

CIRCUIT DESCRIPTION

DTC No.	Detection Item	Trouble Area
14	Open or short in engine coolant temperature sensor circuit.	• Engine coolant temperature sensor. • Harness or connector between engine coolant temperature sensor and ECM. • Harness or connector between A/C amplifier and ECM. • A/C amplifier. • ECM

Wiring diagram for the A/C Amplifier:

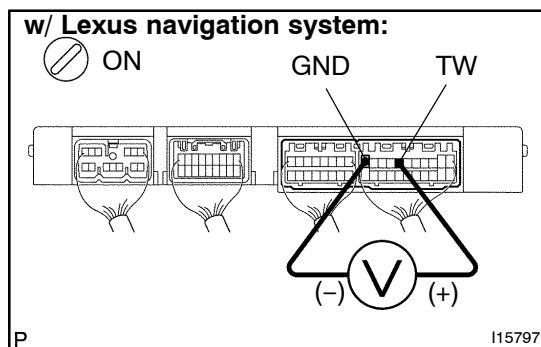
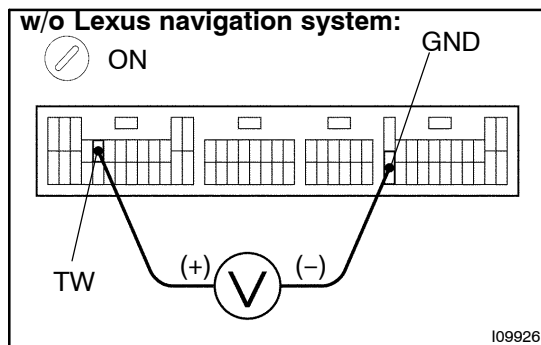
- Engine Coolant Temp. Sensor (E7):**
 - Terminal 14 (E7) connected to ECM via G-B wire.
 - Terminal 18 (E7) connected to ECM via BR-W wire.
- ECM (E7):**
 - THW terminal connected to THWO terminal.
- THWO:**
 - Terminal 20 (E10) connected to Y-B wire.
- Y-B:**
 - Terminal 7 (C26) connected to C8 terminal.
- C8:**
 - Terminal 9 (C8) connected to TW terminal.
- TW:**
 - Terminal 9 (C8) connected to A/C Amplifier.

Legend:

- (*1): w/o Lexus Navigation System
- (*2): w/ Lexus Navigation System

INSPECTION PROCEDURE

1	Check voltage between terminals TW and GND of A/C amplifier connector.
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**PREPARATION:**

Remove A/C amplifier with connectors still connected.

CHECK:

- (a) Turn ignition switch to ON.
- (b) Measure voltage between terminals TW and GND of A/C amplifier connector at each temperature.

OK:**Voltage :**

at 25°C (77°F) : 1.8 – 2.2 V

at 40°C (104°F) : 1.2 – 1.6 V

HINT:

As the temperature increases, the voltage decreases.

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Go to step 3.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page [DI-937](#)). However, if DTC 14 is displayed, check and replace A/C amplifier.

2	Check engine coolant temperature sensor circuit (See page DI-32).
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Replace engine coolant temperature sensor.

OK

3	Check harness and connector between A/C amplifier and ECM (See page IN-34).
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Repair or replace harness or connector.

OK

Check and replace A/C amplifier.