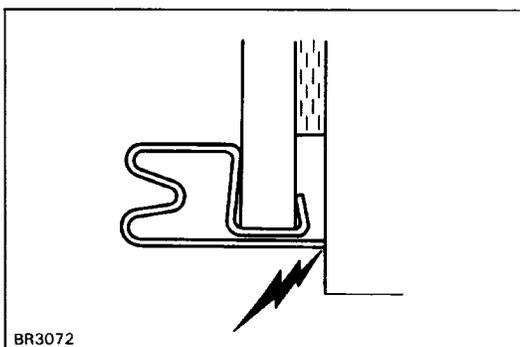
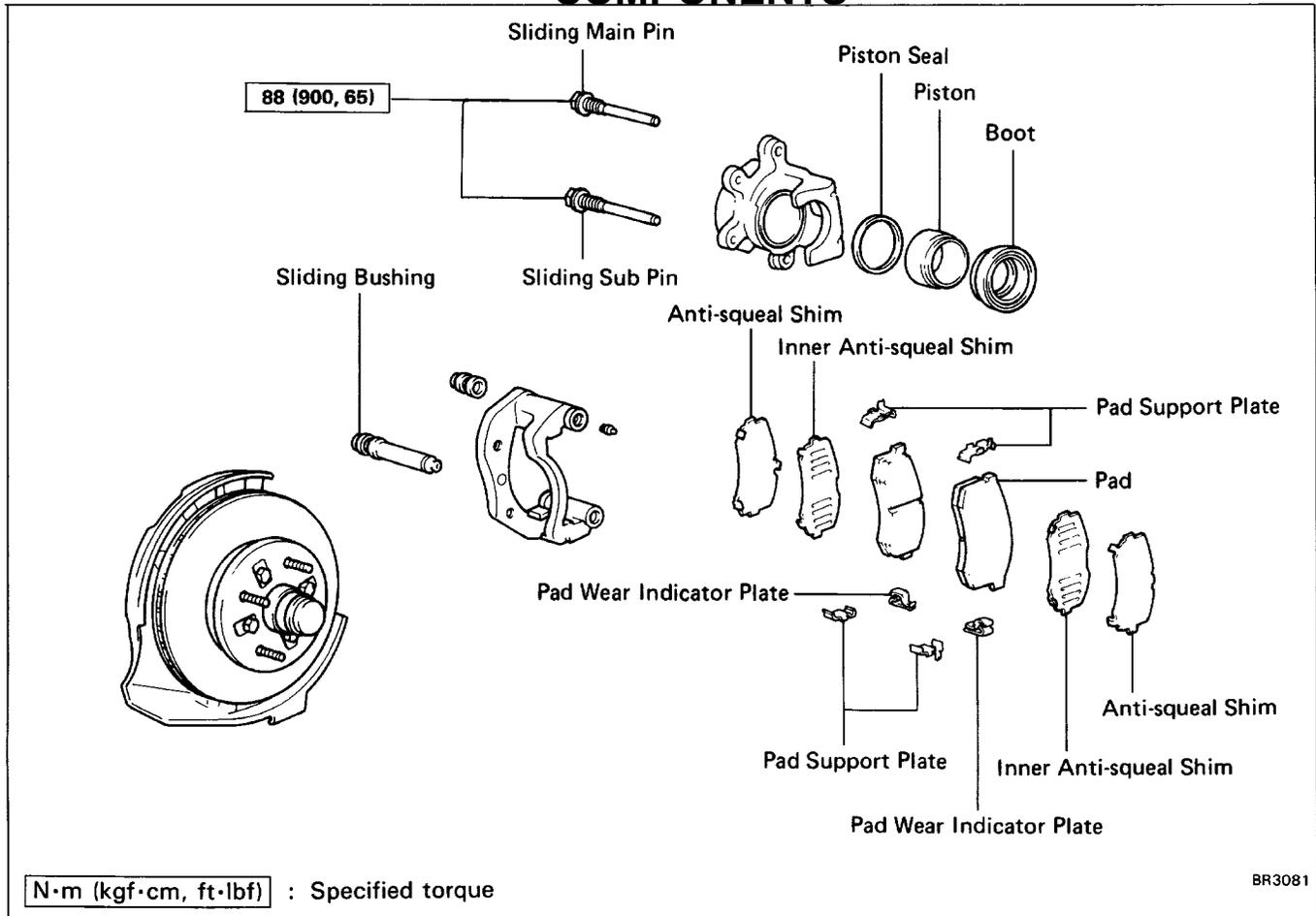


