Tightening Torques		Nm	(kpm)
Hex. nuts of cam bolts to lower control arm bearing	M 14 x 1.5	120	(12)
Hex. nuts of lower shock absorber suspension	M 8	25	(2.5)

Special Tools	
Intermediate angle piece for pit lift	115 589 02 63 00
Cradle for intermediate angle piece	115 589 03 63 00

Notes

Let down lower control arm for removing front spring. Use special cradle placed on pit lift for support. If the special cradle is not available or if the front axle has already been removed together with springs, use spring tensioner BE 15 838 of assembly stand BE 15 798 for tensioning springs.

The front shock absorbers are serving simultaneously as a deflection stop for the front wheels. For this reason, loosen shock absorber suspension only when the vehicle is on its wheels or when the lower control arm in supported.

There is a safety stop between the upper control arm and the front axle carrier.

Removal

1 Loosen lower shock absorber suspension and connecting linkage of torsion bar (Fig. 1).

2 Jack-up vehicle at front and rear, remove front wheel.

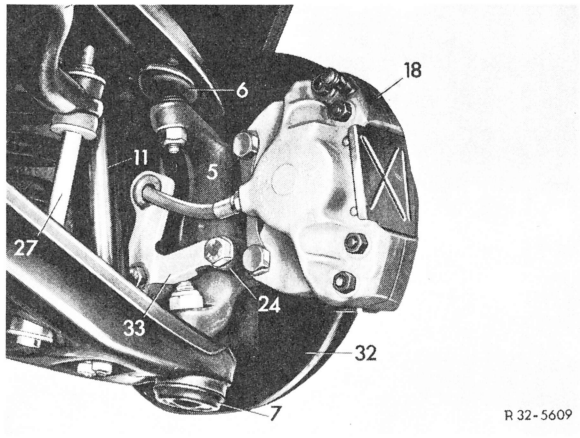

Fig. 1

5 Steering knuckle
6 Guide joint
7 Supporting joint
11 Shock absorber
18 Brake caliper
24 Steering knuckle arm
27 Torsion bar connecting linkage
32 Cover plate for front wheel brake
33 Holder for brake hose

3 Mark position of cam bolt (30) in relation to front axle carrier on bearing of lower control arm (refer to arrows) and lossen hex. nuts (Fig. 2).

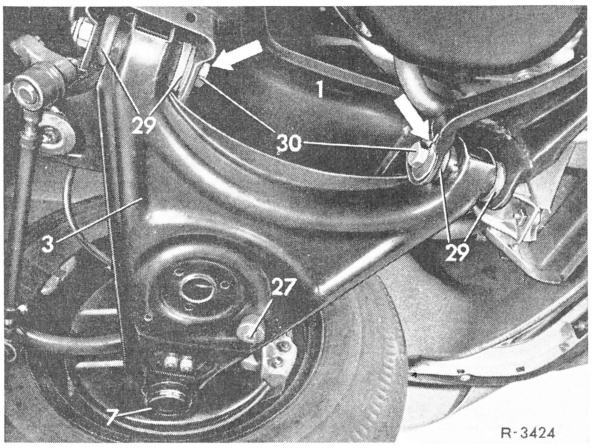

Fig. 2

1 Front axle carrier
3 Lower control arm
7 Supporting joint
27 Torsion bar connecting linkage
29 Rubber mounting
30 Cam bolt

4 Support lower control arm with pit lift, attached intermediate angle piece (47) and cradle (44). Knock out cam bolt (30) and carefully lower pit lift (Fig. 3).

Make sure that the cam bolts are not mixed up.

Note: The cradle (44) has two supporting points for the receiving bolt. Fig. 3 shows the use of the device on left end of vehicle; change bolt around for right end.

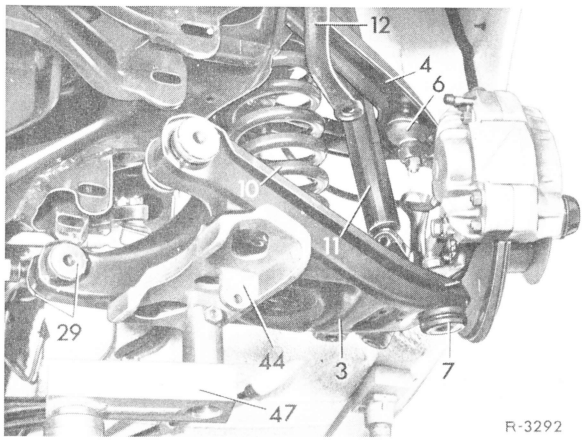

Fig. 3

3 Lower control arm
4 Upper control arm
6 Guide joint
7 Supporting joint
10 Front spring
11 Front shock absorber
12 Torsion bar
29 Rubber mounting
44 Cradle
47 Intermediate angle

When using the intermediate angle piece (47) in combination with a pit lift, **secure pit lift against lateral tilting.**

5 Remove cradle (44), swivel control arm forward and remove front spring with rubber ring (31) (Fig. 4).

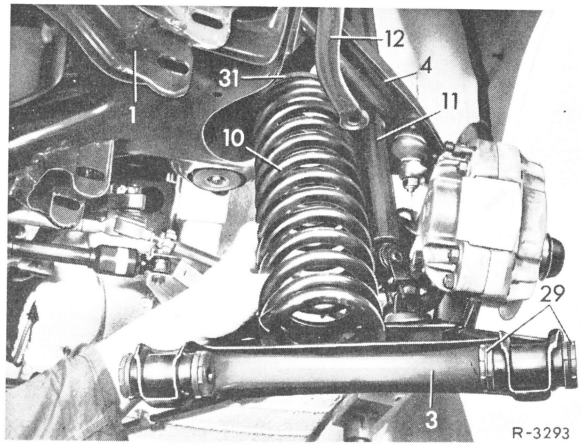

Fig. 4

1 Front axle carrier
3 Lower control arm
4 Upper control arm
10 Front spring
11 Front shock absorber
12 Torsion bar
29 Rubber mounting
31 Rubber mounting for front spring

Installation

6 Insert front spring with ground end up and with rubber mounting attached (31) (Fig. 5).

7 Swivel lower control arm into its installation position while turning front spring in such a manner that the lower coil end is in alignment with the indentation in control arm (Fig. 6).

