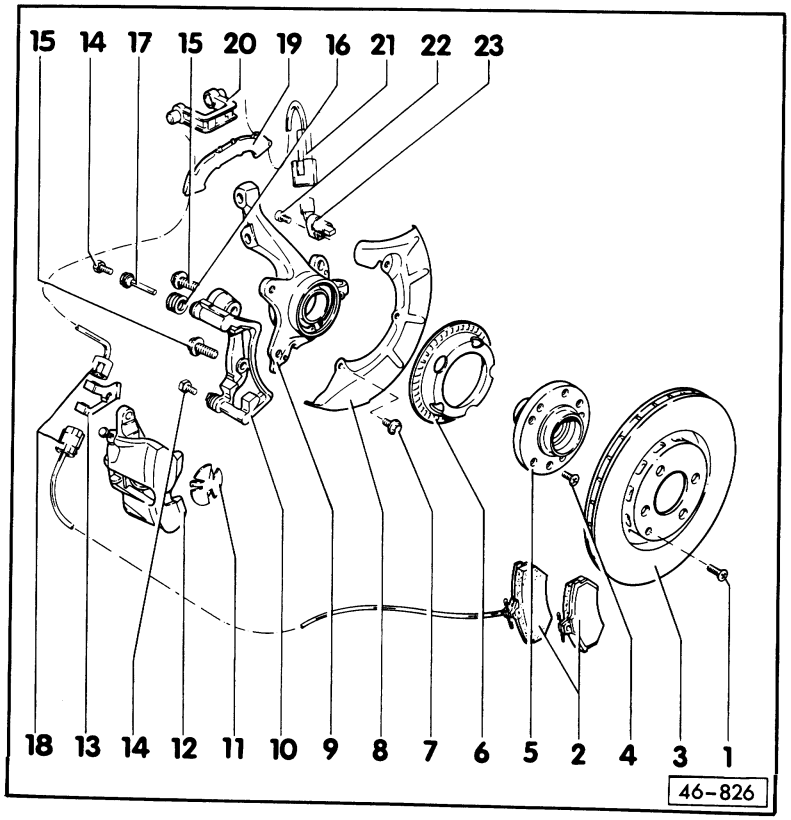


Note
After installing new brake pads, depress brake pedal firmly several times while vehicle is stationary to permit piston and brake pads to adjust to brake disc.

Always remove some brake fluid from the reservoir before installing new brake pads. When the caliper piston is pushed back, fluid is forced out of the caliper and into the reservoir. After pads are installed, refill the reservoir to the MAX mark.

1 – Screw

2 – Brake pads
- some versions have pad wear indicator
- always replace pads on both sides
- removing/installing, page 46.4
- pad thickness when new: 14 mm
- wear limit: 7 mm (including backing plate)

3 – Brake disc
- always replace discs on both sides only
- machine discs on both sides only and ensure adequate margin for wear
- wear limit: 20 mm
- diameter: 280 m
- thickness: 22 mm

4 – Screw

5 – Wheel hub
- removing/installing, see Repair Group 40

6 – Rotor
- for wheel speed sensor (vehicles with ABS)

7 – 10 Nm (7 ft lb)

8 – Splash shield

9 – Wheel bearing housing

10 – Brake pad carrier
- is supplied as replacement part assembled with grease on guide pins
- if protective caps are damaged, install repair kit and lubricate guide pins with grease pack supplied

11 – Heat shield
- install into piston

12 – Brake caliper housing
- do not disconnect hydraulic line when replacing brake pads

