

POWER DOOR LOCK SYSTEM

DOOR KEY CYLINDER SWITCH REMOVAL/INSTALLATION

UK Only

1. Raise the door glass fully.
2. Disconnect the negative battery cable.
3. Remove the door screen. (Refer to DOOR, FRONT DOOR DISASSEMBLY/ASSEMBLY.)
4. Disconnect the door key cylinder switch connector.
5. Remove the door key cylinder switch.
6. Install in the reverse order of removal.

DOOR KEY CYLINDER SWITCH INSPECTION

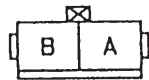
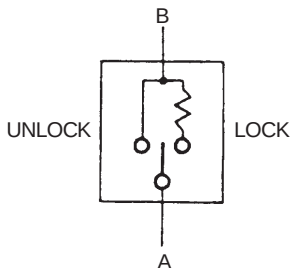
UK Only

1. Raise the door glass fully.
2. Disconnect the negative battery cable.
3. Remove the door screen. (Refer to DOOR, FRONT DOOR DISASSEMBLY/ASSEMBLY.)
4. Disconnect the door key cylinder switch connector.
5. Inspect for continuity between the door key cylinder switch terminals using an ohmmeter.

○—○ : Continuity ○○ : Resistance

Key cylinder position	Terminal	
	A	B
Neutral		
Lock	○—  —○	R
Unlock	○—	○

R: 950—1050 Ω



6. If not as specified, replace the door key cylinder switch.

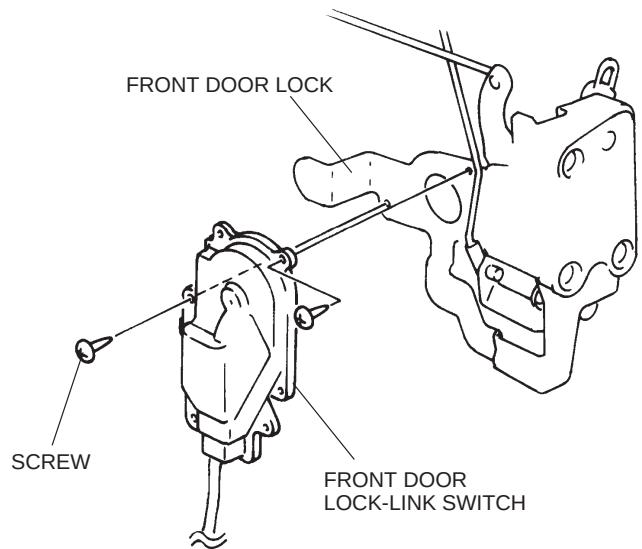
DOOR LOCK-LINK SWITCH REMOVAL/INSTALLATION

Front

Note

- The front door lock-link switch is mounted to the driver-side door lock.

1. Disconnect the negative battery cable.
2. Remove the driver-side door lock. (Refer to DOOR, FRONT DOOR DISASSEMBLY/ASSEMBLY.)
3. Remove the screws.
4. Remove the front door lock-link switch from the front door lock.



5. Install in the reverse order of removal.

Rear UK only

Note

- The rear door lock-link switch is mounted to the rear door lock actuator.

1. Remove and install the rear door lock actuator. (Refer to DOOR LOCK ACTUATOR REMOVAL/INSTALLATION, Rear.)

DOOR LOCK-LINK SWITCH INSPECTION (VEHICLES BUILT UP TO 07/2002)

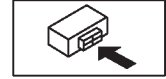
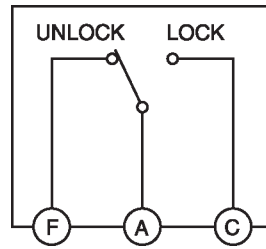
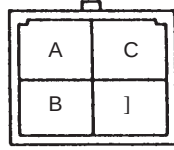
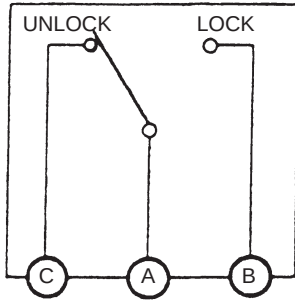
Front

1. Disconnect the negative battery cable.
2. Remove the driver-side door screen. (Refer to DOOR, FRONT DOOR DISASSEMBLY/ASSEMBLY.)
3. Disconnect the front door lock-link switch connector.
4. Inspect for continuity between the front door lock-link switch terminals using an ohmmeter.

