



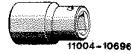



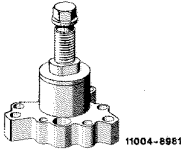
35-530 R and R drive pinion seal with differential housing installed

35-530 Replacement of radial sealing ring on drive pinion

Rear axle center piece installed.

Tightening torques		Nm	
Lock nut of propeller shaft	2-piece	30-40	
	3-piece	front	30-40
		rear	200

Special tools

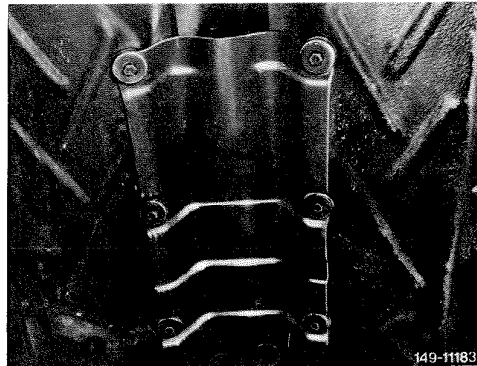
Holding wrench for universal flange		116 589 10 07 00
Socket 3/4" square for slot nut on universal flange		115 589 01 07 00
Socket 30 mm double hex. 3/4" square for double hex. collar nut on universal flange		126 589 02 09 00
Thrust piece for radial seal (component of remover and installer for drive pinion)		116 589 12 61 03
Torque measuring tool for friction torque of rear axle drive 30-600 Ncm		001 589 49 21 00
Connection 3/4" square head to 1/2" square socket		100 589 02 59 00
Puller for universal flange		116 589 19 33 00

35-530 R and R drive pinion seal with differential housing installed

Removal

Models 107, 116, 126

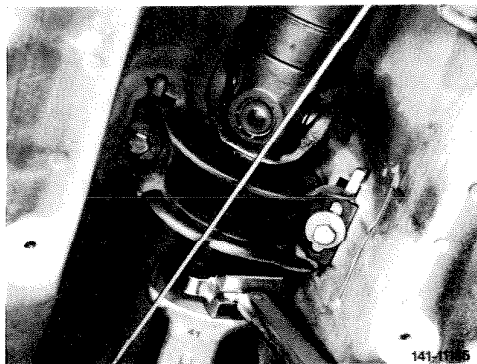
- 1 Remove exhaust system (49-100).
- 2 Unscrew shielding plate.



All models

- 3 Loosen clamping nut and unscrew propeller shaft intermediate bearing on frame floor.

Note: On 3-piece propeller shaft loosen front lock nut only.

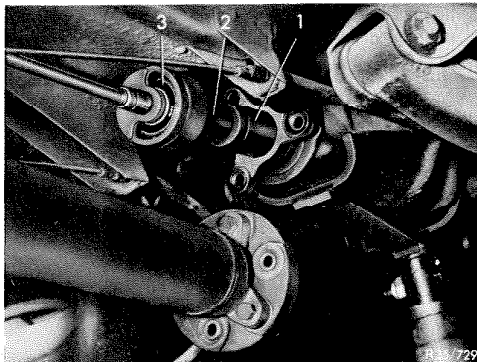


- 4 Unflange propeller shaft from rear axle and push forward out of concentric alignment.

- 5 Measure friction torque of complete rear axle drive and write down.

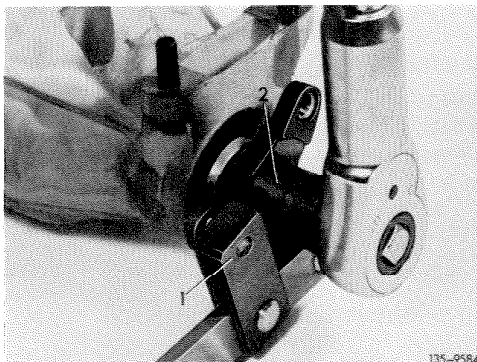
Attention!

When measuring friction torque, make sure that the rear axle shafts are approximately horizontal and that neither the brake pads on brake discs nor the brake shoes of the parking brake are wiping against drum.



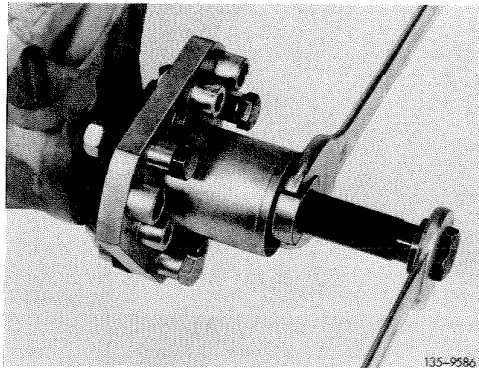
- 6 Plug holding wrench on universal flange and loosen slot nut or double hex. collar nut with slot nut socket or double hex. socket.