13 – Bracket

14 – 35 Nm (26 ft lb)
- always replace

15 – 125 Nm (92 ft lb)
- clean serrations before reusing

16 – Protective cap

17 – Guide pin

18 – Plug connection
- for brake pad wear indicator

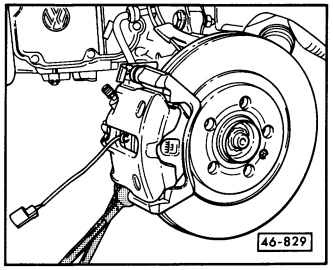
19 – Bracket

20 – Bracket

21 – Plug connection
- for ABS wheel speed sensor

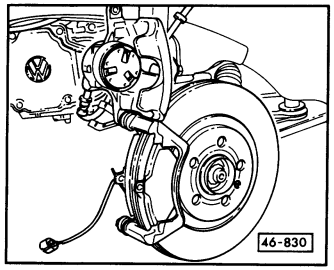
22 – 10 Nm (7 ft lb)

23 – Wheel speed sensor
- clean bore and coat with lubricating paste, Part No. G 000 650



▶ Fig. 1 Brake caliper, removing

- remove lower mounting bolt (hold guide pin with open end wrench while loosening)

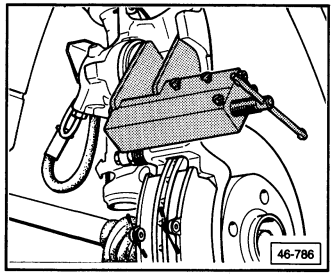


▶ Fig. 2 Brake pads, removing/installing

- swing brake caliper up and remove brake pads

CAUTION

Always remove some brake fluid from the reservoir before installing new brake pads. When the caliper piston is pushed back, fluid is forced out of the caliper and into the reservoir. After pads are installed, refill the reservoir only the **MAX** mark.



▶ Fig. 3 Brake pads, installing

- push piston into caliper housing
- install brake pads and heat shield
- swing brake caliper down and tighten bolts to 35 Nm (26 ft lb)

Note

The two self-locking bolts in the repair kit must always be installed.

