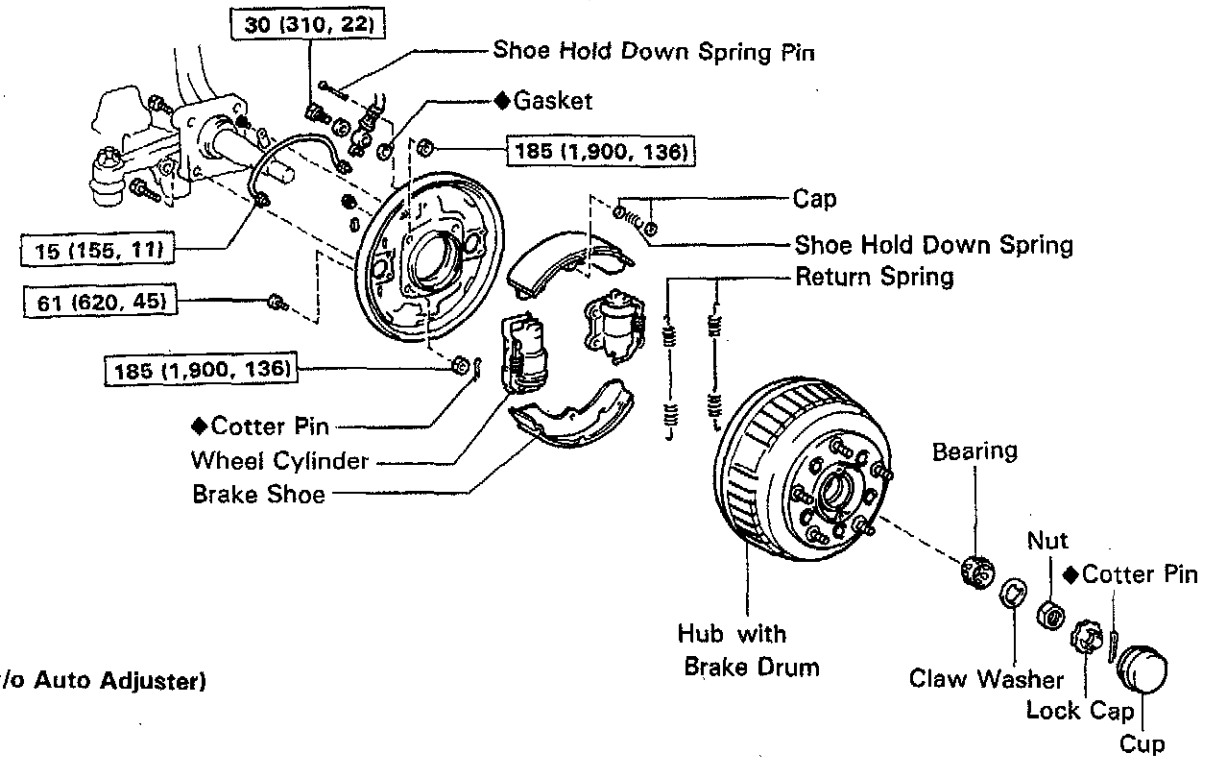
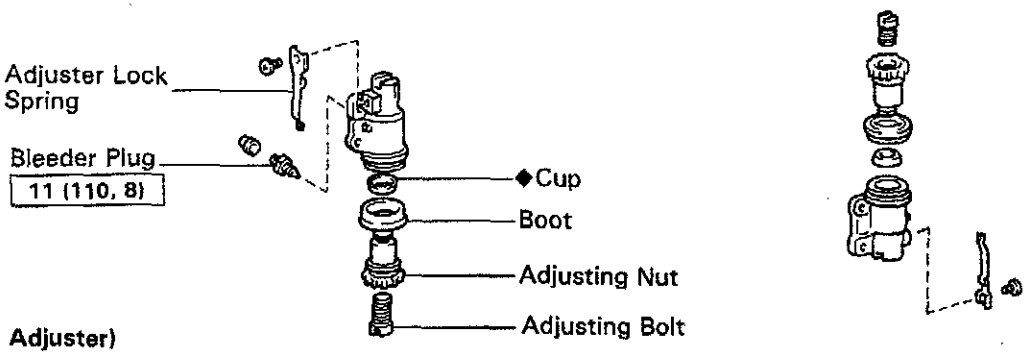
FRONT BRAKE (Drum Brake)

