

# 1985 BMW 325e/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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1985 BMW 325e/318i Electrical Troubleshooting Manual

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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.

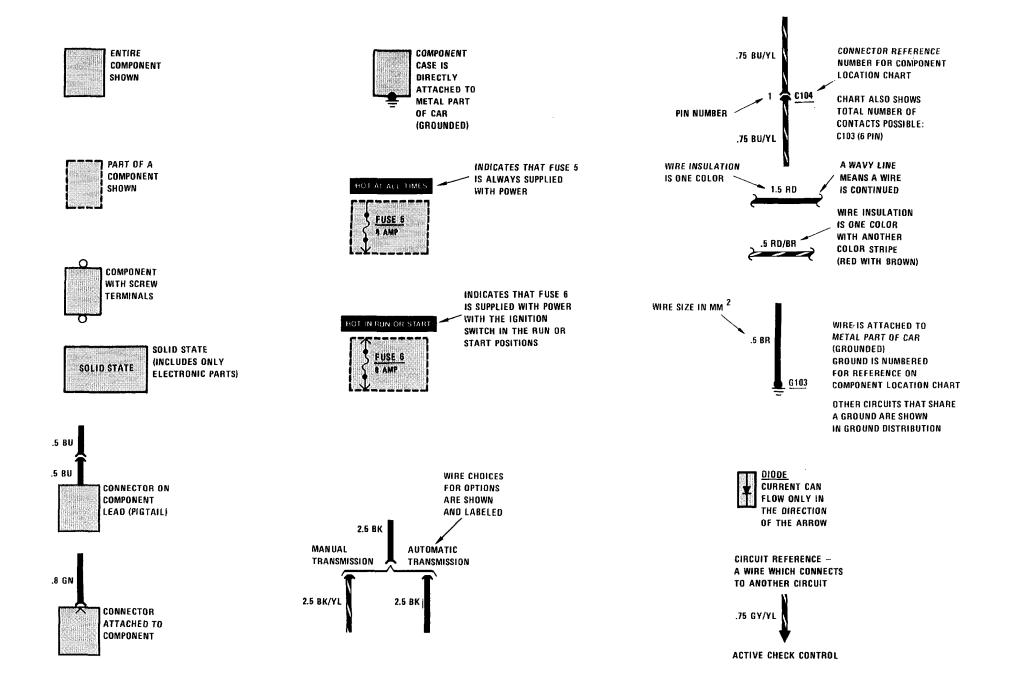
All wiring between components is shown exactly as it exists in the vehicle; however, the wiring is not drawn to scale. To aid in understanding electrical operation, wiring inside complicated components has been simplified. The "Solid State" label designates electronic components.

| WIRE SIZE<br>CONVERSION CHART  |   |  |
|--|---|--|
| METRIC<br>(CROSSECTIONAL AREA<br>IN MM²)                                 | AWG<br>(AMERICAN<br>WIRE GAUGE)   |  |
| .5<br>.75<br>1<br>1.5<br>2<br>2.5<br>4<br>6<br>8<br>16<br>20<br>25<br>32 | 20<br>18<br>16<br>14<br>14<br>12<br>10<br>8<br>8<br>4<br>4<br>4<br>2<br>2 |  |

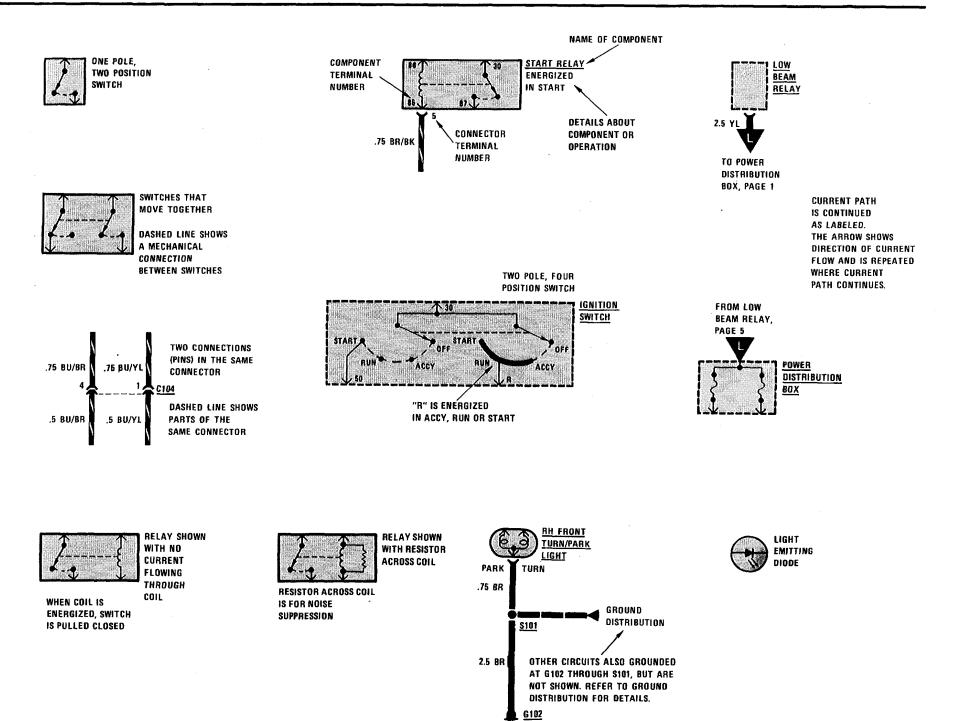
### HOW TO USE THIS MANUAL 3

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

### 4 SYMBOLS



#### SYMBOLS 5



#### 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**

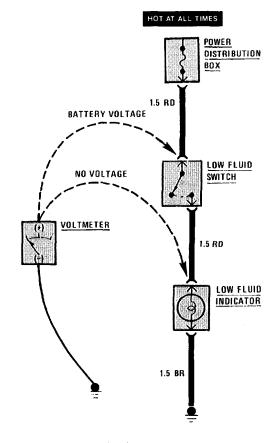
Isolating the problem (Step 3 of TROUBLESHOOTING PROCEDURES) requires the use of a voltmeter and/or ohmmeter. A voltmeter measures voltage at selected points in a circuit. An ohmmeter measures a circuit's resistance to current flow. It has an internal battery that provides current to the circuit under 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 solidstate 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.

#### **Continuity Test**

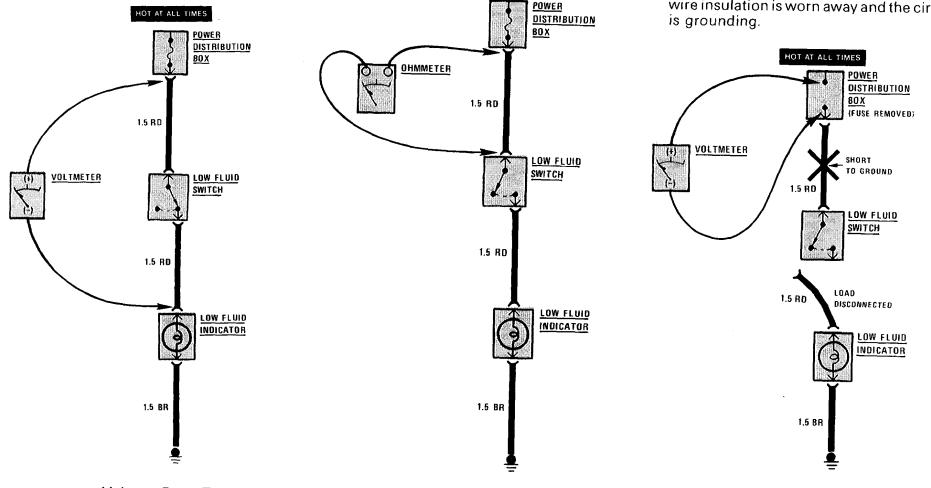
To perform a continuity test, first disconnect the car battery. Then adjust the ohmmeter to read zero while holding the leads together. Connect the ohmmeter leads to connector or terminals at either end of the circuit's suspected problem area. The ohmmeter will show the resistance across that part of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

**BATTERY DISCONNECTED** 

#### 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

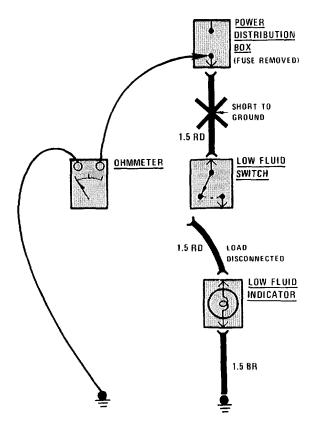
# 8 SYSTEMATIC TROUBLESHOOTING

#### 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.

#### BATTERY DISCONNECTED



Short Test Using Ohmmeter

**Section A** 

# 325e

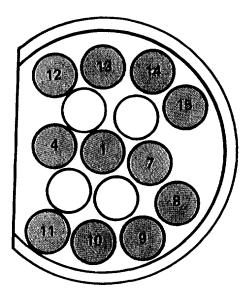
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WIRE WIRE PIN SIZE COLOR **CIRCUIT AND COMPONENT CONNECTED** BR 1.5 Ground Distribution, G103 1 .5 **BR/VI** Gauges/Warning Indicators, Coolant 4 Temperature Sender 7 .5 WT/BU Service Interval Indicator, Service Interval Processor (Reset) YL Ignition, TDC Sensor. .5 8 Ignition, TDC Sensor. 9 SHIELD ΒK Ignition, TDC Sensor. 10 .5 2.5 BK/YL Start, Start Signal. (50) 11 12 ΒU Charge System, Alternator (D+) .75 GN Ignition, Ignition Coil 13 1 Charge System, Alternator (30) 2.5 RD 14 15 1.5 GN/YL Idle Speed Control, Idle Speed Control Unit.

.

#### DIAGNOSTIC CONNECTOR FACE

# **102** C302 (ACCESSORY CONNECTOR)

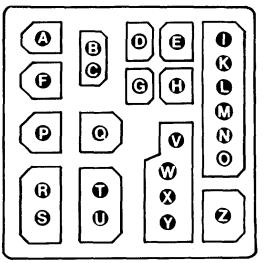


Figure 1-C302 (Accessory Connector) Front View—Under LH Side of Dash Ahead of Pedal Assembly

#### **CIRCUITS USING C301 (ACCESSORY CONNECTOR)**

| TERMINAL | CIRCUIT           | TERMINAL | CIRCUIT         |
|----------|-------------------|----------|-----------------|
| А        | Not Used          | N        | Not Used        |
| В        | Not Used          | 0        | Not Used        |
| С        | Not Used          | Р        | Not Used        |
| D        | Central Locking   | Q        | Power Windows & |
| E        | Not Used          |          | Sunroof         |
| F        | Not Used          | R        | Cruise Control  |
| G        | Not Used          | S        | Cruise Control  |
| Н        | On-Board Computer | Т        | Not Used        |
| 1        | Not Used          | U        | Not Used        |
| J        | Not Used          | V        | Radio           |
| К        | Not Used          | W        | Not Used        |
| L        | Not Used          | Х        | Radio           |
| M        | Not Used          | Y        | Radio           |
|          |                   | Z        | Power Antenna   |

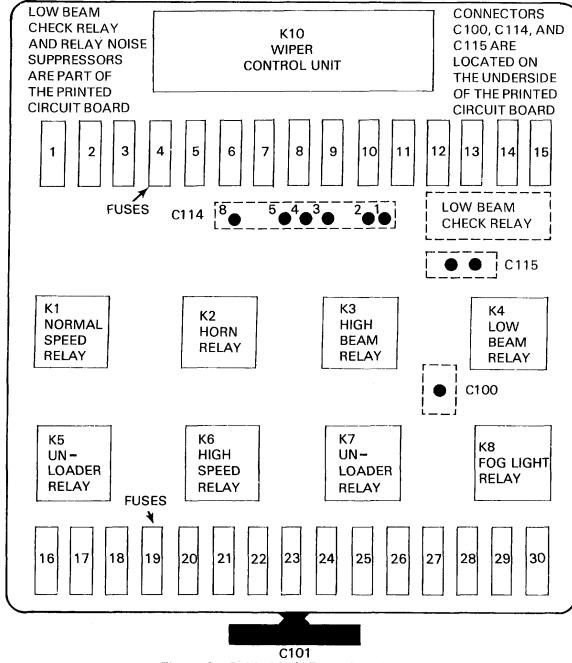


Figure 1 - Behind Left Front Shock Tower

OF CAR

# 103A FUSE DATA

| FUSE | SIZE/       |  |
|------|-------------|--|
| NO.  | COLOR       | CIRCUIT NAME   |
| 1    | 7.5A (BR)   | Headlights (also fuses 2, 13, 14).   |
| 2    | 7.5A (BR)   | Headlights (also fuses 1, 13, 14).   |
| 3    | 15A (LT BU) | Auxiliary Fan (also fuses 18, 19).   |
| 4    | 15A (LT BU) | Lights: Turn/Hazard Warning (also fuse 24);<br>Active Check Control<br>(also fuses 6, 10, 21, 22, 23).   |
| 5    | 30A (LT GN) | Wiper/Washer.  |
| 6    | 7.5A (BR)   | Stoplights/Cruise Control (also fuse 10);<br>Active Check Control<br>(also fuses 4, 10, 21, 22, 23);<br>Cruise Control.  |
| 7    | 15A (LT BU) | Horn.  |
| 8    | 30A (LT GN) | Rear Defogger (also fuse 23).  |
| 9    | 15A (LT BU) | Idle Speed Control (also fuse 10).   |
| 10   | 7.5A (BR)   | Seatbelt Warning (also fuse 21);<br>Service Interval Indicator (also fuse 21);<br>Tachometer/Fuel Economy Gauges<br>(Also fuse 21);<br>Gauges/Indicators;<br>Brake Warning System;<br>Back Up Lights;<br>On-Board Computer (also fuses 12, 21, 27);<br>Start;<br>Idle Speed Control (also fuse 9);<br>Active Check Control (also fuse 21);<br>Stoplights/Cruise Control (also fuse 6). |
| 11   | 15A (LT BU) | Fuel Delivery.   |
| 12   | 7.5A (BR)   | Radio (also fuse 21);<br>Speedometer/Indicators (also fuse 8);<br>On-Board Computer (also fuse 10, 21, 27).  |
| 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) | Sunroof.   |
| 18   | 30A (LT GN) | Auxiliary Fan (also fuses 3, 19).  |
| 19   | 7.5A (BR)   | Auxiliary Fan (also fuses 3, 18);<br>Interior Lights (also fuses 21, 27);<br>Power Mirrors.  |

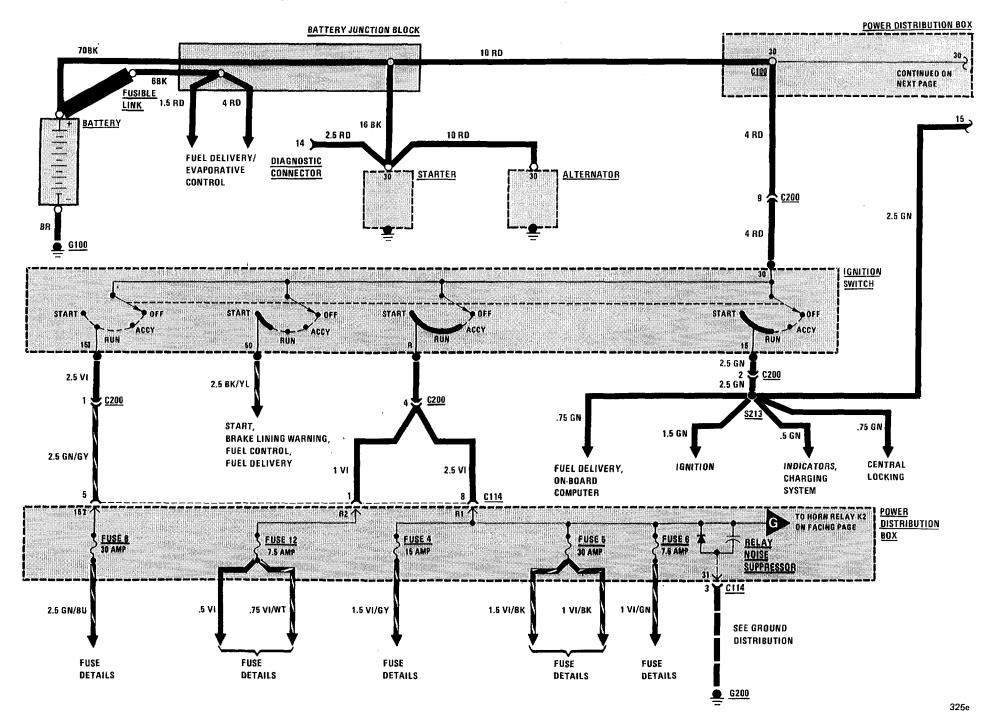
| FUSE | SIZE/       |   |
|------|-------------|---|
| NO,  | COLOR       |   |
| 20   | 30A (LT GN) | Heater/Air Conditioning (also fuse 28).   |
| 21   | 7.5A (BR)   | Auto-Charging Flashlight;<br>Glove Box Light;<br>Ignition Key Warning/Seatbelt Warning<br>(also fuse 10);<br>Interior Lights (also fuses 14, 22, 27);<br>Radio (also fuses 12);<br>Trunk Light;<br>Active Check Control<br>(also fuses 4, 6, 10, 22, 23);<br>Service Interval Indicator (also fuse 10);<br>On-Board Computer (also fuses 10, 12, 27);<br>Fuel Delivery;<br>Tachometer/Fuel Economy Gauge<br>(also fuse 10). |
| 22   | 7.5A (BR)   | Active Check Control<br>(also fuses 4, 6, 10, 21, 23);<br>Lights: Front Park/Tail (also fuse 23);<br>Lights: Front Side Marker (also fuse 23).  |
| 23   | 7.5A (BR)   | Lights: Dash<br>Lights: Front Park/Tail (also fuse 22);<br>Lights: Front Side Marker (also fuse 22);<br>Lights: Rear Marker/License;<br>Active Check Control (Also fuses 4, 6, 10, 21,<br>22);<br>Rear Defogger (also fuse 8).  |
| 24   | 15A (LT BU) | Lights: Turn/Hazard Warning (also fuse 4).  |
| 25   |             | Not Used.   |
| 26   |             | Not Used.   |
| 27   | 30A (LT GN) | Interior Lights (also fuses 19, 21);<br>Central Locking;<br>On-Board Computer (also fuses 10, 12, 21).  |
| 28   | 30A (LT GN) | Cigar Lighter;<br>Power Antenna.  |
| 29   | 7.5A (BR)   | Fog Lights (also fuse 30).  |
| 30   | 7.5 (BR)    | Fog Lights (also fuse 29).  |