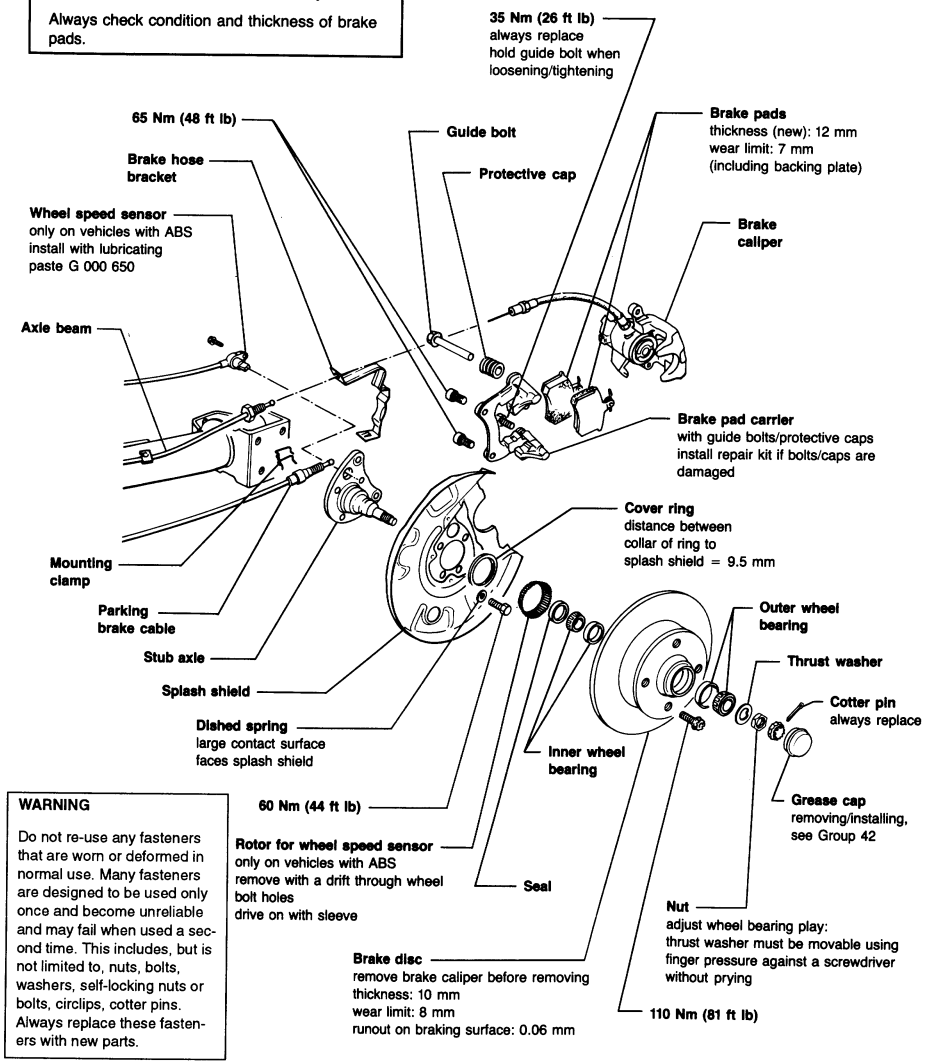
CAUTION

After installing new brake pads, depress brake pedal firmly several times while vehicle is stationary to permit piston and brake pads to adjust to brake disc.

CAUTION

Disc machining must be performed on both sides of disc — never on one side only.

Always check condition and thickness of brake pads.

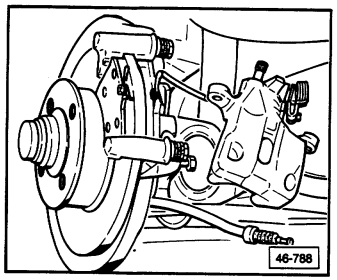


WARNING

Do not re-use any fasteners that are worn or deformed in normal use. Many fasteners are designed to be used only once and become unreliable and may fail when used a second time. This includes, but is not limited to, nuts, bolts, washers, self-locking nuts or bolts, circlips, cotter pins. Always replace these fasteners with new parts.

Rear brake pads, replacing

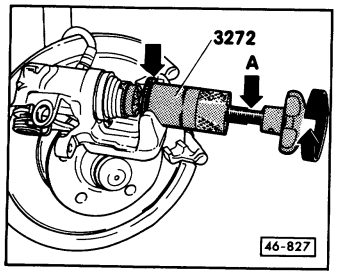
- remove wheels
- remove parking brake cable from brake caliper



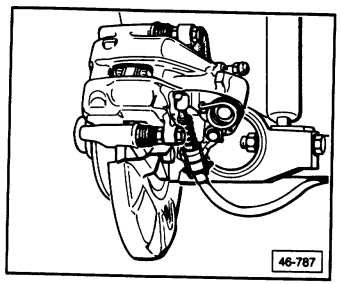
- remove mounting bolts from brake caliper housing
- remove brake pads

CAUTION

Always remove some brake fluid from the reservoir before installing new brake pads. When the caliper piston is pushed back, fluid is forced out of caliper and into the reservoir. After pads are installed, fill reservoir only to the MAX mark.



