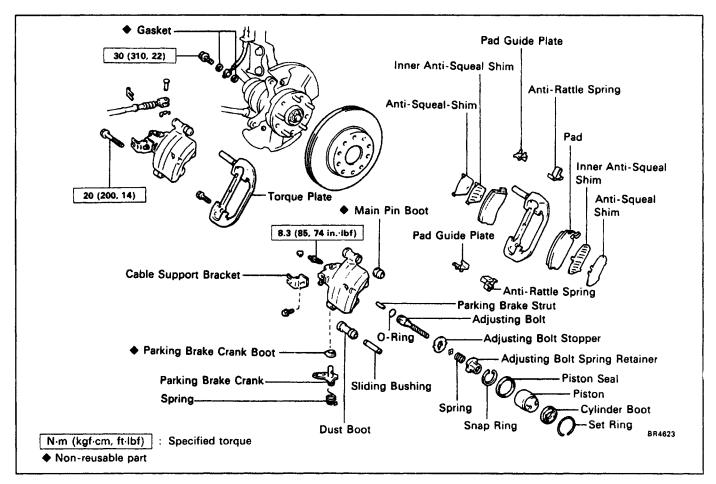
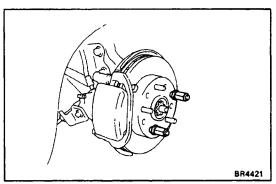
# REAR BRAKE COMPONENTS

8060-01

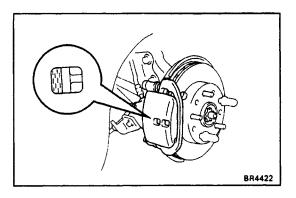




## **BRAKE PADS REPLACEMENT**

## 1. REMOVE REAR WHEEL

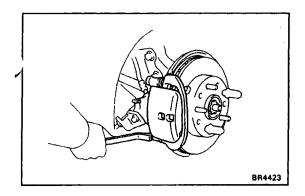
Remove the wheel and temporarily fasten the rotor disc with the hub nuts.



## 2. INSPECT PAD LINING THICKNESS

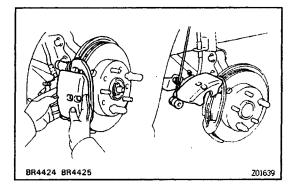
Check the pad thickness through the cylinder in—spection hole and replace the pads if it is not within specification.

Minimum thickness: 1.0 mm (0.039 in.) BR06H-01



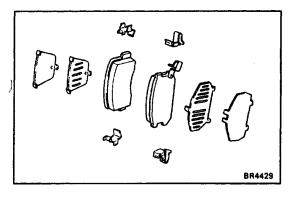
### 3. LIFT UP CYLINDER

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



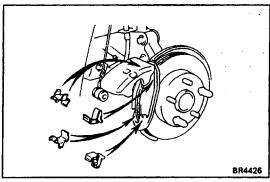
(b) Lift up the brake cylinder and suspend the cylinder with string.

HINT: Do not disconnect the flexible hose from the brake cylinder.



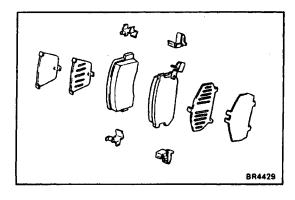
## 4. REMOVE FOLLOWING PARTS:

- (a) Two brake pads
- (b) Four anti-squeal shims
- (c) Two anti-rattle springs
- (d) Two pad guide plats
- 5. CHECK ROTOR DISC THICKNESS AND RUNOUT (See page BR-41)



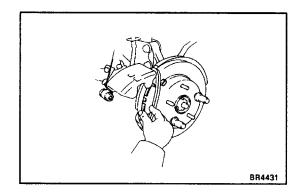
### **6. INSTALL PAD SUPPORT PLATES**

Install the four pad support plates.



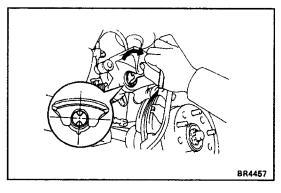
### 7. INSTALL NEW PADS

- (a) Apply disc brake to both sides of the two inner antisqueal shims.
- (b) Install the two anti-squeal shims to the each pad.



(c) Install the two pads.

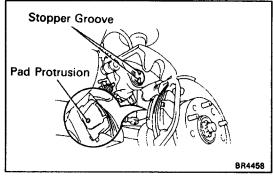
NOTICE: There should be no oil grease adhering to the friction surfaces of the pads or the rotor disc.



