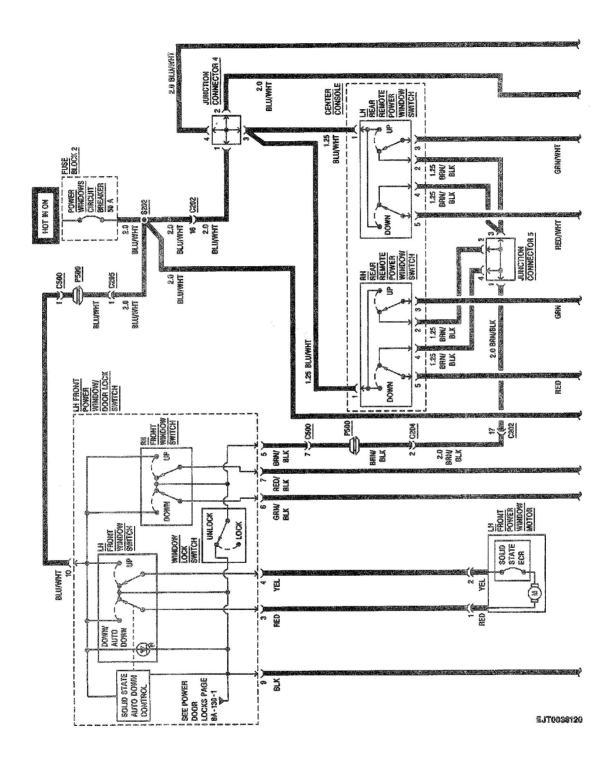
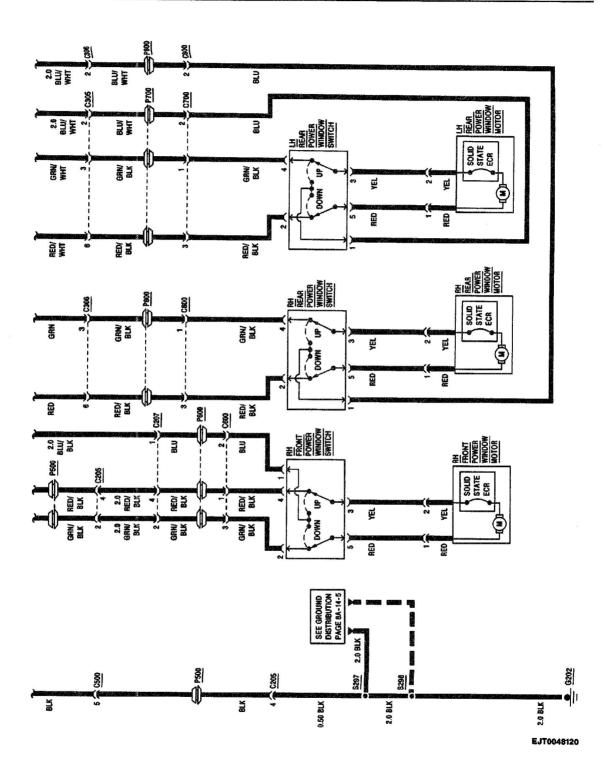
### **POWER WINDOWS**





