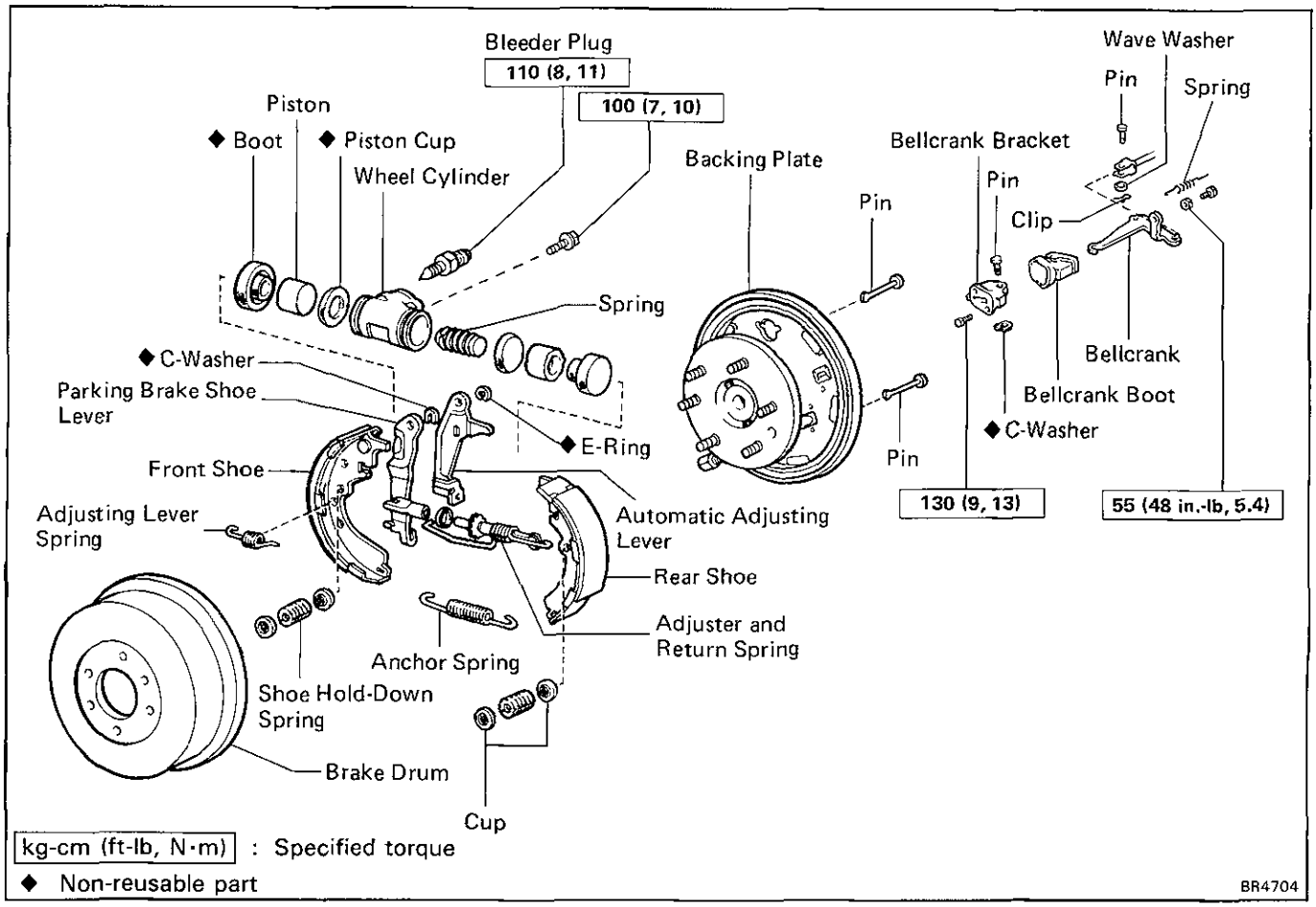
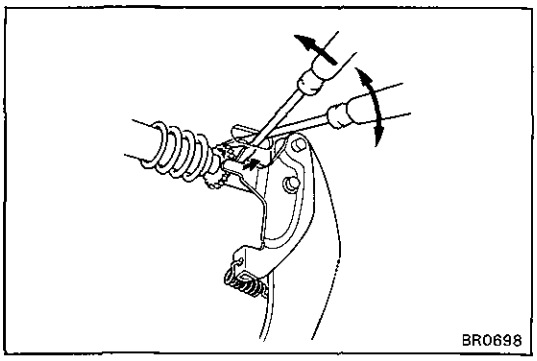
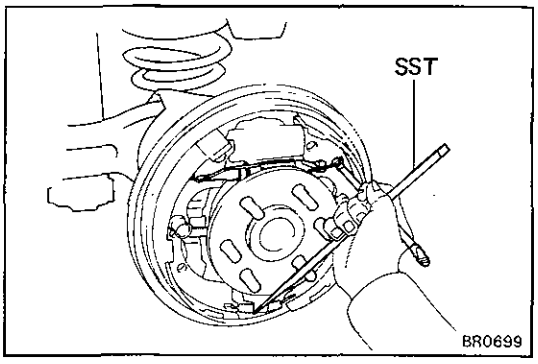
REAR BRAKE

Drum Brake

COMPONENTS







REMOVAL OF REAR BRAKE

1. REMOVE BRAKE DRUM

HINT: If the brake drum cannot be removed easily, perform the following steps.

