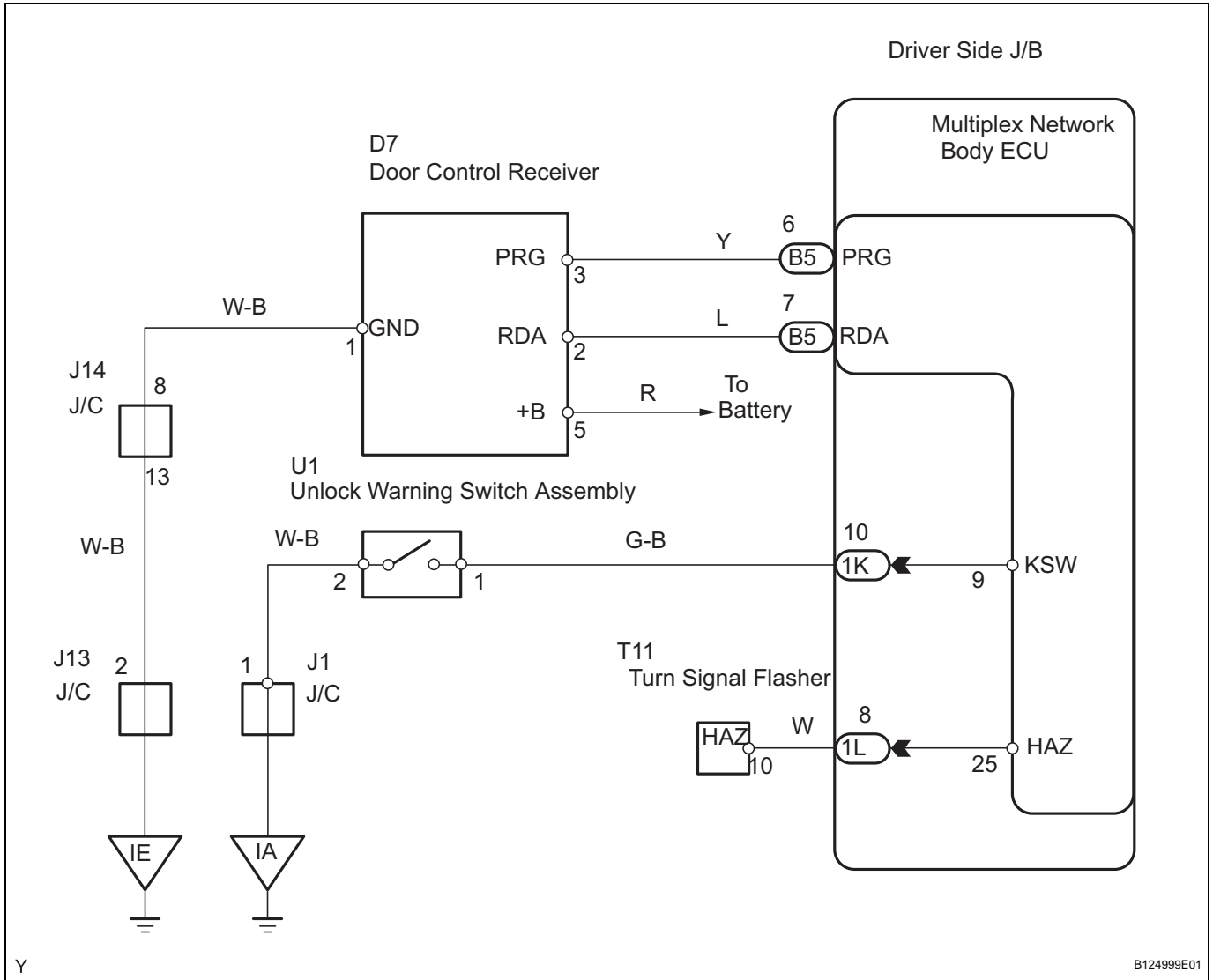


Only Wireless Control Function is Inoperative

DESCRIPTION

The door control receiver receives signals from the transmitter and sends these signals to the multiplex network body ECU. The multiplex network body ECU then controls the door operation by sending LOCK/ UNLOCK signals to the appropriate door lock actuator.

WIRING DIAGRAM



1

CHECK WIRELESS DOOR LOCK CONTROL FUNCTIONS

OK

NORMAL

NG

DL

2 REPLACE TRANSMITTER BATTERY

- (a) After replacing the transmitter battery with a new or correctly functioning one, check that the doors can be locked and unlocked by using the transmitter LOCK/UNLOCK switch.

OK:

Doors can be locked and unlocked with transmitter.

OK

END

NG

3 CHECK WIRELESS DOOR LOCK FUNCTIONS (STANDARD OPERATION)

- (a) Check standard LOCK/UNLOCK switch operation.