### 8A - 120 - 2 ELECTRICAL DIAGNOSIS

POWER WINDOWS		
COMPONENT	LOCATION 201-PG FIG.	CONN
Fuse Block 2	Under LH I/P 06 A	60 W F
Junction Connector 4 (4-Door LSi) (4 Cavities)	Floor Harness, under Rear Center Console	202-15A1
Junction Connector 5 (4-Door LSi) (4 Cavities)	Floor Harness, under Rear Center Console	202-15A1
LH Front Power Window/ Door Lock Switch (4-Door LSi)	LH Front Door, in Armrest	202-14A2
LH Front Power Window Motor (4-Door LSi)	In LH Front Door behind Trim Panel, near Armrest	
LH Rear Power Window Motor (4-Door LSi)	In LH Rear Door behind Trim Panel, near Armrest 11 B	
LH Rear Power Window Switch (4-Door LSi)	LH Rear Door Trim Panel, near Armrest	202-15B1
LH Rear Remote Power Window Switch (4-Door LSi)	LH Rear of Center Console	202-15B1
RH Front Power Window Motor (4-Door LSi)	In RH Front Door behind Trim Panel, near Armrest	
RH Front Power Window Switch (4-Door LSi)	RH Front Door, in Armrest	
RH Rear Power Window Motor (4-Door LSi)	In RH Rear Door behind Trim Panel, near Armrest 11 B	
RH Rear Power Window Switch (4-Door LSi)	RH Rear Door Trim Panel, near Armrest	202-15B1
RH Rear Remote Power Window Switch (4-Door LSi)	RH Rear of Center Console	202-15B2
C202 (22 Cavities)	Main Harness to Floor Harness, LH I/P near G200 06 A	202-08A1
C204 (6 Cavities) (4-Door LSi)	Main Harness to LH Front Door Harness, LH I/P, near "A" Pillar	202-15B3
C205 (4 Cavities) (4-Door LSi)	Main Harness to LH Front Door Harness, LH I/P, near "A" Pillar	202-15A1
C207 (4 Cavities) (4-Door LSi)	Main Harness to RH Front Door Harness, RH I/P, near "A" Pillar	202-15A1
C305 (6 Cavities) (4-Door)	Floor Harness to LH Rear Door Harness, LH "B" Pillar	
C306 (6 Cavities) (4-Door)	Floor Harness to RH Rear Door Harness, RH "B" Pillar	
C500 (10 Cavities)	In LH Front Door, right of Front Door Inside Handle	202-13A1
C600 (10 Cavities)	In RH Front Door, left of Front Door Inside Handle	202-13A1
C700 (4 Cavities) (4-Door LSi)	In LH Rear Door, center of Door behind Armrest	202-13A2
C800 (4 Cavities) (4-Door LSi)	In RH Rear Door, center of Door behind Armrest	
G202	Behind Center I/P on Bulkhead	

COMPONENT	LOCATION	201-PG	FIG.	CONN
P500 (4-Door LSi)	LH Front Door	. 11	A	
	RH Front Door			
P700 (4-Door LSi)	LH Rear Door	. 11	В	
P800 (4-Door LSi)	RH Rear Door	. 11	В	
	Main Harness, behind I/P left of Steering Column			
\$297	Main Harness, near C205			
S298	Main Harness, at Blower Speed Selector Switch connctor breakout			

#### **TROUBLESHOOTING HINTS**

- 1. Check POWER WINDOWS CIRCUIT BREAKER.
- 2. Check that G202 is clean and tight.

3. Check that the Window Lock Switch (in the LH Front Power Window/Door Lock Switch) is in the Unlock position (released).

TEST	RESULT	ACTION
1. Turn Ignition Switch to "ON." Depress LH Front Window Switch	dosm	GO to step 2.
in the LH Front Power Window/Door Lock Switch to the DOWN position and lift to the UP position.	i e e e e e e e e e e e e e e e e e e e	GO to step 10.
2. Depress RH Front Window Switch in the LH Front Power	down	GO to step 3.
the UP position.		GO to step 20.
3. Depress LH Rear Remote Power	LH Rear Window moves up and down.	GO to step 4.
Window Switch to the DOWN position and then lift to the UP position.	LH Rear Window does not operate.	GO to step 36.
4. Depress RH Rear Remote Power	RH Rear Window moves up and down.	GO to step 5.
Window Switch to the DOWN position and then lift to the UP position.	RH Rear Window does not operate.	GO to step 56.
5. Depress RH Front Power Window Switch to the DOWN position and	RH Front Window moves up and down.	GO to step 6.
then lift to the UP position.	RH Front Window does not operate.	GO to step 75.
Carried to the DOWNI	LH Rear Window moves up and down.	GO to step 7.
then fift to the Or position.	LH Rear Window does not operate.	GO to step 76.
7. Depress RH Rear Power Window	RH Rear Window moves up and down.	GO to step 8.
Switch to the DOWN position and then lift to the UP position.	RH Rear Window does not operate.	GO to step 77.

