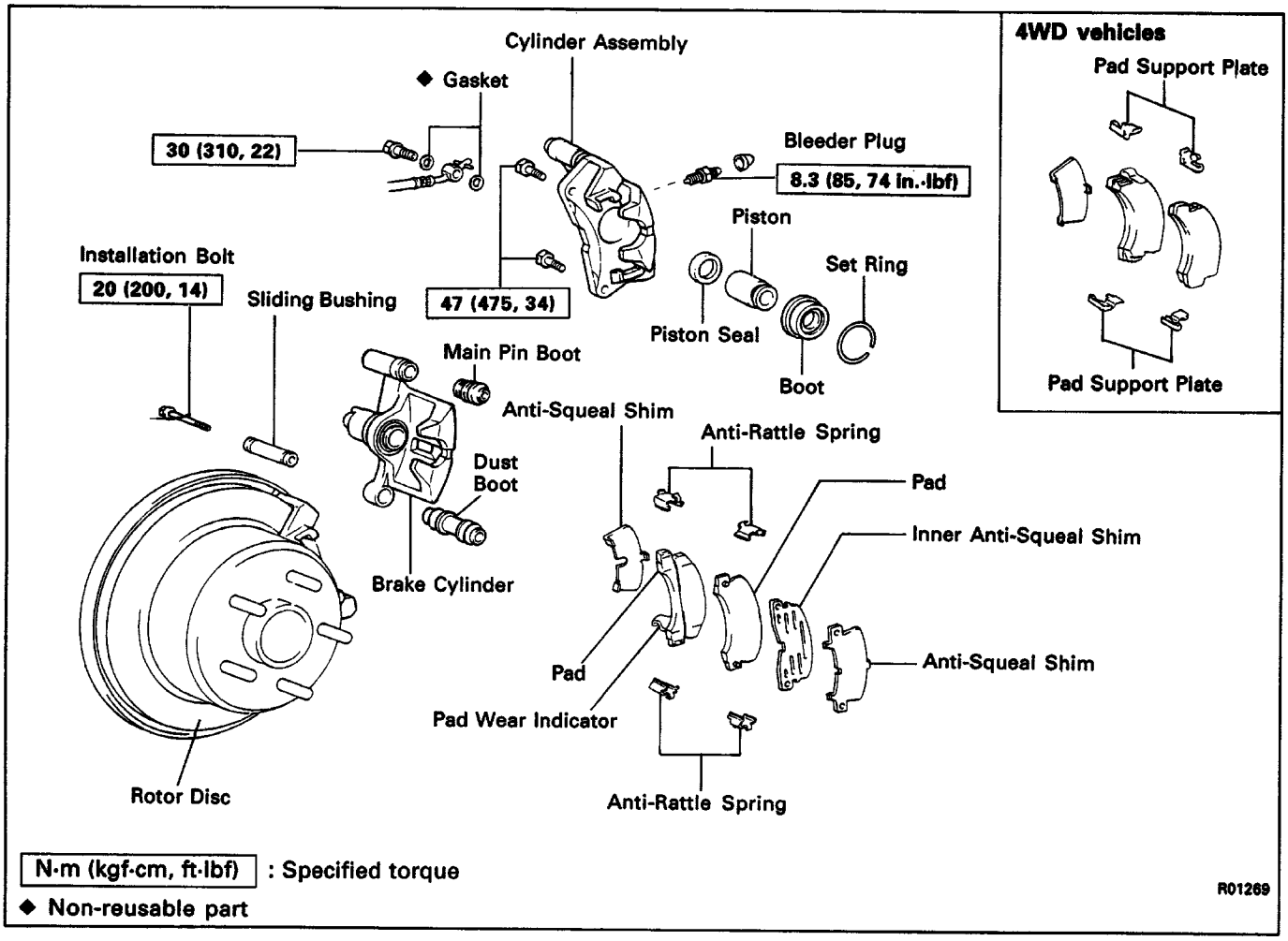
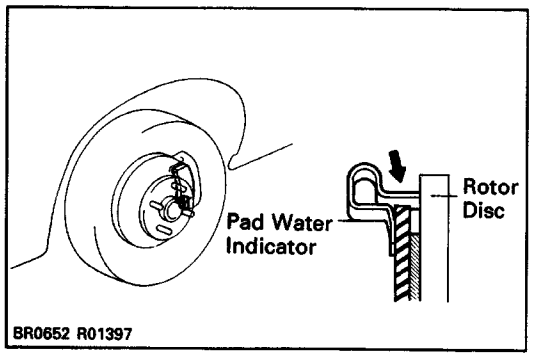
Disc Brake

