

42-150 Replacement of piston seal in caliper for front axle

Data

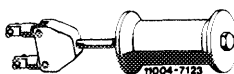
Caliper	Teves S 2-57	Bendix FD 57	Teves SS 2-60	Bendix FE 60
Housing dia.		<u>56.99</u> 57.04	<u>59.99</u> 60.04	
Shaft width for brake pads		77 + 0.15	90 + 0.15	

Lubricant

ATE brake cylinder paste

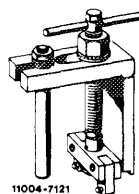
Special tools

Impact puller



123 589 06 33 00

Puller for stuck brake pads



123 589 07 33 00

Piston resetting pliers



123 589 00 37 00

Piston rotating pliers



000 589 50 37 00

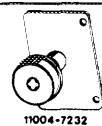
Pliers for pressing-on dust cap



000 589 49 37 00

Installer for
heat shield plate

for caliper 57 mm dia.



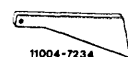
000 589 49 63 00

for caliper 60 mm dia.

000 589 51 43 00

Check gauge for
piston position

Caliper 57 mm dia.



001 589 30 21 00

Caliper 60 mm dia.

000 589 34 23 00

Conventional tool

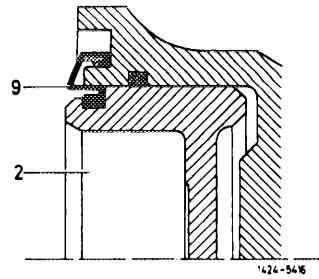
Open double box wrench 9 x 11 mm

e.g. made by Hazet, D-5630 Remscheid
Order no. 612

Note

Do not separate the two halves of the caliper since the fastening bolts are tightened to a different torque by the manufacturer.

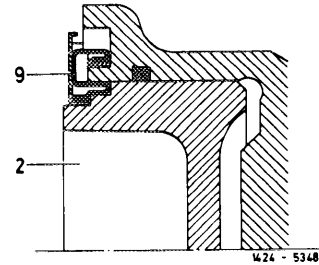
Teves version



Removal

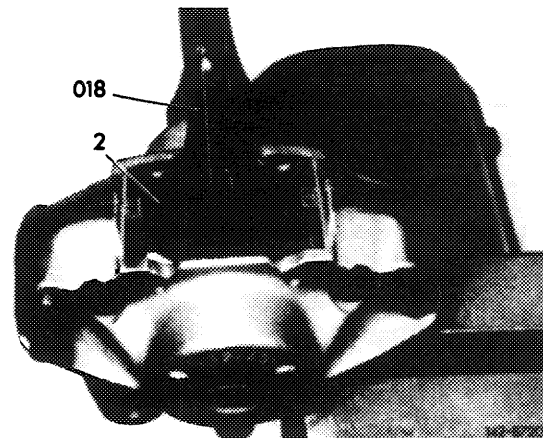
- 1 Remove brake shoes (42–160).
- 2 Force dust cap (9) from housing by means of a screwdriver.

Bendix version



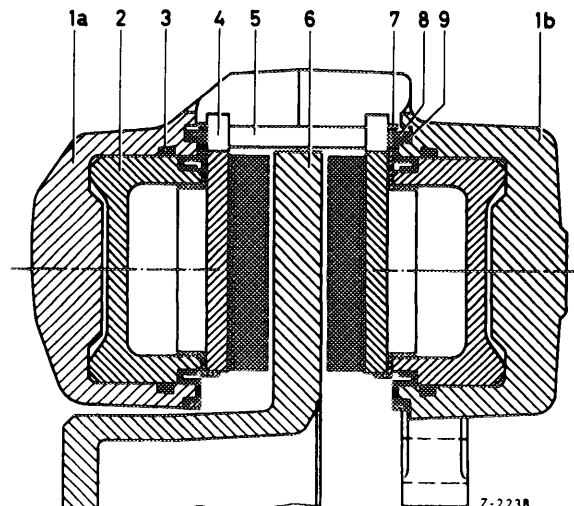
- 3 Hold one piston (2) in caliper with piston resetting pliers (018). Then force out opposite piston with compressed air of approx. 0.5 bar gauge pressure (atü).

Note: If the pistons are rusted down, install a new caliper.



- 4 Remove piston seal (3) from groove of cylinder bore.

