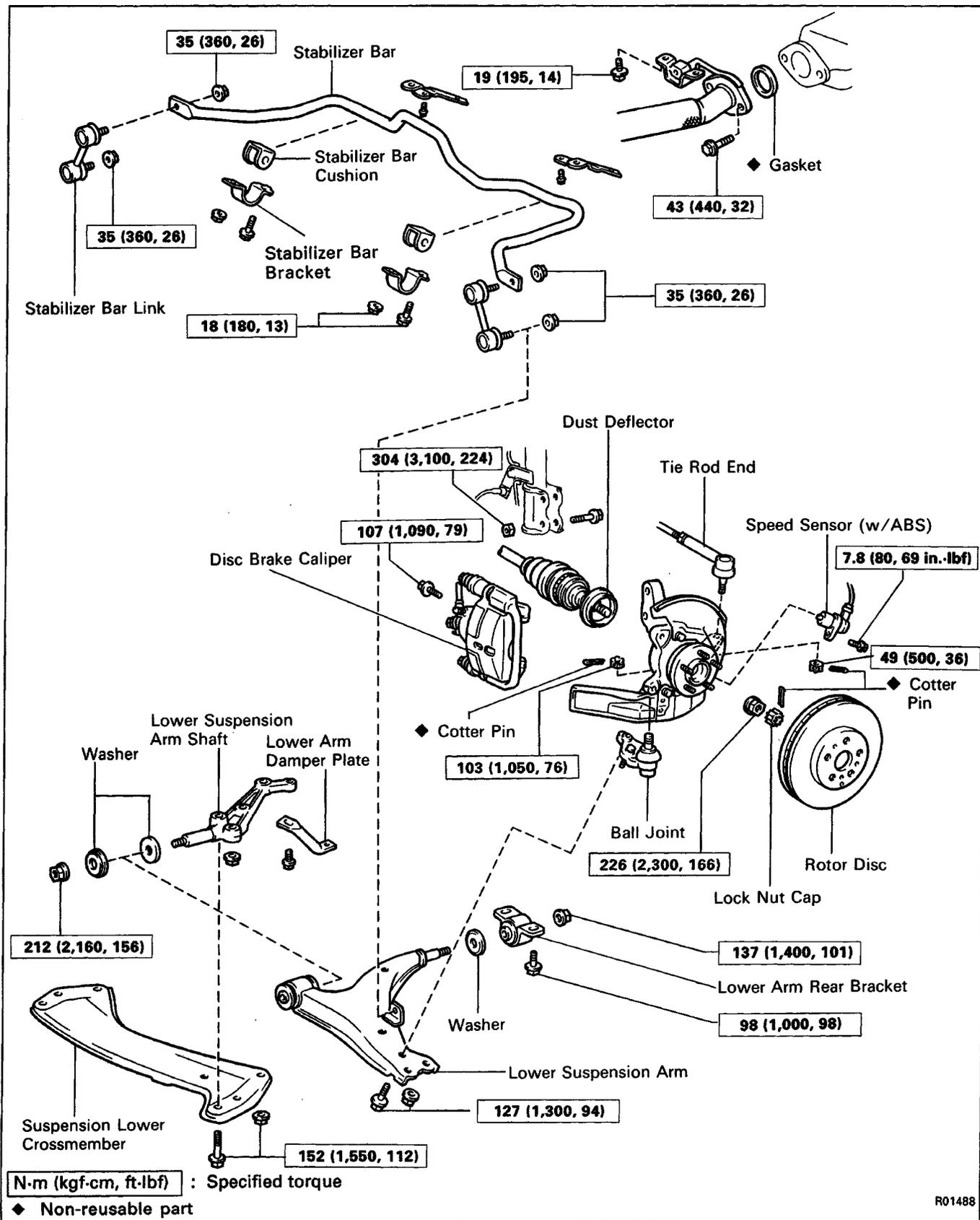


Ball Joints, Lower Arm and Stabilizer Bar COMPONENTS

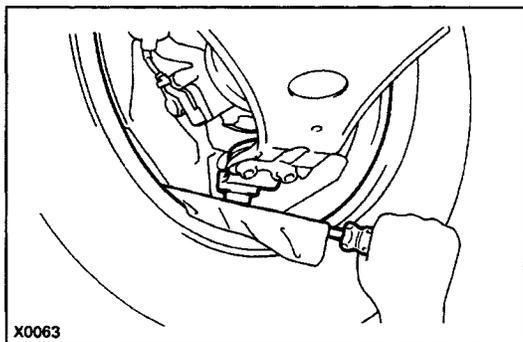


(Ball Joints)

