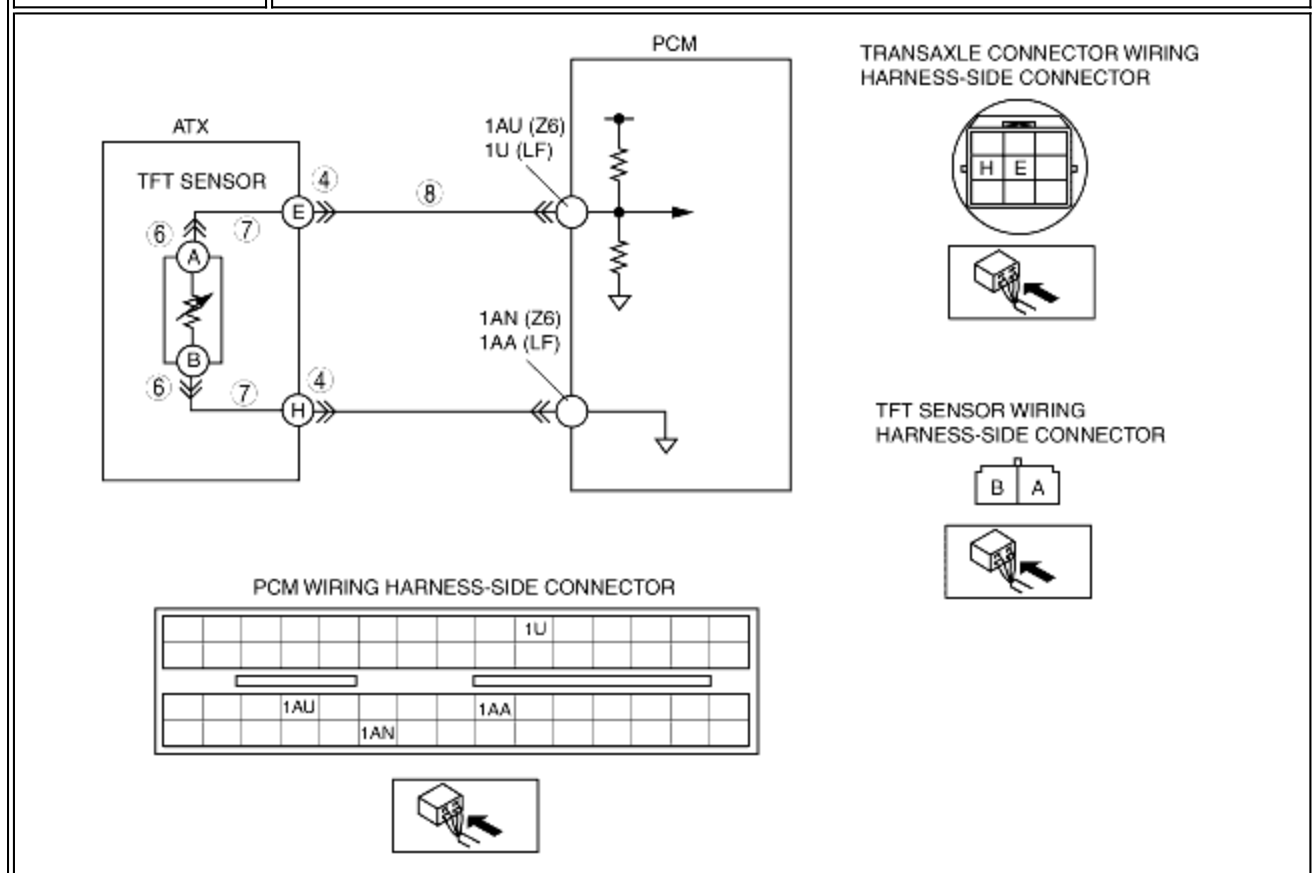


## DTC P0712 [FN4A-EL]

B3E050219090W11

DTC P0712	Transaxle fluid temperature (TFT) sensor circuit malfunction (short to ground)
<b>DETECTION CONDITION</b>	<ul style="list-style-type: none"> <li>If the PCM detects either of the following conditions for <b>150 s or more</b>, the PCM determines that the TFT sensor circuit has a malfunction. <ul style="list-style-type: none"> <li>- TFT sensor voltage <b>0.06 V or less</b> and vehicle speed <b>20 km/h {12 mph} or more</b></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 conditions during the first drive cycle.</li> <li>A PENDING CODE is not available.</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>TFT sensor malfunction</li> <li>Short to ground in wiring harness between TFT sensor terminal A and ATX terminal E</li> <li>Short to ground in wiring harness between TFT sensor terminal B and ATX terminal H</li> <li>Short to ground in wiring harness between ATX terminal E and PCM terminal 1AU (Z6)/1U (LF)</li> <li>Damaged connectors between TFT sensor and PCM</li> <li>PCM malfunction</li> </ul>



### Diagnostic procedure

STEP	INSPECTION	ACTION
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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>VERIFY CURRENT INPUT SIGNAL STATUS</b>  • Turn the ignition switch to the ON position (engine off). • Inspect the voltage at PCM terminal 1AU (Z6)/1U (LF). • Is the voltage <b>above 0.06 V</b> ?	Yes	Go to the intermittent concern troubleshooting procedure. (See <a href="#">INTERMITTENT CONCERN TROUBLESHOOTING [ZJ, Z6].</a> ) (See <a href="#">INTERMITTENT CONCERN TROUBLESHOOTING [LF].</a> )
		No	Go to the next step.
4	<b>INSPECT TERMINAL CONDITION</b>  • Turn the ignition switch to the LOCK position. • Disconnect the ATX connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Are the terminals bent?	Yes	Repair or replace the terminals, then go to Step 9. • If the terminals cannot be repaired, replace the wiring harness, then go to Step 9.
		No	Go to the next step.
