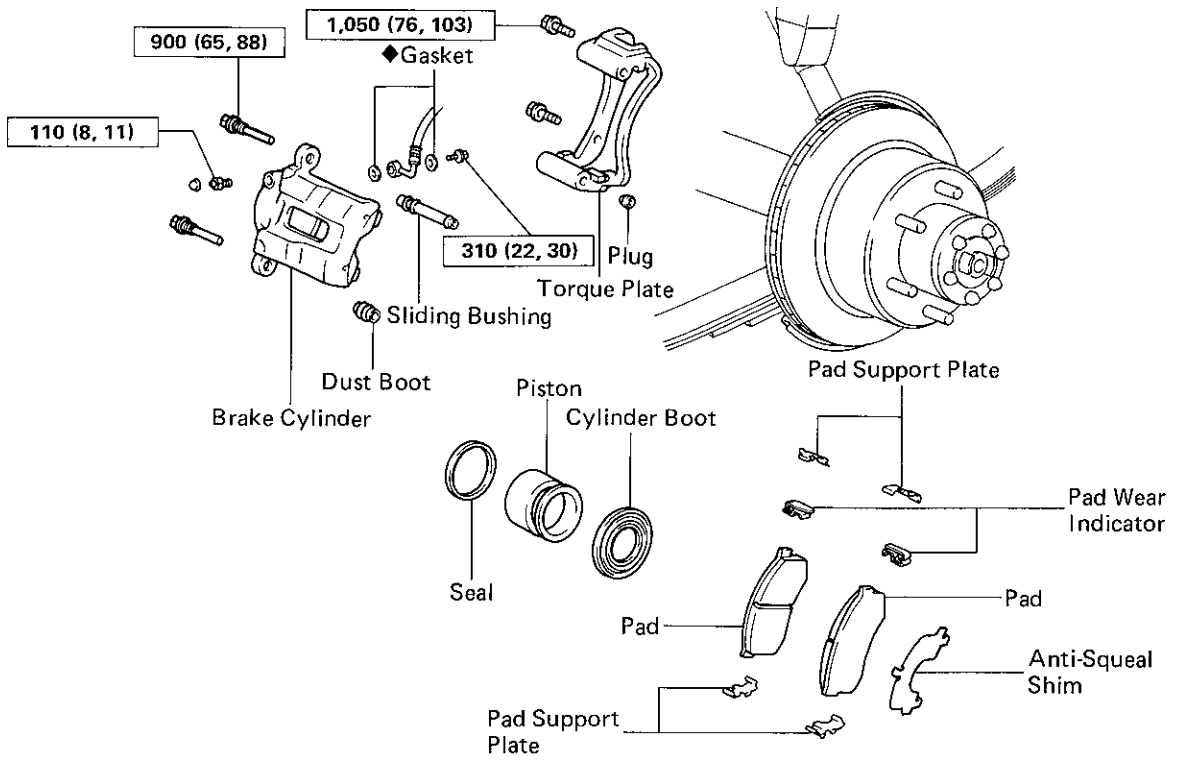
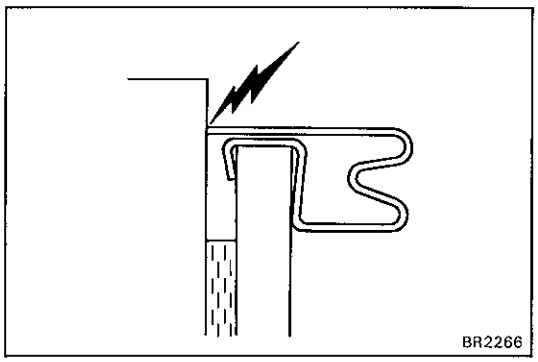
Disc Brake

COMPONENTS



kg-cm (ft-lb, N·m) : Specified torque
◆ Non-reusable part

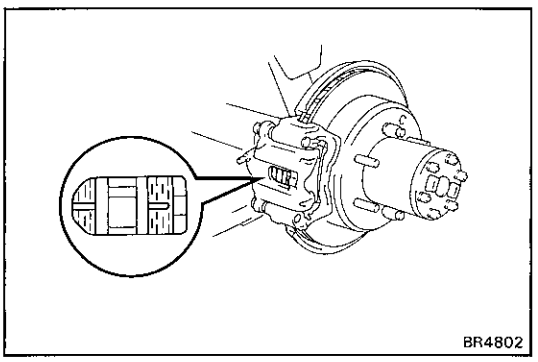
BR4721



REPLACEMENT OF BRAKE PADS

HINT: If a squealing noise occurs from the brakes while driving, check the pad wear indicator plate. If the pad wear indicator plate contacts the rotor disc, the brake pads should be replaced.

