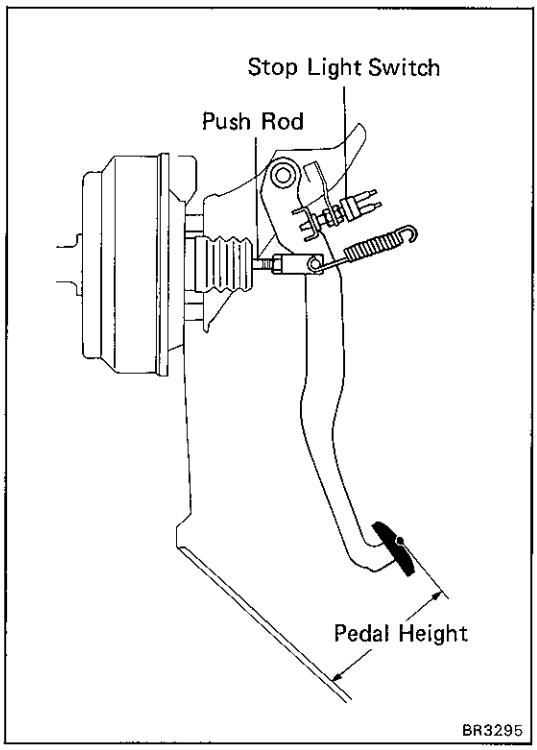


CHECKS AND ADJUSTMENTS

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

(a) Sufficiently loosen the stop light switch.

(b) Loosen the clevis lock nut.

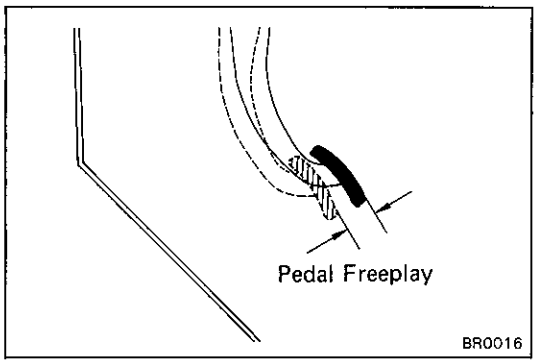
(c) Adjust the pedal height by turning the pedal push rod.

(d) Return the stop light switch until its body lightly contacts the pedal stopper.

(e) After adjusting the pedal height, check and adjust the pedal freeplay.

(f) Tighten the clevis lock nut.

Torque: 375 kg-cm (27 ft-lb, 37 N·m)



3. CHECK PEDAL FREEPLAY

(a) Stop the engine and depress the brake pedal several times until there is no more vacuum left in the booster.

(b) Push in the pedal until the beginning of resistance is felt. Measure the distance, as shown.

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

4. IF NECESSARY, ADJUST PEDAL FREEPLAY

(a) If incorrect, adjust the pedal freeplay by turning the pedal push rod.

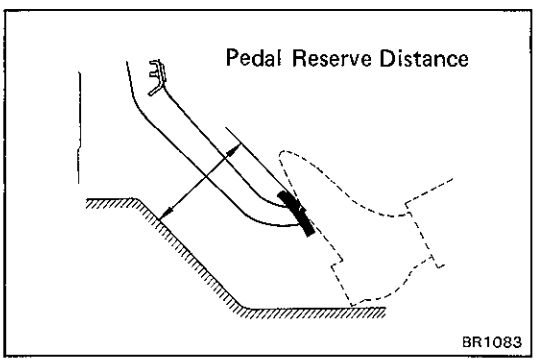
(b) Start the engine and confirm that pedal freeplay exists.

(c) After adjusting the pedal freeplay, check the pedal height.

5. CHECK THAT PEDAL RESERVE DISTANCE IS CORRECT

Release the parking brake lever.

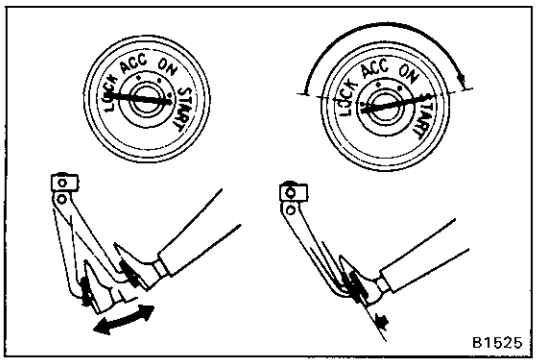
With engine running, depress the pedal and measure the pedal reserve distance, as shown.



