

## DTC P0767 [FN4A-EL]

B3E050219090W31

DTC P0767	Shift solenoid D stuck on
<b>DETECTION CONDITION</b>	<ul style="list-style-type: none"> <li>• When any of DTC P0731, P0732, P0734, and P0741 are not output, and all conditions below are satisfied. <ul style="list-style-type: none"> <li>- ATF temperature <b>20 °C {68 °F} or more</b></li> <li>- Driving in 3GR at D range</li> <li>- Engine running</li> <li>- Turbine speed <b>within 225-4,987 rpm</b></li> <li>- Differential gear case (output) revolution speed <b>35 rpm or more</b></li> <li>- Revolution ratio of forward clutch drum revolution to differential gear case revolution <b>below 0.863 or 1.249 or more</b></li> <li>- None of the following present: DTC P0500, P0706, P0707, P0708, P0712, P0713, P0715, P0751, P0752, P0753, P0756, P0757, P0758, P0761, P0762, P0763, P0766, P0767, P0767, P0768, P0771, P0772, P0773</li> </ul> </li> </ul> <p><b>Diagnostic support note:</b></p> <ul style="list-style-type: none"> <li>• This is a continuous monitor (CCM).</li> <li>• The MIL illuminates if the PCM detects the above malfunction condition in two consecutive drive cycles or in one drive cycle while the DTC for the same malfunction has been stored in the PCM.</li> <li>• The PENDING CODE is available if the PCM detects the above malfunction condition during the first drive cycle.</li> <li>• FREEZE FRAME DATA is available.</li> <li>• The AT warning light illuminates.</li> <li>• The DTC is stored in the PCM memory.</li> </ul>
<b>POSSIBLE CAUSE</b>	<ul style="list-style-type: none"> <li>• ATF level low</li> <li>• Deteriorated ATF</li> <li>• Shift solenoid D stuck</li> <li>• Control valve stuck</li> <li>• PCM malfunction</li> </ul>

### Diagnostic procedure

STEP	INSPECTION	ACTION
1	<b>VERIFY FREEZE FRAME DATA HAS BEEN RECORDED</b>  • Has the FREEZE FRAME DATA been recorded?	Yes Go to the next step.
		No Record the FREEZE FRAME DATA on the repair order, then go to the next step.
2	<b>VERIFY RELATED REPAIR INFORMATION AVAILABILITY</b>  • Verify related Service Bulletins and/or on-line repair information availability. • Is any related repair information available?	Yes Perform repair or diagnosis according to the available repair information. • If the vehicle is not repaired, go to the next step.
		No Go to the next step.
3	<b>INSPECT ATF CONDITION</b>  • Turn the ignition switch to the LOCK position. • Inspect the ATF condition.  - Clear red: Normal - Milky: Water mixed in fluid - Reddish brown: Deteriorated ATF	Yes Go to the next step.
		No If the ATF color is milky or reddish brown, replace ATF, then go to Step 5. (See <a href="#">AUTOMATIC TRANSAXLE FLUID</a> )

	<ul style="list-style-type: none"> <li>Is it normal? (See <a href="#">Automatic Transaxle Fluid (ATF) Condition Inspection.</a>)</li> </ul>		<a href="#">(ATF) REPLACEMENT.</a>
4	<b>INSPECT ATF LEVEL</b> <ul style="list-style-type: none"> <li>Start the engine.</li> <li>Warm up the ATX.</li> <li>Is the ATF level within the specification? (See <a href="#">Automatic Transaxle Fluid (ATF) Level Inspection.</a>)</li> </ul>	Yes	Go to the next step.
		No	Add ATF to the specified level, then go to Step 7. (See <a href="#">Automatic Transaxle Fluid (ATF) Level Inspection.</a> )
5	<b>INSPECT LINE PRESSURE</b> <ul style="list-style-type: none"> <li>Start the engine.</li> <li>Measure the line pressure.</li> </ul> <b>Specification</b>  <b>Idle: 330-470 kPa {3.4-4.7 kgf/cm<sup>2</sup>, 48-68 psi}</b>  <b>Stall:</b>  <b>1,090-1,250 kPa {11.2-12.7 kgf/cm<sup>2</sup>, 159-181 psi} (Z6)</b>  <b>1,160-1,320 kPa {11.8-13.5 kgf/cm<sup>2</sup>, 168-191 psi} (LF)</b> <ul style="list-style-type: none"> <li>Are the line pressures within the specifications? (See <a href="#">Line Pressure Test.</a>)</li> </ul>	Yes	Go to the next step.
		No	<ul style="list-style-type: none"> <li>All ranges: Replace the oil pump or control valve body, then go to Step 7.</li> <li>Any ranges: Replace the ATX, then go to Step 7.</li> </ul> (See <a href="#">AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [Z6].</a> ) (See <a href="#">AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [LF].</a> ) (See ATX Workshop Manual FN4A-EL.)
6	<b>INSPECT OPERATION OF EACH VALVE AND EACH SPRING</b> <ul style="list-style-type: none"> <li>Turn the ignition switch to the LOCK position.</li> <li>Remove the control valve body.</li> <li>Disassemble the control valve body.</li> <li>Is each valve operation normal and is the return spring normal? (See <a href="#">CONTROL VALVE BODY REMOVAL.</a>) (See <a href="#">CONTROL VALVE BODY INSTALLATION.</a>) (See ATX Workshop Manual FN4A-EL.)</li> </ul>	Yes	Replace the ATX, then go to the next step. (See <a href="#">AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [Z6].</a> ) (See <a href="#">AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [LF].</a> ) (See ATX Workshop Manual FN4A-EL.)
		No	Repair or replace the shift valve and return spring, then go to the next step. (See <a href="#">CONTROL VALVE BODY REMOVAL.</a> ) (See <a href="#">CONTROL VALVE BODY INSTALLATION.</a> ) (See ATX Workshop Manual FN4A-EL.)
7	<b>VERIFY TROUBLESHOOTING OF DTC P0767 COMPLETED</b> <ul style="list-style-type: none"> <li>Make sure to reconnect all the disconnected connectors.</li> <li>Clear the DTC from the memory using the WDS or equivalent.</li> <li>Start the engine.</li> <li>Warm up the ATX.</li> <li>Drive the vehicle under the following conditions and make sure that gears shift smoothly from 1GR to 4GR.               <ul style="list-style-type: none"> <li>ATF temperature: <b>20 °C {68 °F} or more</b></li> <li>Drive in the D range, 3GR</li> </ul> </li> <li>Is the PENDING CODE present?</li> </ul>	Yes	Replace the PCM, then go to the next step. (See <a href="#">PCM REMOVAL/INSTALLATION [ZJ, Z6].</a> ) (See <a href="#">PCM REMOVAL/INSTALLATION [LF].</a> )
		No	Go to the next step.

8	<b>VERIFY AFTER REPAIR PROCEDURE</b>  • Perform the "After Repair Procedure". (See <a href="#">AFTER REPAIR PROCEDURE [FN4A-EL]</a> .) • Are any DTCs present?	Yes	Go to the applicable DTC inspection.
		No	DTC troubleshooting completed.