

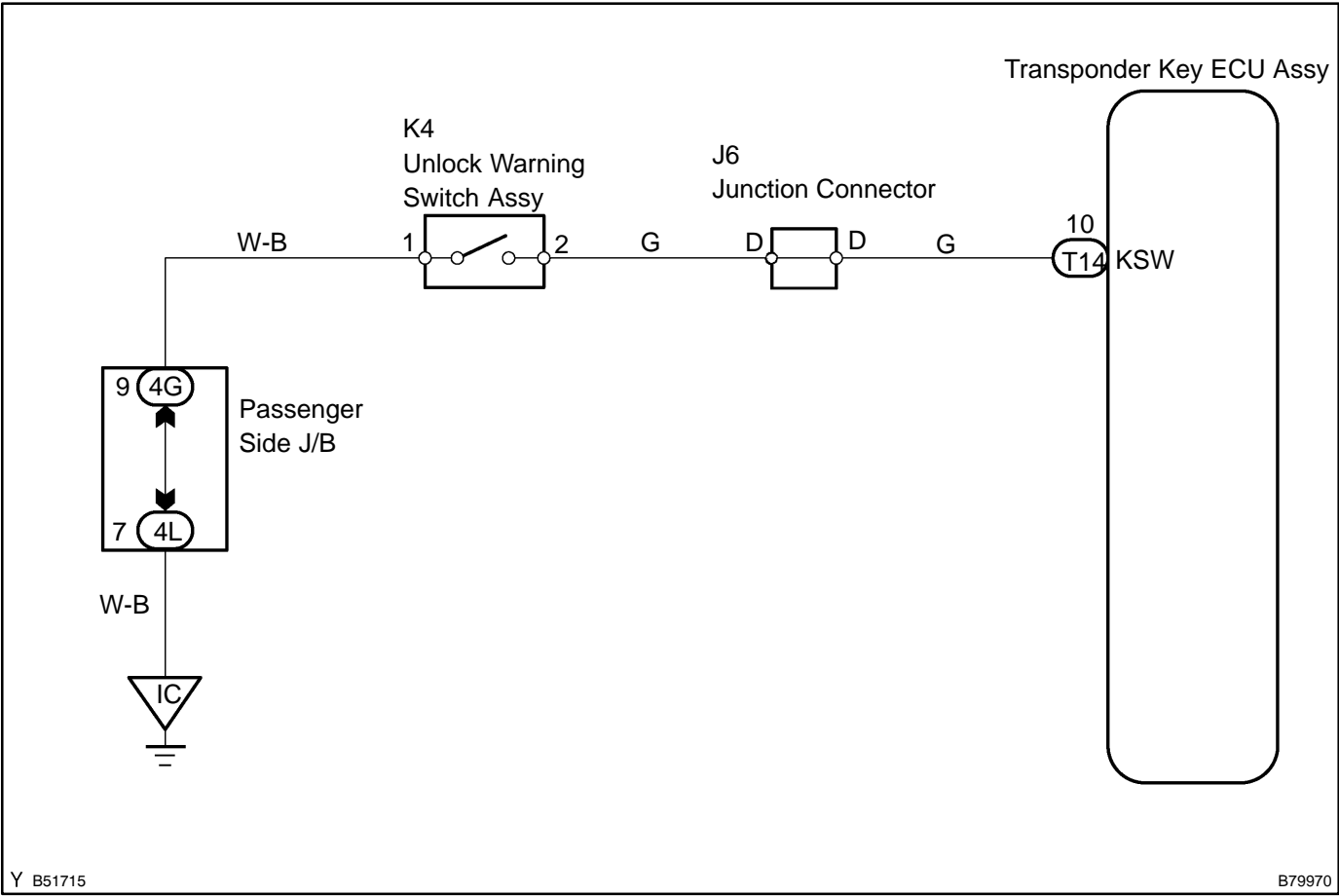
DTC	B2780	PUSH SWITCH/KEY UNLOCK WARNING SWITCH MALFUNCTION
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CIRCUIT DESCRIPTION

This DTC will be output if the transponder key ECU does not detect that the unlock warning switch is ON even when the ignition switch is ON (under normal condition, the unlock warning switch is ON when the ignition switch is ON).

DTC No.	DTC Detection Condition	Trouble Area
B2780	Unlock warning switch ON is not detected when ignition switch is ON	<ul style="list-style-type: none">• Unlock warning switch assy• 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 (TRANSPONDER KEY ECU (SWITCH CONDITION))

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the ignition switch ON with the key that cannot start the engine.
- (c) On the hand-held tester, select the following menu item: DIAGNOSIS/ENHANCED OBD II/DATA LIST/IMMOBILISER/KEY SW. Read the values.

OK: "ON" (Key is in ignition key cylinder) appears on the screen.

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
KEY SW	Unlock warning switch signal /ON or OFF	ON: Key is in ignition key cylinder OFF: No key is in ignition key cylinder	-

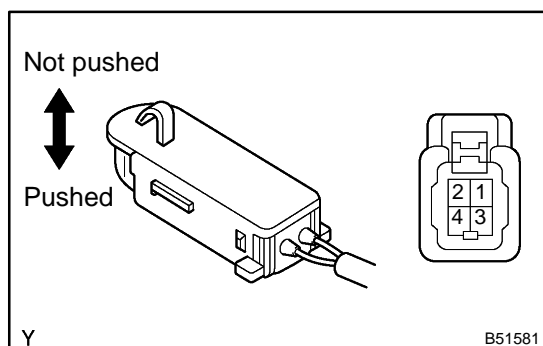
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Go to step 2

OK

REPLACE TRANSPONDER KEY ECU ASSY

2 INSPECT UNLOCK WARNING SWITCH ASSY



- (a) Remove the unlock warning switch.
- (b) Measure the resistance of the unlock warning switch.

Standard:

Tester Connection	Switch Position	Specified Condition
1 - 2	Pushed	Below 1 Ω
1 - 2	Not pushed	10 k Ω or higher

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REPLACE UNLOCK WARNING SWITCH ASSY

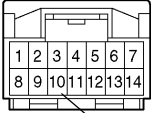
OK

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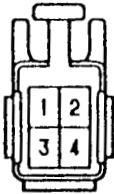
CHECK WIRE HARNESS
(TRANSPONDER KEY ECU ASSY - UNLOCK WARNING SWITCH ASSY)

Wire Harness Side

T14
Transponder Key ECU Assy



K4
Unlock Warning Switch Assy



B63404
B65748

B78556

(a) Disconnect the T14 ECU and K4 switch connectors.

(b) Measure the resistance between the wire harness side connectors.

Standard:

Symbols (Terminal No.)	Specified Condition
T14-10 (KSW) - K4-2	Below 1 Ω

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REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE TRANSPONDER KEY ECU ASSY

2005 HIGHLANDER REPAIR MANUAL (RM1144U)

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Date :

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