

**Front Drive Halfshafts****Inspection and Verification**

**NOTE:** *New front wheel drive halfshafts should not be installed unless disassembly and inspection reveals unusual wear.*

1. Inspect front wheel driveshaft joint boots for evidence of cracks, tears or splits.

**NOTE:** *While inspecting the front wheel driveshaft CV joint boots, watch for indentations (dimples) in the boot convolutions. If an indentation is observed, it must be removed.*

2. Inspect the underbody for any indication of grease splatter in the vicinity of the front wheel driveshaft CV joint boots outboard and inboard locations, which is an indication of front wheel driveshaft CV joint boot and/or front wheel driveshaft CV joint boot clamp damage.
3. Inspect for inboard CV joint stub shaft pilot bearing housing seal leakage at the front wheel driveshaft CV joint.
4. Make sure front axle wheel hub retainer is the correct prevailing torque type.
5. If the concerns remain after the inspection, determine the symptoms and go to the Symptom Chart. For additional Noise, Vibration and Harshness (NVH).  
REFER to: [Noise, Vibration and Harshness \(NVH\)](#) (100-04 Noise, Vibration and Harshness, Diagnosis and Testing).

**Symptom Chart**

Condition	Possible Sources	Actions
Axle howling or whine – front or rear axle	<ul style="list-style-type: none"> <li>• Damaged or worn wheel hub bearings</li> </ul>	<ul style="list-style-type: none"> <li>• CHECK for abnormal wheel hub bearing play or roughness. REFER to: <a href="#">Front Wheel Bearing and Wheel Hub</a> (204-01A Front Suspension - RWD, Removal and Installation).</li> </ul>
Driveline clunk - loud clunk when shifting from REVERSE to DRIVE	<ul style="list-style-type: none"> <li>• Damaged or worn <u>CV</u> joints</li> <li>• Loose hub nut</li> </ul>	<ul style="list-style-type: none"> <li>• INSPECT the <u>CV</u> joints for wear or damage. INSTALL a new halfshaft or driveshaft as necessary. REFER to: <a href="#">Front Halfshaft LH</a> (205-04 Front Drive Halfshafts, Removal and Installation). REFER to: <a href="#">Front Halfshaft RH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</li> <li>• CHECK the torque on the hub</li> </ul>

		<p>nut. REPLACE the hub nut if the torque is not at specification. For front hub nuts.</p> <p>REFER to: <a href="#">Front Halfshaft LH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p> <p>REFER to: <a href="#">Front Halfshaft RH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p>
Driveline clunk <b>FWD</b> (vehicles) — occurs during acceleration or from cruise to coast/deceleration	<ul style="list-style-type: none"> <li>Damaged or worn <u>CV</u> joints</li> </ul>	<ul style="list-style-type: none"> <li>INSPECT the inner <u>CV</u> joint and boot. INSTALL a new halfshaft as necessary.</li> </ul> <p>REFER to: <a href="#">Front Halfshaft LH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p> <p>REFER to: <a href="#">Front Halfshaft RH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p>
	<ul style="list-style-type: none"> <li>Loose hub nut</li> </ul>	<ul style="list-style-type: none"> <li>CHECK the torque on the hub nut. REPLACE the hub nut if the torque is not at specification.</li> </ul> <p>REFER to: <a href="#">Front Halfshaft LH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p> <p>REFER to: <a href="#">Front Halfshaft RH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p>
Driveline clunk — occurs as the vehicle starts to move forward following a stop	<ul style="list-style-type: none"> <li>Loose hub nut</li> </ul>	<ul style="list-style-type: none"> <li>CHECK the torque on the hub nut. REPLACE the hub nut if the torque is not at specification.</li> </ul> <p>REFER to: <a href="#">Front Halfshaft LH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p> <p>REFER to: <a href="#">Front Halfshaft RH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p>
Clicking, popping or grinding - occurs while the vehicle is turning	<ul style="list-style-type: none"> <li>Inadequate or contaminated lubrication in the <u>CV</u> joints</li> </ul>	<ul style="list-style-type: none"> <li>CHECK the <u>CV</u> boots and joints for wear or damage. INSTALL new components as necessary.</li> </ul> <p>REFER to: <a href="#">Front Halfshaft LH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p> <p>REFER to: <a href="#">Front Halfshaft RH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p>
	<ul style="list-style-type: none"> <li>Another component contacting the halfshaft</li> </ul>	<ul style="list-style-type: none"> <li>CHECK the halfshafts and the area around the halfshafts. REPAIR as necessary.</li> </ul>
Grunting — normally associated with a shudder experienced during acceleration from a complete stop	<ul style="list-style-type: none"> <li>Halfshaft <u>CV</u> joint binding</li> </ul>	<ul style="list-style-type: none"> <li>CHECK the outer <u>CV</u> joint for correct seating into the hub. REPAIR as necessary.</li> </ul> <p>REFER to: <a href="#">Front Halfshaft LH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p>

		REFER to: <a href="#">Front Halfshaft RH</a> (205-04 Front Drive Halfshafts, Removal and Installation).
Driveline vibration - occurs at cruising speeds	<ul style="list-style-type: none"><li>• Incorrectly seated <u>CV</u> joint in the wheel hub</li></ul>	<ul style="list-style-type: none"><li>• CHECK the outer <u>CV</u> joint for correct seating into the hub. REPAIR as necessary.</li></ul> <p>REFER to: <a href="#">Front Halfshaft LH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p> <p>REFER to: <a href="#">Front Halfshaft RH</a> (205-04 Front Drive Halfshafts, Removal and Installation).</p> <p>REFER to: <a href="#">Front Wheel Bearing and Wheel Hub</a> (204-01A Front Suspension - RWD, Removal and Installation).</p>

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