

Brake Operating Principle

When the foot brake is applied, the piston in the brake master cylinder is forced forward transmitting fluid pressure to cylinders in the brake calipers through hydraulic lines and hoses. The fluid pressure acts on the brake caliper pistons causing the brake pad segments to bear against the rotating discs, squeezing these from both sides and creating the friction required for stopping. The brake pedal pressure is in proportion to brake pad pressure being exerted upon the brake discs and, thus, the degree of braking action.

When the brake pedal is released, the hydraulic system connecting to the brake caliper cylinders is rendered fully depressurized, the pistons and brake pad segments move slightly away from the friction surfaces of the brake discs, freeing these completely, and the unbraked condition is regained.

Brake Master Cylinder

The brake master cylinder is equipped with a purging check valve which causes a complete depressurization within the hydraulic lines.

The purging check valve differs from the normal check valves inasmuch that the check valve cone has a bored out pressure purging passage of 0,7 mm (.276 in.) diameter. The purging provision ensures a full depressurization of the system but also a "repumping" by fast actuation of the brake pedal as is required in refilling and bleeding operations carried out without the usual bleeding aids. The hydraulic fluid reservoir is located in the forward luggage compartment next to the spare wheel.

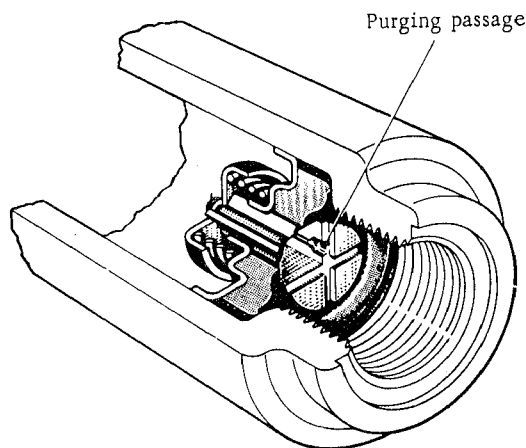


Fig. 3

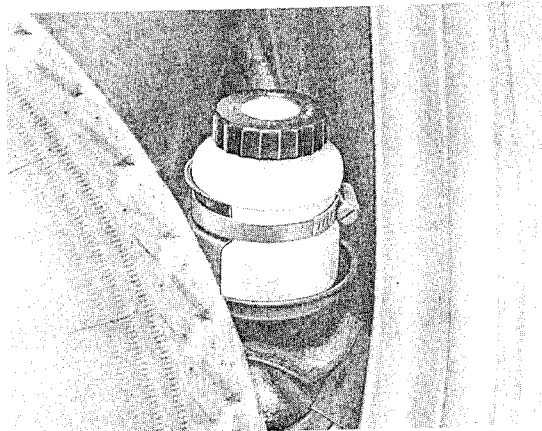


Fig. 3a

Caution:

This brake master cylinder is not interchangeable with brake master cylinders utilized in drum-type brake systems. For this reason, the brake master cylinder has been identified with a metal band reading: "This cylinder has a purging check valve" (German: "Zylinder hat Spezial-Bodenventil").

Brake Calipers

The brake calipers differ in size for front and rear wheels and are, therefore, not interchangeable.

The diameter of the brake master cylinder is 48 mm (1.890 in.) at front and 35 mm (1.378 in.) at rear.