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103B

# **104 POWER DISTRIBUTION**

#### (For Component Location See Page 213)

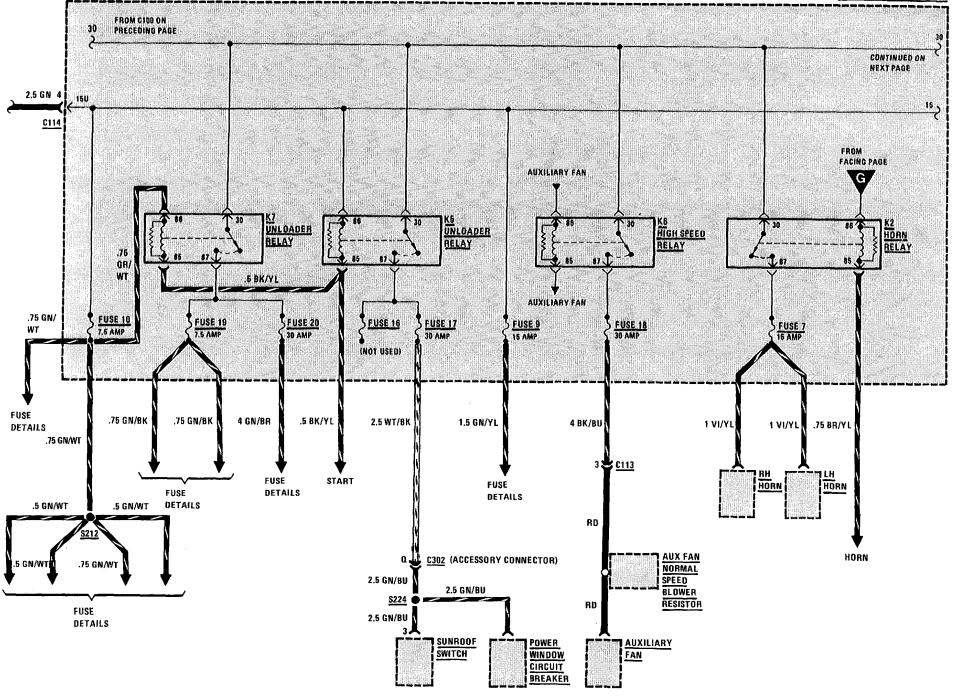


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# **POWER DISTRIBUTION** 105

#### (For Component Location See Page 213)

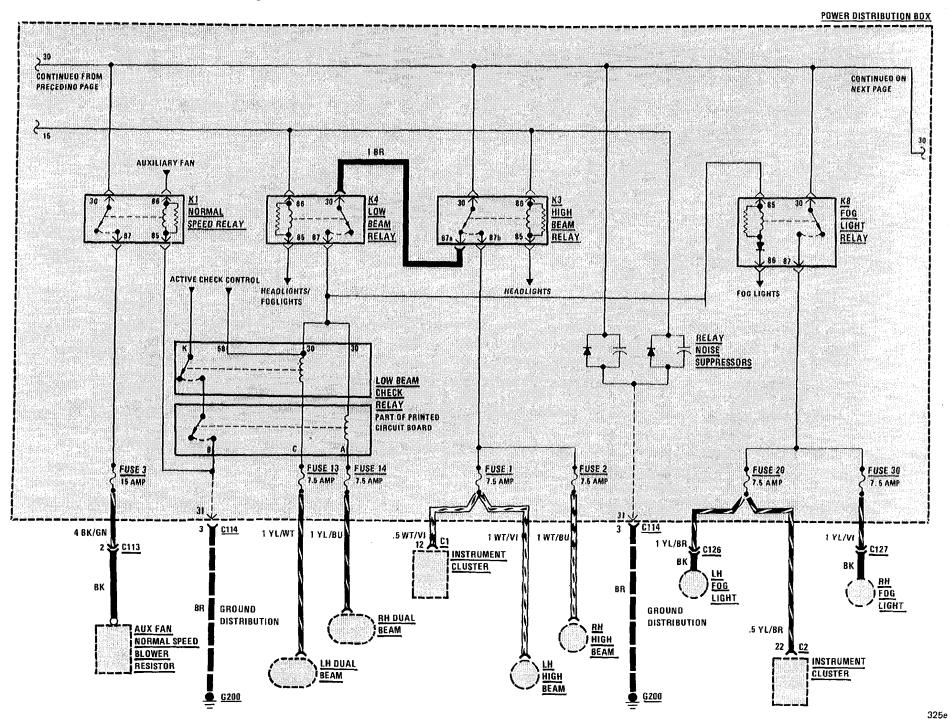
POWER DISTRIBUTION BOX



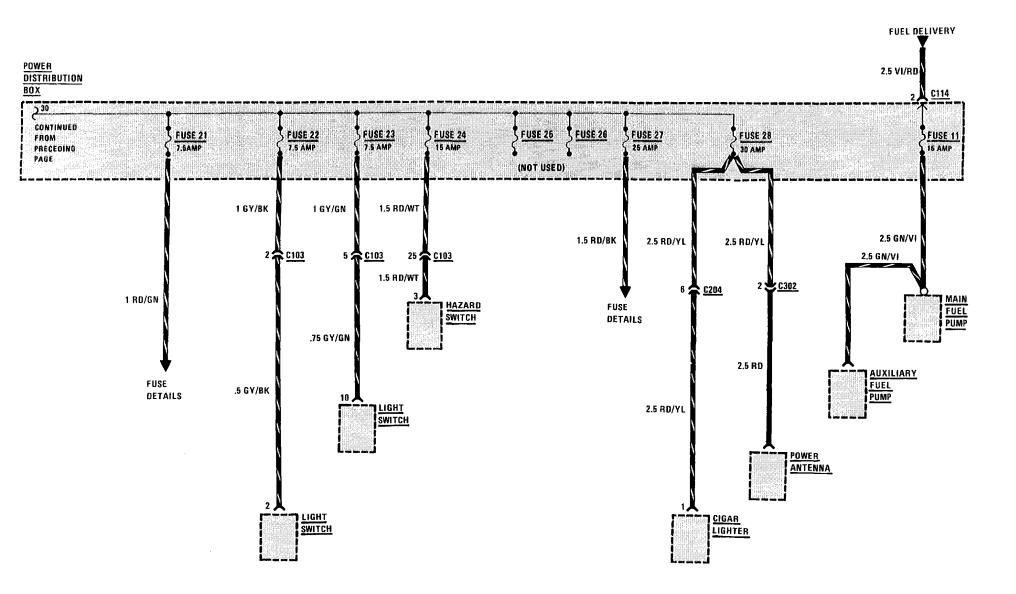
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# **106 POWER DISTRIBUTION**

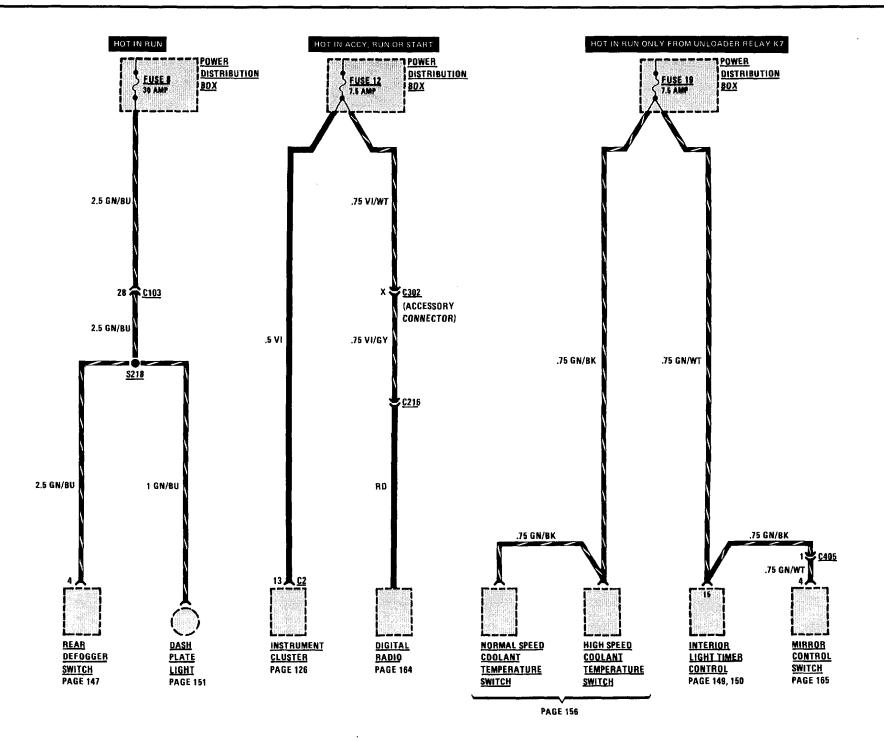
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# (For Component Location See Page 213)



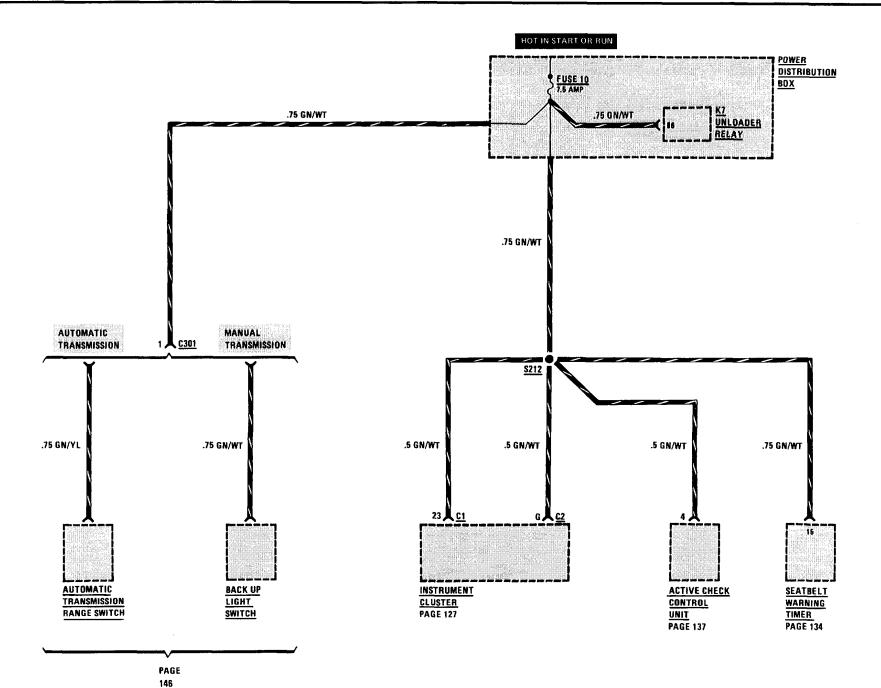
# 108 FUSE DETAILS: FUSES 8, 12 AND 19



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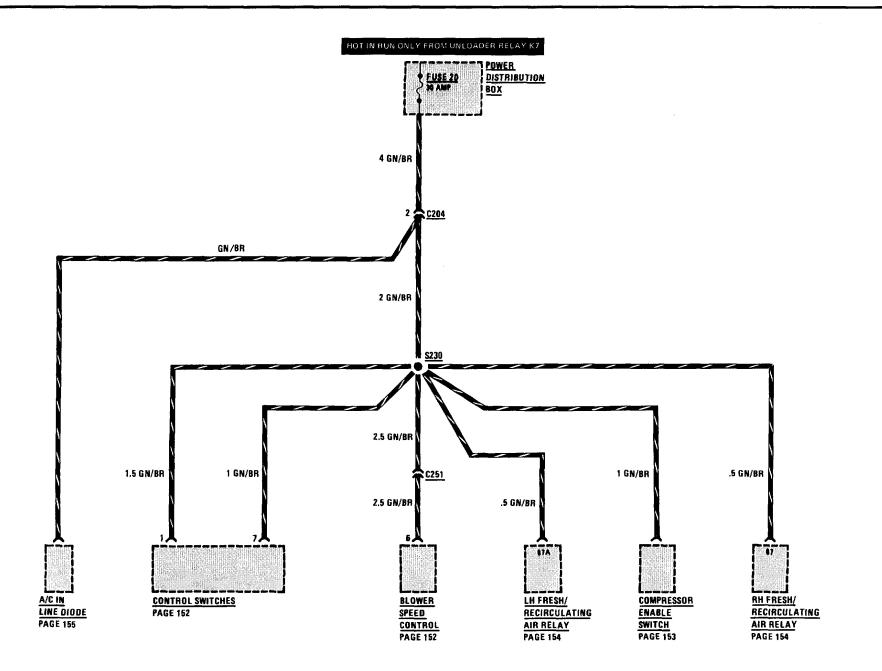
# FUSE DETAILS: FUSE 10 109

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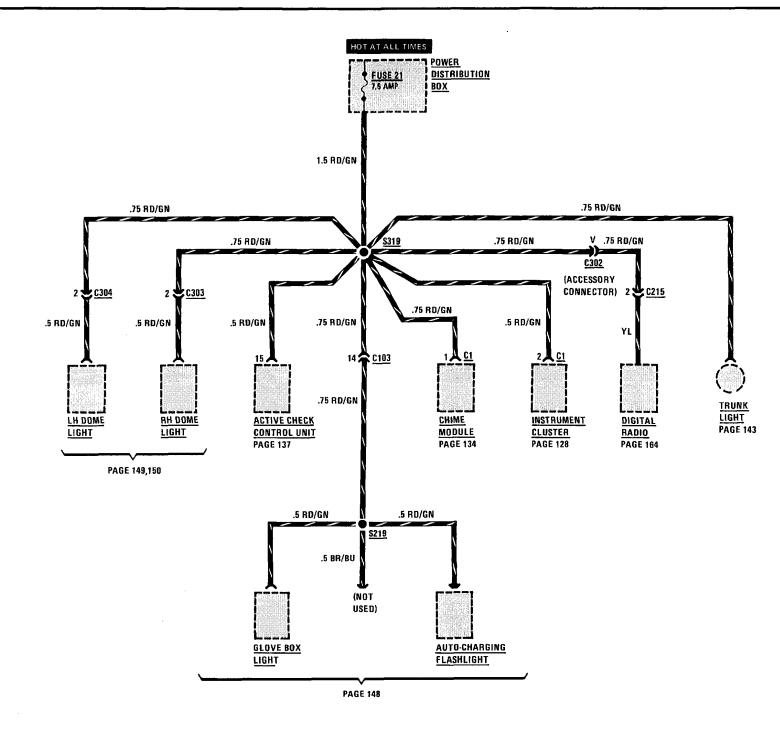


#### 110 FUSE DETAILS: FUSE 20

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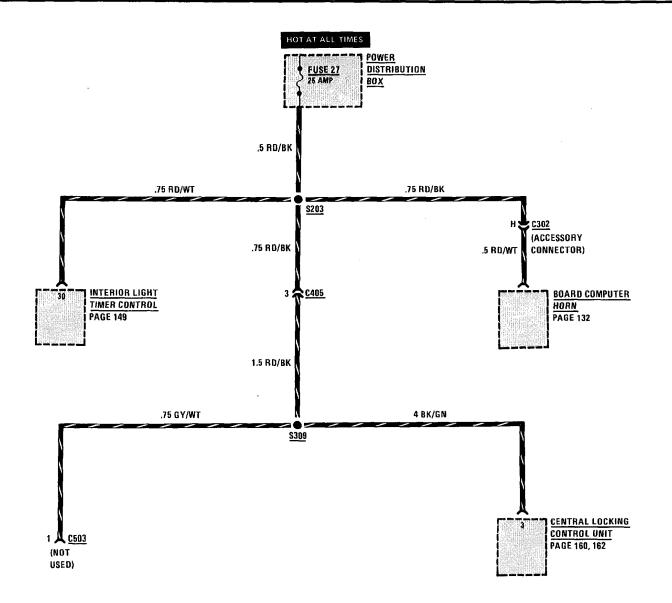


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# 112 FUSE DETAILS: FUSE 27

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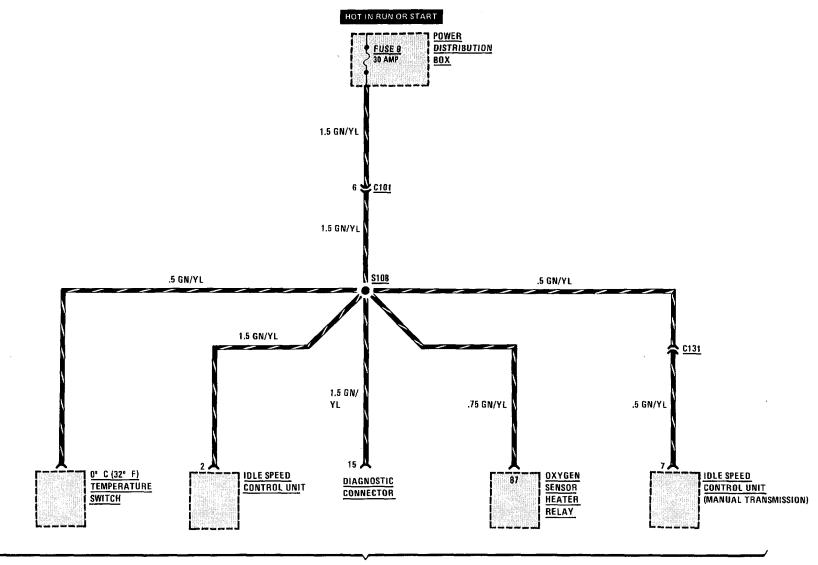


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# FUSE DETAILS: FUSE 9 113

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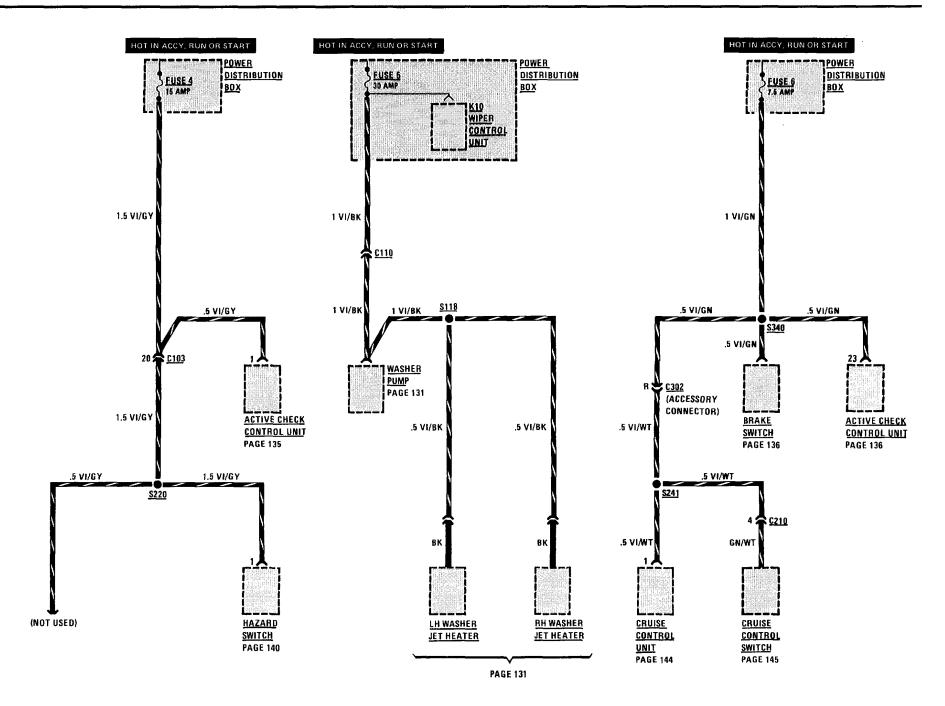


