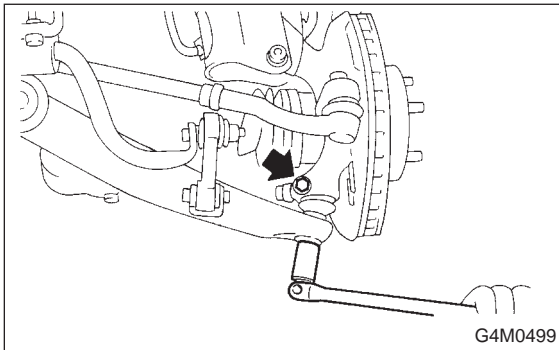


### 3. Front Ball Joint

#### A: REMOVAL

- 1) Remove the wheel.
- 2) Pull out the cotter pin from the ball stud, remove the castle nut, and extract the ball stud from the transverse link.
- 3) Remove the bolt securing the ball joint to the housing.

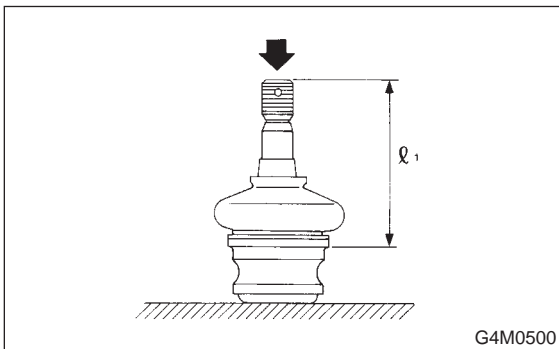


- 4) Extract the ball joint from the housing.

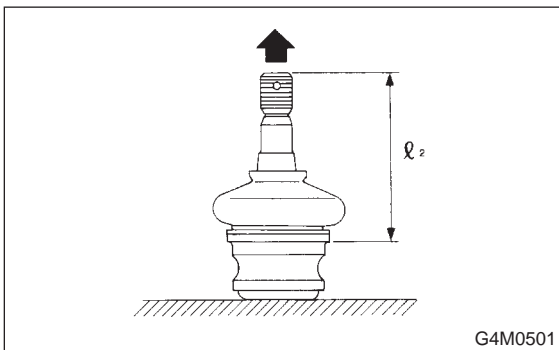
#### B: INSPECTION

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

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



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



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

#### FRONT BALL JOINT

**Specified play for replacement: S**  
**Less than 0.3 mm (0.012 in)**

- 2) When 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.

#### C: INSTALLATION

- 1) Install ball joint onto housing.

**Torque (Bolt):**

**$49 \pm 10 \text{ N}\cdot\text{m}$  ( $5.0 \pm 1.0 \text{ kg}\cdot\text{m}$ ,  $36 \pm 7 \text{ ft}\cdot\text{lb}$ )**

**CAUTION:**

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

- 2) Connect ball joint to transverse link.

**Torque (Castle nut):**

**$39 \text{ N}\cdot\text{m}$  ( $4.0 \text{ kg}\cdot\text{m}$ ,  $29 \text{ ft}\cdot\text{lb}$ )**

- 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.