

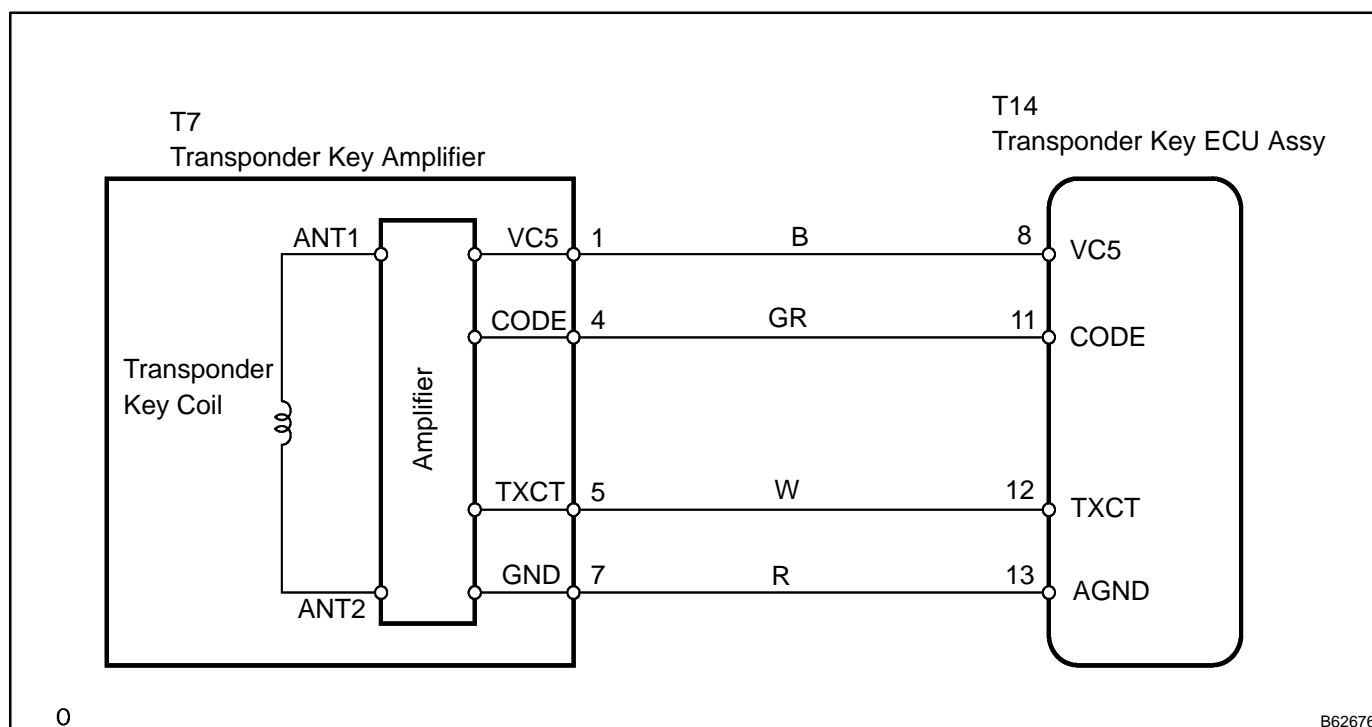
DTC	B2784	ANTENNA COIL OPEN/SHORT
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## CIRCUIT DESCRIPTION

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</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 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.

**OK: "NORMAL" (Antenna coil is normal) appears on the screen.**

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	-

**NG**

**Go to step 2**

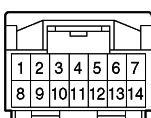
**OK**

### REPLACE TRANSPONDER KEY ECU ASSY

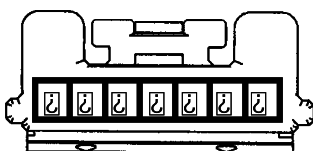
### 2 CHECK WIRE HARNESS (TRANSPONDER KEY ECU ASSY - TRANSPONDER KEY AMPLIFIER) (TRANSPONDER KEY ECU ASSY OR TRANSPONDER KEY AMPLIFIER - BODY GROUND)

#### Wire Harness Side

T14  
Transponder Key ECU Assy



T7  
Transponder Key Amplifier



B63404  
B55013

B64974

- (a) Disconnect the T14 ECU and T7 amplifier connectors.
- (b) Measure the resistance of the wire harness side connectors.

#### Standard:

Tester Connection	Specified Condition
T14-8 (VC5) - T7-1 (VC5)	Below 1 $\Omega$
T14-11 (CODE) - T7-4 (CODE)	Below 1 $\Omega$
T14-12 (TXCT) - T7-5 (TXCT)	Below 1 $\Omega$
T14-13 (AGND) - T7-7 (GND)	Below 1 $\Omega$
T14-8 (VC5) or T7-1 (VC5) - Body ground	10 k $\Omega$ or higher
T14-11 (CODE) or T7-4 (CODE) - Body ground	10 k $\Omega$ or higher
T14-12 (TXCT) or T7-5 (TXCT) - Body ground	10 k $\Omega$ or higher
T14-13 (AGND) or T7-7 (GND) - Body ground	10 k $\Omega$ or higher

**NG**

**REPAIR OR REPLACE HARNESS AND CONNECTOR**

**OK**

### REPLACE TRANSPONDER KEY AMPLIFIER