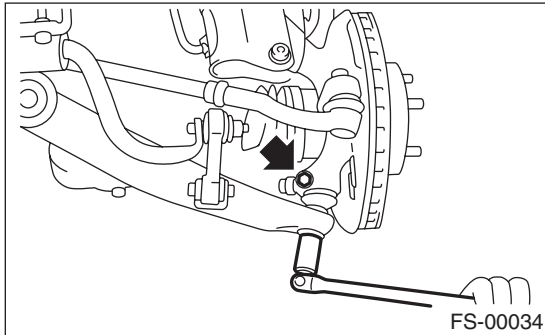


## 4. Front Ball Joint

### A: REMOVAL

- 1) Set vehicle on a lift.
- 2) Disconnect ground cable from battery.
- 3) Lift-up the vehicle and remove the wheel.
- 4) Pull out the cotter pin from the ball stud, remove the castle nut, and extract the ball stud from the transverse link.
- 5) Remove the bolt securing the ball joint to the housing.



- 6) Extract the ball joint from the housing.

### B: INSTALLATION

- 1) Install ball joint onto housing.

**Tightening torque (Bolt):**

**50 N·m (5.1 kgf-m, 37 ft-lb)**

**CAUTION:**

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

- 2) Connect ball joint to transverse link.

**Tightening torque (Castle nut):**

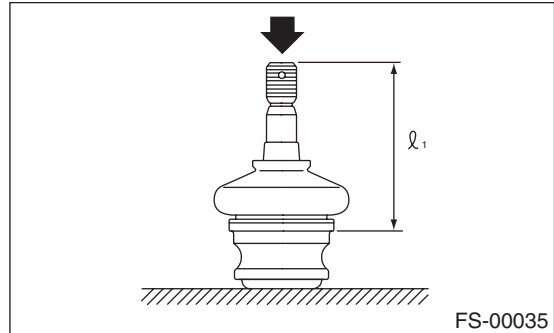
**39 N·m (4.0 kgf-m, 29 ft-lb)**

- 3) Retighten castle nut further within 60° until a slot in castle nut is aligned with the hole in ball stud end, then insert new cotter pin and bend it around castle nut.
- 4) Install front wheel.

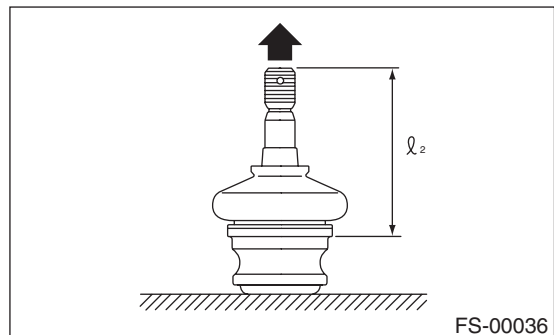
### C: INSPECTION

- 1) Measure free play of ball joint by the following procedures. Replace with a new one when the free play exceeds the specified value.

- (1) With 686 N (70 kgf, 154 lb) loaded in the direction shown in the figure, measure dimension  $l_1$ .



- (2) With 686 N (70 kgf, 154 lb) loaded in the opposite direction shown in the figure, measure dimension  $l_2$ .



- (3) Calculate free play from the following formula.  $S = l_2 - l_1$
- (4) When free play is larger than the following value, replace with a new one.

### FRONT BALL JOINT

**Standard for replacement: S**

**Less than 0.3 mm (0.012 in)**

- 2) When free play is smaller than the specified value, visually inspect the dust cover.
- 3) The ball joint and cover that have been removed must be checked for wear, damage or cracks, and any defective part must be replaced.
- 4) If the dust cover is damaged, replace with the new ball joint.