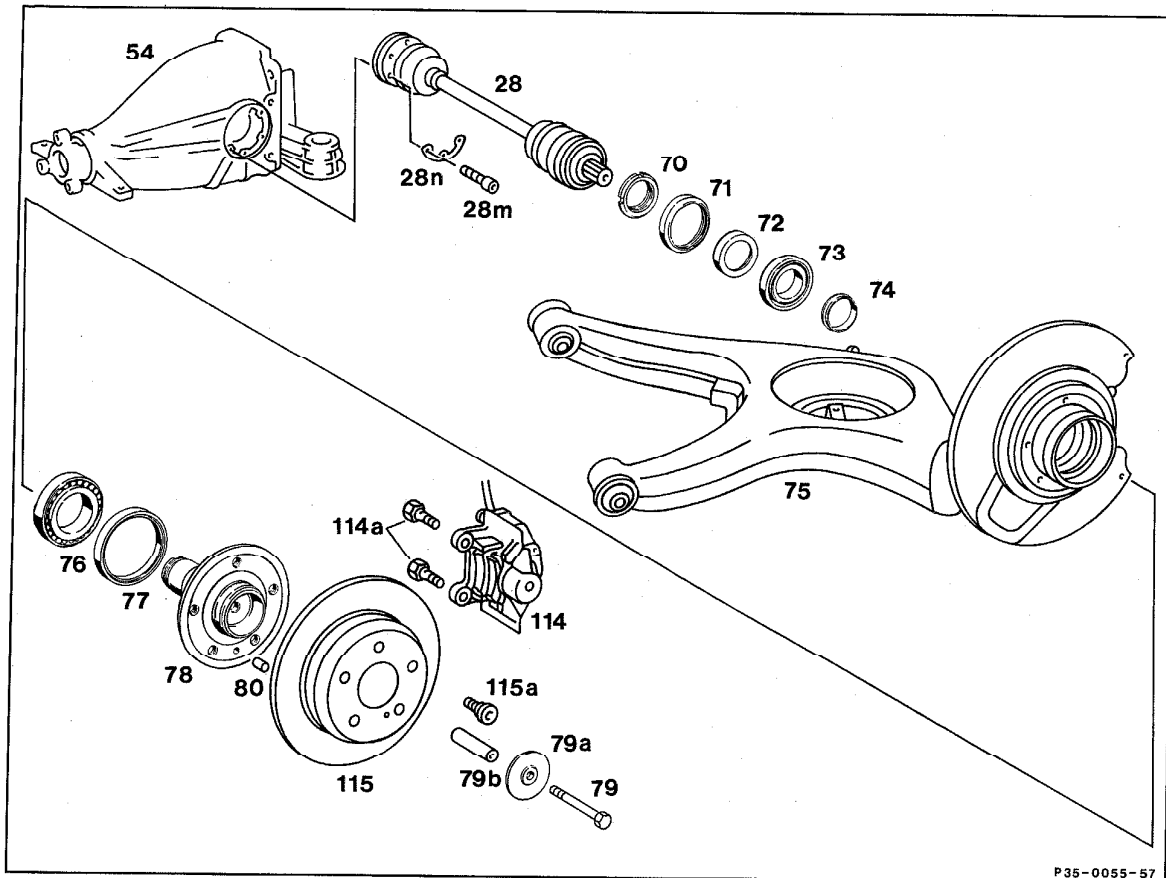


35-0130 R and R rear wheel hub, adjustment of bearings

Preliminary work:
R and R wheels 40-0110



P35-0055-57

P35-0055-57

Rear axle shaft (28)	remove, install (Steps 1 - 3).
Caliper (114) and brake disc (115)	remove, install (42-0228).
Slot nut (70)	unscrew, screw in and tighten. End play 0.04 - 0.06 mm. Install new spacing sleeve (74).
	Assembly plate 136 589 05 31 00
	Socket for slot nut 115 589 02 07 00
	Dial gauge holder 363 589 02 21 00
	Dial gauge (conventional)
Rear wheel hub (78)	pull off possibly using impact puller
	201 589 10 33 00 (Step 8).
Seal (72)	remove, position and replace.

35-0130 R and R rear wheel hub, adjustment of bearings

Inner seal (71)	press off with screwdriver and pull in with assembly tool 201 589 00 61 00. Coat space between the two sealing lips with some multi-purpose grease (Step 10).
Inner taper roller bearing (73)	remove, reinstall. When assembling coat, fill, the cavity between the two outer bearing rings in the wheel carrier and taper roller bearing inner races with approx. 50 g of multi-purpose grease (Step 10). Assembly tool 201 589 00 61 00.
Outer seal (77)	press out. Pull in with installer 116 589 11 61 00 (Step 11).
Outer race of outer taper roller bearing (76)	pull out with puller 115 589 00 33 00. Pull in with installer 116 589 11 61 00 (Steps 12 - 13).
Outer race of inner taper roller bearing (73)	drive out with remover (115 589 02 43 00. Pull in with installer 116 589 11 61 00 (Step 13).
Spacing sleeve (74)	remove, position, only use once (Step 14).
Outer taper roller bearing (76)	pull off with puller 001 589 36 33 00 and collet 000 589 02 34 00. Press off with suitable tube (Step 17).

