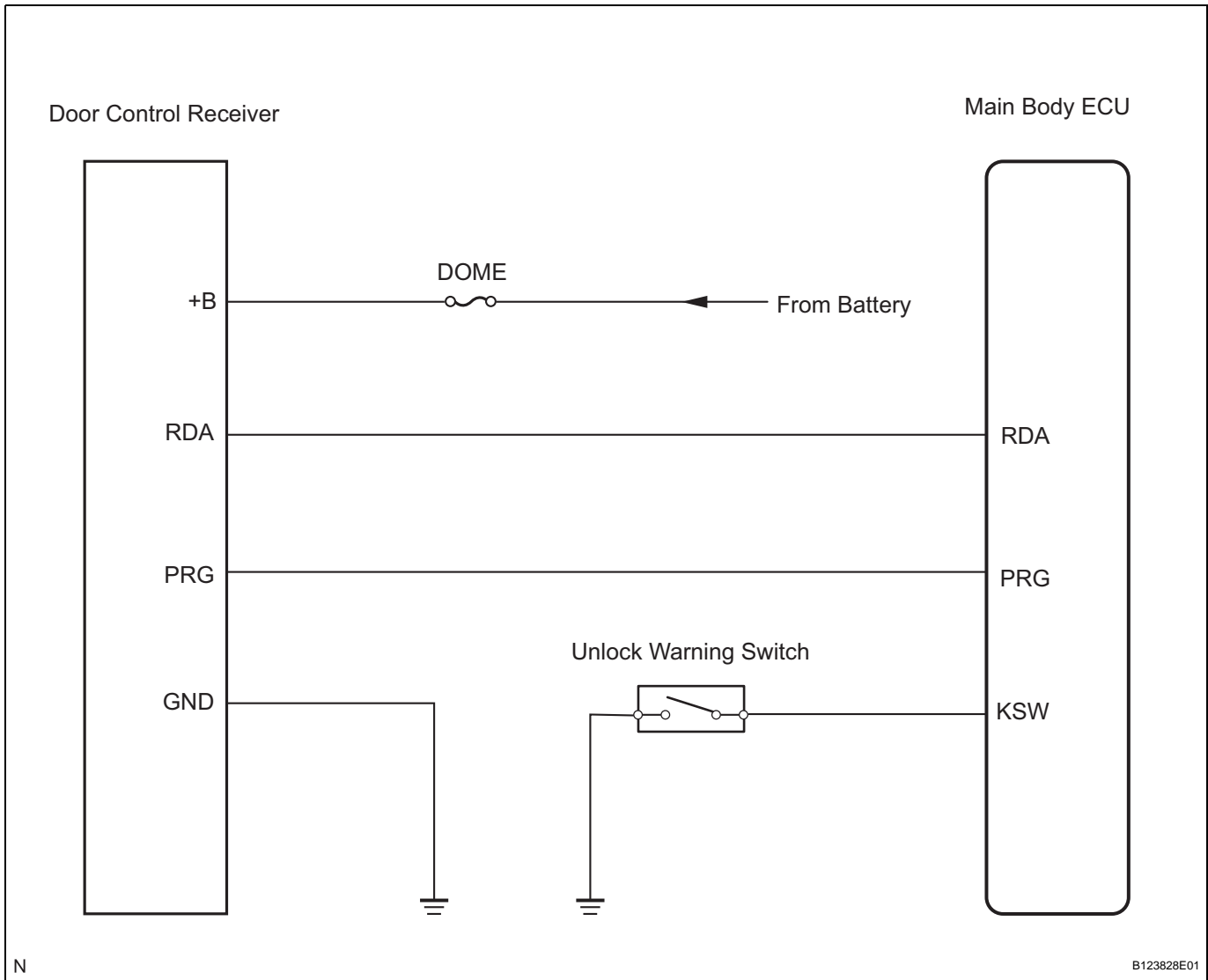## Only Wireless Control Function is Inoperative

DESCRIPTION

The door control receiver receives signals from the transmitter and sends these signals to the main body ECU.

WIRING DIAGRAM

Door Control Receiver   Main Body ECU

+B ————————————— DOME ——o_o—— ◄——— From Battery

RDA ————————————————————————————————— RDA

PRG ————————————————————————————————— PRG

Unlock Warning Switch

GND ——————————————————— ——o—o—— ————— KSW

N   B123828E01

INSPECTION PROCEDURE

1	CHECK WIRELESS DOOR LOCK CONTROL FUNCTIONS

OK:
Each function of wireless door lock control system operates normally using transmitter switches (see page DL-54).

OK >	END

NG

| **2** | **REPLACE TRANSMITTER BATTERY** |

(a) After replacing the transmitter battery, check that the doors can be locked and unlocked using the transmitter switches.
OK:
Doors can be locked and unlocked with transmitter.

