

<b>DTC</b>	<b>22</b>	<b>Compressor Lock Sensor Circuit</b>
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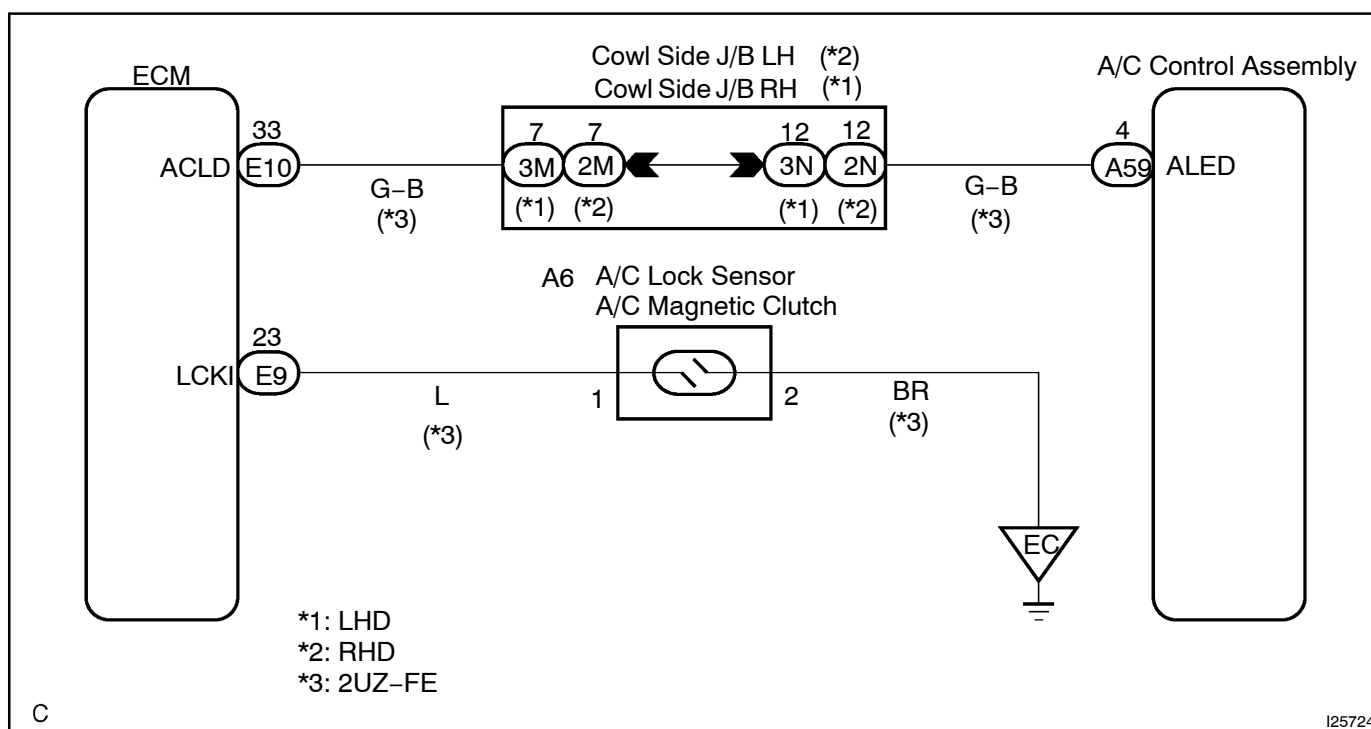
## CIRCUIT DESCRIPTION

This sensor sends 1 pulse per engine revolution to the engine (and ECT) ECU.

If the number ratio of the compressor speed divided by the engine speed is smaller than a predetermined value, the engine (and ECT) ECU turns the compressor OFF. And, the indicator flashes at about 1 second intervals.

DTC No.	Detection Item	Trouble Area
22	<p>All conditions below are detected for 3 sec. or more</p> <p>(a) Engine speed : 450 rpm or more</p> <p>(b) Ratio between engine and compressor speed deviates 20 % or more in comparison to normal operation.</p>	<ul style="list-style-type: none"> <li>• Compressor drive belt</li> <li>• Compressor lock sensor</li> <li>• Compressor</li> <li>• Engine (and ECT) ECU</li> <li>• Harness or connector between compressor lock sensor and engine (and ECT) ECU</li> <li>• Harness or connector between engine (and ECT) ECU and A/C amplifier</li> <li>• A/C amplifier</li> </ul>

## WIRING DIAGRAM



## INSPECTION PROCEDURE

## 1 Check compressor.

**PREPARATION:**

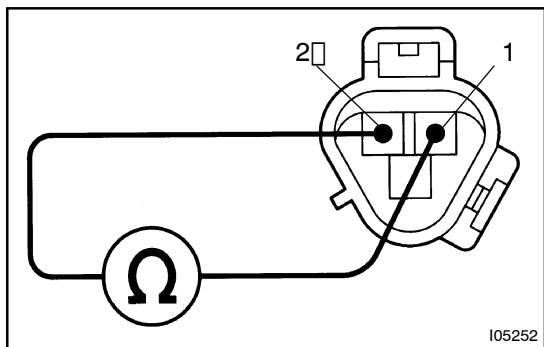
- (a) Check compressor drive belt tension.
- (b) Check if the compressor does not lock during operation with engine started and blower switch and A/C switch ON.

NG

Adjust drive belt tension or repair compressor.

OK

## 2 Check compressor lock sensor.

**PREPARATION:**

Disconnect compressor connector.

**CHECK:**

Measure resistance between terminals 1 and 2 of compressor lock sensor connector.

**OK:**

Resistance: 65 – 125 Ω at 20°C (68°F)

NG

Replace compressor.

OK

## 3 Check harness and connector between compressor lock sensor and engine (and ECU) (See page IN-27).

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Repair or replace harness or connector.

OK

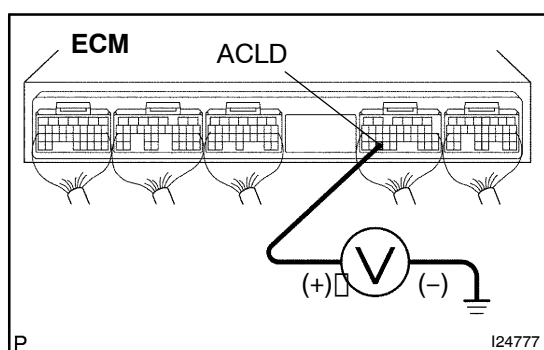
4 Check harness and connector between engine (and ECT) ECU and A/C amplifier (See page IN-27).

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Repair or replace harness or connector.

OK

5 Check voltage between terminals ACLD of engine (and ECT) ECU and body ground.



**PREPARATION:**

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

**CHECK:**

- (a) Turn ignition switch to ON.
- (b) A/C switch ON.
- (c) Measure voltage between terminals ACLD of engine (and ECT) ECU and body ground.

**OK:**

Voltage: Below 1.0 V

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Check and replace engine (and ECT) ECU.

OK

Check and replace A/C amplifier.