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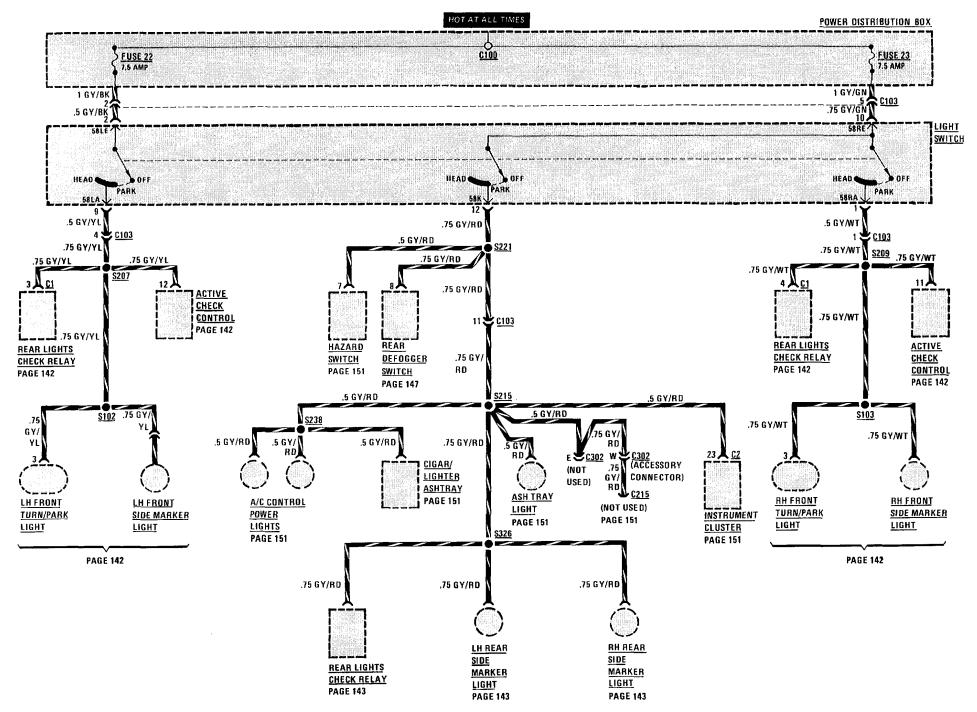
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#### 114 FUSE DETAILS: FUSES 4, 5, AND 6

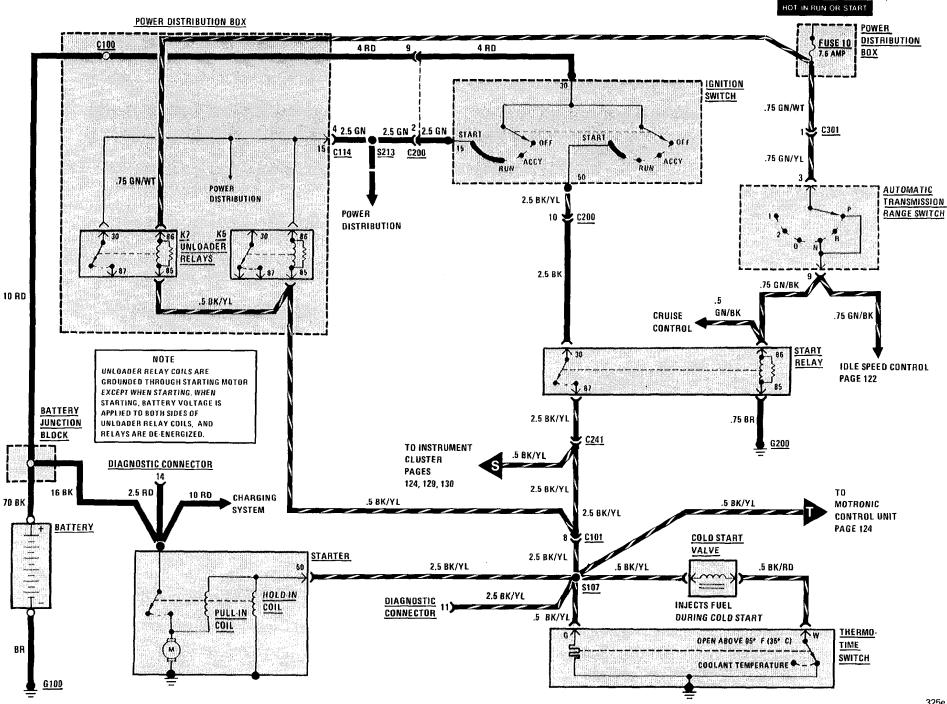


#### LIGHT SWITCH DETAILS 115

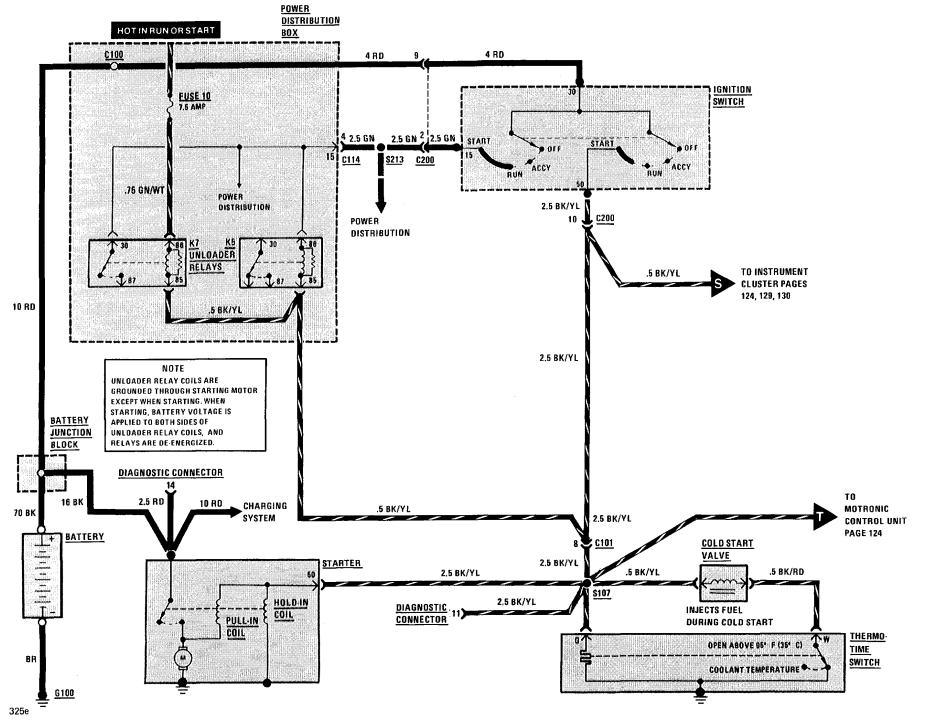


#### 116 START (AUTOMATIC TRANSMISSION)

#### (For Component Location See Page 206)



(For Component Location See Page 209)

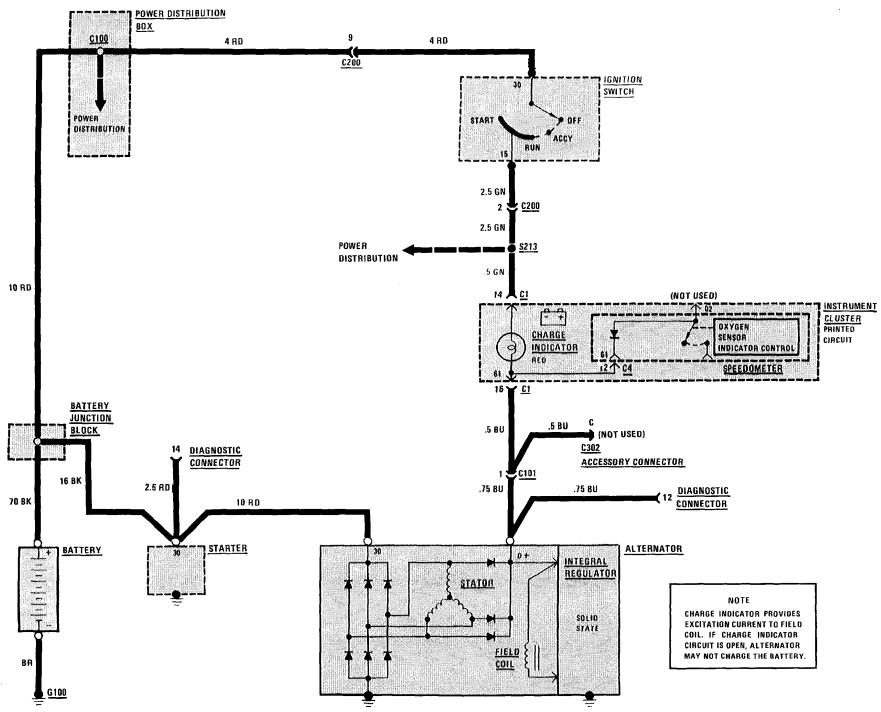


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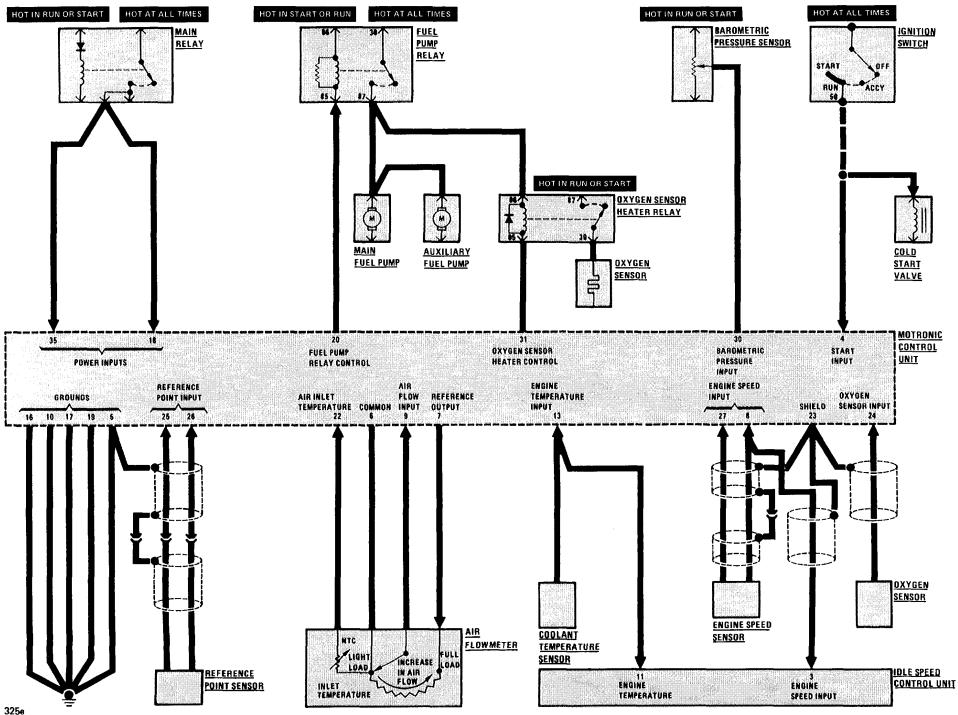
## **118 CHARGING SYSTEM**

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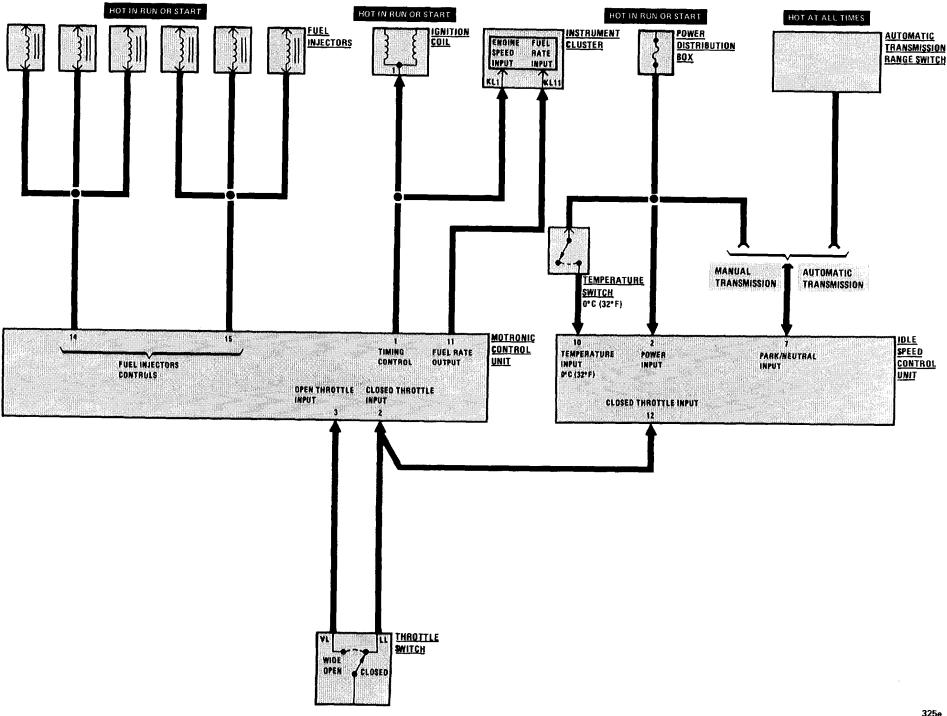
#### (For Component Location See Page 207)



#### BLOCK DIAGRAM FOR 325e ENGINE CONTROLS 119



# 120 BLOCK DIAGRAM FOR 325e ENGINE CONTROLS



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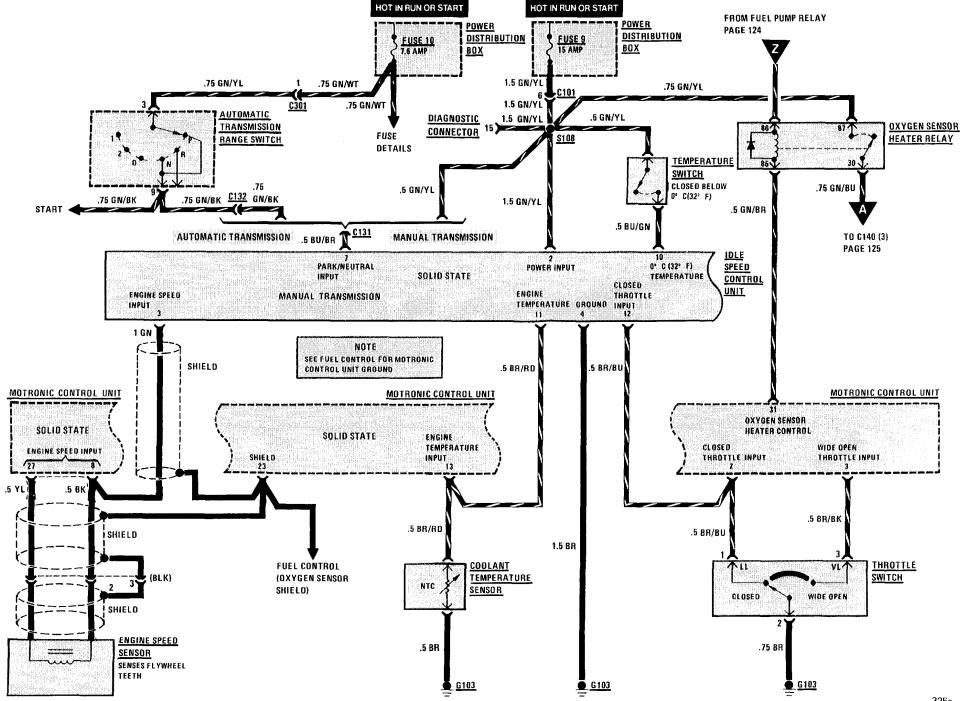
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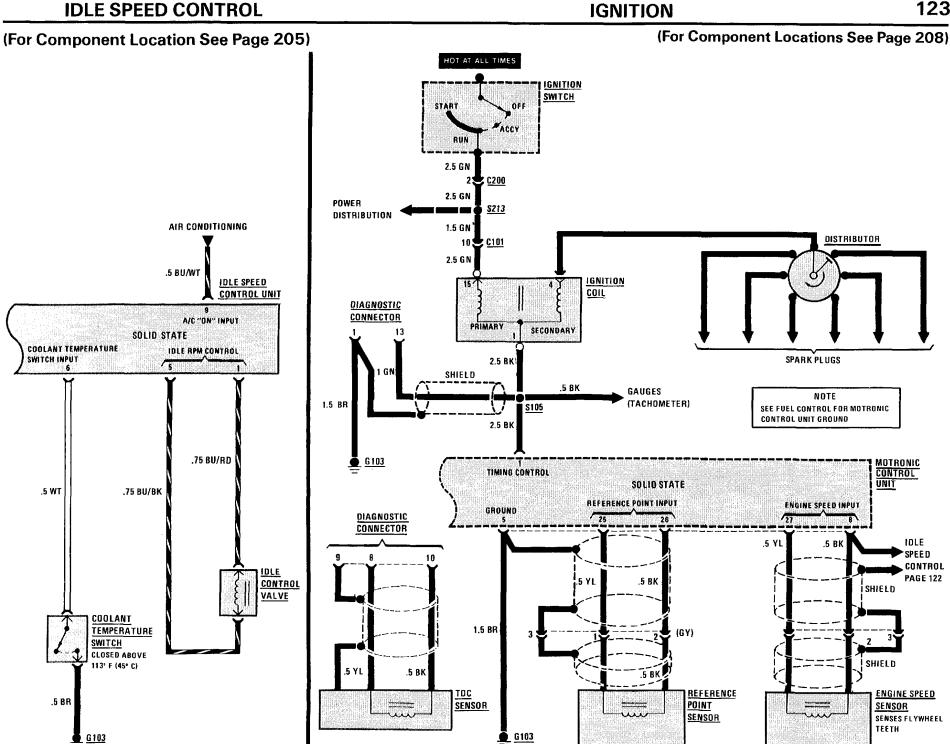
121

# 122 IDLE SPEED CONTROL

#### (For Component Location See Page 205)

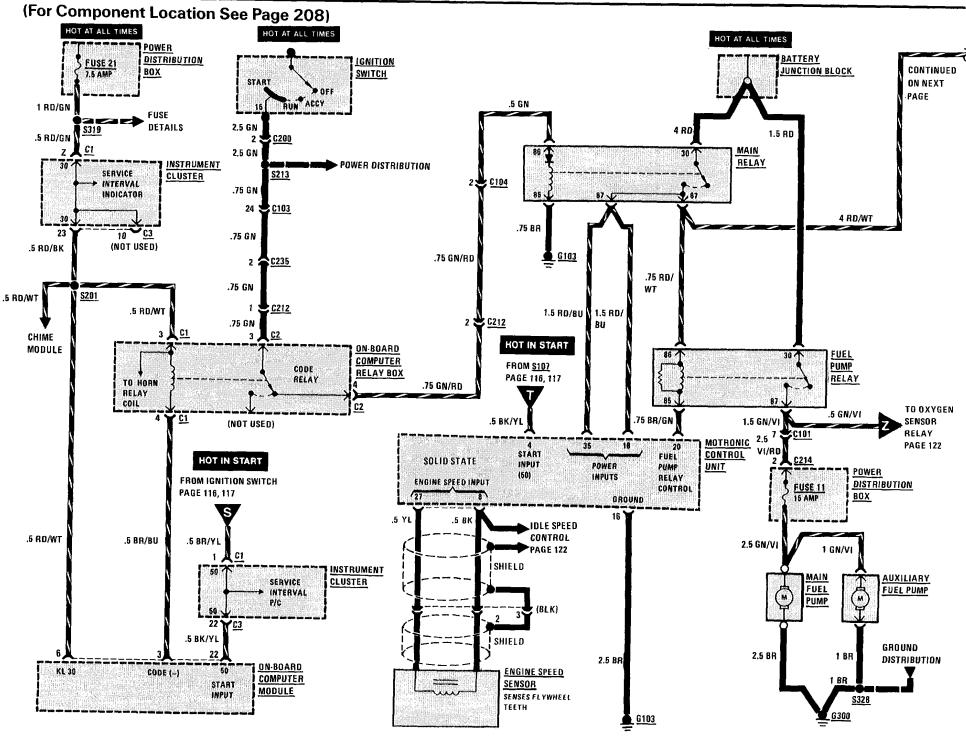


# **IDLE SPEED CONTROL**



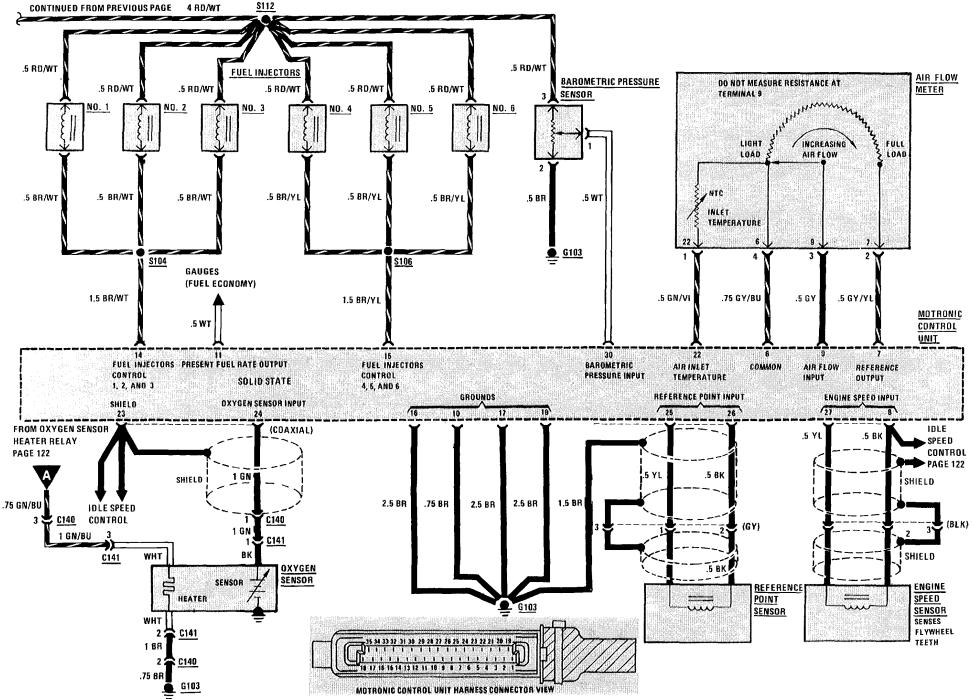
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# 124 FUEL DELIVERY