- 1a Outer caliper half
- 1b Inner caliper half
- 2 Piston
- 3 Piston seal
- 4 Brake shoe
- 5 Holding pin
- 6 Brake disc
- 7 Heat shield
- 8 Clamping ring
- 9 Dust cap



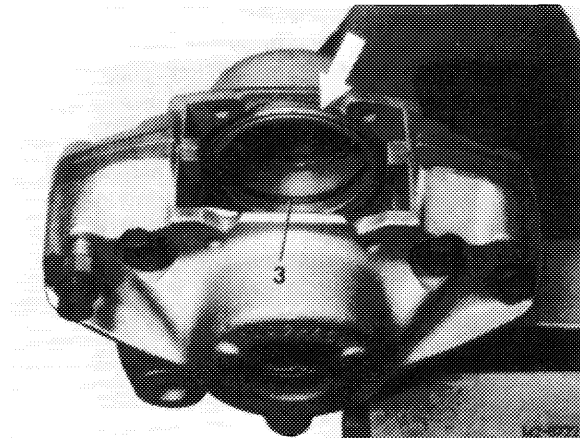
Inspection and repair

- 5 Push heat shield (7) away from piston.
- 6 Remove deposits on piston with a soft brass wire brush or a rough cleaning cloth. Do **not** work on piston with polishing or emery cloth, since this might damage the chrome plated surface. Replace piston, if chrome surface is damaged.
- 7 Check cylinder bores of caliper for wear. Replace complete caliper if bores are scored or rusted. Remove small, minor rust spots in bore with polishing cloth, heavier rust spots in front of piston seal groove with fine emery paper (380 to 500 grain).

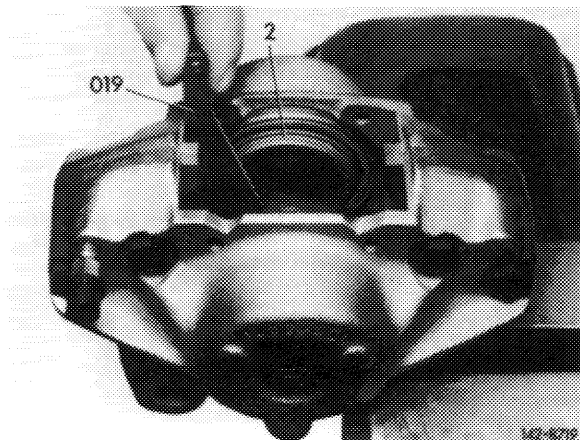
Installation

- 8 Rub new piston seal (3) lightly with ATE brake cylinder paste and insert into groove of cylinder bore.

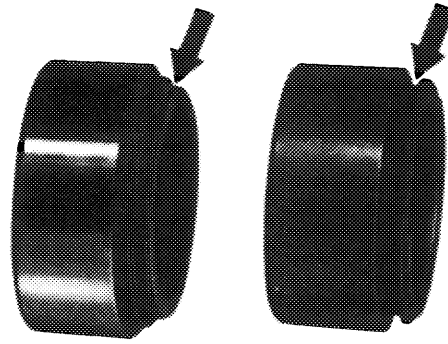
Note: When reconditioning Bendix caliper make sure of a tight and correct seat for pressed-on ring (refer to arrow).



- 9 Insert piston (2) into bore of caliper. Then check position of piston in caliper with inspection gauge (019).



Note: When installing pistons, note different piston versions.

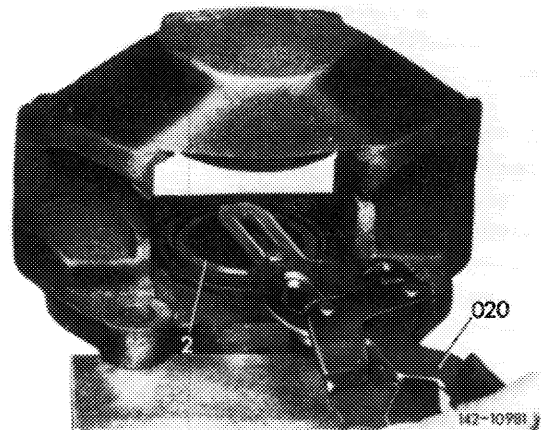


Left:
Bendix piston

Right:
Teves piston

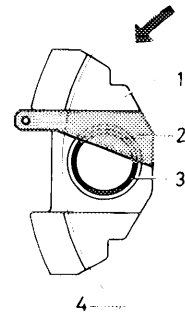
142-8643

10 Move piston (2) into correct position with piston rotating pliers (020), if required.



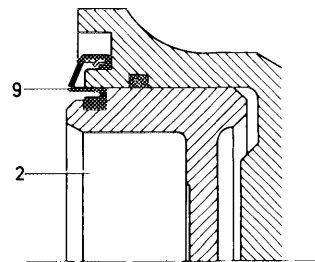
Attention!

