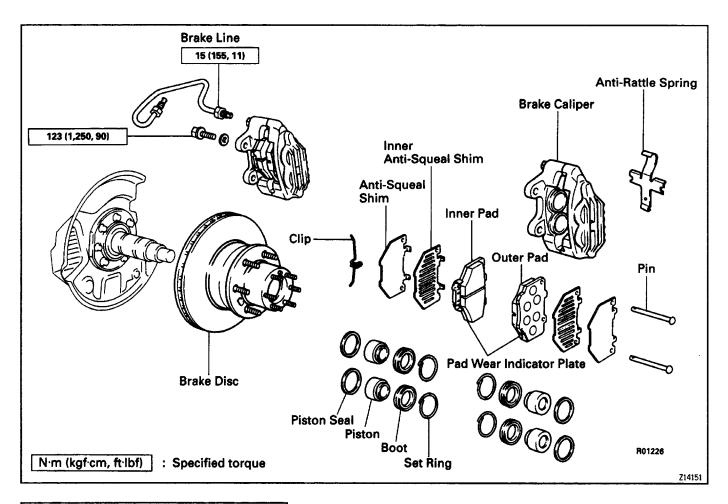
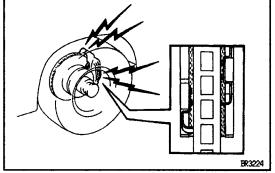
# FRONT BRAKE COMPONENTS

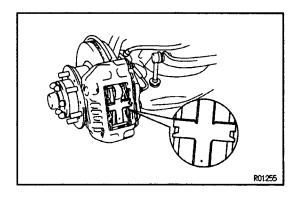




## **BRAKE PADS REPLACEMENT**

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 disc, the brake pads should be replaced.

#### 1. REMOVE FRONT WHEEL

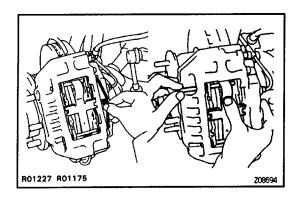


#### 2. INSPECT PAD LINING THICKNESS

Check the pad thickness and replace pads if not within specification.

#### Minimum thickness:

1.0 mm (0.039 in.)



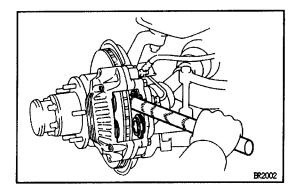
#### 3. REMOVE THESE PARTS:

- (a) Clip
- (b) 2 pins
- (c) Anti-rattle spring
- (d) 2 pads
- (e) 4 anti-squeal shims

NOTICE: The anti-rattle springs and clips can be used again provided that they have sufficient rebound, no deformation, cracks or wear, and have had all rust, dirt

and foreign particles cleaned off.

4. CHECK DISC THICKNESS AND RUNOUT (See page BR-22)



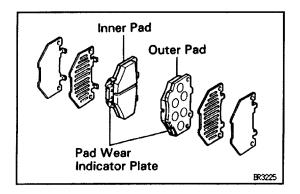
#### **6. INSTALL NEW PADS**

NOTICE: When replacing worn pads, the anti-squeal shims must be replaced together with the pads.

- (a) Draw out a small amount of brake fluid from the reservoir.
- (b) Press in the pistons with a hammer handle or equiva-

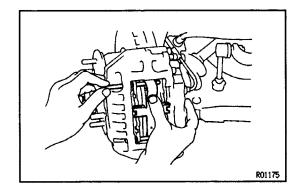
#### HINT:

- Always change the pads on one wheel at a time as there is a possibility of the opposite piston flying out.
- If the piston is difficult to push in, loosen the bleeder plug and push in the piston while letting some brake fluid escape.

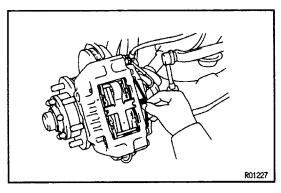


- (c) Install the 4 anti squeal shims to new pads, as shown. HINT: Apply disc brake grease to both side of the inner anti–squeal shim.
- (d) Install the 2 pads.

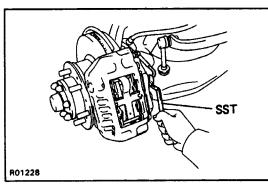
NOTICE: Do not allow oil or grease to got on the rubbing face.



#### 6. INSTALL ANTI-RATTLE SPRING AND 2 PINS



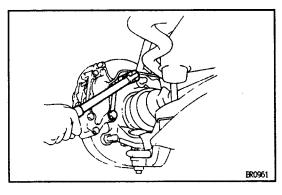
#### 7. INSTALL CLIP



## **CALIPER REMOVAL**

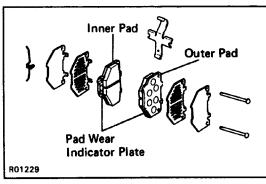
- 1. REMOVE FRONT WHEEL
- 2. DISCONNECT BRAKE LINE

Using SST, disconnect the brake line. Use a container to catch the brake fluid. SST 09751–36011



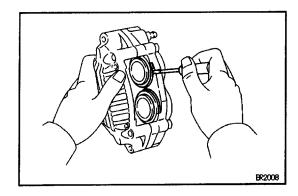
#### 3. REMOVE CALIPER

Remove the 2 mounting bolts and caliper.



