

Data

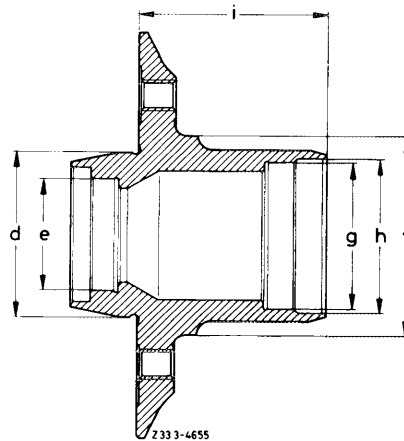
Front wheel hub	Model	114, 115 1st version ^{1),3)}	107, 114, 115 2nd version ^{2),3)} 107 3rd version with ABS
Bolthole circle dia. "k" for attachment of brake disc		88.5	104
Bolthole circle dia. "l" for attachment of brake wheel		112	
Flange distance "i"		73	75
Fitting "f" for brake disc		<u>69.50</u> 69.47	<u>79.97</u> 80.00
Permissible lateral play at the flange		0.03	
Permissible vertical play at the disc wheel centre "d"		0.05	
Fitting "h" for radial sealing ring		62 H8	

¹⁾ Standard equipment on models 114, 115 until June 1971.

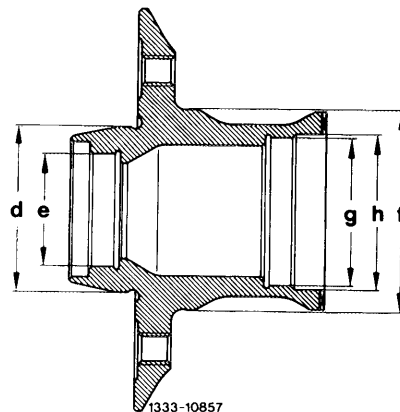
²⁾ For model 107 from series begin, on models 115, 115 standard from July 1971. Replacement for first version.

³⁾ If possible a vehicle should have front wheel hubs with the same flange distance on right and left.

Front wheel hub
1st and 2nd version without ABS



Front wheel hub
3rd version with ABS



Designation	Identification	Part no.	Remarks
Tapered roller bearings¹⁾			
Inner tapered roller bearing "g"	LM 670 48/10	000 981 58 05	
Outer tapered roller bearing "e"	LM 119 49/10	000 981 59 05	

Radial sealing ring

For front wheel hub	without ABS	46 x 62 x 10/8	005 997 50 46	Radial sealing ring with sealing lip and additional dust lip. During assembly, fill space between sealing lip and dust lip with specified grease.
	with ABS	45 x 62 x 10/12 x 7	003 997 93 46	

¹⁾ The bearing inner races are mounted on wheel spindle at a sliding fit or a light force fit. In the event of repairs, a radial play of 0.03 mm on inner bearing and of 0.025 mm on outer bearing between bearing inner race and wheel spindle is still permitted. If the play is larger, there is a possibility to eliminate this play during assembly by applying "Omnifit Type 80 red M or H" with activator (combination pack part no. 002 989 69 71) or Loctite 640 (part no. 002 989 20 71). For details, refer to respective instructions.

²⁾ Special version of tapered roller bearings. In the event of repairs, pay attention to part no.

Lubricant

Quantity	Total capacity	approx. 70 g	Suitably, weigh full capacity prior to starting assembly of front wheel hub.
	In hub with bearing	approx. 50 g	Fill roller cages or tapered roller bearings well with grease. Also provide grease for roller faces.
	In wheel cap	approx. 20 g	Fill approx. up to edge of bead.
Series fillup: up to October 1982	Anti-friction bearing grease (refer to Specifications for service products page 265)		
Series fillup: starting November 1982 and repair fillup	High-temperature anti-friction bearing grease (refer to Specifications for service products page 265.1) ¹⁾		

¹⁾ Available in 150 gr. screw cans, part no. 000 989 49 51.

Special tools

Fixture for pressing on the outer bearing races and the radial sealing ring	107 589 00 43 00
Puller for outer bearing race of inner tapered roller bearing	116 589 05 33 00
Removal punch for outer bearing race of outer tapered roller bearing	116 589 04 15 00
Holder for dial gauge to adjust wheel bearing end play	363 589 02 21 00

Conventional Tools

Dial gauge A 1 DIN 878

e.g. Messrs. Mahr, D-7300 Esslingen
order No. 810

Note

In the event of repairs, from now on use exclusively high-temperature anti-friction bearing grease for front wheel hubs. Generally renew complete grease charge of front wheel hub, since a mixture of anti-friction bearing grease or multi-grade grease must be absolutely prevented. If, in exceptional cases, high-temperature anti-friction bearing grease is not available, multi-grade grease (refer to Operating instructions page 267) may be used.