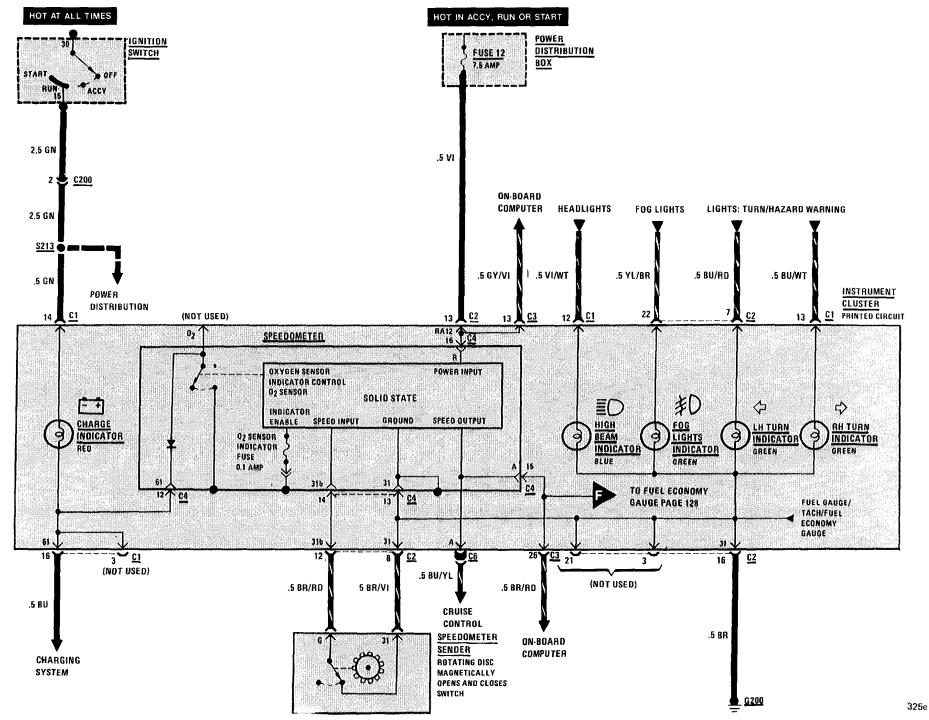
### FUEL CONTROL 125

#### (For Component Location See Page 208)

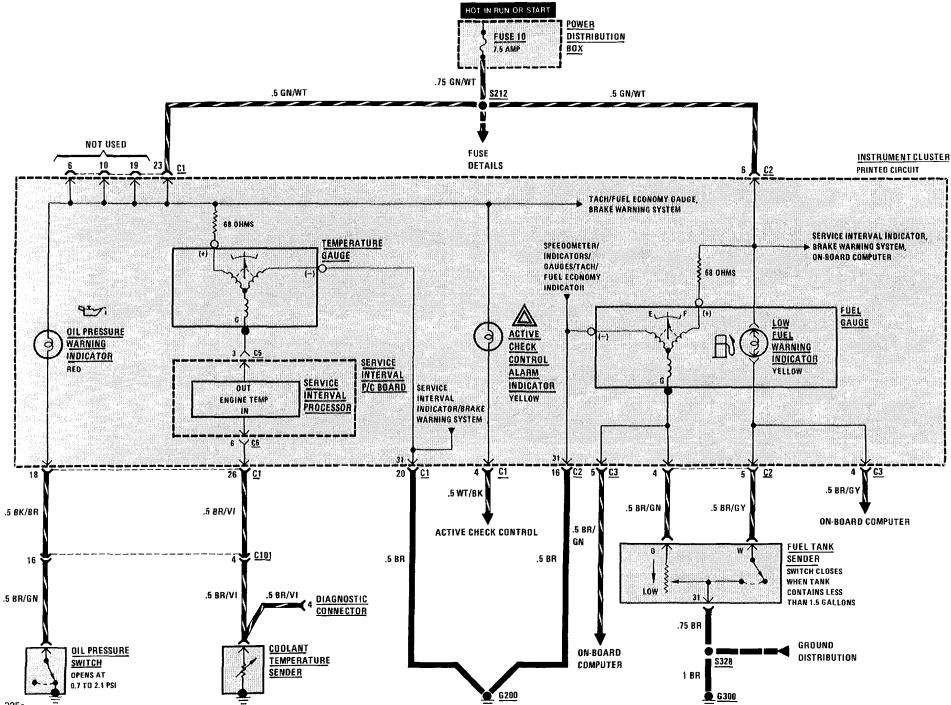


# 126 SPEEDOMETER/INDICATORS

#### (For Component Location See Page 214)



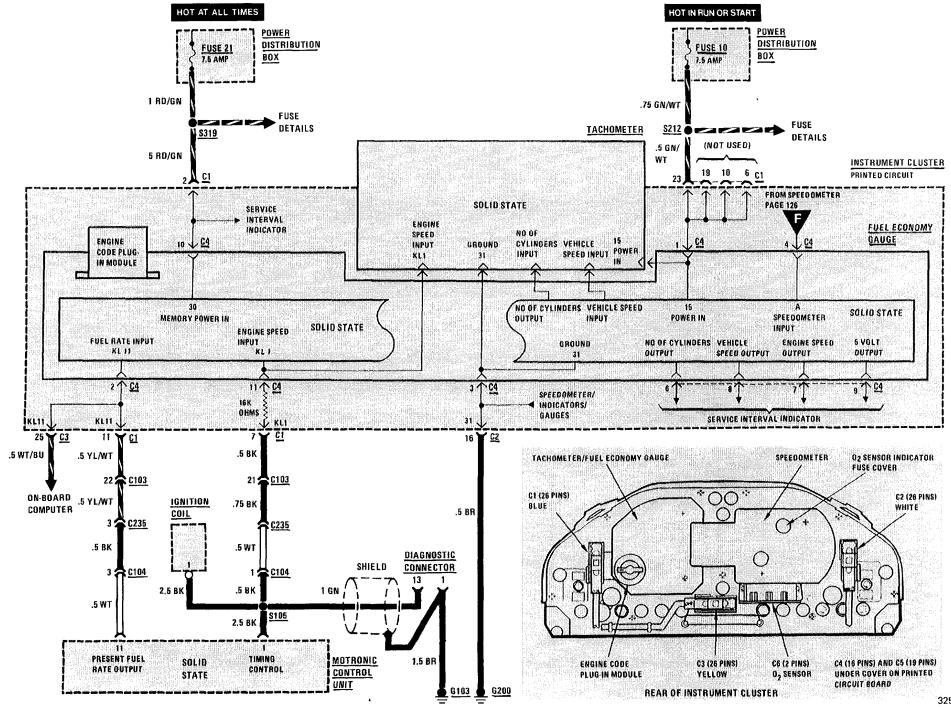
#### **GAUGES/INDICATORS** 127



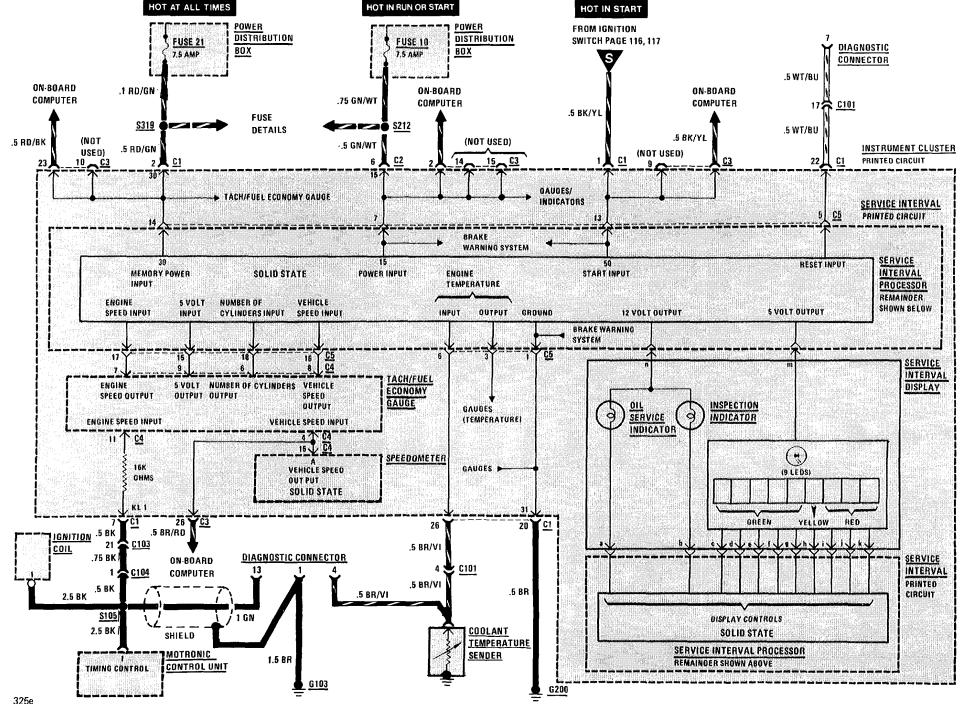
# (For Component Locations See Page 214)

# 128 TACHOMETER/FUEL ECONOMY GAUGE

#### (For Component Location See Page 219)



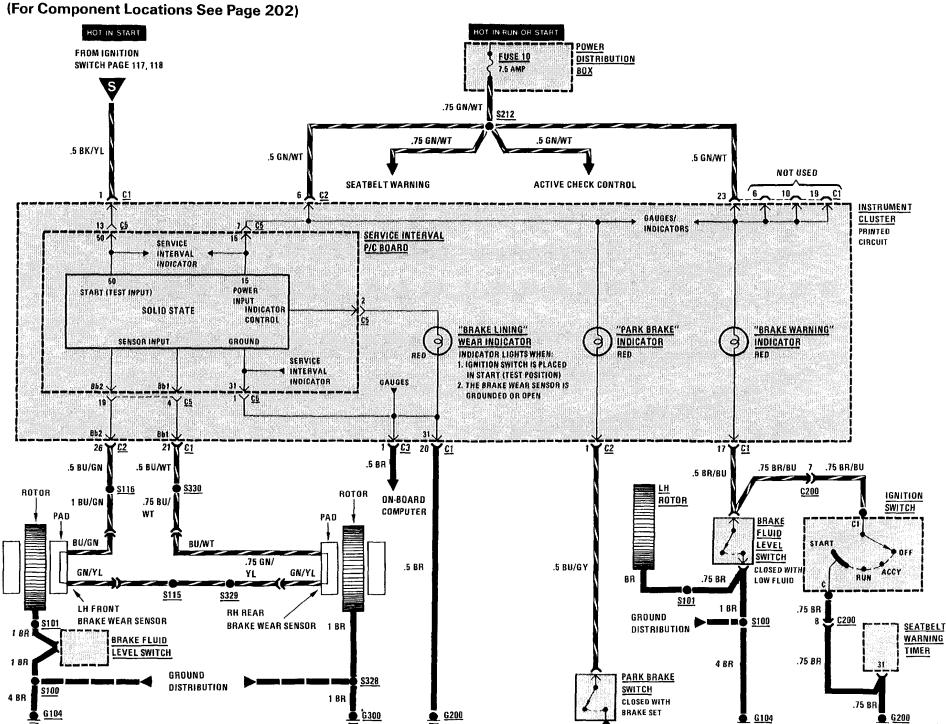
### (For Component Location See Page 214)



5 Terminal C

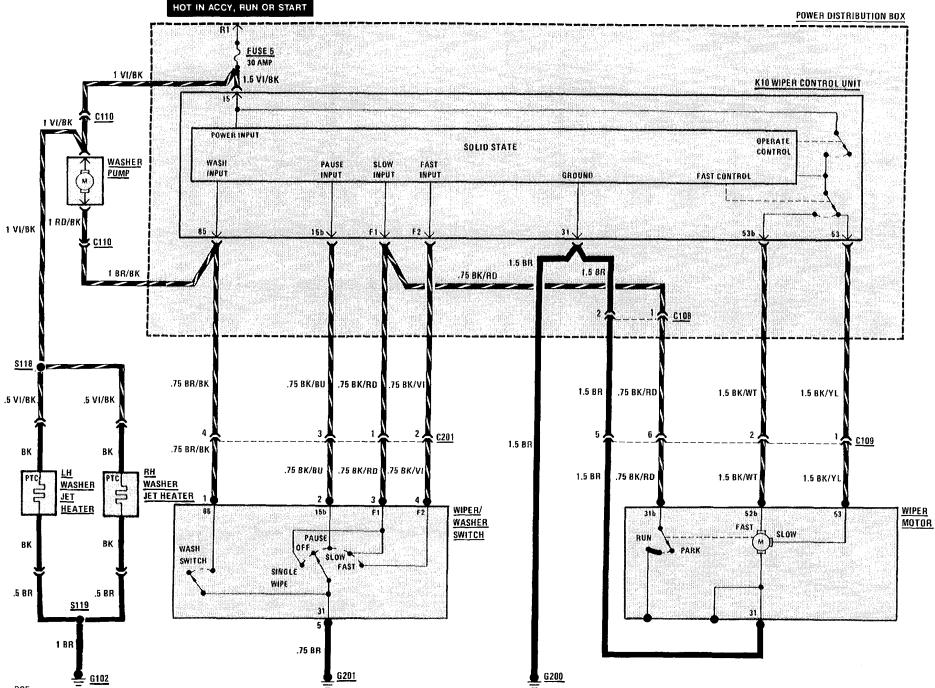
1.5.5.2.5.2

# 130 BRAKE WARNING SYSTEM



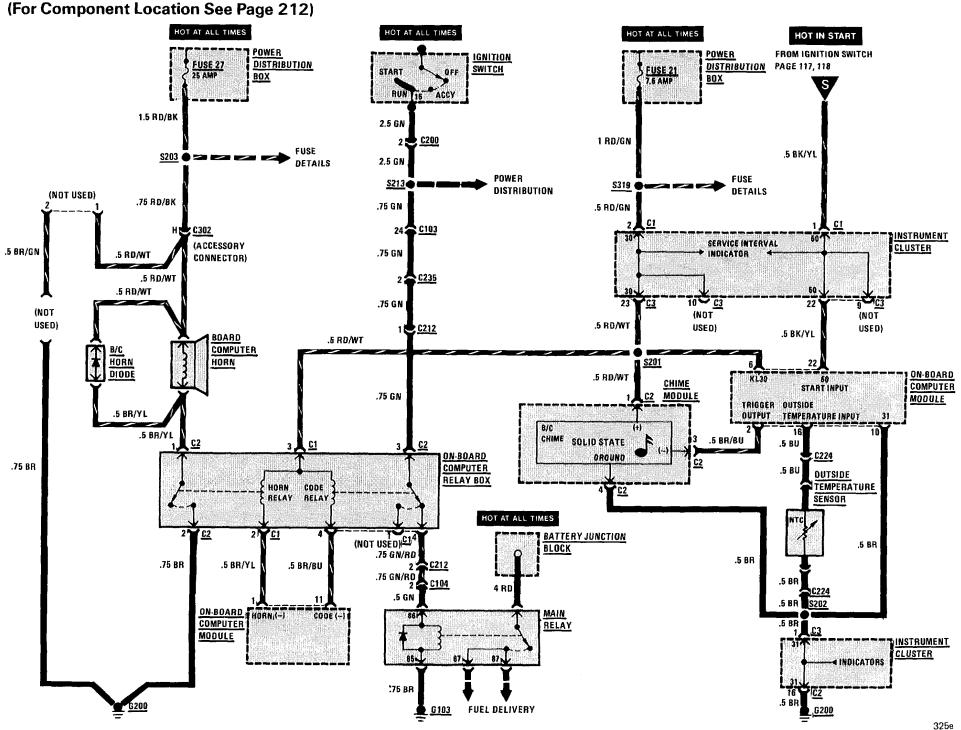
## WIPER/WASHER/WASHER JET HEATERS 131

# (For Component Location See Page 219)

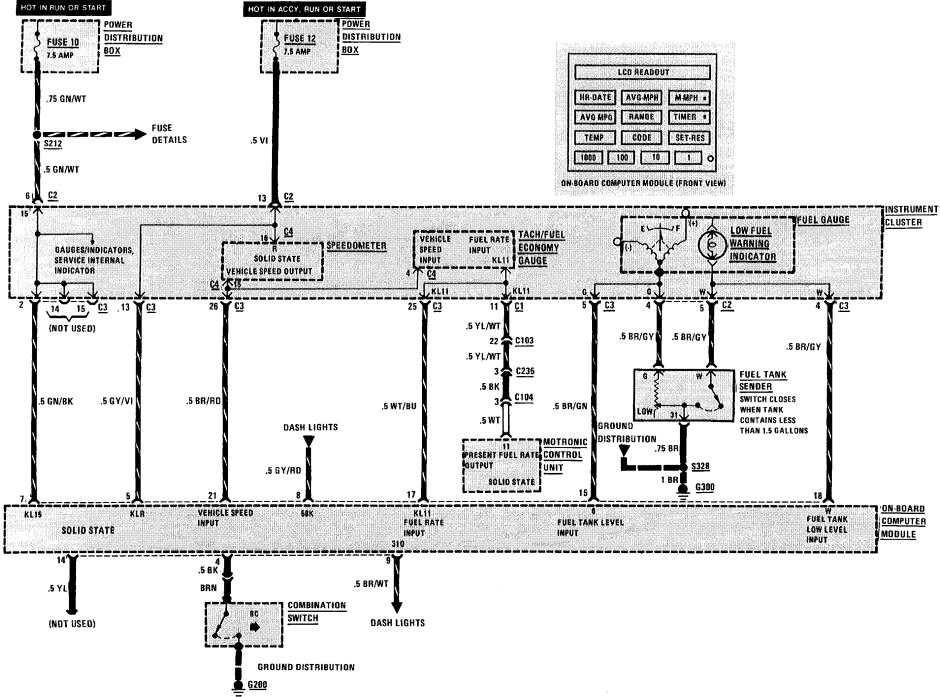


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#### 132 **ON-BOARD COMPUTER**

