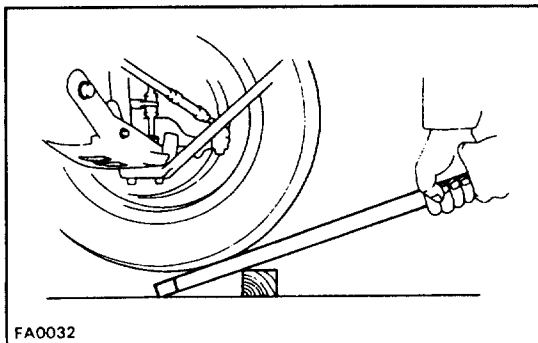
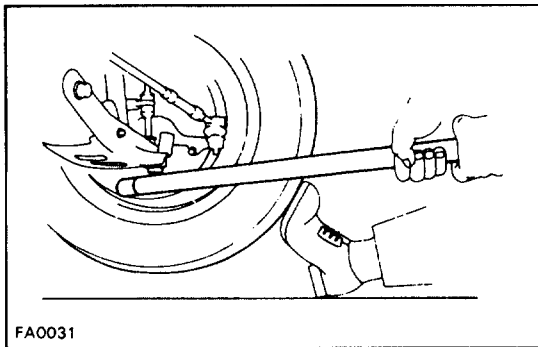
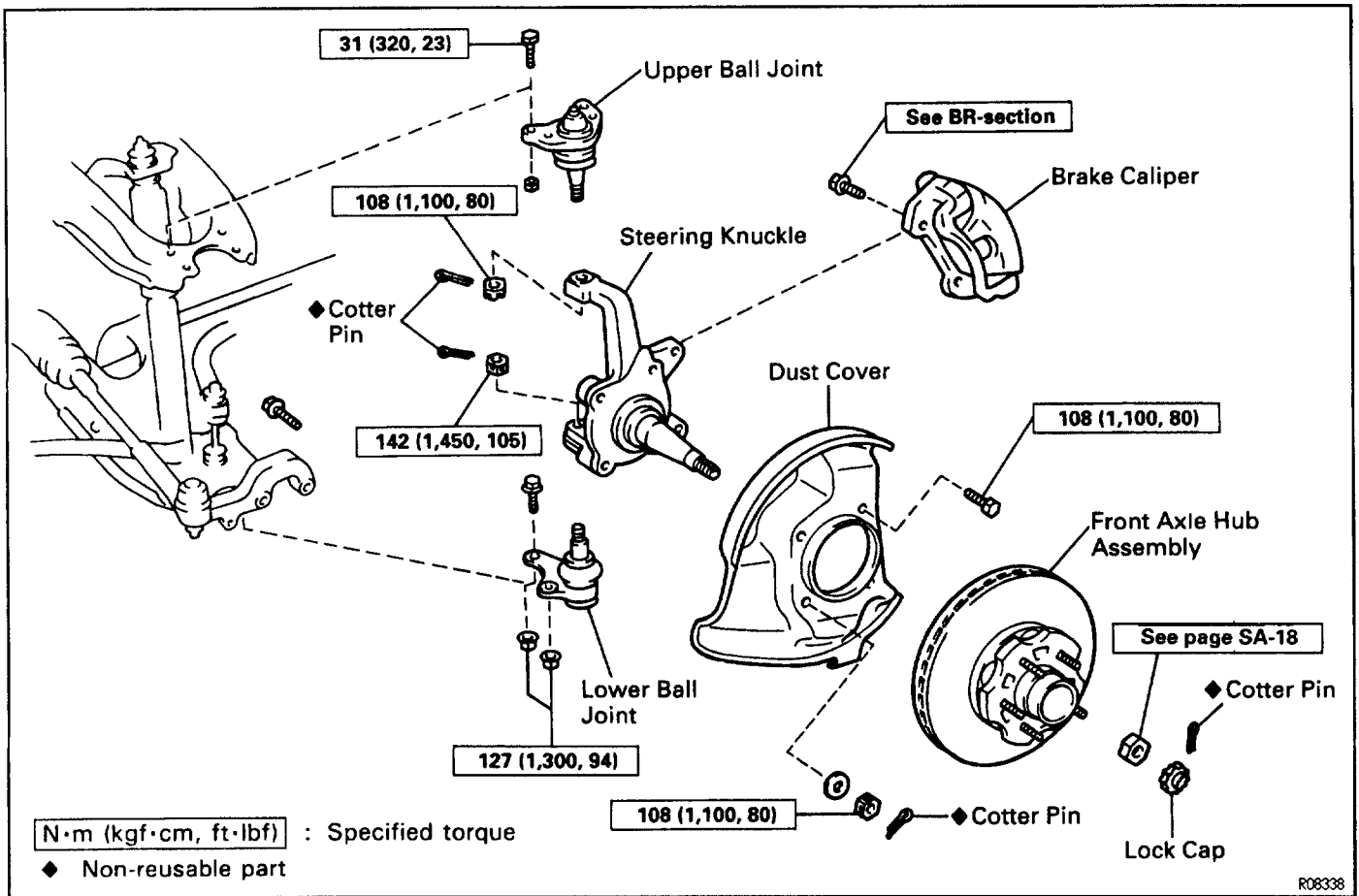


UPPER AND LOWER BALL JOINT COMPONENTS



UPPER AND LOWER BALL JOINT ONVEHICLE INSPECTION

1. INSPECT LOWER BALL JOINT FOR EXCESSIVE LOOSENESS

- Jack up the front of the vehicle and support it with stands.
- Make sure the front wheels are pointing straight ahead, and depress the brake pedal.
- Move the lower arm up and down and check that the lower ball joint has no play.

