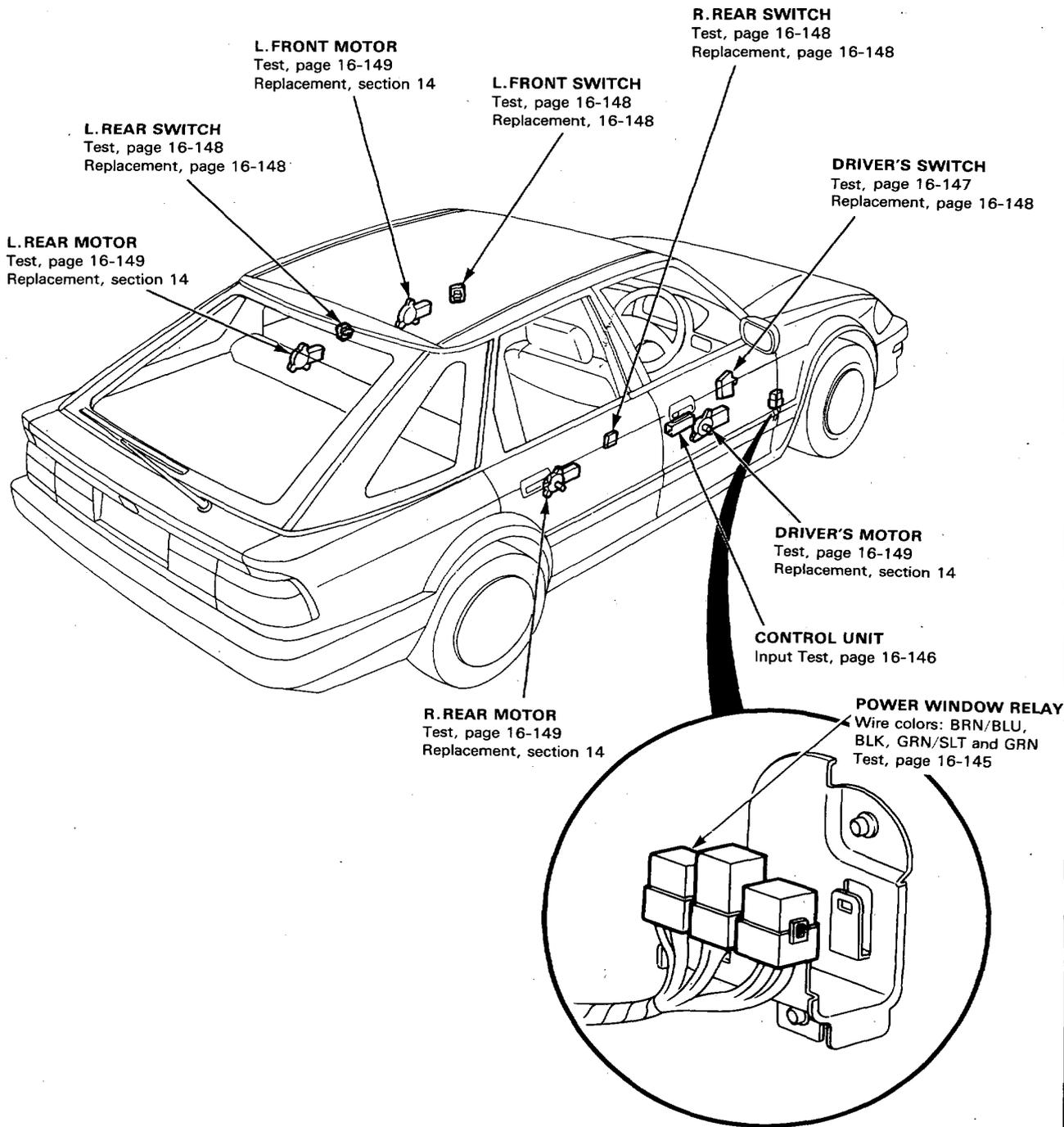




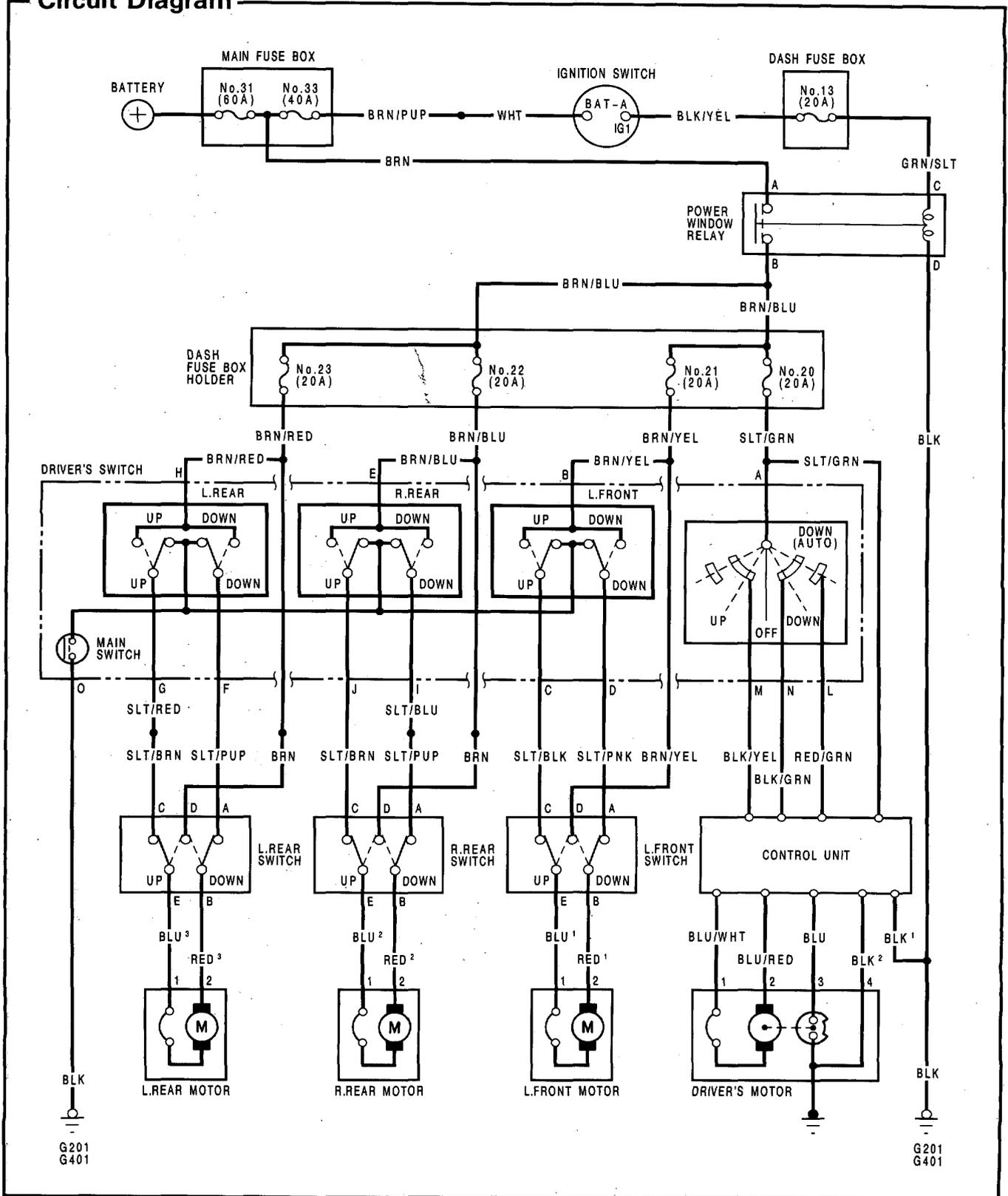
Power Windows

Component Location Index



Power Windows

Circuit Diagram





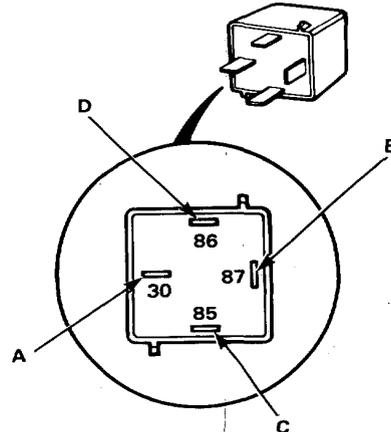
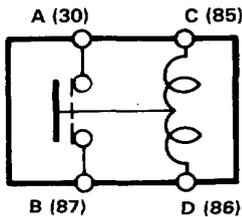
Troubleshooting