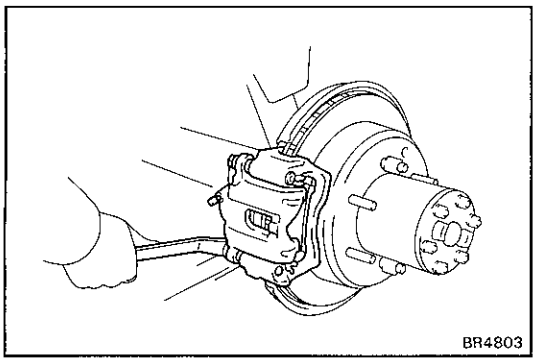
1. REMOVE REAR WHEEL



2. INSPECT PAD LINING THICKNESS

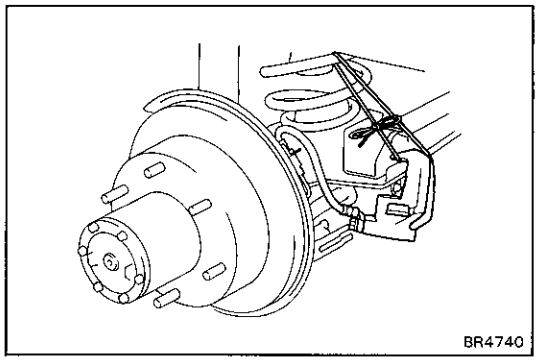
Check the pad thickness through the cylinder inspection hole and replace pads if not within specification.

Minimum thickness: 1.0 mm (0.039 in.)



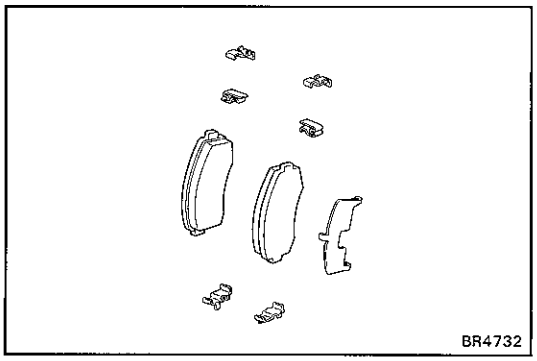
3. **REMOVE BRAKE CYLINDER**

(a) Remove the sliding main pin and sliding sub pin.



(b) Remove the brake cylinder and suspend it so the hose is not stretched.

HINT: Do not disconnect the brake hose.



4. **REMOVE FOLLOWING PARTS**

(a) Two brake pads

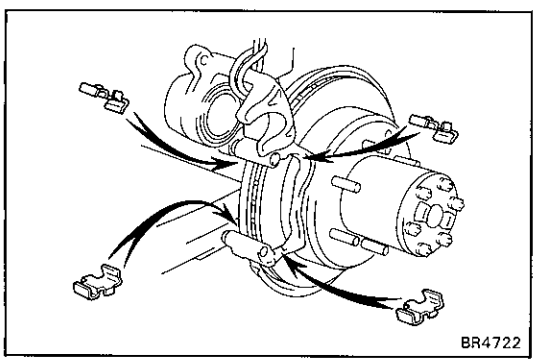
(b) Anti-squeal shim

(c) Two pad wear indicator plates

(d) Four pad support plates

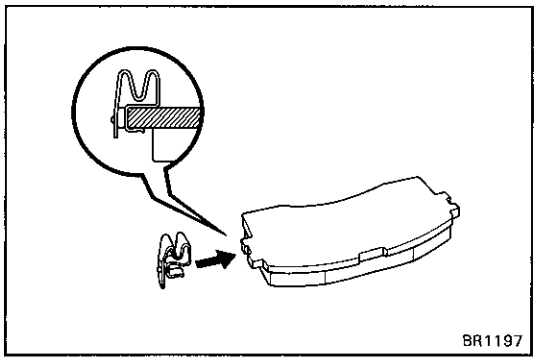
5. **CHECK ROTOR DISC THICKNESS**
(See step 2 on page BR-90)