35-0130 R and R rear wheel hub, adjustment of bearings

Rear wheel bearing

End play of rear wheel hub in mm	0.03 - 0.06
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Rear wheel hub dimensions in mm

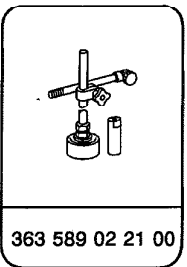
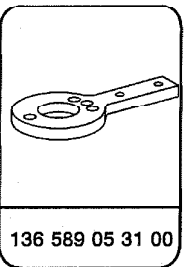
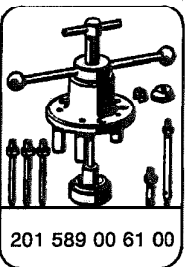
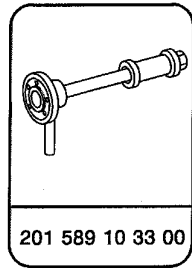
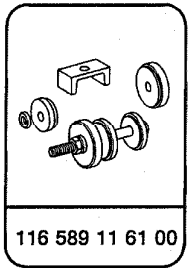
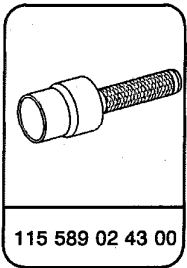
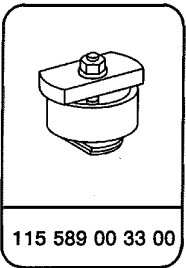
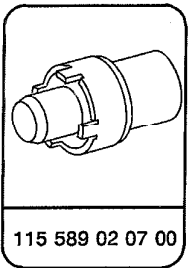
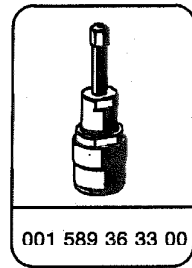
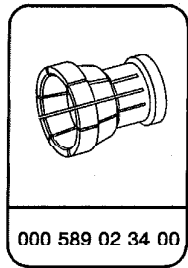
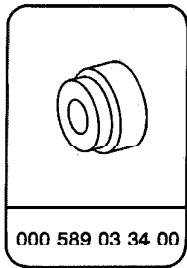
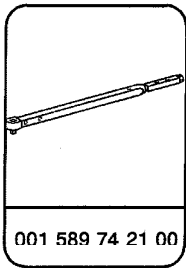
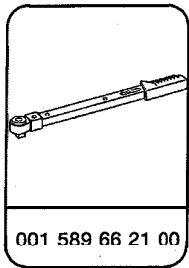
Permissible vertical run out on concentric alignment in installed condition	0.12	
Permissible lateral run out in installed condition	0.12	
Thickness of flange	9.5 - 10.0	
Permissible vertical run out on bearing seats and on running surfaces for seals	0.03	
Permissible vertical run out on concentric alignment	0.02	
Centering boss (outside diameter) for brake disc	67.00	
	66.97	
Dia. of bearing seats	outside	46.028
		46.017
	inside	41.013
		41.002
Diameter of running surface for outer seal		72.00
		71.81
Oil return spiral on running surface for outer seal	Left hand flange	Righthand spiral
	Right hand flange	Lefthand spiral
	Length of spiral on circumference of running surface	20
Width of spacing sleeve		11.8 - 12.0

Lubricant

Lubricant for rear wheel bearing	Multi-purpose grease refer to specifications for service products page 267
Quantity each side	50 g

35-0130 R and R rear wheel hub, adjustment of bearings

Special tools



Conventional tool

Dial gauge A 1 DIN 878

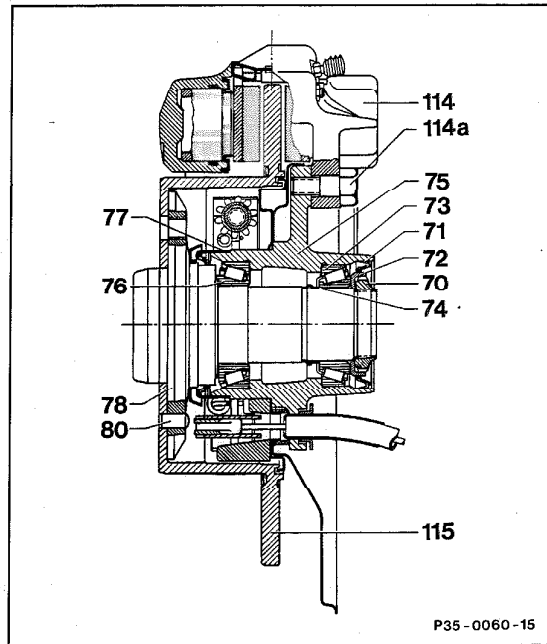
e.g. Company Mahr,
D-7000 Esslingen
Part No. 311 00

35-0130 R and R rear wheel hub, adjustment of bearings

Note

Work on bearing of rear wheel hub can also be completed with the rear axle installed.

