

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

The ATF temperature sensor converts the fluid temperature into a resistance value which is input into the ECM.

DTC No.	DTC Detection Condition	Trouble Area
P0711	Both (a) and (b) are detected: (2-trip detection logic) (a) After 12 sec. of engine start, temp. of atmosphere and that of engine coolant is more than -10°C (b) After normal driving for over 20 min. and 10 km, ATF temp. is less than 10°C	<ul style="list-style-type: none"> • Open or short in ATF temperature sensor circuit • 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.

After running the vehicle for a certain period, the ATF temperature should increase. When the ATF temperature is below 10°C , the ECM interprets this as a fault, turns on the MIL.

MONITOR STRATEGY

Related DTCs	P0711	ATF temperature sensor "A"/Rationality check
Required sensors/Components	ATF temperature sensor	
Frequency of operation	Continuous	
Duration	3 sec.	
MIL operation	2 driving cycles	
Sequence of operation	None	

TYPICAL ENABLING CONDITIONS

Item	Specification	
	Minimum	Maximum
The monitor will run whenever the following DTCs are not present.	See page 05-389	
(A)		
ECT	-15°C (5°F) or more	–
Time after engine start up	1,000 sec. or more	–
ATF temperature sensor circuit	Not circuit malfunction	
ECT sensor circuit	Not circuit malfunction	
IAT sensor circuit	Not circuit malfunction	
Throttle position sensor circuit	Not circuit malfunction	
(B)		
Time after engine start	1,100 sec.	
Driving distance after engine start	9 km (6 mile) or more	–
IAT (12 sec. after engine start)	-10°C (14°F) or more	–
ECT (12 sec. after engine start)	-10°C (14°F) or more	–

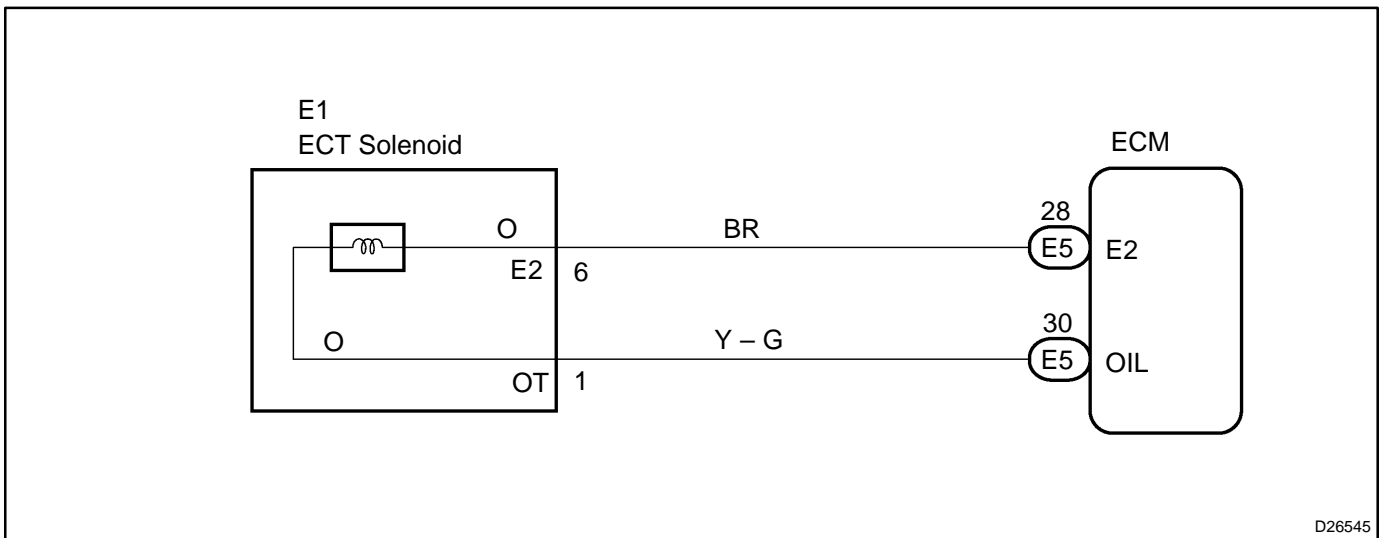
TYPICAL MALFUNCTION THRESHOLDS

Detection criteria	Threshold
Under the following conditions (A) or (B).	
(A), (B)	
ATF temperature	Less than 10 °C (50 °F)

COMPONENT OPERATING RANGE

Parameter	Standard value
ATF temperature sensor resistance	79 Ω to 156 kΩ

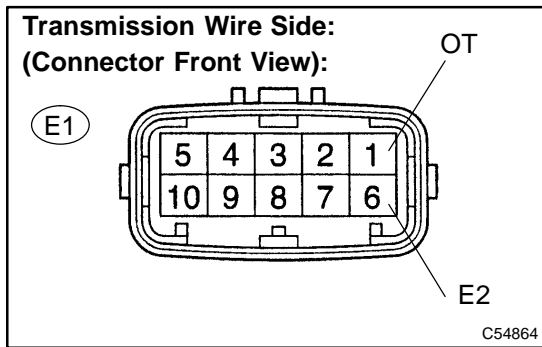
WIRING DIAGRAM



D26545

INSPECTION PROCEDURE

1 INSPECT TRANSMISSION WIRE(ATF TEMPERATURE SENSOR)



- Disconnect the transmission wire connector from the transaxle.
- Measure the resistance according to the value(s) in the table below.

Standard:

Temperature: °C (°F)	Tester Connection	Specified Condition
10 (50)	1 (OT) – 6 (E2)	6.4 kΩ
110 (230)		0.2 kΩ

- Measure the resistance according to the value(s) in the table below.

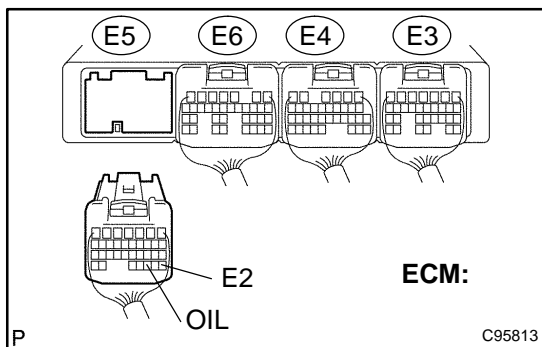
Standard (Check for short):

Tester Connection	Specified Condition
1 (OT) – Body ground	10 kΩ or higher
6 (E2) – Body ground	

NG → **REPAIR OR REPLACE TRANSMISSION WIRE**
(See page 40-29)

OK

2 CHECK HARNESS AND CONNECTOR(TRANSMISSION WIRE – ECM)



- Connect the transmission wire connector to the transaxle.
- Disconnect the ECM connectors.
- Measure the resistance according to the value(s) in the table below.

Standard:

Temperature: °C (°F)	Resistance: kΩ
10 (50)	6.4
110 (230)	0.2

- Measure the resistance according to the value(s) in the table below.

OK:

Standard (Check for short):

Tester Connection	Specified Condition
E5 – 30 (OIL) – Body ground	10 kΩ or higher
E5 – 28 (E2) – Body ground	

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**
(See page 01-30)

OK

REPLACE ECM (See page 10-17)