
DOOR LOCK

POWER DOOR LOCK CONTROL SYSTEM

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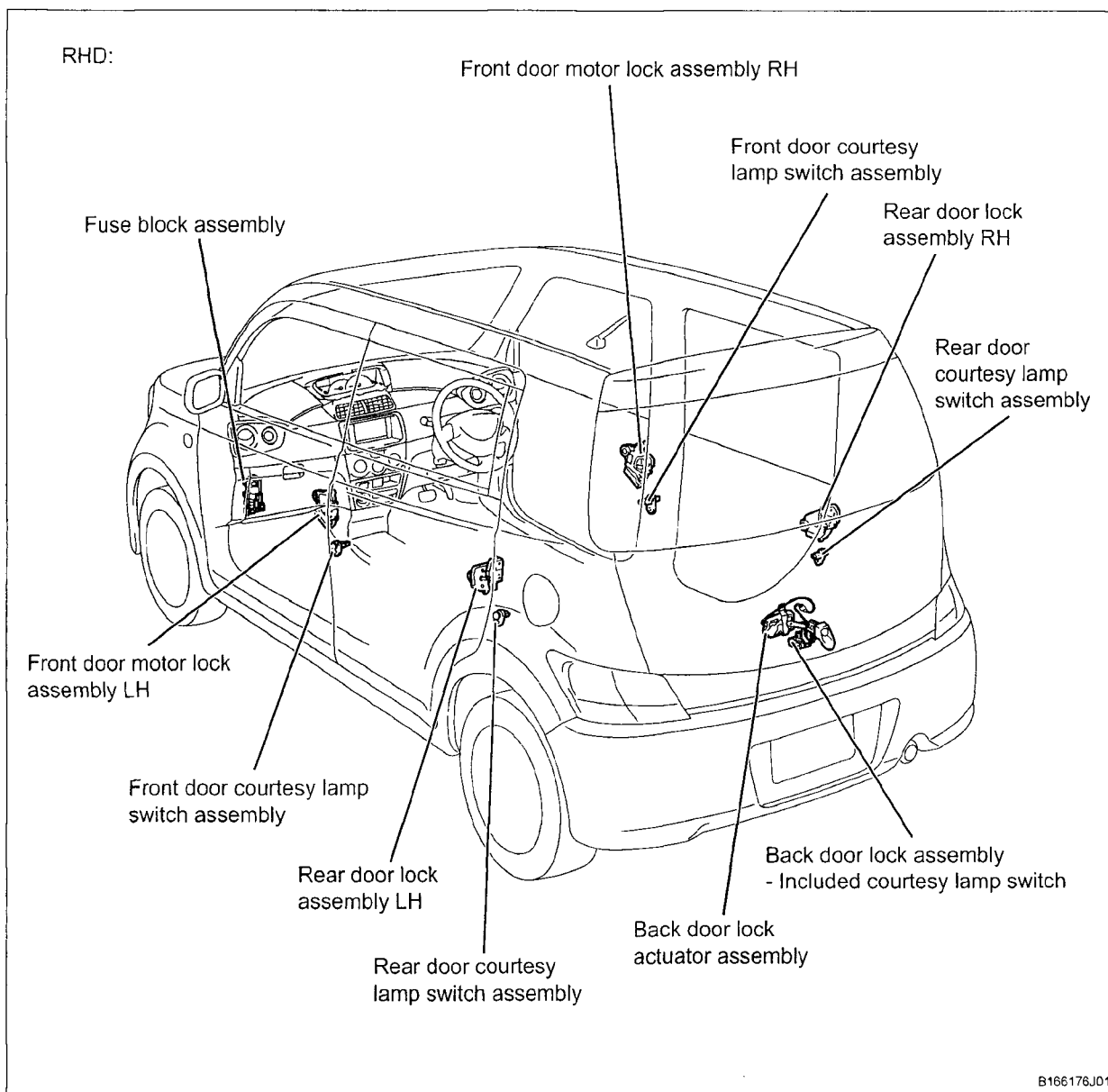
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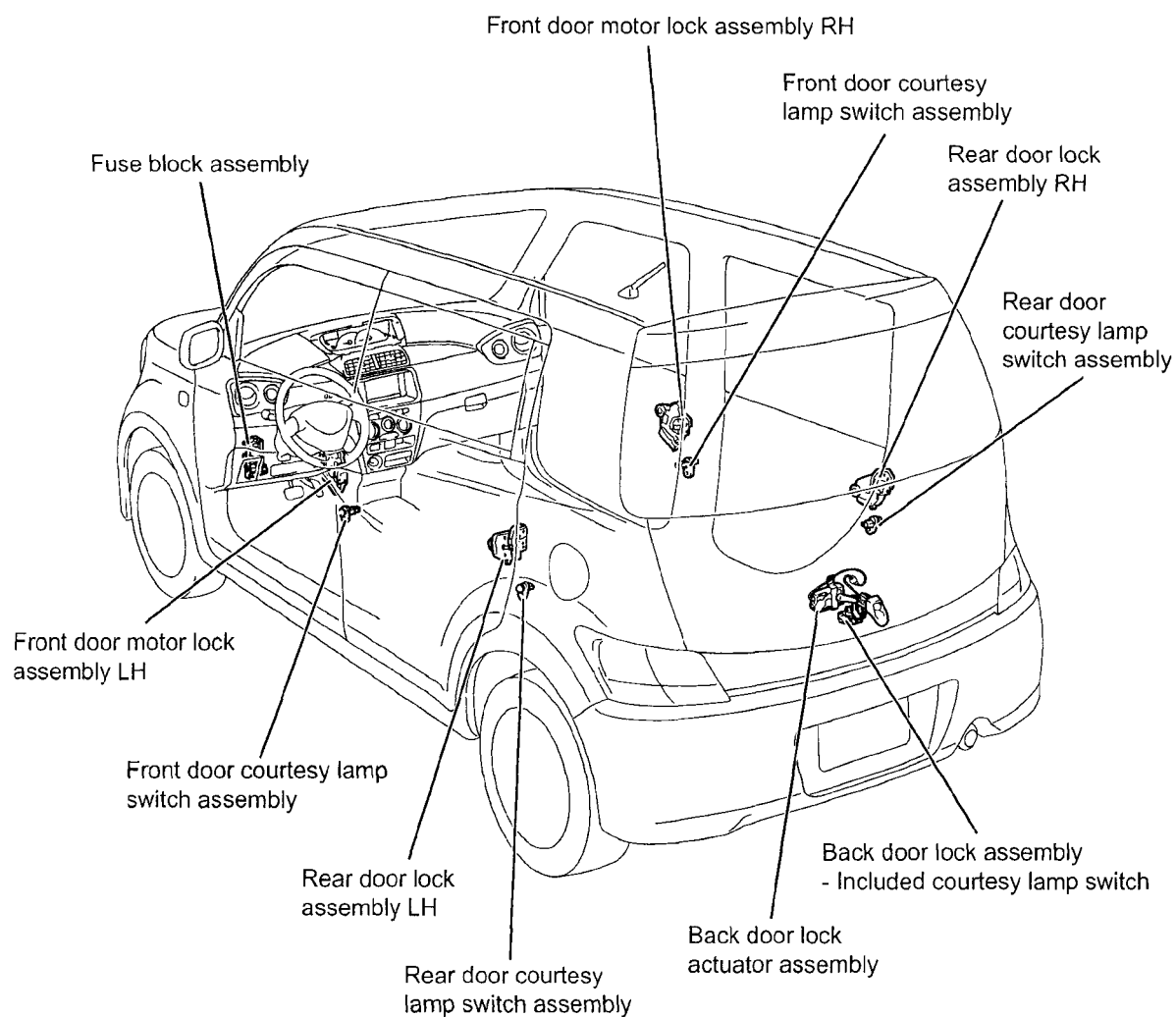
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POWER DOOR LOCK CONTROL SYSTEM

PART LAYOUT



LHD:



8166177J01

LIST OF SYMPTOM

Symptom	Checking items	Reference page
All the doors cannot be locked or unlocked by using the key cylinder (for key coordination) at the driver's door.	IG1/BACK 7.5 A, D/LOCK 15 A	<\$attribute21
	Fuse block assembly (set of door control relay assembly)	-
	Wire harness and connector	-
Only the driver's door cannot be locked or unlocked.	Front door motor lock assembly (driver's seat side)	<\$attribute8
	Fuse block assembly (set of door control relay assembly)	-
	Wire harness and connector	-
Only the passenger seat door cannot be locked or unlocked.	Front door motor lock assembly (passenger seat side)	<\$attribute11
	Fuse block assembly (set of door control relay assembly)	-
	Wire harness and connector	-
Only the right rear door lock cannot be locked or unlocked.	Rear door lock assembly RH	<\$attribute13
	Fuse block assembly (set of door control relay assembly)	-
	Wire harness and connector	-

Symptom	Checking items	Reference page
Only the left rear door lock cannot be locked or unlocked.	Rear door lock assembly LH	<\$attribute15
	Fuse block assembly (set of door control relay assembly)	-
	Wire harness and connector	-
Only the back door cannot be locked or unlocked.	Back door lock actuator assembly	<\$attribute19
	Fuse block assembly (set of door control relay assembly)	-
	Wire harness and connector	-
The key locked-in prevention function does not operate normally.	Unlock warning switch assembly	<\$attribute17
	Front door courtesy lamp switch assembly	-
	Fuse block assembly (set of door control relay assembly)	-
	Wire harness and connector	-

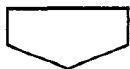
TROUBLESHOOTING PROCEDURE

1 PUTTING THE CAR IN THE GARAGE



2 INQUIRY AND PHENOMENON CHECK

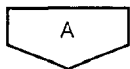
<HINT>
(See page 62-5)



3 LIN COMMUNICATION SYSTEM CHECK

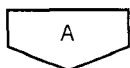
SST 09991-87403, 09991-87404

<HINT>
(See page 94-3)
(1) To [A] if does not fall under the list by symptom
(2) To [B] if fails under the list by symptom



4 LIST OF SYMPTOM

<HINT>
(See page 62-2)
(1) To [A] if does not fall under the list by symptom
(2) To [B] if falls under the list by symptom



5 TROUBLESHOOT AS FOLLOWS BASED ON THE TROUBLE INFORMATION.

(1) Function Check (See page 62-6)
(2) ECU Terminal Sequence (See page 62-6)

B

TO LIN COMMUNICATION SYSTEM SECTION

A

B

TO CHECK STEP 5

A



6

ADJUST, REPAIR, OR REPLACE



END

INQUIRY SHEET

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 ☐ Back door ☐ Front passenger seat ☐ Right rear seat ☐ Left rear seat		☐ Unlock function does not operate ☐ Driver seat ☐ Back door ☐ Front passenger seat ☐ Right rear seat ☐ Left rear seat		
	☐ Lock and unlock functions do not operate ☐ Driver seat ☐ Back door ☐ 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				
Condition Returns To Normal		☐ ACC ON Engine Starting () SW Operation			
Conditions When Problem Occurs	Present Not Present	☐ ACC OFF → ON () Switch Operation Others()			

62

FUNCTION CHECK

1. Electric door lock basic check

- (1) Check if all the doors are locked when the driver's door lock knob is set to the lock side and all the doors are unlocked when the door lock knob is set to the unlock side.
- (2) Check if all the doors are locked when the driver's door is set to the lock side through key operation outside the vehicle and all the doors are unlocked when the door is set to the unlock side.
- (3) Key locked-in prevention function check

<CAUTION>

To prevent closing the door with the ignition key left, check the function with the driver's door glass opened.

(a) Insert the ignition key into the ignition switch lock cylinder.

(b) The door is unlocked immediately even when the driver's door lock knob is set to the lock side with the driver's door opened.

(c) All the doors are unlocked if the driver's door is closed while the driver's door is open and by holding down the door lock knob of the driver's door for 2 seconds or longer.

(4) Illumination function check

<HINT>

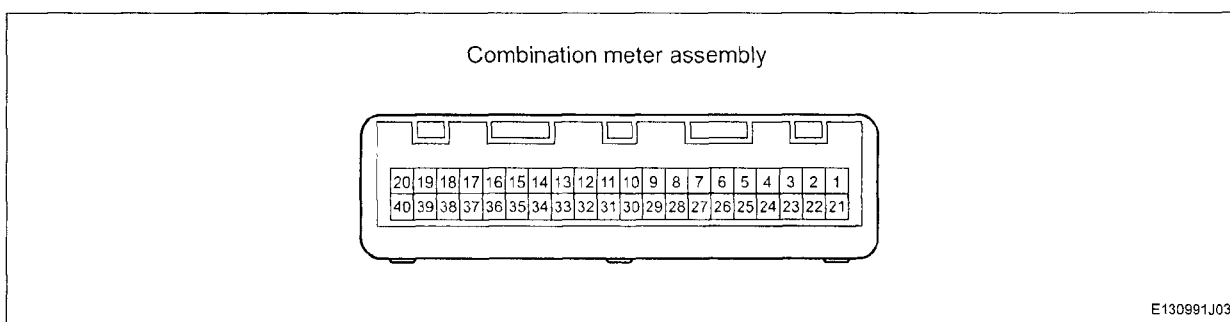
> The room lamp lights or goes out by the illumination function.

> The room lamp operates when the switch is at the DOOR position.

(a) Check if all the doors are unlocked, and each lamp lights and, if left for about 15 seconds without the doors are opened, goes out, if the driver's door is unlocked through key operation while all the doors are locked.

ECU TERMINAL SEQUENCE

1. Combination meter assembly (meter ECU) check



- (1) Using a tester, check the voltage between terminals of the combination meter assembly.

Reference

Terminal number (terminal symbol)	Item	Measuring condition	Reference
8 ↔ body earth	Voltage	All doors closed → Each seat door open	10 - 14 V → 0 V
11 ↔ body earth	Voltage	No key in ignition switch lock cylinder → key is inserted in the cylinder	10 - 14V → 1 V and below

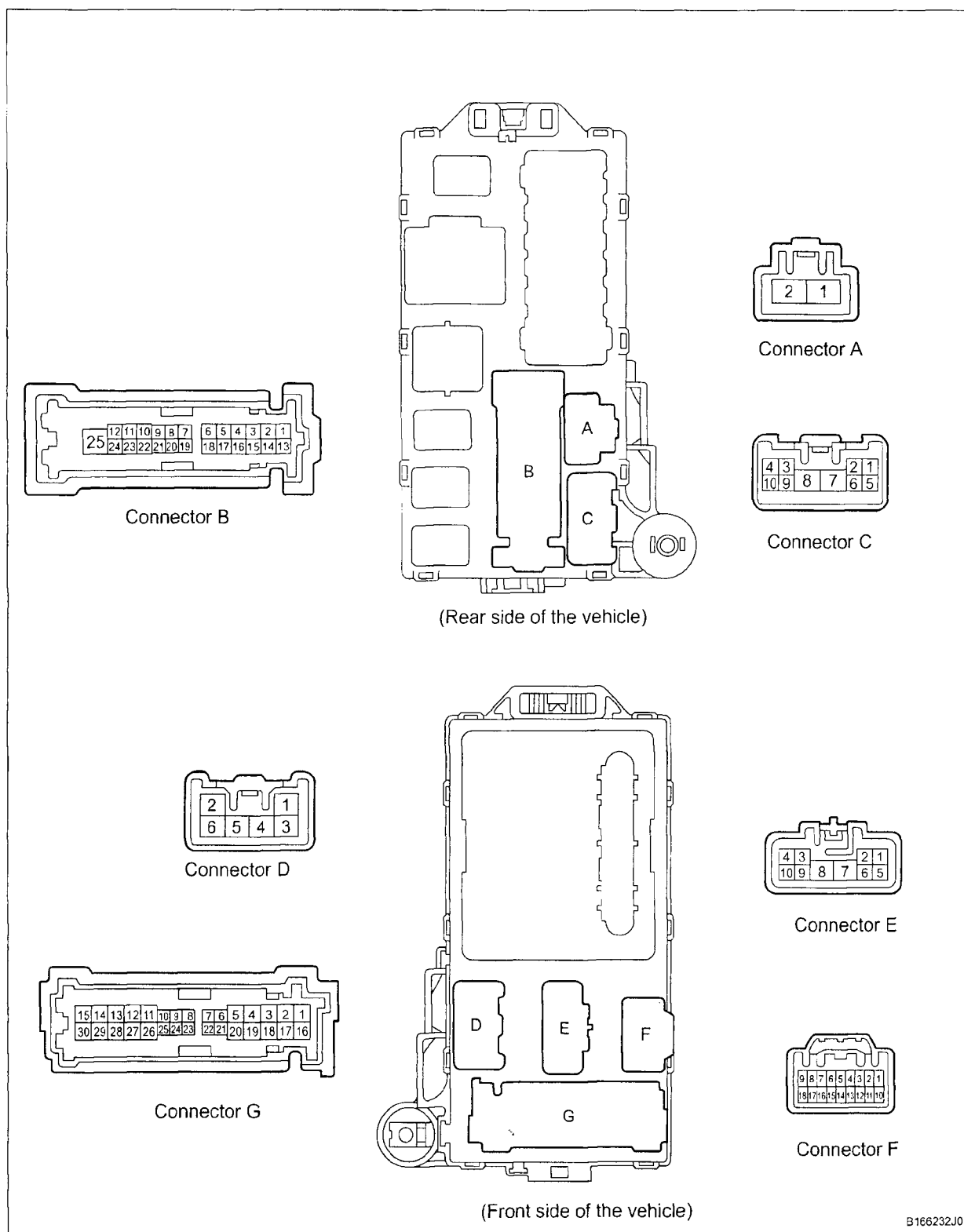
2. Fuse block assembly (set of door control relay assembly) check

(1) Fuse check

(a) Check if AM1 50 A, AM2 30 A, HORN 10 A, BACK UP 15 A, IG 50 A, IG1/BACK 7.5 A, and D/LOCK 15 A fuses are normal.