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

Symptom	Item to be inspected				Driver's door switch	Passenger switch	Driver's motor	Control unit input test	Passenger's motor	Window regulator	Poor ground	Open circuit in wires or loose or disconnected terminals
	State of charge and clean and tight connections of battery	Blown No. 13 (20A) fuse (in the dash fuse box)	Power window relay	in the dash fuse box holder								
All windows do not operate.	1	2	3								G201 G401	BLK/YEL, BRN GRN/SLT or BRN/BLU
Driver's window does not operate.				1	3	4	2		5			SLT/GRN
Driver's window does not operate in AUTO.						2	1					BLU
Passenger windows do not operate.	Left front			1	2	3			4	5		BRN/YEL
	Left rear				1	2	3		4	5		BRN/RED
	Right rear				1	2	3		4	5		BRN/BLU

Relay Test

1. Remove the relay from the dash fuse 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.

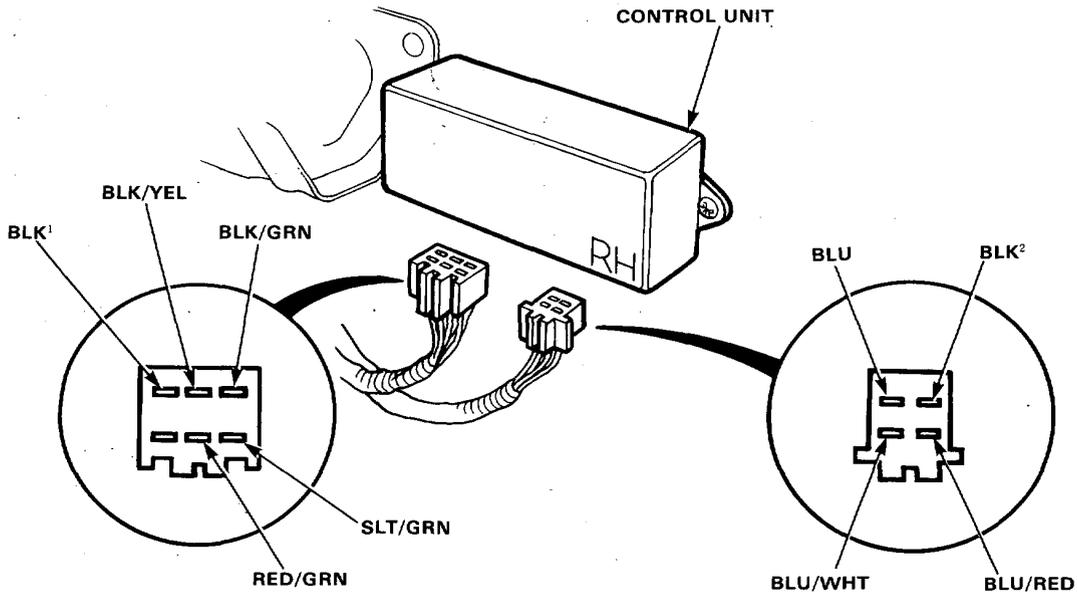


Power Windows

Control Unit Input Test

1. Remove the driver's door trim panel.
2. Remove the 2 screws and the control unit from the door panel.
3. Disconnect the 5-P and the 4-P connectors from the control unit. Make the following input tests at the harness pins.

NOTE: Recheck the connections between the connectors and the control unit, then replace the control unit if all input tests prove OK.

