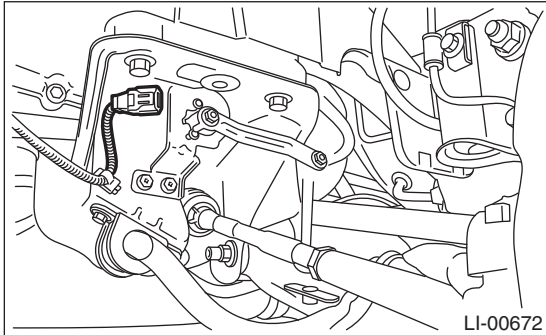


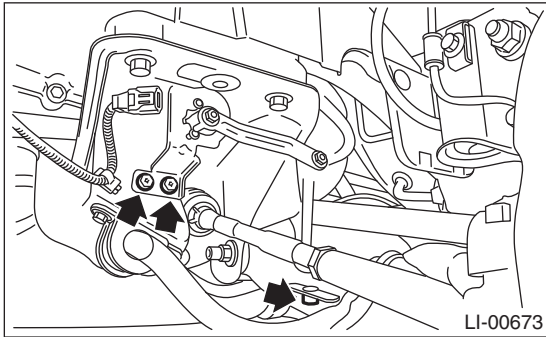
5. Front Ball Joint

A: REMOVAL

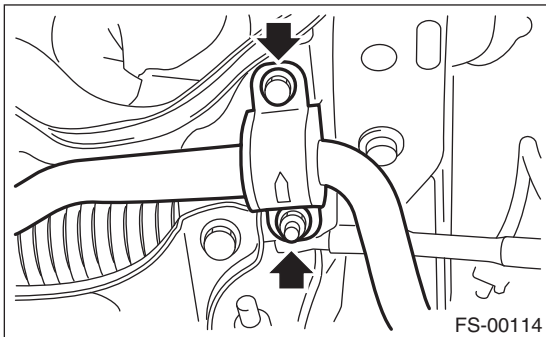
- 1) Disconnect the ground cable from the battery.
- 2) Lift up the vehicle, and remove the front wheels.
- 3) Disconnect the front vehicle height sensor connector (models with auto headlight beam leveler, left side only).



- 4) Remove the front vehicle height sensor (models with auto headlight beam leveler, left side only).

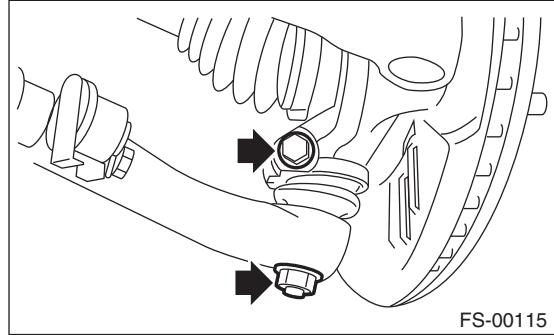


- 5) Remove the both sides of stabilizer bracket.



- 6) Pull out the pin from ball stud, remove the castle nut, and extract the ball stud from front arm.

- 7) Remove the bolt installing ball joint to housing.



- 8) Extract the ball joint from housing.

Front Ball Joint

FRONT SUSPENSION

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):

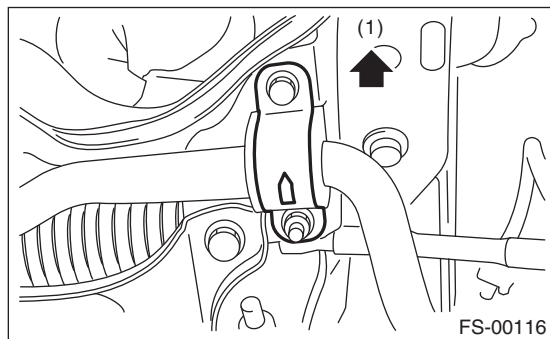
39 N·m (4.0 kgf-m, 28.8 ft-lb)

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.

NOTE:

The stabilizer bracket has a set orientation. Install it with the arrow mark facing the upper side of the vehicle.



(1) Front side

Tightening torque:

25 N·m (2.5 kgf-m, 18.4 ft-lb)

5) Install the front vehicle height sensor (models with auto headlight beam leveler, left side only).

Tightening torque:

7.5 N·m (0.76 kgf-m, 5.5 ft-lb)

6) Install the front vehicle height sensor connector (models with auto headlight beam leveler, left side only).

7) Install the front wheels.

8) Connect the battery ground cable to the battery.

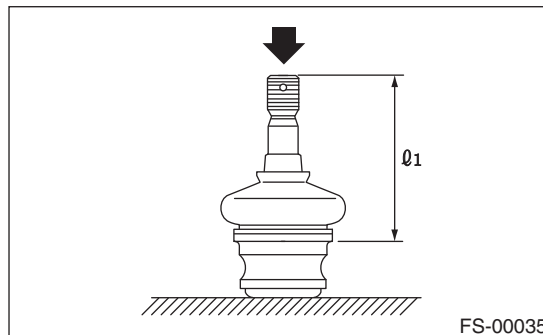
9) Re-initialize the auto headlight beam leveler system (models with auto headlight beam leveler).

<Ref. to LI-15, PROCEDURE, Auto Headlight Beam Leveler System.>

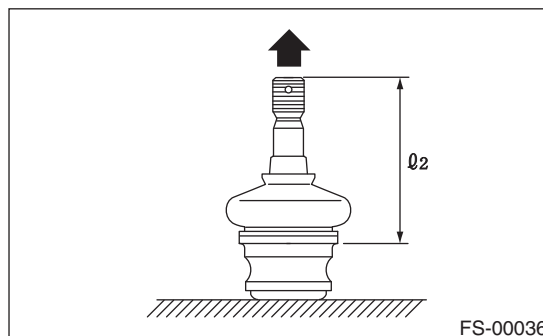
C: INSPECTION

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

(1) With 686 N (70 kgf, 154 lbf) loaded in direction shown in the figure, measure the length ℓ_1 .



(2) With 686 N (70 kgf, 154 lbf) 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.