Disassembly

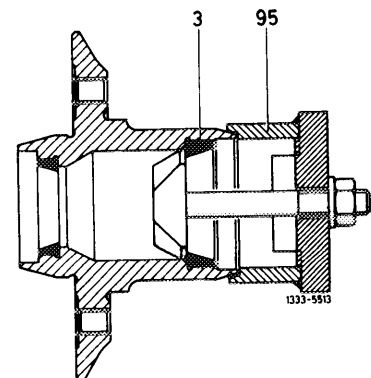
1 Remove inner race and roller cage of outer tapered roller bearing from the hub.

2 Remove radial sealing ring and take inner race and roller cage of inner tapered roller bearing out of the hub.

3 Remove the outer race of the inner tapered roller bearing using the puller.

Note: On model 107 with ABS, uniformly and carefully knock-out outer race with a suitable brass or aluminum mandrel.

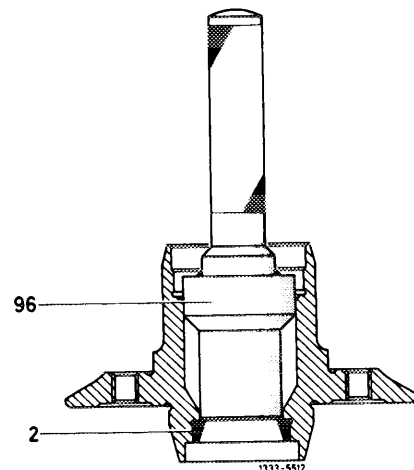
Do not damage teeth!



3 Outer race of inner tapered roller bearing
95 Puller

4 Push the outer race of the outer tapered roller bearing out of the hub using the removal punch.

5 Separate front wheel hub from the brake disc (42-220).



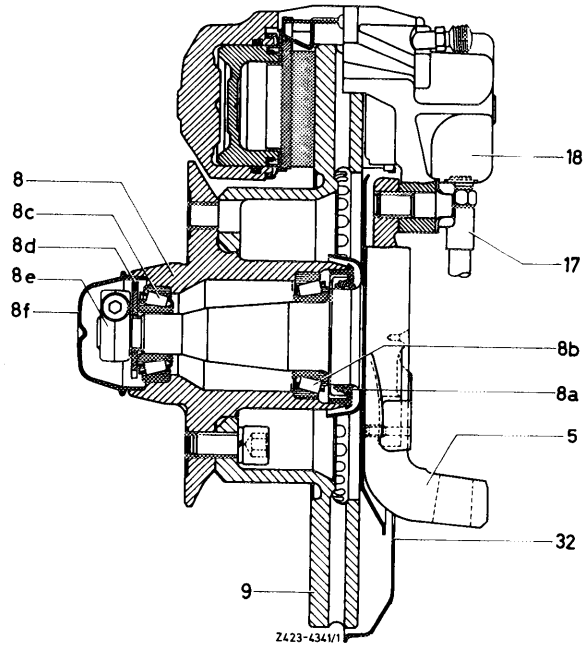
2 Outer race of outer tapered roller bearing
96 Removal punch

Inspection and Repair

- 6 Check flange of front wheel hub for runout (see data).
- 7 Check the threaded holes for the wheel mounting.
- 8 Check tapered roller bearings and bearing seats in the hub.
- 9 Check and if necessary replace the disc (8d) which is ground on both sides.

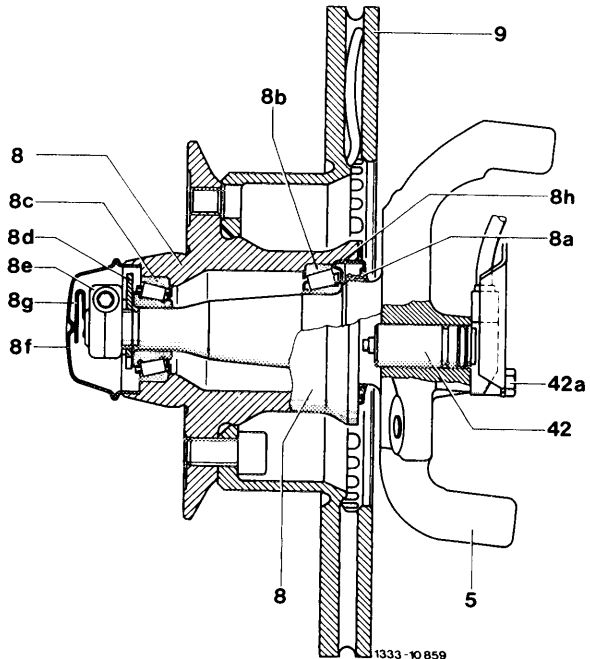
Front wheel hub without ABS

- 5 Steering knuckle
- 8 Wheel hub
- 8a Radial sealing ring
- 8b Tapered roller bearing, outside
- 8c Tapered roller bearing, inside
- 8d Disc
- 8e Clamping nut
- 8f Hub grease cap
- 9 Brake disc
- 17 Brake hose
- 18 Fixed caliper
- 32 Cover plate



