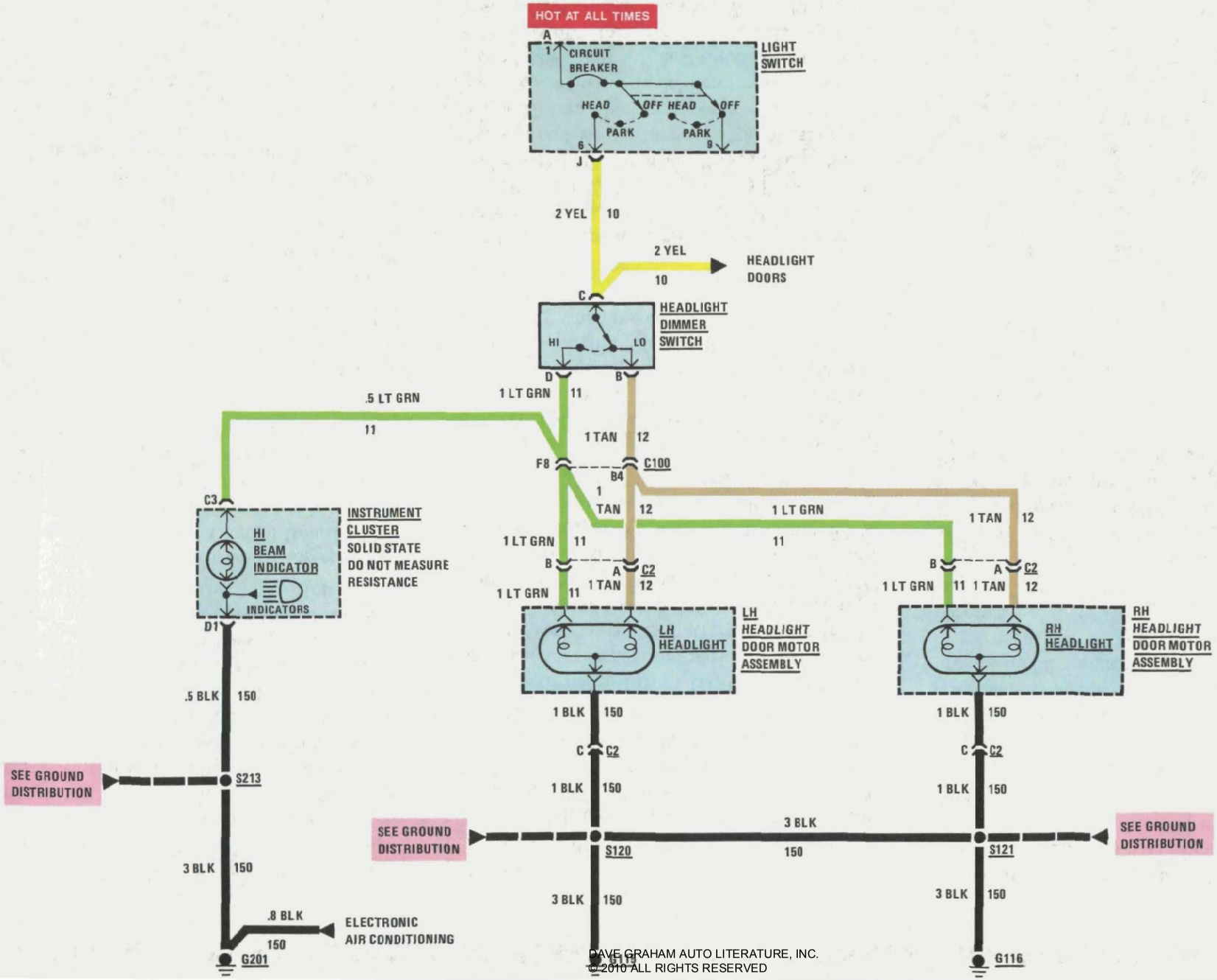