NOTICE:

Standardized test procedure: press the transmitter switch for 1 second, directing the beam at the driver side door outside handle from a distance of 1 m (3.28 ft). The transmitter should be pointed directly at the door handle, i.e. at a 90° angle to the vehicle body.

OK

NORMAL

NG

4 CONFIRM ROOM LIGHT ON

- (a) Check that the room laight comes on.

OK:

Room light comes on.

NG

REPAIR OR REPLACE ROOM LIGHT ASSEMBLY

OK

5 SWITCH TO SELF-DIAGNOSTIC MODE

- (a) Switch to self-diagnostic mode by operating the ignition key cylinder.
- (1) Put the vehicle into its initial condition (See page [DL-43](#)), and insert the key into the ignition key cylinder and remove it.
 - (2) Within 5 seconds of the key being removed (step 1), insert the key into the ignition key cylinder again (ignition key in the LOCK position). Then turn the ignition switch ON and return it to the LOCK position.

- (3) Within 30 seconds of the ignition switch being returned to the LOCK position (step 2), perform the following 9 times: turn the ignition switch ON and return it to the LOCK position.

NOTICE:

If the change to self-diagnostic mode has failed, the system returns to normal mode.

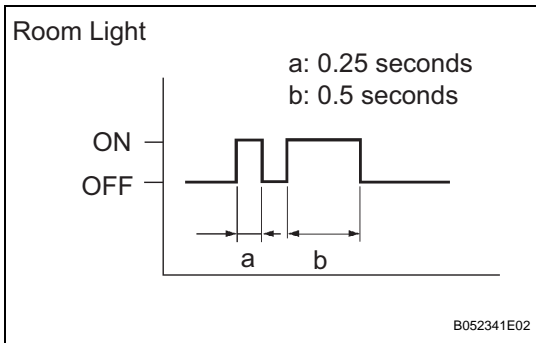
HINT:

- Turning the ignition switch ON after step (a)-(3) has been completed ends self-diagnostic mode.
- Do not lock or unlock any doors during self-diagnostic mode.

- (b) Check that the system has switched to self-diagnostic mode by checking the blinking frequency of the room light.

OK:

The room light output should be as shown in the timing chart on the left.



