



1984

BMW 318i

Electrical

Troubleshooting

Manual

BMW of North America, Inc.
Montvale, New Jersey

FOREWORD

In the interests of continuing technical development work we reserve the right to modify designs and equipment.

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1984

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The purpose of this manual is to show electrical schematics in a manner that makes electrical troubleshooting easier. Electrical components which work together are shown together on one schematic. The Wiper-Washer schematic, for example, shows all of the electrical components in one diagram. At the top of the page is the fuse (positive) that powers the circuit. The flow of current is shown through all wires, connectors, switches, and motors to ground (negative) at the bottom of the page.

Within the schematic, all switches and sensors are shown "at rest," as though the Ignition Switch were off. For identification, component names are underlined and placed next to or above each component. Notes are included, describing how switches and other components work.

The power distribution schematic shows the current feed through all the connections from the Battery and Alternator to each fuse and the Ignition and Light Switches. If the Power Distribution schematic is combined with any other circuit schematic, a complete picture is made of how that circuit works. The Ground Distribution schematics show how several circuits are connected to common grounds.

All wiring between components is shown exactly as it exists in the vehicle; however, the wiring is not drawn to scale. To aid in understanding electrical operation, wiring inside complicated components has been simplified. The "Solid State" label designates electronic components.

WIRE SIZE CONVERSION CHART	
METRIC (CROSSSECTIONAL AREA IN MM ²)	AWG (AMERICAN WIRE GAUGE)
.5	20
.75	18
1	16
1.5	14
2	14
2.5	12
4	10
6	8
8	8
16	4
20	4
25	2
32	2

WIRE INSULATION	
ABBREVIATIONS	COLOR
BK	BLACK
BR	BROWN
RD	RED
YL	YELLOW
GN	GREEN
BU	BLUE
VI	VIOLET
GY	GRAY
WT	WHITE
PK	PINK

4 SYMBOLS



ENTIRE COMPONENT SHOWN



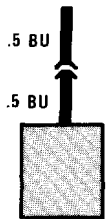
PART OF A COMPONENT SHOWN



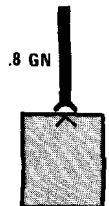
COMPONENT WITH SCREW TERMINALS



SOLID STATE (INCLUDES ONLY ELECTRONIC PARTS)



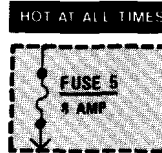
CONNECTOR ON COMPONENT LEAD (PIGTAIL)



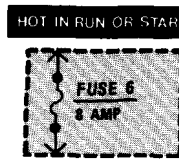
CONNECTOR ATTACHED TO COMPONENT



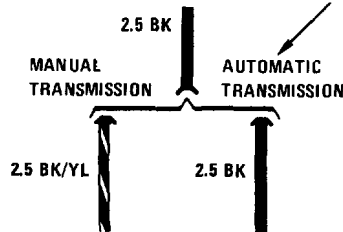
COMPONENT CASE IS DIRECTLY ATTACHED TO METAL PART OF CAR (GROUNDED)



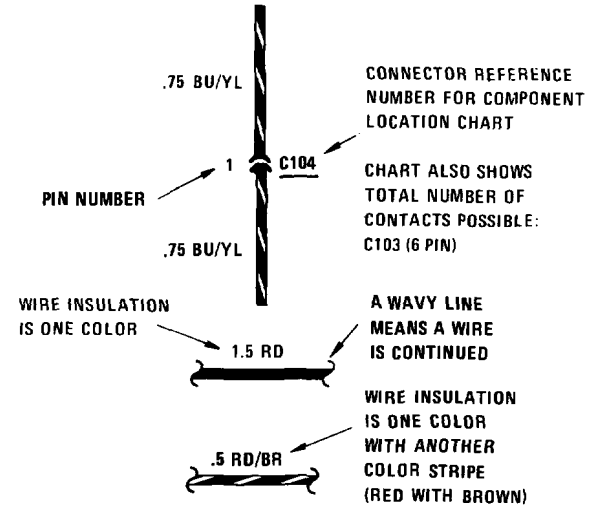
INDICATES THAT FUSE 5 IS ALWAYS SUPPLIED WITH POWER



INDICATES THAT FUSE 6 IS SUPPLIED WITH POWER WITH THE IGNITION SWITCH IN THE RUN OR START POSITIONS



WIRE CHOICES FOR OPTIONS ARE SHOWN AND LABELED

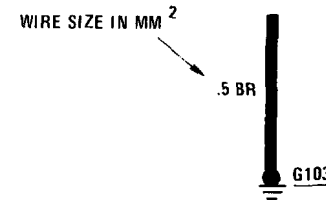


CONNECTOR REFERENCE NUMBER FOR COMPONENT LOCATION CHART

CHART ALSO SHOWS TOTAL NUMBER OF CONTACTS POSSIBLE: C103 (6 PIN)

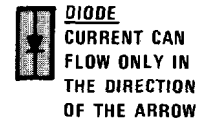
A WAVY LINE MEANS A WIRE IS CONTINUED

WIRE INSULATION IS ONE COLOR WITH ANOTHER COLOR STRIPE (RED WITH BROWN)



WIRE IS ATTACHED TO METAL PART OF CAR (GROUNDED) GROUND IS NUMBERED FOR REFERENCE ON COMPONENT LOCATION CHART

OTHER CIRCUITS THAT SHARE A GROUND ARE SHOWN IN GROUND DISTRIBUTION

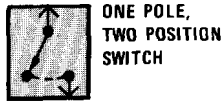


DIODE CURRENT CAN FLOW ONLY IN THE DIRECTION OF THE ARROW

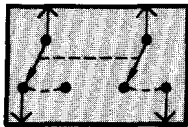
CIRCUIT REFERENCE - A WIRE WHICH CONNECTS TO ANOTHER CIRCUIT



ACTIVE CHECK CONTROL

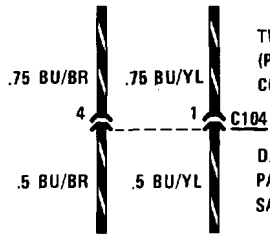


**ONE POLE,
TWO POSITION
SWITCH**



**SWITCHES THAT
MOVE TOGETHER**

DASHED LINE SHOWS
A MECHANICAL
CONNECTION
BETWEEN SWITCHES



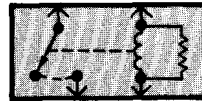
**TWO CONNECTIONS
(PINS) IN THE SAME
CONNECTOR**

**DASHED LINE SHOWS
PARTS OF THE
SAME CONNECTOR**



**WHEN COIL IS
ENERGIZED, SWITCH
IS PULLED CLOSED**

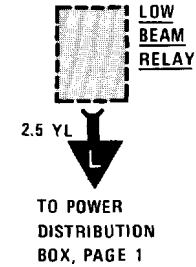
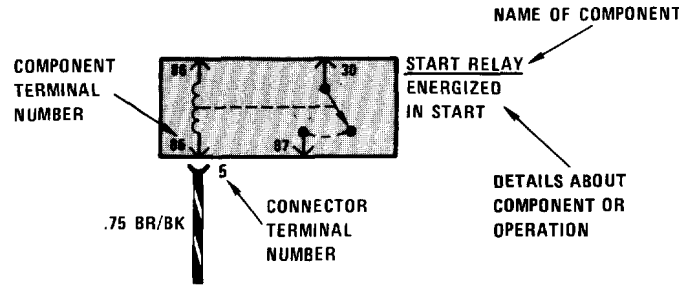
**RELAY SHOWN
WITH NO
CURRENT
FLOWING
THROUGH
COIL**



**RELAY SHOWN
WITH RESISTOR
ACROSS COIL**

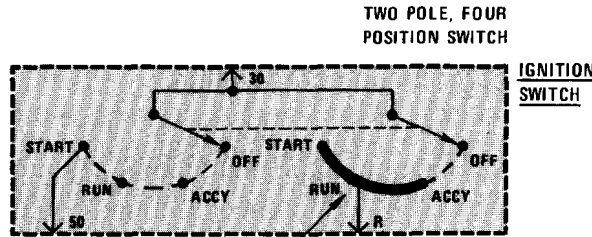
RESISTOR ACROSS COIL
IS FOR NOISE
SUPPRESSION

**RELAY SHOWN
WITH RESISTOR
ACROSS COIL**

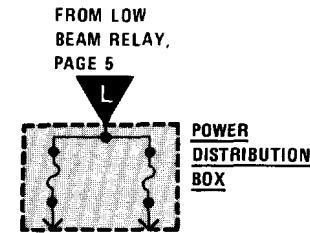


**TO POWER
DISTRIBUTION
BOX, PAGE 1**

**CURRENT PATH
IS CONTINUED
AS LABELED.
THE ARROW SHOWS
DIRECTION OF CURRENT
FLOW AND IS REPEATED
WHERE CURRENT
PATH CONTINUES.**

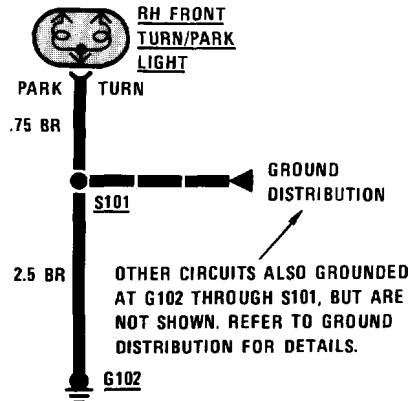


**"R" IS ENERGIZED
IN ACCY, RUN OR START**



**FROM LOW
BEAM RELAY,
PAGE 5**

**POWER
DISTRIBUTION
BOX**



**LIGHT
EMITTING
DIODE**

6 SYSTEMATIC TROUBLESHOOTING

TROUBLESHOOTING PROCEDURE

1. Verify the Problem

Operate the problem circuit to check the accuracy of the complaint. Note the symptoms of the inoperative circuit.

2. Analyze the Problem

Refer to the schematic of the problem circuit in the ETM. Determine how the circuit is supposed to work by tracing the current path(s) from the power feed through the circuit components to ground. Then based on the symptoms you noted in step 1 and your understanding of circuit operation, identify one or more possible causes of the problem.

3. Isolate the Problem

Make circuit tests to prove or disprove the preliminary diagnosis made in step 2. Keep in mind that a logical simple procedure is the key to efficient troubleshooting. Test for the most likely cause of failure first. Try to make tests at points which are easily accessible.

4. Repair the Problem

Once the specific problem is identified, make the repair using the proper tools and safe procedures.

5. Check the Problem

Operate the circuit to check for satisfactory circuit operation. Good repair practice calls for rechecking all circuits you have worked on.

TROUBLESHOOTING TOOLS

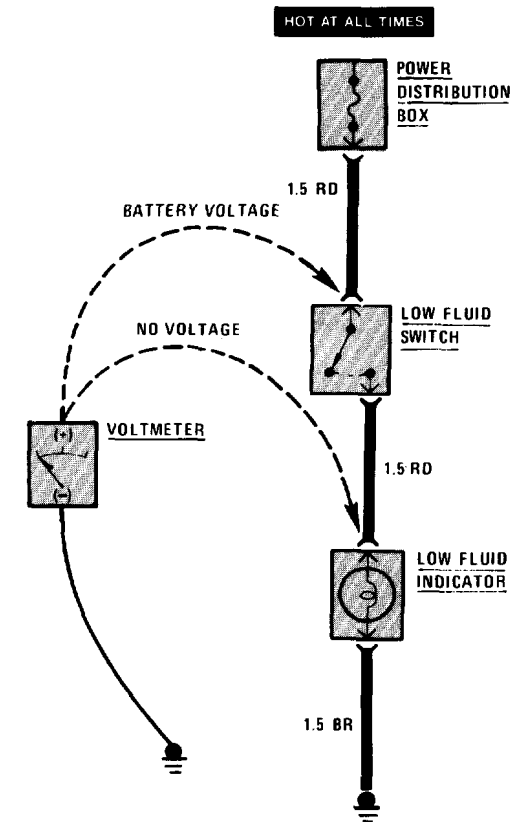
Isolating the problem (Step 3 of TROUBLESHOOTING PROCEDURES) requires the use of a **voltmeter** and/or **ohmmeter**. A voltmeter measures voltage at selected points in a circuit. An ohmmeter measures a circuit's resistance to current flow. It has an internal battery that provides current to the circuit under test. Disconnect the car battery when using an ohmmeter because the battery voltage will cause the ohmmeter to give false readings. Also, do not use an ohmmeter on solid-state components. The voltage that the ohmmeter applies to the circuit could damage these components.

TROUBLESHOOTING TESTS

Voltage Test

This test measures voltage in a circuit. By taking measurements at several points (terminals or connectors) along the circuit, you can isolate the problem.

To take a voltage measurement, connect the negative lead of the voltmeter to the battery's negative terminal or other known good ground. Then connect the positive lead of the voltmeter to the point you want to test. The voltmeter will measure the voltage present at that point in the circuit.

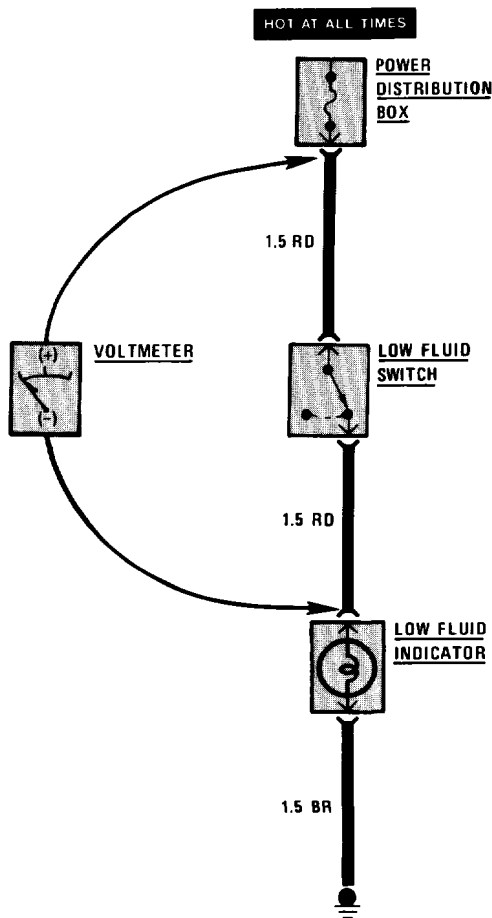


Voltage Test

Voltage Drop Test

Wires, connectors, and switches are designed to conduct current with a minimum loss of voltage. A voltage drop of more than one volt indicates a problem.

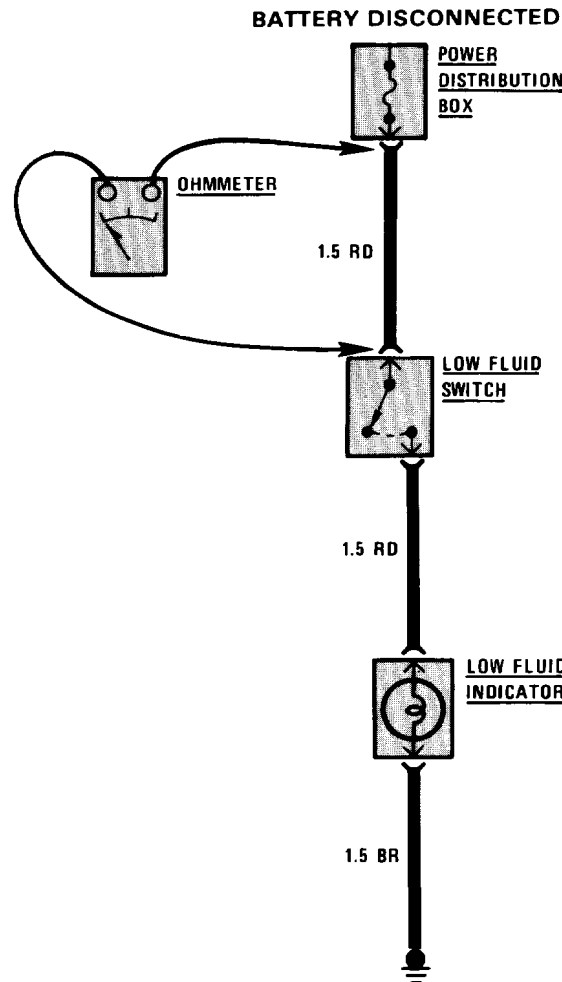
To test for voltage drop, connect the voltmeter leads to connectors at either end of the circuit's suspected problem area. The positive lead should be connected to the connector closest to the power source. The voltmeter will show the voltage drop between these two points.



Voltage Drop Test

Continuity Test

To perform a continuity test, first disconnect the car battery. Then adjust the ohmmeter to read zero while holding the leads together. Connect the ohmmeter leads to connector or terminals at either end of the circuit's suspected problem area. The ohmmeter will show the resistance across that part of the circuit.

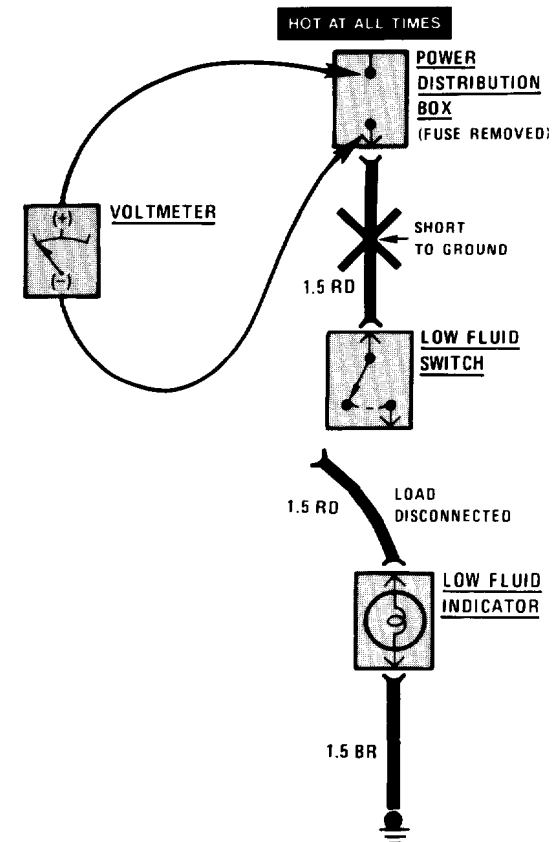


Continuity Test

Short Test Using Voltmeter

Remove the blown fuse and disconnect the load. Connect the voltmeter leads to the fuse terminals. The positive lead should be connected to the terminal closest to the power source.

Starting near the POWER DISTRIBUTION BOX, move the wire harness back and forth and watch the voltmeter reading. If the voltmeter registers a reading, there is a short to ground in the wiring. Somewhere in the area of the harness being moved, the wire insulation is worn away and the circuit is grounding.



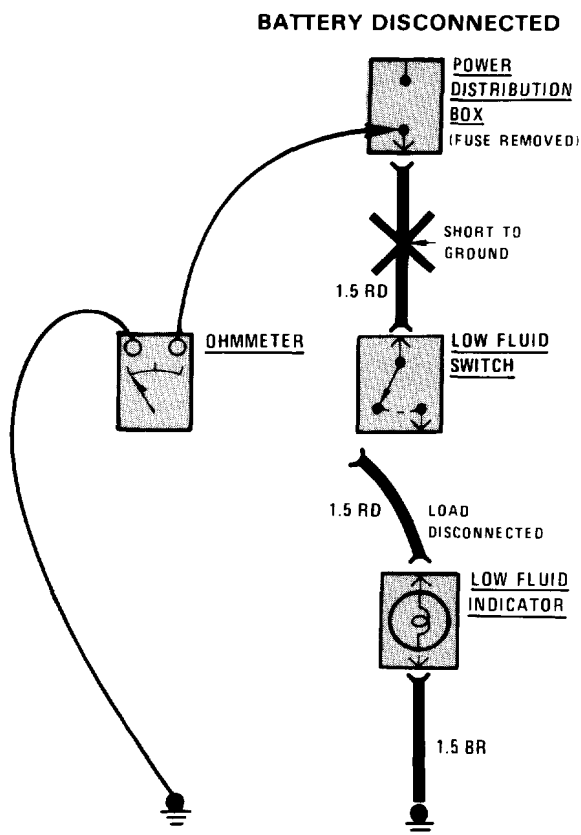
Short Test Using Voltmeter

8 SYSTEMATIC TROUBLESHOOTING

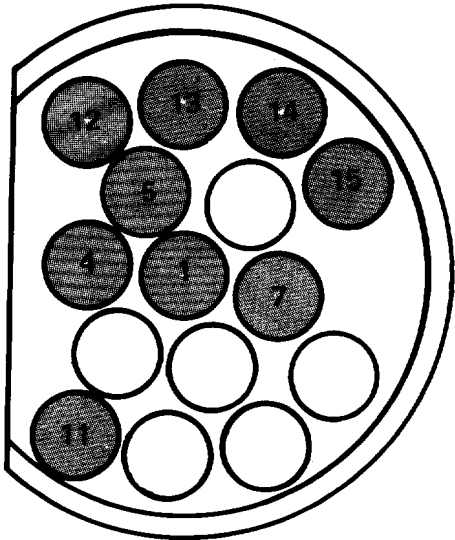
Short Test Using Ohmmeter

Disconnect the battery. Adjust the ohmmeter to read zero while holding the leads together. Remove the blown fuse and disconnect the load. Connect one lead of the ohmmeter to the fuse terminal that is closest to the load. Connect the other lead to a known good ground.

Starting near the POWER DISTRIBUTION BOX, move the wire harness back and forth and watch the ohmmeter reading. Low or no resistance indicates a short to ground in the wiring. Infinitely high resistance indicates no short.



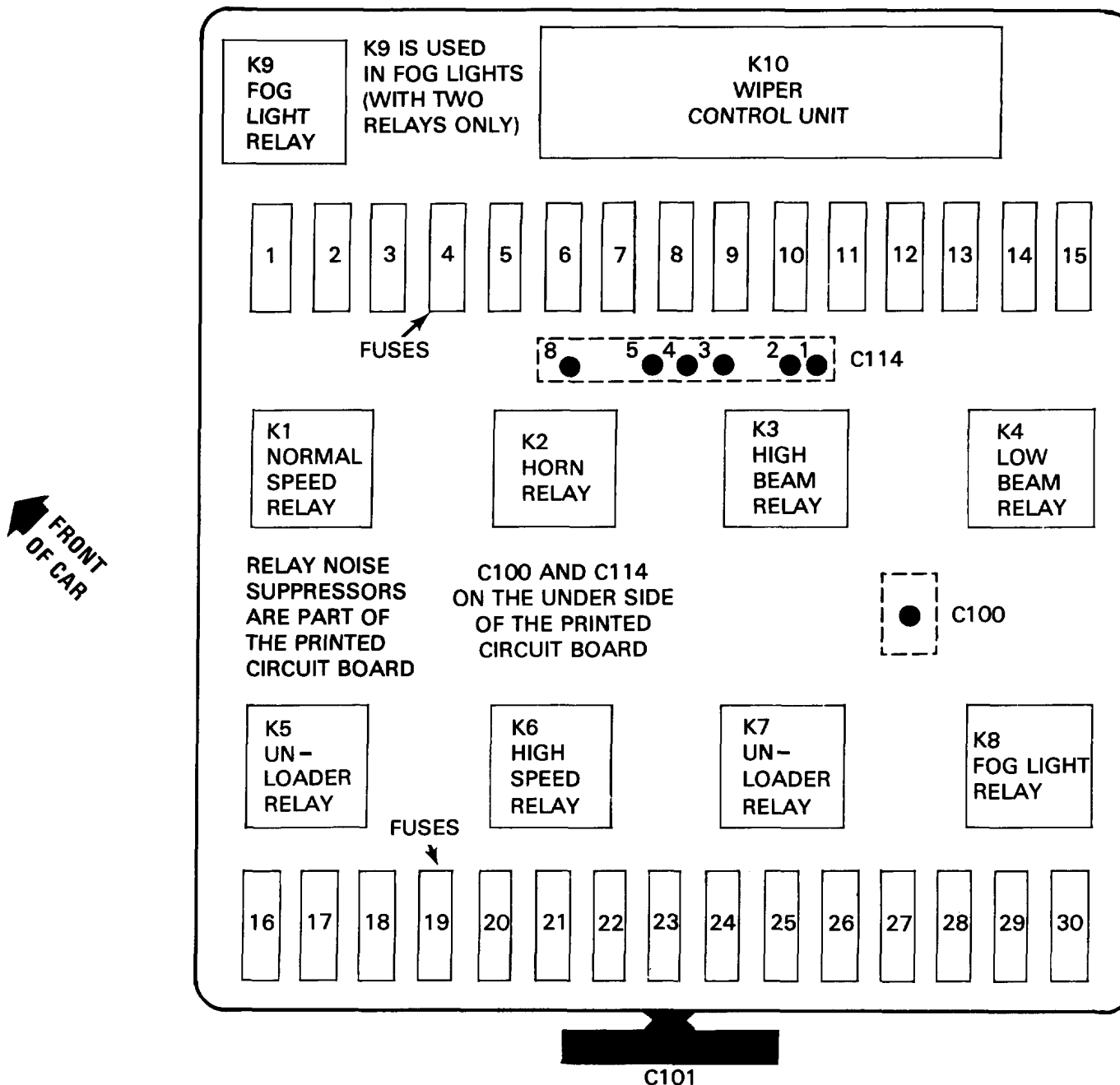
Short Test Using Ohmmeter



DIAGNOSTIC CONNECTOR

PIN	WIRE SIZE	WIRE COLOR	CIRCUIT AND COMPONENT CONNECTED
1	1.5	BR	Ground Distribution G101
4	.5	BR/VI	Gauges/Warning Indicators, Coolant Temperature Sender.
5	.5	WT/GN	Fuel Control, Injector Control Module (Fuel Rate)
7	.5	WT/BU	Service Interval Indicator, Service Interval Processor (Reset).
11	2.5	BK/YL	Start, Start Signal.
12	.75	BU	Charge System, Alternator.
13	.75	BK	Ignition, Ignition Coil.
14	2.5	RD	Charge System, Alternator.
15	1.5	GN/YL	Idle Speed Control, Idle Speed Control Unit.

102 POWER DISTRIBUTION BOX



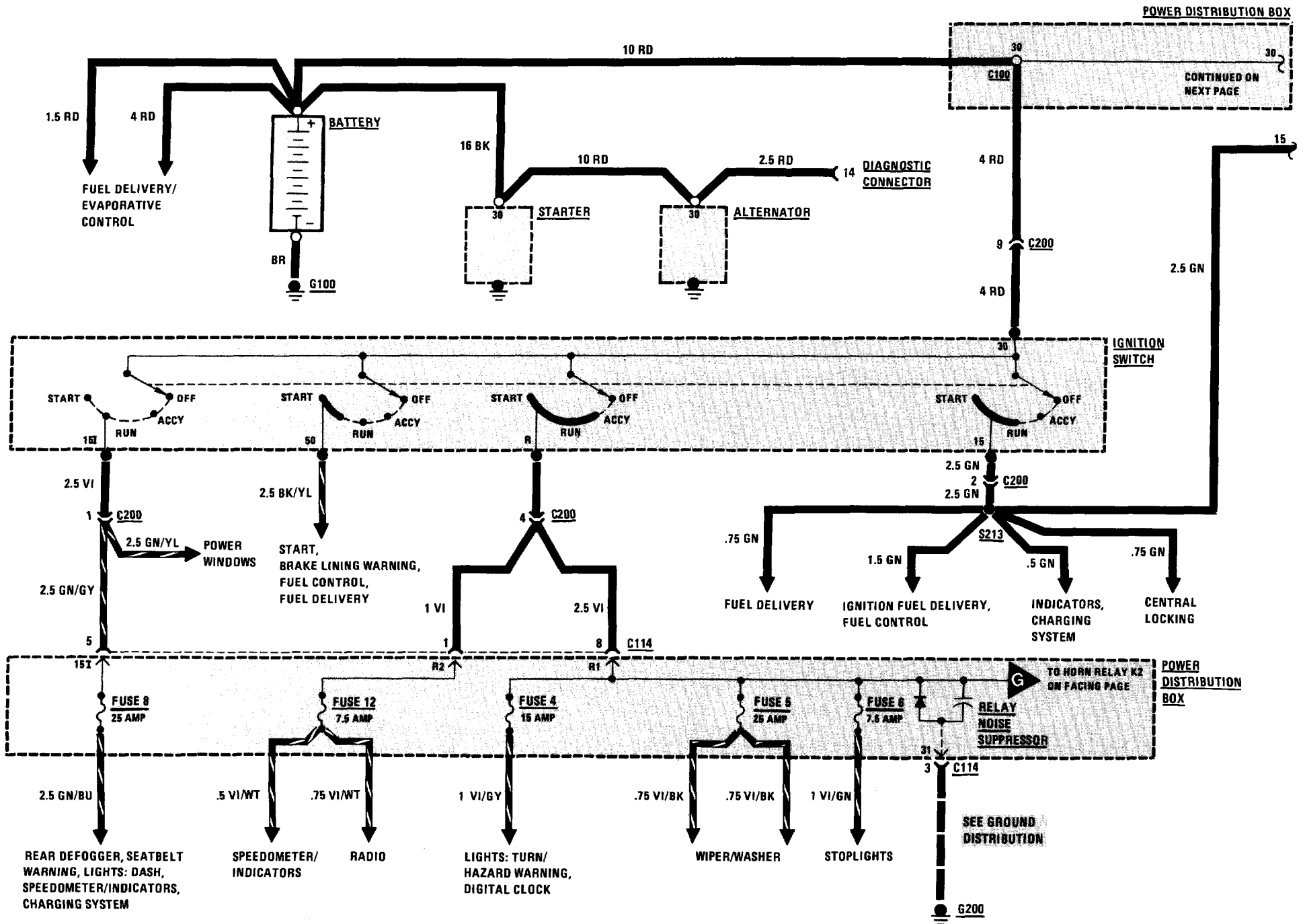
C101
Figure 1 - Behind Left Front Shock Tower

FUSE NO.	SIZE/ COLOR	CIRCUIT NAME
1	7.5A (BR)	Headlights (also fuses 2, 13, 16).
2	7.5A (BR)	Headlights (also fuses 1, 13, 14).
3	15A (LT BLU)	Auxiliary Fan (also fuse 18).
4	15A (LT BU)	Lights: Turn/Hazard Warning (also fuse 24).
5	25A (WT)	Wiper/Washer.
6	7.5A (BR)	Stoplights.
7	15A (LT BU)	Horn.
8	25A (WT)	Lights: Dash Rear Defogger; Seatbelt Warning (also fuse 10); Speedometer/Indicators (also fuse 12).
9	15A (LT BU)	Idle Speed Control/Vacuum Advance; Backup Lights.
10	7.5A (BR)	Seatbelt Warning (also fuse 8); Service Interval Indicator (also fuse 24); Tachometer/Fuel Economy Gauges (also fuse 24); Gauges/Indicators; Brake Warning System.
11	15A (LT BU)	Fuel Delivery.
12	7.5A (BR)	Radio (also fuse 21); Speedometer/Indicators (also fuse 8).
13	7.5A (BR)	Headlights (also fuses 1, 2, 14).
14	7.5A (BR)	Headlights (also fuses 1, 2, 13).
15		Not Used.
16		Not Used.
17	15A (LT BU)	Accessory Connector.(Not Used)
18	30A (LT GN)	Auxiliary Fan (also fuses 3, 19).
19	7.5A (BR)	Auxiliary Fan (also fuses 3, 18); Interior Lights (also fuses 21, 22, 27). Power Mirrors.