(a) Remove the hole plug from the backing plate.

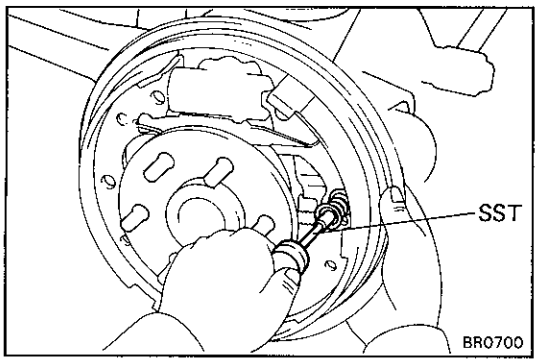
(b) Insert a screwdriver through the hole and hold the adjusting lever away from the adjuster.

(c) Using another screwdriver, reduce the brake shoe adjustment by turning the adjuster.

2. REMOVE REAR BRAKE SHOE

(a) Using SST, remove the return spring from the rear shoe side.

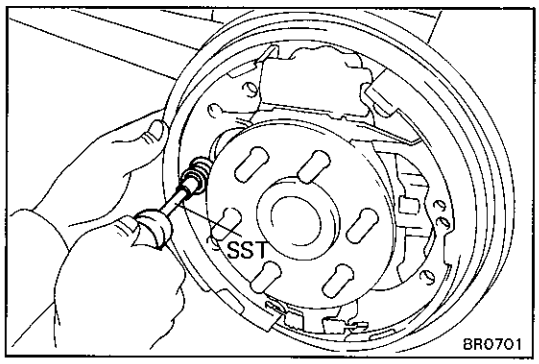
SST 09703-30010



(b) Using SST, remove the two cups, shoe hold-down spring and pin.

SST 09718-00010

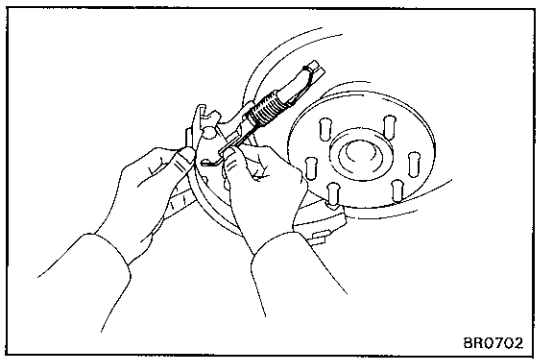
(c) Remove the rear brake shoe and anchor spring.



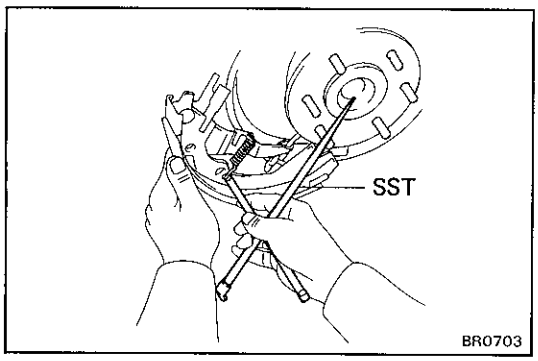
3. REMOVE FRONT BRAKE SHOE AND ADJUSTER

(a) Using SST, remove the two cups, shoe hold-down spring and pin, and remove the shoe.

SST 09718-00010

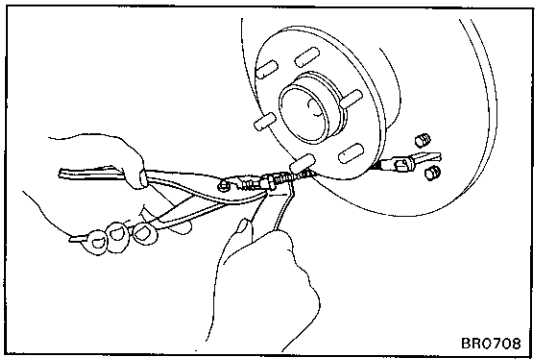


(b) Remove the adjuster and return spring from the parking brake shoe lever.



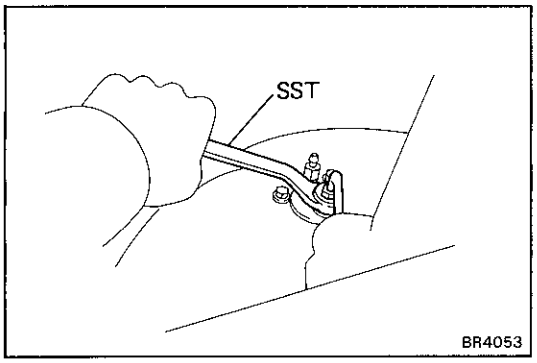
(c) Using SST, remove the adjusting lever spring.

