DTC	B2796	NO COMMUNICATION IN IMMOBILIZER SYSTEM

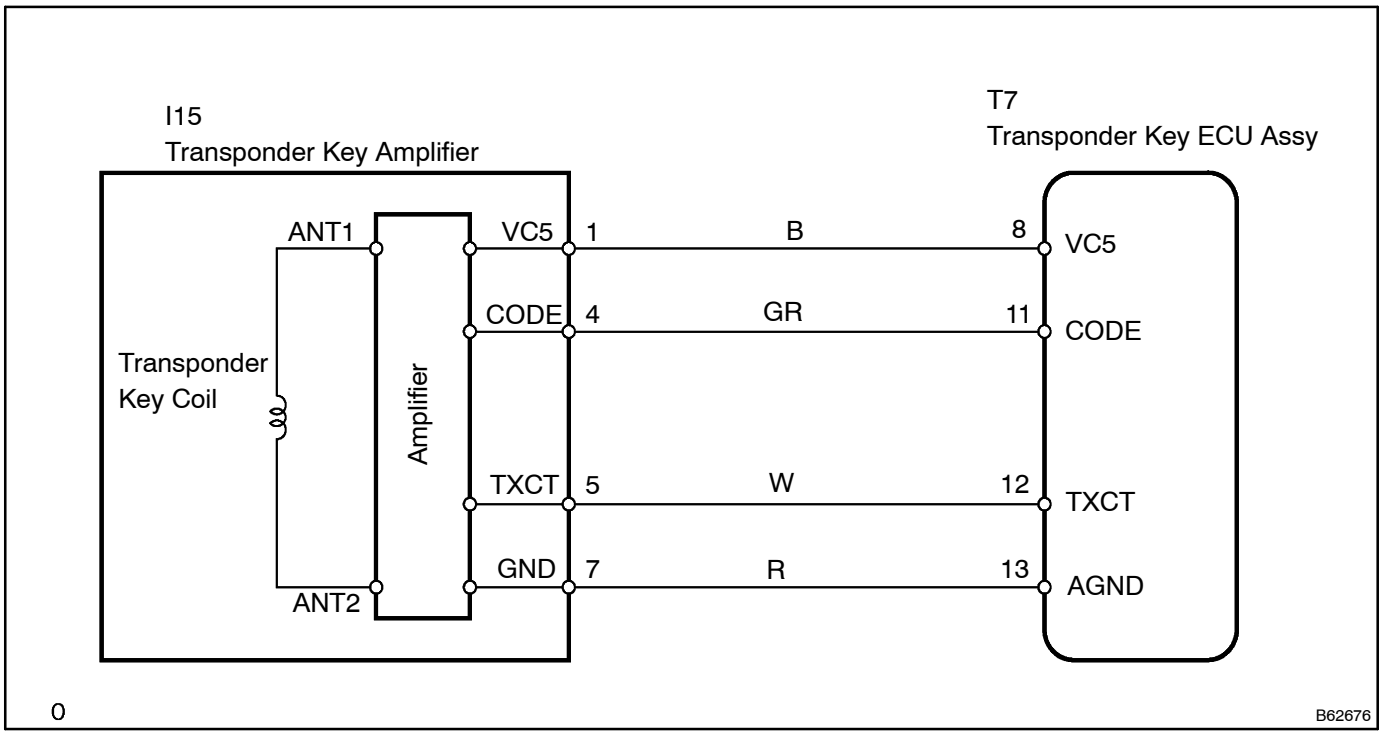
DTC	B2798	COMMUNICATION MALFUNCTION NO. 2

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 is impossible.

DTC No.	DTC Detection Condition	Trouble Area
B2796	No communication	• Key • Wire harness • Transponder key amplifier • Transponder key ECU assy
B2798	Communication error	Key

WIRING DIAGRAM



INSPECTION PROCEDURE

1	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) Select the item ”IMMOBILIZER” on the hand–held tester. Read the values.

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

OK: ”SET” (ignition switch ON) appears on the screen.

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: Engine starts.

OK → **RE–REGISTER OR REPLACE KEY THAT CANNOT 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) Select the item ”ANTENNA COIL” on the hand–held tester. Read the values.

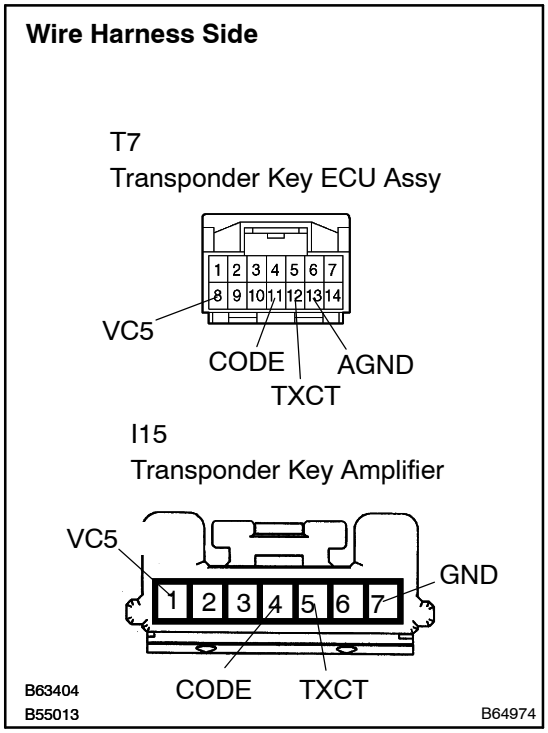
Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
ANTENNA COIL	Antenna coil condition /NORMAL or FAIL	NORMAL: Antenna coil is normal FAIL: Antenna coil is abnormal	–

OK: ”NORMAL” (antenna coil is normal) appears on the screen.

NG → **CHECK AND REPLACE TRANSPONDER KEY ECU ASSY**

OK

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



(a) Disconnect the T7 ECU and T15 amplifier connectors.
(b) Measure the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
T7–8 (VC5) – I15–1 (VC5)	Below 1 Ω
T7–11 (CODE) – I15–4 (CODE)	Below 1 Ω
T7–12 (TXCT) – I15–5 (TXCT)	Below 1 Ω
T7–13 (AGND) – I15–7 (GND)	Below 1 Ω
T7–8 (VC5) or I15–1 (VC5) – Body ground	10 kΩ or higher
T7–11 (CODE) or I15–4 (CODE) – Body ground	10 kΩ or higher
T7–12 (TXCT) or I15–5 (TXCT) – Body ground	10 kΩ or higher
T7–13 (AGND) or I15–7 (GND) – Body ground	10 kΩ or higher

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 → **REPLACE TRANSPONDER KEY ECU ASSY**

OK

END