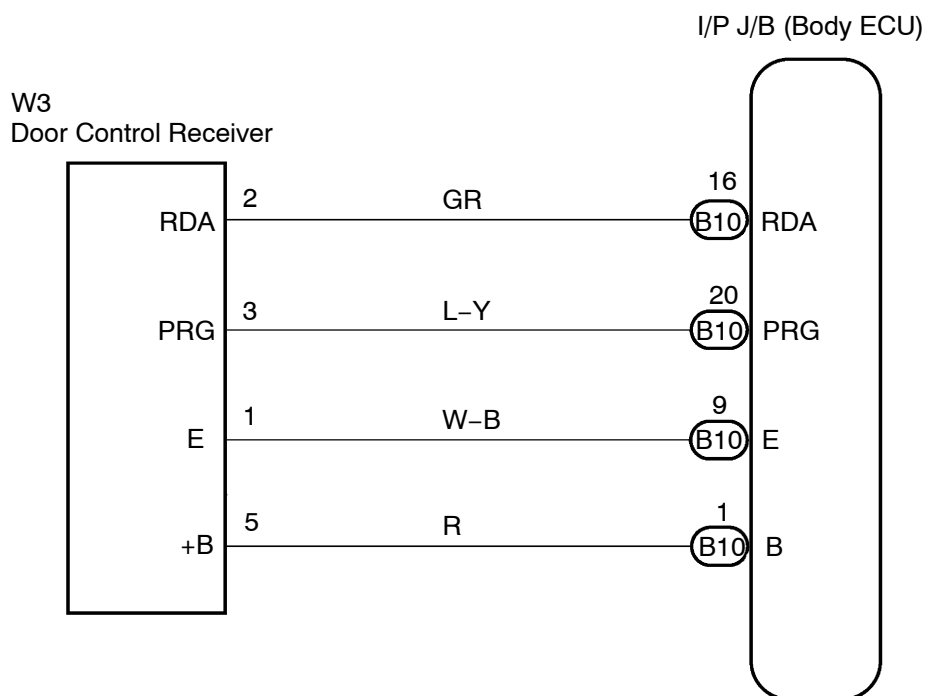


ONLY WIRELESS CONTROL FUNCTION IS INOPERATIVE

CIRCUIT DESCRIPTION

Wireless door lock control system has a function with a large-scale body multiplex communication system. First of all, inspect the communication function depending on the "HOW TO PROCEED WITH TROUBLE-SHOOTING", and check the communication system has no malfunction. Then finally proceed with the troubleshooting. Also, in case that the wireharness between the body ECU and door control receiver has been short-circuited, diagnostic code 42 will be output and wireless control will not function.

WIRING DIAGRAM



B55464

INSPECTION PROCEDURE

HINT:

A switch described in this text indicates the switch for sending, which is built-in the door control transmitter.

1	CHECK THE WIRELESS DOOR LOCK FUNCTIONS
----------	---

(a) Check the basic function.

- (1) Check whether the LED does not light up when the switch is pressed 3 times.

HINT:

- In case that the LED does not light up when the switch has been pressed 3 times or more, it may be caused by the battery dead.
 - In case of keeping pressing the switch, the LED repeats flashing.
 - (2) In the remote control operational area, check that the all doors will lock or unlock when the switch has been pressed for approximately 1 second. It is, however, not the case where the key is in the ignition key cylinder or any of the doors is open.
- (b) Check the chattering prevention function.
- (1) Check that the corresponding operation will be done only once and but not repeat continuously when the switch has been kept pressing. However, if the operations are carried out by approximately 1 second interval, from the time to release the finger from the switch till the time to press it again, check that a corresponding operation to the switch that will be pressed next will be carried out.
- (c) Check the automatic locking function.
- (1) Check that all doors will automatically lock as long as any of the doors has not been opened or all doors have not been locked within approximately 30 seconds after all doors are unlocked by pressing the switch.
 - (2) Under the above condition, the automatic locking function will not work if any of the doors has been opened or all doors have been locked within approximately 30 seconds.
- (d) Check the switch operation fail-safe function.
- (1) Check that doors are not locked or unlocked by the switch while the key is in the ignition key cylinder. However, the time of the discrimination code registration mode is excepted.
 - (2) Check that doors are not locked or unlocked by the switch of an unregistered transmitter, but they are locked or unlocked by the switch of a registered transmitter.
- (e) Check operation stop function when door is open or not completely close
- (1) Check that doors are not locked by the switch while the door is open or is not completely close.
- (f) Check the repeat function.
- (1) Check that the all doors will automatically lock once again 1 second after the lock switch has been pressed while the move of the driver's door control knob, which is in unlocking state, is being blocked forcibly.
- (g) Check the hazard flashing function (answer back).
- (1) Check that the hazard lights will flash once (when locked) or twice (when unlocked) simultaneously with all doors' locking or unlocking operation, when the switch is pressed.
- (h) Check the room light ON function.
- (1) Make the room light switch in the DOOR position.
 - (2) Check that the room light will be on simultaneously with the unlocking operation when the switch has been pressed for 1 second.
 - (3) Check that the room light will be off in approximately 15 seconds if doors have not been opened after the unlocking operation.