○—○ : Continuity

Lock knob position	Terminal		
	A	B	C
Lock	○—	○—	
Unlock	○—		○—

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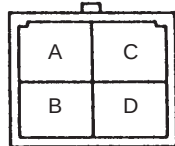
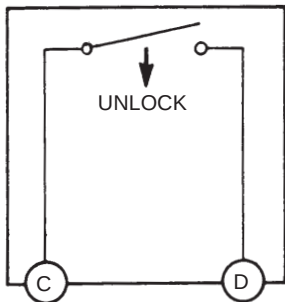
5. If not as specified, replace the front door lock-link switch.

Rear UK only

1. Disconnect the negative battery cable.
2. Remove the door screen. (Refer to DOOR, REAR DOOR DISASSEMBLY/ASSEMBLY.)
3. Disconnect the rear door lock-link switch connector.
4. Inspect for continuity between the rear door lock-link switch terminals using an ohmmeter.

○—○ : Continuity

Lock knob position	Terminal	
	C	D
Lock		
Unlock	○—○	○—○



5. If not as specified, replace the rear door lock actuator.

DOOR LOCK-LINK SWITCH INSPECTION (VEHICLES BUILT FROM 08/2002)

1. Disconnect the front door lock actuator connector.
2. Inspect for continuity between the door lock-link switch terminals using an ohmmeter.
 - If not as specified, replace the front door lock actuator.

○—○ : Continuity

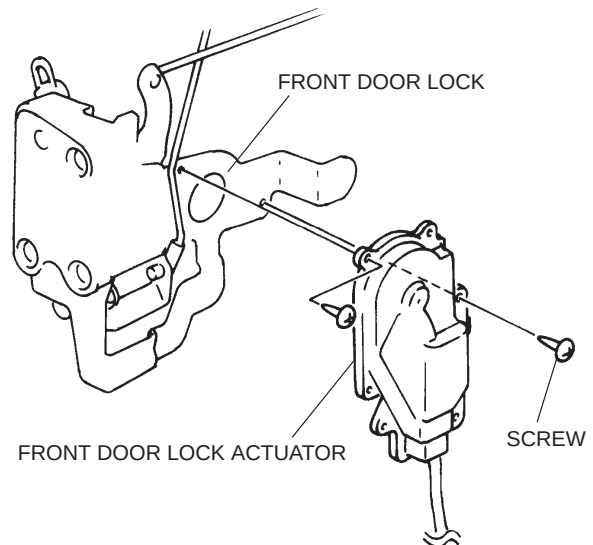
Lock knob position	Terminal		
	F	A	C
Lock		○—○	○—○
Unlock	○—○	○—○	

DOOR LOCK ACTUATOR REMOVAL/INSTALLATION Front

Note

- The front door lock actuator is mounted to the passenger-side door lock.

1. Disconnect the negative battery cable.
2. Remove the passenger-side door lock. (Refer to DOOR, FRONT DOOR DISASSEMBLY/ASSEMBLY.)
3. Remove the screws.
4. Remove the front door lock actuator from the front door lock.



5. Install in the reverse order of removal.

Rear

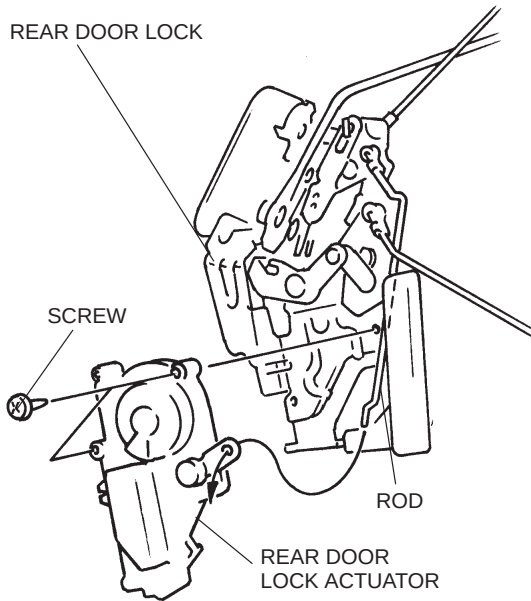
Note

- The rear door lock actuator is mounted to the rear door lock.