INSPECTION OF BALL JOINT

1. INSPECT BALL JOINT FOR EXCESSIVE LOOSENESS

- (a) Jack up the front of the vehicle and place a wooden block with a height of 180–200 mm (7.09–7.87 in.) under one front tire.
- (b) Lower the jack until there is about half a load on one front coil spring. Place stands under the vehicle for safety.
- (c) Make sure the front wheels are in a straightforward position and block the wheel with chocks.
- (d) Move the lower arm up and down, and check that the ball joint has no excessive play.
Ball joint vertical play: 0 mm (0 in.)



2. INSPECT BALL JOINT FOR ROTATION CONDITION

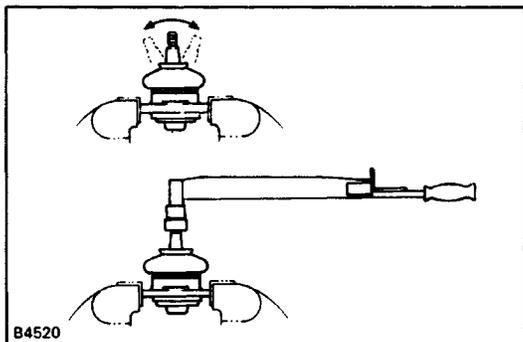
- (a) Remove the ball joint. (See page SA-8)
- (b) Flip the ball joint stud back and forth 5 times as shown in the illustration, before installing the nut.
- (c) Using a torque gauge, turn the nut continuously one turn every 2–4 seconds and take the torque reading on the fifth turn.

Torque (turning): 1.0 – 2.9 N·m

(10 – 30 kgf·cm, 9 – 26 in.-lbf)

If not within specification, replace the ball joint.

- (d) Install the ball joint.

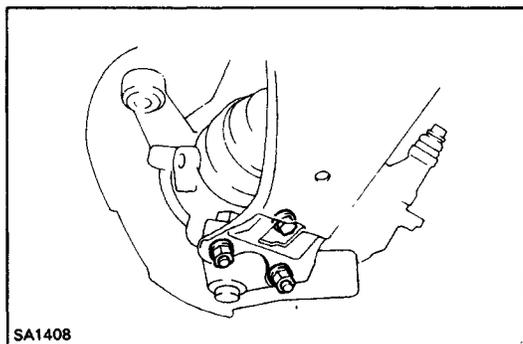


(Lower Arm)

REMOVAL OF LOWER SUSPENSION ARM

1. DISCONNECT LOWER ARM FROM STEERING KNUCKLE

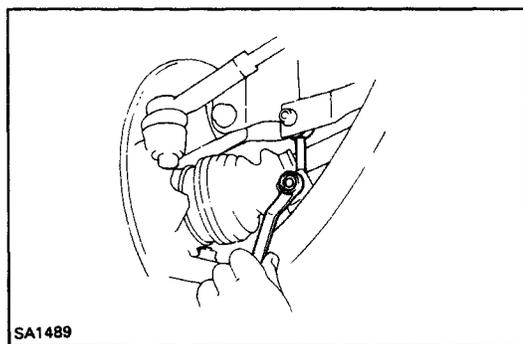
Remove the bolt and two nuts holding the steering knuckle to the lower suspension arm.

