

Oil Types and Filling Capacities

Rear axle without differential lock (positive traction)	Hypoid transmission fluid SAE 90 Refer to pertinent instructions page No. 235
Rear axle with differential lock (name plate on rear axle housing)	Special hypoid transmission fluid Refer to pertinent instructions page No. 235.3
Filling capacity large center housing	1,3 lits.

Gear Assembly

Model	Vehicles	Ratio	Number of Teeth	Center Housing
107.024 107.044	Standard	1 : 3,07	46 : 15	large

Tightening Torques

	Nm	(kpm)
Hex. socket screws for attaching rear rubber mounting to end cover	120	(12)
Hex. socket screws for attaching rear rubber mounting to frame floor	15	(2,5)
Hex. bolts for attaching front rubber mounting to frame floor	120	(12)
Hex. bolts for attaching supporting plate to frame floor	40	(4)
Clamping nut of propeller shaft	30–40	(3–4)

Special Tool

Vehicle jack top	116 589 10 61 00
Spring tensioner for rear spring	115 589 00 31 00
Tensioning wrench for spring tensioner	116 589 01 09 00
Measuring device for position of semi-trailing arms	107 589 02 23 00
Torque wrench	001 589 35 21 00
Special open end wrench SW 46	000 589 13 01 00



35.1 Removal and Installation of Complete Rear Axle

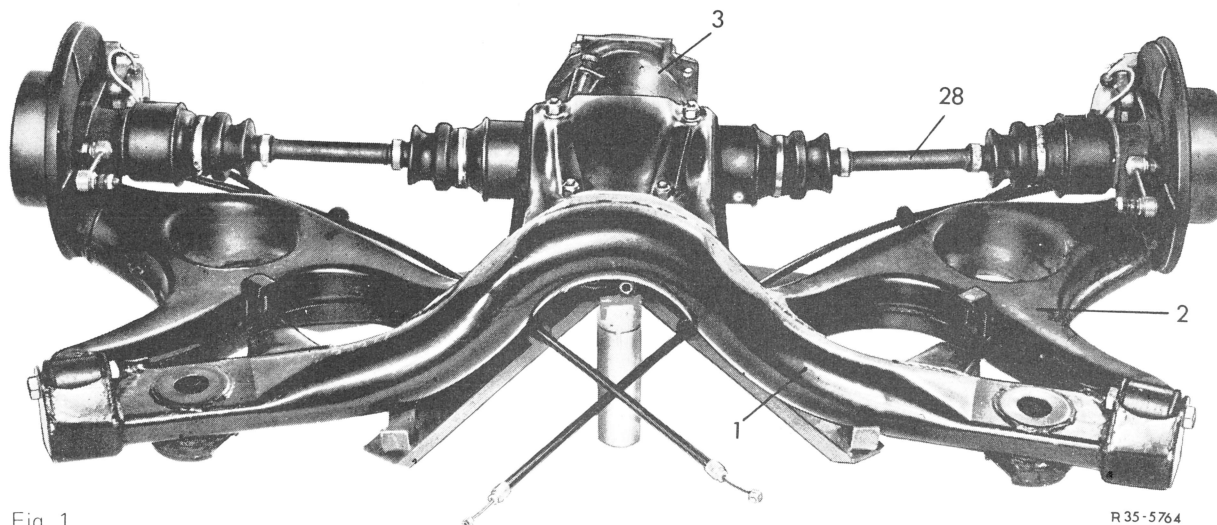


Fig. 1

1 Rear axle carrier 2 Semi-trailing arm 3 Rear axle center housing 28 Rear axle shaft

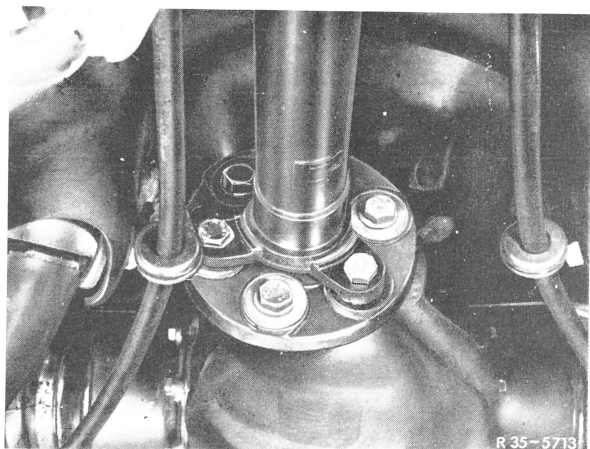


Fig. 2

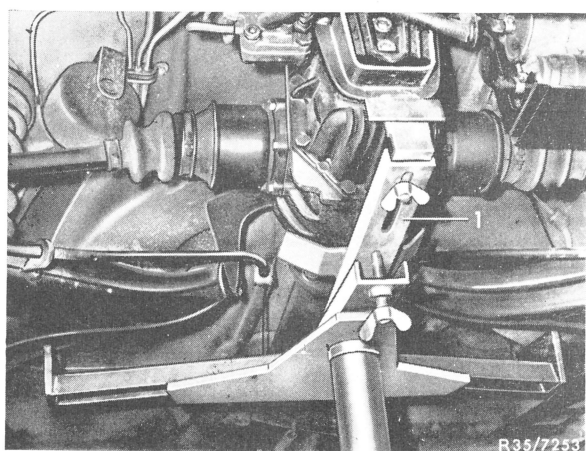


Fig. 3

1 Vehicle jack top (version 2)

Removal

- 1 Remove shock absorber (32.1–110 and 32.2–110).
- 2 Remove exhaust assembly (Service Manual „Engines“ 49.1–100).
- 3 Unscrew shielding plate.
