

Tightening Torques	Nm
Hex. bolts for rubber mountings of suspension on frame floor	45
Hex. nuts of lower shock absorber suspension	20
Hex. bolts of front engine mounting	35
Hex. nuts of track rod joints	35
Self-locking hex. head screw for fastening rpm sensor to steering knuckle	8
Special tools	
Carrying stirrup for engine	107 589 02 61 00
Puller for track rod ball joints	124 589 01 33 00

Notes

The jobs described below apply when the individual parts are subsequently controlled or the front axle is repaired. In such a case, the shock absorber, the torsion bar and the front springs are already removed on vehicle.

But if the vehicle will be placed on the frame straightening bench, for example, as the result of repairs following an accident in which the front axle has not been damaged, remove front axle **complete** with front springs, shock absorbers and torsion bar.

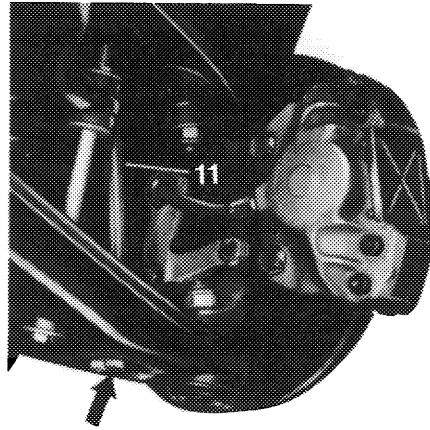
The front shock absorbers are serving simultaneously as a deflection stop for the front wheels. Therefore loosen shock absorber suspension only when the vehicle is on its wheels or when the lower control arm is supported.

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

Remove self-locking screws and nuts on principle!

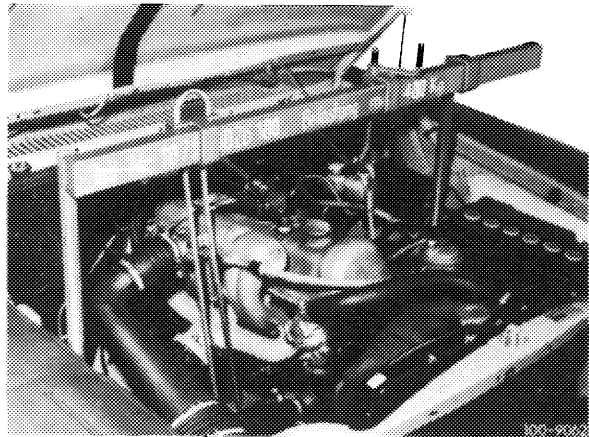
Removal

- 1 Loosen lower shock absorber suspension (arrow).
- 2 Jack-up vehicle at front and rear and place on supporting stands of similar height. Remove front wheels.
- 3 Remove front shock absorbers (11) (32–100).

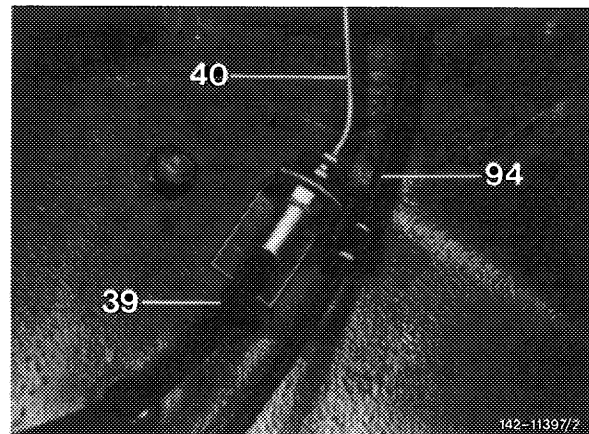


133-5609/2

- 4 Connect carrying stirrup to engine.
- 5 Loosen hex. bolts of front engine mounting right and left.

