

ELECTRIC DOOR LOCK SYSTEM

OPERATION CHECK

1. CHECK ELECTRIC DOOR LOCK

- (a) Check that all of the doors lock when the door lock knob (for manual operation) of the driver's door is turned to LOCK. Also, check that all of the doors unlock when the door lock knob is turned to UNLOCK.
- (b) Check that the key-linked operation works from outside of the vehicle. Do this by making sure that all of the doors lock when the driver's side door lock is turned to LOCK, and that all of the doors unlock when turned to UNLOCK.
- (c) Check the key lock-in prevention function.

NOTICE:

In order to prevent key lock-in, perform the check with the door window open.

- (1) Have the ignition key inserted in the ignition switch lock cylinder.
- (2) With any door open, perform the following lock operations. Then check immediately that the unlocking function works as well.
 - Turn the door lock knob on the driver's side door in the LOCK direction. (immediately)
 - Using the driver's side door key operation, turn the door lock knob in the LOCK direction. (immediately)
 - Lock the vehicle by holding down the door lock knob on the driver side door to the locked side for at least two seconds. Then shut the driver's side door. (Unlock after 1 sec)
- (d) Check illumination function

HINT:

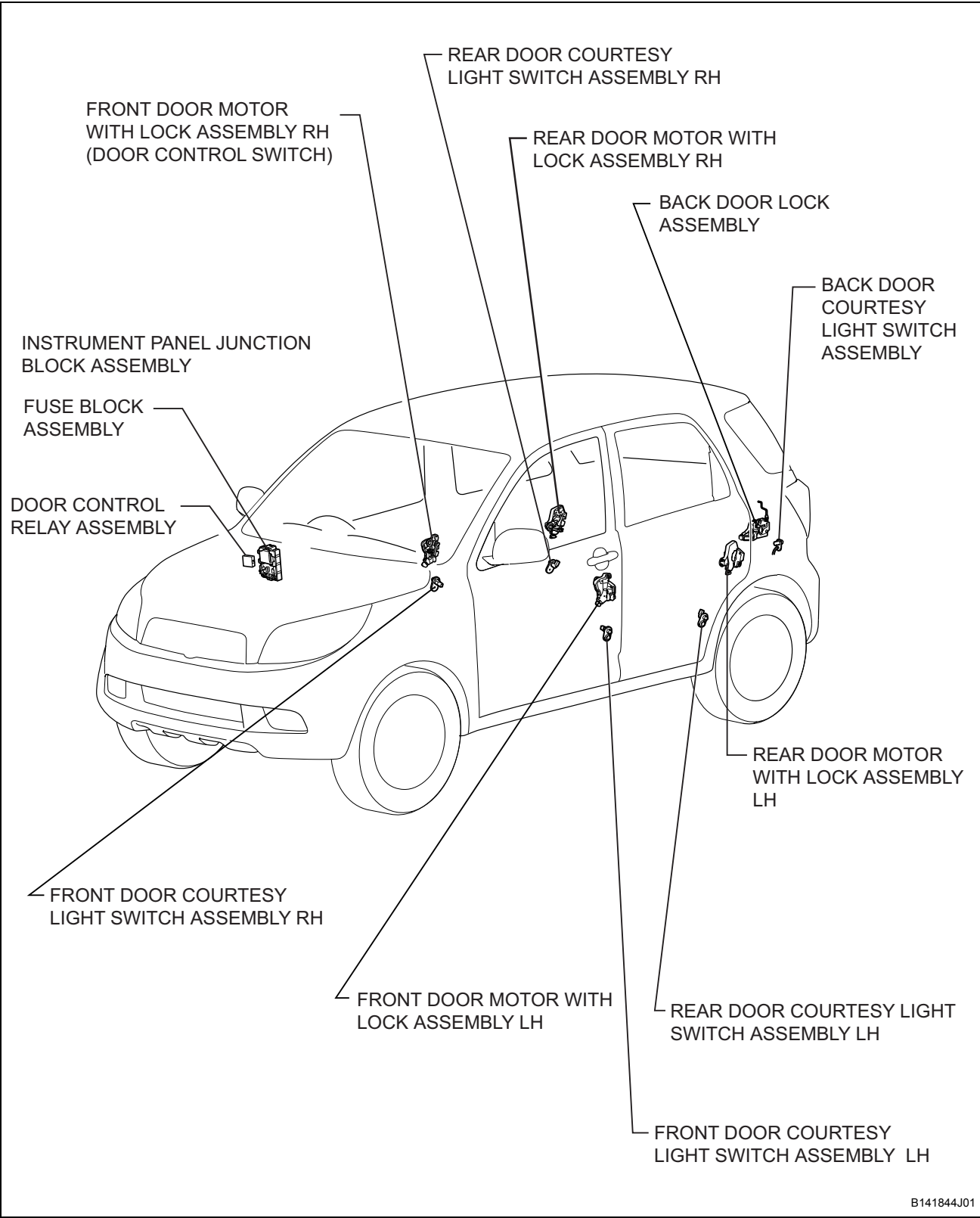
 - The room light comes on and goes off using the illumination function.
 - The room light functions when the switch is in the DOOR position.
- (1) Check that each of the lights goes on when the doors are unlocked by using the key operation in the driver's side door. Also check that each light goes out in about 15 seconds if none of the doors are open after the door unlock operation is completed.

DL



LOCATION

DL



PROBLEM SYMPTOMS TABLE

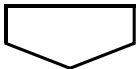
Symptom	Suspected Area	See Page
Unable to lock or unlock any of the doors using the driver's side door lock knob or the driver's side door key operation	ECU-IG 10 A, ECU-B 7.5 A, D/L 25 A fuse	DL-9
	Front door lock assembly RH	
	Wire harness	
	Fuse block assembly	
	Door control relay assembly	
All of the doors can be locked and unlocked except the driver side door	Front door lock assembly RH	DL-12
	Wire harness	
	Fuse block assembly	
	Door control relay assembly	
All of the doors lock and unlock except the passenger side door	Front door lock assembly LH	DL-15
	Wire harness	
	Fuse block assembly	
	Door control relay assembly	
All doors lock and unlock except the right rear door	Rear door lock assembly RH	DL-18
	Wire harness	
	Fuse block assembly	
	Door control relay assembly	
All doors lock and lock except the left rear door	Rear door lock assembly LH	DL-21
	Wire harness	
	Fuse block assembly	
	Door control relay assembly	
The key lock-in prevention function does not operate properly (unlock warning switch circuit)	Unlock unlock warning switch	DL-24
	Fuse block assembly	
	Wire harness	
	Door control relay assembly	
The key lock-in prevention function does not operate properly (unlock warning switch circuit)	Courtesy light switch assembly	DL-28
	Fuse block assembly	
	Wire harness	
	Door control relay assembly	
All doors lock and unlock except back door	Back door lock assembly	DL-32
	Wire harness	
	Door control relay assembly	

DL

HOW TO PROCEED WITH TROUBLE-SHOOTING

1

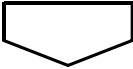
VEHICLE BROUGHT TO WORKSHOP



2

CONDUCT CUSTOMER PROBLEM ANALYSIS AND CHECK SYMPTOMS

HINT:
(See page DL-5.)



3

PROBLEM SYMPTOMS TABLE

HINT:
See page DL-3.

Result	Proceed to
Symptom is not listed in problem symptoms table	A
Symptom is listed in problem symptoms table	B

B

GO TO INSPECTION PROCEDURE 5

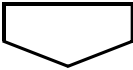


DL

4

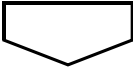
TROUBLESHOOT BASED ON THE SYMPTOM

- (a) CHECK FUNCTION (See page DL-1.)
- (b) ECU terminals (See page DL-6.)
- (c) INSPECTION