OK

NORMAL

NG

2 CHECK TRANSMITTER LED LAMP ON

- (a) Check the transmitter LED lights up 3 times when pressing the switch 3 times.

OK

Go to step 4

NG

3 CHECK TRANSMITTER BATTERY SIMPLY

- (a) When the transmitter battery is exchanged into new or normal one, check the transmitter LED lights up 3 times when pressing the switch 3 times.

OK

REPLACE TRANSMITTER BATTERY

NG

REPLACE TRANSMITTER SUB-ASSY MODULE
SET DOOR CONTROL**4 CHECK THE WIRELESS DOOR LOCK FUNCTIONS**

- (a) Check if the UNLOCK-LOCK operates by a standard operation.

NOTICE:

Standard operation, here means an operation to press the transmission switch for 1 second, directing the transmitter to the vehicle in the location that is 100 cm (39.37 in.) away from the driver's outside handle in the right direction.

NG

REPLACE TRANSMITTER SUB-ASSY MODULE
SET DOOR CONTROL

OK

5 CONFIRM ROOM LAMP ON

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

HINT:

When the light does not come on, proceed with the self-diagnostic mode after the repair of the room light.

6 ENTER INTO THE SELF DIAGNOSTIC MODE

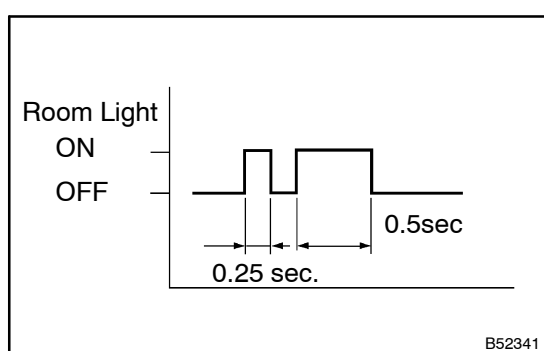
- (a) Enter into the self-diagnostic mode via an operation of the ignition switch lock cylinder.
- (1) Insert the key into the ignition switch lock cylinder under the vehicle's initial condition, and then carry out the operation of the ignition switch assembly OFF→ON→OFF once within 5 seconds after the key pulled out.
 - (2) Within 30 seconds after the ignition switch assembly turned OFF, carry out the operation of the ignition switch assembly OFF→ON→OFF 9 times.

NOTICE:

It will enter into the normal mode if even one of the above conditions has not been met.

HINT:

- Operation of the ignition switch assembly OFF→ON will finish the self-diagnostic mode.
- Do not carry out lock/ unlock operations during the self-diagnostic mode.



- (b) Check that it has entered into the self-diagnostic mode by blinks of the room light.

