

## General Instructions

For removing the front spring, loosen lower control arm on front axle carrier and lower. Use a special adaptor placed on pit hoist for support.

If the front springs must be removed and installed with the front axle carrier removed from vehicle, use the assembly stand BE 13766 with the pertinent spring clamps.

## Removal

- 1 Jack-up vehicle at the front and rear.
- 2 Loosen torsion bar connecting linkage (27) on lower control arm (Fig. 32-5/1).

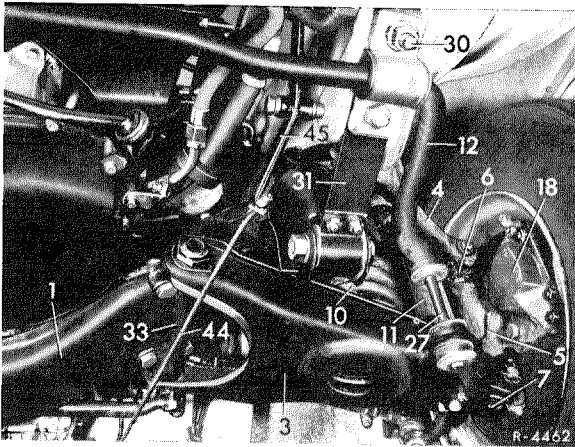


Fig. 32-5/1

- |                            |                                   |
|----------------------------|-----------------------------------|
| 1 Front axle carrier       | 18 Brake caliper                  |
| 3 Lower control arm        | 27 Torsion bar connecting linkage |
| 4 Upper control arm        | 30 Cam bolt                       |
| 5 Steering knuckle         | 31 Leaf spring                    |
| 6 Kingpin                  | 33 Bearing bolt                   |
| 7 Steering knuckle carrier | 44 Center brake cable control     |
| 10 Front spring            | 45 Brake lever                    |
| 11 Front shock absorber    |                                   |
| 12 Torsion bar             |                                   |

- 3 Loosen and remove the two outer of the 4 hex. bolts for fastening bearing bolt (33) for lower control arm on front axle carrier.
- 4 Insert special adaptor (61) and support with pit hoist (Fig. 32-5/2).

- 5 Loosen both inner hex. bolts on bearing bolt. Carefully lower pit hoist and remove front spring together with rubber mount (Fig. 32-5/2 and 3).

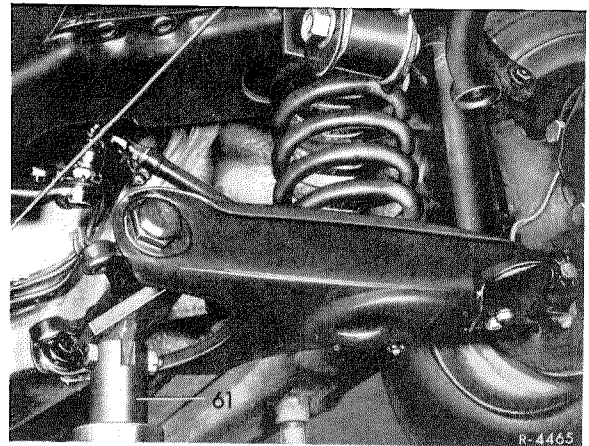


Fig. 32-5/2

61 Special adaptor 111 589 00 63 00

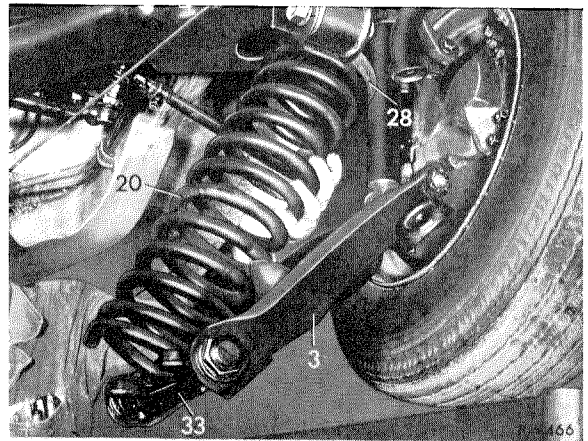


Fig. 32-5/3

- |                     |                                  |
|---------------------|----------------------------------|
| 3 Lower control arm | 28 Rubber mount for front spring |
| 20 Front spring     | 33 Bearing bolt                  |

## Installation

- 6 Attach rubber mount for front spring with textile adhesive tape to spring top, making sure that the upper and the lower coil end of the springs are different (Fig. 32-5/4).

