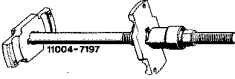

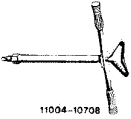



## 33-200 R and R front axle half

Tightening torques	Nm
Hex. screws of upper control arm bearing	85
Hex. nuts of eccentric bolt on lower control arm bearing	180
Hex. nut of ball joint of track rod	35
Hex. screws for fastening cross yoke center piece to bearing carrier	45
Hex. screws for fastening bearing carrier to frame side member	80
Double hex. screws of lower shock absorber mounting	20
Hex. screw of upper control arm support on torsion bar	65
Self-locking hex. socket screw for fastening rpm sensor to steering knuckle	8
<b>Special tools</b>	
Spring tensioner for front spring	126 589 07 31 00
	
Tubular socket wrench element 32 mm 1/2" square 445 mm long for spring tensioner	201 589 01 09 00
	
Wrench for upper shock absorber mounting	126 589 01 09 00
	
Remover for ball joint of track rod	186 589 10 33 00
	

## 33-200 R and R front axle half

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### Note

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Bearings of control arm on front end and of torsion bar on front wall, as well as support of upper control arm on torsion bar may be tightened only in ready-to-drive condition. Tightening of these bearings with wheels without load would provide wrong data concerning control arm position.

During assembly jobs on upper control arm, no distortion via torsion bar should show up. If required, slightly raise front axle half on lower control arm at opposite vehicle side.

The front shock absorber serves simultaneously as a deflection stop of front wheel. For this reason, loosen shock absorber mount only with vehicle resting on its wheels or with the lower control arm supported. With shock absorber loosened, the upper control arm rests on end stop at front end. For assembly of upper mounting, either place vehicle on its wheels or lift axle half at lower control arm.

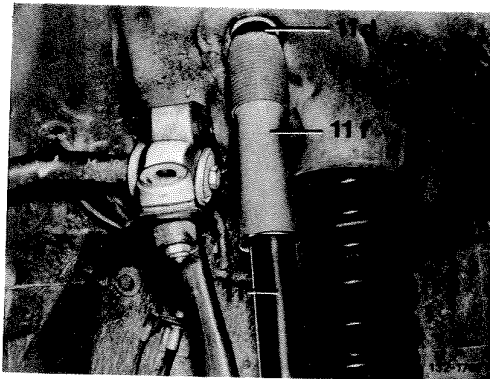
Renew self-locking screws and nuts!

Check brake lines and brake hoses with utmost care (42-012).

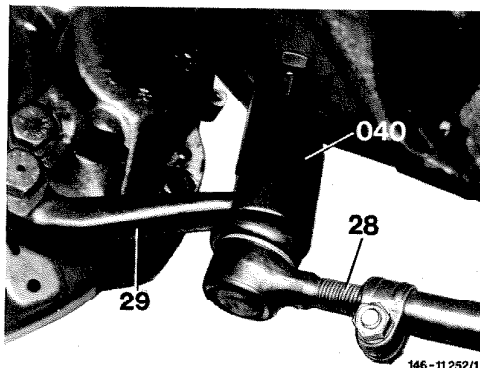
### Removal

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- 1 Remove front shock absorber (11) (32-100).
- 2 Remove front spring (12) (32-200).

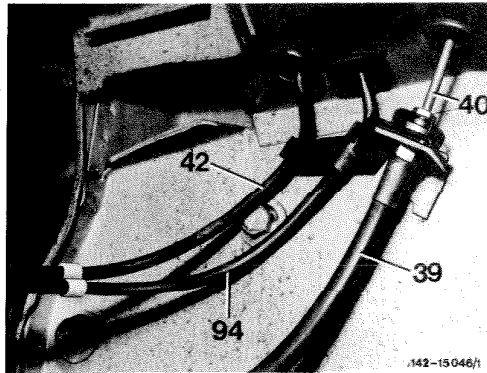


- 3 Loosen ball joint of track rod (28) on steering knuckle arm (29) and remove by means of device (040).

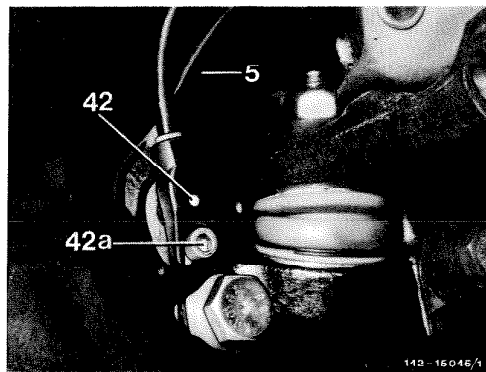


4 Separate brake line (40) and brake hose (39) on front end from each other. Loosen plug connection of brake lining wear indicator on brake caliper. Close lines against penetration of dirt (42.5-100).