1. Disconnect the negative battery cable.
2. Remove the rear door lock. (Refer to DOOR, REAR DOOR DISASSEMBLY/ASSEMBLY.)
3. Remove the screws.
4. Disconnect the rod.

POWER DOOR LOCK SYSTEM

- Remove the rear door lock actuator from the rear door lock.



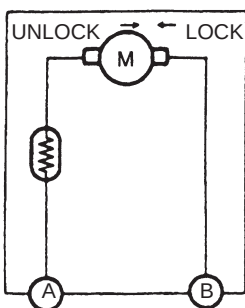
- Install in the reverse order of removal.

DOOR LOCK ACTUATOR INSPECTION (VEHICLES BUILT UP TO 07/2002)

- Disconnect the negative battery cable.
- Remove the door screen. (Refer to DOOR, FRONT DOOR DISASSEMBLY/ASSEMBLY.) (Refer to DOOR, REAR DOOR DISASSEMBLY/ASSEMBLY.)
- Disconnect the door lock actuator connector.
- Apply battery positive voltage to the door lock actuator terminals and inspect the operation of the door lock actuator.

B+: Battery positive voltage

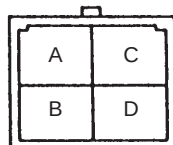
Terminal		Actuator operation
A	B	
GND	B+	Lock
B+	GND	Unlock



FRONT, REAR

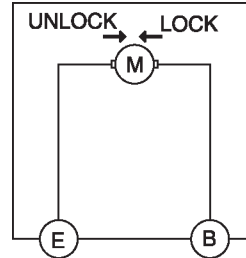


REAR (WITH DOOR-LOCK LINK SWITCH)

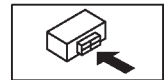


- If not as specified, replace the front door lock actuator.

Actuator operation	Connectio	
	B+	GND
Lock	B	E
Unlock	E	B

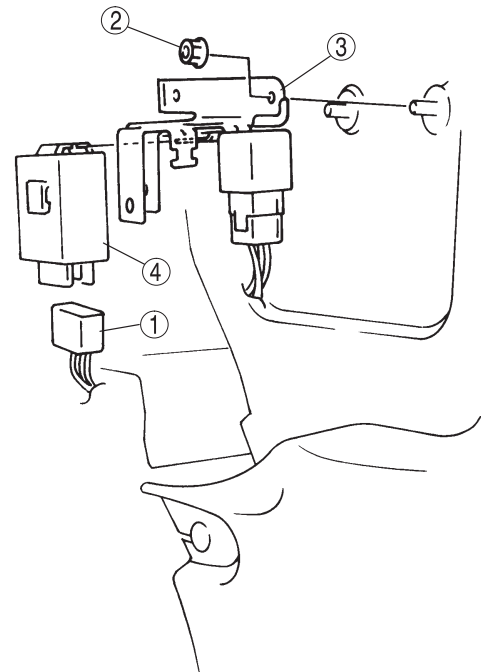


D	E	F
A	B	C



DOOR LOCK TIMER UNIT REMOVAL/INSTALLATION

- Disconnect the negative battery cable.
- Remove the flasher unit. (Refer to section T, EXTERIOR LIGHTING SYSTEM, FLASHER UNIT REMOVAL/INSTALLATION.)
- Remove in the order indicated in the table.
- Install in the reverse order of removal.



1	Door lock timer unit connector
2	Nut
3	Bracket
4	Door lock timer unit

- If not as specified, replace the door lock actuator.

DOOR LOCK ACTUATOR INSPECTION (VEHICLES BUILT FROM 08/2002)

Driver's side

- Disconnect the door lock actuator connector.
- Apply battery positive voltage to the operation of the door lock actuator.

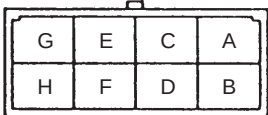
POWER DOOR LOCK SYSTEM

DOOR LOCK TIMER UNIT INSPECTION (VEHICLES BUILT UP TO 07/2002)

1. Remove the flasher unit. (Refer to section T, EXTERIOR LIGHTING SYSTEM, FLASHER UNIT REMOVAL/INSTALLATION.)
2. Measure the voltage at the door lock timer unit terminals as indicated below.
3. Disconnect the door lock timer unit connector before inspecting for continuity at terminals A, C, D, and H.
4. If not as specified, inspect the parts listed under "Inspection area" and the related wiring harnesses.
5. If the parts and wiring harnesses are okay but the system still does not work properly, replace the door lock timer unit.

