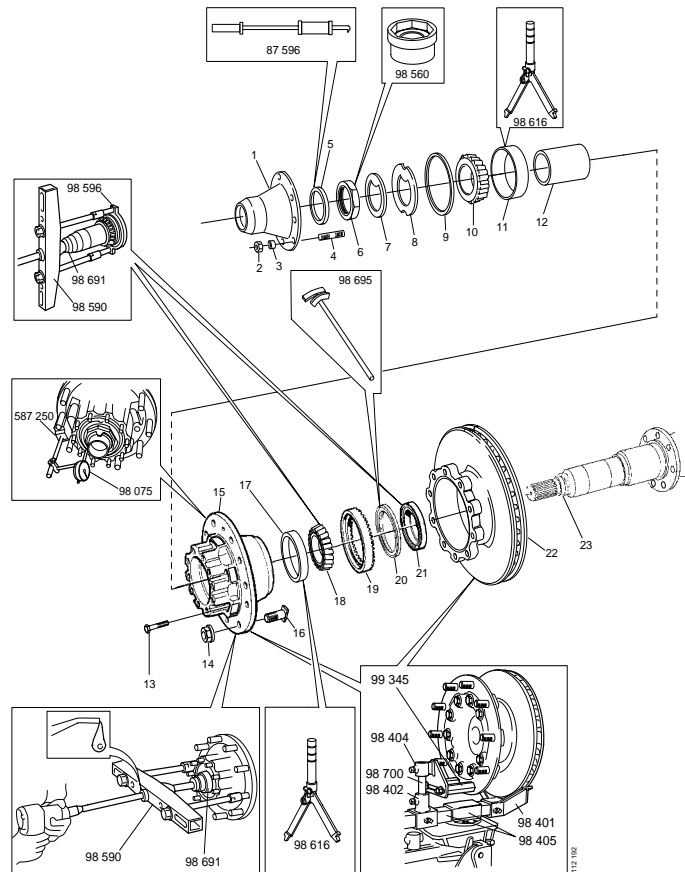


Rear wheel hub

AD/ADA 1300/D

Work description



This description is a trial of a new type of work description. We welcome any comments on the content and coverage. Copy the feedback sheet at the end of the booklet and send it to us.

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Rear wheel hub AD/ADA 1300/D

Work description

Rear wheel hub AD/ADA 1300/D

General

This description applies when replacing bearings and seals in all rear wheel hubs on trucks and buses with the exception of vehicles with hub reduction.

Cleanliness is of the utmost importance when working on hubs and differential gears. Contaminants considerably reduce the service life.

Always clean the outside of the hub before dismantling it. Also clean both old and new parts before reassembling the hub.

Always use new grease when reassembling.

Oil leakage - bearing play

If there is oil or grease leakage through the hub seals, check the bearing play.

Rotate the hub. Then move it in and out and measure the play. If there is bearing play in excess of 0.2 mm, the bearings and seals must be replaced. If the bearing play is within permitted limits, change only the seals.

If oil has leaked into the hub, also check the oil level in the rear axle.

Safety



WARNING!

Never work under a vehicle which is only supported by a jack. Use supports. If the axle has air suspension, evacuate the air suspension.

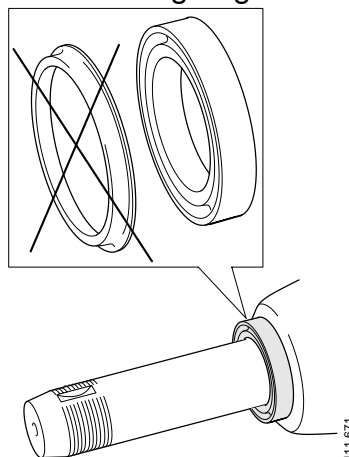
Outer sealing ring

The outer sealing ring has two parts. If it separates, simply put the parts together again before fitting.

Inner sealing ring

IMPORTANT! When replacing an old seal with the new cartridge seal, remove the wear ring's wear plate.

Inner sealing ring



*Before refitting the wear ring, remove the wear plate. When reassembling the hub with the cartridge seal, the wear plate must **not** be refitted.*

Disc brake

Tools

Tools for dismantling and assembling

Number	Designation	Tool board
87 550	Drift	AD2
87 596	Slide hammer puller	D2
98 075	Dial test gauge	D2
98 401, 98 402, 98 404, 98 405, 98 700		F1
98 560	Socket	AD1
98 590	Puller	AD1
98 596	Puller	AD1
98 607	Auxiliary drift	AD/AS2
98 616	Adjustable drift	R2, AD2
98 691	Support drift	AD1
98 695	Removal and fitting tool	AD2
98 778	Assembly drift	R1
99 012	Fully-threaded spindle	H1
99 221	Drift	AD2
99 283	Drift	AD/AS4
99 345	Adapter	B2
587 250	Measuring stand	-

Measuring bearing play and dismantling hub

Description

Remove the brake calliper before starting work on the hub. For information about removing and fitting brake callipers, see the work description for disc brakes in group 10.