6. **CHECK ROTOR DISC RUNOUT**
(See step 3 on page BR-90)



7. **INSTALL PAD SUPPORT PLATES**

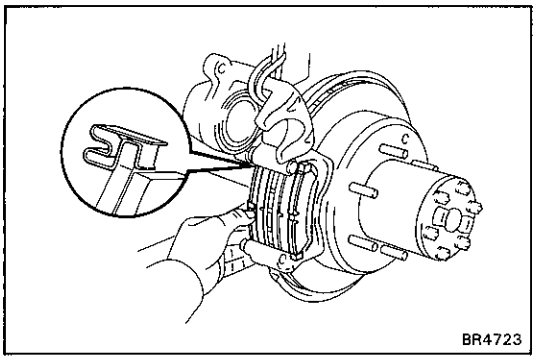
Install the four pad support plates.



8. INSTALL NEW PADS

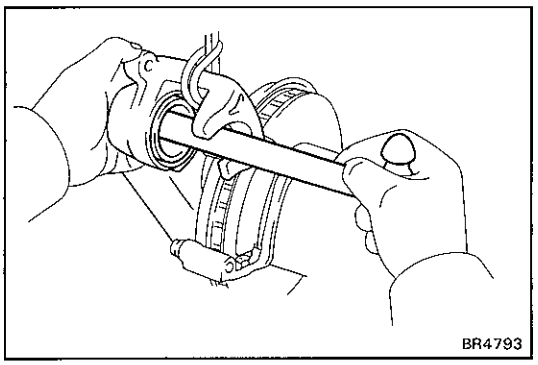
(a) Install two pad wear indicator plates to the each pad.

(b) Install the anti-squeal shim to the outside pad.



(c) Install the two pads so the wear indicator plate is facing upward.

NOTICE: Do not allow oil or grease to get on the rubbing face.



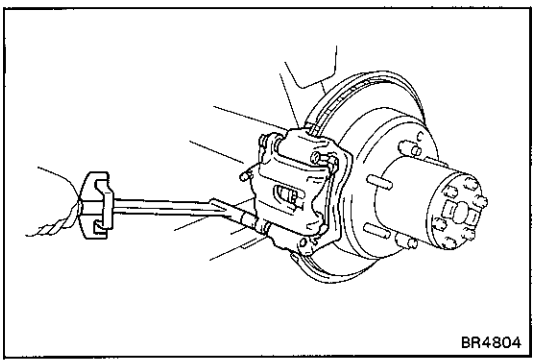
9. INSTALL CYLINDER

(a) Draw out a small amount of brake fluid from reservoir.

(b) Press in piston with a hammer handle or an equivalent.

HINT: Always change the pads on one wheel at a time as there is a possibility of the opposite piston flying out.

(c) Install the brake cylinder carefully so the boot is not wedged.



(d) Install and torque the sliding main pin and sub pin.

Torque: 900 kg-cm (65 ft-lb, 88 N·m)

10. INSTALL REAR WHEEL

11. FILL BRAKE FLUID

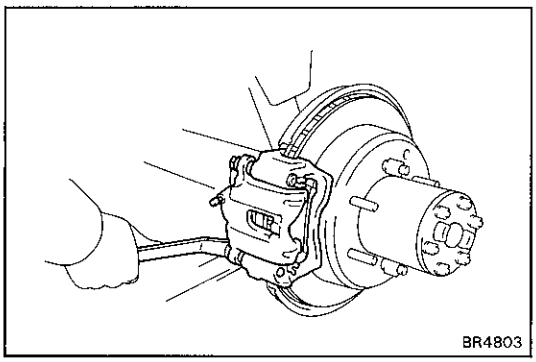
REMOVAL OF CYLINDER

(See page BR-86)

1. **DISCONNECT BRAKE HOSE**

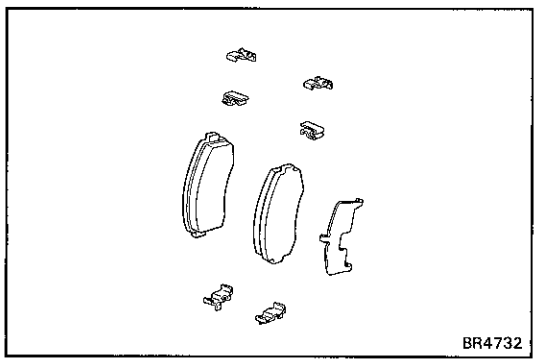
   Remove the union bolt and disconnect the brake hose.

