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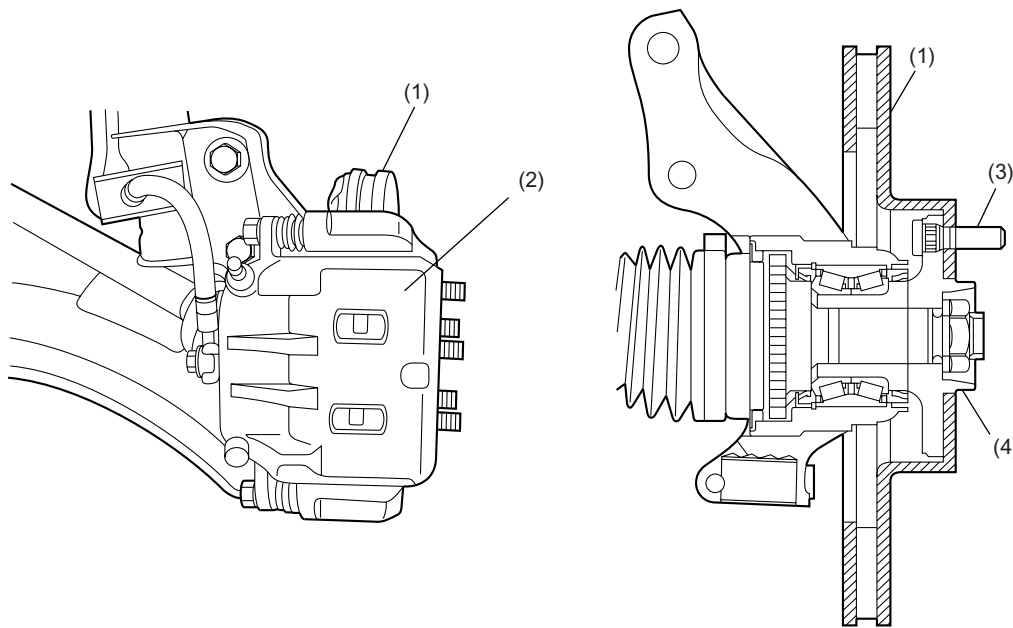
**BRAKE**

## FRONT AND REAR DISC BRAKES

### BRAKE

#### 1. Front and Rear Disc Brakes

- The front disc brakes are of a ventilated disc type which features high heat dissipation and superb braking stability. In addition, disc brakes will quickly restore their original braking performance even when they get wet.
- On STi models, ventilated discs are used on both front and rear wheels.
- Each disc rotor, which is fitted on the outside of the hub, is secured together with the wheel using the hub bolts. This facilitates its removal and installation.
- The inner brake pad is provided with a wear indicator.



BR-00011

- (1) Disc rotor
- (2) Caliper body

- (3) Hub bolt
- (4) Hub

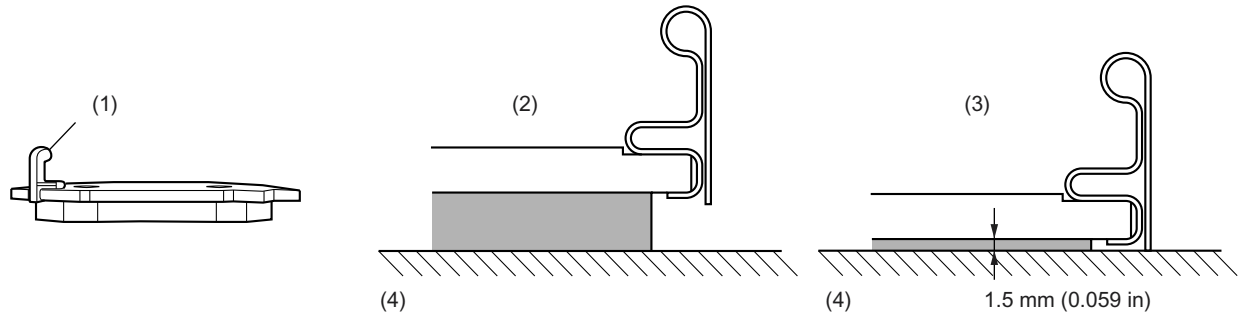
BR-2

## FRONT AND REAR DISC BRAKES

BRAKE

### A: PAD WEAR INDICATOR

A wear indicator is provided on the inner disc brake pads. When the pad wears down to 1.5 mm (0.059 in) the tip of the wear indicator comes into contact with the disc rotor, and makes a squeaking sound as the wheel rotates. This alerts the driver to the situation.



