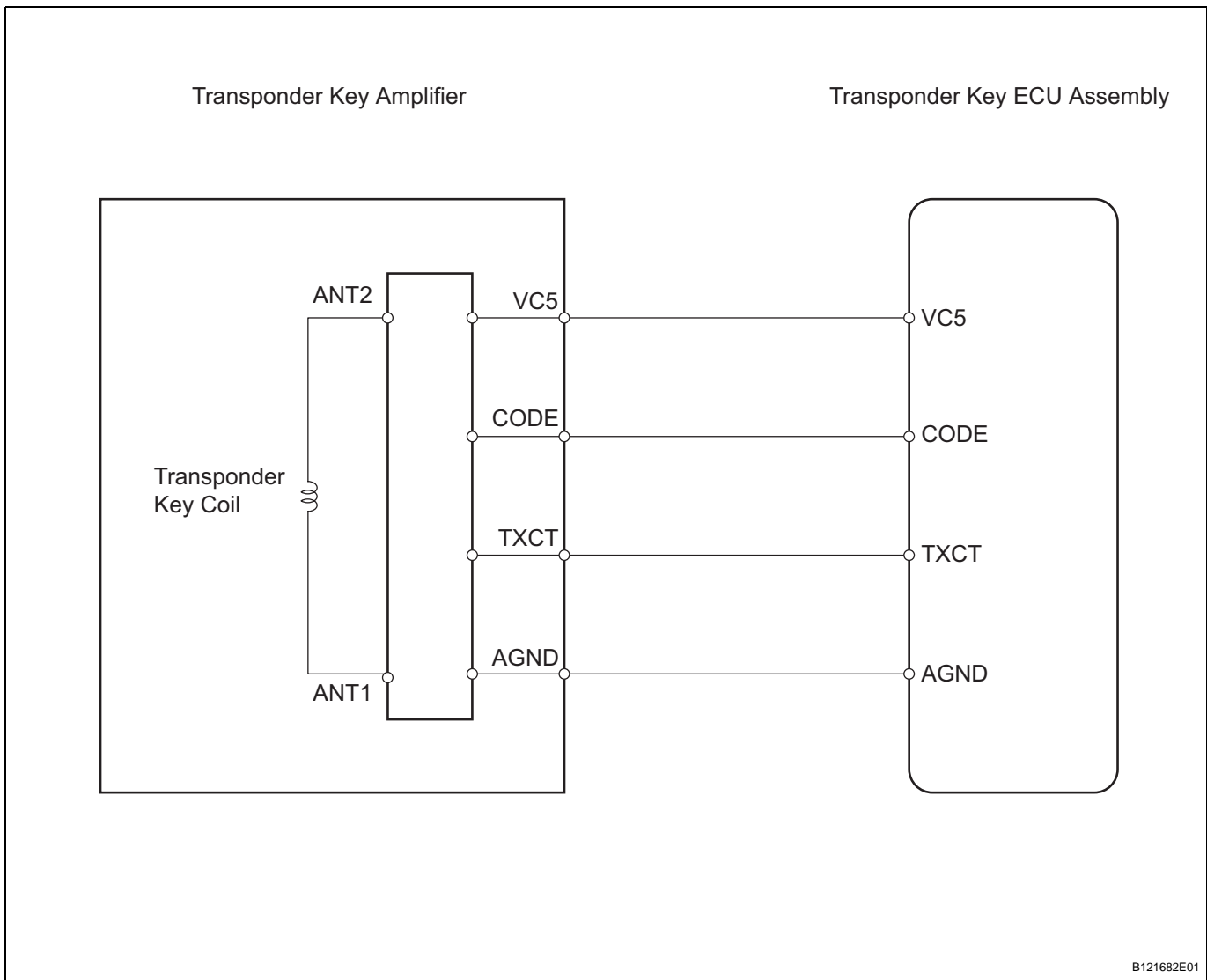


DTC**B2784****Antenna Coil Open / Short****DESCRIPTION**

The transponder key coil receives key code signals from key's transponder chip. The coil is built into the transponder key amplifier, which amplifies the key code signals and output the signals to the transponder key ECU.

DTC No.	DTC Detection Condition	Trouble Area
B2784	Open or short in antenna coil circuit	<ul style="list-style-type: none"> • Wire harness and connector • Transponder key amplifier • Transponder key ECU assembly

WIRING DIAGRAM**EI****1****READ VALUE OF INTELLIGENT TESTER (TRANSPONDER KEY COIL)**

- (a) Connect the intelligent tester to the DLC3.
- (b) Turn the ignition switch ON with the key that cannot start the engine.

- (c) On the intelligent tester, enter the following menus: DIAGNOSIS/ENHANCED OBD II/DATA LIST/IMMOBILISER/ ANTENNA COIL. Read the values.

Transponder key ECU assembly

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
ANTENNA COIL	Transponder key coil condition / NORMAL or FAIL	NORMAL: Transponder key coil is normal FAIL: Transponder key coil is malfunctioning	-

OK:

"NORMAL" (Transponder key coil is normal) appears on the screen.

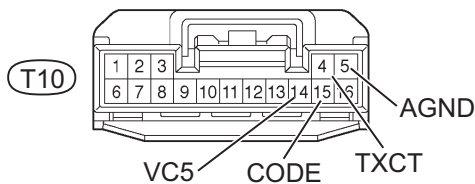
OK → **REPLACE TRANSPONDER KEY ECU ASSEMBLY**

NG

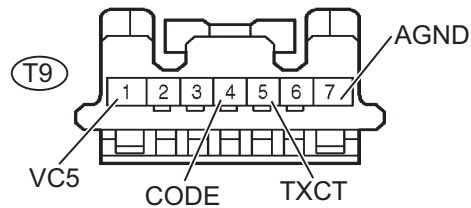
2 CHECK HARNESS AND CONNECTOR (TRANSPONDER KEY ECU ASSEMBLY - TRANSPONDER KEY AMPLIFIER)

Wire Harness Side:

Transponder Key ECU Assembly



Transponder Key Amplifier



B087953E03

- (a) Disconnect the T10 ECU connector.
- (b) Disconnect the T9 amplifier connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
T10-14 (VC5) - T9-1 (VC5)	Below 1Ω
T10-15 (CODE) - T9-4 (CODE)	Below 1Ω
T10-4 (TXCT) - T9-5 (TXCT)	Below 1Ω
T10-5 (AGND) - T9-7 (AGND)	Below 1Ω
T10-14 (VC5) or T9-1 (VC5) - Body ground	10 kΩ or higher
T10-15 (CODE) or T9-4 (CODE) - Body ground	10 kΩ or higher
T10-4 (TXCT) or T9-5 (TXCT) - Body ground	10 kΩ or higher
T10-5 (AGND) or T9-7 (AGND) - Body ground	10 kΩ or higher

- (d) Reconnect the ECU connector.
- (e) Reconnect the amplifier connector.

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

OK

REPLACE TRANSPONDER KEY AMPLIFIER