





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.

 $S = \ell_2 - \ell_1$

(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) If the dust cover is damaged, replace with the new ball joint.
- 4) Check ball joint for damage and cracks. If defective, replace with new one.

C: INSTALLATION

1) Install ball joint onto housing.

Torque (Bolt):

 $49\pm10 \text{ N/m}$ (5.0±1.0 kg-m, 36±7 ft-lb)

CAUTION:

Do not apply grease to tapered portion of ball stud.

2) Connect ball joint to transverse link.

Torque (Castle nut):

39 N m (4.0 kg-m, 29 ft-lb)

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