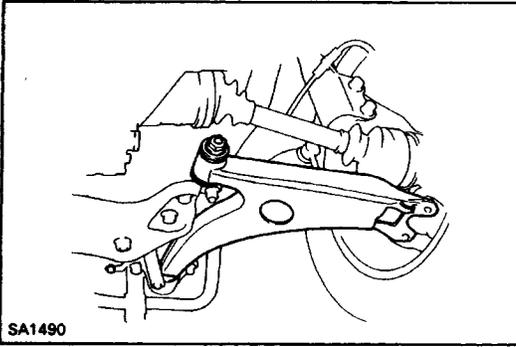


2. DISCONNECT STABILIZER LINK FROM LOWER SUSPENSION ARM

Remove the nut and disconnect the stabilizer link from the lower suspension arm.

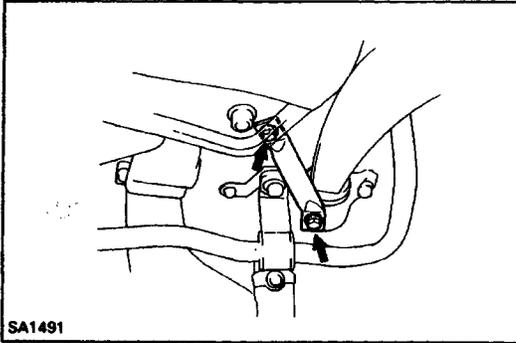
H I N T: If the ball joint stud turns together with the nut, use a hexagon wrench 5 mm (0.197 in.) to hold the stud.





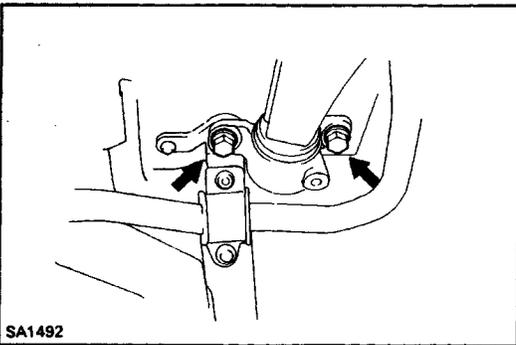
3. REMOVE LOWER SUSPENSION ARM FRONT SETTING NUT

Remove the lower suspension arm front setting nut and washer.



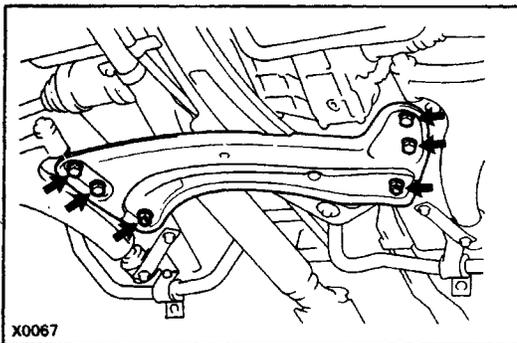
4. REMOVE LOWER SUSPENSION ARM (Except LH Arm w/ A/T)

(a) Remove the two bolts and remove the lower arm damper plate.



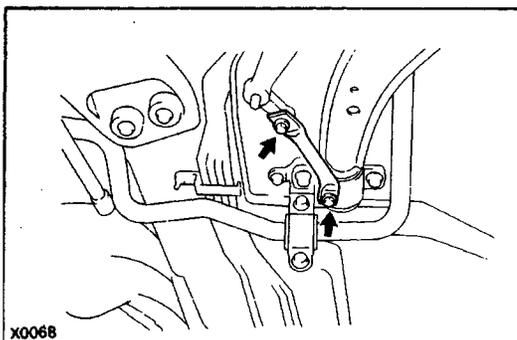
(b) Remove the lower suspension arm rear bracket bolts.

(c) Remove the lower suspension arm.