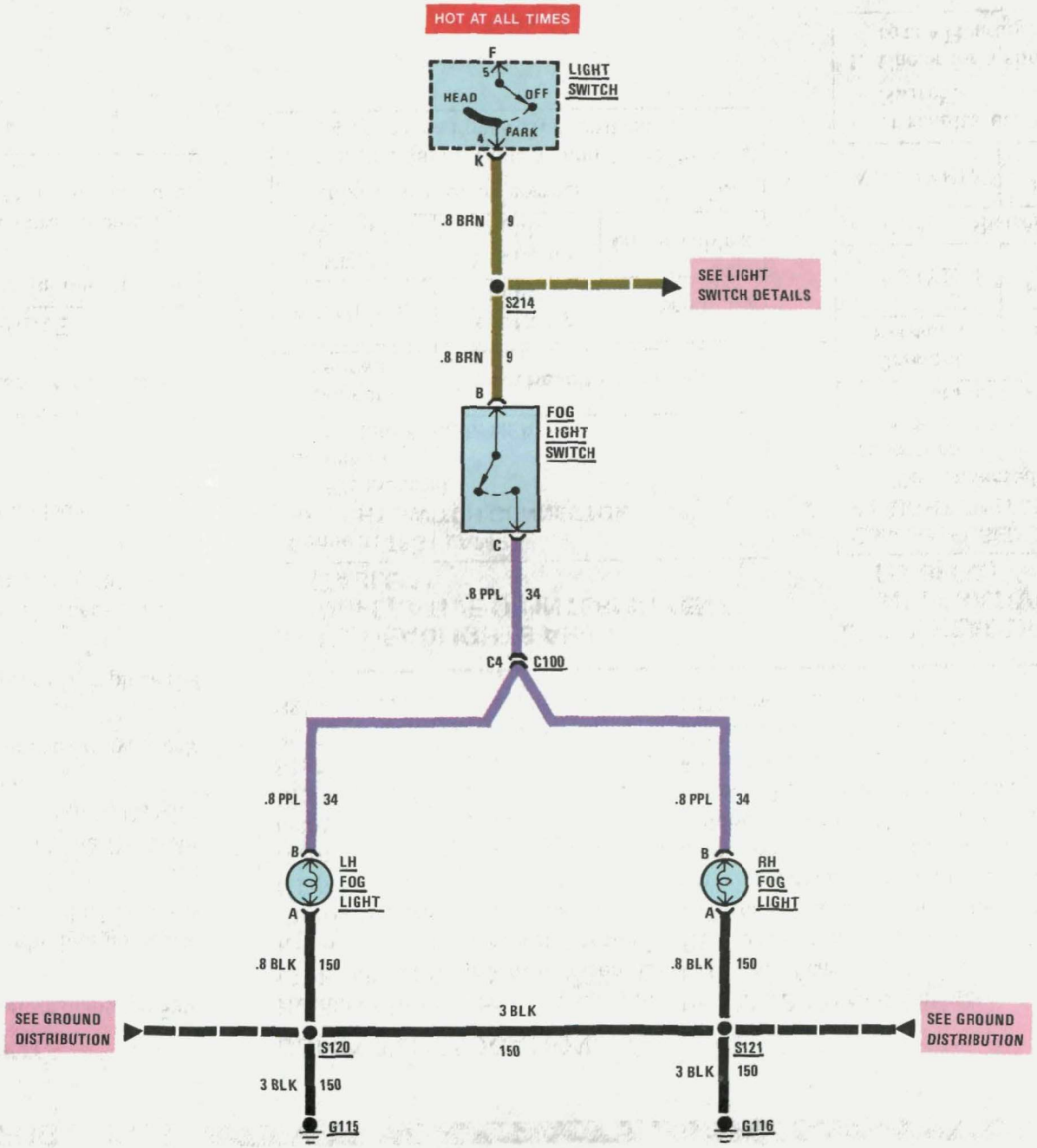
HEADLIGHTS



