

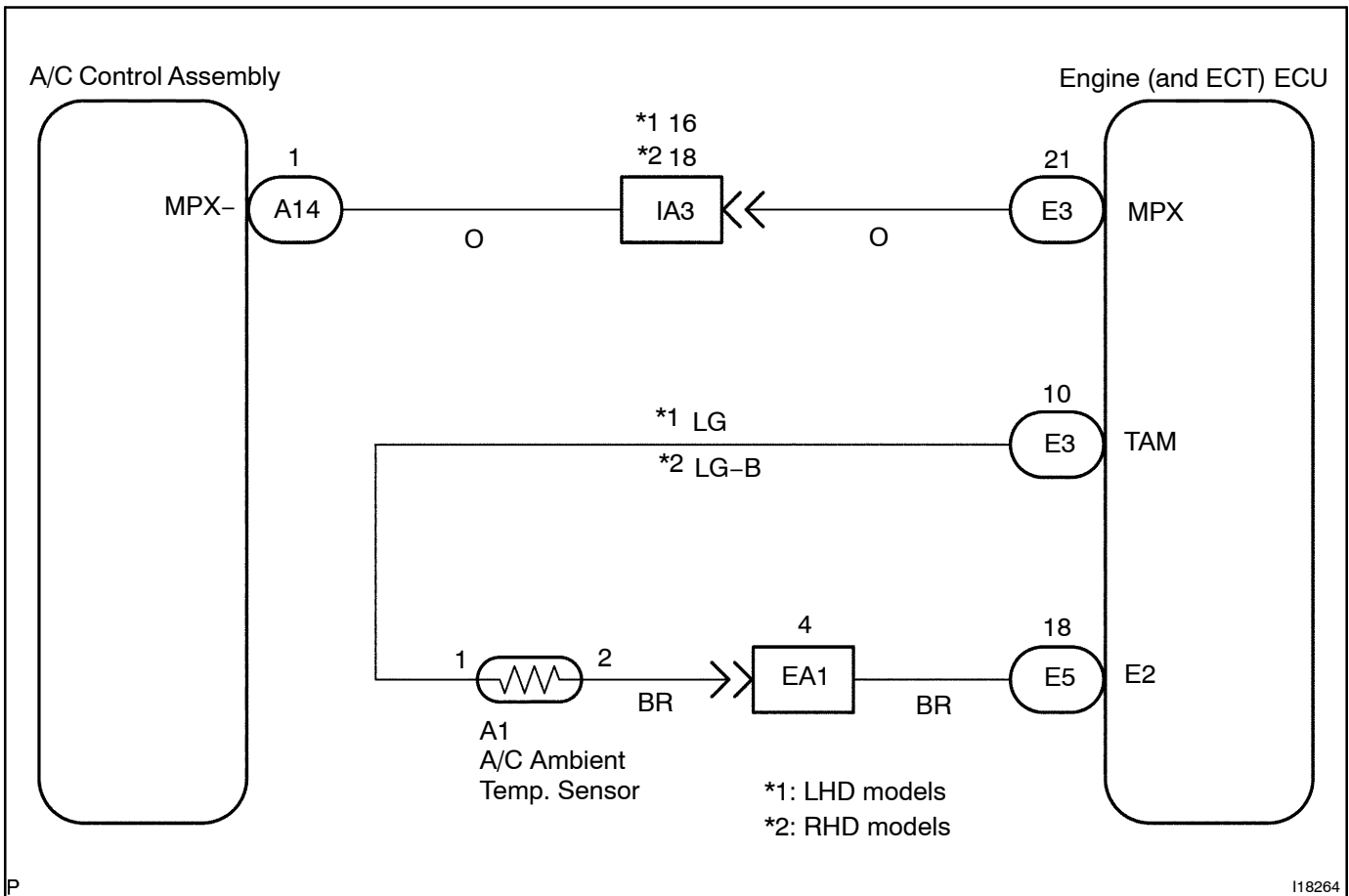
<b>DTC</b>	<b>B1412</b>	<b>Ambient Temperature Sensor Circuit</b>
------------	--------------	---

**CIRCUIT DESCRIPTION**

This sensor detects the ambient temperature and sends the appropriate signals to the A/C control assembly.

