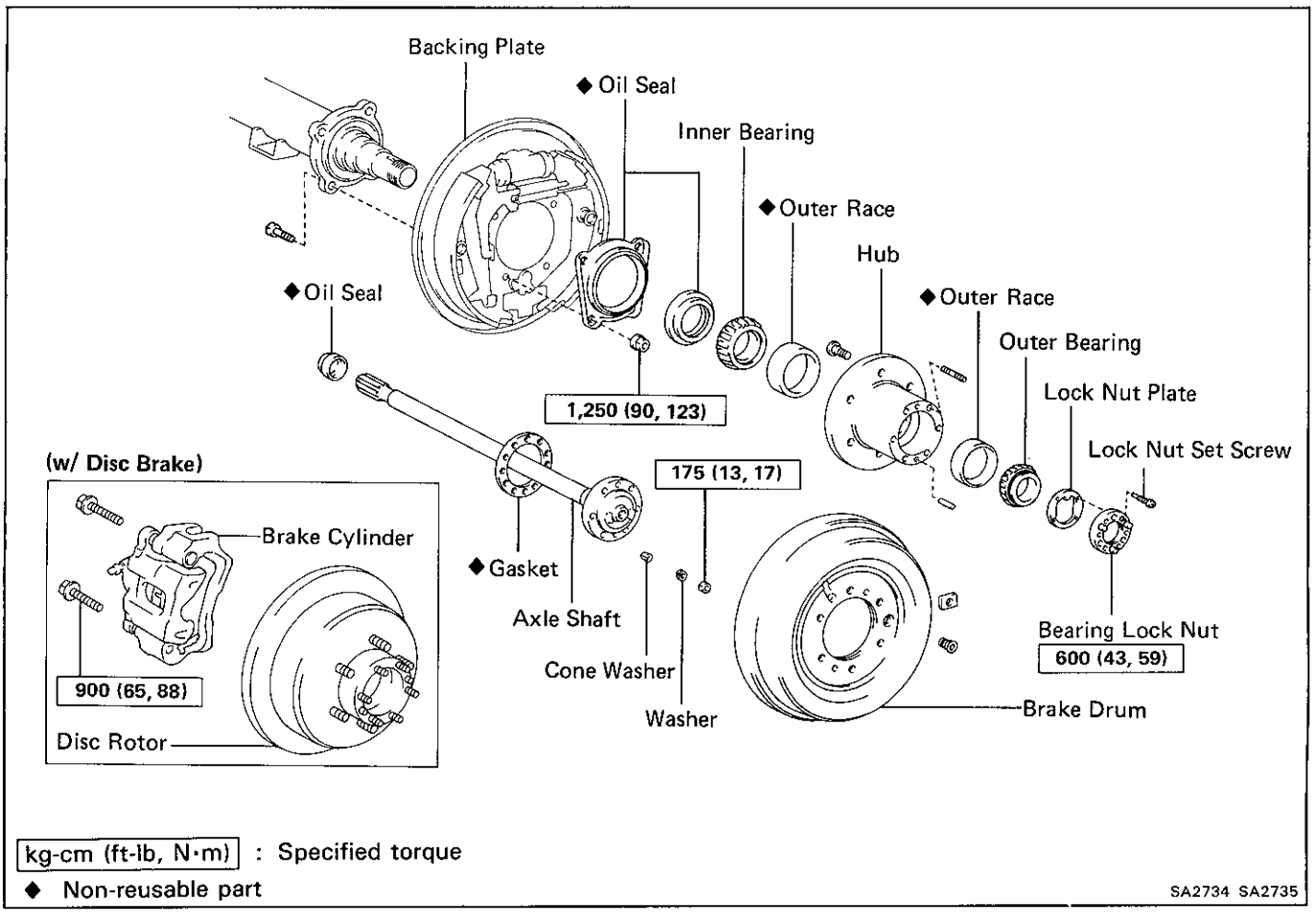
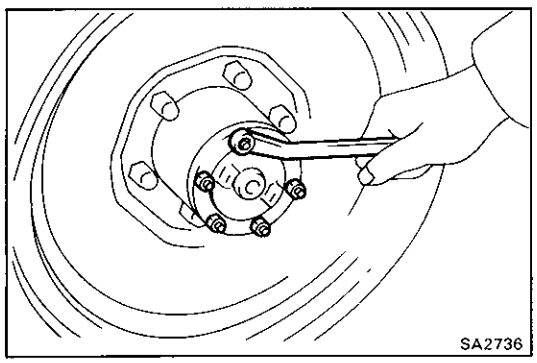
REAR AXLE SHAFT AND AXLE HUB
(Full-Floating Type)
COMPONENTS