SST 09703-30010



(d) Disconnect the parking brake cable from the parking brake shoe lever.

(e) Remove the parking brake cable.

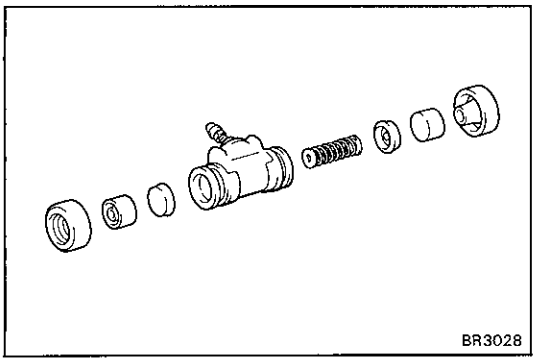


4. IF NECESSARY, REMOVE AND DISASSEMBLE WHEEL CYLINDER

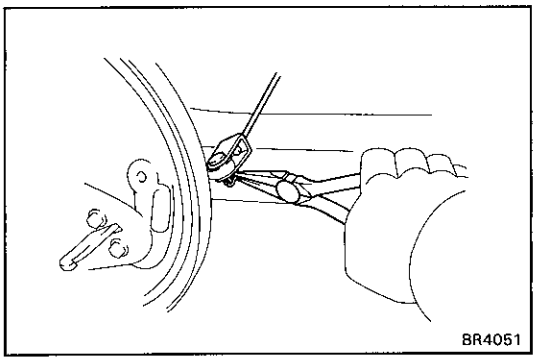
(a) Using SST, disconnect the brake tube.
Use a container to catch the brake fluid.

SST 09751-36011

(b) Remove the two bolts and the wheel cylinder.



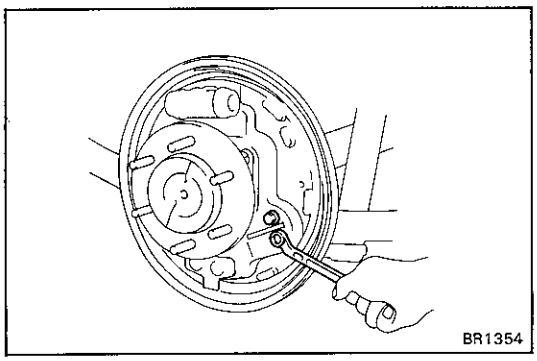
(c) Remove the two boots, two pistons, two piston cups and spring from the cylinder.



5. IF NECESSARY, REMOVE AND DISASSEMBLE BELLCRANK ASSEMBLY

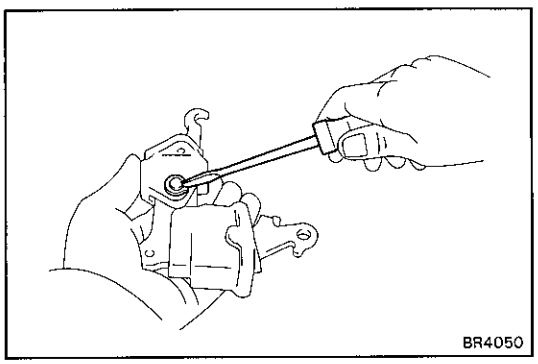
(a) Remove the two tension springs from the bellcrank.

(b) Remove the clip and pin, then disconnect the parking brake cable.



(c) Remove the two bolts and parking brake bellcrank assembly.

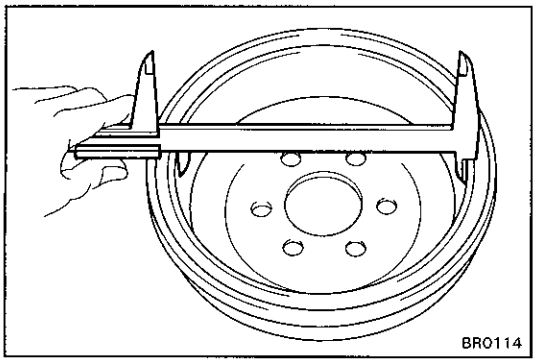
(d) Remove the boot from the parking brake bellcrank bracket.

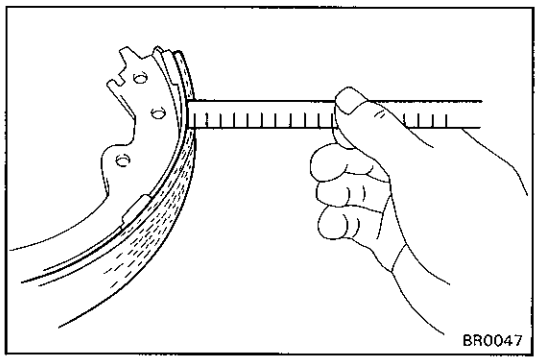


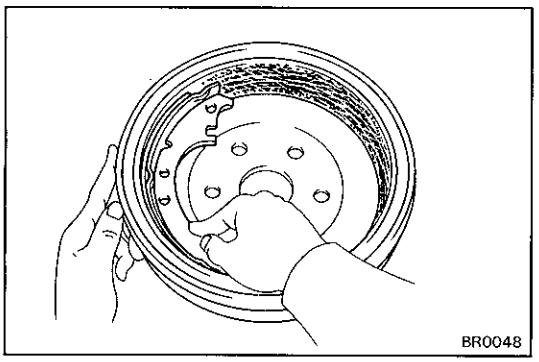
(e) Using a screwdriver, remove the C-washer and pin.

