35-010 Removal and installation of complete rear axle

C. Model 123

Oil type and capacity

Hypoid gear oil SAE 90	refer to specifications for service products page 235
Capacity	1.0 litre

Tightening torques		Nm
Hex bolts for attaching rear rubber bearing to rear axle end cover		120
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 (2-piece)		30-40
Clamping nut of propeller shaft (3-piece)	front	30-40
	rear	200
Hex bolts for attaching propeller 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

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



001 589 66 21 00

001 589 67 21 00

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



126 589 00 01 00

Spring tensioner for rear spring



115 589 00 31 00

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



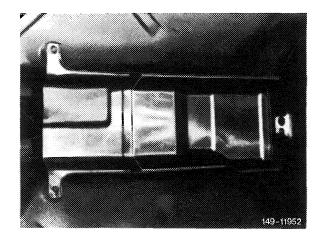
116 589 01 09 00

Note

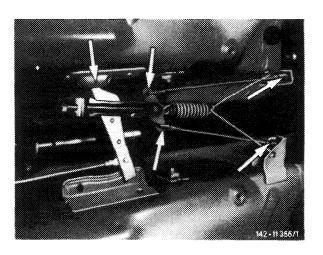
Remove rear axle only with wheels removed first to avoid damage to rear axle shafts during transportation of complete units.

Removal

- 1 Remove exhaust system (49-100).
- 2 Unscrew exhaust shielding plate (on models 123.03/05/09 only).

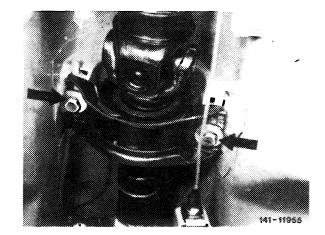


- 3 Remove intermediate lever of parking brake and disconnect cable controls (42–525).
- 4 Unscrew both brake hoses and close brake lines against penetration of dirt.



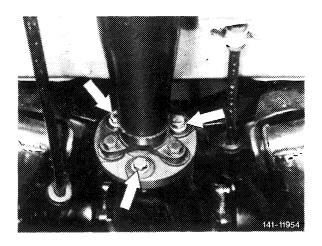
5 Loosen clamping nut of propeller shaft and hex. bolts of propeller shaft intermediate bearing on frame floor.

Note: For 3-piece propeller shaft, use front clamping nut only.



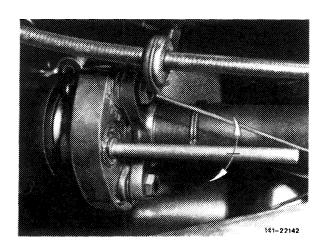
- 6 Unflange propeller shaft at the rear.
- 7 Slide propeller shaft out of centering in forward direction.

Note: Tie propeller shaft to holder of brake cable control by means of a piece of wire to prevent falling down of shaft.

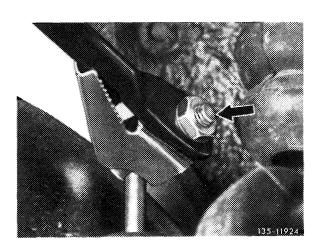


Attention!

On vehicles 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.

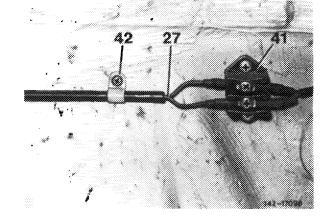


- 8 Remove shock absorbers or struts (32–110 or 32–610).
- 9 Remove rear springs (32-230).
- 10 Loosen torsion bar connection toward rear axle and remove (32–310).

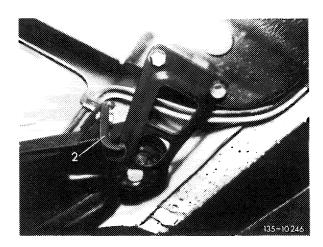


11 On vehicles with ABS

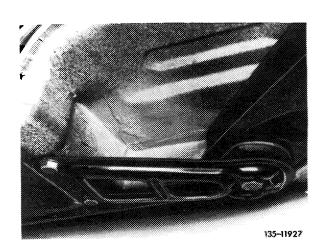
- a) Loosen and remove cable connection (41) of rpm sensor behind rear seat backrest with ignition switched off. Loosen clamps (42) and remove.
- b) Pull out cable (27) in downward direction through rubber grommet in frame floor and protect against damage.



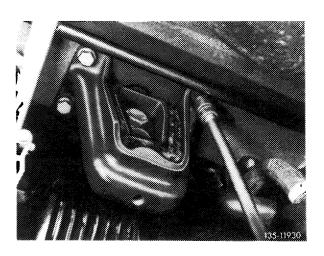
- 27 Cable
- 41 Cable connector
- 42 Clamp
- 12 Slip vehicle jack top with vehicle jack or pit lift under rear axle and lift up to stop.
- 13 Loosen stop limit (2) on rear axle carrier and remove (only on vehicles with engine 617, with engine 616 starting March 1978, with engine 115 starting September 1979 and with engine 102).



14 Unscrew supporting plates of front rubber bearings on frame floor.



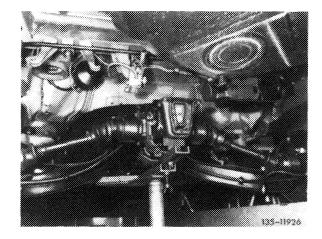
15 Unscrew rear rubber bearing on frame floor.



16 Carefully lower rear axle.

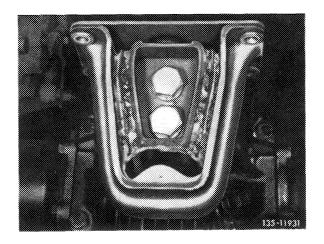
Attention!

