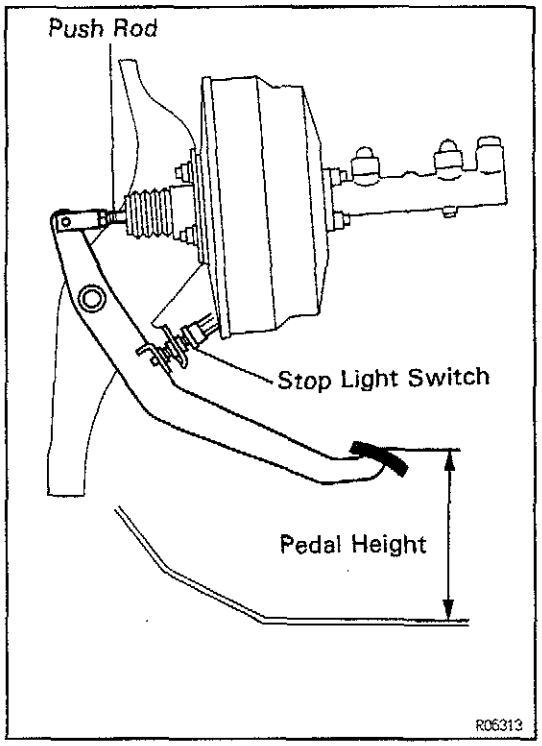
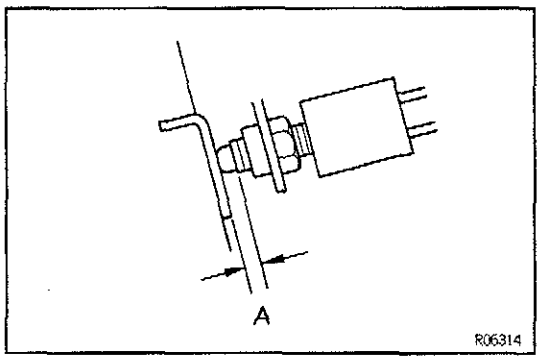
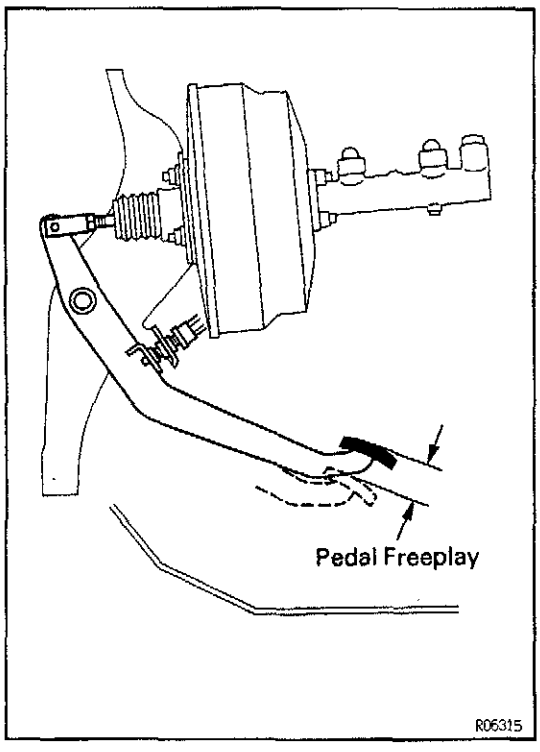






CHECK AND ADJUSTMENT

BRAKE PEDAL CHECK AND ADJUSTMENT

BR01A-02

1. CHECK THAT PEDAL HEIGHT IS CORRECT, AS SHOWN

Pedal height from asphalt sheet:

(EX Grade) 169.2–179.2 mm (6.66–7.06 in.)

(Ex. EX Grade) 172.2–182.2 mm (6.78–7.17 in.)

If the pedal height is incorrect, adjust it.

2. IF NECESSARY, ADJUST PEDAL HEIGHT

(a) Disconnect the connector from the stop light switch.

(b) Loosen the stop light switch lock nut and remove the stop light switch.

(c) Loosen the push rod lock nut.

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

(e) Tighten the push rod lock nut.

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

(f) Install the stop light switch and turn it until it lightly contacts the pedal stopper.

(g) Turn the stop light switch back one turn.

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

Clearance:

0.5–2.4 mm (0.02–0.09 in.)

(i) Tighten the stop light switch lock nut.

(j) Connect the connector to the stop light switch.

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

(l) 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

(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 by hand until the beginning of the resistance is felt, then measure the distance, as shown.