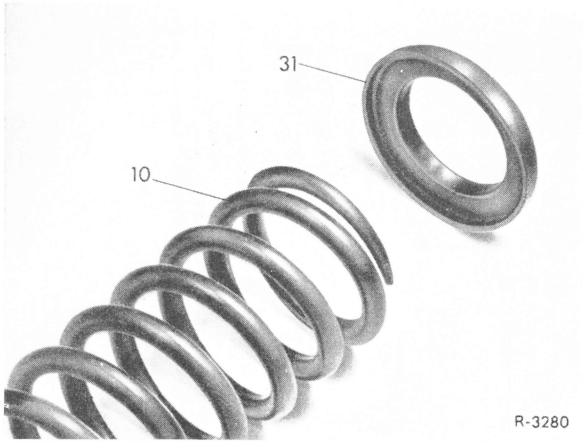

Fig 5

10 Front spring
31 Rubber mounting for front spring

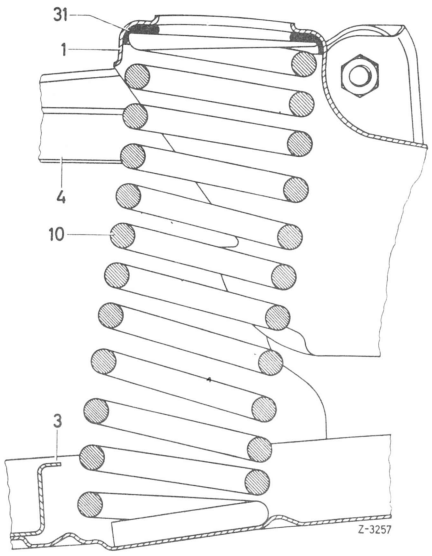

Fig. 6

1 Front axle carrier
3 Lower control arm
4 Upper control arm
10 Front spring
31 Rubber mounting for front spring

8 Carefully raise lower control arm with pit lift while making sure that the rubber mounts (29) are not damaged by the eyes on the front axle carrier (Fig. 3).

9 Mount cam bolts of control arm bearings while observing markings made during removal.

If the position of the cams has not been marked, mount cam bolts as shown in Fig. 7–10 for initial adjustment.

Note: Tighten hex. nuts of cam bolts only when vehicle is on its wheels ready for driving (40.1–320).

10 Mount torsion bar connecting linkage (32.1–300).

11 Attach shock absorber suspension to lower control arm.

12 Mount front wheels, lower vehicle.

13 Check vehicle level on front axle (40.1–300).

14 Check adjustment of front wheels and make corrections, if required (40.1–320).

15 Check adjustment of headlights ("Electrical System" 82.1–250).

Basic adjustment of cam bolts for camber and caster on lower control arm bearings.

Rear cam bolts (camber adjustment)

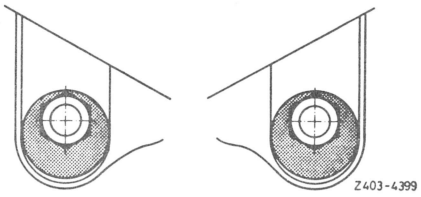

Fig. 7
Type 107

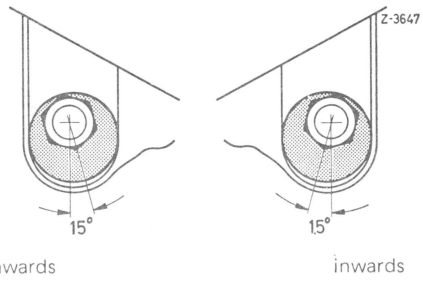

Fig. 8
Type 114, 115

Front cam bolts (caster adjustment)

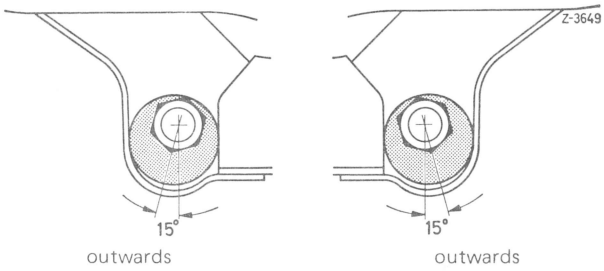

Fig. 9
Type 107, 114, 115 with power steering

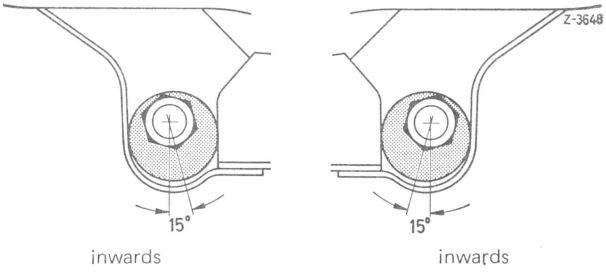

Fig. 10
Type 114, 115 with mechanical steering