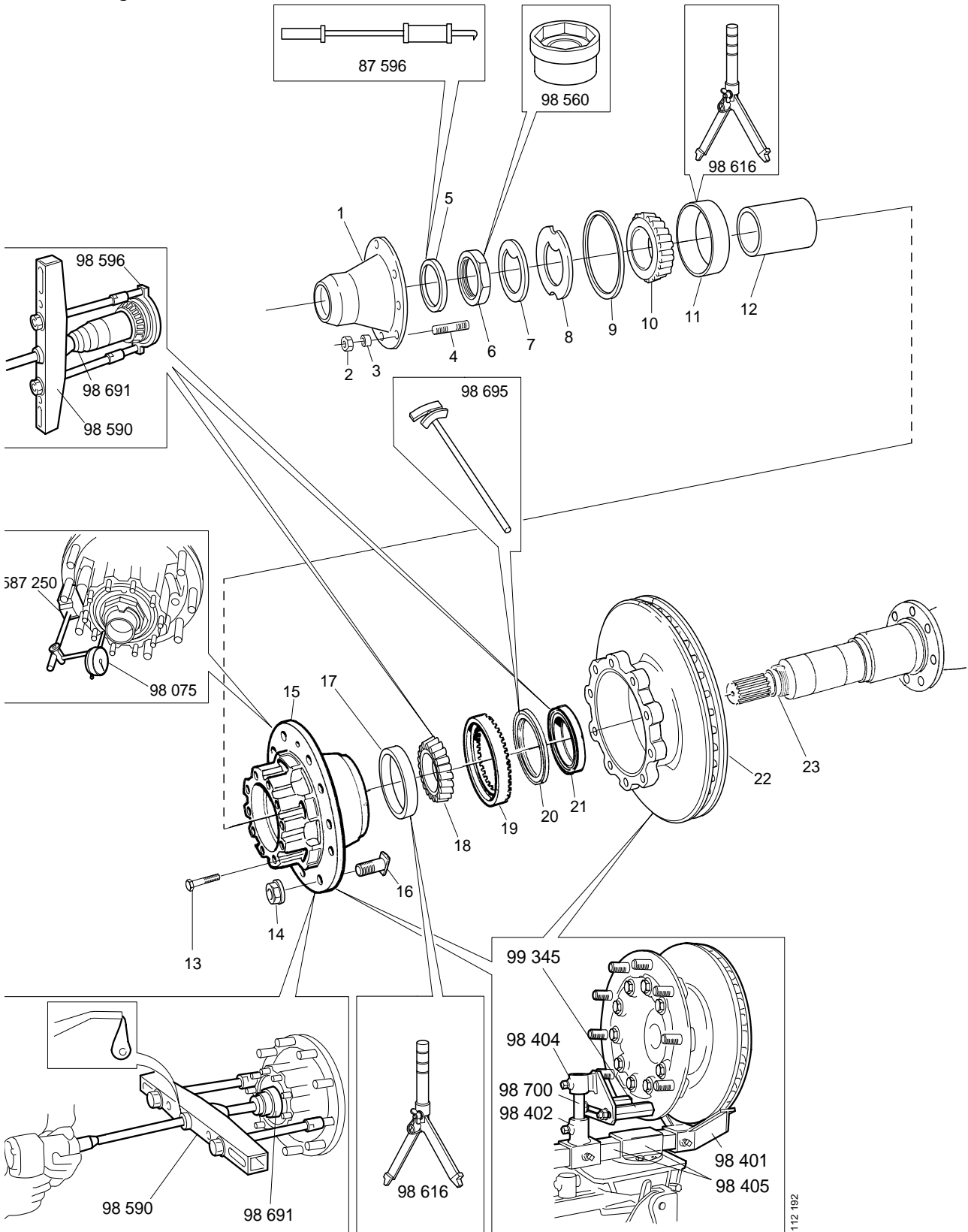
IMPORTANT! Adapters 99 345 must be tightened until the thread meets the hub.

Tip! The hub together with the brake disc can be left in the mobile jack when replacing seals.