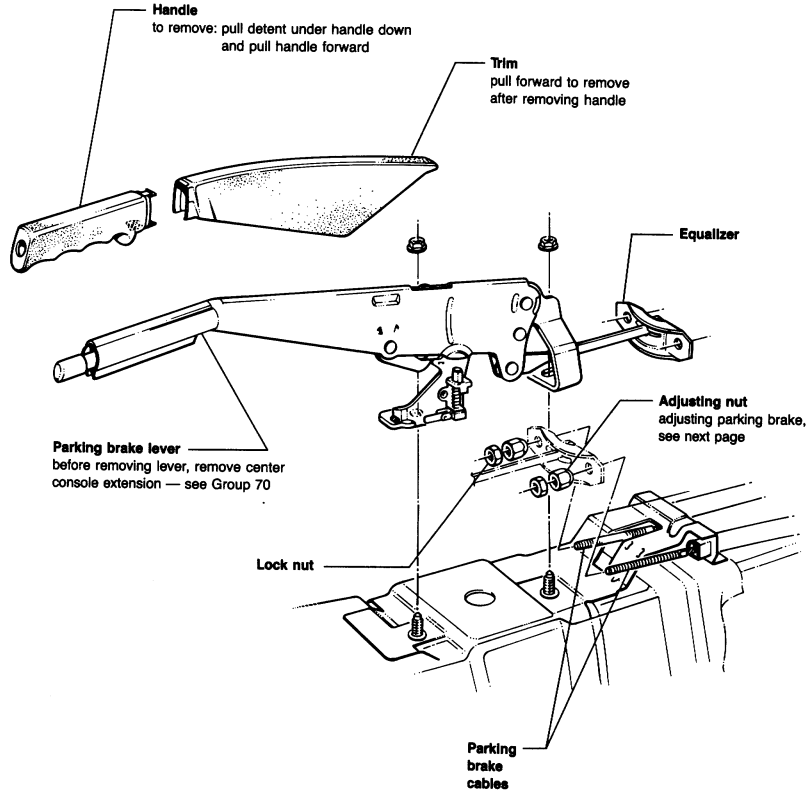
- push piston in by turning knurled wheel of tool clockwise
  - collar of tool (**left arrow**) must make contact with caliper
  - if piston is difficult to move, use 13 mm wrench on tool (**arrow A**)

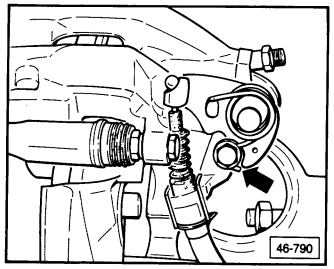


- install brake caliper housing using new self–locking bolts
- attach parking brake cable to brake caliper

CAUTION

Always pump the brake pedal **before** driving the vehicle to properly seat the pads in their normal operating position.