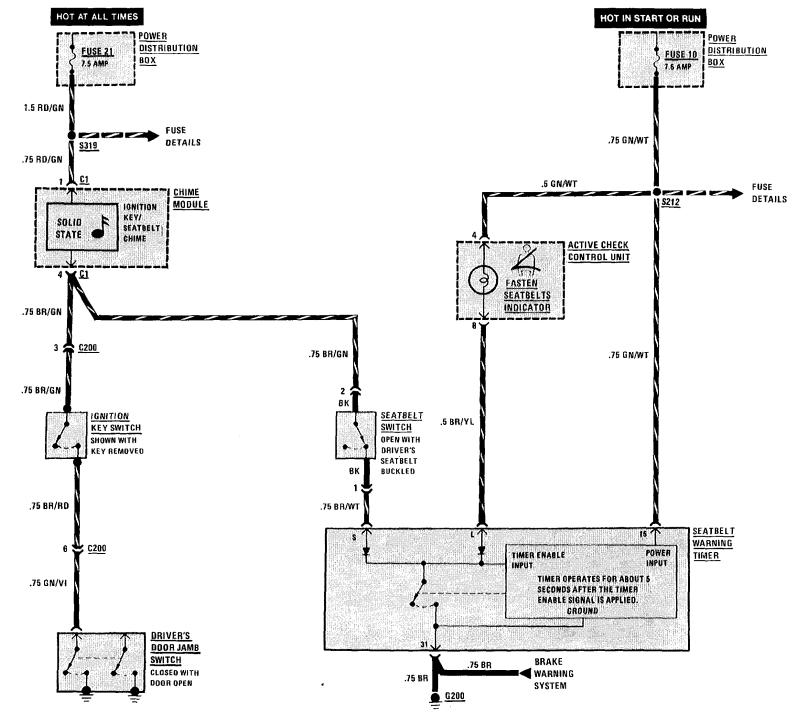


### (For Component Location See Page 212)



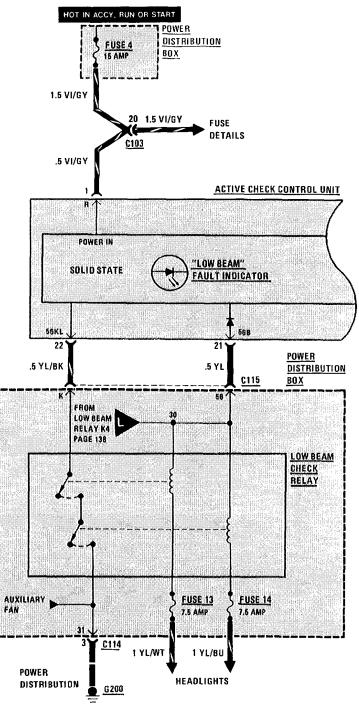
# 134 IGNITION KEY WARNING/SEATBELT WARNING

#### (For Component Location See Page 211)



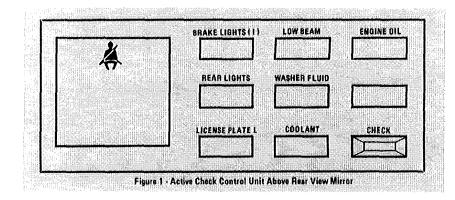
# ACTIVE CHECK CONTROL 135

#### (For Component Locations See Page 201)



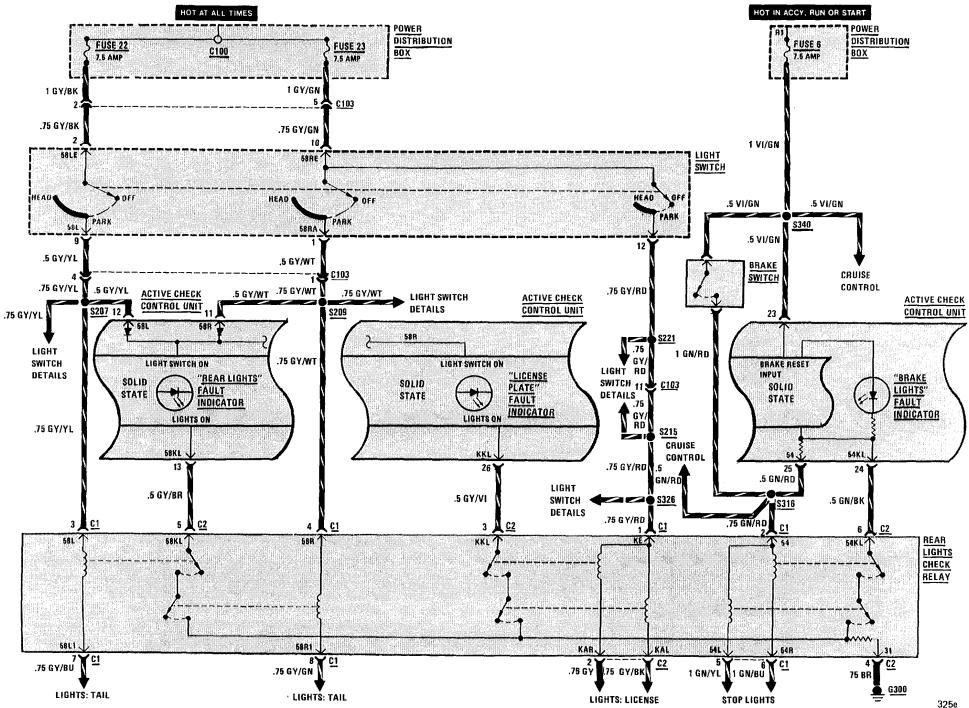
#### ACTIVE CHECK CONTROL

- When the Ignition Switch is initially placed in "Run," the Active Check Control Arm Indicator flashes, and the Active Check Control Unit Brake Light LED and panel light illuminate for test purposes. Depressing the brake pedal clears the display.
- 2. When the Ignition Switch is placed in "Run," fault monitoring begins. To monitor the low beams, rear lights, or license lights, those circuits must be on. The brake lights are monitored only while the brake pedal is depressed.
- 3. When a fault occurs, the alarm indicator flashes, the appropriate LED fault indicator lights, and the panel light goes on for five seconds. Depressing the test button will clear the alarm indicator, but the LED fault indicator remains on.
- To test the unit, depress the test button. The LED fault indicators and the panel lights should go on.

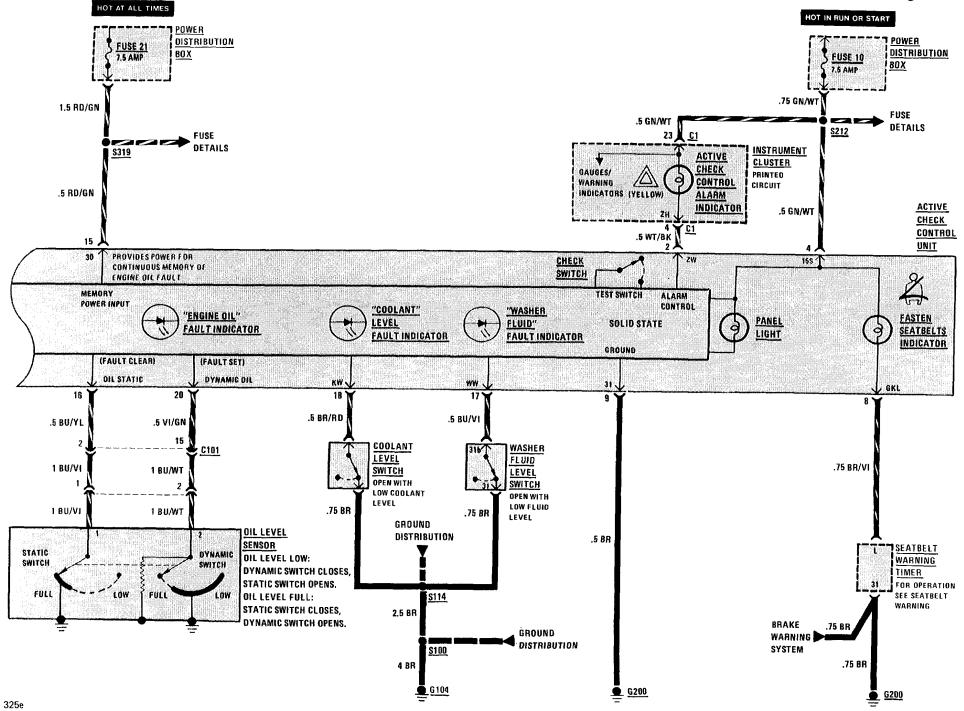


## **136 ACTIVE CHECK CONTROL**

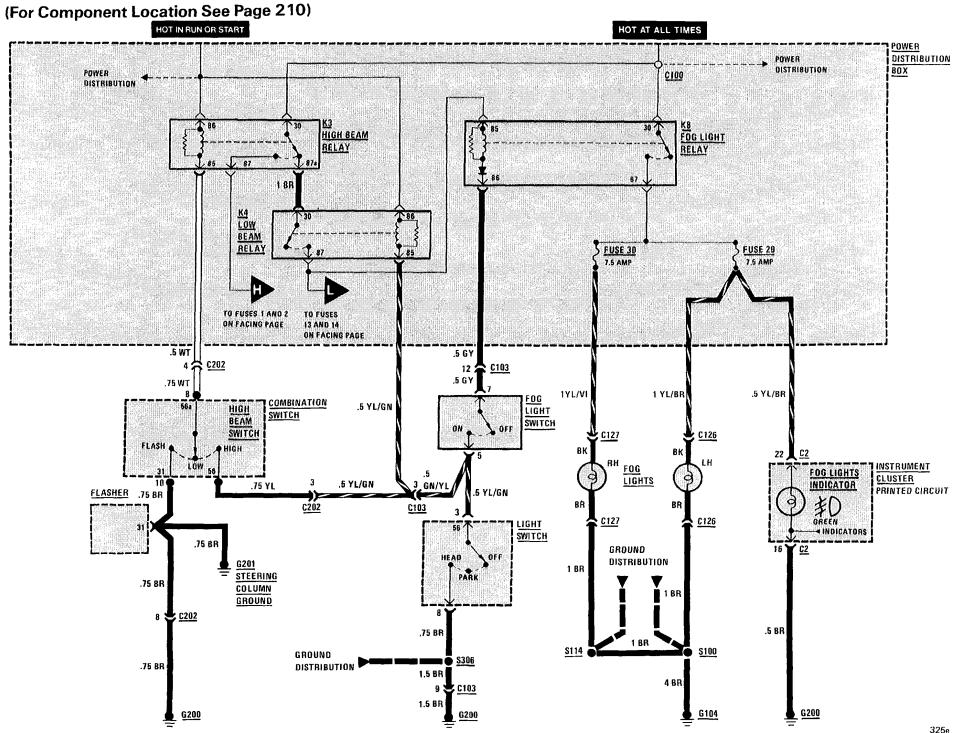
#### (For Component Locations See Page 201)



#### (For Component Locations See Page 201)

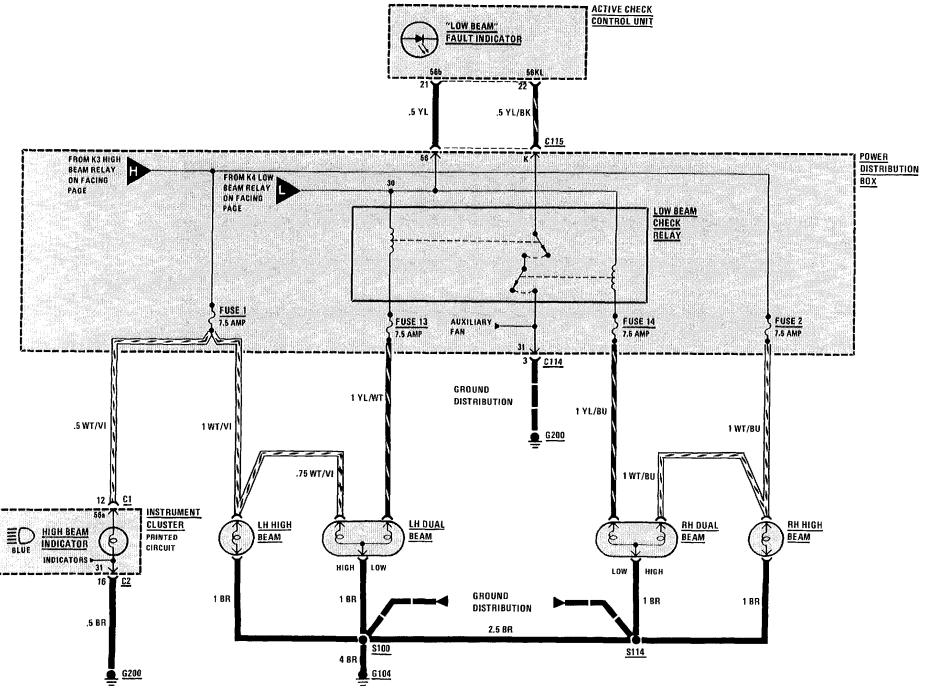


## 138 HEADLIGHTS (CONTROL)/FOGLIGHTS



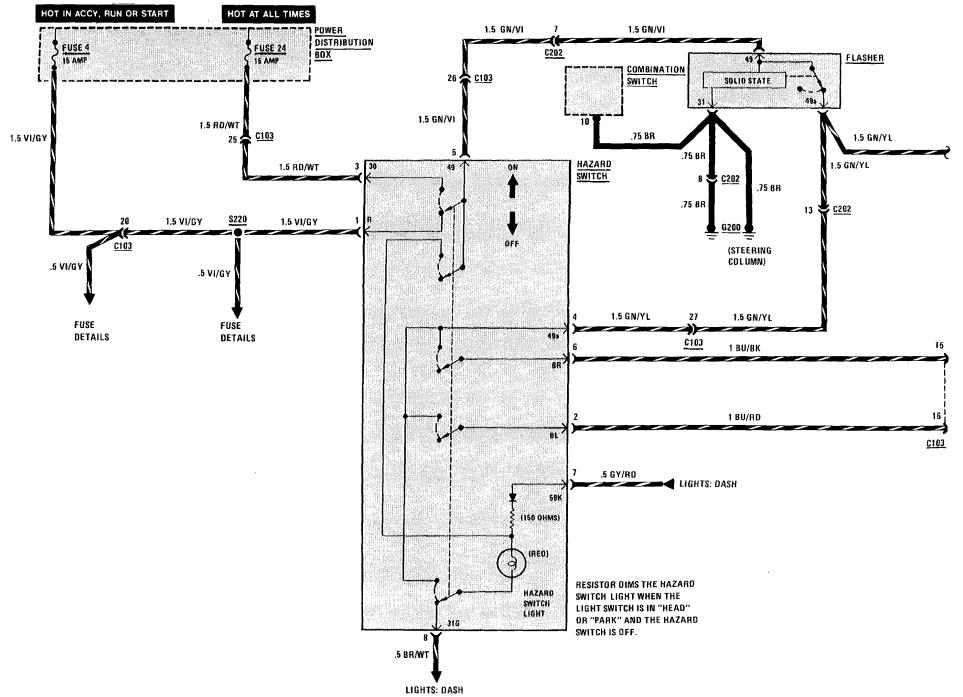
### HEADLIGHTS (POWER) 139

# (For Component Location See Page 210)



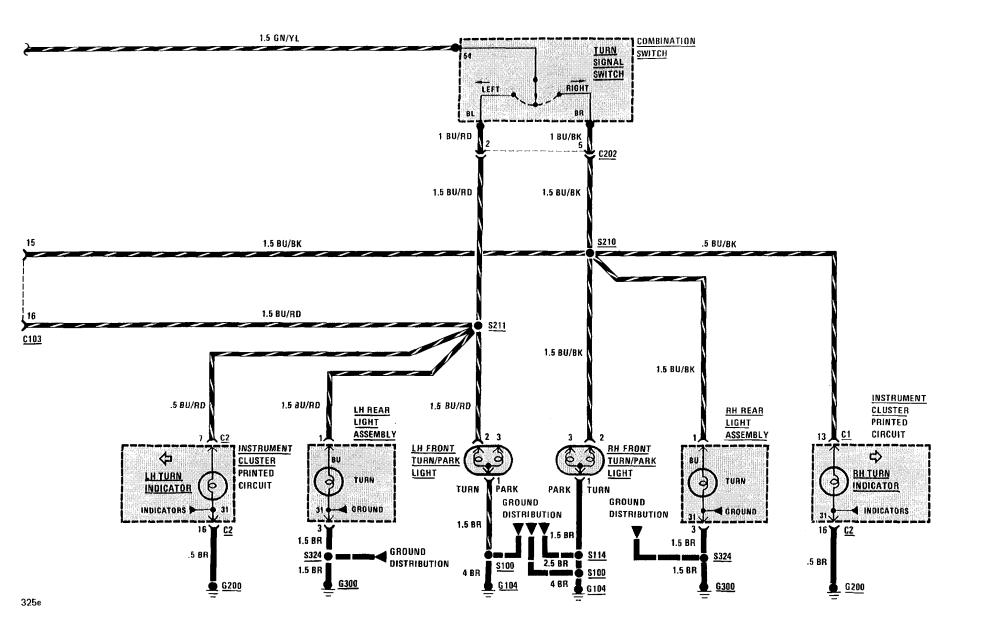
# 140 LIGHTS: TURN/HAZARD WARNING

(For Component Locations See Page 211)

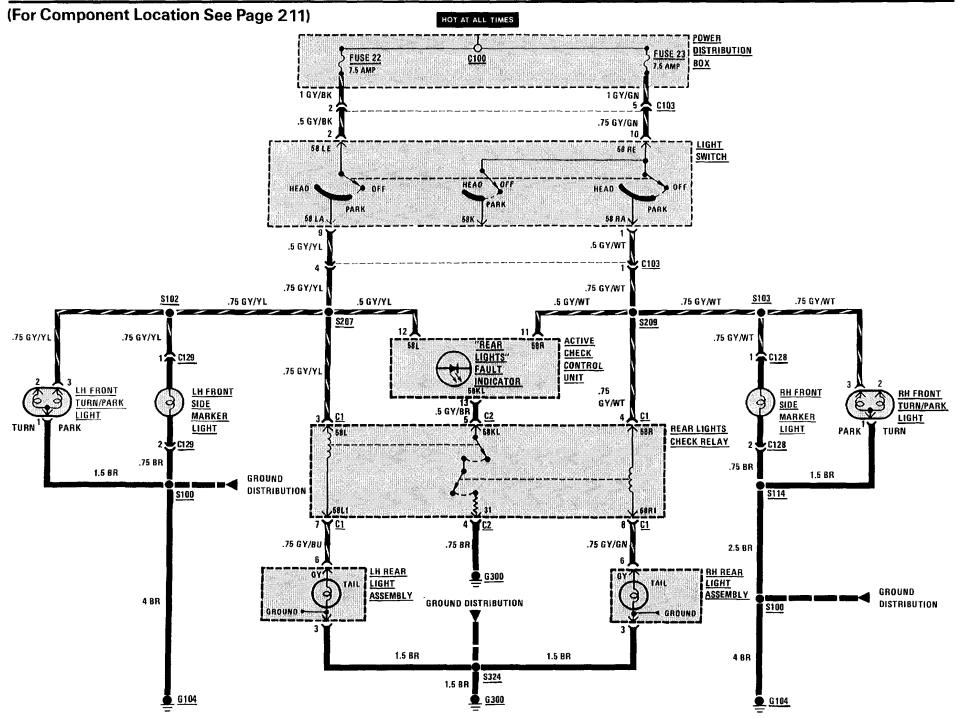


### LIGHTS: TURN/HAZARD WARNING 141

(For Component Locations See Page 211)

