

DTC	B2797	Communication Malfunction No. 1
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DESCRIPTION

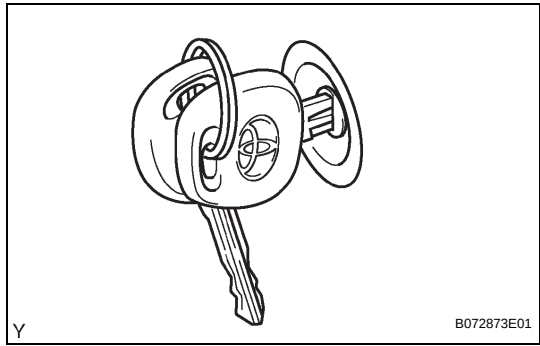
This DTC is output when a communication error occurs between the transponder key amplifier and transponder key ECU. Some possible reasons for the communication error are: 1) 2 or more ignition keys are positioned too close together, or 2) noise is occurring in the communication line.

DTC No.	DTC Detection Conditions	Trouble Areas
B2797	Keys are positioned too close each other, or noise occurred in communication line	• Key • Wire harness and connector • Transponder key amplifier • Transponder key ECU assembly

WIRING DIAGRAM



1	CHECK KEYS
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- (a) Check if the ignition key being used is near other ignition keys, as shown in the illustration. Also, check if the key ring is in contact with the key grip.

Result

Result	Proceed to
The key is near other keys and/ or the key rings is in contact with key grip.	A
The key is not near other keys and/or the key ring is not in contact with the key grip.	B

A

B Go to step 3

2	CHECK FOR DTCS
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- (a) Separate the keys from each other and/or remove the key ring.

- (b) Delete the DTC (see page EI-19).
- (c) Insert a key into the ignition cylinder. Remove it. Repeat for all the other keys.
- (d) Check that no code is output.

OK:

No code is output

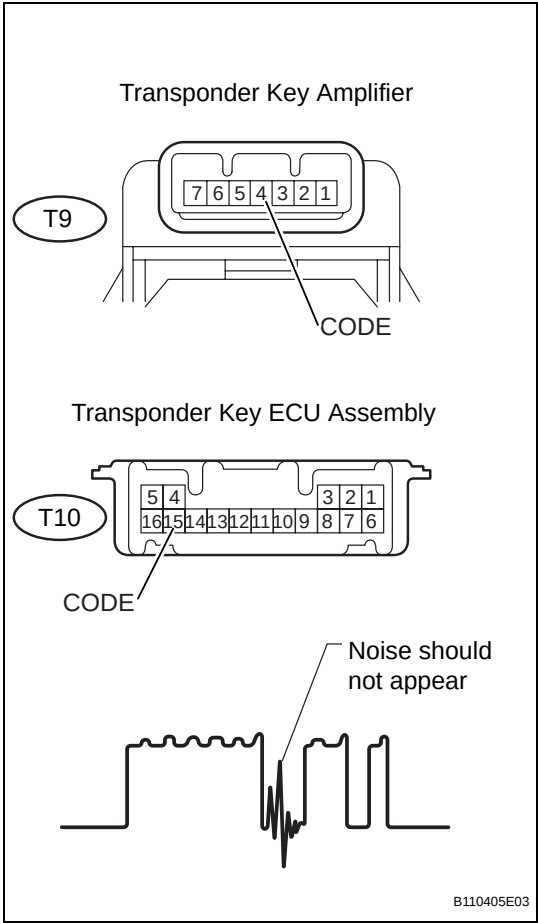
OK

NORMAL (INSPECTION FINISHED)

NG

3

CHECK TRANSPONDER KEY ECU ASSEMBLY



OK

- (a) Using an oscilloscope or the intelligent tester check for noise in the waveform between the terminals of the T9 amplifier connector and T10 ECU connector.

OK:

No noise is present (see illustration)

Tester Connection	Specified Condition
T10-15 (CODE) - T9-4 (CODE)	No noise is present

Tool Setting	5 V/div. 20 ms/DIV.
Condition	Ignition switch: OFF → ON

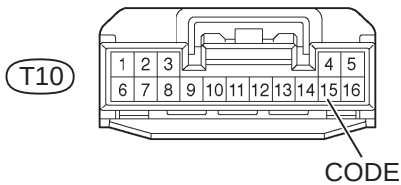
NG

FIND CAUSE OF NOISE AND REMOVE IT

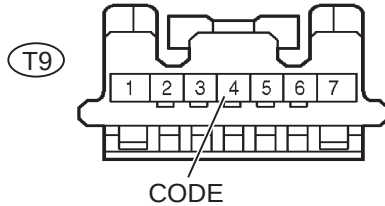
4 CHECK HARNESS AND CONNECTOR (TRANSPONDER KEY ECU ASSEMBLY - TRANSPONDER KEY AMPLIFIER)

Wire Harness Side:

Transponder Key ECU Assembly



Transponder Key Amplifier



B087953E04

- Disconnect the T10 ECU connector.
- Disconnect the T9 amplifier connector.
- Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
T10-15 (CODE) - T9-4 (CODE)	Below 1Ω

- Reconnect the ECU connector.
- Reconnect the amplifier connector.

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REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5 REPLACE TRANSPONDER KEY AMPLIFIER (OPERATION)

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

OK:

Engine starts.

NG

REPLACE TRANSPONDER KEY ECU ASSEMBLY

OK

EI

END (TRANSPONDER KEY AMPLIFIER DEFECTIVE)