FRONT BRAKE 2WD (FS17 18 Type Disc) COMPONENTS



REPLACEMENT OF BRAKE PADS

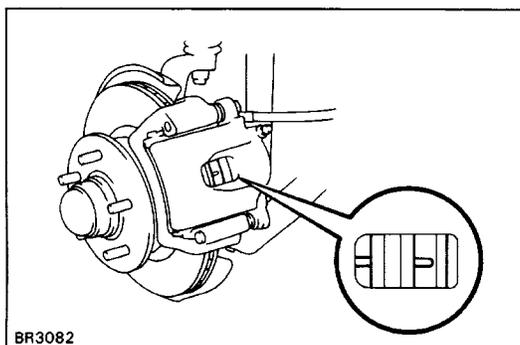
HINT: If a squealing noise occurs from the front brakes while driving, check the pad wear indicator. If there are traces of the indicator contacting the rotor disc, the brake pad should be replaced.

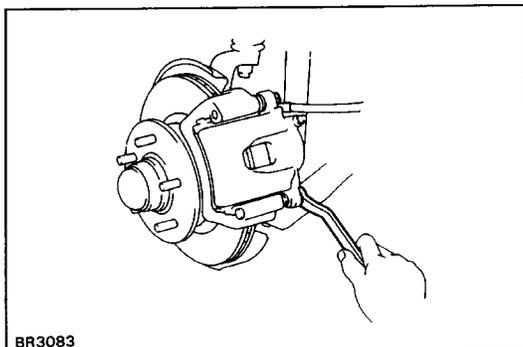
1. REMOVE FRONT WHEEL

2. INSPECT PAD LINING THICKNESS

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

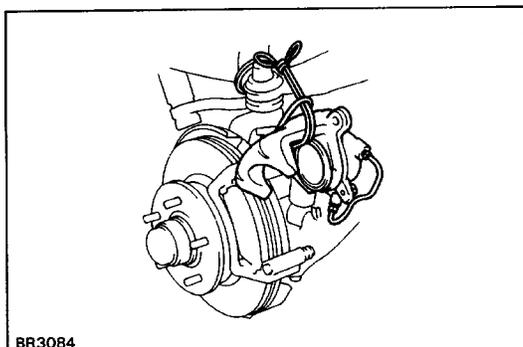
Minimum thickness: 1.0 mm (0.039 in.)





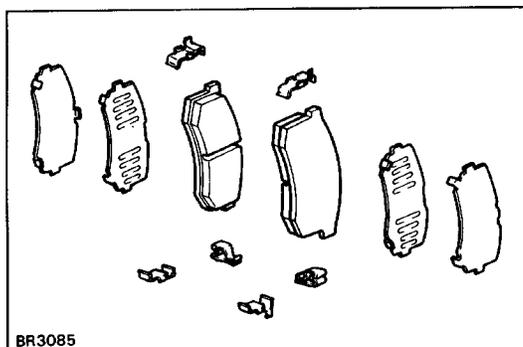
3. LIFT UP CYLINDER

(a) Remove the sliding sub pin 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:

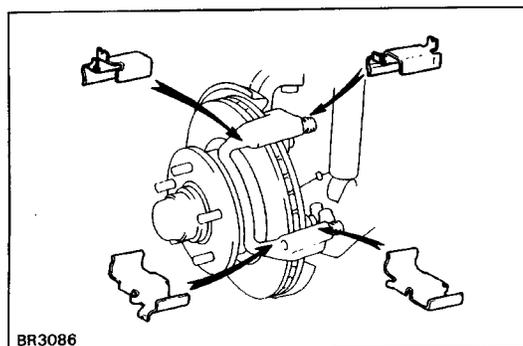
- (a) Two brake pads
- (b) Four anti-squeal shims
- (c) Two pad wear indicator plates
- (d) Four pad support plates