Terminal Voltage List (Reference)

B+: Battery positive voltage

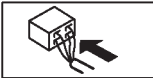
					
Terminal	Signal	Connection	Test condition	Voltage (V) /Continuity	Inspection area
A	GND	Body ground	Constant: inspect for continuity to ground	Yes	—
B	Power supply	D/L 30 A fuse	Constant	B+	D/L 30 A fuse
C	Unlock input	Door lock-link switch	Door lock-link switch is at lock: inspect for continuity to terminal H	No	Door lock-link switch
			Door lock-link switch is at unlock: inspect for continuity to terminal H	Yes	
D	Lock input	Door lock-link switch	Door lock-link switch is at lock: inspect for continuity to terminal H	Yes	Door lock-link switch
			Door lock-link switch is at unlock: inspect for continuity to terminal H	No	
E	Lock output	Door lock actuator	Door lock actuators are locked	0 $\frac{\square}{\square}$ $\frac{\square}{\square}$	Door lock actuator
			Other	0	
F	Unlock output	Door lock actuator	Door lock actuators are unlocked	0 $\frac{\square}{\square}$ $\frac{\square}{\square}$	Door lock actuator
			Other	0	
G	—	Not used	—	—	—
H	GND	Terminal A of door lock timer unit	Constant: inspect for continuity to terminal A	Yes	—

POWER DOOR LOCK SYSTEM

DOOR LOCK TIMER UNIT INSPECTION (VEHICLES BUILT FROM 08/2002)

1. Remove the door lock timer unit without disconnecting the connector.
2. Measure the voltage at the door lock timer unit terminals as indicated below.
3. Disconnect the door lock timer unit connector before inspecting for continuity at terminals K, L, M, and N.
 - If not as specified, inspect the parts listed under "Action."
 - If the parts and wiring harnesses are okay but the system still does not work properly, replace the door lock timer unit.

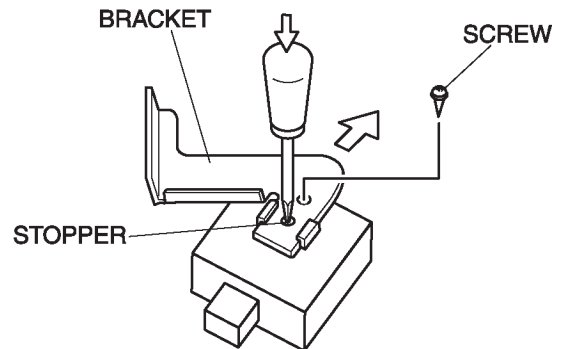
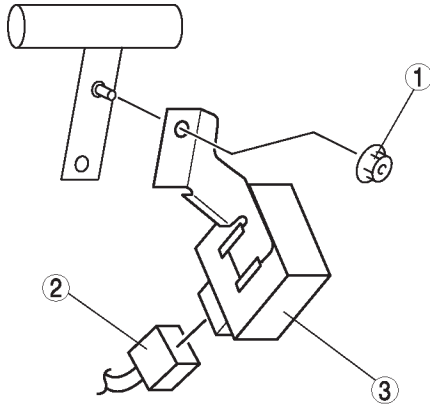
Terminal voltage list (Reference)

