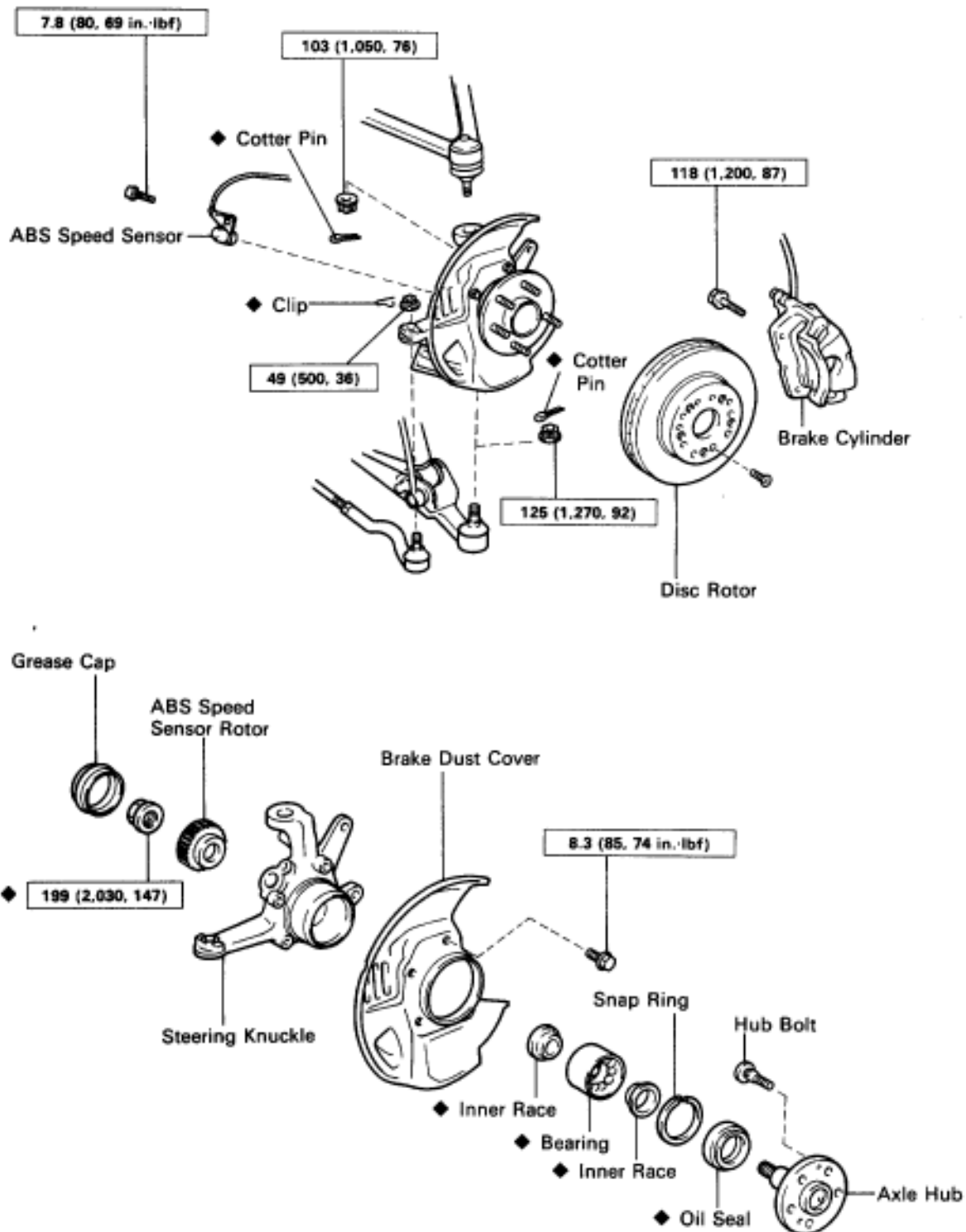


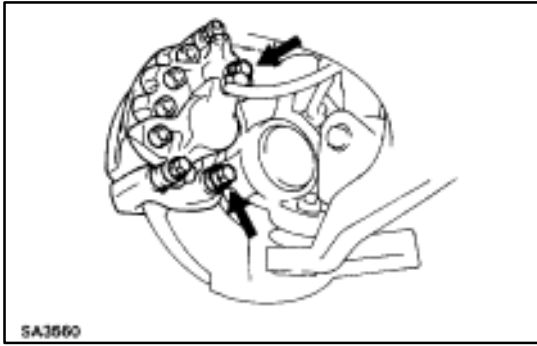
Front Axle Hub COMPONENTS



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

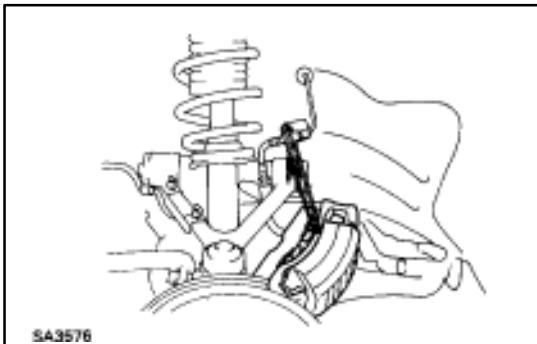
◆ Non-reusable part

R00246

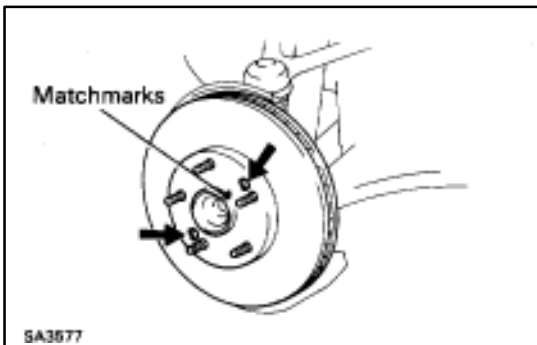


REMOVAL OF STEERING KNUCKLE WITH AXLE HUB

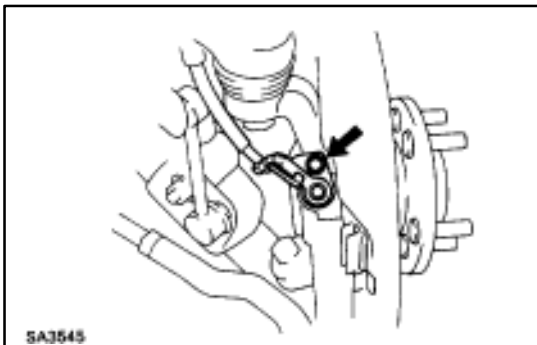
1. JACK UP VEHICLE, REMOVE FRONT WHEEL
