

14.Brake Fluid

A: INSPECTION

1) Check that the brake fluid level remains between MIN and MAX. If out of the specified range, refill or drain fluid. If the fluid level becomes close to “MIN”, refill fluid.

2) Check the fluid for discoloration. If the fluid color has excessively changed, drain the fluid and refill with new fluid.

B: REPLACEMENT

CAUTION:

- To maintain the brake fluid performance, replace the brake fluid according to maintenance schedule or earlier than that when used in severe condition.
- The FMVSS No. 116, fresh DOT3 or 4 brake fluid must be used.
- Cover the air bleeder screw with waste cloth, when loosening it, to prevent brake fluid from being splashed over surrounding parts.
- Do not let brake fluid come into contact with the painted surface of the vehicle body. Wash away with water immediately and wipe off if it is spilled by accident.
- Avoid mixing brake fluid of different brands to prevent fluid performance from degrading.
- Be careful not to allow dirt or dust to enter the reservoir tank.

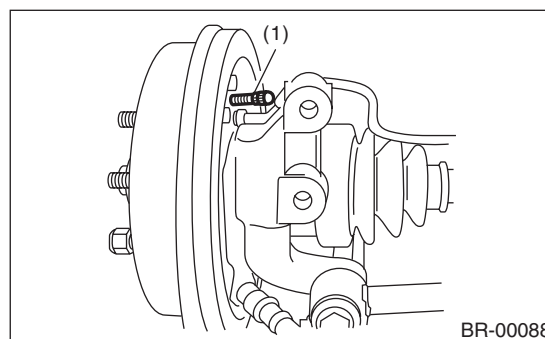
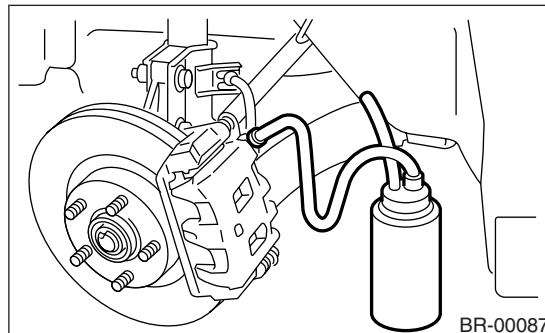
NOTE:

- During air bleeding, keep the reservoir tank filled with brake fluid to eliminate entry of air.
 - Operate the brake pedal slowly.
 - For convenience and safety, perform work with 2 people.
 - The required amount of brake fluid is approximately 500 mℓ (16.9 US fl oz, 17.6 Imp fl oz) for entire brake system.
- 1) Lift-up the vehicle and set rigid racks at the specified locations, or keep the vehicle lifted.
 - 2) Remove both the front and rear wheels.
 - 3) Drain the brake fluid from master cylinder.
 - 4) Refill the reservoir tank with recommended brake fluid.

Recommended brake fluid:

FMVSS No. 116, fresh DOT3 or DOT4 brake fluid

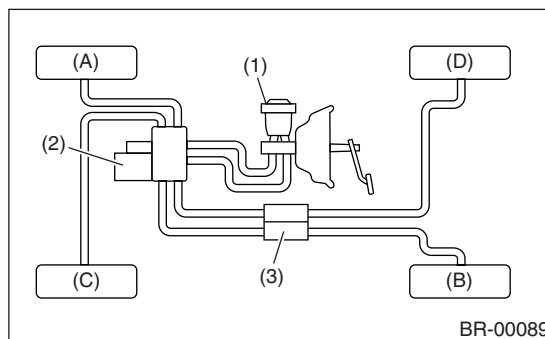
5) Attach one end of a vinyl tube onto air bleeder and insert the other end of the tube into a container to collect brake fluid.



(1) Air bleeder screw

CAUTION:

Brake fluid replacement sequence; (A) Front RH → (B) Rear LH → (C) Front LH → (D) Rear RH



- (1) Master cylinder
- (2) Hydraulic unit
- (3) Proportioning valve

6) Instruct your co-worker to depress the brake pedal slowly two or three times and then hold it depressed.

7) Loosen the air bleeder screw to drain brake fluid. And then quickly tighten the screw.

8) Release the brake pedal slowly. Repeat steps 6) through 8) until there are no more air bubbles in the drained brake fluid.

NOTE:

Add brake fluid as necessary while performing an air bleed operation, in order to prevent the reservoir tank from running short of brake fluid.

9) After completing the air bleeding operation, hold the brake pedal depressed and tighten the screw to install the air bleeder cap.

Tightening torque (air bleeder screw):

8 N·m (0.8 kgf-m, 5.8 ft-lb)

10) Bleed air from each wheel cylinder using the same procedures as described in steps 6) through 8) above.

11) Using a pedal force gauge, depress the brake pedal with a force of approximately 294 N (30 kgf, 66 lb) and hold it there for approximately 20 seconds to check if there is no entry of air and if pedal height remain same. Visually inspect the air bleeder screws and brake pipe joints to make sure that there is no fluid leakage.

12) Install the wheels, and drive vehicle for a short distance between 2 to 3 km (1 to 2 miles) to make sure that brakes are operating properly.