

<b>DTC</b>	<b>P0710</b>	<b>Transmission Fluid Temperature Sensor "A" Circuit</b>
------------	--------------	--

<b>DTC</b>	<b>P0712</b>	<b>Transmission Fluid Temperature Sensor "A" Circuit Low Input (Onry for 5VZ-FE)</b>
------------	--------------	--

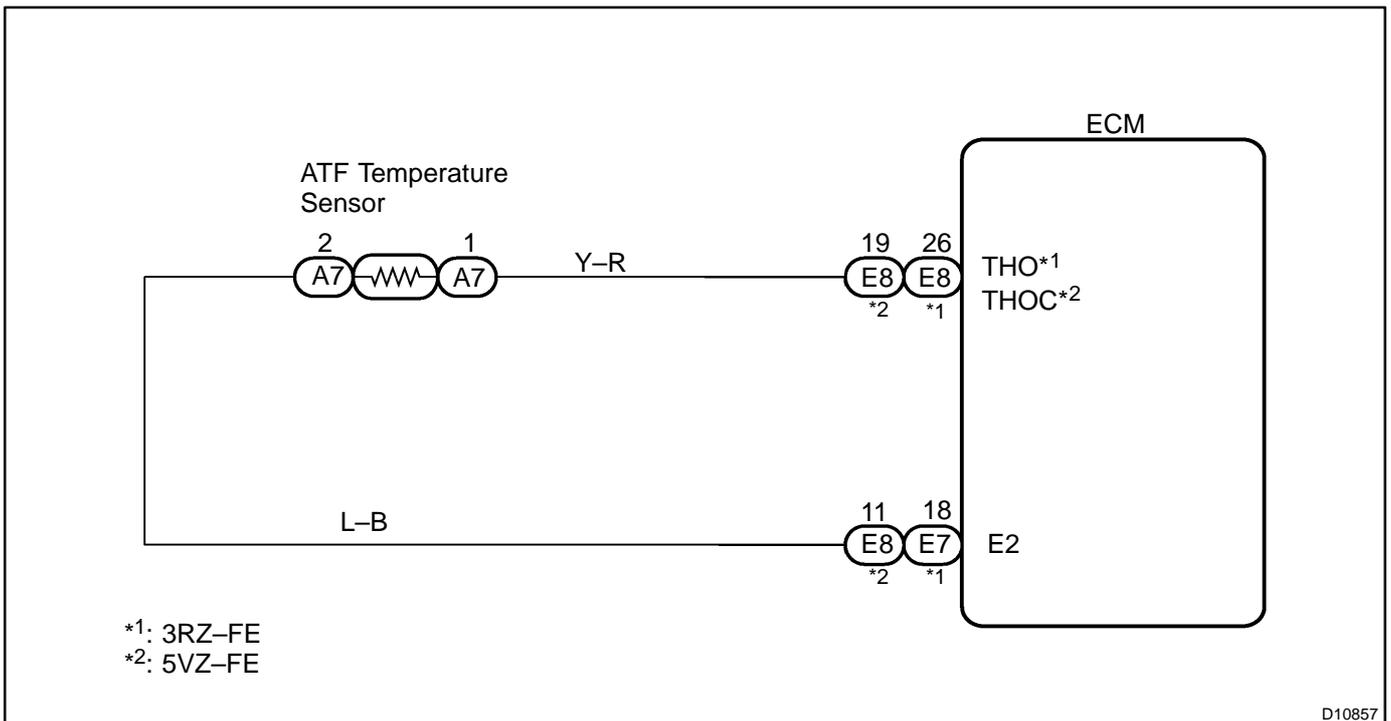
<b>DTC</b>	<b>P0713</b>	<b>Transmission Fluid Temperature Sensor "A" Circuit High Input (Onry for 5VZ-FE)</b>
------------	--------------	---

**CIRCUIT DESCRIPTION**

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

DTC No.	DTC Detecting Condition	Trouble Area
P0710	Either (a) or (b) is detected momentary within 0.5 sec. when neither P0712 or P0713 is not detected (a) ATF temperature sensor resistance is less than 79 Ω. (b) ATF temperature sensor resistance is more than 156 kΩ.	<ul style="list-style-type: none"> <li>• Open or short in ATF temperature sensor circuit</li> <li>• ATF temperature sensor</li> <li>• ECM</li> </ul>
P0712	ATF temperature sensor resistance is less than 79 Ω. for 0.5 sec. or more	
P0713	ATF temperature sensor resistance is more than 156 kΩ. for 0.5 sec. or more	

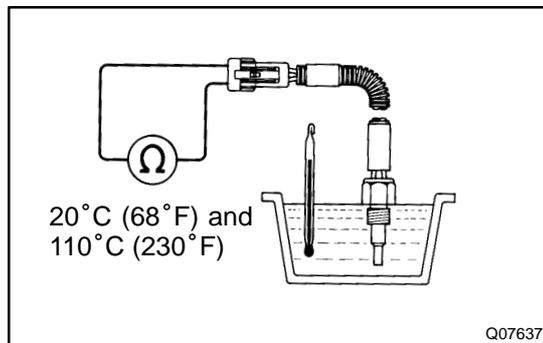
**WIRING DIAGRAM**



D10857

## INSPECTION PROCEDURE

### 1 Check ATF temperature sensor.



#### **PREPARATION:**

Remove the ATF temperature sensor.

#### **CHECK:**

Measure resistance between terminals of ATF temperature sensor at 20 °C (68 °F) and 110 °C (230 °F).

#### **OK:**

**Resistance (Approx.):**

20 °C (68 °F): 12.1 kΩ

110 °C (230 °F): 790 Ω

NG

Replace the ATF temperature sensor.

OK

### 2 Check harness and connector between ATF temperature sensor and ECM (See page [IN-28](#)).

NG

Repair or replace the harness or connector.

OK

Check and replace the ECM  
(See page [IN-28](#)).