

Changing the brake fluid / bleeding the brakes

General

To ensure fast and efficient servicing, it is recommended to use a filling and bleeding device. The procedures described below were carried out with a Teves unit. For a detailed description of the unit, refer to the operating manual of the unit.

Important notes

Bleed both bleeder valves of each wheel of the four-piston fixed caliper brake.

When changing the brake fluid, also drain some brake fluid from the bleeder valve of the clutch slave cylinder.

Use only fresh DOT 4 brake fluid.

Observe change intervals and brake fluid grade.

Total brake fluid change quantity: 1 liter.

Change quantity per wheel: approx. 250 c.c.

On vehicles up to end of MY '92, the brake fluid must be replaced **every 2 years** as a minimum.

As of MY '93, the brake fluid change interval has been **increased to 3 years** - along with the use of special DOT 4 brake fluid.

The 3-year change interval is valid as of MY '93, but only in conjunction with the use of the special Porsche brake fluid. The brake fluid is available under Part No. 000.043.202.04.

Container contents: 5 liters (as of May, 1992).

This special brake fluid may also be used on pre-MY '93 vehicles. However, the **two-year** fluid change interval will remain valid for those vehicles.

Brake fluid

The new brake fluid - Part No.

000.043.202.04 - offers superior properties.

Compared to the brake fluid specified previously, its main features are **further reduction of water absorption and increased wet and dry boiling points.**

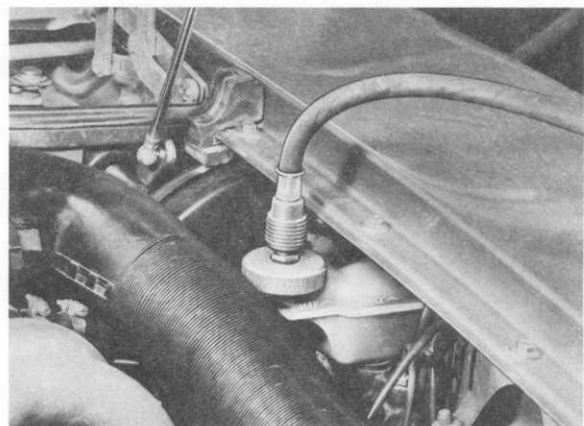
Note on water absorption: Water contents of only 2% in the brake fluid will cause the boiling point to drop by approx. 60 deg.C.

As of MY '93, only the new brake fluid may be used when topping up the reservoir.

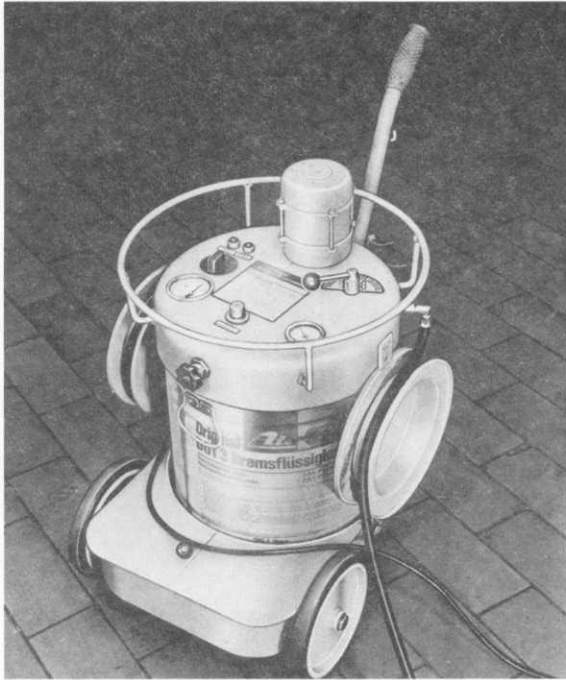
Any mixture of former brake fluid with new brake fluid causes the safety margin of the fluid to be narrowed down unnecessarily. Both the former and the new brake fluid are of amber color.

Procedure for bleeding and changing the fluid

1. Top up reservoir with fresh brake fluid up to upper edge. Take out strainer insert.
2. Connect bleeder flange to reservoir and fit quick coupling of filler hose to the nipple on the bleeder flange.



3. Switch on bleeder. Move selection control lever to filling and bleeding position.



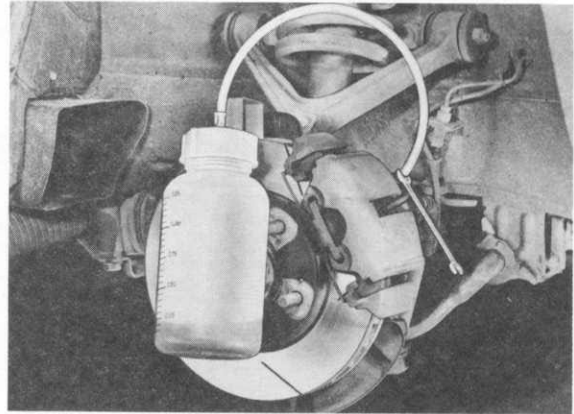
4. Open each bleeder valve until escaping brake fluid is without air bubbles.

Note

First bleed the clutch, if the brake master cylinder or brake fluid tank had been removed.

The stepped brake master cylinder (since 1984 models) has a bleeder valve for the intermediate piston brake circuit (rear axle brake circuit), see point 6.

5. Use a bottle to catch the escaping brake fluid for accurate inspection regarding cleanliness, air bubbles and determination of brake fluid consumption.



6. Operate the brake pedal firmly several times during bleeding procedures and with the bleeder valves open, in order to remove all air bubbles in the brake master cylinder.

If there is a bleeder valve on the master cylinder, begin bleeding of brakes on this valve.

Note

There is no difference in bleeding procedures for cars with ABS.

7. It is recommended to perform a low pressure leak test after finishing the bleeding/brake fluid change procedures. This, of course, requires that the bleeding adapters and filling hose are connected 100 % tight. All bleeder valves of the system must be closed. Keep the selection control lever at "filling and bleeding" and read pressure on the operating pressure gauge.

8. Now set lever to leak test. The pressure value displayed on the operating pressure gauge must not drop during the next 5 minutes.

There is a leak in the brake or clutch system, if pressure does drop during the test time.



9. Install dust caps on bleeder valves. Draw off brake fluid in tank, which is higher than the MAX mark. Install strainer and screw on brake fluid tank cap.