## AXLE SYSTEM

### PROBLEM SYMPTOMS TABLE

**HINT:**
Use the table below to help you find the cause of the problem. The numbers indicate the ranked order of probability of each of the possible causes. Check each part in the order suggested. If necessary, replace the applicable parts.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Suspected area</th>
<th>See page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vehicle unstable</strong></td>
<td>1. Tire (Worn or improperly inflated)</td>
<td>TW-1</td>
</tr>
<tr>
<td></td>
<td>2. Wheel alignment (Incorrect)</td>
<td>SP-2</td>
</tr>
<tr>
<td></td>
<td>3. Steering linkage (Loosen or worn)</td>
<td>-</td>
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<tr>
<td></td>
<td>4. Hub bearing (Worn)</td>
<td>AH-1</td>
</tr>
<tr>
<td></td>
<td>5. Steering gear (Out of adjustment or broken)</td>
<td>-</td>
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<td></td>
<td>6. Suspension parts (Worn)</td>
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<tr>
<td><strong>Front wheel shimmy</strong></td>
<td>1. Tire (Worn or improperly inflated)</td>
<td>TW-1</td>
</tr>
<tr>
<td></td>
<td>2. Wheel (Out of balance)</td>
<td>TW-1</td>
</tr>
<tr>
<td></td>
<td>3. Front shock absorber (Worn)</td>
<td>SP-11</td>
</tr>
<tr>
<td></td>
<td>4. Wheel alignment (Incorrect)</td>
<td>SP-2</td>
</tr>
<tr>
<td></td>
<td>5. Upper ball joint (Worn)</td>
<td>SP-17</td>
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<tr>
<td></td>
<td>6. Lower ball joint (Worn)</td>
<td>SP-22</td>
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<td></td>
<td>7. Hub bearing (Worn)</td>
<td>AH-1</td>
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<tr>
<td></td>
<td>8. Steering linkage (Loose or worn)</td>
<td>-</td>
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<tr>
<td><strong>Rear wheel shimmy</strong></td>
<td>1. Tire (Worn or improperly inflated)</td>
<td>TW-1</td>
</tr>
<tr>
<td></td>
<td>2. Wheel (Out of balance)</td>
<td>TW-1</td>
</tr>
<tr>
<td></td>
<td>3. Rear shock absorber (Worn)</td>
<td>SP-32</td>
</tr>
<tr>
<td></td>
<td>4. Hub bearing (Worn)</td>
<td>AH-2</td>
</tr>
</tbody>
</table>
ON-VEHICLE INSPECTION

1. REMOVE FRONT WHEEL
2. REMOVE FRONT DISC BRAKE CALIPER ASSEMBLY (See page AH-7)
3. REMOVE FRONT DISC (See page BR-42)
4. REMOVE FRONT AXLE HUB GREASE CAP (for 4WD) (See page DS-3)
5. INSPECT FRONT AXLE HUB BEARING
   (a) Inspect the axle hub backlash.
      (1) Using a dial indicator, check the backlash near the center of the axle hub.
      Maximum: 0.05 mm (0.0020 in.)
      If the backlash is greater than the maximum, replace the bearing.
   (b) Inspect the axle hub runout.
      (1) Using a dial indicator, check the runout of the surface of the axle hub.
      Maximum: 0.05 mm (0.0020 in.)
      If the runout is greater than the maximum, replace the bearing.
6. INSTALL FRONT AXLE HUB GREASE CAP (for 4WD)
7. INSTALL FRONT DISC (See page BR-45)
8. INSTALL FRONT DISC BRAKE CALIPER ASSEMBLY (See page AH-11)
9. FILL RESERVOIR WITH BRAKE FLUID (See page BR-5)
10. BLEED BRAKE LINE (See page BR-5)
11. CHECK FLUID LEVEL IN RESERVOIR (See page BR-7)
12. INSTALL FRONT WHEEL
    Torque: 112 N*m (1,137 kgf*cm, 82 ft.*lbf)
13. REMOVE REAR WHEEL
14. SEPARATE REAR DISC BRAKE CALIPER ASSEMBLY (See page PB-17)
15. REMOVE REAR DISC (See page PB-17)
16. INSPECT REAR AXLE SHAFT BEARING
(a) Inspect the axle shaft backlash.
   (1) Using a dial indicator, check the backlash near
       the center of the axle shaft.
       Maximum:
       0.05 mm (0.0020 in.)
       If the backlash is greater than the maximum,
       replace the bearing.
(b) Inspect the axle shaft runout.
   (1) Using a dial indicator, check the runout of the
       surface of the axle shaft.
       Maximum:
       0.05 mm (0.0020 in.)
       If the runout is greater than the maximum,
       replace the bearing.

17. INSTALL REAR DISC (See page PB-20)
18. ADJUST PARKING BRAKE SHOE CLEARANCE (See page PB-20)
19. INSTALL REAR DISC BRAKE CALIPER ASSEMBLY
    (See page PB-20)
20. INSTALL REAR WHEEL
    Torque: 112 N*m (1,137 kgf*cm, 82 ft.*lb)