## 4. REMOVE THESE PARTS:

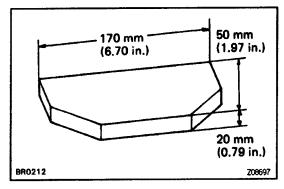
- (a) Clip
- (b) 2 pins
- (c) Anti-rattle spring
- (d) 2 pads
- (e) 4 anti-squeal shims



## CALIPER DISASSEMBLY

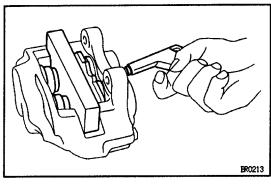
#### 1. REMOVE CYLINDER BOOT SET RINGS AND BOOTS

Using a screwdriver, remove the 4 cylinder boot set rings and 4 boots.



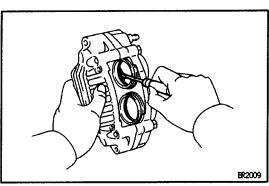
#### 2. REMOVE PISTONS

(a) Prepare the wooden plate to hold the pistons.



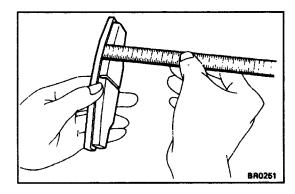
- (b) Place the plate between the pistons and insert a pad at one side.
- (c) Use compressed air to remove the pistons alternately from the cylinder.

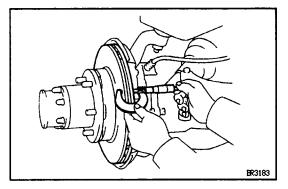
CAUTION: Do not place your fingers in front of the pistons when using compressed air.

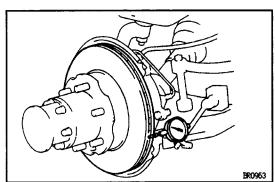


#### 3. REMOVE PISTON SEALS

Using a screwdriver, remove the 4 seals from the cylinder.







## FRONT BRAKE COMPONENTS INSPECTION AND REPAIR

#### 1. MEASURE PAD LINING THICKNESS

Using a ruler, measure the pad lining thickness.

#### Standard thickness:

9.5 mm (0.374 in.) kgf-cm.

#### Minimum thickness:

1.5 mm (0.059 in.)

Replace the pads if the thickness is less than the minimum (the 1.5 mm slit is no longer visible) or if it shows signs of uneven wear.

#### 2. MEASURE DISC THICKNESS

Using a micrometer, measure the disc thickness.

#### Standard thickness:

25.0 mm (0.984 in.)

#### Minimum thickness:

23.0 mm (0.906 in.)

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

#### 3. MEASURE DISC RUNOUT

Using a dial indicator, measure the disc runout at a position 10 mm (0.39 in.) from the outer edge.

#### Maximum disc runout:

0.09 mm (0.0035 in.)

If the runout is greater than maximum, replace the

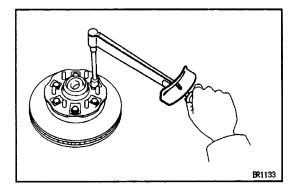
HINT: Before measuring the runout, confirm that the front bearing play is within specification.

#### 4. IF NECESSARY, REPLACE DISC

(a) Remove the front axle hub.

(See page SA-13)

(b) Remove the disc from the axle hub.

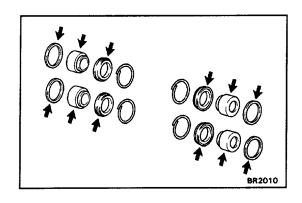


(c) Install a new disc and torque the bolts.

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

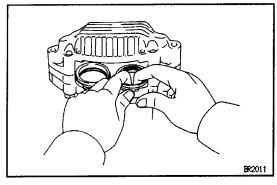
(d) Install the axle hub and adjust the front bearing preload.

(See page SA-16)

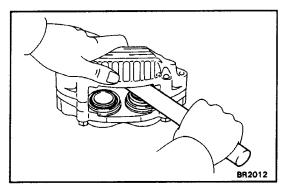


## **CALIPER ASSEMBLY**

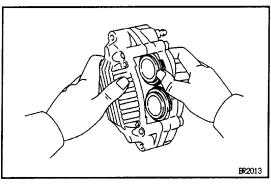
1. APPLY LITHIUM SOAP BASE GLYCOL GREASE TO PARTS INDICATED BY ARROWS



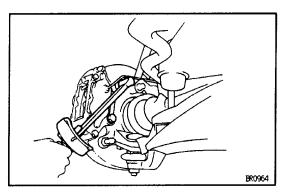
2. INSTALL PISTON SEALS INTO CYLINDER



3. INSTALL PISTONS INTO CYLINDER



4. INSTALL CYLINDER BOOTS AND SET RINGS INTO CYLINDER

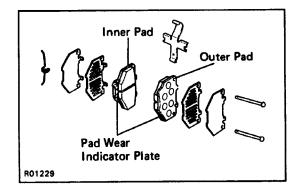


## **CALIPER INSTALLATION**

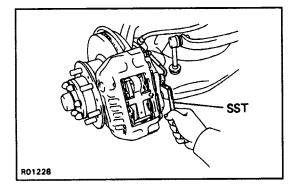
1. INSTALL CALIPER

Install the brake caliper, and torque the 2 mounting bolts.

Torque: 123 N-m (1,250 kgf-cm, 90 ft-lbf)



2. INSTALL PADS
(See steps 5 to 8 on page BR-19)



#### 3. CONNECT BRAKE LINE

Using SST, connect the brake line. 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**
- **6. INSTALL FRONT WHEEL**