- 39 Brake hose
- 40 Brake line
- 94 Cable of brake lining wear indicator

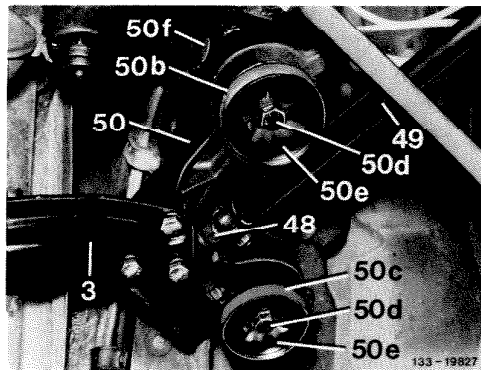


5 On vehicles with ABS, remove rpm sensor (42) from steering knuckle by loosening hex. socket screw (42a).



6 After loosening hex. head screws, remove cross yoke center piece (3) from lefthand and righthand bearing carrier (50).

7 Unscrew hex. head screws (50d) for fastening bearing carrier to frame floor.

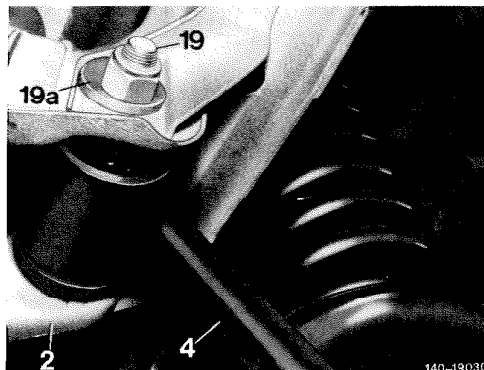


8 Support front axle half.

9 Mark position of eccentric bolt on bearing of lower control arm in relation to frame cross member.

10 Loosen eccentric bolt on bearing of lower control arm and remove.

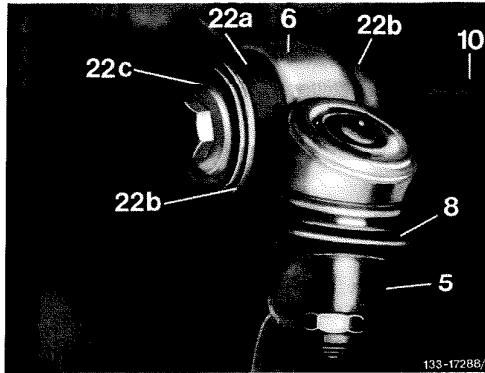
- 2 Frame cross member
- 4 Lower control arm
- 19 Eccentric bolt
- 19a Eccentric disc



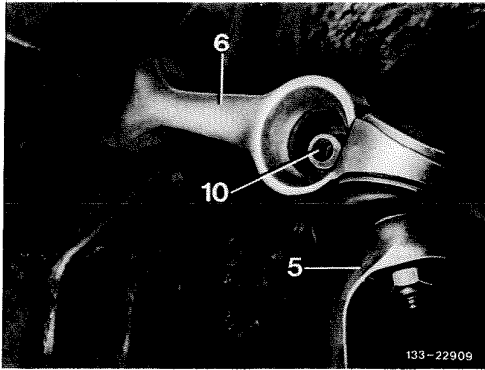
## 33-200 R and R front axle half

11 Remove support of upper control arm on torsion bar.

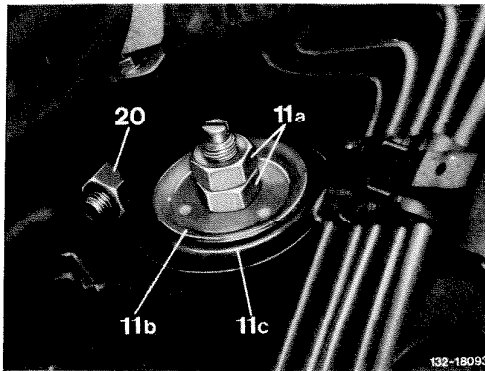
- 5 Steering knuckle
- 6 Upper control arm
- 10 Torsion bar
- 22a Rubber bearing
- 22b Disc washer
- 22c Cone washer



- 5 Steering knuckle
- 6 Upper control arm
- 10 Torsion bar

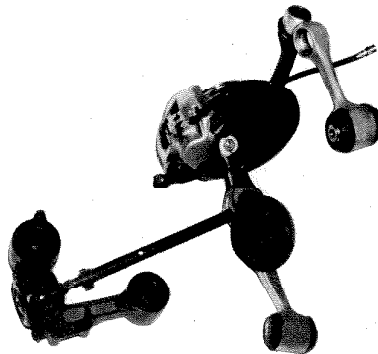


12 Loosen hex. head screw (20) of upper control arm bearing at front end from direction of engine compartment and remove.



