

CHECKS AND ADJUSTMENTS

CHECK AND ADJUSTMENT OF BRAKE PEDAL

1. CHECK THAT PEDAL HEIGHT IS CORRECT

Pedal height from asphalt sheet: 161 – 171 mm

(6.34 – 6.73 in.)

If incorrect, adjust the pedal height.

2. IF NECESSARY, ADJUST PEDAL HEIGHT

- Disconnect the connector from the stop light switch.
- Loosen the stop light switch lock nut and remove the stop light switch.
- Loosen the push rod lock nut.
- Adjust the pedal height by turning the pedal push rod.

- Tighten the push rod lock nut.

Torque: 25 N·m (260 kgf·cm, 19 ft·lbf)

- Install the stop light switch and turn it until it lightly contacts the pedal stopper.

- Return the stop light switch one turn.

- Check that the clearance (A) between stop light switch and pedal.

Clearance: 0.5 – 2.4 mm (0.02 – 0.09 in.)

- Tighten the stop light switch lock nut.

- Connect the connector to the stop light switch.

- Check that the stop lights come on when the brake pedal is depressed, and go off when the brake pedal is released.

- After adjusting the pedal height, check the pedal freeplay

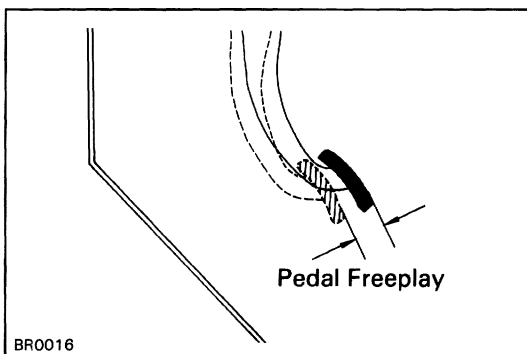
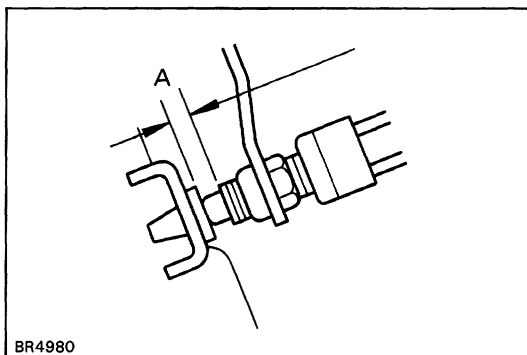
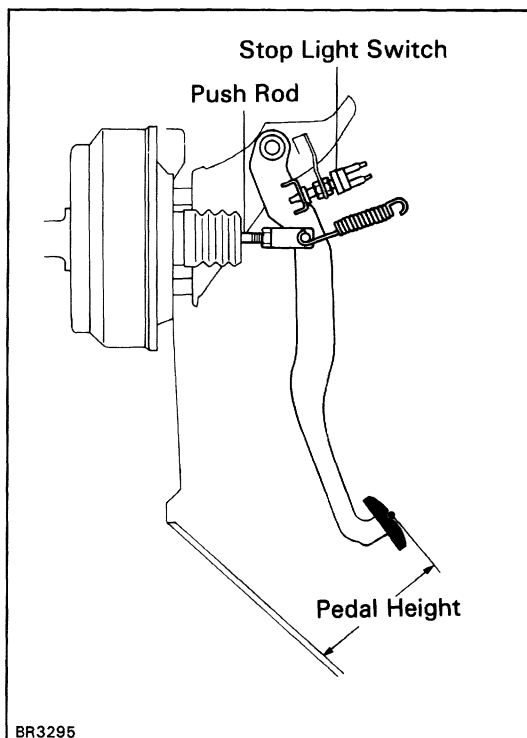
HINT: If clearance (A) between the stop light switch and the brake pedal stopper has been adjusted correctly, the pedal freeplay will meet the specifications.

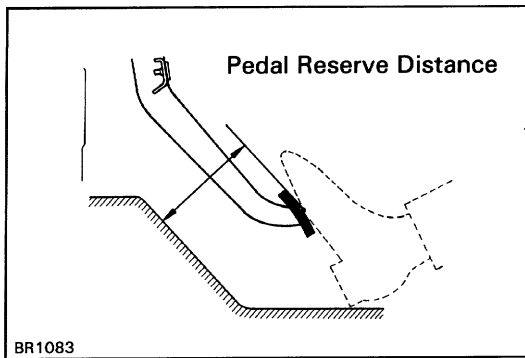
3. CHECK THAT PEDAL FREEPLAY IS CORRECT, AS SHOWN

- Stop the engine and depress the brake pedal several times until there is no more vacuum left in the booster.
- Push in the pedal by hand until the beginning of the resistance is felt, then measure the distance, as shown.