DOOR LOCK TIMER UNIT CONNECTOR <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">M</td> <td style="padding: 2px 5px;">K</td> <td style="padding: 2px 5px;">I</td> <td style="padding: 2px 5px; text-align: center;">✕</td> <td style="padding: 2px 5px;">C</td> <td style="padding: 2px 5px;">A</td> </tr> <tr> <td style="padding: 2px 5px;">N</td> <td style="padding: 2px 5px;">L</td> <td style="padding: 2px 5px;">J</td> <td style="padding: 2px 5px;">H</td> <td style="padding: 2px 5px;">F</td> <td style="padding: 2px 5px;">D</td> </tr> </table> 						M	K	I	✕	C	A	N	L	J	H	F	D
M	K	I	✕	C	A												
N	L	J	H	F	D												
Terminal	Signal	Connected to	Test condition	Voltage (V)/ Continuity	Action												
A	Power supply	D/L 30 A fuse	Under any condition	B+	- Inspect D/L 30 A fuse - Inspect related harness												
B	—	—	—	—	—												
C	Unlock output	Door lock actuator	Door lock actuator is unlocked	0 B+ 0	- Inspect door lock actuator - Inspect related harness												
			Other	Below 1.0													
D	Lock output	Door lock actuator	Door lock actuator is locked	0 B+ 0	- Inspect door lock actuator - Inspect related harness												
			Other	Below 1.0													
F	Lock/Unlock input	Keyless unit	Transmitter lock button is pressed	B+ 5 B+	- Inspect keyless unit - Inspect transmitter - Inspect related harness												
			Transmitter unlock button is pressed	B+ 0 B+													
			No transmitter unlock buttons are pressed	B+													
H	—	—	—	—	—												
I	—	—	—	—	—												
J	—	—	—	—	—												
K	Lock input	Door lock-link switch	Driver's side door is locked: inspect for continuity to ground	Yes	- Inspect door lock-link switch - Inspect related harness												
			Driver's side door is unlocked: inspect for continuity to ground	No													
L	Unlock input	Door lock-link switch	Driver's side door is locked: inspect for continuity to ground	No	- Inspect door lock-link switch - Inspect related harness												
			Driver's side door is unlocked: inspect for continuity to ground	Yes													
M	—	—	—	—	—												
N	Power ground	GND	Under any condition: inspect for continuity to ground	Yes	Inspect GND												

POWER DOOR LOCK SYSTEM

KEYLESS UNIT REMOVAL/INSTALLATION

1. Disconnect the negative battery cable.
2. Remove the glove compartment.
3. Remove in the order indicated in the table.
4. Install in the reverse order of removal.



1	Nut
2	Keyless unit connector
3	Keyless unit

KEYLESS UNIT DISASSEMBLY/ASSEMBLY

1. Remove the screw.

Note

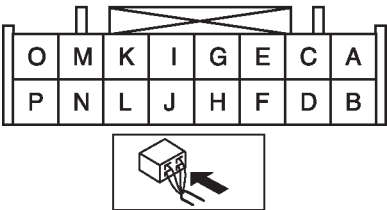
- The screw which fixes the keyless unit bracket is for a body ground connection. Be sure to secure the screw when installing.
2. Slide the bracket the arrow and remove it.
 3. Assemble in the reverse order of disassembly.

POWER DOOR LOCK SYSTEM

KEYLESS UNIT INSPECTION

1. Remove the keyless unit without disconnecting the connector.
2. Measure the voltage at the keyless unit terminals (other than terminal L) as indicated below.
 - If not as specified, inspect the parts listed under "Action."
3. Disconnect the negative battery cable.
4. Disconnect the keyless unit connector and inspect for continuity between terminal L and the bracket.
5. Inspect for continuity at terminal L as indicated below.
6. If the parts and wiring harnesses are okay but the system still does not work properly, perform the troubleshooting.

Terminal voltage list (Reference)

KEYLESS UNIT CONNECTOR 					
Terminal	Signal	Connected to	Test condition	Voltage (V)/ Continuity	Action
A	IG1	METER 15 A fuse	Ignition switch is at ON position	B+	● Inspect METER 15 A fuse ● Inspect related harness
			Ignition switch is at LOCK or ACC position	Below 1.0	
B	Power supply	ROOM 10 A fuse	Under any condition	B+	● Inspect ROOM 10 A fuse ● Inspect related harness
C	Door open/closed	Door switch	Any door is open (any door switch is on)	Below 1.0	● Inspect door switches ● Inspect related harness
			All door are closed (door switcyhes are off)	B+	
D	—	—	—	—	—
E	—	—	—	—	—
F	—	—	—	—	—
G	—	—	—	—	—
*1H	Hazard	Flasher unit	Transmitter LOCK button is pressed	B+ Below 1.0 B+	● Inspect flasher unit ● Inspect related harness
			Transmitter UNLOCK button is pressed	B+ Below 1.0 B+ Below 1.0 B+	
			No transmitter buttons are pressed	B+	
I	—	—	—	—	—
J	—	—	—	—	—
K	—	—	—	—	—
L	Ground	GND	Under any condition: inspect for continuity to ground	Yes	—
M	—	—	—	—	—
N	—	—	—	—	—

