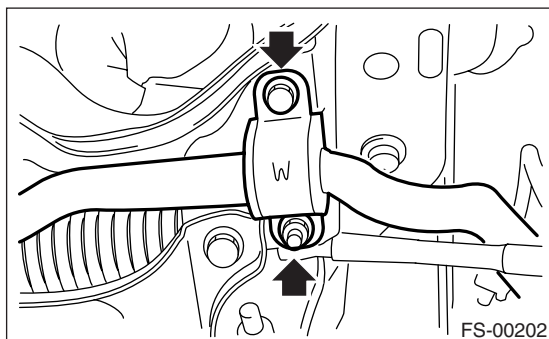


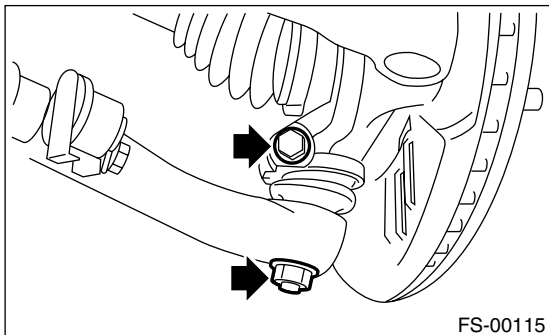
5. Front Ball Joint

A: REMOVAL

- 1) Lift-up the vehicle, and remove the front wheels.
- 2) Remove the both sides of stabilizer bracket.



- 3) Pull out the pin from ball stud, remove the castle nut, and extract the ball stud from front arm.
- 4) Remove the bolt installing ball joint to housing.



- 5) Extract the ball joint from housing.

B: INSTALLATION

- 1) Insert the ball joint into housing.

Tightening torque (Bolt):
50 N·m (5.1 kgf-m, 36.9 ft-lb)

CAUTION:

Do not apply grease to the tapered portion of ball stud.

- 2) Install the ball joint into front arm.

Tightening torque (castle nut):
Front arm
45 N·m (4.6 kgf-m, 33.2 ft-lb)

- 3) Retighten the castle nut further up to 60° until the hole in the ball stud is aligned with a slot in castle nut. Then, insert a new cotter pin and bend it around the castle nut.
- 4) Install the stabilizer bracket.

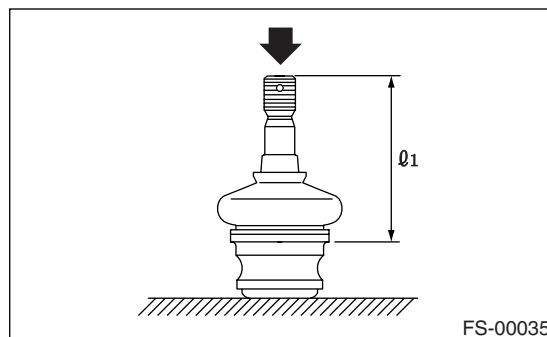
Tightening torque:
25 N·m (2.5 kgf-m, 18.1 ft-lb)

- 5) Install the front wheels.

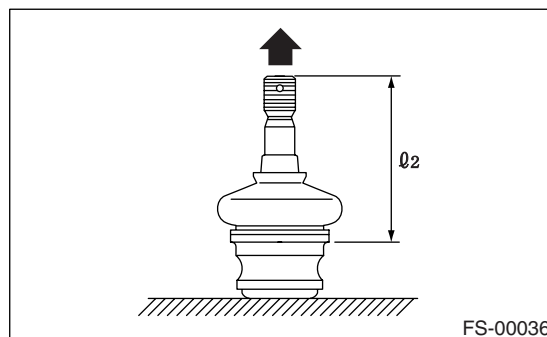
C: INSPECTION

- 1) Measure the play of the ball joint using the following procedures. Replace with a new part if the play exceeds specification.

- (1) With 980 N (100 kgf, 220 lb) loaded in direction shown in the figure, measure the length ℓ_1 .



- (2) With 980 N (100 kgf, 220lb) loaded in direction shown in the figure, measure the length ℓ_2 .



- (3) Determine free play using the following formula.

$$S = \ell_2 - \ell_1$$

- (4) Replace with a new part if the play exceeds specification.

FRONT BALL JOINT

Specification for replacement S:
Less than 0.3 mm (0.012 in)

- 2) If the play is within specification, visually check the dust cover.
- 3) Remove the ball joint and cover, and check for wear, damage or cracks. If any damage is found, replace the corresponding part.
- 4) If the dust cover is damaged, replace with a new ball joint.