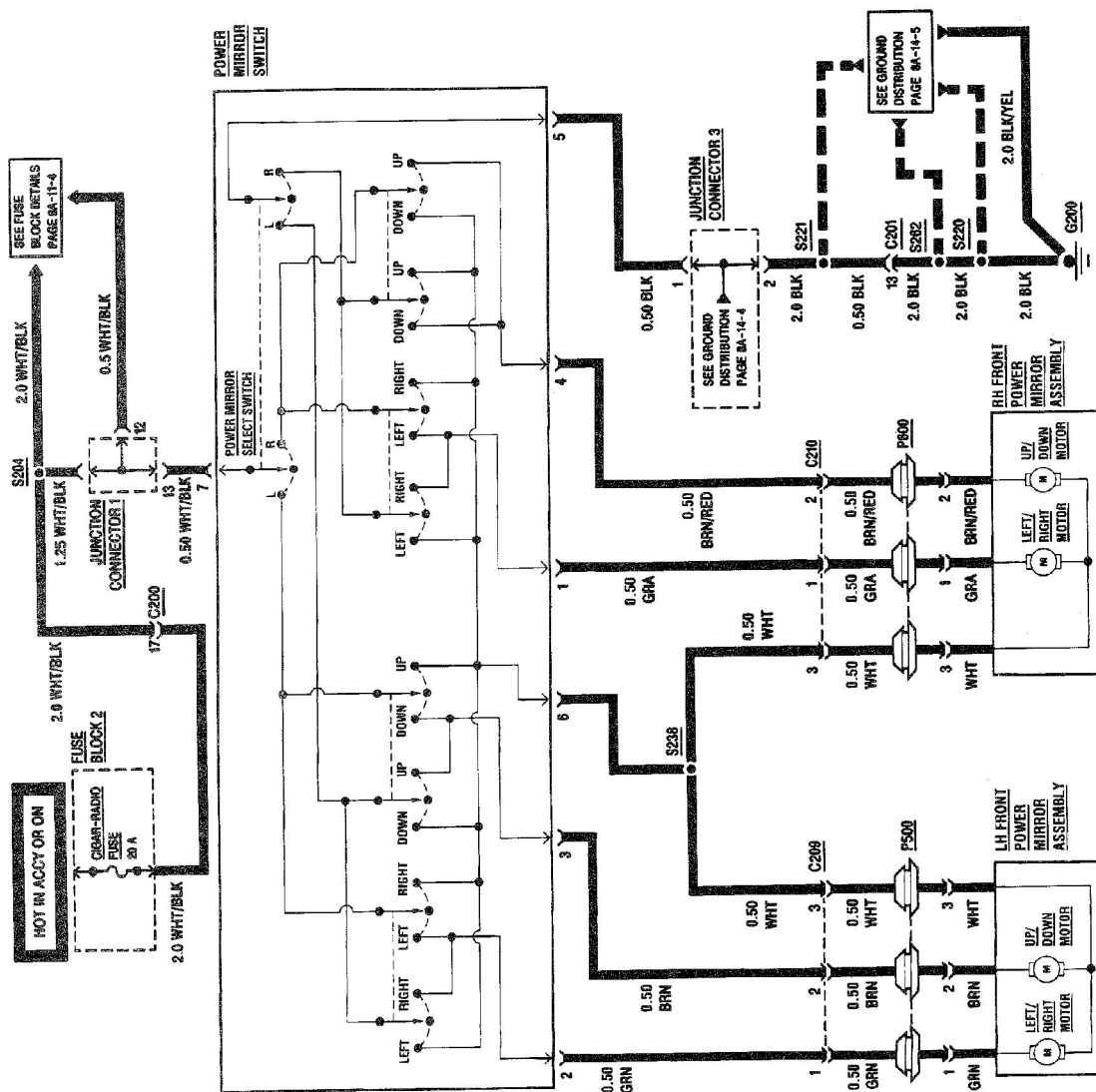


# 8A - 147 - 0 ELECTRICAL DIAGNOSIS POWER MIRRORS



EJT0028147

COMPONENT	LOCATION	201-PG	FIG.	CONN
Junction Connector 1 (20 Cavities).....	I/P Harness, Center of I/P, left of Radio			
Junction Connector 3 (10 Cavities).....	I/P Harness, RH side of I/P, near RH Front Speaker			
LH Front Power Mirror Assembly (4-Door LSi).....	Behind LH Sideview Mirror.....	11	.....	A
Power Mirror Switch (4-Door LSi) .....	LH I/P, left of Steering Column .....	07	.....	A
RH Front Power Mirror Assembly (4-Door LSi).....	Behind RH Sideview Mirror .....	11	.....	A
C200 (22 Cavities).....	Main Harness to I/P Harness, LH I/P near Fuse Block 2.....	06	.....	A..... 202-06A1
C201 (16 Cavities).....	Main Harness to I/P Harness, LH I/P near Fuse Block 2.....	06	.....	A..... 202-07A1
C209 (3 Cavities) (4-Door LSi) .....	I/P Harness to LH Front Door Harness, LH I/P, near "A" Pillar.....	07	.....	A
C210 (3 Cavities) (4-Door LSi) .....	I/P Harness to RH Front Door Harness, RH I/P, near "A" Pillar.....	07	.....	A
P500 (4-Door LSi) .....	LH Front Door .....	11	.....	A
P600 (4-Door LSi) .....	RH Front Door .....	11	.....	A
S204 .....	I/P Harness, behind center of I/P near Radio			
S220 .....	Main Harness, near I/P left of Steering Column			
S221 .....	I/P Harness near, C201 breakout			
S238 .....	I/P Harness, near C209 connector breakout			
S262 .....	Main Harness, left of Steering Column			