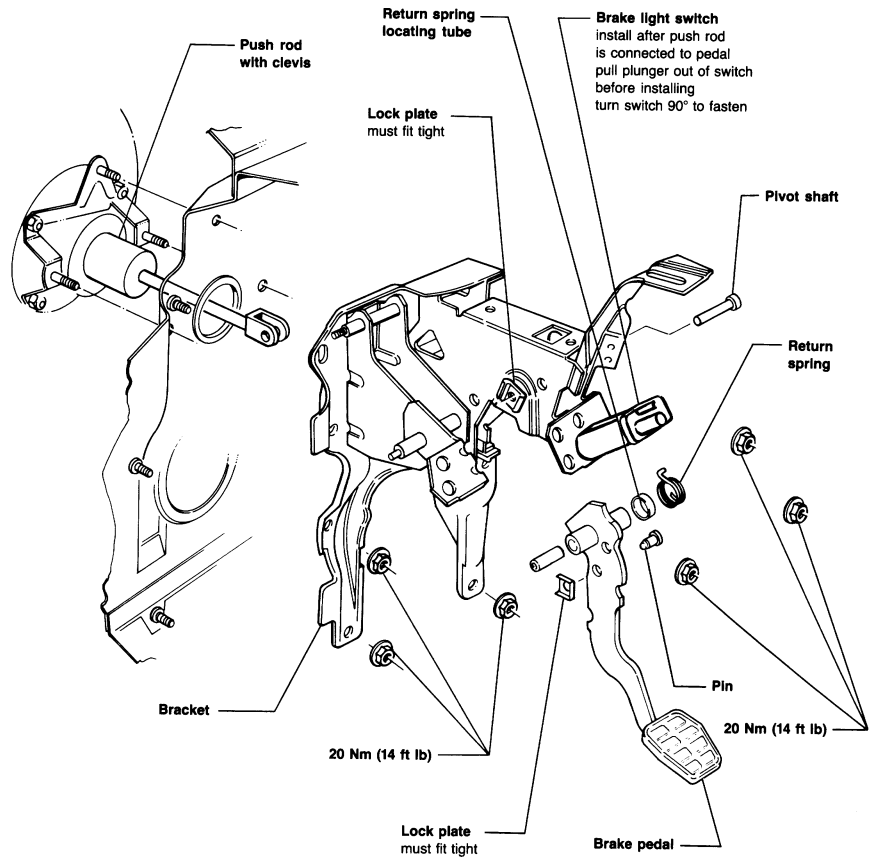
Parking brake, adjusting

Adjustment of the parking brake is only necessary when the parking brake cables, rear brake calipers, brake pads or discs are replaced.

- put parking brake lever into down (disengaged) position
- tighten adjusting nuts until levers on calipers (arrow) just move off their stops
  - maximum persmissible distance from stop = 1.5 mm
- apply and release parking brake
- check that both wheels rotate freely

Note

Lubricate all bushings and pivots before assembly with G 000 602 grease.



Index

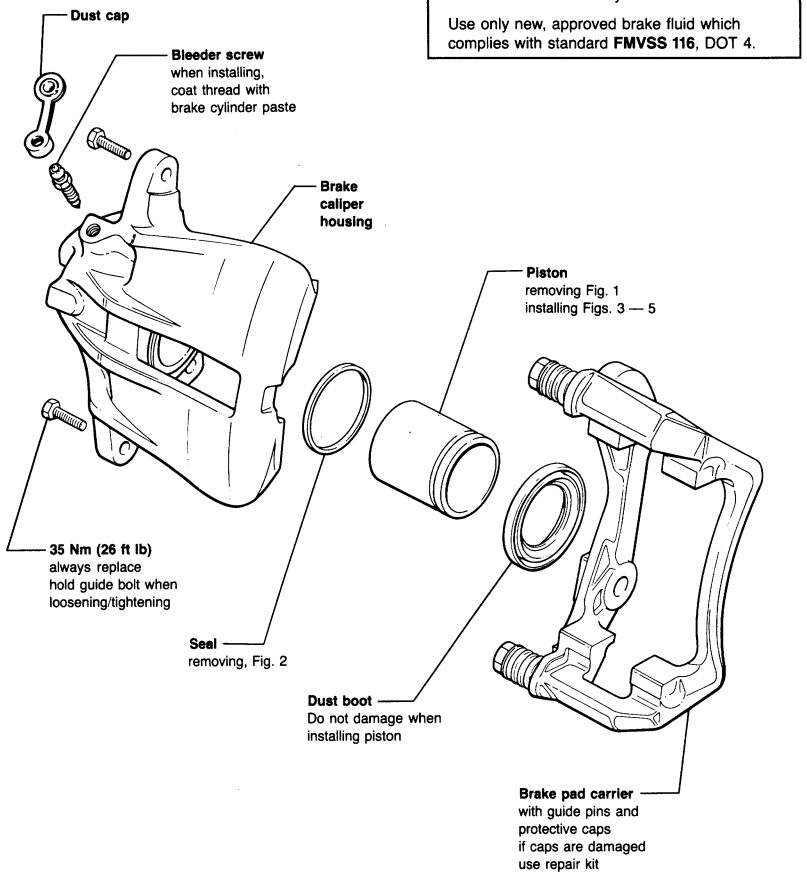
CAUTION

Brake fluid must not come in contact with painted parts.

Brake fluid absorbs moisture from the air and must therefore be replaced every two years.

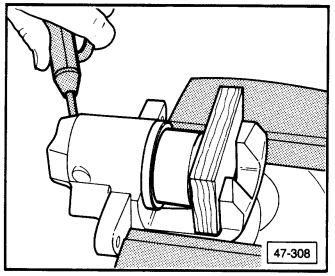
Do not use silicone-based brake fluid (DOT 5). Even the smallest traces may cause severe corrosion in the brake system.