Note: Do not unlock on slot nut or double hex. collar nut with crush nut (since January 1974 or November 1981), but simply turn loose.



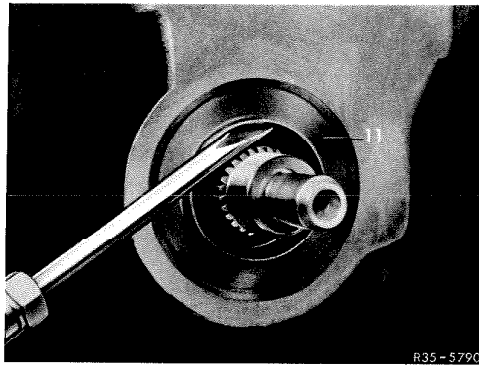
35-530 R and R drive pinion seal with differential housing installed

7 Pull universal flange from drive pinion, using puller, if required.



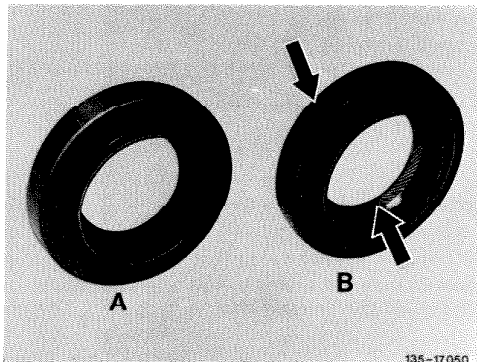
8 Force radial sealing ring out of rear axle housing by means of a screwdriver.

9 Check running surface for radial sealing ring on universal flange. Replace universal flange, if running surface is worn.



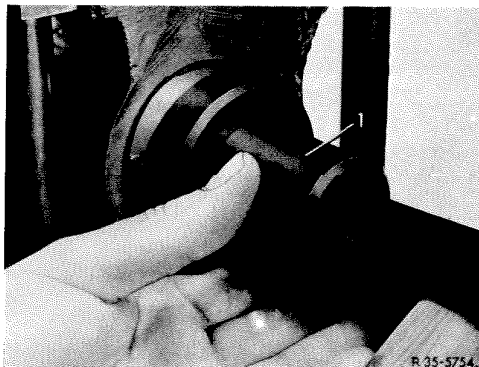
Note: Starting November 1979, only radial sealing rings with oil return feed thread and rubber-coated sheet-metal jacket will be available (B, arrows). This change eliminates the ground thread on universal flange.

- A Radial sealing ring without ground thread (1st version)
- B Radial sealing ring with righthand thread and rubber-coated sheet-metal jacket (2nd version)



Installation

10 Coat radial sealing ring with rubber-coated sheet-metal jacket on OD with rubber sliding compound "naphtalene H or hypoid gear oil" and knock-in up to stop in rear axle housing by means of thrust piece (1).



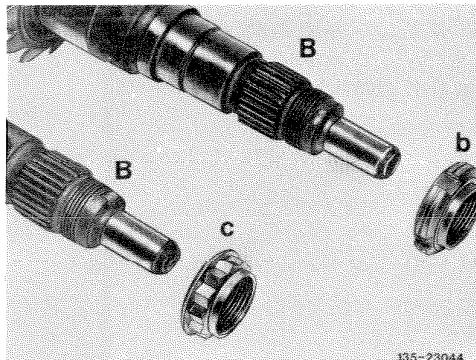
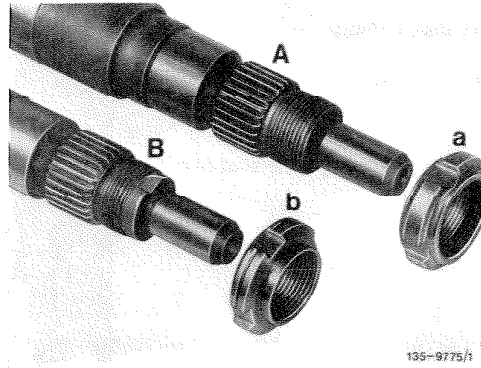
35-530 R and R drive pinion seal with differential housing installed

11 Plug-on joint flange and carefully tighten with a new slot nut until measured or recorded friction torque has been attained. Tightening torque of slot nut should amount to at least 180 Nm. If this minimum tightening torque is not attained, replace elastic spacing sleeve.

Attention!

On drive pinion of 1st version without groove on threads (A) mount **self-locking slot nut** (polystop slot nut, a) **only**.

On drive pinion of 2nd version with groove (B) **optionally use a crush slot nut (b) with a groove on circumference, or a double hex. collar nut (c)**. Other installation combinations are not permitted.

