

Last Modified: 9-14-2016	6.6 C	Doc ID: RM000000QYJ03VX
Model Year Start: 2010	Model: Prius	Prod Date Range: [04/2009 -]
Title: THEFT DETERRENT / KEYLESS ENTRY: ENGINE IMMOBILISER SYSTEM: B2784; Antenna Coil Open / Short; 2010 MY Prius [04/2009 -]		

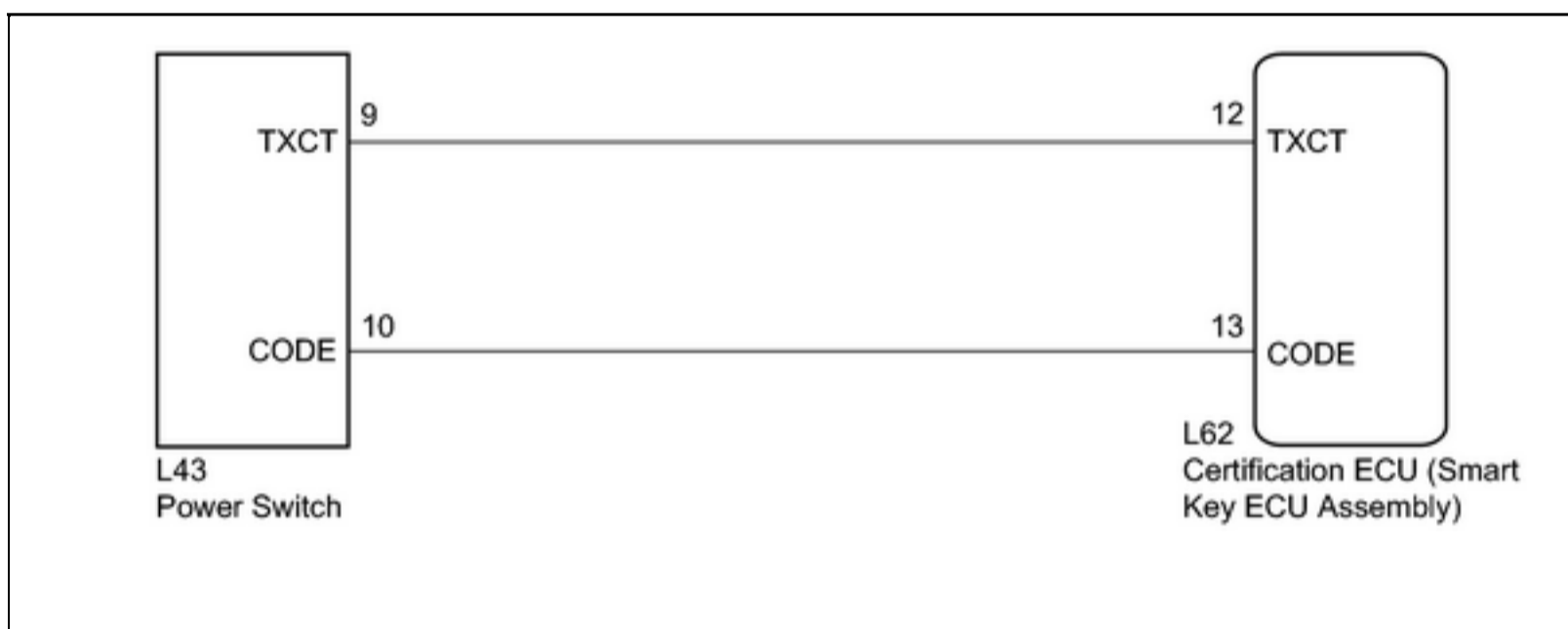
DTC	B2784	Antenna Coil Open / Short
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DESCRIPTION

This DTC is stored when there is an open or short in the transponder key coil (built into the power switch).

DTC NO.	DTC DETECTION CONDITION	TROUBLE AREA
B2784	Transponder key coil is open or shorted.	<ul style="list-style-type: none"> • Wire harness or connector • Power switch • Certification ECU (Smart key ECU assembly)

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

- If the certification ECU (smart key ECU assembly) is replaced, register all the keys and ECU communication ID [INFO](#) .*1
- If the certification ECU (smart key ECU assembly) is replaced, register all the keys [INFO](#) .*2
 - *1: w/o Automatic Light Control System
 - *2: w/ Automatic Light Control System

PROCEDURE

1. CHECK DTC OUTPUT

(a) Clear the DTCs [INFO](#) .

(b) Recheck for DTCs [INFO](#) .

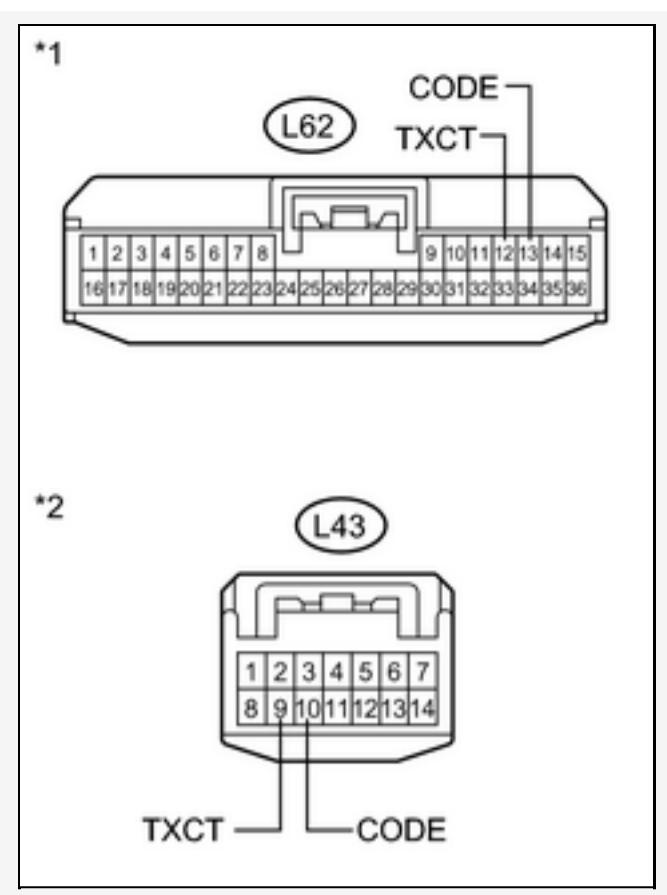
OK:
DTC B2784 is not output.

NG ► GO TO STEP 2

OK ► USE SIMULATION METHOD TO CHECK

2. CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU - POWER SWITCH)

(a) Disconnect the certification ECU (smart key ECU assembly) connector.



(b) Disconnect the power switch connector.

(c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L62-12 (TXCT) - L43-9 (TXCT)	Always	Below 1 Ω
L62-13 (CODE) - L43-10 (CODE)	Always	Below 1 Ω
L62-12 (TXCT) - Body ground	Always	10 k Ω or higher
L62-13 (CODE) - Body ground	Always	10 k Ω or higher

Text in Illustration

*1	Front view of wire harness connector (to Certification ECU (Smart Key ECU Assembly))
*2	Front view of wire harness connector (to Power Switch)

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3. REPLACE POWER SWITCH

(a) Replace the power switch **INFO**.

NEXT

4. CHECK DTC OUTPUT

(a) Clear the DTCs **INFO**.

(b) Recheck for DTCs **INFO**.

OK:
DTC B2784 is not output.

NG REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK END (POWER SWITCH WAS DEFECTIVE)