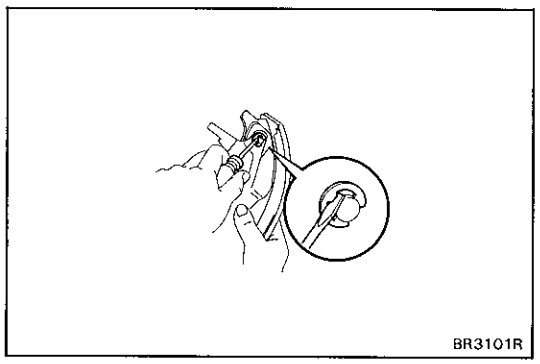
(f) Remove the parking brake bellcrank from the crank bracket.

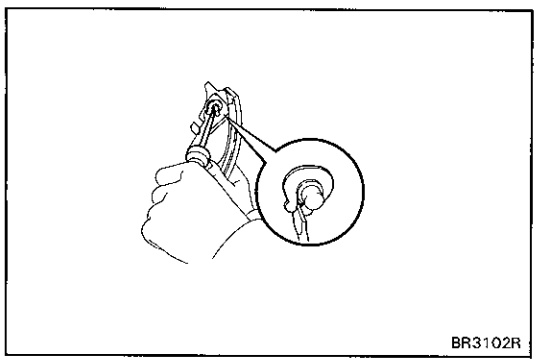
(g) Remove the boot.











INSPECTION AND REPLACEMENT OF REAR BRAKE COMPONENTS

1. MEASURE BRAKE DRUM INSIDE DIAMETER

Maximum inside diameter:

Heavy-Duty: 297.0 mm (11.693 in.)
Light-Duty: 256.0 mm (10.079 in.)

Standard inside diameter:

Heavy-Duty: 295.0 mm (11.614 in.)
Light-Duty: 254.0 mm (10.000 in.)

If the drum is scored or worn, the brake drum may be lathed.

2. MEASURE BRAKE SHOE LINING THICKNESS

Minimum thickness:

Heavy-Duty: 1.5 mm (0.059 in.)
Light-Duty: 1.0 mm (0.039 in.)

Standard thickness:

Heavy-Duty: 6.5 mm (0.256 in.)
Light-Duty: 5.0 mm (0.197 in.)

If the shoe lining is less than minimum or shows signs of uneven wear, replace the brake shoes.

HINT: If any of the brake shoes have to be replaced, replace all of the brake shoes in order to maintain even braking.

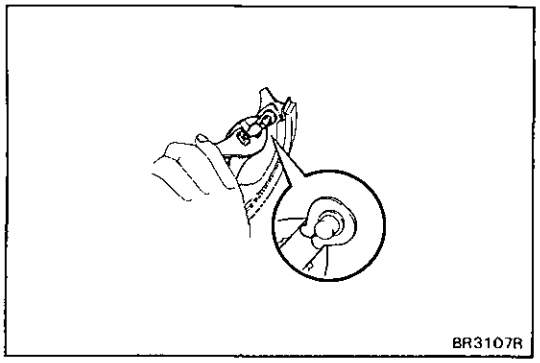
3. INSPECT BRAKE LINING AND DRUM FOR PROPER CONTACT

If the contact between the brake lining and drum is improper, repair the lining with a brake shoe grinder, or replace the brake shoe assembly.

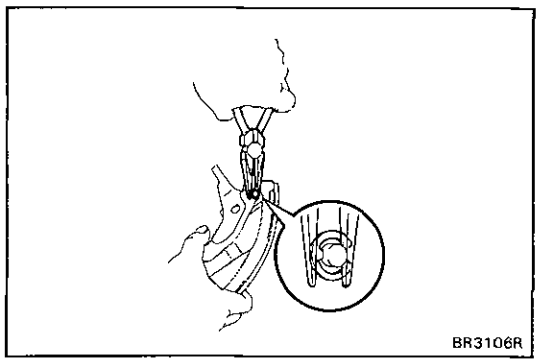
4. IF NECESSARY, REPLACE BRAKE SHOES

(a) Using a screwdriver, remove the automatic adjusting lever from the front shoe.

(b) Using a screwdriver, remove the parking brake shoe lever from the front shoe.



(c) Using pliers, install the parking brake shoe lever with a new C-washer.



(d) Install the automatic adjusting lever with a new E-ring.