5

ADJUST, REPAIR OR REPLACE



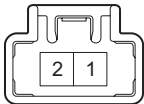
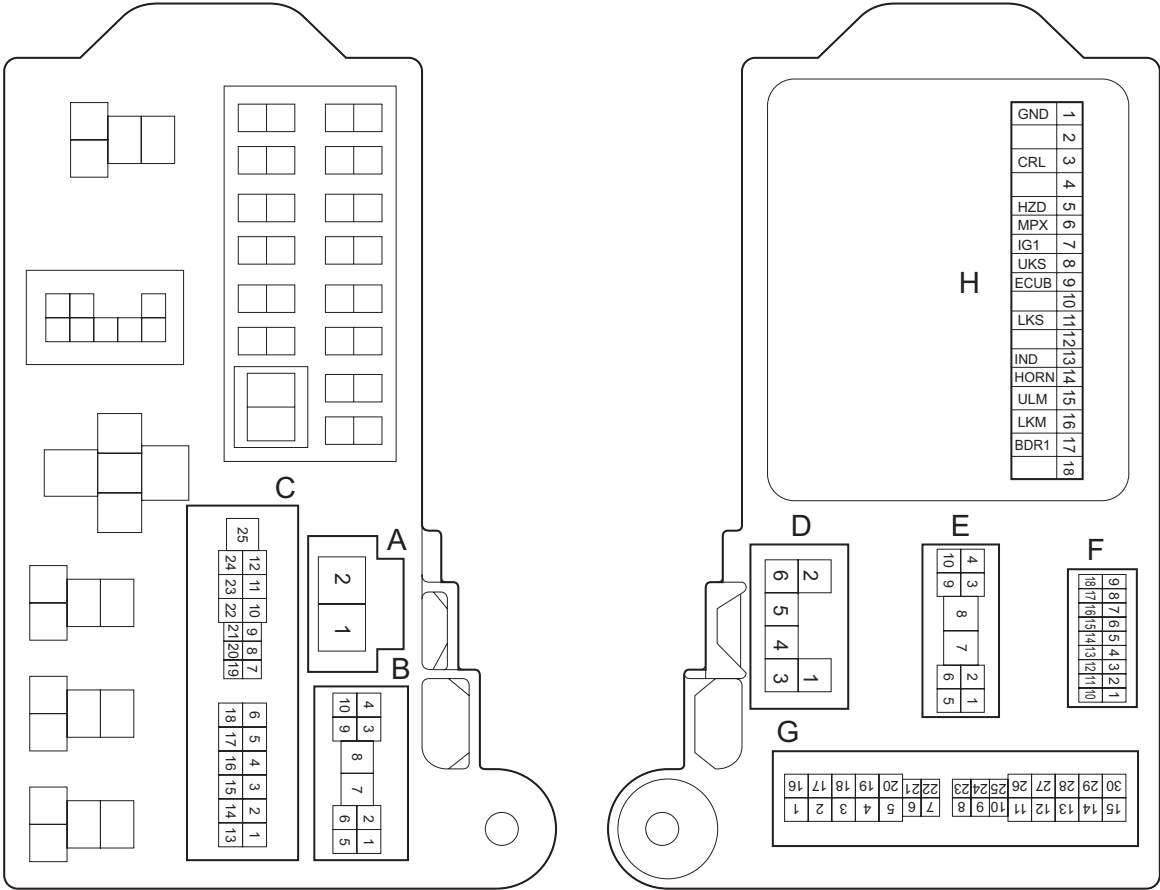
END

CUSTOMER PROBLEM ANALYSIS CHECK

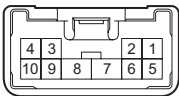
Door Lock Control System Problem Diagnosis Check Sheet				Date Vehicle Brought In / /	
Customer's Name		License Plate No.	First Registration Year 20__ / __ / __		
		Model	VIN		
Written By	Inspector's Name	Engine Type	Odometer Reading km		
Description Of Symptoms					
Date Problem First Occured		Date Time			
Frequency Problem Occurs		Constant Occasional (____times per day, ____times per month)			
Conditions (Method of use and results)					
Weather	Clear Cloudy Rainy Snowy Others()			Temperature	Approx. ()°C
Road	City Suburb Highway Others()			Paved Unpaved	
Problem Symptoms	☐ Lock function does not operate ☐ Driver seat ☐ Front passenger seat ☐ Right rear seat ☐ Left rear seat		☐ Unlock function does not operate ☐ Driver seat ☐ Front passenger seat ☐ Right rear seat ☐ Left rear seat		
	☐ Lock and unlock functions do not operate ☐ Driver seat ☐ Front passenger seat ☐ Right rear seat ☐ Left rear seat				
	☐ Door control does not operate by the master switch				
	☐ Door control does not operate by key link				
	☐ Others()				
H					

ECU TERMINALS

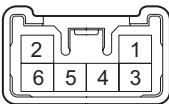
1. FUSE BLOCK ASSEMBLY (DOOR CONTROL RELAY ASSEMBLY)



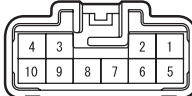
Connector A



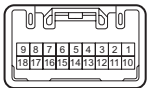
Connector B



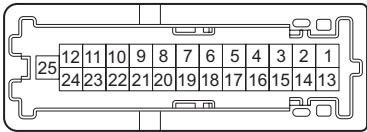
Connector D



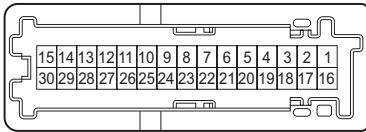
Connector E



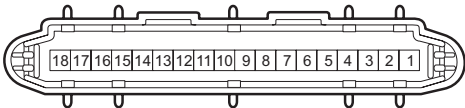
Connector F



Connector C



Connector G



Connector H

(a) INSPECT FUSES

(1) Check that the following fuses are normal: DOME 7.5 A, POWER 30 A, AM1 50 A, AM2 30, BACK UP 15 A, HORN 10 A.

(b) Check the fuse block assembly (door control relay assembly).

(1) Disconnect connectors A, C and G.

(2) Using a tester, check the voltage and continuity between the body ground and each terminal of the connector.

Standard:

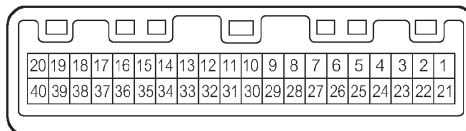
Terminal No.	Item	Measurement Condition	Standard
A2 (BDR1) ↔ G29 (GND)	Voltage	Always	10 to 14 V
C10 (ECUB) ↔ G29 (GND)	Voltage	Always	10 to 14 V
G23 (LKS) ↔ Body ground	Continuity	The door control switch is in the LOCK position	Continuity
G10 (UKS) ↔ Body ground	Continuity	The door control switch is in the UNLOCK position	Continuity
G29 (GND) ↔ Body ground	Continuity	Always	Continuity

(3) Connect the connector.

(4) Using a tester, check the voltage between the connector terminals.

Standard

Terminal No.	Item	Measurement Condition	Standard
D4 (IG1) ↔ G29 (GND)	Voltage	Ignition switch OFF → ON	About 0 V → 10 to 14 V
G17 (CRL) ↔ G29 (GND)	Voltage	All doors open → closed	About 0 V → 10 to 14 V
F5 (HZD) ↔ G29 (GND)	Voltage	Hazard lights OFF → Blinking	10 to 14 V → About 0 V
G16 (LKM) ↔ G30 (ULM) G1 (LKM) ↔ G11 (ULM) B4 (LKM3) ↔ B2 (ULM3)	Voltage	Door control switch (manual function, key-linked operation) OFF → LOCK	About 0 → 10 to 14 V → About 0 V
G30 (ULM2) ↔ G16 (LKM2) G11 (ULM) ↔ G1 (LKM) B2 (ULM3) ↔ B4 (LKM3)	Voltage	Door control switch (manual function, key-linked operation) OFF → LOCK	About 0 → 10 to 14 V → About 0 V

2. Combination meter assembly

B068593

(a) CHECK INPUT / OUTPUT SIGNALS

(1) Using a tester, connect the connector and check the continuity and the voltage of each terminal by aiming the tester needle from behind the vehicle's wire harness connector .

Standard:

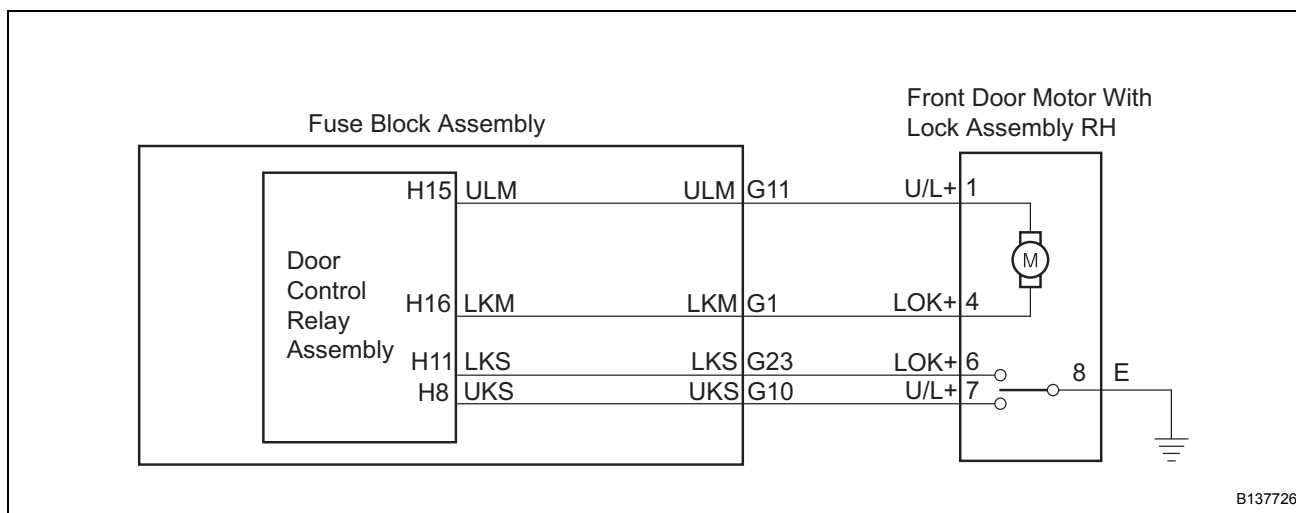
Terminal No.	Item	Measurement Condition	Standard
2 (KEY) ↔ Body ground	Voltage	The ignition key is the key cylinder → the ignition key is not in the cylinder	1 V or less → 10 to 14 V
9 (CTY) ↔ Body ground	Voltage	Door indicator OFF → ON	1 V or less → 10 to 14 V

UNABLE TO LOCK OR UNLOCK ANY OF DOORS USING MASTER SWITCH OR DRIVER SIDE DOOR KEY OPERATION

DESCRIPTION

The door control relay assembly receives the switch signal from the driver's side door lock knob and the driver's side door key. The door control relay assembly then actuates the door lock motor of each door.