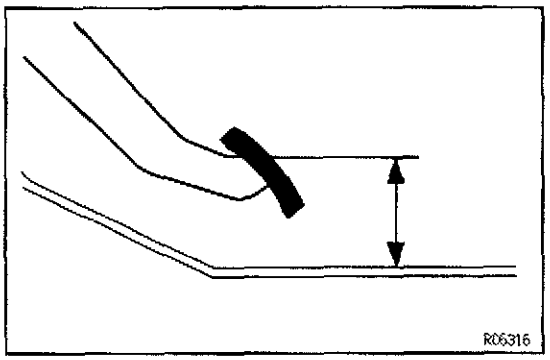
Pedal freeplay:

1–6 mm (0.04–0.24 in.)

HINT: The freeplay to the 1st point of resistance is due to the play between the clevis and pin. It is 1–3 mm (0.04–0.12 in.) on the pedal.

BR

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



BR

4. CHECK THAT PEDAL RESERVE DISTANCE IS CORRECT, AS SHOWN

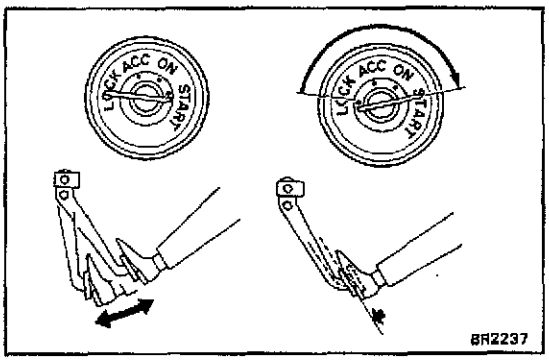
(a) Release the parking brake.

(b) Stop the engine and depress the brake pedal several times with there is no vacuum left in the booster, depress the pedal and measure the pedal reserve distance, as shown.

Pedal reserve distance from asphalt sheet at 490 N (50 kgf, 110.2 lbf):

More than 90 mm (3.54 in.)

If the reserve distance is incorrect, troubleshoot the brake system.



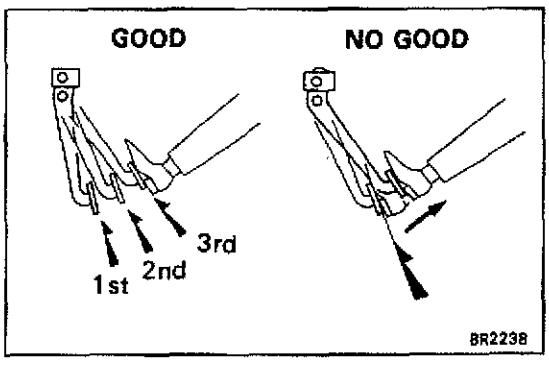
BRAKE BOOSTER OPERATIONAL TEST

BR01B–06

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.

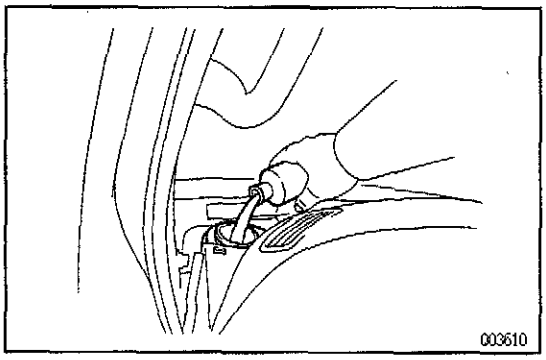
(b) Depress the brake pedal and start the engine. If the pedal goes down slightly, operation is normal.



2. AIR TIGHTNESS

(a) Start the engine and stop it after 1 or 2 minutes. Depress the brake pedal several times slowly. If the pedal goes down the farthest the 1st time, but gradually rises after the 2nd or 3rd time, the booster is air tight.

(b) Depress the brake pedal while the engine is running, and stop the engine with the pedal depressed. If there is no change in the pedal reserve travel after holding the pedal for 30 seconds, the booster is air tight.



BRAKE SYSTEM BLEEDING

BR01C-07

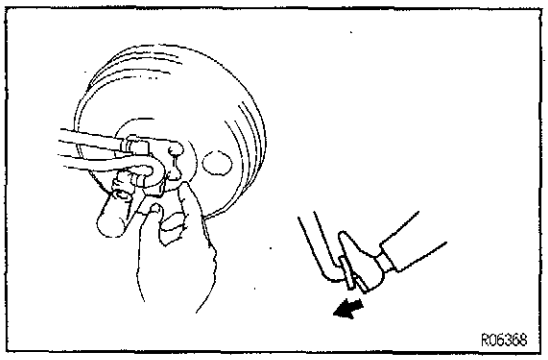
HINT: If any work is done on the brake system or if air in the brake lines is suspected, bleed the system of air.