## 8A - 120 - 4 ELECTRICAL DIAGNOSIS

# POWER WINDOWS

TEST		RESULT	ACTION
in the LH F	ront Power	LH Front Window operates, all other windows are not operational.	GO to step 9.
LOCK position. A	/Door Lock Switch to the position. Attempt to move dows with all window	All windows are operational.	Check for short to ground between LH Front Power Window/Door Lock Switch and the LH and RH Rear Remote Power Window Switches. If OK, Replace LH Front Power Window/Door Lock Switch.
		All windows are not operational.	Replace LH Front Power Window/Door Lock Switch.
in the LH Fi	ront Power	LH Front Window moves down automatically to the fully open position.	All systems diagnosed in this cell are functioning normally.
Window/Door Lock to the DOWN release.		LH Front Window moves momentarily and stops.	Replace LH Front Power Window/Door Lock Switch.
10. Backprobe LH		Test lamp lights.	GO to step 11.
Window Motor co test lamp from cav Depress LH Front to the DOWN posi	ity 1 to ground. Window Switch	Test lamp does not light.	GO to step 14.
11. Backprobe LH		Test lamp lights.	GO to step 12.
test lamp from cav	Window Motor connector with a test lamp from cavity 2 to ground. Lift LH Front Window Switch to	Test lamp does not light.	GO to step 15.
12. Disconnect LH		Test lamp lights.	GO to step 13.
Window Motor connector. Connect a test lamp from cavity 1 to B+.	Test lamp does not light.	GO to step 17.	
13. Connect a test lam to B+.	p from cavity 2	Test lamp lights.	Replace LH Front Power Window Motor.
		Test lamp does not light.	GO to step 18.
Window/Door liconnector with a cavity 3 to groun	Backprobe LH Front Power Window/Door Lock Switch connector with a test lamp from cavity 3 to ground. Depress LH	Test lamp lights.	Repair open in RED wire between LH Front Power Window/Door Lock Switch and LH Front Power Window Motor.
Front Window S DOWN position.	Switch to the	Test lamp does not light.	GO to step 16.
15. Backprobe LH Window/Door I connector with a cavity 4 to ground.	Lock Switch test lamp from Lift LH Front	Test lamp lights.	Repair open in YEL wire between LH Front Power Window/Door Lock Switch and LH Front Power Window Motor.
Window Switch position.	n to the UP	Test lamp does not light.	GO to step 16.
16. Backprobe LH Window/Door l	Lock Switch	Test lamp lights.	Replace LH Front Power Window/Door Lock Switch.
	connector with a test lamp from cavity 10 to ground.	Test lamp does not light.	Repair open in BLU/WHT wire between LH Front Power Window/Door Lock Switch and Fuse Block 2.
17. Backprobe LH Window/Door I connector with a security 3 to B+.	Lock Switch		Repair open in RED wire between LH Front Power Window/Door Lock Switch and LH Front Power Window Motor.
		Test lamp does not light.	GO to step 19.

TEST	RESULT	ACTION
<ol> <li>Backprobe LH Front Power Window/Door Lock Switch connector with a test lamp from cavity 4 to B+.</li> </ol>		Repair open in YEL wire between LH Front Power Window/Door Lock Switch and LH Front Power Window Motor.
	Test lamp does not light.	GO to step 19.
<ol> <li>Backprobe LH Front Power Window/Door Lock Switch connector with a test lamp from</li> </ol>		Replace LH Front Power Window/Door Lock Switch.
cavity 9 to B+.	lest lamp does not light.	Repair open in BLK wire between LH Front Power Window/Door Lock Switch and G202.
20. Backprobe RH Front Power Window Motor connector with a	1 0	GO to step 21.
test lamp from cavity 1 to ground. Depress RH Front Window Switch in the LH Front Power Window/Door Lock Switch to the DOWN position.		GO to step 24.
21. Backprobe RH Front Power	Test lamp lights.	GO to step 22.
Window Motor connector with a test lamp from cavity 2 to ground. Lift RH Front Window Switch in the LH Front Power Window/Door Lock Switch to the UP position.	Test lamp does not light.	GO to step 27.
22. Disconnect RH Front Power	Test lamp lights.	GO to step 23.
Window Motor connector. Connect a test lamp from cavity 1 to B+.	Test lamp does not light.	GO to step 30.
23. Connect a test lamp from cavity 2 to B+.	Test lamp lights.	Replace RH Front Power Window Motor.
20.20	Test lamp does not light.	GO to step 33.
<ol> <li>Backprobe RH Front Power Window Switch connector with a test lamp from cavity 5 to ground.</li> </ol>	Test lamp lights.	Repair open in RED wire between RH Front Power Window Switch and RH Front Power Window Motor.
Depress RH Front Window Switch in the LH Front Power Window/Door Lock Switch to the DOWN position.	Test lamp does not light.	GO to step 25.
25. Backprobe RH Front Power Window Switch connector with a	Test lamp lights.	Replace RH Front Power Window Switch.
test lamp from cavity 2 to ground.  Depress RH Front Window Switch in the LH Front Power Window/Door Lock Switch to the DOWN position.	Test lamp does not light.	GO to step 26.
26. Backprobe LH Front Power Window/Door Lock Switch connector with a test lamp from cavity 6 to ground. Depress RH Front Window Switch to the	-	Repair open in GRN/BLK wire between LH Front Power Window/Door Lock Switch and RH Front Power Window Switch.
DOWN position.	Test lamp does not light.	GO to step 16.
27. Backprobe RH Front Power Window Switch connector with a test lamp from cavity 3 to ground.	Test lamp lights.	Repair open in YEL wire between RH Front Power Window Switch and RH Front Power Window Motor.
Lift RH Front Window Switch in the LH Front Power Window/Door Lock Switch to the UP position.	Test lamp does not light.	GO to step 28.