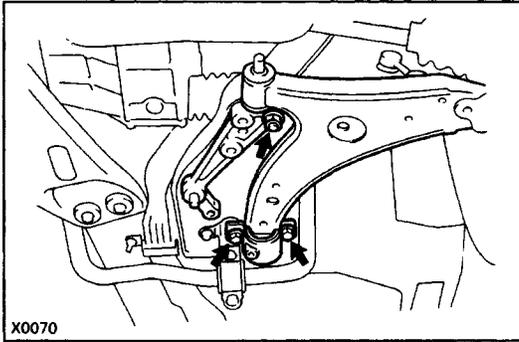


(LH Arm w/ A/T)

(a) Remove the four bolts and two nuts, then remove the suspension lower crossmember

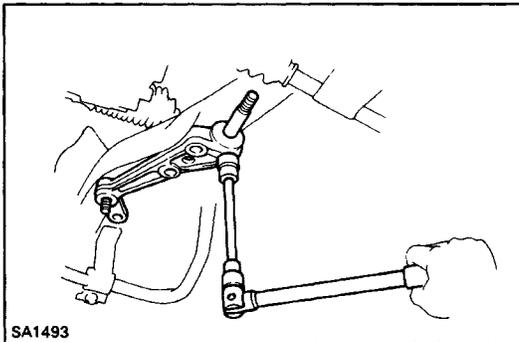


(b) Remove the two bolts and remove the lower arm damper plate.



X0070

- (c) Remove the two bolts and nut, then remove the lower suspension arm with the lower arm shaft.
- (d) Remove the lower arm shaft from the lower suspension arm.



SA1493

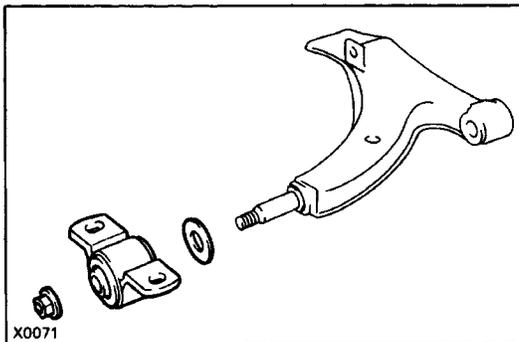
**5. (EXCEPT LH ARM w/ A/T)
IF NECESSARY, REMOVE LOWER SUSPENSION ARM
SHAFT**

- (a) Remove the four bolts and two nuts, then remove the suspension lower crossmember.
- (b) Remove the nut and remove the lower suspension arm shaft.

**REPLACEMENT OF LOWER SUSPENSION
ARM REAR BUSHING**

1. REMOVE NUT AND BUSHING

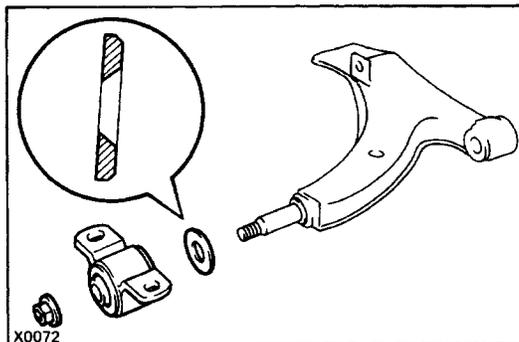
Remove the nut, then remove the bushing and washer.



X0071

2. INSTALL NEW BUSHING

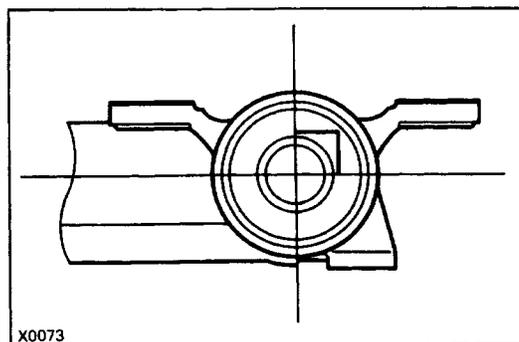
- (a) Install the washer with the tapered side towards the lower suspension arm body as shown in the illustration.



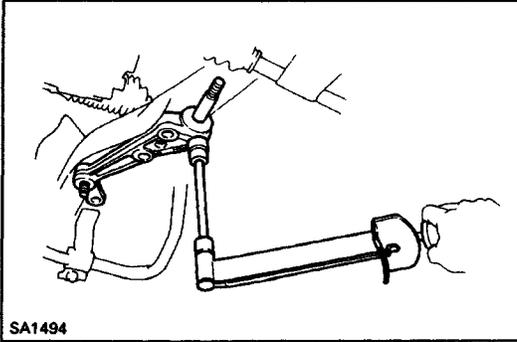
X0072

- (b) Install the new bushing to the lower suspension arm as shown in the illustration.