2. REMOVE FRONT BRAKE CYLINDER AND DISC ROTOR
 - (a) Remove the two bolts and remove the brake cylinder from the steering knuckle.



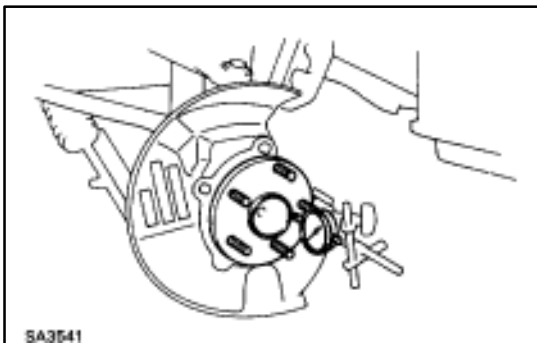
- (b) Hang up the brake cylinder using wire, etc.



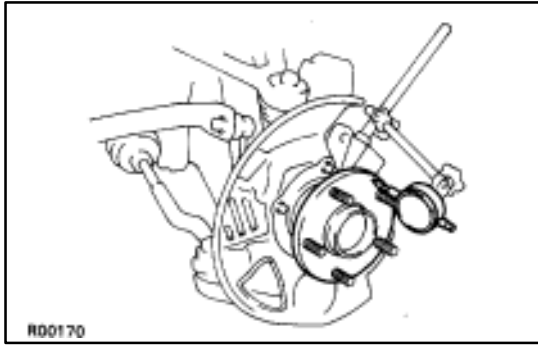
- (c) Place matchmarks on the disc rotor and axle hub.
- (d) Remove the two screws and remove the disc rotor.