# 8A - 120 - 6 ELECTRICAL DIAGNOSIS

## POWER WINDOWS

TEST	RESULT	ACTION
28. Backprobe RH Front Power Window Switch connector with a		Replace RH Front Power Window Switch.
	Test lamp does not light.	GO to step 29.
<ol> <li>Backprobe LH Front Power Window/Door Lock Switch connector with a test lamp from cayity 7 to ground. Depress RH</li> </ol>		Repair open in GRN/BLK wire between LH Front Power Window/Door Lock Switch and RH Front Power Window Switch.
Front Window Switch to the DOWN position.	Test lamp does not light.	GO to step 16.
30. Backprobe RH Front Power Window Switch connector with a test lamp from cavity 5 to B+.	Test lamp lights.	Repair open in RED wire between RH Front Power Window Switch and RH Front Power Window Motor.
	Test lamp does not light.	GO to step 31.
31. Backprobe RH Front Power Window Switch connector with a	Test lamp lights.	Replace RH Front Power Window Switch.
test lamp from cavity 2 to B+.	Test lamp does not light.	GO to step 32.
32. Backprobe LH Front Power Window/Door Lock Switch connector with a test lamp from cavity 6 to B+.	Test lamp lights.	Repair open in GRN/BLK wire between LH Front Power Window/Door Lock Switch and RH Front Power Window Switch.
	Test lamp does not light.	GO to step 19.
33. Backprobe RH Front Power Window Switch connector with a test lamp from cavity 3 to B+.	Test lamp lights.	Repair open in YEL wire between RH Front Power Window Switch and RH Front Power Window Motor.
,	Test lamp does not light.	GO to step 34.
34. Backprobe RH Front Power Window Switch connector with a	Test lamp lights.	Replace RH Front Power Window Switch.
test lamp from cavity 4 to B+.	Test lamp does not light.	GO to step 35.
35. Backprobe LH Front Power Window/Door Lock Switch connector with a test lamp from cavity 7 to B+.		Repair open in RED/BLK wire between LH Front Power Window/Door Lock Switch and RH Front Power Window Switch.
	Test lamp does not light.	GO to step 19.
36. Backprobe LH Rear Power	Test lamp lights.	GO to step 37.
Window Motor connector with a test lamp from cavity 1 to ground. Depress LH Rear Remote Power Window Switch to the DOWN position.		GO to step 40.
37. Backprobe LH Rear Power	Test lamp lights.	GO to step 38.
Window Motor connector with a test lamp from cavity 2 to ground Lift LH Rear Remote Power Window Switch to the UF position.	Tool ramp does not again	GO to step 44.
38. Disconnect LH Rear Power	Test lamp lights.	GO to step 39.
Window Motor connector. Connec a test lamp from cavity 1 to B+.		GO to step 47.

