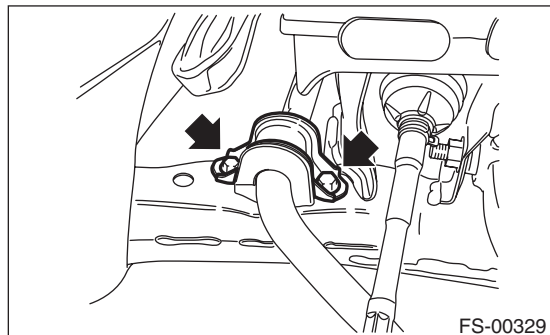


5. Front Ball Joint

A: REMOVAL

- 1) Lift up the vehicle, and then remove the front wheels.
- 2) Remove the left and right stabilizer brackets.



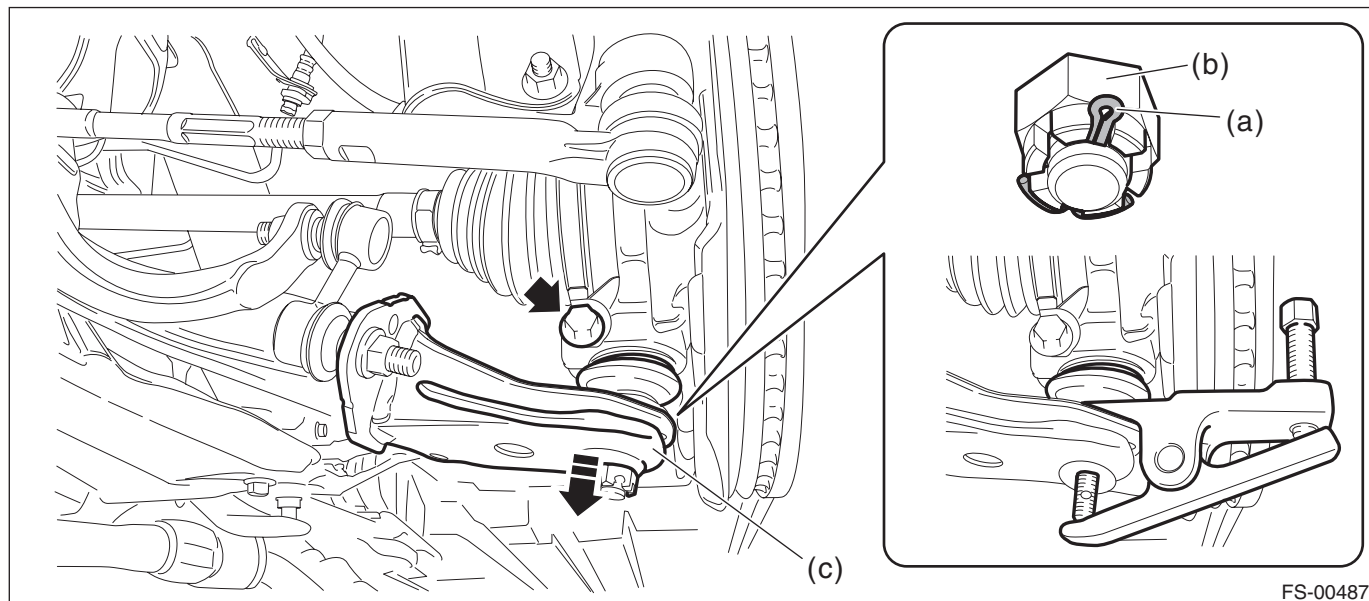
- 3) Remove the ball joint.
 - (1) Extract the cotter pin (a) from the ball stud.
 - (2) Remove the castle nut (b).
 - (3) Extract the ball stud from the front arm (c).
 - (4) Remove the bolt securing the ball joint to the front axle housing.

CAUTION:

Be careful not to damage the boot during removal.

Preparation tool:

Tie-rod ball joint puller



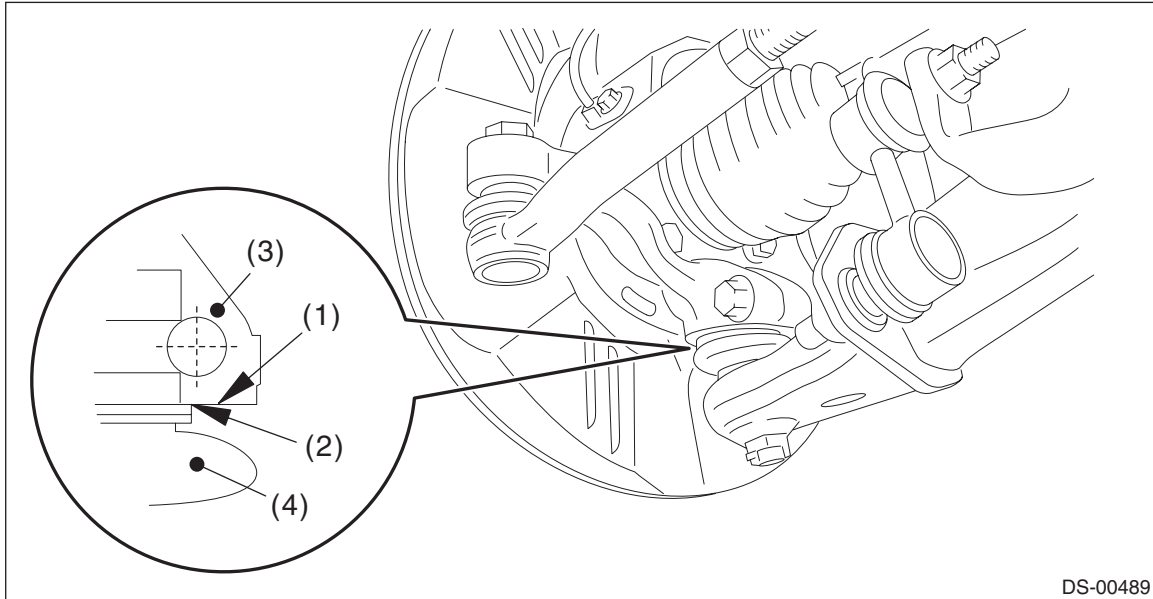
- (5) Extract the ball joint from the front axle housing.