DTC No.	Detection Item	Trouble Area
B1412	Open or short in ambient temperature sensor circuit.	<ul style="list-style-type: none"> <li>• Ambient temperature sensor.</li> <li>• Harness or connector between ambient temperature sensor and engine (and ECT) ECU</li> <li>• Harness or connector between engine (and ECT) ECU and A/C control assembly</li> <li>• Engine (and ECT) ECU</li> <li>• A/C control assembly</li> </ul>

**WIRING DIAGRAM**



## INSPECTION PROCEDURE

**HINT:**

In case of using the hand-held tester, start the inspection step 1 and in case of not using the hand-held tester, start from step 2.

<b>1</b>	<b>Check ambient temp. sensor using hand-held tester.</b>
----------	---

**PREPARATION:**

Connect the hand-held tester to the DLC3.

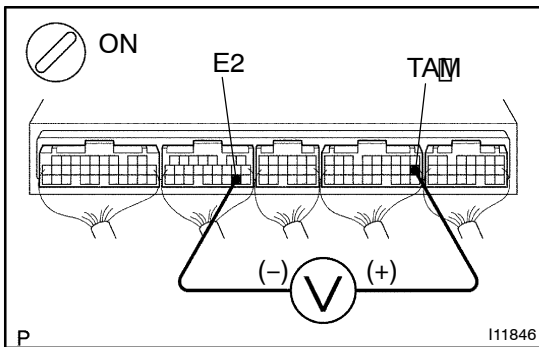
**CHECK:**

Check the ambient temp. sensor using DATA LIST.

<b>OK</b>	<b>Check and replace engine (and ECT) ECU.</b>
-----------	--

<b>NG</b>
-----------

<b>2</b>	<b>Check voltage between terminals TAM and E2 of engine (and ECT) ECU.</b>
----------	--



**PREPARATION:**

Remove engine (and ECT) ECU with connectors still connected.

**CHECK:**

- (a) Turn ignition switch to ON.
- (b) Measure voltage between terminals TAM and E2 of engine (and ECT) ECU connector at each temperature.

**OK:**

**Voltage :**

at 25°C (77°F) : 1.35 – 1.75 V

at 40°C (104°F) : 0.85 – 1.25 V

**HINT:**

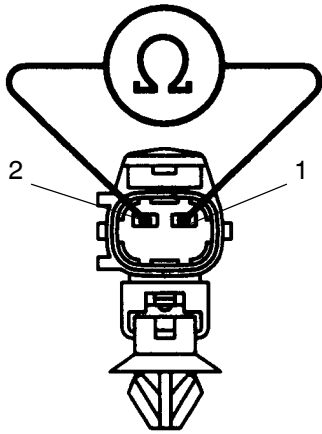
As the temperature increases, the voltage decreases.

<b>NG</b>	<b>Go to step 3.</b>
-----------	----------------------

<b>OK</b>
-----------

<p><b>Proceed to next circuit inspection shown on problem symptoms table (See page DI-59). However, if DTC B1412 is displayed, check and replace engine (and ECT) ECU and A/C control assembly.</b></p>
---

### 3 Check ambient temperature sensor.



105262

#### PREPARATION:

Disconnect ambient temperature sensor (See Pub. No. RM684E on page AC-67).

#### CHECK:

Measure resistance between terminals 1 and 2 of ambient temperature sensor connector at each temperature.

#### OK:

##### Resistance

at 25°C (77°F) : 1.6 – 1.8 kΩ

at 50°C (122°F) : 0.5 – 0.7 kΩ

#### HINT:

As the temperature increases, the resistance decreases.

#### NOTICE:

**When installing the ambient temperature sensor, be sure to connect the sensor connector before connecting the battery.**

NG

Replace ambient temperature sensor.

OK

### 4 Check harness and connector between engine (and ECT) ECU and ambient temperature sensor (See page IN-31).

NG

Repair or replace harness or connector.

OK

### 5 Check harness and connector between engine (and ECT) ECU and A/C control assembly (See page IN-31).

NG

Repair or replace harness or connector.

OK

**Check and replace engine (and ECT) ECU or A/C control assembly.**