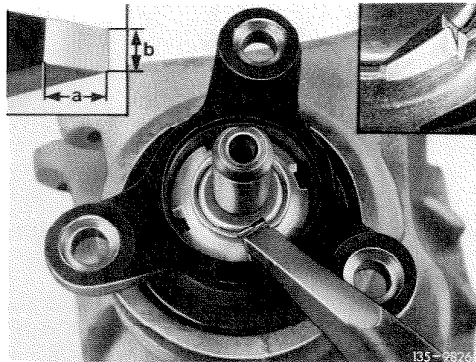


12 Peen crush slot nut or double hex. collar nut with a peening tool into one of the two grooves of drive pinion in such a manner that no gap shows up between groove and locking tab.

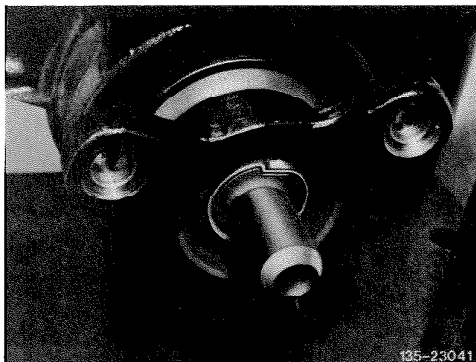
Attention!

Blows should not be too heavy.

Dimensions for peening tool: "a" = approx. 8 mm
"b" = approx. 4 mm



Crush slot nut



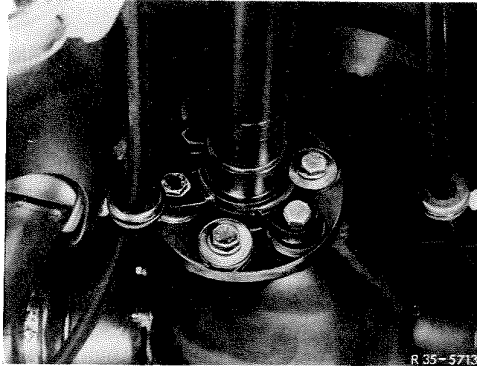
Double hex. collar nut

35-530 R and R drive pinion seal with differential housing installed

13 Attach propeller shaft to flange.

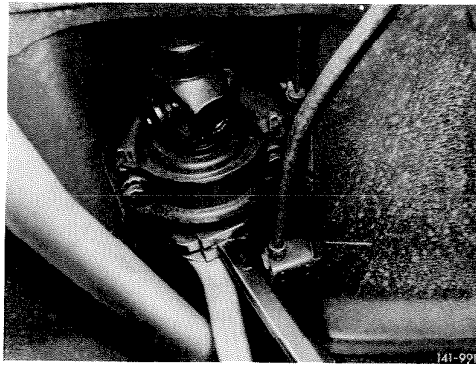
14 Attach propeller shaft intermediate bearing but do not yet tighten.

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



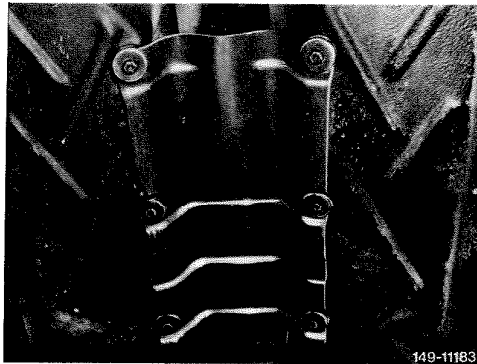
16 Tighten lock nut on propeller shaft to 30-40 Nm.