Maximum vertical play:

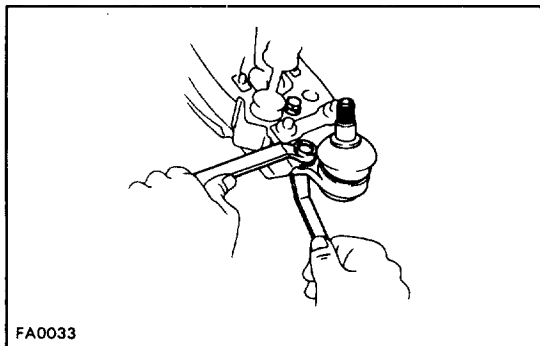
2.3 mm (0.091 in.)

2. INSPECT UPPER BALL JOINT FOR EXCESSIVE LOOSENESS

Move the wheel up and down, and check that the upper ball joint has no excessive play.

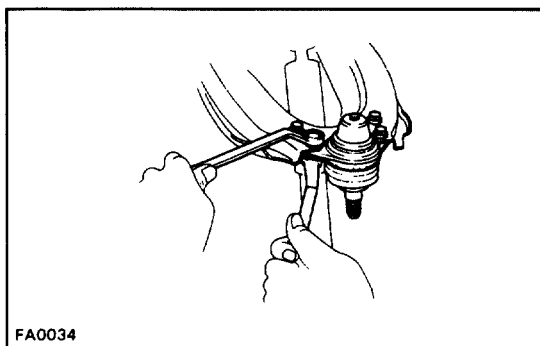
Maximum vertical play:

2.3 mm (0.091 in.)

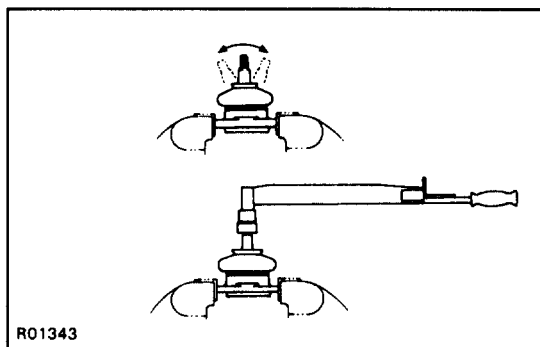


UPPER AND LOWER BALL JOINT REMOVAL

1. REMOVE STEERING KNUCKLE
(See page SA-14)
2. REMOVE LOWER BALL JOINT FROM LOWER ARM



3. REMOVE UPPER BALL JOINT FROM UPPER ARM



UPPER AND LOWER BALL JOINT INSPECTION

INSPECT BALL JOINTS

- (a) As shown in the illustration flip the ball joint stud back and forth 5 times before installing the nut.
- (b) Using a torque gauge, turn the nut continuously one turn every 2–4 seconds and take the torque reading on the 5th turn.

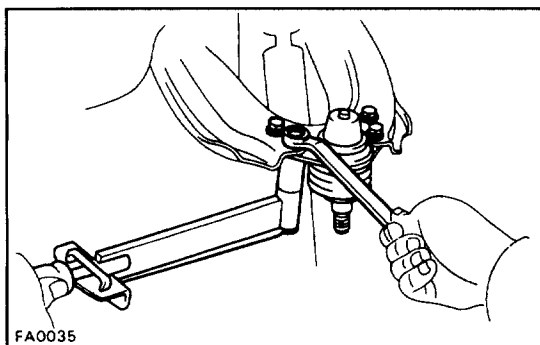
Torque (turning):

Upper ball joint:

2.0–3.9 N·m (20–40 kgf·cm, 17–35 in.·lbf)

Lower ball joint:

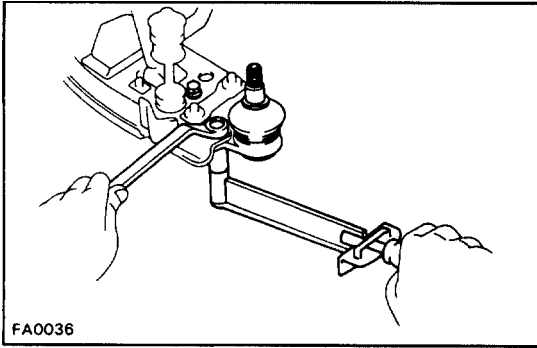
0.5–4.9 N·m (5–50 kgf·cm, 4–43 in.·lbf)



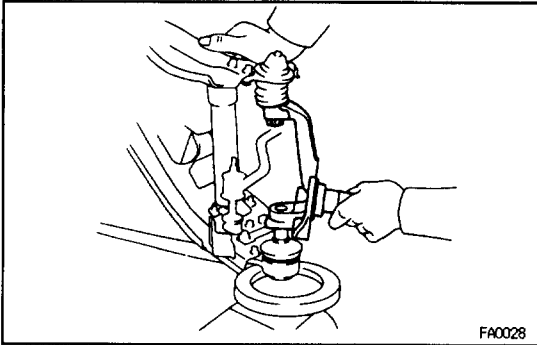
UPPER AND LOWER BALL JOINT

1. INSTALL UPPER BALL JOINT TO UPPER ARM

Torque: 31 N·m (320 kgf·cm, 23 ft·lbf)

**2. INSTALL LOWER BALL JOINT TO LOWER ARM**

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

**3. INSTALL STEERING KNUCKLE**

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