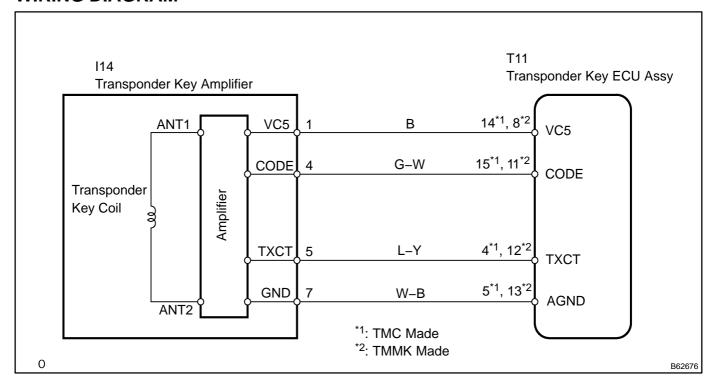
DTC	B2796	NO COMMUNICATION IN IMMOBILISER SYSTEM
DTC	B2798	COMMUNICATION MALFUNCTION NO.2

# **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 assy is impossible.

DTC No.	DTC Detection Condition	Trouble Area
B2796	No communication	Key Wire harness Transponder key amplifier (Transponder key coil) Transponder key ECU assy
B2798	Communication error	• 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 will not start the engine.
- (c) Select the item "IMMOBILISER" on the hand-held tester.

OK:

 $\textbf{SET} \rightarrow \textbf{Ignition switch ON} \\ \textbf{UNSET} \rightarrow \textbf{Without key} \\$ 

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.

- 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 will not start the engine.
- (c) Select the item "ANTENNA COIL" on the hand-held tester.

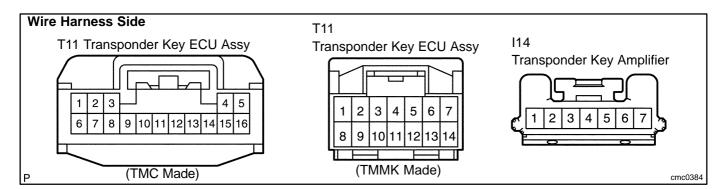
OK: NORMAL NG: FAIL

NG

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)



- (a) Disconnect the T11 ECU and I14 amplifier connector.
- (b) Check the continuity between the wire harness side connectors.

## Standard (TMC Made):

Symbols (Terminal No.)	Specified Condition
VC5 (T11−14) ⇔ VC5 (I14−1)	Continuity
CODE (T14–15) ⇔ CODE (I14–4)	Continuity
TXCT (T14–4) ⇔ TXCT (I14–5)	Continuity
AGND (T14–5) ⇔ GND (I14–7)	Continuity

#### Standard (TMMK Made):

Symbols (Terminal No.)	Specified Condition
VC5 (T11−8) ⇔ VC5 (I14−1)	Continuity
CODE (T14–11) ⇔ CODE (I14–4)	Continuity
TXCT (T14–12) ⇔ TXCT (I14–5)	Continuity
AGND (T14–13) ⇔ GND (I14–7)	Continuity

(c) Check the continuity between the T11 or I14 wire harness side connector and the body ground. **Standard (TMC Made):** 

Symbols (Terminal No.)	Specified Condition
VC5 (T11–14) or VC5 (I14–1) ⇔ Body ground	No continuity
CODE (T14–15) or CODE (I14–4) ⇔ Body ground	No continuity
TXCT (T14–4) or TXCT (I14–5) ⇔ Body ground	No continuity
AGND (T14–5) or GND (I14–7) ⇔ Body ground	No continuity

### Standard (TMMK Made):

Symbols (Terminal No.)	Specified Condition
VC5 (T11–8) or VC5 (I14–1) ⇔ Body ground	No continuity
CODE (T14–11) or CODE (I14–4) ⇔ Body ground	No continuity
TXCT (T14–12) or TXCT (I14–5) ⇔ Body ground	No continuity
AGND (T14–13) or GND (I14–7) ⇔ Body ground	No continuity

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

# 5 CHECK OPERATION OF TRANSPONDER KEY AMPLIFIER

(a) After replacing the transponder key amplifier, check that the engine starts.

NG NORMAL (TRANSPONDER KEY AMPLIFIER DEFECTIVE)

OK

**REPLACE TRANSPONDER KEY ECU ASSY**