5. **INSPECT WHEEL CYLINDER FOR CORROSION OR DAMAGE**

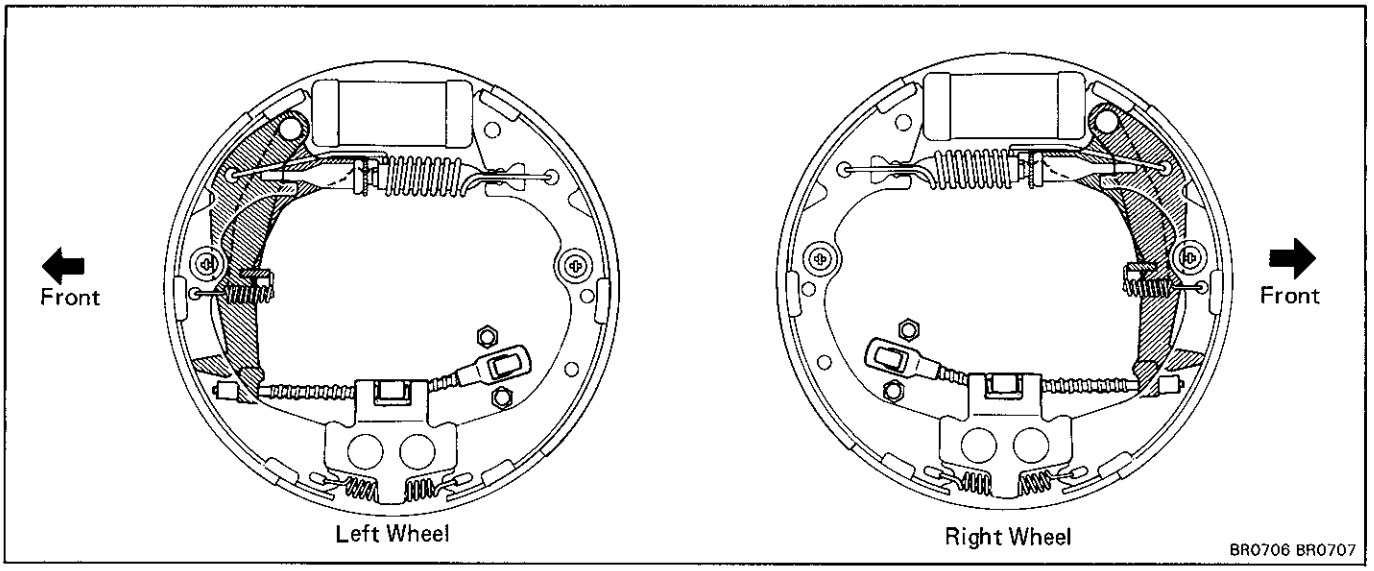
6. **INSPECT BACKING PLATE FOR WEAR OR DAMAGE**

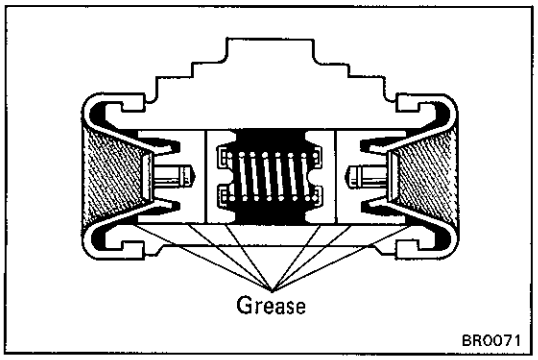
7. **INSPECT BELLCRANK PARTS FOR BENDING, WEAR OR DAMAGE**

INSTALLATION OF REAR BRAKE

(See page BR-76)

HINT: Assemble the parts in the correct direction as shown.





1. **IF NECESSARY, ASSEMBLE AND INSTALL WHEEL CYLINDER**

(a) Apply lithium soap base glycol grease to the piston cups and piston.

Install the spring and two piston cups in the wheel cylinder.

Make sure the flanges of the cups are pointed inward.

(b) Install two pistons. Apply lithium soap base glycol grease as shown, and install the two boots.

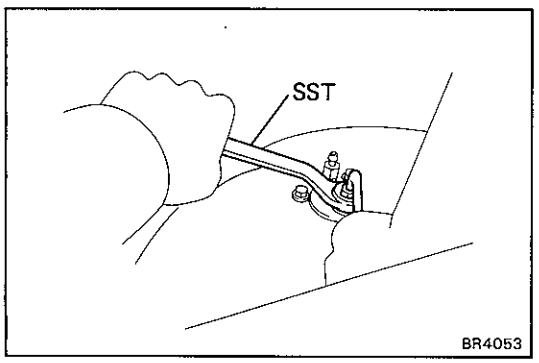
(c) Install the wheel cylinder on the backing plate with two bolts.