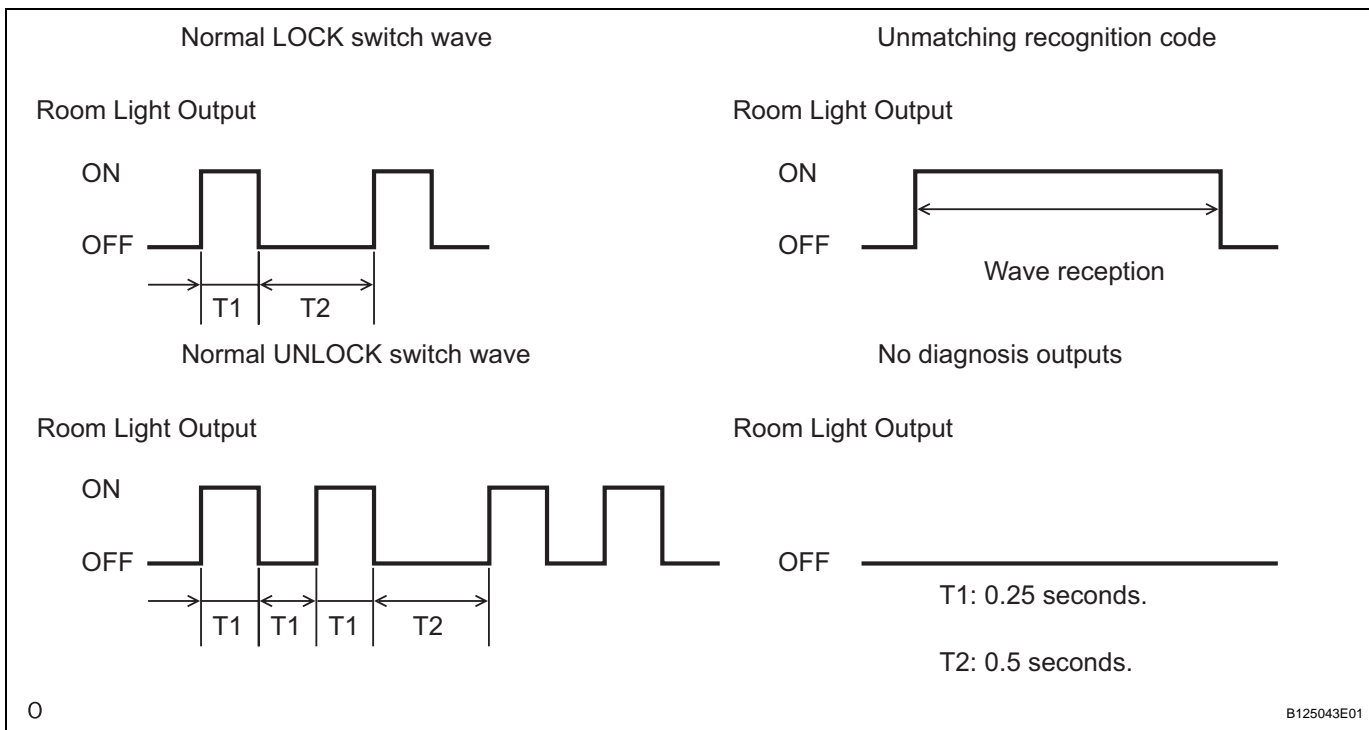
NG →

Go to step 9

OK

6 CHECK BY SELF-DIAGNOSTIC MODE

- (a) Inspect the diagnosis outputs when the door control transmitter switch is held down. The diagnosis outputs can be checked with the outputs of the room light.



Result

Result	Proceed to
Normal waves (room light blinking) for LOCK and UNLOCK switches are output.	A
An unmatching recognition code is output and room light stays ON.	B
No diagnosis outputs are present and the room light is OFF.	C

B

REPLACE DRIVER SIDE JUNCTION BLOCK

C

Go to step 8

A

7

REGISTER RECOGNITION CODE

- (a) Check that the system can switch to rewrite mode or add mode and a recognition code can be registered.

OK:

Recognition code can be registered.

NG

Go to step 15

OK

NORMAL

8

CHECK RESPONSE OF DOOR CONTROL RECEIVER

- (a) Prepare a new or correctly functioning door control transmitter switch for the same vehicle model. Press and hold a switch on the transmitter and check that an unmatching recognition code is output.

OK:

Unmatching recognition code is output.

NG

Go to step 12

OK

REPLACE DOOR CONTROL TRANSMITTER

9

CONFIRM INPUT METHOD OF SELF-DIAGNOSTIC MODE

Result

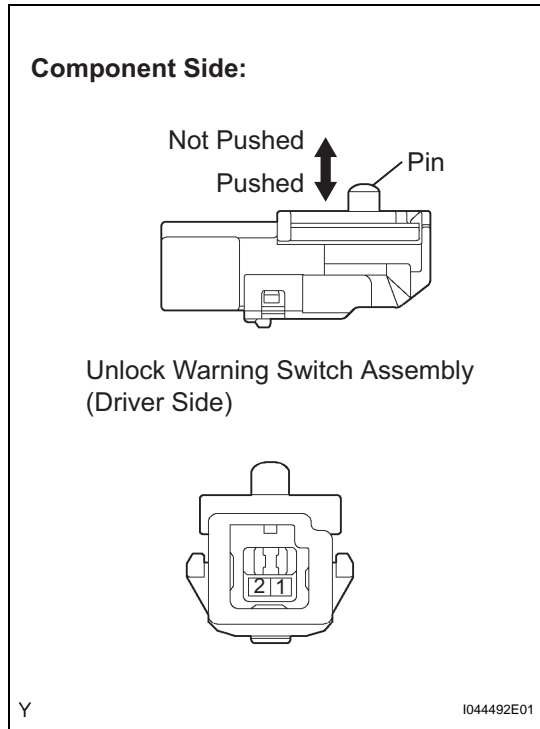
Result	Proceed to
The method for changing the system to self-diagnostic mode works.	A
The method for changing the system to self-diagnostic mode does not work.	B

B

Go to step 5

A

10 INSPECT UNLOCK WARNING SWITCH ASSEMBLY



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

Standard Resistance

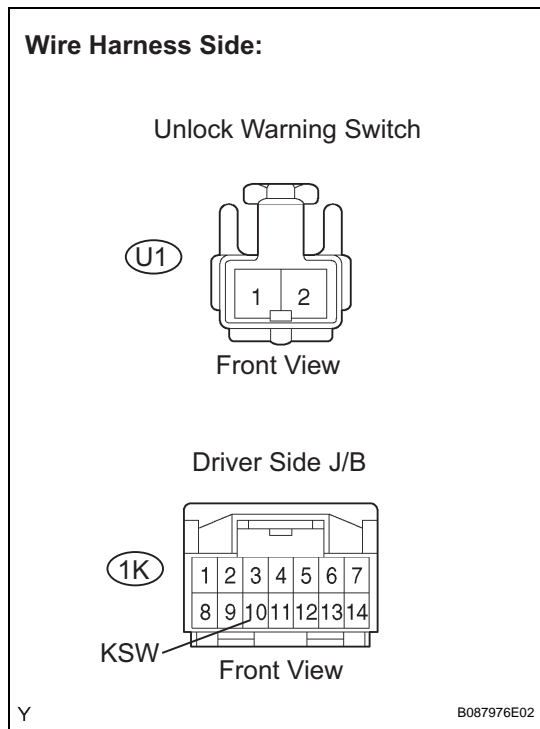
Tester Connection	Switch Condition	Specified Condition
1 - 2	Not pushed	10 kΩ or higher
1 - 2	Pushed	Below 10 Ω

- (c) Reinstall the unlock warning switch.