3. TEMPORARILY INSTALL NUT



X0073



SA1494

INSTALLATION OF LOWER SUSPENSION ARM

(See page SA-51)

1. (EXCEPT LH ARM w/ A/T)

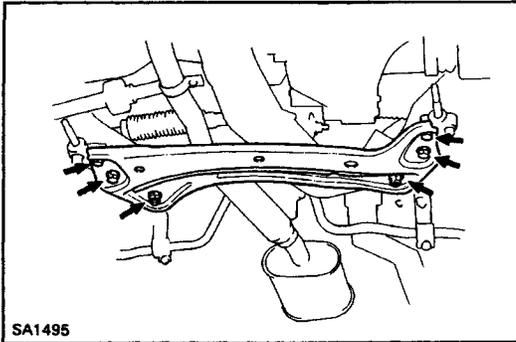
IF NECESSARY, INSTALL LOWER SUSPENSION ARM SHAFT

- (a) Install the lower suspension arm shaft in place, then install and torque the front side nut.

Torque: 152 N-m (1,550 kgf-cm, 112 ft-lbf)

- (b) Install the suspension lower crossmember in place, then install and torque the four bolts and two nuts.

Torque: 152 N-m (1,550 kgf-cm, 112 ft-lbf)

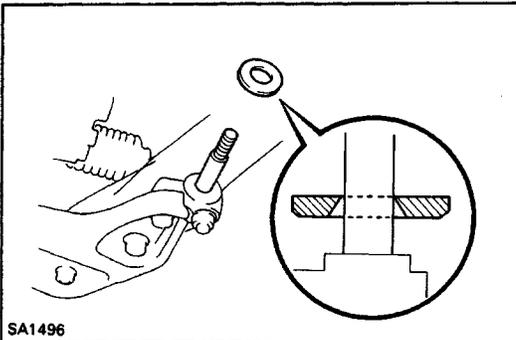


SA1495

2. INSTALL LOWER SUSPENSION ARM

(Except LH Arm w/ A/T)

- (a) Install the washer to the lower suspension arm shaft with the tapered side towards the body.

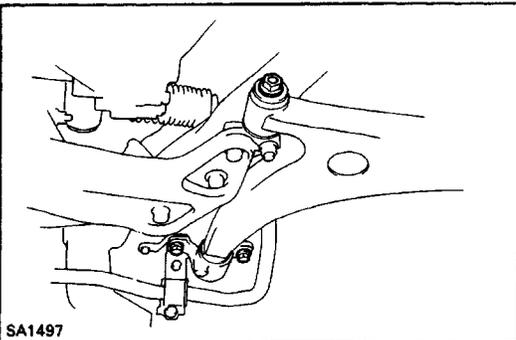


SA1496

- (b) Install the lower suspension arm in place, then temporarily install the rear bracket bolts, front washer and nut.

- (c) Torque the rear bracket bolts.

Torque: 98 N-m (1,000 kgf-cm, 72 ft-lbf)

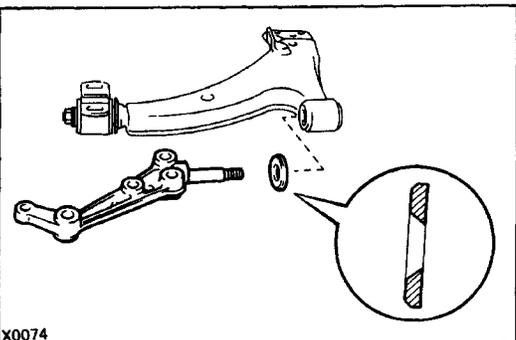


SA1497

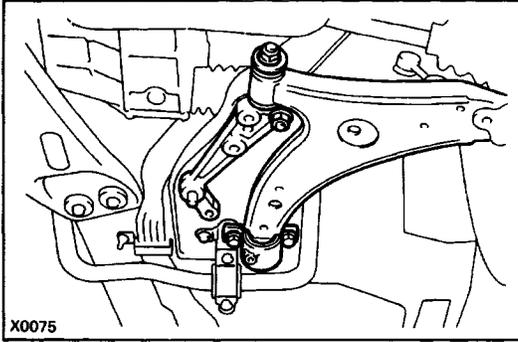
(LH Arm w/ A/T)

- (a) Install the washer to the lower suspension arm shaft with the tapered side towards the shaft body.

