

## A. Righthand Supporting Tube with Connecting Bolts and Carrier of Rear Axle Suspension

### General Instructions

On vehicles with air suspension observe Job No. 32-11 "Instructions for Assembly Jobs".

The supporting tube can be taken off only with the rear axle removed from vehicle.

### Removal

- 1 Remove righthand rear axle shaft (refer to Job No. 35-4).
- 2 Unscrew hex. nut (12) of wedge screw (13) (Fig 35-5/1) and knock out wedge screw (Fig. 35-5/2).
- 3 Pull rubber sleeve from rear axle housing.

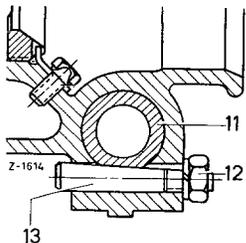


Fig. 35-5/1

- 11 Connecting bolt
- 12 Hex. nut with circlip
- 13 Wedge screw

4 Loosen hex. bolt (1) on connecting bolt and clamping screw (4) on cover (3) of rear axle housing (Fig. 35-5/3).

5 Knock connecting bolt out toward the rear by means of assembly mandrel 180 589 08 39 00.

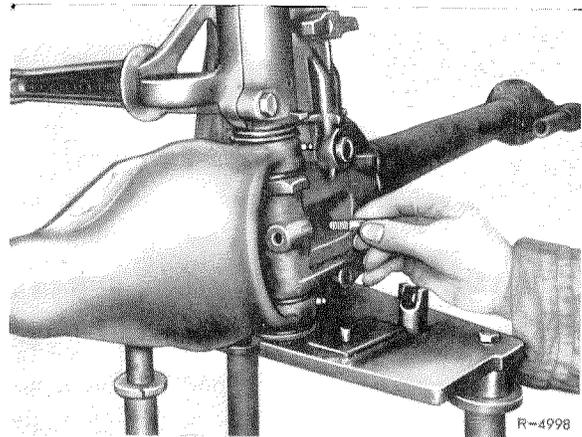


Fig. 35-5/2

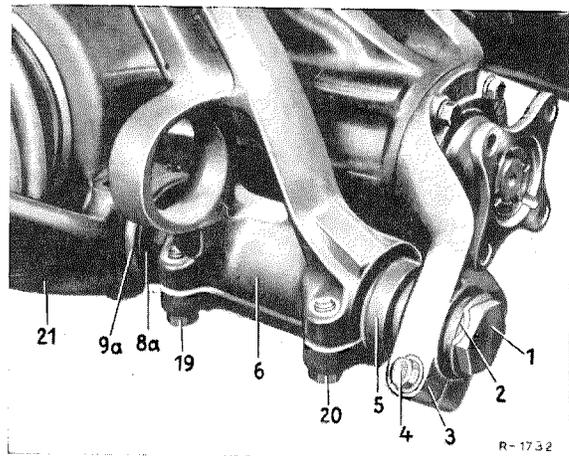


Fig. 35-5/3

- 1 Hex. bolt
- 2 Lock washer
- 3 Cover with clamping eye
- 4 Clamping screw
- 5 Rubber mount
- 6 Carrier for rear axle suspension
- 8a Washer
- 9a Rubber ring
- 19 Hex. bolt
- 20 Hex. bolt
- 21 Supporting tube right

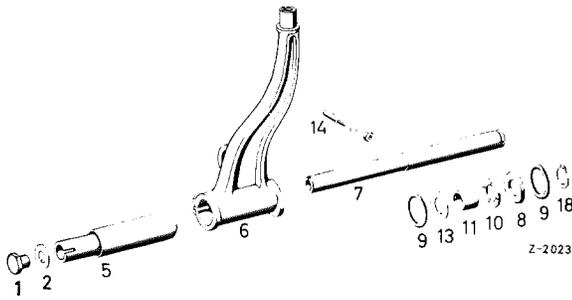


Fig. 35-5/4

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| 1 Hex. bolt                       | 9 Rubber ring                       |
| 2 Lock washer                     | 10 Washer                           |
| 4 Spacing sleeve                  | 11 Sleeve                           |
| 5 Rubber mount                    | 13 Compensating washer              |
| 6 Carrier of rear axle suspension | 14 Wedge screw with nut and circlip |
| 7 Connecting bolt                 | 18 Locking ring                     |
| 8 Washer                          |                                     |

### Installation

6 Check supporting tube and connecting bolt and replace, if required.

7 Replace sealing rings for rear axle shaft in supporting tube.

8 Slide rubber sleeve on supporting tube in such a manner that the high portion of the bead of the eccentric sleeve points upwards. The sleeve is designated with two word "OBEN" (TOP).

