

DTC**B2795****Unmatched Key Code****DESCRIPTION**

This DTC is output when a key code that has not been registered in the transponder key ECU is inserted into the ignition key cylinder.

DTC No.	DTC Detection Condition	Trouble Area
B2795	Key with unregistered key code is inserted	Key

INSPECTION PROCEDURE**1****REREGISTER KEY**

- (a) Clear the DTC (see page [EI-18](#)).
- (b) Reregister the key code with the transponder key ECU (see page [EI-5](#))
- (c) Check that the engine starts with the key.

OK:**Engine starts.****NG****REPLACE KEY****OK****END**

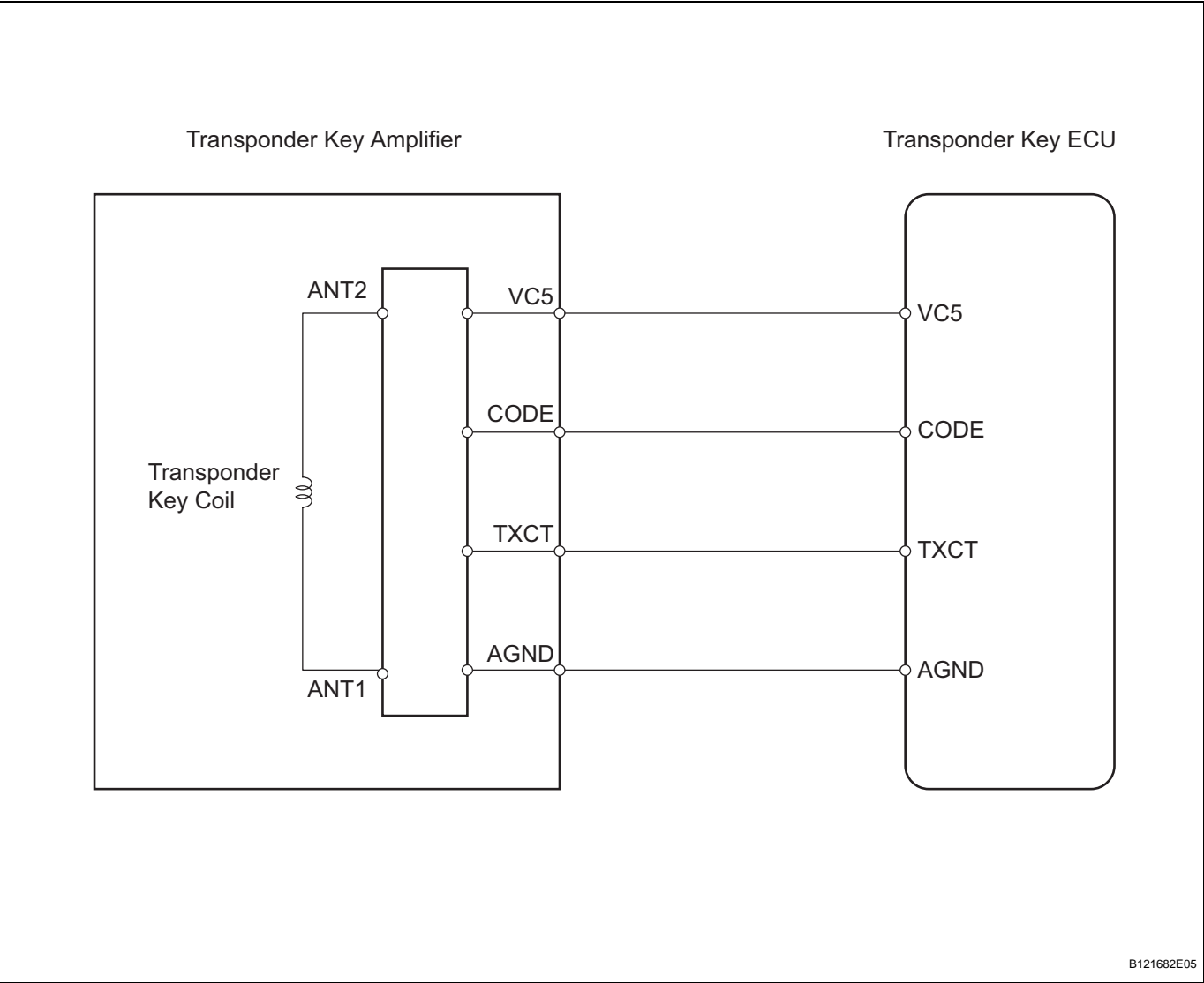
DTC	B2796	No Communication in Immobiliser System
DTC	B2798	Communication Malfunction No. 2

DESCRIPTION

When a key is inserted into the ignition key cylinder but no communication occurs between the key and transponder key ECU, DTC B2796 is output. When a key is inserted into the ignition key cylinder but a communication error occurs between the key and transponder key ECU, DTC B2798 is output.

