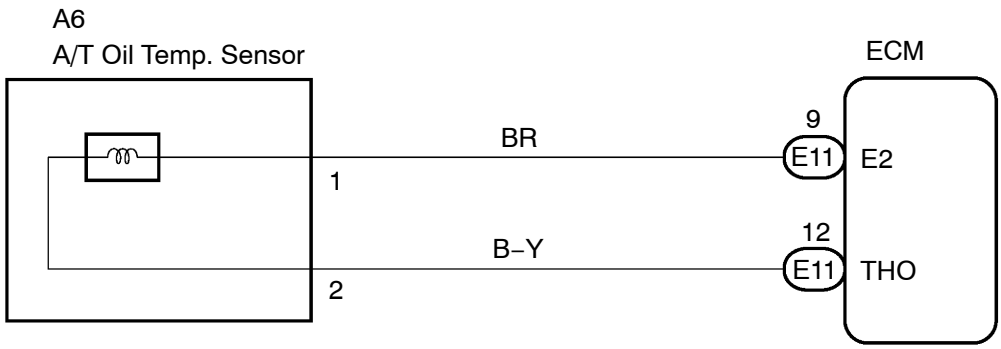
DTC	38	TRANSMISSION FLUID TEMPERATURE SENSOR CIRCUIT MALFUNCTION

CIRCUIT DESCRIPTION

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

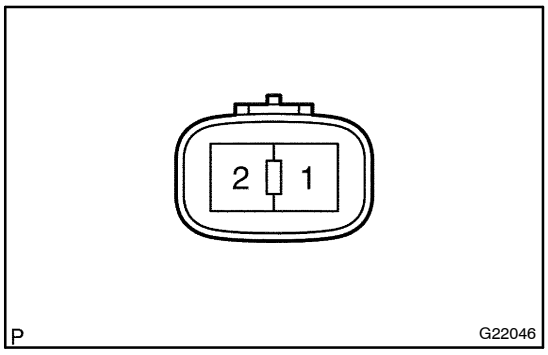
DTC No.	DTC Detection Condition	Trouble Area
38	Either (a) or (b) is detected for 0.5 sec. or more: (1 trip detection logic) (e) Temp. sensor resistance is less than 79 Ω (f) After engine has been operating for 15 min. or more, resistance at temp. sensor is more than 156 kΩ	• Open or short in ATF temp. sensor • ATF temp. sensor • ECM

WIRING DIAGRAM



INSPECTION PROCEDURE

1	INSPECT TEMPERATURE SENSOR(ATF TEMPERATURE SENSOR)



(a) Disconnect the ATF temperature sensor connector from the transmission.

(b) Measure the resistance between the sensor connector terminals.

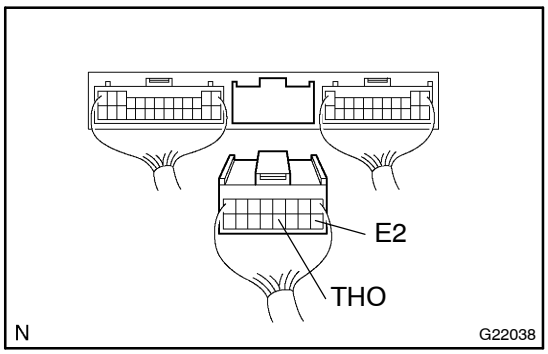
OK:

Resistance: 79 Ω – 156 KΩ

NG → **REPLACE TEMPERATURE SENSOR(See page 40–48)**

OK

2	CHECK HARNESS AND CONNECTOR (ATF TEMPERATURE SENSOR – ECM)



(a) Connect the ATF temperature sensor connector to the transmission.

(b) Disconnect the ECM connector.

(c) Measure resistance between terminals THO and E2.

OK:

Resistance: 79 Ω – 156 kΩ

(d) Measure resistance between terminals THO and E2 of the ECM connector and body ground.

OK:

Resistance: 1 MΩ or higher

NG	REPAIR OR REPLACE HARNESS OR CONNECTOR (See page 01–36)

OK

CHECK AND REPLACE ECM (See page 01–36)