- 70 Slot nut
- 71 Inner seal
- 72 Seal (thrust pad)
- 73 Inner taper roller bearing
- 74 Spacing sleeve
- 75 Semi-trailing arm
- 76 Outer taper roller bearing
- 77 Outer seal
- 78 Rear wheel hub
- 80 Parallel pin
- 114 Caliper
- 114a Self-locking hexagon bolt
- 115 Brake disc

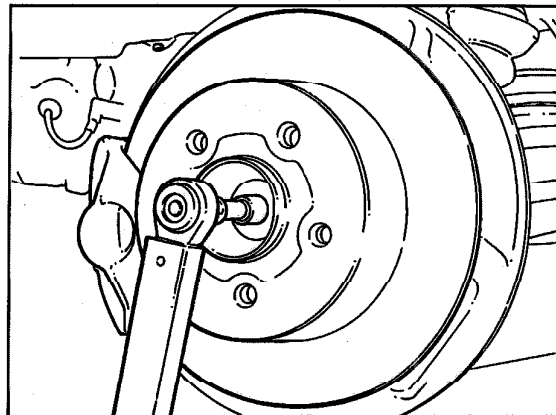


P35-0060-15

P35-0060-15

Removal and installation

- 1 Unscrew, screw in hexagon bolt for attaching rear axle shaft to rear wheel hub and remove together with spacing sleeve and tensioning washer.



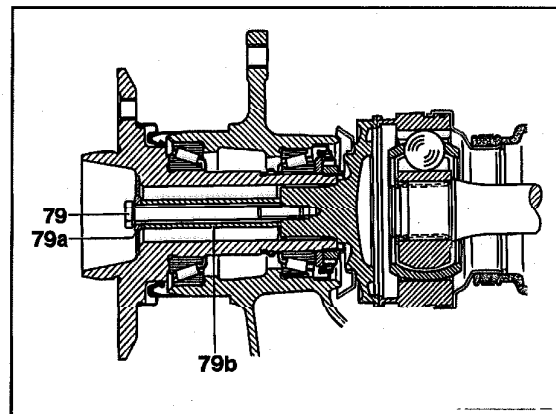
P35-2105-13

Note

Tightening torque 30 Nm (79). Torque wrench 001 589 66 21 00.

⚠ CAUTION!

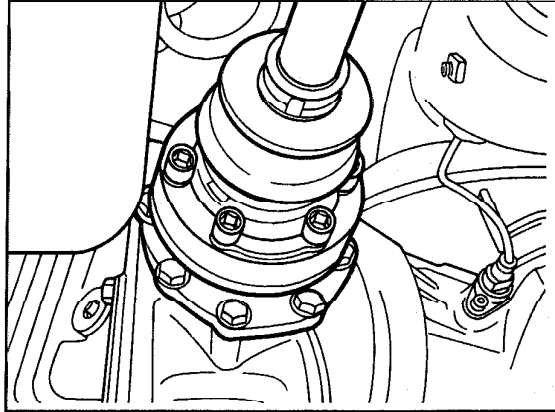
Replace tensioning washer (79a) after one-time use. Oil tensioning washer (79a) in area of bolt head.



P35-0058-13

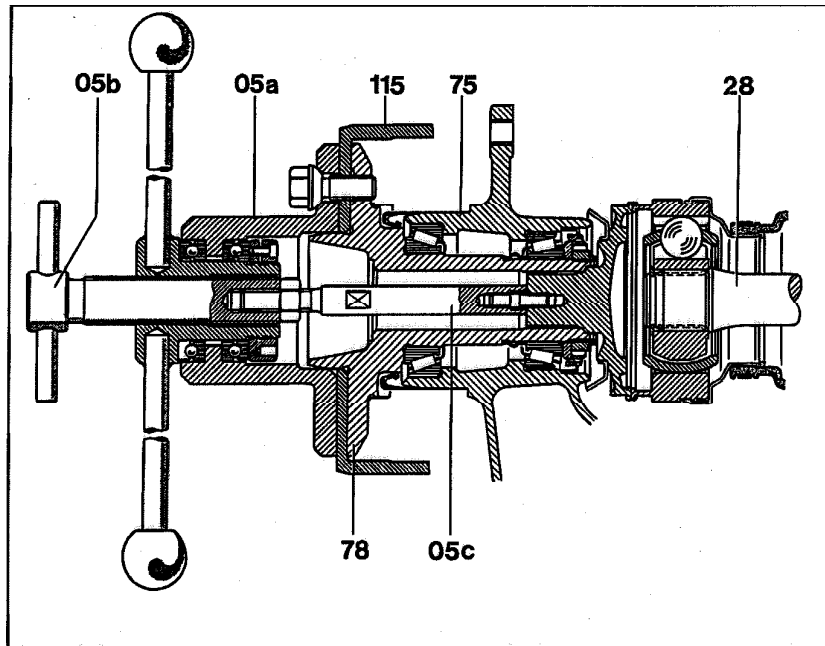
35-0130 R and R rear wheel hub, adjustment of bearings

2 Removal and installation of rear axle shaft (35-0620).



P35-2106-13

3 If required, push out, push in rear axle shaft (28) at rear wheel hub (78) by means of assembly tool 201 589 00 61 00 (05a - 05c).

