

SUSPENSION

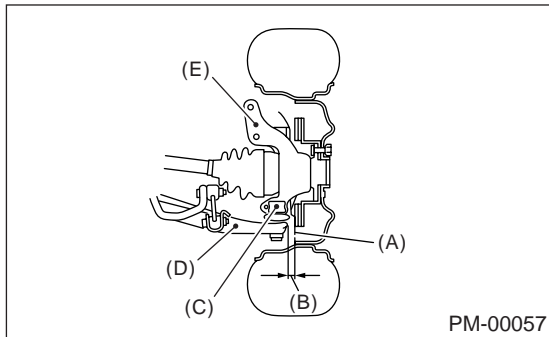
PERIODIC MAINTENANCE SERVICES

21. Suspension

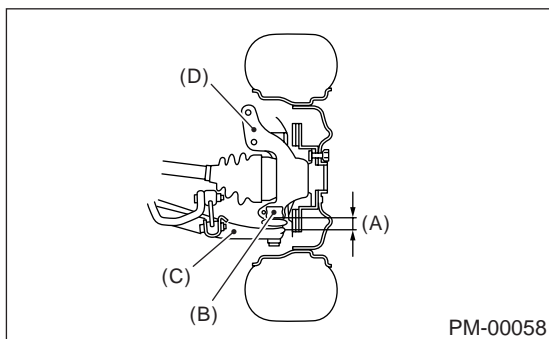
A: INSPECTION

1. SUSPENSION BALL JOINT

- 1) Jack up vehicle until front wheels are off ground.
- 2) Next, grasp bottom of tire and move it in and out. If relative movement is observed between brake disc cover and end of transverse link, ball joint may be excessively worn.
- 3) Next, grasp end of transverse link and move it up and down. Relative movement between housing and transverse link boss indicates ball joint may be excessively worn.
- 4) If relative movement is observed in the immediately preceding two steps, remove and inspect ball joint. If free play exceeds standard, replace ball joint. <Ref. to FS-18, Front Ball Joint.>



- (A) Disc cover
- (B) Relative movement
- (C) Ball joint
- (D) Transverse link
- (E) Housing



- (A) Relative movement
- (B) Ball joint
- (C) Transverse link
- (D) Housing

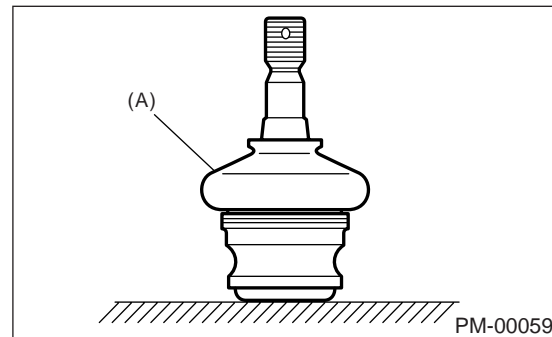
5) Damage of dust seal

Visually inspect ball joint dust seal. If it is damaged, remove transverse link. <Ref. to FS-15, Front Transverse Link.> And measure free play of ball joint. <Ref. to FS-18, Front Ball Joint.>

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

NOTE:

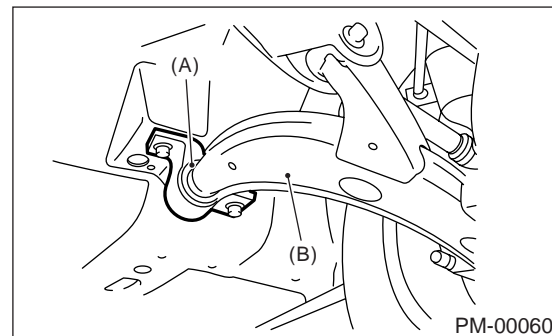
When transverse link ball joint has been removed or replaced, check toe-in of front wheel. If front wheel toe-in is not at specified value, adjust toe-in. <Ref. to FS-6, Wheel Alignment.>



- (A) Dust seal

2. TRANSVERSE LINK'S REAR BUSHING

Check oil leaks at around liquid-filled bushing. If oil leaks, replace bushing.



- (A) Rear bushing
- (B) Transverse link

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3. WHEEL ARCH HEIGHT

- 1) Unload cargoes and set vehicle in curb weight (empty) condition.
- 2) Then, check wheel arch height of front and rear suspensions to ensure that they are within specified values.
- 3) When wheel arch height is out of standard, visually inspect following components and replace deformed parts.
 - Suspension components [Front strut assembly and rear shock absorber assembly]
 - Body parts to which suspensions are installed.
- 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-6, Wheel Alignment.> <Ref. to RS-8, Wheel Alignment.>

4. WHEEL ALIGNMENT OF FRONT SUSPENSION

- 1) Check alignment of front suspension to ensure that following items conform to standard values.
 - Toe-in
 - Camber angle
 - Caster angle
 - Steering angle<Ref. to FS-6, Wheel Alignment.>
- 2) When caster angle does not conform to standard value, visually inspect following components and replace deformed parts.
 - Suspension components [Strut assembly, crossmember, transverse link, etc.]
 - Body parts to which suspensions are installed.
- 3) When toe-in and camber are out of standard value, adjust them so that they conform to respective service standard.
- 4) When right-and-left turning angles of tire are out of standard, adjust to standard value.

5. WHEEL ALIGNMENT OF REAR SUSPENSION

- 1) Check alignment of rear suspension to ensure that following items are within standard values.
 - Toe-in
 - Camber angle
 - Thrust angle<Ref. to RS-8, Wheel Alignment.>
- 2) When camber angle does not conform to standard value, visually inspect parts listed below. If deformation is observed, replace damaged parts.
 - Suspension components [Shock absorber, link F, link R, link UPR, arm R, sub frame, etc.]
 - Body parts to which suspensions are installed.
- 3) When toe-in and thrust angle are out of standard value, adjust them so that they conform to respective service standard.

6. OIL LEAKAGE OF STRUT AND SHOCK ABSORBER

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

7. TIGHTNESS OF BOLTS AND NUTS

Check bolts and nuts shown in the figure for looseness. Retighten bolts and nuts to specified torque. If self-lock nuts and bolts are removed, replace them with new ones.

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

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

8. DAMAGE TO SUSPENSION PARTS

- 1) Check the following parts and the fastening portion of the vehicle body for deformation or excessive rusting which impairs the suspension. If necessary, replace damaged parts with new ones. If minor rust formation, pitting, etc. are noted, remove rust and apply remedial anti-corrosion measures.
 - Front suspension
 - Transverse link
 - Crossmember
 - Strut
 - Rear suspension
 - Sub frame
 - Link F
 - Link R
 - Link UPR
 - Arm R
 - Shock absorber
 - In the district 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 measure as required.