DI8BS–01

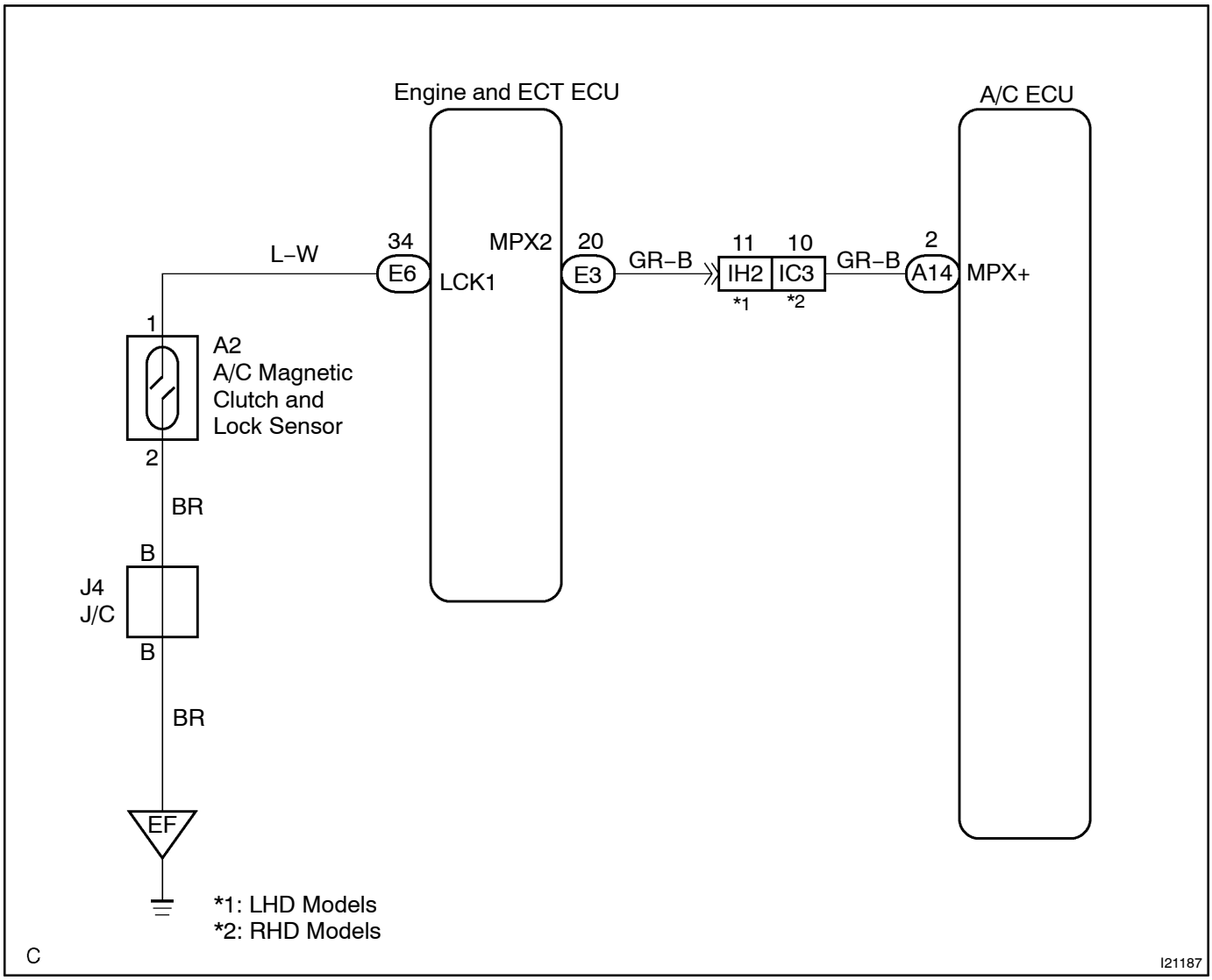
DTC	B1422/22	Compressor Lock Sensor Circuit

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.

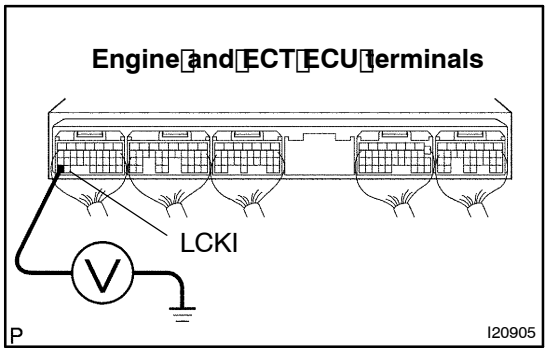
DTC No.	Detection Item	Trouble Area
B1422/22	All conditions below are detected for 3 secs. or more (a) Engine speed : 450rpm or more (b) Ratio between engine and compressor speed deviates 20% or more in comparison to normal operation.	• Compressor. • Compressor drive belt. • Compressor lock sensor. • Harness and connector between compressor and engine and ECT ECU. • Harness and connector between engine and ECT ECU and A/C ECU. • Engine and ECT ECU. • A/C ECU.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Check voltage between terminal LCKI of engine and ECT ECU connector and body ground.**



CHECK:

(a) Start engine.
(b) Push AUTO SW.
(c) Measure voltage between terminal LCKI of engine and ECT ECU connector and body ground when A/C switch is ON.

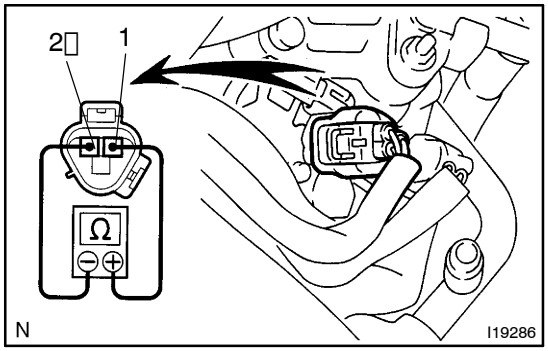
OK:

Voltage : 10 – 14 V

OK	**Proceed to next circuit inspection shown on problem symptoms table (See page DI–1772).**

NG

2	**Check compressor lock sensor.**



PREPARATION:

(a) Jack up the vehicle.
(b) Disconnect compressor lock sensor connector.

CHECK:

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

OK:

Resistance : at 20°C (68°F) : 160 – 320 Ω

NG	**Replace compressor lock sensor.**

OK

3	Check harness and connectors between engine and ECT ECU and compressor lock sensor (See page IN–35).

NG → Repair or replace harness or connector.

OK →

Check multiplex communication system.