3. REMOVE ABS SPEED SENSOR FROM STEERING KNUCKLE
Remove the bolt and disconnect the sensor from the steering knuckle.



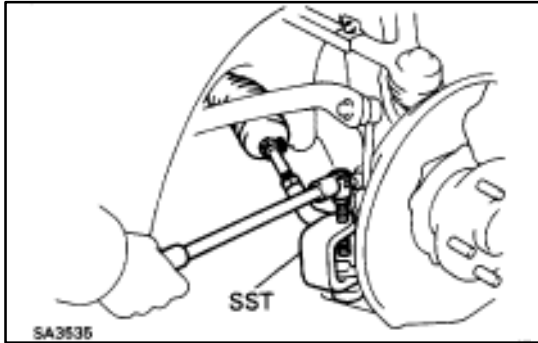
4. CHECK BACKLASH IN BEARING SHAFT DIRECTION
Place the dial indicator near the center of the axle hub and check the backlash in the bearing shaft direction.
Maximum: 0.05 mm (0.0020 in.)
If greater than the specified maximum, replace the bearing.

**5. CHECK AXLE HUB DEVIATION**

Using a dial indicator, check the deviation at the surface of the axle hub outside the hub bolt.

Maximum: 0.05 mm (0.0020 in.)

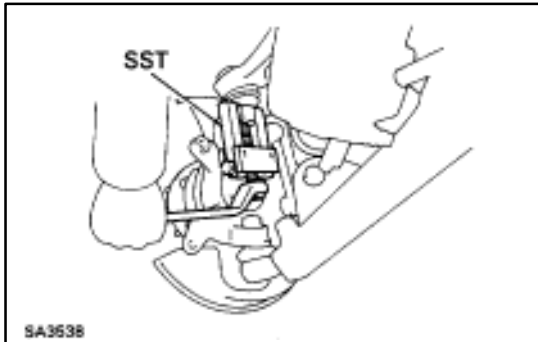
If greater than the specified maximum, replace the axle hub.

**6. DISCONNECT TIE ROD END FROM STEERING KNUCKLE**

(a) Remove the cotter pin and nut.

(b) Using SST, disconnect the tie rod end from the steering knuckle.

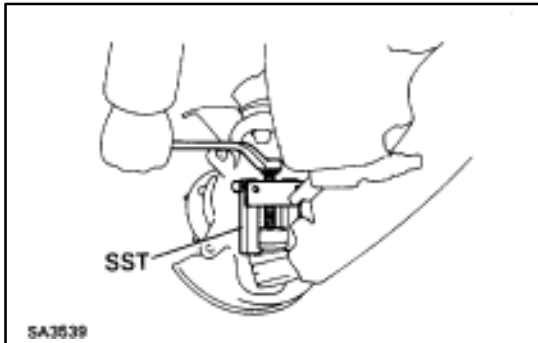
SST 09628-10011

**7. DISCONNECT STEERING KNUCKLE FROM UPPER SUSPENSION ARM**

(a) Remove the cotter pin and nut.

(b) Using SST, disconnect the steering knuckle from the upper suspension arm.

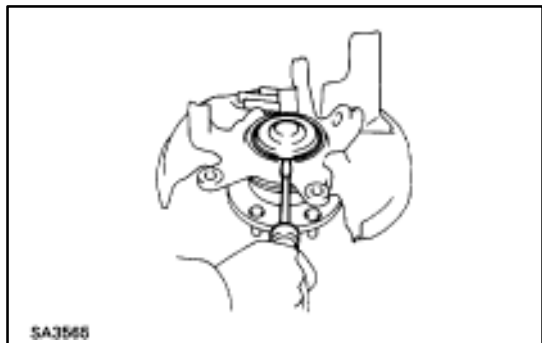
SST 09628-62011

**8. REMOVE STEERING KNUCKLE**

(a) Remove the clip and nut.

(b) Using SST, remove the steering knuckle from the lower suspension arm.

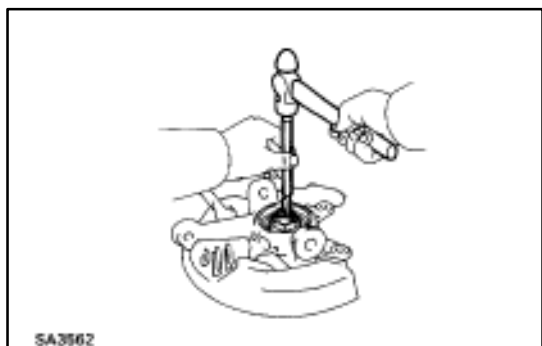
SST 09628-62011



DISASSEMBLY OF FRONT AXLE HUB

1. REMOVE HUB BEARING CAP

Using a screwdriver, remove the hub bearing cap from the steering knuckle.