(2) Fuse block assembly (set of door control relay assembly) check

(a) Disconnect connectors A, C, and G of the fuse block assembly (set of door control relay assembly).



(b) Using a tester, check the voltage and electrical continuity between terminals of the connector of the vehicle side and between body earth.

Reference

Terminal number (terminal symbol)	Item	Measuring condition	Reference
A2 (BDR1) ↔ G29 (GND)	Voltage	Continuously	10 - 14 V

Terminal number (terminal symbol)	Item	Measuring condition	Reference
B10 (ECUB) ↔ G29 (GND)	Voltage	Continuously	10 - 14 V
G10 (UKS) ↔ body earth	Electrical continuity	Door control switch UNLOCK	With electrical continuity
G23 (LKS) ↔ body earth	Electrical continuity	Door control switch LOCK	With electrical continuity
G29 (GND) ↔ body earth	Electrical continuity	Continuously	With electrical continuity

<HINT>

The vehicle is defective if the measured value is non-standard.

(c) Connect the connector and check the voltage between terminals of the connector by using a tester.

Reference

Terminal number (terminal symbol)	Item	Measuring condition	Reference
C2 (ULM) ↔ C4 (LKM)	Voltage	Door control switch (Driver's door lock knob operates in coordination.) Neutral → ON (LOCK)	About 0 V → 10 - 14 V → about 0 V
C4 (LKM) ↔ C2 (ULM)	Voltage	Door control switch (Driver's door lock knob operates in coordination.) Neutral → ON (UNLOCK)	About 0 V → 10 - 14 V → about 0 V
D4 (IG1) ↔ G29 (GND)	Voltage	IG OFF → ON	About 0 V → 10 - 14 V
F5 (EHW) ↔ body earth	Voltage	Hazard lamp goes out → lights.	10 - 14 V → about 0 V
G1 (LKM) ↔ G11 (ULM)	Voltage	Door control switch (Driver's door lock knob operates in coordination.) Neutral → ON (UNLOCK)	About 0 V → 10 - 14 V → about 0 V
G11 (ULM) ↔ G1 (LKM)	Voltage	Door control switch (Driver's door lock knob operates in coordination.) Neutral → ON (LOCK)	About 0 V → 10 - 14 V → about 0 V
G16 (LKM) ↔ G30 (ULM)	Voltage	Door control switch (Driver's door lock knob operates in coordination.) Neutral → ON (UNLOCK)	About 0 V → 10 - 14 V → about 0 V
G30 (ULM) ↔ G16 (LKM)	Voltage	Door control switch (Driver's door lock knob operates in coordination.) Neutral → ON (LOCK)	About 0 V → 10 - 14 V → about 0 V

<HINT>

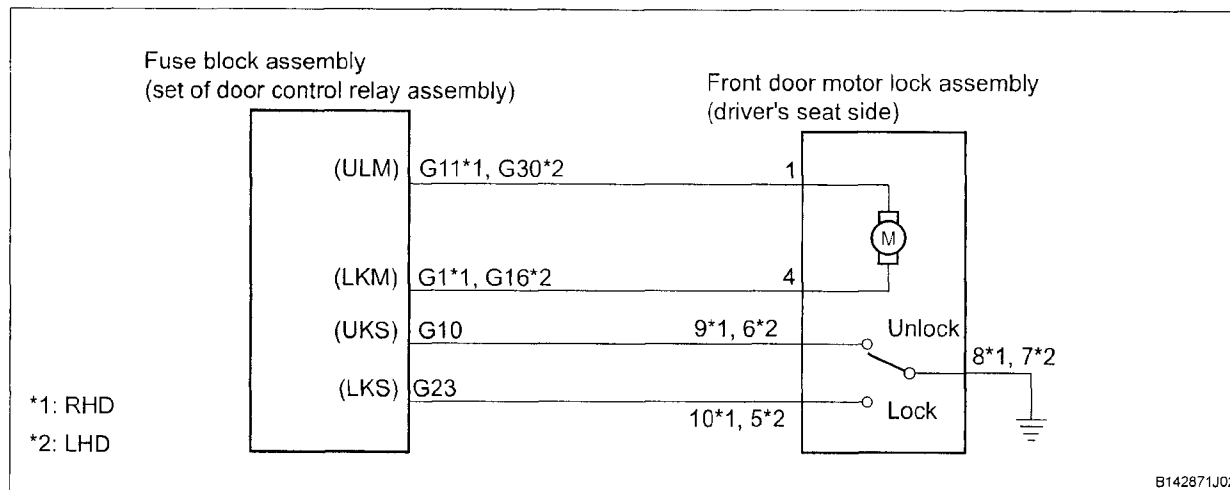
- > The fuse block assembly (set of door control relay assembly) is defective if the measured value is non-standard.
- > The voltage may be intermittently output because the circuit operates intermittently depending on the part checked.

ONLY THE DRIVER'S DOOR CANNOT BE LOCKED OR UNLOCKED

Circuit Description

The fuse block assembly receives the switch signal from the driver's door lock knob and drives the door lock motor of the driver's door.

Circuit Diagram

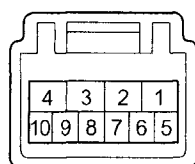
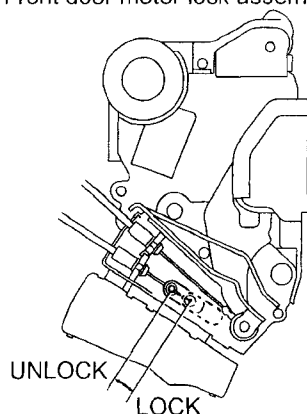


Check Procedure

62

1 FRONT DOOR MOTOR LOCK ASSEMBLY (DRIVER'S SEAT SIDE) UNIT CHECK

RHD: Front door motor lock assembly RH



Y

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- (1) Door lock operation and position switch continuity check
- (a) Check if the door lock operates and continuity of the position switch when the battery voltage is applied across the motor terminals in the door lock.

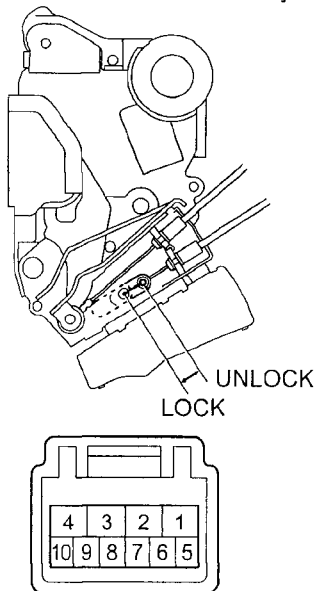
Reference
RHD

Connection	Operation	Reference Position switch
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK	Terminals 8 ↔ 10 With electrical continuity
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK	Terminals 8 ↔ 9 With electrical continuity

LHD

Connection	Operation	Reference Position switch
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK	Terminals 7 ↔ 5 With electrical continuity
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK	Terminals 7 ↔ 6 With electrical continuity

LHD: Front door motor lock assembly LH



Y

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NG

FRONT DOOR MOTOR LOCK ASSEMBLY (DRIVER'S SEAT SIDE) REPLACEMENT

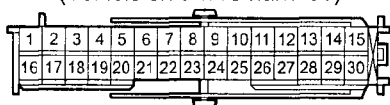
OK

2 WIRE HARNESS AND CONNECTOR CHECK (BETWEEN FRONT DOOR MOTOR LOCK ASSEMBLY (DRIVER'S SEAT SIDE) AND FUSE BLOCK ASSEMBLY)

Front door motor lock assembly
(driver's seat side)
(Vehicle side wire harness)



Fuse block assembly
Connector G
(Vehicle side wire harness)



B142672J03

- (1) Disconnect the connector of the front door motor lock assembly (driver's seat side) and connector G of the fuse block assembly.
- (2) Using a tester, check electrical continuity between terminals of the connector of the vehicle side.

Reference
RHD

Terminal number (Front door motor lock assembly (driver's seat side) ↔ fuse block assembly)	Reference
1 ↔ G11 (ULM)	With electrical continuity
4 ↔ G1 (LKM)	With electrical continuity

LHD

Terminal number (Front door motor lock assembly (driver's seat side) ↔ fuse block assembly)	Reference
1 ↔ G30 (ULM)	With electrical continuity
4 ↔ G16 (LKM)	With electrical continuity

NG

WIRE HARNESS AND CONNECTOR REPAIR AND REPLACEMENT

OK

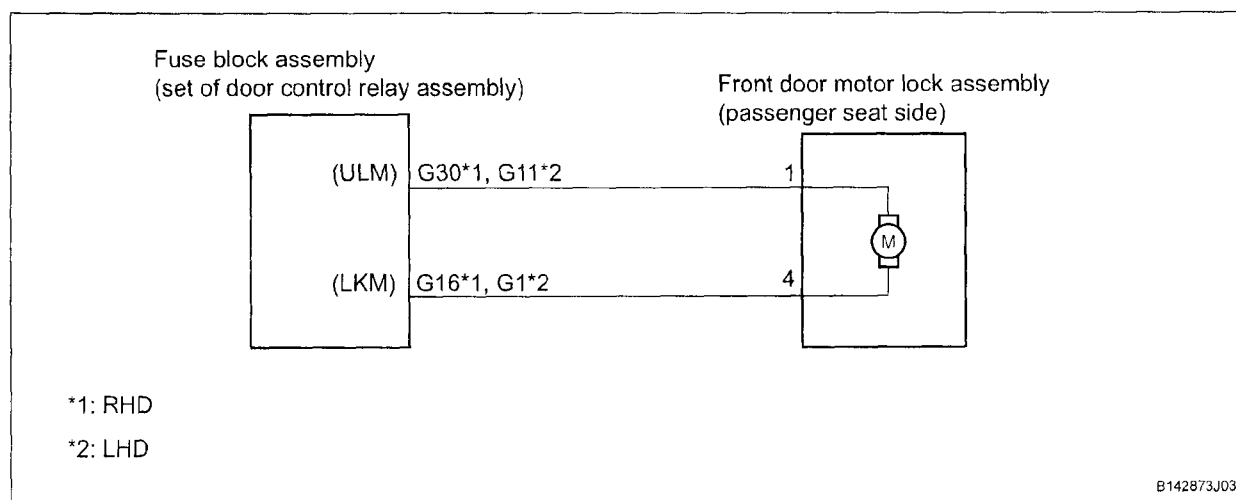
DOOR CONTROL RELAY ASSEMBLY REPLACEMENT

ONLY THE PASSENGER SEAT DOOR CANNOT BE LOCKED OR UNLOCKED

Circuit Description

The door control relay assembly receives the switch signal from the driver's door key and gives the door lock motor of the passenger seat door.

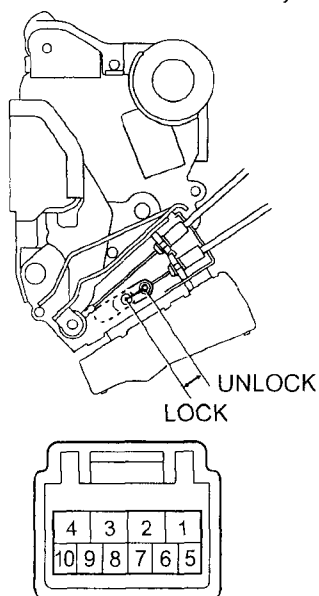
Circuit Diagram



Check Procedure

1 FRONT DOOR MOTOR LOCK ASSEMBLY (PASSENGER SIDE) UNIT CHECK

RHD: Front door motor lock assembly LH



Y

E107857J04

- (1) Door lock operation and position switch continuity check
 (a) Check if the door lock operates when the battery voltage is applied across the motor terminals in the door lock.

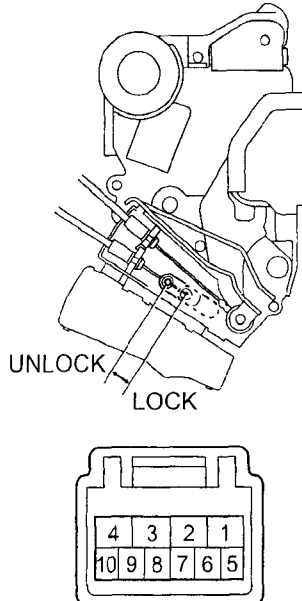
Reference

Connection	Operation
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK

NG

FRONT DOOR MOTOR LOCK ASSEMBLY
(PASSENGER SIDE) REPLACEMENT

LHD: Front door motor lock assembly RH



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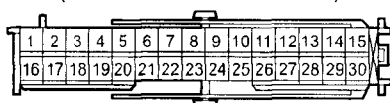
OK

2 WIRE HARNESS AND CONNECTOR CHECK (BETWEEN FRONT DOOR MOTOR LOCK ASSEMBLY (PASSENGER SEAT) AND FUSE BLOCK ASSEMBLY)

Front door motor lock assembly
(passenger seat side)
(Vehicle side wire harness)



Fuse block assembly
Connector G
(Vehicle side wire harness)



B142872J04

- (1) Disconnect the connector of the front door motor lock assembly (passenger side) and connector G of the fuse block assembly.
- (2) Using a tester, check electrical continuity between terminals of the connector of the vehicle side.

Reference
RHD

Terminal number (Front door motor lock assembly (passenger side) ↔ fuse block assembly)	Reference
1 ↔ G30 (ULM)	With electrical continuity
4 ↔ G16 (LKM)	With electrical continuity

LHD

Terminal number (Front door motor lock assembly (passenger side) ↔ fuse block assembly)	Reference
1 ↔ G11 (ULM)	With electrical continuity
4 ↔ G1 (LKM)	With electrical continuity

NG

WIRE HARNESS AND CONNECTOR REPAIR AND
REPLACEMENT

OK

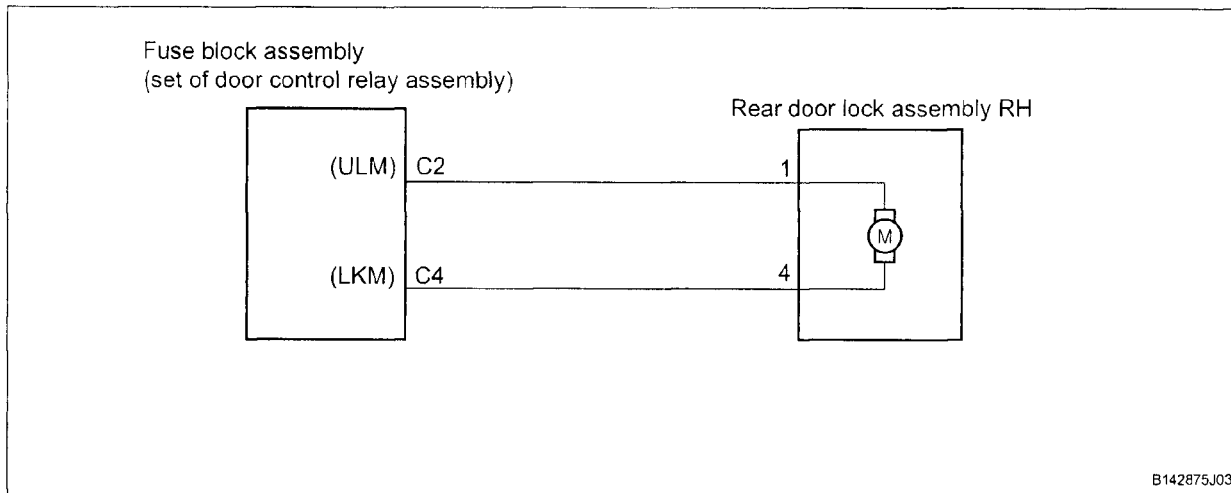
DOOR CONTROL RELAY ASSEMBLY REPLACEMENT

ONLY THE RIGHT REAR DOOR LOCK CANNOT BE LOCKED OR UNLOCKED

Circuit Description

The door control relay assembly receives the switch signal from the driver's door key and drives the door lock motor of the right rear door.