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

1. FILL BRAKE RESERVOIR WITH BRAKE FLUID

Fluid:

SAE J1703 or FMVSS No.116 DOT3

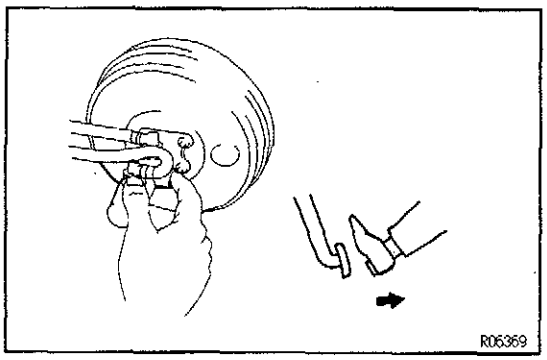


2. BLEED MASTER CYLINDER

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

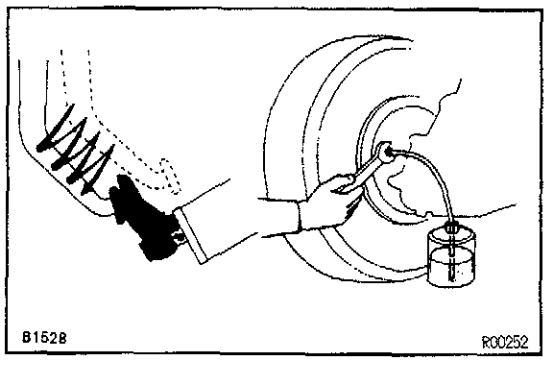
(a) Disconnect the brake lines from the master cylinder.

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



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

(d) Repeat (b) and (c) 3 or 4 times.



3. BLEED BRAKE LINE

(a) Connect the vinyl tube to the brake cylinder.

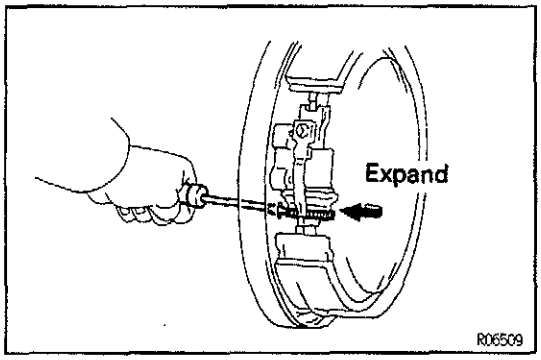
(b) Depress the brake pedal several times, then loosen the bleeder plug with the pedal held down.

(c) At the point when fluid stops coming out, tighten the bleeder plug, then release the brake pedal.

(d) Repeat (b) and (c) until all the air in the fluid has been bled out.

(e) Repeat the above procedure to bleed the air out of the brake line for each wheel.

4. **BLEED LSP & BV**
5. **CHECK FLUID LEVEL IN RESERVOIR**
   Check the fluid level and add fluid if necessary.
   Fluid:
   SAE J1703 or FMVSS No.116 DOT3

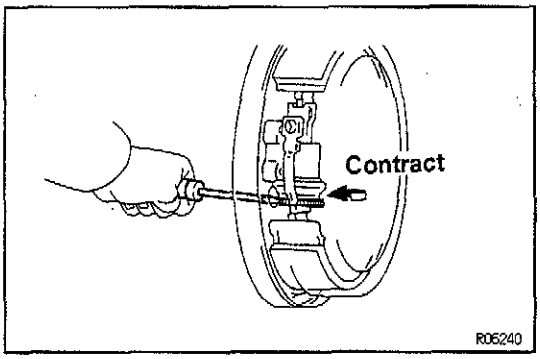


BRAKE SHOE CLEARANCE ADJUSTMENT

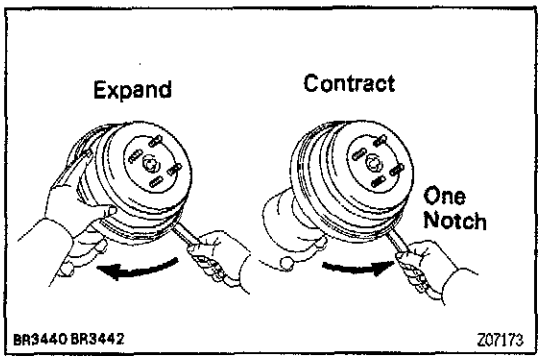
BR0KC-02

ADJUST BRAKE SHOE CLEARANCE

(a) Jack up and support the vehicle.
(b) Remove the shoe adjusting hole plug 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:
   5 notches
(e) Repeat the steps (c) and (d) for other wheel cylinders.
(f) Install the shoe adjusting hole plug.
(g) Check that the pedal reserve distance is correct.
(See page BR–8)