2. REMOVE FRONT AXLE HUB LOCK NUT AND ABS SPEED SENSOR ROTOR

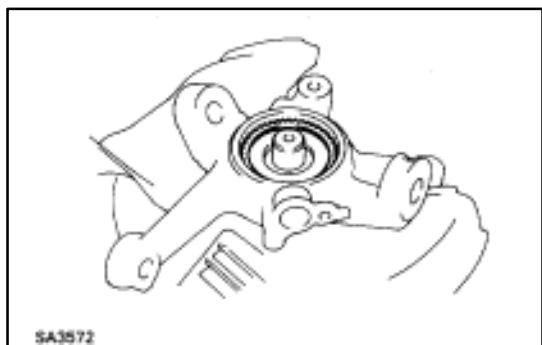
(a) Clamp the axle hub in a soft jaw vice.

HINT: Close vice until it holds hub bolt do not tighten further.

(b) Using a hammer and chisel, loosen the staked part of the lock nut and remove it.

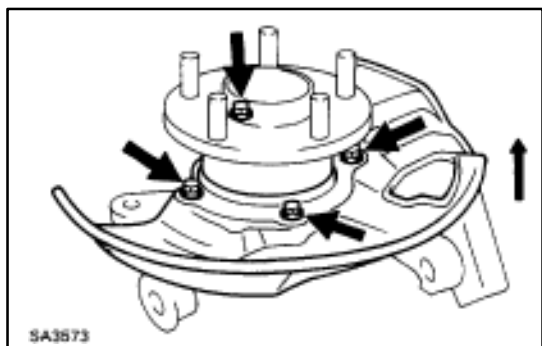
(c) Remove the sensor rotor.

NOTICE: Take care not to scratch the serrations of the sensor rotor.



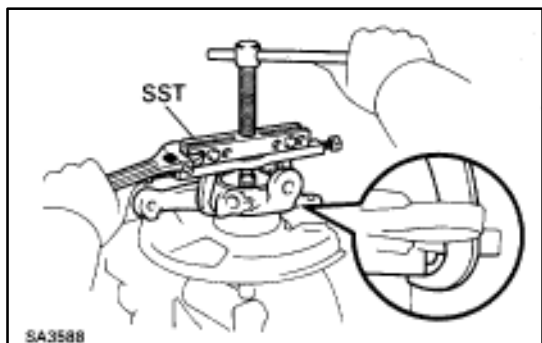
3. REMOVE AXLE SHAFT FROM STEERING KNUCKLE

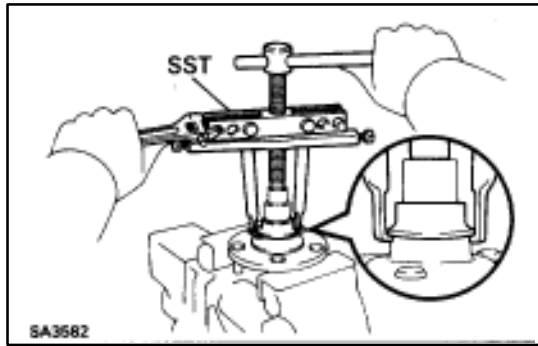
(a) Remove the four bolts and shift the brake dust cover toward the hub side (outside).



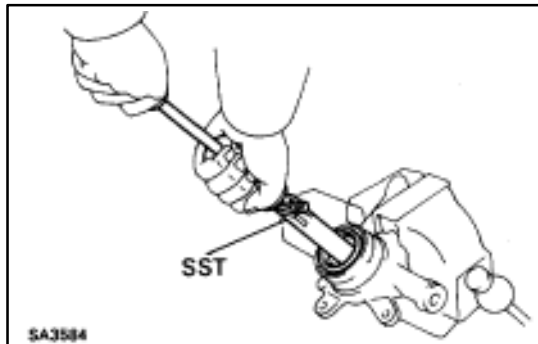
(b) Using SST, remove the axle shaft from the steering knuckle.