Front wheel hub with ABS

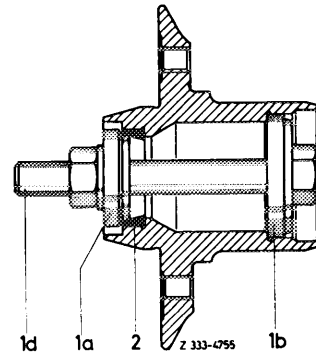
- 5 Steering knuckle
- 8 Wheel hub
- 8a Radial sealing ring
- 8b Tapered roller bearing, outside
- 8c Tapered roller bearing, inside
- 8d Disc
- 8e Clamping nut
- 8f Hub grease cap
- 8g Pull-off disc
- 8h Pull-off disc
- 9 Brake disc
- 32 Cover plate
- 42 Rpm sensor
- 42a Fastening screw



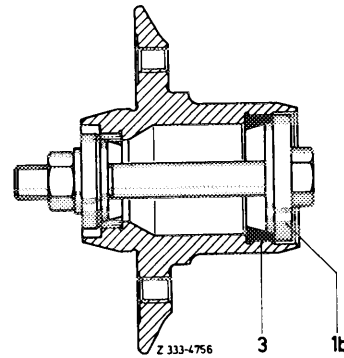
Assembly

10 Using the special tool, press the outer races of the tapered roller bearings into the front wheel hub individually.

- 1a Pressure plate for outer race of outer tapered roller bearing
- 1b Pressure plate for outer race of inner tapered roller bearing
- 1d Bolt with washer and hex. nut
- 2 Outer race for outer tapered roller bearing



- 1b Pressure plate for outer race of inner tapered roller bearing
- 3 Outer race of inner tapered roller bearing

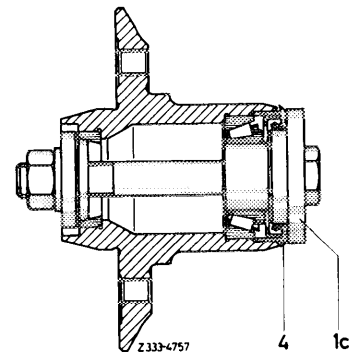


11 Fill hub cap with specified grease approx. up to edge of bead.

12 Fill roller cage of inner tapered roller bearing well with grease, insert inner race with roller cage into the hub and apply grease to the roller faces.

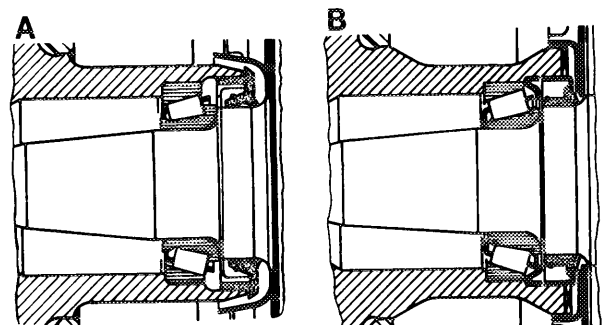
13 Fill the radial sealing ring with grease between the sealing lip and the dust lip, then press in using special tool.

- 1c Pressure plate for radial sealing ring
- 4 Radial sealing ring



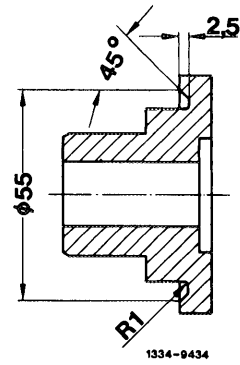
Note: On vehicles model 107 with ABS, the radial sealing ring, part no. 003 997 93 46 is mounted together with a pull-off disc, part no. 111 334 00 64.

- A Front wheel hub without ABS
- B Front wheel hub with ABS



1334-9292

For pressing-in radial sealing ring, changing the mounting member of the former special tool 117 589 00 43 00 is a self-made job.



Mounting member (change it yourself)

14 Fill the front wheel hub with the remaining grease.

Note: If too much grease is used, the filling action causes the grease to overheat and it can lose its lubricant properties. The amount of grease must however not be too small, otherwise the tapered roller bearings might not be properly lubricated.

15 Install brake disc (42-220).

16 Check the condition of the running surface for the radial sealing ring on the steering knuckle.