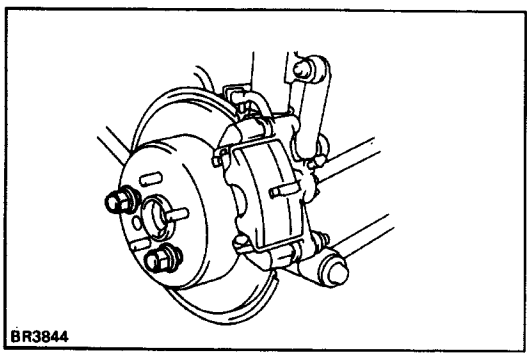
COMPONENTS





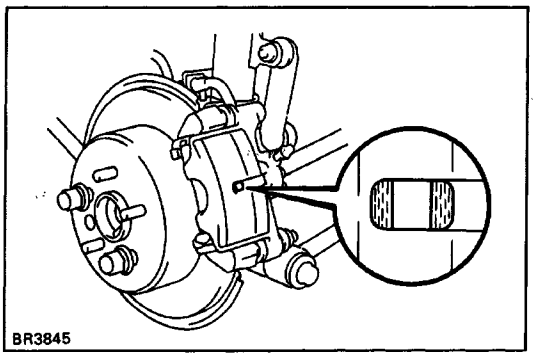
REPLACEMENT OF BRAKE PADS

HINT: If a squealing noise is made by the rear brakes while driving, check the pad wear indicator. If there is evidence of the indicator contacting the rotor disc, the brake pad should be replaced.



1. REMOVE REAR WHEEL

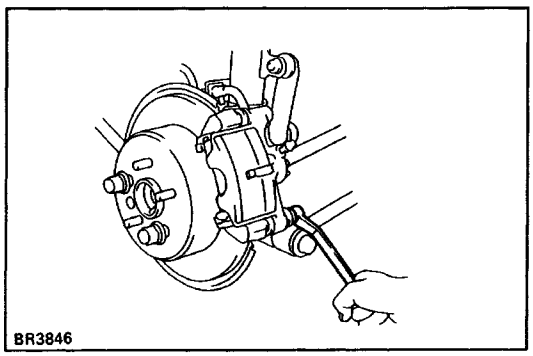
Remove the wheel and temporarily fasten the rotor disc with the hub nuts.



2. INSPECT PAD LINING THICKNESS

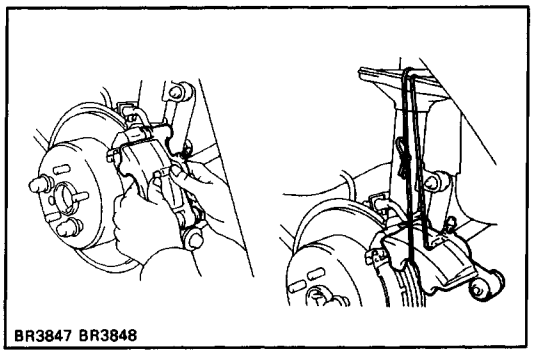
Check the pad thickness through the cylinder inspection hole and replace the pads if the thickness is not within specification.

Minimum thickness: 1.0 mm (0.039 in.)



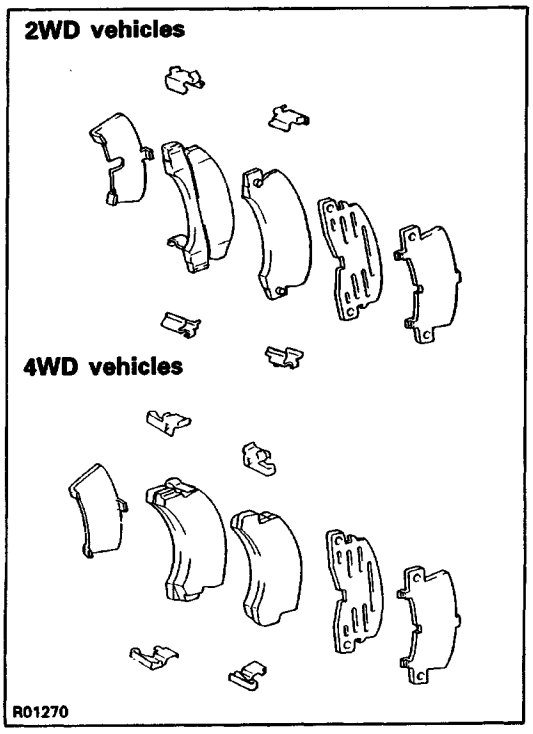
3. LIFT UP CYLINDER

(a) Remove the installation bolt from the torque plate.