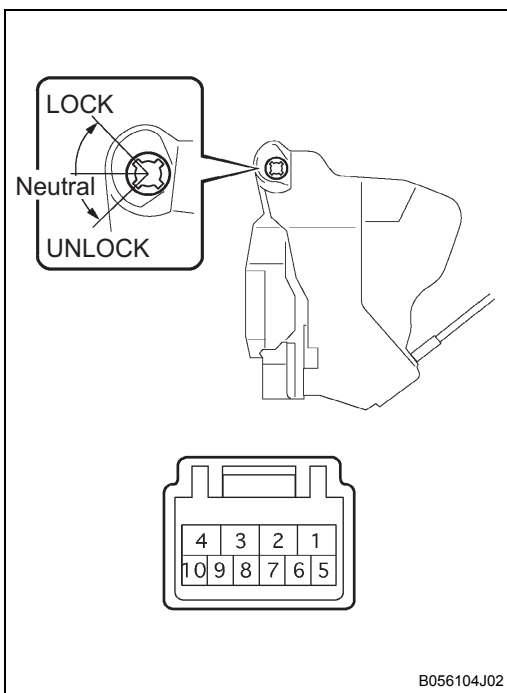
CIRCUIT DIAGRAM



INSPECTION PROCEDURE

1

CHECK FRONT DOOR LOCK ASSEMBLY RH



(a) CHECK CONTINUITY (DOOR LOCK CONTROL SWITCH, KEY-LINK OPERATION)

- (1) Using a tester, check the continuity between the terminals when the switch lever in the positions shown below.

Standard:

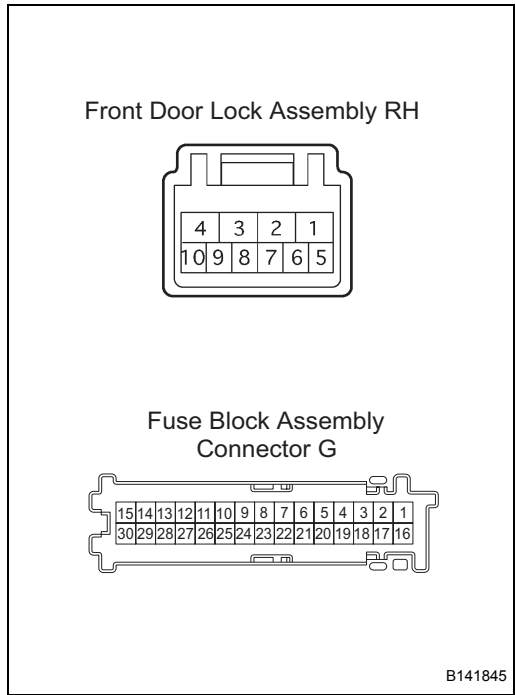
Switch	Terminal No.	Standard
LOCK	Terminal 6 ↔ Terminal 8	Continuity
Neutral	-	-
UNLOCK	Terminal 7 ↔ Terminal 8	Continuity

NG

REPLACE FRONT DOOR LOCK ASSEMBLY RH

OK

2 CHECK WIRE HARNESS (BETWEEN FRONT DOOR LOCK ASSEMBLY AND FUSE BLOCK ASSEMBLY)



- (a) Detach the front door lock assembly RH and connector G of the fuse block assembly.
- (b) Using a tester, check the continuity between each terminal of the vehicle side connector. (For terminal layout, see page DL-6.)

Standard:

Terminal No. (Door lock ↔ Fuse block assembly)	Standard
1 (U/L+) ↔ G11 (ULM)	Continuity
4 (LOK+) ↔ G1 (LKM)	Continuity
6 (LOK+) ↔ G23 (LKS)	Continuity
7 (U/L+) ↔ G10 (UKS)	Continuity

Standard:

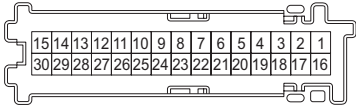
Terminal No. (Door lock ↔ Body ground)	Standard
8 (E) ↔ Body Ground	Continuity

NG REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

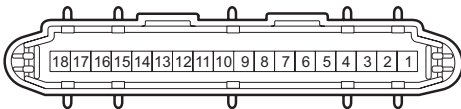
OK

3**INSPECT FUSE BLOCK ASSEMBLY**

Fuse Block Assembly
Connector G



Fuse Block Assembly
Connector H



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- (a) Remove the door control relay assembly from the fuse block assembly.
- (b) Using a tester, check the continuity between each terminal of the fuse block assembly. (For terminal layout, see page DL-6.)

Standard:

Terminal No. (Fuse block connector G ↔ Fuse block connector H)	Standard
G11 (ULM) ↔ H15 (ULM)	Continuity
G1 (LKM) ↔ H16 (LKM)	Continuity
G23 (LKS) ↔ H11 (LKS)	Continuity
G10 (UKS) ↔ H8 (UKS)	Continuity

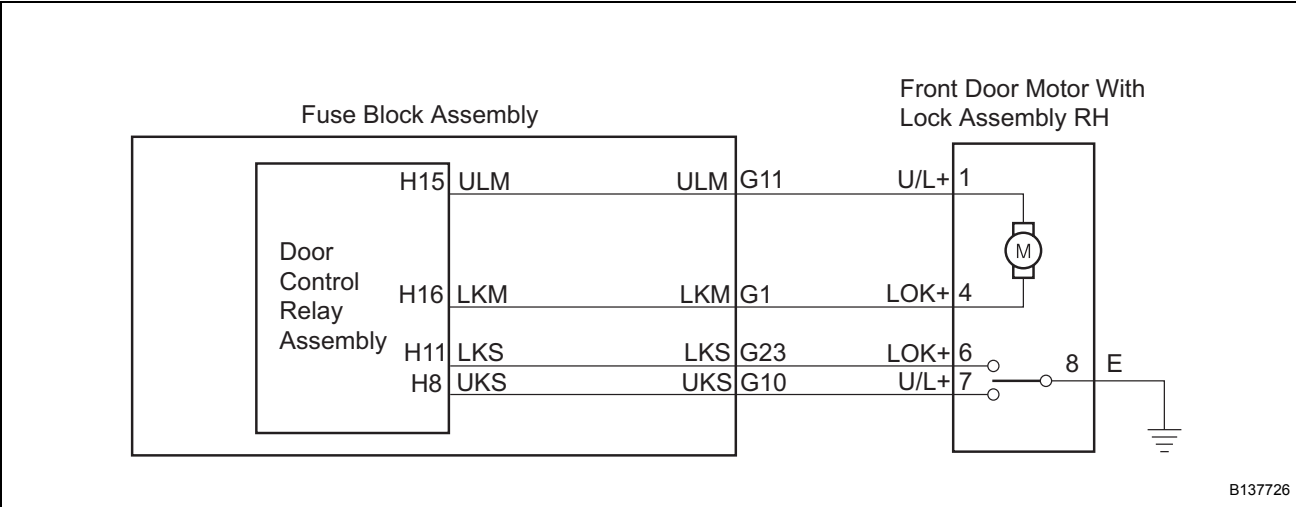
NG**REPLACE FUSE BLOCK ASSEMBLY****OK****DL****REPLACE DOOR CONTROL RELAY ASSEMBLY**

ALL DOORS LOCK AND UNLOCK EXCEPT THE DRIVER SIDE DOOR

DESCRIPTION

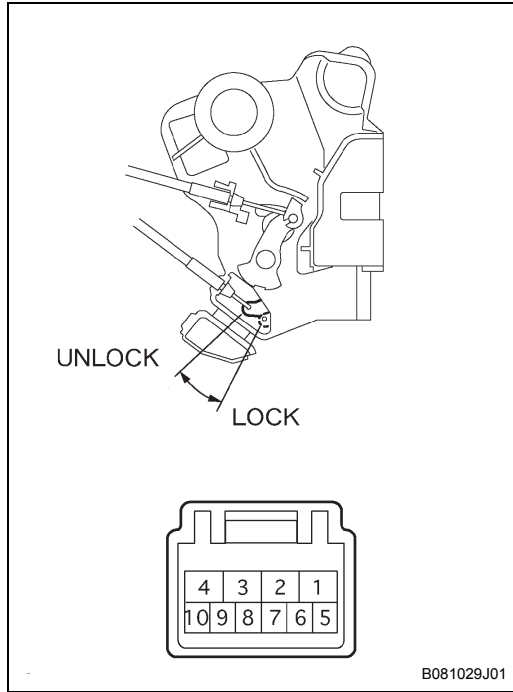
The door control relay assembly receives the switch signal from the driver's side door lock knob and the driver's side door key. The door control relay assembly then actuates the door lock motor of the driver's door.