COMPONENTS

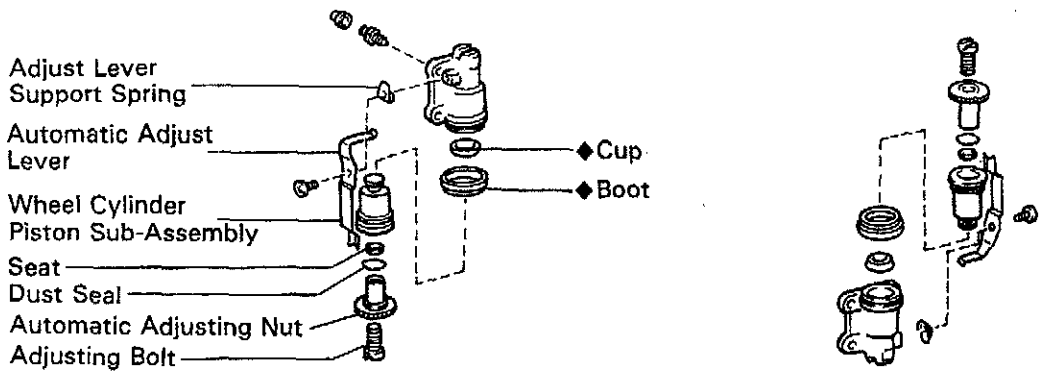
BR0L0-01



(w/o Auto Adjuster)



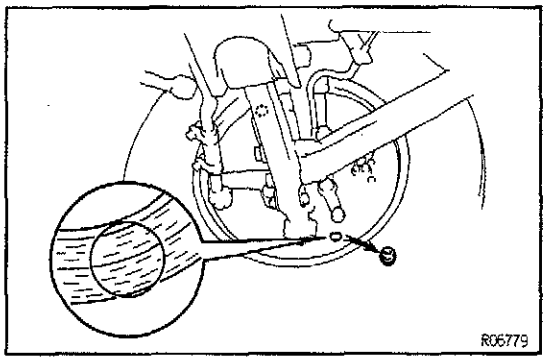
(w/ Auto Adjuster)



N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

R06310



FRONT BRAKE REMOVAL

BR0L1-01

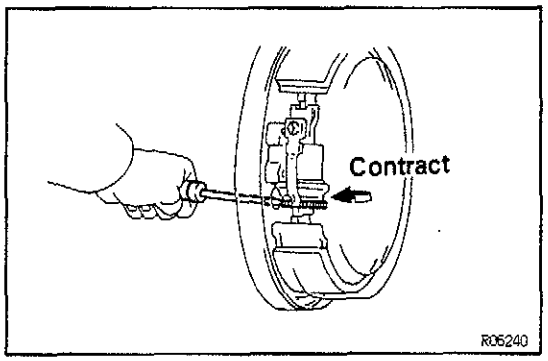
1. INSPECT SHOE LINING THICKNESS

Remove the inspection hole plugs, and check the shoe lining the thickness through the holes.
If less than minimum, replace the shoes.

Minimum thickness:

4.2 mm (0.165 in.)

2. REMOVE FRONT WHEELS



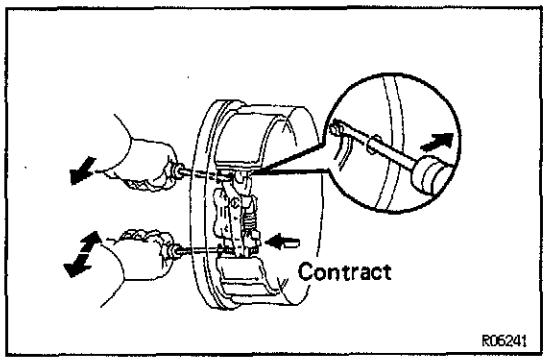
3. REMOVE FRONT AXLE HUB WITH DRUM

(See page SA–10)

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

(w/o Auto Adjuster)

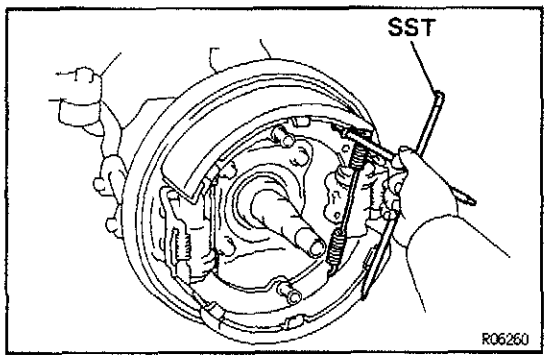
Insert a screwdriver through the hole in the backing plate, and reduce the brake shoe adjustment by turning the adjusting nut.