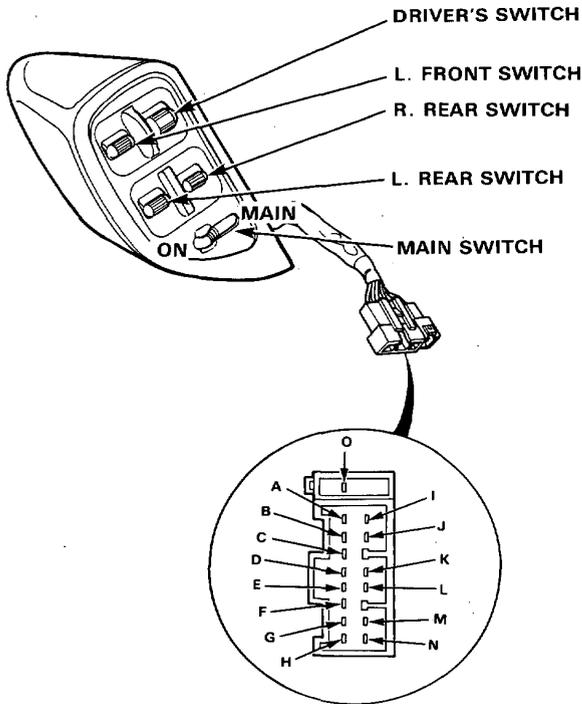


No.	Test condition	Test: desired result	Possible cause (if result is not obtained)
1	BLK¹ Under all conditions.	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> • Poor ground (G201, G401). • An open in the wire.
2	SLT/GRN Ignition switch "ON".	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 20 (20A) or No. 13 (20A) fuse. • Faulty power window relay. • An open in the wire.
3	BLK/YEL Ignition switch "ON". Driver's switch "UP".	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Faulty driver's switch. • An open in the wire.
4	BLK/GRN Ignition switch "ON". Driver's switch "DOWN".		
5	RED/GRN Ignition switch "ON". Driver's switch "DOWN(AUTO)".		
6	BLU or BLK² Connect the WHT/YEL terminal to the BLU/WHT terminal, and the BLK¹ terminal to the BLU/RED terminal.	Check for resistance between the BLU and BLK² terminals: Should indicate between 20-50 ohms as the motor runs.	<ul style="list-style-type: none"> • Faulty pulser. • Faulty driver's motor. • An open in the wire.



Driver's Switch Test

1. Remove the door trim panel.
2. Dis connect the 15-P connectors from the driver's door harness.
3. Check for continuity between the terminals in each switch position according to the tables.



DRIVER'S SWITCH

Terminal	A	L	M	N
Position				
OFF				
UP	○	—	○	
DOWN	○	—	—	○
DOWN(AUTO)	○	○		

L. FRONT SWITCH

Terminal	B	C	D	O
Position				
OFF	ON		○	○
	OFF		○	○
UP	ON		○	○
	OFF	○	○	
DOWN	ON		○	○
	OFF	○	○	

R. REAR SWITCH

Terminal	E	I	J	O
Position				
OFF	ON		○	○
	OFF		○	○
UP	ON		○	○
	OFF	○	○	
DOWN	ON		○	○
	OFF	○	○	

L. REAR SWITCH

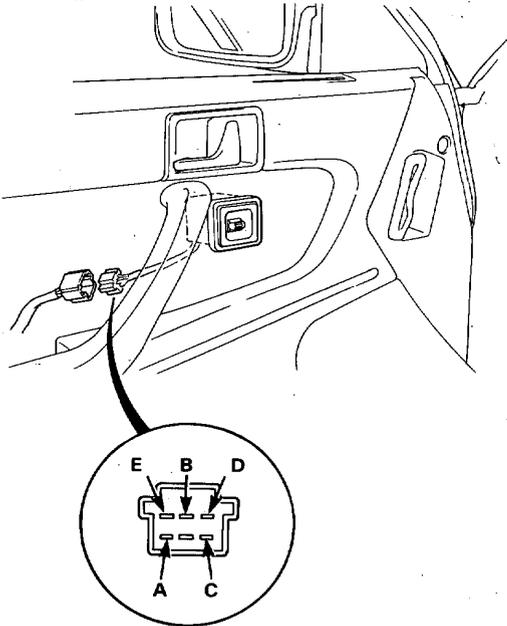
Terminal	F	G	H	O
Position				
OFF	ON	○	○	○
	OFF	○	○	
UP	ON	○	○	○
	OFF		○	○
DOWN	ON		○	○
	OFF	○	○	

Power Windows

Passenger Switch Test

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

NOTE: Left front switch shown, rear switches similar.



