

**Caution**

- Vehicle specifications differ depending on the vehicle identification number (VIN).

- **Type A VIN:**  
 JM0 KE\*\*\*\*\* 100001—  
 JM6 KE\*\*\*\*\* 100001—  
 JM8 KE\*\*\*\*\* 100001—  
 JMZ KE\*\*\*\*\* 100001—
- **Type B VIN:**  
 JM0 KE\*\*\*\*\* 200001—  
 JM6 KE\*\*\*\*\* 200001—  
 JM8 KE\*\*\*\*\* 200001—  
 JMZ KE\*\*\*\*\* 200001—

DTC P0721:00	Output shaft speed sensor/sensor output range malfunction
<b>DETECTION CONDITION</b>	<b>Type A VIN</b> <ul style="list-style-type: none"> <li>• Under the following conditions, the output shaft speed is <b>13,560 rpm or more</b> for <b>1 s</b>:           <ul style="list-style-type: none"> <li>— Engine is running.</li> <li>— Battery voltage is <b>10 V or more</b>.</li> </ul> </li> <li>• Under the following conditions, the vehicle speed signal from the DSC HU/CM and the output shaft speed sensor signal differ by <b>520 rpm or more</b> for <b>1 s</b>:           <ul style="list-style-type: none"> <li>— Engine is running.</li> <li>— Battery voltage is <b>10 V or more</b>.</li> <li>— Vehicle speed signal related DTC is not recorded.</li> <li>— Vehicle speed is <b>16 km/h {9.9 mph} or more</b>.</li> <li>— Vehicle speed signal from DSC HU/CM and turbine/input shaft speed sensor signal do not differ.</li> <li>— Output shaft speed sensor signal is input.</li> <li>— Output shaft speed is <b>13,560 rpm or less</b>.</li> </ul> </li> </ul> <b>Type B VIN</b> <ul style="list-style-type: none"> <li>• Under the following condition, the output shaft speed is <b>13,560 rpm or more</b> in forward or <b>2,000 rpm or more</b> in reverse for a continuous <b>1 s</b>:           <ul style="list-style-type: none"> <li>— Battery voltage is <b>8 V or more</b>.</li> </ul> </li> </ul> <b>Diagnostic support note</b> <ul style="list-style-type: none"> <li>• The check engine light illuminates if the TCM detects the above malfunction condition during the first drive cycle.</li> <li>• The automatic transaxle warning light illuminates if the TCM detects the above malfunction condition during the first drive cycle.</li> <li>• PENDING CODE is available.</li> <li>• FREEZE FRAME DATA is available.</li> <li>• DTC is stored in the TCM memory.</li> </ul>
<b>FAIL-SAFE FUNCTION</b>	<ul style="list-style-type: none"> <li>• Inhibits learning control.</li> <li>• Inhibits manual mode.</li> <li>• Inhibits neutral idle control.</li> <li>• Inhibits i-stop control.</li> <li>• Inhibits AAS.</li> </ul>
<b>POSSIBLE CAUSE</b>	<ul style="list-style-type: none"> <li>• Output shaft speed sensor malfunction</li> </ul>
<b>SYSTEM WIRING DIAGRAM</b>	Not applicable

**Diagnostic procedure**

STEP	INSPECTION	ACTION
1	<b>VERIFY DSC HU/CM DTC</b> <ul style="list-style-type: none"> <li>• Perform the DSC HU/CM DTC inspection using the M-MDS. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].)</li> <li>• Are any DTCs present?</li> </ul>	Yes Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].)
		No Go to the next step.

STEP	INSPECTION		ACTION
2	<b>VERIFY INSTRUMENT CLUSTER REPAIR HISTORY</b> <ul style="list-style-type: none"> <li>Does the instrument cluster have a record of replacement?</li> </ul>	Yes	Perform the instrument cluster configuration, then go to Step 6. (See INSTRUMENT CLUSTER CONFIGURATION (USING AS-BUILT DATA).)
		No	Go to the next step.
3	<b>VERIFY AUTOMATIC TRANSMISSION REPAIR HISTORY</b> <ul style="list-style-type: none"> <li>Does the automatic transmission (with control valve body) have a record of replacement?</li> </ul>	Yes	Perform the TCM configuration. (See TCM CONFIGURATION [GW6A-EL, GW6AX-EL].)
		No	Go to the next step.
4	<b>VERIFY FREEZE FRAME DATA/SHOT DATA HAS BEEN RECORDED</b> <ul style="list-style-type: none"> <li>Has the freeze frame data/snapshot data been recorded on the repair order?</li> </ul>	Yes	Go to the next step.
		No	Record the freeze frame data/snapshot data on the repair order, then go to the next step.
5	<b>VERIFY RELATED SERVICE INFORMATION AVAILABILITY</b> <ul style="list-style-type: none"> <li>Verify related Service Information availability.</li> <li>Is any related Service Information available?</li> </ul>	Yes	Perform repair or diagnosis according to the available Service Information. <ul style="list-style-type: none"> <li>If the vehicle is not repaired, replace the control valve body. (See CONTROL VALVE BODY REMOVAL/INSTALLATION [GW6A-EL, GW6AX-EL].)</li> </ul> Go to the next step.
		No	Replace the control valve body, then go to the next step. (See CONTROL VALVE BODY REMOVAL/INSTALLATION [GW6A-EL, GW6AX-EL].)
6	<b>VERIFY DTC TROUBLESHOOTING COMPLETED</b> <ul style="list-style-type: none"> <li>Clear the DTC using the M-MDS. (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [GW6A-EL, GW6AX-EL].)</li> <li>Perform the following procedure to ensure that the DTC has been resolved:               <ol style="list-style-type: none"> <li>Drive the vehicle for <b>1 s or more</b> under the following condition:                   <ul style="list-style-type: none"> <li>Vehicle speed: <b>30 km/h {19 mph} or more</b></li> </ul> </li> </ol> </li> <li>Perform the DTC inspection using the M-MDS. (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [GW6A-EL, GW6AX-EL].)</li> <li>Are any DTCs present?</li> </ul>	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [GW6A-EL, GW6AX-EL].)
		No	DTC troubleshooting completed.