(w/ Auto Adjuster)

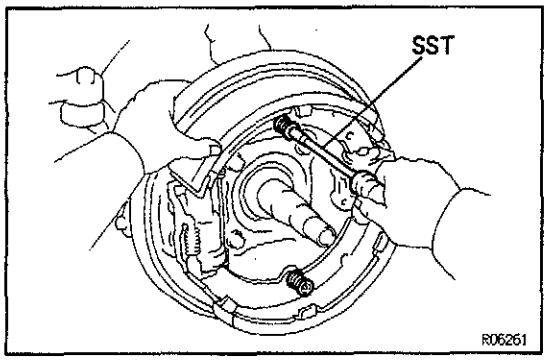
(a) Insert a screwdriver through the hole in the backing plate, and hold the adjust lever away from the adjuster.

(b) Using another screwdriver, reduce the brake shoe adjustment by turning the adjusting nut.



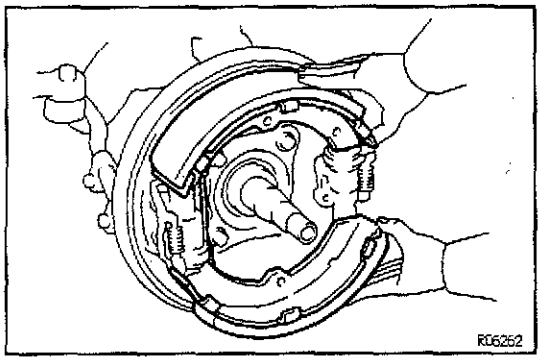
4. REMOVE RETURN SPRING

Using SST, remove the return spring.
SST 09703–30010



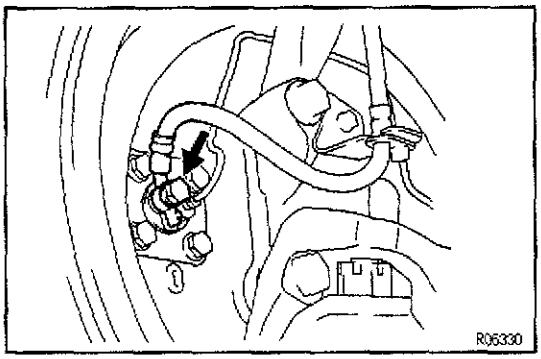
5. REMOVE SHOE HOLD–DOWN SPRINGS

Using SST, remove the springs, cups and pins.
SST 09718–00010



6. REMOVE SHOES AND RETURN SPRING

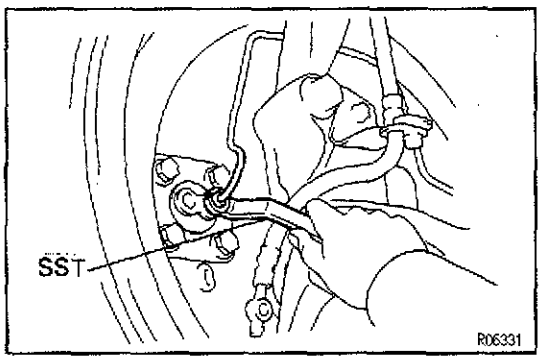
Slide the shoes and remove together with the return spring.



7. IF NECESSARY, REMOVE WHEEL CYLINDERS

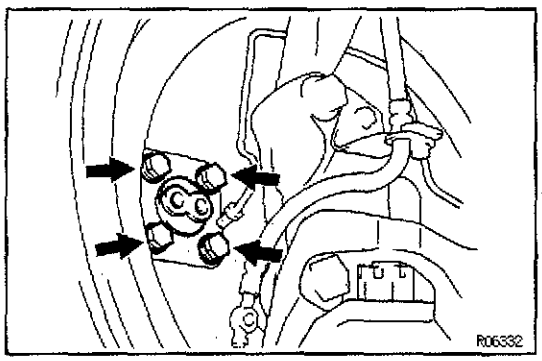
(a) Remove the union bolt and gaskets.

HINT: Use a container to catch the brake fluid.

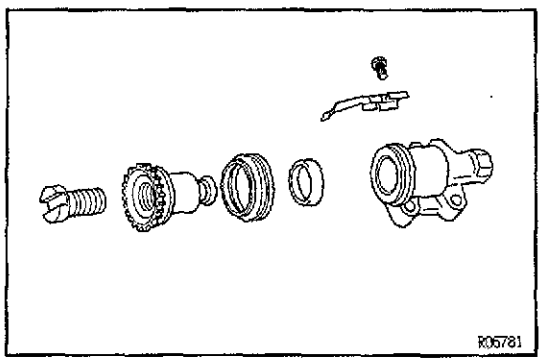


(b) Using SST, disconnect the brake line from the wheel cylinders.