13 Remove front axle half.

14 Check rubber bearing of upper and lower control arm, as well as rubber bearing for supporting upper control arm on torsion bar and renew, if required.



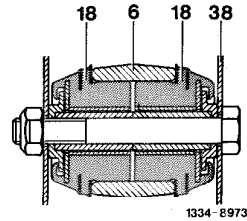
**Installation**

15 Introduce front axle half and mount upper control arm on front end and on torsion bar, but do not tighten screws.

For this purpose, raise front axle half accordingly on opposite vehicle side to obtain a favorable position of torsion bar.

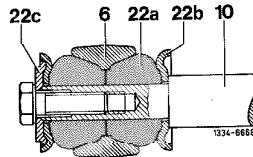
Bearing of upper control arm on front end

- 6 Upper control arm
- 18 Rubber bearing
- 38 Front end



Support of upper control arm on torsion bar

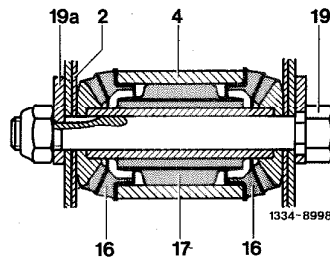
- 6 Upper control arm
- 10 Torsion bar
- 22a Rubber bearing
- 22b Disc washer
- 22c Cone washer



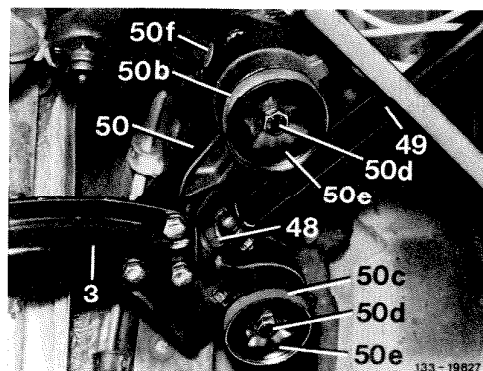
16 Mount bearing of lower control arm on frame cross member.

Bearing of lower control arm on frame cross member

- 2 Frame cross member
- 4 Lower control arm
- 16 Axial-torsion rubber bearing
- 17 Radial-torsion rubber bearing
- 19 Eccentric bolt (camber adjustment)
- 19a Eccentric washer



17 Mount bearing carrier, while using new insertion nut (50f). Tighten hex. screws to 80 Nm.

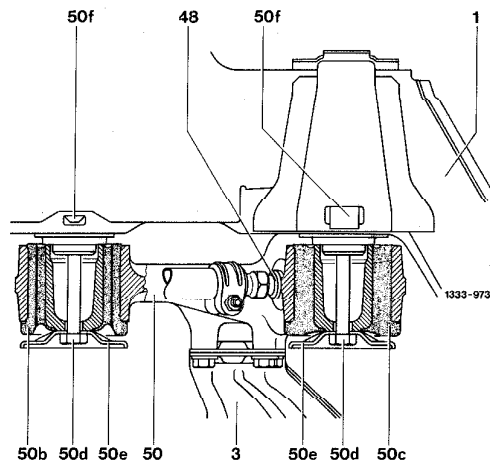
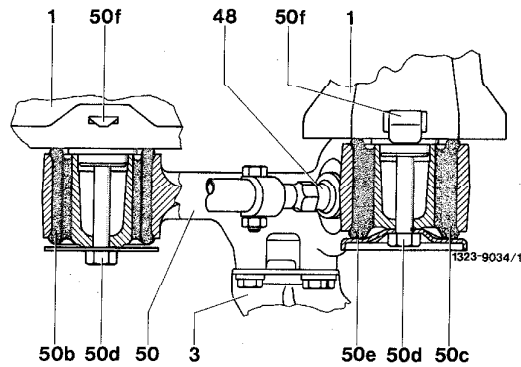


## 33-200 R and R front axle half

**Note:** The stop disc (50e) for front rubber bearing has been standardized following installation of rubber bearing with flange (2nd version starting March 1981). In the event of repairs, the flat stop disc can still be used for rubber bearing of first version.

