DTC	U0235	Lost Communication with Cruise Control Front Distance Range Sensor

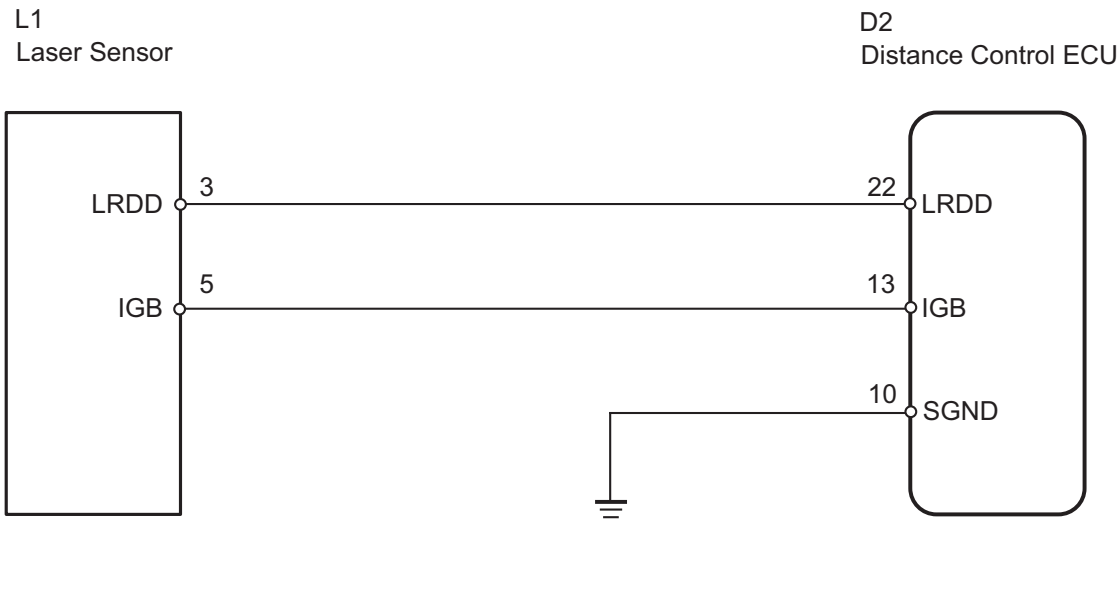
DESCRIPTION

The laser sensor and distance control ECU transmit the data for general vehicle control and diagnosis function along the communication line. The laser sensor transmits information about the vehicle in front to the distance control ECU.

DTC No.	DTC Detection Condition	Trouble Area
U0235	The ECM detects a communication error signal (from the laser sensor to the distance control ECU) for 0.15 sec. or more while the dynamic laser cruise control is in operation.	• Communication circuit • Laser sensor • Distance control ECU

WIRING DIAGRAM

CC



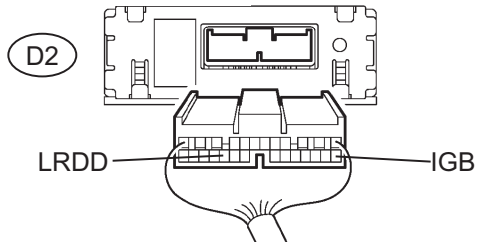
INSPECTION PROCEDURE

NOTICE:

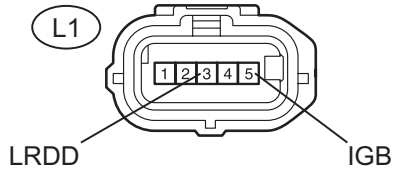
- **When the distance control ECU is replaced with a new one, initialization must be performed (See page CC-125).**
- **When the laser sensor is replaced with a new one, adjustment of the laser sensor beam axis must be performed (See page CC-127).**

1 CHECK HARNESS AND CONNECTOR (DISTANCE CONTROL ECU - LASER SENSOR)

Distance Control ECU Wire Harness View:



Laser Sensor Wire Harness View:



E135385E05

(a) Disconnect the D2 distance control ECU connector and L1 laser sensor connector.
(b) Measure the resistance according to the value(s) in the table below.

Standard resistance

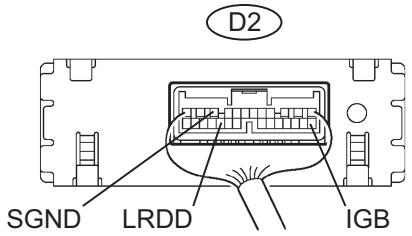
Tester Connection	Condition	Specified Condition
D2-22 (LRDD) - L1-3 (LRDD)	Always	Below 1 Ω
D2-13 (IGB) - L1-5 (IGB)	Always	Below 1 Ω
D2-22 (LRDD) - Body ground	Always	10 kΩ or higher
D2-13 (IGB) - Body ground	Always	10 kΩ or higher

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

2 CHECK DISTANCE CONTROL ECU

Distance Control ECU Wire Harness View:



E135386E07

(a) Reconnect the D2 distance control ECU connector.
(b) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
D2-13 (IGB) - Body ground	Ignition switch on	10 to 14 V
D2-22 (LRDD) - D2-10 (SGND)	Ignition switch on	4.5 to 5.5 V

(c) Reconnect the L1 laser sensor connector.

NG → **REPLACE DISTANCE CONTROL ECU (See page CC-124)**

OK

3	CHECK DTC OUTPUT

(a) Clear the DTCs (See page CC-60).
(b) Turn the ignition switch to the ON position.
(c) Check if the same DTC is recorded (See page CC-60).

Result

Result	Proceed to
DTC U0235 is not output	A
DTC U0235 is output	B

B → **REPLACE LASER SENSOR (See page CC-127)**

A

CC **END (INTERMITTENT PROBLEM IS PRESENT)**