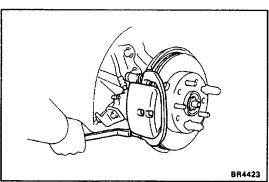
## 8. INSTALL CYLINDER

(a) Using SST, slowly turn piston clockwise until the piston turns freely, ten align the cylinder protrusion and piston stopper groove.

SST 09719-14020 (09718-00020)



(b) Fit the pad protrusion into the piston stopper groove and install the cylinder.



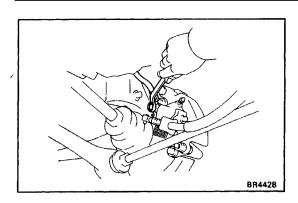
(c) Install and torque the installation bolt.

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

- 9. INSTALL REAR WHEEL
- 10. CHECK THAT FLUID LEVEL IS MAX LINE
- 11. ADJUST PAD CLEARANCE

Depress the brake pedal for several times.

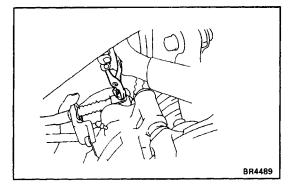
BR06J - 01



## CYLINDER REMOVAL

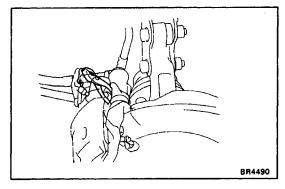
## 1. DISCONNECT FLEXIBLE HOSE

- (a) Remove the union bolt and two gaskets, and disconnect the flexible hose.
- (b) Use a container to catch the brake fluid.

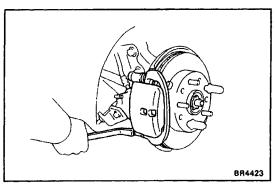


### 2. DISCONNECT PARKING BRAKE CABLE

- (a) Remove the pin clip.
- (b) Pull out the hole pin while pushing the parking brake crank

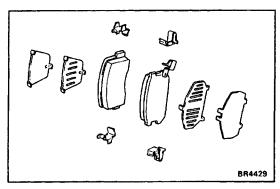


- (c) Remove the clip.
- (d) Remove the parking brake cable from the cable support bracket.



## 3. REMOVE CYLINDER

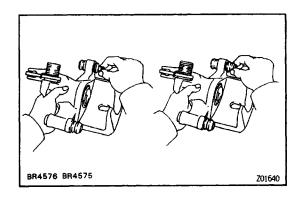
Remove the installation bolt, and remove the brake cylinder.



### 4. REMOVE FOLLOWING PARTS:

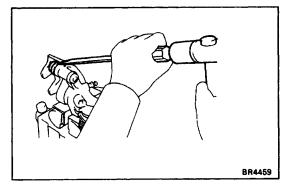
- (a) Two brake pads
- (b) Four anti-squeal shims
- (c) Two anti-squeal springs
- (d) Two pad guide plats

BROSK -- 01



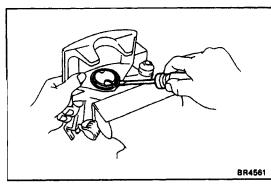
## CYLINDER DISASSEMBLY

## 1. REMOVE DUST BOOT AND SLIDING BUSHING



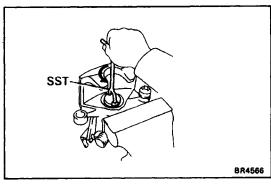
## 2. REMOVE MAIN PIN BOOT

Using a chisel and hammer, tap out the dust boots.



## 3. REMOVE CYLINDER BOOT SET RING AND CYLIN-DER BOOT

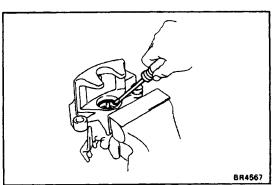
Using a screwdriver, remove the cylinder boot set ring and cylinder boot.



### 4. REMOVE PISTON FROM CYLINDER

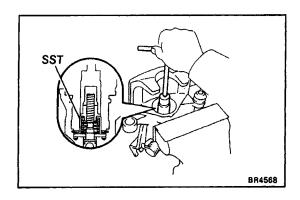
Using SST, turn the piston counterclockwise and remove it.

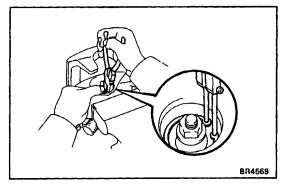
SST 09719-14020



## 5. REMOVE PISTON SEAL FROM CYLINDER

Using a screwdriver, remove the piston seal.