CIRCUIT DIAGRAM



INSPECTION PROCEDURE

1 CHECK FRONT DOOR LOCK ASSEMBLY RH



- (a) Check the continuity between the door lock function and the position switch
- (1) Check the continuity between the position switch and the door lock function when battery voltage is applied between the motor terminals inside the door lock.

Standard:

Connection	Operates	Standard Position Switch	
Positive (+) battery terminal ↔ Terminal 4 Negative (-) battery terminal ↔ Terminal 1	LOCK	Terminal 7 ↔ Terminal 8 No continuity	Terminal 6 ↔ Terminal 8 Continuity
Positive (+) battery terminal ↔ Terminal 1 Negative (-) battery terminal ↔ Terminal 4	UNLOCK	Terminal 7 ↔ Terminal 8 Continuity	Terminal 6 ↔ Terminal 8 No continuity

NG REPLACE FRONT DOOR LOCK ASSEMBLY RH

OK

2

CHECK WIRE HARNESS (BETWEEN FRONT DOOR LOCK ASSEMBLY AND FUSE BLOCK ASSEMBLY)

HINT:

For inspection procedures and precautions, see page IN-38.

- (a) Detach the front door lock assembly RH and connector G of the fuse block assembly.
- (b) Using a tester, check the continuity between each terminal of the vehicle side connector. (For terminal layout, see page DL-6.)

Standard:

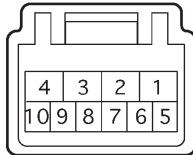
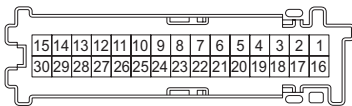
Terminal No. (Door lock ↔ Fuse block)	Standard
1 (U/L+) ↔ G11 (ULM)	Continuity
4 (LOK+) ↔ G1 (LKM)	Continuity

DL

NG

REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

Front Door Lock Assembly RH

Fuse Block Assembly
Connector G

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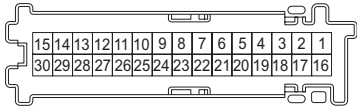
OK

3

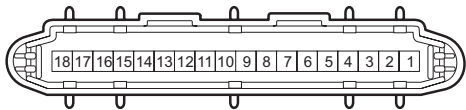
INSPECT FUSE BLOCK ASSEMBLY

- (a) Remove the door control relay assembly from the fuse block assembly.

Fuse Block Assembly
Connector G



Fuse Block Assembly
Connector H



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- (b) Using a tester, check the continuity between each terminal of the fuse block assembly. (For terminal layout, see page DL-6.)

Standard:

Terminal No. (Fuse block connector G ↔ Junc- tion block connector H)	Standard
G11 (ULM) ↔ H15 (ULM)	Continuity
G1 (LKM+) ↔ H16 (LKM)	Continuity
G23 (LKS) ↔ H11 (LKS)	Continuity
G10 (UKS+) ↔ H8 (UKS)	Continuity

NG

REPLACE FUSE BLOCK ASSEMBLY

OK

REPLACE DOOR CONTROL RELAY ASSEMBLY

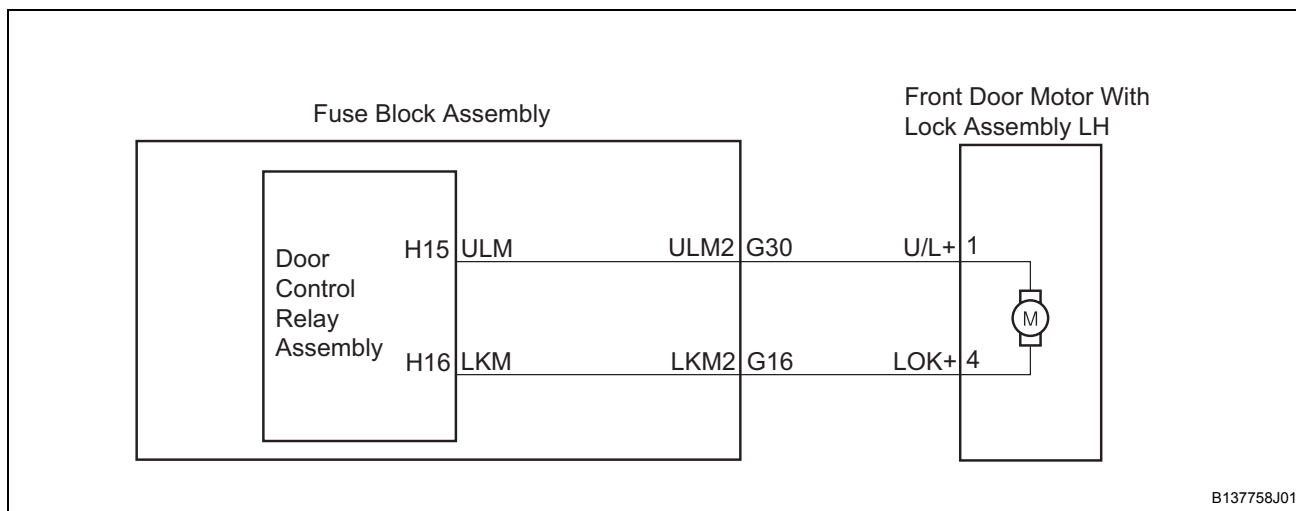
DL

ALL DOORS LOCK AND UNLOCK EXCEPT PASSENGER SIDE DOOR

DESCRIPTION

The door control relay assembly receives the switch signal from the driver's side door lock knob and the driver's side door key. The door control relay assembly then actuates the door lock motor of the passenger side door.

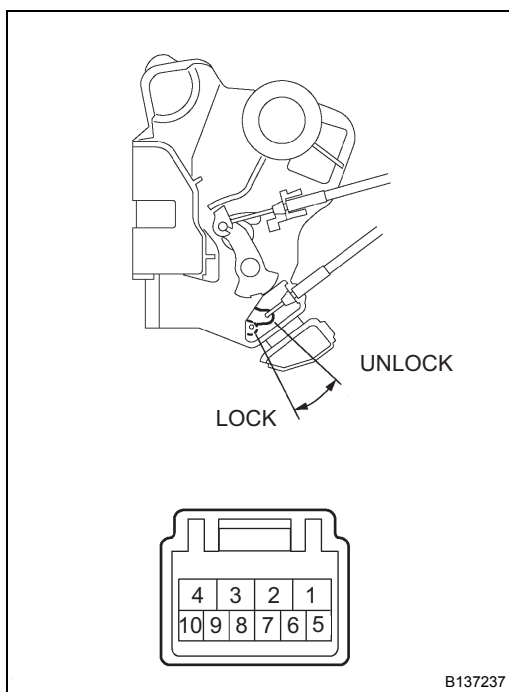
CIRCUIT DIAGRAM



INSPECTION PROCEDURE

1

CHECK FRONT DOOR LOCK ASSEMBLY LH



(a) CHECK DOOR LOCK FUNCTION

- (1) Check the operation of the door lock when battery voltage is applied between the terminals of the motor inside the door lock.

Standard:

Connection	Operates
Positive (+) battery terminal ↔ Terminal 4 Negative (-) battery terminal ↔ Terminal 1	LOCK
Positive (+) battery terminal ↔ Terminal 1 Negative (-) battery terminal ↔ Terminal 4	UNLOCK

NG

REPLACE FRONT DOOR LOCK ASSEMBLY LH

OK

2

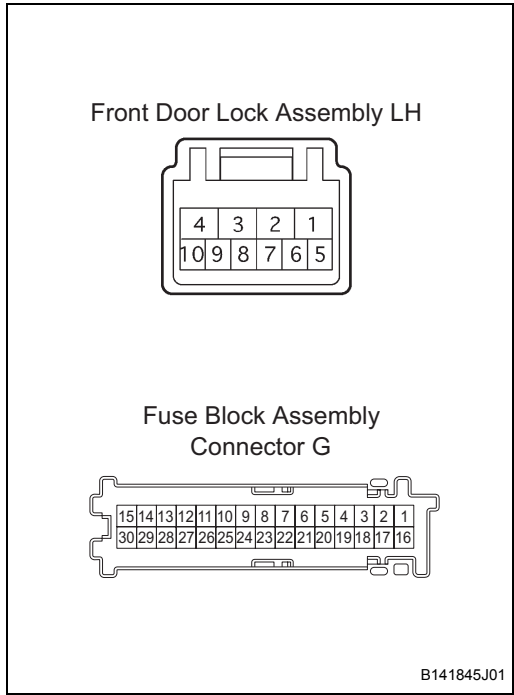
CHECK WIRE HARNESS (BETWEEN FRONT DOOR LOCK ASSEMBLY LH AND FUSE BLOCK ASSEMBLY)

- HINT:
For inspection procedures and precautions, (see page IN-38.)
- (a) Detach the front door lock assembly RH and connector G of the fuse block assembly.
 - (b) Using a tester, check the continuity between each terminal of the vehicle side connector. (For terminal layout, see page DL-6.)
- Standard:**

Terminal No. (Door lock ↔ Junction block)	Standard
1 (U/L+) ↔ G30 (ULM2)	Continuity
4 (LOK+) ↔ G16 (LKM2)	Continuity

NG

REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR



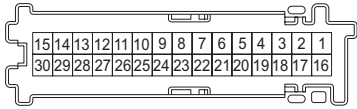
OK

3

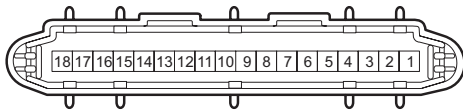
INSPECT FUSE BLOCK ASSEMBLY

- (a) Remove the door control relay assembly from the fuse block assembly.