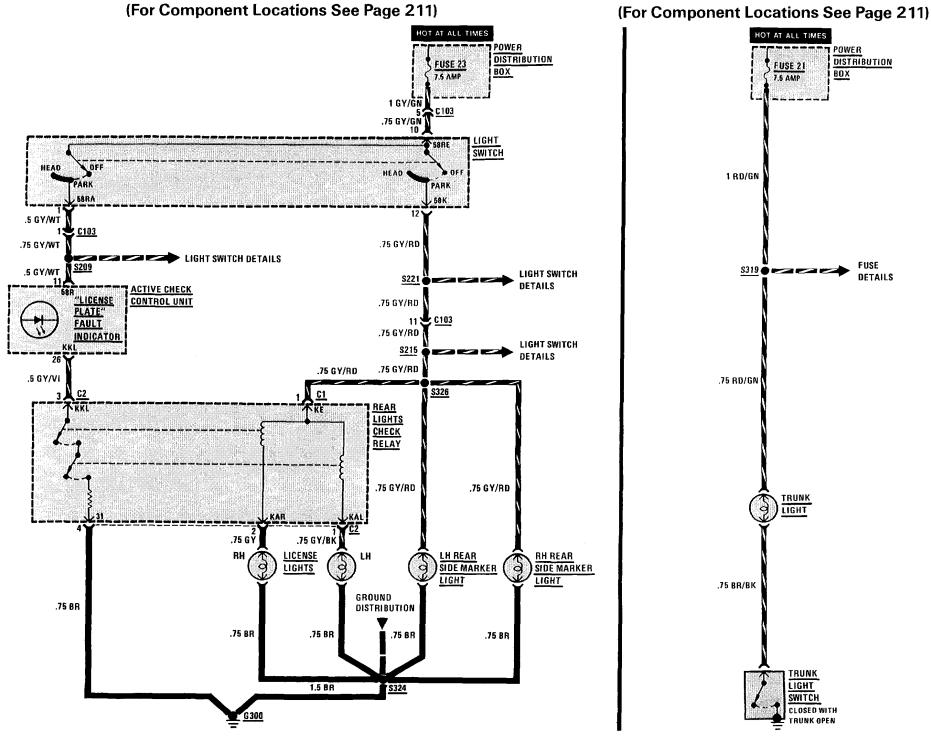


# 142 LIGHTS: FRONT PARK/FRONT SIDE MARKER/TAIL

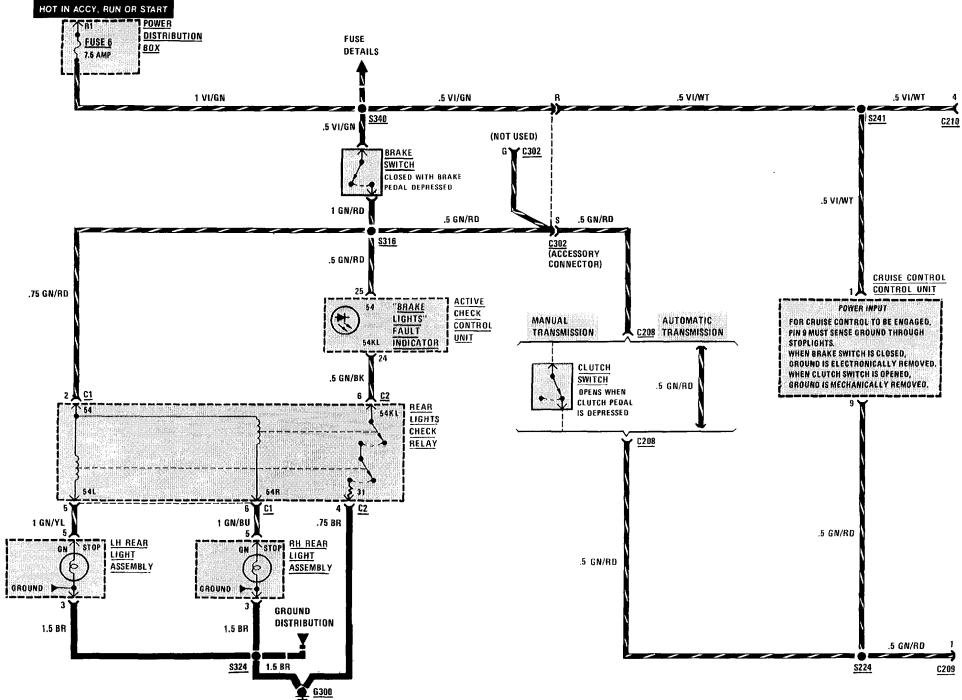


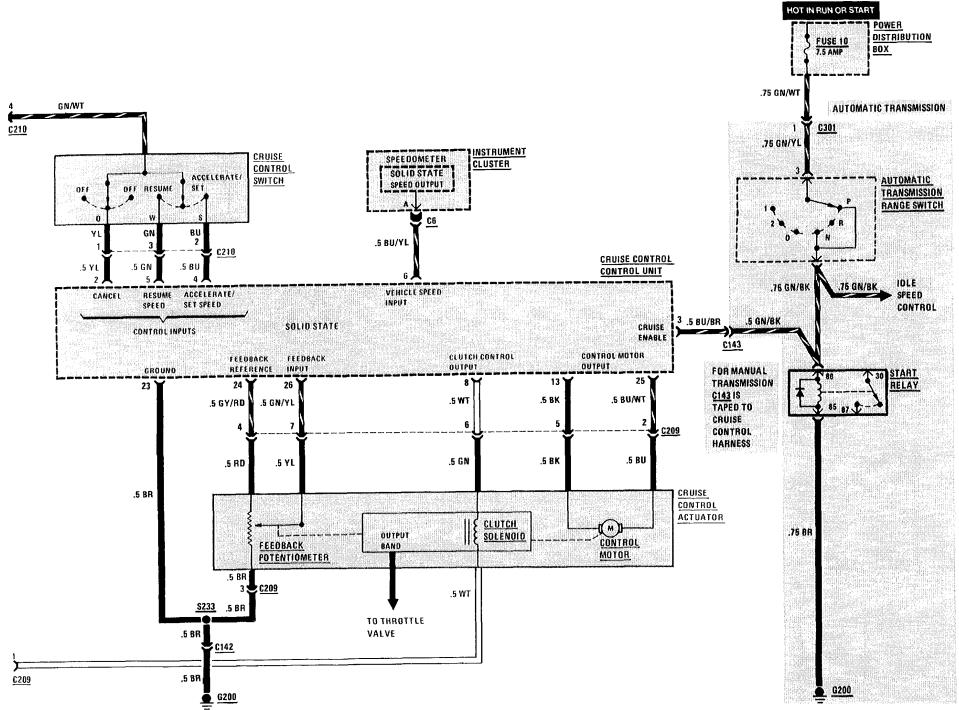
### LIGHTS: REAR MARKER/LICENSE

### **TRUNK LIGHT** 143



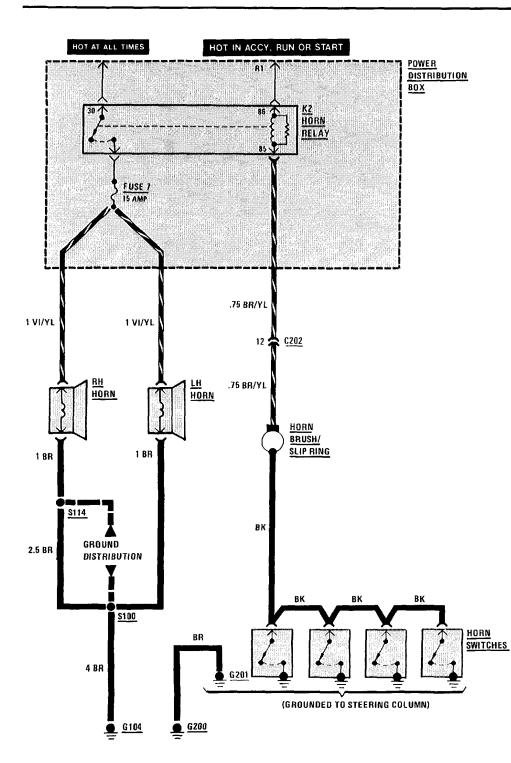
#### (For Component Locations See Page 203)

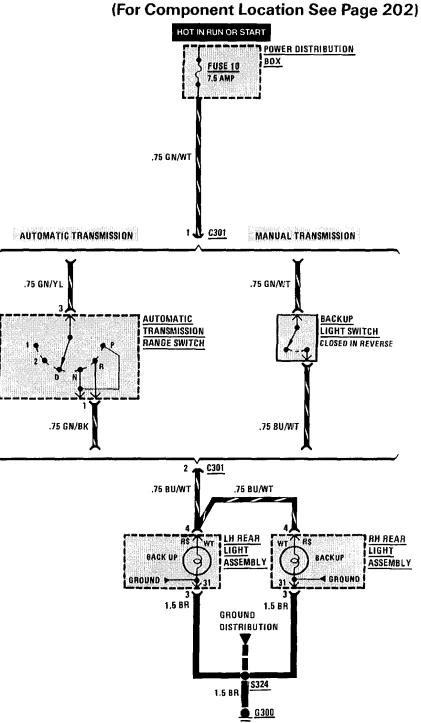


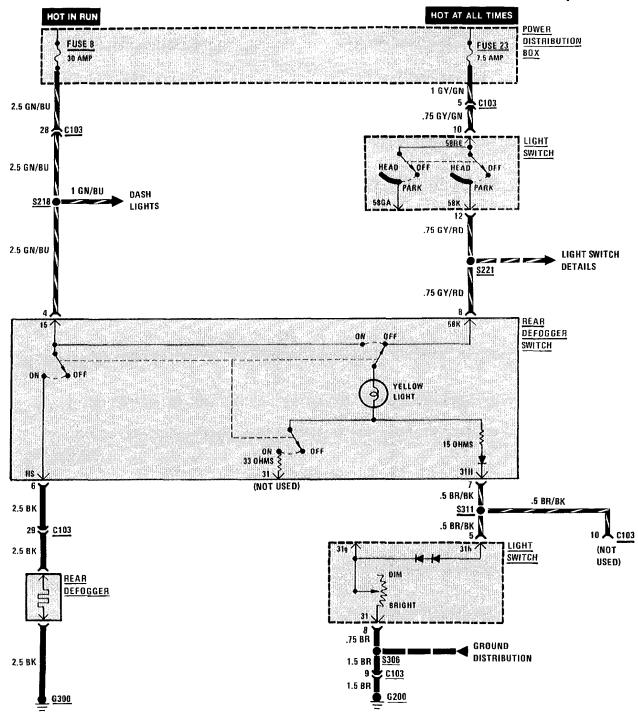


### HORNS

## **BACK UP LIGHTS**





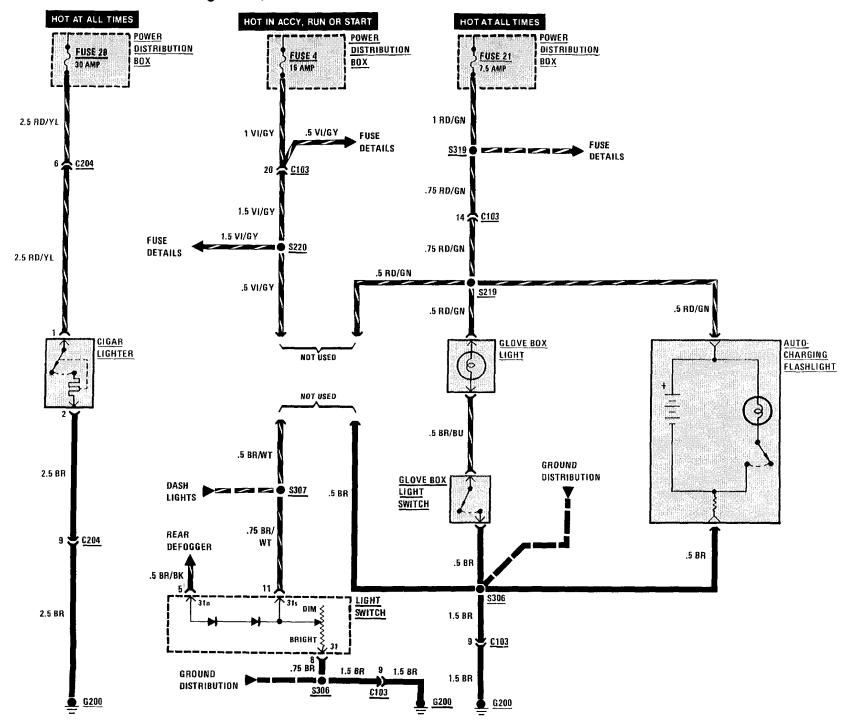


# (For Component Location See Page 214)

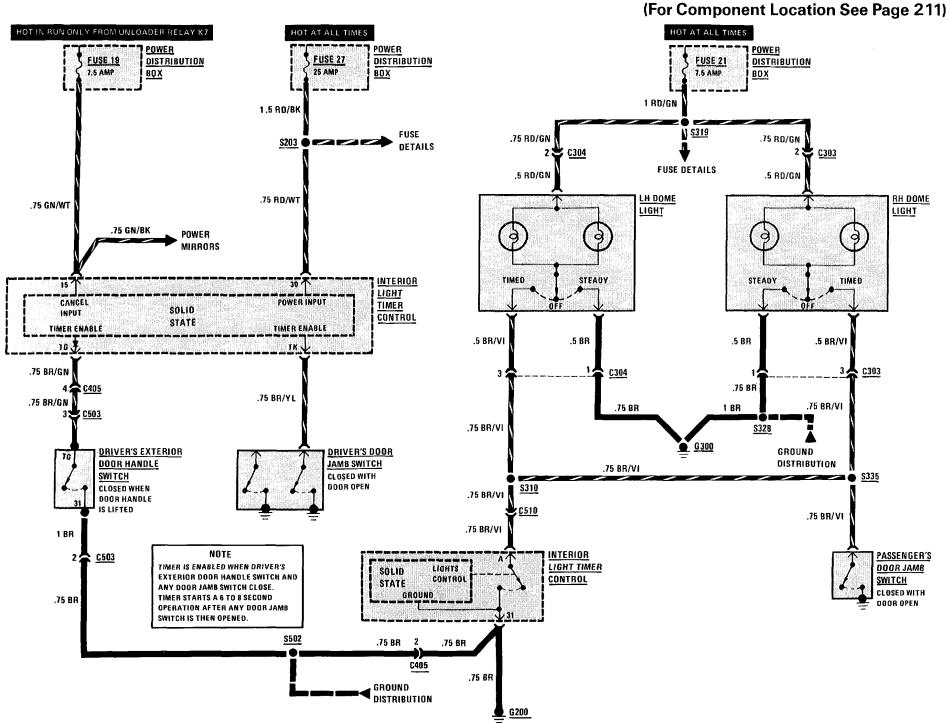
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(For Component Locations See Page 203)

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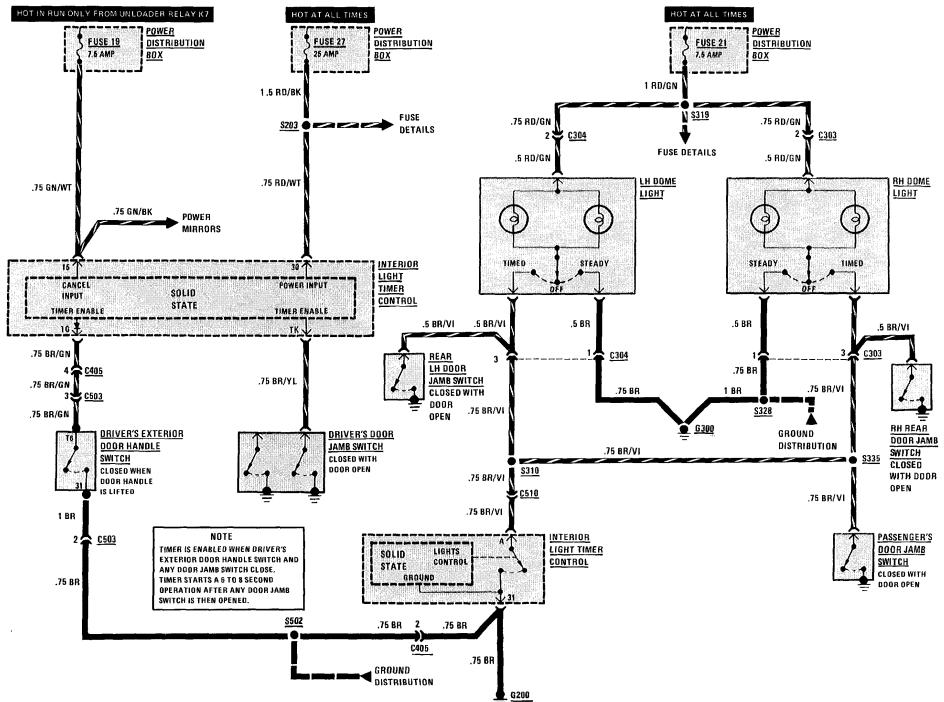
INTERIOR LIGHTS (2 DOOR) 149

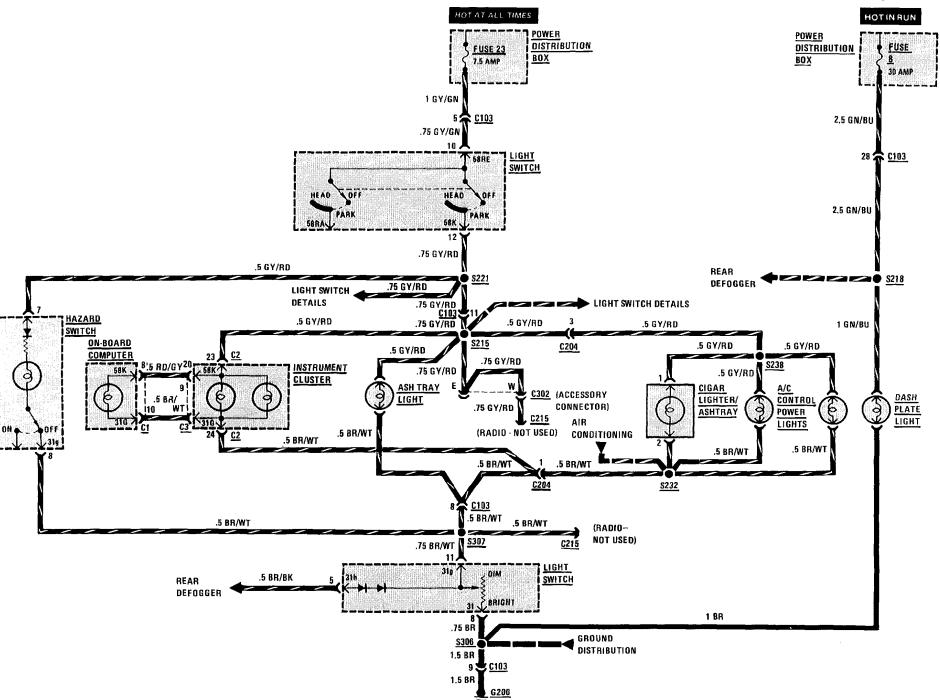


## 150 INTERIOR LIGHTS (4 DOOR)

11.6 Sect.

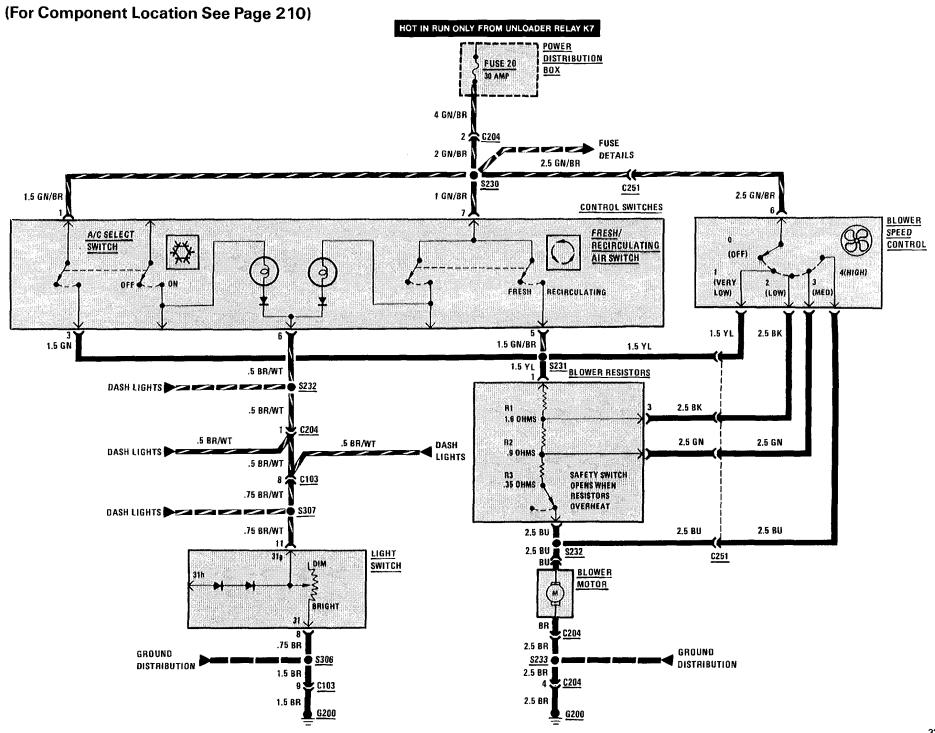
#### (For Component Location See Page 211)