FUSE NO.	SIZE/ COLOR	CIRCUIT NAME
20	30A (LT GN)	Heater/Air Conditioning (also fuse 28).
21	7.5A (BR)	Auto-Charging Flashlight; Digital Clock; Glove Box Light; Ignition Key Warning; Interior Lights (also fuses 14, 22, 27); Radio (also fuses 12); Trunk Light.
22	7.5A (BR)	Interior Lights (also fuses 19, 21, 27); Lights: Front Park/Tail; Lights: Front Side Marker.
23	7.5A (BR)	Lights: Dash; Lights: Front Park/Tail; Lights: Front Side Marker; Lights: Rear Marker/License.
24	15A (LT BU)	Lights: Turn/Hazard Warning (also fuse 4); Tachometer/Fuel Economy Gauges (also fuse 10); Service Interval Indicator (also fuse 10).
25	25A (WT)	Not Used.
26	25A (WT)	Not Used.
27	25A (WT)	Interior Lights (also fuses 19, 21, 22). Central Locking.
28	25A (WT)	Cigar Lighter; Power Antenna.
29	7.5A (BR)	Fog Lights.
30	7.5A (BR)	Fog Lights.

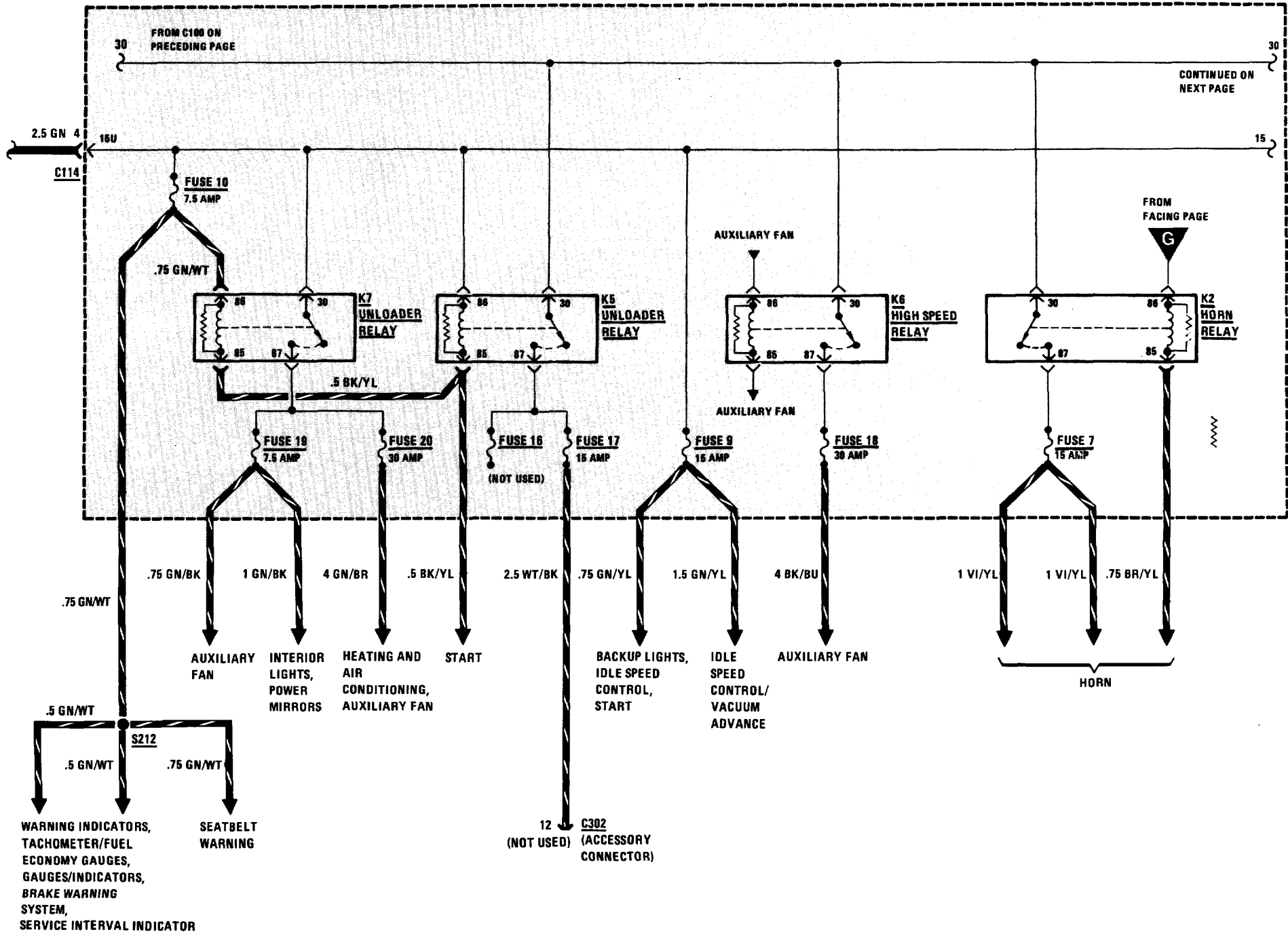
104 POWER DISTRIBUTION

(For Component Locations See Page 201)



(For Component Locations See Page 201)

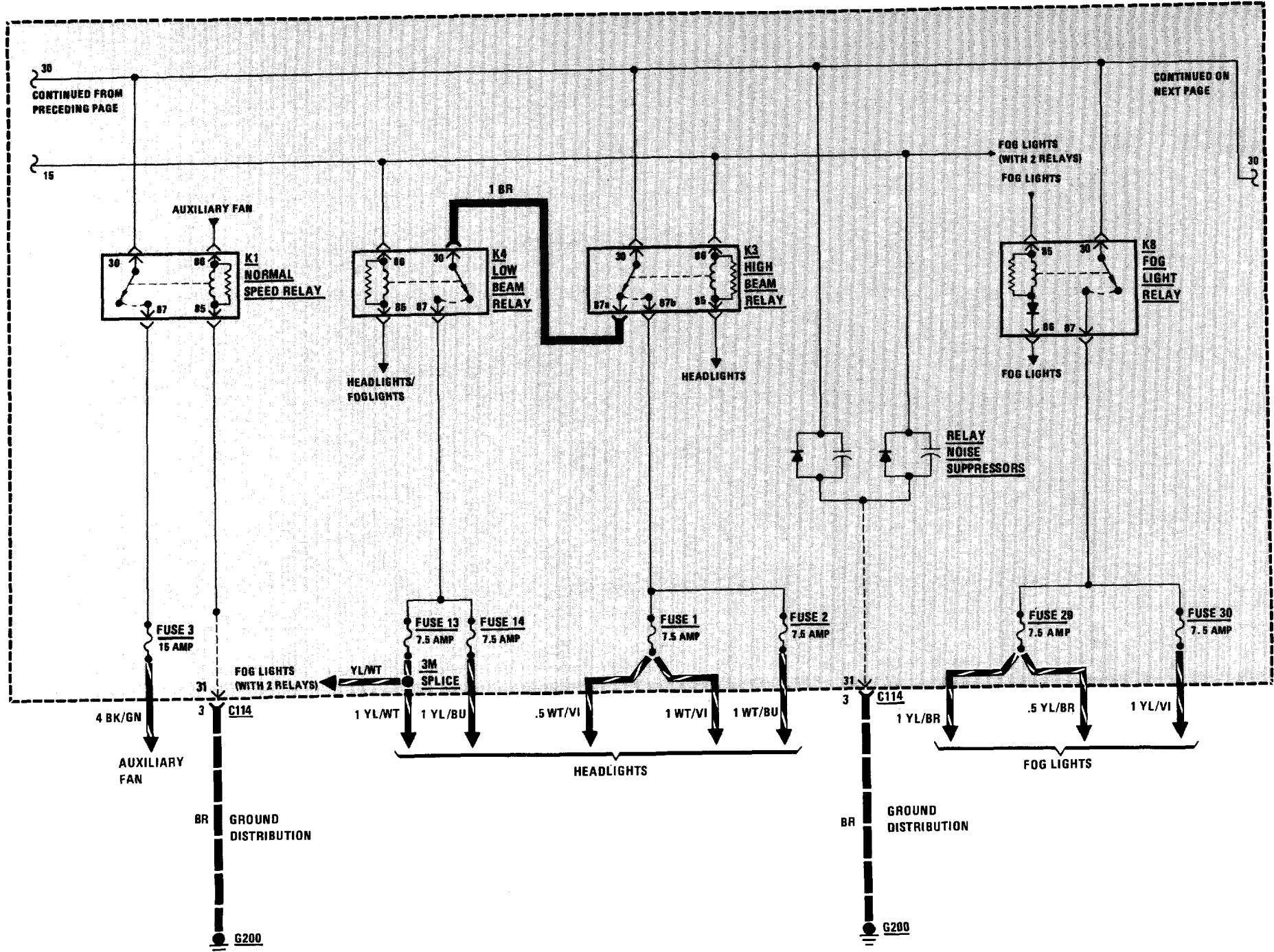
POWER DISTRIBUTION BOX



106 POWER DISTRIBUTION

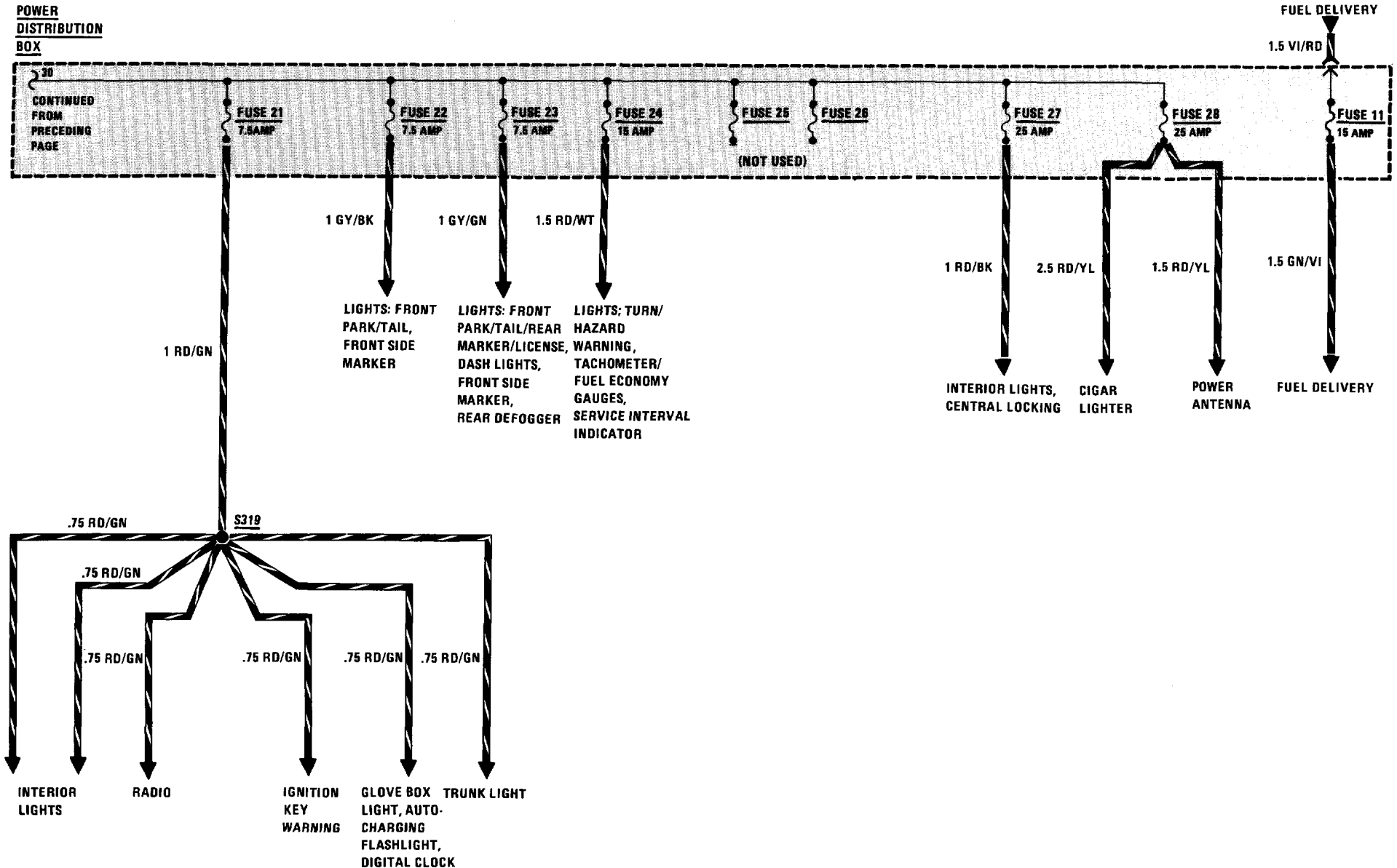
(For Component Locations See Page 201)

POWER DISTRIBUTION BOX

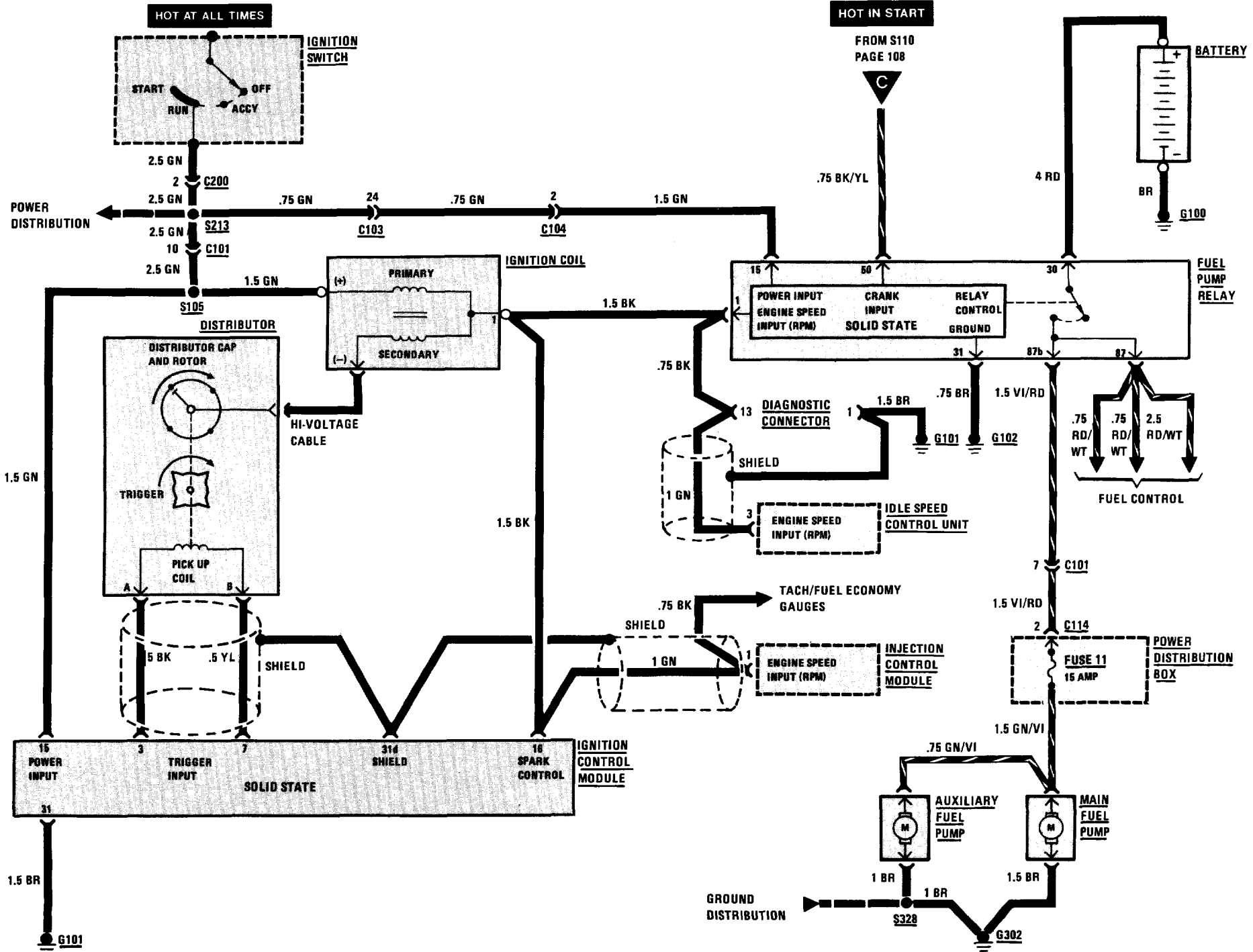


(For Component Locations See Page 201)

POWER DISTRIBUTION BOX

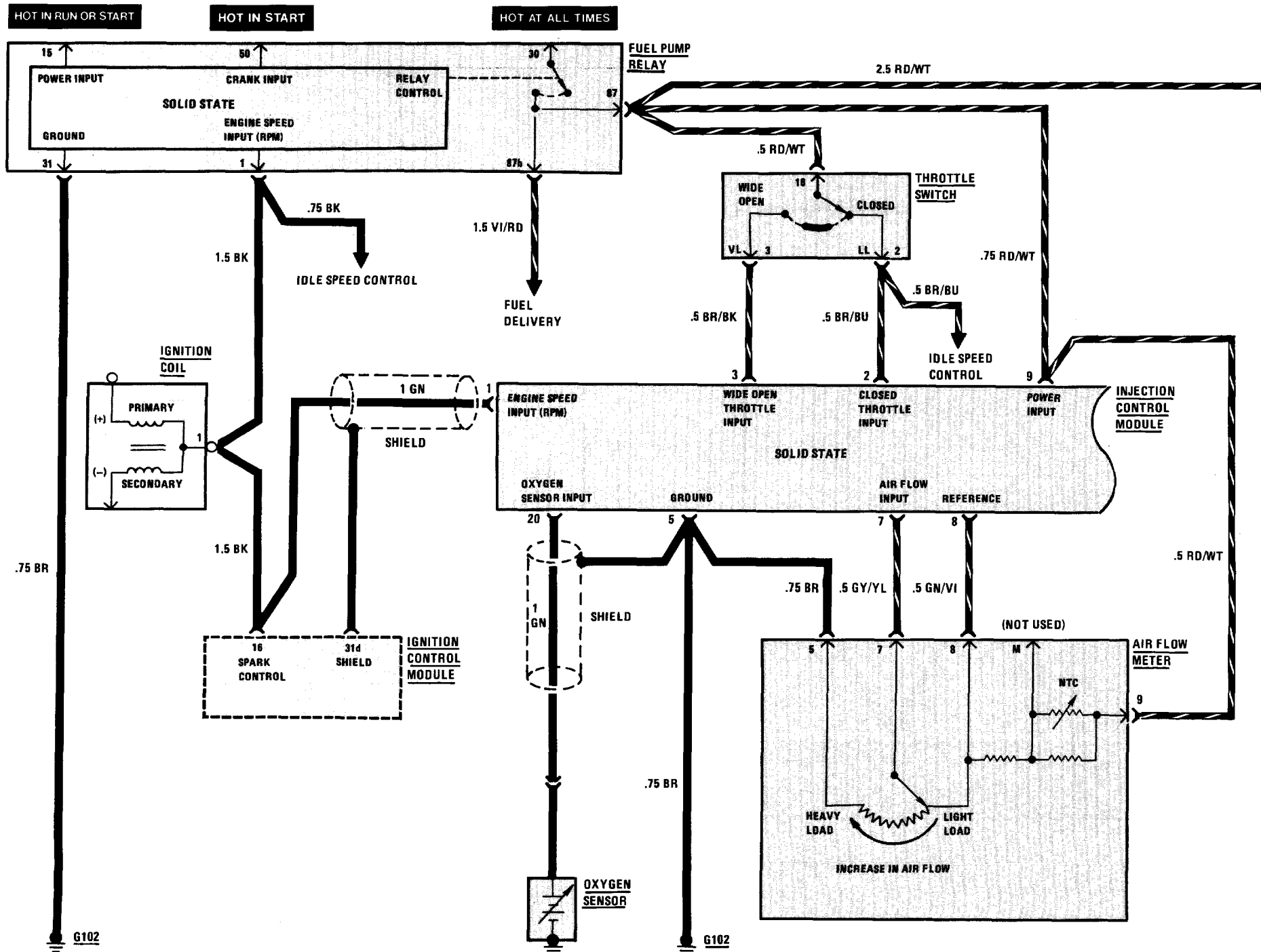


(For Component Locations See Page 201)

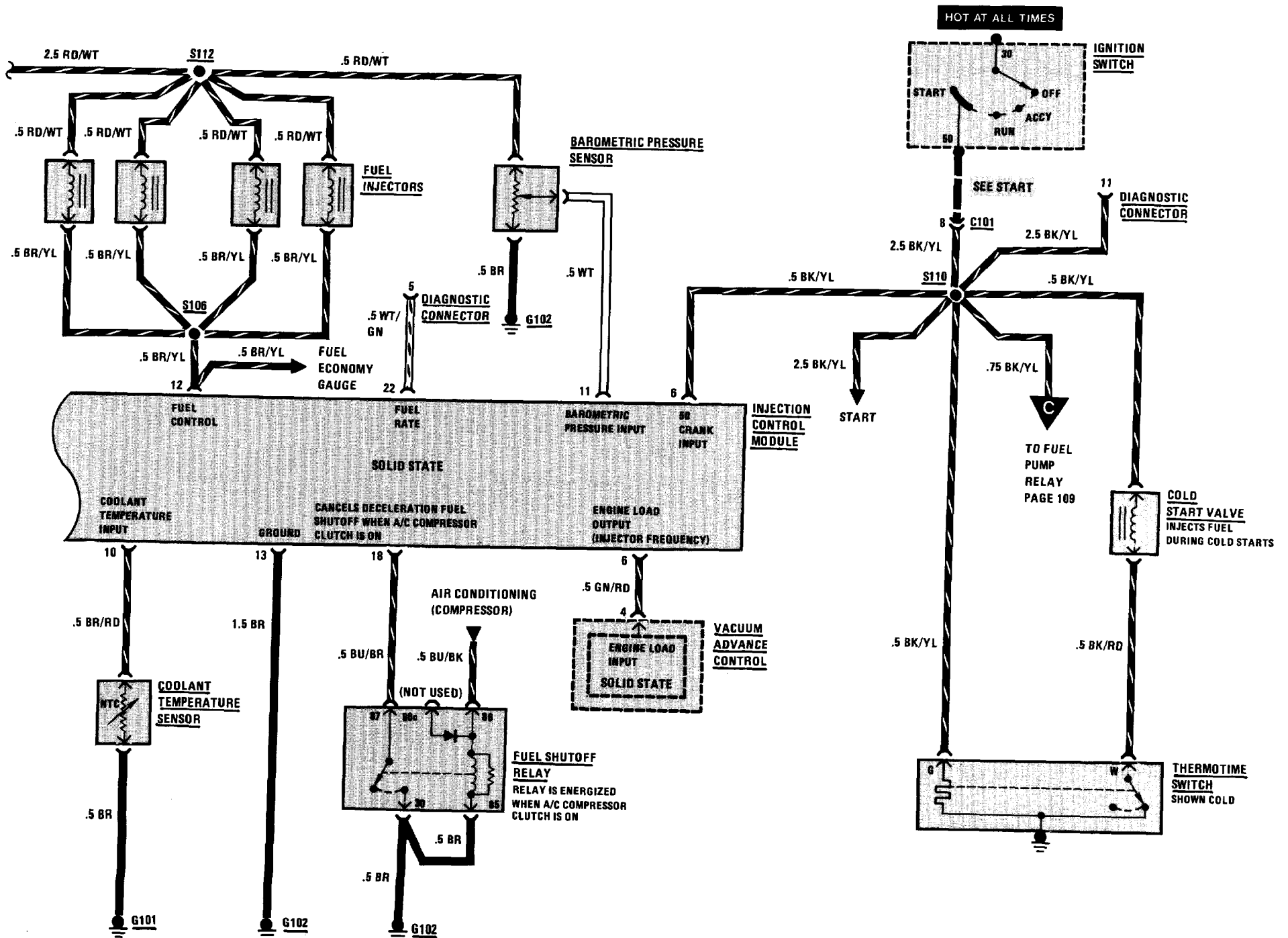


110 FUEL CONTROL

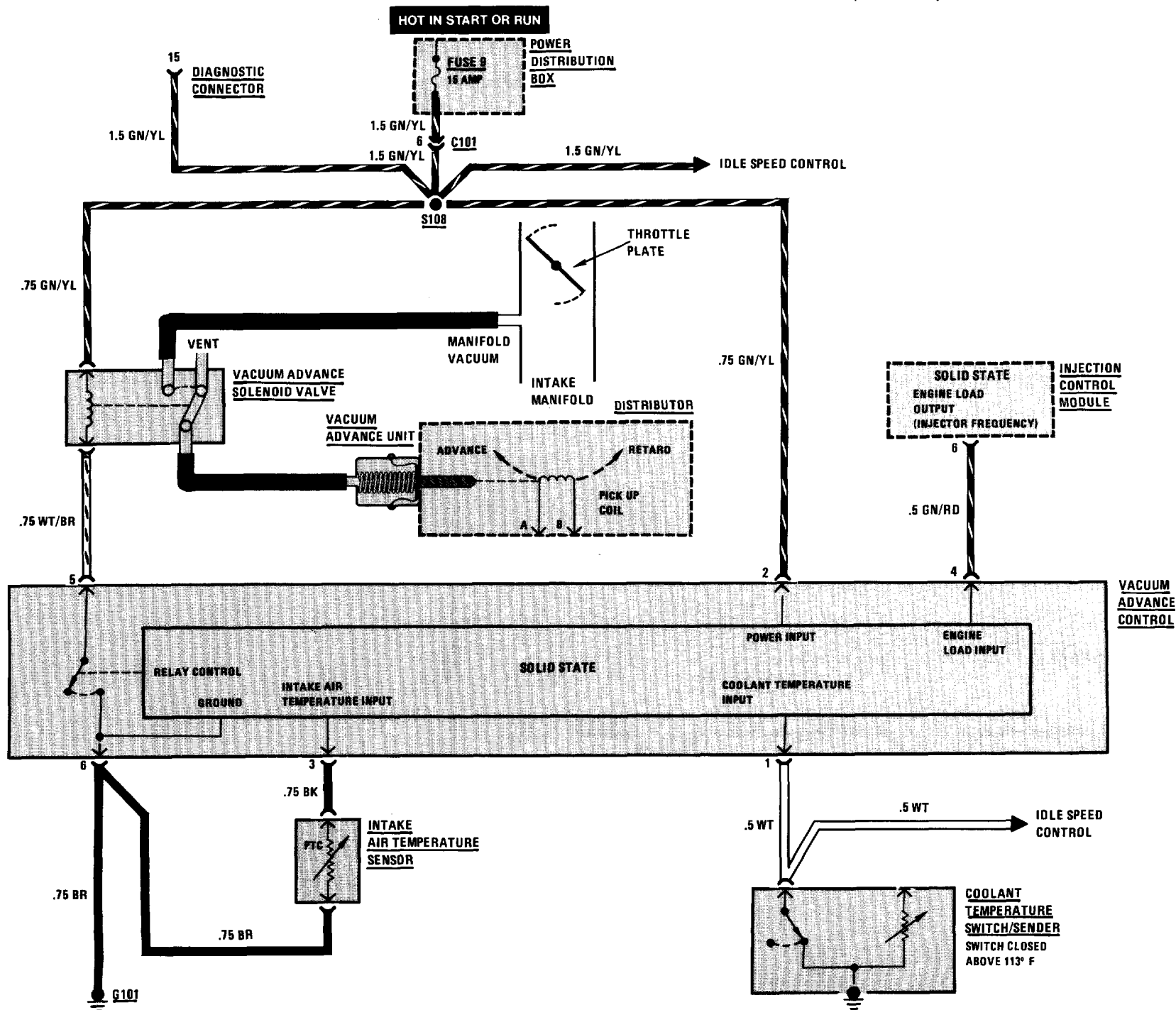
(For Component Locations See Page 202)



(For Component Locations See Page 202)

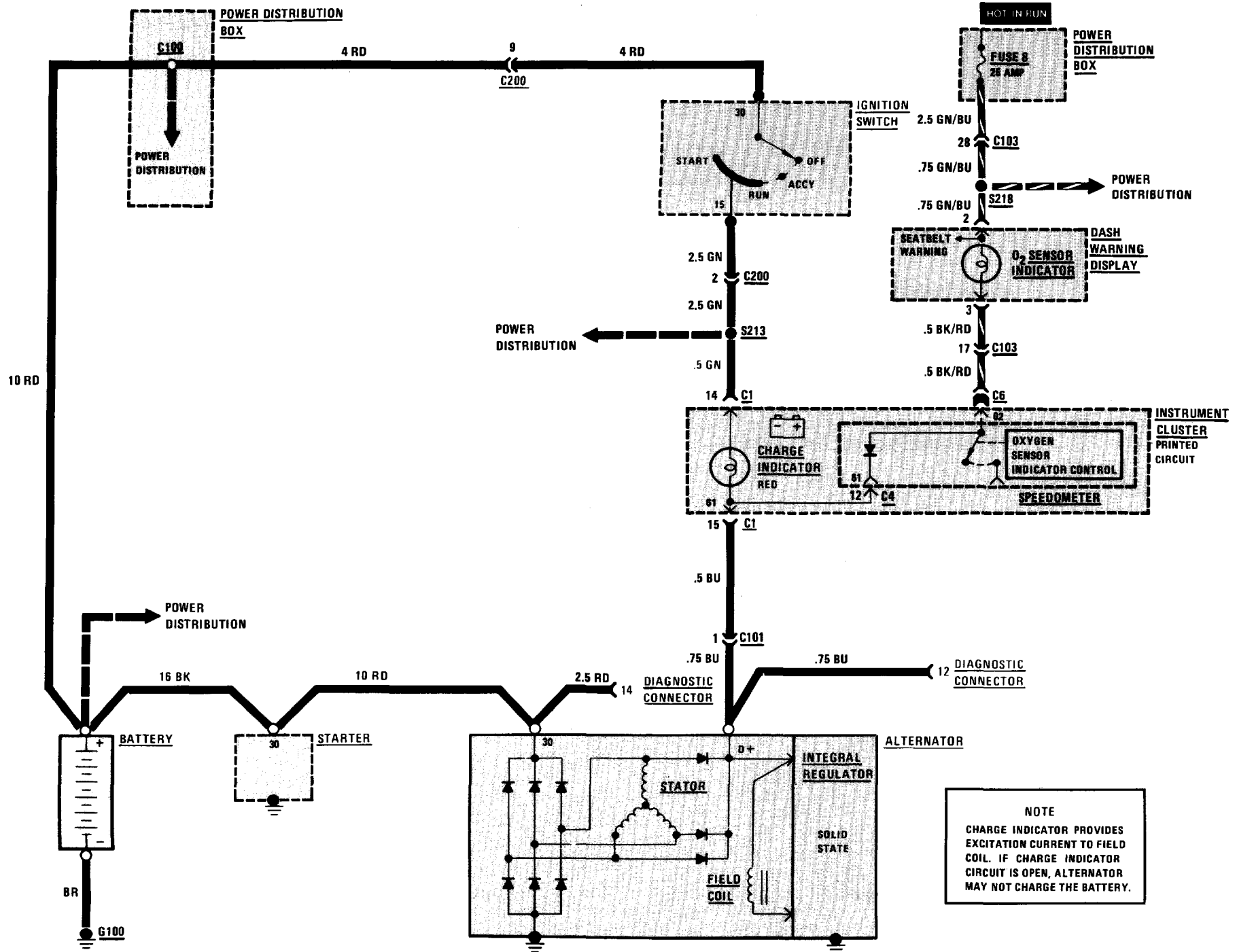


(For Component Locations See Page 203)