NG

Go to step 11

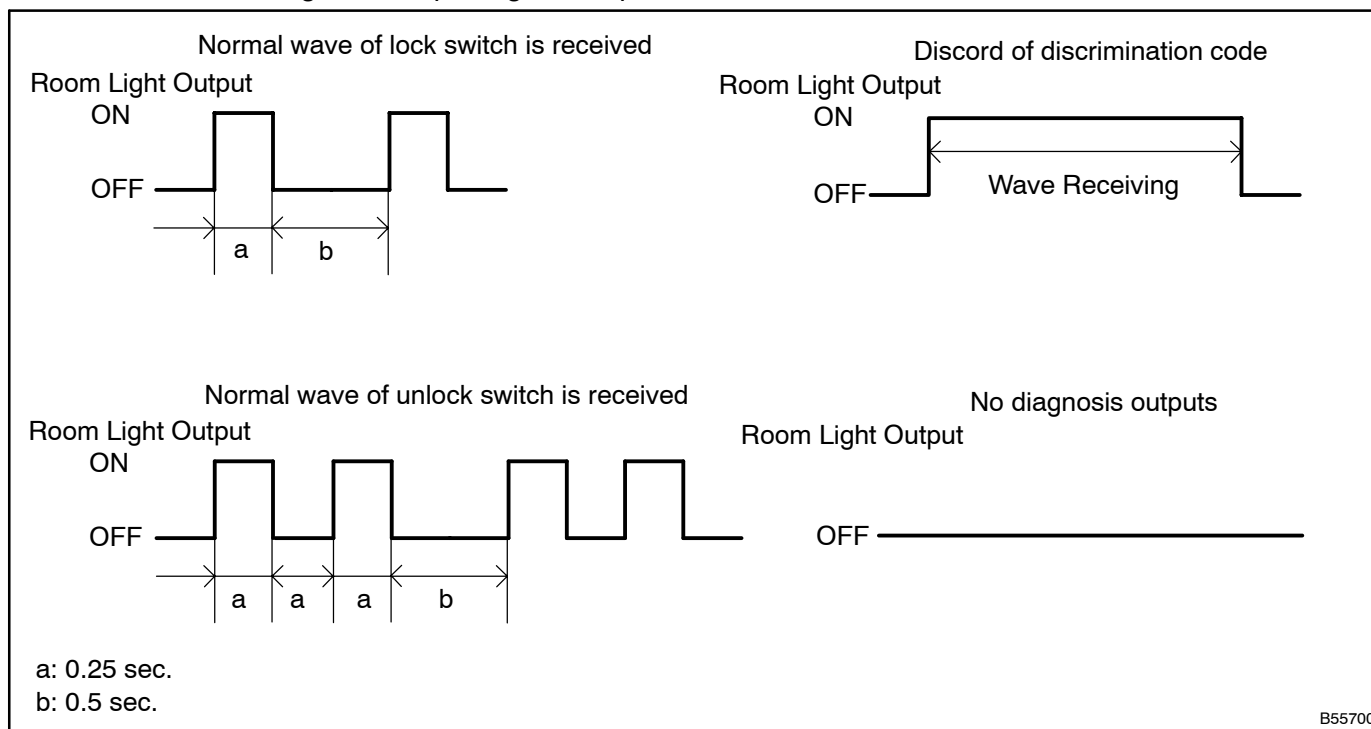
OK

7 CHECK BY SELF-DIAGNOSTIC MODE

- (a) Inspect outputs of the diagnosis when the door control transmitter switch has been kept pressing (Check of diagnosis outputs can be made by output of the room light.).

HINT:

- In case of a reception of the normal wave of the LOCK/UNLOCK switch (room light blinks) and no diagnosis outputs (room light off), go to step A.
- In case of discord of discrimination code (room lights on), go to step B.
- In case of no diagnosis outputs, go to step C.



A

REPLACE INSTRUMENT PANEL JUNCTION BLOCK ASSY

C

Go to step 9

B

8 REGISTRATION OF RECOGNITION CODE

- (a) Check that it is possible to enter into the rewrite mode to add mode or the discrimination code registration, and also registration is possible.

OK

NORMAL(CARRY OUT INSPECTION OF FUNCTIONS)

NG

Go to step 10

9 CHECK RESPONSE OF DOOR CONTROL RECEIVER RESPONSE

- (a) When a new normal door control transmitter switch of the same type of vehicle is kept pressing, check if a diagnosis of no correspondence in the recognition code is output,

OK

**REPLACE TRANSMITTER SUB-ASSY MODULE
SET DOOR CONTROL**

NG

Go to step 13**10 EXCHANGE DOOR CONTROL RECEIVER WITH NORMAL ONE**

OK

REPLACE DOOR CONTROL RECEIVER

NG

**REPLACE INSTRUMENT PANEL JUNCTION
BLOCK ASSY****11 CONFIRM INPUT METHOD OF SELF DIAGNOSTIC MODE**

- (a) When the input method of self diagnostic mode is correct, proceed to "A".
 (b) When the input method of self diagnostic mode is incorrect, proceed to "B".

B

Go to step 6

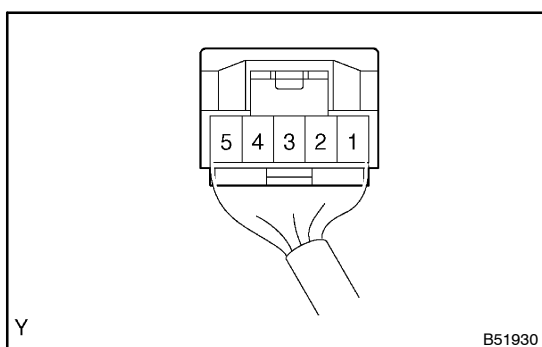
A

12 INSPECT UN-LOCK WARNING SWITCH ASSY

OK

**REPLACE INSTRUMENT PANEL JUNCTION
BLOCK ASSY**

NG

REPLACE UN-LOCK WARNING SWITCH ASSY**13 CHECK DOOR CONTROL RECEIVER**

- (a) Disconnect the connector from the control receiver.
 (b) Check that the connector on the harness side.

