

# Power Windows



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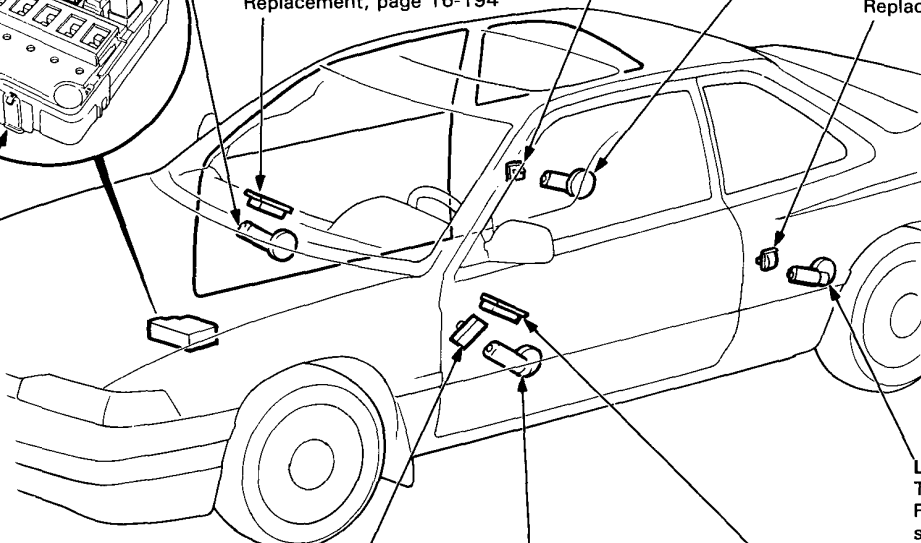
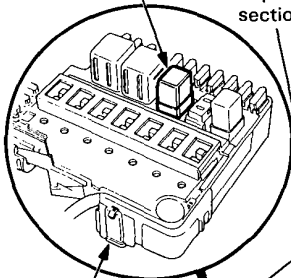
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### Circuit Diagram

- Several different wires have the same color. They have been given a number suffix to distinguish them (for example BLU/WHT<sup>1</sup> and BLU/WHT<sup>2</sup> are not the same).
- "DN" in the switch circuit denotes DOWN.



LHD: G202  
RHD: G204



## Troubleshooting

NOTE: The numbers in the table show the troubleshooting sequence.

Item to be inspected		Symptom																		Poor ground	Open circuit in wires or loose or disconnected terminals	
		Blown No. 21 (40 A) fuse (in the under-hood relay box)	Blown No. 15 (20A) fuse (in the dash fuse box)	Power window relay	Blown No. 19 (15A) fuse	Blown No. 17 (15A) fuse	Blown No. 18 (15A) fuse	Blown No. 16 (15A) fuse	Driver's motor	Window regulator	Driver's switch	Passenger's switch	Pulser (in driver's motor)	Passenger's motor	Control unit input							
Symptom																						
All windows do not operate.		1	2	3															LHD: G202 RHD: G204	WHT/BLK or GRN/BLK		
Driver's window does not operate.					1				2	3								4	G403	WHT/YEL		
Driver's window does not operate in (AUTO)											1		2					3		RED/GRN, RED/YEL* or BLU		
Passenger's windows do not operate.	Front					1			3	5	4		2					G403	BLU/YEL, BLU/GRN, BLU/RED <sup>1</sup> , BLU/WHT <sup>1</sup> or BLU/BLK			
	Left rear						1		3	5	4		2					G403	GRN/YEL, GRN <sup>2</sup> , BLU/RED <sup>3</sup> , BLU/WHT <sup>3</sup> or GRN/BLK			
	Right rear							1	3	5	4		2					G403	YEL <sup>2</sup> , YEL/GRN, BLU/RED <sup>2</sup> , BLU/WHT <sup>2</sup> or YEL/BLK			