Pedal reserve distance from asphalt sheet at 50 kg (110 lb, 490 N):

Front disc type	**More than 68 mm (2.68 in.)**
Front drum type	
• **Heavy-Duty**	
70, 73 series	**More than 100 mm (3.94 in.)**
75 series	**More than 90 mm (3.54 in.)**
• **Light-Duty**	**More than 105 mm (4.13 in.)**

If incorrect, troubleshoot the brake system.



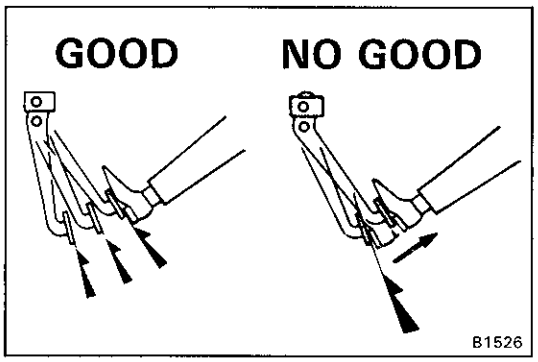
OPERATIONAL TEST OF BRAKE BOOSTER

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

1. OPERATING CHECK

(a) Depress the brake pedal several times with the engine off, and check that there is no change in the pedal reserve distance.

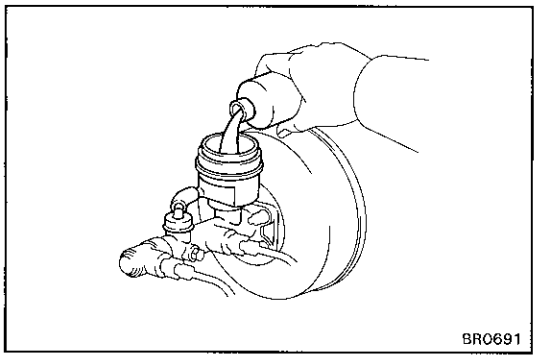
(b) Depress the brake pedal and start the engine. If the pedal goes down slightly, operation is normal.



2. AIR TIGHTNESS CHECK

(a) 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.

(b) 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

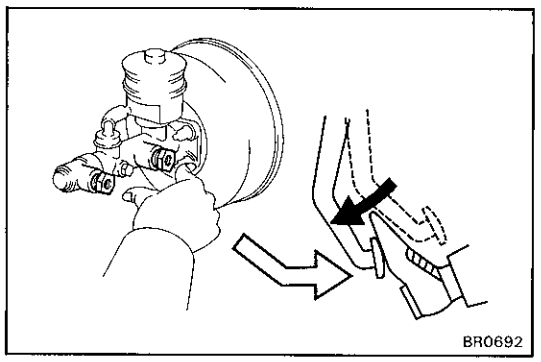
HINT: If any work is done on the brake system or if air is suspected in the brake lines, bleed the system of air.

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.

Brake fluid: SAE J1703 or FMVSS No.116 DOT3

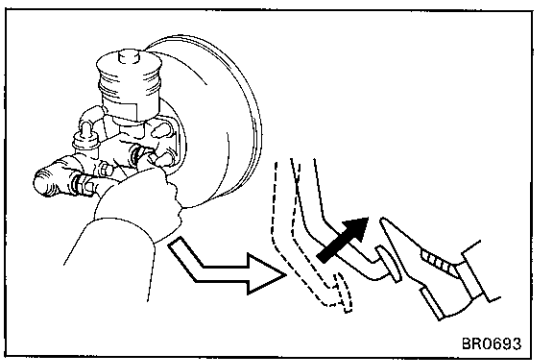


2. BLEED MASTER CYLINDER

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

(a) Disconnect the brake tubes from the master cylinder. Use a container to catch the brake fluid.