kg-cm (ft-lb, N·m) : Specified torque
◆ Non-reusable part

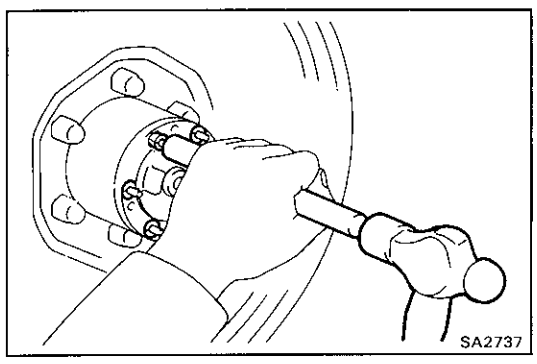
SA2734 SA2735



REMOVAL OF REAR AXLE SHAFT

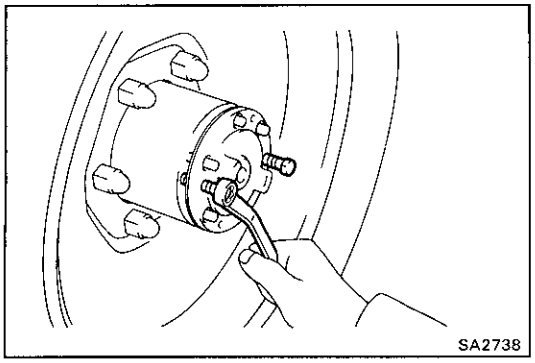
1. REMOVE AXLE SHAFT SET NUT

Remove the six set nuts and washers.



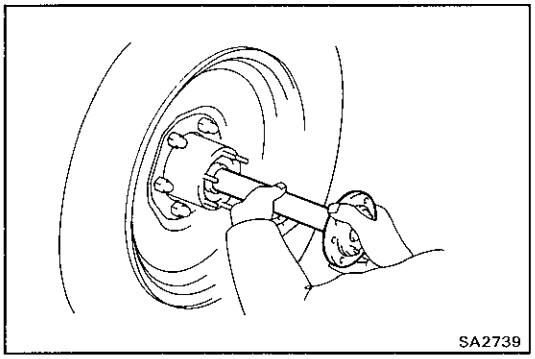
2. REMOVE CONE WASHER

Using a hammer and brass bar, drive on the bolt and remove the six cone washers.



3. **REMOVE REAR AXLE SHAFT**

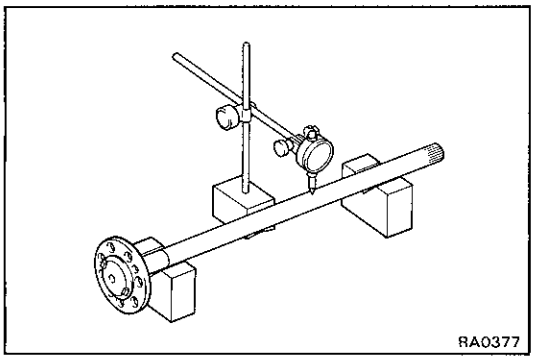
(a) Install the two service bolts to the service hole and tighten them.



(b) Remove the axle shaft with the gasket.

NOTICE: When pulling out the axle shaft, be careful not to damage the oil seal.

(c) Remove the two bolts from the axle shaft.



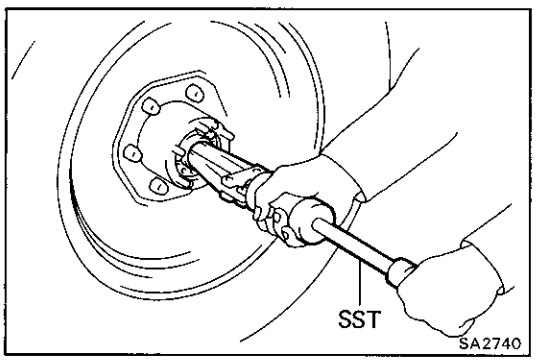
INSPECTION OF REAR AXLE SHAFT COMPONENTS

1. **INSPECT REAR AXLE SHAFT**

Check the axle shaft for wear or damage.

Limit runout: 0.8 mm (0.031 in.)

If the rear axle shaft is damaged or worn, or if runout is greater than maximum, replace the rear axle shaft.