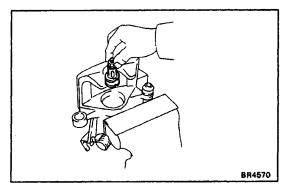


(a) Set SST onto the adjusting bolt, and lightly tighten it with a 14 mm socket.

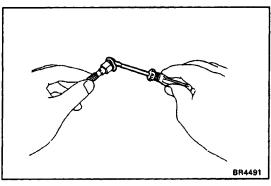
SST 09 756 - 00010

### **CAUTION:**

- To insure safety, always use SST as there is a possibility of the spring flying out, causing injury or damaging to the interior surface of the cylinder.
- Be careful not to tighten the SST too tightly as this may damage the spring retainer.
- (b) Using snap ring pliers, remove the snap ring from the cylinder.

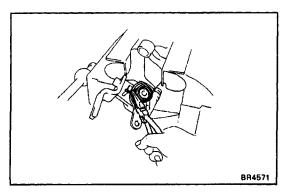


(c) Remove the parking brake strut, spring retainer, spring, spring plate and stopper together with the adjusting bolt from the cylinder.

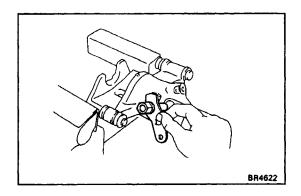


## 7. DISASSEMBLE ADJUSTING BOLT

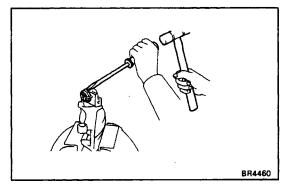
- (a) Remove SST.
  - SST 09576 00010
- (b) Remove the spring retainer, spring, spring plate and stopper from the adjusting bolt.
- (c) Remove the O-ring from the adjusting bolt.



8. REMOVE TORSION SPRING FROM PARKING BRAKE CRANK



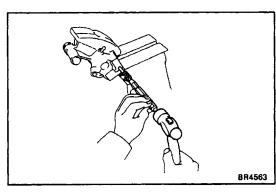
## 9. REMOVE PARKING BRAKE CRANK FROM CYLIN-DER



## 10. REMOVE PARKING BRAKE CRANK BOOT

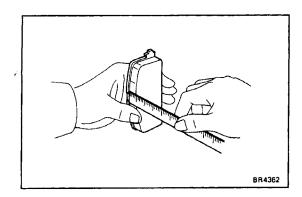
Using a chisel and hammer, tap out the parking brake crank boot.

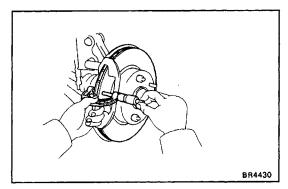
## 11. REMOVE CABLE SUPPORT BRACKET



## 12. REMOVE STOPPER PIN

Using a pin punch, tap out the pin.





## REAR BRAKE COMPONENTS INSPECTION

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.

#### 2. MEASURE ROTOR DISC THICKNESS

(3S-GTE Engine)

Standard thickness:

22.0 mm (0.866 in.)

Minimum thickness:

21.0 mm (0.827 in.)

(5S-FE Engine)

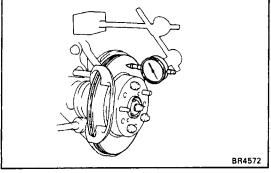
Standard thickness:

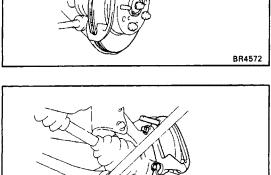
16.0 mm (0.630 in.)

Minimum thickness:

15.0 mm (0.591 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

HINT: Before measuring the runout, confirm that the rear 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:

0.10 mm (0.0039 in.)

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

## 4. IF NECESSARY, REPLACE ROTOR DISC

- (a) Remove the disc brake cylinder mounting from the dust cover.
- (b) Remove the hub nuts and rotor disc.
- (e) Install a new rotor disc and temporarily fasten the disc with hub nuts.
- (d) Install the torque plate to the rear axle carrier.

