

## 35-010 Removal and installation of complete rear axle

### B. Models 107, 116

#### Oil types and capacities

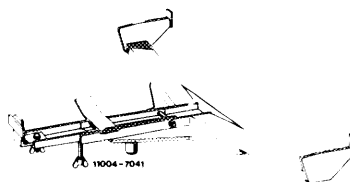
Standard differential	Hypoid gear oil SAE 90 refer to specifications for service products page 235	
Differential with restricted slip (positive traction) (information plate on rear axle housing)	Special Hypoid gear oil refer to specifications for service products page 235.3	
Capacity	large center piece	1.3 litre
	small center piece	1.0 litre

#### Tightening torques

	Nm
Hex socket or hex bolts for attaching rear rubber bearing to end cover	120
Hex bolts for attaching rear rubber bearing to frame floor	25
Hex bolts, self-locking for attaching rear rubber bearing to frame floor	30
Hex bolts for attaching front rubber bearings to frame floor	120
Hex bolts for attaching supporting plate to frame floor	40
Clamping nut of propeller shaft	30-40
Hex bolts for attaching universal shaft intermediate bearing to frame floor	25

#### Special tools

Vehicle jack top for removal and installation of complete rear axle



116 589 10 61 00

Torque wrench 25-130 Nm with plug-in ratchet 1/2" square



001 589 66 21 00

Torque wrench 40-200 Nm with plug-in ratchet 1/2" square

001 589 67 21 00

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Open end wrench 46 mm for torque wrench  
for clamping nut of propeller shaft



126 589 00 01 00

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Spring tensioner for rear spring



115 589 00 31 00

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Tubular socket 24 mm 1/2" square  
for spring tensioner



116 589 01 09 00

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### Note

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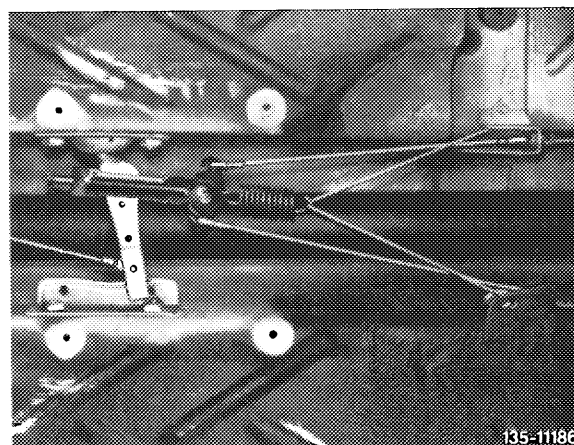
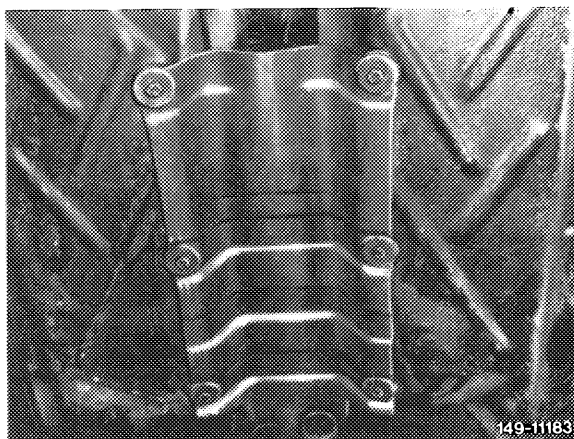
On vehicles with hydropneumatic suspension observe  
"general jobs on vehicles with hydropneumatic sus-  
pension" (32-600).

Remove rear axle only with wheels removed first to  
avoid damage to rear axle shaft during transportation  
of complete units.