\*: Standard for some types

# Power Windows

## Control Unit Input Test

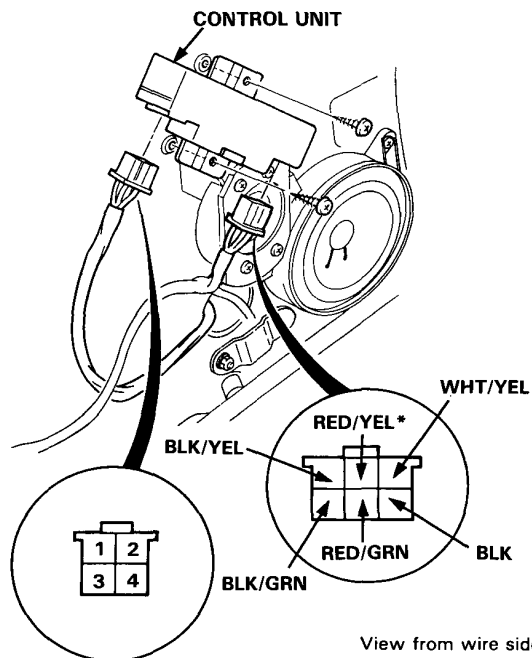
NOTE: The control unit only controls the driver's door window.

Remove the driver's door trim panel and remove the control unit from the panel to disconnect the 4-P and 6-P connectors from the control unit.  
Make the following input tests at the harness pins.

**NOTE:**

- To test the unit, keep the driver's switch connector connected with the door wire harness.
- Recheck the connections between the 4-P and 6-P connectors, and the control unit, then replace the control unit if all input tests prove OK.

\*: Standard for some types

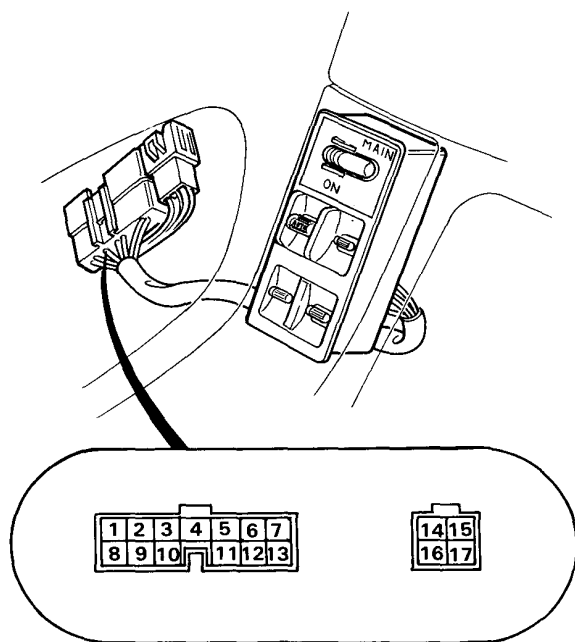


No.	Wire	Test condition	Test: desired result	Possible cause (if result is not obtained)
1	BLK	Under all conditions.	Check for continuity to ground: should be continuity.	<ul style="list-style-type: none"> <li>• Poor ground (G403).</li> <li>• An open in the wire.</li> </ul>
2	WHT/YEL	Ignition switch ON.	Check for voltage to ground: should be battery voltage.	<ul style="list-style-type: none"> <li>• Blown No. 21 (40 A) or No. 19 (15 A) fuse.</li> <li>• Faulty power window relay.</li> <li>• Poor ground.</li> <li>• (LHD: G202, RHD: G204).</li> <li>• An open in the WHT/YEL or WHT/BLK wire.</li> </ul>
3	BLK/YEL	Ignition switch ON and driver's switch UP.	Check for voltage to ground: should be battery voltage as the switch is turned.	<ul style="list-style-type: none"> <li>• Faulty driver's switch.</li> <li>• An open in the wire.</li> </ul>
4	BLK/GRN	Ignition switch ON and driver's switch DOWN.		
5	RED/YEL*	Ignition switch ON and driver's switch UP (AUTO).		
6	RED/GRN	Ignition switch ON and driver's switch DOWN (AUTO).		
7	No. 3 and No. 4	Connect the WHT/YEL terminal to the No. 1 terminal, and the BLK terminal to the No. 2 terminal.	Check for resistance between the No. 3 and No. 4 terminals: should indicate between 20—50 ohms as the motor runs.	<ul style="list-style-type: none"> <li>• Faulty pulser.</li> <li>• Faulty driver's motor.</li> <li>• An open in the wire.</li> </ul>



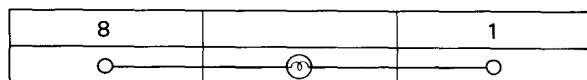
## Driver's Switch Test

1. Remove the door trim panel.
2. Check for continuity between the terminals in each switch position according to the tables.