Bearing 1st version  
(up to February 1982)

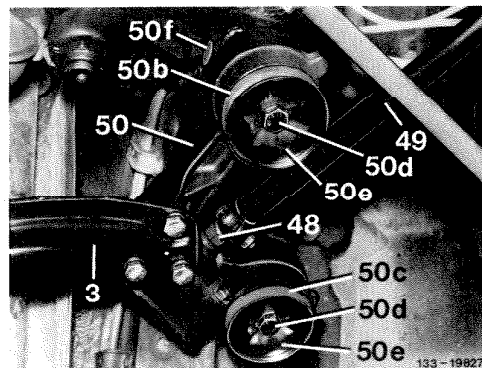
Front rubber bearing without flange  
Flat disc on front bearing



Bearing 2nd version  
(starting March 1982)

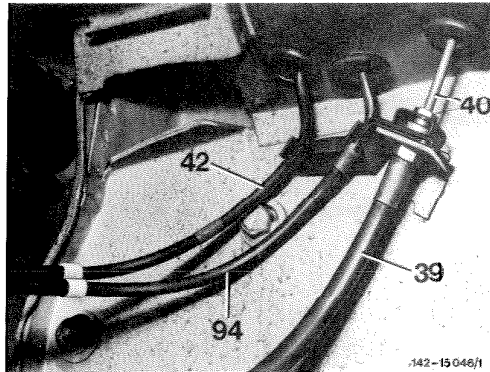
Front rubber bearing with flange  
Disc on front bearing

**18** Mount cross yoke center piece (3) with new micro-encapsulated screws to side member. Tighten hex. screws to 45 Nm.

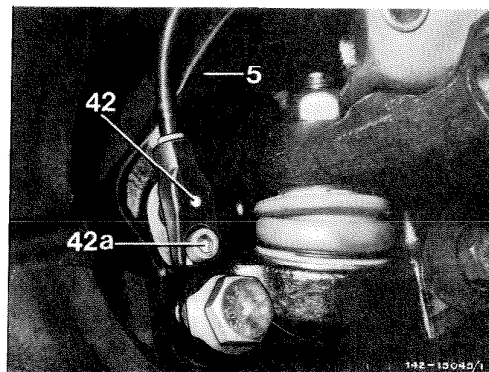


19 Connect brake line and brake hose at front end to each other. Fasten plug connection of brake lining wear indicator to fixed caliper (42.5-100).

- 39 Brake hose
- 40 Brake line
- 94 Cable of brake lining wear indicator



20 On vehicles with ABS, insert rpm sensor (42) in steering knuckle. Tighten hex. socket screw (42a).

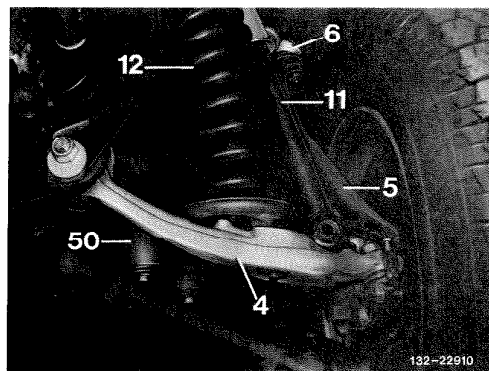


21 Install front spring (12) (32-200).

22 Fasten ball joint of track rod to steering knuckle arm.

23 Bleed brake system (42-010).

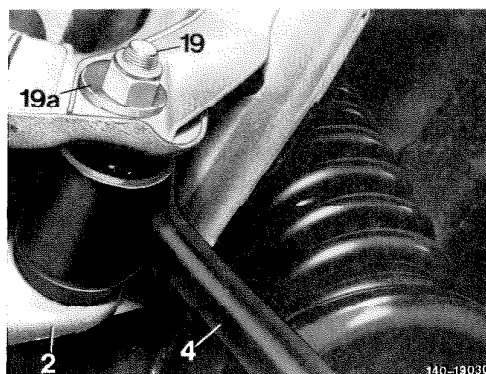
24 Install front shock absorber (11) (32-100).



25 Set eccentric bolt (19) of camber adjustment to previously applied mark and tighten.

**Attention!**

If the position of the eccentric bolt has not been marked during removal, mount eccentric bolt in center position for initial adjustment.



## 33-200 R and R front axle half

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- 26 Tighten hex. screw of upper control arm (6) bearing at front end and support on torsion bar (10).
- 27 Check vehicle level of front axle (40-300).
- 28 Check adjustment of front wheels (40-320).
- 29 Check adjustment of headlamps.