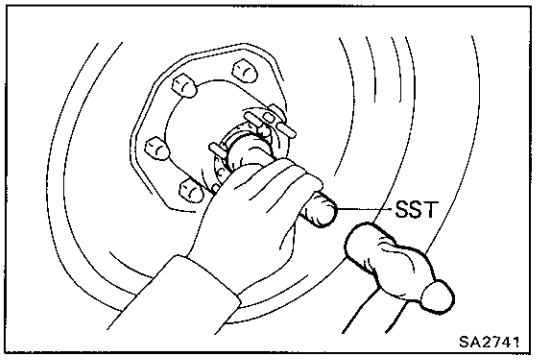
2. **INSPECT OIL SEAL FOR WEAR OR DAMAGE**

If the oil seal is damaged or worn, replace it.

3. **IF NECESSARY, REPLACE OIL SEAL**

(a) Using SST, drive out the oil seal.

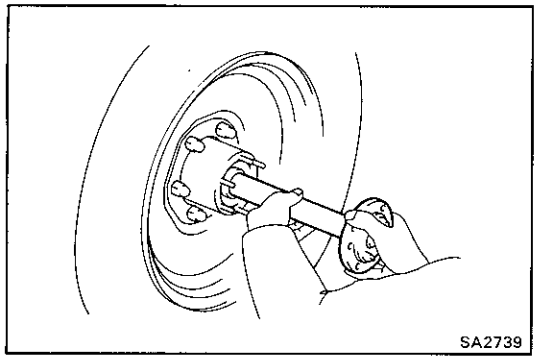
SST 09308-00010



(b) Using SST, drive in a new oil seal.

SST 09517-36010

(c) Apply MP grease to the oil seal lip.



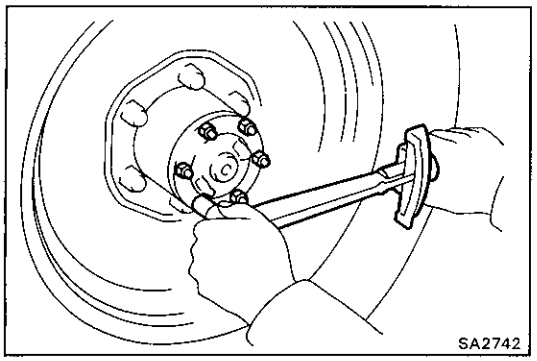
INSTALLATION OF REAR AXLE SHAFT

(See page SA-116)

1. **APPLY MP GREASE TO OIL SEAL LIP**

2. **INSTALL NEW GASKET AND INSERT AXLE SHAFT**

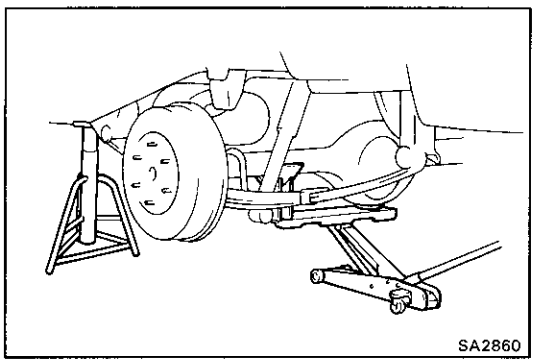
   NOTICE: When inserting the axle shaft, be careful not to damage the oil seal.



3. **INSTALL CONE WASHER AND SET NUT**

   Install the cone washers and spring washers and the six nuts. Torque the nuts.

   Torque: 340 kg-cm (25 ft-lb, 33 N·m)

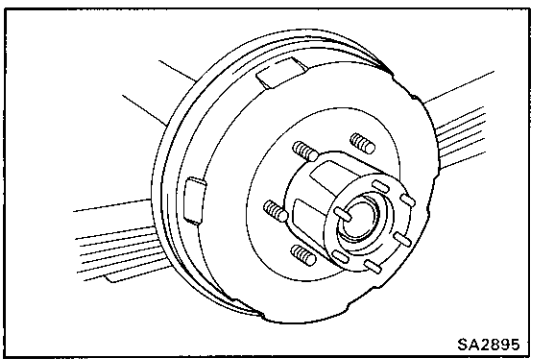


REMOVAL OF REAR AXLE SHAFT

(See page SA-116)

