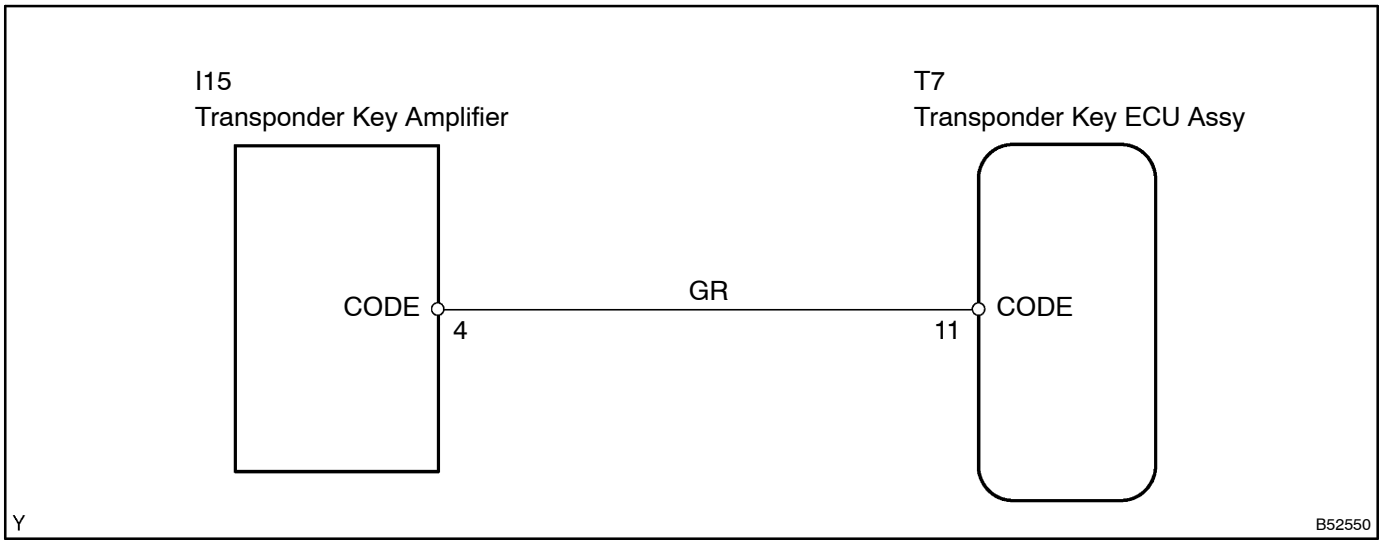
DTC	B2797	COMMUNICATION MALFUNCTION NO.1

CIRCUIT 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) two or more ignition keys are positioned too close together, or 2) noise is occurring in the communication line. Follow the inspection procedure below.

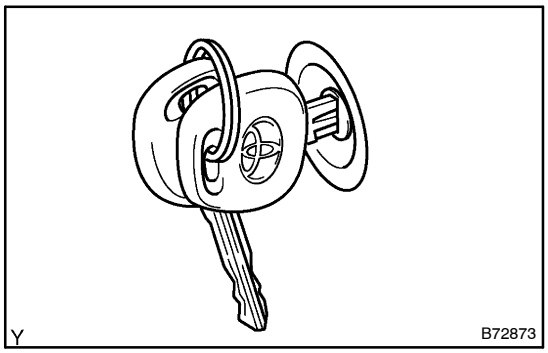
DTC No.	DTC Detection Condition	Trouble Area
B2797	Keys are positioned too close to each other, or noise occurred in communication line	• Key • Wire harness • Transponder key amplifier • Transponder key ECU assy

WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK KEYS



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

A → **Go to step 3**

B

2 CHECK FOR DTCS

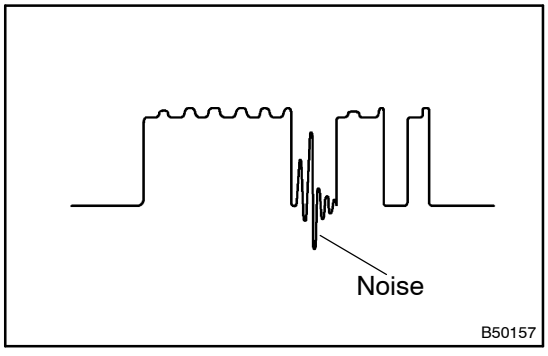
(a) Separate the keys from each other. Or, remove the key ring.
(b) Delete the DTC (see page 05–1065).
(c) Insert a key into the ignition cylinder. Remove it. Repeat for all the other keys.
(d) Check that no code is output.

NG → **Go to step 3**

OK

END

3 CHECK TRANSPONDER KEY ECU ASSY



(a) Using an oscilloscope or the hand–held tester, check the waveform between the terminals of I15 amplifier connector and T7 ECU connectors. The waveform should should be similar to the illustration on the left.
OK: No noise present (see illustration on the left).

Tester Connection	Specified Condition
T7–11 (CODE) – I15–4 (CODE)	No noise is present

Tool setting	10 V/DIV., 20 ms/ DIV.
Condition	Ignition switch OFF → ON

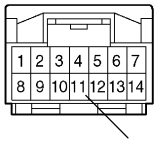
NG → **FIND CAUSE OF NOISE AND REMOVE IT**

OK

4	CHECK WIRE HARNESS (TRANSPONDER KEY ECU ASSY – TRANSPONDER KEY AMPLIFIER)

Wire Harness Side

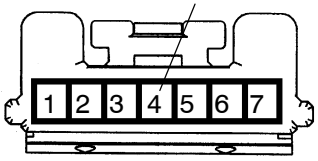
T7
Transponder Key ECU Assy



CODE

I15
Transponder Key Amplifier

CODE



B63404
B55013
B64974

(a) Disconnect the T7 ECU and I15 amplifier connectors.
(b) Measure the resistance of the terminals of the connectors.

Tester Connection	Specified Condition
T7–11 (CODE) – I15–4 (CODE)	Below 1 Ω

NG → **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.
OK: Engine starts.

NG → **REPAIR TRANSPONDER KEY ECU ASSY**

OK

END