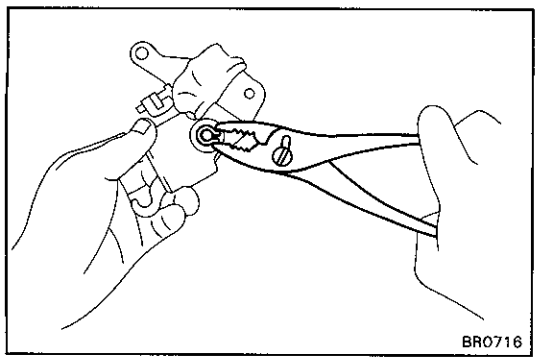
Torque: 100 kg-cm (7 ft-lb, 10 N·m)

(d) Using SST, connect the brake tube.

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Torque: 155 kg-cm (11 ft-lb, 15 N·m)





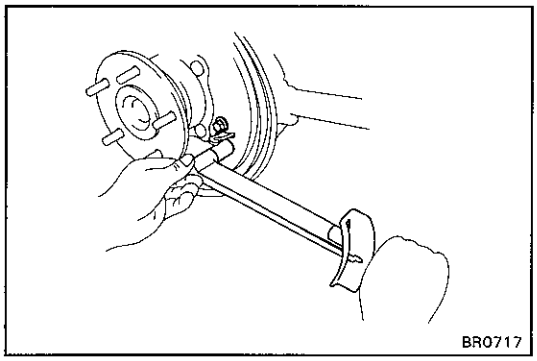
2. **IF NECESSARY, ASSEMBLE AND INSTALL PARKING BRAKE BELLCRANK ASSEMBLY**

(a) Apply lithium soap base glycol grease to the boot.

(b) Install the boot to the parking brake bellcrank.

(c) Install the bellcrank to the crank bracket.

(d) Install the pin with a new C-washer.

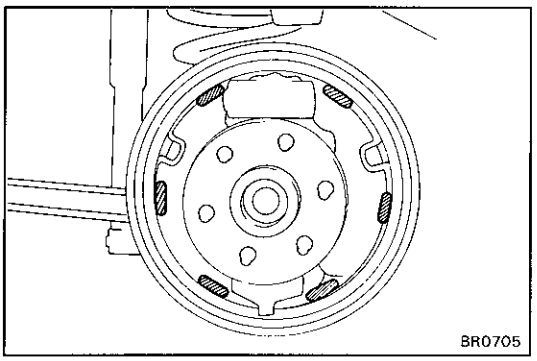


(e) Install the bellcrank assembly on the backing plate with two bolts.

(f) Torque the bolts.

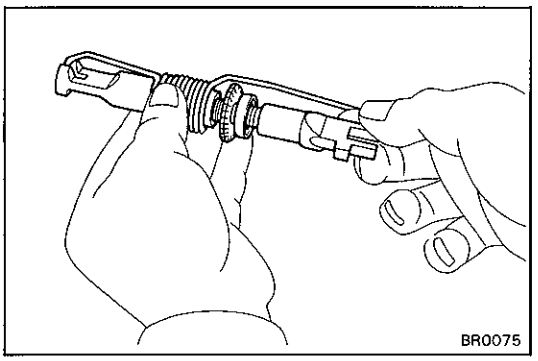
Torque: 130 kg-cm (9 ft-lb, 13 N·m)

(g) Connect the parking brake cable to the bellcrank assembly with the pin and clip.

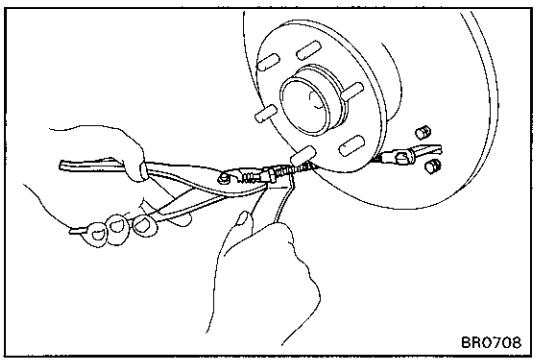


3. APPLY HIGH TEMPERATURE GREASE ON BACKING PLATE, AS SHOWN

Apply high temperature grease to the brake shoe contact surfaces.



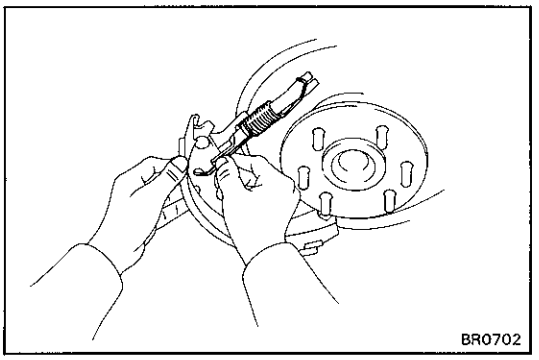
4. APPLY HIGH TEMPERATURE GREASE TO ADJUSTER BOLT THREADS AND ENDS



5. INSTALL PARKING BRAKE CABLE AND CONNECT TO PARKING BRAKE SHOE LEVER

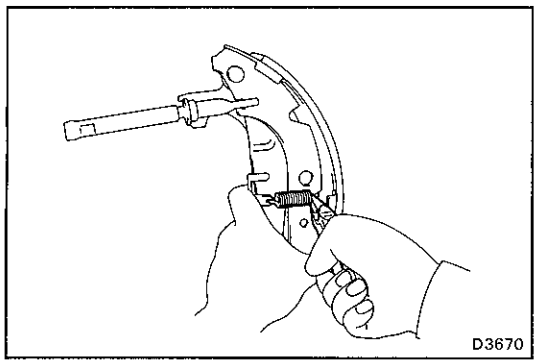
(a) Install the parking brake cable to bellcrank as shown.