17 Tighten propeller shaft intermediate bearing.

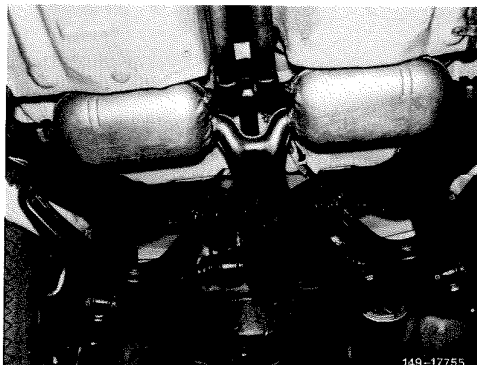


Models 107, 116, 126

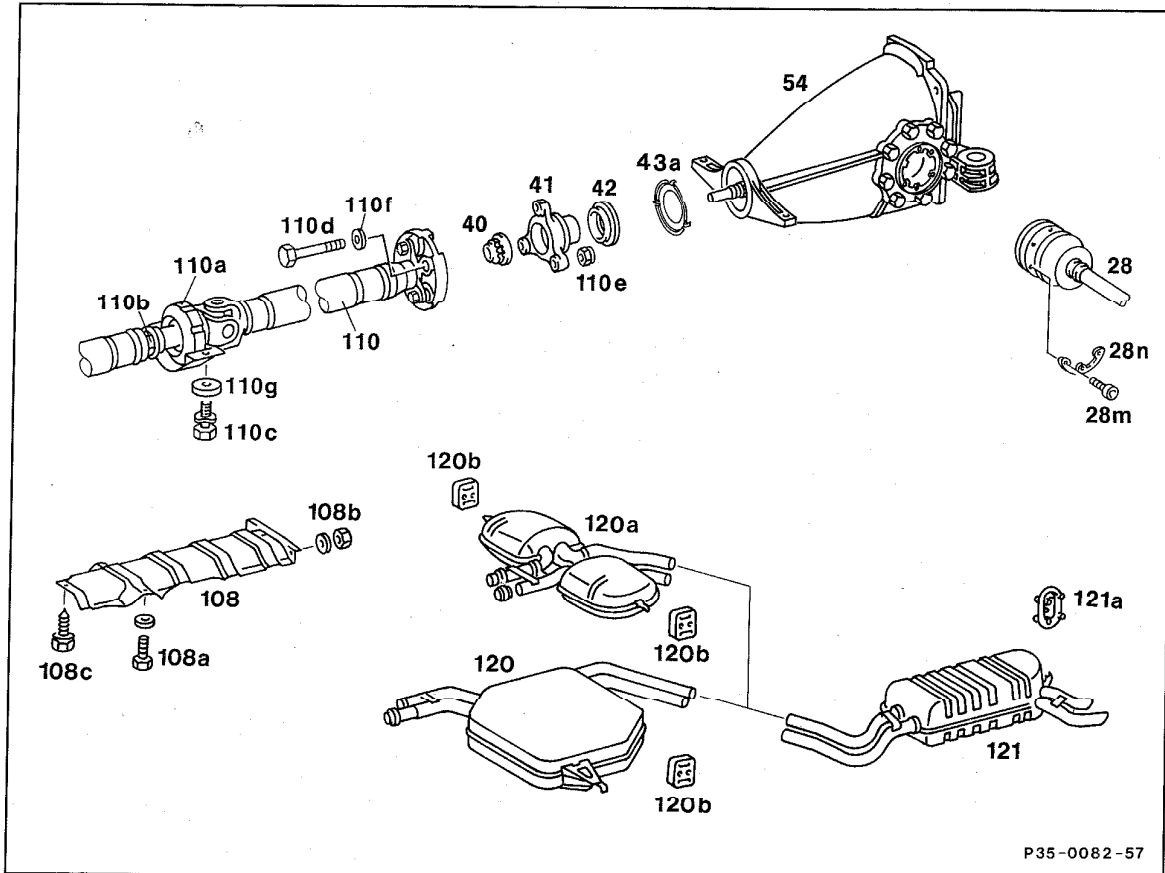
18 Mount shielding plate.



19 Install exhaust system (49-100).



35-530 R and R drive pinion seal with differential housing installed



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P35-0082-57

- | | |
|---|---|
| Rear axle oil | drain and fill up to oil fill hole (refer to Factory Approved Service Products list ¹⁾). |
| Rubber rings on exhaust system (120-122a) | unhook on center and rear mufflers, hook on. Support exhaust system on rear muffler (step 2). |
| Exhaust guard plate (108) | remove, install, 25 Nm (step 3). |
| Drive shaft gland nut (110b) | loosen, tighten, 30-40 Nm, open-end wrench 46 mm 126 589 00 01 00, torque wrench 001 589 66 21 00. |
| Drive shaft intermediate bearing (110a) | screw off, screw on, 25 Nm (step 4). |
| Drive shaft (110) | remove at joint flange (41), install, replace self-locking hex. nuts, M10 = 40 Nm, M12 = 60 Nm (steps 5 and 6). |

¹⁾ Supplied with owner's literature or available through your local authorized Mercedes-Benz Dealer.

35-530 R and R drive pinion seal with differential housing installed

Rear axle shafts (28) on connection flanges	remove, install and tie in place (steps 7 and 8).
Frictional torque at rear axle differential housing . .	measure and note, torque measuring unit 001 589 49 21 00, socket wrench socket 30 mm 126 589 02 09 00, connector 3/4" 100 589 02 59 00.
12-point collar nut (40)	loosen or tighten in increments until measured frictional torque is achieved (step 10), retaining wrench 116 589 10 07 00, socket wrench socket 30 mm 126 589 02 09 00, torque wrench 001 589 74 21 00.
Joint flange (41)	remove, reinstall, pull with puller 116 589 19 33 00 if required (step 11).
Radial shaft seal (42)	press out of differential housing, press in, installation tool 124 589 02 15 00.
Thrust washer (43a)	replace if present (step 13).
Oil level	check, add oil if required.