5. CHECK ROTOR DISC THICKNESS

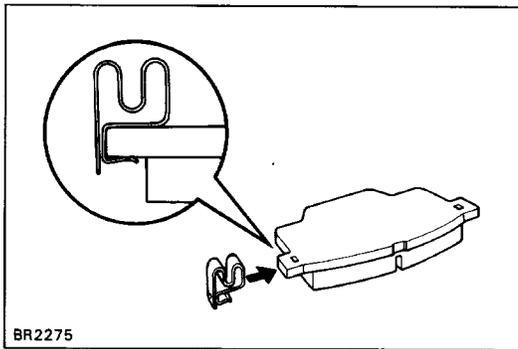
(See step 2 on page [BR-30](#))

6. CHECK ROTOR DISC RUNOUT

(See step 3 on page [BR-30](#))

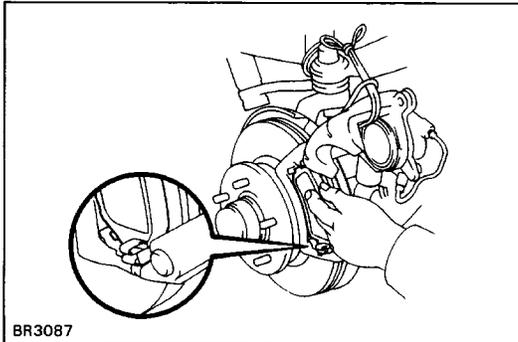


7. INSTALL PAD SUPPORT PLATES

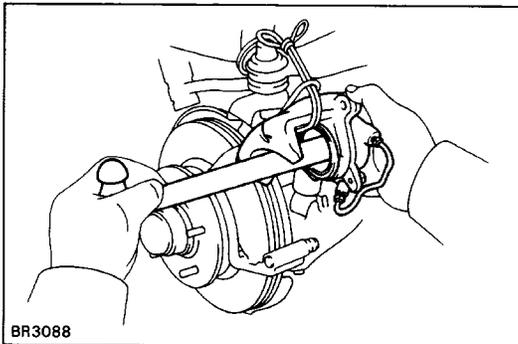


8. INSTALL NEW PADS

- (a) Install a pad wear indicator plate to the pad.
- (b) Install the two anti-squeal shims to the each pad.
HINT: Apply disc brake grease to both side of the inner anti-squeal shim.

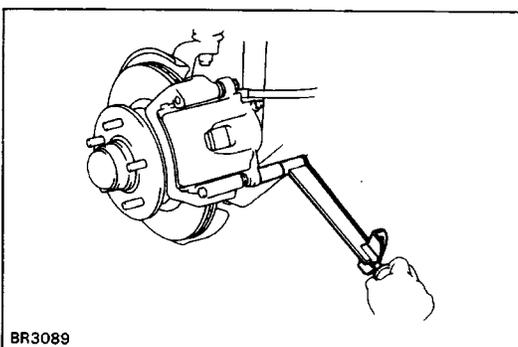


- (c) Install the two pads so the wear indicator plate is facing underneath.
NOTICE: Do not allow oil or grease to get on the rubbing face.



9. INSTALL CYLINDER

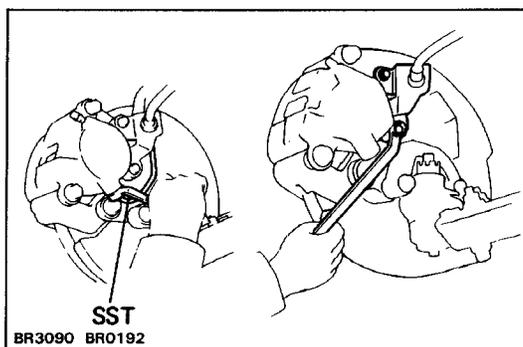
- (a) Draw out a small amount of brake fluid from the reservoir.
- (b) Press in piston with a hammer handle or an equivalent.
HINT: Always change the pad on one wheel at a time as there is a possibility of the opposite piston flying out.
- (c) Insert the brake cylinder carefully so the boot is not wedged.