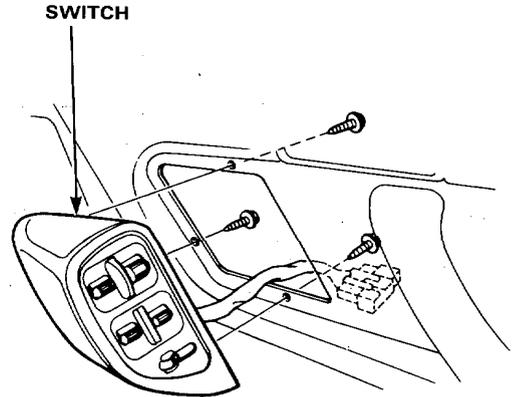
View from wire side

Terminal	A	B	C	D	E
UP				○	○
OFF	○	○	○		○
DOWN		○		○	

Switch Replacement

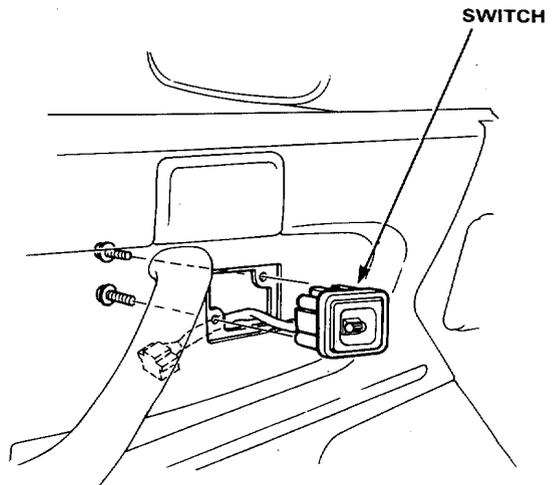
Driver's Switch :

1. Remove the door trim panel.
2. Disconnect the 15-P connector's from the driver's door harness.
3. Remove the switch from the door trim panel by releasing the 3 mounting screws.



Passenger Switches :

1. Remove the door trim panel.
2. Disconnect the 5-P connector's from the passenger door harness.
3. Remove the switch from the door trim panel by removing the 2 mounting screws.

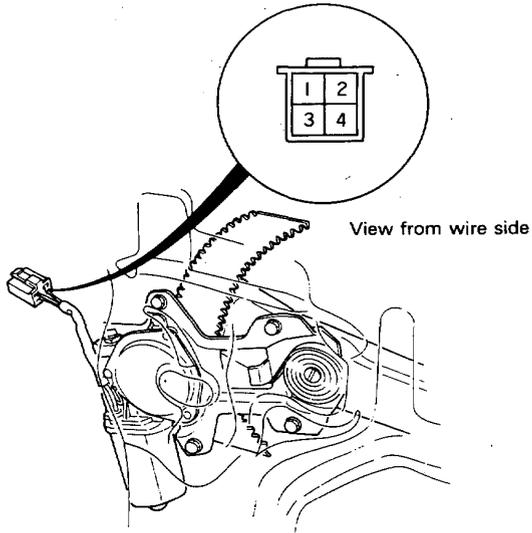




Driver's Motor Test

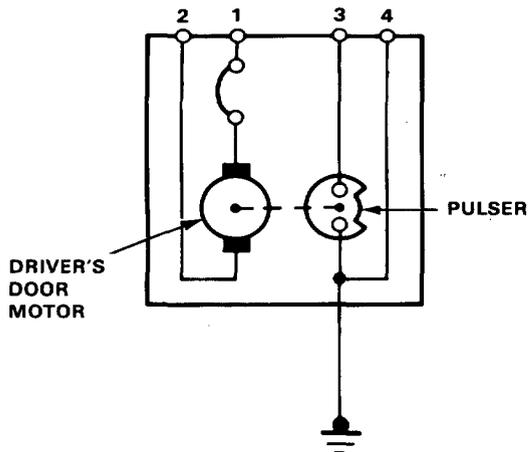
Motor Test :

1. Remove the door trim panel.
2. Disconnect the 4-P connector from the door wire harness.
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 battery.
4. If the motor does not run, replace it.



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 applying 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.