OK > **END (TRANSMITTER BATTERY DEFECTIVE)**

NG

| **3** | **SWITCH TO SELF DIAGNOSTIC MODE** |

(a) Switch to self-diagnostic mode by operating the ignition key cylinder.
  (1) Make sure the vehicle is in its initial condition. Then insert the key into the ignition key cylinder and remove it.
  (2) Within 5 seconds of removing the key, insert the key into the ignition key cylinder (ignition switch OFF). Then turn the ignition switch ON and OFF.
  (3) Within 30 seconds of turning the ignition switch OFF, perform the following operation 9 times: turn the ignition switch ON and OFF.
  NOTICE:
  If the system cannot enter self-diagnostic mode, the system returns to normal mode.
 HINT:
  • Turning the ignition switch ON after the above operations have been completed ends self-diagnostic mode.
  • Do not lock or unlock doors during self-diagnostic mode.

(b) Check that the system has switched to self-diagnostic mode by checking the wireless door lock buzzer sound.
OK:
Buzzer pattern is same as illustration on left.

NG > **Go to step 8**

Buzzer Output:

T1: 0.13 seconds

T2: 0.5 seconds

ON
OFF

T1   T2

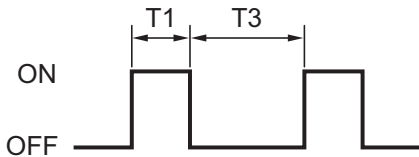N   B110075E18
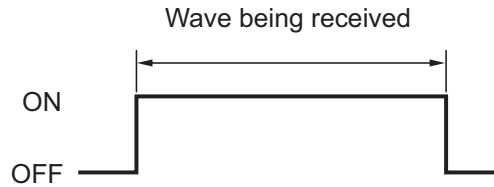
DL
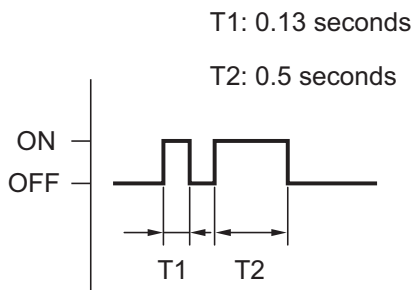
OK

4	CHECK BY SELF DIAGNOSTIC MODE

(a) Check the diagnostic outputs when the door control transmitter switch is held down. The diagnostic outputs can be checked by the wireless door lock buzzer sound.
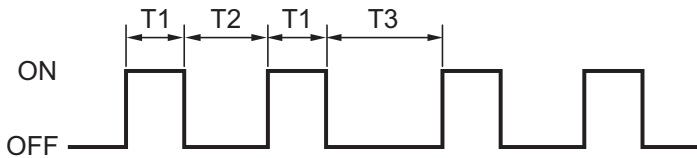
Buzzer Output:

Normal Wave (LOCK Switch):
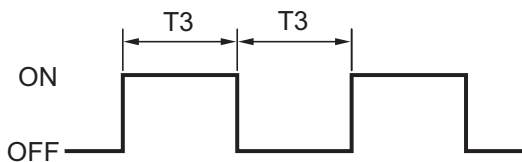
Mismatched Recognition Code:

Normal Wave (UNLOCK Switch):

No Diagnosis Output:

Normal Wave (PANIC Switch):

T1: 0.13 seconds

T2: 0.25 seconds

T3: 0.50 seconds

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Result

Result	Proceed to
Unmatching recognition code is output	A
Normal waves (buzzer patterns) for LOCK and UNLOCK switches are output	B
No diagnosis outputs	C

B	REPLACE MAIN BODY ECU
C	Go to step 6

A

5	REGISTER RECOGNITION CODE

(a) Check that the system can be switched to rewrite mode or add mode, and that a recognition code can be registered.
OK:
   Recognition code can be registered.

NG	Go to step 12

OK

END

6	CHECK RESPONSE OF DOOR CONTROL RECEIVER

(a) When a new or normally functioning door lock control transmitter switch for the same vehicle type is held down, check that an unmatching recognition code is output.
OK:
   Unmatching recognition code is output.

OK	REPLACE DOOR CONTROL TRANSMITTER MODULE

NG

7	REPLACE DOOR CONTROL RECEIVER

(a) After replacing the door control receiver, check that the doors can be locked and unlocked by using the transmitter LOCK and UNLOCK switches.
OK:
   Doors can be locked and unlocked with transmitter.

