

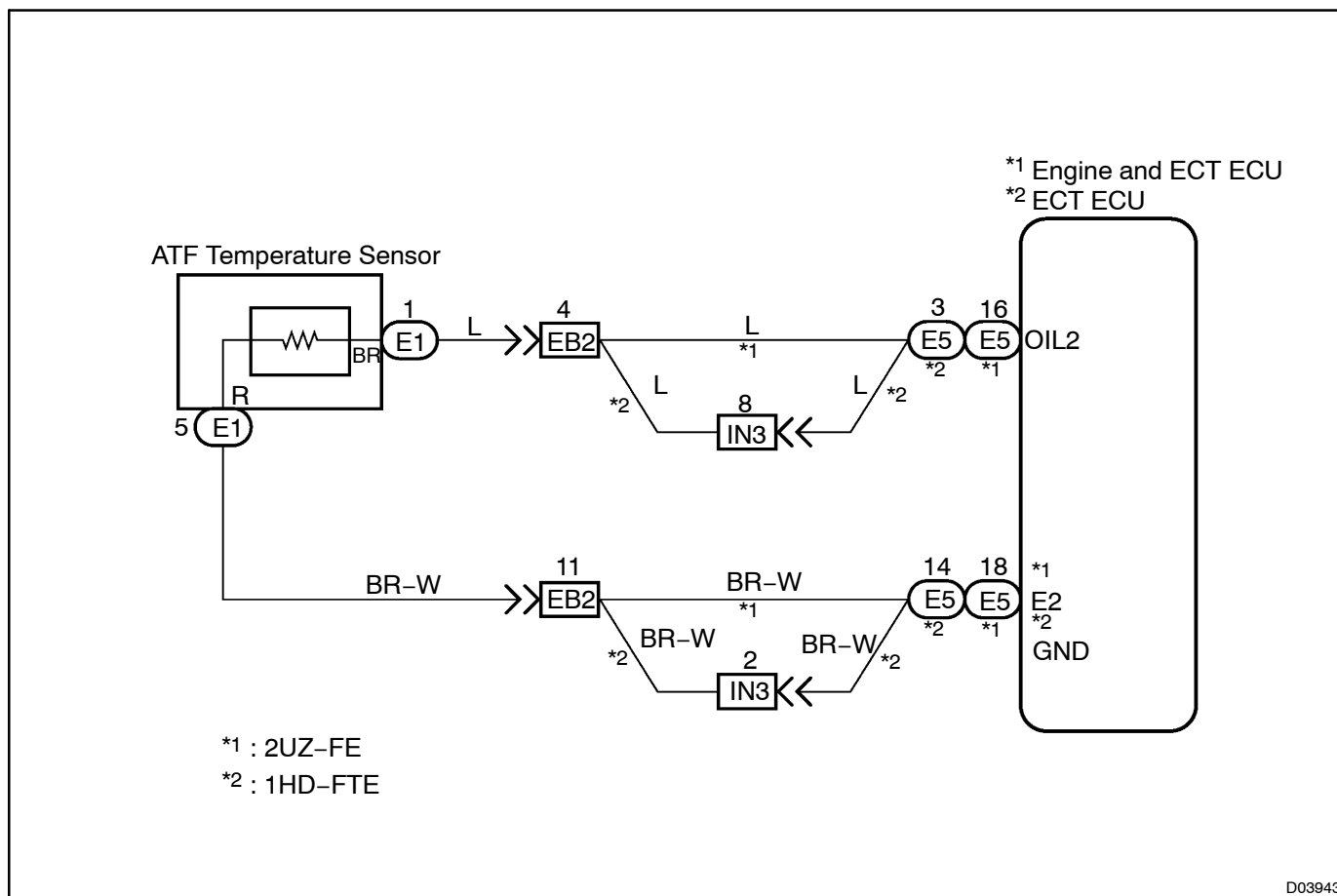
|            |                 |                                                                                   |
|------------|-----------------|-----------------------------------------------------------------------------------|
| <b>DTC</b> | <b>P0710/38</b> | <b>Transmission Fluid Temperature Sensor Malfunction (ATF Temperature Sensor)</b> |
|------------|-----------------|-----------------------------------------------------------------------------------|

## CIRCUIT DESCRIPTION

The ATF temperature sensor converts fluid temperature into a resistance value which is input into the Engine and ECT ECU (2UZ-FE, 1FZ-FE) or ECT ECU (1HZ, 1HD-T, 1HD-FTE).

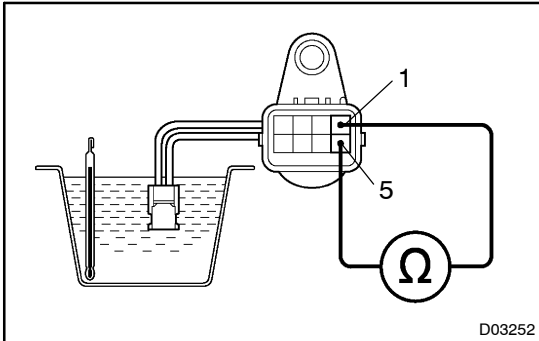
| DTC No.  | DTC Detecting Condition                                                                                                                                                                                                                                                                                              | Trouble Area                                                                                                                                                                                                          |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| P0710/38 | <p>Either (a) or (b) is detected for 0.5 sec. or more.<br/>(2-trip detection logic)</p> <p>(a) Temperature sensor resistance is less than 79 <math>\Omega</math></p> <p>(b) After the engine has been operating for 15 minutes or more, the resistance at the temp. sensor is more than 156 k<math>\Omega</math></p> | <ul style="list-style-type: none"> <li>• Open or short in ATF temperature sensor</li> <li>• ATF temperature sensor</li> <li>• Engine and ECT ECU (2UZ-FE, 1FZ-FE)</li> <li>• ECT ECU (1HZ, 1HD-T, 1HD-FTE)</li> </ul> |

## WIRING DIAGRAM



## INSPECTION PROCEDURE

## 1 Check ATF temperature sensor.

**PREPARATION:**

Remove the ATF temperature sensor ([See page AT-8](#)).

**CHECK:**

Measure resistance between terminals 1 and 5 of solenoid connector at 10 °C (50 °F) and 110 °C (230 °F).

**OK:**

**Resistance (Approx.):**

10 °C (50 °F): 6.5 kΩ

110 °C (230 °F): 200 – 300 Ω

NG

Replace the ATF temperature sensor.

OK

2 Check harness and connector between ATF temperature sensor and Engine and ECT ECU or ECT ECU ([See page IN-35](#)).

NG

Repair or replace the harness or connector.

OK

Check and replace the Engine and ECT ECU or ECT ECU ([See page IN-35](#)).