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

HINT: Do not disconnect the brake hose.



4. REMOVE FOLLOWING PARTS:

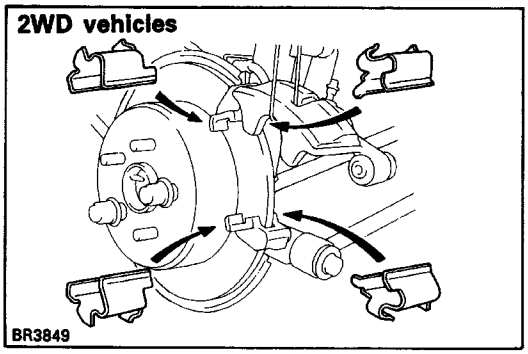
(a) Two brake pads
(b) Three anti–squeal shims
(c) Four anti–rattle springs (2WD vehicles)
(d) Four pad support plates (4WD vehicles)

5. CHECK ROTOR DISC THICKNESS
(See step 2 on page BR–41)

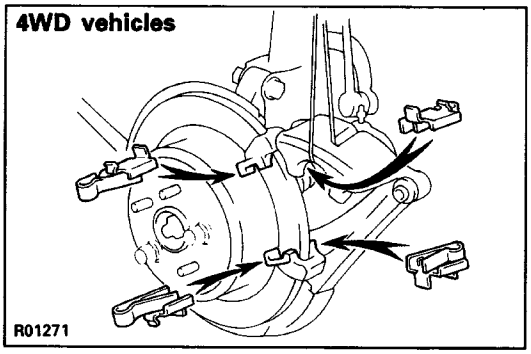
6. CHECK ROTOR DISC RUNOUT
(See step 3 on page BR–41)

7. INSTALL ANTI–RATTLE SPRINGS

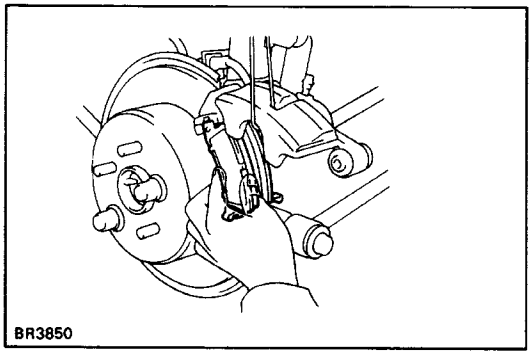
Install the four anti–rattle springs.



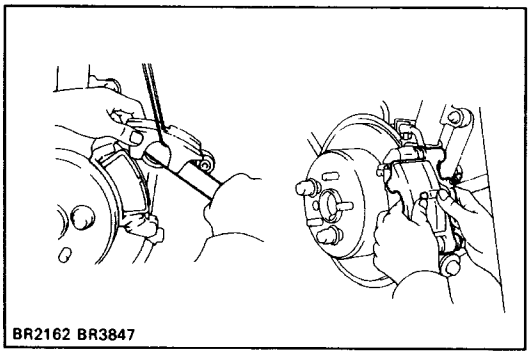
7. (2WD vehicles)
INSTALL ANTI–RATTLE SPRINGS
Install the four anti–rattle springs.



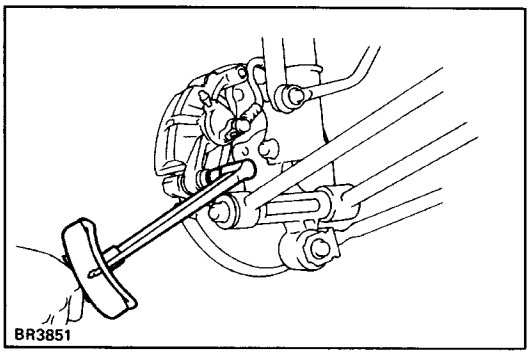
8. (4WD vehicles)
INSTALL PAD SUPPORT PLATES
Install four pad support plates.
9. INSTALL NEW PADS
(a) Apply disc brake grease to both sides of the inner anti–squeal shim.
(b) Install the two anti–squeal shims to the outside pad.
(c) Install the anti–squeal shim to the inside pad.