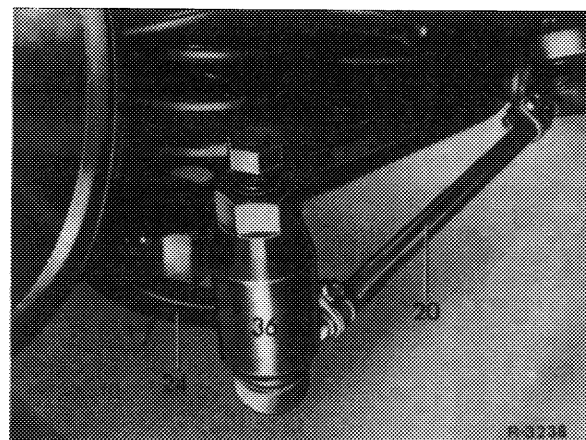


- 6 Separate brake lines and brake hoses from each other. Close connections with rubber plugs.



142-11397/2

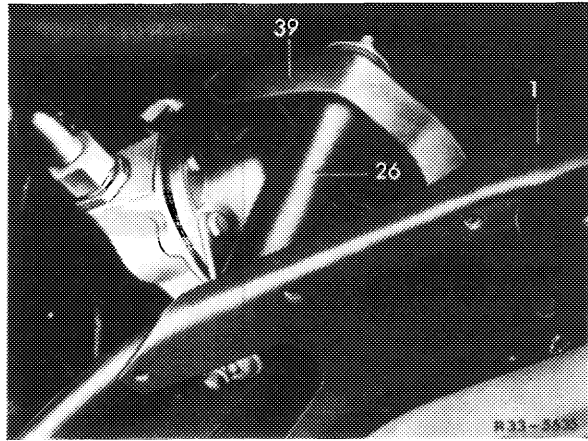
- 7 Remove track rods left and right from steering knuckle arm (46–530).
- 8 Remove front torsion bar (32–300).



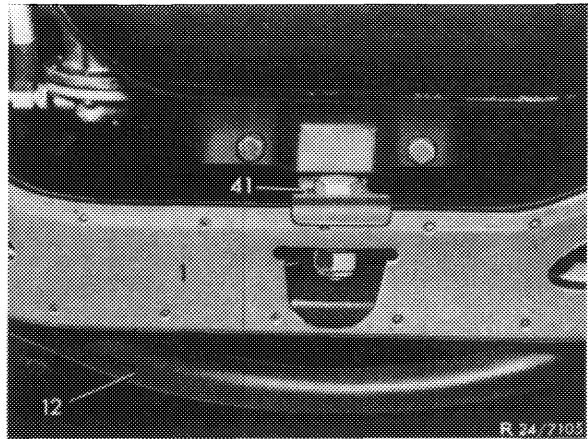
- 20 Track rod
- 24 Steering knuckle arm
- 36 Remover

P-3238

9 On vehicles with engines 110, 115, 130, 180 and 615, 616, 617 detach engine shock absorber suspension from front axle carrier.



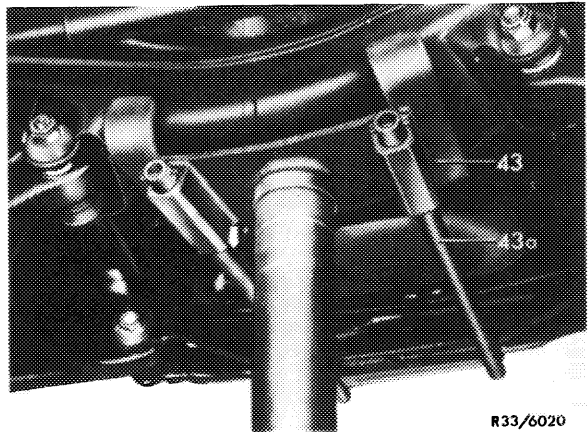
10 On vehicles with engines, 115, and 615, 616, detach engine movement limiter from front axle carrier.