### Removal

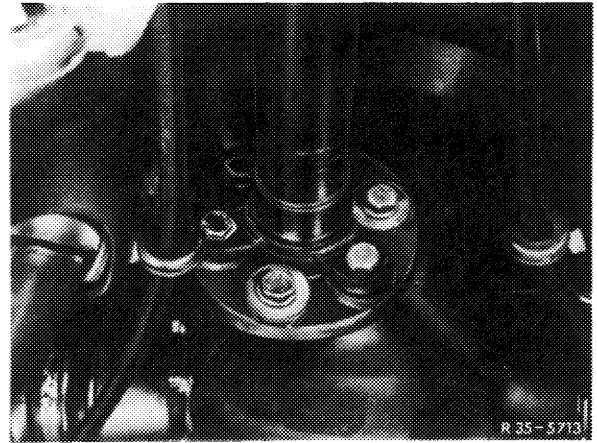
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- 1 Remove exhaust system (49-100).
- 2 Unscrew exhaust shield plate.
- 3 Remove shock absorbers or struts (32-110 or  
32-610).
- 4 Remove intermediate lever of parking brake and  
disconnect cable controls (42-525).
- 5 Unscrew both brake hoses and close brake lines  
against penetration of dirt.
- 6 Loosen clamping nut and unscrew propeller shaft  
intermediate bearing from frame floor.



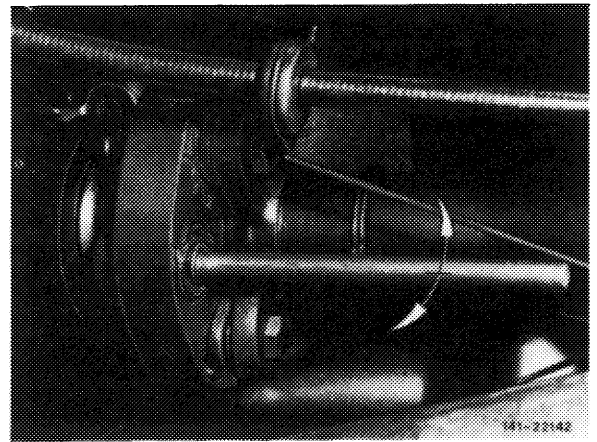
7 Unflange propeller shaft at the rear.

8 Slide propeller shaft out of centering in forward direction.



**Attention!**

On model 107.042 with manual 5-speed transmission (starting October 1981), prior to sliding back propeller shaft, loosen fitted sleeves in universal flange by means of a cylindrical mandrel of 10 mm dia. and approx. 150 mm long. For this purpose, introduce mandrel each time into a fitted sleeve and move in radial direction (arrow). Only then slide propeller shaft out of centering in forward direction to prevent damage to companion plate.



9 Remove rear springs (32–230).

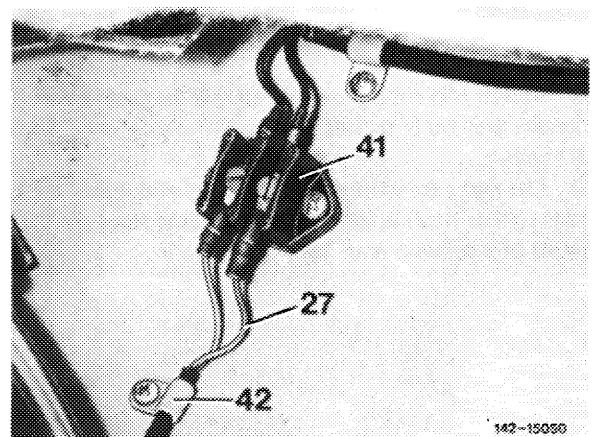
10 Loosen torsion bar connection to rear axle (32–310 or 32–320).

**11 On vehicles with ABS**

a) Loosen cable connector (41) of rpm sensor behind rear seat backrest **with ignition switched off** and remove. Loosen clamps (42) and remove.

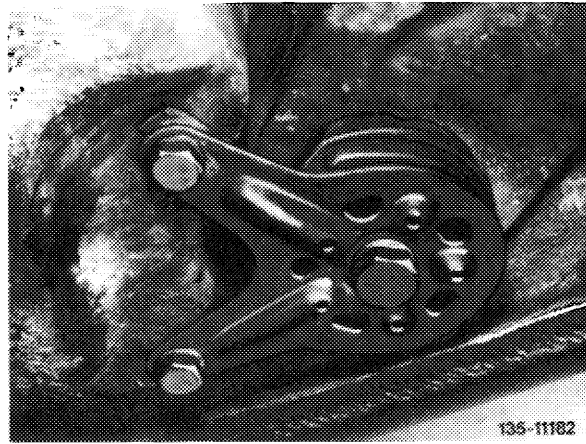
b) Pull out cable (27) in downward direction through rubber grommet in frame floor and protect against damage.