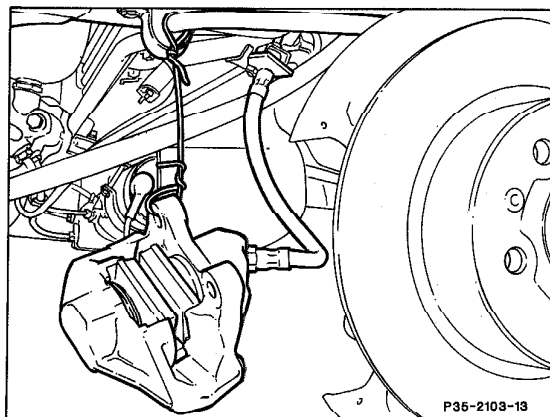


P35-0059-35

35-0130 R and R rear wheel hub, adjustment of bearings

4 Remove, install caliper and brake disc (42-0228).

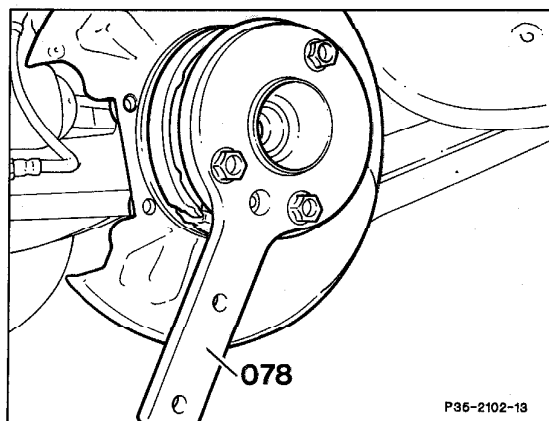
5 Attach caliper to stabilizer bar with binding wire.



P35-2103-13

P35-2103-13

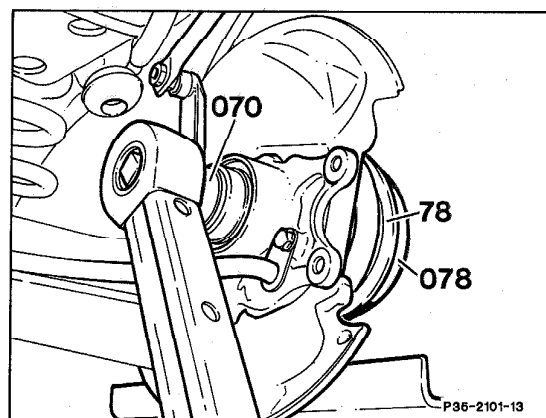
6 Detach, mount assembly plate 136 589 05 31 00 (078).



P35-2102-13

P35-2102-13

7 Unlock, or tighten up slot nut with socket for slot nut 115 589 02 07 00 (070).



P35-2101-13

P35-2101-13

78 Rear wheel hub
078 Assembly plate
136 589 05 31 00

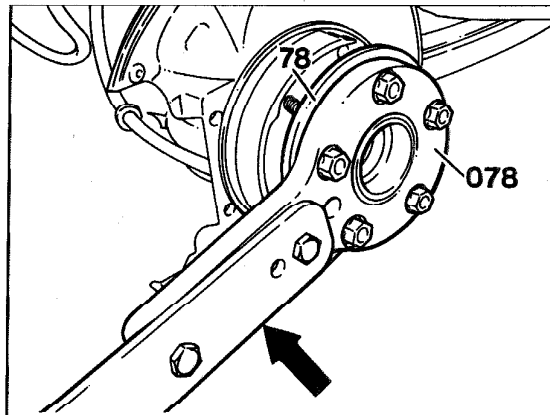
35-0130 R and R rear wheel hub, adjustment of bearings

Note

An extension (arrow, self-made) can also be used for any support of the assembly plate (078).

It is not necessary to unlock the slot nut, since this can be stripped by applying some additional force.

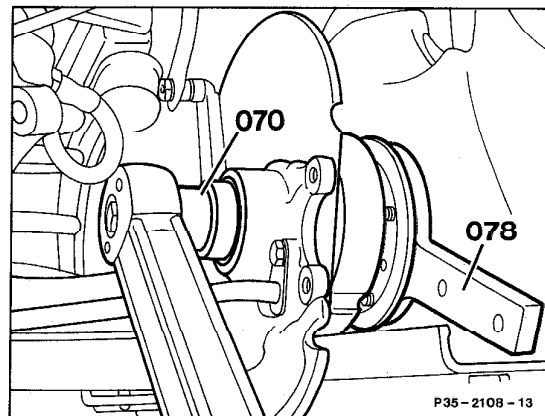
Clamp assembly plate (078) on the shaft in the vise in order to slacken the slot nut when the semi-trailing arm is removed.