POWER DOOR LOCK SYSTEM

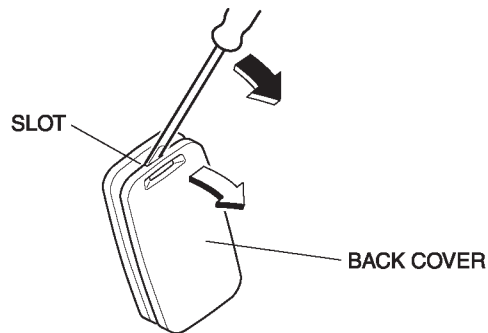
Terminal	Signal	Connected to	Test condition	Voltage (V)/ Continuity	Action
O	Lock/ unlock output	Door lock timer unit	Transmitter LOCK button is pressed	B+ 6 B+ *25 2.5 5	- Inspect door lock timer unit - Inspect related harness
			Transmitter UNLOCK button is pressed	B+ Below 1.0 B+ *25 Below 1.0 5	
			No transmitter buttons are pressed	B+	
				*25	
P	—	—	—	—	—

*1 :Except vehicles with theft-deterrent system.

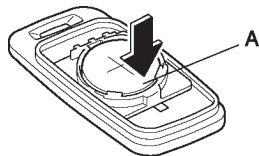
*2 :Vehicles with theft-deterrent system.

TRANSMITTER BATTERY REPLACEMENT

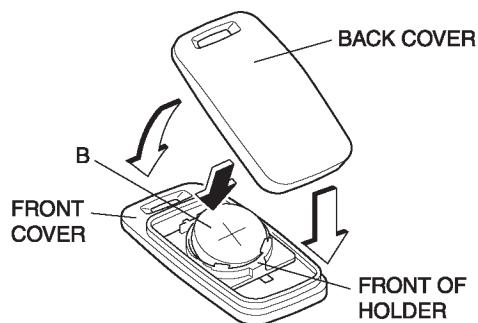
1. Insert a small screwdriver in to the slot and gently pry open the transmitter.



2. Press the portion of the battery indicated by A and remove the battery.
3. Install a new (CR2025) into the front portion of the holder with the positive pole (+) facing up. Press on the B portion of the battery to set the battery.



4. Align the front and back covers and snap the transmitter shut.



Battery specification Lithium CR2025 X 1

Note

- The batteries will last about **2 years** when used **10 times** a day.

TRANSMITTER BATTERY INSPECTION

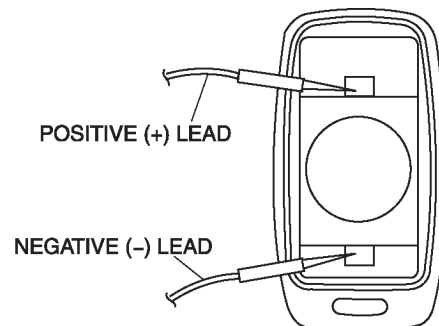
Caution

- Since the battery voltage does not drop fully if the button is pushed for only **4 seconds** or less, it can not be properly examined to see whether it is good or bad. Always push the button for **5 seconds**.

Note

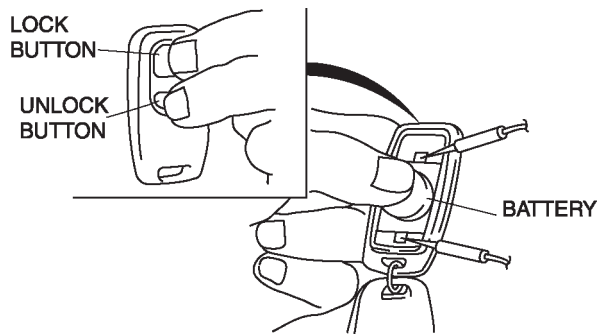
- A correct measurement can not be obtained if the battery temperature is low. Make sure the battery is at **18 °C {64 °F} or more** for **at least 30 minutes** before reinspecting if a measurement value is under the standard voltage.

1. Remove the transmitter cover.
2. Apply the circuit tester leads to the positions indicated in the figure.



POWER DOOR LOCK SYSTEM

3. While pressing the battery as shown in the figure, press the LOCK and UNLOCK buttons on the transmitter at the same time to start measurement of the voltage.
4. Release the buttons after **5 seconds**.



5. Verify that the minimum voltage is the standard voltage or more for **10 seconds** after starting measurement.
 - If the voltage is under the standard voltage, replace the battery

Standard voltage
2.7 V