

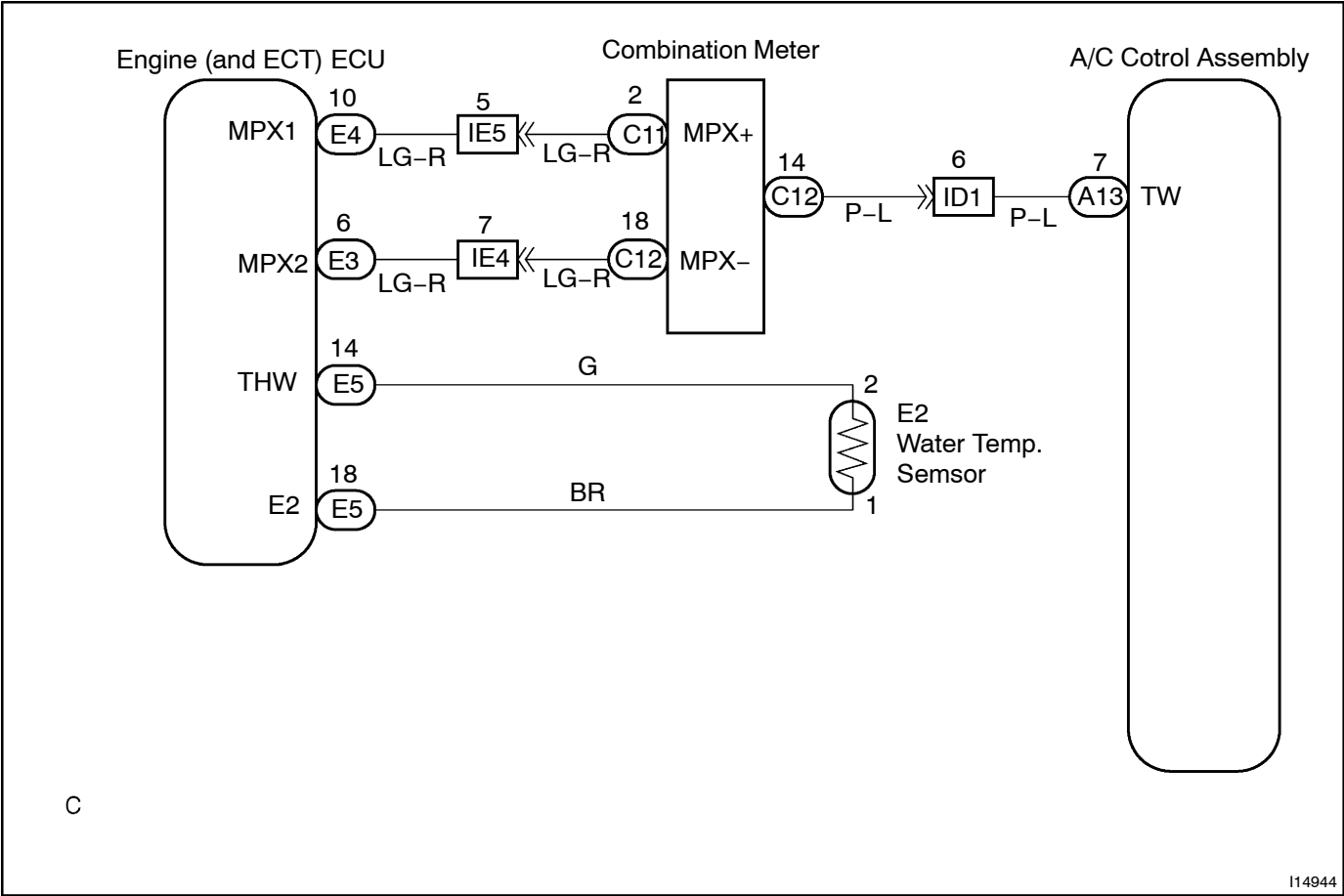
DTC	14	Water Temperature Sensor Circuit
-----	----	----------------------------------

CIRCUIT DESCRIPTION

This sensor detects the water temperature and sends the appropriate signals to the A/C control assembly. These signals are used for warm up control when the engine is cold.

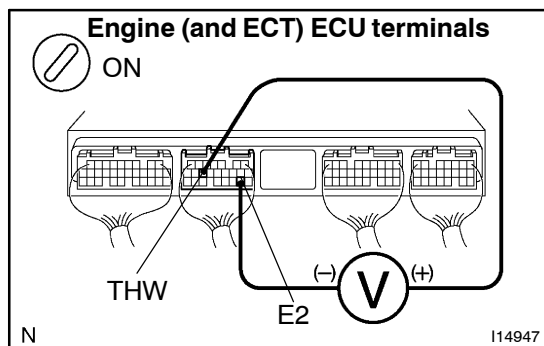
DTC No.	Detection Item	Trouble Area
14	Open or short in engine coolant temperature sensor circuit.	• Water temperature sensor • Harness or connector between water temp. sensor and engine (and ECT) ECU • Harness or connector between engine (and ECT) ECU and combination meter • Harness or connector combination meter and A/C control assembly • A/C control assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check voltage between terminals THW and E2 of engine (and ECT) ECU.

**PREPARATION:**

- (a) Remove the engine (and ECT) ECU cover.
- (b) Turn ignition switch ON.

CHECK:

Measure voltage between terminals THW and E2 of engine (and ECT) ECU connector.

OK:

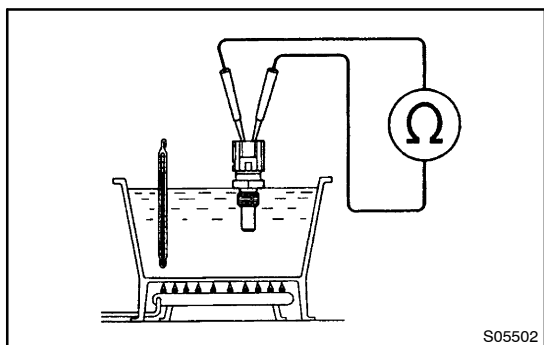
Water temperature	Voltage
20°C (68°F)	0.5 – 3.4 V
60°C (140°F)	0.2 – 1.0 V

OK

Go to step 4.

NG

2 Check water temp. sensor.

**PREPARATION:**

Disconnect the water temp. sensor connector.

CHECK:

Measure resistance between terminals.

OK:

Resistance is within acceptable zone on chart.

Water temperature	Resistance
20°C (68°F)	2 – 3 kΩ
80°C (176°F)	0.2 – 0.4 kΩ

NG

Replace water temp. sensor.

OK

- 3** Check for open and short in harness and connector between engine (and ECT) ECU and water temp. sensor ([See page IN-20](#)).

NG

Repair or replace harness or connector.

OK

Check and replace engine ECU.

- 4** Check for open and short in harness and connector between engine (and ECT) ECU and combination meter ([See page IN-20](#)).

NG

Repair or replace harness or connector.

OK

- 5** Check harness and connector between combination meter and A/C control assembly ([See page IN-20](#)).

NG

Repair or replace harness or connector.

OK

Check and replace A/C control assembly and combination meter.