- 4 Unscrew holding bracket of parking brake and disconnect cable controls (Service Manual „Brakes, Steering“ 42.1–525 and 42.3–525).
- 5 Unscrew both brake hoses and close brake lines against entry of dirt.
- 6 Loosen clamping nut and unscrew propeller shaft intermediate bearing on frame floor.
- 7 Unflange propeller shaft at rear and push forward out of centering (Fig. 2).
- 8 Loosen torsion bar on rear axle (32.1–310, 32.1–320, 32.2–310 and 32.2–320).
- 9 Remove rear springs (32.1–230 and 32.2–230).
- 10 Slide vehicle jack top with a vehicle jack or pit lift under rear axle and lift until seated (Fig. 3).
- 11 Unscrew supporting plates and front rubber mounting on frame floor (Fig. 4).

12 Unscrew rear rubber mounting on frame floor (Fig. 5).

13 Carefully lower rear axle (Fig. 6).

Caution! When lowering and when transporting rear axle make sure that cover plates of brake discs are not damaged.

14 Unscrew rear rubber mounting from end cover.

Installation

15 Check front and rear rubber mounting and replace, if required.

16 Attach rear rubber mounting to end cover. Tighten hexagon socket screws to 120 Nm (12 kpm) (Fig. 7).

17 Lift rear axle with vehicle jack top and insert front rubber mounting into guides on frame floor (Fig. 6).

18 Mount supporting plates for rubber mounting on frame floor. Tighten hex. bolt on rubber mounting to 120 Nm (12 kpm) and hex. bolts on supporting plate to 40 Nm (4 kpm) (Fig. 4).

19 Attach rear rubber mounting to frame floor and tighten hex. bolts to 25 Nm (2.5 kpm). (Fig. 5).

Caution! Locking bolts with plastic coating (micro-encapsulation) may be used only once.

