DTC	P0710/38	TRANSMISSION FLUID TEMPERATURE SENSOR ”A” CIRCUIT

DTC	P0712/38	TRANSMISSION FLUID TEMPERATURE SENSOR ”A” CIRCUIT LOW INPUT

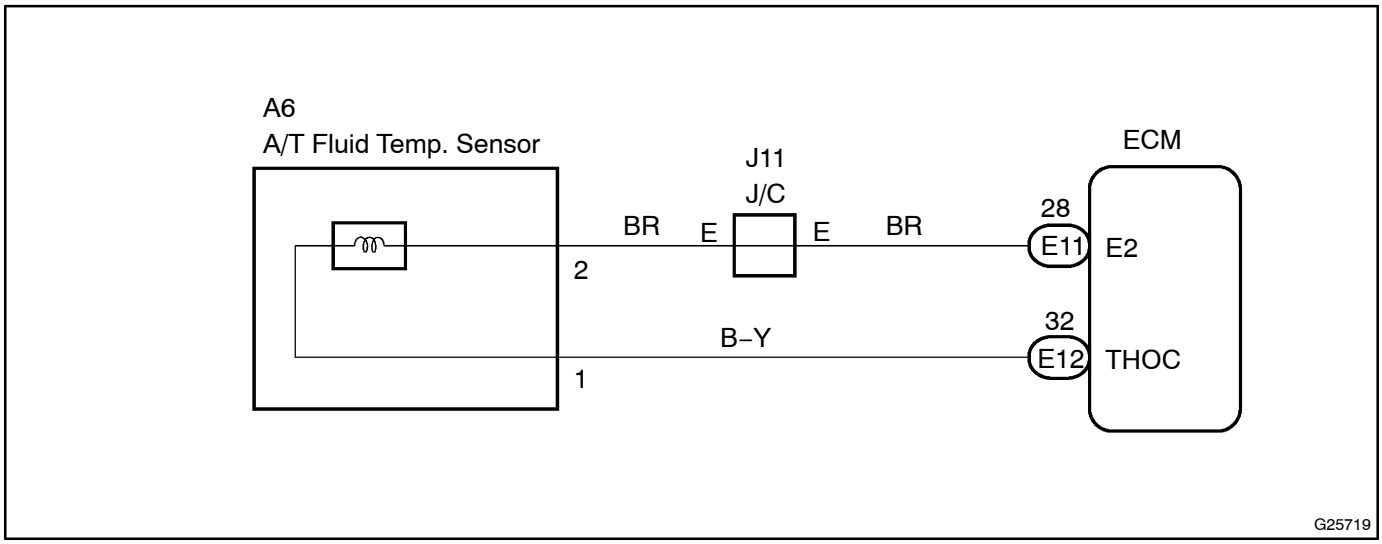
DTC	P0713/38	TRANSMISSION FLUID TEMPERATURE SENSOR ”A” CIRCUIT HIGH INPUT

CIRCUIT DESCRIPTION

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

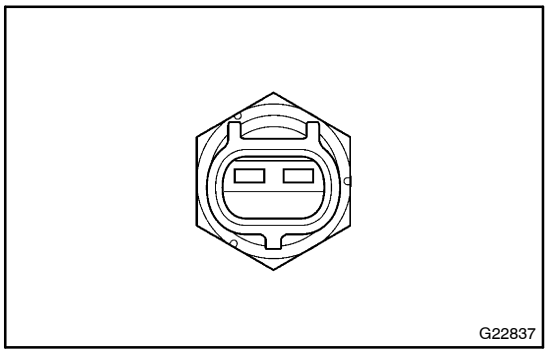
DTC No.	DTC Detecting Condition	Trouble Area
P0710/38	(a) and (b) is detected momentary within 0.5 sec. when neither P0712 or P0713 is not detected (1–trip detection logic) (a) ATF temperature sensor resistance is less than 79 Ω. (b) ATF temperature sensor resistance is more than 156 kΩ. HINT: Within 0.5 sec. the malfunction switches from (a) to (b) or from (b) to (a)	• Open or short in ATF temperature sensor circuit • ATF temperature sensor • ECM
P0712/38	ATF temperature sensor resistance is less than 79 Ω. for 0.5 sec. or more (1–trip detection logic)	
P0713/38	DTC is detected for 0.5 sec. or more (1–trip detection logic) ATF temperature sensor resistance is more than 156 kΩ. after started engine for 15 minutes or more	

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.

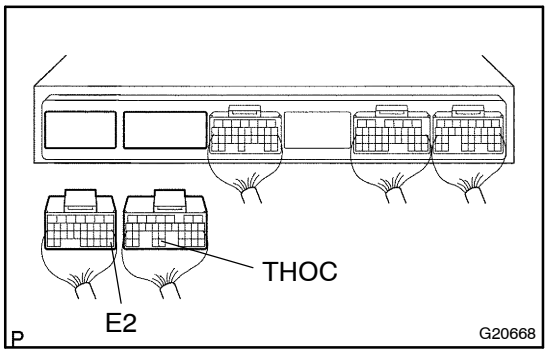
OK:

79 Ω – 156 kΩ

NG → **REPLACE TEMPERATURE SENSOR (See page 40–15)**

OK

2 CHECK HARNESS AND CONNECTOR (ATF TEMPERATURE – ECM)



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

(b) Disconnect the ECM connector.

(c) Measure resistance between terminals THOC and E2.

OK:

79 Ω – 156 kΩ

(d) Check the continuity between the wire harness side connectors.

OK:

Standard (Check for short):

Symbols	Specified condition
THOC ⇔ Body ground	No continuity
E2 ⇔ Body ground	

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (See page 01–35)**

OK

CHECK AND REPLACE ECM (See page 01–35)