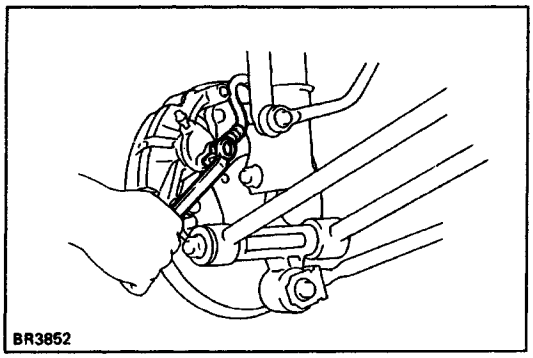
(d) Install the two pads with the pad wear indicator plates facing downward.
NOTICE: There should be no oil or grease adhering to the friction surfaces of the pads or the rotor disc.



9. INSTALL CYLINDER
(a) Draw out a small amount of brake fluid from the reservoir tank.
(b) Press in the piston with a hammer handle or an equivalent.
HINT: If the piston is heavy and difficult to push in, loosen the bleeder plug and push in the piston while letting some brake fluid escape.
(c) Install the brake cylinder.



(d) Install and torque the installation bolt.
Torque: 20 N–m (200 kgf–cm, 14 ft–lbf)
10. INSTALL REAR WHEEL
11. FILL BRAKE FLUID



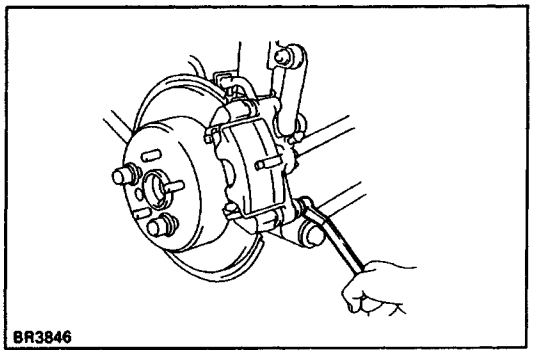
REMOVAL OF CYLINDER

(See page BR–36)

1. DISCONNECT FLEXIBLE HOSE

(a) Remove the union bolt and two gaskets from the brake cylinder, then disconnect the flexible hose from the brake cylinder.

(b) Use a container to catch the brake fluid as it drains out.

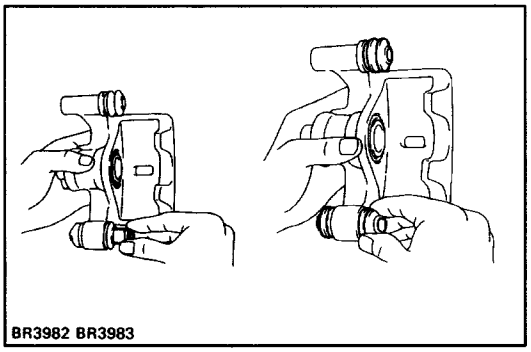


2. REMOVE CYLINDER FROM TORQUE PLATE

Remove the installation bolt and cylinder.

3. REMOVE PADS

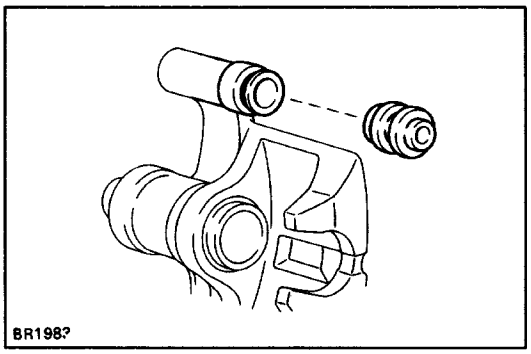
(See page BR–37)