(b) Slowly depress the brake pedal and hold it.



(c) Block off the outlet holes with your fingers, and release the brake pedal.

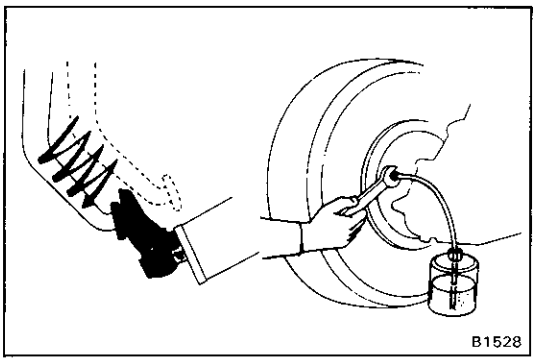
(d) Repeat (b) and (c) three or four times.

(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**

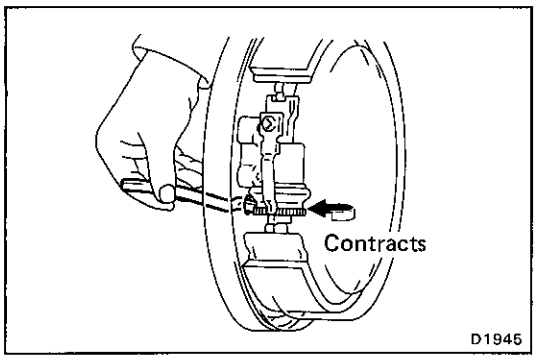
(a) Slowly pump the brake pedal several times.

(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:
110 kg-cm (8 ft-lb, 11 N·m)

5. **REPEAT PROCEDURE FOR EACH WHEEL**



ADJUSTMENT OF BRAKE SHOE CLEARANCE (Front Drum Brake Type)

ADJUST BRAKE SHOE CLEARANCE

(a) Jack up and support the vehicle.

(b) Remove the shoe adjusting hole plugs from the backing plate.

(c) Using a screwdriver, turn the adjusting nut until the wheel locks.

(d) Using a screwdriver, turn the adjusting nut until the wheel turns freely.

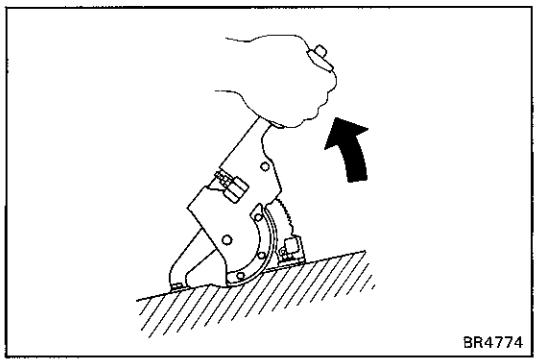
Standard number of notches to be backed off:
7 — 8 notches

(e) Repeat the steps (c) and (d) for the other wheel cylinder.

(f) Install the shoe adjusting hole plugs.

(g) Repeat the steps from (b) to (f) for another wheel.

(h) Check that the pedal reserve distance is correct. (See page BR-6)

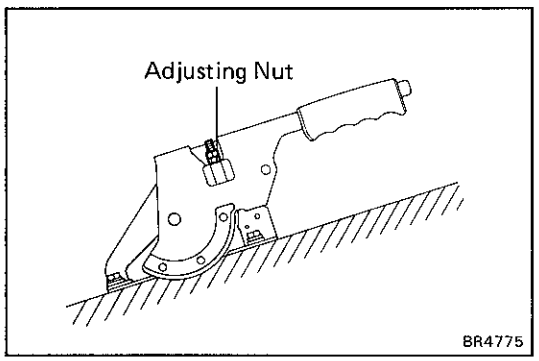


CHECK AND ADJUSTMENT OF PARKING BRAKE

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 20 kg (44.1 lb, 196 N):
7 — 9 clicks



2. IF NECESSARY, ADJUST PARKING BRAKE

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

(a) For shoe clearance adjustment, see step 9 on page BR-84 or see step 11 on page BR-101.

(b) Loosen the two adjusting nuts and adjust the parking brake cable until travel is correct.