- 27 Cable
- 41 Cable connector
- 42 Clamp



12 Slip vehicle jack top with vehicle jack or pit lift under rear axle and lift up to stop.

13 Unscrew supporting plates of front rubber bearing from frame floor.

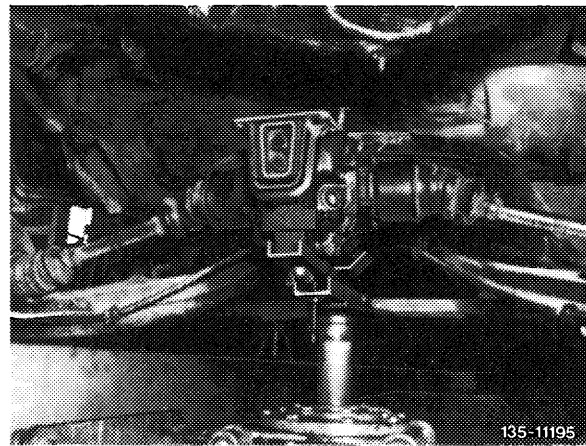


14 Unscrew rear rubber bearing from frame floor.

15 Carefully lower rear axle.

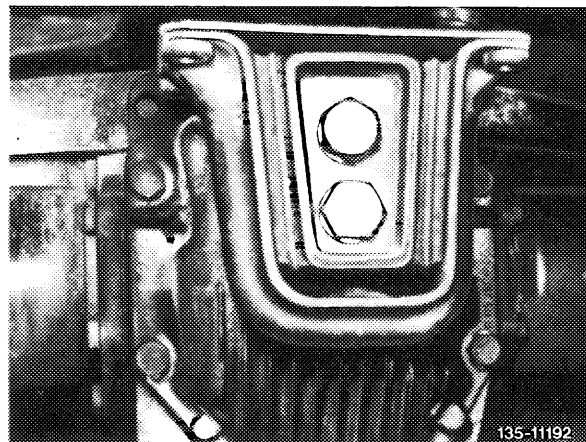
**Attention!**

When lowering and transporting rear axle do not damage cover plates of brake discs.



16 Unscrew rear rubber bearing from rear axle end cover.

17 Check front and rear rubber bearing and renew, if required.

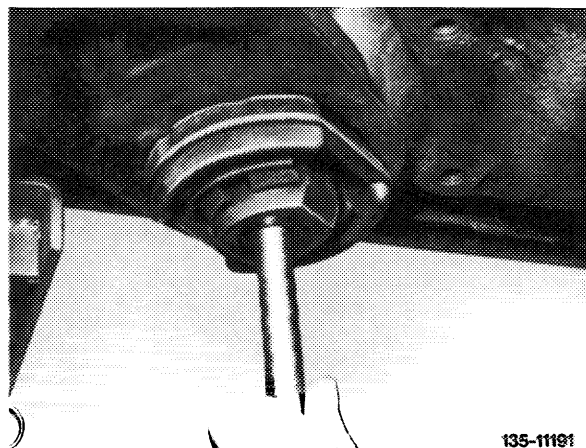


**Installation**

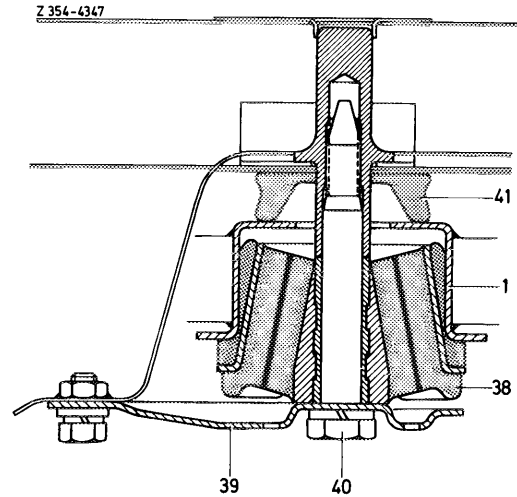
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18 Attach rear rubber bearing to rear axle end cover. Tighten hex. bolts to 120 Nm.