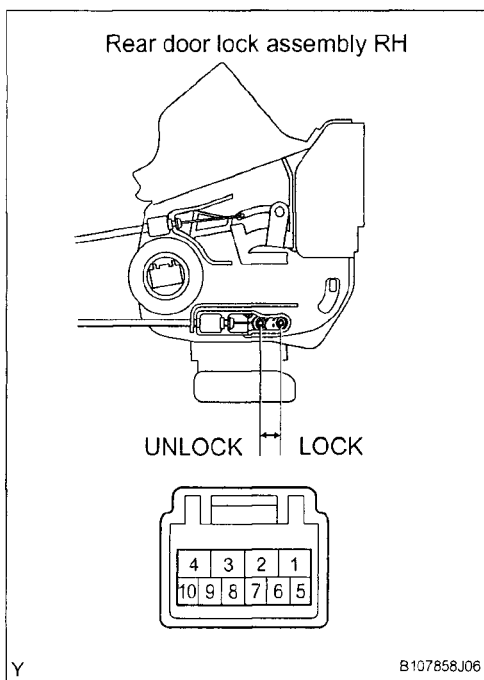
Circuit Diagram



62

Check Procedure

1 REAR DOOR LOCK ASSEMBLY RH UNIT CHECK



(1) Door lock operation check

- (a) Check if the door lock operates when the battery voltage is applied across the motor terminals in the door lock.

Reference

Connection	Operation
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK

NG

REAR DOOR LOCK ASSEMBLY RH REPLACEMENT

OK

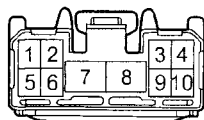
2 WIRE HARNESS AND CONNECTOR CHECK (BETWEEN REAR DOOR LOCK ASSEMBLY RH AND FUSE BLOCK ASSEMBLY)

- (1) Disconnect the connector of the rear door lock assembly RH and connector C (rear side of the vehicle) of the fuse block assembly.

Rear door lock assembly RH
(Vehicle side wire harness)



Fuse block assembly
Connector C
(Vehicle side wire harness)



B142878J01

- (2) Using a tester, check electrical continuity between terminals of the connector of the vehicle side.

Reference

Terminal number (Rear door lock assembly RH ↔ fuse block assembly)	Reference
1 ↔ C2 (ULM)	With electrical continuity
4 ↔ C4 (LKM)	With electrical continuity

NG

WIRE HARNESS AND CONNECTOR REPAIR AND
REPLACEMENT

OK

DOOR CONTROL RELAY ASSEMBLY REPLACEMENT

62

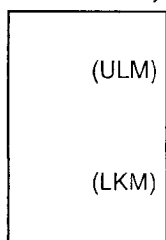
ONLY THE LEFT REAR DOOR LOCK CANNOT BE LOCKED OR UNLOCKED

Circuit Description

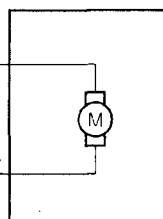
The door control relay assembly receives the switch signals from the master switch and driver's door key and controls the door lock motor of the left rear door.

Circuit Diagram

Fuse block assembly
(set of door control relay assembly)



Rear door lock assembly LH

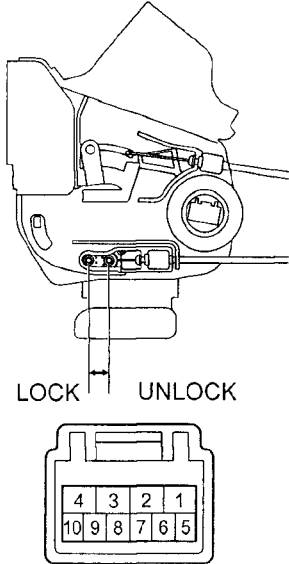


B142875J04

Check Procedure

1 REAR DOOR LOCK ASSEMBLY LH UNIT CHECK

Rear door lock assembly LH



Y

B107859J05

OK

(1) Door lock operation check

- (a) Check if the door lock operates when the battery voltage is applied across the motor terminals in the door lock.

Reference

Connection	Operation
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK

NG

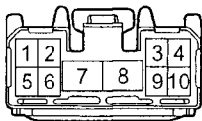
REAR DOOR LOCK ASSEMBLY LH REPLACEMENT

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

Rear door lock assembly LH
(Vehicle side wire harness)



Fuse block assembly
Connector C
(Vehicle side wire harness)



B142878J02

OK

- (1) Disconnect the connector of the rear door lock assembly LH and connector C (rear side of the vehicle) of the fuse block assembly.
(2) Using a tester, check electrical continuity between terminals of the connector of the vehicle side.

Reference

Terminal number (Rear door lock assembly LH ↔ fuse block assembly)	Reference
1 ↔ C2 (ULM)	With electrical continuity
4 ↔ C4 (LKM)	With electrical continuity

NG

WIRE HARNESS AND CONNECTOR REPAIR AND REPLACEMENT

DOOR CONTROL RELAY ASSEMBLY REPLACEMENT

THE KEY LOCKED-IN PREVENTION FUNCTION DOES NOT OPERATE NORMALLY

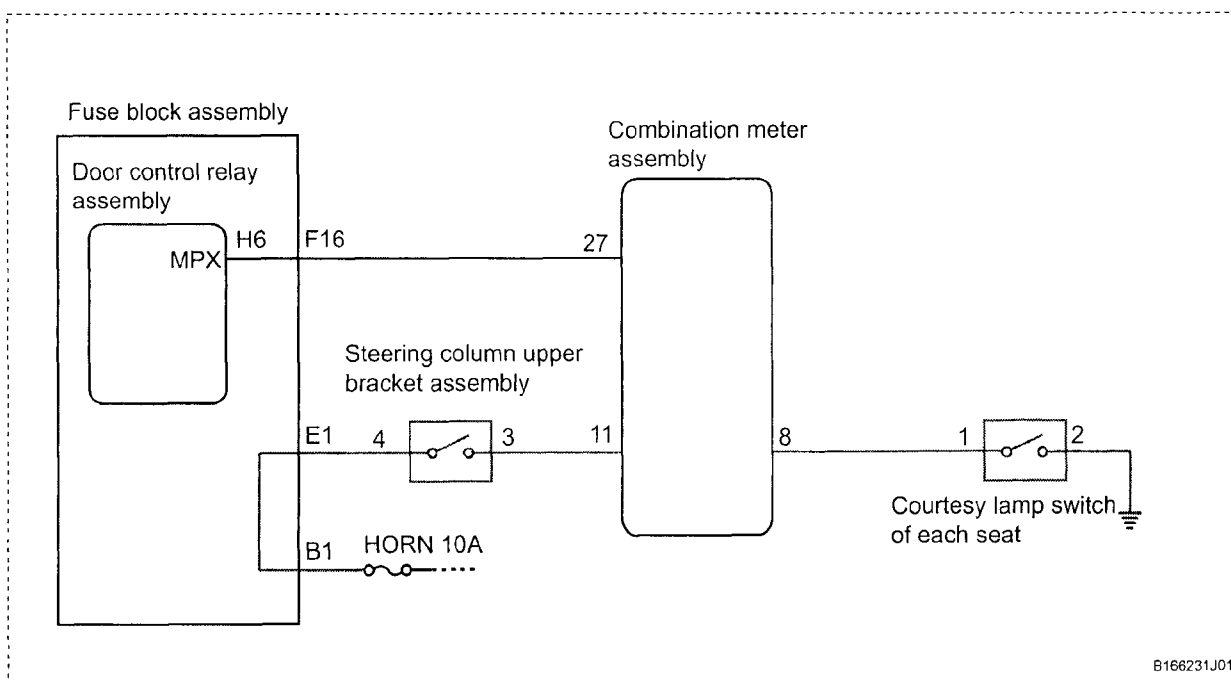
Circuit Description

The door control relay assembly detects that the key switch is inserted into the ignition key cylinder. If the door is closed in a keyless locked state when the driver's door is open, the ignition key switch is OFF, and the key is in the ignition key cylinder, the unlock signal is transmitted to the door locks of all the seats, and the doors are not locked.

<CAUTION>

The electric door lock system uses large-scale body multiple communication. First, in accordance with 'How to proceed troubleshooting', execute 'Communication function check' and proceed troubleshooting.

Circuit Diagram



62

Check Procedure

1	ROOM LAMP AND DOOR WARNING LAMP LIGHTING CHECK
---	--

(1) Check if the room lamp and door warning lamp light when the driver's door is opened.

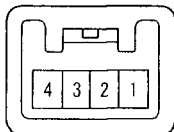
NG

TO STEP 4

OK

2 STEERING COLUMN UPPER BRACKET ASSEMBLY (KEY INSERTION SWITCH) UNIT CHECK

Steering column upper bracket assembly
bracket assembly
(key insertion switch)



B166230J01

(1) Conductivity Check

- (a) Using a tester, check electrical continuity between terminals of the connector.

Reference

Terminal number (terminal symbol)	Condition	Reference
3 ↔ 4	Key inserted ↔ removed	With ↔ without electrical continuity

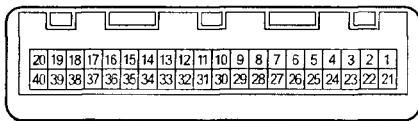
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STEERING COLUMN UPPER BRACKET ASSEMBLY
(KEY INSERTION SWITCH) REPLACEMENT

OK

62 3 COMBINATION METER ASSEMBLY CHECK

Combination meter assembly



B143967J01

(1) Voltage check

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

Reference

Terminal number (terminal symbol)	Condition	Specified value
8 ↔ Body earth	Door closed to opened	0 V → 10 - 14 V
11 ↔ Body earth	Without to with key in ignition lock cylinder	0 V → 10 - 14 V

<CAUTION>

If the combination meter assembly is replaced, set CAN Communication Destination Information after the replacement (See page 63-13).

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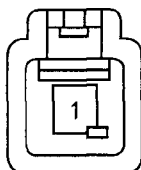
COMBINATION METER ASSEMBLY REPLACEMENT

OK

WIRE HARNESS AND CONNECTOR REPAIR OR REPLACEMENT

4 COURTESY LAMP SWITCH UNIT CHECK

Courtesy lamp switch



B149119J01

(1) Conductivity Check

- (a) Using a tester, check electrical continuity between the terminal of the connector and body earth.

Reference

Operation	Reference
When switch is pushed in	Without electrical continuity
When switch is not pushed in	With electrical continuity

NG

COURTESY LAMP SWITCH REPLACEMENT

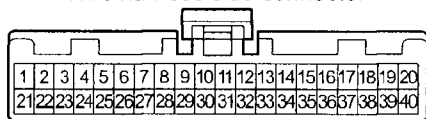
OK

5 WIRE HARNESS AND CONNECTOR CHECK

Courtesy lamp switch
Wire harness side connector



Combination meter assembly
Wire harness side connector



6143945J01

- (1) Wire harness electrical continuity check
 - (a) Disconnect the connectors of the door courtesy lamp switch and combination meter assembly.
 - (b) Using a tester, check electrical continuity between terminals of the connector of the vehicle side of the courtesy lamp switch and the connector of the vehicle side of the combination assembly.

Reference

Terminal number (terminal symbol) (Courtesy switch ↔ combination meter assembly)	Measuring condition	Reference
1 ↔ 8	Continuously	With electrical continuity

NG

WIRE HARNESS AND CONNECTOR REPAIR AND REPLACEMENT

62

OK

DOOR CONTROL RELAY ASSEMBLY REPLACEMENT

ONLY THE BACK DOOR CANNOT BE LOCKED OR UNLOCKED

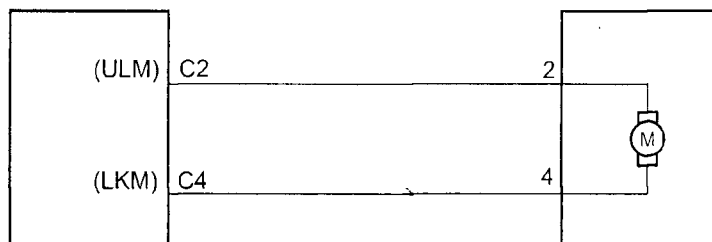
Circuit Description

The door control relay assembly receives the switch signals from the master switch and driver's door key and drives the back door lock assembly.

Circuit Diagram

Fuse block assembly
(set of door control relay assembly)

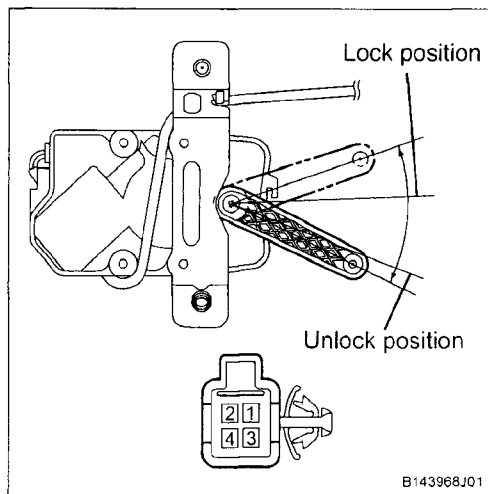
Back door lock actuator assembly



8142882J03

Check Procedure

1 BACK DOOR LOCK ACTUATOR ASSEMBLY UNIT CHECK



(1) Door lock operation check

- (a) Check the operation of the door lock when the battery voltage is applied across the actuator terminals in the door lock.

Reference

Connection	Operation
Battery plus ↔ 2 terminals Battery minus ↔ 4 terminals	OPEN

NG

BACK DOOR LOCK ACTUATOR ASSEMBLY REPLACEMENT

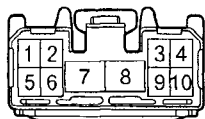
OK

2 WIRE HARNESS AND CONNECTOR CHECK (BETWEEN BACK DOOR LOCK ACTUATOR ASSEMBLY AND FUSE BLOCK ASSEMBLY (SET OF DOOR CONTROL RELAY))

Back door lock actuator assembly
(Vehicle wire harness side connector)



Fuse block assembly
(set of door control relay assembly)
(Vehicle wire harness side connector C)



B142683J01

(1) Conductivity Check

- (a) Disconnect the connector of the back door lock actuator assembly and connector C of the fuse block assembly (set of door control relay).
- (b) Using a tester, check electrical continuity between terminals of the connector of the vehicle side.