**Caution!** Attach hose binders with locks facing toward the rear and being accessible from below.

9 Slide rubber rings (9) on supporting tube eyes (Fig. 35-4).

10 Insert carrier (6) with attached rubber mount (5) into clamping eye in cover (3) of rear axle housing (Fig. 35-5/5).

11 Insert sleeve (11a) into front supporting tube eye.

12 Hold supporting tube against rear axle housing and locate with assembly mandrel 180 589 08 39 00. When inserting the assembly mandrel introduce the compensating washers (13a) and (13b) from the front between the fork of the supporting tube and the rear axle housing.

13 Press or knock sleeve (11b) on supporting bolt (7). Attach washer (10b) and washer (8b) in such a manner that the chamfered end points away from the groove of the locking ring.

**The specified play must be accurately maintained. If the play is too low, the compensating washers develop a tendency for seizing.**

**The supporting tubes should move easily. With supporting tubes which are moving heavily, for example as a result of seized compensating washers, the rear axle shows a tendency for rumbling.**

14 Insert locking ring into groove of connecting bolt.

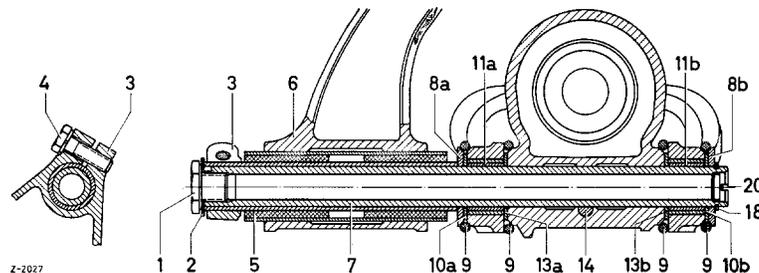
15 Grease connecting bolt and slide through from the rear, pushing out the assembly bolt. Simultaneously slide washer (10a), rubber ring (9a) and washer (8a) in between the front supporting tube eye and the rubber mount (5).

**Note:** The surface for the wedge screw (14) on connecting bolt should face downwards. It is attached in the same direction as the groove for turning the connecting bolt.

16 Screw-in hex. bolt (1) with lock washer and tighten to a tightening torque of 10-12 mkp and loosen again (Fig. 35-5/6).

Fig. 35-5/5

- |                                   |
|-----------------------------------|
| 1 Hex. bolt                       |
| 2 Lock washer                     |
| 3 Cover with clamping eye         |
| 4 Clamping screw                  |
| 5 Rubber mount                    |
| 6 Carrier of rear axle suspension |
| 7 Connecting bolt                 |
| 8a, 8b Washers                    |
| 9 Rubber ring                     |
| 10a, 10b Washers                  |
| 11a, 11b Sleeves                  |
| 13a, 13b Compensating washers     |
| 14 Wedge screw                    |
| 18 Lock ring                      |
| 20 Groove                         |



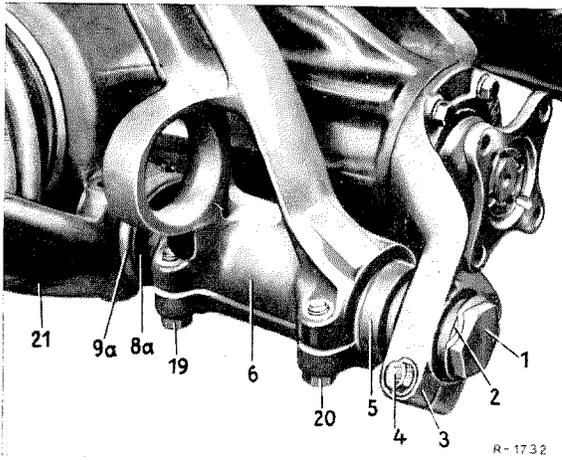


Fig. 35-5/6

- |                                    |                          |
|------------------------------------|--------------------------|
| 1 Hex. bolt                        | 8a Washer                |
| 2 Lock washer                      | 9a Rubber ring           |
| 3 Cover with clamping eye          | 19 Hex. bolt             |
| 4 Clamping screw                   | 20 Hex. bolt             |
| 5 Rubber mount                     | 21 Supporting tube right |
| 6 Carrier for rear axle suspension |                          |