Insert piston in such a manner that with the caliper installed the elevation (marked in black) on the piston is facing downwards. This elevation serves for one-sided contact of the brake pads while braking, which will reduce the tendency to squeal.



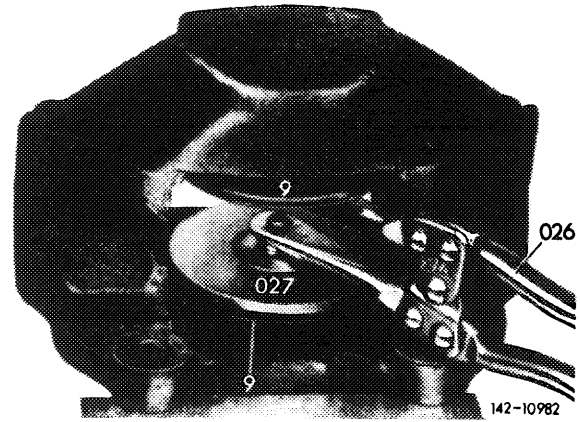
Z-2564

11 On Teves caliper, mount dust cap (9) on piston (2) and position against collar of caliper.



1424-5416

12 Place dust cap (9) on collar of caliper by means of pliers (026) and pertinent discs (027).

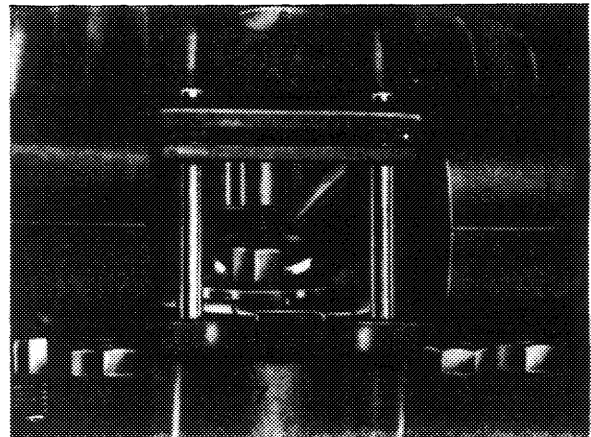


13 Insert heat shield (7) into piston with the recess in the shield fitted accurately to the elevation of the piston.

14 Place pressing-in device (17) into caliper and press heat shield into piston.

Attention!

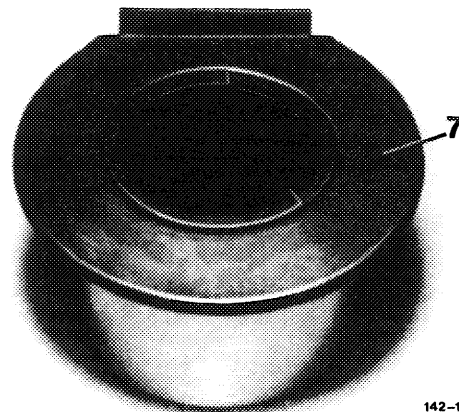
The elevation on the piston should project at least 0.1 mm beyond heat shield. The heat shields for the inner and outer piston are different.



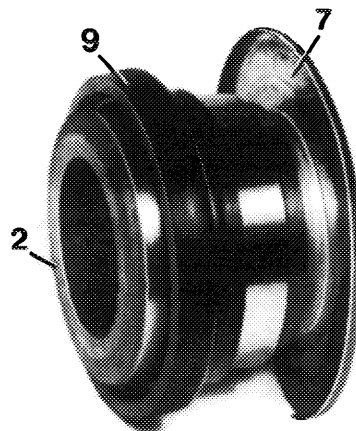
15 On Bendix caliper, press heat shield (7) on piston according to piston position.

Attention!

The elevation on the piston should project at least 0.1 mm beyond heat shield.



16 Place dust cap (9) on piston (2).



17 Use blunt installation needle to mount dust cap (9) on collar of caliper. Then push piston completely back until dust cap (9) is perfectly seated on piston collar.

18 Install brake pads into caliper (42-160).