Reference

Terminal number (Back door lock actuator assembly ↔ fuse block assembly (set of door control relay))	Reference
2 ↔ C2 (ULM3)	With electrical continuity
4 ↔ C4 (LKM3)	With electrical continuity

NG

WIRE HARNESS AND CONNECTOR REPAIR AND REPLACEMENT

OK

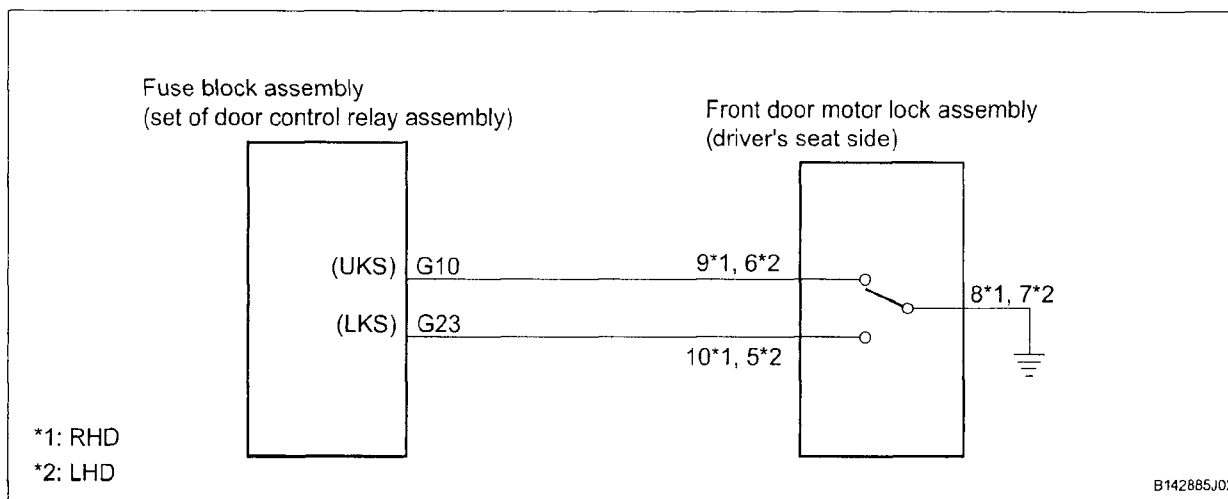
DOOR CONTROL RELAY ASSEMBLY REPLACEMENT

ALL THE DOORS CANNOT BE LOCKED OR UNLOCKED BY USING THE KEY CYLINDER (FOR KEY COORDINATION) AT THE DRIVER'S DOOR

Circuit Description

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

Circuit Diagram



62

Check Procedure

1 FRONT DOOR MOTOR LOCK ASSEMBLY (DRIVER'S SEAT SIDE) UNIT CHECK

- (1) Continuity check (door control switch, for coordination with key)
(a) Using a tester, check electrical continuity between terminals at each position of the switch lever.

Reference

RHD

Switch	Terminal number	Reference
LOCK	Terminals 10 ↔ 8	With electrical continuity
UNLOCK	Terminals 9 ↔ 8	With electrical continuity

LHD

Switch	Terminal number	Reference
LOCK	Terminals 5 ↔ 7	With electrical continuity
UNLOCK	Terminals 6 ↔ 7	With electrical continuity

NG

FRONT DOOR MOTOR LOCK ASSEMBLY (DRIVER'S SEAT SIDE) REPLACEMENT

OK

2

WIRE HARNESS AND CONNECTOR CHECK (BETWEEN FRONT DOOR MOTOR LOCK ASSEMBLY (DRIVER'S SEAT SIDE) AND FUSE BLOCK ASSEMBLY)

Front door motor lock assembly
(driver's seat side)
(Vehicle side wire harness)



Fuse block assembly
Connector G
(Vehicle side wire harness)



8142872J03

- (1) Disconnect the connector of the front door motor lock assembly (driver's seat side) and connector G of the fuse block assembly.
- (2) Using a tester, check electrical continuity between each terminal of the connector of the vehicle side and body earth.

Reference

RHD

Terminal number	Reference
9 ↔ G10 (UKS)	With electrical continuity
10 ↔ G23 (LKS)	With electrical continuity
8 ↔ body earth	With electrical continuity

LHD

Terminal number	Reference
6 ↔ G10 (UKS)	With electrical continuity
5 ↔ G23 (LKS)	With electrical continuity
7 ↔ body earth	With electrical continuity

NG

WIRE HARNESS AND CONNECTOR REPAIR AND REPLACEMENT

OK

DOOR CONTROL RELAY ASSEMBLY REPLACEMENT

WIRELESS DOOR LOCK CONTROL SYSTEM

FUNCTION CHECK

1. Precautions on checking

- (1) The wireless door lock remote control operates only when the following three conditions are satisfied.
 - (a) All doors are closed.
 - (b) Key plate is not inserted into the ignition switch lock cylinder.
 - (c) Electrical door lock operates normally.
- (2) Wireless door lock remote control operation range
 - (a) The operation range changes depending on the operator and how to hold the remote control.
 - (b) The operation range may be narrowed or the remote control may not operate at some locations depending on the influences of the body shape of the vehicle and the surrounding environment.
 - (c) The operation range may be narrowed or the remote control may not operate in an environment where there is a strong electrical wave or if noise is superimposed on the frequency, because the remote control uses minute electrical wave.
 - (d) The operation range may be narrowed or the remote control may not operate if the battery is worn out.

<HINT>
The battery life may be shortened or the door control transmitter may malfunction if it is left at a location where is subject to direct sunlight, such as on the dashboard.

2. Vehicle initial state (state where the conditions of wireless operation are satisfied)

- (1) Key is not inserted into the ignition switch lock cylinder.
- (2) All doors are closed (door warning indicator lamp in the meter remains off).
- (3) Driver's door is locked.

3. Wireless door lock control function check

(1) Basic function check

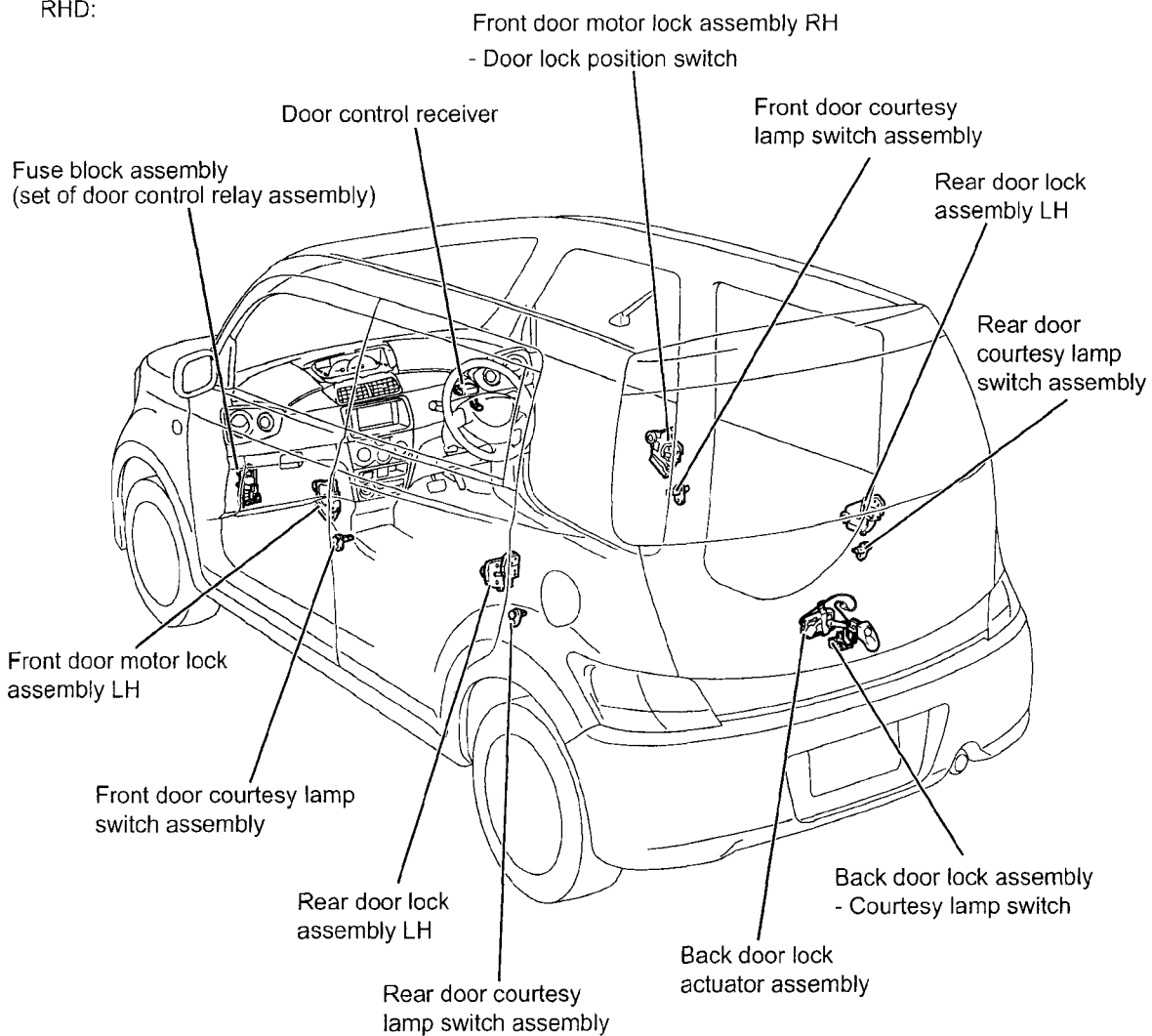
<HINT>

The switch mentioned below is a LOCK/UNLOCK switch for transmission built in the door control transmitter.

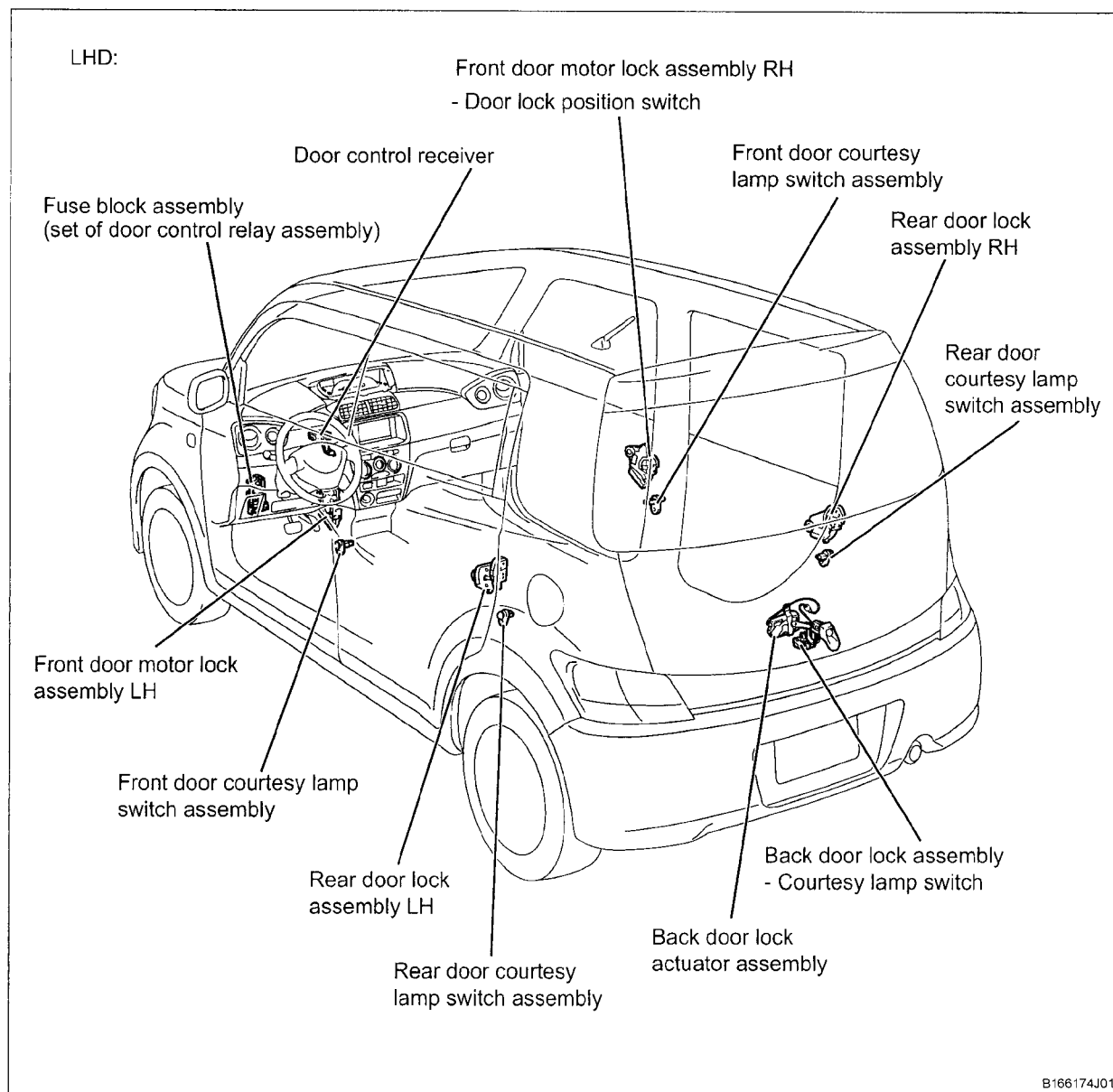
- (a) Check if the wireless operation is performed in the remote control operation range. Note, however, that the operation is not performed while the key is inserted into the ignition switch lock cylinder or any door is opened.
- (2) Chattering prevention function check
 - (a) Check if the door control transmitter performs the corresponding operation only once and does not continuously perform the operation even when the switch is held down. Note, however, that the transmitter performs the operation corresponding to the switch pressed next if the switch has been released once and then pressed again after about 1 second.
- (3) Auto lock function check
 - (a) Check if any door is not opened within 30 seconds after the switch is pressed and all the doors are unlocked, or if all the doors are automatically locked unless the driver's door is locked.
 - (b) Check if the doors are not automatically locked if any of the doors is opened within 30 seconds after the above state or if the driver's door is locked.
- (4) Switch malfunctioning prevention function check
 - (a) Check if the doors are not locked or unlocked when the switch is operated with the key inserted into the ignition switch lock cylinder. However, this does not apply when an identification code is being registered.
 - (b) Check if the doors are not locked or unlocked if a switch of the transmitter which has not been registered is operated, and they are locked or unlocked if a registered transmitter switch is operated.
- (5) Operational stop function check when door is opened or is not fully closed
 - (a) Check if the doors are not locked even if the switch is operated when any of the doors is not fully closed or is opened.
- (6) Repeat function check
 - (a) Check if all the doors are locked against about 1 seconds after the switch is pressed with the door control knob of the driver's door forcibly unlocked.
- (7) Answerback function check
 - (a) Check if all the doors are locked or unlocked and the hazard lamp lights once (when the doors are locked) or two times (when the doors are unlocked) when the switch is pressed.

PART LAYOUT

RHD:



B166173J01



62

LIST OF SYMPTOM

Symptom	Checking items	Reference page
No answer back (hazard)	Fuse block assembly (set of door control relay assembly)	<\$attribute32
	Lighting system (turn signal flasher assembly)	
	Wire harness and connector	
Only the wireless function (remote control) does not operate.	ECU-IG2 7.5 A, ACC 7.5 A, D/L 15 A fuses	<\$attribute33
	Transmitter battery	
	Door control transmitter	
	Door control receiver	
	Fuse block assembly (set of door control relay assembly)	
	Unlock warning switch assembly	
	Wire harness and connector	

TROUBLESHOOTING PROCEDURE

1 PUTTING THE CAR IN THE GARAGE



2 INQUIRY AND PHENOMENON CHECK

<HINT>
(See page 62-27)

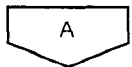


3 LIN COMMUNICATION SYSTEM CHECK

SST 09991-87403, 09991-87404

<HINT>
(See page 94-3)
(1) To [A] if does not fall under the list by symptom
(2) To [B] if falls under the list by symptom

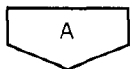
B TO LIN COMMUNICATION SYSTEM SECTION



4 LIST OF SYMPTOM

<HINT>
(See page 62-25)
(1) To [A] if does not fall under the list by symptom
(2) To [B] if falls under the list by symptom

B TO CHECK STEP 5



5 TROUBLESHOOT AS FOLLOWS BASED ON THE TROUBLE INFORMATION.

(1) ECU Terminal Sequence (See page 62-28)
(2) Function Check (See page 62-23)
(3) Unit check



6 ADJUST, REPAIR, OR REPLACE



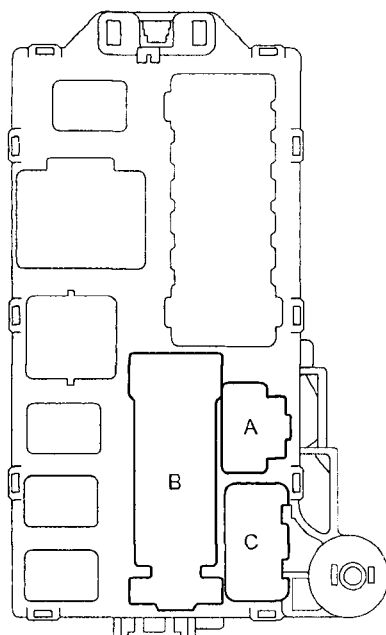
END

INQUIRY SHEET

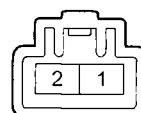
Wireless Door Lock Control System Problem Diagnosis Check Sheet				Date Vehicle Brought In / /	
Customer's Name		License Plate No.		First Registered Year 20__ / /	
		Model		VIN	
Written By	Inspector's Name	Engine Type		Odometer Reading km	
Description Of Symptoms					
Date Problem First Occured		Date 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 Suburbs Highway Others ()			Paved	Unpaved
Problem Symptoms	☐ DTC is output		☐ () ☐ ()		
	☐ All wireless door lock control functions do not operate				
	☐ Answer back function does not operate				
	☐ Others				
Condition Returns To Normal		☐ IG ON Engine Starting () SW Operation			
Conditions When Problem Occurs	Present Not Present	☐ IG OFF ON () SW Operation Others ()			
B105502J01					

ECU TERMINAL SEQUENCE

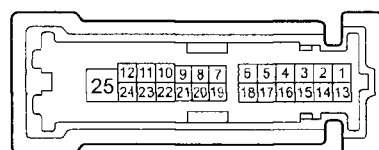
1. Fuse block assembly (set of door control relay assembly) check
 - (1) Fuse check
 - (a) Check if AM1 50 A, HORN 10 A, BACK UP 15 A, AM2 30 A, IG 50 A, IG1/BACK 7.5 A, ECU IG2 7.5 A, D/LOCK 15 A, and HAZ 10 A fuses are normal.
 - (2) Fuse block assembly (set of door control relay assembly) check
 - (a) Disconnect connectors B and D (front of the vehicle) of the fuse block assembly (set of door control relay assembly).
 - (b) Using a tester, check the voltage and electrical continuity between terminals of the connector of the vehicle side and between body earth.



