DTC	P1616	Communication Error from ECM to Distance Control ECU

DTC	U0100	Lost Communication with ECM/PCM "A"

DESCRIPTION

The ECM receives signals from each sensor and ECU, then sends signals such as A/T signals, cruise control operation signals, low speed operation signals, brake control operation signals, and laser light emission prohibiting signals, to the distance control ECU. The ECM is the only component that has a function to record and output the DTCs in the dynamic laser cruise control system. Therefore, if the distance control ECU detects a communication error from the ECM, it sends a malfunction signal back to the ECM.

DTC No.	DTC Detection Condition	Trouble Area
P1616	While the dynamic laser cruise control is either preparing for operation or operating, if the ECM continuously receives a logical error signal from the distance control ECU for more than a specific amount of time, the ECM records this logical error code	• Communication circuit • ECM • Distance control ECU
U0100	While the dynamic laser cruise control is either preparing for operation or operating, if the ECM continuously receives a communication cut off signal from the distance control ECU for more than a specific amount of time, the ECM records this communication cut off code	• Communication circuit • ECM • Distance control ECU

CC

INSPECTION PROCEDURE

HINT:

This circuit uses CAN communication. Therefore, if there are any malfunctions in the communication circuit, one or more DTCs in the CAN communication system are output.

1	CHECK CAN COMMUNICATION SYSTEM

Refer to HOW TO PROCEED WITH TROUBLESHOOTING (See page CA-7).

NEXT

END

DTC	P1617	Distance Control ECU Malfunction

DESCRIPTION

In the dynamic laser cruise control system, the ECM and the distance control ECU communicate with one another to control the system based on some designation information. If the designation information of the ECM and distance control ECU is different or the distance control ECU is malfunctioning, this DTC is recorded.

DTC No.	DTC Detection Condition	Trouble Area
P1617	While the dynamic laser cruise control is either preparing for operation or operating, if a designation signal from the ECM and a designation return signal from the distance control ECU do not match or the distance control ECU is malfunctioning for more than a specific amount of time, the ECM records this trouble code	Distance control ECU

INSPECTION PROCEDURE

CC

NOTICE:

When the distance control ECU is replaced with a new one, initialization must be performed (See page CC-125).

1	CONFIRM DESIGNATION INFORMATION

(a) Confirm the designation information.

(1) Turn the ignition switch to the ON position.

(2) Turn the cruise control main switch on.

(3) With the brake pedal depressed, push the cruise control main switch to + (ACCEL)/RES (RESUME) 3 times within 3 seconds. Check that the skid control buzzer sounds at this time.

OK:

The skid control buzzer sounds. (Initialization is performed.)

NOTICE:

- **Do not turn the light control switch on at this time because the beam axis automatic adjustment mode has already started, which could lead to incorrect beam axis. If the light control switch is turned on by mistake, readjust the beam axis (refer to page for beam axis adjustment) (See page CC-127).**
- **If initialization cannot be performed, first inspect the stop light switch circuit, cruise main switch circuit, and skid control buzzer circuit.**

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

OK

2	CHECK DTC

(a) Clear the DTCs and then recheck for DTCs.
Result

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

HINT:
If DTC P1617 is still output after replacing the distance control ECU, replace the ECM.

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

A

END