P35-2104-13

Note

Replace slot nut. Carefully tighten up slot nut with socket for slot nut 115 589 02 07 00 (070) until there is still a detectable end play present, while supporting assembly plate (078). Attach dial gauge holder with dial gauge to brake cover plate. Torque wrench 001 589 74 21 00.



P35-2108-13

P35-2108-13

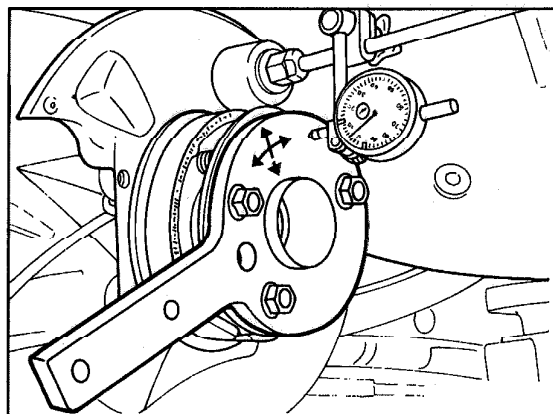
Check end play of rear wheel hub while moving rear wheel hub in and out and simultaneously rotating to the left and right.

End play 0.03 - 0.06 mm.

Dial gauge holder 363 589 02 21 00, dial gauge.

⚠ CAUTION!

If there is no longer any end play present due to over-tightening the slot nut, do not correct this by loosening the slot nut, but always install a new spacing sleeve and adjust end play again.

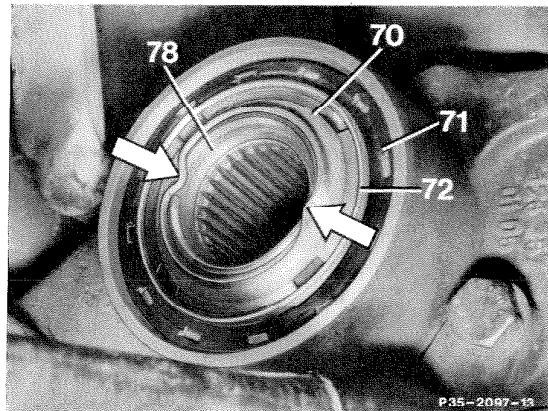


P35-2107-13

35-0130 R and R rear wheel hub, adjustment of bearings

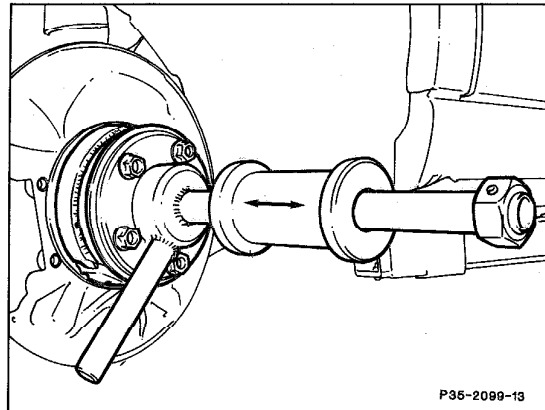
Secure slot nut (070) by bending over at two points in the matching grooves (arrows) in the rear wheel hub (78).

71 Seal
72 Seal
(compression ring)



P35-2097-13

8 Drive rear wheel hub out of the wheel carrier with impact puller 201 589 10 33 00 and remove.



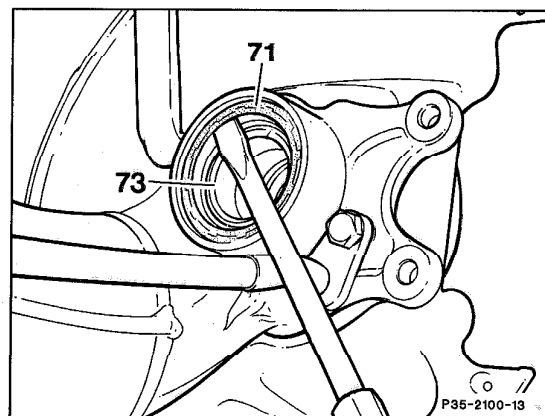
P35-2099-13

9 Remove or position seal.

Note

Always replace seal.

10 Press inner seal (71) out of the wheel carrier with a screwdriver and remove together with taper roller bearing inner race (73).