SST 09751–36011



(c) Remove the bolts and wheel cylinders.

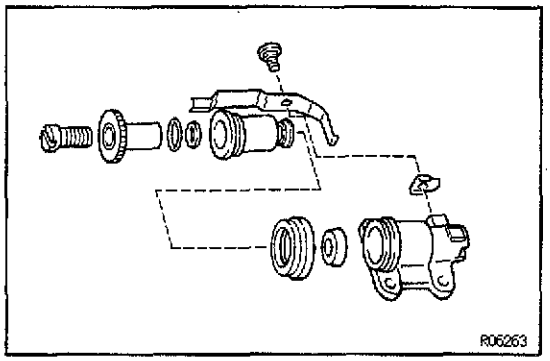


8. IF NECESSARY, DISASSEMBLE WHEEL CYLINDER

Remove the following parts from the wheel cylinder.

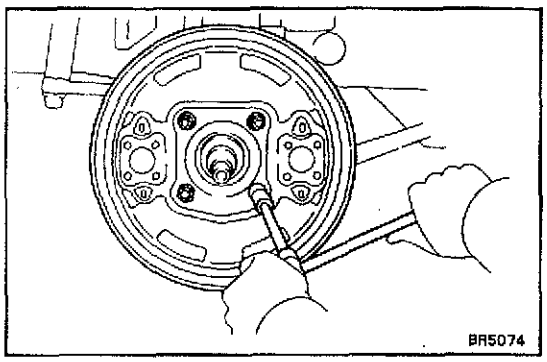
(w/o Auto Adjuster)

- Adjusting bolt and nut
- Boot
- Cup
- Adjuster lock spring and screw



(w/ Auto Adjuster)

- Adjust lever support spring
- Adjusting bolt and nut
- Dust seal
- Seat
- Wheel cylinder piston subassembly and automatic adjust lever with spring
- Boot
- Cup



9. IF NECESSARY, REMOVE BACKING PLATE

(a) Remove the brake tube clamp from the backing plate.

(b) Remove the 2 cotter pins and the 4 nuts and remove the backing plate.

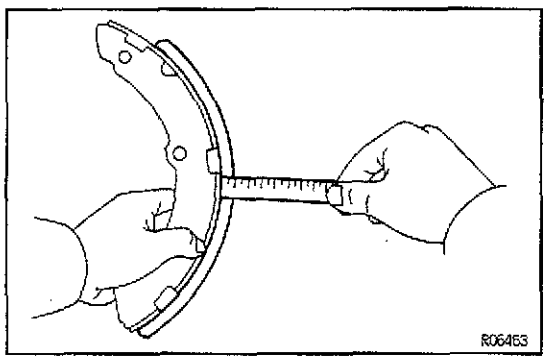
BR

BR01L2-01

FRONT BRAKE COMPONENTS INSPECTION AND REPAIR

1. INSPECT DISASSEMBLED PARTS

Inspect the disassembled parts for wear, rust or damage.



2. INSPECT BRAKE SHOE LINING THICKNESS

Standard thickness:

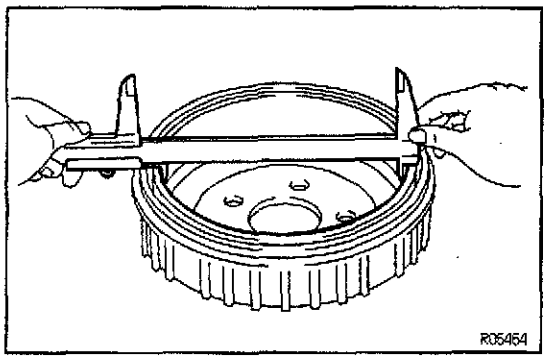
10.2 mm (0.402 in.)

Minimum thickness:

4.2 mm (0.165 in.)

If the shoe lining thickness 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 front brake shoes in order to maintain even braking.



3. INSPECT BRAKE DRUM INSIDE DIAMETER

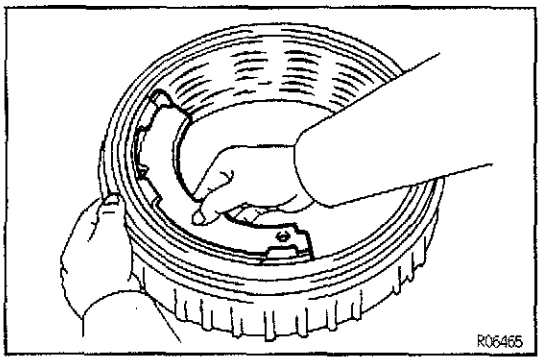
Standard inside diameter:

320.0 mm (12.598 in.)