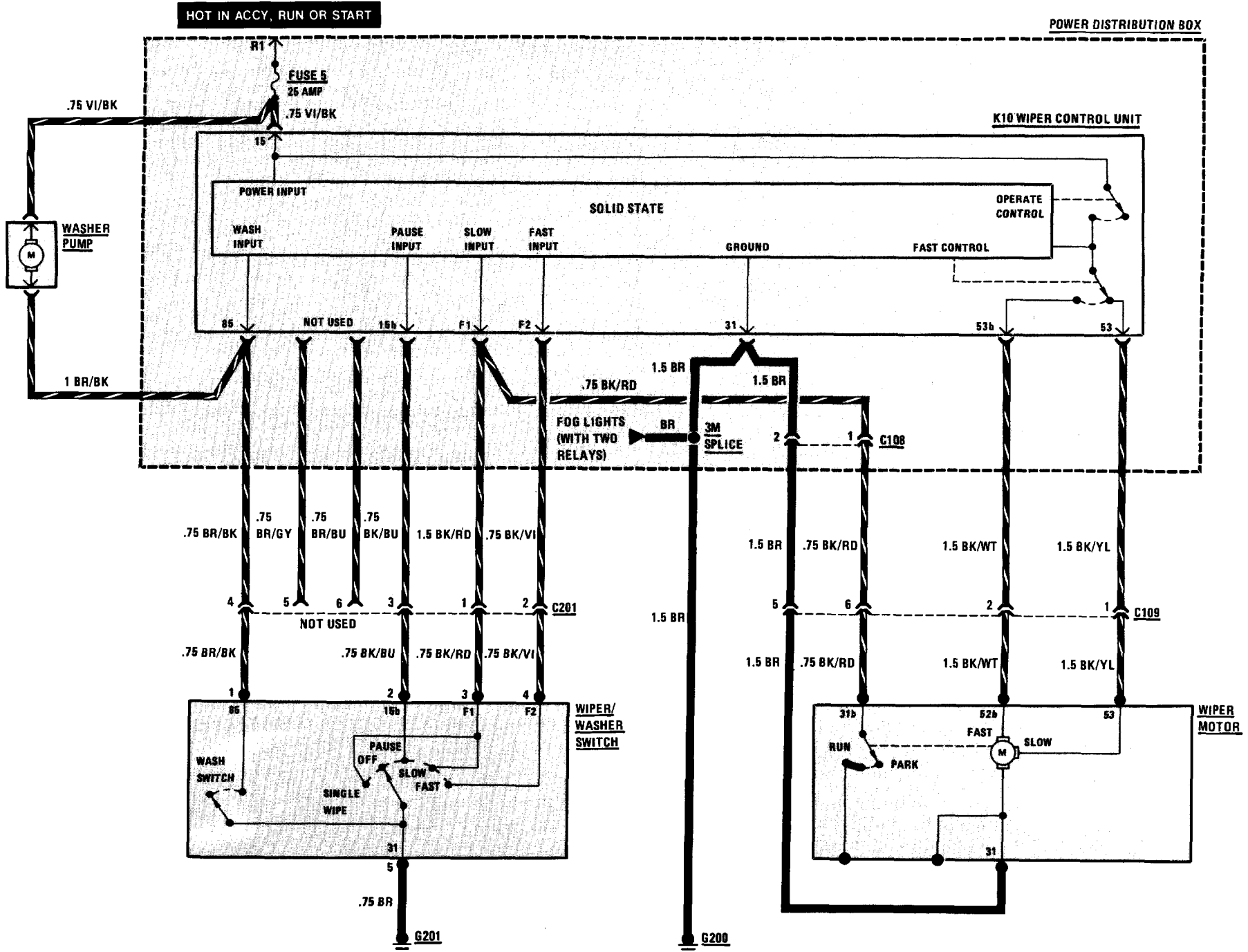
114 CHARGING SYSTEM

(For Component Locations See Page 203)



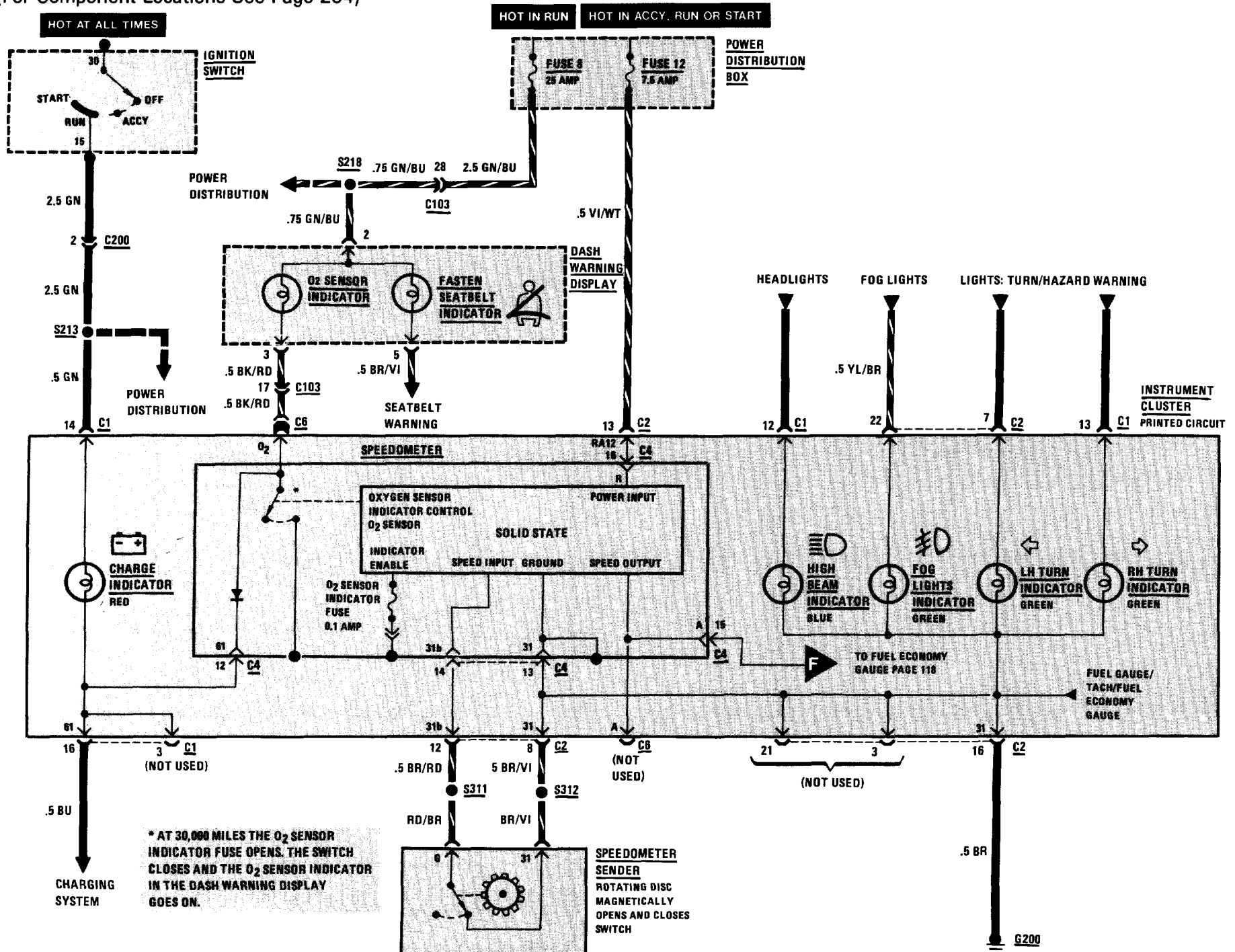
NOTE
 CHARGE INDICATOR PROVIDES EXCITATION CURRENT TO FIELD COIL. IF CHARGE INDICATOR CIRCUIT IS OPEN, ALTERNATOR MAY NOT CHARGE THE BATTERY.

(For Component Locations See Page 203)

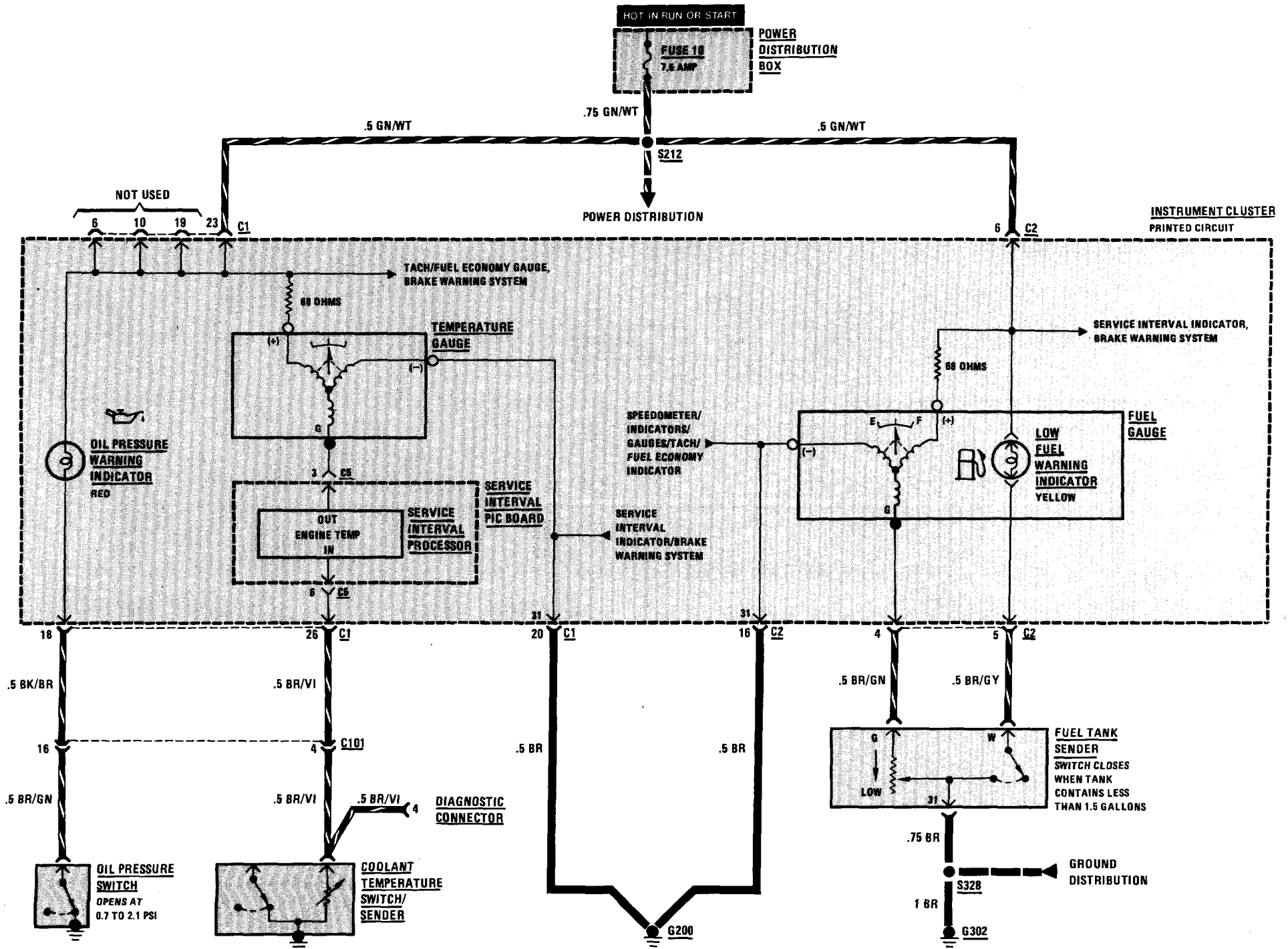


116 SPEEDOMETER/INDICATORS

(For Component Locations See Page 204)

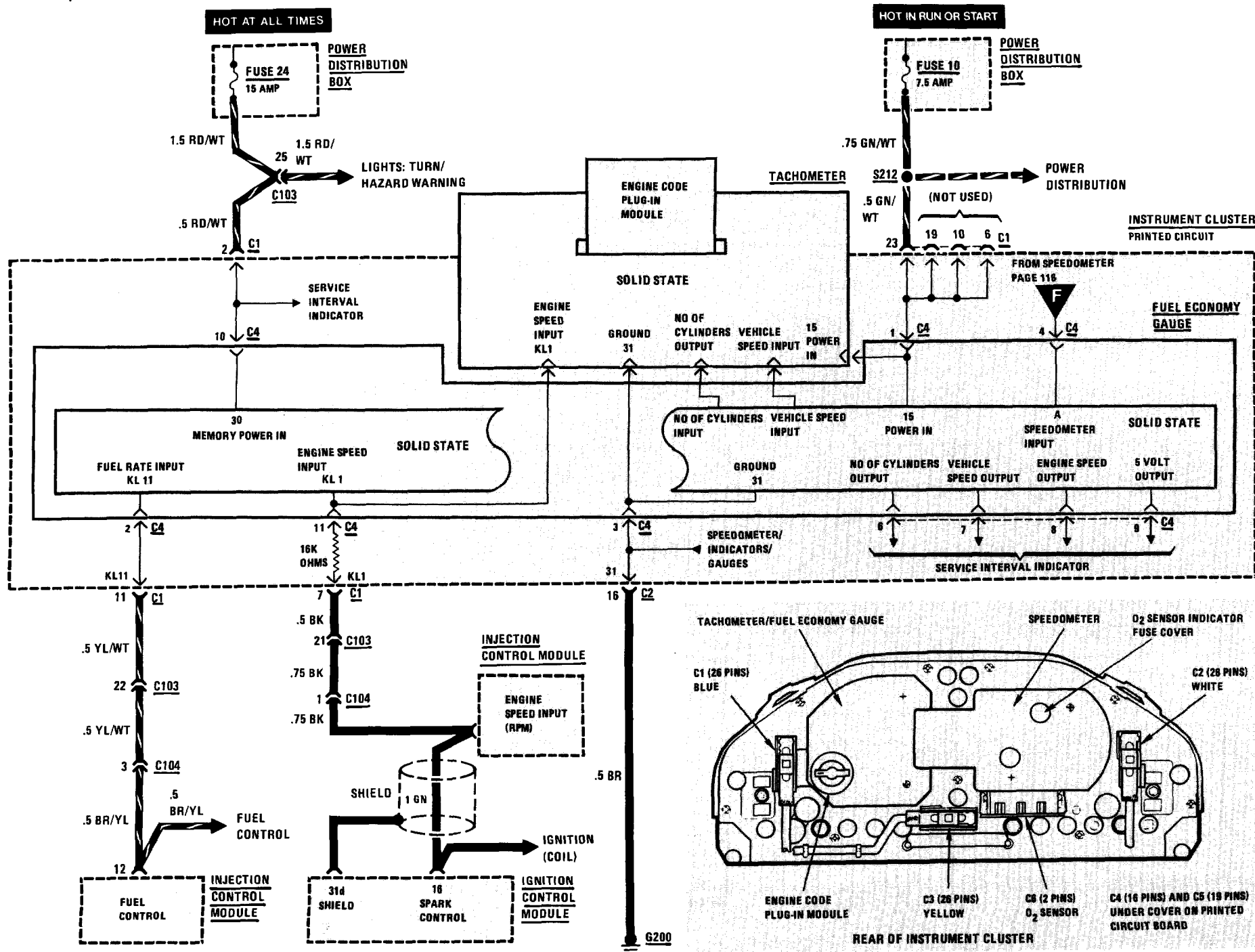


(For Component Locations See Page 204)

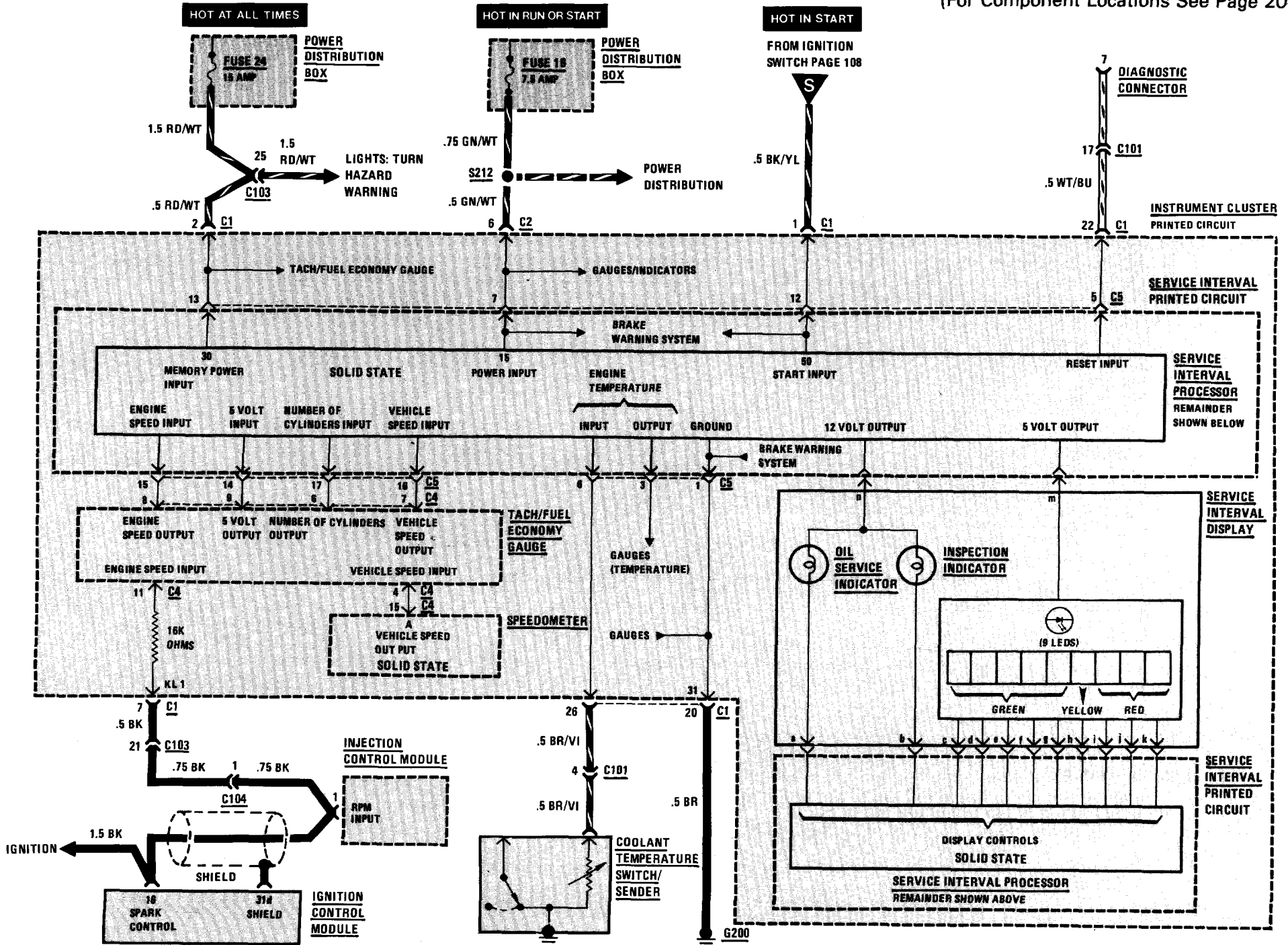


118 TACHOMETER/FUEL ECONOMY GAUGE

(For Component Locations See Page 204)

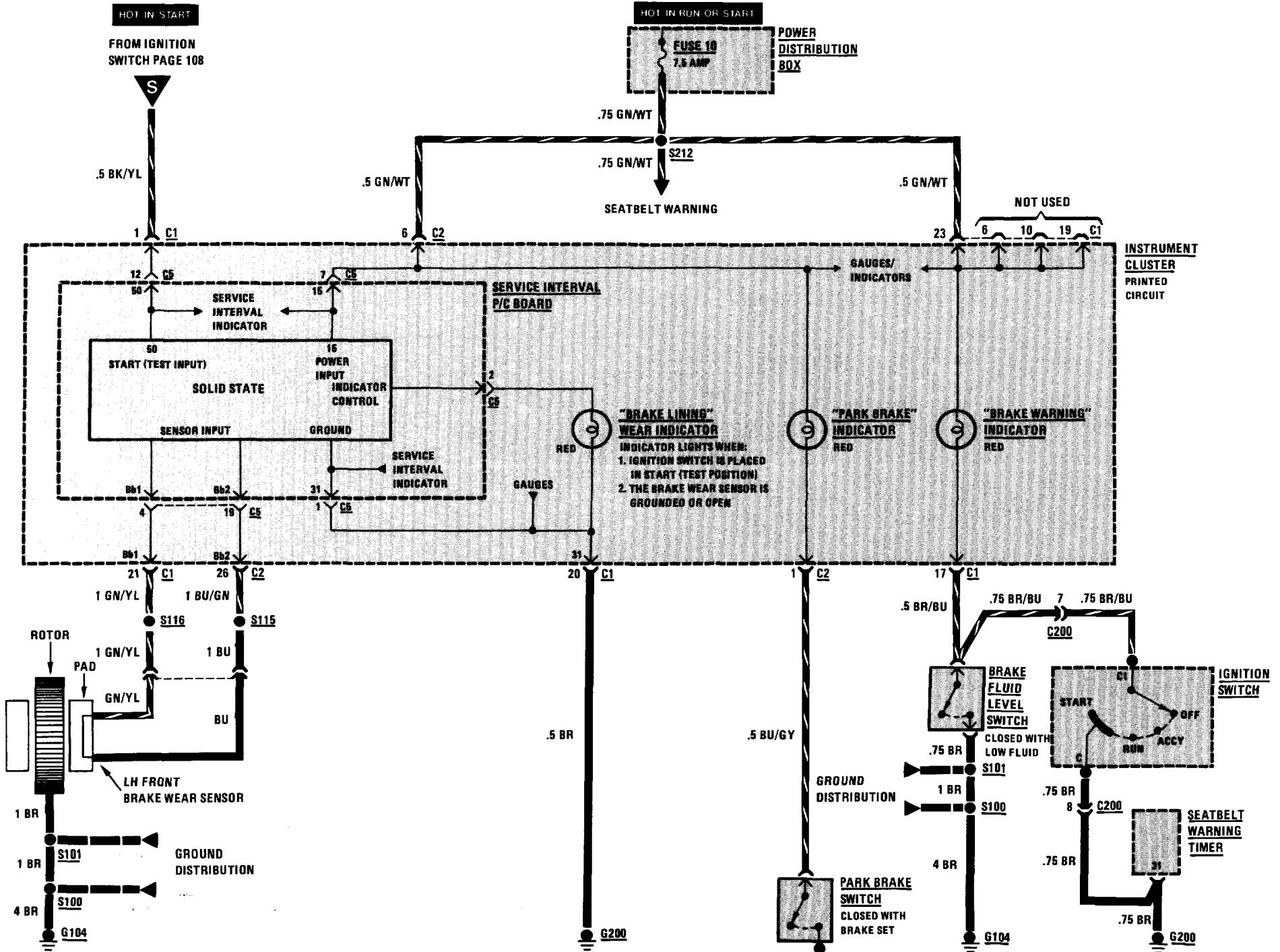


(For Component Locations See Page 204)



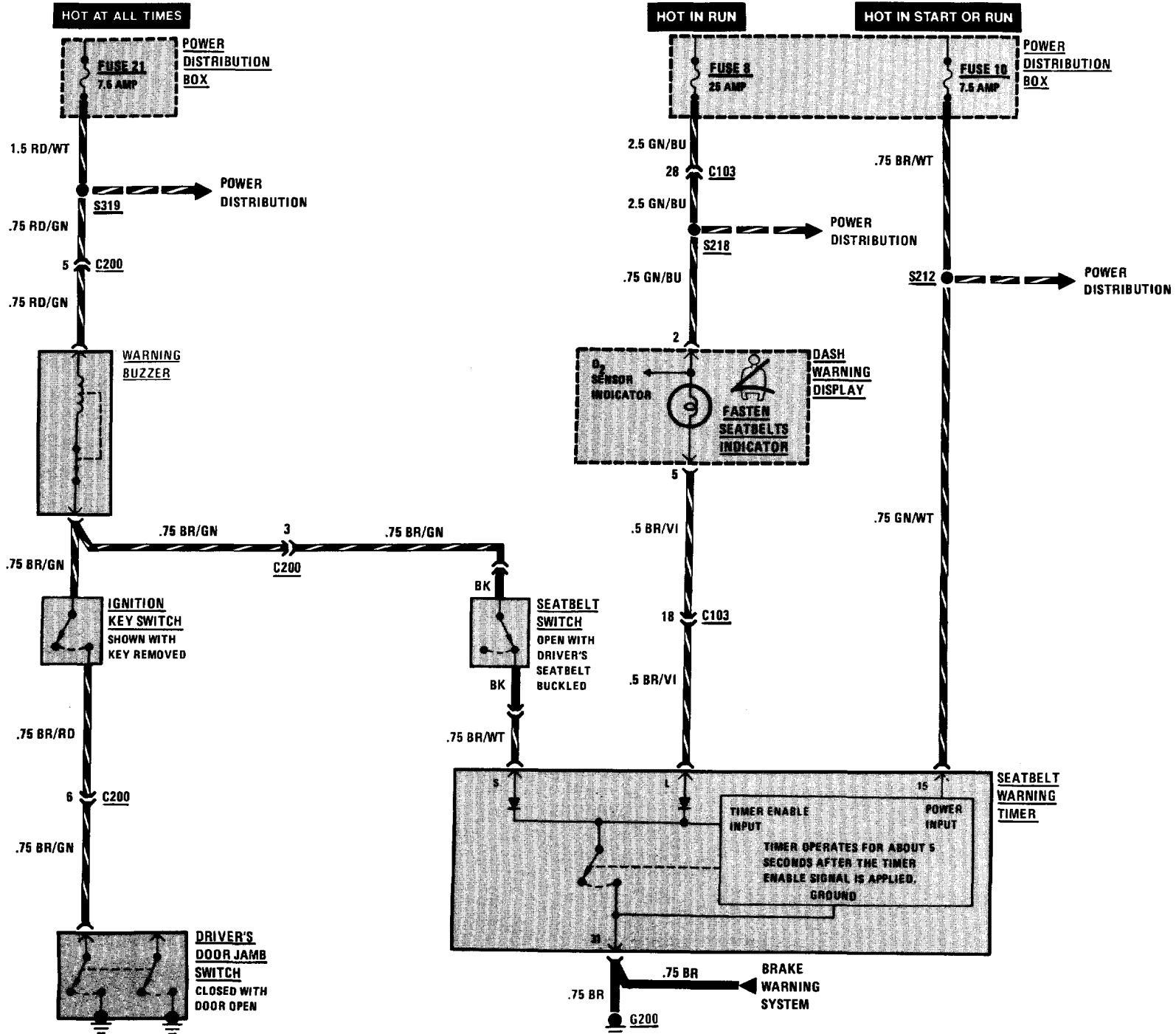
120 BRAKE WARNING SYSTEM

(For Component Locations See Page 205)

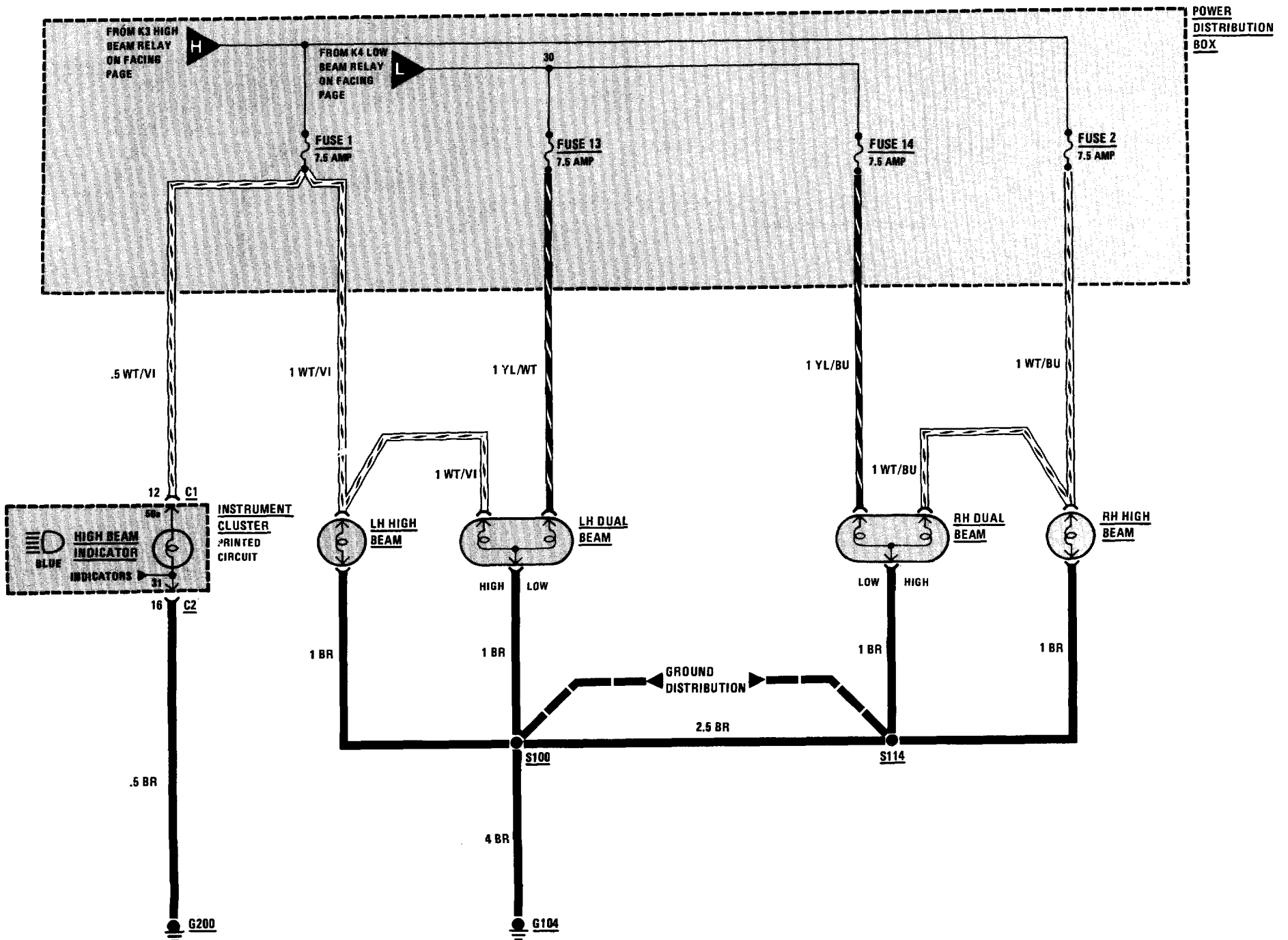


IGNITION KEY WARNING/SEATBELT WARNING 121

(For Component Locations See Page 205)