19 Lift rear axle with vehicle jack top and insert front rubber bearing into guides on frame floor by means of a suitable mandrel.



20 Mount supporting plates of rubber bearings to frame floor. Tighten hex. bolts (40) of rubber bearings to 120 Nm and hex. bolts of supporting plates to 40 Nm.

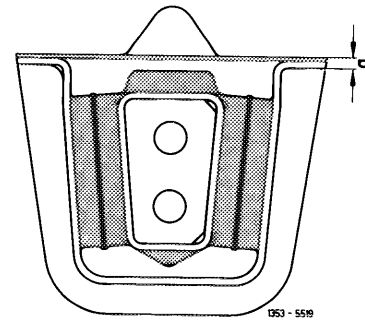


21 Mount rear rubber bearing on frame floor with hex. bolts, snap rings and washers or with new self-locking hex. bolts. Tightening torque of hex. bolts 25 Nm, of self-locking hex. bolts 30 Nm.

**Attention!**

Use self-locking hex. screws with plastic coating (micro-encapsulated) only once.

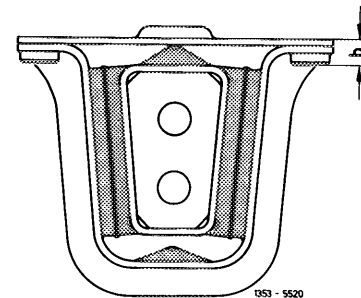
For rubber bearing **without** washers on fastening eyes, use hex. bolts with snap rings and washers (dimension a = 5 mm, on model 107 1st version only).



For rubber bearing **with** washers, use self-locking hex. bolts (dimension b = 12 mm).

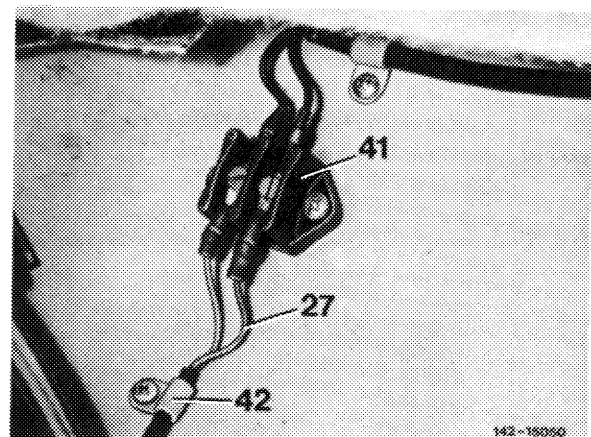
22 Remove vehicle jack top.

23 Flange propeller shaft to rear axle.



**24 On vehicles with ABS**

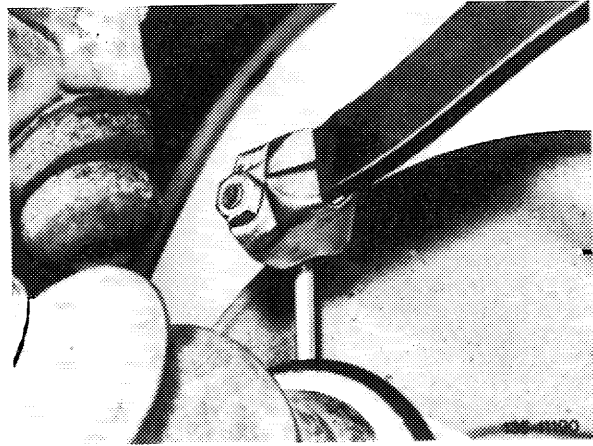
Pull cable (27) for rpm sensor in upward direction through rubber grommet in frame floor and connect to cable connector (41) Attach cable with clamps (42).