NG	REPLACE MAIN BODY ECU

OK

END

DL

8	**CONFIRM PROCEDURES TO ENTER SELF DIAGNOSTIC MODE**

Result

Result	Proceed to
Self-diagnostic mode entry successful	A
Self-diagnostic mode entry unsuccessful	B

B	Go to step 3

A

9	**INSPECT UNLOCK WARNING SWITCH ASSEMBLY**
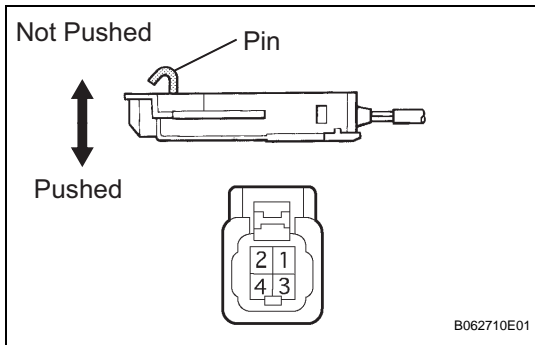
(a) Remove the unlock warning switch.
(b) Measure the resistance.
Standard resistance

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

NG	REPLACE UNLOCK WARNING SWITCH ASSEMBLY

OK

10	**CHECK HARNESS AND CONNECTOR (DOOR CONTROL RECEIVER - MAIN BODY ECU)**

Wire Harness Side:

Door Control Receiver Connector

Main Body ECU Connector
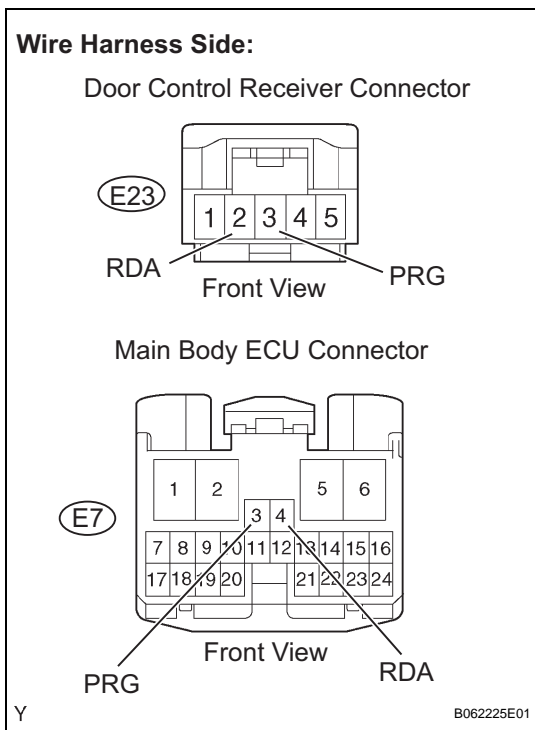
(a) Disconnect the E7 main body ECU connector.
(b) Disconnect the E23 door control receiver connector.
(c) Measure the resistance.
Standard resistance

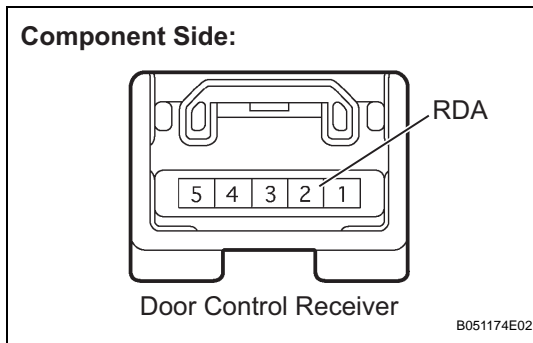| Tester Connection	Specified Condition
E7-4 (RDA) - E23-2 (RDA)	Below 1 Ω
E7-4 (RDA) or E23-2 (RDA) - Body ground	10 kΩ or higher
E7-3 (PRG) - E23-3 (PRG)	Below 1 Ω
E7-3 (PRG) or E23-3 (PRG) - Body ground	10 kΩ or higher

(d) Reconnect the main body ECU connector.
(e) Reconnect the door control receiver connector.

NG	REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

| 11 | CHECK DOOR CONTROL RECEIVER (OUTPUT) |

Component Side:

RDA

5 4 3 2 1

Door Control Receiver

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(a) Measure the voltage of the connector.
Standard voltage

Tester Connection	Condition	Specified Condition
E23-2 (RDA) - Body ground	Transmitter switch ON→OFF (No key in ignition key cylinder, all doors closed)	Below 1V → Pulse generation → Below 1V

OK > **REPLACE MAIN BODY ECU**

NG

| 12 | REPLACE DOOR CONTROL TRANSMITTER MODULE |

(a) Check that the doors can be locked and unlocked by using the transmitter LOCK and UNLOCK switches.
OK:
Doors can be locked and unlocked with transmitter.

NG > **REPLACE DOOR CONTROL RECEIVER**

OK

| END (DOOR CONTROL TRANSMITTER MODULE DEFECTIVE) |

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