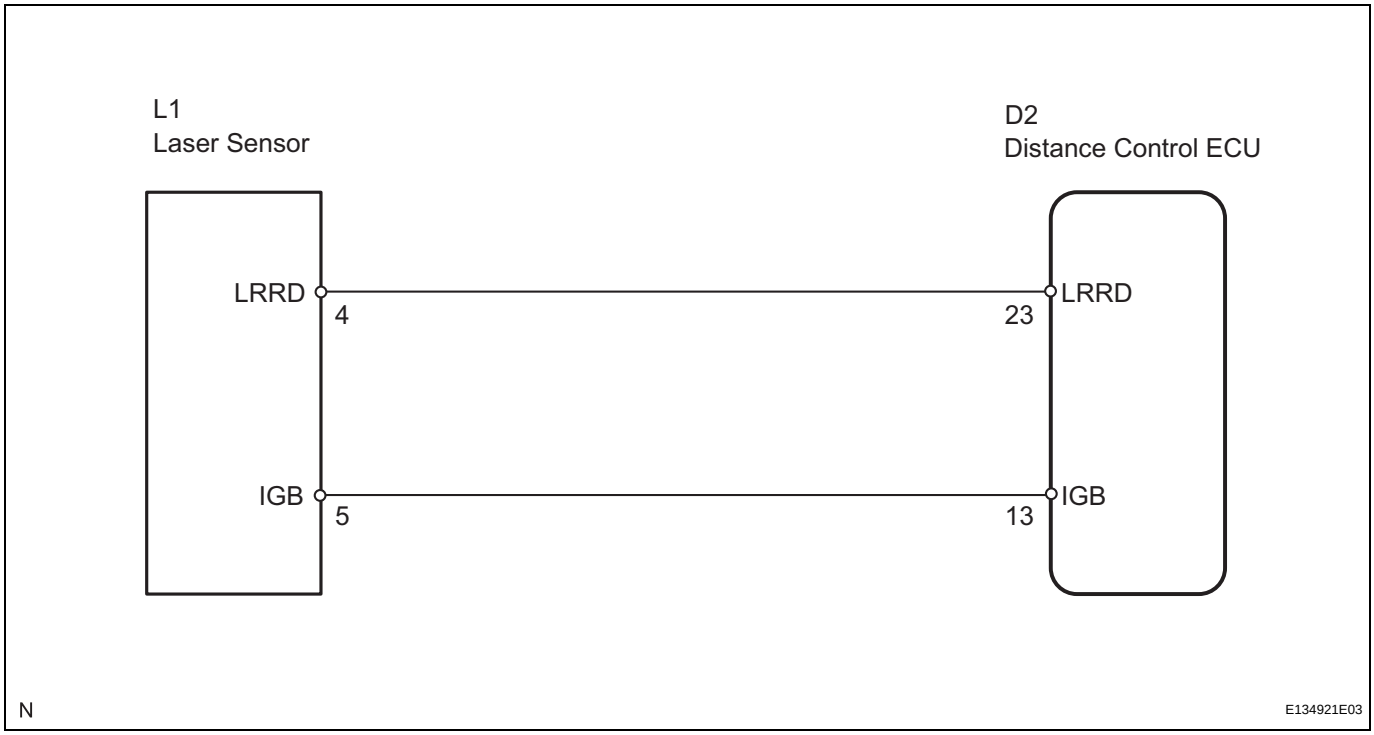
DTC	U1102	Lost Communication with Radar Sensor

DESCRIPTION

The laser sensor and distance control ECU transmit the data for general vehicle control and diagnosis function along the communication line. The distance control ECU determines the curve radius information based on signals from the steering wheel and yaw rate sensor. The distance control ECU transmits the current vehicle speed and curve radius information to the laser sensor.

DTC No.	DTC Detection Condition	Trouble Area
U1102	The ECM detects a communication error signal (from the distance control ECU to the laser sensor) for 0.15 sec. or more while the dynamic laser cruise control is in operation	• Communication circuit • Laser sensor • Distance control ECU (Cruise control ECU)

WIRING DIAGRAM



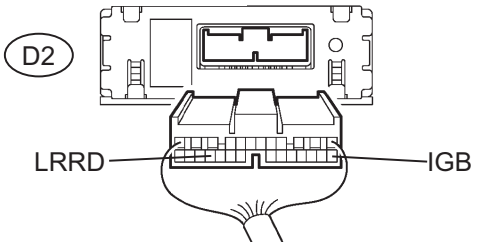
INSPECTION PROCEDURE

NOTICE:

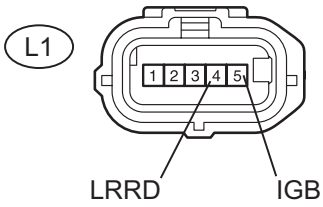
- **When the distance control ECU is replaced with a new one, initialization must be performed (See page CC-125).**
- **When the laser sensor is replaced with a new one, adjustment of the laser sensor beam axis must be performed (See page CC-127).**

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

Distance Control ECU Wire Harness View:



Laser Sensor Wire Harness View:



E135385E06

(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

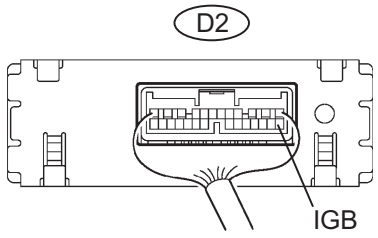
Tester Connection	Condition	Specified Condition
D2-23 (LRRD) - L1-4 (LRRD)	Always	Below 1 Ω
D2-13 (IGB) - L1-5 (IGB)	Always	Below 1 Ω
D2-23 (LRRD) - Body ground	Always	10 kΩ or higher
D2-13 (IGB) - Body ground	Always	10 kΩ or higher

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

OK

2	CHECK DISTANCE CONTROL ECU

Distance Control ECU Wire Harness View:



E135386E08

(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

(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

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

OK

END (INTERMITTENT PROBLEM IS PRESENT)