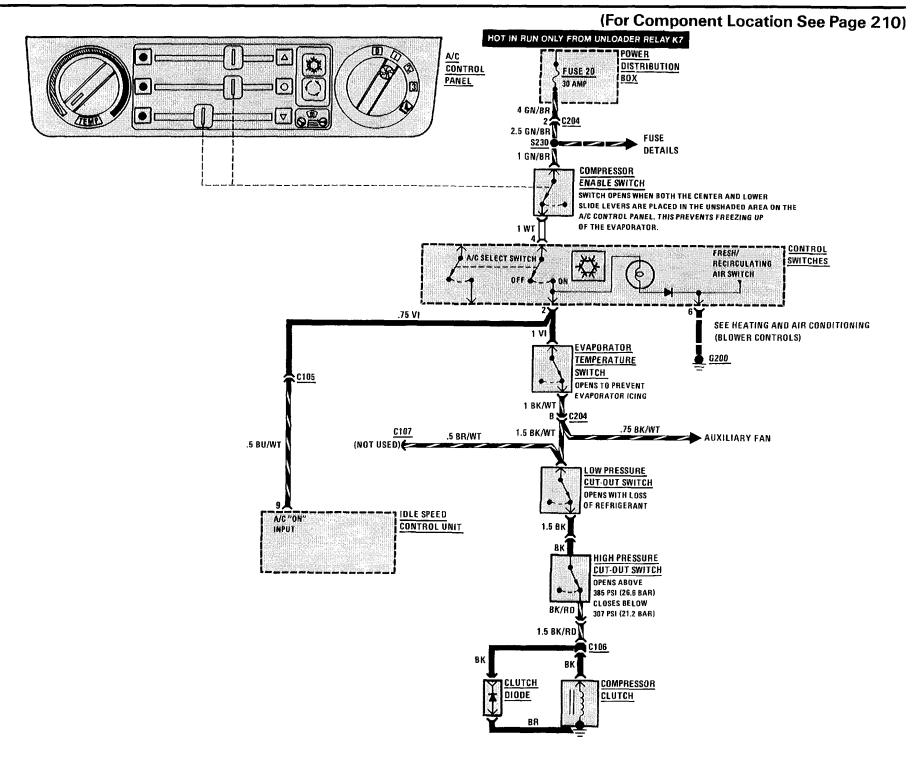


#### (For Component Locations See Page 203)

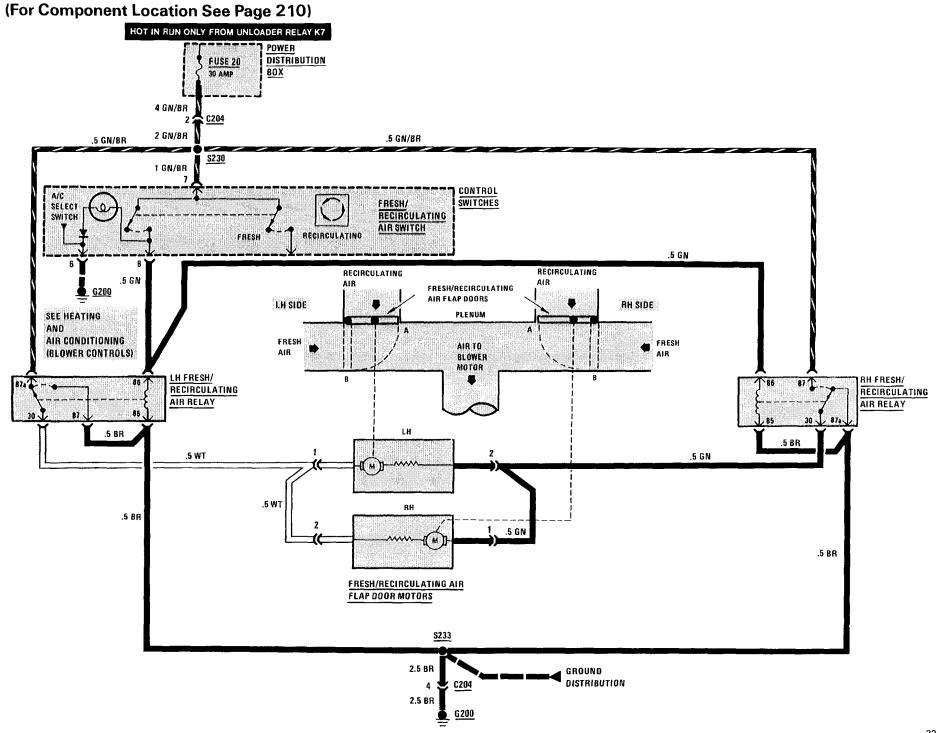
### 152 HEATING AND AIR CONDITIONING (BLOWER CONTROLS)



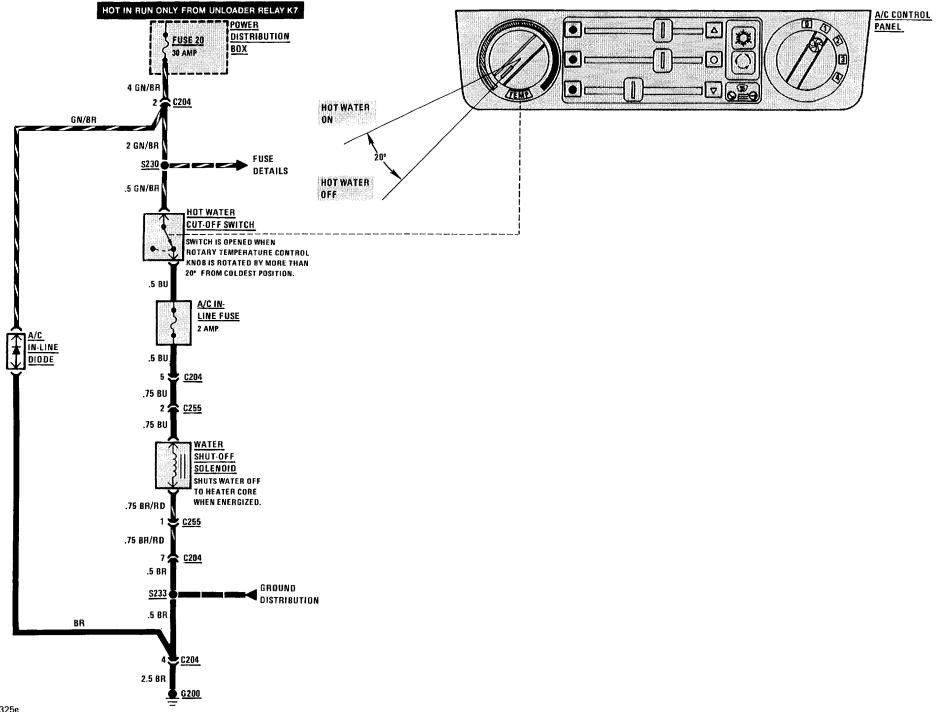
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# 154 HEATING AND AIR CONDITIONING (FRESH/RECIRCULATING AIR CONTROLS)



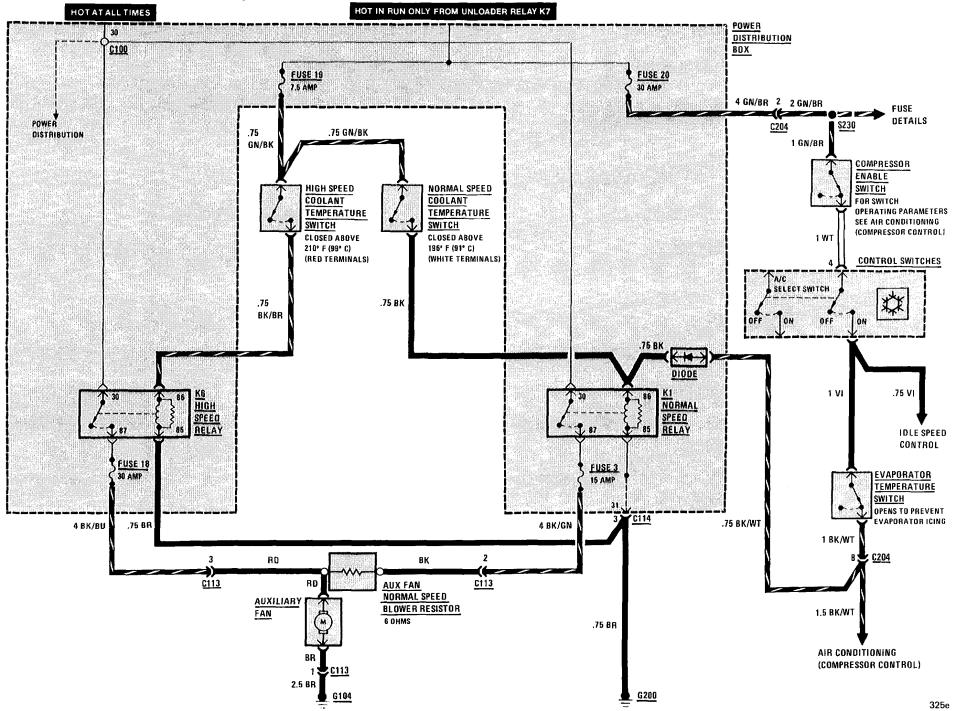
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### (For Component Location See Page 210)

# 156 AUXILIARY FAN

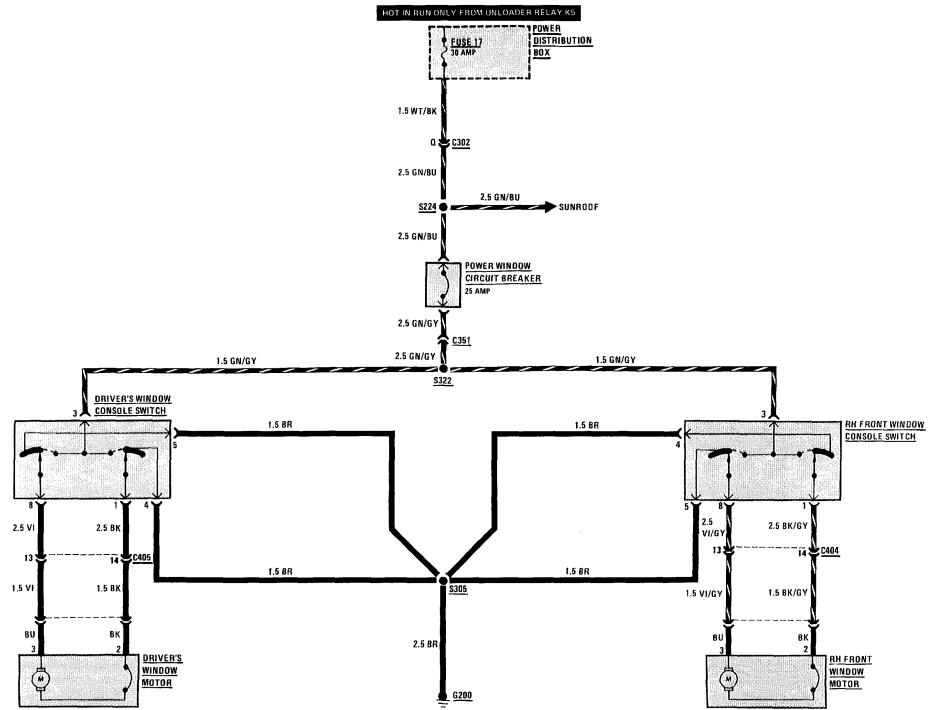




# POWER WINDOWS (2 DOOR) 157

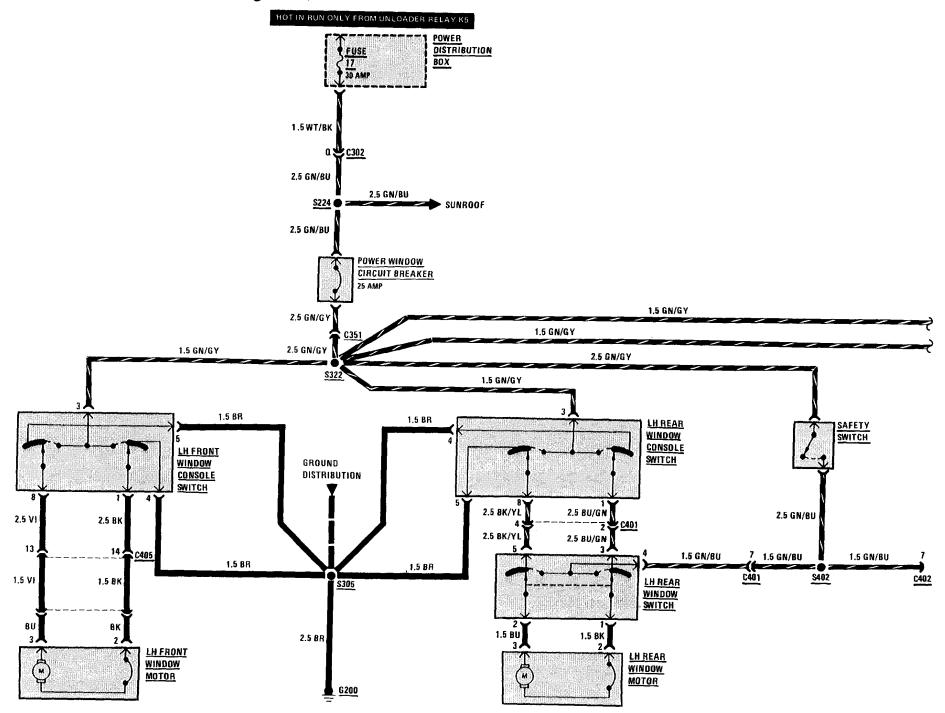
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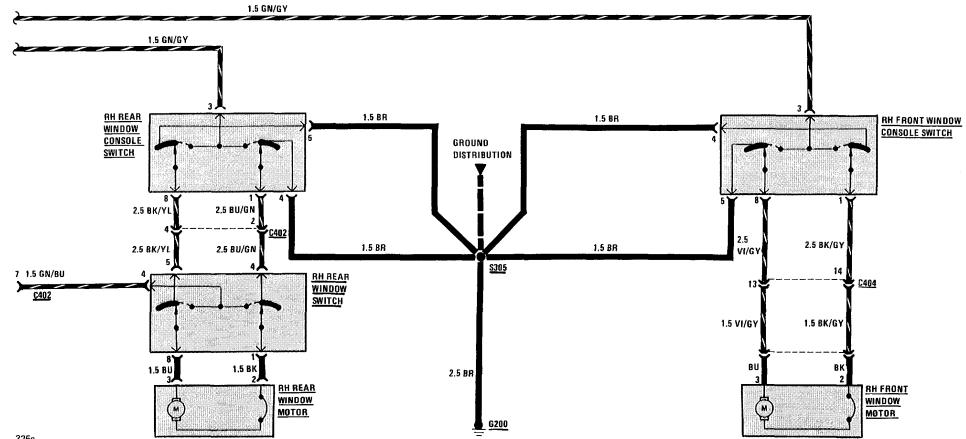
# 158 POWER WINDOWS (4 DOOR)

(For Component Locations See Page 213)



## POWER WINDOWS (4 DOOR) 159

(For Component Locations See Page 213)

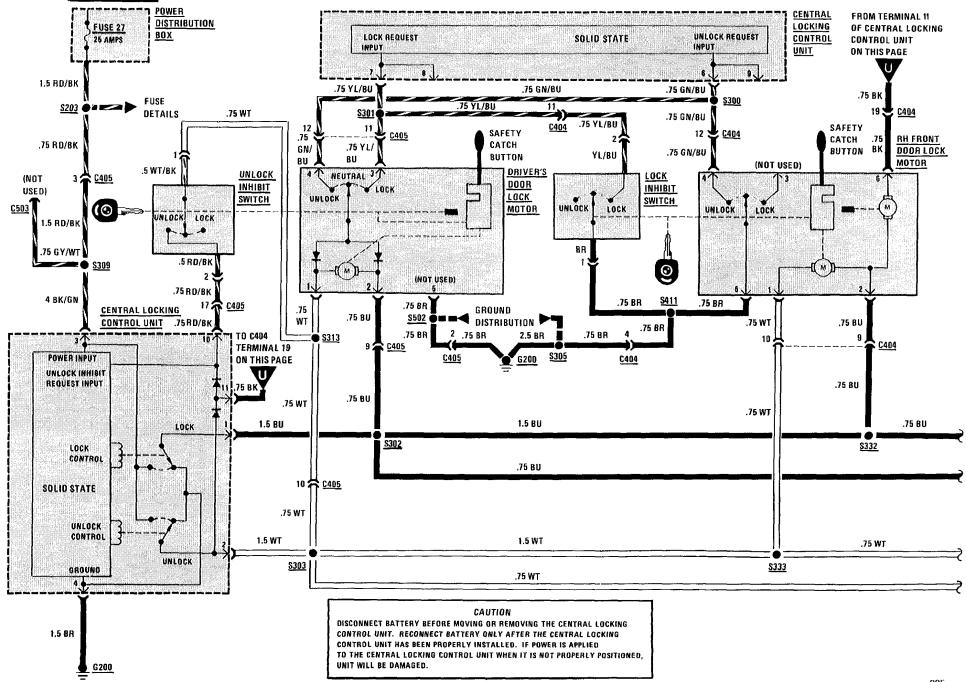


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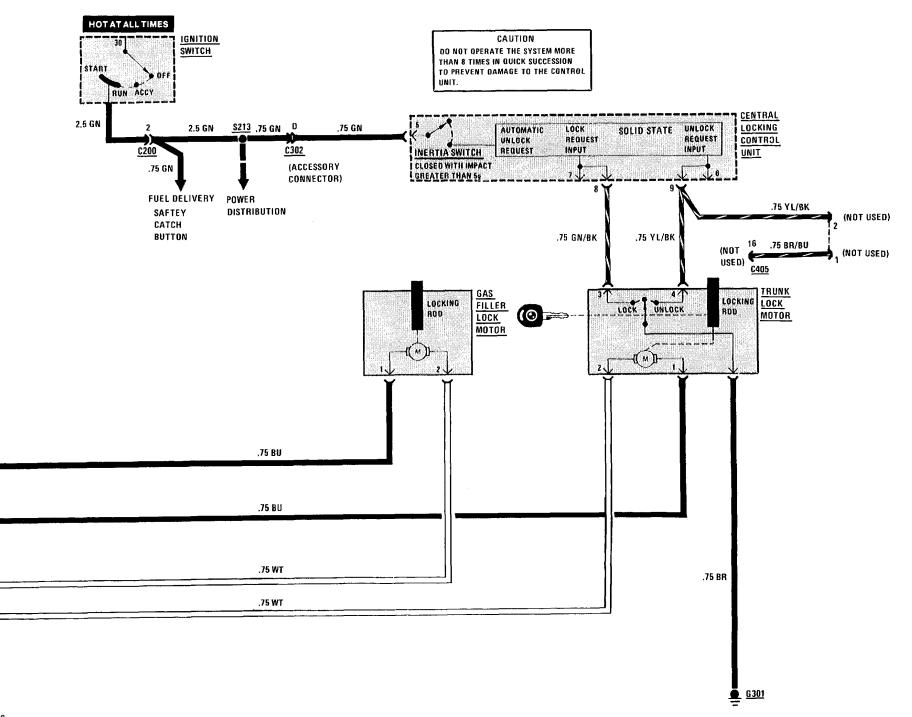
# 160 CENTRAL LOCKING 2 DOOR (SELECT)