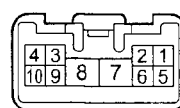
(Rear side of the vehicle)



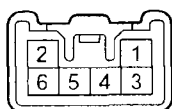
Connector A



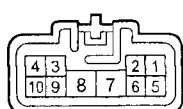
Connector B



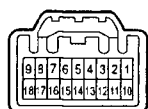
Connector C



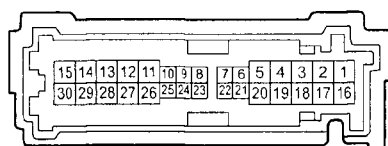
Connector D



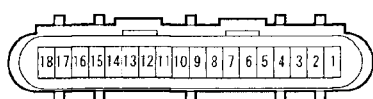
Connector E



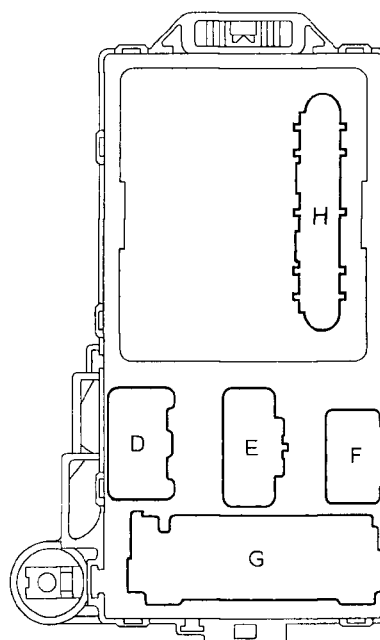
Connector F



Connector G



Connector H



(Front side of the vehicle)

Reference

Terminal number (terminal name)	Item	Measuring condition	Reference
D4 ↔ body earth	Voltage	IG OFF → ON	0 V → 10 - 14 V
D6 ↔ body earth	Voltage	IG OFF → ON (ACC)	0 V → 10 - 14 V
A2 ↔ body earth	Voltage	Continuously	10 - 14 V
C2 ↔ body earth	Voltage	Continuously	10 - 14 V
G29 (GND) ↔ body earth	Electrical continuity	Continuously	With electrical continuity

<HINT>

The vehicle is defective if the measured value is non-standard.

- (3) Connect the connector and check the voltage between terminals of the connector.

Specified value

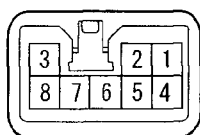
Terminal number (terminal name)	Item	Measuring condition	Reference
F5 (EHW) ↔ body earth	Voltage	Transmitter OFF → ON with ignition switch OFF, without key, all doors closed	10 - 14 V → 0 V → 10 - 14 V

<HINT>

The fuse block assembly (set of door control relay assembly) is defective if the measured value is non-standard.

62

Door control receiver



B156934J01

2. Door control receiver check

- (1) Disconnect the connector and check the voltage and electrical continuity between terminals of the connectors of the wire harness of the vehicle side by using a tester.

Reference

Terminal number (terminal symbol)	Item	Measuring condition	Specified value
4 (GND) ↔ body earth	Electrical continuity	Continuously	With electrical continuity
8 (+B) ↔ 4 (GND)	Voltage	Continuously	10 - 14 V

<HINT>

The vehicle is defective if the measured value is non-standard.

- (2) Check the waveform between terminals with the connector connected.

Reference

Terminal number (terminal symbol)	Item	Measuring condition	Specified value
5 (SIG) ↔ 4 (GND)	Waveform	"LOCK" switch of transmitter OFF → ON with ignition switch OFF, without key, all doors closed	Pulse generation Waveform 1
5 (SIG) ↔ 4 (GND)	Waveform	"UNLOCK" switch of transmitter OFF → ON with ignition switch OFF, without key, all doors closed	Pulse generation Waveform 2

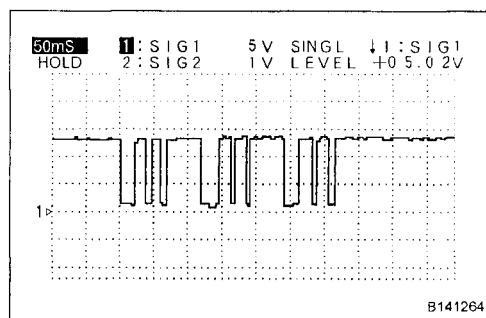
<HINT>

If the waveform is non-standard, the door control receiver is defective.

3. Oscilloscope waveform

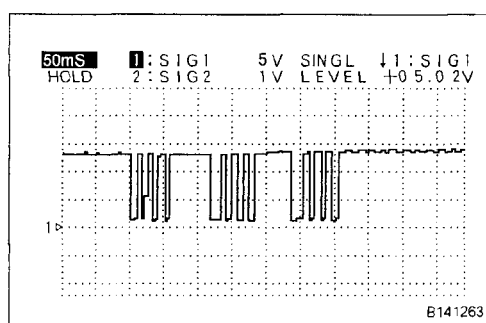
<HINT>

The oscilloscope waveform shown is for your reference and waveforms of noise and chattering are omitted.



(1) Waveform 1

Item	Description
Measuring terminal	5 (SIG) ↔ 4 (GND)
Measuring instrument set	5 V (voltage axis), 50 ms (time axis)
Condition	When "LOCK" operated



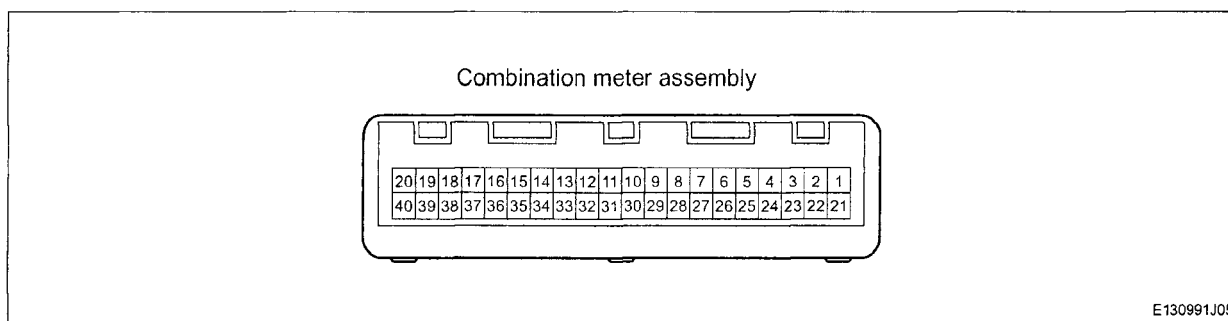
(2) Waveform 2

Item	Description
Measuring terminal	5 (SIG) ↔ 4 (GND)
Measuring instrument set	5 V (voltage axis), 50 ms (time axis)
Condition	When "UNLOCK" operated

62

4. Combination Meter Assembly Check

- (1) Disconnect the connector and check the voltage and electrical continuity between terminals of the wire harness of the vehicle side by using a tester.



Reference

Terminal number (terminal symbol)	Item	Measuring condition	Specified value
8 ↔ body earth	Voltage	Each door fully closed → opened	1 V and above → 10 - 14 V
11 ↔ body earth	Voltage	With → without key in ignition switch lock cylinder	1 V and above → 10 - 14 V
14 ↔ body earth	Electrical continuity	Continuously	With electrical continuity

- (2) Connect the connector and check the voltage and waveform between terminals of the connector.

Reference

Terminal number (terminal symbol)	Item	Measuring condition	Specified value
26 ↔ body earth	Voltage	Switch of transmitter OFF → ON with ignition switch OFF, without key, all doors closed	10 - 14 V → 1 V and below
27 ↔ body earth	Waveform	Switch of transmitter OFF → ON with ignition switch OFF, without key, all doors closed	Pulse generation

<HINT>

If the value is non-standard, the combination meter assembly is defective.

NO ANSWER BACK (HAZARD)

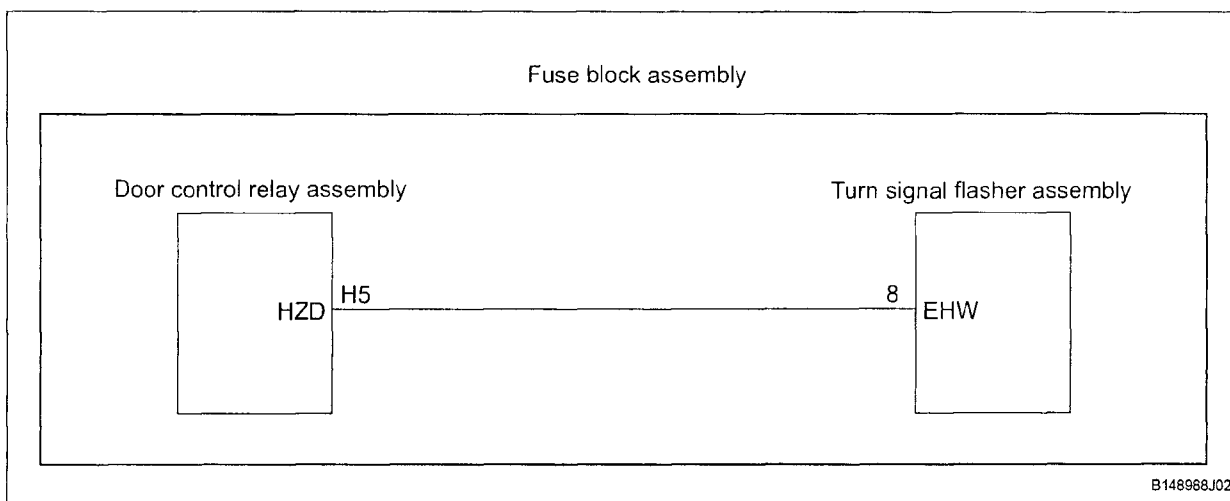
Circuit Description

The door control receiver receives a signal from the transmitter and transmits a door lock or unlock signal to the fuse block assembly. The body ECU outputs (answers back) a hazard lamp blinking signal in response to the door lock or unlock signal it has received.

<CAUTION>

The wireless door lock control system uses large-scale body multiple communication. First, in accordance with 'How to Proceed Troubleshooting', execute 'Communication function check' and check there is no error in the communication system, and then proceed troubleshooting.

Circuit Diagram



Check Procedure

1 WIRELESS DOOR LOCK OPERATION CHECK

- (1) Check if the wireless door lock functions when a switch of the transmitter is operated.

<HINT>

If the doors can be locked or unlocked, it can be checked if a wireless command from the transmitter has been input to the door control receiver.

NG

TO ONLY WIRELESS FUNCTION DOES NOT OPERATE

OK

2 HAZARD LAMP OUTPUT CHECK

- (1) Check if the hazard lamp operates normally when the hazard switch is pressed.

<HINT>

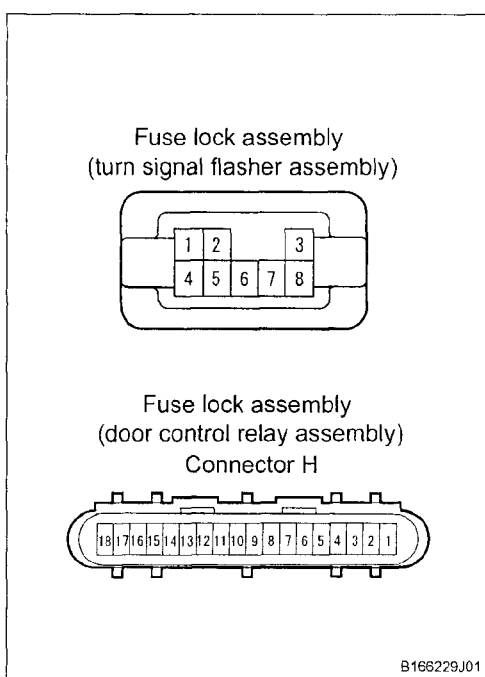
If not, refer to Lighting system (See page 60-10)

NG

TO LIGHTING SYSTEM

OK

3 FUSE BLOCK ASSEMBLY CHECK (BETWEEN TURN SIGNAL FLASHER ASSEMBLY AND DOOR CONTROL RELAY ASSEMBLY)



- (1) Remove the turn signal flasher assembly and door control relay assembly.
- (2) Using a tester, check electrical continuity between terminal of the connector of the turn signal flasher assembly of the fuse block assembly and the connector terminal of the door control relay assembly.

Reference

Terminal number	Reference
8 (EHW) ↔ H5 (HZD)	With electrical continuity

NG

FUSE BLOCK ASSEMBLY REPLACEMENT

62

OK

DOOR CONTROL RELAY ASSEMBLY REPLACEMENT

ONLY WIRELESS FUNCTION (REMOTE CONTROL) DOES NOT OPERATE (PREPARE A NEW OR NORMAL TRANSMITTER)

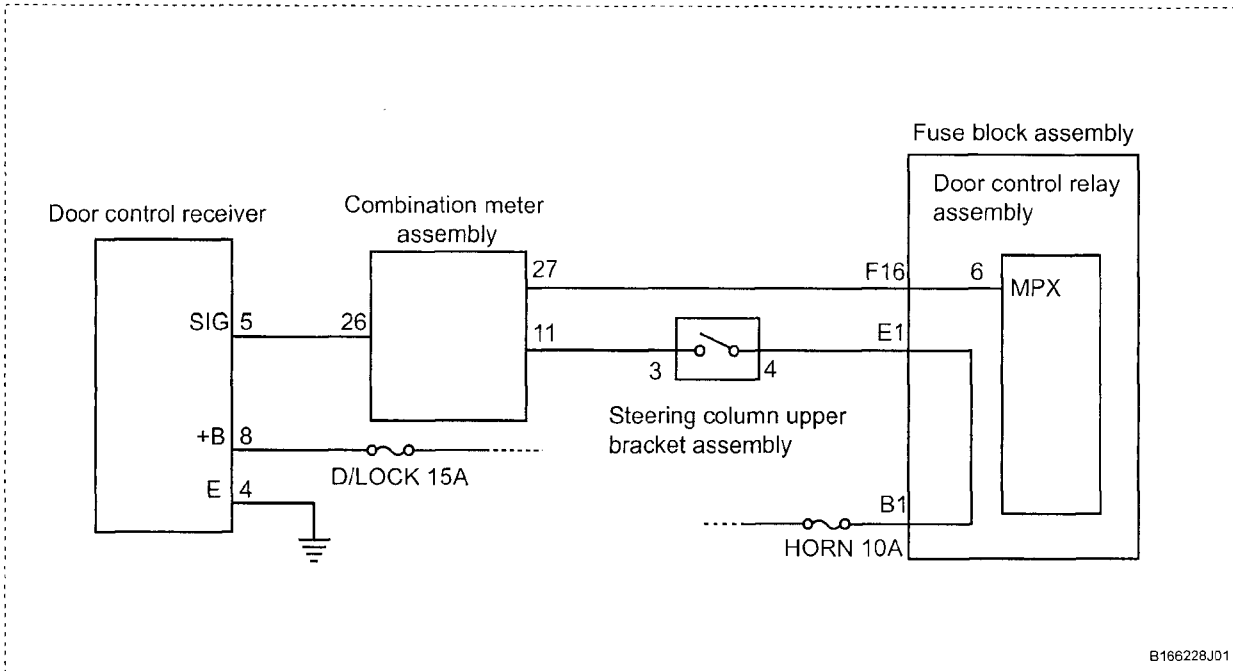
Circuit Description

The door control receiver receives a signal from the door lock control transmitter and sends it to the combination meter assembly from which it is sent to the door control relay assembly.

