

DTC	B2799	Engine Immobiliser System
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CIRCUIT DESCRIPTION

This DTC is output when the Engine and ECT ECU detects errors in the communication between the Steering Lock ECU and the Engine and ECT ECU, and in the communication lines.

This is also output when the engine start is attempted with the COMMUNICATION ID between the Steering Lock ECU and the Engine and ECT ECU is different.

Before troubleshooting for this DTC, make sure that there is no DTC detected in the Theft Deterrent ECU and the Steering Lock ECU. If there is interior verification-related DTC (B1242, B2775) any key code-related DTC (B279*) detected in the Theft Deterrent ECU and the Steering Lock ECU, repair them first.

In some cases, the interior verification may be failed due to user's misuse of the smart key function. In such cases, the permission to start the engine is not given from the communication between the Steering Lock ECU and the Engine and ECT ECU, resulting in the output of this DTC. If this DTC is output, confirm with the user whether or not the following conditions occurred in the past.

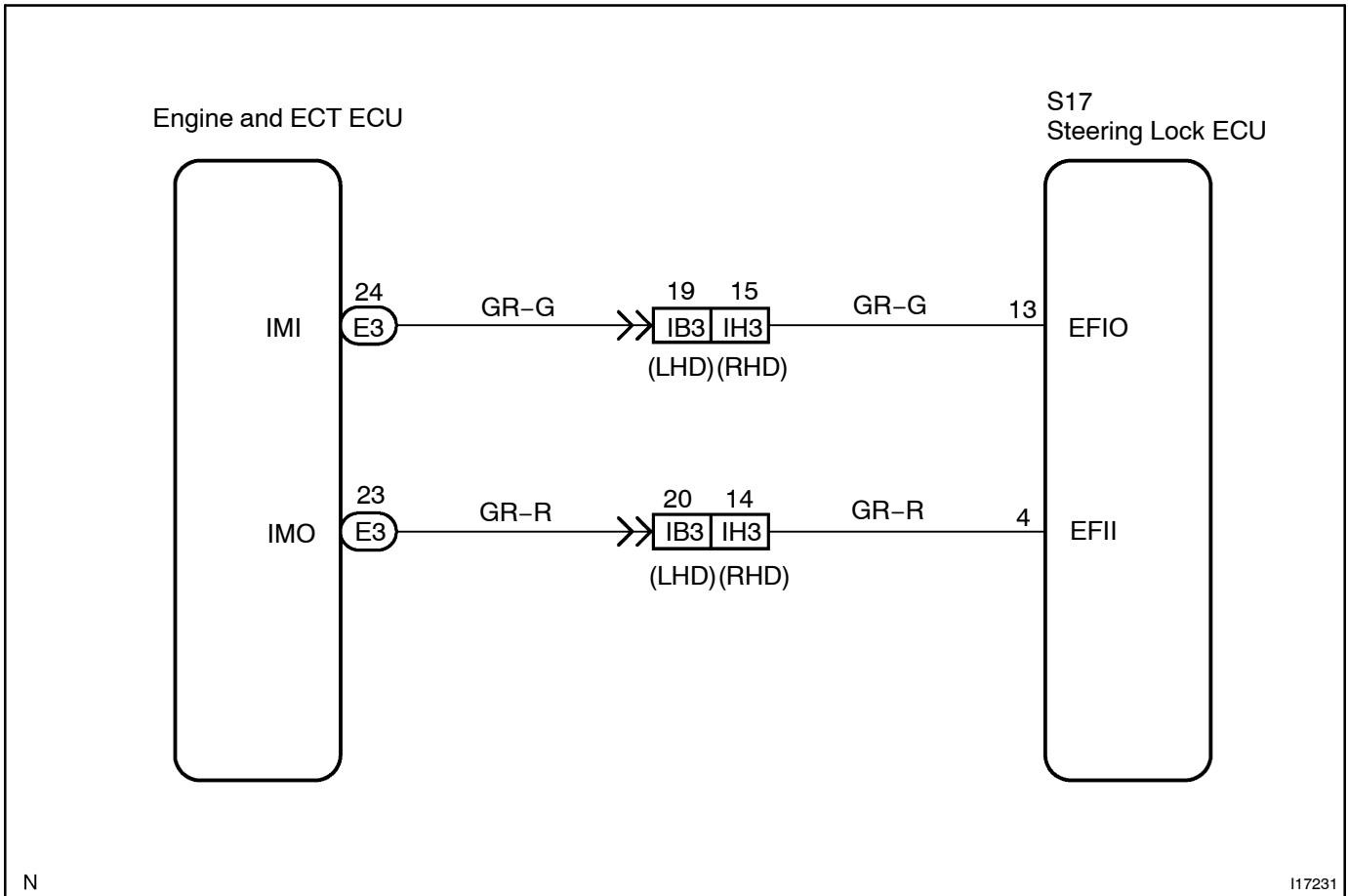
Case1	With the smart key within the interior verification area, the starter SW is turned ACC and left as it is for 60 sec or more. After that, the engine start was attempted with the smart key outside the interior verification area.
Case2	With the smart key within the interior verification area, the starter SW is turned IG ON and left as it is for 5 min or more. After that, the engine start was attempted with the smart key outside the interior verification area.
Case3	The starter Switch is turned back ACC from IG ON. After that, the engine start was attempted with the smart key outside the interior verification area.
Case4	With the starter SW in the ACC or the IG ON (engine stopped) position, two conditions that "the shift position is not in P range" and "the D door is open" are realized. After that, the engine start was attempted with the shift lever still not in P range. ()

HINT:

- In case of 1 and 2, when the engine start is attempted, the smart key system performs the interior verification again. However, because the smart key is outside the interior verification area, the interior verification is failed and the permission to start the engine is not given, which results in the DTC output. At this time the Steering Lock ECU also detects B2775.
- In case 3, when the starter SW is turned back ACC and then IG ON again, the interior verification is failed and the permission to start the engine is not given, which results in the DTC output. At this time the Steering Lock ECU also detects B2775.

DTC No.	Detection Item	Trouble Area
B2799	<ul style="list-style-type: none"> • Error in communication between engine and ECT ECU and Steering Lock ECU, and in communication line • COMMUNICATION ID is different in communication with Steering Lock ECU 	<ul style="list-style-type: none"> • Wire harness • Steering Lock ECU • Engine and ECT ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

- 1 Clear DTC. Check whether or not all smart keys that user has can start the engine.

HINT:

Engine start check should be performed with the smart key inserted into the starter SW.

RESULT:

A	All keys start the engine.
B	A specific key does not start the engine. In this case, ECU detects DTC (B2799).
C	All keys do not start the engine. In this case, ECU detects DTC (B2799).

A

No problem at this time.

HINT:

It is suspected that in the past the engine was attempted to start under the condition that the interior verification was failed or that the key code is different between the Steering Lock ECU and the key.

B

A specific key is faulty or unregistered.

C

- 2 Check wire harness and connector between Steering Lock ECU and Engine and ECT ECU (See page IN-35).

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Repair or replace wire harness or connector.

OK

Replace Engine and ECT ECU (See page IN-35).