Maximum inside diameter:

322.0 mm (12.677 in.)

If the drum is scored or worn, the brake drum may be lathed to the maximum inside diameter.

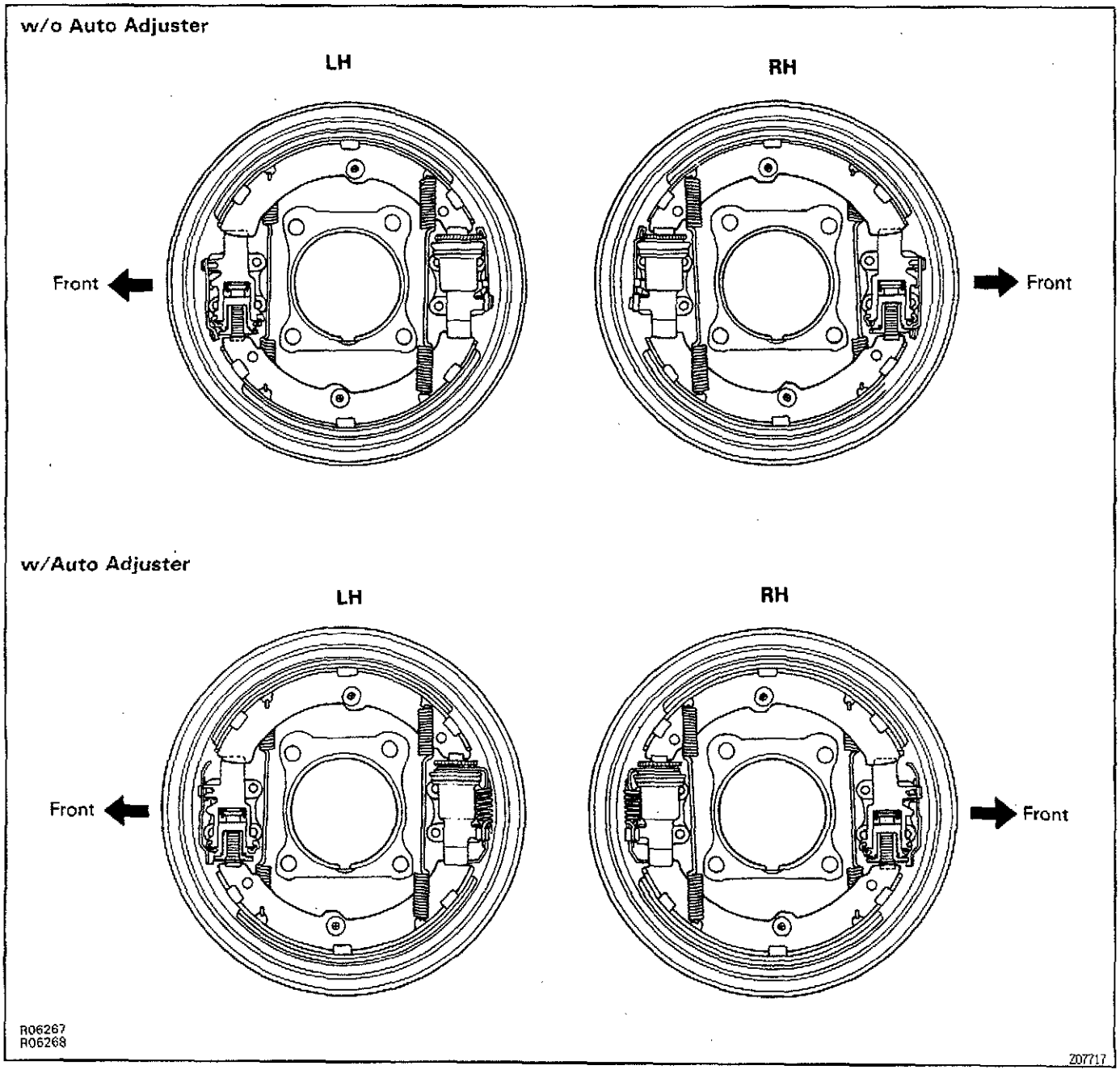


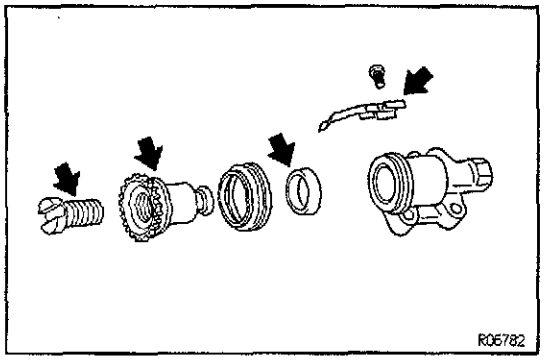
4. INSPECT BRAKE LINING AND DRUM FOR PROPER CONTACT

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

FRONT BRAKE ASSEMBLY

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



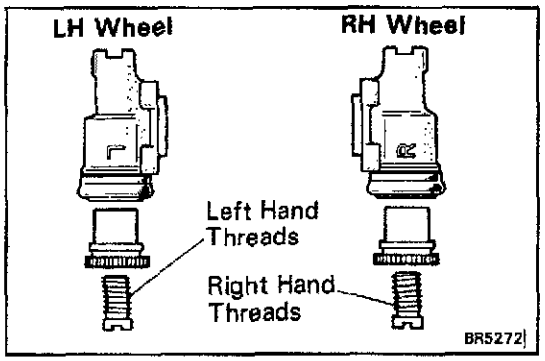


1. WHEEL CYLINDER ASSEMBLE

(w/o Auto Adjuster)

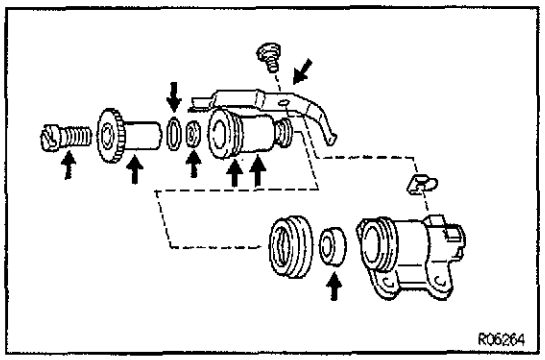
(a) Apply lithium soap base glycol grease to parts, as shown.

(b) Assemble the wheel cylinder.
HINT: Install in proper direction only.
- Cup
- Boot