SST 09950-20017

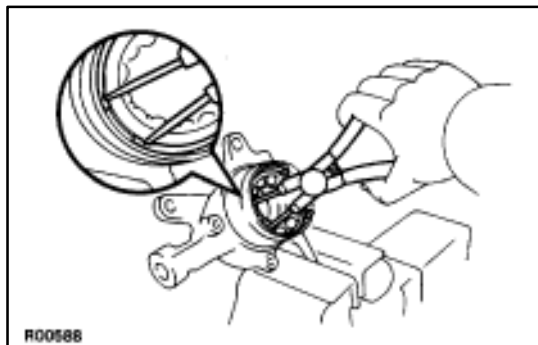


**4. REMOVE INNER RACE (OUTSIDE) FROM AXLE SHAFT**

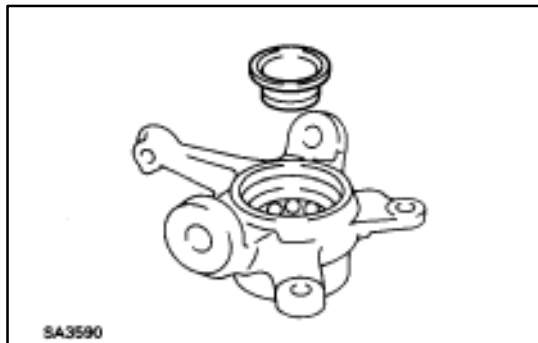
Using SST, remove the inner race from the axle shaft.
SST 09950-20017

**5. REMOVE OIL SEAL**

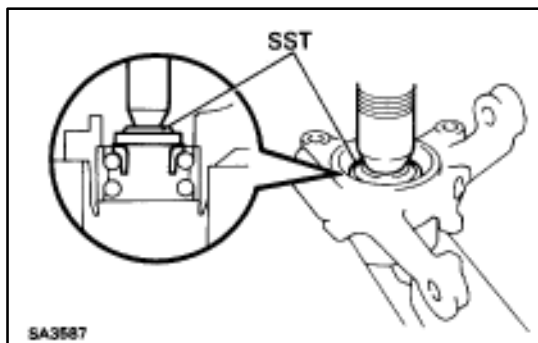
Using SST, remove the oil seal from the steering knuckle.
SST 09308-00010

**6. REMOVE BEARING FROM STEERING KNUCKLE**

(a) Using snap ring pliers, remove the snap ring.

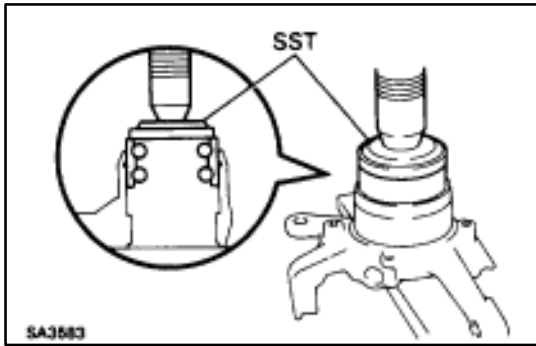


(b) Place the inner race above the bearing on the inner side.



(c) Using SST and a press, remove the bearing from the steering knuckle.

SST 09608-35014 (09608-06100)

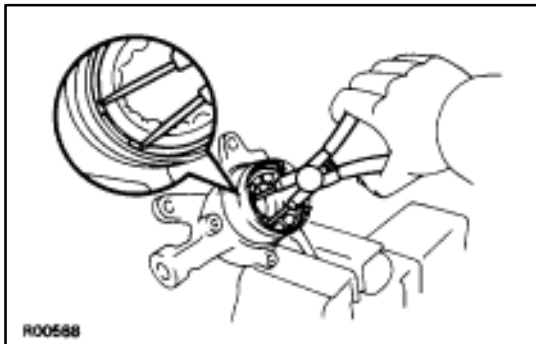


ASSEMBLY OF FRONT AXLE HUB

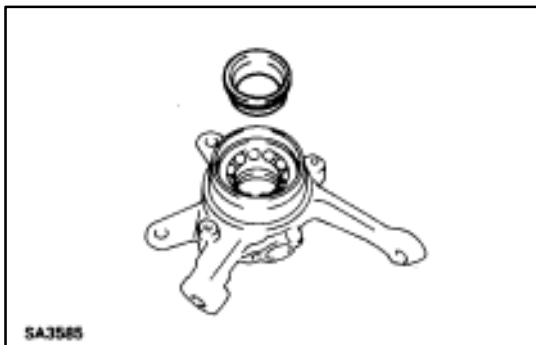
1. INSTALL BEARING

- (a) Using SST, install a new bearing to steering knuckle.
SST 09608-35014 (09608-06200)

NOTICE: If the inner race and balls come loose from the bearing outer race, be sure to install them on the same side as before.