Use only new, approved brake fluid which complies with standard **FMVSS 116**, DOT 4.



CAUTION

Use all parts supplied in repair kit.

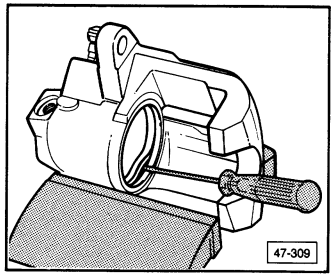


▶ **Fig. 1 Brake caliper piston, removing**

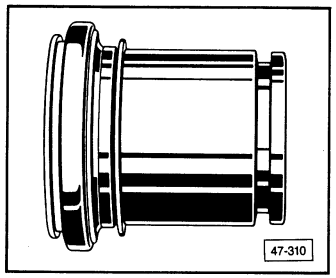
CAUTION

Place a wooden block in the caliper to prevent damage to the piston.

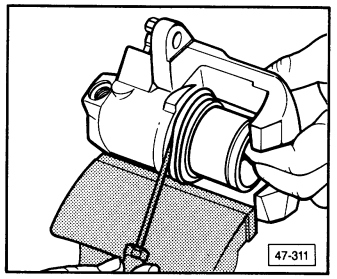
Use only enough air pressure to force the piston out.



▶ **Fig. 2 Brake caliper piston seal, removing**

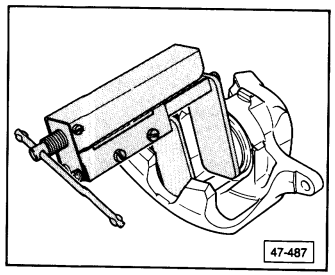


▶ **Fig. 3 Brake caliper piston, installing**



▶ **Fig. 4 Brake caliper piston, installing**

- lubricate piston and cylinder bore lightly with brake cylinder paste
- install piston and insert inner lip of dust boot into groove in brake cylinder



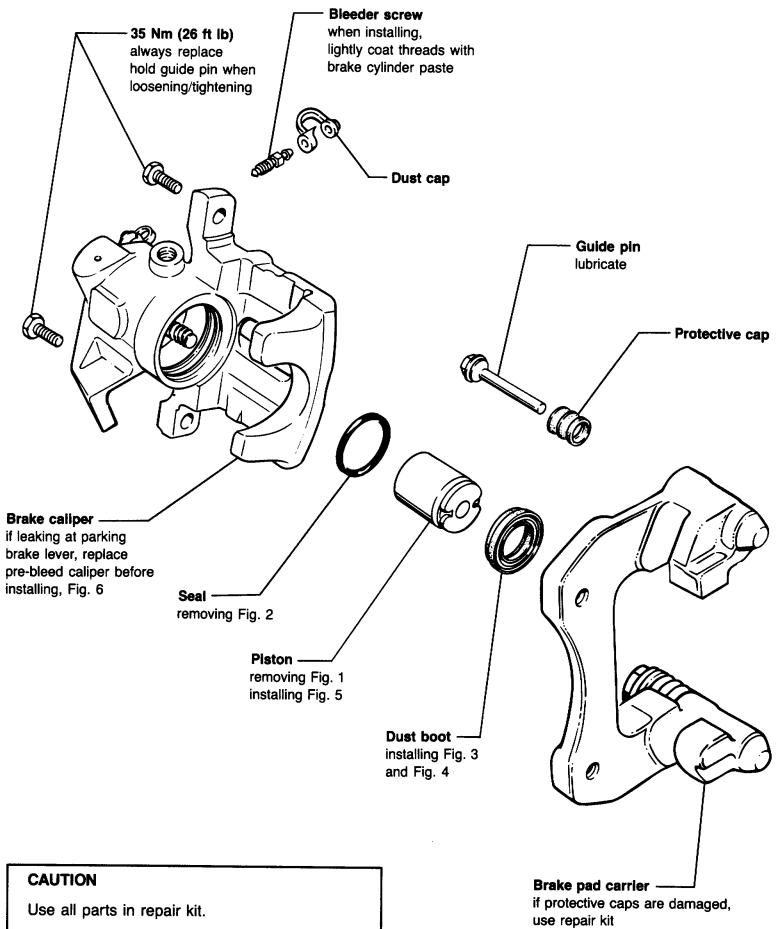
▶ **Fig. 5 Brake caliper piston, installing**

CAUTION

The outer lip of the dust boot must slip into the groove in the piston.