- (b) Install the lower suspension arm shaft with washer to the lower suspension arm, then temporarily install the front washer and nut.



X0074

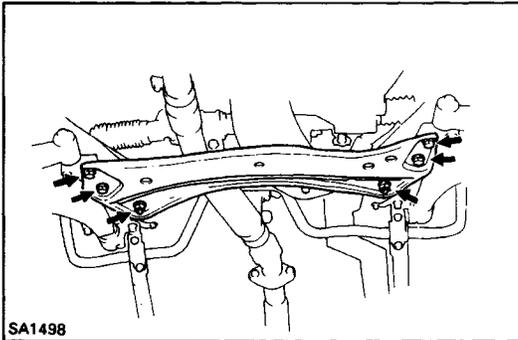


- (c) Install the lower suspension arm to the body in place, then install and torque the front side arm shaft installation nut.

Torque: 152 N-m (1,550 kgf-cm, 112 ft-lbf)

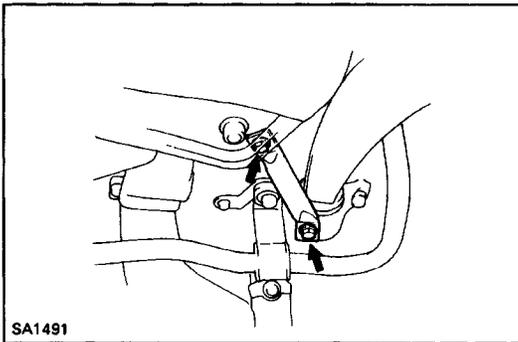
- (d) Install and torque the rear bracket bolts.

Torque: 98 N-m (1,000 kgf-cm, 72 ft-lbf)



- (e) Install the suspension lower crossmember in place, then install and torque the four bolts and two nuts.

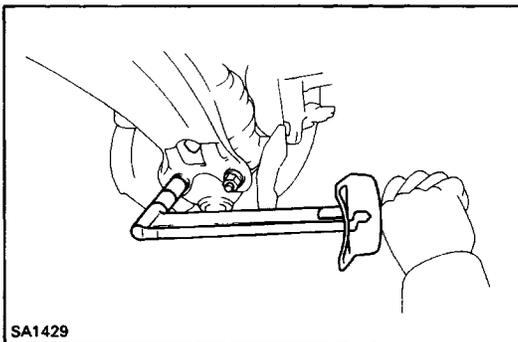
Torque: 152 N-m (1,550 kgf-cm, 112 ft-lbf)



3. INSTALL LOWER ARM DAMPER PLATE

Install the lower arm damper plate with the two bolts.

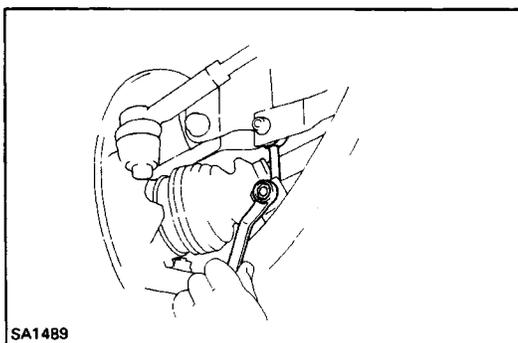
Torque: 65 N-m (660 kgf-cm, 48 ft-lbf)



4. CONNECT LOWER SUSPENSION ARM TO STEERING KNUCKLE

Connect the lower suspension arm to the steering knuckle, then install and torque the bolt and two nuts.