(1) Wear indicator

(2) New pad

(3) Worn pad

(4) Disc rotor

### B: FRICTIONAL MATERIAL OF BRAKE PADS

The brake pads materials do not contain any asbestos which is harmful to human body.

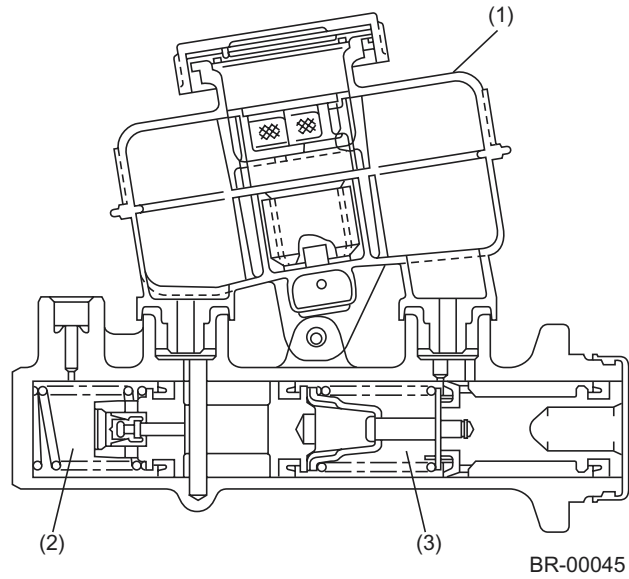
BR-3

## MASTER CYLINDER

BRAKE

### 2. Master Cylinder

- There is a brake fluid reservoir tank on the master cylinder. The reservoir is completely sealed for extended service life of the brake fluid.



- (1) Reservoir tank
- (2) Secondary hydraulic chamber
- (3) Primary hydraulic chamber

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## MASTER CYLINDER

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### A: BRAKE FLUID LEVEL SWITCH

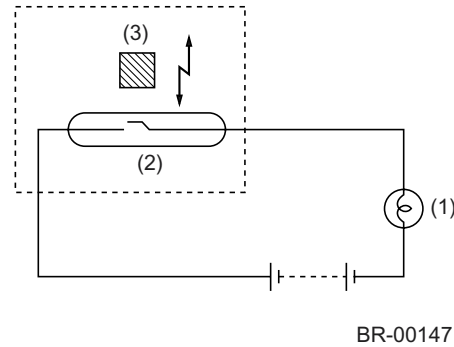
The brake fluid level switch is located inside the brake fluid reservoir tank and causes the brake system warning light on the combination meter to come on when the fluid level has dropped below the predetermined level.

The switch assembly consists of a reed switch (normally open) and a permanent magnet that is incorporated in a float.

When the brake fluid level is normal, the float is far above the reed switch, so the force of the magnet is unable to act on the reed switch. The warning light circuit, therefore, remains open.

When the brake fluid level drops to a level approximately 30 mm (1.18 in) below the maximum level and the float lowers accordingly, the magnet aligns with the reed switch, activating the reed switch contact. The warning light then comes on to warn the driver of the situation.

The warning light may, although momentarily, illuminate even when the brake fluid level is normal if the vehicle tilts or swing largely.