- (d) Install and torque the sliding sub pin.
Torque: 88 N-m (900 kgf-cm, 65 ft-lbf)

10. INSTALL FRONT WHEEL

11. CHECK THAT FLUID LEVEL IS MAX LINE

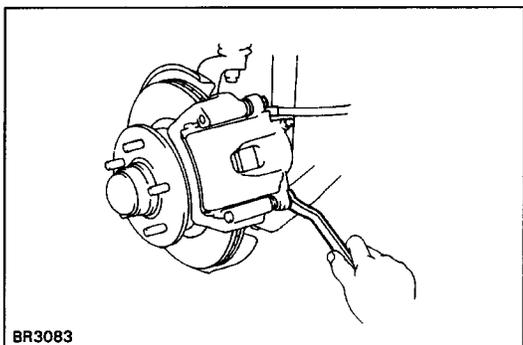


REMOVAL OF CYLINDER

(See page BR-26)

1. DISCONNECT BRAKE TUBE

- (a) Using SST, disconnect the brake tube. Use a container to catch the brake fluid.
SST 09751-36011
- (b) Remove the bracket from the cylinder.

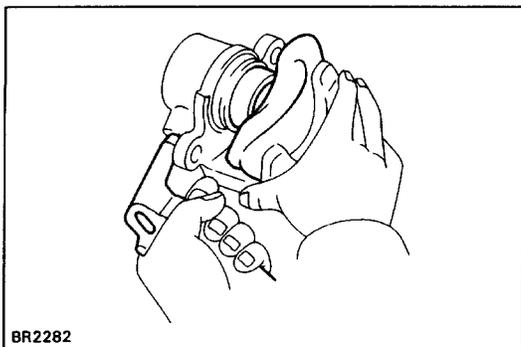


2. REMOVE CYLINDER FROM TORQUE PLATE

- (a) Remove the sliding main pin and sliding sub pin.
- (b) Remove the cylinder.

3. REMOVE PADS

(See step 4 on page BR-27)



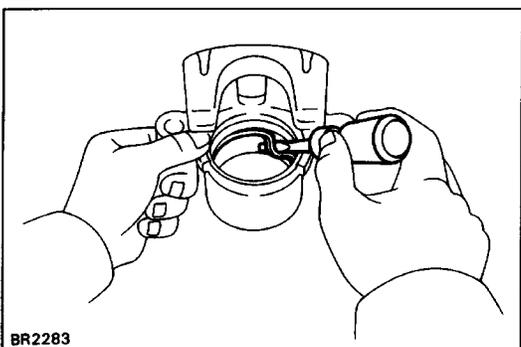
DISASSEMBLY OF CYLINDER

(See page BR-26)

1. REMOVE PISTON FROM CYLINDER

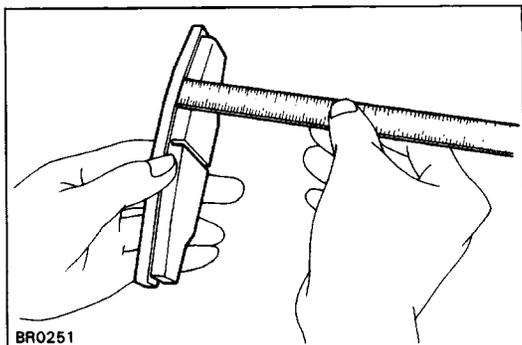
- (a) Put a piece of cloth or an equivalent between the piston and cylinder.
- (b) Use compressed air to remove the piston and cylinder boot from the cylinder.

CAUTION: 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.



BR0251

INSPECTION OF FRONT BRAKE COMPONENTS

1. MEASURE PAD LINING THICKNESS

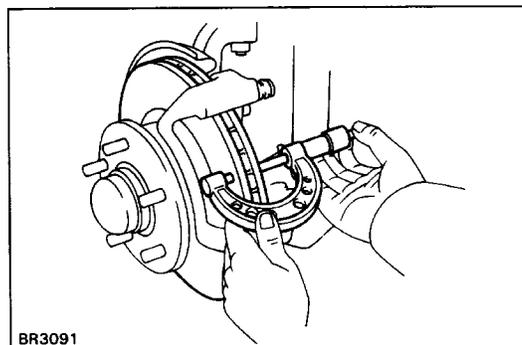
Standard thickness:

FS 17 Type 9.5 mm (0.374 in.)