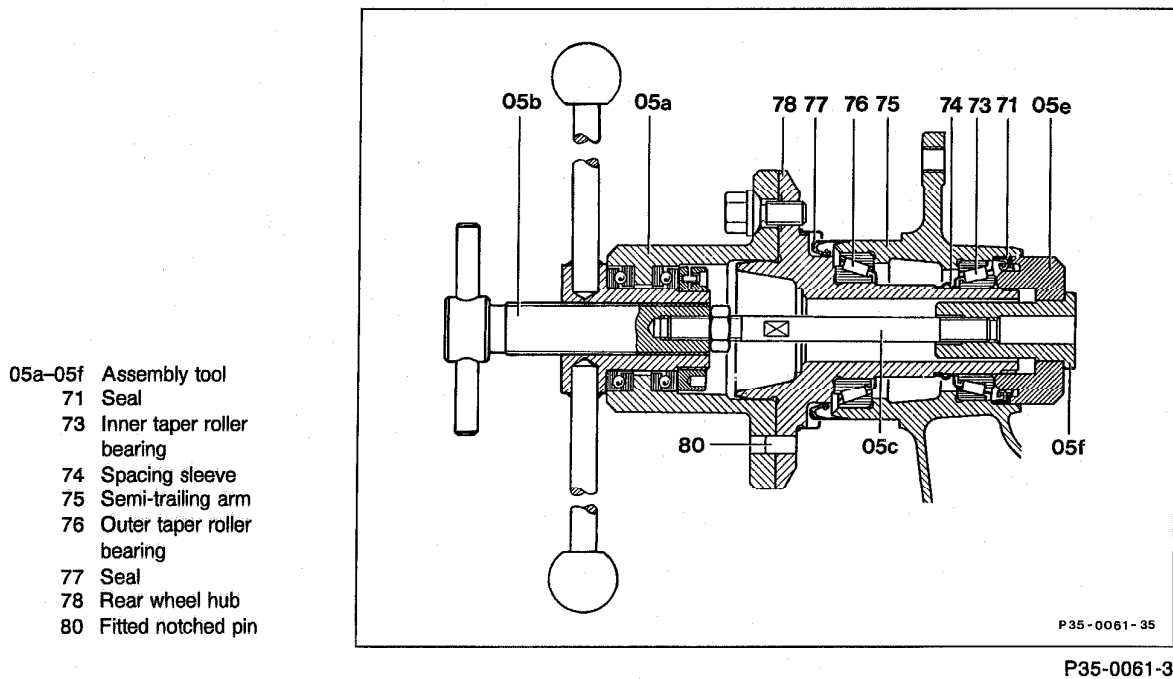
P35-2100-13

35-0130 R and R rear wheel hub, adjustment of bearings

Note

Coat new seal (71) between the two sealing lips with multi-purpose grease. Mount seal with partially rubberized jacket in dry condition.

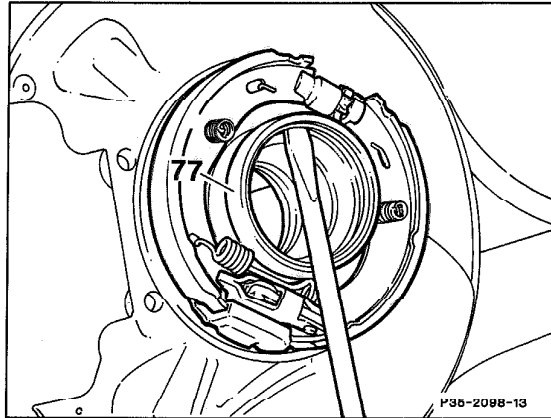
Coat or fill both taper roller bearing inner races and cavity between the two bearing Outer races in the wheel carrier with approx. 50 g of multi-purpose grease in accordance with the factory approved service products list.



Press off or press on bearing inner race (73) and seal (71) together with the assembly tool 201 589 00 61 00 (05a-05f).

35-0130 R and R rear wheel hub, adjustment of bearings

11 Press off outer seal (77) from wheel carrier with a screwdriver.

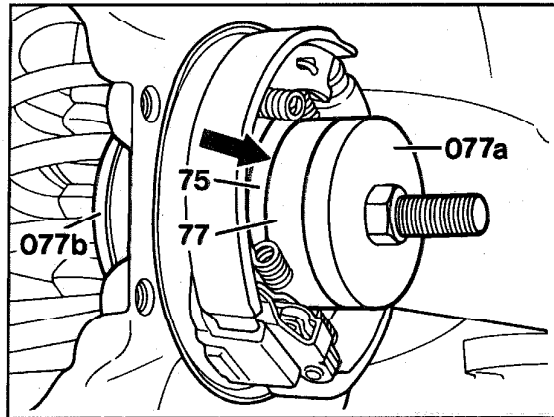


P35-2098-13

Note

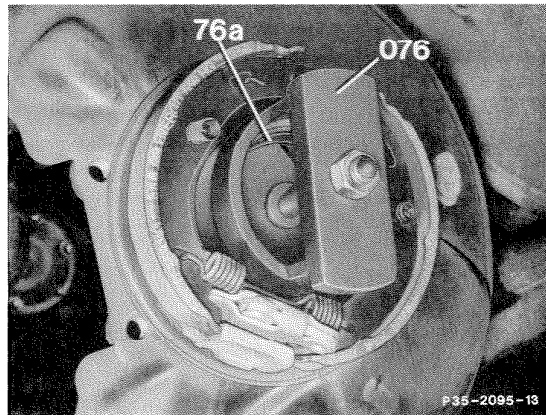
Coat seat for the outer seal on the wheel carrier (75) with sealing compound and carefully pull on new seal (77) with installer 116 589 11 61 00, so that it contacts chamfer on the wheel carrier (arrow).

