

Disassembly and Reassembly of Brake Wheel Cylinders

Job No.

42—7

A. Front Brake Wheel Cylinder

Disassembly:

1. Unscrew the bleed screw from the brake wheel cylinder.
2. Remove the actuating pin (8), the metal boot (6), and the rubber boot (7) (Fig. 42—7/1).

Then remove the piston (5), the cup (4), the cup expander (3), and the stop spring (2) from the brake wheel cylinder housing.

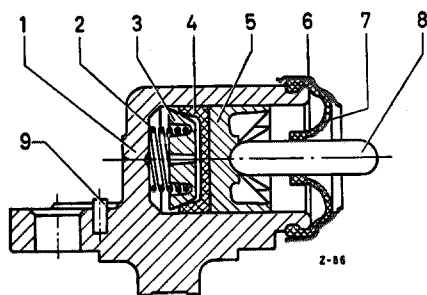


Fig. 42—7/1

- | | |
|------------------------|-----------------|
| 1 Brake wheel cylinder | 6 Metal boot |
| 2 Stop spring | 7 Rubber boot |
| 3 Piston cup expander | 8 Actuating pin |
| 4 Piston cup | 9 Notched pin |
| 5 Piston | |

3. Thoroughly clean all parts with brake fluid or alcohol.

Checking:

4. Check the brake wheel cylinder bore for wear, scoring, and rust. Scored or rusty brake wheel cylinders must be replaced.

The permissible diameter for the bore of the front brake wheel cylinder ($1\frac{1}{8}$ " ϕ) is 28.570—28.672 mm.

The maximum permissible conicity of the bore is 0.03 mm.

5. Check the piston for scoring and wear. The permissible diameter of the piston is

28.505—28.422 mm

Note: The permissible clearance between piston and bore is 0.065—0.25 mm.

Reassembly:

6. The bore in the brake wheel cylinder, the piston, and a new cup should be lightly coated with brake fluid or ATE blue brake paste.

Note: Use the brake paste sparingly.

When reassembling the brake wheel cylinder, always use new cups and new rubber boots.

7. Slide the stop spring (2), the cup expander (3), a new cup (4), and the piston (5) into the bore of the brake wheel cylinder (1).

Press on the rubber boot (7) and the metal boot (6); then install the actuating pin (8) (see Fig. 42—7/1).

Note: In order to prevent the piston and the cup from falling out after reassembly, it is advisable to put a Piston Clamp 120 589 03 31 on the brake wheel cylinder (see Fig. 42—7/3).

B. Rear Brake Wheel Cylinder

Disassembly:

8. Unscrew the bleed screw from the brake wheel cylinder.
9. Remove the actuating pins (1) and the two rubber boots (2) (Fig. 42 — 7/2).

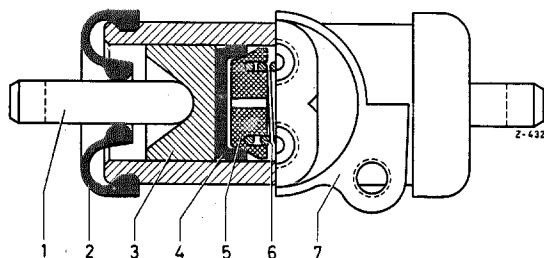


Fig. 42 — 7/2

- | | |
|-----------------|--------------------------|
| 1 Actuating pin | 5 Cup expander |
| 2 Rubber boot | 6 Stop spring |
| 3 Piston | 7 Brake cylinder housing |
| 4 Cup | |

10. Remove the two pistons (3), the two cups (4), the two cup expanders (5), and the stop spring (6) from the brake wheel cylinder bore.
11. Thoroughly clean all parts with brake fluid or alcohol.

Checking:

12. Check the brake wheel cylinder bore for wear, scoring, and rust. Scored or rusty brake wheel cylinders must be replaced.

The permissible diameter for the bore of the rear brake wheel cylinder is

25.400 — 25.502 mm for the 1" ϕ bore
23.810 — 23.912 mm for the $\frac{15}{16}$ " ϕ bore.
The maximum permissible conicity of the bore is 0.03.

13. Check the two pistons for scoring and wear. The permissible diameters of the pistons are
25.335 — 25.252 mm for the 1" ϕ bore
23.662 — 23.745 mm for the $\frac{15}{16}$ " ϕ bore.

Note: The permissible clearance between the pistons and the bore is 0.065 — 0.250.

Reassembly:

14. The bore in the brake wheel cylinder, the pistons, and two new cups should be lightly coated with brake fluid or ATE blue brake paste.

Note: Use the brake paste sparingly.

When reassembling the brake wheel cylinder, always use new cups and new rubber boots.

15. Insert a new cup (4) and a piston (3) in the bore of the brake wheel cylinder (see Fig. 42 — 7/2). Press on a rubber boot (2) at this side.
16. Now install a cup expander (5) and the stop spring (6) from the other side into the brake wheel cylinder in such a way that the cup expander rests snugly against the cup.

Note: The stop spring must be properly seated in the cup expander.

17. Install the second cup expander (5), the second cup (4), and the second piston (3). Then press the second rubber boot onto the brake wheel cylinder.

Note: In order to prevent the pistons and the cups from falling out after reassembly, it is advisable to put a Piston Clamp 00 589 02 37 on the brake wheel cylinder (Fig. 42 — 7/3).

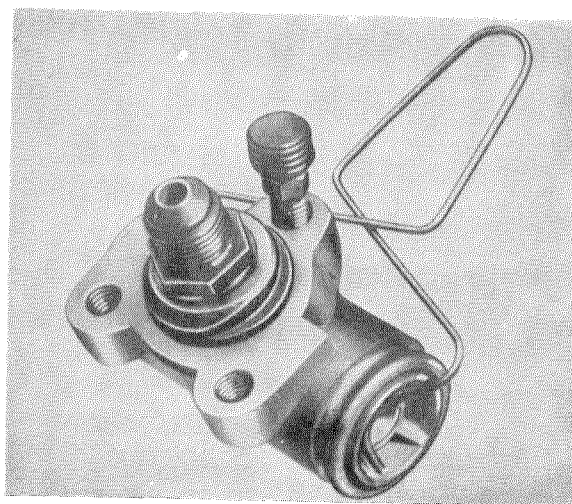


Fig. 42 — 7/3