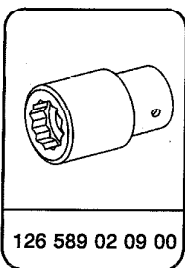
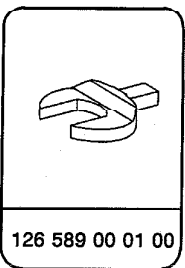
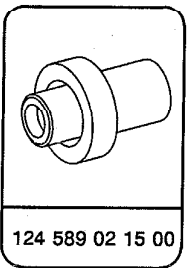
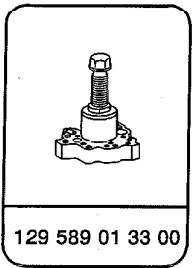
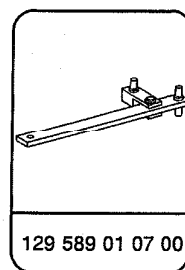
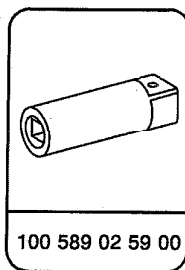
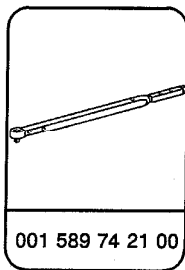
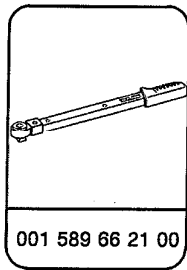
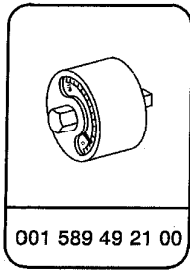
Oil types and capacities

Standard differential	Hypoid gear oil SAE 90 refer to Factory Approved Service Products list ¹⁾
Limited slip differential with ASD (indicator plate on differential housing)	Special hypoid gear oil refer to Factory Approved Service Products list ¹⁾ .
Capacity, differential housing with ring gear dia. 210	1.3 liters
Capacity, differential housing with ring gear dia. 185	1.0 liters

¹⁾ Supplied with owner's literature or available through your local authorized Mercedes-Benz Dealer.

35-530 R and R drive pinion seal with differential housing installed

Special tools

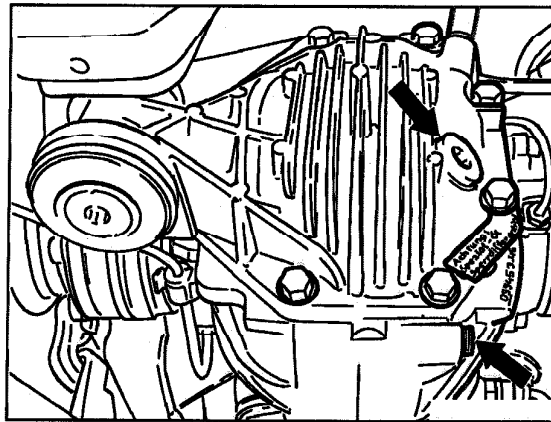


Removal, installation

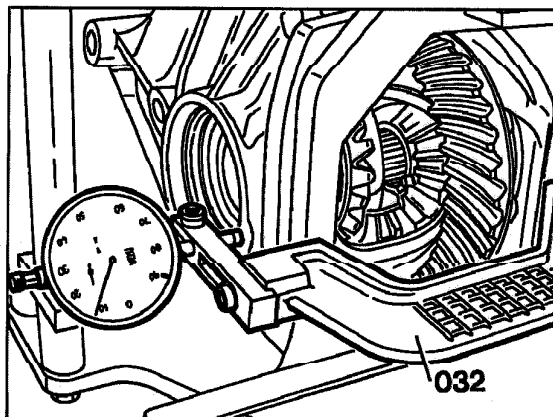
- 1 Drain oil from rear axle, refill (arrows).

Installation note

Pay attention to oil types and capacities.



- 2 Unhook rubber rings on center and rear mufflers, hook in and support rear muffler with suitable belt.



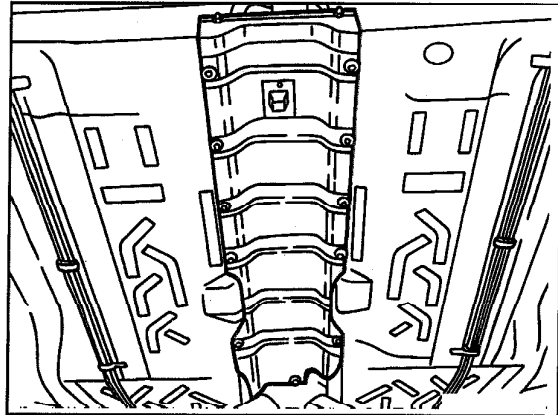
Arrangement, model 126

35-530 R and R drive pinion seal with differential housing installed

- 3 Remove exhaust guard plate, install.

Installation note

Tightening torque for M8 hex. nuts and bolts:
25 Nm.