077a 80 mm \varnothing washer
077b 82 mm \varnothing washer



P35-2109-13

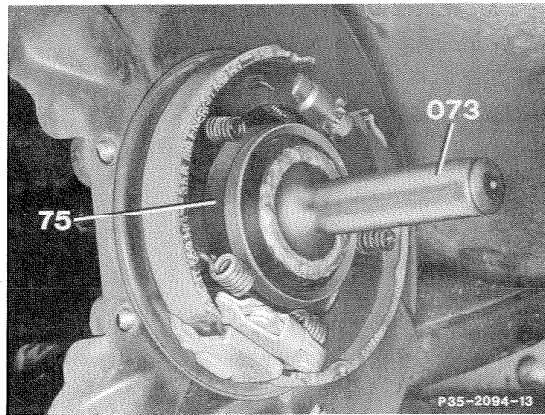
12 Pull bearing outer race (76a) of outer taper roller bearing out of the wheel carrier with puller 115 89 00 33 00 (076).



P35-2095-13

35-0130 R and R rear wheel hub, adjustment of bearings

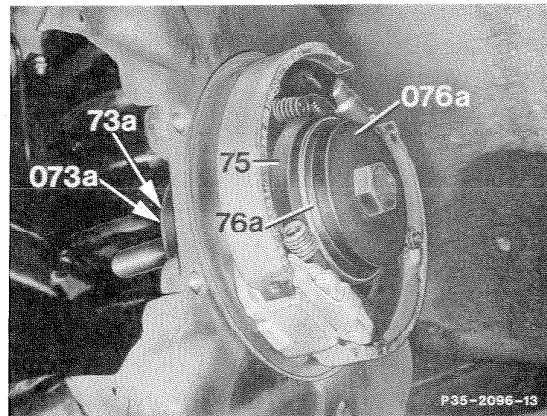
13 Drive bearing outer race of inner taper roller bearing out of wheel carrier (75) with punch 115 589 02 43 00 (073).



P35-2094-13

Note

Pull both bearing Outer races (73a, 76a) into the wheel carrier (75) simultaneously with installer 116 589 11 61 00 (073a, 076a).



P35-2096-13

073a 67.5 mm \varnothing washer
076a 74.8 mm \varnothing washer

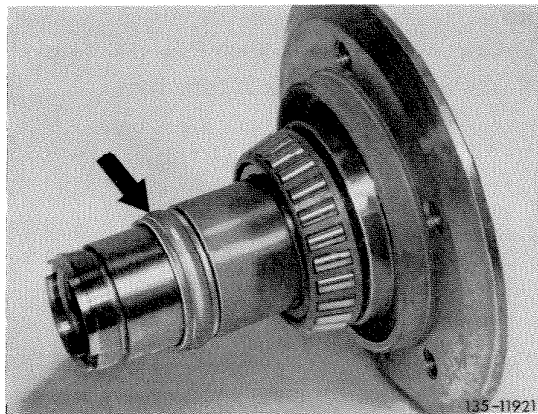
14 Remove or position spacing sleeve (arrow).

Note

Generally replace spacing sleeve after it has been used once.

Width of spacing sleeve

11.8 - 12.0 mm.

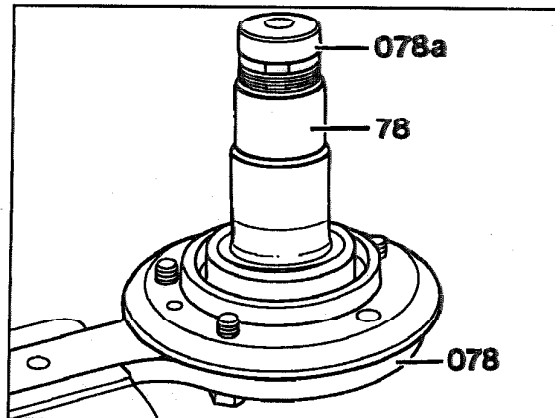


135-11921

35-0130 R and R rear wheel hub, adjustment of bearings

15 Clamp assembly plate 136 589 05 31 00 (078) with rear wheel hub (78) in vise.

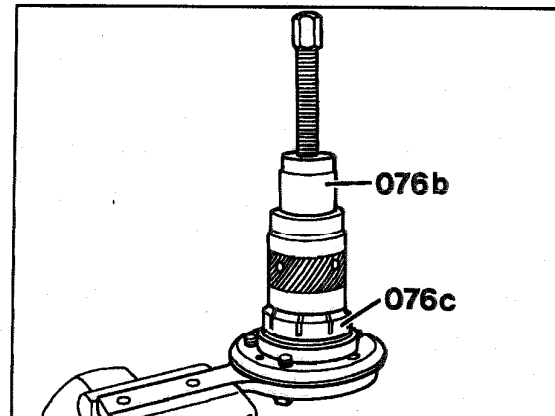
16 Position or remove thrust pad 000 589 03 34 00 (078a) for supporting the puller.