1. **JACK UP VEHICLE AND REMOVE WHEEL**

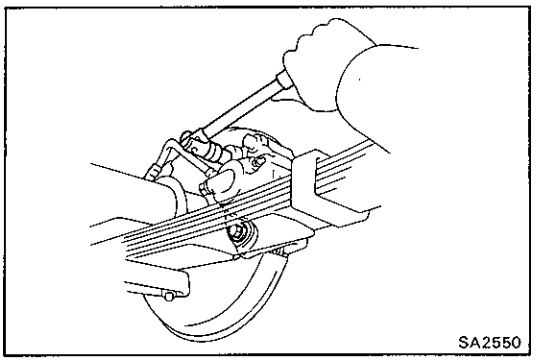
2. **REMOVE REAR AXLE SHAFT**
   (See page SA-116)



3. **(w/ DRUM BRAKE)**
   REMOVE BRAKE DRUM

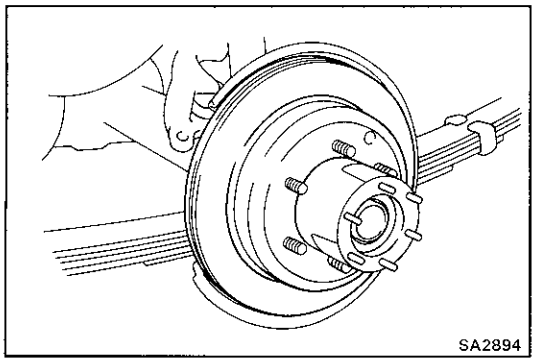
   (a) Remove the screw from the brake drum.

   (b) Remove the brake drum from the axle hub.

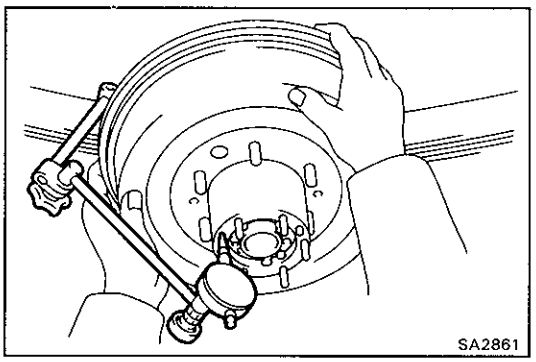


4. **(w/ DISC BRAKE)**
   REMOVE ROTOR DISC

   (a) Remove the two bolts and the brake cylinder with torque plate from the rear axle carrier.



(b) Remove the rotor disc from the axle hub.

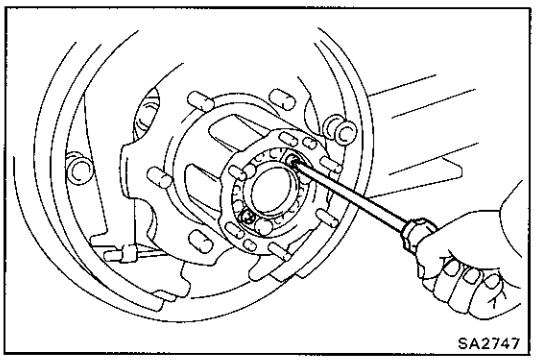


5. REMOVE BEARING LOCK NUT

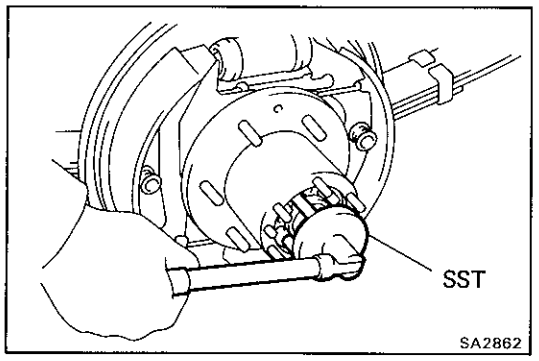
(a) Check the movement of the drum or disc rotor.

(b) Check the hub axial play.

Hub axial play: Less than 0.1 mm (0.004 in.)

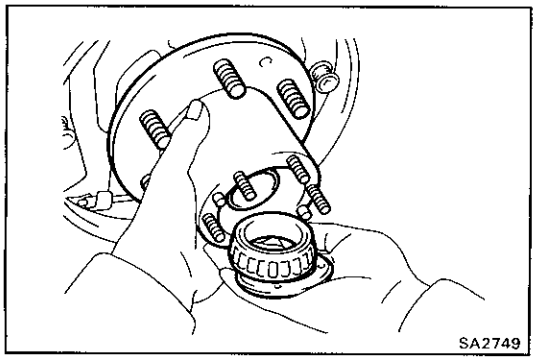


(c) Remove the two lock nut set screws.



(d) Using SST, remove the lock nut.

SST 09509-25011



6. REMOVE REAR AXLE HUB

Remove the axle hub with the lock nut plate and outer bearing.

