35-540 Replacement of radial sealing ring of rear axle shaft

Rear axle center piece installed.

Tightening torques		Nm
Hex socket necked-down bolt for attaching rear rubber bearing to rear axle end cover (rubber bearing 1st version)		140
Hex socket bolts or hex bolts for attaching rear rubber bearing to rear axle end cover (rubber bearing 2nd version)		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 rear axle end cover		45
Hex bolt for attaching rear axle shaft to rear axle shaft flange	1st version M 12	95
	2nd and 3rd version M 8	30
Special tools		
Installer for radial sealing ring with 65 mm OD	11004-7088	116 589 05 43 00
Installer for radial sealing ring with 81 mm OD	11004-7093	116 589 10 15 00
Installer for radial sealing ring for rear axle center piece without lateral bearing cap	11004-9150/1	126 589 00 15 00
Assembly tool for removal and installation of rear axle shaft on rear axle shaft flange	1004-7042	116 589 24 61 00

Layout of rear axle center piece with lateral bearing caps

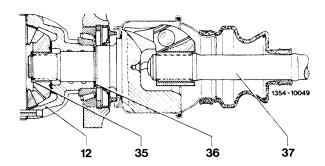
- Rear axle housing 16 Side gear 17 Thrust washer 18 Differential pinion Ball washer 20 Differential bolt 20a Clamping sleeve21 Tapered roller bearing
 - Sealing ring Compensating washer Bearing cap Radial sealing ring
- 26 Locking ring27 Spacing ring28a Rear axle shaft 28c Inner spider 28d Spider joint hub 28e Ball 28f Stop buffer 28g Protective sleeve 28h Sealing ring 28i Stop sleeve 28k Sealing ring 20a ₂₁ 28h 28g 28f 28e

18 19 16 17

3

Layout of rear axle center piece without lateral bearing caps

- Differential housing
- Locking ring 35
- Spacing ring Rear axle shaft



23 24 27 28c

28k 28a

1353-6108

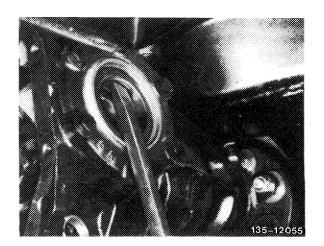
28d

Note

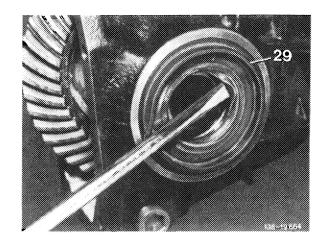
Thoroughly clean rear axle housing in range of bearing cap, so that no dirt can enter rear axle housing.

Removal

- 1 Completely remove rear axle shaft at respective end (35-620).
- 2 Force radial sealing ring out of bearing cap by means of a screwdriver.



Rear axle center piece with lateral bearing caps



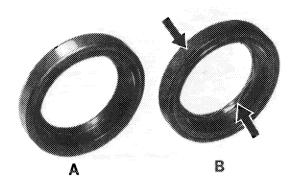
Rear axle center piece without lateral bearing cap

29 Radial sealing ring

3 Check running surface for radial sealing ring on inner spider and renew rear axle shaft, if required.

Note: Starting November 1979 only radial sealing rings with alternate thread for oil return together with rubber-coated sheet-metal jacket will be available (B, arrows). They can be used at the left and right. This will eliminate ground thread on rear axle shafts.

- A = Radial sealing ring without thread (1st version)
- B = Radial sealing ring with alternate thread and rubbercoated sheet-metal jacket (2nd version)



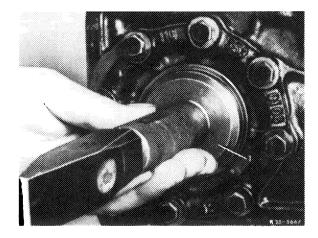
135-17049

Installation

Rear axle center piece with lateral bearing caps

4 Knock-in radial sealing ring with 65 mm OD by means of installer, until installer is flush with bearing cap.

Note: Coat radial sealing ring togehter with rubber-coated sheet-metal jacket on OD with rubber sliding compound "napthalene H or hypoid gear oil".

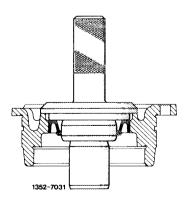


Attention!

On vehicles with large rear axle center piece there are 2 versions of bearing caps for radial sealing rings with 65 mm dia.

On 1st version, push radial sealing ring inwards until punch rests against lug for dirt labyrinth of bearing cap.

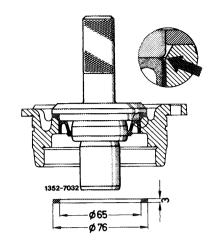
Radial sealing ring correctly inserted

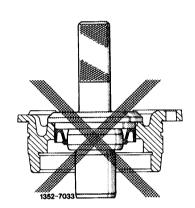


On 2nd version, push radial sealing ring inward until punch is flush with lower edge of chamfer (lug for dirt labyrinth is made shorter) of bearing cap.

To avoid excessive pressure, use spacing ring made according to drawing.

Radial sealing ring correctly inserted!

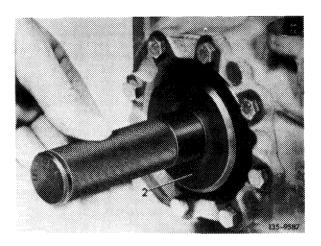




Radial sealing ring wrongly inserted!

5 Press radial sealing ring of 81 mm OD into bearing cap until installer rests against cap.

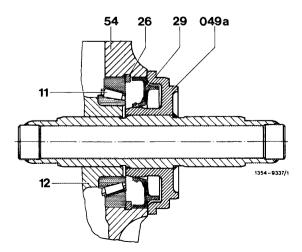
Note: Coat radial sealing ring together with rubbercoated sheet-metal jacket on OD with rubber sliding compound "naphtalene or hypoid gear oil".



Rear axle center piece without lateral bearing caps

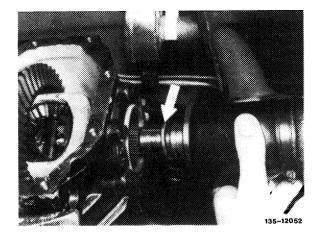
6 Coat radial sealing ring at OD with rubber sliding compound "naphtalene H or hypoid gear oil" and knock-in by means of installer, until installer (49a) rests against rear axle housing (54).

- Tapered roller bearing
- Transmission housing
- 26 Locking ring
- 29 Radial sealing ring
- 049a Installer
- Rear axle housing



- 7 Install rear axle shaft complete with spacing ring. For this purpose, use a new locking ring between spider and side gear (35–620).
- 8 Check end play between inner spider and differential housing.

There should be no noticeable end play; the locking ring should just barely turn in groove. If required, install thicker or thinner spacing ring.



9 Fill rear axle housing with oil up to level of filler hole.