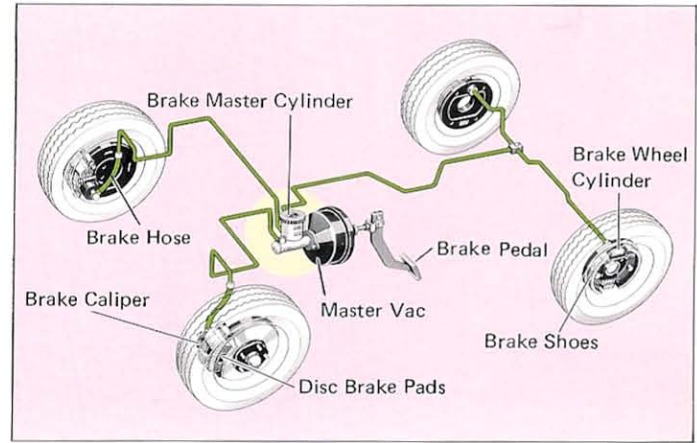


# BRAKE MASTER CYLINDERS

Among a vehicle's many functions, braking plays an especially important role in that it helps the driver and the passengers avoid danger, thereby ensuring safety. Thus, it is vital that the brake system always functions properly as part of the total vehicle system, which differs according to model and specifications. The brake master cylinder is just like a heart in this brake system.

The force of stepping on the brake pedal is first transmitted to the brake master cylinder located in the engine compartment room. Then the brake master cylinder changes this power into oil pressure and sends the pressure through the brake hoses to the calipers and brake wheel cylinders at each wheel. Brake pads and brake shoes stop the wheels with friction, thus stopping the vehicle.

<Brake System>



**Reservoir Cap:**

This cap stays tight even with temperature changes, to prevent entry of water or dust.

**Brake Fluid Strainer:**

This strainer filters out fine contaminants to keep brake fluid clean.

**Reservoir Tank:**

**Cups:**

Specially processed materials are used which resist transformation due to temperature changes or reaction with brake fluid.

The shape and hardness of the cups are designed to assure high sealing performance. They fit the inside surface so well and move so smoothly that they wear very slowly.

**※2 Piston Kit:**

Pistons are supplied as a kit to reduce maintenance costs and repair time.

**Float:**

This float gauges the fluid level and sends a signal to the brake fluid level indicator when the fluid is low.

**Cylinder Body:**

The body is corrosion resistant. The inside surface is finished by a very precise process, making the piston stroke smooth. Thus, high sealing performance is maintained for a long time.

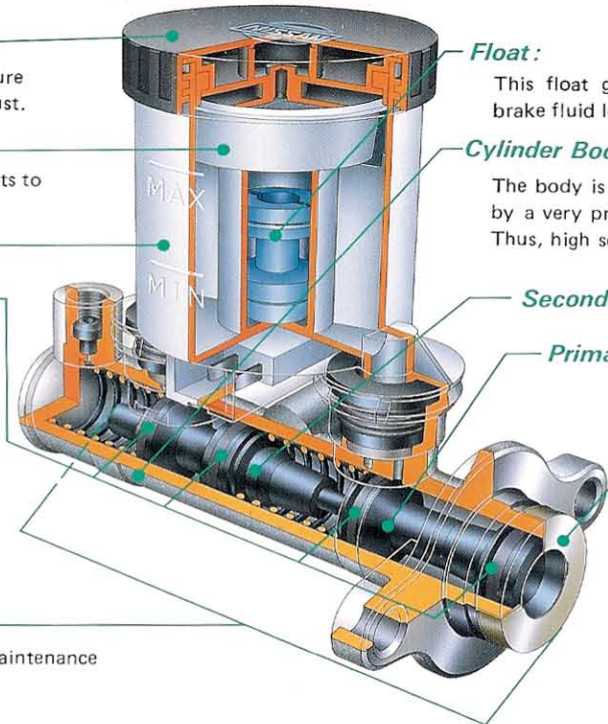
**Secondary Piston**

**Primary Piston**

**Snap Ring**

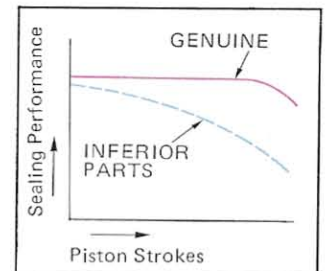
**※1 Pistons:**

The pistons move in the cylinder to generate oil pressure. They function under high loads during quick braking, and maintain a constant stroke. The surface is treated to prevent corrosion by brake fluid, thus providing high durability.



## Genuine Nissan Brake Master Cylinders Feature:

1. High sealing performance in the cylinder — generates oil pressure to assure steady braking power.
2. High durability
3. Maintenance cost savings — pistons are supplied as a kit for high repairability, in this way saving money and repair time.



## Problems with Using Inferior Brake Master Cylinders :

1. Poor sealing performance due to improper shaping of cups and pistons may cause fluid leakage, thereby reducing braking performance.
2. Poor materials in the cylinder body or component parts may not match the brake fluid chemicals, and an inadequate inside surface finishing may cause corrosion and result in a shorter service life.
3. Finishing problems such as scratches on the cylinder body or on the pistons may decrease sealing performance and durability.



## CLUES FOR CHECKING BRAKE MASTER CYLINDER

The brake master cylinder should be inspected periodically. If your brake system is in the condition described below, please contact our Nissan dealer immediately. In replacing a brake master cylinder, you are recommended to use a genuine Nissan brake master cylinder. For the specific timing of

periodic brake system inspections, please refer to the periodic maintenance schedule in your Owner's Manual. At the same time, you are recommended to periodically check the brake pedal, master vac, brake hoses, disc brake calipers, brake wheel cylinders, disc brake pads and brake shoes.

### 1. Poor Braking



### 2. Low Brake Fluid Levels



### 3. Leakage of Brake Fluid



**GENUINE NISSAN BRAKE MASTER CYLINDERS**