

# POWER BRAKE UNIT INSPECTION

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B3E041143800W03

## Note

- The following inspection methods are simple inspection methods to judge the function of the power brake unit.
- If there is any malfunction in the power brake unit, replace the power brake unit as a single unit.

## Without Using SST

### Operation inspection

1. With the engine stopped, pump the pedal a few times.
2. With the pedal depressed, start the engine.
3. If the pedal moves down slightly immediately after starting the engine, the unit is normal.

### Vacuum function inspection

1. Start the engine.
2. Stop the engine after driving the vehicle for **1-2 min**.
3. Depress the pedal with normal force.
4. If the first pedal stroke is long and becomes shorter with subsequent strokes, the unit is normal.
  - If a problem is found, inspect for damage to or improper installation of the check valve and vacuum hose. After repairing, inspect again.

### Vacuum loss function inspection

1. Start the engine.
2. Depress the pedal with normal force.
3. With the pedal depressed, stop the engine.
4. Hold the pedal depressed for **approx. 30 s**.
5. If the pedal height does not change during this time, the unit is normal.

## Using SST

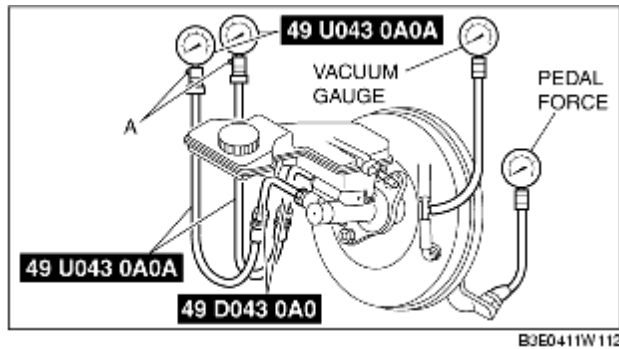
### Pre-inspection preparation

1. Install the **SST** (49 D043 0A0) to the master cylinder in the orientation shown in the figure.

### Note

- When installing the **SST** (49 D043 0A0) to the master cylinder, use a commercially available flare nut wrench.
  - Flare nut across flat: **12 mm {0.47 in}**

2. Connect the **SSTs**, a vacuum gauge, and a pedal force gauge to the master cylinder, and bleed the air from the **SSTs** and the brake line. (Bleed the air from the **SSTs** using air bleed valve A.)



### Vacuum loss inspection

- Start the engine.
- Depress the brake pedal with a force of **200 N {20.4 kgf, 44.9 lbf}**.
- Stop the engine when the vacuum gauge reading reaches **68 kPa {510 mmHg, 20.1 inHg}** with the pedal depressed.
- With the engine off, observe the vacuum gauge for **15 s**.
- If the gauge has dropped **3.3 kPa {25 mmHg, 1.0 inHg}** or less, the unit is normal.

### Lack of hydraulic pressure inspection

- If the pedal force and fluid pressure correlation is within the specification with the engine stopped and a vacuum amount of **0 kPa {0 mmHg, 0 inHg}**, the system is normal.

#### Standard fluid pressure

Pedal force (N {kgf, lbf})	Fluid pressure (kPa {kgf/cm <sup>2</sup> , psi})
200 {20.4, 44.9}	500 {5.10, 72.6} or more

### Hydraulic pressure inspection

- Start the engine. Depress the brake pedal when the vacuum reaches **66.7 kPa {500 mmHg, 19.7 inHg}**.
- At this time, apply the indicated pedal force and if the fluid pressure is within the specification, the unit is normal.

#### Standard fluid pressure

<b>Pedal force</b> <b>(N {kgf, lbf})</b>	<b>Fluid pressure (kPa {kgf/cm<sup>2</sup>, psi})</b>
200 {20.4, 44.9}	6,500 {66.29, 942.8} or more