Removal and Installation of Steering

Removal:

1. Disconnect the ground battery cable at the negative terminal of the battery.

2. Loosen and remove the upper clamping screw (5) of the steering coupling (see Fig. 46 — 1/2).

3. Disconnect the cables for the flash direction signals and for the horn at the cable connector on the wheel arch assembly.

4. Back out the grub screw from the steering column jacket (Fig. 46 — 1/1). Set the steering lock to the "Garage" position and pull the steering tube out of the steering coupling and the wiring harness out of the steering.

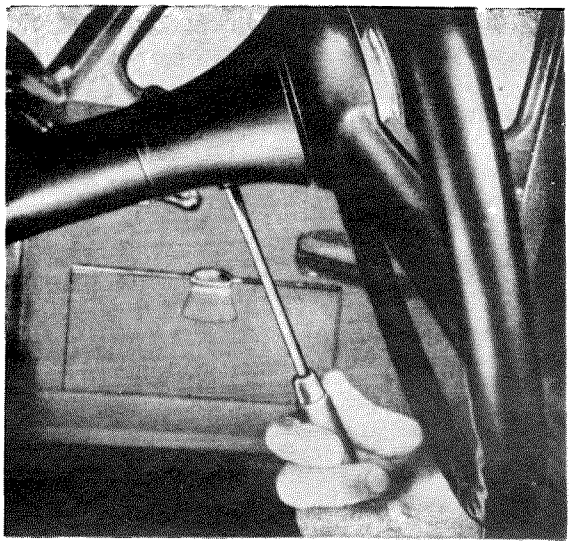

Fig. 46 — 1/1

5. Pull the cotter pins out of the castle nuts (2) on the ball heads of the steering gear arm, unscrew the castle nuts and then use Bell-shaped Puller 186 589 10 33 to remove the two ball heads (Fig. 46 — 1/2).

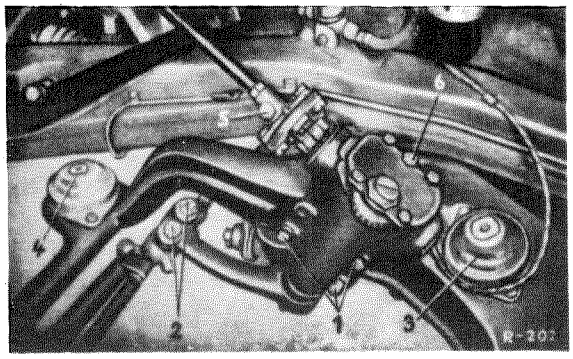

Fig. 46 — 1/2

1 Fixing screws for steering
2 Castle nuts for ball heads
3 Rubber mounting for front engine suspension
4 Rubber mounting for rear engine suspension
5 Upper clamping screw for steering coupling
6 Screw plug

6. Remove the three hexagon screws (1) and disconnect the steering from the front axle support and pull out upward (Fig. 46 — 1/2).

   If necessary, loosen and remove the lower clamping screw of the steering coupling and remove the steering coupling.

Installation:

7. Top up the steering gear assembly with 0.3 liter SAE 90 hypoid oil.

8. Use three hexagon screws (1) and lock washers to fix the steering to the front axle support.

9. Install a sealing cover and a rubber cuff on each of the ball heads.

   Press the ball heads into the steering arm.

   The contact surface of the ball heads must be free from oil and grease! Screw on, tighten and cotter the castle nuts.

10. Pull the wiring harness through the cable tube of the steering.

Line up the front wheels in the straight fore and aft position, bring the steering wheel to the dead center position and insert the steering tube in the steering coupling (see Fig. 46 — 1/2).

Note: Use Center Check Screw 186 589 00 23 for the steering.

If, when the steering wheel is at the dead center position, the front wheels do not line up in the straight fore and aft position, the front wheel alignment must be corrected by adjusting the tie-rods. (For further details see Job No. 40 — 3).

11. Place the upper clamping screw (5) in the steering coupling and tighten up with hexagon nut and lock washer (see Fig. 46 — 1/2).

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 and to the steering gear assembly.