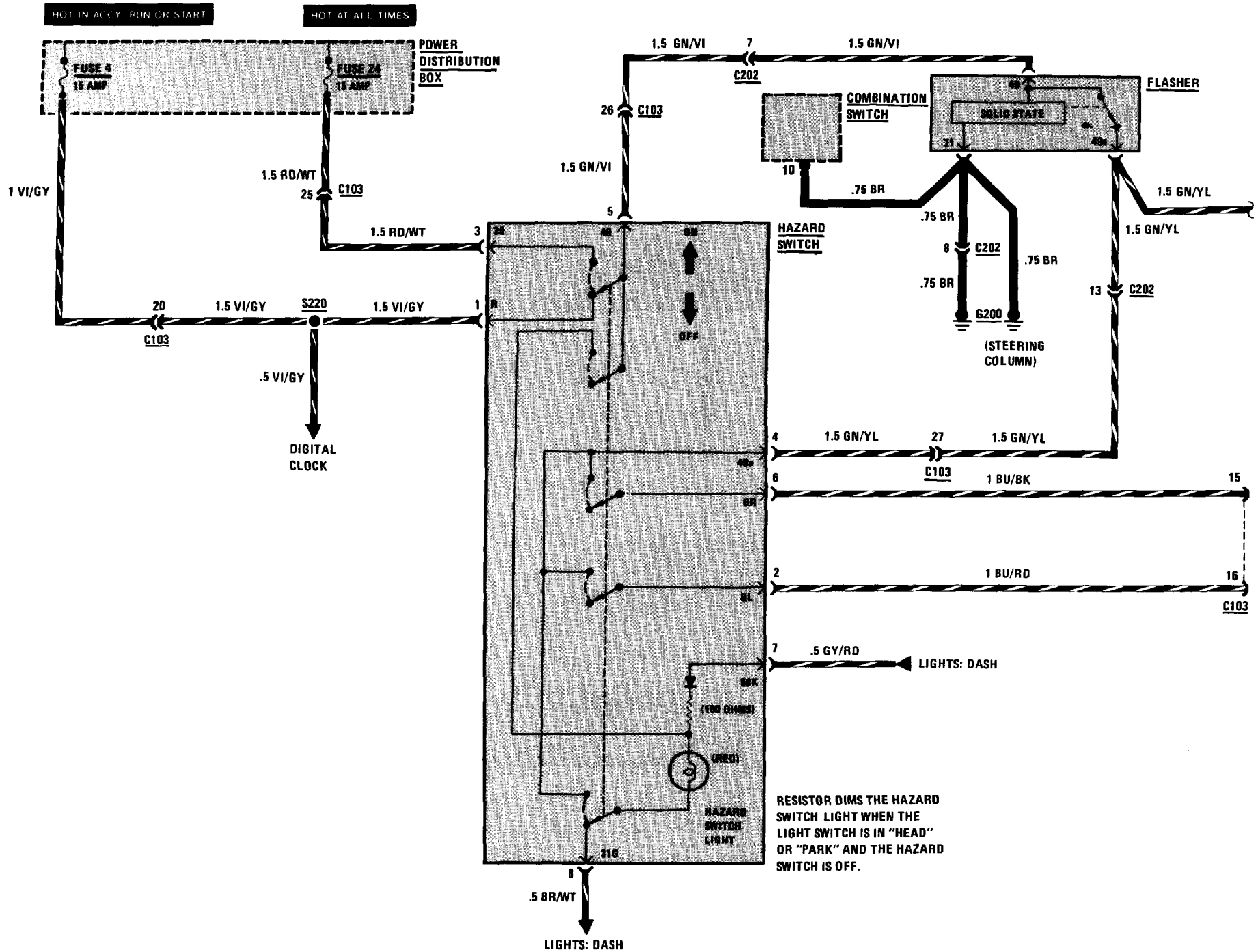


(For Component Locations See Page 205)



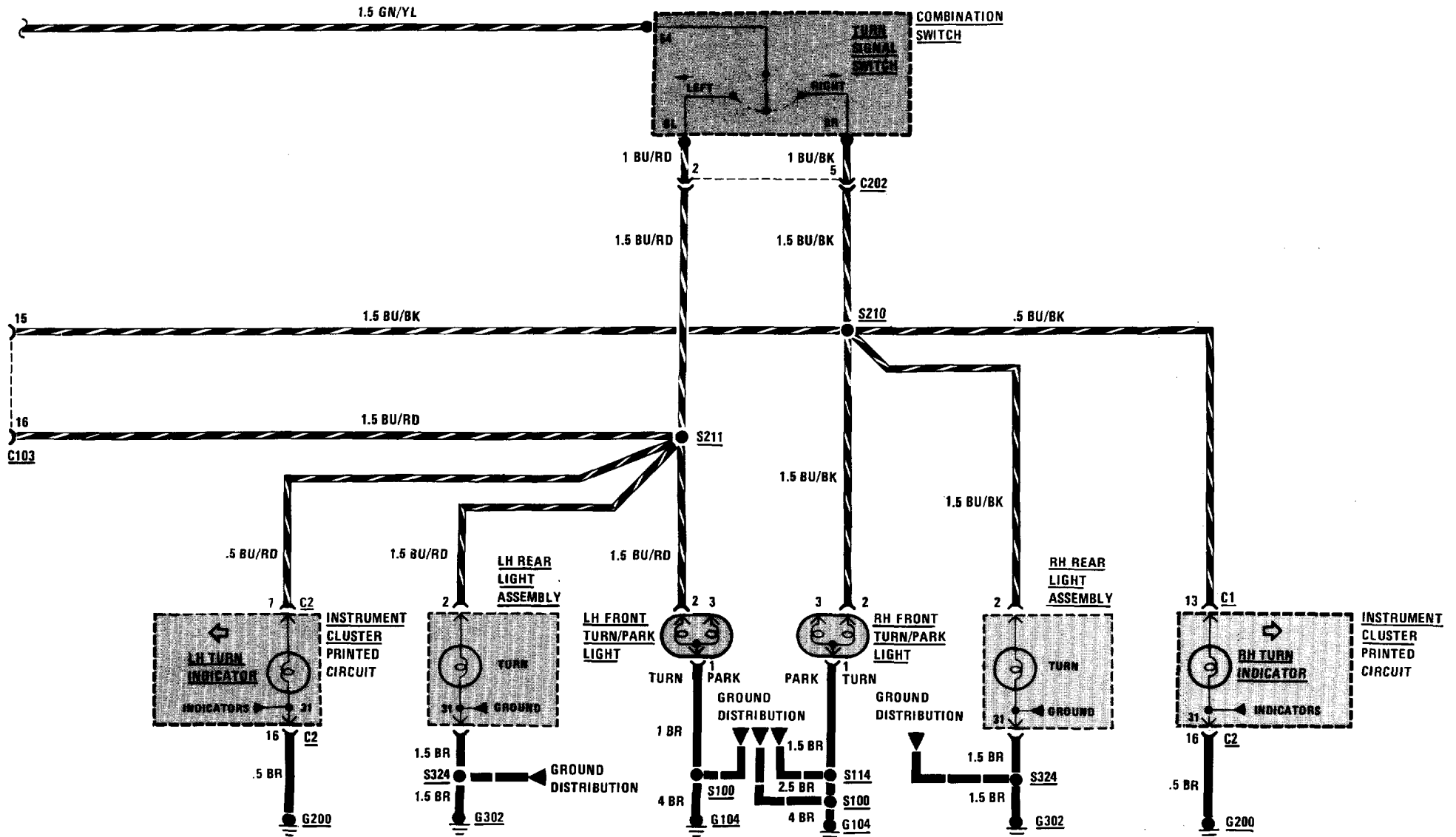
124 LIGHTS: TURN/HAZARD WARNING

(For Component Locations See Page 206)



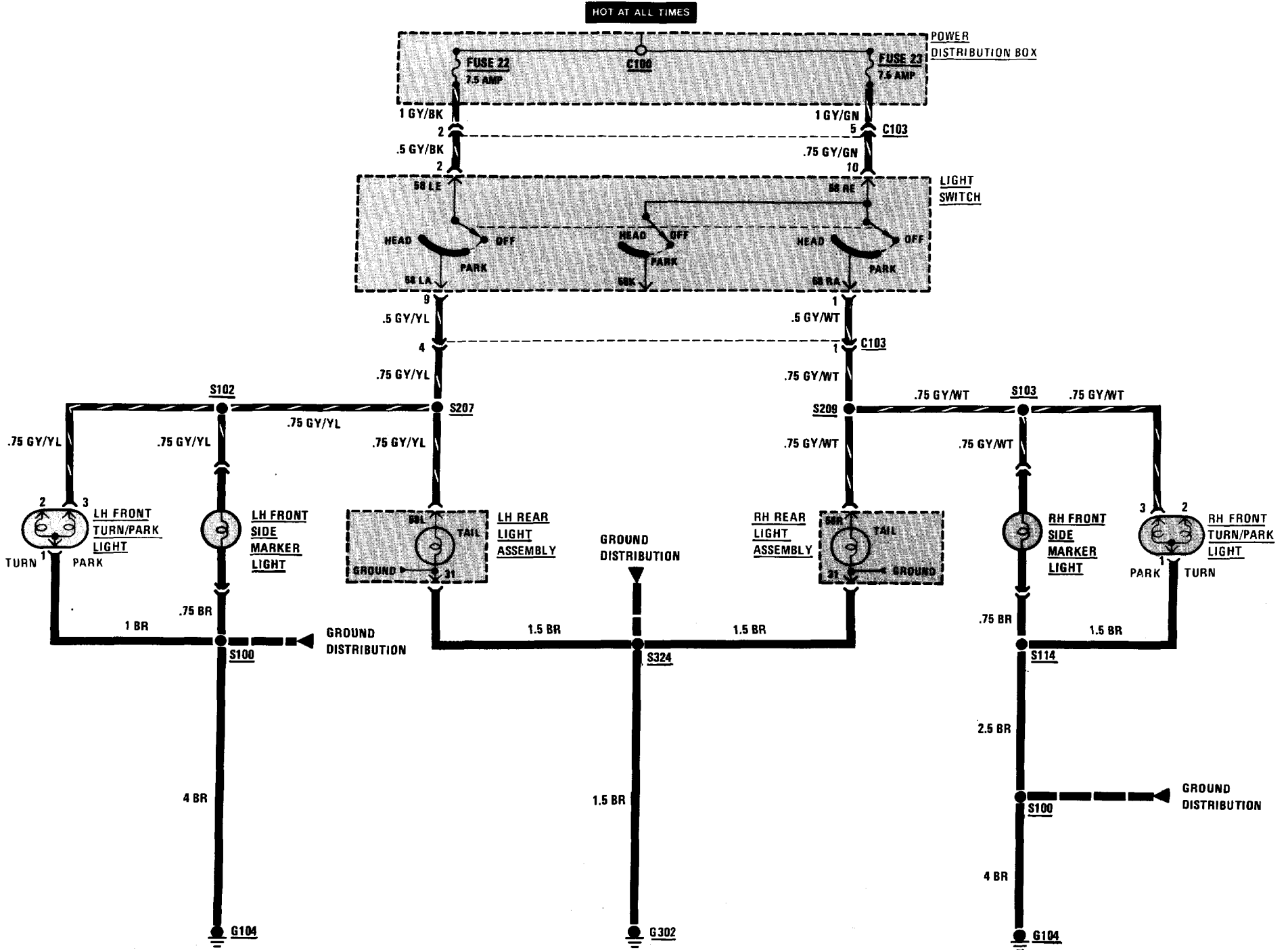
LIGHTS: TURN/HAZARD WARNING 125

(For Component Locations See Page 206)

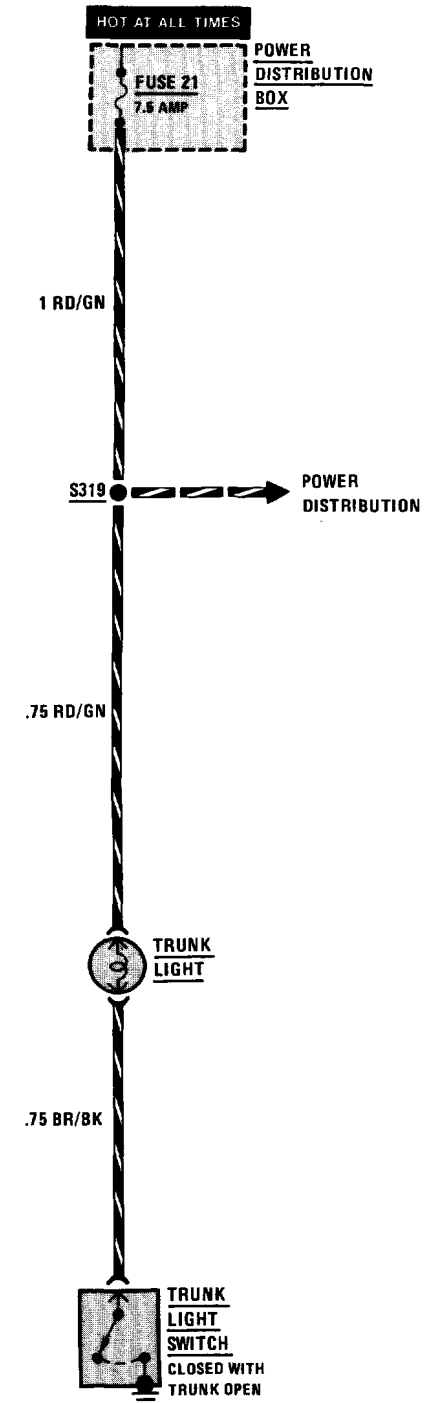
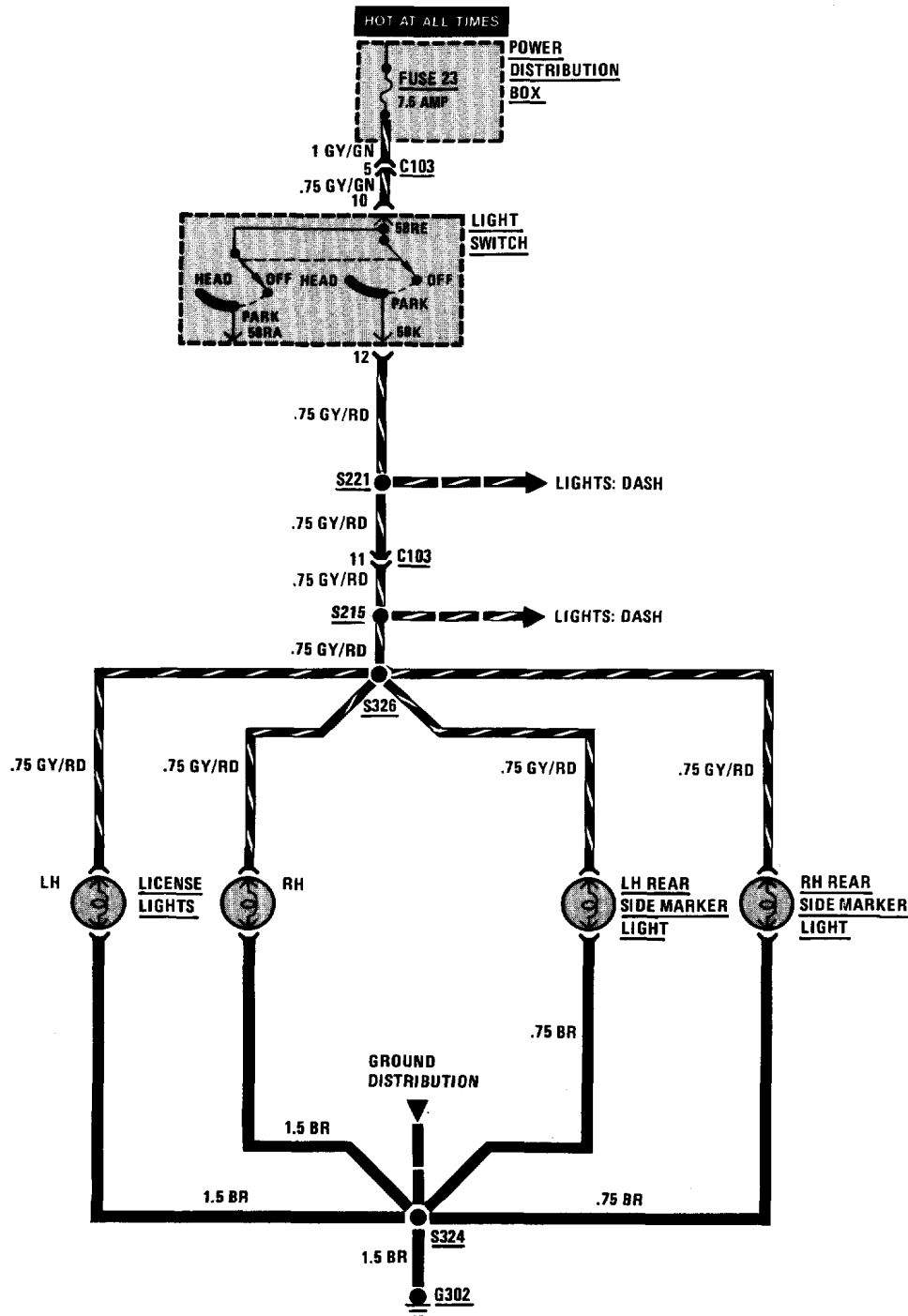


126 LIGHTS: FRONT PARK/FRONT SIDE MARKER/TAIL

(For Component Locations See Page 206)

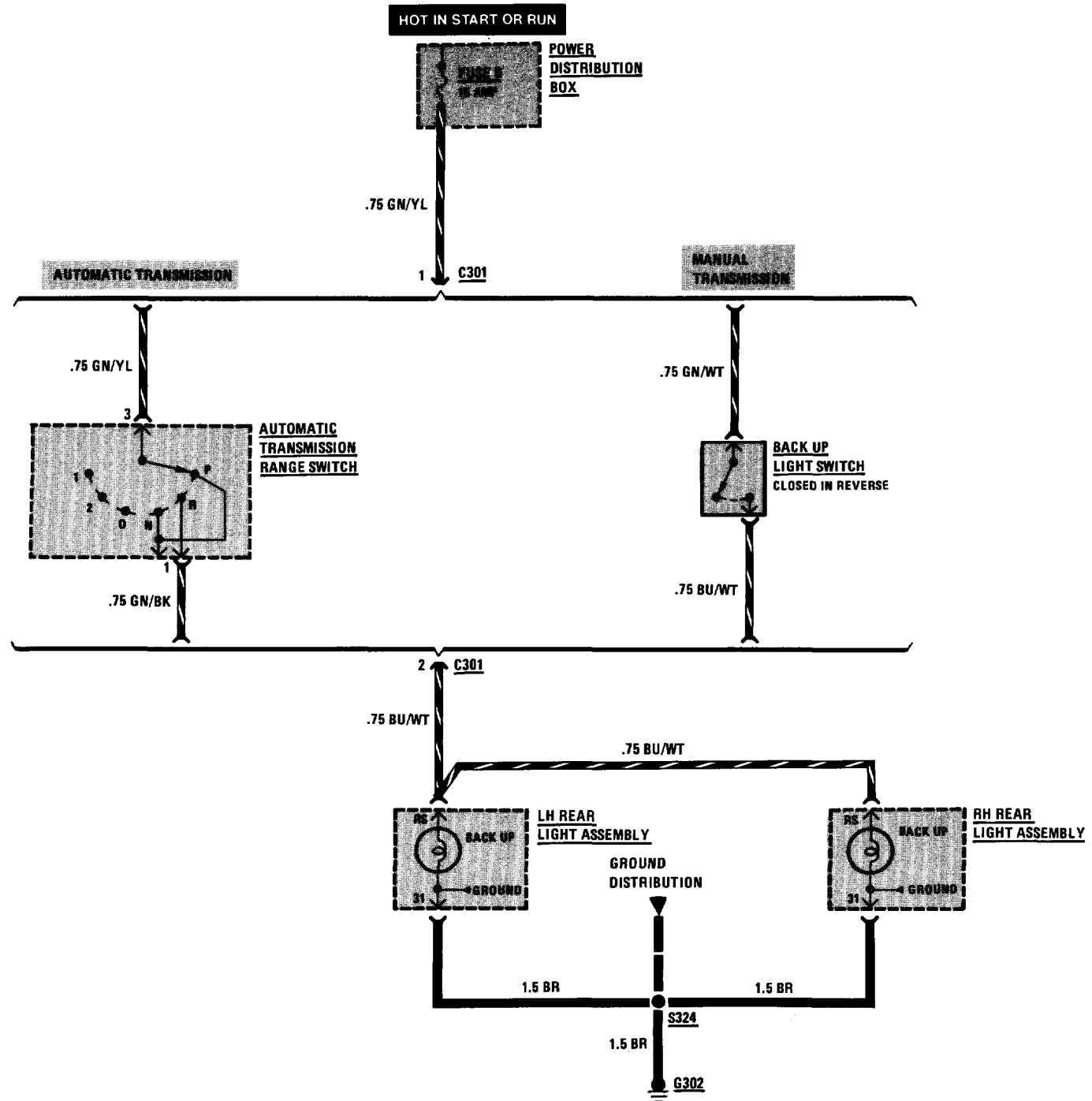


(For Component Locations See Page 206)

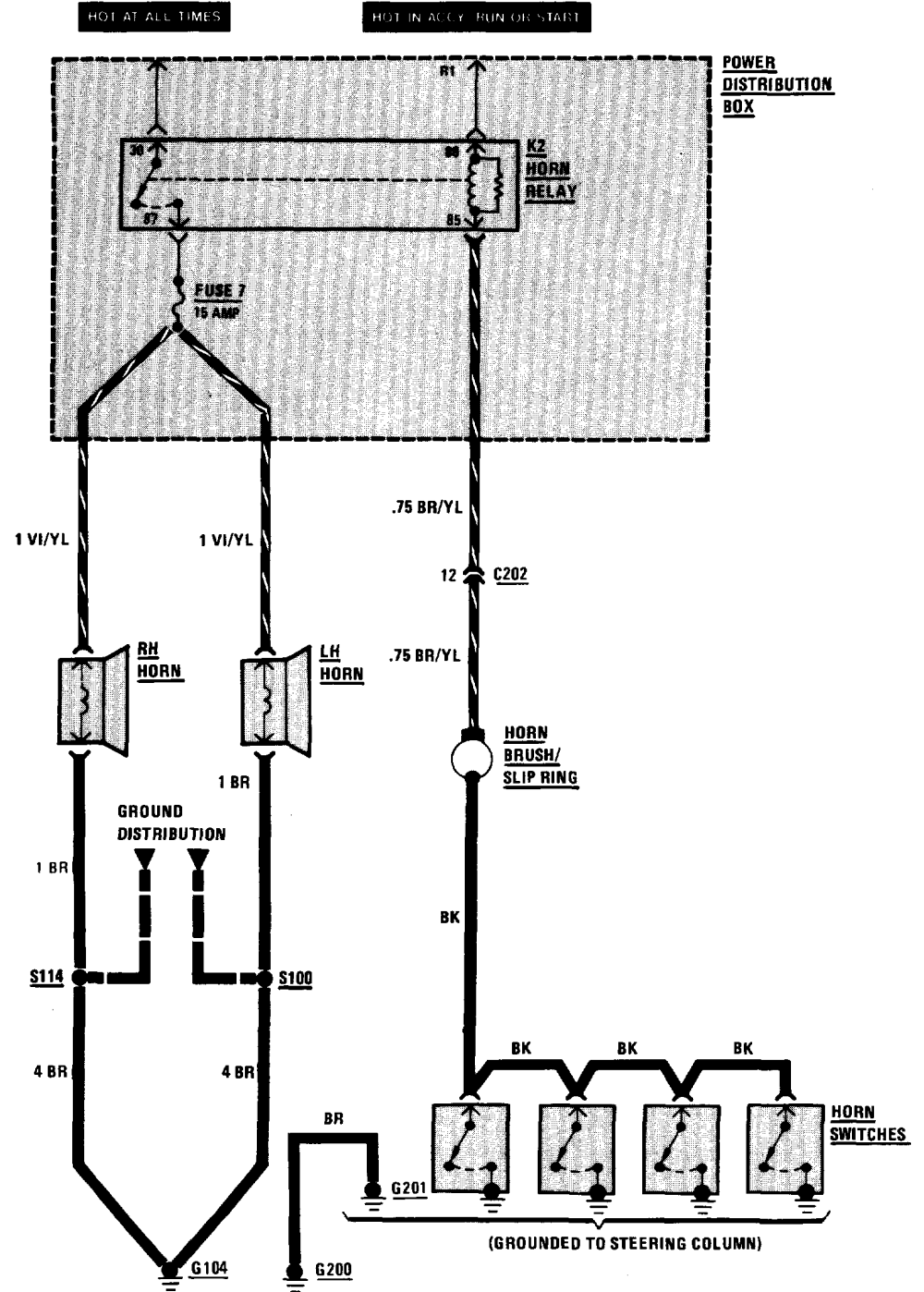
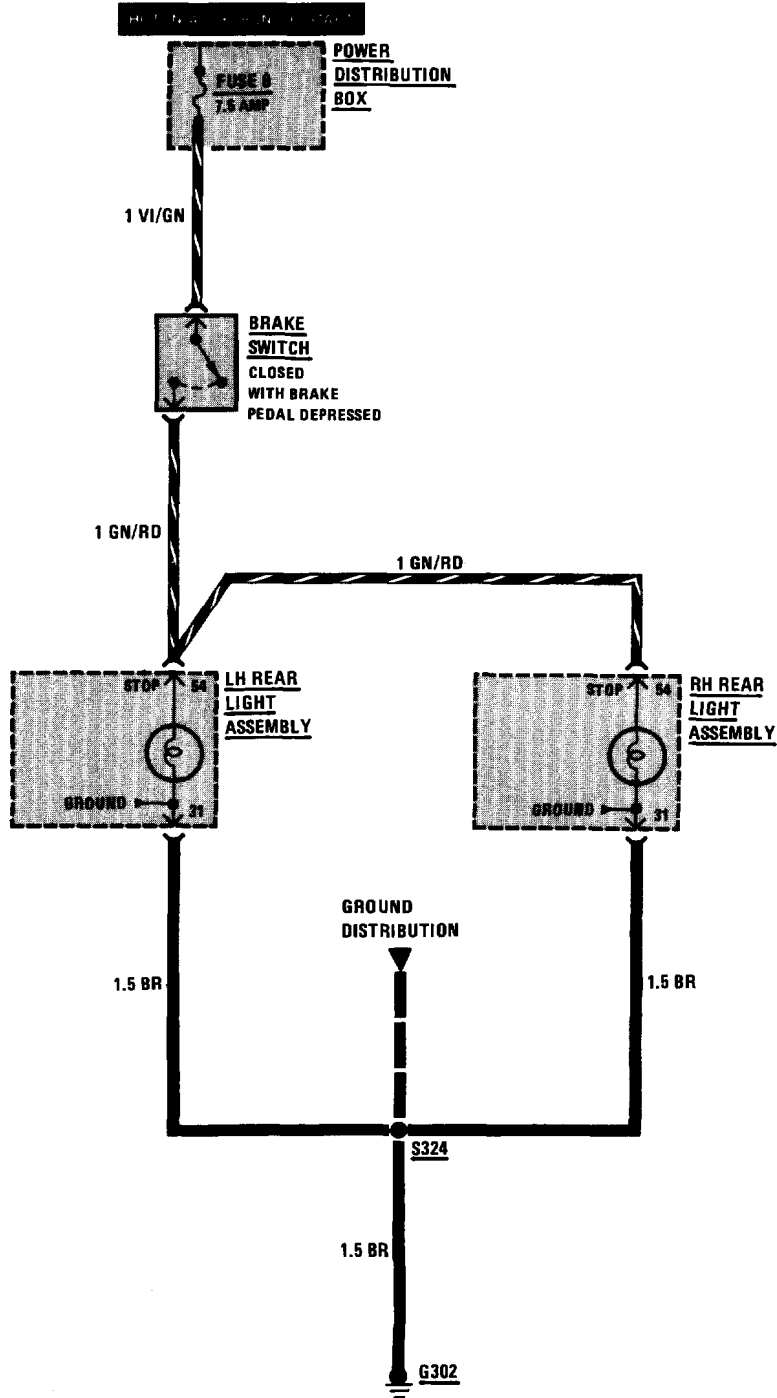


128 BACK UP LIGHTS

(For Component Locations See Page 206)

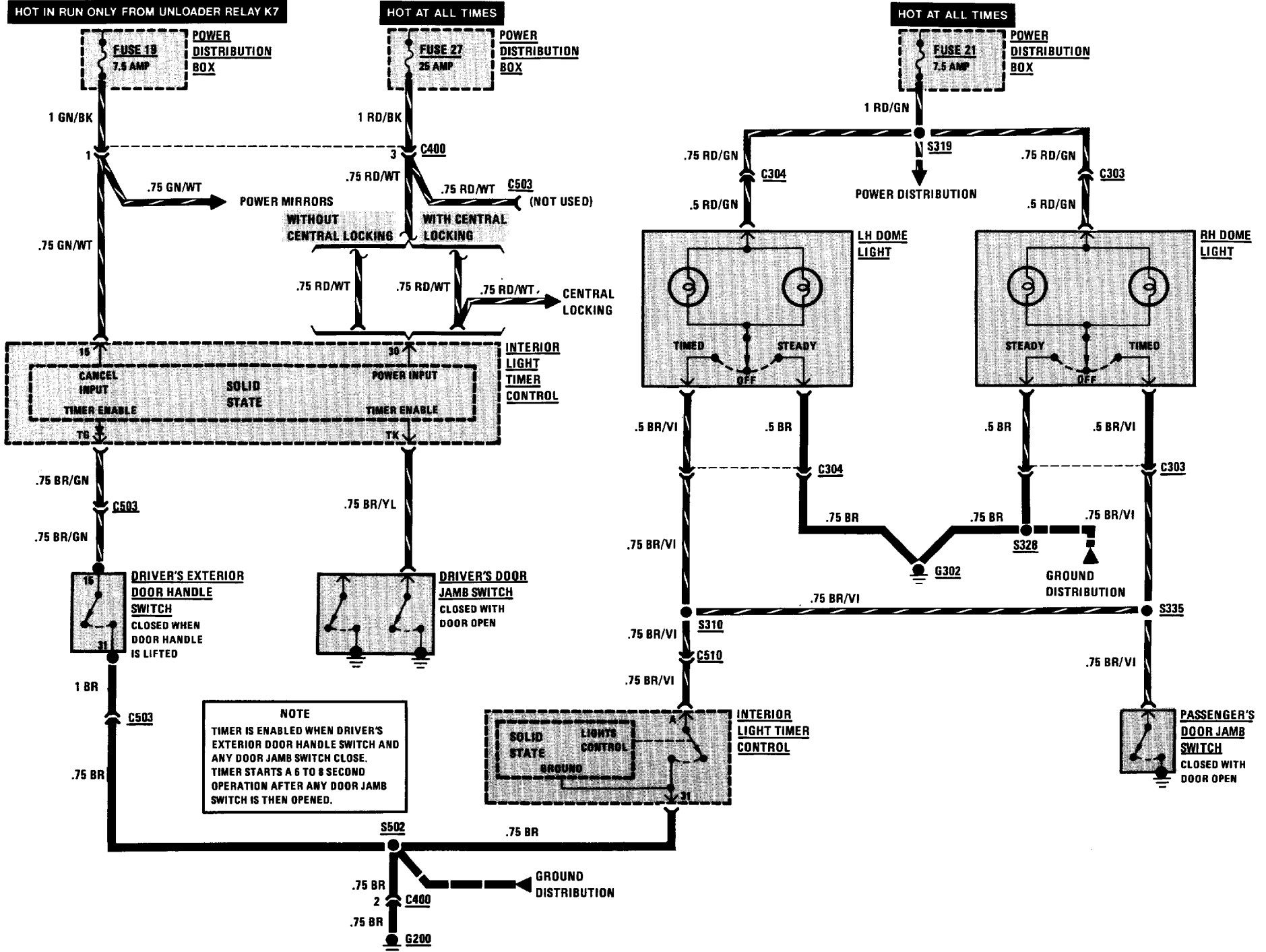


(For Component Locations See Page 206)



