22.Suspension

A: INSPECTION

1. SUSPENSION BALL JOINT

1) Jack-up the vehicle until front wheels are off ground.

2) Next, grasp the bottom of tire and move it in and out. If relative movement (B) is observed between the brake disc cover (A) and end of transverse link (D), ball joint (C) may be excessively worn.



3) Next, grasp the end of transverse link (C) and move it up and down. Relative movement (A) between the housing (D) and transverse link boss indicates ball joint (B) may be excessively worn.



4) If relative movement is observed in the immediately preceding two steps, remove and inspect the ball joint. If free play exceeds standard, replace the ball joint. <Ref. to FS-17, Front Ball Joint.>

5) Damage of dust seal

Visually inspect the ball joint dust seal. If it is damaged, remove the transverse link. <Ref. to FS-15, Front Transverse Link.> And measure free play of ball joint. <Ref. to FS-17, Front Ball Joint.>

(1) When looseness exceeds standard value, replace the ball joint.

(2) If the dust seal is damaged, replace with the new ball joint.

NOTE:

When the transverse link 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-6, Wheel Alignment.>



(A) Dust seal

2. TRANSVERSE LINK'S REAR BUSHING

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



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

3. WHEEL ARCH HEIGHT

1) Unload cargoes and set the vehicle in curb weight (empty) condition.

2) Then, check the wheel arch height of front and rear suspensions to ensure that they are within specified values. <Ref. to FS-6, Wheel Alignment.>
3) When the wheel arch height is out of standard, visually inspect the following components and replace deformed parts.

• Suspension components [Front strut assembly and rear strut assembly]

• Parts connecting between suspension and body. 4) When no components are deformed, adjust the wheel arch height by replacing coil spring in the suspension which wheel arch height is out of standard. <Ref. to FS-6, Wheel Alignment.> <Ref. to RS-8, Wheel Alignment.>

4. WHEEL ALIGNMENT OF FRONT SUS-PENSION

1) Check the 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 the caster angle does not conform to reference, visually inspect the following components and replace deformed parts.

• Suspension components [Strut assembly, crossmember, transverse link, etc.]

• Body parts to which suspensions are installed.

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

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 angle
- Thrust angle
- <Ref. to RS-8, Wheel Alignment.>

2) When the camber angle does not conform to reference, visually inspect parts listed below. If deformation is observed, replace the damaged parts.

• Suspension components [Shock absorber, front lateral links, rear lateral links, trailing link, etc.]

Body parts to which suspensions are installed.
3) When the 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

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

7. TIGHTNESS OF BOLTS AND NUTS

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

Front suspension: <Ref. to FS-2, General Description.>

Rear suspension: <Ref. to RS-2, 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 ones. If minor rust formation, pitting, etc. are noted, remove the rust and apply remedial anti-corrosion measures.

- Front suspension
 - Transverse link
 - Crossmember
 - Strut
- Rear suspension
 - Crossmember
 - Lateral links
 - Trailing link
 - Strut

• 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.