FS18 Type 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 (the 1.0 mm slit is no longer visible), or if it shows sign of uneven wear.



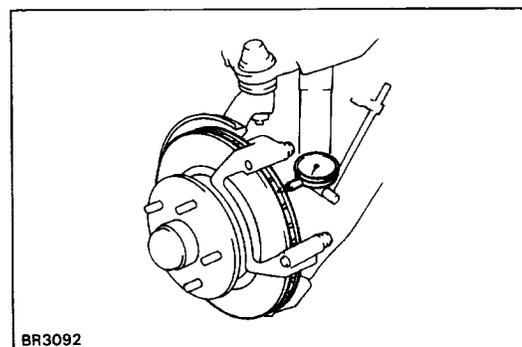
BR3091

2. MEASURE ROTOR DISC THICKNESS

Standard thickness: 22.0 mm (0.866 in.)

Minimum thickness: 20.0 mm (0.787 in.)

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



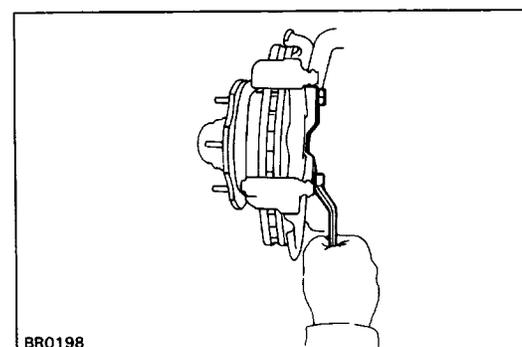
BR3092

3. MEASURE ROTOR DISC RUNOUT

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

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

Maximum disc runout: 0.09 mm (0.0035 in.)



BR0198

4. IF NECESSARY, REPLACE ROTOR DISC

(a) Remove the torque plate from the knuckle.

(b) Remove the axle hub. (See page [SA-15](#))

(c) Remove the disc from the axle hub.

(d) Install a new rotor disc. Torque the bolts.

Torque: 64 N·m (650 kgf·cm, 47 ft·lbf)

(e) Install the axle hub and adjust the front bearing pre-load. (See page [SA-16](#))

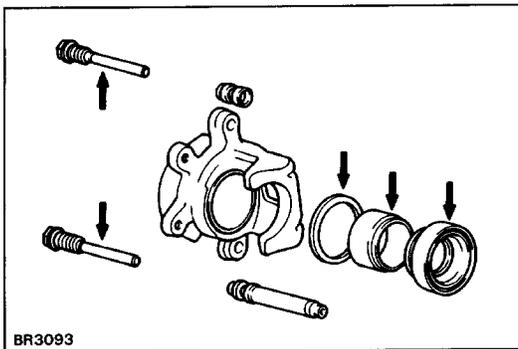
(f) Install the torque plate onto the knuckle.

Torque: 108 N·m (1,100 kgf·cm, 80 ft·lbf)

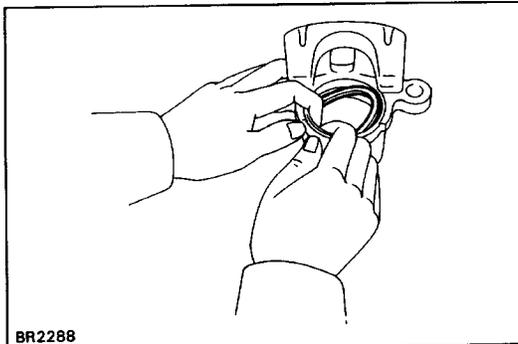
ASSEMBLY OF CYLINDER

(See page [BR-26](#))