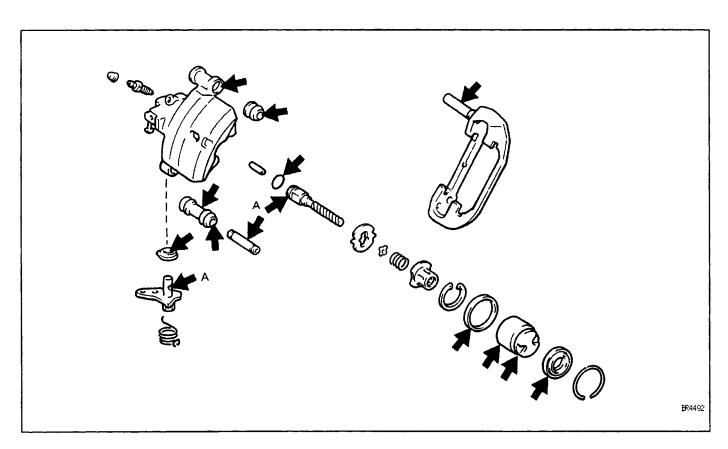
Torque: 59 N-m (600 kgf-cm, 43 ft-lbf)

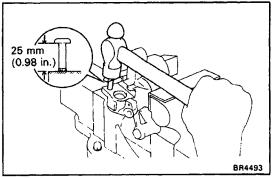
10-M808

## CYLINDER ASSEMBLY

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

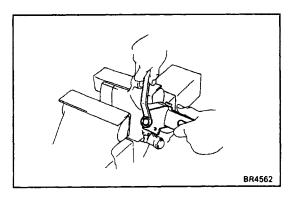
HINT: Pack the lithium soap base glycol grease into areas marked "A".



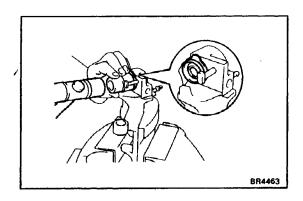


## 2. INSTALL STOPPER PIN

Tap in the pin to the brake cylinder until the stopper pin extends 25 mm (0.98 in.).

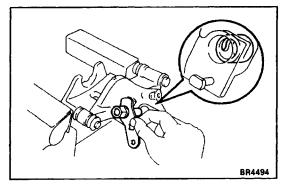


3. INSTALL CABLE SUPPORT BRACKET Torque: 47 N-m (475 kgf-cm, 34 ft-lbf)



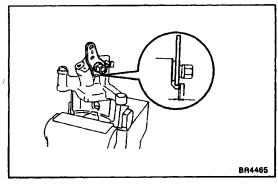
## 4. INSTALL PARKING BRAKE CRANK BOOT

- (a) Using a 24 mm socket wrench and hammer, tap in new parking brake crank boot shown in the figure.
- (b) Confirm that the metal plate portion of the parking brake crank boot fits snugly in the cylinder.

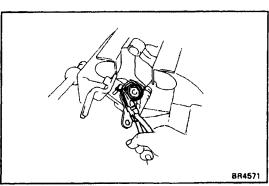


### **5. INSTALL PARKING BRAKE CRANK**

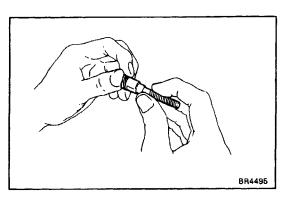
- (a) Check that the needle roller bearing is not covering the cylinder hole.
- (b) Install the parking brake crank in cylinder.



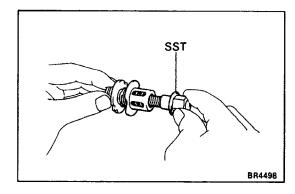
(c) Check that there is clearance between the parking brake crank and cylinder.

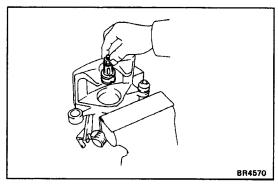


### 6. INSTALL TORSION SPRING



### 7. INSTALL O-RING TO ADJUSTING BOLT





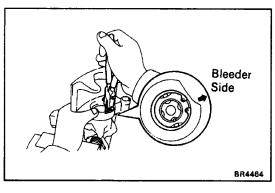


(a) Assemble the parking brake stopper, spring plate, spring, spring retainer and parking brake strut to the. adjusting bolt, and using SST, fully tighten them down by hand.

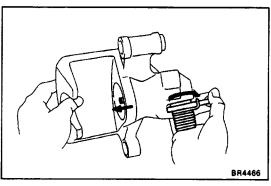
SST 09756 - 00010

## HINT:

- Position the inscribed surface of the stopper upward.
- Align the notches of the spring retainer and stopper.
- (b) Install the adjusting bolt sub-assembly into the cylinder.