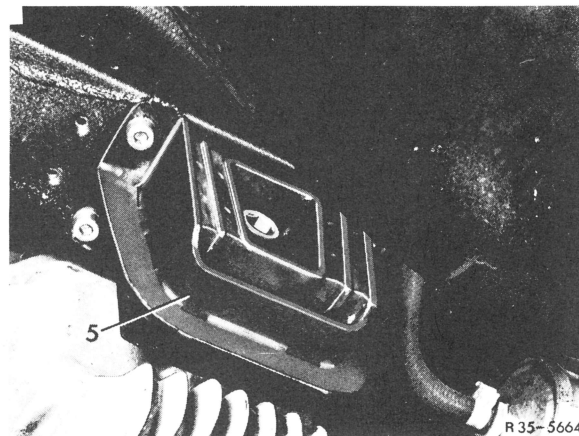


Fig. 5

5 Rubber mounting

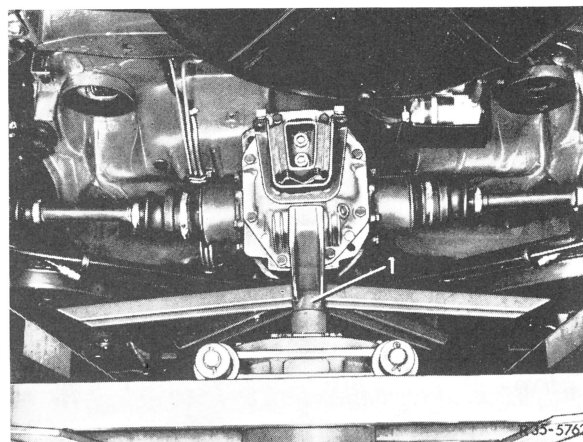


Fig. 6

1 Vehicle jack top (version 1)

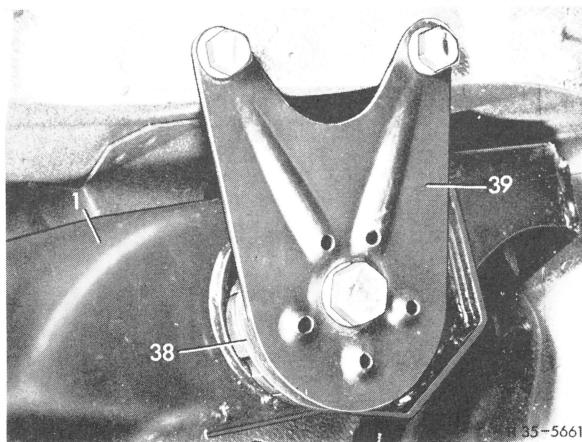


Fig. 4

1 Rear axle carrier 39 Supporting plate
38 Rubber mounting

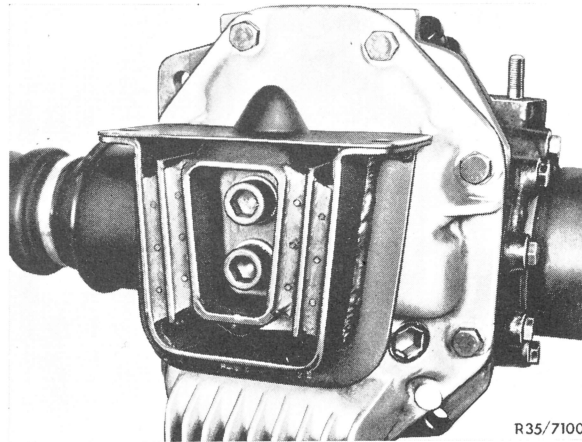


Fig. 7

35.1 Removal and Installation of Complete Rear Axle

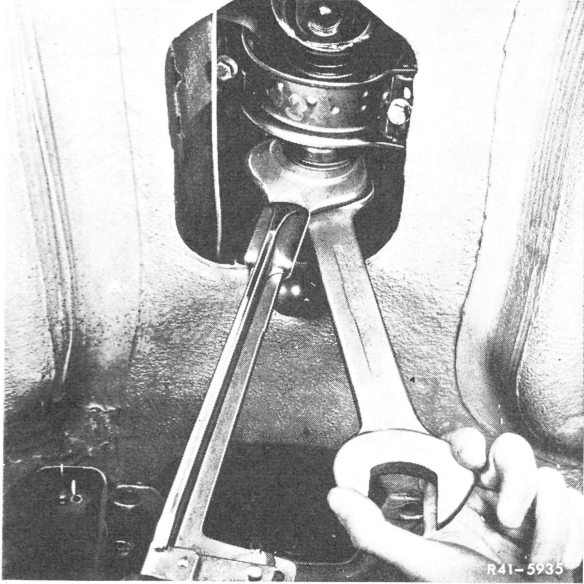


Fig. 8

- 20 Remove vehicle jack top.
- 21 Flange-on propeller shaft (Fig. 2).
- 22 Lightly attach propeller shaft intermediate bearing.
- 23 Install rear springs (32.1–230 and 32.2–230).
- 24 Install shock absorbers (32.1–110 and 32.2–110).
- 25 Attach torsion bar to rear axle (32.1–310, 32.1–320, 32.2–310 and 32.2–320).
- 26 Connect both brake hoses and bleed brake system (Service Manual „Brakes, Steering“ 42.0–010).
- 27 Attach cable controls of parking brake and mount holding bracket. Adjust parking brake (Service Manual „Brakes, Steering“ 42.1–525 and 42.3–525).
- 28 Move vehicle several times back and forth in condition ready for driving, then tighten clamping nut on propeller shaft to 30–40 Nm (3–4 kpm) (Fig. 8).
- 29 Tighten propeller shaft intermediate bearing.
- 30 Mount shielding plate.
- 31 Install exhaust assembly (Service Manual „Engines“ 49.1–100).
- 32 Check oil level in rear axle and add oil up to overflow through filler hole, if required.
- 33 Check position of semi-trailing arm (40.1–300 and 40.2–300).
- 34 Check headlight aiming and adjust (Service Manual „Electrical Systems“ 82.0–250).