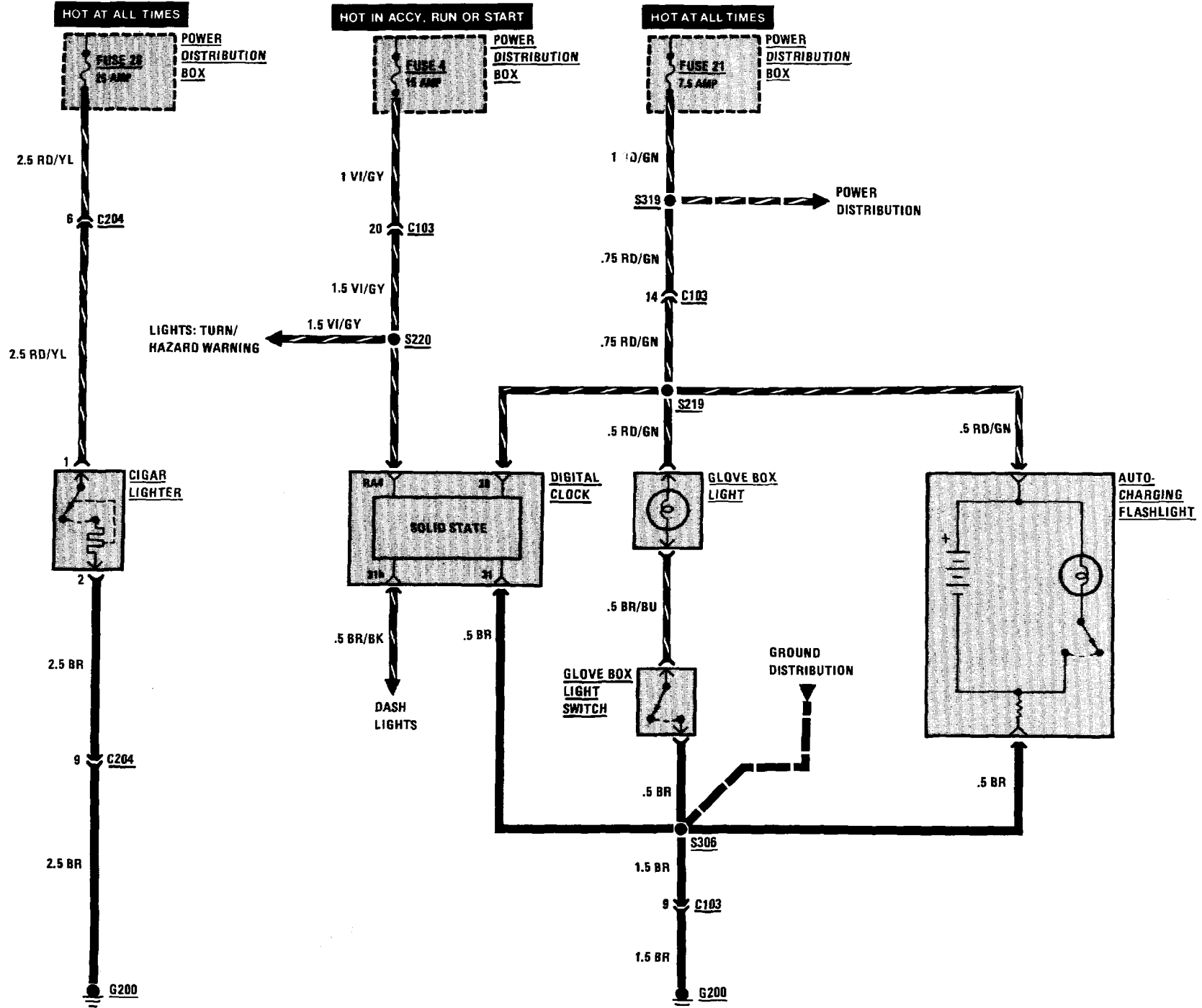
130 INTERIOR LIGHTS

(For Component Locations See Page 207)



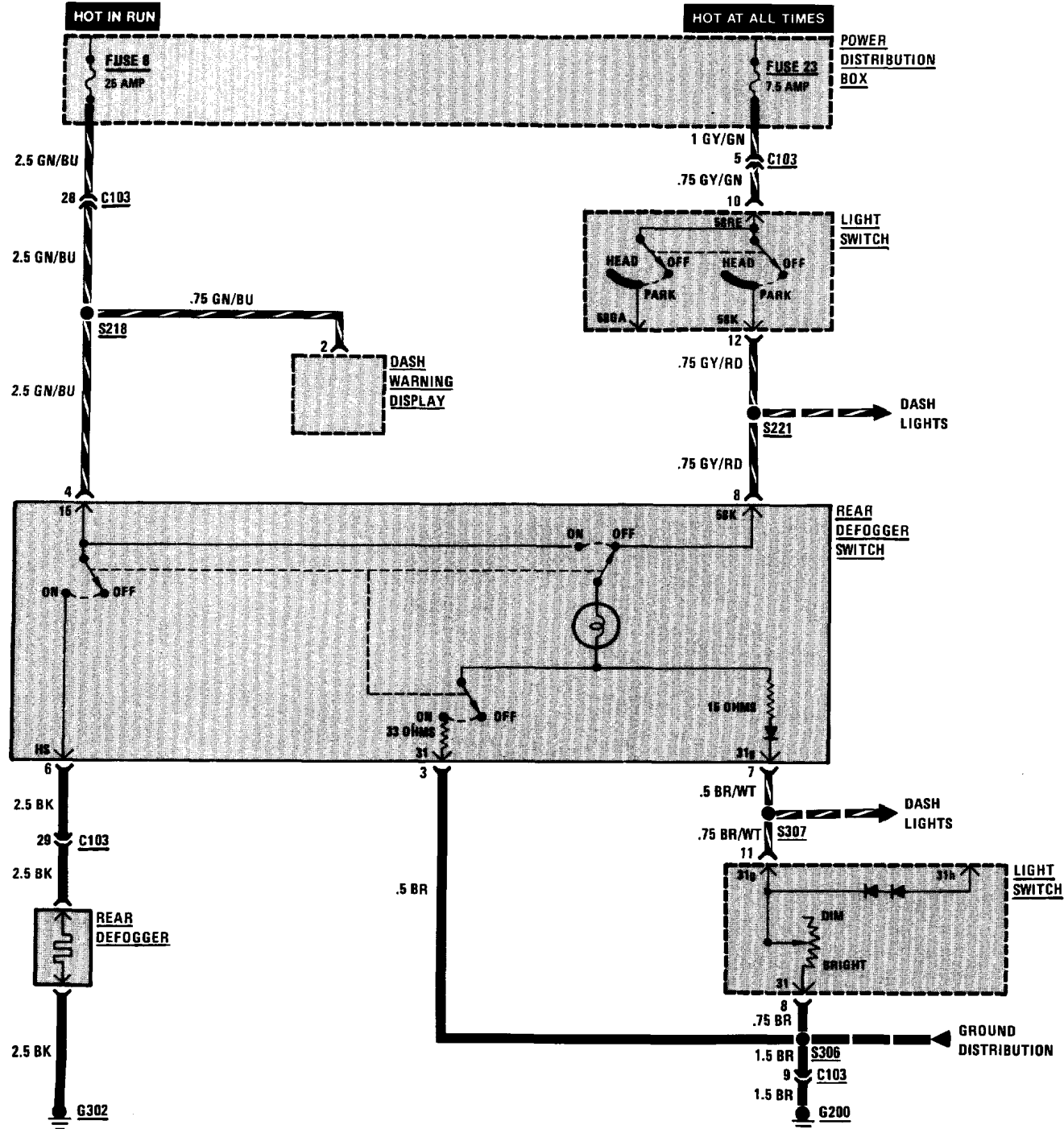
CIGAR LIGHTER/DIGITAL CLOCK/GLOVE BOX LIGHT/AUTO-CHARGING FLASHLIGHT 131

(For Component Locations See Page 207)



132 REAR DEFOGGER

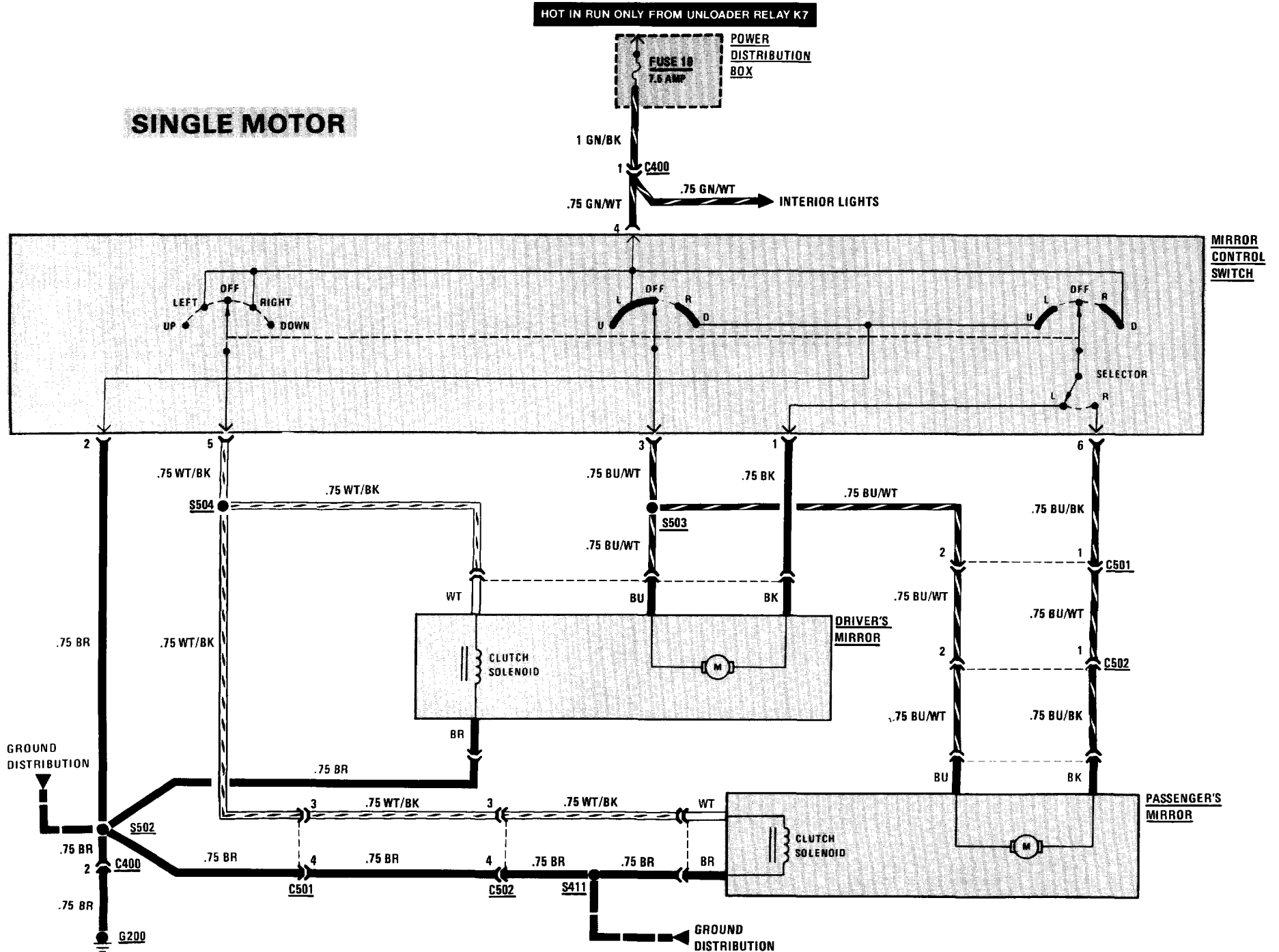
(For Component Locations See Page 207)



134 POWER MIRRORS

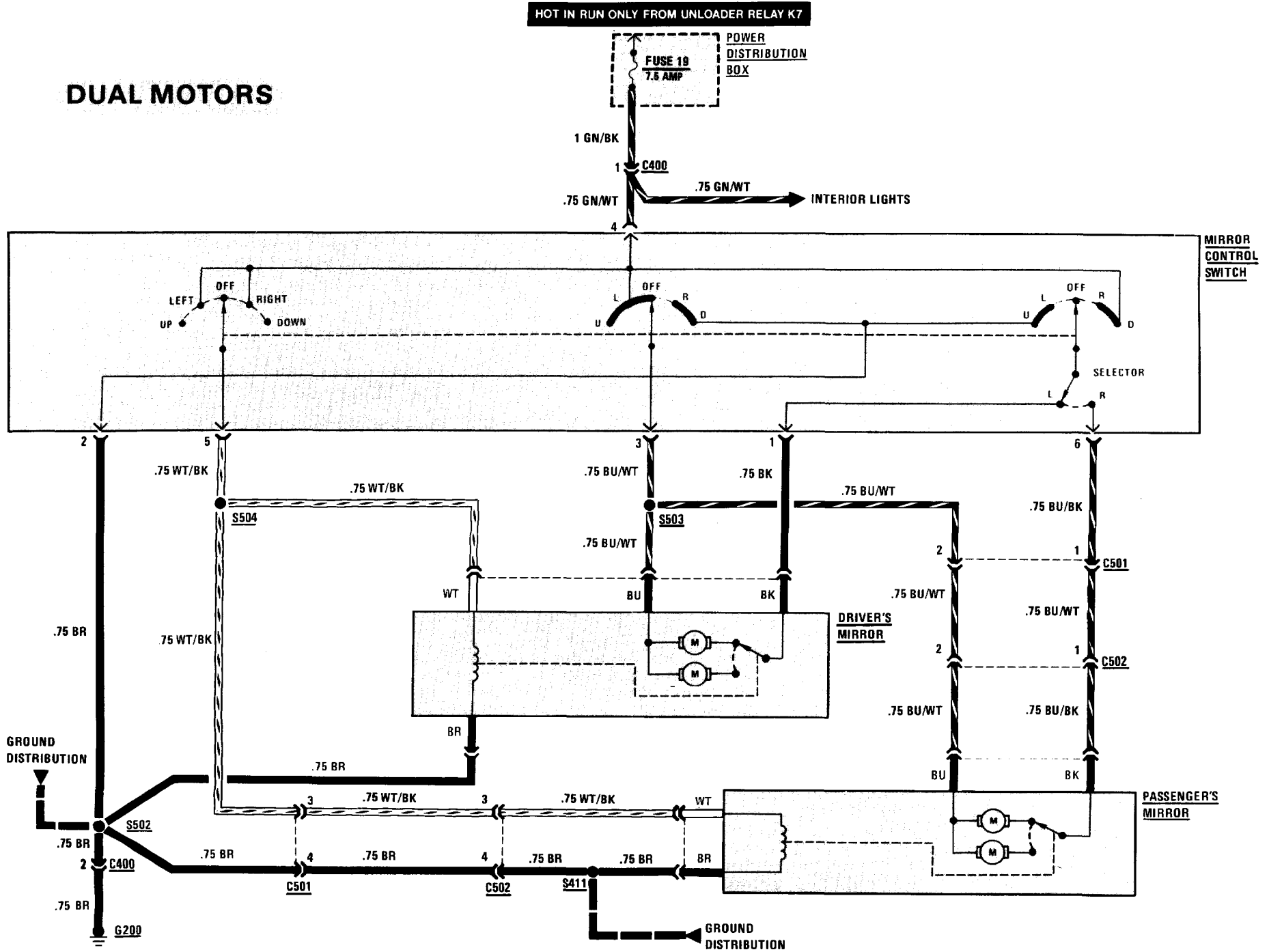
(For Component Locations See Page 208)

SINGLE MOTOR



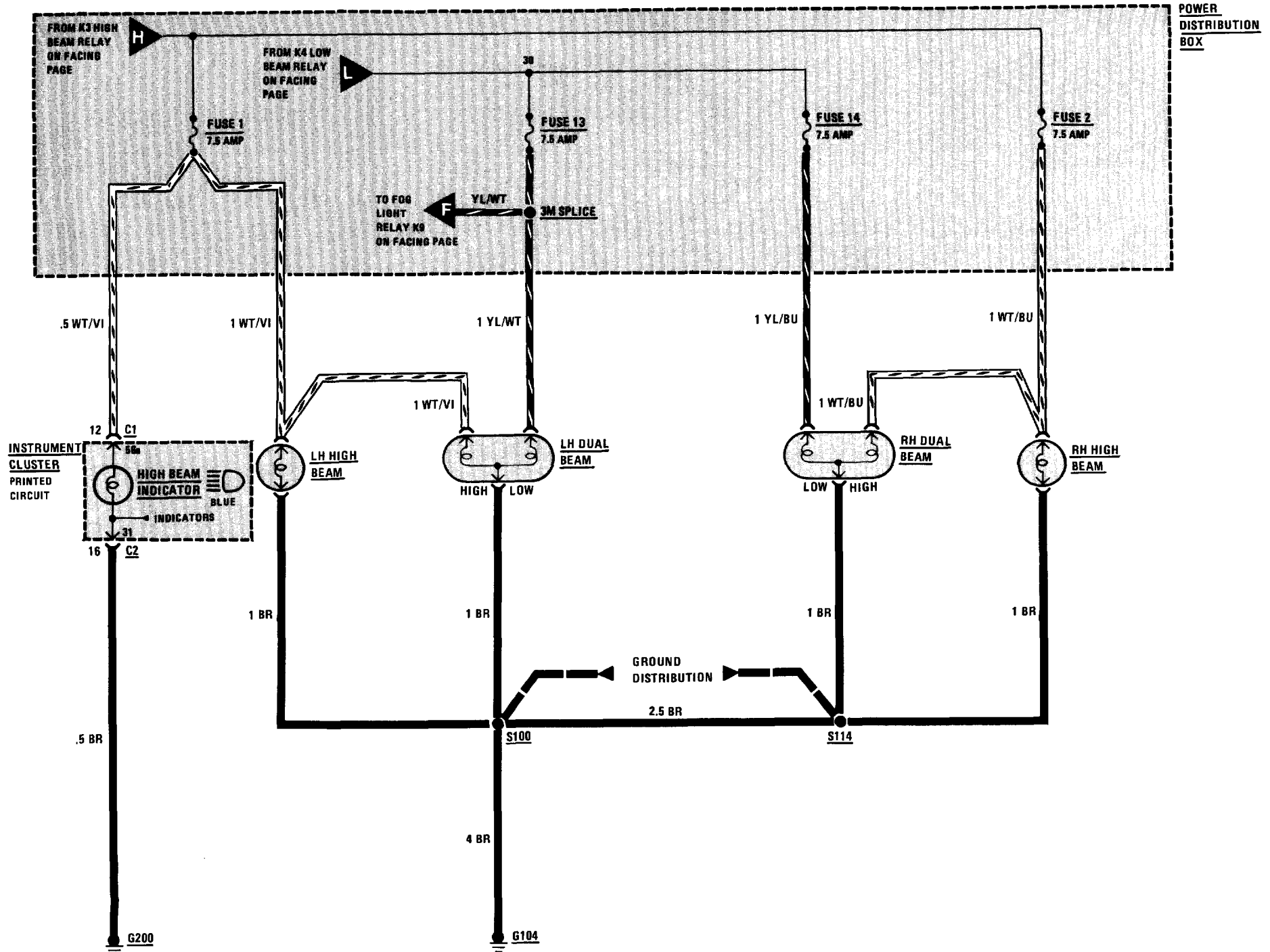
(For Component Locations See Page 208)

DUAL MOTORS



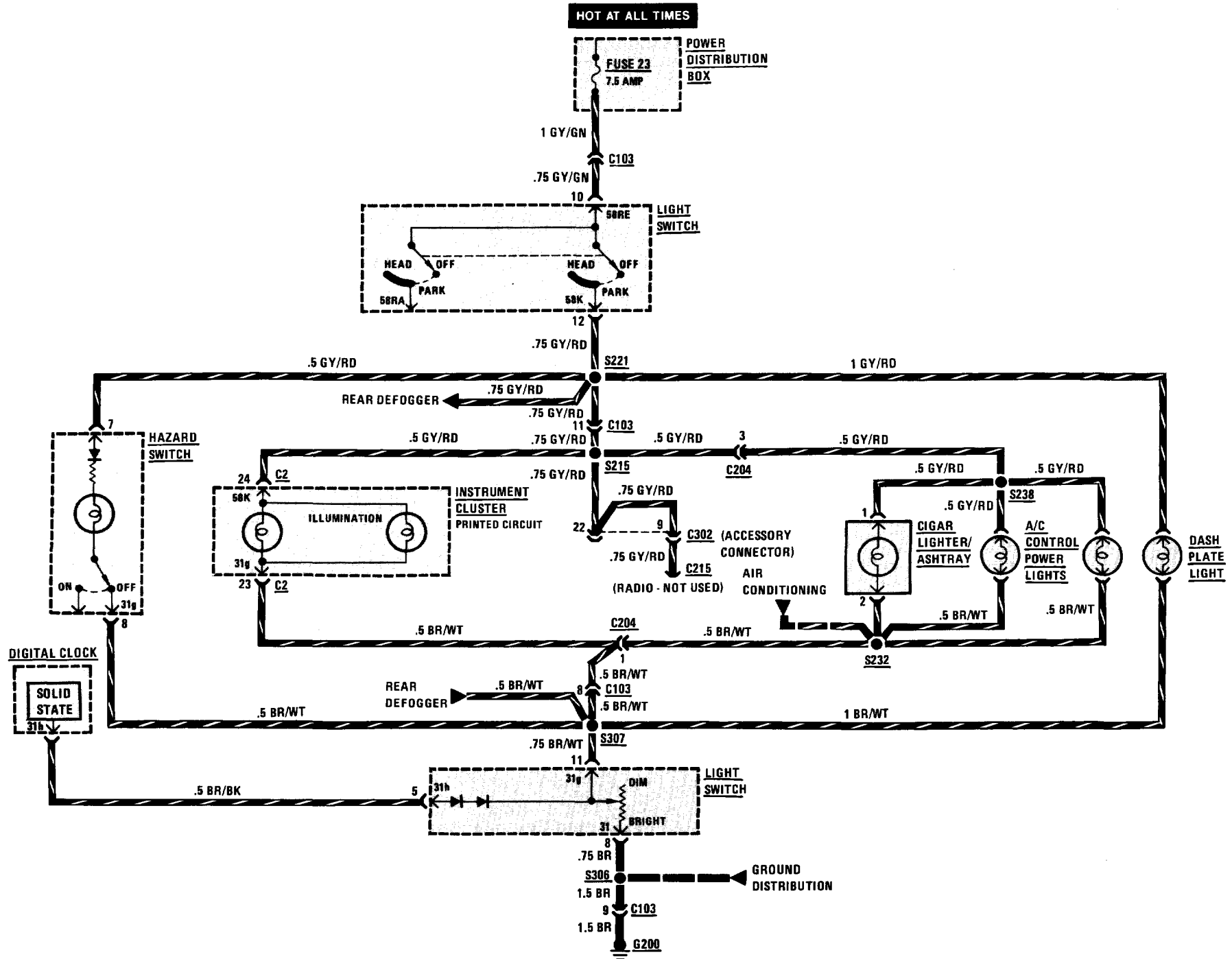
HEADLIGHTS (POWER)/FOG LIGHTS (WITH TWO RELAYS) 137

(For Component Locations See Page 205)

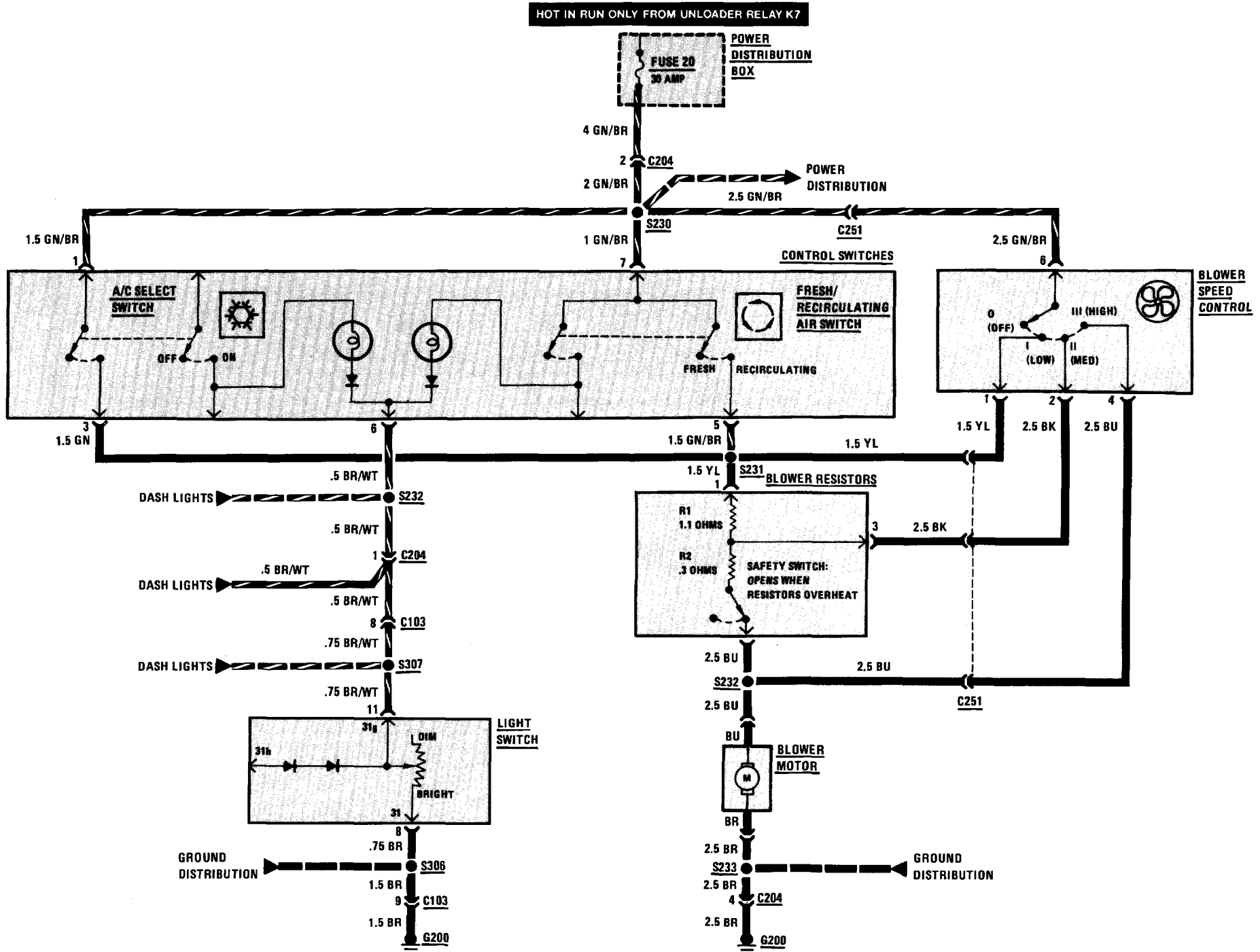


138 DASH LIGHTS

(For Component Locations See Page 208)

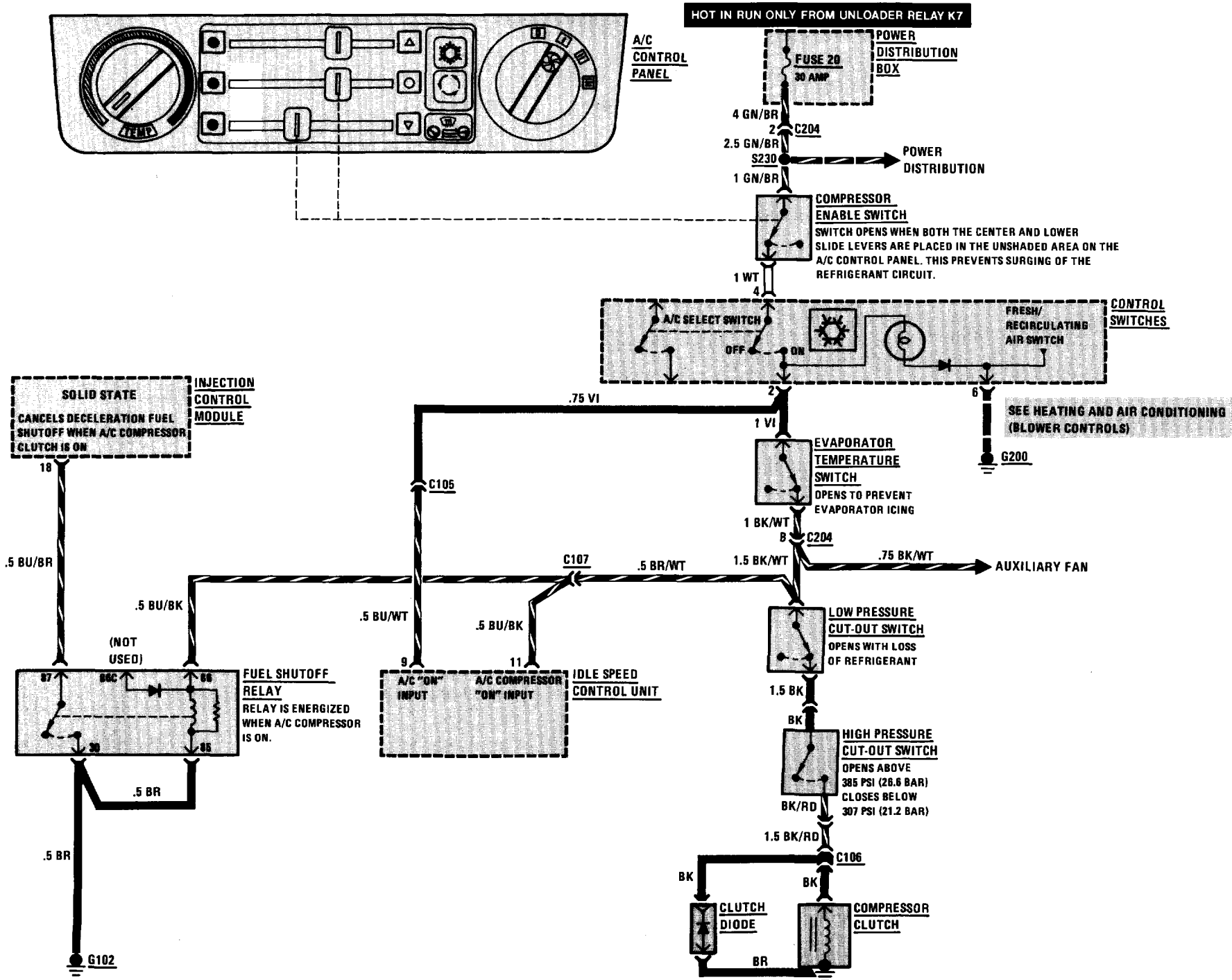


(For Component Locations See Page 208)