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



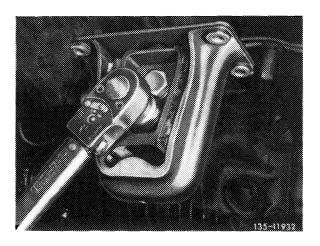
17 Unscrew rear rubber bearing from rear axle end cover.

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

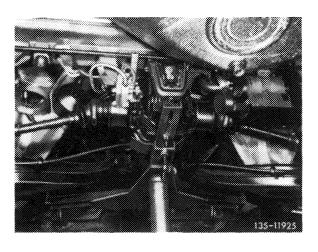


Installation

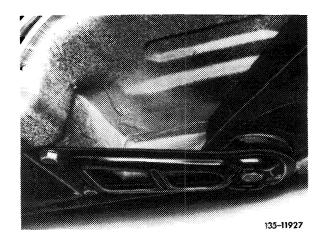
19 Attach rear rubber bearing to rear axle end cover. Tighten hex. bolts to 120 Nm.



20 Lift rear axle with vehicle jack top and insert front rubber bearing into guides of frame floor.



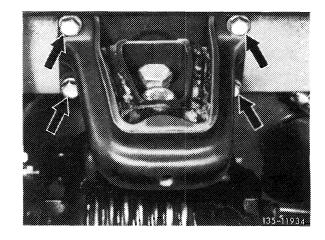
21 Mount supporting plates of rubber bearings on frame floor. Tighten hex. bolts of rubber bearing to 120 Nm and hex. bolts of supporting plate to 40 Nm.



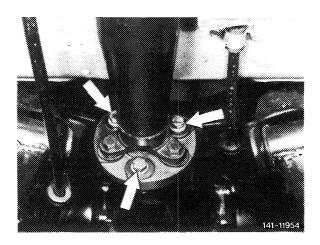
22 Mount rear rubber bearing on frame floor. Tighten self-locking hex. bolts to 30 Nm.

Attention!

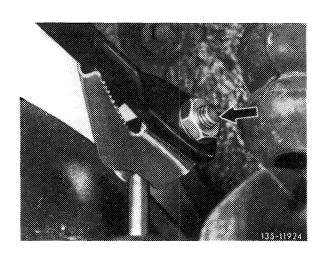
Self-locking hex. bolts with plastic coating (microencapsulated) may be used only once.



- 23 Remove vehicle jack top.
- 24 Flange propeller shaft to rear axle.

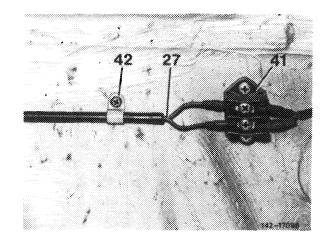


- 25 Mount torsion bar connection toward rear axle (32–310).
- 26 Install rear springs (32-230).
- 27 Install shock absorbers or struts (32–110 or 32–610).

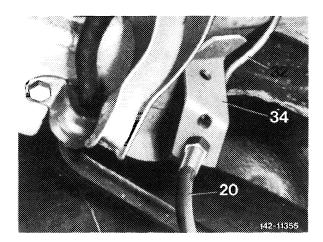


28 On vehicles with ABS

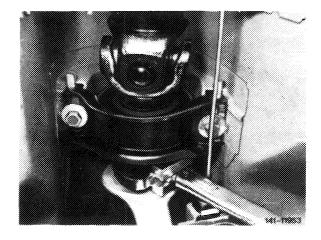
Pull cable (27) for rpm sensor in upward direction through rubber grommet in frame floor and connect to cable connector (41). Fasten cable with clamps (42).



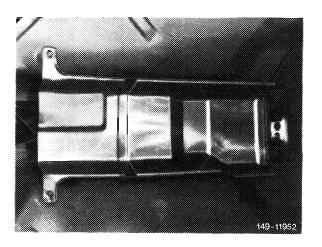
- 29 Connect both brake hoses (20) and bleed brake system (42–010).
- 30 Connect cable controls of parking brake and install mounting bracket. Adjust parking brake (42–525).



- 31 Tighten clamping nut on propeller shaft to 30–40 Nm.
- 32 Tighten propeller shaft intermediate bearing to 25 Nm.



- 33 Mount shielding plate (on models 123.03/05/09 only).
- 34 Install exhaust system (40-100).

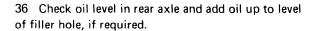


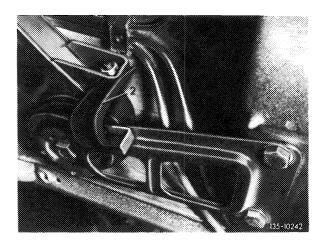
35 Mount stop limit (2) at front to rear axle carrier (only on vehicles with engine 617, with engine 616 starting March 1978, with engine 115 starting September 1979 and with engine 102).

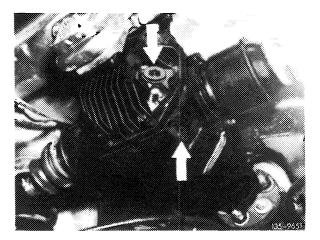
Attention!

Clearance between rubber buffer of stop limitation and supporting plate should be 2–3 mm with vehicle ready for driving. To adjust, make sheet metal angle piece with the following dimensions:

Thickness 2.5 mm, length 60 mm, height 20 mm, width 10 mm.







- 37 Check vehicle level on rear axle (40-300).
- 38 Check headlight adjustment.

