

DTC	P0711	TRANSMISSION FLUID TEMPERATURE SENSOR "A" PERFORMANCE
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CIRCUIT DESCRIPTION

The ATF (Automatic Transmission Fluid) temperature sensor converts the fluid temperature into a resistance value which is input into the ECM.

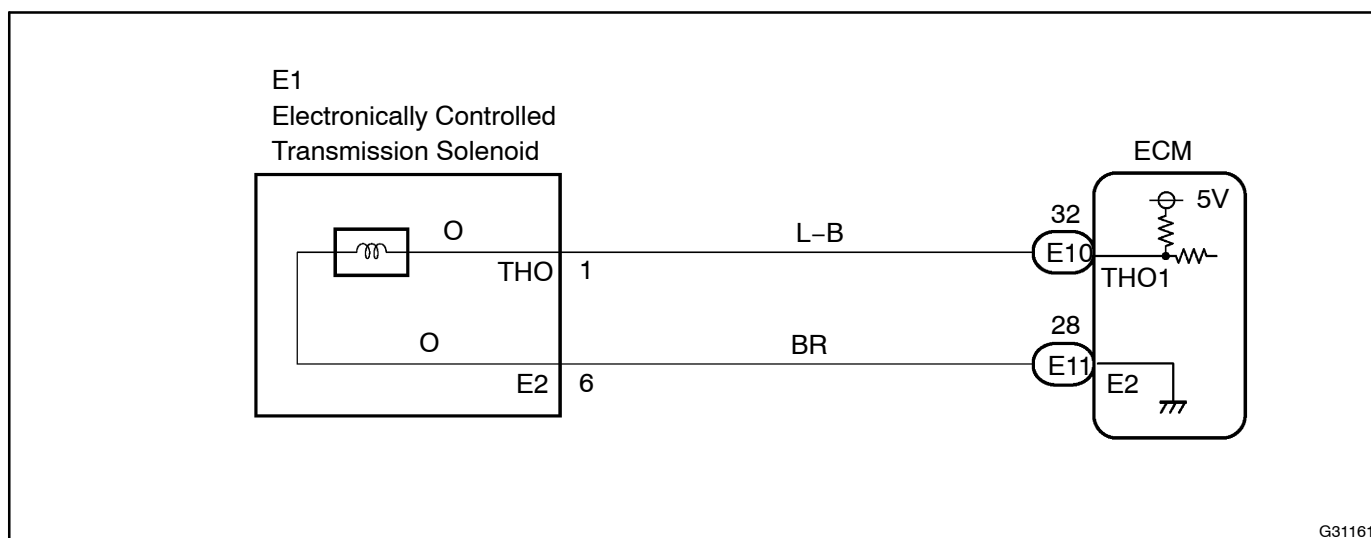
DTC No.	DTC Detection Condition	Trouble Area
P0711	(A) Both (a) and (b) are detected: (2-trip detection logic) (a) Intake air and engine coolant temperatures are more than -10°C (14°F) at engine start (b) After normal driving for over 19 min. and 8 km (5 mile) or more, ATF temp. is less than 10°C (50°F)	<ul style="list-style-type: none"> • Open or short in ATF temperature sensor circuit • Transmission wire (ATF temperature sensor) • ECM

MONITOR DESCRIPTION

The ATF temperature sensor converts the ATF temperature to an electrical resistance value. Based on the resistance, the ECM determines the ATF temperature and detects an opens or shorts in the ATF temperature circuit or a fault of the ATF temperature sensor.

After running the vehicle for a certain period, the ATF temperature should increase. If the ATF temperature is below 10°C (50°F) after running the vehicle for a certain period, the ECM interprets this as a fault, and turns on the MIL.

WIRING DIAGRAM



G31161

INSPECTION PROCEDURE

HINT:

Using the Intelligent Tester II Data List allows switch, sensor, actuator and other item values to be read without removing any parts. Reading the Data List early in troubleshooting is one way to shorten labor time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

- Warm up the engine.
- Turn the ignition switch off.
- Connect the Intelligent Tester II to the DLC3.
- Turn the ignition switch to the ON position.
- Turn on the tester.
- Select the item "Enter / Diagnosis / OBD-MOBD / Powertrain / Engine and ECT / Data List".
- Follow the instructions on the tester and read the Data List.

Item	Measurement Item/ Range (display)	Normal Condition
A/T Oil Temperature	ATF Temp. Sensor Value/ min.: -40°C (-40°F) max.: 215°C (419°F)	<ul style="list-style-type: none"> After Stall Test; Approx. 30°C (176°F) Equal to ambient temperature when cold soak

HINT:

When DTC P0712 is output and Intelligent Tester II output is 50°C (302°F) or more, there is a short circuit. When DTC P0713 is output and Intelligent Tester II output is -40°C (-40°F), there is an open circuit. Measure the resistance between terminal THO1 (THO) and body ground.

Temperature Displayed	Malfunction
-40°C (-40°F)	Open circuit
150°C (302°F) or more	Short circuit

HINT:

If a circuit related to the ATF temperature sensor becomes open, P0713 is immediately set (in 0.5 second). When P0713 is set, P0711 cannot be detected. It is not necessary to inspect the circuit when P0711 is set.

1	CHECK OTHER DTCs OUTPUT (IN ADDITION TO DTC P0711)
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- Connect the Intelligent Tester II to the DLC3.
- Turn the ignition switch to the ON position.
- Turn on the tester.
- Select the item "Powertrain / Engine and ECT / DTC / Current or Pending".
- Read the DTCs using the Intelligent Tester II.

Result:

Display (DTC output)	Proceed to
Only "P0711" is output	A
"P0711" and other DTCs	B

HINT:

If any other codes besides "P0711" are output, perform troubleshooting for those DTCs first.

B

**GO TO RELEVANT DTC CHART
(SEE PAGE 05-783)**

A

2 CHECK TRANSAXLE FLUID LEVEL (See Pub. No. RM864E, page 40-2)**OK:****Automatic transaxle fluid level is correct.****NG****ADD FLUID****OK****REPLACE TRANSMISSION WIRE (See Pub. No. RM864E, page 40-23)**