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

WIRING DIAGRAM



INSPECTION PROCEDURE

1 READ VALUE OF INTELLIGENT TESTER (ENGINE IMMOBILISER SYSTEM)

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch ON with a key that cannot start the engine.
- (c) On the intelligent tester, enter the following menus: DIAGNOSIS / OBD/MOBD / IMMOBILISER / DATA LIST / IMMOBILISER. Read the result.

Transponder key ECU:

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
IMMOBILISER	Immobiliser system status / SET or UNSET	SET: No key is in ignition key cylinder UNSET: Key is in ignition key cylinder	-

OK:**UNSET (key is in ignition key cylinder) appears on the screen.****OK****REPLACE TRANSPONDER KEY ECU****NG****2 CHECK WHETHER ENGINE STARTS WITH OTHER KEY**

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

OK:**Engine starts.****NG****REREGISTER OR REPLACE KEY THAT CANNOT START ENGINE****OK****3 READ VALUE OF INTELLIGENT TESTER (TRANSPONDER KEY COIL)**

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch ON with a key that cannot start the engine.
- (c) On the intelligent tester, enter the following menus: DIAGNOSIS / OBD/MOBD / IMMOBILISER / DATA LIST / ANTENNA COIL. Read the result.

Transponder key ECU:

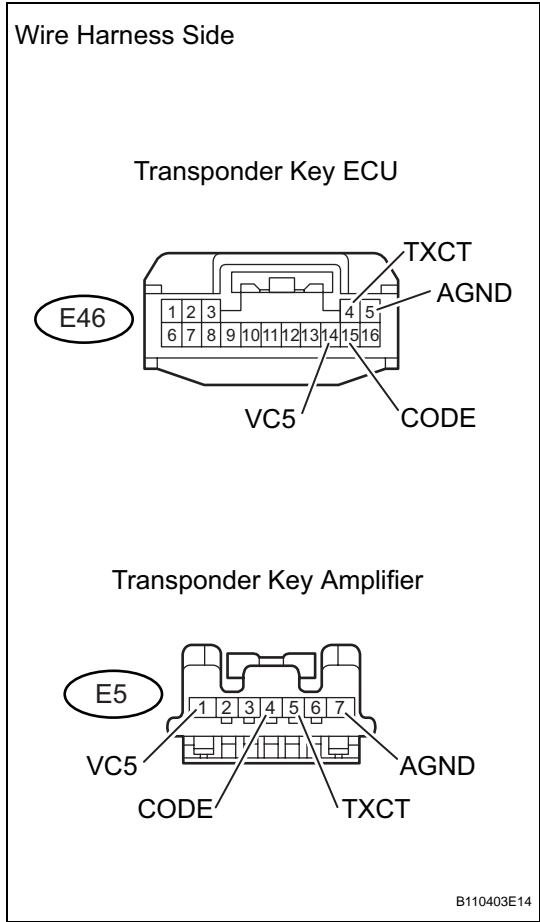
Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
ANTENNA COIL	Transponder key coil condition/ NORMAL or FAIL	NORMAL: Transponder key coil is normal FAIL: Transponder key coil is malfunctioning	-

OK:
NORMAL (Transponder key coil is normal) appears on the screen.

OK → REPLACE TRANSPONDER KEY ECU

NG

4 CHECK WIRE HARNESS (TRANSPONDER KEY ECU - TRANSPONDER KEY AMPLIFIER)



- (a) Disconnect the E46 ECU connector.
- (b) Disconnect the E5 amplifier connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
E46-14 (VC5) - E5-1 (VC5)	Below 1 Ω
E46-15 (CODE) - E5-4 (CODE)	
E46-4 (TXCT) - E5-5 (TXCT)	
E46-5 (AGND) - E5-7 (AGND)	
E46-14 (VC5) or E5-1 (VC5) - Body ground	10 kΩ or higher
E46-15 (CODE) or E5-4 (CODE) - Body ground	
E46-4 (TXCT) or E5-5 (TXCT) - Body ground	
E46-5 (AGND) or E5-7 (AGND) - Body ground	

NG → REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

5 CHECK TRANSPONDER KEY AMPLIFIER (OPERATION)

- (a) Temporarily replace the transponder key amplifier with a new or normally functioning one..
- (b) Check that the engine starts normally.

OK:
Engine starts normally.

NG → REPLACE TRANSPONDER KEY ECU

OK

END (TRANSPONDER KEY AMPLIFIER IS DEFECTIVE)