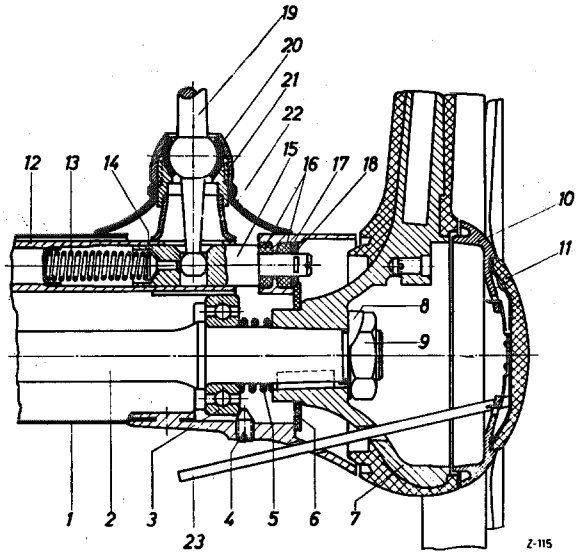

Fig. 46 — 1/3

1 Steering column jacket
2 Steering tube
3 Annular grooved bearing
4 Grub screw
5 Compression spring for steering tube
6 Rubber washer
7 Steering wheel
8 Locking plate
9 Hexagon nut
10 Horn ring
11 Trademark plate
12 Shift tube
13 Compression spring for shift tube
14 Spring seat pin
15 Guide pin
16 Rubber ring
17 Compensating rubber ring
18 Snap ring
19 Shift lever
20 Rubber cushion
21 Cover cap
22 Rubber cuff
23 Welding rod (3 mm thick) to press off the trademark plate

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

12. Connect the flash direction signal and horn cables to the steering column cable connector at the wheel arch assembly.
When connecting up the cables, pay attention to the color coding of the individual cables.

The individual cables must be connected so 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).

13. Screw in and tighten the grub screw (4) for the steering column jacket (Fig. 46 — 1/3). On no account may the grub screw be omitted, since this screw is necessary to prevent axial displacement of the annular grooved bearing and the steering tube.

14. Turn the steering hard over to the left and to the right. In doing this, check whether the steering knuckle arm rests against the steering knuckle assembly stop face (Fig. 46 — 1/4).

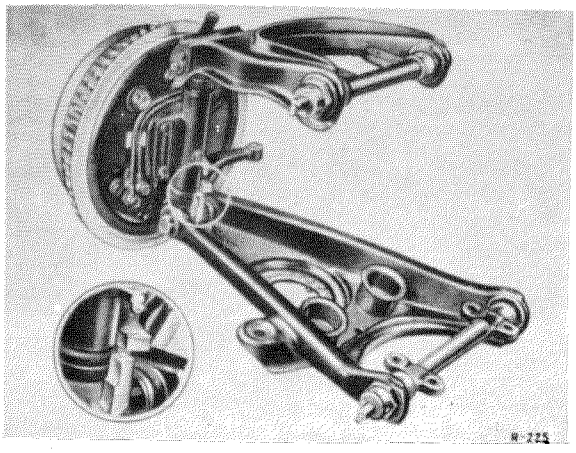

Fig. 46 — 1/4

The lock must be limited by the steering knuckle assembly. If this is not the case, the cause may be an incorrectly installed steer-

ing gear arm or toe-in maladjusted on one side.

For this reason, it is important to adjust the toe-in with the steering wheel in the dead center position, so that the toe-in on the left and on the right wheel is equally distributed.

Note: The steering shaft must not strike against the safety stop faces in the housing (Fig. 46 — 1/5). The sole purpose of these stop faces is to exclude all possibility of fouling or pressure of the steering nut on the taper roller bearings.

15. Check and adjust the toe-in (see Job No. 40 — 3).

16. Check whether the horn and flash direction signals are working properly.

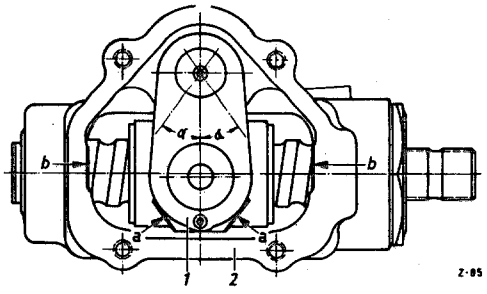

Fig. 46 — 1/5

1 Steering shaft arm
2 Steering housing
a Stop faces at the steering shaft arm
b Stop faces at the housing
Angle of lock α = 35° 30'