	TEST	RESULT	ACTION
39.	Connect a test lamp from cavity 2 to B+.	Test lamp lights.	Replace LH Rear Power Window Motor.
		Test lamp does not light.	GO to step 52.
40.	Backprobe LH Rear Power Window Switch connector with a test lamp from cavity 5 to ground. Depress LH Rear Remote Power		Repair open in RED wire between LH Rear Power Window Switch and LH Rear Power Window Motor.
	Window Switch to the DOWN position.	rest tamp does not fight.	GO to step 41.
41.	Backprobe LH Rear Power Window Switch connector with a	Test lamp lights.	Replace LH Rear Power Window Switch.
ione e margane	test lamp from cavity 2 to ground.  Depress LH Rear Remote Power Window Switch to the DOWN position.	Test lamp does not light.	GO to step 42.
42.	Backprobe LH Rear Remote Power Window Switch connector with a test lamp from cavity 5 to ground. Depress LH Rear Remote Power Window Switch to the		Repair open in RED/BLK - RED/WHT wire between LH Rear Remote Power Window Switch and LH Rear Power Window Switch.
	DOWN position.	Test lamp does not light.	GO to step 43.
43.	Backprobe LH Rear Remote Power Window Switch connector		Replace LH Rear Remote Power Window Switch.
	with a test lamp from cavity 1 to ground.	Test lamp does not light.	Repair open in BLU/WHT wire between LH Rear Remote Power Window Switch and Fuse Block 2.
44.	Backprobe LH Rear Power Window Switch connector with a test lamp from cavity 3 to ground. Lift LH Rear Remote Power		Repair open in YEL wire between LH Rear Power Window Switch and LH Rear Power Window Motor.
***************************************	Window Switch to the UP position.	Test lamp does not light.	GO to step 45.
45.	45. Backprobe LH Rear Power Window Switch connector with a test lamp from cavity 4 to ground. Lift LH Rear Remote Power Window Switch to the UP position.	Test lamp lights.	Replace LH Rear Power Window Switch.
		Test lamp does not light.	GO to step 46.
	Backprobe LH Rear Remote Power Window Switch connector with a test lamp from cavity 3 to ground. Lift LH Rear Remote		Repair open in GRN/BLK - GRN/WHT wire between LH Rear Remote Power Window Switch and LH Rear Power Window Switch.
	Power Window Switch to the UP position.	Test lamp does not light.	GO to step 43.
	Backprobe LH Rear Power Window Switch connector with a test lamp from cavity 5 to B+.		Repair open in RED wire between LH Rear Power Window Switch and LH Rear Power Window Motor.
40		Test lamp does not light.	GO to step 48.
	Backprobe LH Rear Power Window Switch connector with a test lamp from cavity 2 to B+.	Test lamp lights.	Replace LH Rear Power Window Switch.
	too tamp from cavity 2 to 11+.	Test lamp does not light.	GO to step 49.

