DTC	38(1)	TRANSMISSION FLUID TEMPERATURE SENSOR CIRCUIT MALFUNCTION

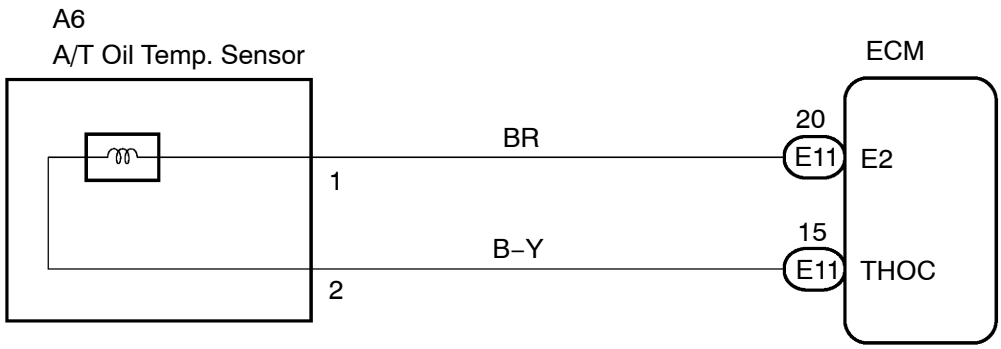
CIRCUIT DESCRIPTION

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(1)	Either (a) or (b) is detected for 0.6 sec. or more: (1 trip detection logic) (a) Temp. sensor resistance is less than 79 Ω (b) Engine coolant temp. is more than 70 °C (158 °F), resistance at ATF temp. sensor is more than 156 kΩ	• Open or short in ATF temp. sensor • ATF temp. sensor • ECM

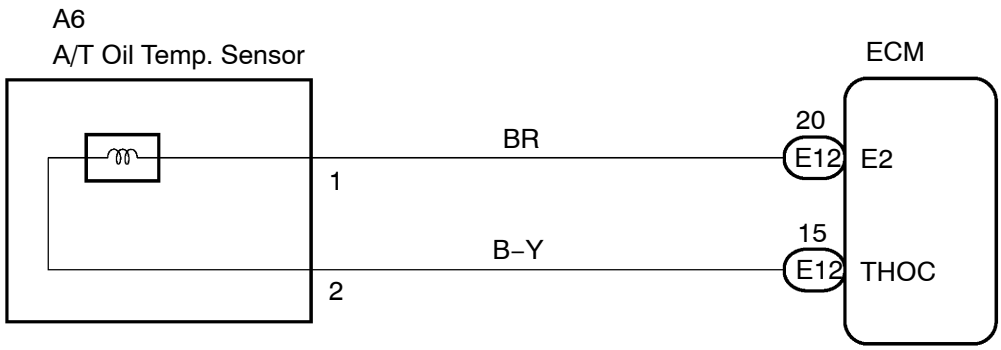
WIRING DIAGRAM

1KZ–TE:



D26545

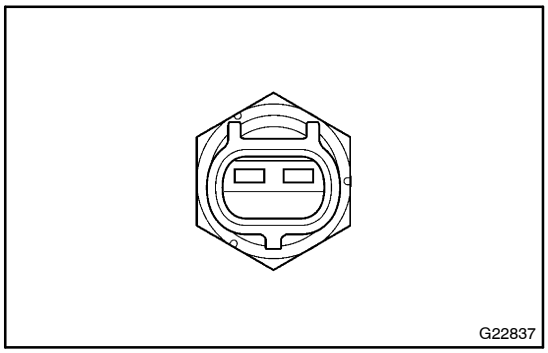
1KD–FTV:



D26545

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:

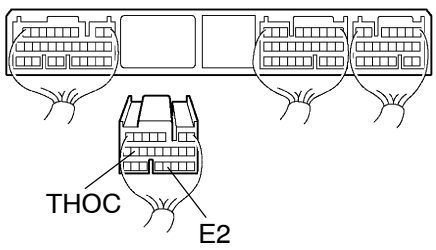
Resistance: 79 Ω – 156 kΩ

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

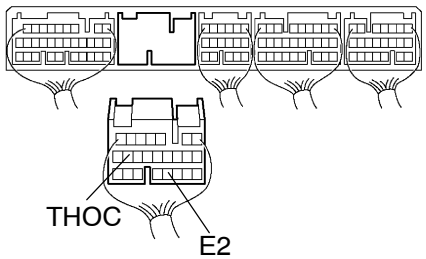
OK

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

1KZ–TE:



1KD–FTV:



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

(b) Disconnect the ECM connector.

(c) Measure resistance between terminals THOC and E2.

OK:

Resistance: 79 Ω – 156 kΩ

(d) Measure resistance between terminals THOC 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)