B: INSTALLATION

1) Install the ball joint to the front axle housing.

CAUTION:

- Do not apply grease to the tapered portion of ball stud.
- Before tightening, make sure the lower side of front axle housing and stepped section of ball joint are in contact.



- (1) Lower side of front axle housing (3) Front axle housing (4) Ball joint boot
 (2) Raised section of ball joint

Tightening torque:

50 N·m (5.1 kgf-m, 36.9 ft-lb)

2) Install the ball joint into front arm.

- (1) Connect the ball joint to the front arm.

Tightening torque:

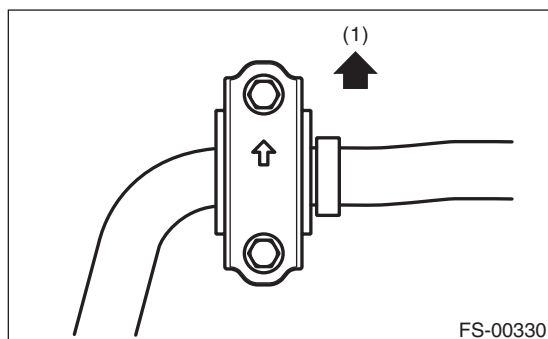
39 N·m (3.98 kgf-m, 28.8 ft-lb)

- (2) Retighten the castle nut further up to 60° until the hole in the ball stud is aligned with a slot in castle nut.
 (3) Insert a new cotter pin and bend it around the castle nut.

3) 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 of vehicle

Tightening torque:

25 N·m (2.55 kgf-m, 18.4 ft-lb)

Front Ball Joint

FRONT SUSPENSION

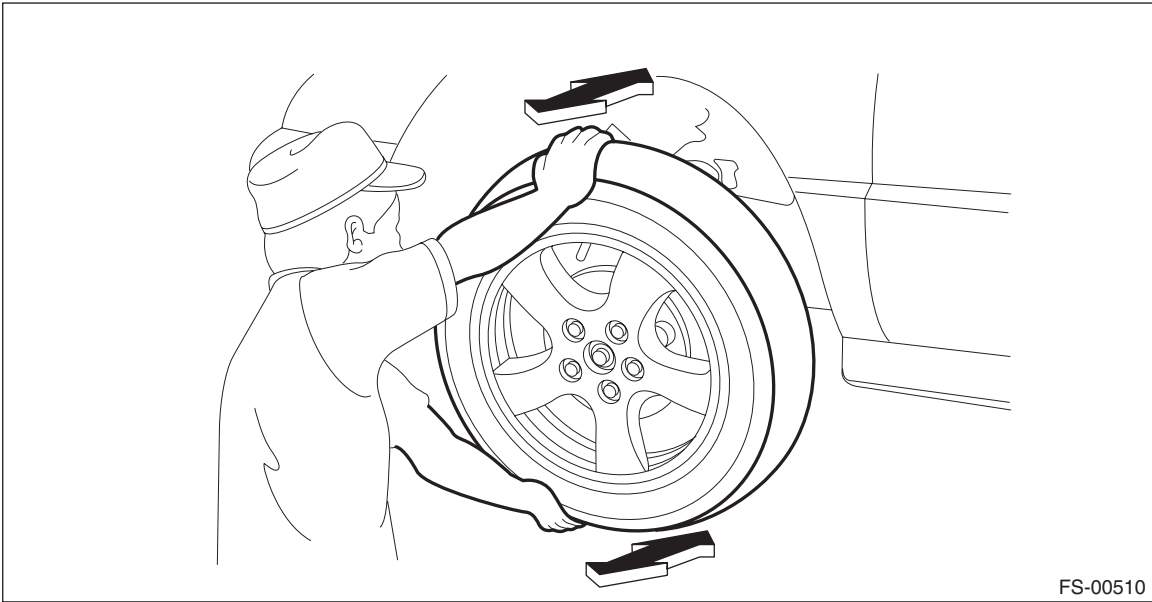
4) Install the front wheels.

Tightening torque:

120 N·m (12.24 kgf-m, 88.5 ft-lb)

C: INSPECTION

1) Check that there is no play by moving the upper and lower portions of front tire in an axial direction with the brake pedal depressed.



- **Play exists** → Replace the ball joint. <Ref. to FS-32, REMOVAL, Front Ball Joint.>
- 2) Check that there is no play by moving the upper and lower portions of front tire in an axial direction with the brake pedal released.
- **Play exists** → Check the hub unit bearing. <Ref. to DS-29, INSPECTION, Front Hub Unit Bearing.>
- 3) Replace the ball joint if the ball joint boot is damaged when visually inspecting the ball joint boot.