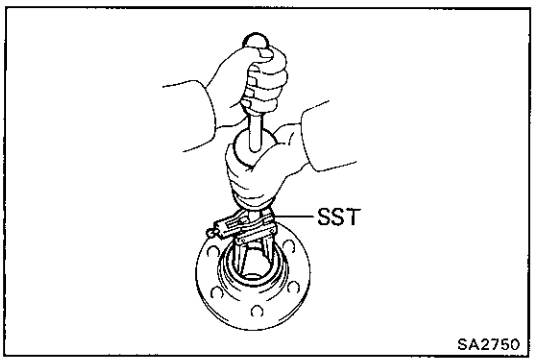
7. REMOVE BACKING PLATE AND OIL SEAL

Remove the four nuts and remove the oil seal and backing plate.

INSPECTION AND REPLACEMENT OF AXLE HUB COMPONENTS

1. INSPECT AXLE HOUSING

Using a magnetic flaw detector or flaw detecting penetrant, check for damage or cracks.

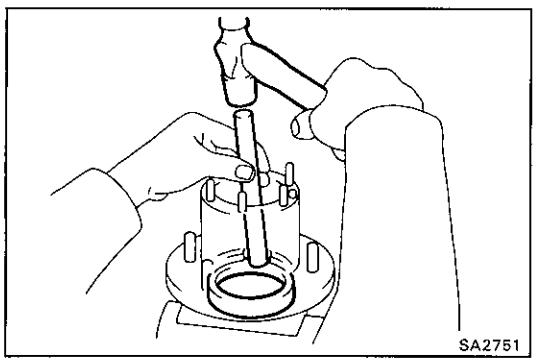


2. REMOVE OIL SEAL AND INNER BEARING

(a) Using SST, remove the oil seal.

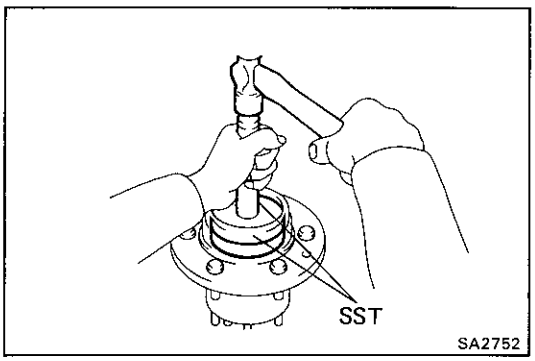
SST 09308-00010

Remove the inner bearing from the axle hub.



3. REMOVE BEARING OUTER RACE

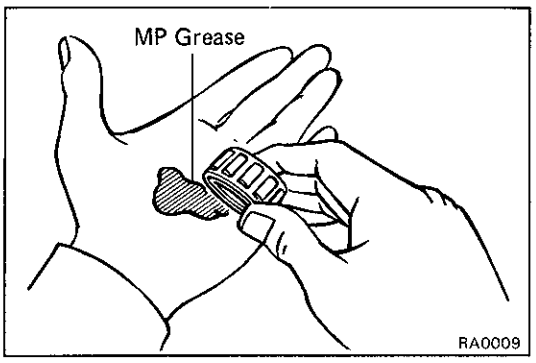
Using a hammer and brass bar, drive out the bearing outer race from the axle hub.



4. INSTALL BEARING OUTER RACE

Using SST and hammer, drive in the bearing outer race to the axle hub.

SST 09608-35014 (09608-06020, 09608-06200)

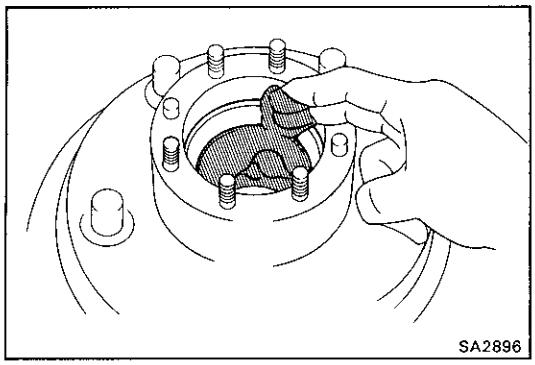


5. COAT BEARING WITH MP GREASE

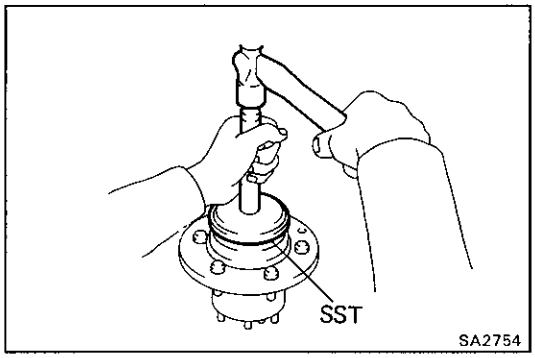
(a) Place MP grease in the palm of your hand.

