

DIAGNOSTIC TROUBLE CODE CHART**TRANSPONDER KEY ECU DTC CHART**

DTC No.	Detection Item	Trouble Areas	See page
B2780	Push Switch / Key Unlock Warning Switch Malfunction	Unlock warning switch assembly Wire harness and connector Transponder key ECU assembly	EI-22
B2784	Antenna Coil Open / Short	Wire harness and connector Transponder key amplifier Transponder key ECU assembly	EI-24
B2793	Transponder Chip Malfunction	Key	EI-26
B2794	Unmatched Encryption Code	Key	EI-27
B2795	Unmatched Key Code	Key	EI-28
B2796	No Communication in Immobiliser System	Key Transponder key amplifier Wire harness and connector Transponder key ECU assembly	EI-29
B2797	Communication Malfunction No. 1	Key Wire harness and connector Transponder key amplifier Transponder key ECU assembly	EI-32
B2798	Communication Malfunction No. 2	Key	EI-29

ECM DTC CHART

DTC No.	Detection Item	Trouble Areas	See page
B2799	Engine Immobiliser System	Wire harness and connector ECM	EI-35

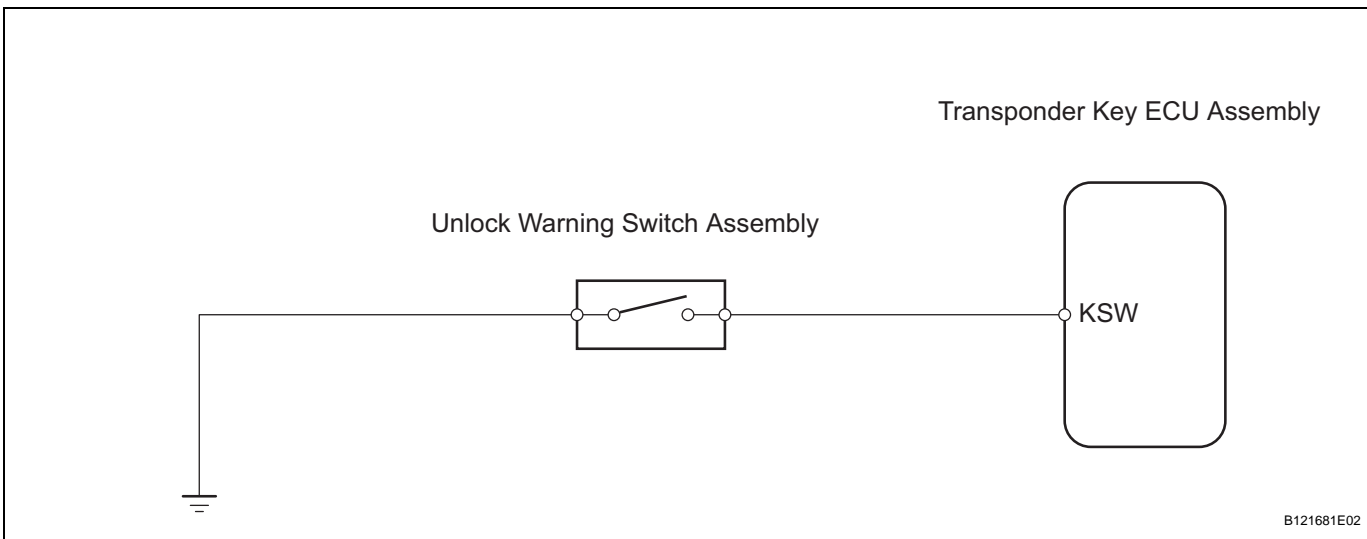
DTC	B2780	Push Switch / Key Unlock Warning Switch Malfunction
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DESCRIPTION

This DTC will be output if the transponder key ECU does not detect that the unlock warning switch is ON even when the key is inserted into the ignition key cylinder. Under normal conditions, the unlock warning switch is ON when the key is inserted into the ignition key cylinder.

DTC No.	DTC Detection Condition	Trouble Areas
B2780	Unlock warning switch ON is not detected when the key is inserted into the ignition key cylinder	<ul style="list-style-type: none"> • Unlock warning switch assembly • Wire harness and connector • Transponder key ECU assembly

WIRING DIAGRAM



1 READ VALUE OF INTELLIGENT TESTER (UNLOCK WARNING SWITCH)

- (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 / KEY SW. Read the values.



Transponder key ECU assembly

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

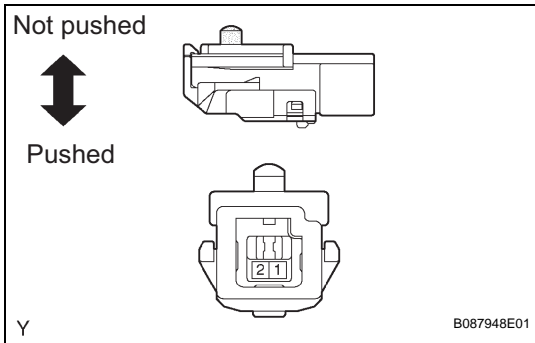
OK:
 "ON" (key is in ignition key cylinder) appears on the screen.

OK

REPLACE TRANSPONDER KEY ECU ASSEMBLY

NG

2 INSPECT UNLOCK WARNING SWITCH ASSEMBLY



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

Standard resistance

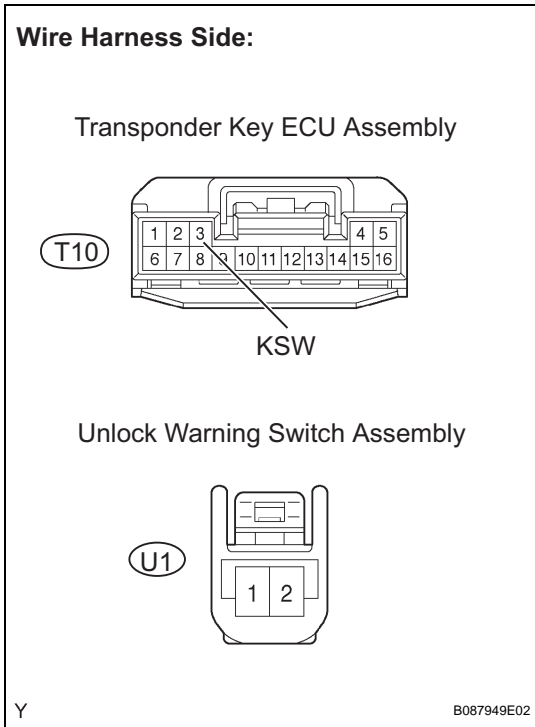
Tester Connection	Switch Condition	Specified Condition
1-2	Pushed	Below 1Ω
1-2	Not pushed	10 kΩ or higher

- (c) Reinstall the unlock warning switch.

NG **REPLACE UNLOCK WARNING SWITCH ASSEMBLY**

OK

3 CHECK HARNESS AND CONNECTOR (TRANSPONDER KEY ECU - UNLOCK WARNING SWITCH)



- (a) Disconnect the T10 ECU connector.
- (b) Disconnect the U1 switch connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
T10-3 (KSW) - U1-1	Below 1 Ω
U1-2 - Body ground	Below 1 Ω

- (d) Reconnect the unlock warning switch connector.
- (e) Reconnect the ECU connector.

NG **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

REPLACE TRANSPONDER KEY ECU ASSEMBLY