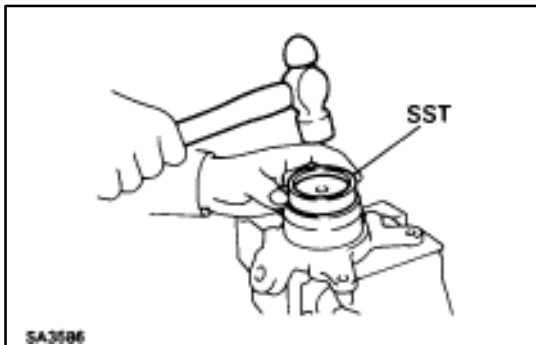


- (b) Using a snap ring pliers, install the snap ring.

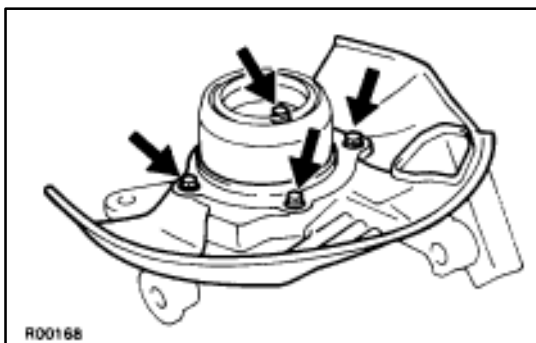


2. INSTALL OIL SEAL

- (a) Install the inner race (outside).



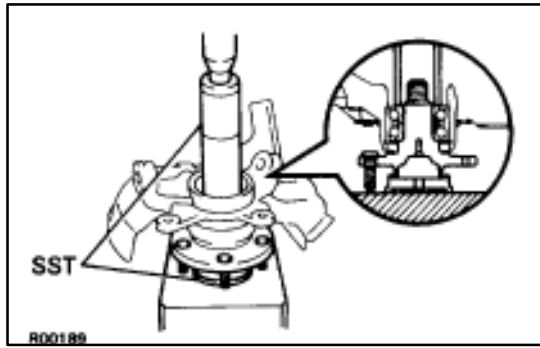
- (b) Using SST and a hammer, tap in a new oil seal until it is flush with end surface of the steering knuckle.
SST 09608-32010



3. INSTALL AXLE HUB TO STEERING KNUCKLE.

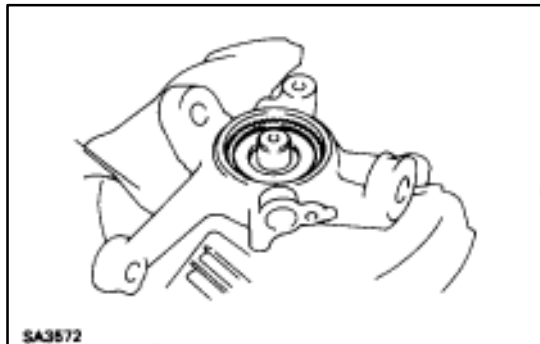
- (a) Install the brake dust cover to the steering knuckle with the four bolts.

Torque: 8.3 N·m (85 kgf·cm, 74 in.·lbf)



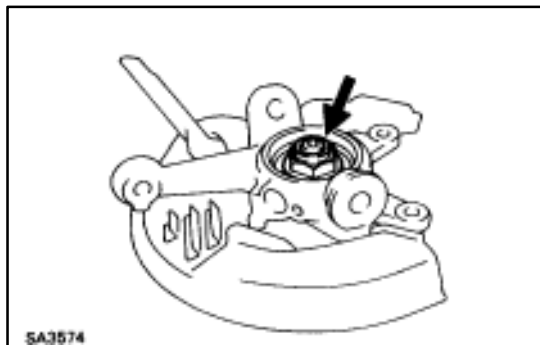
- (b) Using SST and a press, press the axle hub to steering knuckle.

SST 09608-32010, 09608-35014 (09608-06040)



4. INSTALL ABS SPEED SENSOR ROTOR

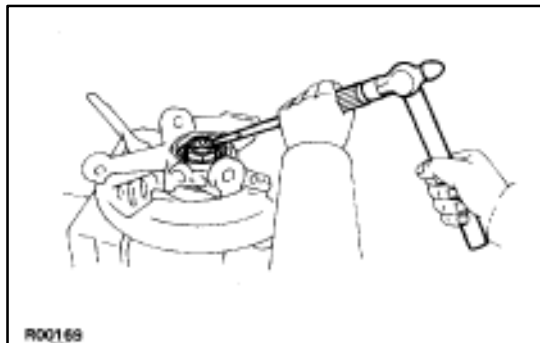
NOTICE: Do not scratch the serrations of the sensor rotor.