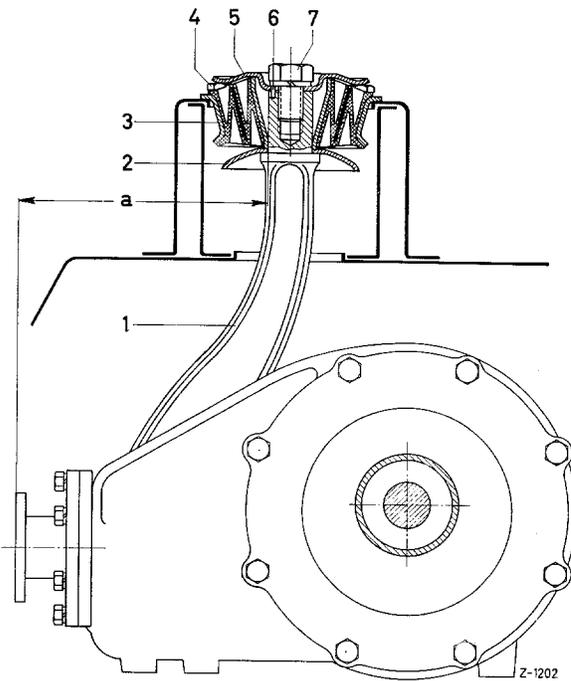


Fig. 35-5/7

- |                                                                     |                                                       |
|---------------------------------------------------------------------|-------------------------------------------------------|
| a Distance between joint flange and carrier of rear axle suspension | 4 Hex. bolts for attaching rubber mount to body/frame |
| 1 Carrier of rear axle suspension                                   | 5 Clamping disc                                       |
| 2 Bottom clamping disc                                              | 6 Cylindrical notched pin                             |
| 3 Rubber mount                                                      | 7 Hex. bolt with circlip                              |

17 Knock-in wedge screw (14) and tighten hex. nut with circlip (12) (Fig. 35-5/2).

18 Tighten hex. bolt (1) to specified torque (refer to Job No. 35-0). Simultaneously knock from the rear against the connecting bolt, so that no end play shows up. Lock hex. bolt (1) (Fig. 35-5/6).

19 Tighten clamping screw (4) in cover of rear axle housing to specified torque (refer to Job No. 35-0).

20 Fit rear rubber ring (9) in between washer (8b) and supporting tube eye (Fig. 35-5/5).

21 Adjust reference distance "a" between the face of the joint flange and the carrier (1) for rear axle suspension (for dimension refer to Job No. 35-0) (Fig. 35-5/7 and Fig. 35-5/8).

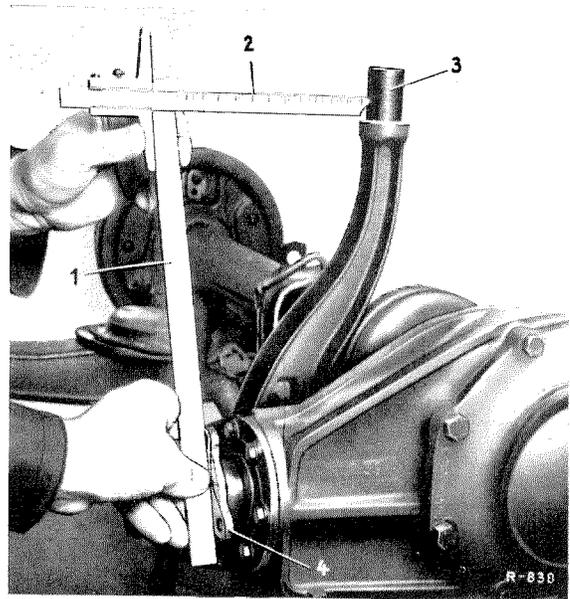


Fig. 35-5/8

- |                |                                   |
|----------------|-----------------------------------|
| 1 Straightedge | 3 Carrier of rear axle suspension |
| 2 Depth gauge  | 4 Joint flange                    |

22 Check angle between carrier and lefthand supporting tube. Seen in driving direction, the carrier should form a right angle with the left supporting tube (Fig. 35-5/9).