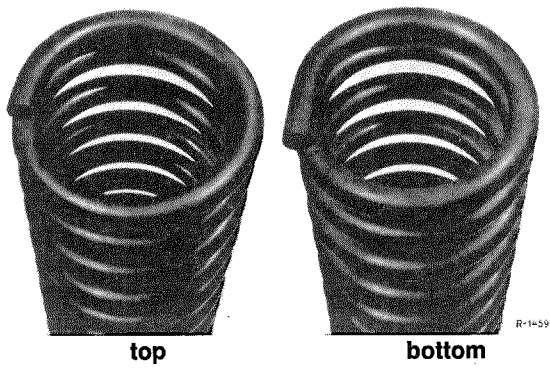


Fig. 32-5/4

**Note:** The various axle loads and spring lengths are compensated by the rubber mounts (28) between the spring and the front axle carrier (Fig. 32-5/5) (also refer to Job No. 32-0 "Adjustment of Front Springs").

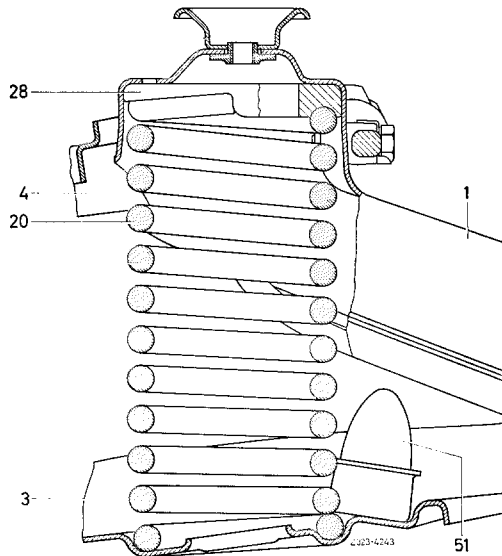


Fig. 32-5/5

- |                      |  |
|----------------------|--|
| 1 Front axle carrier | 20 Front spring                              |
| 3 Lower control arm  | 28 Rubber mount                              |
| 4 Upper control arm  | 51 Supplementary rubber spring (stop buffer) |

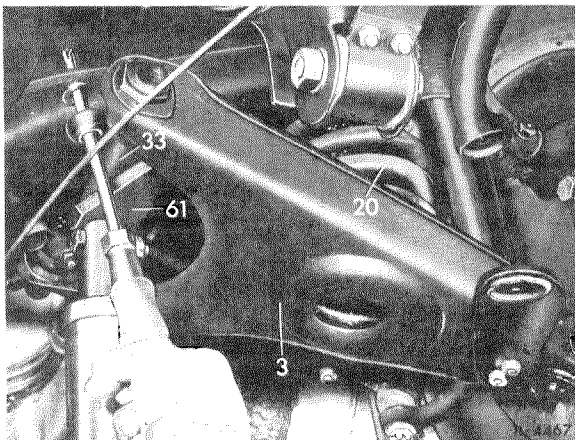


Fig. 32-5/6

- |                     |                                     |
|---------------------|-------------------------------------|
| 3 Lower control arm | 33 Bearing bolt                     |
| 20 Front spring     | 61 Special adaptor 111 589 00 63 00 |

**7** Insert front spring, making sure that the lower coil end is in alignment with the impression in the control arm.

**8** Raise control arm and push bearing bolt into its correct position by means of a suitable mandrel (Fig. 32-5/6).

**Note:** The bearing bolt is located by the two pins of the special set (61) engaging in the front axle carrier.

**9** Mount the two inner hex. bolts for fastening the bearing bolt, lower hoist and also insert the two outer bolts (Fig. 32-5/7).

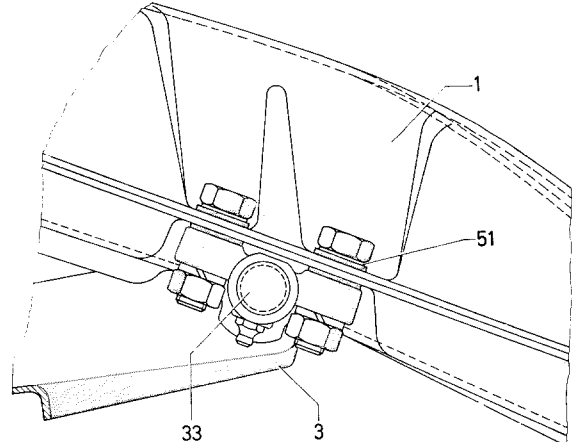


Fig. 32-5/7

- |                      |                 |
|----------------------|-----------------|
| 1 Front axle carrier | 33 Bearing bolt |
| 3 Lower control arm  | 51 Washer       |

**Caution!**

Use only specified bolts and nuts (refer to Job No. 33-0).

Always mount hex. bolts for bearing bolt with their head up.

For assembly reasons the washer (51) has been installed in production vehicles as from October 1969.

In repair cases, the washer should be used again for these vehicles, but **not** for vehicles where the washer has not been used before.

**10** Mount torsion bar connecting linkage (refer to Job No. 32-8).

**11** Lower vehicle.

**12** Check control arm position of front axle (refer to Job No. 40-6, Section B).

**13** Check caster, camber and toe-in of front wheels and adjust, if required (refer to Job No. 40-6, Section C).

**14** Check adjustment of headlamps (refer to Job No. 82-2).