Fuse Block Assembly
Connector G



Fuse Block Assembly
Connector H



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- (b) Using a tester, check the continuity between each terminal of the fuse block assembly. (For terminal layout, see page DL-6.)

Standard:

Terminal No. (Fuse block assembly connector G ↔ Fuse block assembly connector H)	Standard
G30 (ULM2) ↔ H15 (ULM)	Continuity
G16 (LKM2) ↔ H16 (LKM)	Continuity

NG

REPLACE FUSE BLOCK ASSEMBLY

OK

DL

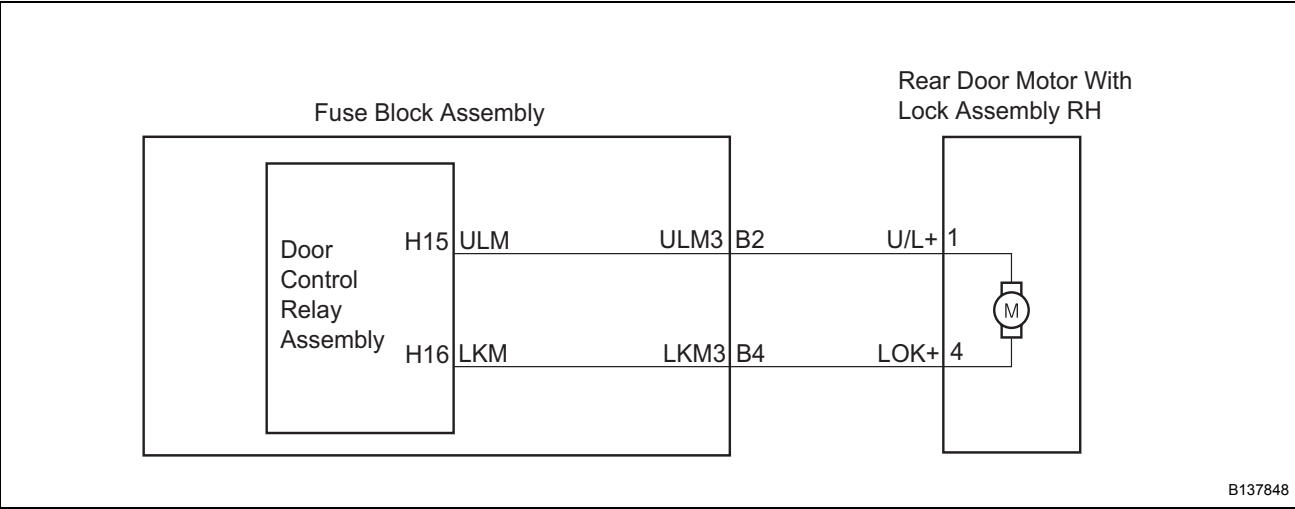
REPLACE DOOR CONTROL RELAY ASSEMBLY

ALL DOORS LOCK AND UNLOCK EXCEPT THE RIGHT REAR DOOR

DESCRIPTION

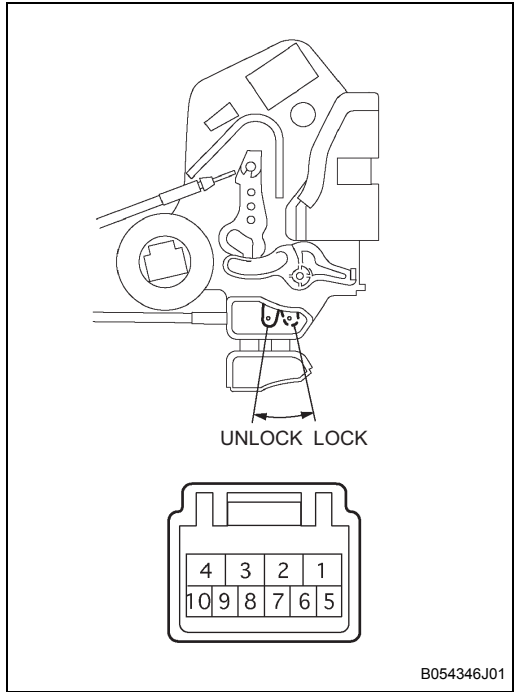
The door control relay assembly receives the switch signal from the driver's side door unlock knob and driver side door key. The door control relay assembly then actuates the door lock motor of the right rear door.

CIRCUIT DIAGRAM



INSPECTION PROCEDURE

1 CHECK REAR DOOR LOCK ASSEMBLY RH



- (a) Check the operation of the door lock when battery voltage is applied between the terminals of the motor inside the door lock.
- Standard:

Connection	Operates
Positive (+) battery terminal ↔ Terminal 4 Negative (-) battery terminal ↔ Terminal 1	LOCK
Positive (+) battery terminal ↔ Terminal 1 Negative (-) battery terminal ↔ Terminal 4	UNLOCK

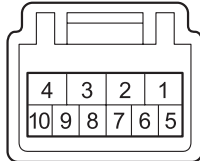
NG

REPLACE REAR DOOR LOCK ASSEMBLY RH

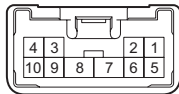
OK

2**CHECK WIRE HARNESS (BETWEEN REAR DOOR LOCK ASSEMBLY RH AND FUSE BLOCK ASSEMBLY)**

Rear Door Motor With Lock Assembly RH



Fuse Block Assembly Connector B



B141851

HINT:

For inspection procedures and precautions, see page IN-38.

- (a) Detach the front door lock assembly RH and connector B of the fuse block assembly.
- (b) Using a tester, check the continuity between each terminal of the vehicle side connector.

Standard:

Terminal No. (Door lock ↔ Junction block)	Standard
1 (U/L+) ↔ B2 (ULM3)	Continuity
4 (LOK+) ↔ B4 (LKM3)	Continuity

DL

NG

REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

OK

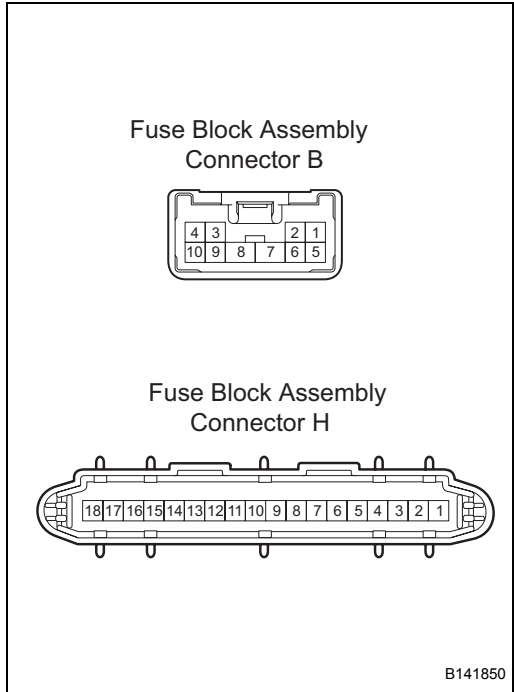
3**INSPECT FUSE BLOCK ASSEMBLY**

HINT:

For inspection procedures and precautions, see page IN-38.

- (a) Remove the door control relay assembly from the fuse block assembly.

DL



- (b) Using a tester, check the continuity between each terminal of the fuse block assembly. (For terminal layout, see page DL-6.)
- Standard:**

Terminal No. (Fuse block assembly connector B ↔ Fuse block assembly connector H)	Standard
B2 (ULM3) ↔ H15 (ULM)	Continuity
B4 (LKM3) ↔ H16 (LKM)	Continuity