Parts involved

Pos.	Designation	Remarks
1	Carrier	Puller screws may be used.
2	Nut	-
3	Cone	-
4	Stud	-
5	Sealing ring	Knock off.
6	Nut	-
7	Lock washer	-
8	Washer	-
9	Gasket	-
10	Bearing, inner race	-
11	Bearing, outer race	Knock off. When replacing bearings, it is easiest to separate the hub and the brake disc.
12	Socket	-
13	Screw for the brake disc	-
15	Hub	Rotate the hub. Then move it in and out and measure the play. If there is bearing play in excess of 0.2 mm, the bearings must be replaced.
17	Bearing, outer race	Knock off. When replacing bearings, it is easiest to separate the hub and the brake disc.
18	Bearing, inner race	Pull off with the wear ring (21).
19	Pulse wheel	Protect the pulse wheel with blocks if the hub must be laid down. When replacing the pulse wheel, it is easiest to separate the hub and the brake disc.
20	Sealing ring	Tap out the sealing ring.
21	Wear ring	-
22	Brake disc	IMPORTANT! Adapters 99 345 must be tightened until the thread meets the hub.

Dismantling the hub



Assembling the hub

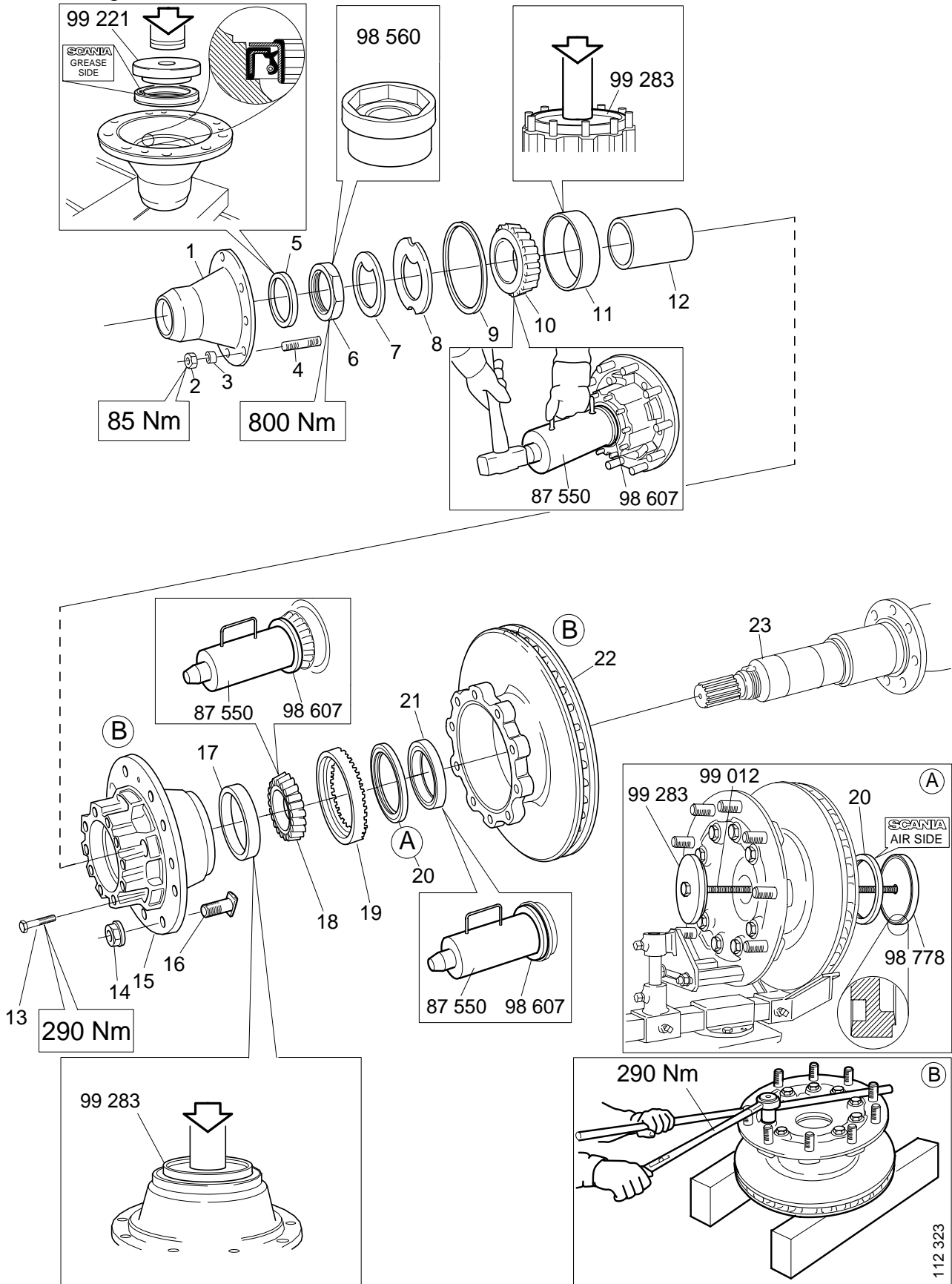
Description

Tip! The hub together with the brake disc can be left in the mobile jack when replacing seals.