   Use a container to catch the brake fluid.



2. **REMOVE CYLINDER FROM TORQUE PLATE**

   Remove the two sliding pins and cylinder.



3. **REMOVE PADS**

   (See step 3 on page BR-87)

DISASSEMBLY OF CYLINDER

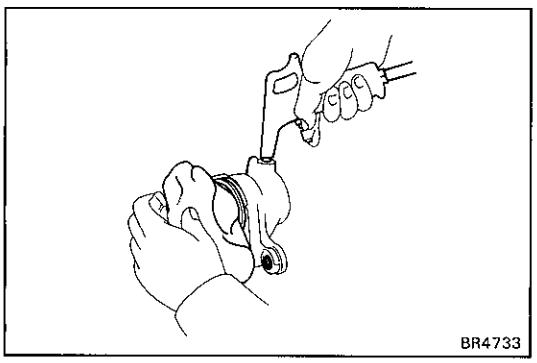
(See page BR-86)

1. **REMOVE PISTON FROM CYLINDER**

   (a) Put a piece of cloth or equivalent between the piston and cylinder.

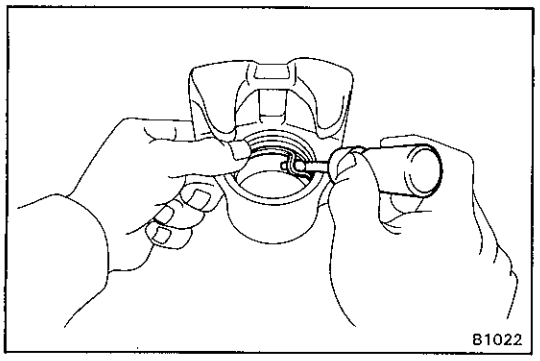
   (b) Use compressed air to remove the piston and cylinder boot from the cylinder.

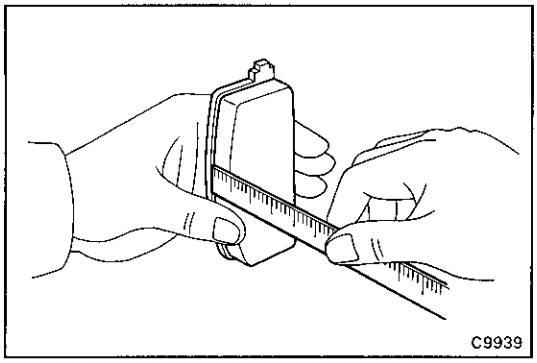
   NOTICE: Do not place your fingers in front of the piston when using compressed air.



2. **REMOVE PISTON SEAL FROM BRAKE CYLINDER**

   Using a screwdriver, remove the piston seal.





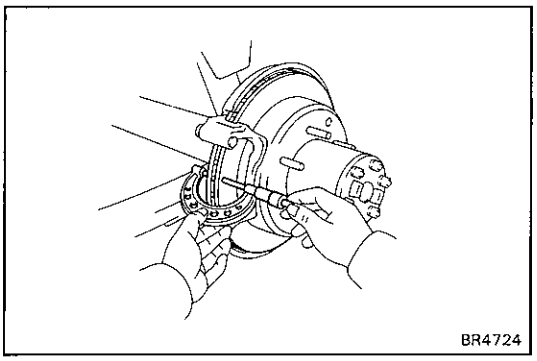
INSPECTION AND REPAIR OF REAR BRAKE COMPONENTS

1. MEASURE PAD LINING THICKNESS

Minimum thickness: 1.0 mm (0.039 in.)

Standard thickness: 10.0 mm (0.394 in.)

Replace the pad if the thickness is less than the minimum or if it shows sign of uneven wear.