CAUTION

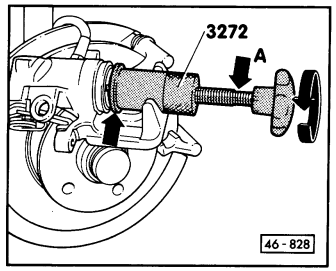
New brake calipers are filled with brake fluid and pre-bled. Repaired calipers must be pre-bled before installation.



CAUTION

Use all parts in repair kit.

Coat seals, pistons and cylinders lightly with VW brake cylinder paste or equivalent before installing.

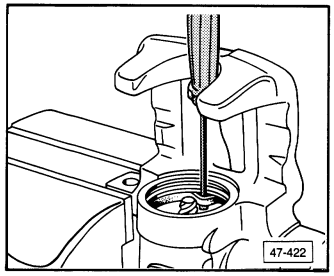


▶ **Fig. 1 Brake caliper piston, removing**

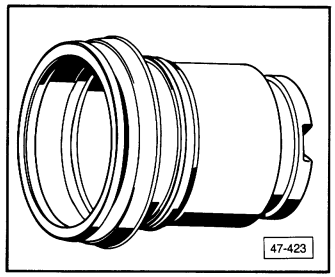
- turn knurled wheel of tool counterclockwise to remove piston from caliper housing

Note
If the piston is difficult to turn use an open–end wrench (13 mm) on the flats provided (**arrow A**).

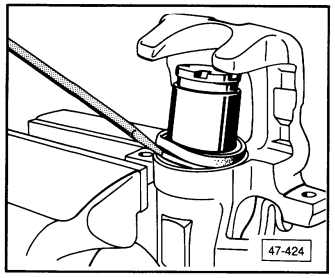
CAUTION
Collar of tool (**arrow**) must be next to caliper piston.



▶ **Fig. 2 Brake caliper piston seal, removing**

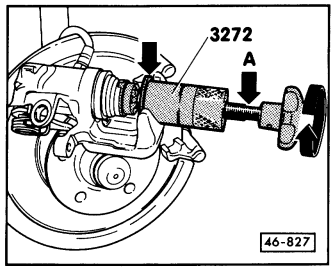


▶ **Fig. 3 Brake caliper piston, installing**



▶ **Fig. 4 Brake caliper piston, installing**

- install inner lip of dust boot into groove in cylinder with a screwdriver



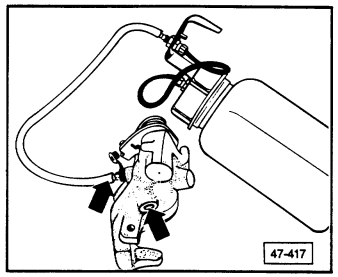
▶ **Fig. 5 Brake caliper piston, installing**

- turn knurled wheel of tool clockwise to install piston

CAUTION
Collar of tool (**arrow**) must contact brake caliper.

Note
If the piston is difficult to turn use an open–end wrench (13 mm) on the flats provided (**arrow A**).

CAUTION
The outer lip of the dust boot must slip into the groove in the piston.



▶ **Fig. 6 Brake caliper, pre-bleeding**

- hold caliper in position shown
- open bleeder valve and fill with brake fluid from container (**left arrow**) until fluid flows from brake connection (**right arrow**) without bubbles
- close bleeder valve