FOG LIGHTS



HEADLIGHTS AND FOG LIGHTS

TROUBLESHOOTING HINTS

- **Try the following checks before doing the System Diagnosis.**

1. If one Headlight or Fog Light does not work, check the light, connections and wires to the light.
2. If Hi Beams do not light, but the Hi Beam Indicator lights, check the LT GRN (11) wire for an open (see schematic).
3. If Headlights on one side are on dimly, check the ground on that side.
4. If the Headlights do not turn off, replace the Light Switch.
5. If the Fog Lights do not work, check the Fog Light Switch, BRN (9) and PPL (34) wires for an open (see schematic).

- **Go to System Diagnosis for diagnostic tests.**

SYSTEM DIAGNOSIS

- **Diagnostic steps for the symptoms listed in the following table are listed after the table.**

SYMPTOM TABLE

A. All the Headlights are inoperative or intermittent
B. Lo Beams on both sides are inoperative or Hi Beams and Hi Beam Indicator are inoperative

COMPONENT LOCATION

		Page-Figure
Headlight Dimmer Switch	Behind I/P, LH center of steering column	201- 4-B
LH Headlight Door Motor Assembly	LH front of car	201-10-C
RH Headlight Door Motor Assembly	RH front of car	201-10-C
C100 (42 cavities)	LH front of dash, left of brake master cylinder	201- 2-A
G115	On frame, behind LH park/turn lamp	201-10-D
G116	On frame, behind RH park/turn lamp	201-11-C
G201	Behind I/P, near LH side of steering column	
S120	Front lights harness, behind LH park/turn light	201-10-D
S121	Front lights harness, behind RH park/turn light	201-11-C
S213	I/P harness, behind RH side of I/P	201-10-A
S214	I/P harness, above steering column	201- 4-B

A: ALL HEADLIGHTS ARE INOPERATIVE OR INTERMITTENT (TABLE 1)

Connect: TEST LAMP
At: LIGHT SWITCH CONNECTOR (Connected)
Condition:
- **Light Switch: HEAD**

Connect Between	Correct Result	For Diagnosis
A & Ground	Test Lamp lights	See 1
J (YEL) & Ground	Test Lamp lights	Go to Table 2

- If both results are correct, go to Test B.

1. Check Fusible Link M and RED (2) wire for open (see Power Distribution).

A: ALL HEADLIGHTS ARE INOPERATIVE OR INTERMITTENT (TABLE 2)

Connect: FUSED JUMPER
At: LIGHT SWITCH CONNECTOR (Disconnected)
Conditions:
- **Put a 15 amp fuse in the fused jumper**
- **Dimmer Switch: LO**

Connect Between	Correct Indication	For Diagnosis
A & J (YEL)	Headlights light	See 1
• Dimmer Switch: HI		
A & J (YEL)	Hi Beams light	See 1

- If results are correct, replace the Light Switch.

1. Check for a short to ground in the wiring to the Headlights.

B: LO BEAMS ON BOTH SIDES ARE INOPERATIVE OR HI BEAMS AND HI BEAM INDICATOR ARE INOPERATIVE

Connect: TEST LAMP
At: HEADLIGHT DIMMER SWITCH CONNECTOR (Connected)
Conditions:
- **Light Switch: HEAD**
- **Dimmer Switch: LO**

Connect Between	Correct Result	For Diagnosis
C (YEL) & Ground	Test Lamp lights	See 1
B (TAN) & Ground	Test Lamp lights	See 2
• Dimmer Switch: HI		
D (LT GRN) & Ground	Test Lamp lights	See 2
• If all results are correct, check wiring to lights for an open.		

