


42–220 Removal and installation of brake disc on front axle

Data

Thickness of brake disc	22
Wear limit	20.0 ¹⁾
Brake disc dia.	278 ± 0.2
Fitted bore dia.	<u>80.05</u> 80.00
Lateral runout	max. 0.12

¹⁾  starting 1980 wear limit 19.4 mm.

Tightening torques

	Nm
Self-locking hex socket bolt for attaching brake disc to front wheel hub	115
Fitted hex bolt for attaching caliper to steering knuckle	115

Special tools

Pulling and mounting tool for wheel cap		116 589 22 33 00
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Dial gauge holder for adjusting wheel bearing play and checking brake disc for lateral runout		363 589 02 21 00
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Puller for wheel hub		116 589 17 33 00
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Measuring slide for measuring thickness of brake disc		126 589 00 19 00
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Conventional tool

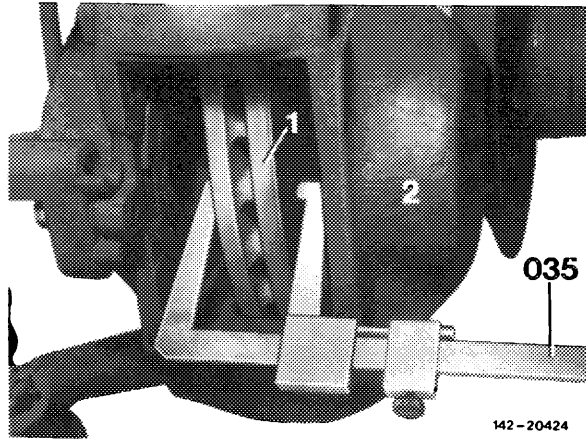
Dial gauge A 1 DIN 878	e.g. made by Mahr, D-7300 Esslingen order no. 810
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Note

When checking brake disc, proceed as follows:

- a) Measure thickness of brake disc between cover plate and caliper or, with brake pads removed, in shaft with measuring slide.
- b) Check visually.

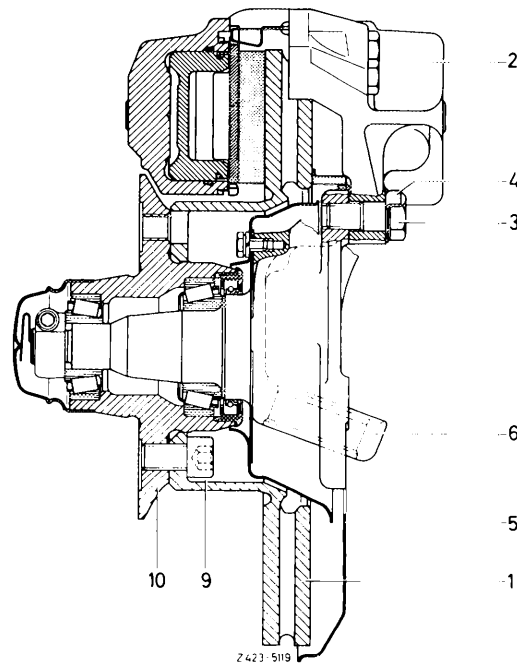
Replace brake disc when cracks are large (not measurable), when score marks are deeper than 0.5 mm and when the wear limit is attained.



Removal

1 With locking plate installed, unbend locking plate (4) and unscrew fitted hex bolts (3). Then remove caliper (2) from steering knuckle (6).

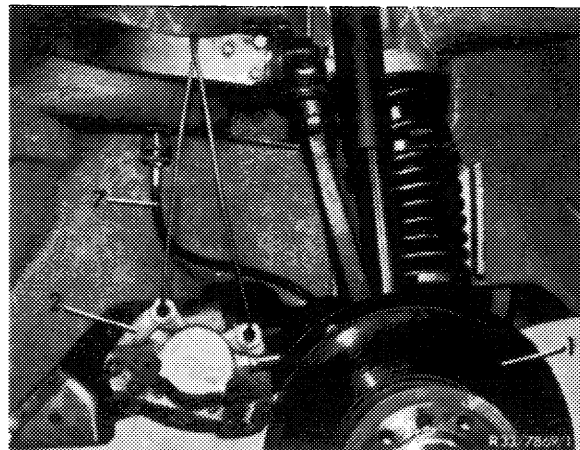
- 1 Brake disc
- 2 Caliper
- 3 Fitted hex bolt
- 4 Locking plate
- 5 Cover plate
- 6 Steering knuckle
- 9 Hex socket screw
- 10 Front wheel hub



2 Attach caliper and brake hose to torsion bar by means of a suitable hook.

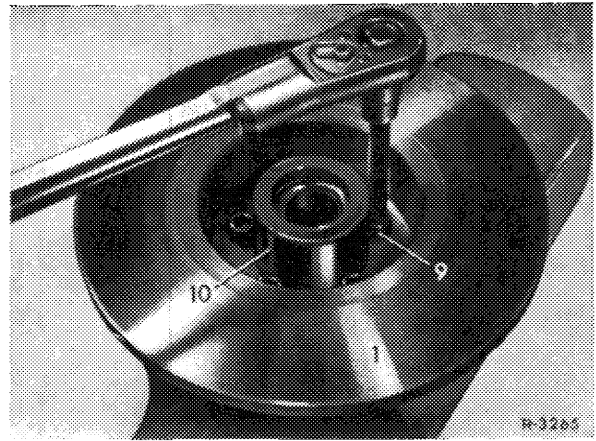
Note: The hook must be self-made. Do not put brake hose under tensile stress.