P35-2112-13

17 Pull taper roller bearing inner race off rear wheel hub with puller 001 589 36 33 00 and collet 00 589 02 34 00.

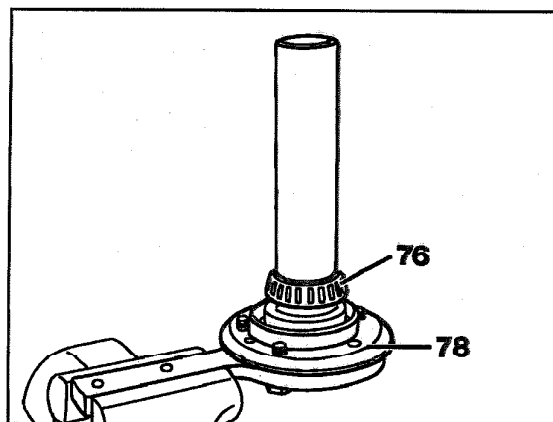
076b Puller
076c Collet



P35-2113-13

Note

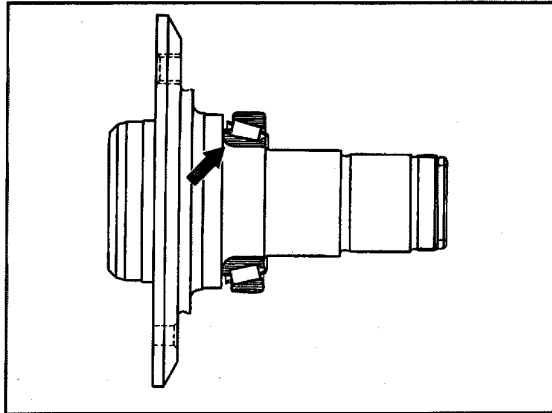
Press taper roller bearing inner race (76) onto rear wheel hub (78) with a suitable tube.



P35-2111-13

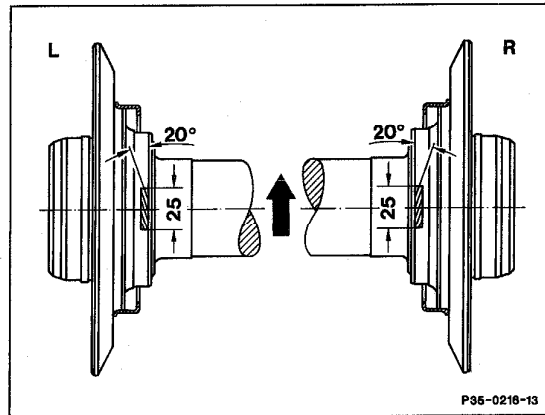
35-0130 R and R rear wheel hub, adjustment of bearings

Only use taper roller bearing with a large fillet radius on the rear wheel hub (arrow).



P35-0222-13

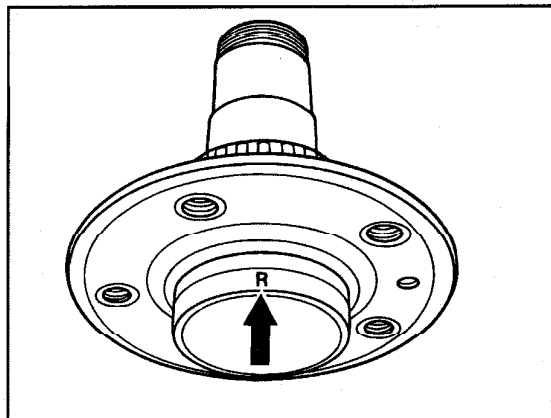
If required, refinish oil return spiral with emery cloth (grain 180) at an angle of approx. 20° over a length of 25 mm.



L Left rear wheel hub
R Right rear wheel hub

P35-0216-13

The rear wheel hubs are provided with an oil return spiral on running surface for outer seal, which differs on left hand and right hand side. For identification, the chamfer for concentric alignment is provided with a punched in "R" for right hand side (arrow) and a punched in "L" for left hand side.



P35-2110-13

35-0130 R and R rear wheel hub, adjustment of bearings

18 Check all individual parts for re-use. Pay particular attention to the running surfaces for the seals on the rear wheel hub and on the seal. Replace worn parts. Check vertical and lateral run out of the rear wheel hub.

19 Installation takes place in the reverse sequence.