NG

REPLACE FUSE BLOCK ASSEMBLY

OK

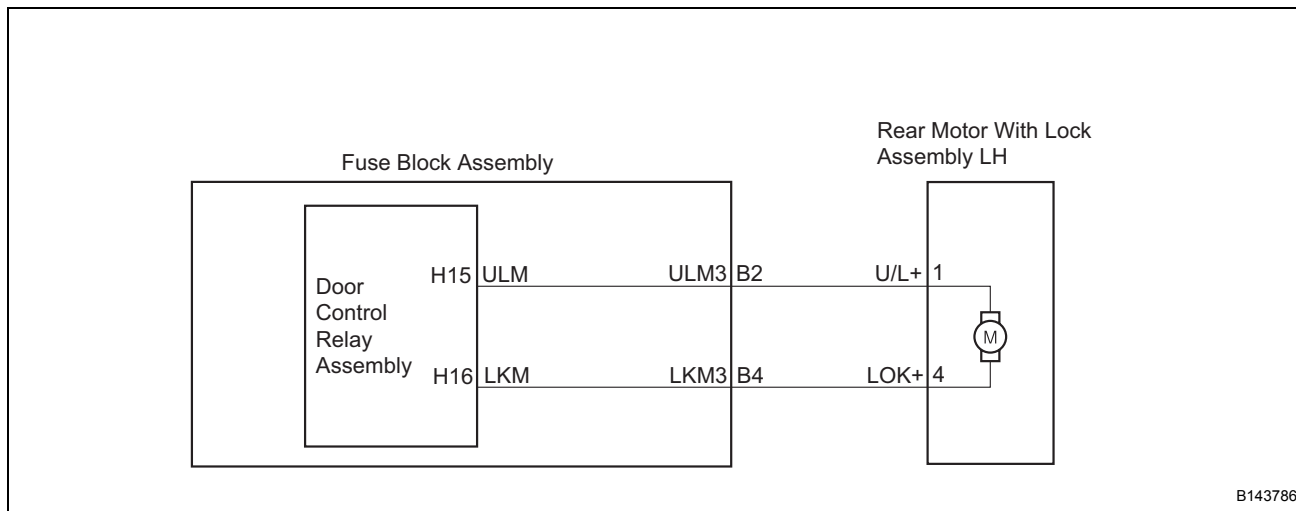
REPLACE DOOR CONTROL RELAY ASSEMBLY

ALL DOORS LOCK AND UNLOCK EXCEPT THE LEFT REAR DOOR

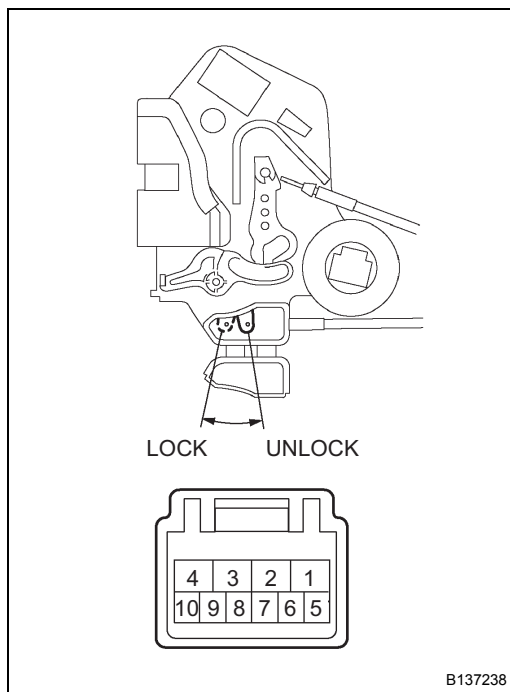
DESCRIPTION

The door control relay assembly receives the switch signal from the driver's side door lock knob and the driver's side door key. The door control relay assembly then actuates the motor of the left rear door.

CIRCUIT DIAGRAM



INSPECTION PROCEDURE

1
CHECK REAR DOOR LOCK ASSEMBLY LH


- (a) Check the operation of the door lock when battery voltage is applied between the terminals of the motor inside the door lock.

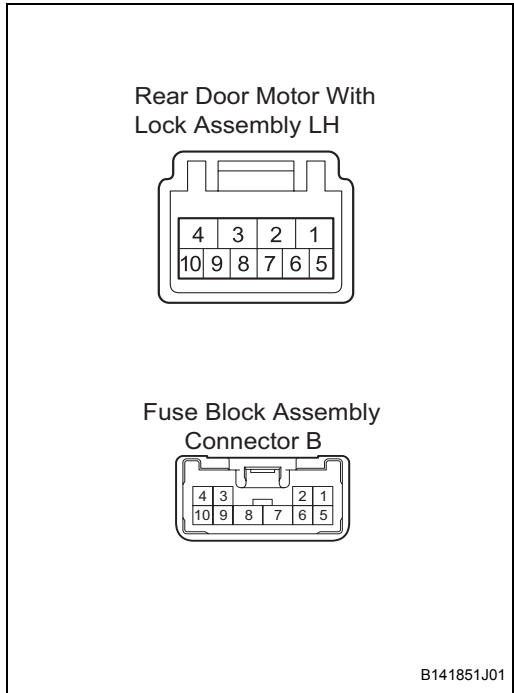
Standard:

Connection	Operates
Positive (+) battery terminal ↔ Terminal 4 Negative (-) battery terminal ↔ Terminal 1	LOCK
Positive (+) battery terminal ↔ Terminal 1 Negative (-) battery terminal ↔ Terminal 4	UNLOCK

NG
REPLACE REAR DOOR LOCK ASSEMBLY LH
OK

2

CHECK WIRE HARNESS (BETWEEN REAR DOOR LOCK ASSEMBLY LH AND FUSE BLOCK ASSEMBLY)



OK

3

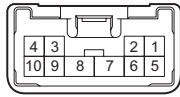
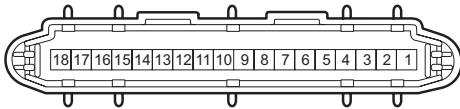
INSPECT FUSE BLOCK ASSEMBLY

- HINT:
For inspection procedures and precautions, see page DL-6.
- (a) Detach the front door lock assembly RH and connector B of the fuse block assembly.
 - (b) Using a tester, check the continuity between each terminal of the vehicle side connector.
- Standard:**

Terminal No. (Door lock ↔ Fuse block assembly)	Standard
1 (U/L+) ↔ B2 (ULM3)	Continuity
4 (LOK+) ↔ B4 (LKM3)	Continuity

NG

REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

Fuse Block Assembly
Connector BFuse Block Assembly
Connector H

B141850

- (b) Using a tester, check the continuity between each terminal of the fuse block assembly.

Standard:

Terminal No. (Fuse block assembly connector B ↔ Fuse block assembly connector H)	Standard
B2 (ULM3) ↔ H15 (ULM)	Continuity
B4 (LKM3) ↔ H16 (LKM)	Continuity

NG

REPLACE FUSE BLOCK ASSEMBLY

OK

DL

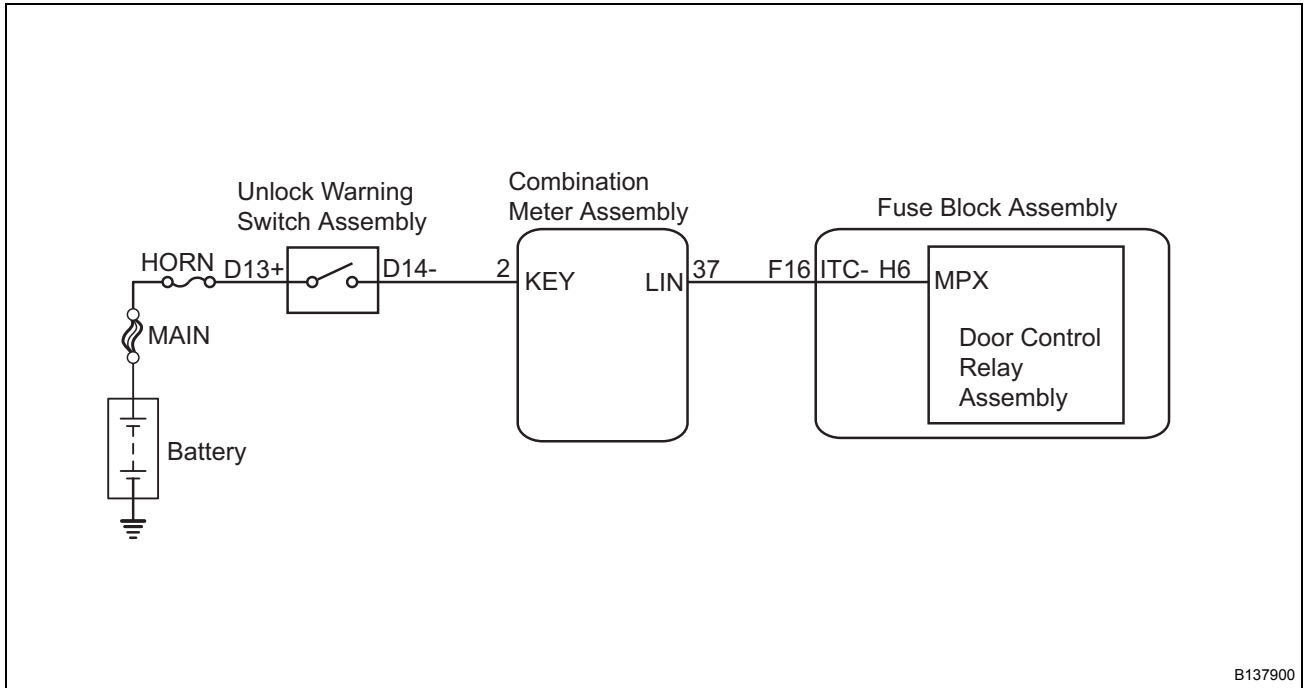
REPLACE DOOR CONTROL RELAY ASSEMBLY

KEY LOCK-IN PREVENTION FUNCTION DOES NOT OPERATE NORMALLY (UNLOCK WARNING SWITCH CIRCUIT)

DESCRIPTION

Through the unlock warning switch assembly, the combination meter assembly (meter ECU) detects the presence or absence of a key in the ignition system switch lock cylinder. When a door is locked while any of the doors is still open and the key is in the ignition switch lock cylinder, the door control relay assembly transmits an UNLOCK signal (after first sending a LOCK signal) to the lock motors in all of the doors. This prevents the doors from being locked.