View from wire side

### Switch Light



### Driver's Switch (\*: Standard for some types)

Terminal Position	2	12	3	13	11
UP (AUTO)*	○	○	○		
UP		○	○		
OFF					
DOWN			○	○	
DOWN (AUTO)			○	○	○

### Front Passenger's Switch

Terminal Position		14	15	16	17
	Main Switch				
UP	ON	○	○	○	○
	OFF	○	○		
OFF	ON		○	○	○
	OFF		○		○
DOWN	ON	○		○	○
	OFF	○			○

### Right Rear Switch

Terminal Position		4	10	16	9
	Main Switch				
UP	ON	○	○	○	○
	OFF	○	○		
OFF	ON		○	○	○
	OFF		○		○
DOWN	ON	○		○	○
	OFF	○			○

### Left Rear Switch

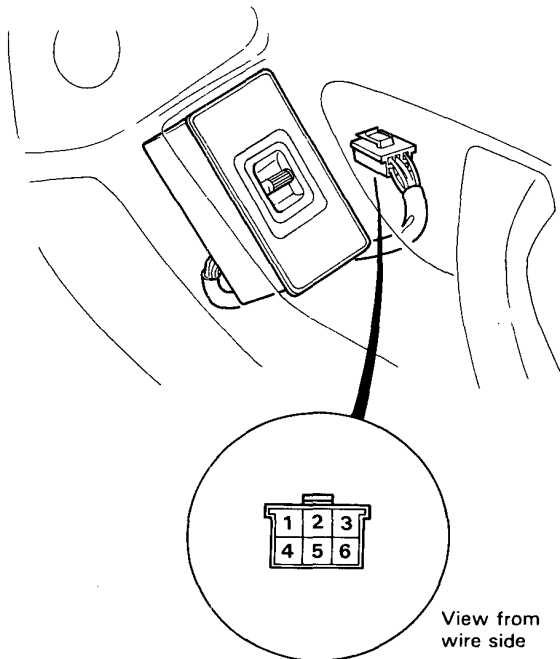
Terminal Position		7	6	16	5
	Main Switch				
UP	ON	○	○	○	○
	OFF	○	○		
OFF	ON		○	○	○
	OFF		○		○
DOWN	ON	○		○	○
	OFF	○			○

# Power Windows

## Passenger's Switch Test

1. Remove the door trim panel.
2. Check for continuity between the terminals in each switch position according to the table.

NOTE: Right front switch shown; rear switches similar.

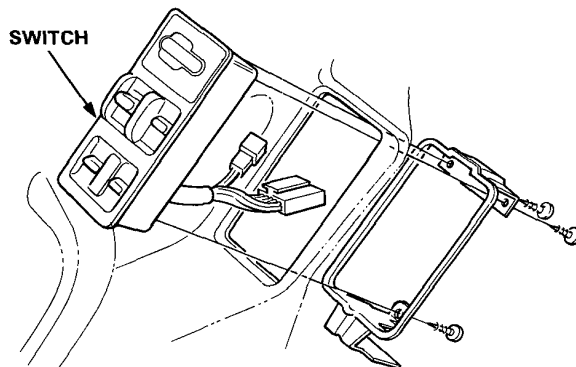


Terminal Position	3	2	1	6	4
UP	○	○			○
OFF			○	○	○
DOWN	○	○	○	○	

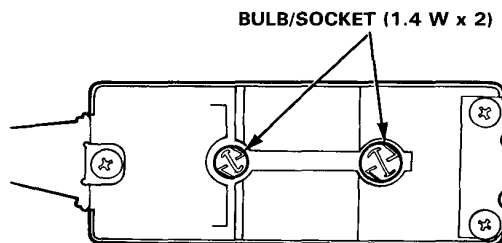
## Switch Replacement

### Driver's Switch:

1. Remove the door trim panel.
2. Remove the switch from the door trim panel by releasing the 3 mounting screws.



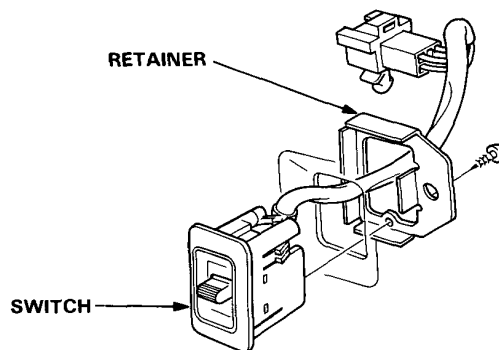
3. If it is necessary to service the driver's switch light, turn the socket 45° counterclockwise to remove it.