(b) Pack grease into the bearing, continuing until the grease oozes out from the other side.

(c) Do the same around the bearing circumference.



6. COAT INSIDE OF HUB WITH MP GREASE



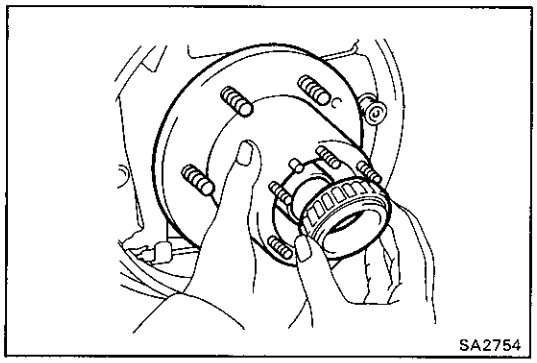
7. INSTALL INNER BEARING AND OIL SEAL

(a) Install the inner bearing to the axle hub.

(b) Using SST and a hammer, drive in the oil seal to the axle hub.

SST 09608-35014 (09608-06020, 09608-06210)

(c) Coat MP grease to the oil seal lip.


SA2754

INSTALLATION OF REAR AXLE HUB

(See page SA-116)

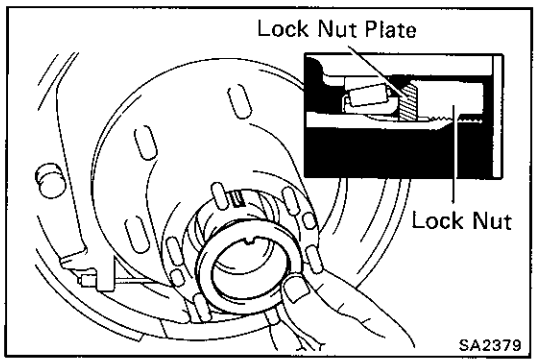
1. INSTALL AXLE HUB

(a) Install the backing plate and oil seal to the axle housing with the four bolts and nuts.

(b) Install the axle hub to the axle housing.

NOTICE: Be careful not to damage the oil seal.

(c) Install the outer bearing.

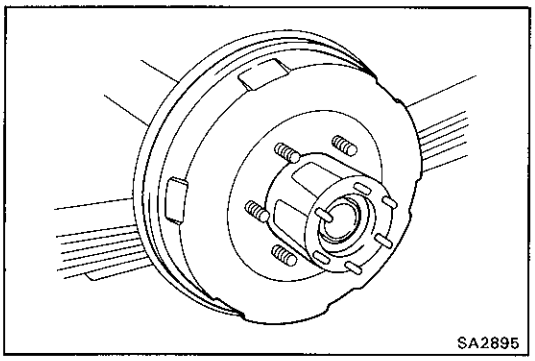


SA2379

2. INSTALL LOCK NUT PLATE AND BEARING LOCK NUT

(a) After fully pushing in the outer bearing, position the protrusion of the lock nut plate into the axle housing groove.

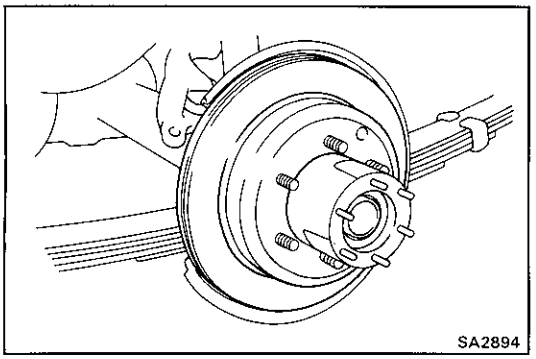
(b) Temporarily install the bearing lock nut.


SA2895

3. (w/ DRUM BRAKE TYPE) INSTALL BRAKE DRUM

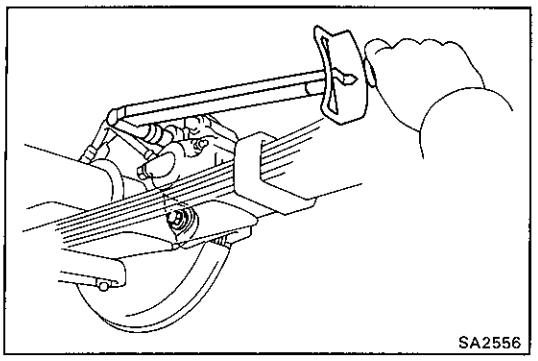
(a) Install the brake drum to the axle hub.