CIRCUIT DIAGRAM



INSPECTION PROCEDURE

1

INSPECT FUSES

(a) Check the HORN 10 A fuse.

NG

REPLACE FUSES

OK

2

CHECK WIRE HARNESS (POWER SOURCE SYSTEM)

(a) Check the voltage.

- (1) Disconnect the connector of the unlock warning switch assembly.
- (2) Using a tester, check the voltage of the 2 (D13+) terminal of the vehicle side connector of the unlock warning switch.

Standard:

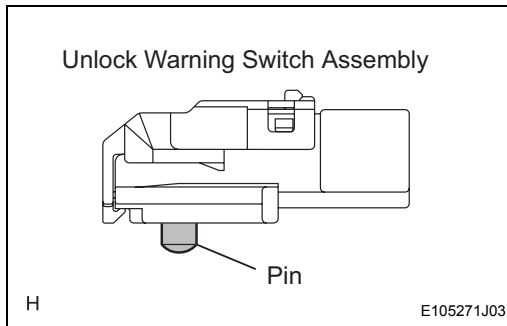
Terminal No.	Item	Measurement Condition	Standard
2 (D13+) ↔ Body ground	Voltage	Always	10 to 14 V

NG

**REPAIR OR REPLACE WIRE HARNESS
(POWER SOURCE SYSTEM)**

OK

3 CHECK UNLOCK WARNING SWITCH ASSEMBLY



(a) Check the continuity.

- (1) Using a tester, check the continuity between terminal 1 (D14-) and terminal 2 (D13+) of the connector.

Standard:

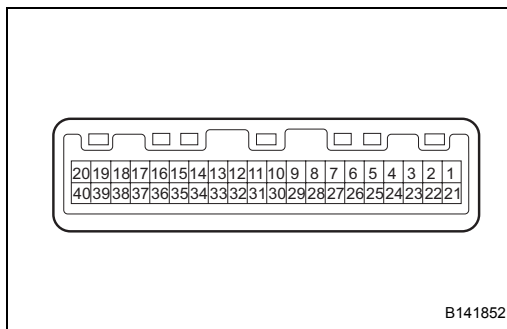
Measurement Condition	Standard
With the pin not depressed	No continuity
With the pin depressed	Continuity

NG

**REPLACE UNLOCK WARNING SWITCH
ASSEMBLY**

OK

4 CHECK WIRE HARNESS (BETWEEN THE UNLOCK WARNING SWITCH AND THE COMBINATION METER ASSEMBLY)



(a) Check the voltage.

- (1) Disconnect the connector of the combination meter assembly.
(2) Insert the key into the ignition lock cylinder.
(3) Using a tester, check the voltage between each terminal of the vehicle side connector of the combination meter assembly.

Standard:

Terminal No.	Standard
2 (KEY) ↔ 15 (GND)	10 to 14 V

NG

**REPAIR OR REPLACE WIRE HARNESS OR
CONNECTOR (BETWEEN THE UNLOCK
WARNING SWITCH AND THE COMBINATION
ASSEMBLY)**

OK

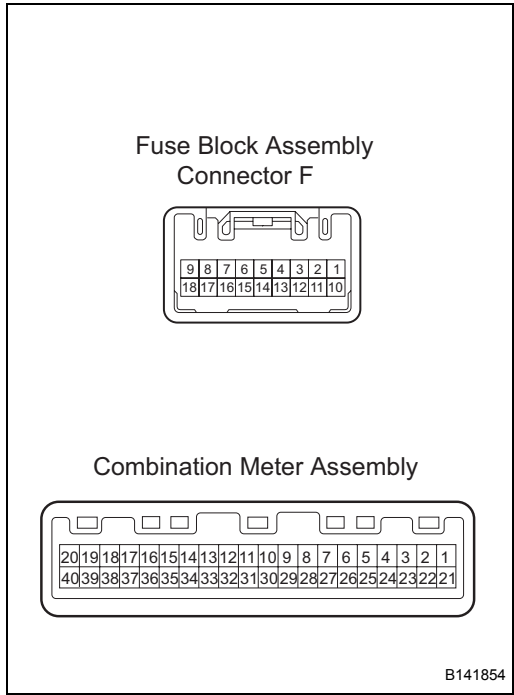
GO TO METER AND GAUGE SYSTEM

DL

DL

5

CHECK WIRE HARNESS (BETWEEN THE COMBINATION METER ASSEMBLY AND THE FUSE BLOCK ASSEMBLY)



OK

- (a) Using a tester, check the continuity between each terminal of the vehicle side connector.
- (b) Disconnect the connector to the combination meter assembly and connector F of the fuse block assembly.

Standard:

Terminal No.	Standard
Combination meter ↔ Fuse block	
37 (LIN) ↔ F16 (ITC-)	Continuity

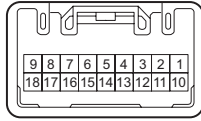
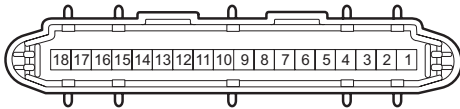
NG

REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR (BETWEEN THE COMBINATION METER ASSEMBLY AND THE FUSE BLOCK ASSEMBLY)

6

INSPECT FUSE BLOCK ASSEMBLY

- (a) Remove the door control relay assembly from the fuse block assembly.

Fuse Block Assembly
Connector FFuse Block Assembly
Connector H

B141853

- (b) Using a tester, check the continuity between each terminal of the fuse block assembly.

Standard:

Terminal No.	Standard
Fuse block assembly connector F ↔ Fuse block assembly connector H	
F16 (ITC-) ↔ H6 (MPX)	Continuity

NG**REPLACE FUSE BLOCK ASSEMBLY****OK****REPLACE DOOR CONTROL RELAY ASSEMBLY****DL**

KEY LOCK-IN PREVENTION FUNCTION DOES NOT OPERATE NORMALLY (COURTESY LIGHT SWITCH CIRCUIT)

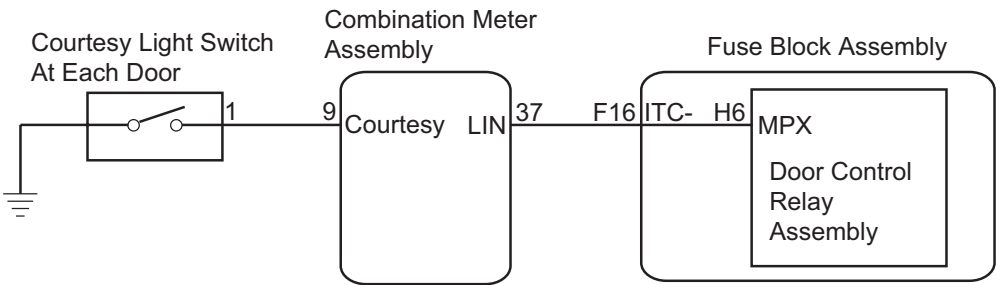
DESCRIPTION

With any door open and the electric card key still in the vehicle, when the door is closed using the keyless lock, an unlock is immediately output and the door will not lock.

NOTICE:

This occurs as the electric door lock system attempts to perform body multiplex communication. Perform a trouble shooting according to HOW TO PROCEED WITH TROUBLE SHOOTING after checking the communication functions and confirming there is no malfunction.

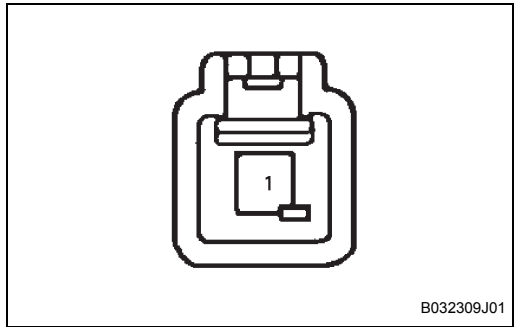
CIRCUIT DIAGRAM



B137902

INSPECTION PROCEDURE

1 CHECK COURTESY LIGHT SWITCH



B032309J01

- (a) Check the continuity.
 - (1) Using a tester, check the continuity between the bracket and terminal 1 of each courtesy light switch connector.
- Standard:

Operation	Standard
With the switch depressed	No continuity
With the switch not depressed	Continuity

NG REPLACE COURTESY LIGHT SWITCH ASSEMBLY

OK

2

CHECK WIRE HARNESS (BETWEEN EACH COURTESY LIGHT SWITCH AND THE COMBINATION METER ASSEMBLY)

- (a) Check the continuity.
- (1) Disconnect the connector from each courtesy light switch assembly, and disconnect the connector from the combination meter assembly.
 - (2) Using a tester, check the continuity between the terminal of each connector of the vehicle side wire harness.