1. Check YEL (10) wire for an open.
2. Replace Dimmer Switch.

CIRCUIT OPERATION

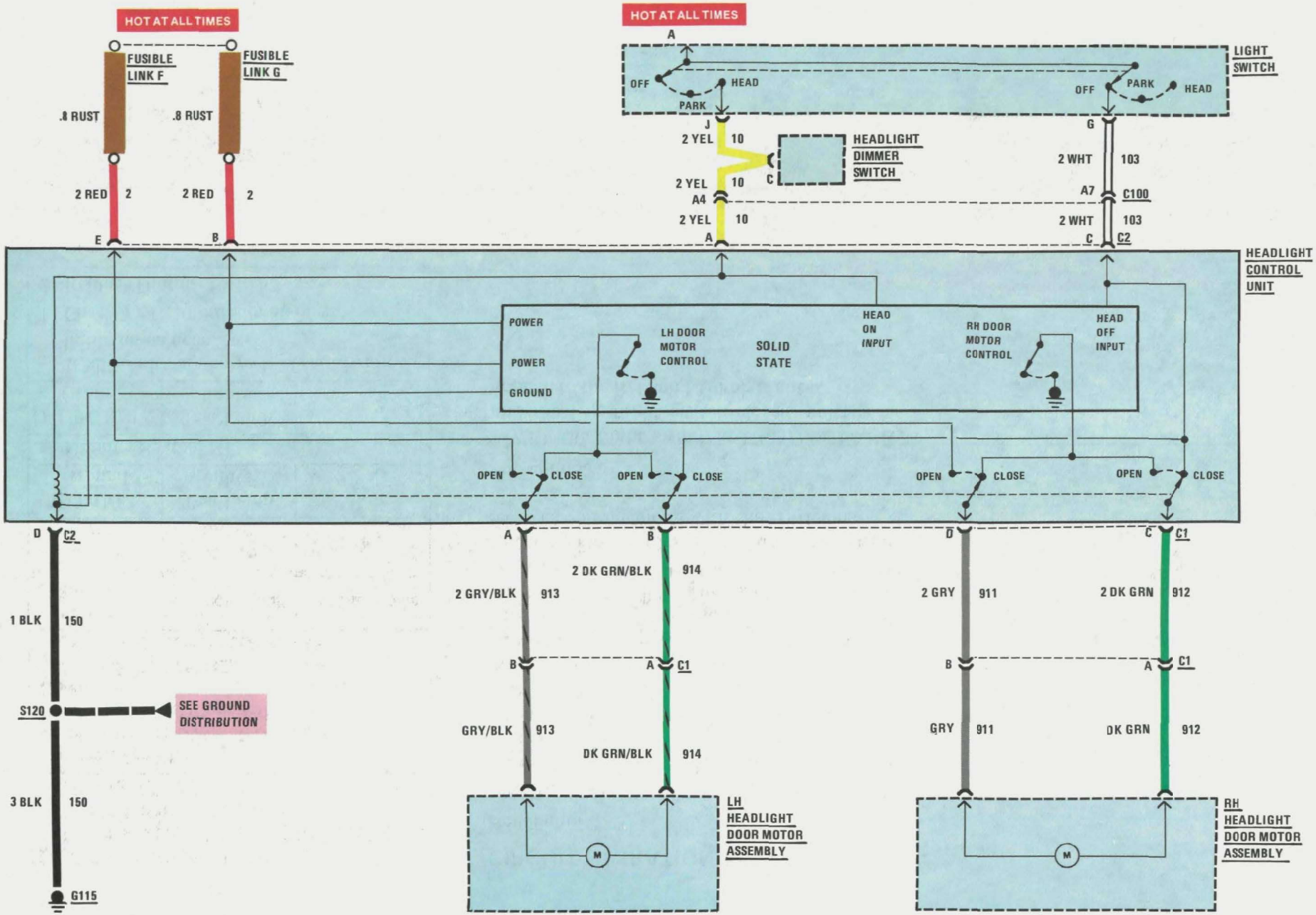
Headlights

Voltage is applied to the Light Switch at all times. The Light Switch includes a self-resetting circuit breaker. The circuit breaker opens when the Headlight circuit draws too much current. When the circuit breaker opens, it interrupts the current flow. With no current flow, the circuit breaker cools off and resets automatically. When the Light Switch is in HEAD, the Headlight Dimmer Switch directs voltage to either the Lo Beams or the Hi Beams. The High Beam Indicator also receives voltage along with the Hi Beams.

Fog Lights

With the Light switch in HEAD or PARK and the Fog Light switch closed, voltage is applied to the RH and LH Fog Lights.

HEADLIGHT DOORS



TROUBLESHOOTING HINTS

- **Try the following checks before doing the System Check.**

1. Check that ground G115 is clean and tight.
2. Check Fusible Links F and G for an open.
3. Check that Connector C2 to the Headlight Control Unit is clean and tight.
4. Check for any mechanical binding.

