DIAGNOSTIC TROUBLE CODE CHART

If a trouble code is displayed during the DTC check, check the circuit listed for that code. For details of each code, turn the page mentioned below the "DTC No" in the DTC chart. the "DTC No" in the DTC chart.

1. TRANSPONDER KEY ECU DIAGNOSTIC TROUBLE CODE CHART

TRANSPONDER KEY ECU

DTC Code	Detection Item	Trouble Area	See page
B2780	Push Switch / Key Unlock Warning Switch Malfunction	1. Unlock warning switch assembly 2. Wire harness 3. Transponder key ECU assembly	EI-18
B2784	Antenna Coil Open / Short	1. Transponder key amplifier 2. Wire harness 3. Transponder key ECU assembly	EI-21
B2793	Transponder Chip Malfunction	Key	EI-24
B2794	Unmatched Encryption Code	Key	EI-25
B2795	Unmatched Key Code	Key	EI-26
B2796	No Communication in Immobiliser System	1. Key 2. Transponder key amplifier 3. Wire harness 4. Transponder key ECU assembly	EI-27
B2797	Communication Malfunction No. 1	1. Key 2. Transponder key amplifier 3. Wire harness 4. Transponder key ECU assembly	EI-31
B2798	Communication Malfunction No. 2	Key	EI-27

2. ECM DIAGNOSTIC TROUBLE CODE CHART

NOTICE:
The DTC for the immobiliser system is specified above. If other codes are output, check the DTC chart for the SFI system.

ECM

DTC Code	Detection Item	Trouble Area	See page
B2799	Engine Immobiliser System Malfunction	1. Wire harness 2. Transponder key ECU assembly 3. ECM	EI-34

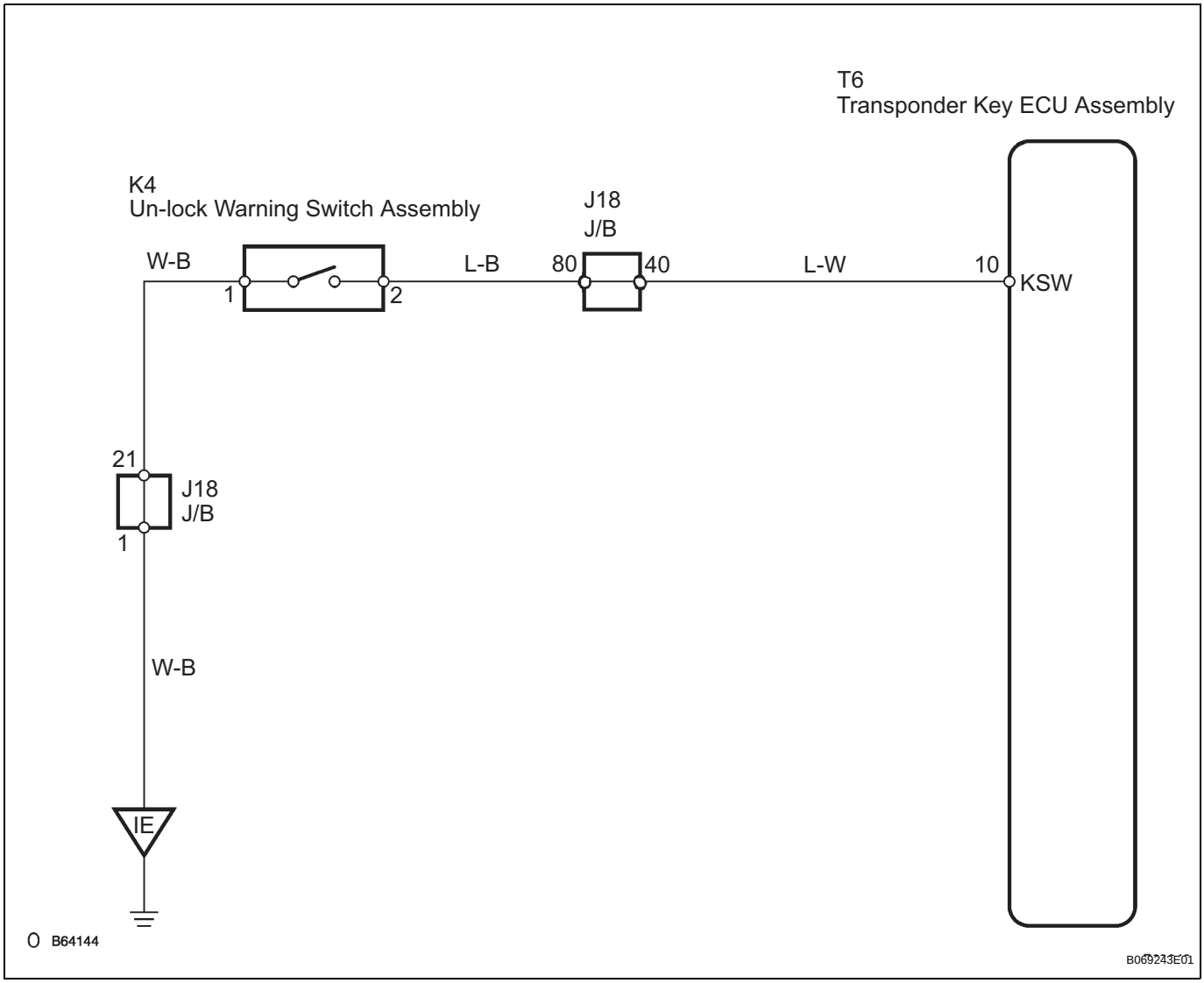
DTC	B2780	Push Switch / Key Unlock Warning Switch Malfunction