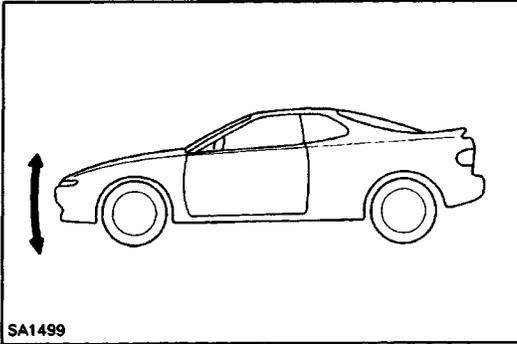
Torque: 127 N-m (1,300 kgf-cm, 94 ft-lbf)



5. CONNECT STABILIZER LINK

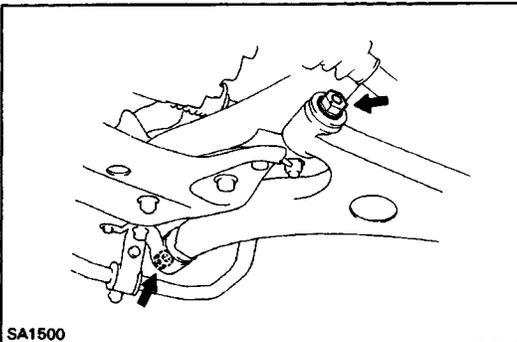
Connect the stabilizer link to the lower suspension arm and torque the nut.

Torque: 35 N-m (360 kgf-cm, 26 ft-lbf)



6. INSTALL WHEEL AND LOWER VEHICLE

- (a) Install the wheel and lower the vehicle.
- (b) Bounce the vehicle up and down to stabilize the suspension.



7. TORQUE FRONT SETTING NUT AND REAR NUT

Torque:

Front setting nut

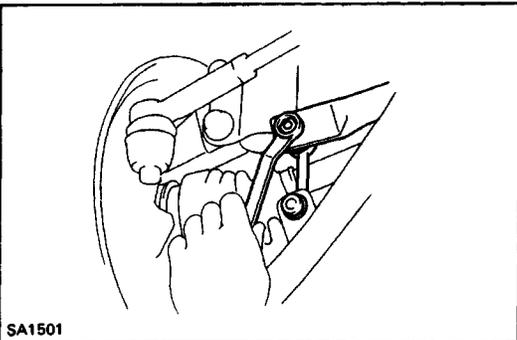
212 N-m (2,160 kgf-cm, 156 ft-lbf)

Rear nut

137 N-m (1,400 kgf-cm, 101 ft-lbf)

8. CHECK FRONT WHEEL ALIGNMENT

(See page SA-4)



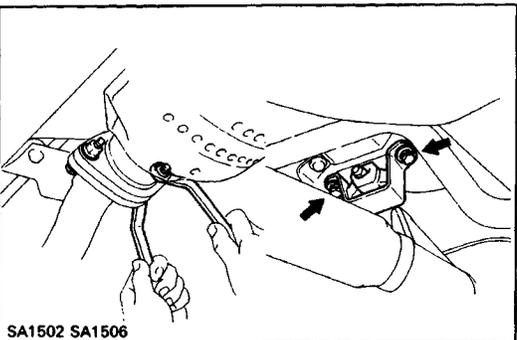
(Stabilizer Bar)

(See page SA-51)

REMOVAL OF STABILIZER BAR

1. REMOVE STABILIZER BAR LINK

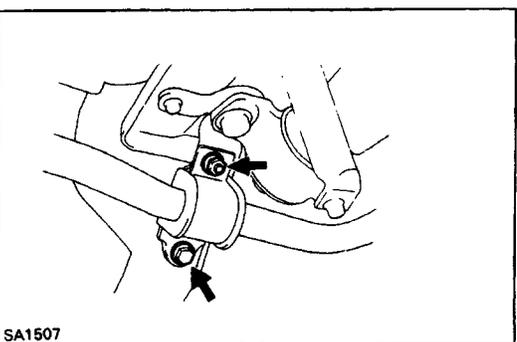
HINT: If the ball joint stud turns together with the nut, use a hexagon wrench 5 mm (0.197 in.) to hold the stud.