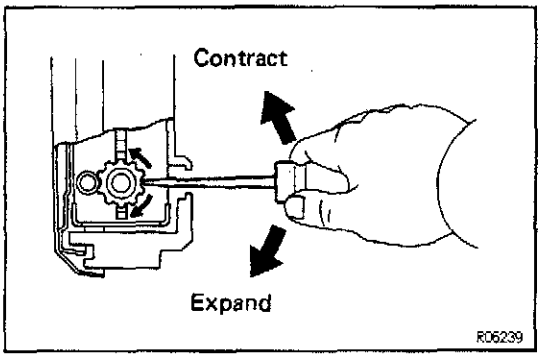


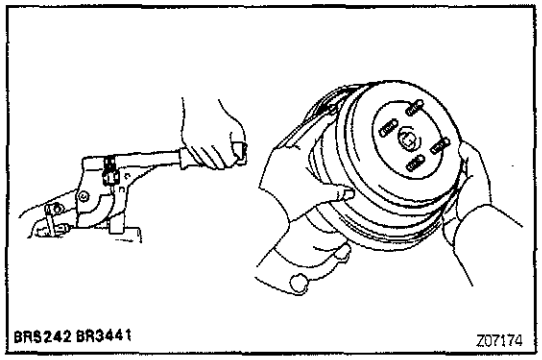
PARKING BRAKE SHOE CLEARANCE ADJUSTMENT

BR0KD-02

1. **JACK UP AND SUPPORT VEHICLE**
2. **ADJUST BRAKE SHOE CLEARANCE**
   (6.3 in. Type)

(a) Release the parking brake.
(b) Turn the shoe adjuster clockwise until the brake shoes are fully expanded.
(c) Turn the shoe adjuster counterclockwise 1 notch.
   (7.9 in. Type)
(d) Remove the hole plug.
(e) Turn the shoe adjuster and expand the shoe until the brake drum locks.
(f) Return the shoe adjuster 7 notches.
(g) Install the hole plug.



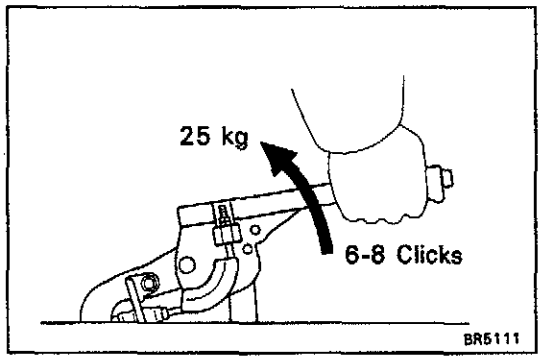


(6.3 in. and 7.9 in. Type)

(h) With the parking brake pulled its full distance, check to see that the drum is locked.

(i) Release the parking brake lever and ensure that the parking brake is not dragging.
If dragging, turn the shoe adjuster counterclockwise another notch.

(j) Check that the parking brake lever travel is correct.



PARKING BRAKE LEVER TRAVEL CHECK AND ADJUSTMENT 6R01D-04

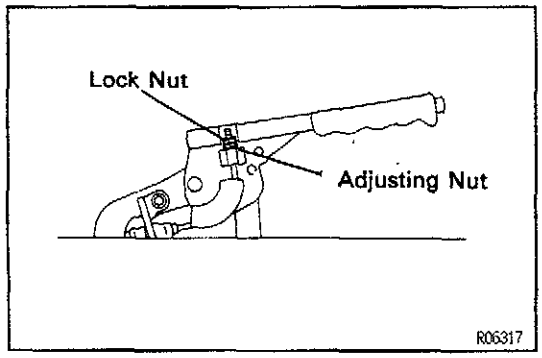
1. CHECK THAT PARKING BRAKE LEVER TRAVEL IS CORRECT

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

Parking brake lever travel at 245 N (25 kgf, 55 lbf):

6 – 8 clicks

If incorrect, adjust the parking brake.



2. IF NECESSARY, ADJUST PARKING BRAKE LEVER TRAVEL

(a) Remove the parking brake cover and parking brake boot.

(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 cover and parking brake boot.