<CAUTION>

The wireless door lock control system uses large-scale body multiple communication. First, in accordance with 'How to Proceed Troubleshooting', execute 'Communication function check' and then proceed troubleshooting.

Circuit Diagram



Check Procedure

1	WIRELESS DOOR LOCK OPERATION CHECK
---	------------------------------------

(1) Basic function check (See page 62-23)

OK → NORMAL (FUNCTION CHECK IMPLEMENTATION)

NG

2	TRANSMITTER CHECK
---	-------------------

(1) If there is a transmitter other than the one registered to the vehicle

(a) By using the other transmitter, check if the door can be remotely locked or unlocked.

(2) If there is no other transmitter registered to the vehicle

(a) Check if the identification code of a correct or new transmitter can be registered.

OK

NG → TO STEP 4

3	TRANSMITTER BATTERY CHECK
---	---------------------------

(1) Replace the door control transmitter battery with a new or correct one. Check if the door can be remotely locked or unlocked when the switch of the transmitter is pressed.

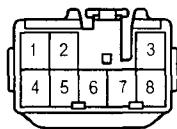
NG → DOOR CONTROL TRANSMITTER MODULE SET REPLACEMENT

OK

TRANSMITTER BATTERY REPLACEMENT

4

DOOR CONTROL RECEIVER CHECK (POWER SUPPLY, GROUND)

Door control receiver
wire harness side connector

B166935J01

- (1) Disconnect the connector of the door control receiver and check electrical continuity and voltage between each terminal and body earth by using a tester.

Reference

Terminal number (Terminal symbol)	Item	Measuring condition	Reference
4 (GND) ↔ Body earth	Electrical continuity	Continuously	With electrical continuity
8 (+B) ↔ Body earth	Voltage	Continuously	10 - 14 V

62

NG

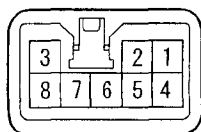
WIRE HARNESS AND CONNECTOR REPAIR AND
REPLACEMENT

OK

5

DOOR CONTROL RECEIVER CHECK (OUTPUT)

Door control receiver



B166934J01

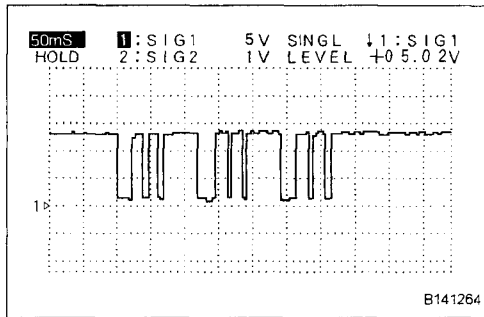
- (1) Connect an oscilloscope between connector terminal 5 (SIG) of the door control receiver and the body earth to check the waveforms.

Reference

Terminal number (Terminal symbol)	Item	Measuring condition	Reference
5 (SIG) ↔ Body earth	Waveform	Transmitter "LOCK" switch OFF → ON with ignition switch OFF, no key, and all doors closed	Pulse generation Waveform 1
5 (SIG) ↔ Body earth	Waveform	Transmitter "UNLOCK" switch OFF → ON with ignition switch OFF, no key, and all doors closed	Pulse generation Waveform 2

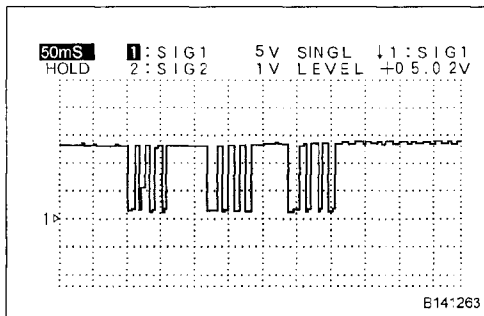
<HINT>

The oscilloscope waveform shown is for your reference and waveforms of noise and chattering are omitted.



(a) Waveform 1

Item	Description
Measuring terminal	5 (SIG) ↔ 4 (GND)
Equipment set	5 V (voltage axis), 50 ms (time axis)
Condition	When "LOCK" operated



(b) Waveform 2

Item	Description
Measuring terminal	5 (SIG) ↔ 4 (GND)
Equipment set	5 V (voltage axis), 50 ms (time axis)
Condition	When "LOCK" operated

OK

TO STEP 7

NG

6 REPLACE THE DOOR CONTROL RECEIVER WITH A NORMAL ONE.

- (1) Replace the door control receiver with a normal one and check if the identification code of the door control transmitter can be registered.

OK

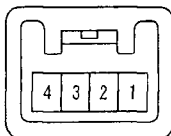
DOOR CONTROL RECEIVER REPLACEMENT

NG

DOOR CONTROL TRANSMITTER MODULE SET REPLACEMENT

7 STEERING COLUMN UPPER BRACKET ASSEMBLY (KEY INSERTION SWITCH) UNIT CHECK

Steering column upper bracket assembly
bracket assembly
(key insertion switch)



B166230J01

- (1) Conductivity Check

- (a) Disconnect the connector of the steering column upper bracket assembly.
(b) Using a tester, check electrical continuity between terminals of the connector.

Reference

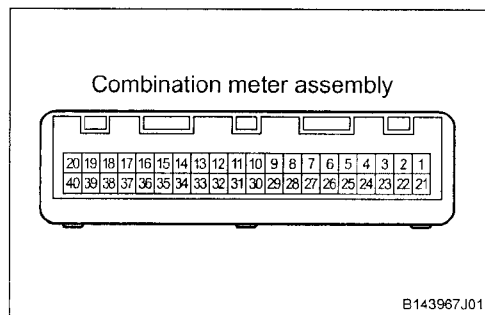
Terminal number (Terminal name)	Item	Measuring condition	Reference
3 ↔ 4	Electrical continuity	Key inserted → removed	With → without electrical continuity

NG

STEERING COLUMN UPPER BRACKET ASSEMBLY (KEY INSERTION SWITCH) REPLACEMENT

OK

8 COMBINATION METER ASSEMBLY CHECK (INPUT/OUTPUT SIGNAL)



- (1) Connect an oscilloscope between connector terminal 26 of the combination meter assembly and the body earth to check the waveforms.

Reference

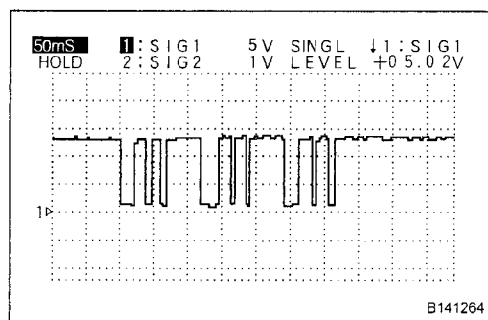
Terminal number (terminal symbol)	Item	Measuring condition	Reference
26 ↔ Body earth	Waveform	Transmitter "LOCK" switch OFF → ON with ignition switch OFF, no key, and all doors closed	Pulse generation Waveform 1
26 ↔ Body earth	Waveform	Transmitter "UNLOCK" switch OFF → ON with ignition switch OFF, no key, and all doors closed	Pulse generation Waveform 2
11 ↔ Body earth	Voltage	With → without key in ignition switch lock cylinder.	1 V and above → 10 - 14 V

62

<HINT>

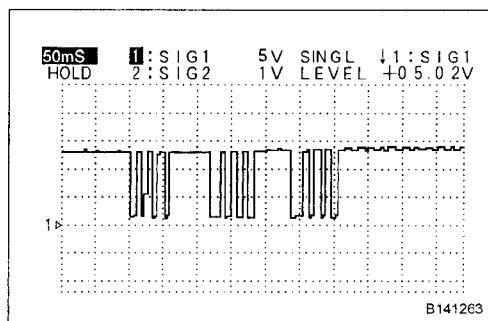
The oscilloscope waveform shown is for your reference and waveforms of noise and chattering are omitted.

(a) Waveform 1



Item	Description
Measuring terminal	26 ↔ body earth
Equipment set	5 V (voltage axis), 50 ms (time axis)
Condition	When "LOCK" operated

(b) Waveform 2



Item	Description
Measuring terminal	26 ↔ body earth
Equipment set	5 V (voltage axis), 50 ms (time axis)
Condition	When "LOCK" operated

NG

WIRE HARNESS AND CONNECTOR REPAIR AND REPLACEMENT

OK

9

REPLACE THE DOOR CONTROL RELAY ASSEMBLY WITH A NORMAL ONE.

- (1) Replace the door control relay assembly with a normal one and implement function check.

<CAUTION>

If the combination meter assembly is replaced, set CAN Communication Destination Information after the replacement (See page 63-13)

NG

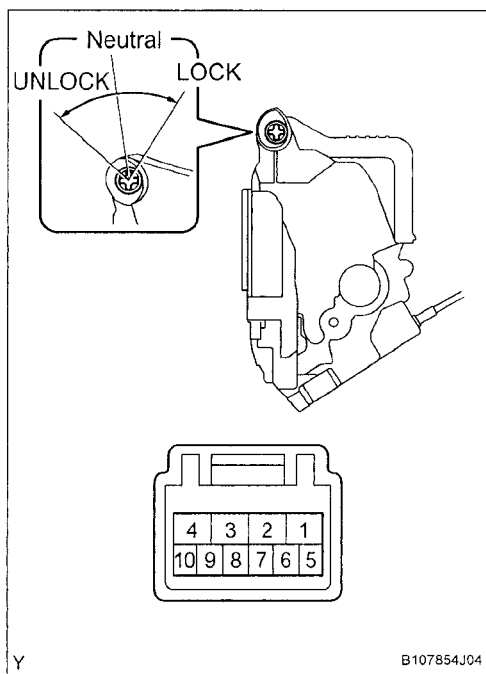
COMBINATION METER ASSEMBLY REPLACEMENT

OK

DOOR CONTROL RELAY ASSEMBLY REPLACEMENT

FRONT DOOR MOTOR LOCK ASSEMBLY RH

INSPECTION



1. Front door motor lock assembly RH check (RHD)

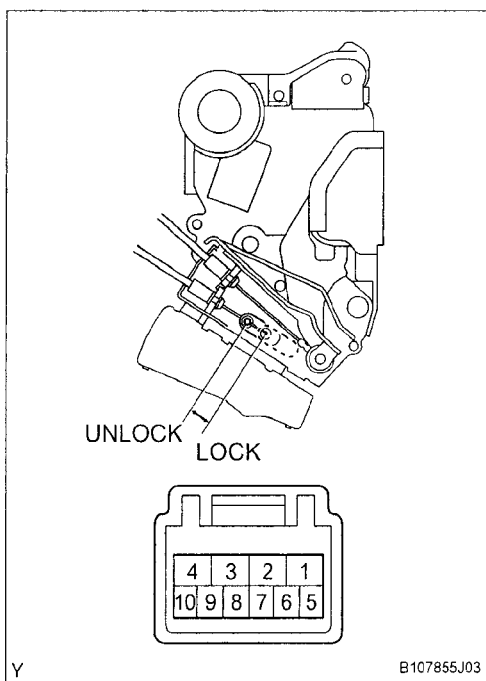
(1) Continuity check (door control switch, for coordination with key)

(a) Using a tester, check electrical continuity between terminals at each position of the switch lever.

Reference

Switch	Terminal number	Reference
LOCK	Terminals 8 ↔ 10	With electrical continuity
Neutral	-	-
UNLOCK	Terminals 8 ↔ 9	With electrical continuity

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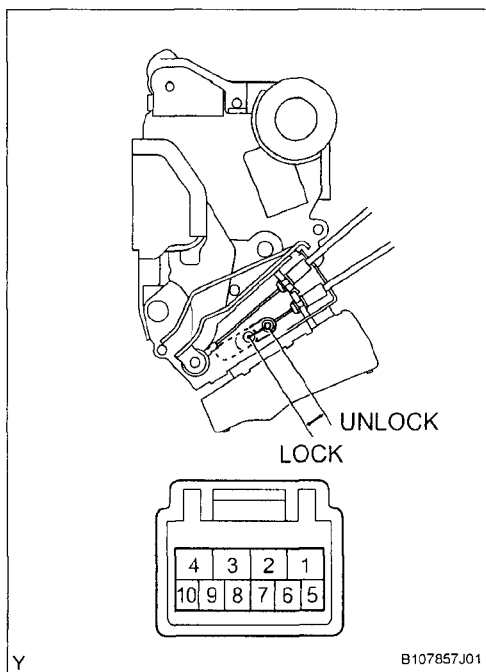
(2) Door lock operation and position switch continuity check

(a) Apply the battery voltage between terminals of the connector in the door lock and check if the door lock operates.

(b) Using a tester, check electrical continuity of the position switch.

Reference

Terminal name	Operation	Reference
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK	Terminals 7 ↔ 8 Without electrical continuity
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK	Terminals 7 ↔ 8 With electrical continuity



2. Front door motor lock assembly RH removal (LHD)

(1) Door lock operation and position switch continuity check

(a) Apply the battery voltage between terminals of the connector in the door lock and check if the door lock operates.

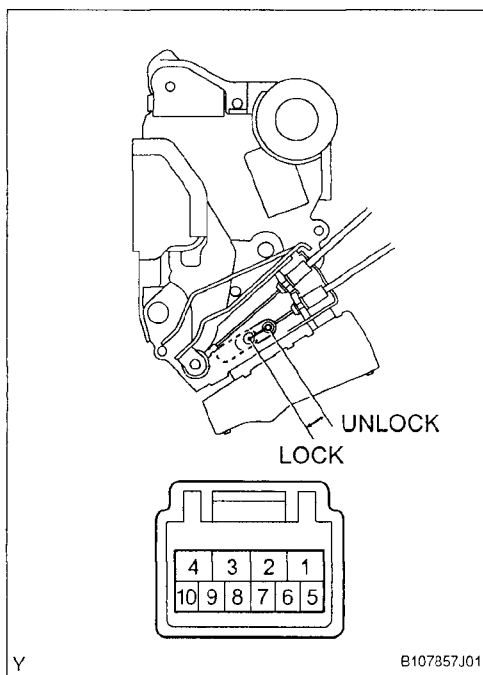
(b) Using a tester, check electrical continuity of the position switch.

Reference

Terminal name	Operation	Reference
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK	Terminals 7 ↔ 8 Without electrical continuity
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK	Terminals 7 ↔ 8 With electrical continuity

FRONT DOOR MOTOR LOCK ASSEMBLY LH

INSPECTION



1. Front door motor lock assembly LH check (RHD)

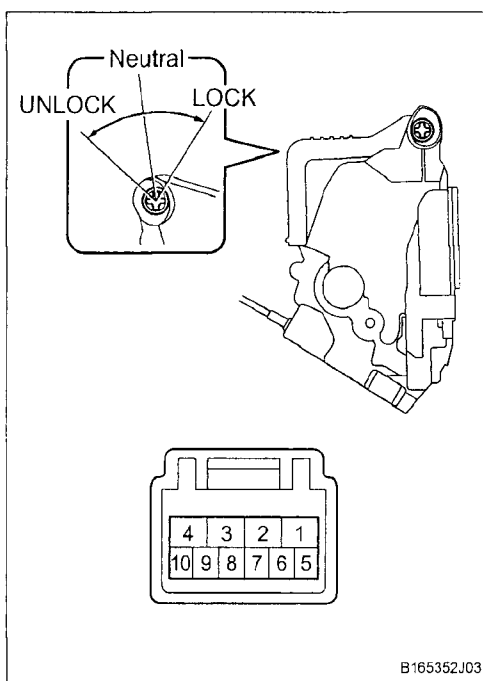
(1) Door lock operation check

- (a) Apply the battery voltage between terminals of the connector in the door lock and check if the door lock operates.