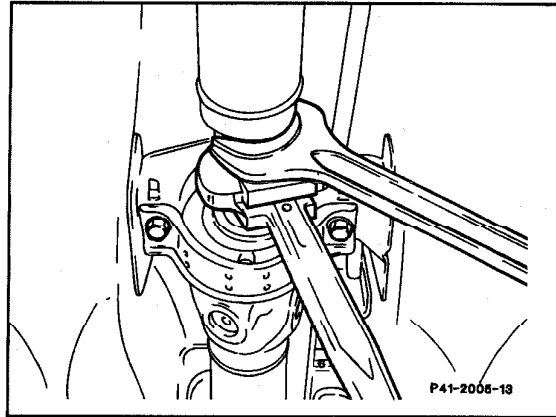


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- 4 Loosen gland nut, tighten and screw drive shaft intermediate bearing off on frame floor, screw on.

Installation note

Gland nut 30-40 Nm,
drive shaft intermediate bearing 25 Nm.
Torque wrench 001 589 66 21 00,
open-end wrench 46 mm 126 589 00 01 00.



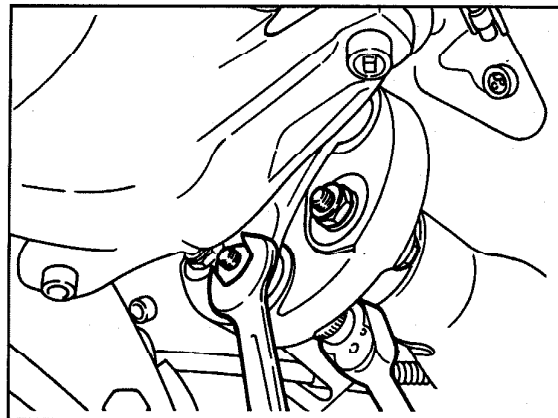
P41-2006-13

P41-2005-13

- 5 Remove drive shaft on rear axle differential housing, install.

Installation note

Replace self-locking hex. nuts.
Tightening torque M10 = 40 Nm;
M12 = 60 Nm.

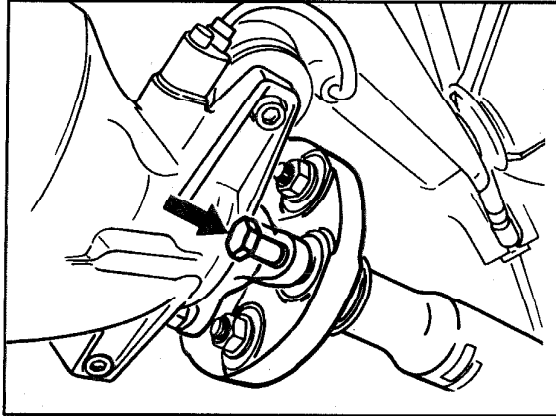


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35-530 R and R drive pinion seal with differential housing installed

Note

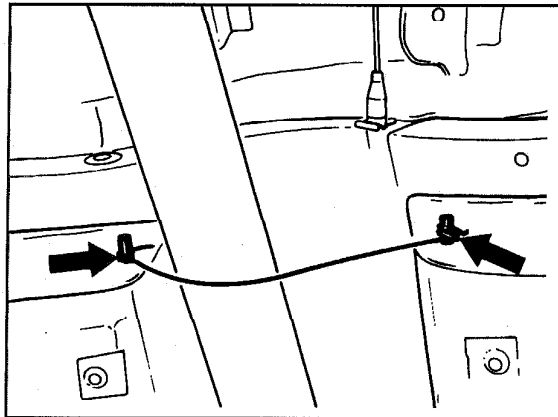
On models 126.03/04 up to approx. beginning of 10/85 the three hex. head bolts for mounting the joint plate on the joint flange must be installed from the rear toward the front for reasons of space. The bolts can only be inserted when the joint flange is located at the same height as the point on the differential housing marked with an arrow.



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⚠ CAUTION!

Secure drive shaft against falling with binding wire; for this purpose use two mounting screws of exhaust guard plate (arrows).



P35-2463-13

35-530 R and R drive pinion seal with differential housing installed

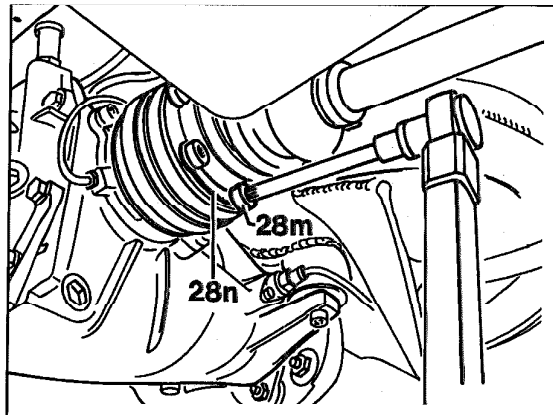
7 Screw rear axle shafts off at connection flanges, screw on and remove with retaining bolts (28m) and washers (28n), reinstall.