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 the normal conditions, 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	• Unlock warning switch assembly • Wire harness • Transponder key ECU assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1	READ VALUE OF INTELLIGENT TESTER

(a) Connect the intelligent tester (with CAN VIM) to the DLC3.
(b) Turn the ignition switch on and turn the intelligent tester main switch on.
(c) Select KEY SW in the DATA LIST and read the value displayed on the intelligent tester.

Transponder key ECU:

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	-

EI

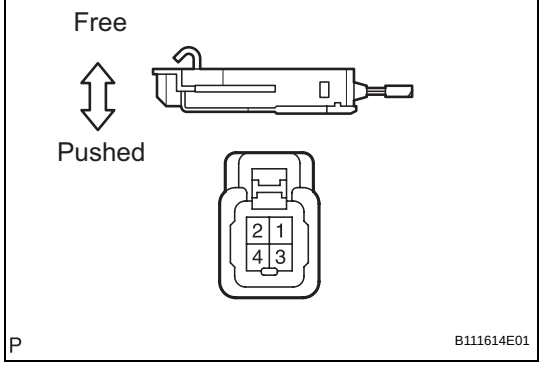
OK:
ON (Key is in ignition key cylinder) appears on the screen

OK → **REPLACE TRANSPONDER KEY ECU ASSEMBLY**

NG

2	INSPECT UNLOCK WARNING SWITCH ASSEMBLY

Unlock Warning Switch Assembly Connector Front View:



(a) Remove the unlock warning switch.
(b) Measure the resistance according to the value(s) in the table below.

Resistance

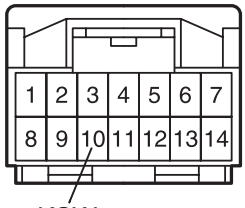
Tester Connection	Switch Condition	Specified Condition
1 - 2	Switch pushed (Key set)	Below 1 Ω
	Switch free (Key removed)	10 kΩ or higher

NG → **REPLACE UNLOCK WARNING SWITCH ASSEMBLY**

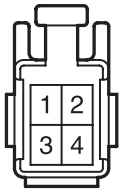
OK

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

Wire Harness Side Connector Front View:



T6 Transponder Key ECU Assembly



K4 Unlock Warning Switch Assembly

P B111594E04

(a) Disconnect the T6 ECU and K4 switch connectors.
(b) Measure the resistance according to the value(s) in the table below.

Resistance

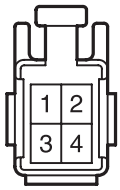
Tester Connection	Specified Condition
T6-10 (KSW) - K4-2	Below 1 Ω
T6-10 (KSW) - Body ground	10 kΩ or higher

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

OK

4	CHECK HARNESS AND CONNECTOR (UNLOCK WARNING SW ASSEMBLY - BODY GROUND)

Wire Harness Side Connector Front View:



K4 Unlock Warning Switch Assembly

P B111599E01

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

Resistance

Tester Connection	Specified Condition
K4-1 - Body ground	Below 1 Ω

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

OK

REPLACE TRANSPONDER KEY ECU ASSEMBLY

EI