

DTC	B2796	NO COMMUNICATION IN IMMOBILIZER SYSTEM
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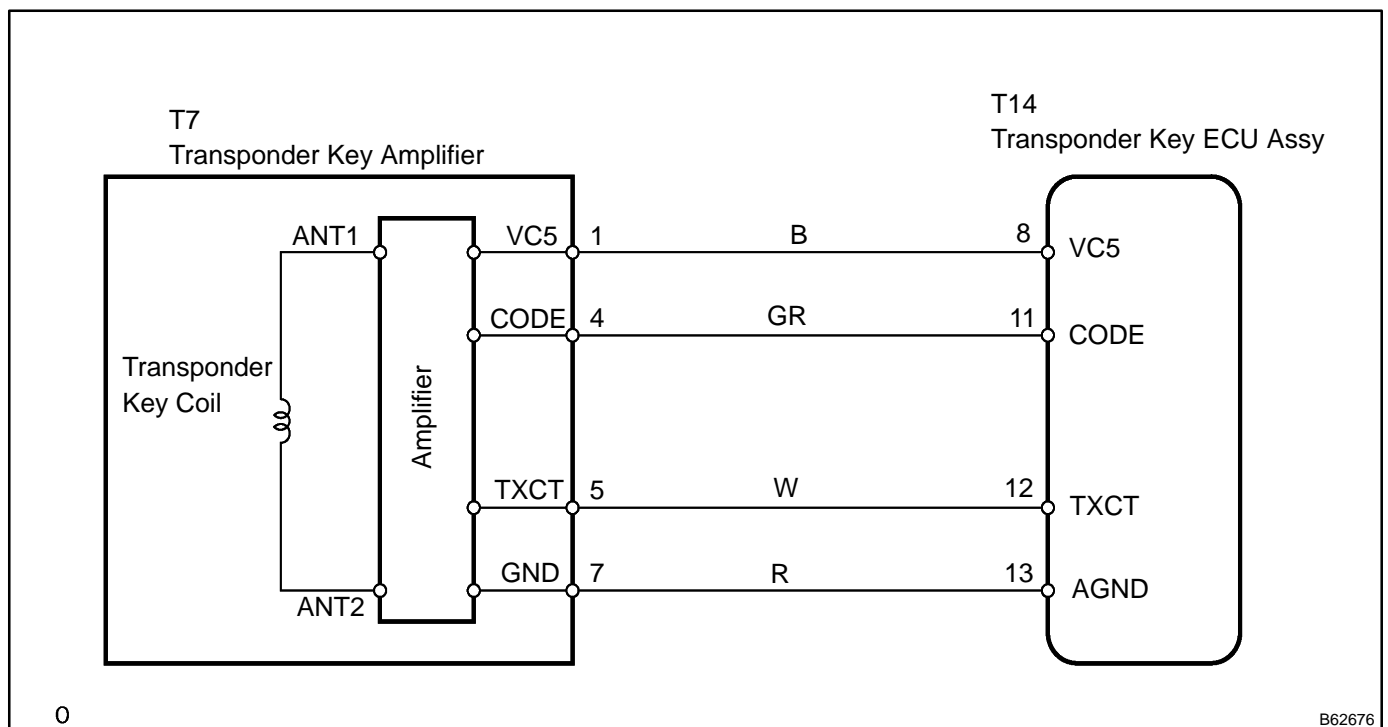
DTC	B2798	COMMUNICATION MALFUNCTION NO. 2
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CIRCUIT DESCRIPTION

This code is stored in the memory when a key that does not have a transponder chip is inserted or if communication between the key and transponder key ECU Assy is impossible.

DTC No.	DTC Detection Condition	Trouble Area
B2796	No communication	<ul style="list-style-type: none"> • Key • Wire harness • Transponder key amplifier • Transponder key ECU Assy
B2798	Communication error	<ul style="list-style-type: none"> • Key

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

Start the inspection from step 1 when using the hand-held tester and start from step 2 when not using the hand-held tester.

1 READ VALUE OF HAND-HELD TESTER (IMMOBILISER ECU (TRANSPONDER KEY ECU ASSY) (SWITCH CONDITION))

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the ignition switch ON with the key that does not start the engine.
- (c) Select the item "IMMOBILIZER" on the hand-held tester.

OK: "SET" (Ignition switch ON) appears on the screen.

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
IMMOBILIZER	Immobilizer system status /SET or UNSET	UNSET: Without key SET: Ignition switch ON	-

OK

NORMAL

NG

2 CHECK WHETHER ENGINE STARTS WITH OTHER KEYS

- (a) Check whether the engine starts with the other keys for the vehicle.

OK

RE-REGISTER OR REPLACE KEY THAT WILL NOT START ENGINE

NG

HINT:

Start the inspection from step 3 when using the hand-held tester and start from step 4 when not using the hand-held tester.

3 READ VALUE OF HAND-HELD TESTER (IMMOBILIZER ECU (TRANSPONDER KEY ECU ASSY) (SWITCH CONDITION))

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the ignition switch ON with the key that does not start the engine.
- (c) On the hand-held tester, select the following menu item: DIAGNOSIS/ENHANCED OBD II/DATA LIST/IMMOBILIZER/ANTENNA COIL. Read the values.

OK: "NORMAL" (Antenna coil is normal) appears on the screen.

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
ANTENNA COIL	Antenna coil condition /NORMAL or FAIL	NORMAL: Antenna coil is normal FAIL: Antenna coil is abnormal	-

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CHECK AND REPLACE TRANSPONDER KEY ECU ASSY

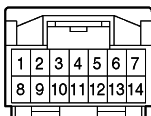
OK

4 CHECK WIRE HARNESS (TRANSPONDER KEY ECU ASSY - TRANSPONDER KEY AMPLIFIER) (TRANSPONDER KEY ECU ASSY OR TRANSPONDER KEY AMPLIFIER - BODY GROUND)

Wire Harness Side

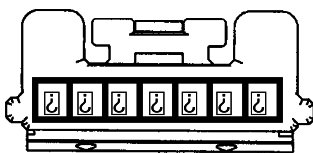
T14

Transponder Key ECU Assy



T7

Transponder Key Amplifier

B63404
B55013

B64974

- (a) Disconnect the T14 ECU and T7 amplifier connectors.
- (b) Measure the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
T14-8 (VC5) - T7-1 (VC5)	Below 1 Ω
T14-11 (CODE) - T7-4 (CODE)	Below 1 Ω
T14-12 (TXCT) - T7-5 (TXCT)	Below 1 Ω
T14-13 (AGND) - T7-7 (GND)	Below 1 Ω
T14-8 (VC5) or T7-1 (VC5) - Body ground	10 k Ω or higher
T14-11 (CODE) or T7-4 (CODE) - Body ground	10 k Ω or higher
T14-12 (TXCT) or T7-5 (TXCT) - Body ground	10 k Ω or higher
T14-13 (AGND) or T7-7 (GND) - Body ground	10 k Ω or higher

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REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

5 CHECK OPERATION OF TRANSPONDER KEY AMPLIFIER

- (a) After replacing the transponder key amplifier with a normally functioning amplifier, check that the engine starts.

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REPLACE TRANSPONDER KEY ECU ASSY

OK

REPLACE TRANSPONDER KEY AMPLIFIER