5	<b>INSPECT TFT SENSOR CIRCUIT</b>  • Turn the ignition switch to the ON position (engine off). • Verify that the voltage changes to <b>4.67 V or more</b> at PCM terminal 1AU (Z6)/1U (LF) when ATX connector is disconnected. • Does the voltage change?	Yes	Go to the next step.
		No	Go to Step 8.
6	<b>INSPECT TFT SENSOR TERMINAL CONDITION</b>  • Turn the ignition switch to the LOCK position. • Remove the under cover of control valve body. • Disconnect the TFT sensor connector. • Inspect for bent TFT sensor terminals. • Are the terminals bent?	Yes	Repair terminals or replace the TFT sensor, then go to Step 9. (See <a href="#">TRANSAXLE FLUID TEMPERATURE (TFT) SENSOR REMOVAL/INSTALLATION.</a> )
		No	Go to the next step.
7	<b>INSPECT TFT SENSOR CIRCUIT FOR SHORT TO GROUND</b>  • Inspect for continuity between TFT sensor terminals (wiring harness-side) and body ground.  - A and body ground - B and body ground  • Is there continuity?	Yes	Repair or replace the wiring harness, then go to Step 9.
		No	Replace the TFT sensor, then go to Step 9. (See <a href="#">TRANSAXLE FLUID TEMPERATURE (TFT) SENSOR REMOVAL/INSTALLATION.</a> )
8	<b>INSPECT ATX CONNECTOR CIRCUIT FOR SHORT TO GROUND</b>  • Turn the ignition switch to the LOCK position. • Inspect for continuity between ATX terminal E (wiring harness-side) and body ground. • Is there continuity?	Yes	Repair or replace the wiring harness, then go to the next step.
		No	Go to the next step.
	<b>VERIFY TROUBLESHOOTING OF DTC P0712 COMPLETED</b>		

9	<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>• Drive the vehicle under the following condition for <b>150 s or more</b>. <ul style="list-style-type: none"> <li>- Vehicle speed (VSS PID) <b>20 km/h {12 mph} or more</b>.</li> </ul> </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.
10	<b>VERIFY AFTER REPAIR PROCEDURE</b> <ul style="list-style-type: none"> <li>• Perform the "After Repair Procedure". (See <a href="#">AFTER REPAIR PROCEDURE [FN4A-EL]</a>.)</li> <li>• Are any DTCs present?</li> </ul>	Yes	Go to the applicable DTC inspection.
		No	DTC troubleshooting completed.