(b) Install parking brake cable to the parking brake shoe lever.



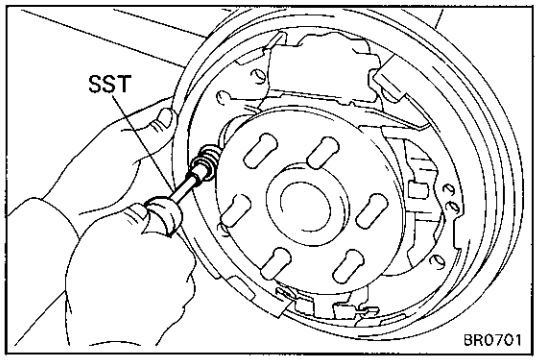
6. INSTALL ADJUSTER ONTO FRONT SHOE

(a) Install the adjuster and return spring onto the front shoe.



(b) Using SST, install the adjusting lever spring.

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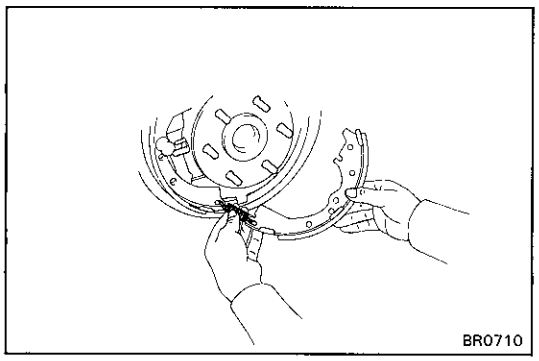


7. INSTALL FRONT SHOE

(a) Set the front shoe in place with the end of the shoe inserted in the wheel cylinder and the other end in the anchor plate.

(b) Using SST, install the pin, two cups and shoe hold-down spring.

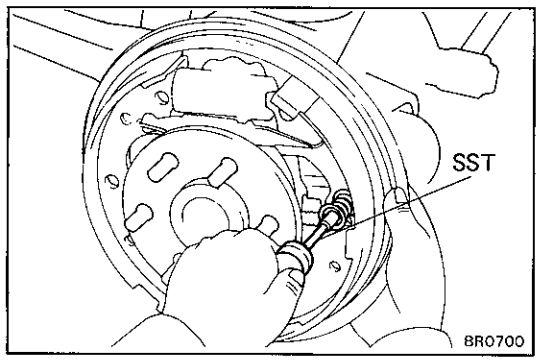
SST 09718-00010



8. INSTALL REAR SHOE

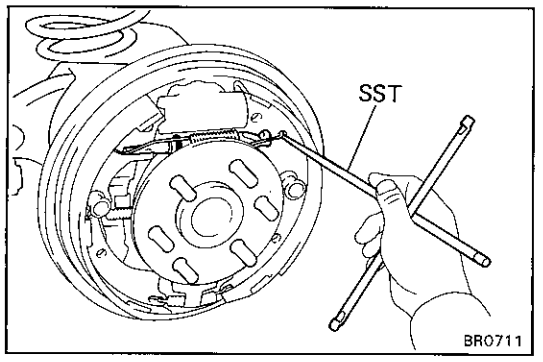
(a) Install the anchor spring between the front and rear shoes.

(b) Set the rear shoe in place with the end of the shoe inserted in the wheel cylinder and the adjuster in place.



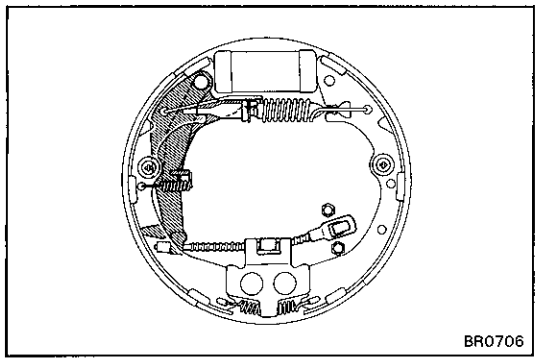
(c) Using SST, install the pin, two cups and shoe hold-down spring.

SST 09718-00010



(d) Using SST, connect the return spring to the rear shoe.