CAUTION!

Assure that the screwdriver insert is completely inserted into the serrated or Allen profile when loosening the retaining bolts - clean bolt head if required.

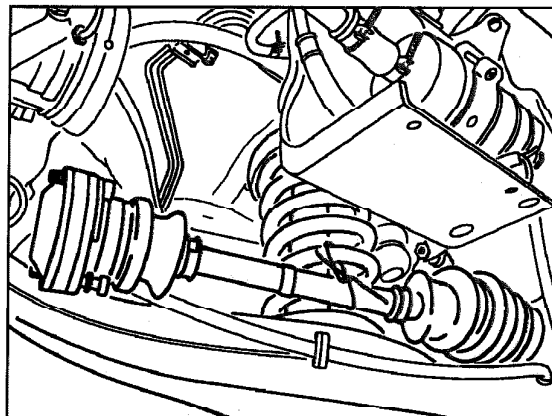
Installation note

Replace self-locking retaining bolts. On retaining bolts with M10 thread oil contact surface and thread. Tightening torque M10 = 70 Nm; M12 = 125-145 Nm.



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8 Press rear axle shafts together and fasten to rear springs with wire, unfasten.

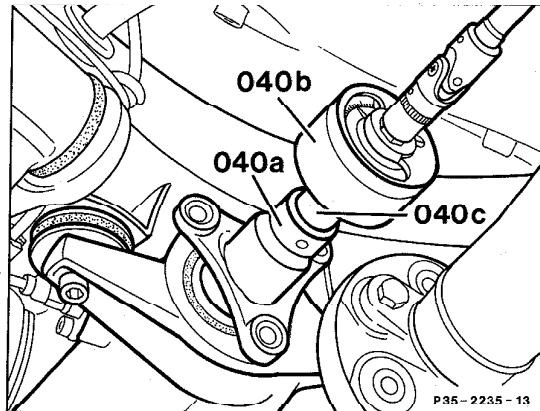


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35-530 R and R drive pinion seal with differential housing installed

9 Measure and note frictional torque of rear axle differential housing.

Torque measuring instrument 001 589 49 21 00 (040b), socket wrench socket 30 mm 126 589 02 09 00 (040a), connector 3/4" 100 589 02 59 00 (040c).

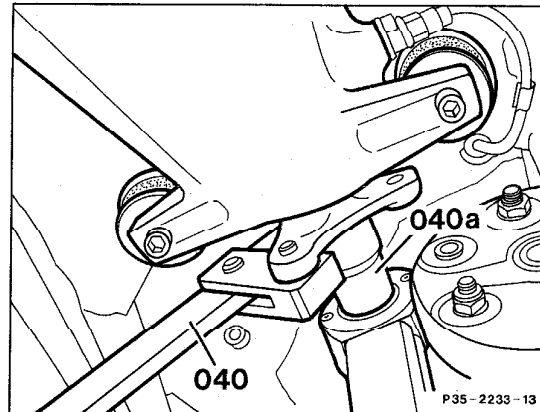


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10 Attach holding wrench (040) to joint flange and screw out 12-point collar nut with socket wrench socket (040a), screw in.

Note

Do not disengage lock on 12-point collar nut with pinch collar lock, only break loose.



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35-530 R and R drive pinion seal with differential housing installed

Installation note

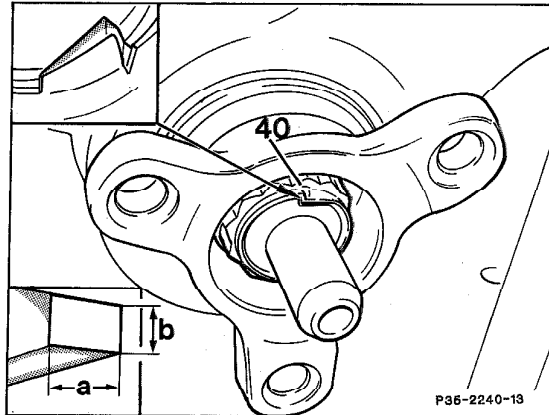
Replace 12-point collar nut (40). Carefully tighten 12-point collar nut in increments until measured or noted frictional torque is reached. The tightening torque for the 12-point collar nut must be at least 180 Nm. If this minimum tightening torque is not reached, replace resilient spacer sleeve.

Knock 12-point collar nut into one of two grooves in drive pinion with punch so that there is no space between the groove and retaining tab (arrow, cutout). Holding wrench

116 589 10 07 00, socket wrench socket 30 mm

126 589 02 09 00, torque wrench

001 589 74 21 00.