- **Go to System Check for a guide to normal operation.**
- **Go to System Diagnosis for diagnostic tests.**

SYSTEM CHECK

- **Use the System Check Table as a guide to normal operation.**
- **Refer to System Diagnosis for a list of symptoms and diagnostic steps.**

SYSTEM CHECK TABLE

ACTION	NORMAL RESULT
Put Light Switch in HEAD	Headlight Doors open and Headlights light
Put Light Switch in PARK	Headlights go out, Headlight Doors stay open
Put Light Switch in OFF	Headlight Doors close

- **Refer to System Diagnosis when a result is not normal.**

COMPONENT LOCATION

		Page-Figure
Fusible Link F	LH rear of engine compartment, at Jump Start Junction Block	201- 6-A
Fusible Link G	LH rear of engine compartment, at Jump Start Junction Block	201- 6-A
Headlight Control Unit	Lower LH front of engine compartment	201-17-B
Headlight Dimmer Switch	Behind I/P, LH center of steering column	201- 4-B
LH Headlight Door Motor Assembly	LH front of car	201-10-C
RH Headlight Door Motor Assembly	RH front of car	201-10-C
C100 (42 cavities)	LH front of dash, left of brake master cylinder	201- 2-A
G115	On frame, behind LH park/turn lamp	201-10-D
S120	Front lights harness, behind LH park/turn light	201-10-D

SYSTEM DIAGNOSIS

- **Do the tests listed for your symptom in the Symptom Table below.**
- **Tests follow the Symptom Table.**

SYMPTOM TABLE

A: Neither Headlight Door operates properly

B: Right Headlight Door does not operate properly

C: Left Headlight Door does not operate properly

A: NEITHER HEADLIGHT DOOR OPERATES PROPERLY

Connect: TEST LAMP
At: HEADLIGHT CONTROL UNIT CONNECTOR C2 (Disconnected)

Connect Between	Correct Result	For Diagnosis of Incorrect Results
B (RED) & Ground	Test Lamp lights	See 1

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E (RED) & Ground	Test Lamp lights	See 1
E (RED) & D (BLK)	Test Lamp lights	See 3
• Light Switch: HEAD		
A (YEL) & Ground	Test Lamp lights	See 4
• Light Switch: OFF		
C (WHT) & Ground	Test Lamp lights	See 2

- If all results are correct, replace Headlight Control Unit.

1. Check Fusible Link G and Fusible Link F and RED (2) wire for an open.
2. Check Light Switch, and WHT (103) wire for an open (see schematic).
3. Check BLK (150) wire for an open.
4. Refer to Headlights, 8A-100.

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B: LEFT HEADLIGHT DOOR DOES NOT OPERATE PROPERLY

CONNECT: TEST LAMP
At: HEADLIGHT CONTROL UNIT CONNECTORS C1 (CONNECTED)
Condition:
- **Turn Headlights on while observing Test Lamp**

Connect Between	Correct Result	For Diagnosis
A (GRY/BLK) & B (DK GRN/BLK)	Test Lamp Lights	See 1

- If results are correct, check/repair GRY/BLK (913) wire and DK GRN/BLK (914) wire for an open. If wires are good, replace Left Hand Headlight Door Motor Assembly.

1. Replace Headlight Control Unit.

C: RIGHT HEADLIGHT DOOR DOES NOT OPERATE PROPERLY

CONNECT: TEST LAMP
At: HEADLIGHT CONTROL UNIT CONNECTORS C1 (CONNECTED)
Condition:
- **Turn Headlights on while observing Test Lamp**

Connect Between	Correct Result	For Diagnosis
D (GRY) & C (DK GRN)	Test Lamp Lights	See 1

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- If results are correct, check/repair GRY (911) wire and DK GRN (912) wire for an open. If wires are good, replace Right Hand Headlight Door Motor Assembly.

1. Replace Headlight Control Unit.

CIRCUIT OPERATION

Voltage to open the Headlight Doors and to power the Solid State circuitry is applied to the Headlight Control Unit at all times at terminals B and E of C2. With the Light Switch in OFF, voltage to close the Headlight Doors is applied to terminal C of C2. With the Light Switch in HEAD, voltage is applied to terminal A of C2 to allow the Headlight doors to open.

When the Light Switch is moved to HEAD, voltage is applied to the relay coil. The relay contacts close and voltage is applied to the Headlight Door Motor Assemblies. Ground is provided for the motors through the solid state circuitry until the Headlight doors are open.

When the Light Switch is moved to OFF, voltage is reversed across the Headlight Door Motors. The motors run in the opposite direction to close the Headlight Doors. When the doors are closed, the solid circuitry senses the motors are not operating and ground is removed.