- ENGINE IMMOBILIZER SYSTEM (W/O SMART ENTRY 05-2401 SYSTEM) 05-2401

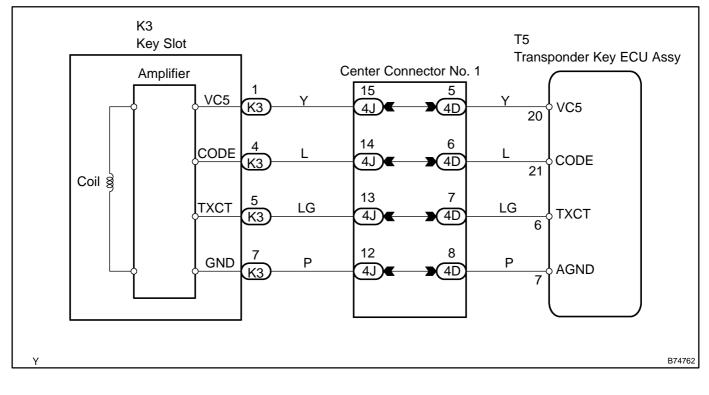
DTC B2784 ANTENNA COIL OPEN/SHORT

CIRCUIT DESCRIPTION

This DTC detected when an antenna coil is open/short.

DTC No.	DTC Detection Condition	Trouble Area
		Wire harness
B2784	Antenna coil is open/short	Key slot
		Transponder key ECU assy

WIRING DIAGRAM



INSPECTION PROCEDURE

1 READ VALUE OF HAND-HELD TESTER

- (a) Connect the hand-held tester (with CAN VIM) to the DLC3.
- (b) Insert the key that cannot start the hybrid control system into the key slot, and change the power switch's power mode to ON (IG) by pushing the power switch.
- (c) Read the DATA LIST according to the display on the tester.

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

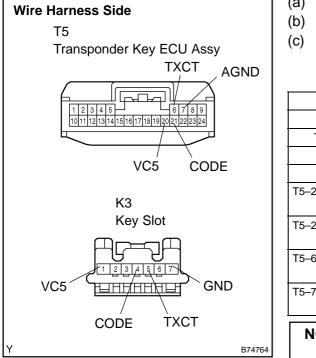
Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note	
ANTENNA COIL	Antenna coil condition /NORMAL or FAIL	NORMAL: Antenna coil is normal FAIL: Antenna coil is abnormal	-	
NG > Go to step 2				

OK

2

REPLACE TRANSPONDER KEY ECU ASSY

CHECK WIRE HARNESS (TRANSPONDER KEY ECU ASSY – KEY SLOT) (TRANSPONDER KEY ECU ASSY OR KEY SLOT – BODY GROUND)



(a) Disconnect the T5 ECU connector.

- b) Disconnect the K3 key slot connector.
- Measure the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition		
T5–20 (VC5) – K3–1 (VC5)	Below 1 Ω		
T5–21 (CODE) – K3–4 (CODE)	Below 1 Ω		
T5–6 (TXCT) – K3–5 (TXCT)	Below 1 Ω		
T5–7 (AGND) – K3–7 (GND)	Below 1 Ω		
T5–20 (VC5) or K3–1 (VC5) – Body ground	10 k Ω or higher		
T5–21 (CODE) or K3–4 (CODE) – Body ground	10 k Ω or higher		
T5–6 (TXCT) or K3–5 (TXCT) – Body ground	10 k Ω or higher		
T5–7 (AGND) or K3–7 (GND) – Body ground	10 k Ω or higher		
NG REPAIR OR RECONNECTOR	EPLACE HARNESS AND		

OK

REPLACE TRANSPONDER KEY ECU ASSY