Parts involved

Pos.	Designation	Remarks
1	Carrier	Fill the carrier with grease.
2	Nut	Use new nuts. Tightening torque 85 Nm.
3	Cone	-
4	Stud	-
5	Sealing ring	Lubricate and press the sealing ring in as far as possible.
6	Nut	Turn the flat side of the nut towards the hub. Rotate the hub when tightening. Tightening torque 800 Nm.
7	Lock washer	Replace the lock washer. Remember to close it up.
8	Washer	-
9	Gasket	Replace the gasket.
10	Bearing, inner race	Do not tap the bearing all the way in. The bearing seats when the hub nut is tightened.
11	Bearing, outer race	Press it into the hub.
12	Socket	-
13	Screw for the brake disc	Place the hub on blocks so that the pulse wheel is not damaged. Tightening torque 290 Nm.
15	Hub	Fill the hub with grease.
17	Bearing, outer race	Press it into the hub.
18	Bearing, inner race	Tap onto the shaft journal.
19	Pulse wheel	Place the pulse wheel on a flat surface. Press down the hub. Use drift 99 283. Protect the pulse wheel with blocks if the hub and brake disc must be laid down.
20	Sealing ring	Turn the marking "AIR SIDE" towards you. Lubricate and pull in the sealing ring. Position the seal straight.
21	Wear ring	Note: When replacing an old seal with a cartridge seal, remove the wear ring's wear plate. If the wear ring is damaged or corroded: replace it. Knock in.
22	Brake disc	-

Assembling the hub



Drum brake

Tools

Tools for dismantling and assembling

Number	Designation	Tool board
87 55	Drift	AD2
87 596	Slide hammer puller	D2
98 075	Dial test gauge	D2
98 560	Socket	AD1
98 590	Puller	AD1
98 596	Puller	AD1
98 607	Auxiliary drift	AD/AS2
98 616	Adjustable drift	R2, AD2
98 691	Support drift	AD1
98 695	Removal and fitting tool	AD2
99 221	Drift	AD2
99 283	Drift	AD/AS4
587 250	Measuring stand	-

