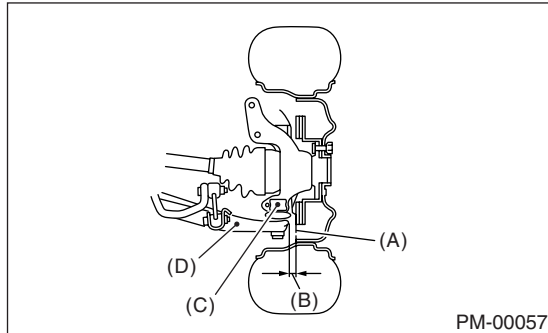


## 20. Suspension

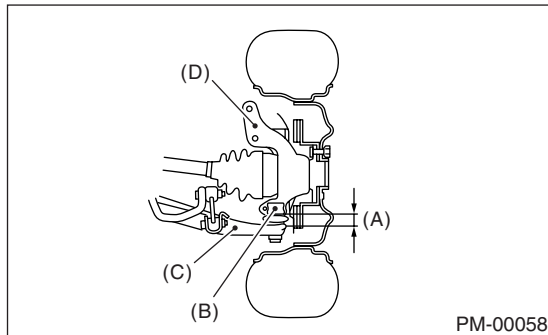
### A: INSPECTION

#### 1. SUSPENSION BALL JOINT

- 1) Jack-up the vehicle until front wheels are off ground.
- 2) Grasp the bottom of tire and move it in and out along the shaft. If relative movement is observed between the brake disc cover (A) and the end of front arm (D), ball joint (C) may be excessively worn.



- 3) Grasp the end of front arm and move it up and down. Relative movement (A) between the housing (D) and front arm (C) boss indicates ball joint (B) may be excessively worn.

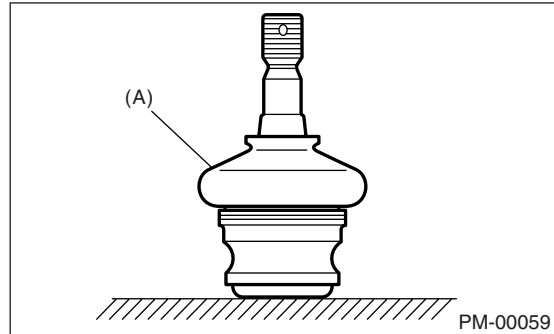


- 4) If relative movement is observed in the step 2), 3), remove and inspect the ball joint. If the free play exceeds standard value, replace the ball joint. <Ref. to FS-16, Front Ball Joint.>
- 5) Damage of dust seal  
Visually inspect the ball joint dust seal. If it is damaged, remove the front arm. <Ref. to FS-18, Front Arm.> Also, measure the free play of the ball joint. <Ref. to FS-16, Front Ball Joint.>

- (1) If the free play exceeds standard value, replace the ball joint.
- (2) If the dust seal is damaged, replace with a new ball joint.

#### NOTE:

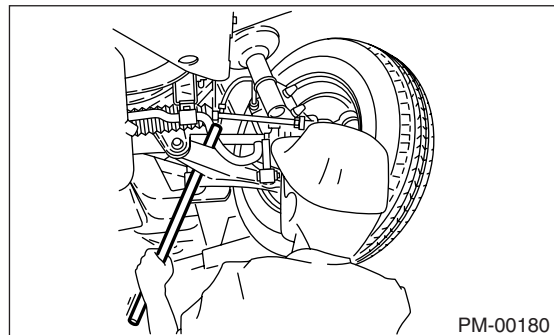
When the front arm ball joint has been removed or replaced, check the toe-in of front wheel. If the front wheel toe-in is not at specified value, adjust the toe-in. <Ref. to FS-7, Wheel Alignment.>



(A) Dust seal

#### 2. FRONT, REAR SUSPENSION BUSHING

Apply pressure with tire lever etc. to inspect the bushing for abnormal fatigue or damage. Replace the bushings if there is abnormal fatigue or damage.



#### 3. WHEEL ARCH HEIGHT

- 1) Unload the cargoes and set the vehicle in curb weight (empty) condition.
- 2) Check the wheel arch height of front and rear suspensions to ensure that they are within specified values. <Ref. to FS-7, Wheel Alignment.>
- 3) When the wheel arch height is out of standard, visually inspect following components and replace deformed parts.
  - Suspension components [Front strut assembly and rear damper assembly]
  - Parts connecting suspension and body
- 4) When no components are deformed, adjust wheel arch height by replacing coil spring in the suspension whose wheel arch height is out of standard. <Ref. to FS-7, Wheel Alignment.> <Ref. to RS-7, Wheel Alignment.>

## 4. WHEEL ALIGNMENT OF FRONT SUSPENSION

1) Check the alignment of front suspension to ensure that following items conform to standard values.

- Toe-in
- Camber
- Caster
- Steering angle

<Ref. to FS-7, Wheel Alignment.>

2) When the caster angle does not conform to reference obviously, visually inspect the following components and replace deformed parts.

- Suspension components [Strut assembly, crossmember, front arm, etc.]
- Parts connecting suspension and body

3) When the toe-in and camber are out of standard value, adjust them so that they conform to standard value.

4) When the right-and-left turning angles of tire are out of standard, adjust to standard value.

## 5. WHEEL ALIGNMENT OF REAR SUSPENSION

1) Check the alignment of rear suspension to ensure that following items are within standard values.

- Toe-in
- Camber
- Thrust angle

<Ref. to RS-7, Wheel Alignment.>

2) When the camber angle does not conform to standard value, visually inspect the following components. If the deformation is observed, replace the damaged parts.

- Suspension components [Shock absorber, front link, rear link, upper link, rear arm, sub frame, etc]
- Parts connecting suspension and body

3) When the toe-in and thrust angle are out of standard value, adjust them so that they conform to standard value.

## 6. OIL LEAKAGE OF STRUT AND SHOCK ABSORBER

Visually inspect the front strut and rear shock absorber for oil leakage. Replace the front strut and rear shock absorber if oil leaks excessively.

## 7. TIGHTNESS OF BOLTS AND NUTS

Check the bolts and nuts for looseness. Retighten the bolts and nuts to specified torque. If the self-locking nuts and bolts are removed, replace them with new parts.

- Front suspension

<Ref. to FS-3, COMPONENT, General Description.>

- Rear suspension

<Ref. to RS-3, COMPONENT, General Description.>

## 8. DAMAGE TO SUSPENSION PARTS

Check the following parts and the fastening portion of the vehicle body for deformation or excessive rusting which impairs the suspension. If necessary, replace the damaged parts with new parts. If minor rust formation, pitting, etc. are noted, remove the rust and take rust prevention measure.

- Front suspension

- Front arm
- Crossmember
- Strut

- Rear suspension

- Sub frame
- Front link
- Rear link
- Upper link
- Rear arm
- Shock absorber

- In the area where salt is sprayed to melt snow on a road in winter, check suspension parts for damage caused by rust every 12 months after lapse of 60 months. Take rust prevention measures as required.