## TROUBLESHOOTING HINTS

1. Check CIGAR RADIO Fuse with a fuse tester.
2. Check that G200 is clean and tight.

3. Before component replacement, check for poor connections at related component and in-line harness connector terminal connections.

## 8A - 147 - 2 ELECTRICAL DIAGNOSIS

### POWER MIRRORS SYSTEM DIAGNOSIS

TEST	RESULTS	ACTION
1. Turn IGNITION SWITCH to "ACC" or "ON". Check operation of LH and RH MIRRORS, for both UP/DOWN and LEFT/RIGHT.	Both Mirrors are functioning properly.	All systems diagnosed in this Section are functioning properly.
	Both Mirrors are inoperative.	GO to step 2.
	LH FRONT POWER MIRROR ASSEMBLY is inoperative.	GO to step 5.
	RH FRONT POWER MIRROR ASSEMBLY is inoperative.	GO to step 10.
2. Backprobe POWER MIRROR SWITCH with a test lamp from cavity 7 to ground.	Test lamp does not light.	Repair open in WHT/BLK wire between POWER MIRROR SWITCH and FUSE BLOCK 2.
	Test lamp lights.	GO to step 3.
3. Backprobe POWER MIRROR SWITCH with a test lamp from cavity 5 to B+.	Test lamp does not light.	Repair open in BLK wire between POWER MIRROR SWITCH and G200.
	Test lamp lights.	GO to step 4.
4. Turn IGNITION SWITCH to "LOCK". Disconnect POWER MIRROR SWITCH connector and LH FRONT POWER MIRROR ASSEMBLY connector. Connect a digital multimeter from LH FRONT POWER MIRROR ASSEMBLY connector cavity 3 to POWER MIRROR SWITCH cavity 6. Measure resistance.	More than 0.3 ohms.	Repair open in WHT wire between POWER MIRROR SWITCH and LH and RH FRONT POWER MIRROR ASSEMBLIES.
	Less than 0.3 ohms.	Replace POWER MIRROR SWITCH.
5. Place POWER MIRROR SELECT SWITCH in the "L" position. Backprobe POWER MIRROR SWITCH with a test lamp from cavity 2 to cavity 6. Push the POWER MIRROR SWITCH to the "LEFT" and "RIGHT" positions.	Test lamp does not light in one or both positions.	Replace POWER MIRROR SWITCH.
	Test lamp lights in both directions.	GO to step 6.
6. Backprobe POWER MIRROR SWITCH with a test lamp from cavity 3 to cavity 6. Push the POWER MIRROR SWITCH to the "UP" and "DOWN" positions.	Test lamp does not light in one or both positions.	Replace POWER MIRROR SWITCH.
	Test lamp lights in both directions.	GO to step 7.
7. Backprobe LH FRONT POWER MIRROR ASSEMBLY with a test lamp from cavity 1 to cavity 3. Push the POWER MIRROR SWITCH to the "LEFT" position.	Test lamp does not light.	GO to step 8.
	Test lamp lights.	GO to step 9.
8. Backprobe LH FRONT POWER MIRROR ASSEMBLY with a test lamp from cavity 1 to ground. Push the POWER MIRROR SWITCH to the "LEFT" position.	Test lamp does not light.	Repair open in GRN wire between POWER MIRROR SWITCH and LH FRONT POWER MIRROR ASSEMBLY.
	Test lamp lights.	Repair open in WHT wire between POWER MIRROR SWITCH and LH FRONT POWER MIRROR ASSEMBLY.