Tighten clamping screws of carrier, but do not change the distance "a" adjusted under Item 20. (For tightening torque refer to Job No. 35-0.)

**Note:** If the carrier does not form a right angle together with the lefthand supporting tube, rumbling or drumming noises will be transmitted while driving, since the rubber mount at the top in the body/frame will be distorted.

**23** Install righthand rear axle shaft (refer to Job No. 35-4).

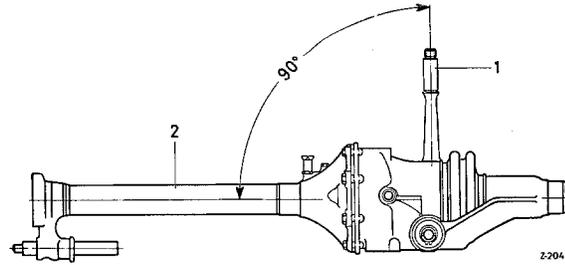


Fig. 35-5/9

- 1 Carrier of rear axle suspension
- 2 Lefthand supporting tube

## B. Bearing of Brake Holddown on Supporting Tube

### General Instructions

On vehicles with air suspension observe Job No. 32-11 "Instructions for Assembly Jobs".

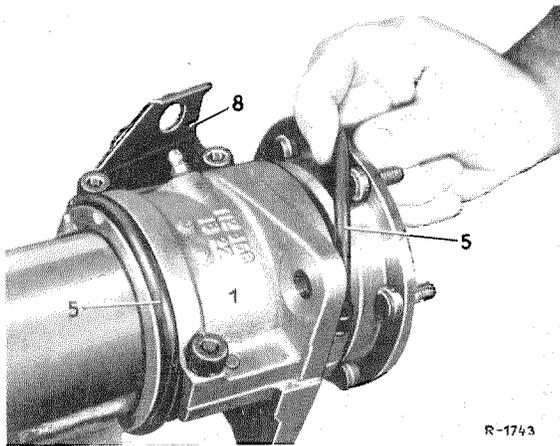


Fig. 35-5/10

- 1 Bearing housing
- 5 Rubber ring
- 8 Brake hose holder

**Note:** The bearing of the brake holddown can be disassembled without removing the rear axle shaft, unless the rubber rings for sealing the bearing housing require replacement.

### Removal

- 1 Remove brake caliper (refer to Job No. 42-7).
- 2 Replace rear axle shaft if required (refer to Job No. 35-4).
- 3 Remove lever for brake holddown from bearing housing.

**4** Remove rubber rings (5) between supporting tube and bearing housing (1) (Fig. 35-5/10).

**5** Unscrew hex. socket screw and remove brake hose holder (8).

**6** Separate bearing housing halves (Fig. 35-5/11).

**7** Remove individual components of bearings from supporting tube, identify and check for reuse

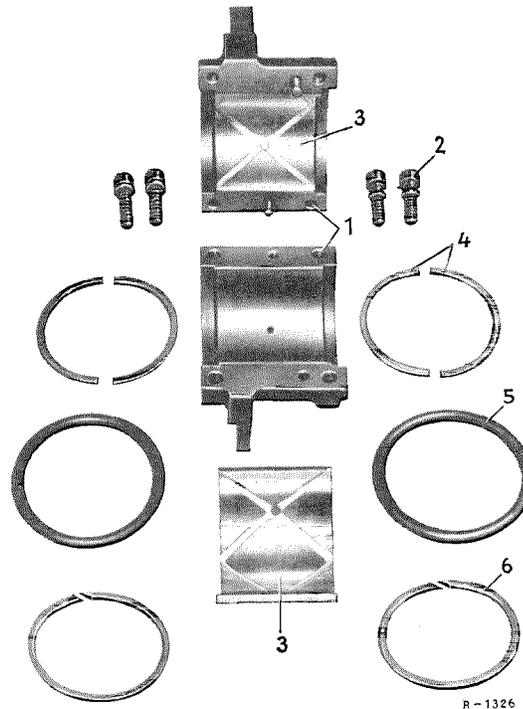


Fig 35-5/11

- 1 Bearing housing
- 2 Hexagon socket screw with circlip
- 3 Bearing shells
- 4 Compensating washer (ring half)
- 5 Rubber ring
- 6 Felt ring