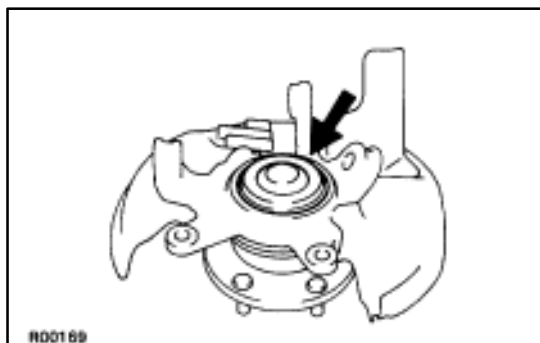
5. INSTALL AXLE HUB LOCK NUT

- (a) Install and torque a new axle hub lock nut.

Torque: 199 N·m (2,030 kgf·cm, 147 ft·lbf)

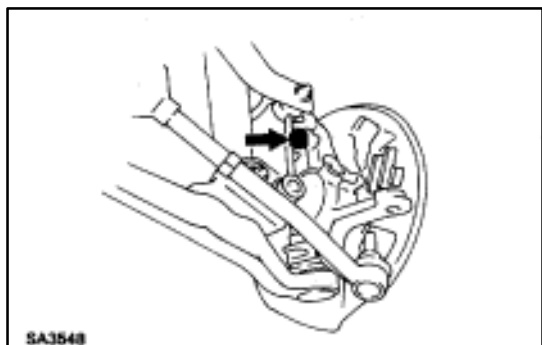


- (b) Using a screwdriver and hammer, stake the lock nut.



6. INSTALL HUB BEARING CAP

Using a screwdriver and hammer, install the hub bearing cap to the steering knuckle.



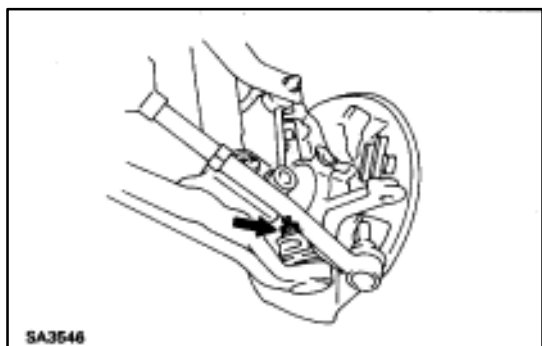
INSTALLATION OF FRONT AXLE HUB

1. INSTALL STEERING KNUCKLE TO UPPER BALL JOINT

- (a) Install the steering knuckle to the upper suspension arm with the nut.

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

- (b) Install a new cotter pin.

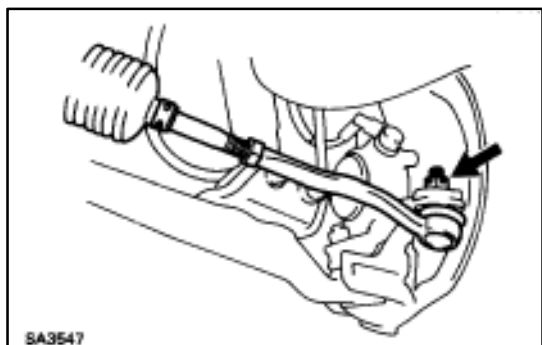


2. CONNECT STEERING KNUCKLE TO LOWER SUSPENSION ARM

- (a) Connect the steering knuckle to the lower suspension arm with the nut.

Torque: 125 N·m (1,270 kgf·cm, 92 ft·lbf)

- (b) Install a new clip.

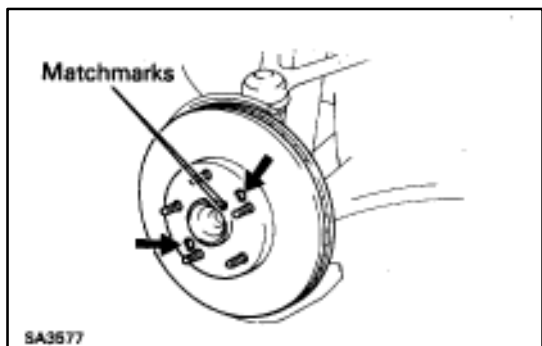


3. CONNECT TIE ROD END TO STEERING KNUCKLE

- (a) Connect the tie rod end to the steering knuckle with the nut.