(c) Install the adjusting bolt and nut to the wheel cylinder. There are 2 kinds of adjusting nuts and bolts. Make sure each location has its correct adjusting nuts and bolts.
RH wheel (R mark) – Right–hand threads
LH wheel (L mark) – Left–hand threads

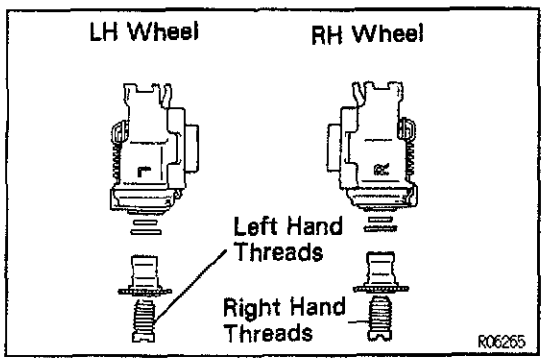
(d) Install the adjusting lock spring with the screw.



(w/ Auto Adjuster)

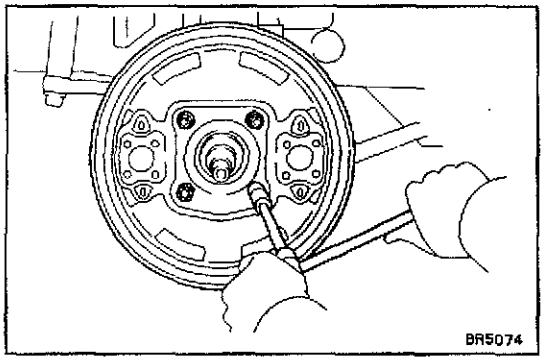
(a) Apply lithium soap base glycol grease to parts, as shown.

(b) Assemble the wheel cylinder.
HINT: Install in proper direction only.
- Cups
- Boot
- Wheel cylinder piston subassembly and automatic adjuster lever with spring
- Adjust lever support spring
- Screw



(c) Install the seat and dust seal to the wheel cylinder piston subassembly.