BR3982 BR3983

DISASSEMBLY OF CYLINDER

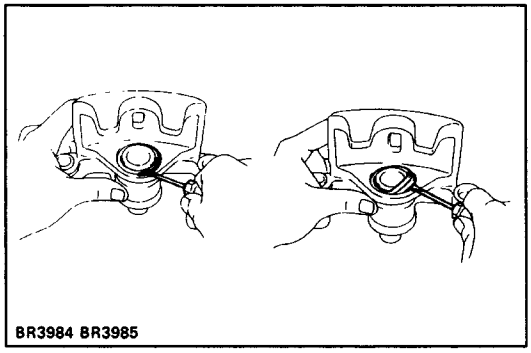
(See page BR–36)

1. REMOVE SLIDING BUSHING AND DUST BOOT


BR1982

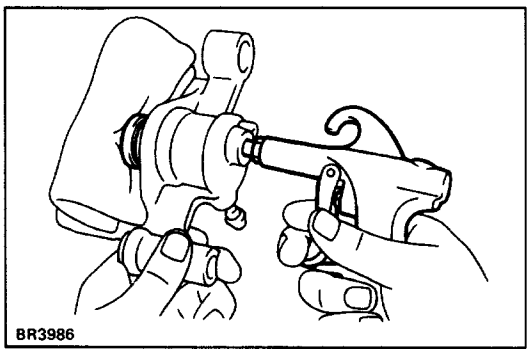
2. REMOVE MAIN PIN BOOT

Pull out the main pin boot.


BR3984 BR3985

3. REMOVE CYLINDER BOOT SET RING AND CYLINDER BOOT

Using a screwdriver, remove the cylinder boot set ring and cylinder boot.

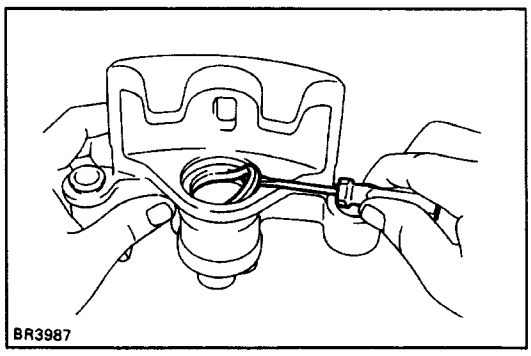

BR3986

4. REMOVE PISTON FROM CYLINDER

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

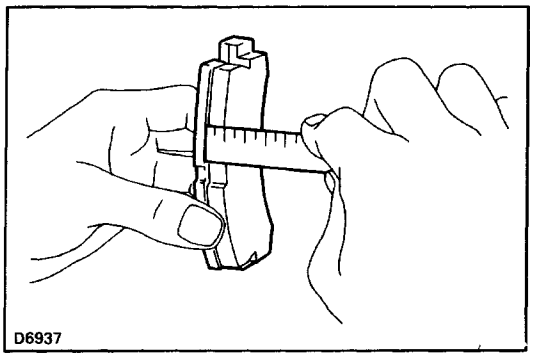
(b) Use compressed air to remove the piston from the cylinder.

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


BR3987

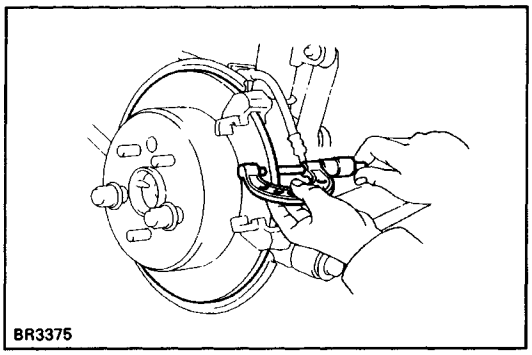
5. REMOVE PISTON SEAL FROM BRAKE CYLINDER

Using a screwdriver, remove the piston seal.