# 8A - 120 - 8 ELECTRICAL DIAGNOSIS

## POWER WINDOWS

OTHER CHI	TEST	RESULT	ACTION
	Backprobe LH Rear Remote Power Window Switch connector with a test lamp from cavity 5 to B+.	Test lamp lights.	Repair open in RED/BLK - RED/WHT wire between LH Rear Remote Power Window Switch and LH Rear Power Window Switch.
		Test lamp does not light.	GO to step 50.
	Backprobe LH Rear Remote Power Window Switch connector	F	Replace LH Rear Remote Power Window Switch.
	with a test lamp from cavity 4 to B+.	Test lamp does not light.	GO to step 51.
	Backprobe LH Front Power Window/Door Lock Switch connector with a test lamp from cavity 5 to B+.	Test lamp lights.	Repair open in BRN/BLK wire between LH Front Power Window/Door Lock Switch and LH Rear Remote Power Window Switch.
		Test lamp does not light.	GO to step 19.
52.	Backprobe LH Rear Power Window Switch connector with a test lamp from cavity 3 to B+.		Repair open in YEL wire between LH Rear Power Window Switch and LH Rear Power Window Motor.
		Test lamp does not light.	GO to step 53.
53.	Backprobe LH Rear Power Window Switch connector with a		Replace LH Rear Power Window Switch.
	test lamp from cavity 4 to B+.	Test lamp does not light.	GO to step 54.
54.	Backprobe LH Rear Remote Power Window Switch connector with a test lamp from cavity 3 to B+.	Test lamp lights.	Repair open in GRN/BLK - GRN/WHT wire between LH Rear Remote Power Window Switch and LH Rear Power Window Switch.
		Test lamp does not light.	GO to step 55.
55.	Backprobe LH Rear Remote Power Window Switch connector	Test lamp lights.	Replace LH Rear Remote Power Window Switch.
	with a test lamp from cavity 2 to B+.	Test lamp does not light.	GO to step 51.
56.	Backprobe RH Rear Power	Test lamp lights.	GO to step 57.
	Window Motor connector with a test lamp from cavity 1 to ground. Depress RH Rear Remote Power Window Switch to the DOWN position.	1991 tamp does not ingine	GO to step 60.
57.	Backprobe RH Rear Power	Test lamp lights.	GO to step 58.
	Window Motor connector with a test lamp from cavity 2 to ground. Lift RH Rear Remote Power Window Switch to the UP position.	Test lamp does not light.	GO to step 64.
58.	Disconnect RH Rear Power		GO to step 59.
	Window Motor connector. Connect a test lamp from cavity 1 to B+.		GO to step 67.
59.	Connect a test lamp from cavity 2 to B+.	Test lamp lights.	Replace RH Rear Power Window Motor.
		Test lamp does not light.	GO to step 72.

#### evetem diagnosis

and Aspertures	TEST	RESULT	ACTION
60.	Backprobe RH Rear Power Window Switch connector with a test lamp from cavity 5 to ground. Depress RH Rear Remote Power Window Switch to the DOWN	The Control of the Co	Repair open in RED wire between RH Rear Power Window Switch and RH Rear Power Window Motor. GO to step 61.
61.	position.  Backprobe RH Rear Power Window Switch connector with a test lamp from cavity 2 to ground.		Replace RH Rear Power Window Switch,
- Albanna - Carlo	Depress RH Rear Remote Power Window Switch to the DOWN position.		GO to step 62.
62.	Backprobe RH Rear Remote Power Window Switch connector with a test lamp from cavity 5 to ground. Depress RH Rear Remote Power Window Switch to the		Repair open in RED - RED/BLK wire between RH Rear Remote Power Window Switch and RH Rear Power Window Switch.
	DOWN position.	Test lamp does not light.	GO to step 63.
63.	Backprobe RH Rear Remote Power Window Switch connector	Test lamp lights.	Replace RH Rear Remote Power Window Switch.
100000000000000000000000000000000000000	with a test lamp from cavity 1 to ground.	Test lamp does not light.	Repair open in BLU/WHT wire between RH Rear Remote Power Window Switch and Fuse Block 2.
64.	Backprobe RH Rear Power Window Switch connector with a test lamp from cavity 3 to ground.		Repair open in YEL wire between RH Rear Power Window Switch and RH Rear Power Window Motor.
·	Lift RH Rear Remote Power Window Switch to the UP position.	Test lamp does not light.	GO to step 65.
65. Backprobe RH Rear Power Window Switch connector with a		Replace RH Rear Power Window Switch.	
was well as	test lamp from cavity 4 to ground. Lift RH Rear Remote Power Window Switch to the UP position.	Test lamp does not light.	GO to step 66.
66.	Backprobe RH Rear Remote Power Window Switch connector with a test lamp from cavity 3 to ground. Lift RH Rear Remote	Test lamp lights.	Repair open in GRN - GRN/BLK wire between RH Rear Remote Power Window Switch and RH Rear Power Window Switch.
	Power Window Switch to the UP position.	Test lamp does not light.	GO to step 63.
	Backprobe RH Rear Power Window Switch connector with a test lamp from cavity 5 to B+.	Test lamp lights.	Repair open in RED wire between RH Rear Power Window Switch and RH Rear Power Window Motor.
		Test lamp does not light.	GO to step 68.
	Backprobe RH Rear Power Window Switch connector with a test lamp from cavity 2 to B+.	Test lamp lights.	Replace RH Rear Power Window Switch.
CENAMANA	*	Test lamp does not light.	GO to step 69.
	Backprobe RH Rear Remote Power Window Switch connector with a test lamp from cavity 5 to B+.	Test lamp lights.	Repair open in RED - RED/BLK wire between RH Rear Remote Power Window Switch and RH Rear Power Window Switch.
	l'	Test lamp does not light.	GO to step 70.