- 1 Front axle carrier
- 12 Torsion bar
- 41 Engine movement limiter

11 Remove front springs (32–200), attach lower control arms again temporarily to front axle carrier.

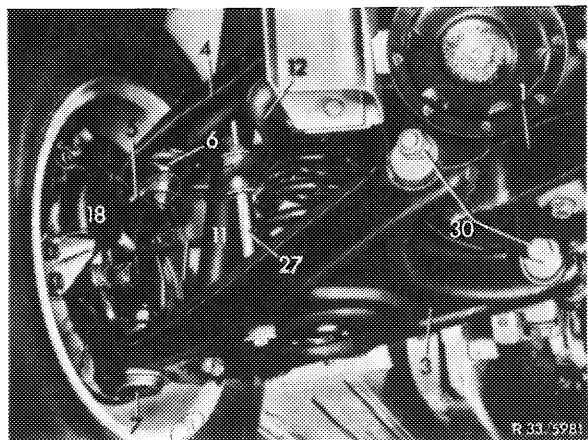
12 Support front axle carrier with pit lift and cradle (43) with supplementary member (43a).



R 33/6020

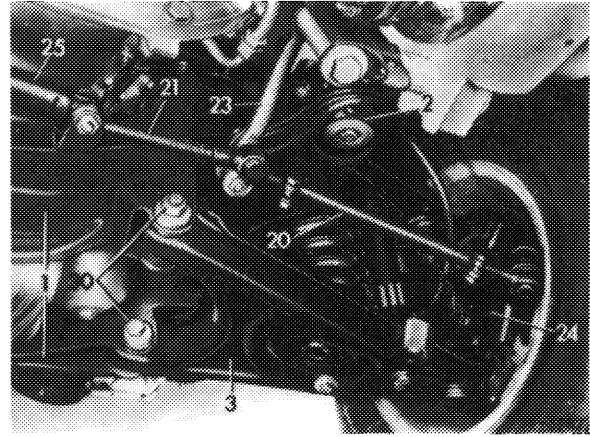
Front axle seen from the front

- | | |
|----------------------|-----------------------------------|
| 1 Front axle carrier | 11 Front shock absorber |
| 3 Lower control arm | 12 Torsion bar |
| 4 Upper control arm | 27 Torsion bar connecting linkage |
| 5 Steering knuckle | 30 Eccentric bolts |
| 6 Guide joint | |
| 7 Supporting joint | |

