

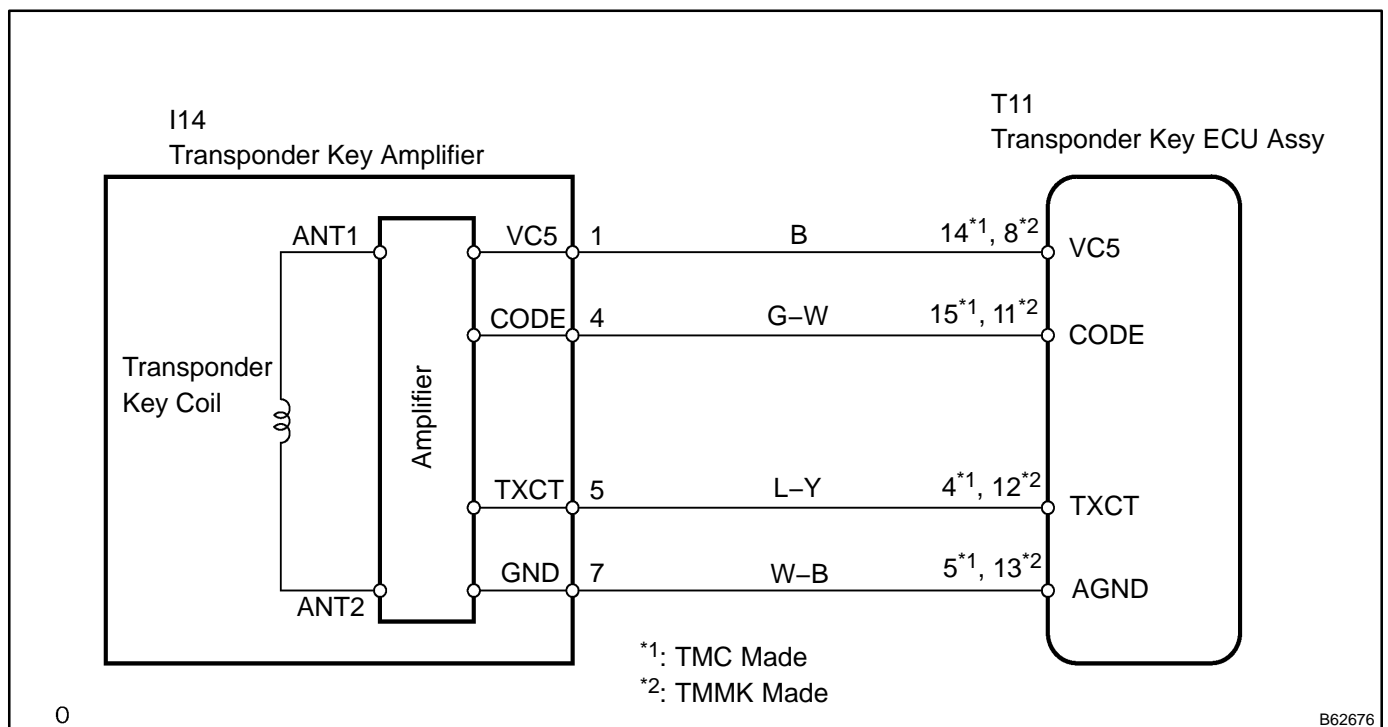
DTC	B2784	ANTENNA COIL OPEN/SHORT
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## CIRCUIT DESCRIPTION

The transponder key coil is built into the transponder key amplifier and receives a key code signal from the transponder chip in the key. This signal is amplified by the amplifier, then it is output to the transponder key ECU Assy.

DTC No.	DTC Detection Condition	Trouble Area
B2784	Antenna coil is open/short	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Transponder key amplifier (Transponder key coil)</li> <li>• Transponder key ECU Assy</li> </ul>

## 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	<b>READ VALUE OF HAND-HELD TESTER (IMMOBILISER ECU (TRANSPONDER KEY ECU ASSY) (SWITCH CONDITION))</b>
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- Connect the hand-held tester to the DLC3.
- Turn the ignition switch ON with the key that will not start the engine.
- Select the item "ANTENNA COIL" on the hand-held tester.

**OK: NORMAL**

**NG: FAIL**

**OK**

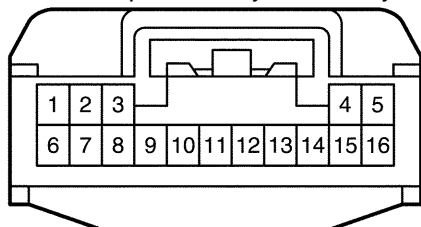
**CHECK AND REPLACE TRANSPONDER KEY  
ECU ASSY**

**NG**

## 2 CHECK WIRE HARNESS (TRANSPONDER KEY ECU ASSY ⇔ TRANSPONDER KEY AMPLIFIER) (TRANSPONDER KEY ECU ASSY OR TRANSPONDER KEY AMPLIFIER ⇔ BODY GROUND)

### Wire Harness Side

T11 Transponder Key ECU Assy

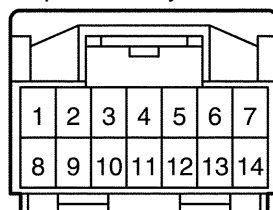


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(TMC Made)

T11

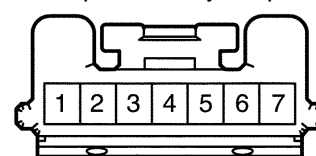
Transponder Key ECU Assy



(TMMK Made)

I14

Transponder Key Amplifier



cmc0384

- Disconnect the T11 ECU and I14 amplifier connector.
- 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

- 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**

OK

**REPLACE TRANSPONDER KEY AMPLIFIER**