# 8A - 120 - 10 ELECTRICAL DIAGNOSIS

# POWER WINDOWS

***********	TEST	RESULT	ACTION
70.	Backprobe RH Rear Remote		Replace RH Rear Remote Power Window Switch.
	with a test lamp from cavity 4 to B+.	Test lamp does not light.	GO to step 71.
71.	Backprobe RH Rear Power Window Switch connector with a test lamp from cavity 3 to B+.	Test lamp lights.	Repair open in YEL wire between RH Rear Power Window Switch and RH Rear Power Window Motor.
		Test lamp does not light.	GO to step 72.
72.	Backprobe RH Rear Power Window Switch connector with a	Test lamp lights.	Replace RH Rear Power Window Switch.
	test lamp from cavity 4 to B+.	Test lamp does not light.	GO to step 73.
73.	Backprobe RH Rear Remote Power Window Switch connector with a test lamp from cavity 3 to B+.		Repair open in GRN - GRN/BLK wire between RH Rear Remote Power Window Switch and RH Rear Power Window Switch.
	<i>D</i> · ·	Test lamp does not light.	GO to step 74.
74.	74. Backprobe RH Rear Remote Power Window Switch connector with a test lamp from cavity 2 to B+.		Replace RH Rear Remote Power Window Switch.
		Test lamp does not light.	GO to step 51.
75.	<ol> <li>Backprobe RH Front Power Window Switch connector with a test lamp from cavity 1 to ground.</li> </ol>	Test lamp lights.	Replace RH Front Power Window Switch.
		Test lamp does not light.	Repair open in BLU - BLU/WHT wire between RH Front Power Window Switch and Fuse Block 2.
76.	Backprobe LH Rear Power Window Switch connector with a	Test lamp lights.	Replace LH Rear Power Window Switch.
	test lamp from cavity 1 to ground.	Test lamp does not light.	Repair open in BLU - BLU/WHT wire between LH Rear Power Window Switch and Fuse Block 2.
77	Backprobe RH Rear Power Window Switch connector with a	Test lamp lights.	Replace RH Rear Power Window Switch.
test lamp from cavity 1 to	test lamp from cavity 1 to ground	Test lamp does not light.	Repair open in BLU - BLU/WHT wire between LH Rear Power Window Switch and Fuse Block 2.

# COMPONENT REPLACEMENT INFORMATION

For com	aponent replacement procedures, refer to the section listed below.	
LH From	nt Power Window/Door Lock Switch	Section 10 6
LH From	nt Power Window Motor (serviced as part of Window Regulator)	Section 10-0
LH Rea	r Power Window Motor (serviced as part of Window Regulator)	Section 10-0
Ln Kea	r Power window Switch	Spotion 10 4
LH Rea	r Remote Power Window Switch	Section 10-0
KH FIO	nt Power Window Motor (serviced as part of Window Regulator)	Saction 10 6
KU LIOI	nt Power window Switch	Section 10 6
RH Rea	r Power Window Motor (serviced as part of Window Regulator)	Section 10-0
ки кеа	r Power Window Switch	Section 10-6
RH Rea	r Remote Power Window Switch	Saction 90

#### CIRCUIT OPERATION

With the Ignition Switch in "ON," voltage is applied through the POWER WINDOW CIRCUIT BREAKER to the LH Front Power Window/Door Lock Switch, RH Front Power Window Switch, LH Rear Remote Power Window Switch, RH Rear Remote Power Window Switch, LH Rear Power Window Switch, and RH Rear Power Window Switch. The LH Front Power Window/Door Lock Switch is permanently grounded to G202.

