990 00 48.

The increased friction produced by the two spring washers is intended to have a certain damping effect. If the two spring washers are installed subsequently, make sure that they are not fastened too tightly. Also make sure that the radial play between the shift tube and the rubber mounting in the bearing body does not exceed 0.04—0.06 mm. If necessary install a new rubber mounting (see Job No. 26—14/1, Section C).

In countries with particularly bad roads the standard rear engine rubber mountings with a hardness of 40° Shore can be replaced by harder mountings of a hardness of 70° Shore.

These engine mountings are available as
part No. 121 323 00 12 left, and
part No. 121 223 01 12 right
(see also Job No. 24—1).