

DTC	U0235	COMMUNICATION ERROR FROM RADAR SENSOR TO DISTANCE CONTROL ECU
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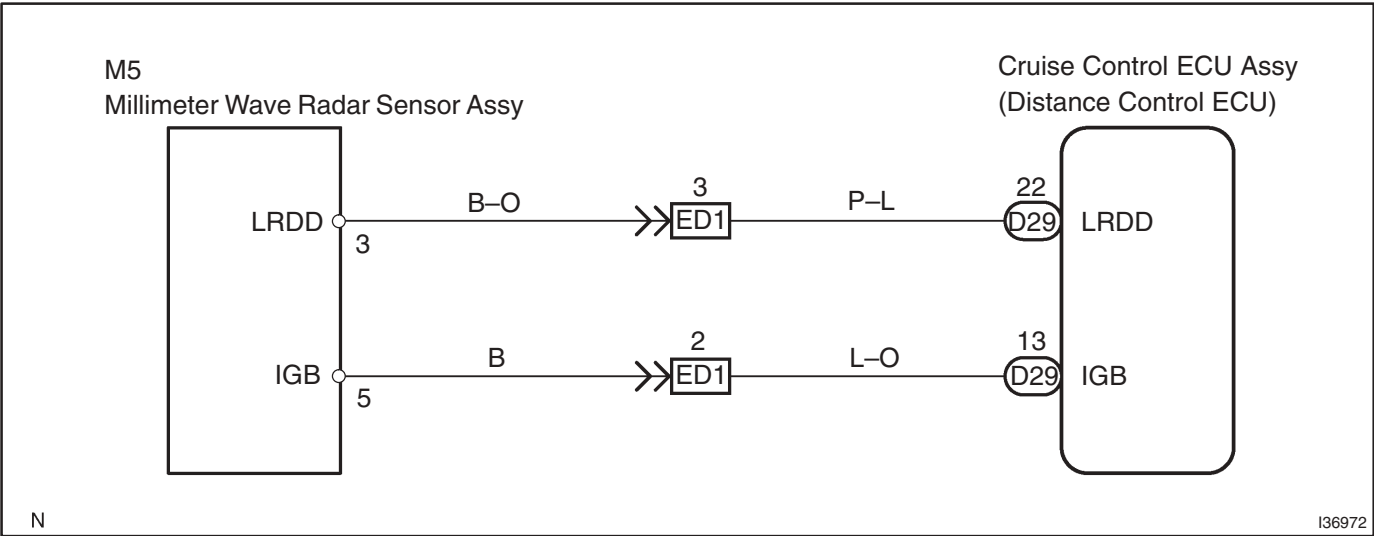
CIRCUIT DESCRIPTION

The millimeter wave radar sensor and cruise control ECU (distance control ECU) transmit the data for general vehicle control and diagnosis function along the communication line.

The millimeter wave radar sensor transmits information about the vehicle in front to the cruise control ECU (distance control ECU).

DTC No.	DTC Detection Condition	Trouble Area
U0235	ECM detects communication error signal (from millimeter wave radar sensor to cruise control ECU (distance control ECU)) for 0.15 sec. or more while dynamic radar cruise control operating	<ul style="list-style-type: none">• Communication circuit• Millimeter wave radar sensor assy• Cruise control ECU assy (Distance control ECU)

WIRING DIAGRAM

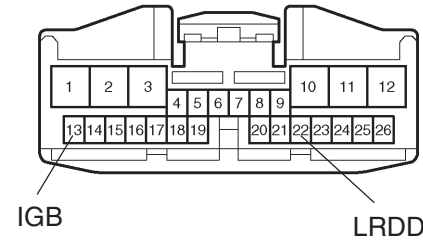


INSPECTION PROCEDURE

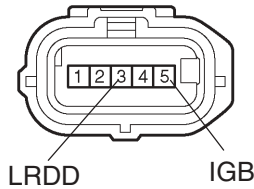
1 CHECK WIRE HARNESS (CRUISE CONTROL ECU ASSY – MILLIMETER WAVE RADAR SENSOR ASSY)

Wire Harness Side

D29
Distance Control ECU



M5
Millimeter Wave Radar Sensor Assy



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I44448

- (a) Disconnect the D29 ECU connector.
- (b) Disconnect the M5 sensor connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
D29-22 (LRDD) – M5-3 (LRDD)	Below 1 Ω
D29-13 (IGB) – M5-5 (IGB)	Below 1 Ω
D29-22 (LRDD) – Body ground	10 k Ω or higher
D29-13 (IGB) – Body ground	10 k Ω or higher

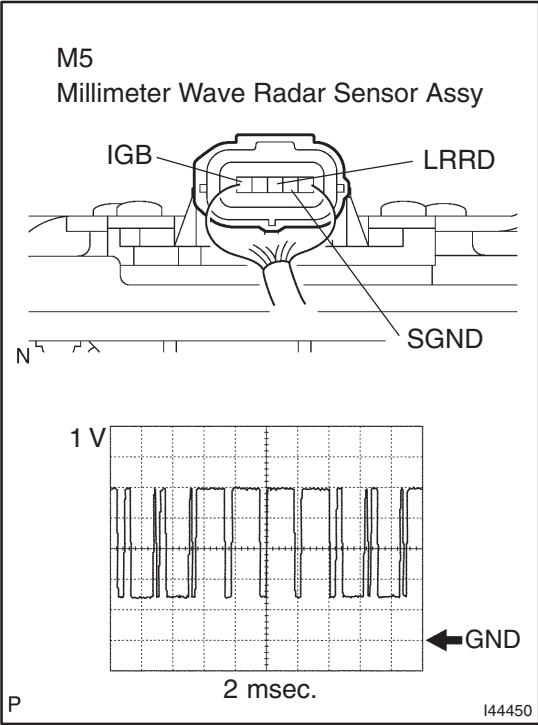
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REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

2

CHECK MILLIMETER WAVE RADAR SENSOR ASSY



(a) Measure the voltage of the wire harness side connector.

Standard:

Tester Connection	Condition	Specified Condition
M5-5 (IGB) – Body ground	Ignition switch ON	10 to 14 V

(b) Check the signal waveform between terminal LRDD (M5-3) of the millimeter wave radar sensor and body ground.

Tester Connection	LRDD (M5-3) – SGND (M5-2)
Tool Setting	1 V/DIV., 2 msec./DIV
Condition	Ignition switch ON

OK:

Waveform similar to illustration on left is output.

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REPLACE MILLIMETER WAVE RADAR SENSOR ASSY ([See page 82-1](#))

OK

REPLACE CRUISE CONTROL ECU ASSY (See Pub. No. RM1049E, page 82-2)