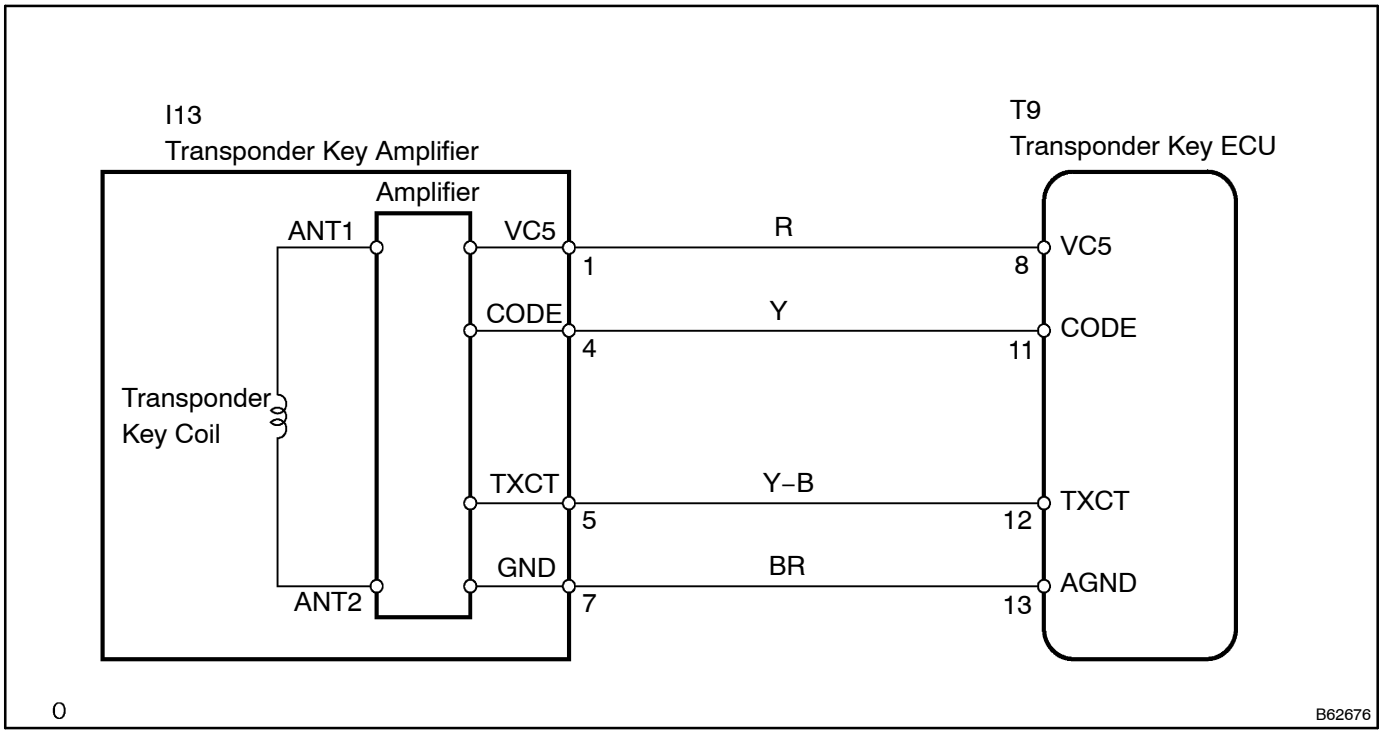
DTC B2784 ANTENNA COIL OPEN/SHORT

CIRCUIT DESCRIPTION

The transponder key coil is built in 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.

DTC No.	DTC Detection Condition	Trouble Area
B2784	Antenna coil is open/short	• Transponder key amplifier (transponder key coil) • Wire harness • Transponder key ECU assy

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 with which the engine does not start.
(c) Select the item ”ANTENNA COIL” on the hand–held tester.
OK: NORMAL
NG: FAIL

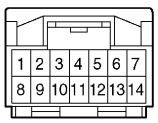
OK → **CHECK AND REPLACE TRANSPONDER KEY ECU ASSY**

NG

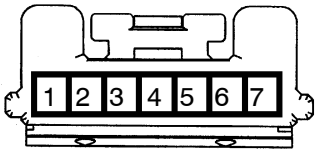
2	CHECK WIRE HARNESS (TRANSPONDER KEY ECU ASSY ⇔ TRANSPONDER KEY AMPLIFIER) (TRANSPONDER KEY ECU ASSY OR TRANSPONDER KEY AMPLIFIER ⇔ BODY GROUND)

Wire Harness Side

T9
Transponder Key ECU Assy



I13
Transponder Key Amplifier



B63404
B55013
B64974

(a) Disconnect the T9 ECU and I13 amplifier connectors.
(b) Check the continuity between the wire harness side connectors.

Standard:

Symbols (Terminal No.)	Specified Condition
VC5 (T9–8) ⇔ VC5 (I13–1)	Continuity
CODE (T9–11) ⇔ CODE (I13–4)	Continuity
TXCT (T9–12) ⇔ TXCT (I13–5)	Continuity
AGND (T9–13) ⇔ GND (I13–7)	Continuity

(c) Check the continuity between the T9 ECU or I13 amplifier wire harness side connector and body ground.

Standard:

Symbols (Terminal No.)	Specified Condition
VC5 (T9–8) or VC5 (I13–1) ⇔ Body ground	No continuity
CODE (T9–11) or CODE (I13–4) ⇔ Body ground	No continuity
TXCT (T9–12) or TXCT (I13–5) ⇔ Body ground	No continuity
AGND (T9–13) or GND (I13–7) ⇔ Body ground	No continuity

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

REPLACE TRANSPONDER KEY AMPLIFIER