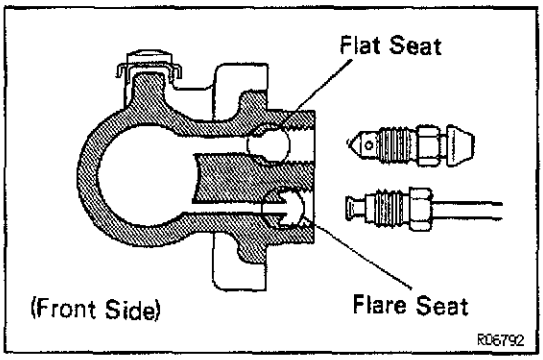
(d) Install the adjusting nut and bolt to the wheel cylinder piston subassembly.
There are 2 kinds of adjusting nuts and bolts. Make sure each location has its correct adjusting nuts and bolts.
RH Wheel (R mark) – Right–hand threads
LH Wheel (L mark) – Left–hand threads



2. INSTALL BACKING PLATE TO STEERING KNUCKLE

(a) Install the backing plate with the nuts, and tighten the nuts.
Torque: 185 N·m (1,900 kgf·cm, 137 ft·lbf)

(b) Install 2 new cotter pins.

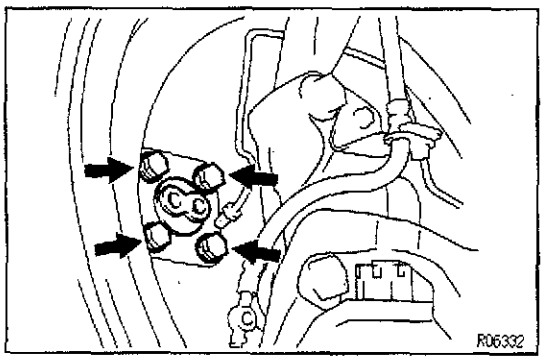


3. INSTALL BLEEDER PLUG

HINT:

- Front–wheel cylinder union seats are flat and flare shaped, as shown.
- Both union seats of front side wheel cylinder are flat.

BR

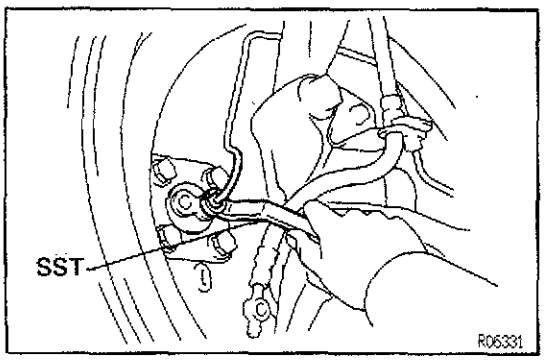


4. INSTALL WHEEL CYLINDERS TO BACKING PLATE

(a) Install the front side wheel cylinder with the adjuster facing downward.

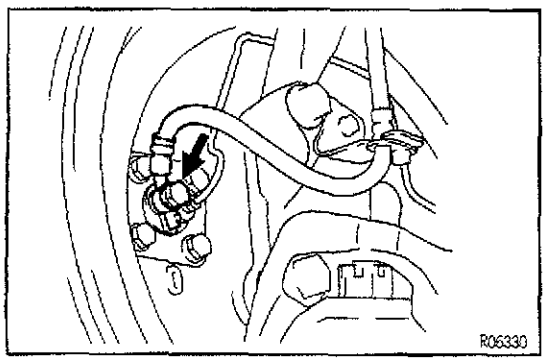
(b) Install the rear side wheel cylinder with the adjuster facing upward.

(c) Tighten the mounting bolts of the wheel cylinders.
Torque: 61 N·m (620 kgf·cm, 45 ft·lbf)



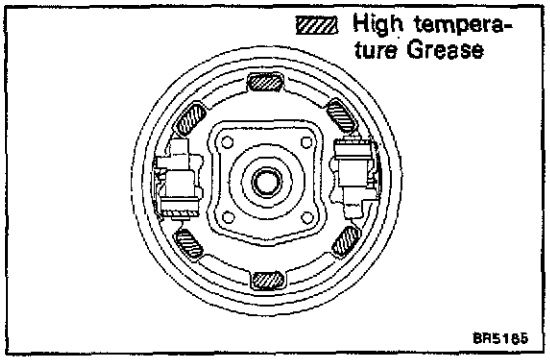
5. INSTALL BRAKE LINE TO WHEEL CYLINDER

(a) Install the brake line in place and tighten the nuts by finger, then tighten them with SST.
SST 09751–36011
Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)