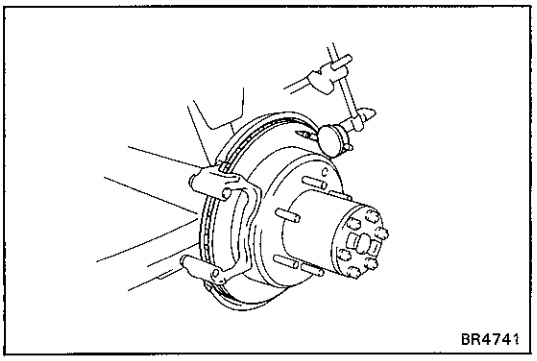


2. MEASURE ROTOR DISC THICKNESS

Minimum thickness: 16.0 mm (0.630 in.)

Standard thickness: 18.0 mm (0.709 in.)

If the disc is scored or worn, or if thickness is less than minimum, repair or replace the disc.



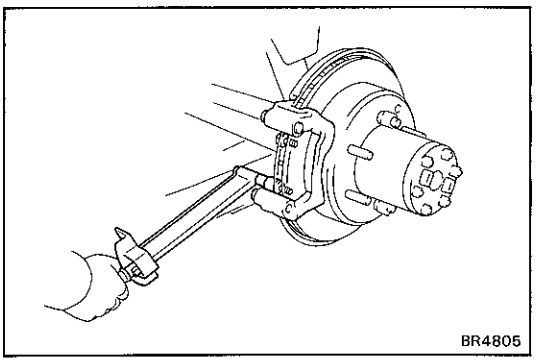
3. MEASURE ROTOR DISC RUNOUT

Measure the rotor disc runout at 10 mm (0.39 in.) from the outer edge of the rotor disc.

Maximum disc runout: 0.15 mm (0.0059 in.)

If the runout is greater than maximum, replace the disc.

HINT: Before measuring the runout, confirm that the front bearing play is within specification.



4. IF NECESSARY, REPLACE ROTOR DISC

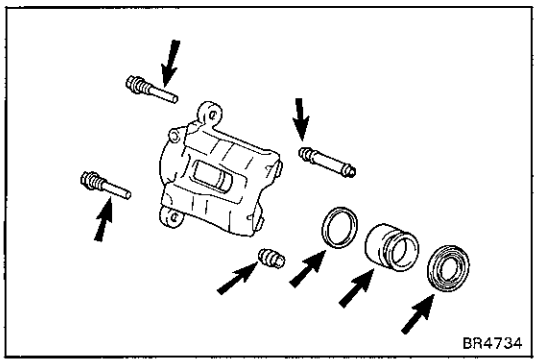
(a) Remove the torque plate from the knuckle.

(b) Remove the wheel nuts of temporarily installed rotor disc and pull off the rotor disc from the axle hub.

(c) Install a new rotor disc and temporarily fasten it with the wheel nuts.

(d) Install the torque plate onto the knuckle.

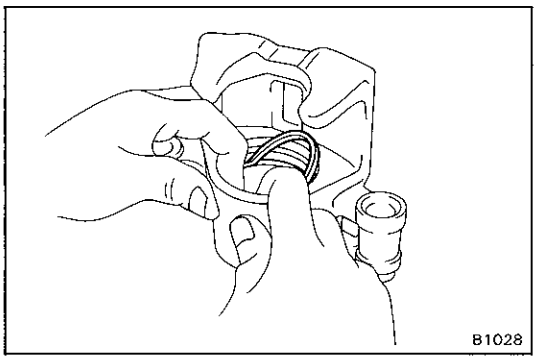
Torque: 1,050 kg-cm (76 ft-lb, 103 N·m)



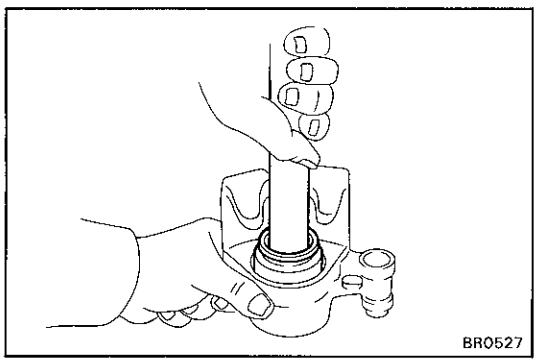
ASSEMBLY OF CYLINDER

(See page BR-86)