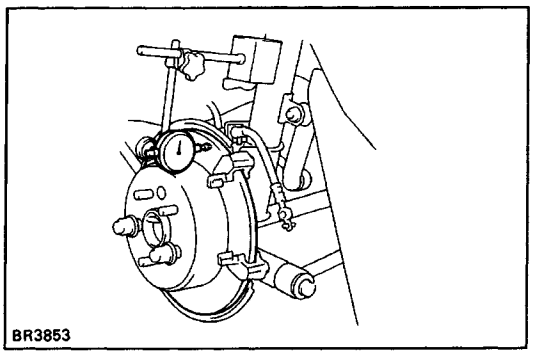

D6937

INSPECTION AND REPAIR OF REAR BRAKE COMPONENTS

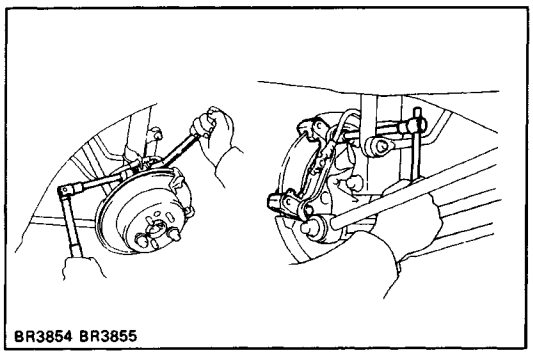
1. MEASURE PAD LINING THICKNESS
Standard thickness: 10.0 mm (0.394 in.)
Minimum thickness: 1.0 mm (0.039 in.)
Replace the pad if the thickness is less than the minimum or if it shows sign of uneven wear.


BR3375

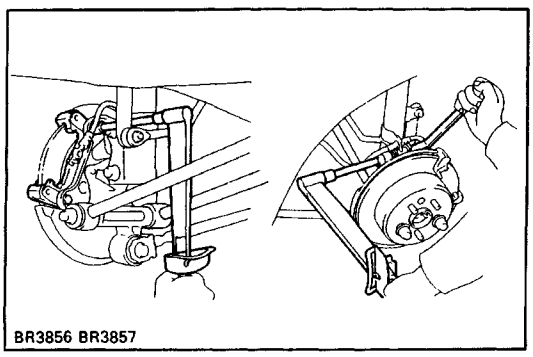
2. MEASURE ROTOR DISC THICKNESS
Standard thickness: 10.0 mm (0.394 in.)
Minimum thickness: 9.0 mm (0.354 in.)
If the disc is scored or worn, or if thickness is less than minimum, repair or replace the disc.


BR3853

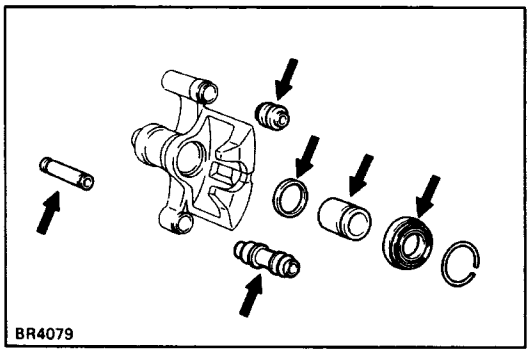
3. MEASURE ROTOR DISC RUNOUT
Measure the rotor disc runout at 10 mm (0.39 in.) from the outer edge of the rotor disc.
Maximum disc runout: 0.15 mm (0.0059 in.)
If the runout is greater than the maximum, replace the disc.
HINT: Before measuring the runout, confirm that the hub bearing play is within specification.


BR3854 BR3855

4. IF NECESSARY, REPLACE ROTOR DISC
(a) Remove the axle carrier mounting bolt and nut of upper side.
(b) Remove the torque plate.
(c) Remove the hub nuts of the temporarily installed disc and pull off the rotor disc.
(d) Install a new rotor disc and loosely install the hub nuts.


BR3856 BR3857

(e) Install the torque plate and tighten the mounting bolt.
Torque: 47 N–m (475 kgf–cm, 34 ft–lbf)
(f) Install the axle carrier mounting bolt and nut of upper side.
Torque: 226 N–m (2,300 kgf–cm, 166 ft–lbf)

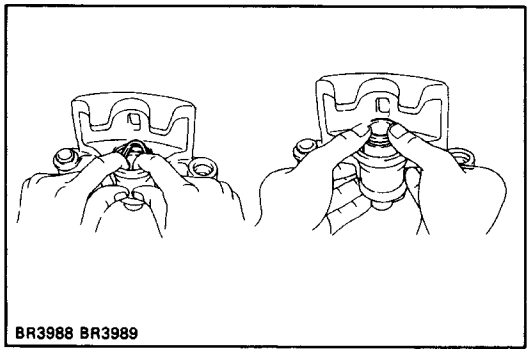

BR4079

ASSEMBLY OF CYLINDER

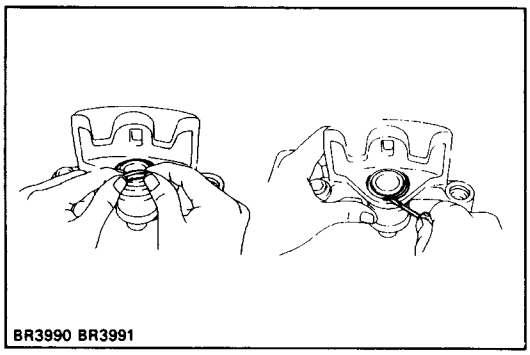
(See page BR–36)

