

DTC	38(1)	Transmission Fluid Temperature Sensor Circuit Malfunction (ATF Temperature Sensor No. 1)
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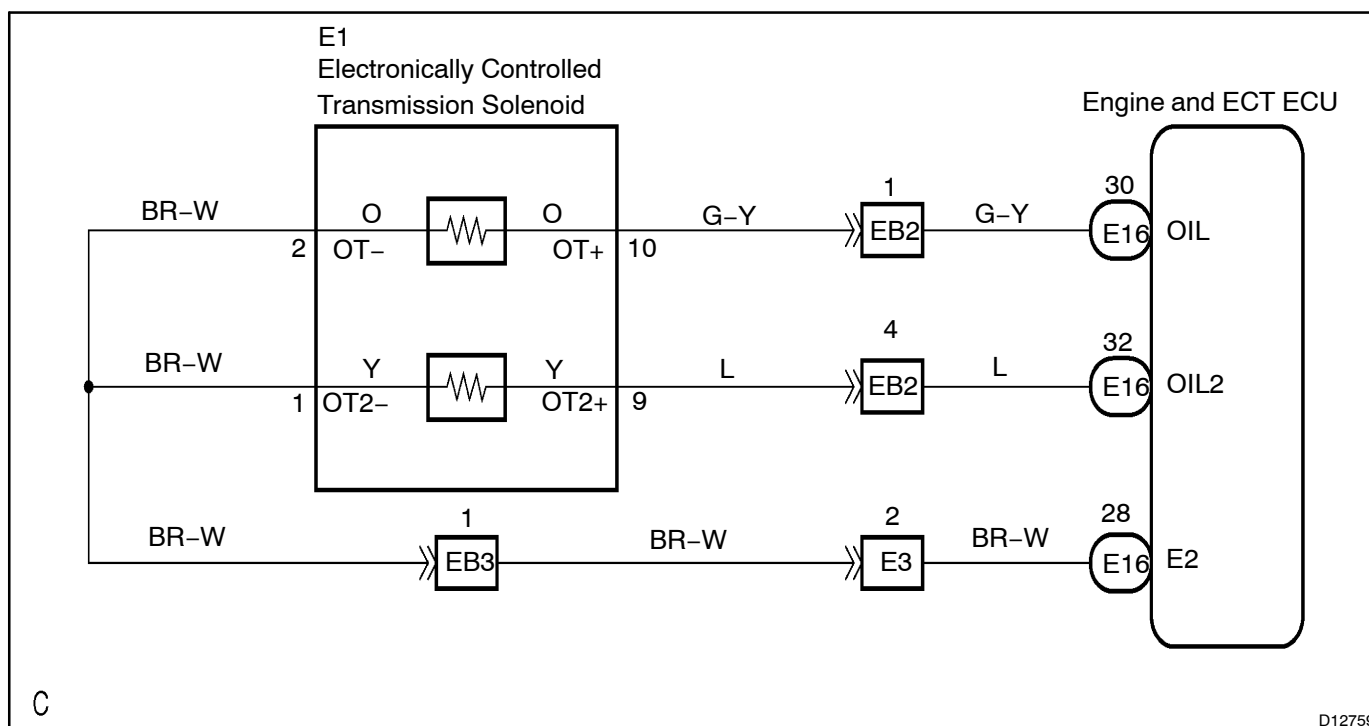
DTC	38(2)	Transmission Fluid Temperature Sensor No. 2 Circuit Malfunction (ATF Temperature Sensor No. 2)
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CIRCUIT DESCRIPTION

The ATF temperature sensor converts fluid temperature into a resistance value which is input into the Engine & ECT ECU.

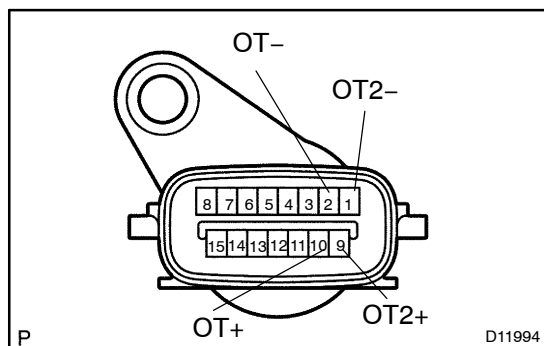
DTC No.	DTC Detecting Condition	Trouble Area
38(1)	Either (a) or (b) is detected for 0.5 sec. or more. (1-trip detection logic) (a) Temp. sensor resistance is less than 79 Ω (b) After the engine has been operating for 15 minutes or more, the resistance at the temp. sensor is more than 156 k Ω	• Open or short in ATF temperature sensor No. 1 circuit • ATF temperature sensor No. 1 • Engine & ECT ECU
38(2)	DTC is detected for 0.5 sec. or more (1-trip detection logic) ATF temperature sensor resistance is more than 156 k Ω . after started engine for 15 minutes or more	• Open in ATF temperature sensor No. 2 circuit • ATF temperature sensor No. 2 • Engine and ECT ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check transmission wire.

**PREPARATION:**

Disconnect the transmission wire connector from the transmission.

CHECK:

- (a) Measure the resistance between terminals OT+ and OT-.
- (b) Measure the resistance between terminals OT2+ and OT2-.

OK:

79 Ω – 156 k Ω

CHECK:

- (a) Measure resistance between terminals OT+ and OT- of the transmission wire connector and body ground.
- (b) Measure resistance between terminals OT2+ and OT2- of the transmission wire connector and body ground.

OK:

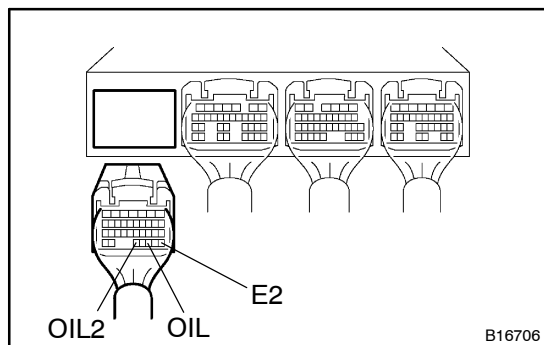
Resistance: 1 M Ω or higher

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Replace the transmission wire (ATF temperature sensor).

OK

- 2 Measure resistance between terminal OIL, OIL2 and E2 of Engine and ECT ECU connector.**

**PREPARATION:**

- (a) Connect the transmission wire connector.
- (b) Disconnect the connector of the Engine and ECT ECU.

CHECK:

- (a) Measure the resistance between terminals OIL and E2.
- (b) Measure the resistance between terminals OIL2 and E2.

OK:

79 Ω – 156 k Ω

CHECK:

Measure resistance between terminals OIL, OIL2 and E2 of the Engine and ECT ECU connector and body ground.

OK:

Resistance: 1 M Ω or higher

NG

**Repair or replace the harness or connector
(See page IN-38).**

OK

**Check and replace the Engine and ECT ECU
(See page IN-38).**