25 Screw on propeller shaft intermediate bearing, but do not yet tighten.

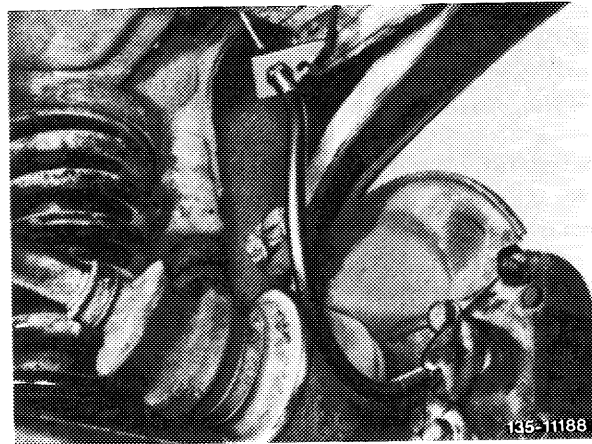
26 Mount torsion bar connection to rear axle (32-310 or 32-320).

27 Install rear springs (32-230).



28 Install shock absorbers or struts (32-110 or 32-610).

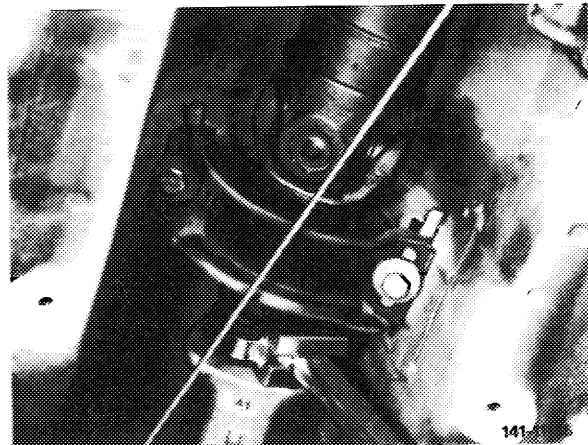
29 Connect both brake hoses and bleed brake system (42-010).



30 Attach cable controls of parking brake and mount bracket. Adjust parking brake (42-525).

31 Tighten clamping nut on propeller shaft to 30-40 Nm.

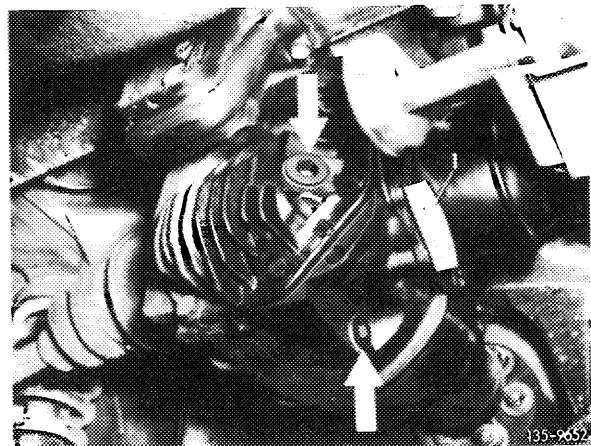
32 Tighten propeller shaft intermediate bearing to 25 Nm.



33 Mount shielding plate.

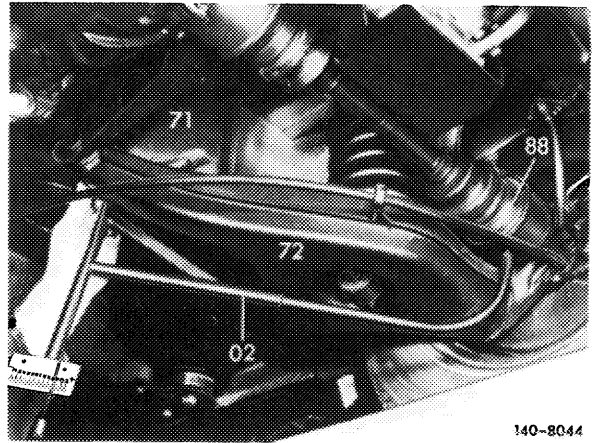
34 Install exhaust system (49-100).

35 Check oil level in rear axle and add oil up to level of filler hole, if required.



36 Check position of semi-trailing arm (40–300).

37 Check adjustment of headlights (82–250).



140-8044