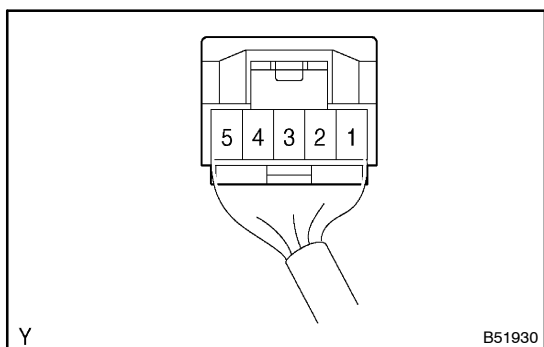
Voltage and Continuity:

Tester connection	Specified condition
5 (+B) – Body ground	10 – 14 V
1 (E) – Body ground	Continuity

NG

**REPAIR OR REPLACE HARNESS AND
CONNECTOR**

OK

14 CHECK DOOR CONTROL RECEIVER

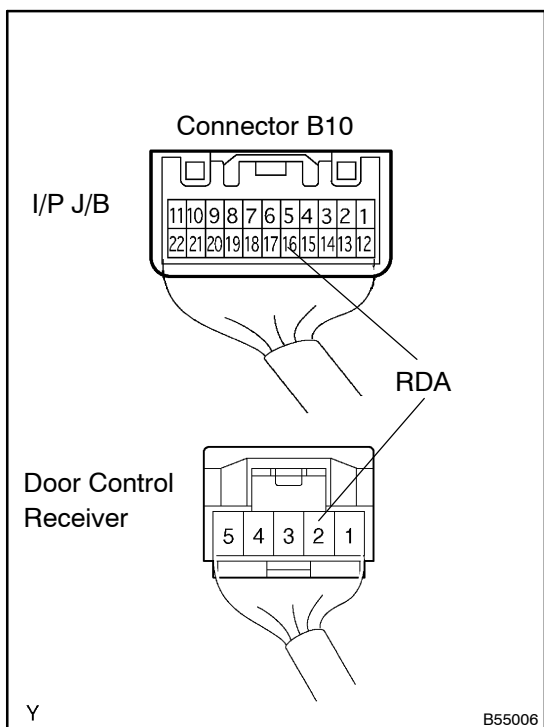
- (a) Reconnect the connector to the door control receiver, check the voltage between terminal 2 and the body ground.

Voltage:

Tester connection	Condition	Specified condition
2 (RDA) – Ground	IG switch OFF, No key in ignition switch, All door closed, Each transmitter switch OFF → ON	Below 1 V → About 6 – 7 V → Below 1 V

NOTICE:

Check the confirmation of the output voltage with the bar graph display.

NG**Go to step 16****OK****15 CHECK WIRE HARNESS**

- (a) Disconnect the door control receiver connector and I/P J/B connector B10.
- (b) Check the continuity between the I/P J/B connector B10 and door control receiver connector on the wire harness side.

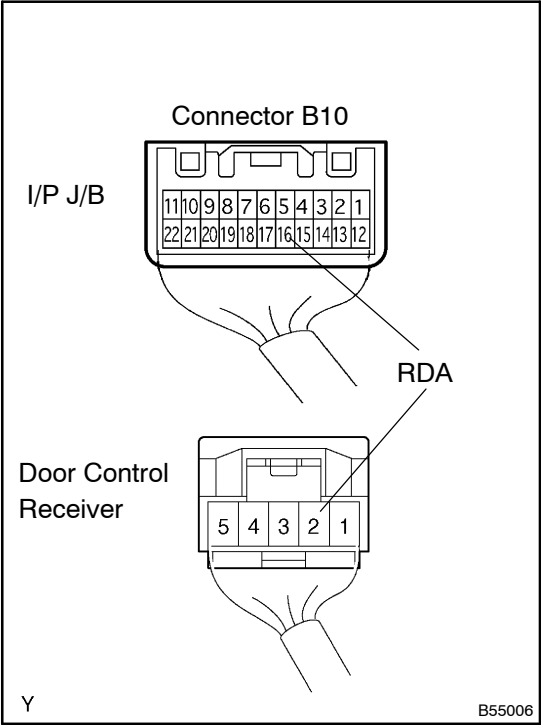
Continuity:

Tester connection (Receiver – I/P J/B)	Specified condition
2 (RDA) ⇔ B10-16 (RDA)	Continuity

OK**Go to step 17****NG****REPAIR OR REPLACE HARNESS AND CONNECTOR**

16

CHECK WIRE HARNESS



- (a) Disconnect the door control receiver connector and I/P J/B connector B10.
- (b) Check the continuity between the I/P J/B connector B10 and door control receiver connector on the wire harness side.

Continuity:

Tester connection	Specified condition
Receiver: 2 (RDA) - Body ground	No continuity
I/P J/B: B10-16 (RDA) - Body ground	No continuity

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

17

EXCHANGE DOOR CONTROL RECEIVER WITH NORMAL ONE

OK

REPLACE DOOR CONTROL RECEIVER

NG

REPLACE INSTRUMENT PANEL JUNCTION BLOCK ASSY