

### NO.3 ABNORMAL NOISE AND/OR VIBRATION FROM COUPLING COMPONENT

id030300800600

3	Abnormal noise and/or vibration from coupling component
<b>[TROUBLESHOOTING HINTS]</b> <ul style="list-style-type: none"> <li>Abnormal noise and/or vibration from coupling component during driving</li> <li>Propeller shaft is malfunctioning or attached improperly.</li> <li>Engine mount or differential mount malfunction</li> <li>Resonance of rotating parts on vehicle (engine, propeller shaft, rear differential, tire, etc.)</li> <li>Resonance with engine vibration (mainly with exhaust system parts)</li> <li>Rear differential malfunction</li> <li>Coupling component malfunction</li> </ul>	

#### Diagnostic procedure

STEP	INSPECTION	ACTION
1	<b>VERIFY DSC, PCM, TCM (ATX), INSTRUMENT CLUSTER, EPS, AND 4WD SYSTEM DTCS</b> <ul style="list-style-type: none"> <li>Verify DSC, PCM, TCM (ATX), BCM (MTX), instrument cluster, EPS, and 4WD system DTCS using the M-MDS.</li> <li>Are there any DTCS present?</li> </ul>	Yes Go to applicable DTC inspection.
		No Go to next step.
2	<b>VERIFY INSTALLATION CONDITION OF VEHICLE PARTS</b> <ul style="list-style-type: none"> <li>Verify installation condition for following: <ul style="list-style-type: none"> <li>Propeller shaft (including bending and joint operation)</li> <li>Center bearing</li> <li>Engine mount</li> <li>Differential mount</li> <li>Hub bearing</li> <li>Exhaust system parts</li> <li>ABS wheel-speed sensor</li> </ul> </li> <li>Are they properly installed?</li> </ul>	Yes Go to next step.
		No Repair or replace malfunctioning part.
3	<b>DETERMINE IF MALFUNCTION IS CAUSED BY REAR DIFFERENTIAL</b> <ul style="list-style-type: none"> <li>Install tires of another brand.</li> </ul> <p><b>Note</b></p> <ul style="list-style-type: none"> <li>When tires of another brand are installed, the same malfunction can occur due to conditions different from customer explanation. Be careful not to confuse it with customer complaint.</li> <li>Perform simulation driving at the same engine speed, gear position, and vehicle speed that customer vehicle had malfunction.</li> <li>Does the same malfunction occur?</li> </ul>	Yes Reinstall customer's vehicle tire. Go to next step.
		No 4WD system is okay. Reinstall customer's vehicle tire.
4	<b>INSPECT REAR DIFFERENTIAL</b> <ul style="list-style-type: none"> <li>Inspect rear differential for following: <ul style="list-style-type: none"> <li>Backlash</li> <li>Teeth contact (See REAR DIFFERENTIAL ASSEMBLY.)</li> </ul> </li> <li>Are they okay?</li> </ul>	Yes Replace coupling component.
		No Inspect malfunctioning part and adjust it if necessary.