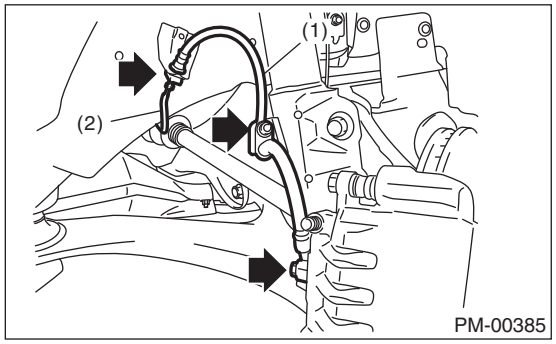
17.Brake Line

A: INSPECTION

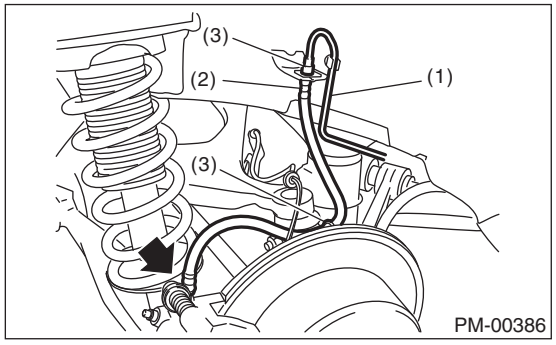
1. BRAKE LINE

1) Check for scratches, swelling, corrosion, traces of fluid leakage on the brake hoses or pipe joints.
2) Check the possibility of adjacent parts interfering with brake pipes/hoses during driving, and loose connections/clamps.
3) Check any trace of fluid leakage, scratches, etc. on master cylinder and wheel cylinder.

NOTE:
• When the brake fluid level in the reservoir tank is lower than specified limit, the brake warning light on the combination meter will illuminate.
• Visually check the brake hose for damage. (Use a mirror where it is difficult to see)



(1) Front brake hose
(2) Front brake pipe

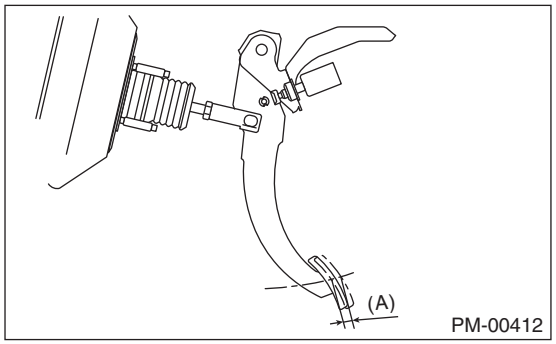


(1) Rear brake pipe
(2) Rear brake hose
(3) Clamp

2. SERVICE BRAKE

1) Move to the pull-up direction with the force of 10 N (1 kgf, 2 lbf) or less and check the free play.

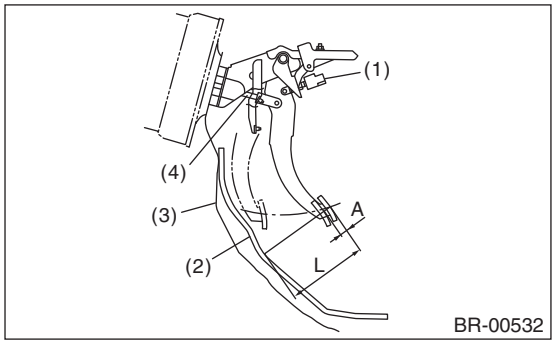
Brake pedal play
0.5 — 2.0 mm (0.02 — 0.08 in)



(A) Pedal free play

2) If the free play is out of specifications above, adjust the brake pedal as follows.
(1) Remove the stop light switch. <Ref. to BR-44, REMOVAL, Stop Light Switch.>
(2) Loosen the lock nut of the brake booster operating rod, and rotate the rod to adjust the pedal height L to be within the standard value.

Pedal height L:
150 — 160 mm (5.91 — 6.30 in)



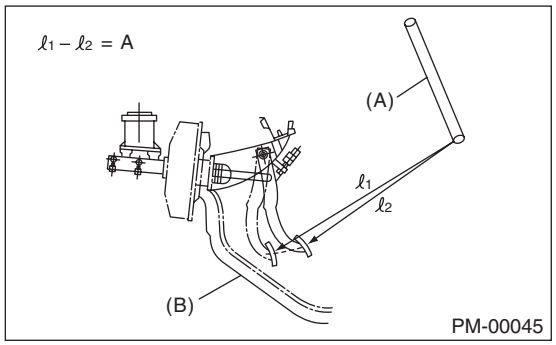
(1) Stop light switch
(2) Mat
(3) Toe board
(4) Brake booster operating rod

(3) Tighten the lock nut.

Locknut tightening torque:
22 N·m (2.2 kgf-m, 16 ft-lb)
(4) Install the stop light switch. <Ref. to BR-44, INSTALLATION, Stop Light Switch.>

3) Check the pedal stroke.
While the engine is idling, depress the brake pedal with a 490 N (50 kgf, 110 lbf) load and measure the distance between the brake pedal and steering wheel. With the brake pedal released, measure the distance between pedal and steering wheel again. The difference between the two measured values must be the specified value or less. If the measured value is specification or more, there is possibility of entering air in hydraulic unit.

Brake pedal stroke A:
95 mm (3.74 in)/ 490 N (50 kgf, 110 lbf) or less

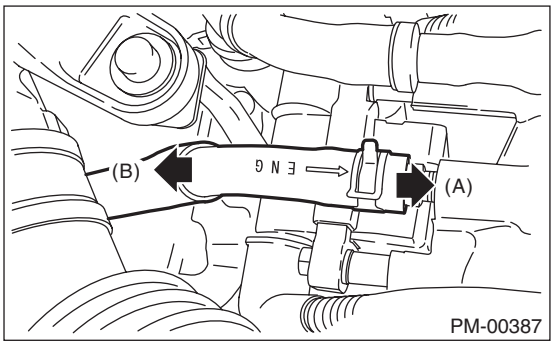


(A) Steering wheel
(B) Toe board

4) Check to see if air is in the hydraulic brake line by the feel of pedal operation. If air appears to exist in the line, bleed it from the system.
5) Check for even operation of all brakes, using a brake tester or by driving the vehicle for a short distance on a straight road.

3. BRAKE SERVO SYSTEM

1) With the engine off, depress the brake pedal several times applying the same pedal force. Make sure the travel distance should not change.
2) With the brake pedal depressed, start the engine. Make sure the pedal should move slightly toward the floor.
3) With the brake pedal depressed, stop the engine and keep the pedal depressed for 30 seconds. Make sure the pedal height should not change.
4) A check valve is built into the vacuum hose. Disconnect the vacuum hose to inspect function of check valve.
Blow compressed air into vacuum hose from the end of brake booster side. Check that the air flows from the air hose on engine side. Next blow air into hose from engine side: Check that the air does not flow from the hose.
Replace the both check valve and vacuum hose if the check valve is faulty. Engine side of vacuum hose is indicated by marking “ENG” as shown.



(A) Engine side
(B) Brake booster side

5) Check the vacuum hose for cracks or other damage.

NOTE:
When installing the vacuum hose on the engine and brake booster, do not use soapy water or lubricating oil on their connections.
6) Check the vacuum hose to make sure it is tightly secured.