

DTC P0751 [FN4A-EL]

B3E050219090W21

DTC P0751	Shift solenoid A stuck off
DETECTION CONDITION	<ul style="list-style-type: none"> When P0731, P0732, and P0733 are not output, and all conditions below are satisfied. <ul style="list-style-type: none"> ATF temperature 20 °C {68 °F} or more Driving in 4GR at D range Engine running Turbine speed within 225- 4,987 rpm Differential gear case (output) revolution speed 35 rpm or more Torque converter clutch (TCC) not operating Revolution ratio of forward clutch drum revolution to differential gear case revolution within 0.91-1.09 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 <p>Diagnostic support note:</p> <ul style="list-style-type: none"> This is a continuous monitor (CCM). 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. The PENDING CODE is available if the PCM detects the above malfunction condition during the first drive cycle. FREEZE FRAME DATA is available. The AT warning light illuminates. The DTC is stored in the PCM memory.
POSSIBLE CAUSE	<ul style="list-style-type: none"> ATF level low Deteriorated ATF Shift solenoid A stuck Control valve stuck PCM malfunction

Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA HAS BEEN RECORDED • 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	VERIFY RELATED REPAIR INFORMATION AVAILABILITY • 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	INSPECT ATF CONDITION • 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 AUTOMATIC TRANSAXLE FLUID)

	<ul style="list-style-type: none"> Is it normal? (See Automatic Transaxle Fluid (ATF) Condition Inspection.) 		(ATF) REPLACEMENT.
4	INSPECT ATF LEVEL <ul style="list-style-type: none"> Start the engine. Warm up the ATX. Is the ATF level within the specification? (See Automatic Transaxle Fluid (ATF) Level Inspection.) 	Yes	Go to the next step.
		No	Add ATF to the specified level, then go to Step 7. (See Automatic Transaxle Fluid (ATF) Level Inspection.)
5	INSPECT LINE PRESSURE <ul style="list-style-type: none"> Start the engine. Measure the line pressure. Specification Idle: 330-470 kPa {3.4-4.7 kgf/cm², 48-68 psi} Stall: 1,090-1,250 kPa {11.2-12.7 kgf/cm², 159-181 psi} (Z6) 1,160-1,320 kPa {11.8-13.5 kgf/cm², 168-191 psi} (LF) <ul style="list-style-type: none"> Are the line pressures within the specifications? (See Line Pressure Test.) 	Yes	Go to the next step.
		No	<ul style="list-style-type: none"> All ranges: Replace the oil pump or control valve body, then go to Step 7. Any ranges: Replace the ATX, then go to Step 7. (See AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [Z6].) (See AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [LF].) (See ATX Workshop Manual FN4A-EL.)
6	INSPECT OPERATION OF EACH VALVE AND EACH SPRING <ul style="list-style-type: none"> Turn the ignition switch to the LOCK position. Remove the control valve body. Disassemble the control valve body. Is each valve operation normal and is the return spring normal? (See CONTROL VALVE BODY REMOVAL.) (See CONTROL VALVE BODY INSTALLATION.) (See ATX Workshop Manual FN4A-EL.) 	Yes	Replace the ATX, then go to the next step. (See AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [Z6].) (See AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [LF].) (See ATX Workshop Manual FN4A-EL.)
		No	Repair or replace the shift valve and return spring, then go to the next step. (See CONTROL VALVE BODY REMOVAL.) (See CONTROL VALVE BODY INSTALLATION.) (See ATX Workshop Manual FN4A-EL.)
7	VERIFY TROUBLESHOOTING OF DTC P0751 COMPLETED <ul style="list-style-type: none"> Make sure to reconnect all the disconnected connectors. Clear the DTC from the memory using the WDS or equivalent. Start the engine. Warm up the ATX. Drive the vehicle under the following conditions and make sure that gears shift smoothly from 1GR to 4GR. <ul style="list-style-type: none"> ATF temperature: 20 °C {68 °F} or more Drive in the D range Is the PENDING CODE present? 	Yes	Replace the PCM, then go to the next step. (See PCM REMOVAL/INSTALLATION [ZJ, Z6].) (See PCM REMOVAL/INSTALLATION [LF].)
		No	Go to the next step.

8	VERIFY AFTER REPAIR PROCEDURE <ul style="list-style-type: none">• Perform the "After Repair Procedure". (See AFTER REPAIR PROCEDURE [FN4A-EL].)• Are any DTCs present?	Yes	Go to the applicable DTC inspection.
		No	DTC troubleshooting completed.