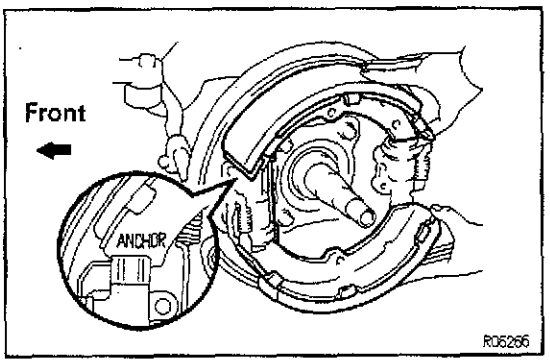
(b) Install the brake hose on the wheel cylinder with 2 new gaskets.
Torque: 30 N·m (310 kgf·cm, 22 ft·lbf)

6. INSTALL BRAKE TUBE CLAMP TO BACKING PLATE



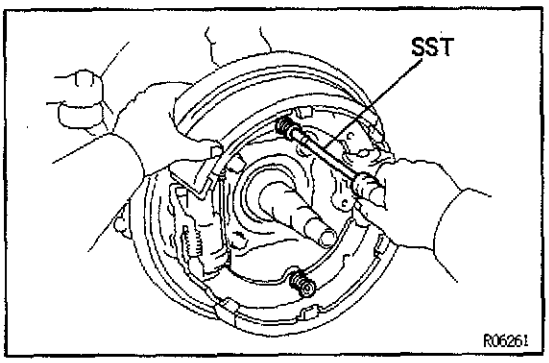
7. INSTALL BRAKE SHOES

(a) Apply high temperature grease to the brake shoe contact surfaces, as shown.

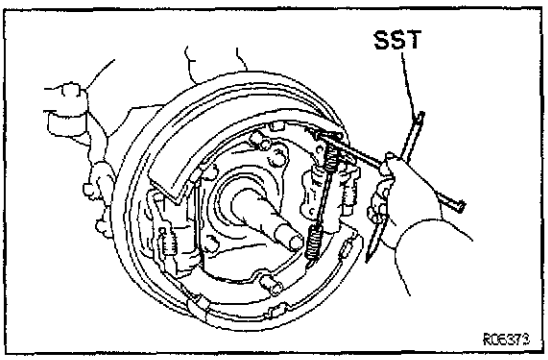


(b) Hook the return spring to the brake shoe front inner side.

(c) Install the brake shoes, as shown in the illustration.
HINT: Install the shoe so that the letters "ANCHOR" on the shoe are directly above the anchor of the body.

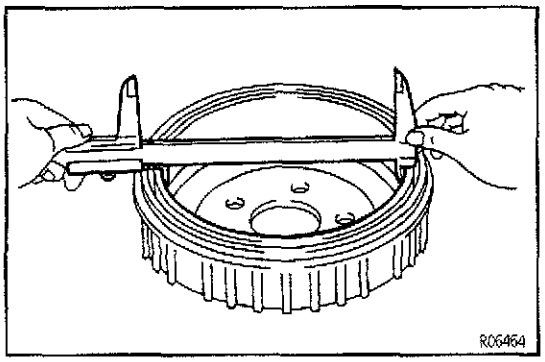


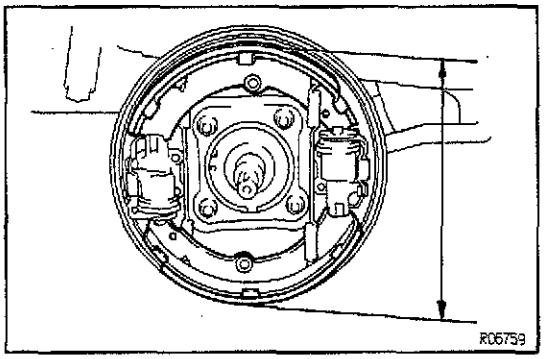
(d) Using SST, install the shoe hold–down springs, cups and pins.
SST 09718–00010



(e) Using SST, install the other side return spring.
SST 09703–30010

8. CLEAN LINING AND INNER DRUM WITH SANDPAPER





9. *(w/ Auto Adjuster)*
CHECK CLEARANCE BETWEEN BRAKE SHOES AND DRUM
Measure the brake drum inside diameter and diameter of the brake shoes. Check that the difference between the diameter is the correct shoe clearance.
Reference clearance:
less than 0.5 mm (0.02 in.)

10. **INSTALL AXLE HUB WITH DRUM**
(See page SA–15)
11. **FILL BRAKE RESERVOIR WITH BRAKE FLUID AND BLEED BRAKE SYSTEM**
(See page BR–9)
12. **CHECK FLUID LEAKAGE**
13. **(w/o Auto Adjuster)**
ADJUST BRAKE SHOE CLEARANCE
(See page BR–10)
14. **INSTALL WHEELS**