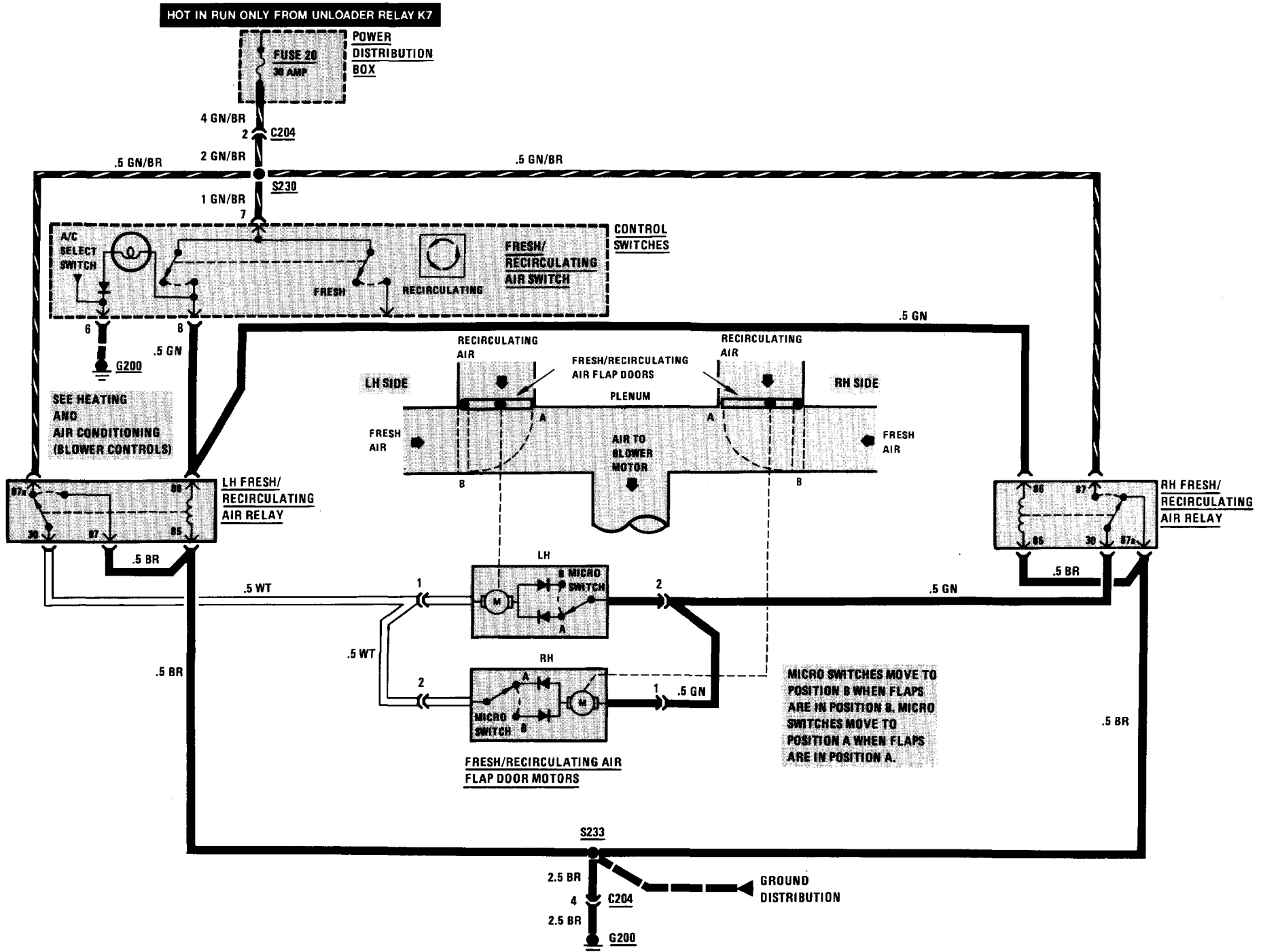


140 HEATING AND AIR CONDITIONING (COMPRESSOR CONTROLS)

(For Component Locations See Page 208)

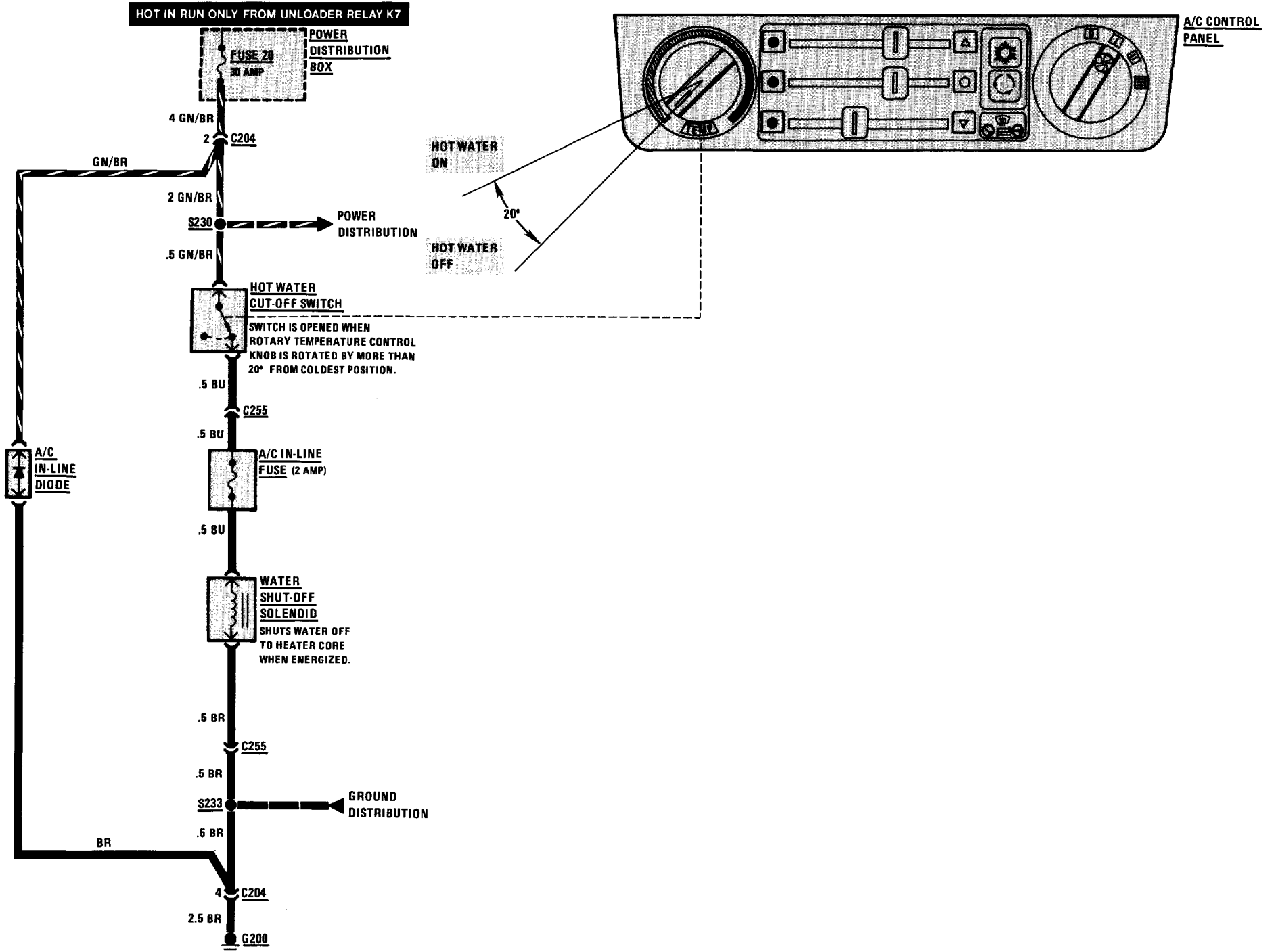


(For Component Locations See Page 208)



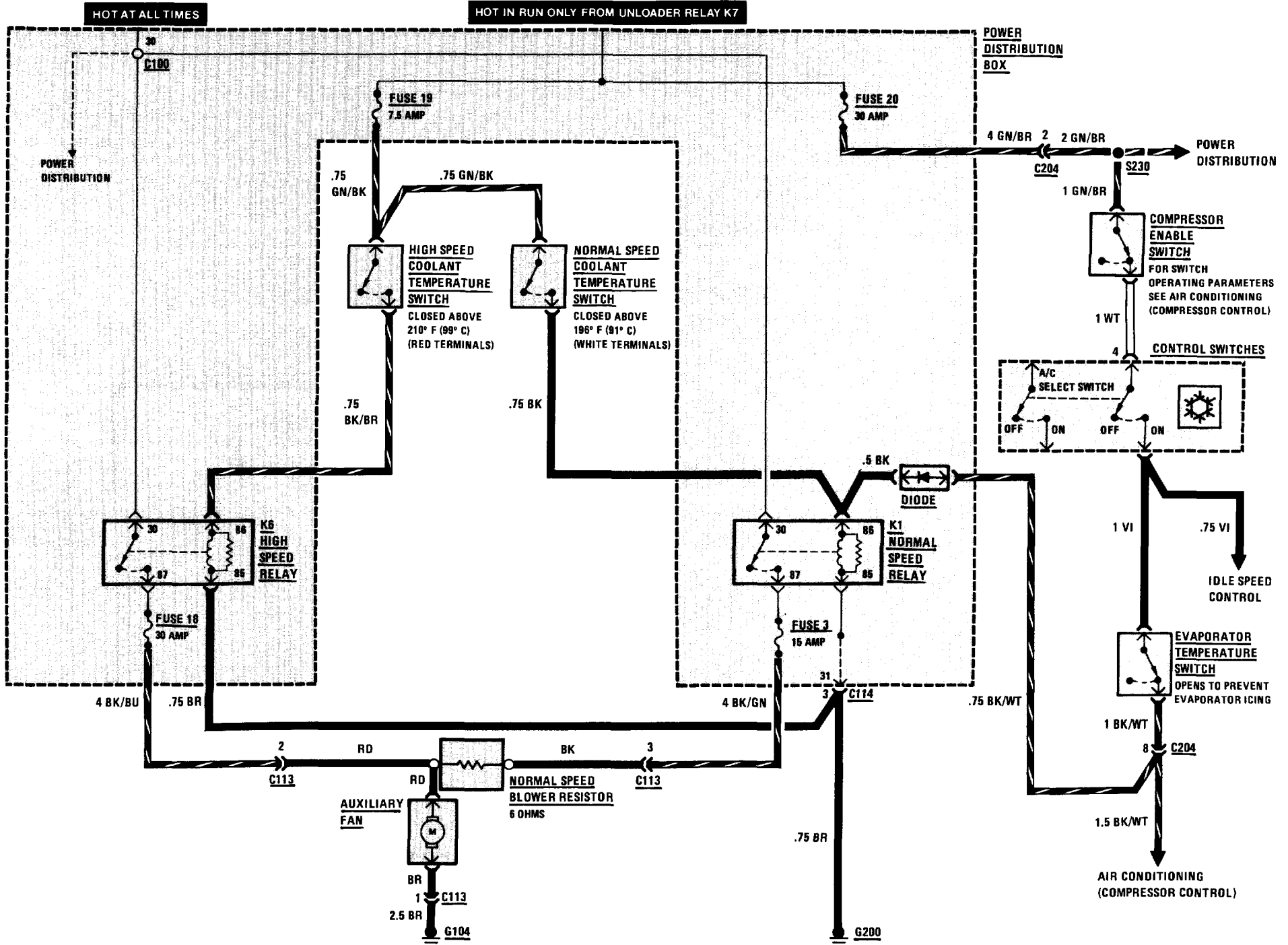
142 HEATING AND AIR CONDITIONING (HOT WATER CONTROL)

(For Component Locations See Page 208)



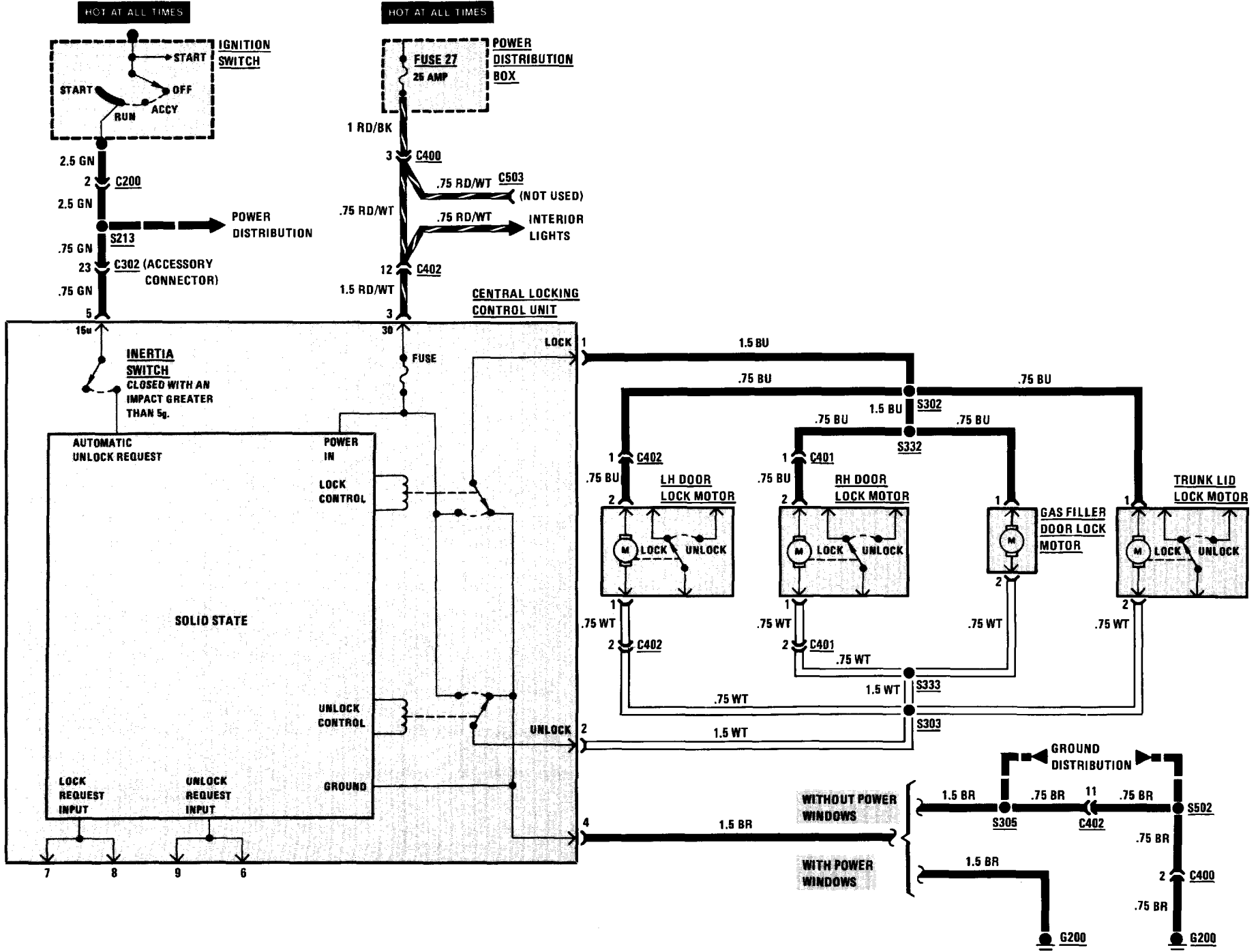
AUXILIARY FAN 143

(For Component Locations See Page 209)



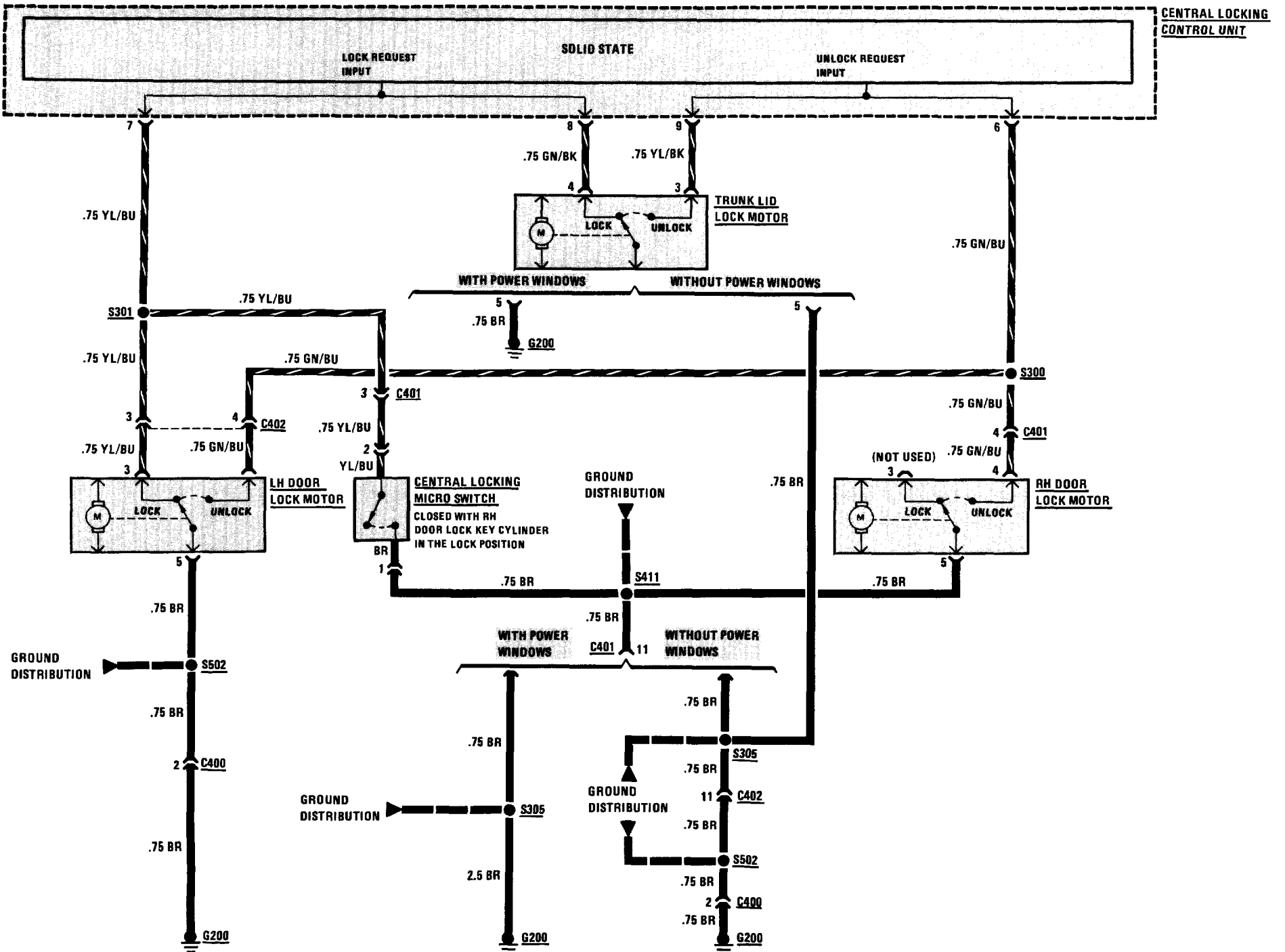
144 CENTRAL LOCKING (CONTROL)

(For Component Locations See Page 209)



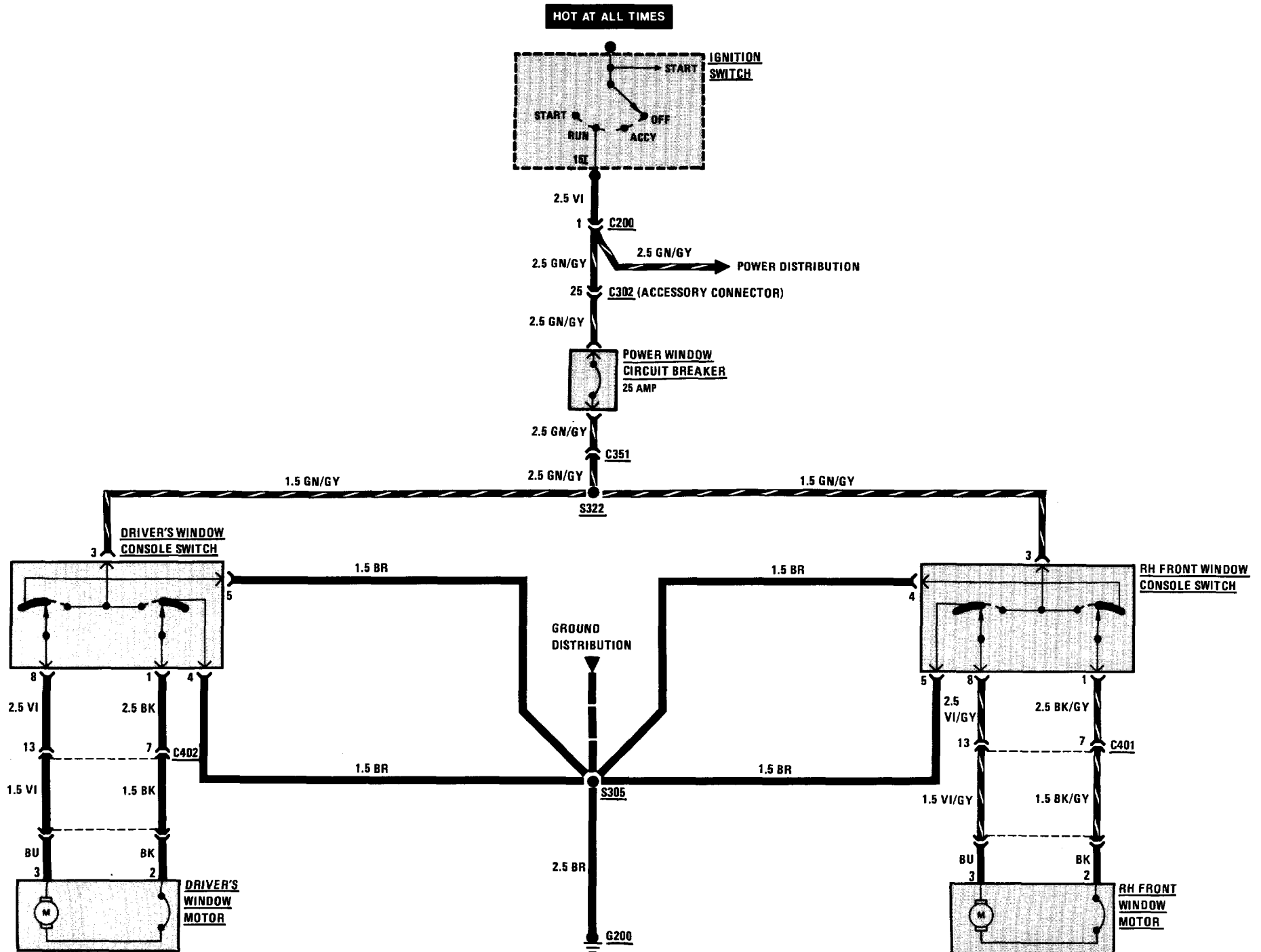
CENTRAL LOCKING (REQUEST) 145

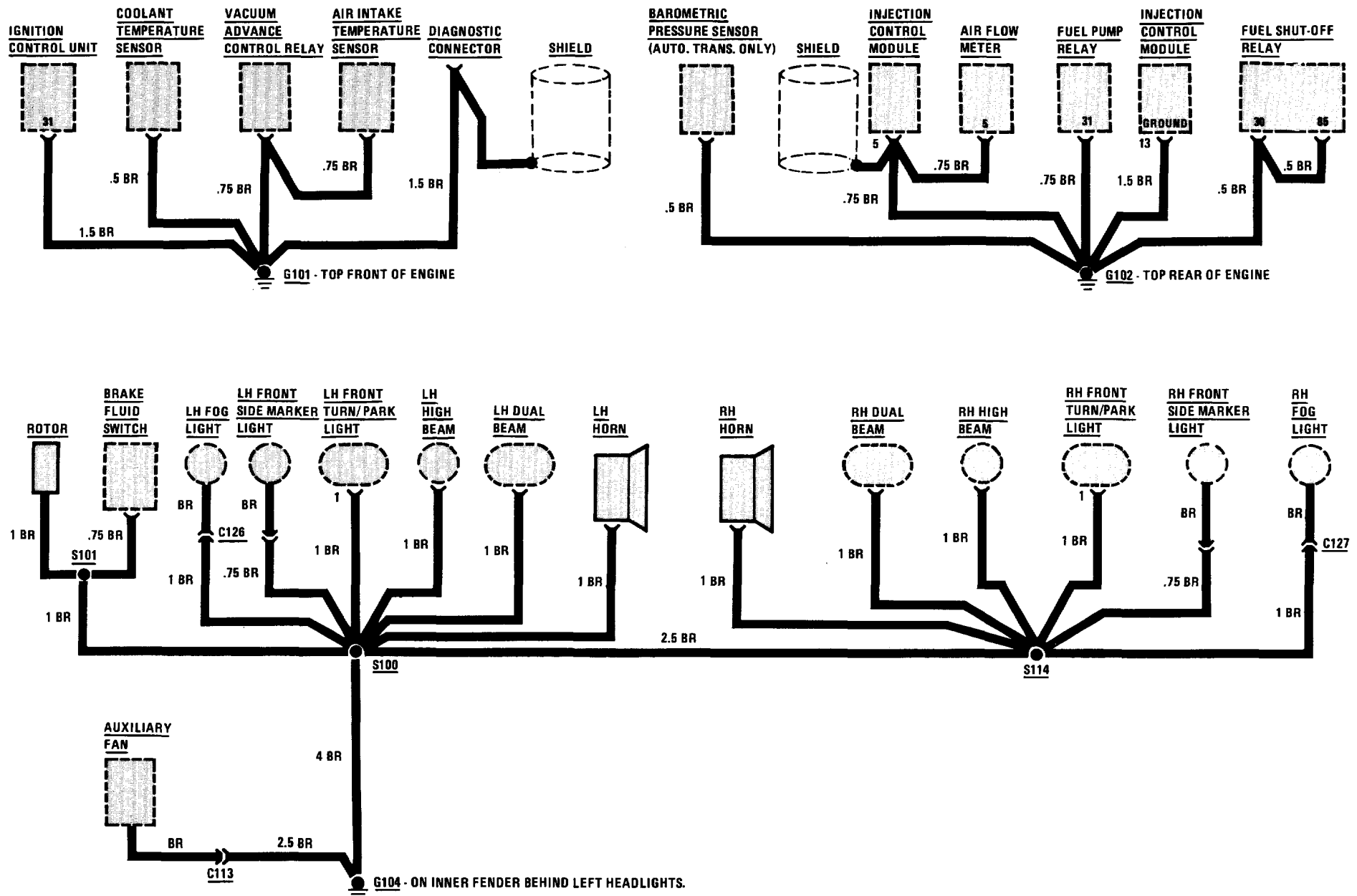
(For Component Locations See Page 209)



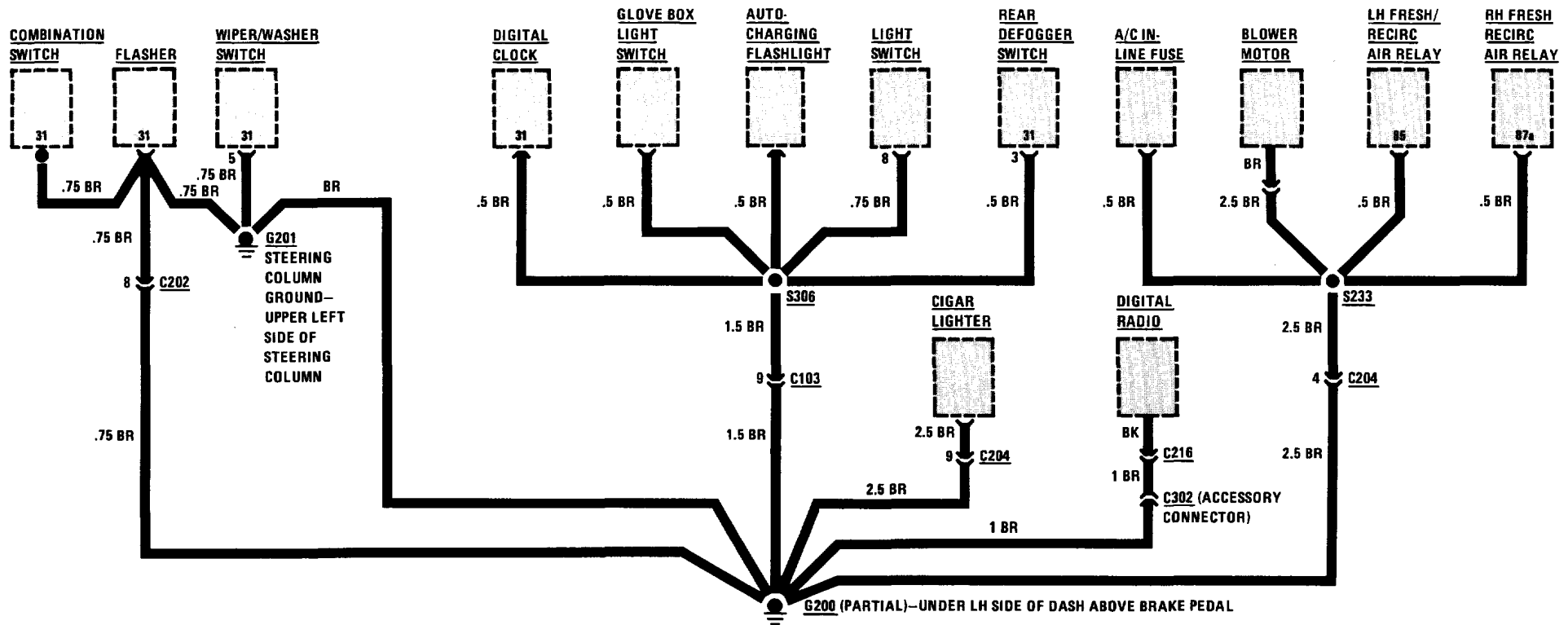
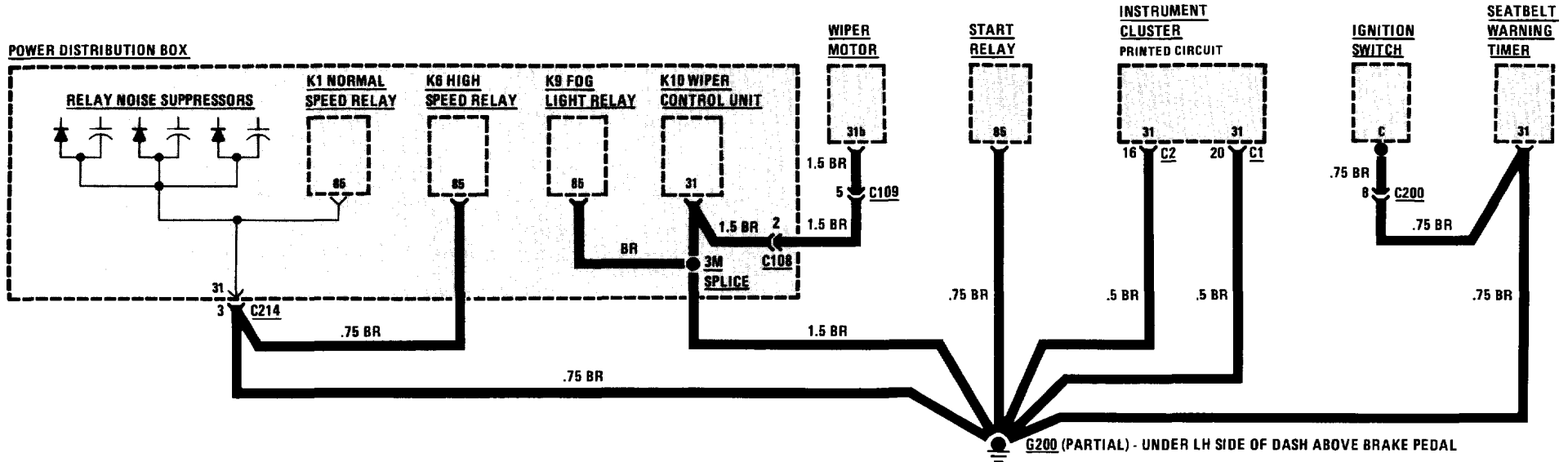
146 POWER WINDOWS