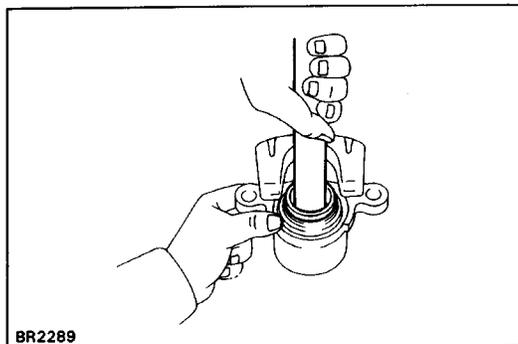
1. APPLY LITHIUM SOAP BASE GLYCOL GREASE TO PARTS INDICATED WITH ARROWS



2. INSTALL PISTON SEAL IN CYLINDER



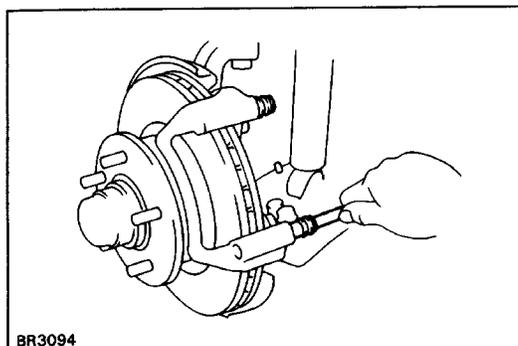
3. INSTALL PISTON AND CYLINDER BOOT IN CYLINDER

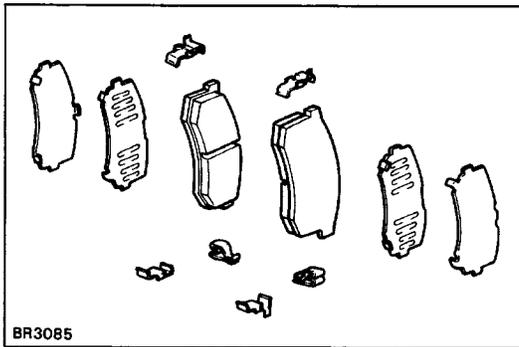


4. INSTALL PIN BOOT AND CYLINDER SLIDING BUSHING

(a) Install the pin boot into the sliding sub pin side.

(b) Using a plastic bar, install the cylinder sliding bushing into the sliding sub pin side.



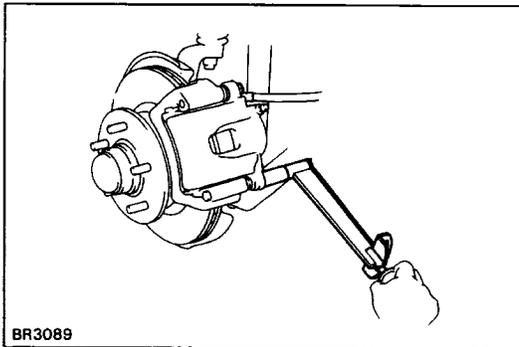


INSTALLATION OF CYLINDER

(See page [BR-26](#))

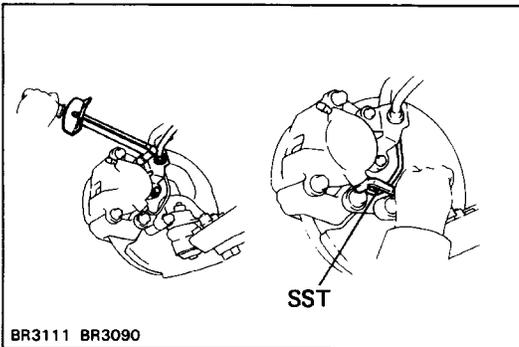
1. INSTALL PADS

(See steps 7 to 8 on pages [BR-27](#) and 28)



2. INSTALL CYLINDER

- (a) Insert the brake cylinder.
- (b) Install and torque the two sliding pins.
Torque: 88 N-m (900 kgf-cm, 65 ft-lbf)



3. CONNECT BRAKE TUBE

- (a) Install the bracket to the cylinder.
Torque: 18 N-m (185 kgf-cm, 13 ft-lbf)
- (b) Using SST, connect the brake tube to the cylinder.
SST 09751-36011
Torque: 15 N-m (155 kgf-cm, 11 ft-lbf)

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

(See page [BR-8](#))

5. CHECK FOR FLUID LEAKAGE