Reference

Terminal name	Operation
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK

62



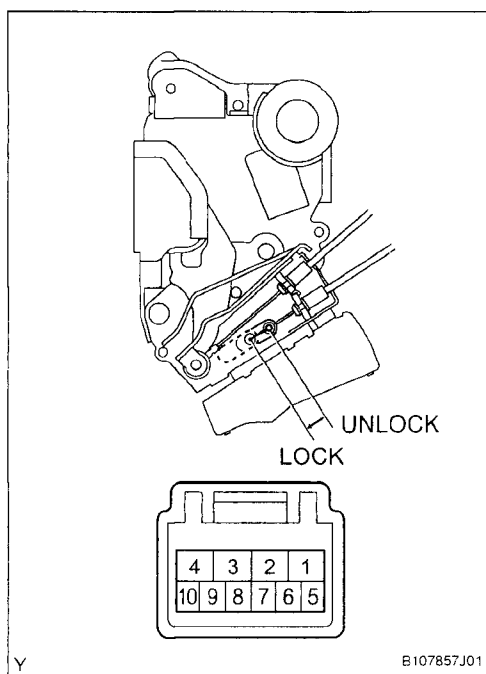
2. Front door motor lock assembly LH removal (LHD)

(1) Continuity check (door control switch, for coordination with key)

- (a) Using a tester, check electrical continuity between terminals at each switch lever position.

Reference

Switch	Terminal number	Reference
LOCK	Terminals 8 ↔ 10	With electrical continuity
Neutral	-	-
UNLOCK	Terminals 8 ↔ 9	With electrical continuity



(2) Door lock operation check

(a) Apply the battery voltage between terminals of the connector in the door lock and check if the door lock operates.

Reference

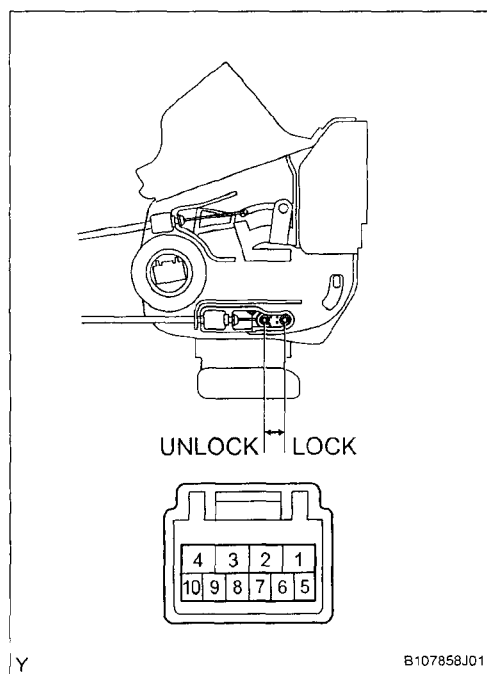
Terminal name	Operation
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK

REAR DOOR LOCK ASSEMBLY RH

INSPECTION

<HINT>

For both the right- and left-steering wheel vehicles



1. Rear door lock assembly RH check

(1) Door lock operation check

(a) Apply the battery voltage between terminals of the connector in the door lock and check if the door lock operates.

Reference

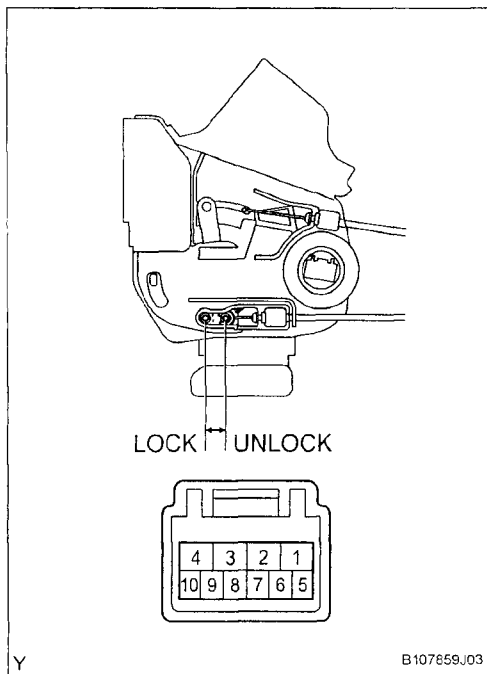
Terminal name	Operation
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK

REAR DOOR LOCK ASSEMBLY LH

INSPECTION

<HINT>

For RHD and LHD



1. Rear door lock assembly LH check

(1) Door lock operation check

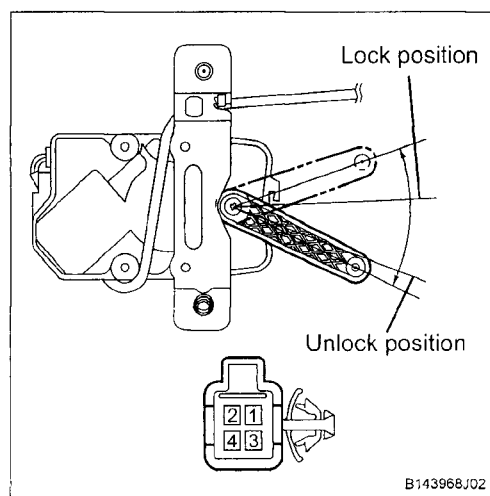
(a) Apply the battery voltage between terminals of the connector in the door lock and check if the door lock operates.

Reference

Terminal name	Operation
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK

BACK DOOR LOCK ACTUATOR ASSEMBLY

INSPECTION



1. Back door lock assembly check

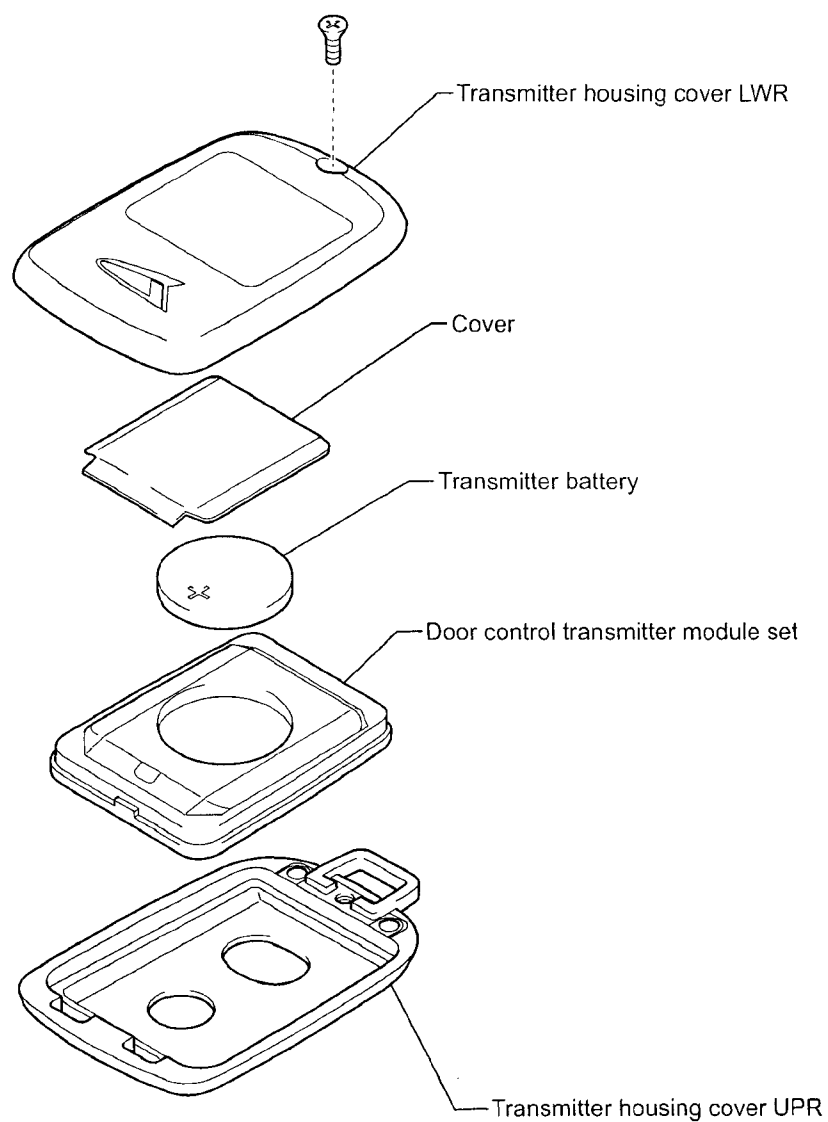
(1) Operation check

- (a) Apply the battery voltage between terminals of the connector and check the operation of the actuator.

Reference

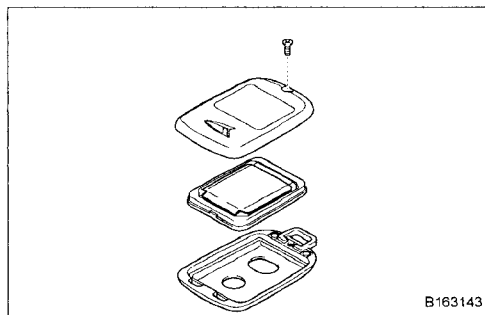
Terminal name	Operation
Battery plus ↔ 4 terminals Battery minus ↔ 1 terminals	LOCK
Battery plus ↔ 1 terminals Battery minus ↔ 4 terminals	UNLOCK

DOOR CONTROL TRANSMITTER MODULE SET COMPONENTS



B163133J02

REMOVAL



1. Door control transmitter module set removal

<CAUTION>

Exercise care in handling each electronic component as they are high-precision components.

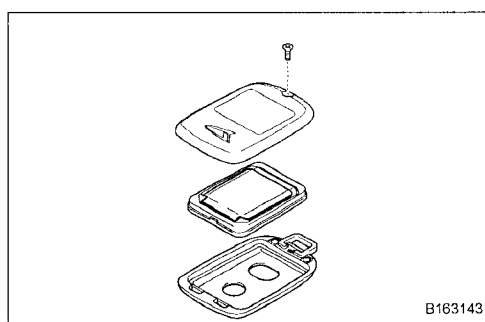
- (1) Remove the screw and then cover.

<CAUTION>

Do not apply excessive force.

- (2) Remove the door control transmitter module set from the transmitter housing case.

INSTALLATION



1. Door control transmitter module set installation

- (1) Attach the door control transmitter and cover.

- (2) Tighten the transmitter housing cover with a screw.

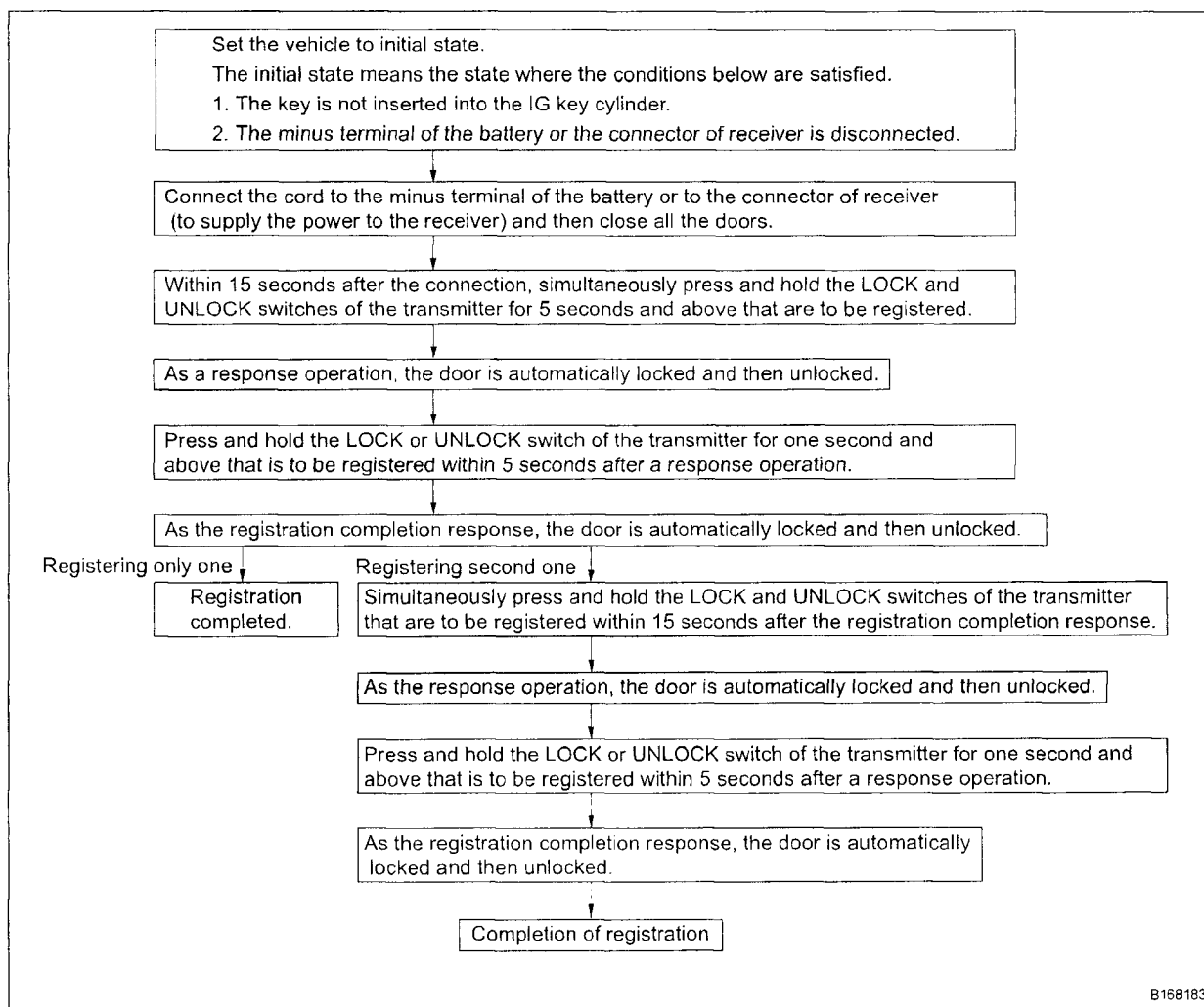
REGISTRATION

1. Identification code registration

<HINT>

- > An identification code must be registered if the transmitter is lost or a new one is added.
- > Up to 2 identification codes can be registered to the receiver and, therefore, 2 transmitters can be used. To register the second transmitter, register 2 transmitters in succession in accordance with the following procedure.
- > When a new transmitter is registered, all the old identification codes registered to the receiver are erased.
- > The recording of the identification code is not lost even when the battery is disconnected.

- (1) Register the identification code in the following procedure.



(2) After registration, perform the following works.

(a) Wireless door lock control system function check

(See page 62-23)

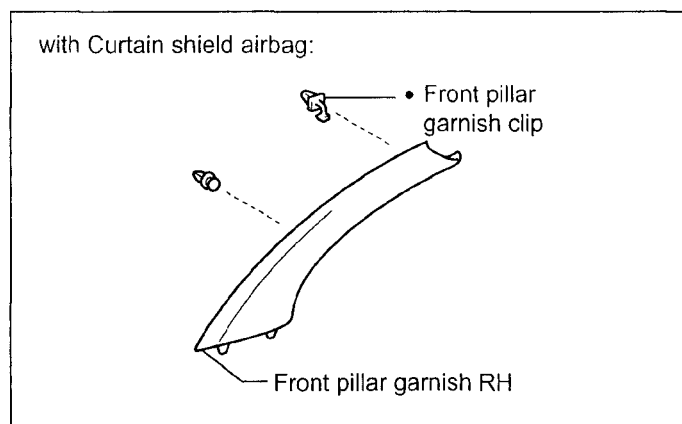
<CAUTION>

If the wireless door lock control system does not operate, redo registration of the identification code.