SST 09703-30010

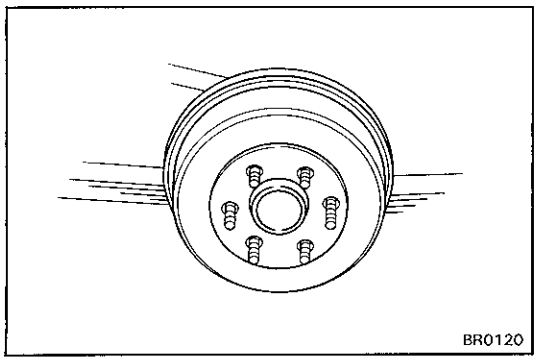

BR0706

9. CHECK OPERATION OF AUTOMATIC ADJUSTING MECHANISM

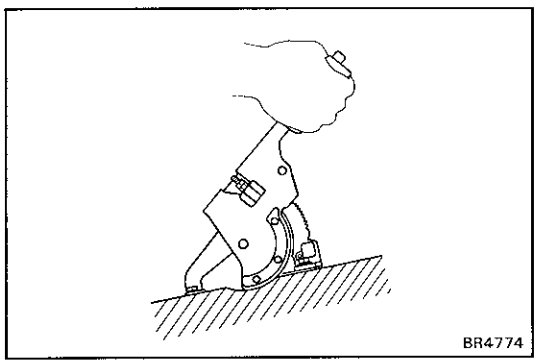
(a) Check that the adjusting bolt turns while pulling the parking brake cable rearward.

If the bolt does not turn, check the installation of the rear brakes.

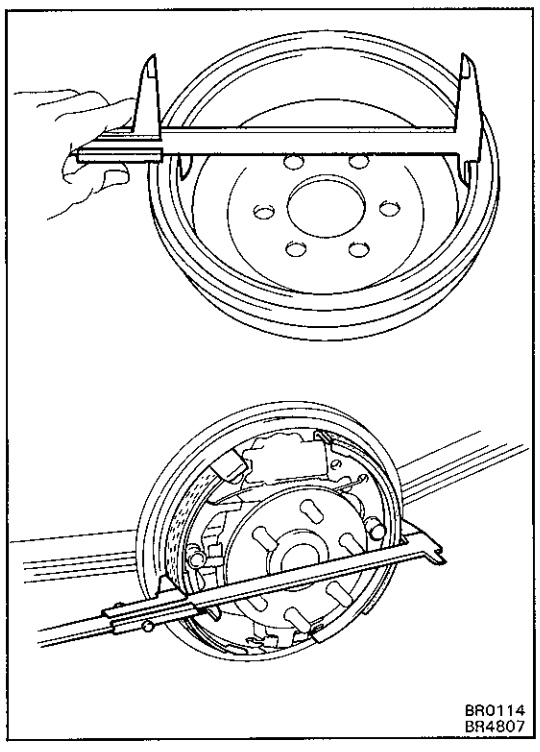
(b) Adjust the adjuster to the shortest possible length.


BR0120

(c) Install the drum.


BR4774

(d) Pull the parking brake lever all the way up and down until the clicking sound can no longer be heard.


BR0114
BR4807

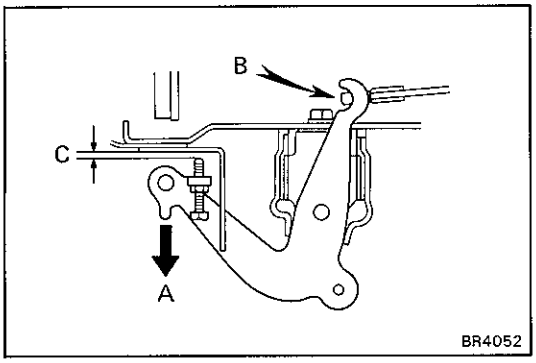
10. CHECK CLEARANCE BETWEEN BRAKE SHOES AND DRUM

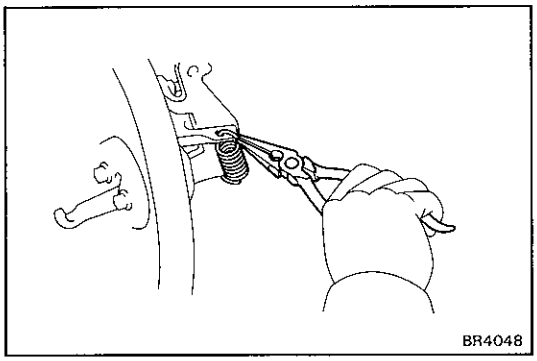
(a) Remove the drum.

(b) Measure the brake drum inside diameter and diameter of the brake shoes. Check that the difference between the diameter is the correct shoe clearance.

Shoe clearance: 0.6 mm (0.024 in.)

If incorrect, check the parking brake system.





11. IF NECESSARY, ADJUST BELLCRANK

(a) Lightly pull the bellcrank in direction A until there is no slack at part B.

(b) In this condition, turn the adjusting bolt so that dimension C will be the following specification.

Heavy-Duty: 0.4 — 0.8 mm (0.016 — 0.031 in.)
Light-Duty: 0.2 — 0.7 mm (0.008 — 0.028 in.)

(c) Lock the adjusting bolt with the lock nut.

(d) Connect the parking brake cable No. 2 to the bellcrank.

(e) Install the two tension springs.

12. INSTALL BRAKE DRUM AND REAR WHEEL

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

14. CHECK FOR FLUID LEAKAGE