(b) Install the screw to the brake drum.


SA2894

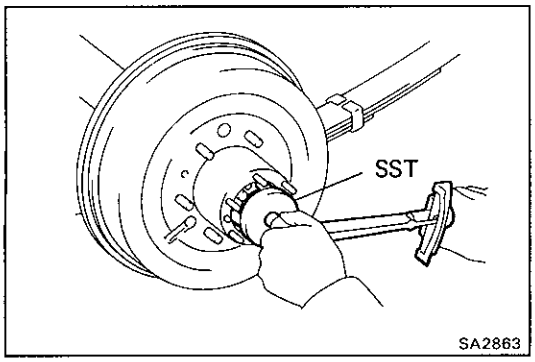
4. (w/ DISC BRAKE TYPE) INSTALL ROTOR DISC

(a) Install the rotor disc to the axle hub.


SA2556

(b) Install the brake cylinder with torque plate to the dust cover with the two bolts.

Torque: 900 kg-cm (65 ft-lb, 88 N·m)

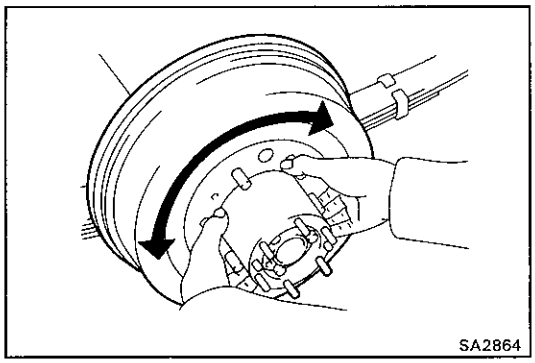


5. **ADJUST PRELOAD**

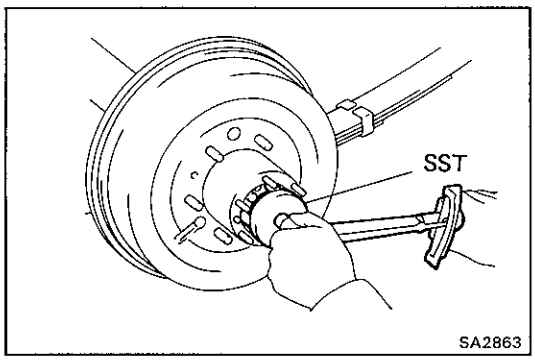
(a) Using SST, torque the bearing lock nut.

SST 09509-25011

Torque: 600 kg-cm (43 ft-lb, 59 N·m)



(b) Snug down the bearing by turning the hub several times.



(c) Using SST, loosen the bearing lock nut until you can rotate it by hand.

SST 09509-25011

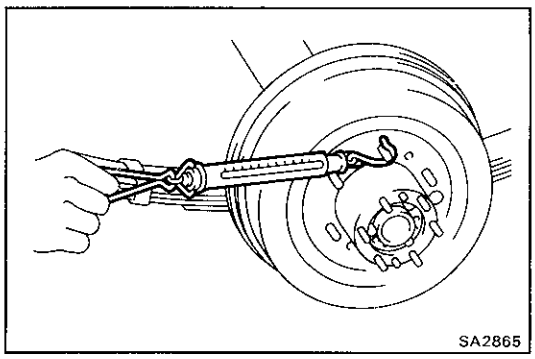
(d) Using SST, retighten the bearing lock nut.

SST 09509-25011

Torque: 600 kg-cm (43 ft-lb, 59 N·m)

(e) Using SST, loosen the bearing lock nut until you can rotate it by hand.

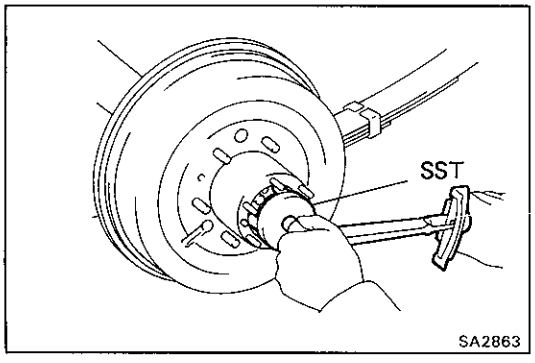
SST 09509-25011



(f) Using a spring tension gauge, measure the frictional force of the oil seal.