NG → **REPLACE UNLOCK WARNING SWITCH ASSEMBLY**

OK

11 CHECK HARNESS AND CONNECTOR (UNLOCK WARNING SWITCH - DRIVER SIDE J/B AND BODY GROUND)



- (a) Disconnect the U1 unlock warning switch connector.
- (b) Disconnect the 1K driver side J/B connector.
- (c) Check the resistance.

Standard Resistance

Tester Connection	Specified Condition
U1-1 - 1K-10 (KSW)	Below 1 Ω
U1-2 - Body ground	Below 1 Ω

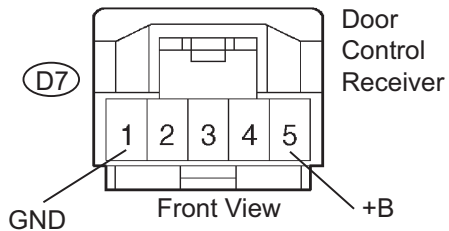
- (d) Reconnect the unlock warning switch connector.
- (e) Reconnect the driver side J/B connector.

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

OK

12 CHECK HARNESS AND CONNECTOR (DOOR CONTROL RECEIVER - BATTERY AND BODY GROUND)

Wire Harness Side:



B059092E01

- (a) Disconnect the D7 door control receiver connector.
 (b) Check the voltage and resistance.

Standard

Tester Connection	Specified Condition
D7-5 (+B) - Body ground	10 to 14 V
D7-1 (GND) - Body ground	Below 1 Ω

- (c) Reconnect the door control receiver connector.

NG

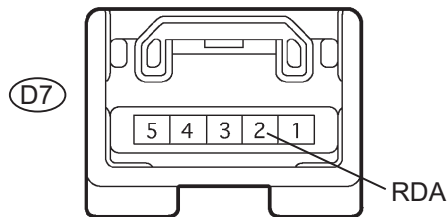
REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

13 CHECK DOOR CONTROL RECEIVER (OUTPUT)

Component Side:

Door Control Receiver



B070999E03

- (a) Turn the ignition switch ON.
 (b) Measure the voltage of the connector.

Standard Voltage

Tester Connection	Condition	Specified Condition
D7-2 (RDA) - Body ground	Each transmitter switch OFF (No key in ignition key cylinder and all doors closed)	Below 1 V
D7-2 (RDA) - Body ground	Each transmitter switch ON (No key in ignition key cylinder and all doors closed)	Alternates between 6V and 7V

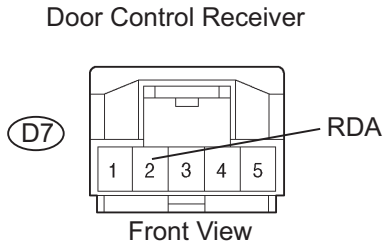
NG

Go to step 15

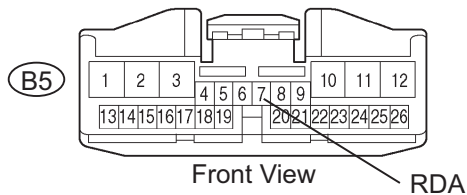
OK

14 CHECK HARNESS AND CONNECTOR (DOOR CONTROL RECEIVER - DRIVER SIDE J/B (ECU AND GROUND))

Wire Harness Side:



Multiplex Network Body ECU



Y

B087977E01

- (a) Disconnect the D7 door control receiver connector.
- (b) Disconnect the B5 multiplex network body ECU connector.

- (c) Check the resistance.
- Standard Resistance**

Tester Connection	Specified Condition
D7-2 (RDA) - B5-7 (RDA)	Below 1 Ω
D7-2 (RDA) - Body ground	10 kΩ or higher
B5-7 (RDA) - Body ground	10 kΩ or higher

- (d) Reconnect the door control receiver connector.
- (e) Reconnect the multiplex network body ECU connector.

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

OK

15 REPLACE DOOR CONTROL RECEIVER WITH NORMAL ONE

NG → **REPLACE DRIVER SIDE JUNCTION BLOCK**

OK

REPLACE DOOR CONTROL RECEIVER