TEST	RESULTS	ACTION
9. Backprobe POWER MIRROR SWITCH with a test lamp from cavity 2 to cavity 3. Push the POWER MIRROR SWITCH to the "DOWN" position.	Test lamp does not light.	Repair open in GRN wire between POWER MIRROR SWITCH and LH FRONT POWER MIRROR ASSEMBLY.
	Test lamp lights.	Replace LH FRONT POWER MIRROR ASSEMBLY.
10. Place POWER MIRROR SELECT SWITCH in the "R" position. Backprobe POWER MIRROR SWITCH with a test lamp from cavity 1 to cavity 6. Push the POWER MIRROR SWITCH to the "LEFT" and "RIGHT" positions.	Test lamp does not light in one or both positions.	Replace POWER MIRROR SWITCH.
	Test lamp lights in both positions.	GO to step 11.
11. Backprobe POWER MIRROR SWITCH with a test lamp from cavity 4 to cavity 6. Push the POWER MIRROR SWITCH to the "UP" and "DOWN" positions.	Test lamp does not light in one or both positions.	Replace POWER MIRROR SWITCH.
	Test lamp lights in both positions.	GO to step 12.
12. Backprobe RH FRONT POWER MIRROR ASSEMBLY with a test lamp from cavity 1 to cavity 3. Push the POWER MIRROR SWITCH to the "LEFT" position.	Test lamp does not light.	GO to step 13.
	Test lamp lights.	GO to step 14.
13. Backprobe RH FRONT POWER MIRROR ASSEMBLY with a test lamp from cavity 1 to ground. Push the POWER MIRROR SWITCH to the "LEFT" position.	Test lamp does not light.	Repair open in GRA wire between POWER MIRROR SWITCH and RH FRONT POWER MIRROR ASSEMBLY.
	Test lamp lights.	Repair open in WHT wire between POWER MIRROR SWITCH and RH FRONT POWER MIRROR ASSEMBLY.
14. Backprobe RH FRONT POWER MIRROR ASSEMBLY with a test lamp from cavity 2 to cavity 3. Push the POWER MIRROR SWITCH to the "DOWN" position.	Test lamp does not light.	Repair open in BRN/RED wire between POWER MIRROR SWITCH and RH FRONT POWER MIRROR ASSEMBLY.
	Test lamp lights.	Replace RH FRONT POWER MIRROR ASSEMBLY.

## COMPONENT REPLACEMENT INFORMATION

For component replacement procedures, refer to the section listed below.

Power Mirror Switch .....	Section 10-6
LH Front Power Mirror Assembly .....	Section 10-6
RH Front Power Mirror Assembly .....	Section 10-6

## 8A - 147 - 4 ELECTRICAL DIAGNOSIS

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### POWER MIRRORS

#### CIRCUIT OPERATION

Voltage is applied to the POWER MIRROR SWITCH from the CIGAR RADIO Fuse through JUNCTION CONNECTOR 1 when the Ignition Switch is in "ACC" or "ON." The POWER MIRROR SWITCH is permanently grounded through JUNCTION CONNECTOR 3 to G200.

Each Power Mirror has two reversible motors: one to move the mirror UP and DOWN, the other to move the mirror LEFT and RIGHT. The driver operates the POWER MIRROR SWITCH to control the polarity of the voltage to the motors. The POWER MIRROR SELECT SWITCH directs voltage to either the RH or LH POWER MIRROR ASSEMBLIES.

With the POWER MIRROR SELECT SWITCH in the "L" position and the POWER MIRROR SWITCH held in the UP position, battery voltage is applied through the UP contacts of the POWER MIRROR SWITCH to the Up-Down Motor in the LH FRONT POWER MIRROR ASSEMBLY. The Up-Down Motor is grounded through the POWER MIRROR SWITCH to G200. The Up-Down Motor will continue to run and turn the Power Mirror until the POWER MIRROR SWITCH is released.

When the POWER MIRROR SWITCH is held in the DOWN position, battery voltage is applied through the DOWN contacts of the POWER MIRROR SWITCH to the Up-Down Motor in the LH FRONT POWER MIRROR

ASSEMBLY. The Up-Down Motor is grounded through the POWER MIRROR SWITCH to G200. The Up-Down Motor will continue to run and turn the Power Mirror down until the POWER MIRROR SWITCH is released.

The Left-Right Motor operates in a similar manner. With the POWER MIRROR SELECT SWITCH in the "L" position and the POWER MIRROR SWITCH held in the LEFT position, battery voltage is applied through the LEFT contacts of the POWER MIRROR SWITCH to the Left-Right Motor in the LH FRONT POWER MIRROR ASSEMBLY. The Left-Right Motor is grounded through the POWER MIRROR SWITCH to G200. The Left-Right Motor will continue to run and turn the Power Mirror left until the POWER MIRROR SWITCH is released.

When the POWER MIRROR SWITCH is held in the RIGHT position, battery voltage is applied through the RIGHT contacts of the POWER MIRROR SWITCH to the Left-Right Motor in the LH FRONT POWER MIRROR ASSEMBLY. The Left-Right Motor is grounded through the POWER MIRROR SWITCH to G200. The Left-Right Motor will continue to run and turn the Power Mirror right until the POWER MIRROR SWITCH is released.

The RH Front Power Mirror operates in the same way as the LH Front Power Mirror when the POWER MIRROR SELECT SWITCH is placed in the "R" position and the POWER MIRROR SWITCH is operated.

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