Rear wheel bearing preload (at starting):

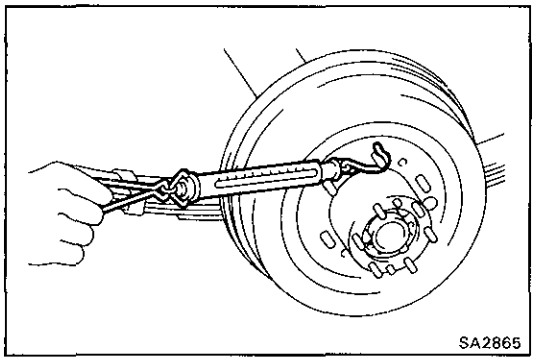
0.4 — 3.3 kg (0.9 — 7.3 lb, 4 — 32 N)



(g) Using SST, retighten the bearing lock nut.

SST 09509-25011

Torque: 600 kg-cm (43 ft-lb, 59 N·m)

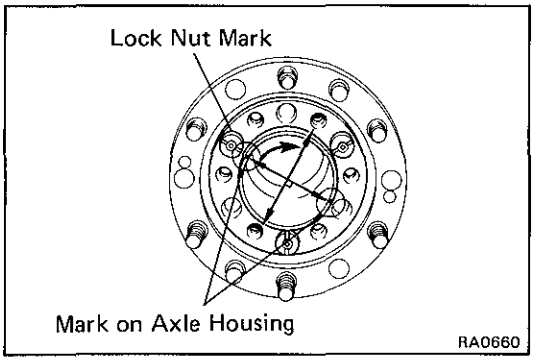


(h) Using a spring tension gauge, measure the preload at the hub bolt.

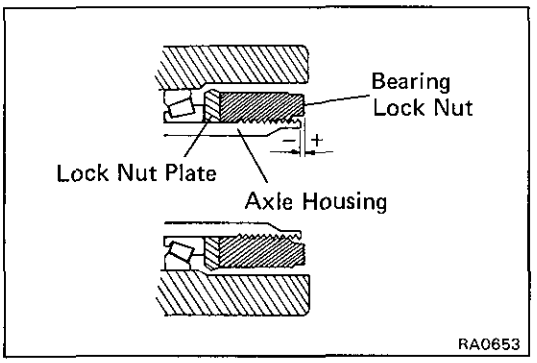
Rear wheel bearing preload (at starting):

2.6 — 5.7 kg (5.7 — 12.6 lb, 25 — 56 N)

If preload is not with in specification, the procedure above must be repeated.



(i) Align the lock nut mark with one of the marks on the axle housing, and place lock screws in the holes at right angles to the lock nut.

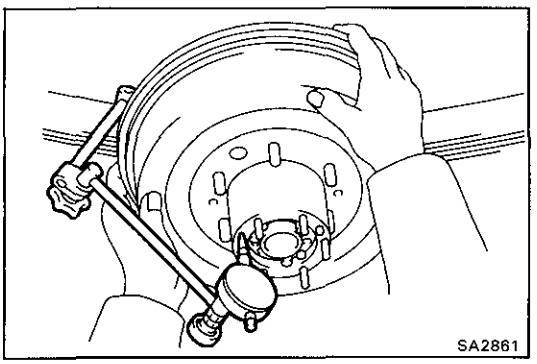


(j) Measure the distance between the top surface of axle housing and the lock nut.

Standard distance:

−0.2 — 0.9 mm (−0.008 — 0.035 in.)

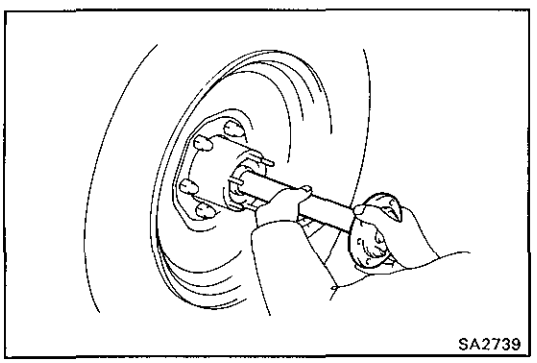
If not within specification, reinstall the axle hub.



(k) Check the movement of the drum or disc rotor.

(m) Check the hub axial play.

Hub axial play: Less than 0.1 mm (0.004 in.)



6. INSTALL REAR AXLE SHAFT
(See page SA-118)

7. INSTALL WHEEL AND LOWER VEHICLE