Pedal freeplay: 3 – 6 mm (0.12 – 0.24 in.)

If incorrect, check the stop light switch clearance. And if the clearance is OK, then troubleshoot the brake system.





5. CHECK THAT PEDAL RESERVE DISTANCE IS CORRECT

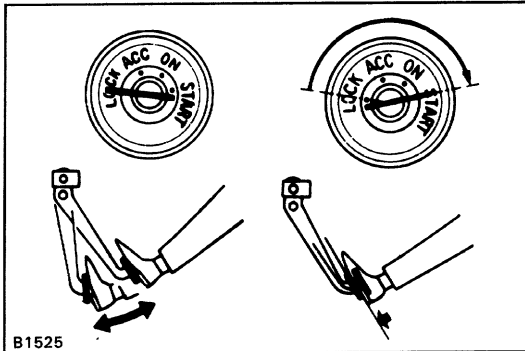
Release the parking brake lever.

With engine running, depress the pedal and measure the pedal reserve distance, as shown.

Pedal reserve distance from asphalt sheet at 490 N

(50 kgf, 110 lbf): More than 59 mm (2.32 in.)

If incorrect, troubleshoot the brake system.



OPERATIONAL TEST OF BRAKE BOOSTER

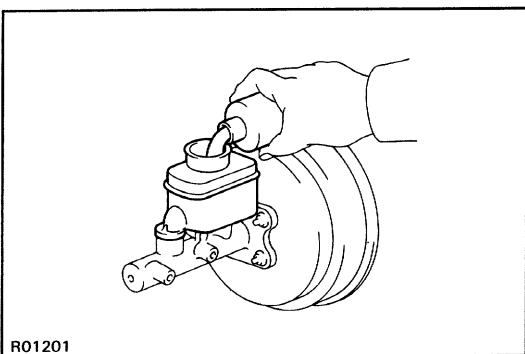
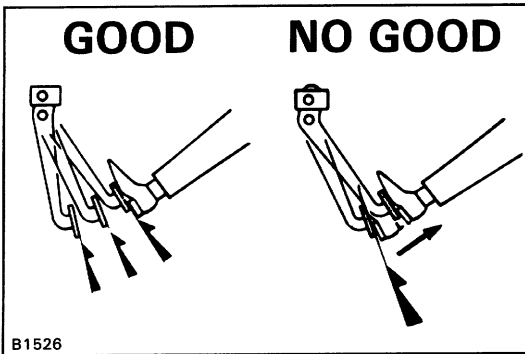
HINT: If the booster leaks or lacks of vacuum, repair before testing.

1. OPERATING CHECK

- Depress the brake pedal several times with the engine off, and check that there is no change in the pedal reserve distance.
- Depress the brake pedal and start the engine. If the pedal goes down slightly, operation is normal.

2. AIR TIGHTNESS CHECK

- Start the engine and stop it after one or two minutes. Depress the brake pedal several times slowly. If the pedal goes down the farthest the first time, but gradually rises after the second or third time, the booster is air tight.
- Depress the brake pedal while the engine is running, and stop it with the pedal depressed. If there is no change in pedal reserve travel after holding the pedal for thirty seconds, the booster is air tight.



BLEEDING OF BRAKE SYSTEM

HINT: If any work is done on the brake system or if air is suspected in the brake lines, bleed the system of air.

NOTICE: Do not let brake fluid remain on a painted surface. Wash it off immediately.

1. FILL BRAKE RESERVOIR WITH BRAKE FLUID

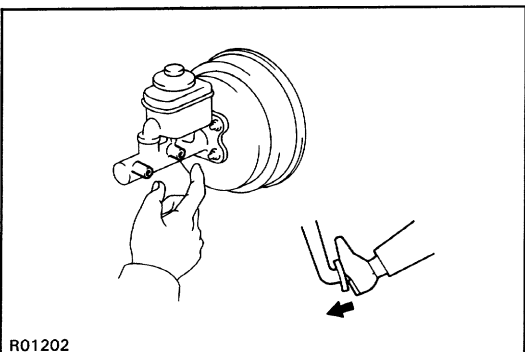
Check the reservoir after bleeding each wheel. Add fluid, if necessary.