(For Component Locations See Page 210)

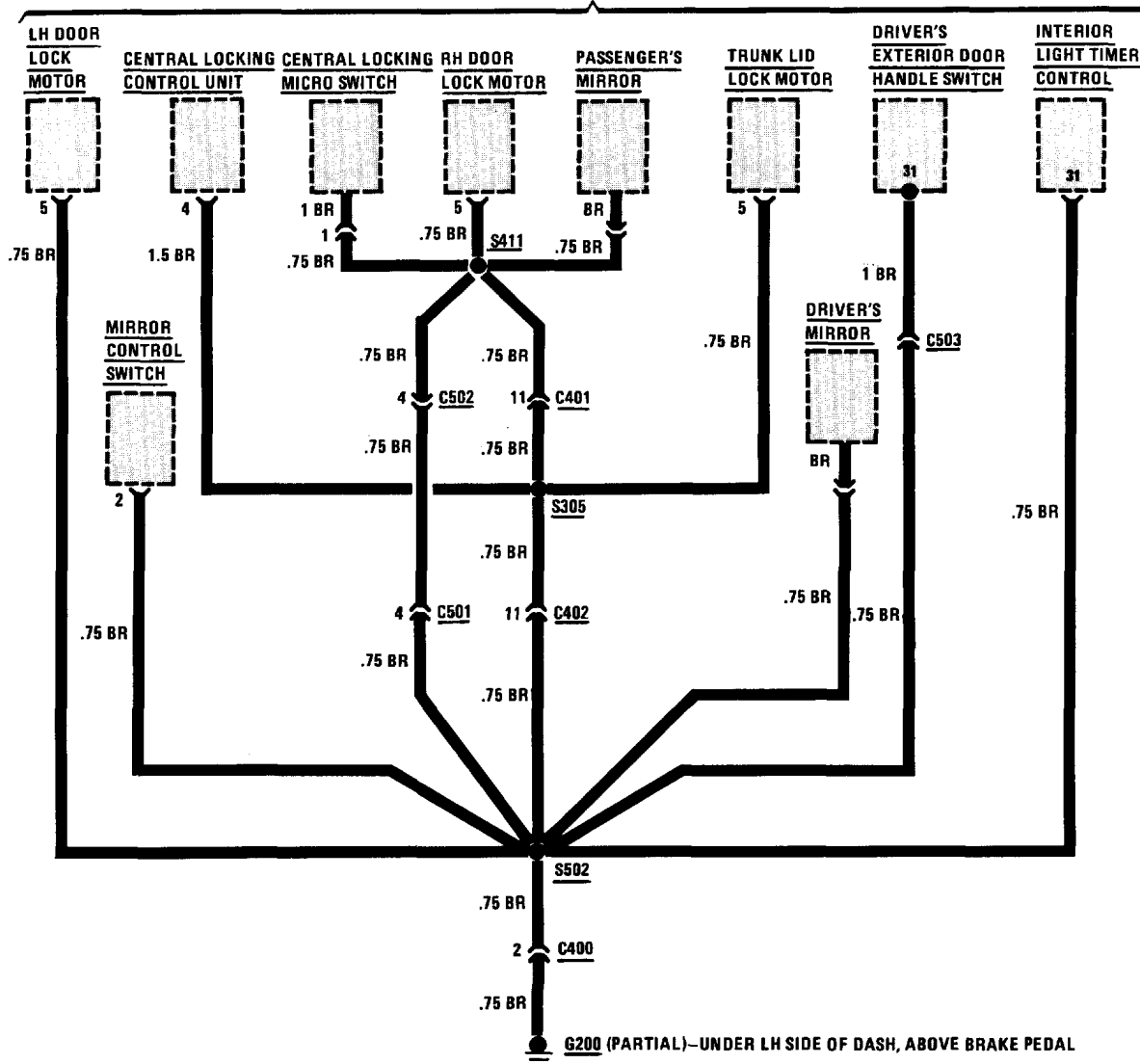




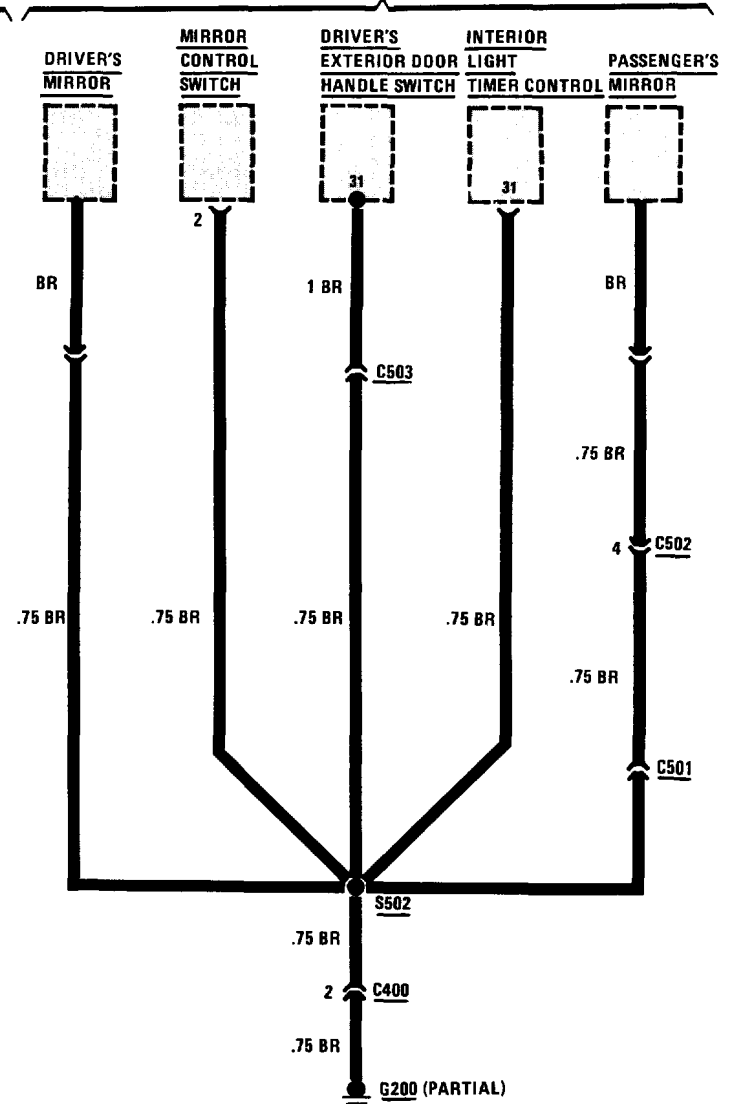
148 GROUND DISTRIBUTION (G200 PARTIAL AND G201)



CENTRAL LOCKING WITHOUT POWER WINDOWS

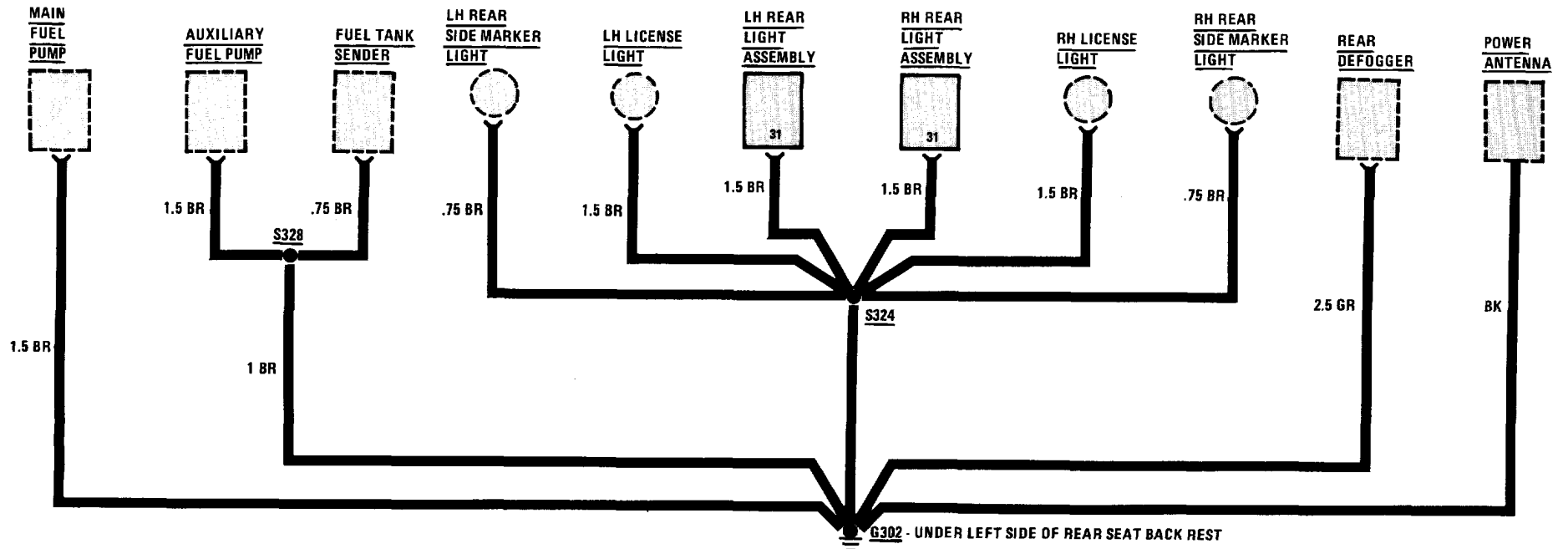
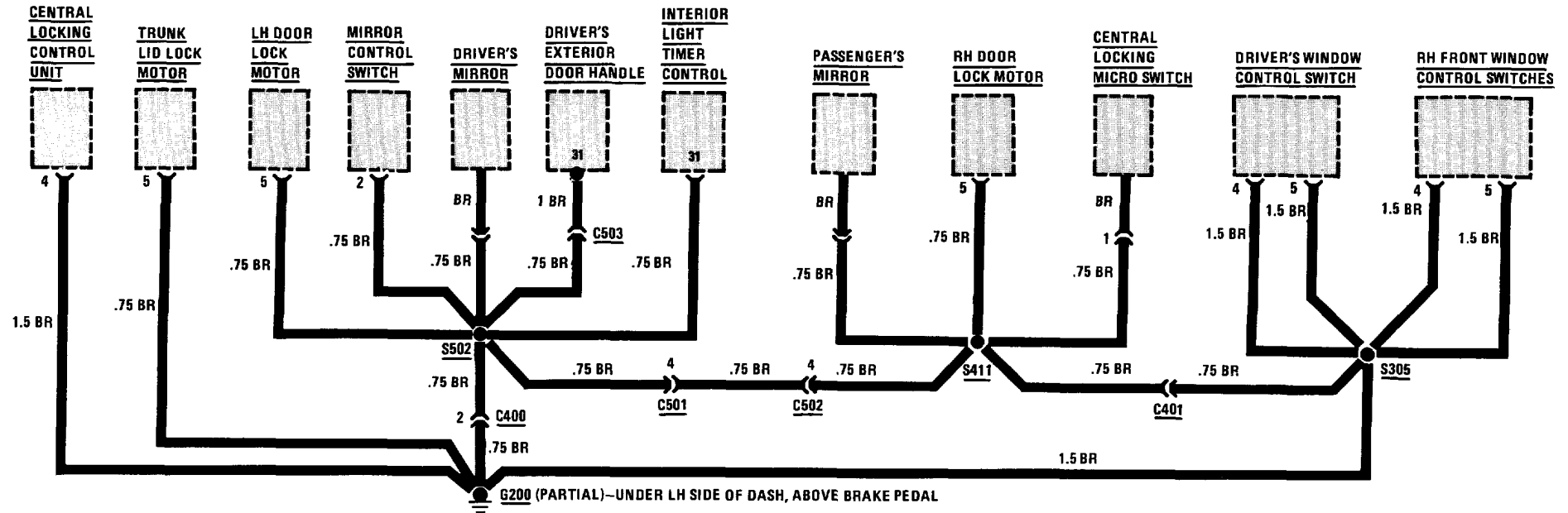


POWER MIRRORS AND INTERIOR LIGHTS WITH CENTRAL LOCKING OR POWER WINDOWS



150 GROUND DISTRIBUTION (G302 AND G200 PARTIAL)

WITH CENTRAL LOCKING AND POWER WINDOWS



POWER DISTRIBUTION

Diagnostic Connector	Top front of engine	202-2
Ignition Switch	Upper part of steering column	
Power Distribution Box	At top rear of left front wheel well.....	201-1
C200 (9 pins)	Under left side of dash, on steering column ...	201-1
C302 (25 pins) Accy Connector	Upper left corner of driver's footwell	211-3
G100	Behind right front shock tower	
G200	Under left side of dash, above brake pedal ..	210-2

START

Automatic Trans. Range Switch	At base of shift lever	
Diagnostic Connector	Top front of engine	202-2
Ignition Switch	Upper part of steering column	
Power Distribution Box	At top rear of left front wheel well.....	201-1
Start Relay	Upper left corner of drivers footwell	
C101 (19 pins)	On power distribution box	201-1
C200 (9 pins)	Under left side of dash, on steering column	210-1
C241 (1 pins)	Behind instrument panel, above steering column	208-2
C301 (2 pins)	At base of shift level	
G100	Behind right front shock tower	
G200	Under left side of dash, above brack pedal..	210-2

IGNITION/FUEL DELIVERY

Auxiliary Fuel Pump	In fuel tank.....	209-1
Diagnostic Connector	Top front of engine	202-2
Fuel Pump Relay	On bracket in front of left front shock tower	201-2
Idle Speed Control Unit	Right side of dash, above glove box.....	202-1
Ignition Coil	On right front wheel well	
Ignition Control Module	On bulkhead, above brake booster	203-2
Ignition Switch	Upper part of steering column	
Injection Control Module	Right side of dash, above glove box.....	202-1
Main Fuel Pump	Under car, in front of left rear wheel	
Power Distribution Box	At top rear of left front wheel well.....	201-1
C101 (19 pins)	On power distribution box	201-1
C103 (29 pins)	Upper left corner of driver's footwell	211-3

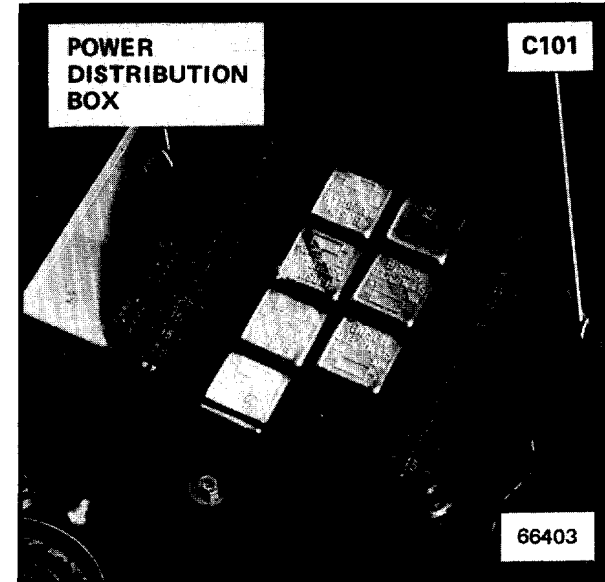


Figure 1 - Behind Left Front Shock Tower

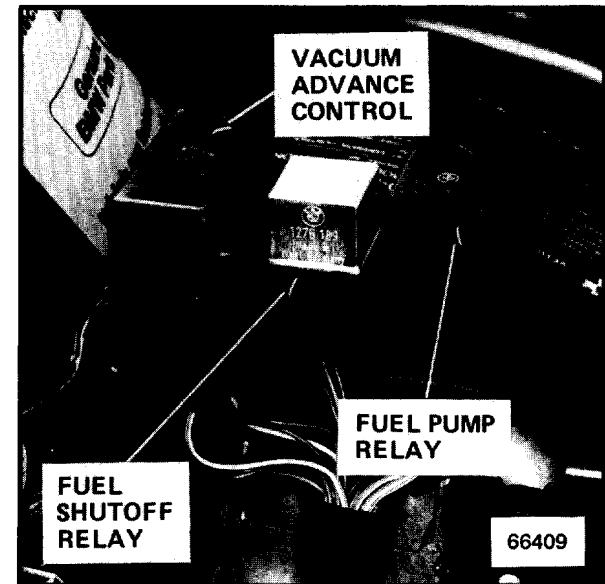


Figure 2 - Forward Of Left Front Shock Tower

202 COMPONENT LOCATIONS

(continued)

C104 (3 pins)	Right side of dash, above glove box	212-6
C200 (9 pins)	Under left side of dash, on steering column	210-1
G100	Behind right front shock tower	
G101	Top front of engine	203-1
G102	Top rear of engine	
G302	Under left side of rear seat	209-2

FUEL CONTROL

Air Flow Meter	Behind air cleaner	204-1
Barometric Pressure Sensor ...	Mounted on air intake housing	205-2
Cold Start Valve	Top center of engine	203-1
Coolant Temperature Sensor ..	Front of engine, top of thermostat housing ...	202-2
Diagnostic Connector	Top front of engine	202-2
Fuel Pump Relay	On bracket in front of left front shock tower	201-2
Fuel Shutoff Relay	On bracket in front of left front shock tower	201-2
Ignition Coil	On right front wheel well	
Ignition Control Module	On bulkhead, above brake vacuum booster ...	203-2
Ignition Switch	Upper part of steering column	
Injection Control Module	Right side of dash, above glove box	202-1
Oxygen Sensor	RH rear of engine, in exhaust manifold	
Thermotime Switch	Front of engine, top of thermostat housing ...	202-2
Throttle Switch	Below rear of throttle body	
Vacuum Advance Control	On bracket in front of left front shock tower	201-2
C101 (19 pins)	On power distribution box	201-1
G101	Top front of engine	203-1
G102	Top-rear of engine	

IDLE SPEED CONTROL

0°C (32°F) Temp Switch	On bulkhead, behind distributor	207-1
Automatic Trans. Range Switch	At base of shift lever	
Coolant Temperature Switch/Sender	Front of engine, top of thermostat housing ...	202-2
Diagnostic Connector	Top front of engine	202-2
Fuel Pump Relay	On bracket in front of left front shock tower	201-2
Idle Speed Control Unit	Right side of dash, above glove box	202-1
Idle Speed Control Valve	Top rear of engine	203-1



Figure 1 - Below Right Side Of Dash

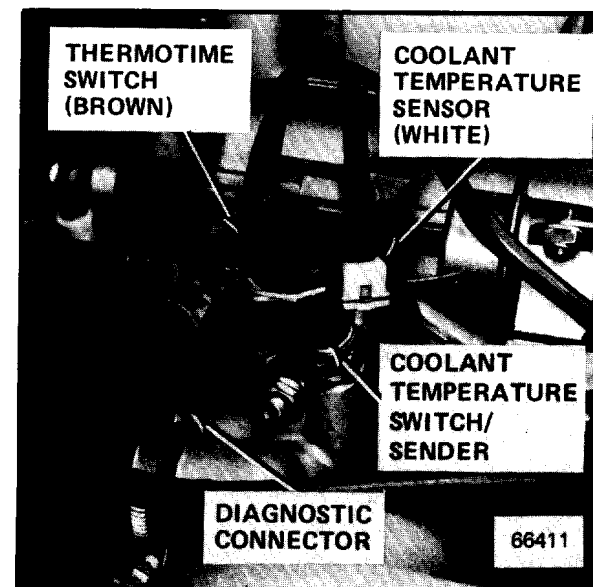


Figure 2 - Top Left Front Of Engine

(continued)

Ignition Coil	On right front wheel well	
Ignition Control Module	On bulkhead, above brake vacuum booster ...	203-2
Power Distribution Box	At top rear of left front wheel well.....	201-1
Throttle Switch.....	Below rear of throttle body	
C101 (19 pins)	On power distribution box	201-1
C105 (1 pin)	Right side of evaporator housing	
C131 (1 pin)	Right side of dash, above glove box	212-6
C301 (2 pins)	At base of shift lever	
G101	Top front of engine	203-1

VACUUM ADVANCE

Coolant Temperature Switch/Sender	Front of engine, top of thermostat housing ...	202-2
Diagnostic Connector	Top front of engine	202-2
Ignition Control Module	On bulkhead, above brake vacuum booster ...	203-2
Intake Air Temp Sensor	In air intake, behind left headlights	204-2
Power Distribution Box	At top rear of left front wheel well.....	201-1
Vacuum Advance Control	On bracket in front of left front shock tower	201-2
Vacuum Advance Solenoid Valve	On bulkhead, above brake vacuum booster ...	203-2
Vacuum Advance Unit	On distributor	
C101 (19 pins)	On power distribution box	201-1
G101.....	Top front of engine	203-1

CHARGING SYSTEM

Dash Warning Display	Top center of dash	
Diagnostic Connector	Top front of engine	202-2
Ignition Switch.....	Upper part of steering column	
Power Distribution Box	At top rear of left front wheel well.....	201-1
C101 (19 pins)	On power distribution box	201-1
C103 (29 pins)	Upper left corner of driver's footwell	211-3
C200 (9 pins).....	Under left side of dash, on steering column	210-1
G100.....	Behind right front shock tower	

WIPER/WASHER

Power Distribution Box	At top rear of left front wheel well.....	201-1
Washer Pump	Ahead of right front wheel well, on reservoir	206-2

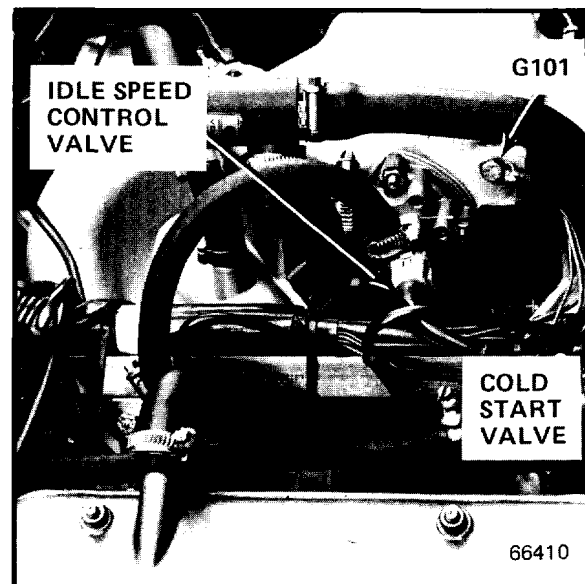


Figure 1 - Top Center Of Engine

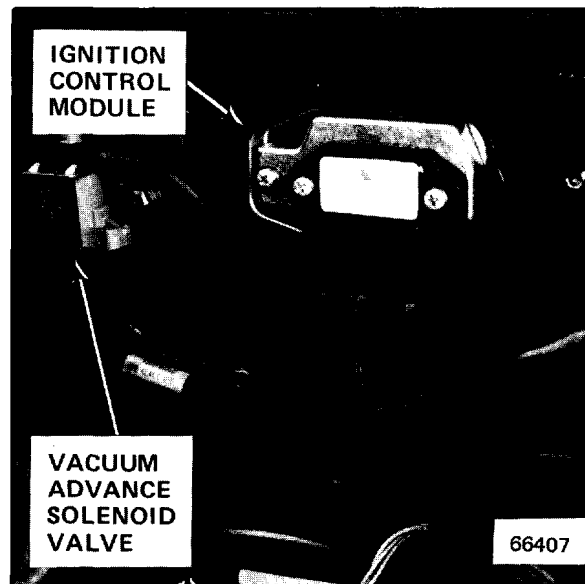


Figure 2 - Left Rear Corner Of Engine Compartment

204 COMPONENT LOCATIONS

(continued)

Wiper Motor	Under left side freshair intake cowl	
Wiper/Washer Switch	Upper right side of steering column	
C201 (6 pins)	Under left side of dash, on steering column ...	210-1
C108	In power distribution box	
C109	Near Wiper Motor	
G200.....	Under left side of dash, above brake pedal ..	210-2
G201 (Steering Column Ground)	Upper left side of steering column	

SPEEDOMETER/INDICATORS/GAUGES

Coolant Temperature Switch/Sender	Front of engine, top of thermostat housing ...	202-2
Dash Warning Display	Top center of dash	
Diagnostic Connector	Top front of engine	202-2
Fuel Tank Sender	Top of fuel tank	209-1
Ignition Switch	Upper part of steering column	
Oil Pressure Switch.....	On top rear of cylinder head	
Power Distribution Box	At top rear of left front wheel well.....	201-1
Speedometer Sender	In rear of differential	
C101 (19 pins)	On power distribution box	201-1
C103 (29 pins)	Upper left corner of driver's footwell	211-3
C200 (9 pins).....	Under left side of dash, on steering column	210-1
G200.....	Under left side of dash, above brake pedal ..	210-2
G302.....	Under left side of rear seat	209-2

TACHOMETER/FUEL ECONOMY GAUGE

Ignition Control Module	On bulkhead, above brake vacuum booster ...	203-2
Injection Control Module	Right side of dash, above glove box.....	202-1
Power Distribution Box	At top rear of left front wheel well.....	201-1
C103 (29 pins)	Upper left corner of driver's footwell	211-3
C104 (3 pins)	Right side of dash, above glove box.....	212-6
G200.....	Under left side of dash, above brake pedal ..	210-2

SERVICE INTERVAL INDICATOR

Coolant Temperature Switch/Sender	Front of engine, top of thermostat housing ...	202-2
Ignition Control Module	On bulkhead, above brake vacuum booster ...	203-2

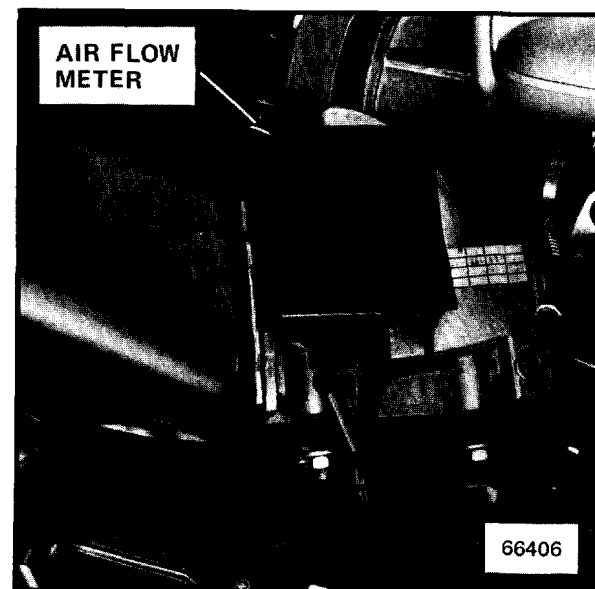


Figure 1 - Left Front Corner Of Engine Compartment

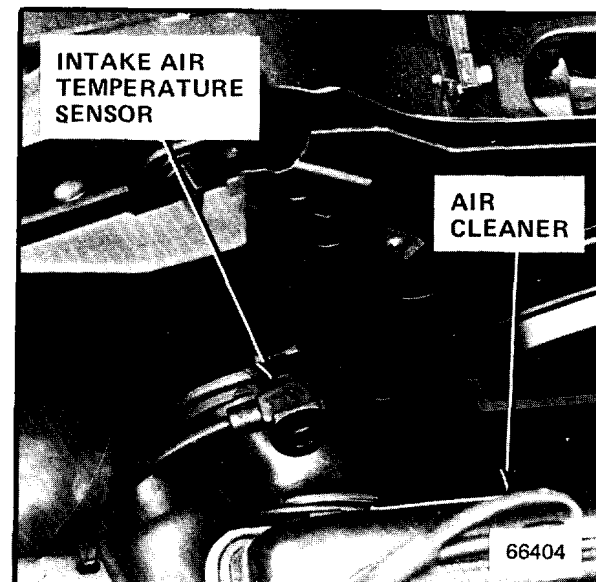


Figure 2 - Left Front Corner Of Engine Compartment

(continued)

Injection Control Module	Right side of dash, above glove box	202-1
Power Distribution Box	At top rear of left front wheel well	201-1
C101 (19 pins)	On power distribution box	201-1
C103 (29 pins)	Upper left corner of driver's footwell	211-3
C104 (3 pins)	Right side of dash, above glove box	212-6
G200	Under left side of dash, above brake pedal ..	210-2

BRAKE WARNING SYSTEM

Brake Fluid Level Switch	Left of engine, on brake fluid reservoir	208-1
Ignition Switch	Upper part of steering column	
Park Brake Switch	At base of parking brake	
Power Distribution Box	At top rear of left front wheel well	201-1
Seatbelt Warning Timer	Above brake pedal	210-2
C200 (9 pins)	Under left side of dash, on steering column	210-1
G104	On inner fender, behind left headlights	211-1
G200	Under left side of dash, above brake pedal ..	210-2

IGNITION KEY WARNING/SEATBELT WARNING

Dash Warning Display	Top center of dash	
Power Distribution Box	At top rear of left front wheel well	201-1
Seatbelt Switch	In driver's seatbelt buckle	
Seatbelt Warning Timer	Above brake pedal	210-2
Warning Buzzer	Upper part of steering column	
C103 (29 pins)	Upper left corner of driver's footwell	211-3
C200 (9 pins)	Under left side of dash, on steering column ..	210-1
G200	Under left side of dash, above brake pedal	210-2

HEADLIGHTS/FOG LIGHTS

Combination Switch	Upper left side of steering column	
Flasher	Upper part of steering column	
Fog Light Switch	On dash, left of steering column	
Power Distribution Box	At top rear of left front wheel well	201-1
C103 (29 pins)	Upper left corner of driver's footwell	211-3
C126 (2 pins)	Behind left headlights	211-1
C127 (2 pins)	Behind right headlights	211-2