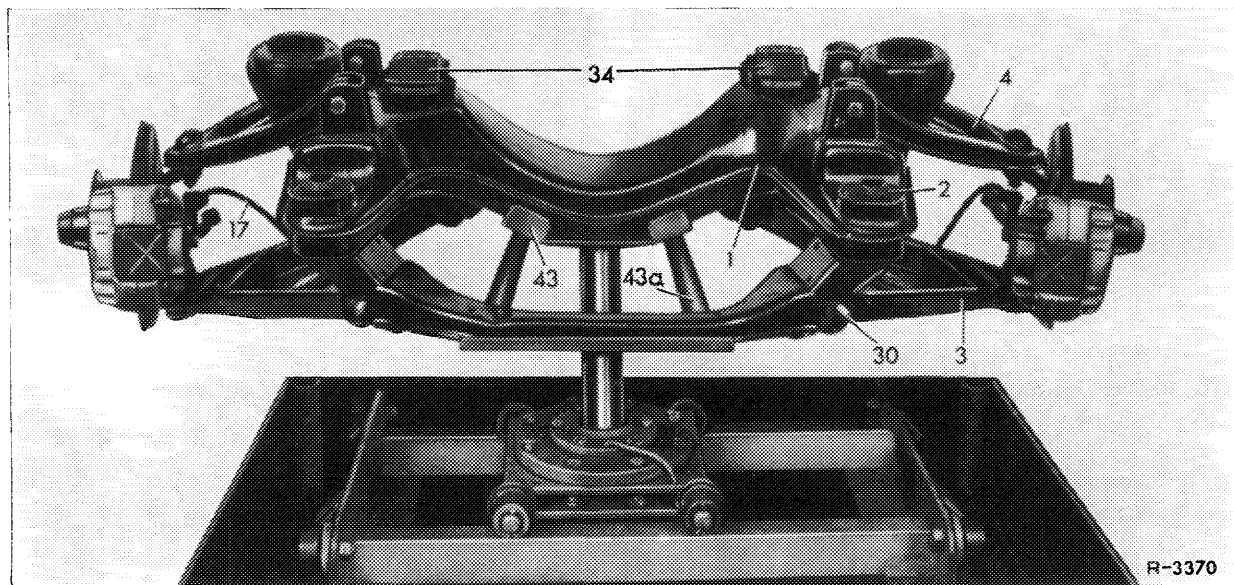


R 33/5981

13 Loosen hex. bolts of four rubber mounts (2) for attaching front axle carrier to frame floor.



14 Lower pit lift and remove front axle.



1 Front axle carrier
2 Rubber mount
3 Lower control arm

4 Upper control arm
17 Brake hose
30 Cam bolt

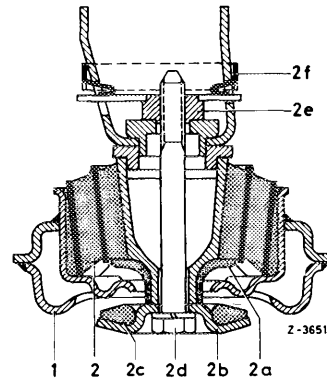
34 Rubber mount of front engine mounting
43 Cradle

43a Supplementary member for removal and installation of front axle

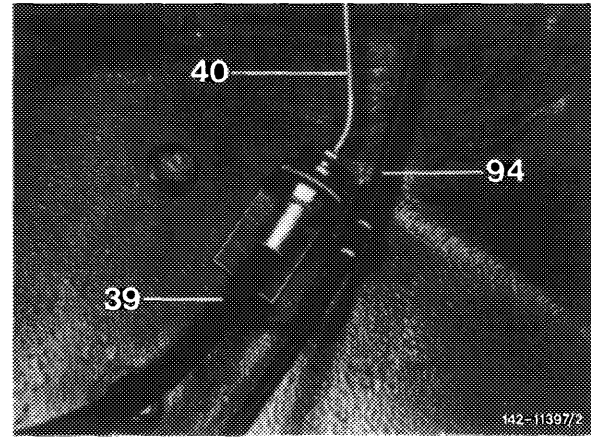
Installation

- 15 Check rubber mount of front engine mounting.
- 16 Check condition of rubber mount for suspending front axle and for tight seat in front axle carrier (33-110).
- 17 Introduce front axle and attach to frame floor.
- 18 Remove engine carrying stirrup. Install the hex. bolts for the engine suspension.

- 1 Front axle carrier
- 2 Rubber mount
- 2a Stop buffer for deflection
- 2b Stop plate
- 2c Stop buffer for deflection
- 2d Hex. bolt
- 2e Fastening nut
- 2f Holder for fastening nut



19 Connect brake hoses.



20 Install front springs (32–200).

Attention!

Tighten hex. nuts of eccentric bolt for lower control arms **only, if the vehicle is resting on its wheels ready for driving.**

21 Install front shock absorber (32–100).

22 Mount track rod joints.

23 Install torsion bar (32–300).

24 On vehicles with engines 110, 115, 130, 180 and 615, 616, 617, attach engine shock absorber to front axle carrier.

25 On vehicles with engine 115 and 615, 616, mount engine movement limiter to front axle carrier and adjust.

26 Bleed brake system (42–010).

27 Mount front wheels, lower vehicle.

28 Check vehicle level at front axle.

29 Check wheel adjustment at front axle and correct, if necessary (40–320).

30 Check adjustment of headlights.