(1) Warning light

(2) Reed switch

(3) Permanent magnet

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## BRAKE BOOSTER

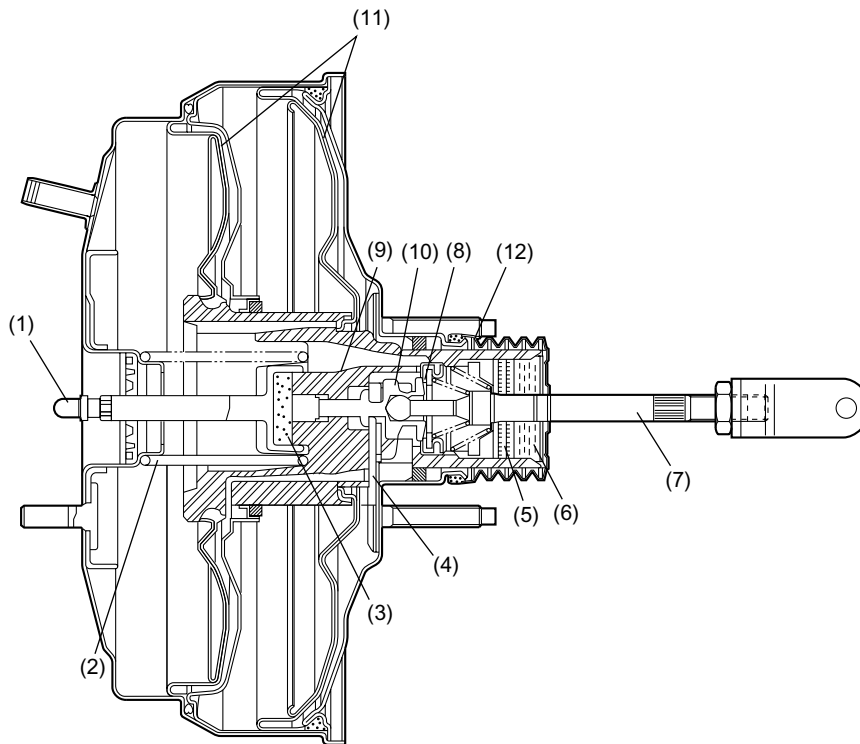
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### 3. Brake Booster

The brake booster is a tandem type that uses two diaphragms.

By utilizing the differential pressure between the intake manifold vacuum and atmospheric pressure, a high braking force can be obtained even when the pedal depressing effort is small.

The brake booster is installed between the brake pedal and master cylinder. This contributes to improve the response to the brake pedal. If it fails, the brake servo effect is lost requiring a larger pedal effort, however, the braking force is still maintained.



BR-00057

- |                   |                   |                          |
|-------------------|-------------------|--------------------------|
| (1) Pushrod       | (5) Filter        | (9) Valve body           |
| (2) Return spring | (6) Silencer      | (10) Plunger valve       |
| (3) Reaction disc | (7) Operating rod | (11) Diaphragm plate     |
| (4) Key           | (8) Poppet valve  | (12) Valve return spring |

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## BRAKE PEDAL

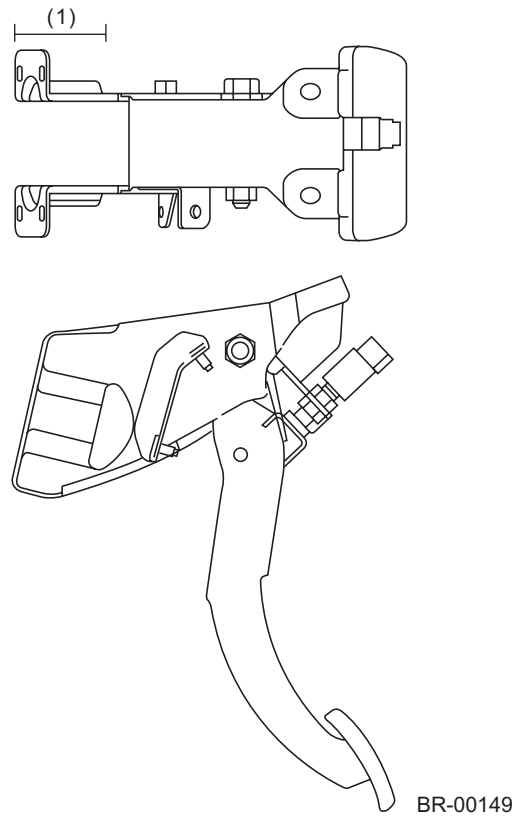
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### 4. Brake Pedal

To minimize brake pedal rearward movement in case of a collision for extra safety, the shape of the brake pedal bracket has been changed.

An impact absorbing area is provided at the side of the pedal bracket.

In case of a front collision, the brake pedal bracket impact absorbing area deforms to minimize shock to the driver.



(1) Impact absorbing area

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# BRAKE PEDAL

BRAKE

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MEMO

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