Standard:

Terminal No. Each courtesy ↔ Combination meter	Standard
1 (+) ↔ 9 (courtesy)	Continuity

DL

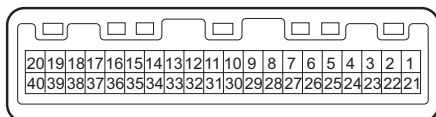
NG

REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR (BETWEEN EACH COURTESY LIGHT SWITCH AND THE COMBINATION METER ASSEMBLY)

Front Door Courtesy Light Switch Assembly



Combination Meter Assembly



B141855

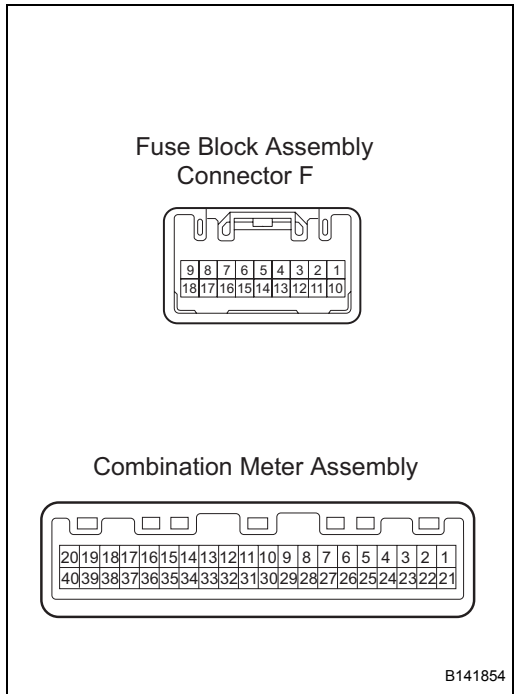
OK

3

CHECK WIRE HARNESS (BETWEEN THE COMBINATION METER ASSEMBLY AND THE FUSE BLOCK ASSEMBLY)

- (a) Check the continuity.
- (1) Disconnect the connector to the combination meter assembly and connector F of the fuse block assembly.

DL



OK

4

INSPECT FUSE BLOCK ASSEMBLY

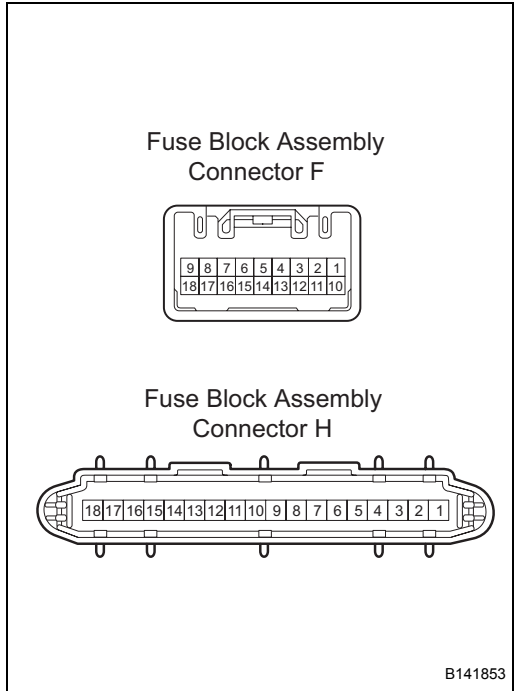
- (2) Using a tester, check the continuity between the terminal of each connector of the vehicle side wire harness.

Standard:

Terminal No. Combination meter↔ Fuse block assembly	Standard
37 (LIN) ↔ F16 (ITC-)	Continuity

NG

REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR (BETWEEN THE COMBINATION METER ASSEMBLY AND THE INSTRUMENT PANEL JUNCTION BLOCK ASSEMBLY)



- (a) Check the continuity.
- (1) Remove the main door control relay assembly from the fuse block assembly.
- (2) Using a tester, check the continuity between each terminal of the fuse block assembly.

Standard:

Terminal No. Fuse block assembly connector F ↔ Fuse block assembly connector H	Standard
16 (ITC-) ↔ H6 (MPX)	Continuity

NG

REPLACE FUSE BLOCK ASSEMBLY

OK

REPLACE DOOR CONTROL RELAY ASSEMBLY

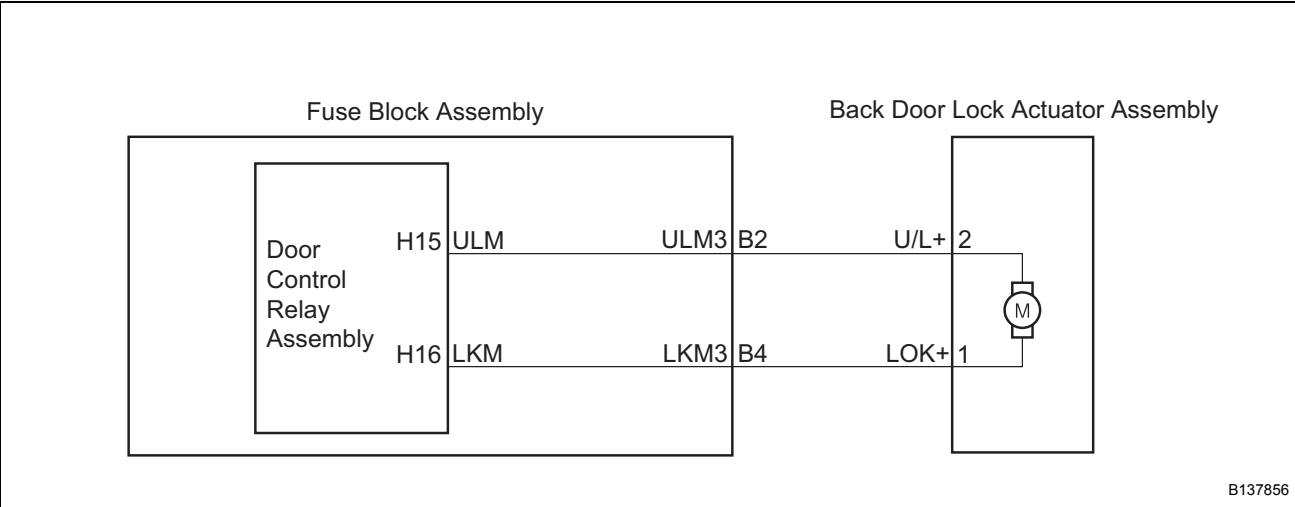
DL

ALL DOORS LOCK AND UNLOCK EXCEPT BACK DOOR

DESCRIPTION

The door control relay assembly receives the switch signal from the driver's side door lock knob and the driver's side door key. The door control relay assembly then actuates the motor of the back door.

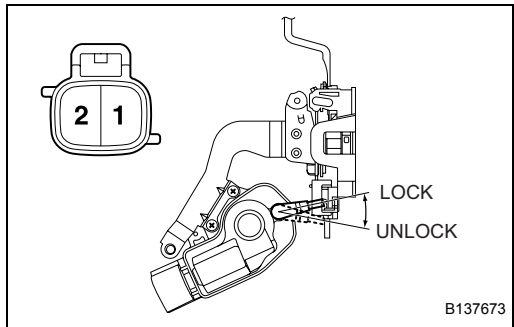
CIRCUIT DIAGRAM



INSPECTION PROCEDURE

1

CHECK BACK DOOR LOCK ASSEMBLY



- (a) Check the operation of the door lock when battery voltage is applied between the terminals of the actuator inside the door lock.
- Standard:**

Connection	Operates
Positive (+) battery terminal ↔ Terminal 2 Negative (-) battery terminal ↔ Terminal 1	UNLOCK
Positive (+) battery terminal ↔ Terminal 1 Negative (-) battery terminal ↔ Terminal 2	LOCK

OK

NG

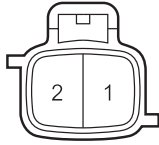
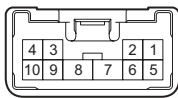
CHECK BACK DOOR LOCK ASSEMBLY

2

CHECK WIRE HARNESS AND CONNECTOR (BETWEEN THE BACK DOOR ACTUATOR ASSEMBLY AND THE FUSE BLOCK ASSEMBLY)

- (a) Disconnect the connector of the back door lock actuator assembly and the connector B of the fuse block assembly.

Back Door Lock Actuator Assembly

Fuse Block Assembly
Connector B

B141856

OK

- (b) Using a tester, check the continuity between each terminal of the vehicle side connector.

Standard:

Terminal No. (Door lock ↔ Fuse block connector B)	Standard
2 (U/L+) ↔ B2 (ULM3)	Continuity
1 (LOK+) ↔ B4 (LKM3)	Continuity

NG

REPAIR OR REPLACE WIRE HARNESS OR
CONNECTOR

DL

3**INSPECT FUSE BLOCK ASSEMBLY**

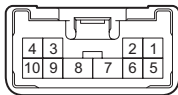
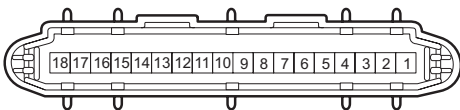
- (a) Remove the door control relay assembly from the fuse block assembly.
- (b) Using a tester, check the continuity between each terminal of the fuse block assembly connector.

Standard:

Terminal No. (Fuse block connector B ↔ Fuse block connector H)	Standard
B2 (ULM3) ↔ H15 (ULM)	Continuity
B4 (LKM3) ↔ H16 (LKM)	Continuity

NG

REPLACE FUSE BLOCK ASSEMBLY

Fuse Block Assembly
Connector BFuse Block Assembly
Connector H

B141857

OK

REPLACE DOOR CONTROL RELAY ASSEMBLY

DL