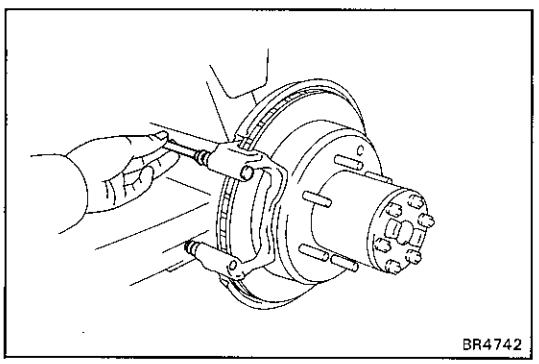
1. **APPLY LITHIUM SOAP BASE GLYCOL GREASE TO FOLLOWING PARTS**
   (a) Sliding bushing, hole plug and dust boot.
   (b) Piston, piston seal and cylinder boot.



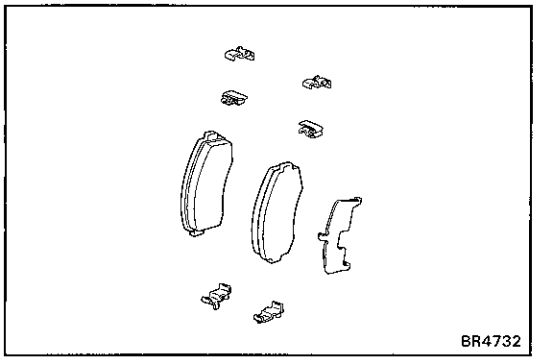
2. **INSTALL PISTON SEAL IN CYLINDER**



3. **INSTALL PISTON AND CYLINDER BOOT IN CYLINDER**



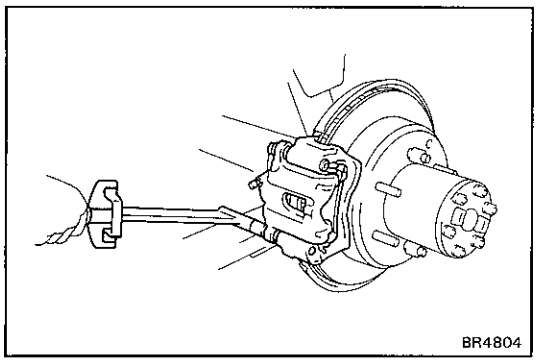
4. **INSTALL DUST BOOT AND SLIDING BUSHING**
   (a) Install the dust boot into the sliding sub pin side.
   (b) Using a plastic bar, install the cylinder sliding bushing into the sliding main pin side.


BR4732

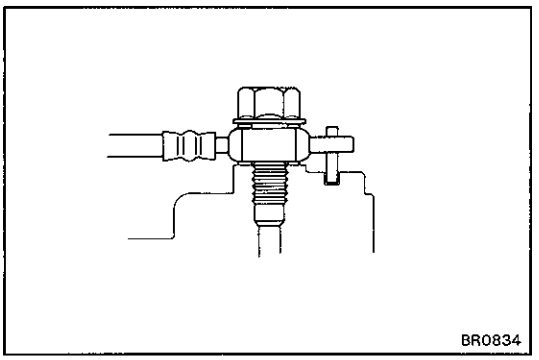
INSTALLATION OF CYLINDER

(See page BR-86)

1. **INSTALL PADS**
(See steps 7 to 8 on pages BR-87 and 89)


BR4804

2. **INSTALL CYLINDER**
   (a) Insert the brake cylinder.
   (b) Install and torque the two installation bolts.
   Torque: 900 kg-cm (65 ft-lb, 88 N·m)


BR0834

3. **CONNECT BRAKE HOSE TO CYLINDER**
   Set the brake hose and new gaskets in position and install the union bolt.
   Torque: 310 kg-cm (22 ft-lb, 30 N·m)

4. **FILL BRAKE RESERVOIR WITH BRAKE FLUID AND BLEED BRAKE SYSTEM**
(See page BR-7)

5. **CHECK FOR FLUID LEAKAGE**