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Dimensions for punch, cutout bottom left
"a" = approx. 8 mm
"b" = approx. 4 mm

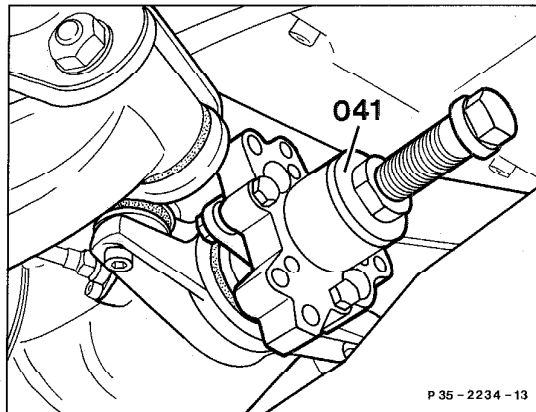
CAUTION!

Do not hit hard in axial direction.

11 Pull joint flange off of drive pinion, use puller (041) if required, remove and insert. Puller 116 589 19 33 00.

Installation note

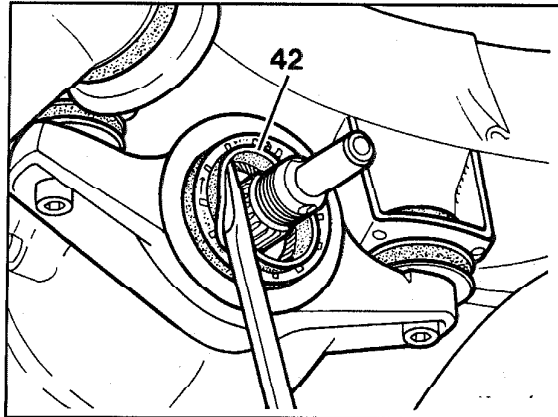
Check running surface for radial shaft seal on joint flange. If running surface is worn, replace joint flange.



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35-530 R and R drive pinion seal with differential housing installed

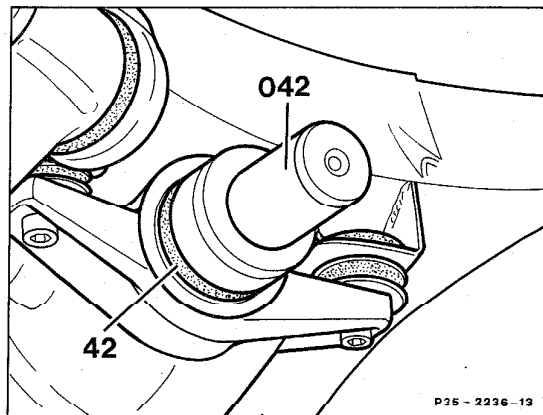
12 Press radial shaft seal (42) out of differential housing with suitable screwdriver.



P35-2237-13

Installation note

Drive radial shaft seal (42) into differential housing against stop with installation punch 124 589 02 15 00 (042).



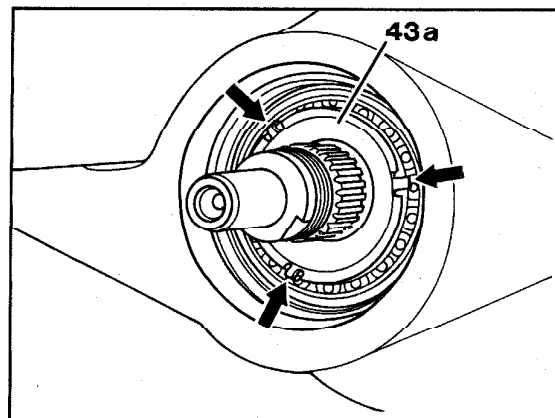
P26 - 2236 - 13

P35-2236-13

13 Always replace thrust washer (43a) for prevention of load change knocking, if present.

⚠ CAUTION!

Assure that none of the retaining lugs (arrows) on the thrust washer are broken off when pressing out the radial shaft seal; remove lug in differential housing if required.

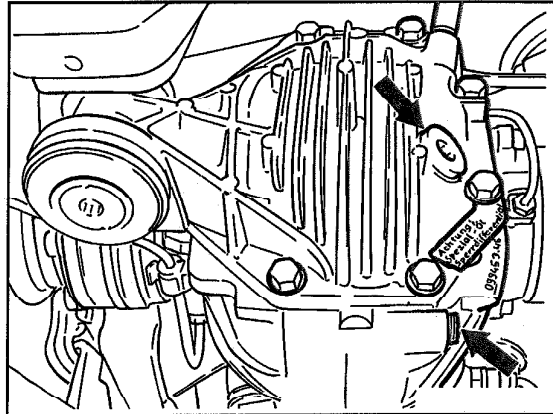


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35-530 R and R drive pinion seal with differential housing installed

14 Fill differential housing with hypoid gear oil up to height of fill opening (refer to Factory Approved Service Products list).

15 Install in opposite order.



P35-2239-13