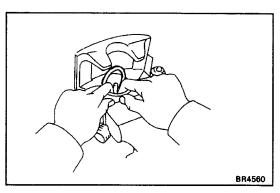


- (e) Using snap ring pliers, install the snap ring. HINT: Face the snap ring opening toward the bleeder side.
  - (d) Remove the SST. SST 09756-00010
  - (e) Firmly pull up the adjusting bolt by hand and insure that it does not move.

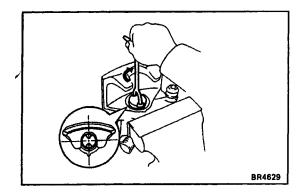


#### 9. OPERATIONAL CHECK

Move the parking brake crank by hand and insure that the adjusting bolt moves smoothly.

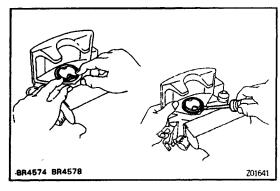


10. INSTALL PISTON SEAL IN CYLINDER

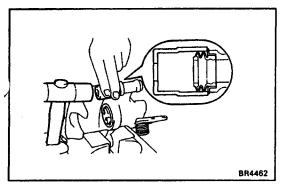


## 11. INSTALL PISTON IN CYLINDER

Using SST, slowly turn the piston clockwise until the piston turns freely, then align the cylinder protrusion and piston stopper groove.

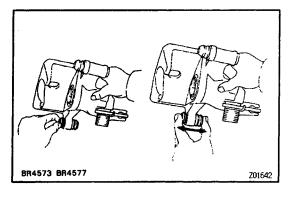


## 12. INSTALL CYLINDER BOOT AND SET RING IN CYLINDER



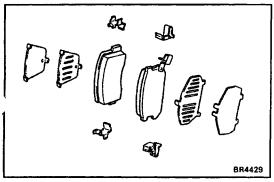
### 13. INSTALL MAIN PIN BOOT

- (a) Using a 19 mm socket wrench and hammer, tap in new main pin boot into the cylinder.
- (b) Confirm that the metal plate portion of the main pin boot fits snugly in the cylinder.



## 14. INSTALL DUST BOOT AND SLIDING BUSHING

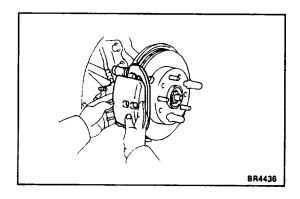
- (a) Install the dust boot.
- (b) Install the bushing into the boot, with the flange facing inside.



## CYLINDER INSTALLATION 1. INSTALL FOLLOWING PARTS:

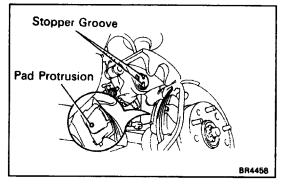
- () T
  - (a) Two pad guide plats
  - (b) Two anti-rattle springs
  - (c) Four anti-squeal shims
  - (d) Two brake pads

BR06N -0

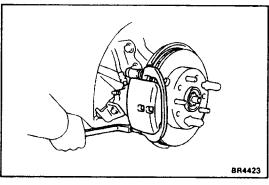


## 2. INSTALL CYLINDER

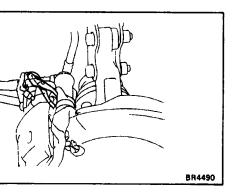
(a) Install the cylinder onto the main pin. HINT: Make sure that the boot end is installed into the groove of the main pin.



(b) Fit the pad protrusion into the piston stopper groove, and install the cylinder.

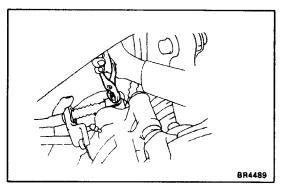


(c) Install the torque the installation bolt. Torque: 20 N-m (200 kgf-cm, 14 ft-lbf)

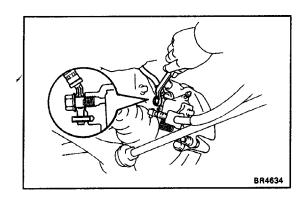


## 3. CONNECT PARKING BRAKE CABLE

(a) Install the parking brake cable to the cable support bracket and install the retainer.



(b) Install the hole pin while pushing the parking brake lever, and install the clip.



## 4. CONNECT BRAKE HOSE

Install the flexible hose one 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.

## 5. FILL BRAKE RESERVOIR WITH BRAKE FLUID AND BLEED BRAKE SYSTEM

(See page BR-9)

**6. CHECK FOR FLUID LEAKAGE** 

## 7. ADJUST REAR BRAKE

Depress the brake pedal several times and adjust the rear brake automatically.