# 11.Air Bleeding A: PROCEDURE

#### **CAUTION:**

- Do not allow brake fluid to come in contact with vehicle body; wash away with water and wipe off completely if spilled.
- Avoid mixing different brands of brake fluid to prevent degrading the quality of fluid.
- Be careful not to allow dirt or dust to get into the reservoir tank.

# 1. MASTER CYLINDER

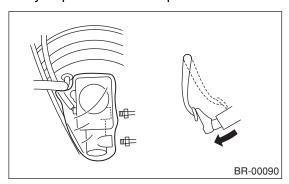
#### NOTE:

- If the master cylinder is disassembled or reservoir tank is empty, bleed the master cylinder.
- If bleeding the master cylinder is not necessary, bleed the brake line without doing the procedure below. <Ref. to BR-34, BRAKE LINE, PROCEDURE, Air Bleeding.>
- 1) Fulfill the reservoir tank of master cylinder with brake fluid.

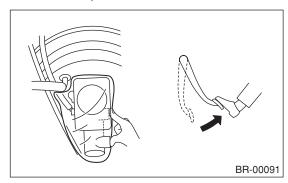
#### NOTE:

During the operation, keep the reservoir tank filled with brake fluid to eliminate entry of air.

- 2) Disconnect the brake line at primary and secondary sides.
- 3) Put a plastic bag cover on master cylinder.
- 4) Slowly depress the brake pedal and hold it.



5) Close the outlet plug with your finger, and then return the brake pedal.



- 6) Repeat the step4) and 5) several times.
- 7) Remove the plastic bag.

8) Install the brake pipes to master cylinder.

Tightening torque:

Model with ABS

15 N·m (1.5 kgf-m, 10.8 ft-lb) Model with VDC

18 N·m (1.8 kgf-m, 13.0 ft-lb)

9) Bleed air from the brake line. <Ref. to BR-34, BRAKE LINE, PROCEDURE, Air Bleeding.>

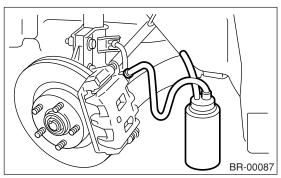
## 2. BRAKE LINE

- 1) If the master cylinder is disassembled or reservoir tank is empty, bleed the master cylinder before bleeding the brake line. <Ref. to BR-34, MASTER CYLINDER, PROCEDURE, Air Bleeding.>
- Fulfill the reservoir tank of the master cylinder with brake fluid.

#### NOTE:

During the bleeding operation, keep the reservoir tank filled with brake fluid to eliminate entry of air.

3) Fit one end of vinyl tube into the air bleeder and put the other end into a brake fluid container.



- 4) Several times depress the brake pedal and keep it
- 5) Loosen the air bleeder screws to discharge the brake fluid.

With the air bleeder tightened quickly, release the brake pedal.

- 6) Repeat the steps 4) and 5) until there are no more air bubbles in the vinyl tube.
- 7) Repeat the steps above from 2) to 6) in order to bleed each wheel.

### NOTE:

Perform the operation in order from the closest wheel cylinder to the master cylinder.

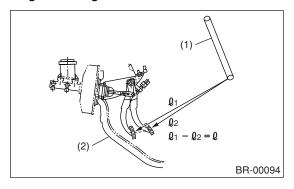
8) Tighten the air bleeder screws securely.

# Tightening torque:

- 8 N·m (0.8 kgf-m, 5.8 ft-lb)
- 9) Inspect that there is no brake fluid leak evident in the entire system.
- 10) Check the pedal stroke.

While the engine is idling after warming up, depress the brake pedal with a 500 N (51 kgf, 112 lb) load and measure the distance between brake ped-

al and steering wheel. With the brake pedal released, measure the distance between pedal and steering wheel again.



- (1) Steering wheel
- (2) Toe board

# Specified pedal stroke:

When depressing brake pedal with a 500 N (51 kgf, 112 lb) load. 95 mm (3.74 in) or less

- 11) If it is more than specified, there is a possibility that air is in the brake line. Bleed the brake line until pedal stroke meets the specification.
- 12) Operate the hydraulic control unit in the sequence control mode. <Ref. to ABS-10, ABS Sequence Control.>
- 13) Recheck the pedal stroke.
- 14) If it is more than specified, there is a possibility that air is in the inside of the hydraulic unit. Repeat above steps 2) to 9) until pedal stroke meets the specification.
- 15) Add brake fluid to the required level ("MAX" level) of reservoir tank.
- 16) Test run the vehicle and ensure that brakes provide normal braking action.