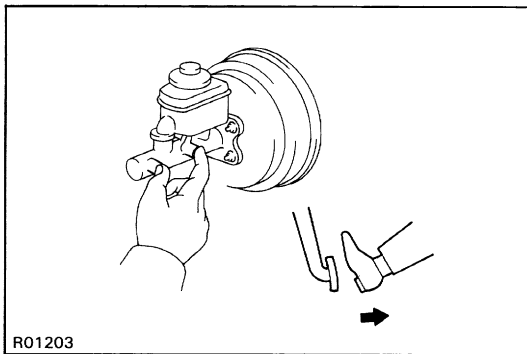
Fluid type: SAE J1703 or FMVSS NO.116 DOT3

2. BLEED MASTER CYLINDER

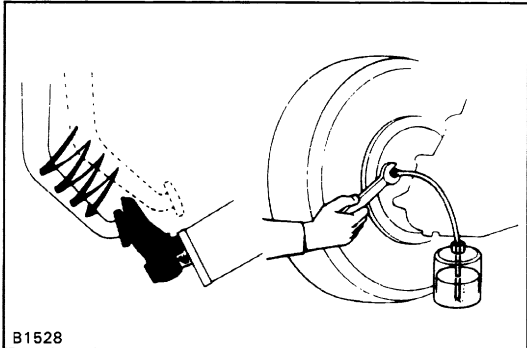
HINT: If the master cylinder was disassembled or if the reservoir becomes empty, bleed the air from the master cylinder.

- Disconnect the brake tubes from the master cylinder.
- Use a container to catch the brake fluid.
- Slowly depress the brake pedal and hold it.





- (c) Block off the outlet holes with your fingers, and release the brake pedal.
- (d) Repeat (b) and (c) three or four times.
- (e) Connect the brake tubes to the master cylinder.



3. CONNECT VINYL TUBE TO WHEEL CYLINDER BLEEDER PLUG

Insert other end of the tube in a half-full container of brake fluid.

HINT: Begin air bleeding from the wheel cylinder with the longest hydraulic line.

4. BLEED AIR FROM BRAKE LINE

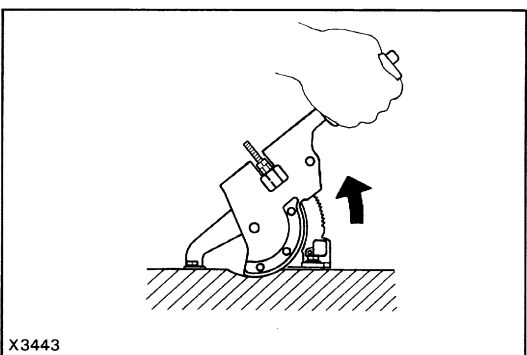
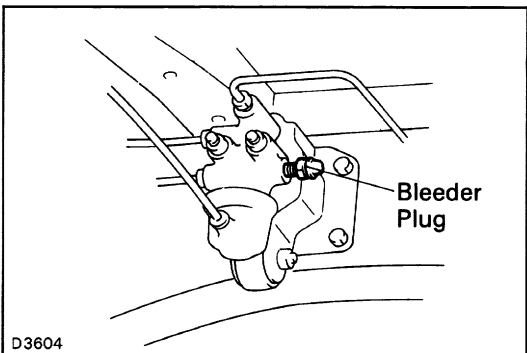
- (a) Slowly pump the brake pedal several times.
- (b) While an assistant press on the pedal, loosen the bleeder plug until fluid starts to run out. Then close the bleeder plug.
- (c) Repeat this procedure until there are no more air bubbles in the fluid.

Bleeder plug tightening torque:

11 N-m (110 kgf-cm, 8 ft-lbf)

5. REPEAT PROCEDURE FOR EACH WHEEL

6. BLEED LOAD SENSING PROPORTIONING AND BYPASS VALVE



CHECK AND ADJUSTMENT OF PARKING BRAKE

1. CHECK THAT PARKING BRAKE LEVER TRAVEL IS CORRECT

Pull the parking brake lever all the way up, and count the number of clicks.

Parking brake lever travel at 196 N

(20 kgf, 44.1 lbf): 7 – 9 clicks

2. IF NECESSARY, ADJUST PARKING BRAKE LEVER TRAVEL .

HINT: Before adjusting the parking brake, make sure that the rear brake shoe clearance has been adjusted.

For shoe clearance adjustment, see step 8 on page [BR-34](#).

- (a) Remove the parking brake lever cover.
- (b) Loosen the lock nut and turn the adjusting nut until the lever travel is correct.
- (c) Tighten the lock nut.

Torque: 5.4 N-m (55 kgf-cm, 48 in.-lbf)

- (d) Install the parking brake lever cover.