2. DISCONNECT FRONT EXHAUST PIPE FROM REAR EXHAUST PIPE

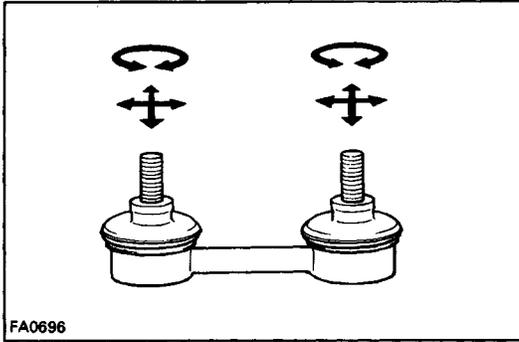
3. DISCONNECT FRONT EXHAUST PIPE FROM BODY

Remove the two bolts and disconnect the exhaust pipe from the body.



4. REMOVE BOTH STABILIZER BAR BRACKETS AND CUSHION FROM BODY

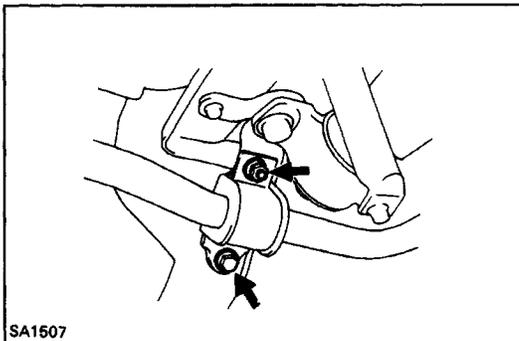
5. REMOVE STABILIZER BAR



INSPECTION OF STABILIZER LINK

INSPECT STABILIZER LINK

Rotate ball joint arm in all direction. If the movement is not smooth and free, replace the stabilizer link.

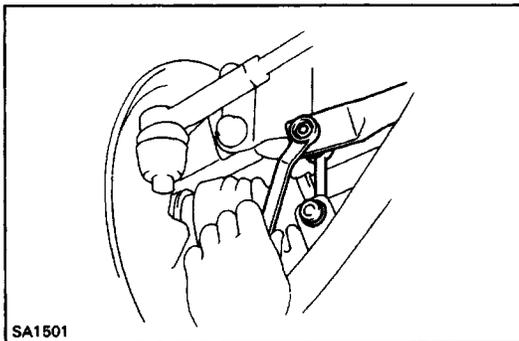


INSTALLATION OF STABILIZER BAR

1. INSTALL STABILIZER BAR

- (a) Install the cushions on the painted portions of the stabilizer bar.
- (b) Install the stabilizer bar in place, then install the both stabilizer brackets with the bolts and nuts.

Torque: 18 N-m (180 kgf-cm, 13 ft-lbf)

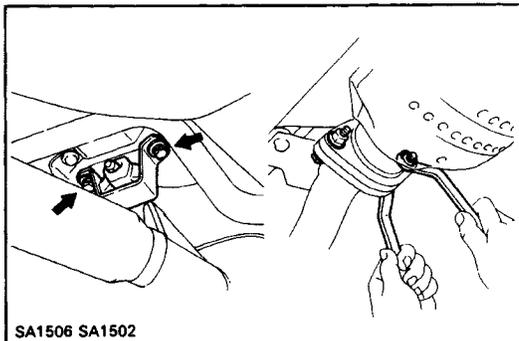


2. INSTALL STABILIZER BAR LINK

Install the stabilizer bar link with the nuts.

Torque: 35 N-m (360 kgf-cm, 26 ft-lbf)

HINT: If the ball joint stud turns together with the nut, use a hexagon wrench 5 mm (0.197 in.) to hold the stud.



3. CONNECT FRONT EXHAUST PIPE TO BODY

Torque: 19 N-m (195 kgf-cm, 14 ft-lbf)

4. CONNECT FRONT EXHAUST PIPE TO REAR EXHAUST PIPE

Torque: 43 N-m (440 kgf-cm, 32 ft-lbf)