When the LH Front Window Switch is depressed, the DOWN/AUTO DOWN contacts close, allowing voltage to be applied to the LH Front Power Window Motor. The LH Front Power Window Motor is grounded through the normally closed UP contacts of the LH Front Window Switch to G202. With both power and ground supplied to the motor, it begins to turn and open the window. The LH Front Power Window Motor will stop once the window is completely open, via an electronic circuit breaker (ECB) within the motor, or whenever the LH Front Window Switch is released, returning the DOWN/AUTO DOWN contacts to their normally grounded position. Closing the LH Front Window is accomplished by lifting the LH Front Window Switch, closing the UP contacts, allowing voltage to be applied to the other side of the LH Front Power Window Motor. In this case, the LH Front Power Window Motor is grounded through the normally closed DOWN/AUTO DOWN contacts of the LH Front Window Switch to G202. With both power and ground supplied to the motor, it begins to turn and close the window. The LH Front Power Window Motor will stop once the window is completely closed, via an ECB within the motor, or whenever the LH Front Window switch is released, returning the UP contacts to their normally grounded position.

The RH Front, LH Rear and RH Rear Windows can be operated by two separate switches. The RH Front Window Switch is located in the LH Front Power Window/Door Lock Switch, while the RH Front Power Window Switch is located on the RH Front Door. The LH and RH Rear

Remote Power Window Switches are located in the Center Console, while the individual rear switches are located on each rear door. When either the RH Front, LH Rear Remote or RH Rear Remote Power Window Switch is depressed, the DOWN contacts close, allowing voltage to be applied through the appropriate Window Switch (located on the door) to the Window Motor. The Window Motor is grounded through the appropriate Window Switch (located on the door) and the normally closed UP contacts of the depressed switch to G202. With both power and ground supplied to the motor, it begins to turn and open the window. The Window Motor will stop once the window is completely open, via an ECB within the motor, or whenever the Window Switch is released, returning the DOWN contacts to their normally grounded position. Closing the RH Front, LH Rear or RH Rear Window is accomplished by lifting the appropriate Window Switch (in the LH Front Power Window/Door Lock Switch or Center Console), closing the UP contacts, applying voltage through the appropriate Window Switch (located on the door) to the Window Motor. In this case, the Window Motor grounds through the appropriate Window Switch and the normally grounded DOWN contacts of the lifted switch to G202. With both power and ground supplied to the motor, it begins to turn and closes the window. The Window Motor will stop once the window is completely closed, via an ECB within the motor, or whenever the Window switch is released, returning the UP contacts to their normally grounded position.

The other method of operating the windows is through the Window Switch located on the appropriate door. When any one of these switches are depressed to the DOWN position, the DOWN contacts of that switch close, applying voltage directly through that switch to the appropriate Window Motor. The Window Motor grounds through the depressed switch and through the normally grounded UP contacts in the other switch to G202. With both power and ground supplied to the motor, it begins to turn and open the window. The motor will stop when the window is

#### **POWER WINDOWS**

completely open, via the ECB, or whenever the Window Switch is released, returning the DOWN contacts to their normally grounded position. Closing the window is accomplished by lifting the appropriate Window Switch, closing the UP contacts of that switch, applying voltage directly through the lifted switch to the appropriate Window Motor. The Window Motor grounds through the lifted switch and through the normally grounded DOWN contacts in the other switch to G202. With both power and ground supplied to the motor, it begins to turn and close the window. The motor will stop when the window is completely closed, via the ECB, or whenever the Window Switch is released, returning the UP contacts to their normally grounded position.

The LH Front Power Window/Door Lock Switch also contains circuitry for the AUTO DOWN and WINDOW LOCK features. The AUTO DOWN feature allows the LH Front Window to open automatically to the fully open position. When the LH Front Window Switch is depressed to the AUTO DOWN position, the Auto Down Control circuitry holds the DOWN/AUTO DOWN contacts of the LH Front Power Window/Door Lock Switch closed. With these contacts closed, the LH Front Power Window Motor will operate in the same manner as described earlier. When the window is completely open, the ECB and the control circuitry force the DOWN/AUTO DOWN contacts open, returning them to their normally grounded position. The WINDOW LOCK feature allows the RH Front, LH Rear and RH Rear Windows to be locked out. When the Window Lock Switch is depressed, only the LH Front Window Switch in the LH Front Power Window/Door Lock Switch is operational.

# BLANK