### Passenger's Switches:

1. Remove the door trim panel.
2. Remove the switch from the door trim panel by releasing the screw and retainer.

NOTE: Right front switch shown; rear switches similar.

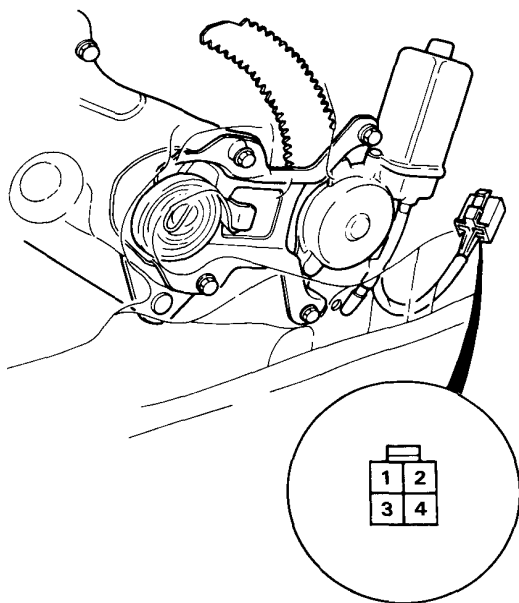




## Driver's Motor Test

### Motor Test

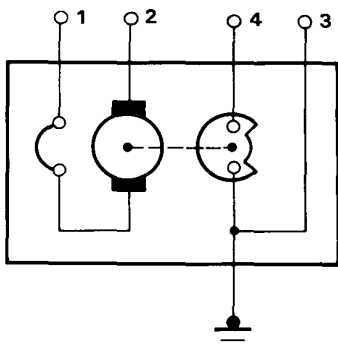
1. Remove the door trim panel.
2. Remove the control unit from the panel to disconnect the 4-P connector from the power window control unit.
3. Test motor operation by connecting battery voltage to the No. 1 and No. 2 terminals. Test the motor in each direction, by switching the leads from the battery.
4. If the motor does not run, replace it.



View from wire side

### Pulser Test

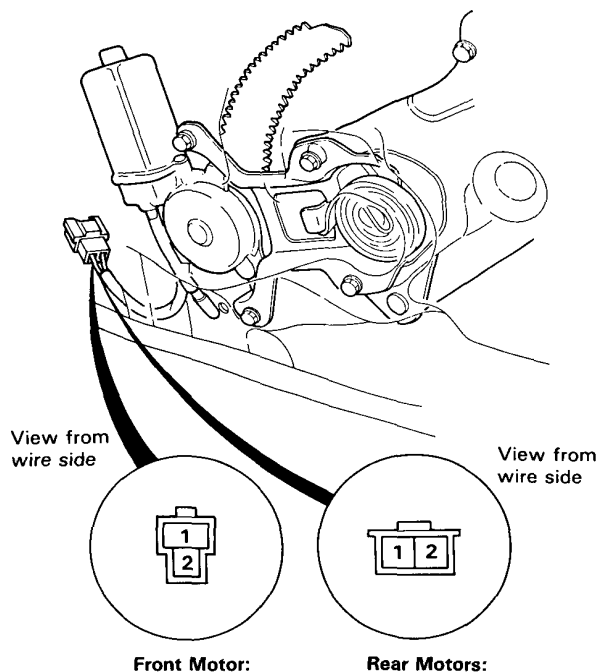
Measure resistance between the No. 3 and No. 4 terminals when running the motor by connecting battery voltage to the No. 1 and No. 2 terminals. Ohmmeter should indicate between 20–50 ohms as the motor runs.



## Passenger's Motor Test

1. Remove the door trim panel.
2. Disconnect the 2-P connector from the motor.
3. Test motor operation by connecting battery voltage to the No.1 and No.2 terminals. Test the motor in each direction, by switching the leads from the battery.
4. If the motor does not run, replace it.

NOTE: Front motor shown; rear motors similar.



# Power Windows

## Relay Test

1. Remove the power window relay in the under-hood relay box.
2. There should be continuity between the A and B terminals when the battery is connected to the C and D terminals.  
There should be no continuity when the battery is disconnected.