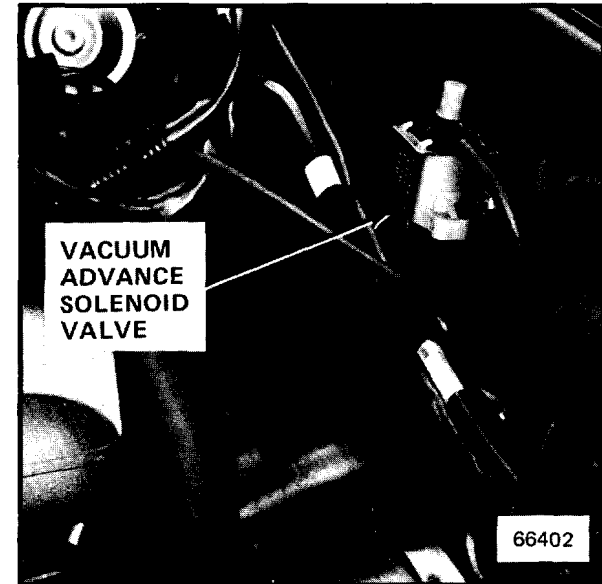


Figure 1 - Above Brake Vacuum Booster

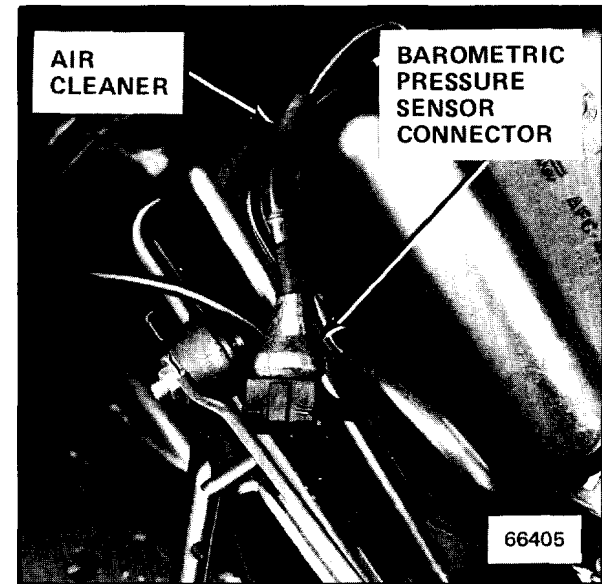


Figure 2 - Left Front Corner Of Engine Compartment (Manual Transmission Shown)

206 COMPONENT LOCATIONS

(continued)

C202 (13 pins)	Under left side of dash, on steering column ..	210-1
G104	On inner fender, behind left headlights	211-1
G200	Under left side of dash, above brake pedal....	210-2

LIGHTS: TURN/HAZARD WARNING

Combination Switch	Upper left side of steering column	
Flasher	Upper part of steering column	
Hazard Switch	In center console, above radio	212-5
Power Distribution Box	At top rear of left front wheel well	201-1
C103 (29 pins)	Upper left corner of driver's footwell	211-3
C200 (9 pins)	Under left side of dash, on steering column ..	210-1
C202 (13 pins)	Under left side of dash, on steering column ..	210-1
G104	On inner fender, behind left headlights	211-1
G200	Under left side of dash, above brake pedal....	210-2
G201 (Steering Column Ground)	Upper left side of steering column	
G302	Under left side of rear seat	209-2

LIGHTS: FRONT PARK/FRONT SIDE MARKER/TAIL/REAR MARKER/LICENSE/TRUNK

Power Distribution Box	At top rear of left front wheel well	201-1
C103 (29 pins)	Upper left corner of driver's footwell	211-3
G104	On inner fender, behind left headlights	211-1
G302	Under left side of rear seat	209-2

BACK UP LIGHTS

Automatic Trans. Range Switch	At base of shift lever	
Backup Light Switch	On transmission	
Power Distribution Box	At top rear of left front wheel well	201-1
C301 (2 pins)	At base of shift lever	
G302	Under left side of rear seat	209-2

STOPLIGHTS/HORN

Brake Switch	Above brake pedal	212-3
Horn/Brush Slip Ring	In upper steering column	

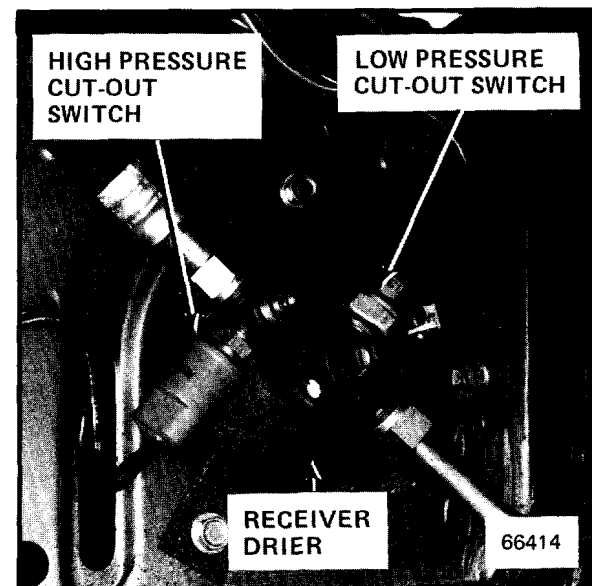


Figure 1 - Behind Right Headlights

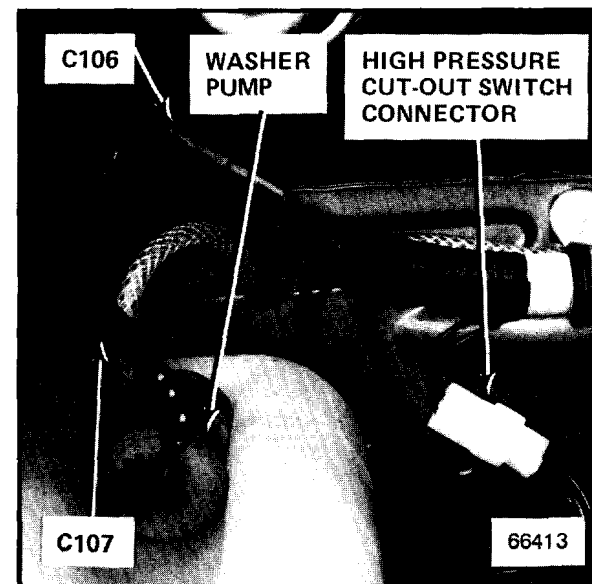


Figure 2 - Right Front Corner Of Engine Compartment

(continued)

Power Distribution Box	At top rear of left front wheel well	201-1
C202 (13 pins)	Under left side of dash, on steering column ..	210-1
G104.....	On inner fender, behind left headlights	211-1
G200.....	Under left side of dash, above brake pedal....	210-2
G201 (Steering Column Ground)	Upper left side of steering column	
G302.....	Under left side of rear seat	209-2

INTERIOR LIGHTS

Driver Exterior Door Handle		
Switch.....	In rear of left door	212-1
Interior Light Timer Control ...	Below left front speaker	
Power Distribution Box	At top rear of left front wheel well	201-1
C303 (3 pins)	At base of right "B" pillar	
C304 (3 pins)	At base of left "B" pillar	
C400 (6 pins)	Behind and above left front speaker	
C503 (3 pins)	In rear of door.....	212-2
C510 (1 pin)	Behind and above left front speaker	
G200.....	Under left side of dash, above brake pedal....	210-2
G302.....	Under left side of rear seat	209-2

CIGAR LIGHTER/DIGITAL CLOCK/GLOVE BOX LIGHT/AUTOCHARGING FLASHLIGHT

Auto-Charging Flashlight	In glove box	
Glove Box Light	In right underdash cover, in glove box	
Power Distribution Box	At top rear of left front wheel well	201-1
C103 (29 pins)	Upper left corner of driver's footwell	211-3
C204 (9 pins)	Under left side of dash	212-3
G200.....	Under left side of dash, above brake pedal....	210-2

REAR DEFOGGER

Dash Warning Display	Top center of dash	
Power Distribution Box	At top rear of left front wheel well	201-1
C103 (29 pins)	Upper left corner of driver's footwell	211-3
G200.....	Under left side of dash, above brake pedal....	210-2
G302.....	Under left side of rear seat	209-2



Figure 1 - Bulkhead Behind Distributor

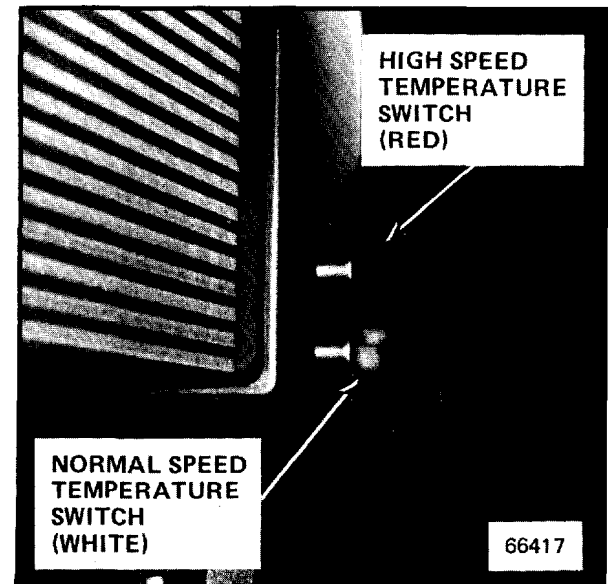


Figure 2 - Bottom Left Rear Of Radiator

208 COMPONENT LOCATIONS

RADIO/POWER ANTENNA

Power Distribution Box	At top rear of left front wheel well.....	201-1
C250 (7 pins)	Behind right side of center console	208-2
C302 (25 pins) Accy Connector	Upper left corner of driver's footwell	211-3
G200.....	Under left side of dash, above brake pedal....	210-2
G302.....	Under left side of rear seat	209-2

POWER MIRRORS

Mirror Control Switch	On driver's door, above arm rest	
Power Distribution Box	At top rear of left front wheel well.....	201-1
C400 (6 pins)	Behind and above left front speaker	
C501 (4 pins).....	Upper left corner of drivers footwell.....	211-3
C502 (4 pins).....	Above and behind right rear speaker	212-2
G200.....	Under left side of dash, above brake pedal....	210-2

DASH LIGHTS

Power Distribution Box	At top rear of left front wheel well.....	201-1
C103 (29 pins)	Upper left corner of driver's footwell	211-3
C204 (9 pins).....	Under left side of dash, on steering column ..	210-1
C302 (25 pins) Accy Connector	Upper left corner of driver's footwell	211-3
G200.....	Under left side of dash, above brake pedal....	210-2

HEATING AND AIR CONDITONING

A/C In-Line Diode.....	Left side of evaporator housing	
A/C In-Line Fuse	Left side of evaporator housing	
Blower Motor	Behind center console, in evaporator housing	
Blower Resistors	Behind center console, in evaporator housing	
Clutch Diode.....	Near washer pump	
Evaporator Temperature Switch	Left side of evaporator housing	
Fuel Shutoff Relay	On bracket in front of left front shock tower	201-2
High Pressure Cut-Out Switch	On receiver dryer	206-2
Fresh/Recir. Air Relays	Behind A/C face plate	
Fresh/Recir. Air Flap Door		
Motors	Behind A/C face plate	208-2
Hot Water Cut-Off Switch	Behind A/C face plate	
Idle Speed Control Unit	Right side of dash, above glove box	202-1
Ignition Control Module	On bulkhead, above brake vacuum booster ...	203-2

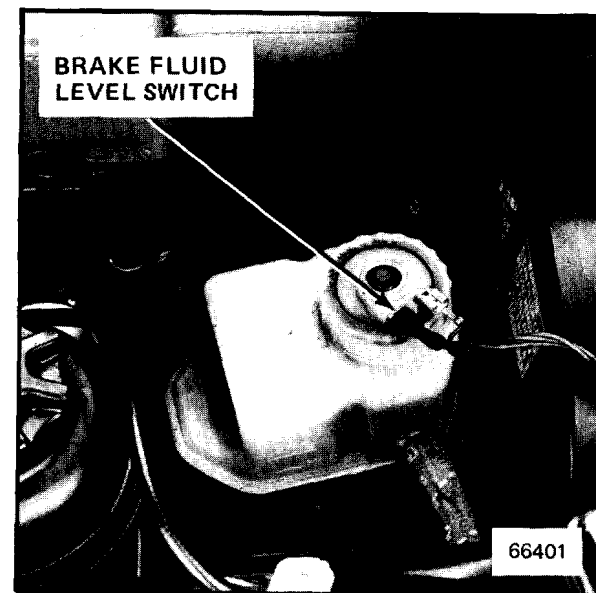


Figure 1 - LH Rear Of Engine Compartment

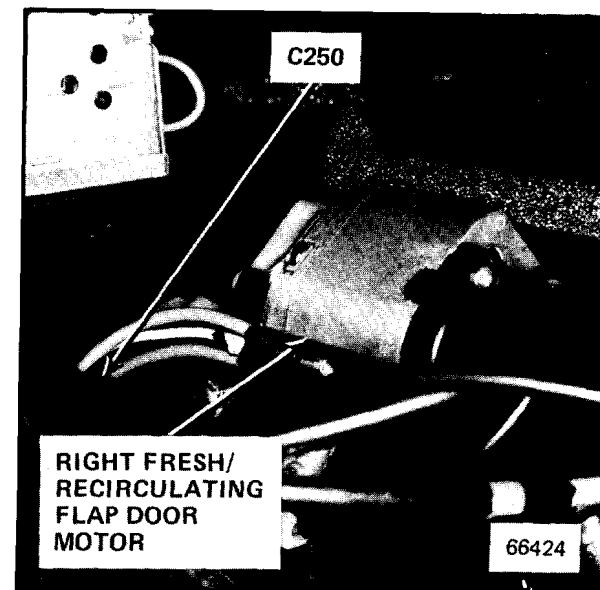


Figure 2 - Behind Right Side Of Center Console

(continued)

Low Pressure Cut-Out Switch.....	Behind right headlights	206-2
Power Distribution Box	At top rear of left front wheel well.....	201-1
Water Shut-Off Solenoid	Left side of evaporator housing	
C103 (29 pins)	Upper left corner of driver's footwell	211-3
C105 (1 pin)	Right side of evaporator housing	212-6
C106 (1 pin)	Near washer pump	206-1
C107 (2 pins)	Near washer pump	206-1
C204 (9 pins)	Under left side of dash, on steering column ..	212-3
C251 (4 pins)	Behind A/C face plate	
C255	Left side of evaporator housing	
G200	Under left side of dash, above brake pedal .	210-2

AUXILIARY FAN

Auxiliary Fan	In front of condensor	
Compressor Enable Switch ...	Behind A/C face plate	
Evaporator Temperature Switch	Left side of evaporator housing	
High Speed Temperature Switch.....	Bottom left rear of radiator	207-2
Normal Speed Blower Resistor	On auxiliary fan shroud	
Normal Speed Temperature Switch.....	Bottom left rear of radiator	207-2
Power Distribution Box	At top rear of left front wheel well.....	201-1
C113 (3 pins)	Behind left headlights.....	211-1
C204 (9 pins)	Under left side of dash, on steering column ..	210-1
G104.....	On inner fender, behind left headlights.....	212-3
G200.....	Under left side of dash, above brake pedal....	210-2

CENTRAL LOCKING SYSTEM..

Central Locking Control Unit...	Below and behind left front speaker	
Central Locking Micro Switch.....	Rear of right door, at lock cylinder	212-4
Door Lock Motors	Rear part of each door	212-4
Gas Filler Door Lock Motor....	Behind right rear inner wheel well	
Ignition Switch	Upper part of steering column	
Power Distribution Box	At top rear of left front wheel well.....	201-1
Trunk Lid Lock Motor	On trunk lock center support	

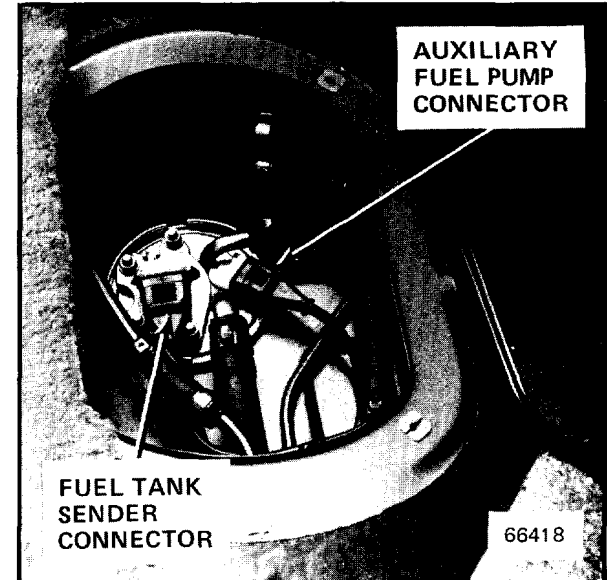


Figure 1 - Under Right Side Of Rear Seat

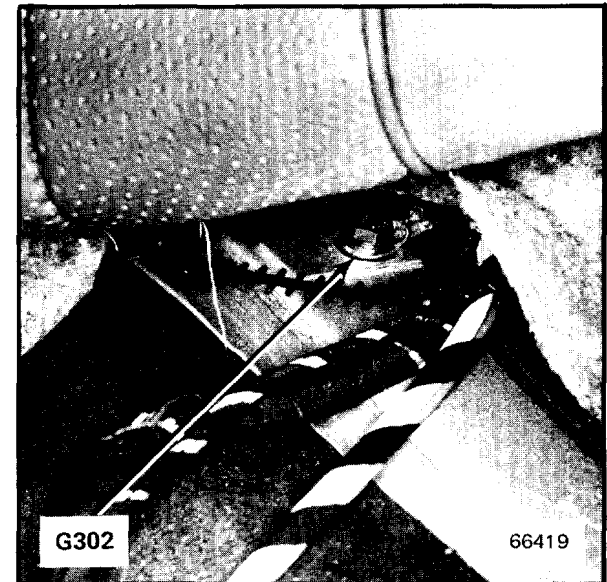


Figure 2 - Left Side Of Rear Seat Back Rest

210 COMPONENT LOCATIONS

(continued)

C200 (9 pins)	Under left side of dash, on steering column ..	210-1
C302 (25 pins) Accy Connector	Upper left corner of driver's footwell	211-3
C400 (6 pins)	Behind and above left front speaker	
C401 (13 pins)	Above and behind right front speaker	
C402 (13 pins)	Above and behind left front speaker	
G200	Under left side of dash, above brake pedal....	210-2

POWER WINDOWS

Ignition Switch	Upper part of steering column	
Power Distribution Box	At top rear of left front wheel well	201-1
Power Window Circuit		
Breaker	On center console, above radio	212-5
Power Window Motors	Forward part of each door	
C200 (9 pins)	Under left side of dash, on steering column ..	210-1
C302 (25 pins) Accy Connector	Upper left corner of driver's footwell	211-3
C351 (1 pin)	Behind center console	
C401 (13 pins)	Above and behind right front speaker	
C402 (13 pins)	Above and behind left front speaker	
G200	Under left side of dash, above brake pedal....	210-2



Figure 1 - Under Left Side Of Dash

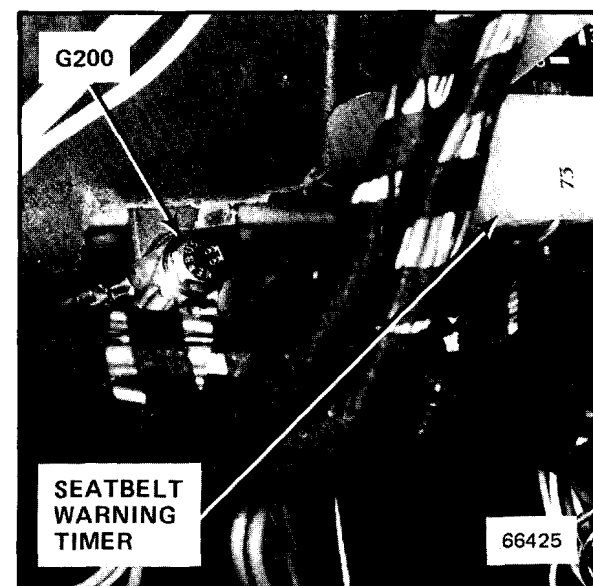


Figure 2 - Above Pedal Assembly

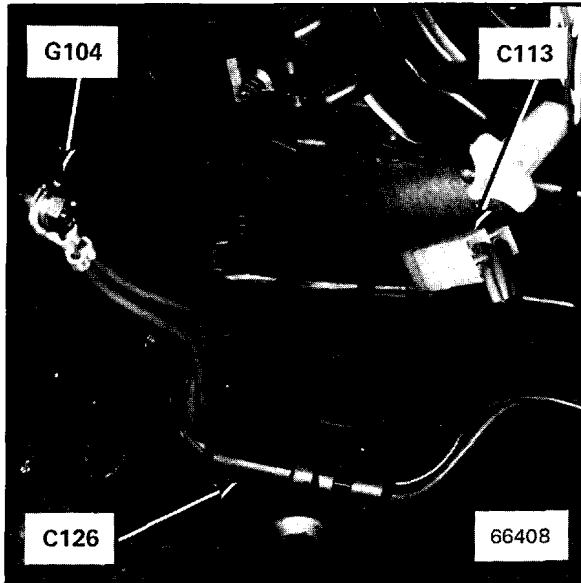


Figure 1 - Behind Left Headlights

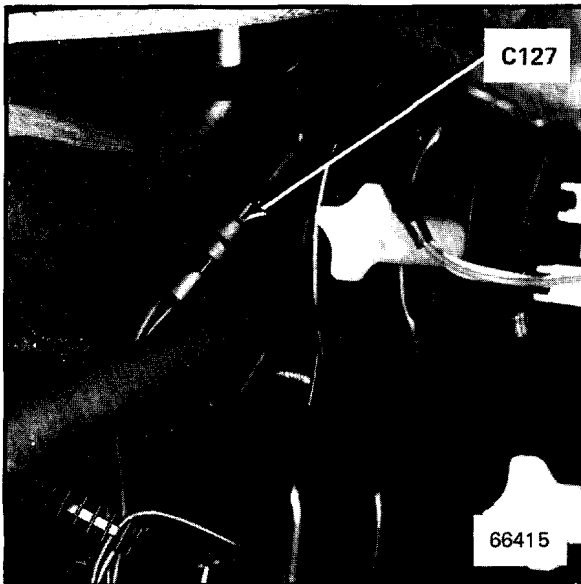


Figure 2 - Behind Right Headlights

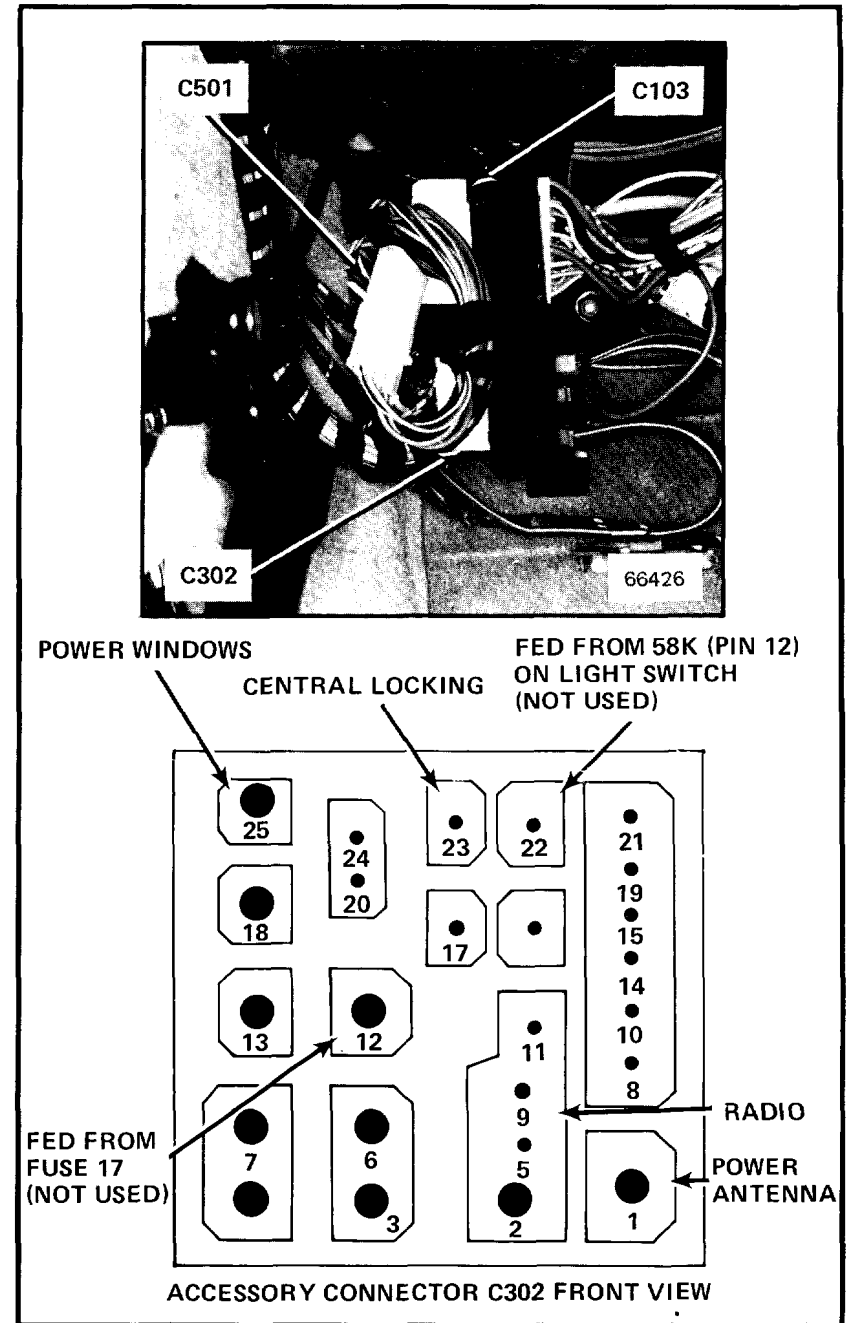


Figure 3 - Under Left Side Of Dash Ahead Of Pedal Assembly

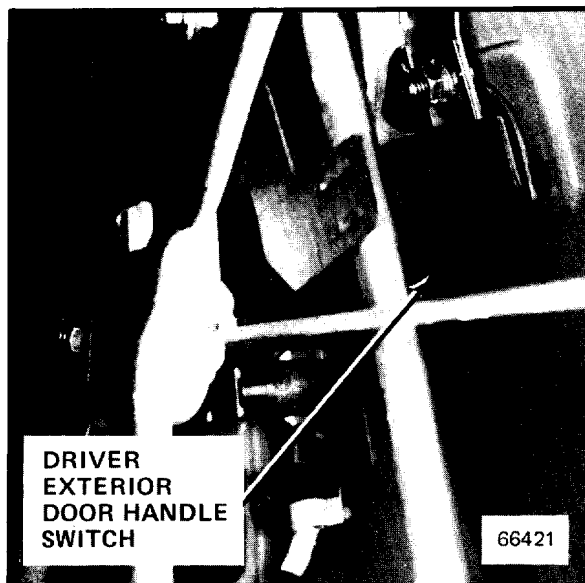


Figure 1 - Rear Of Left Door



Figure 3 - Under Left Side Of Dash

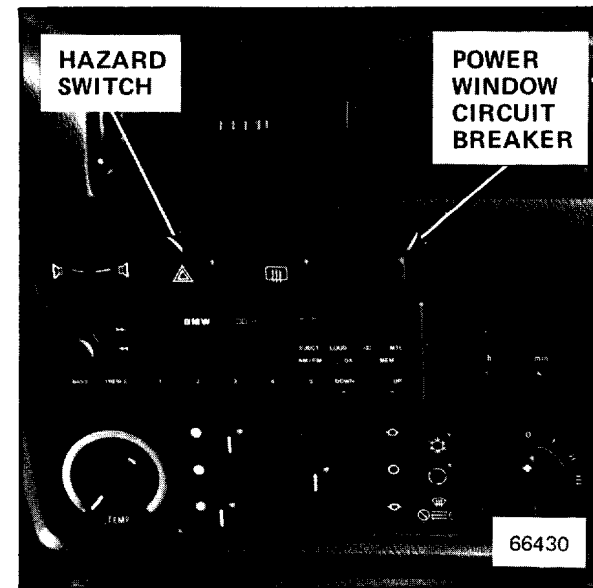


Figure 5 - Center Console

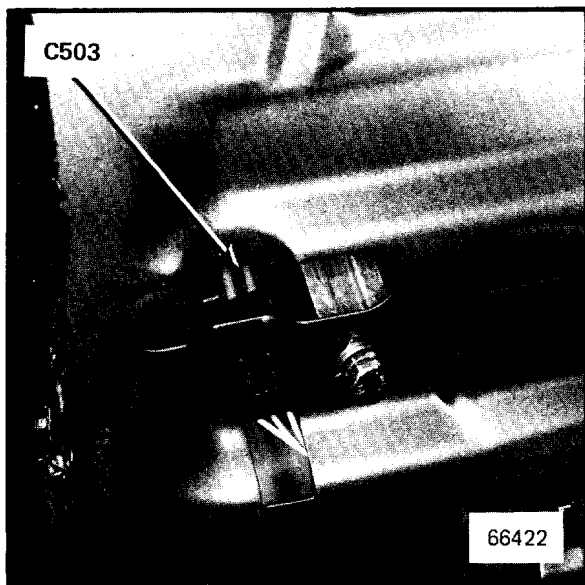


Figure 2 - Rear Of Left Door

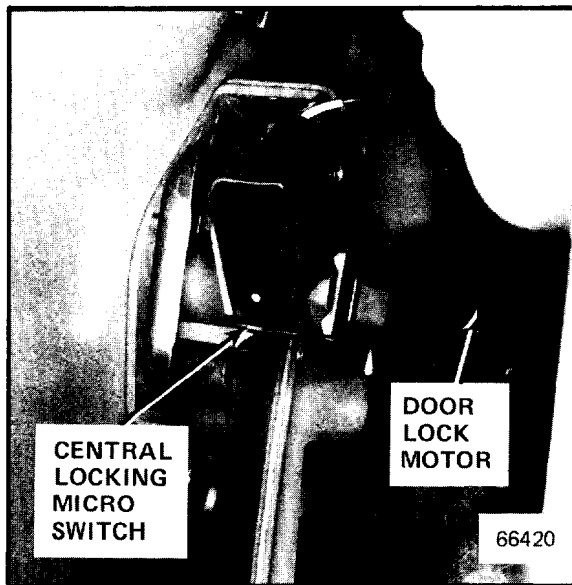


Figure 4 - Rear Of Right Door

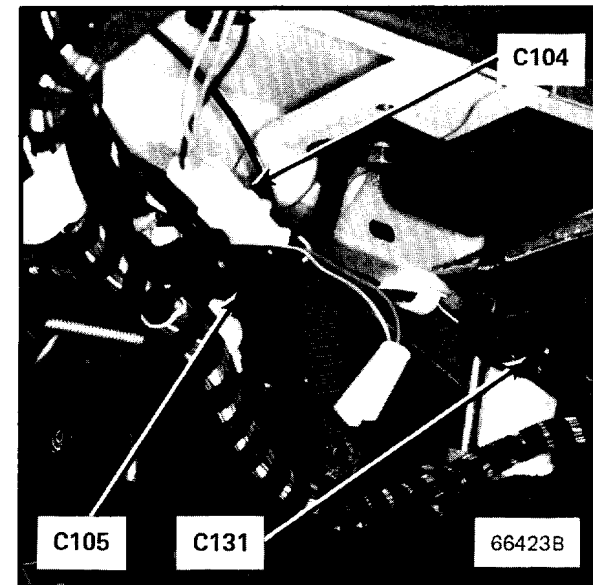


Figure 6 - Behind Right Side Of Dash