3 Remove front wheel hub (33–310).



4 Screw three hex bolts M 12 x 1.5 into front wheel hub. Then clamp front wheel hub into a vise using aluminum jaws.

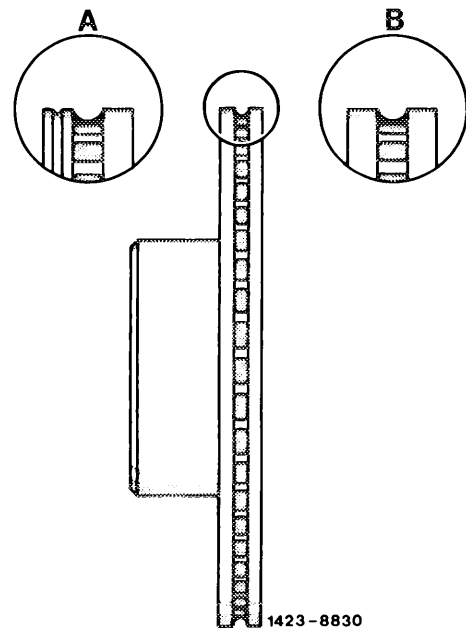
5 Unscrew self-locking hex socket bolts (9) holding brake disc (1) to front wheel hub (10).



Installation

Attention!

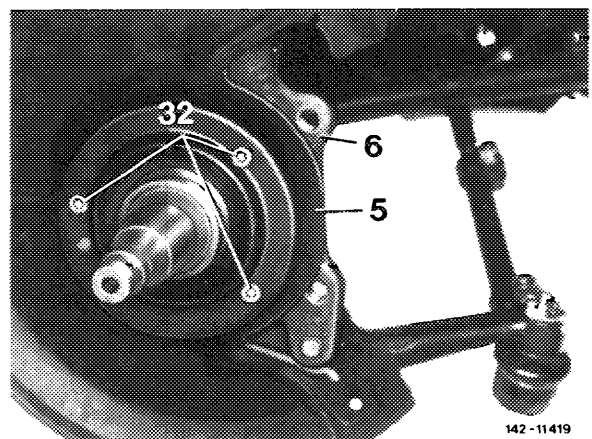
Models 116.024, 116.033 and 116.120 (USA) 1980 are provided with modified calipers with linings 17.5 mm thick and modified, vented brake discs, which are indentified with a groove at their circumference.



- A = Brake disc with groove
- B = Brake disc without groove

Note: Prior to installation of brake disc, remove rust, if any, on flange of brake disc and front wheel hub. Make sure that there is no burr at fitting point of brake disc. Check attachment of cover plate.

Spare part brake discs are protected against corrosion by means of nitrocellulose paint. For this reason, clean brake discs with solvent prior to installation. Make sure that safety rules are observed.

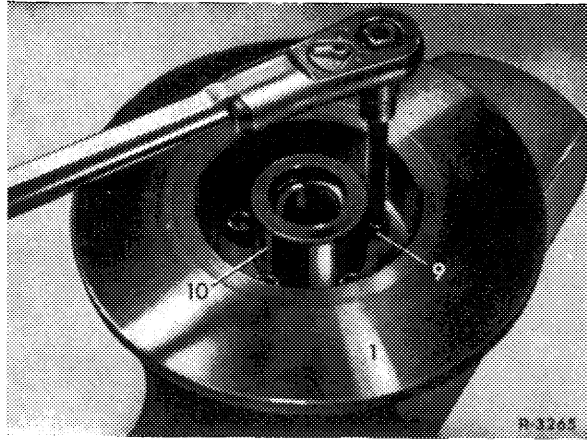


6 Attach brake disc (1) to front wheel hub (10) with new self-locking hex socket bolts (9).

Tighten self-locking hex. socket screws to 115 Nm.

Note: Self-locking hex socket bolts may be used only once.

7 Install front wheel hub (33–310).



8 Attach caliper with a new locking plate (4) and fitted hex bolts (3) or self-locking bolts (3) to steering knuckle (6) and tighten to 115 Nm. Secure with locking plate, if required (42–100).

Attention!

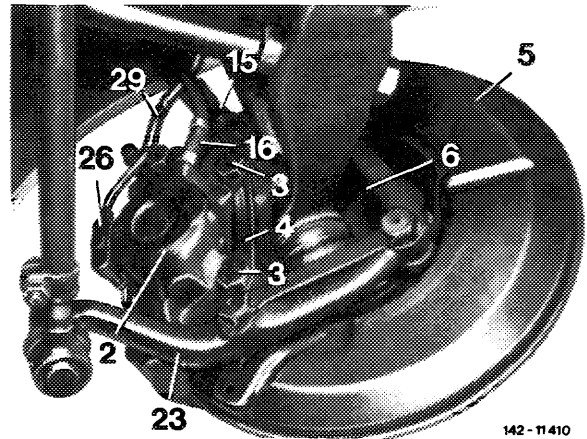
Starting at the end of 1976, self-locking fitted hex bolts will be installed. **Self-locking fitted hex bolts may be used only once.**

During reconditioning jobs (when the caliper is not replaced) continue using the original fastening method:

- a) Bolts with locking plate or
- b) self-locking bolts.

When renewing calipers, use locking plate also for self-locking bolts for safety reasons.

Make sure of perfect installation of brake hose.



Prior to moving off, actuate brake pedal several times energetically to obtain the correct clearance between brake disc and brake pad. Then top up brake fluid supply in expansion tank of tandem main cylinder.

Note: If during a trial run (mainly driving around a bend) a varying pedal travel is observed, measure lateral runout of brake disc at OD. For this purpose, place dial gauge holder on a suitable plate. Simultaneously, check wheel bearing end play of front wheel hub and adjust, if required (33–300).

If the lateral runout of the brake disc is too high, displace brake disc on front wheel hub. Renew brake disc, if required.