Measuring bearing play and dismantling hub

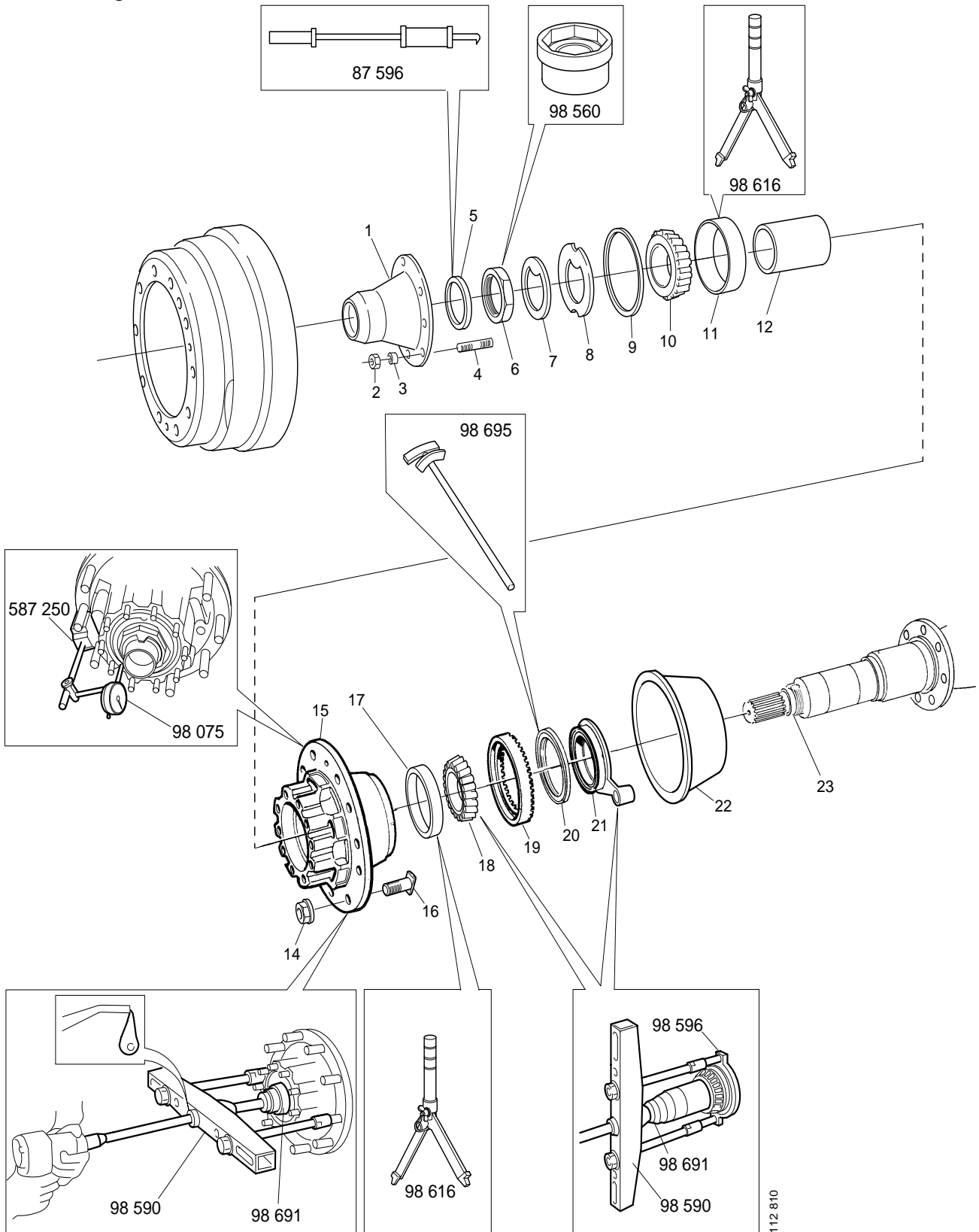
Description

Remove the brake drum before starting work on the hub. For information about removing and fitting the necessary brake parts, see the work description for brakes in group 10.

Parts involved

Pos.	Designation	Remarks
1	Carrier	Puller screws may be used.
2	Nut	-
3	Cone	-
4	Stud	-
5	Sealing ring	Knock off.
6	Nut	-
7	Lock washer	-
8	Washer	-
9	Gasket	-
10	Bearing, inner race	-
11	Bearing, outer race	Knock off.
12	Socket	-
15	Hub	Rotate the hub. Then move it in and out and measure the play. If there is bearing play in excess of 0.2 mm, the bearings must be replaced.
17	Bearing, outer race	Knock off.
18	Bearing, inner race	Pull off with the wear ring (21).
19	Pulse wheel	When replacing the pulse wheel, remove the oil trap.
20	Sealing ring	Tap out the sealing ring.
21	Wear ring	-
22	Oil trap	Remove if you are replacing the pulse wheel.

Dismantling the hub



112 810

Assembling the hub

Description

Parts involved

Pos.	Designation	Remarks
1	Carrier	Fill the carrier with grease.
2	Nut	Use new nuts. Tightening torque 85 Nm.
3	Cone	-
4	Stud	-
5	Sealing ring	Lubricate and press the sealing ring in as far as possible.
6	Nut	Turn the flat side of the nut towards the hub. Rotate the hub when tightening. Tightening torque 800 Nm.
7	Lock washer	Replace the lock washer. Remember to close it up.
8	Washer	-
9	Gasket	Replace the gasket.
10	Bearing, inner race	Do not tap the bearing all the way in. The bearing seats when the hub nut is tightened.
11	Bearing, outer race	Press it into the hub.
12	Socket	-
15	Hub	Fill the hub with grease.
17	Bearing, outer race	Press it into the hub.
18	Bearing, inner race	Tap onto the shaft journal.
19	Pulse wheel	Place the pulse wheel on a flat surface. Press down the hub. Use drift 99 283.
20	Sealing ring	Turn the marking "AIR SIDE" towards you. Lubricate and press in the sealing ring. Position the seal straight.
21	Wear ring	Note: When replacing an old seal with a cartridge seal, remove the wear ring's wear plate. If the wear ring is damaged or corroded: replace it. Turn the wear ring so that the ABS sensor fits.
22	Oil trap	Tap the oil trap into position. Close up the edges.

Assembling the hub