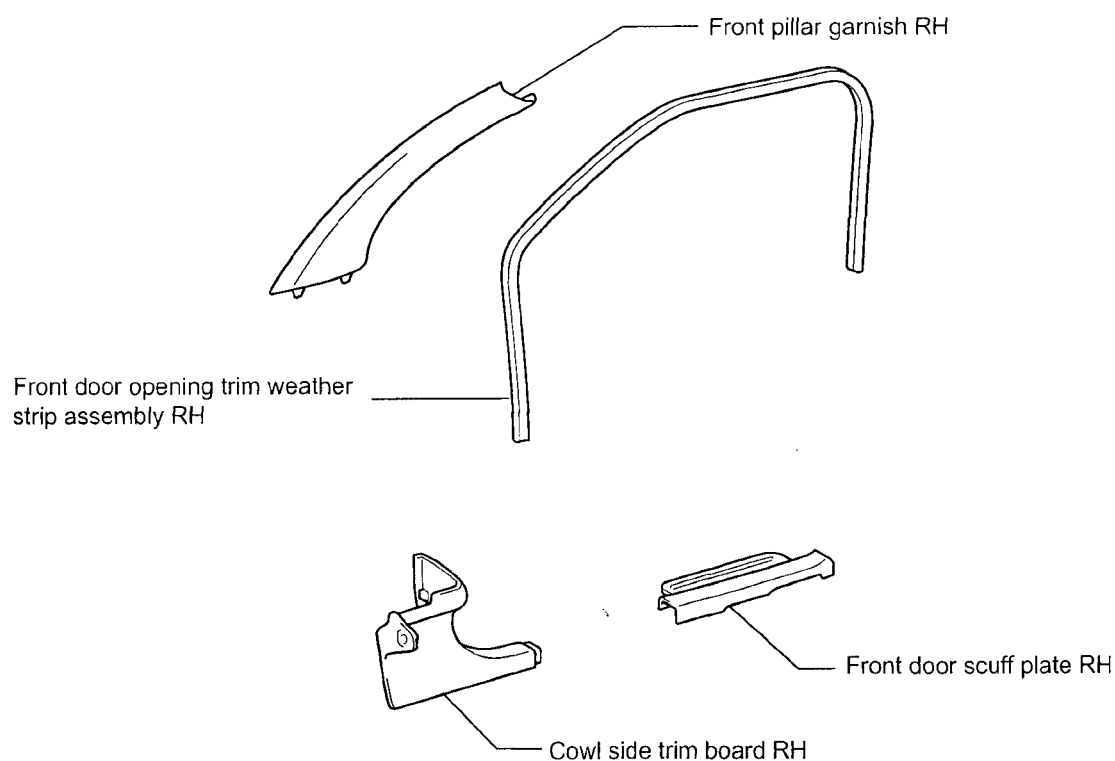
DOOR CONTROL RECEIVER

COMPONENTS

RHD:



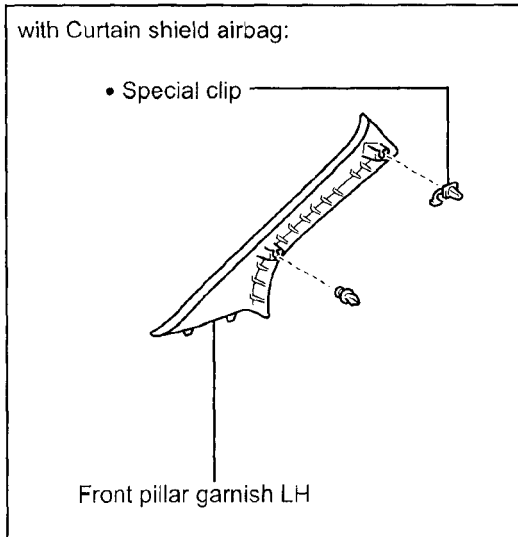
62



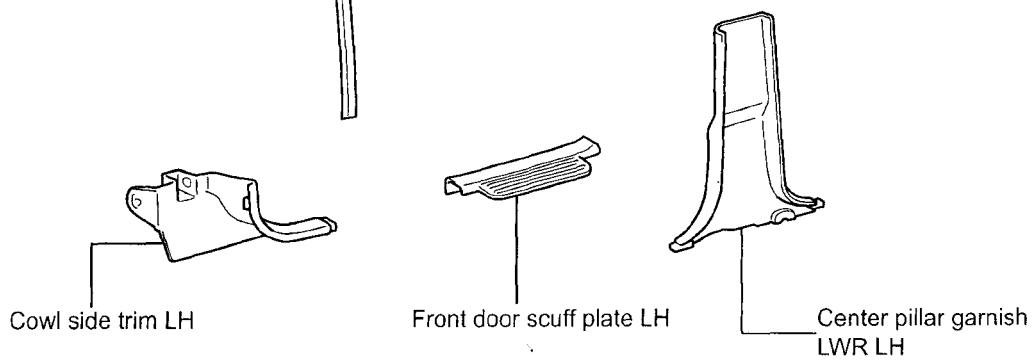
• Nonreusable part

B166962J01

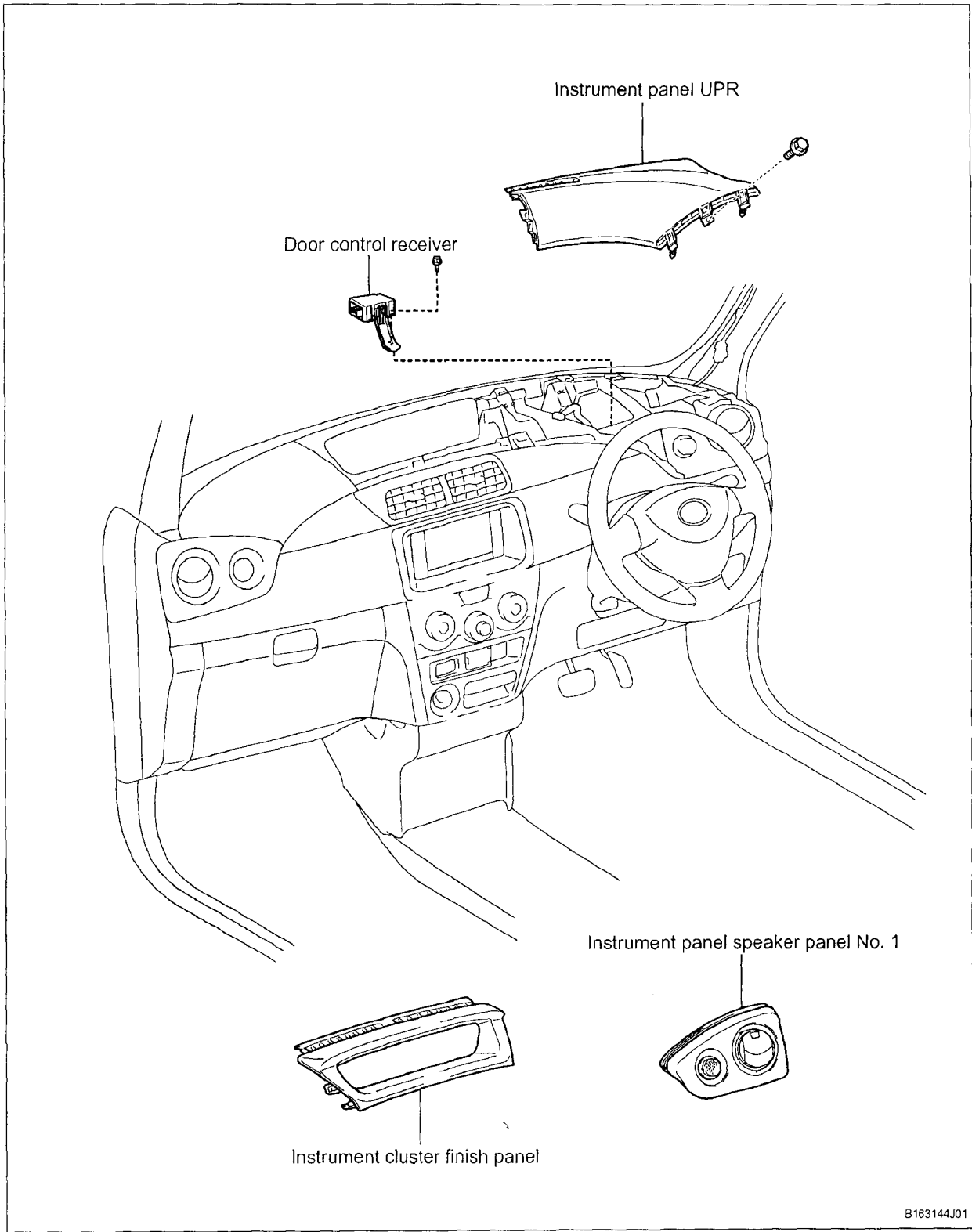
LHD:



Front door opening trim
weather strip assembly LH



• Nonreusable part



LHD:

Instrument panel UPR (RH)

Door control receiver

Instrument panel speaker panel No. 2

Instrument cluster finish panel

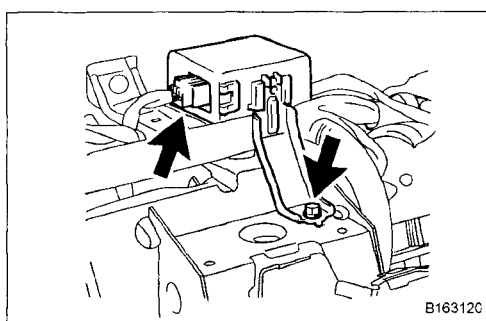
B167597J02

REMOVAL

<HINT>

This procedure is for the right-steering wheel vehicle. For the left-steering wheel vehicle, the procedure must be reversed from the right to the left.

1. Battery minus terminal disconnection
2. Instrument panel speaker panel No. 1 removal
(See page 78-19)
<HINT>
For LHD vehicle, remove the instrument panel speaker panel No.2.
3. Instrument cluster finish panel removal (See page 78-17)
4. Front door scuff plate RH removal (See page 83-14)
5. Cowl side trim board RH removal (See page 83-15)
6. Front door opening trim weather strip assembly RH removal (See page 83-18)
7. Front pillar garnish RH removal (without Curtain shield air bag) (See page 83-21)
8. Front pillar garnish RH removal (with Curtain shield air bag) (See page 83-22)
9. Instrument panel UPR removal (RH) (See page 78-20)



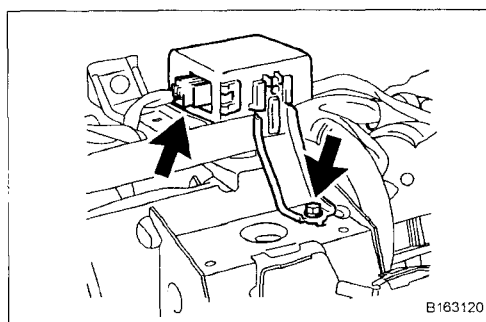
10. Door control receiver removal
 - (1) Disconnect the connector
 - (2) Remove bolt and then door control receiver.

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INSTALLATION

<HINT>

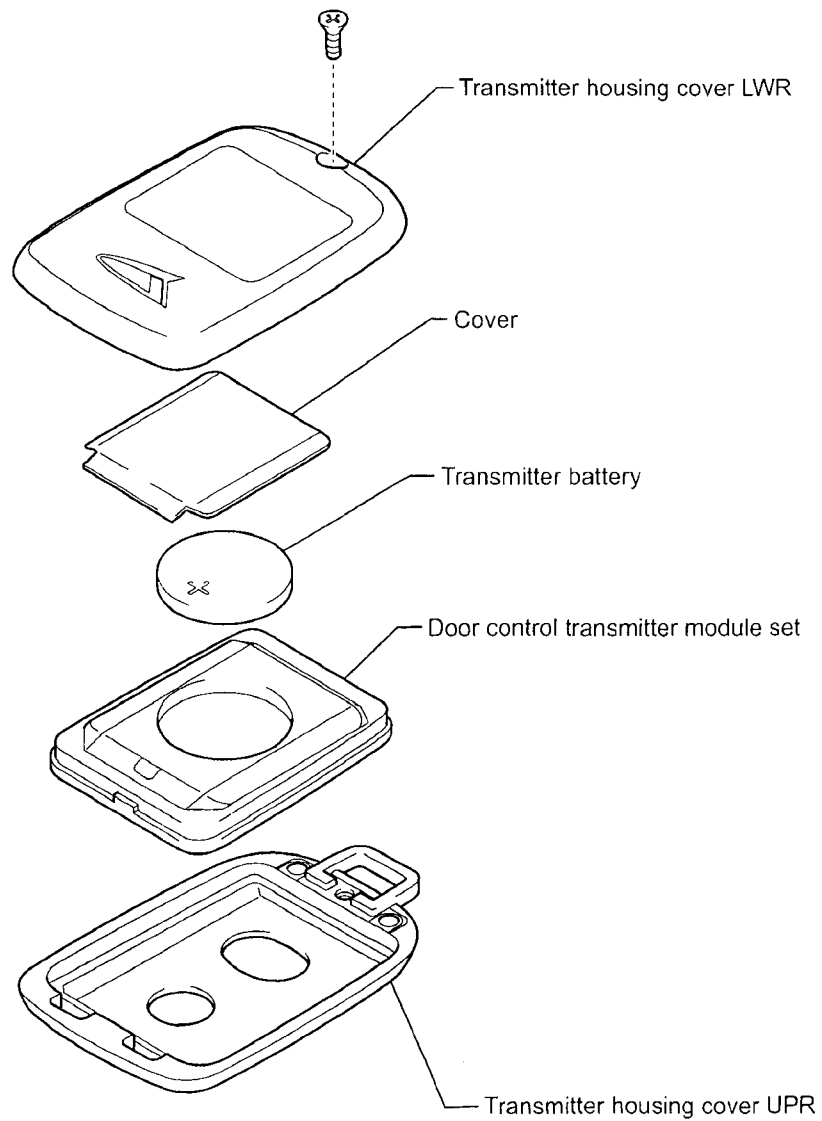
This procedure is for RHD. For LHD, the procedure must be reversed from the right to the left.



1. Door control receiver installation
 - (1) Use bolt to attach the door control receiver.
 - (2) Connect the connector.
2. Instrument panel UPR installation (RH) (See page 78-31)
3. Front pillar garnish RH installation (without Curtain shield air bag) (See page 83-30)
4. Front pillar garnish RH installation (with Curtain shield air bag) (See page 83-31)
5. Front door opening trim weather strip assembly RH installation (See page 83-35)
6. Cowl side trim board RH installation (See page 83-38)
7. Front door scuff plate RH installation (See page 83-39)
8. Instrument cluster finish panel installation (See page 78-33)
9. Instrument panel speaker panel No. 1 installation
(See page 78-33)
<HINT>
For LHD, install the instrument panel speaker panel No.2.
10. Battery minus terminal connection
Specified value: $T=6.4N \cdot m$ {65kgf*cm}

TRANSMITTER BATTERY (WIRELESS KEY)

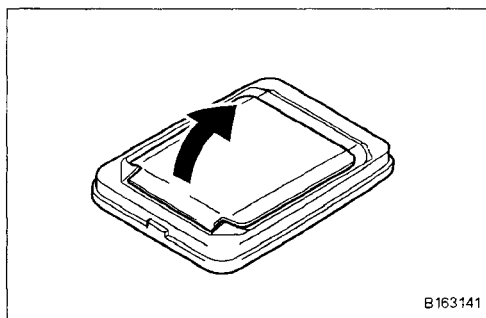
COMPONENTS



B163133J01

REMOVAL

1. Door control transmitter module set removal (See page 62-47)



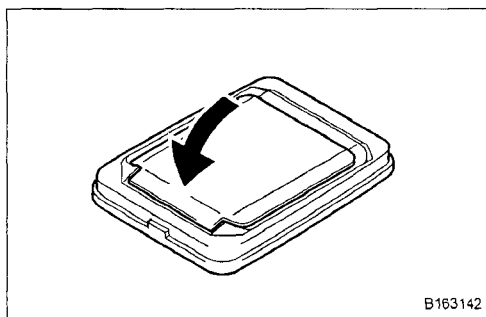
2. Transmitter battery removal

- (1) Remove the cover.
- (2) Remove the battery (lithium battery (CR1616)).

<CAUTION>

- > Do not hold the terminals with your fingers.
- > The terminals will be deformed if the battery (lithium battery (CR1616)) is forcibly twisted when removed.

INSTALLATION



1. Transmitter battery installation

- (1) Attach the battery (lithium battery (CR1616)).

<CAUTION>

- > Face the battery plus terminal upward.
- > Exercise care not to deform the terminals.

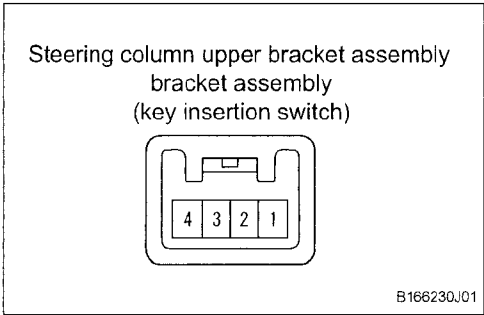
- (2) Attach the cover.

<CAUTION>

Unless the cover is securely sealed, water may get inside the module set.

2. Door control transmitter module set installation (See page 62-47)

STEERING COLUMN UPPER WITH SWITCH BRACKET ASSEMBLY
INSPECTION



1. Steering column shift lever assembly check
(1) Using a tester, check electrical continuity between the terminal 3 and 4 of the connector.
Reference

Measuring terminal	Condition	Reference
3 ↔ 4	Key inserted ↔ removed	With ↔ without electrical continuity