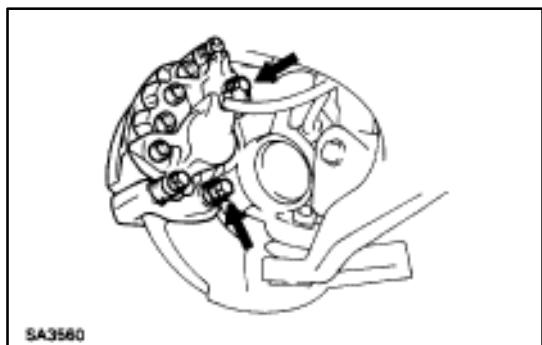
Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

- (b) Install a new cotter pin.



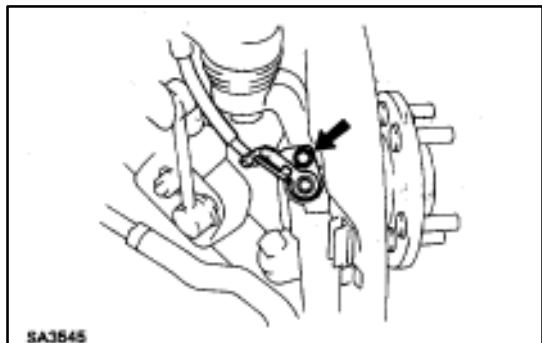
4. INSTALL FRONT BRAKE DISC ROTOR AND BRAKE CYLINDER

- (a) Align the matchmarks and install the disc rotor to the axle hub with the two screws.



- (b) Install the brake cylinder to the steering knuckle with the two bolts.

Torque: 118 N·m (1,200 kgf·cm, 87 ft·lbf)



5. CONNECT ABS SPEED SENSOR TO STEERING KNUCKLE

Connect the sensor to the steering knuckle with the bolt.

Torque: 7.8 N·m (80 kgf·cm, 69 in·lbf)

6. INSTALL FRONT WHEEL AND LOWER VEHICLE

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

7. CHECK FRONT WHEEL ALIGNMENT

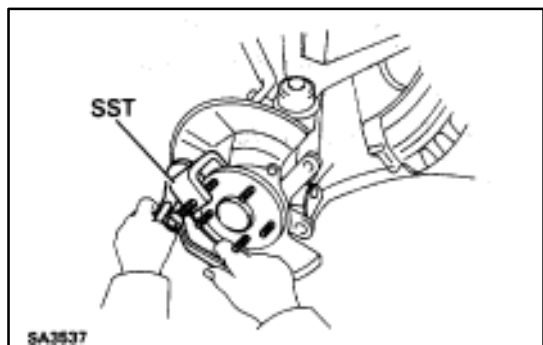
(See page [SA-4](#))

REPLACEMENT OF FRONT WHEEL HUB BOLT

1. JACK UP VEHICLE AND REMOVE FRONT WHEEL

2. REMOVE FRONT BRAKE CYLINDER AND DISC ROTOR

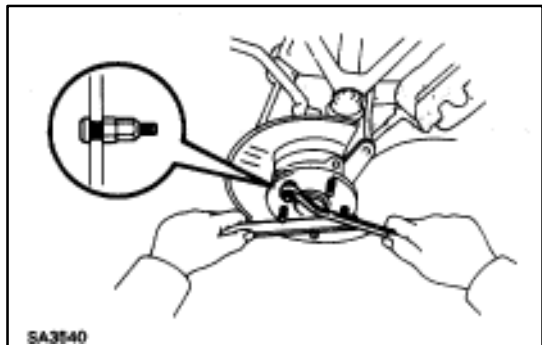
(See page [SA-17](#))



3. REMOVE HUB BOLT

Using SST, remove the hub bolt.

SST 09628-10011



4. INSTALL HUB BOLT

Install washer and nut to the bolt as shown in the illustration, and install the hub bolt by torquing the nut.

5. INSTALL FRONT BRAKE DISC ROTOR AND BRAKE CYLINDER

(See page [SA-23](#))

6. INSTALL FRONT WHEEL AND LOWER VEHICLE

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)