1. APPLY LITHIUM SOAP BASE GLYCOL GREASE TO FOLLOWING PARTS:

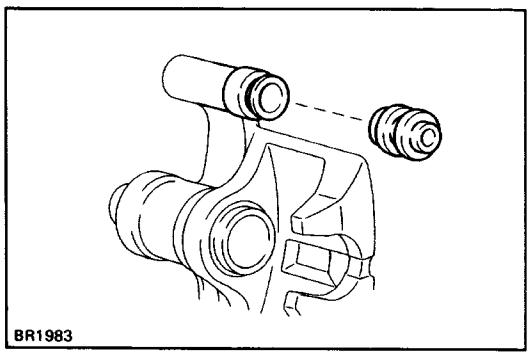
(a) Main pin boot
(b) Sliding bushing and dust boot
(c) Piston, piston seal and cylinder boot


BR3988 BR3989

2. INSTALL PISTON SEAL AND PISTON IN CYLINDER

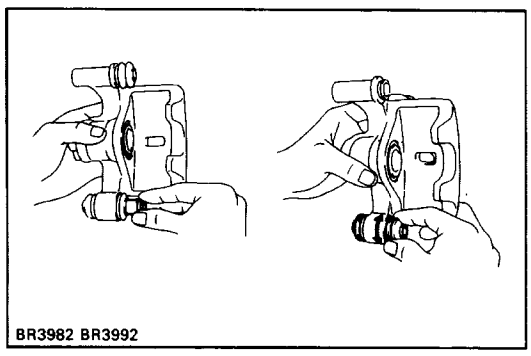

BR3990 BR3991

3. INSTALL CYLINDER BOOT AND SET RING IN CYLINDER


BR1983

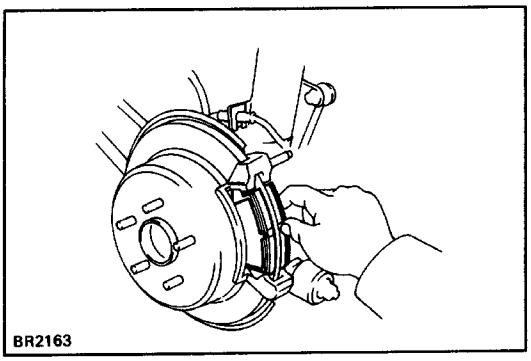
4. INSTALL MAIN PIN BOOT

Install the main pin boot in place.


BR3982 BR3992

5. INSTALL SLIDING BUSHING AND DUST BOOT

Install the sliding bushing and dust boot into the brake cylinder.



INSTALLATION OF CYLINDER

(See page BR–36)

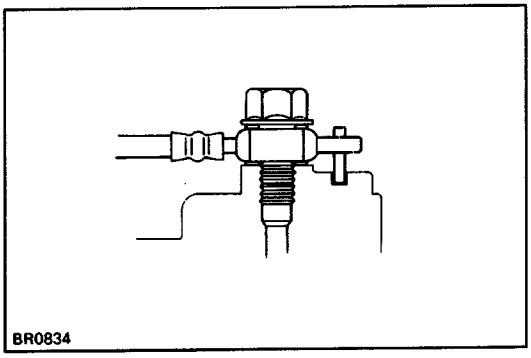
1. INSTALL PADS

2. INSTALL CYLINDER

(a) Install the brake cylinder.

(b) Install and torque the installation bolt.

Torque: 20 N–m (200 kgf–cm, 14 ft–lbf)



3. INSTALL FLEXIBLE HOSE TO BRAKE CYLINDER

Install the flexible hose on the brake cylinder with two new gaskets.

Torque: 30 N–m (310 kgf–cm, 22 ft–lbf)

HINT: Insert the flexible hose lock securely in the lock hole in the brake cylinder.

4. FILL BRAKE RESERVOIR WITH BRAKE FLUID AND BLEED BRAKE SYSTEM

(See page BR–7)

5. CHECK FOR LEAKS