(For Component Locations See Page 202)

HOT AT ALL TIMES



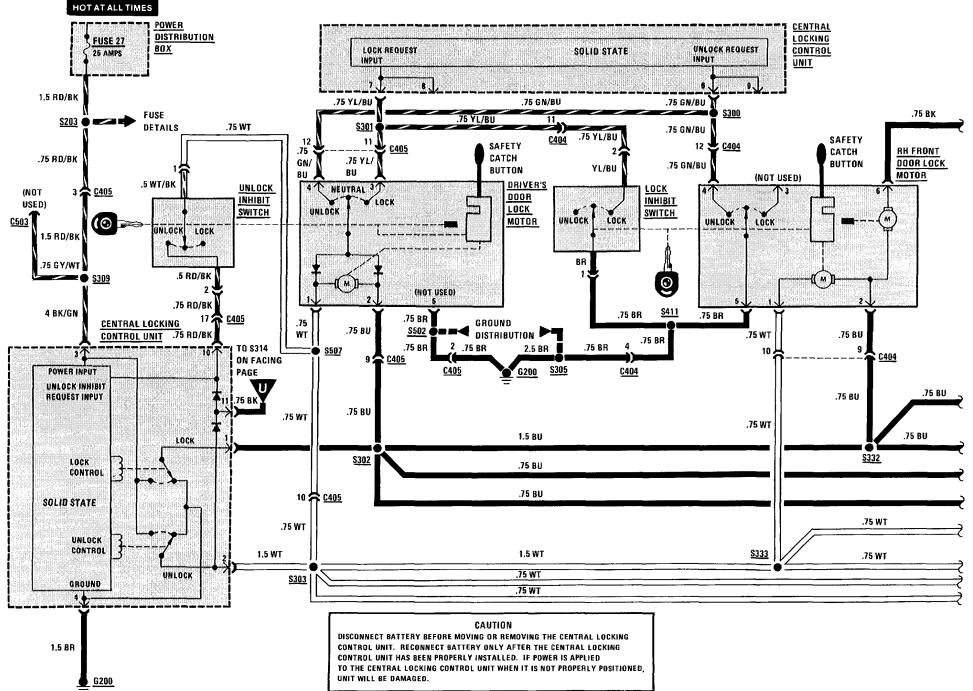
## (For Component Locations See Page 202)



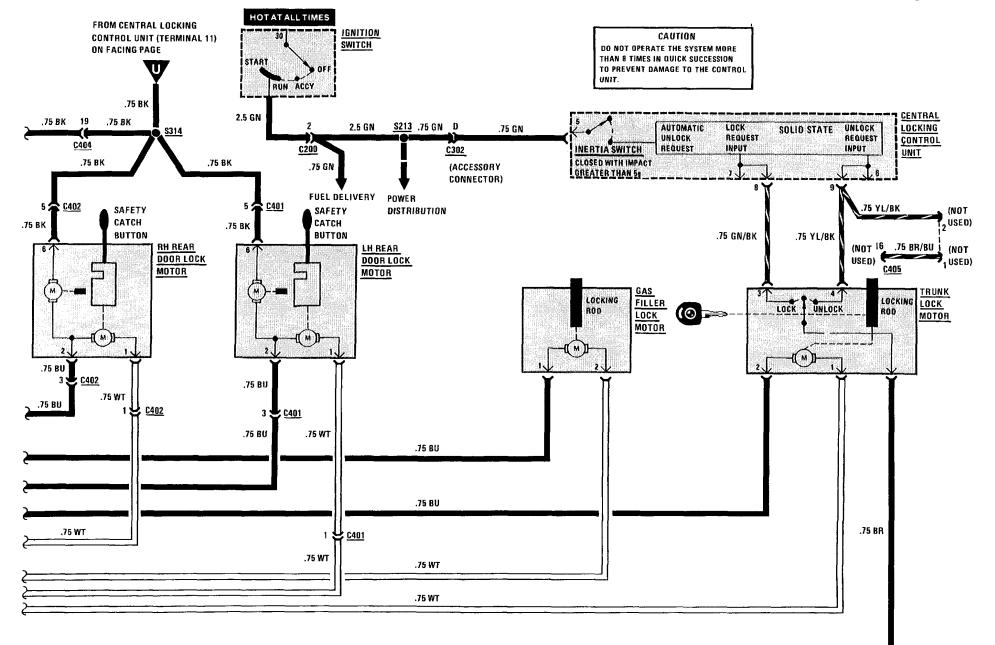
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# 162 CENTRAL LOCKING 4 DOOR (SELECT)

## (For Component Locations See Page 202)

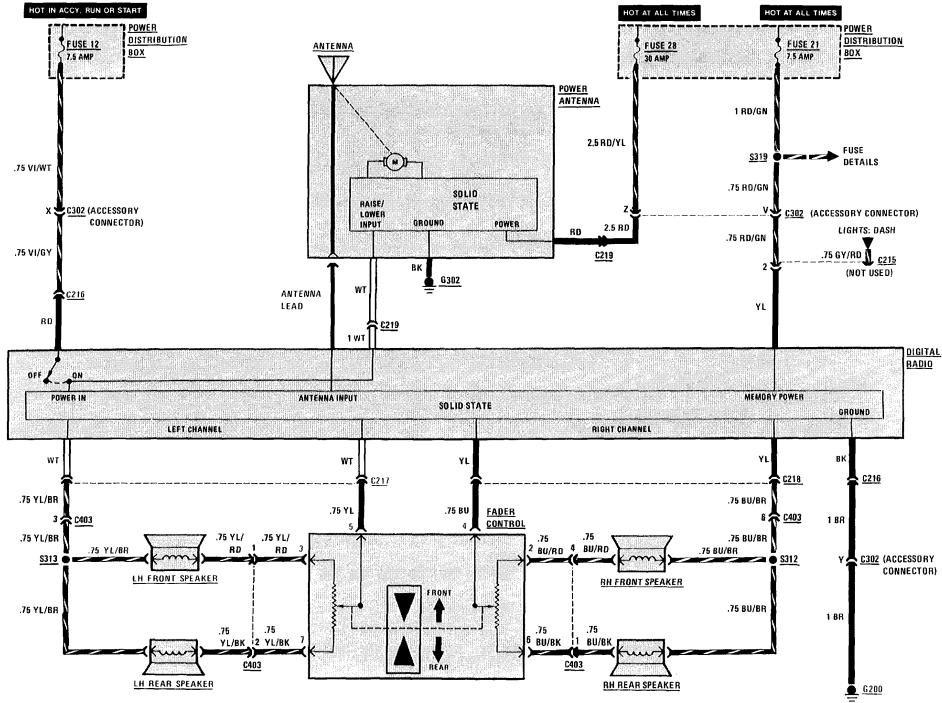


# (For Component Locations See Page 202)



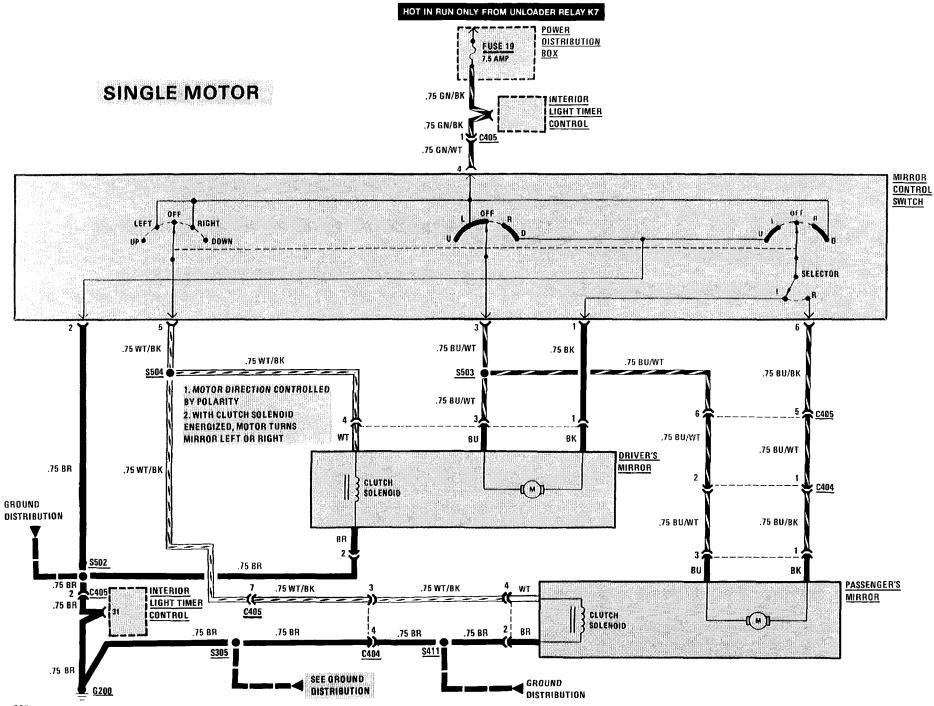
## 164 RADIO/POWER ANTENNA

## (For Component Location See Page 214)

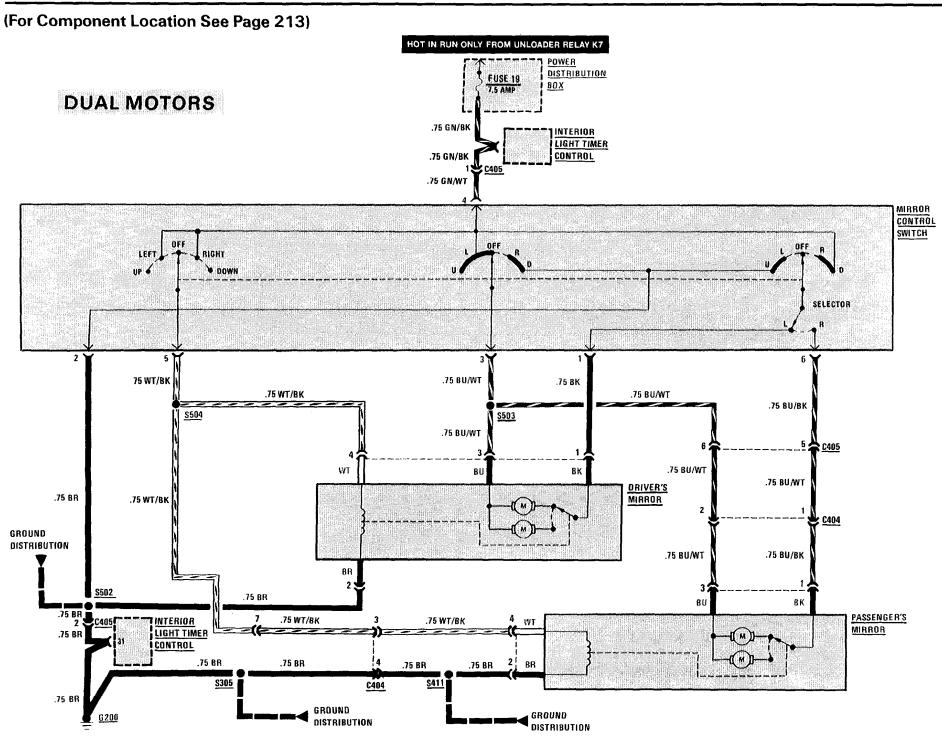


## POWER MIRRORS 165

## (For Component Location See Page 213)

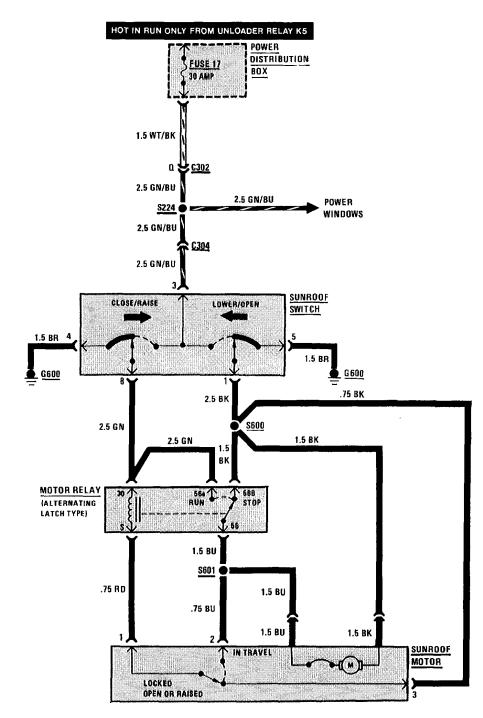


# **166 POWER MIRRORS**

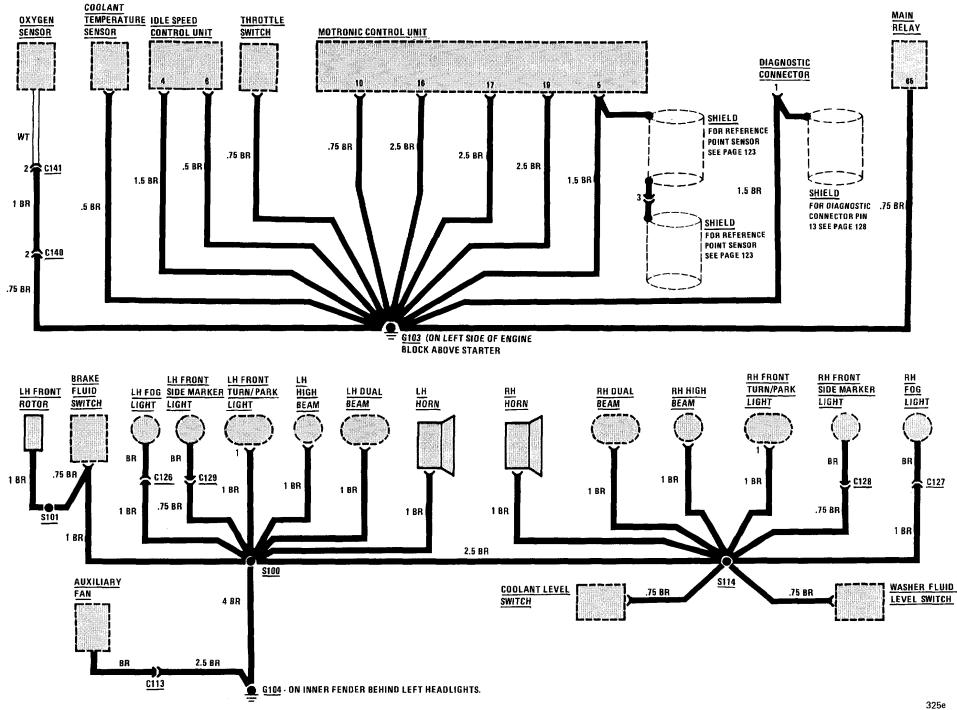


# SUNROOF 167

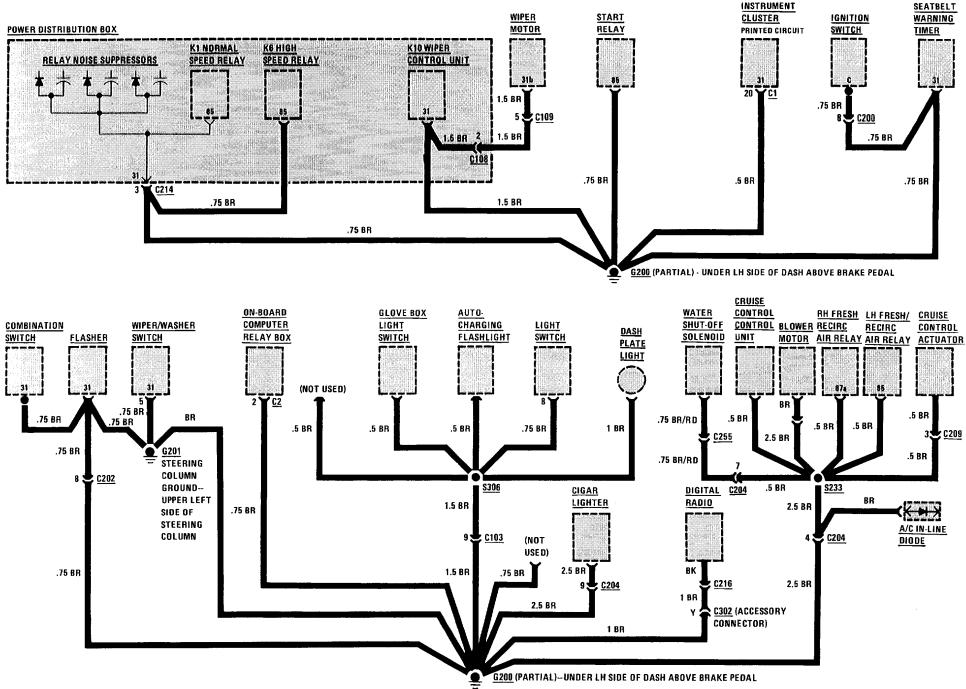
# (For Component Location See Page 219)



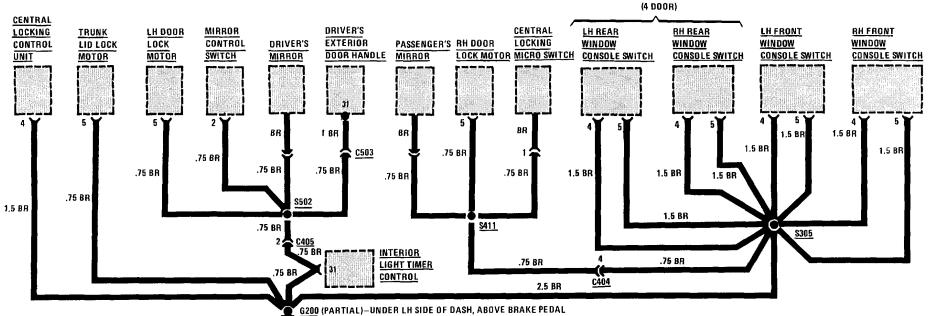
#### 168 **GROUND DISTRIBUTION (G103 AND G104)**



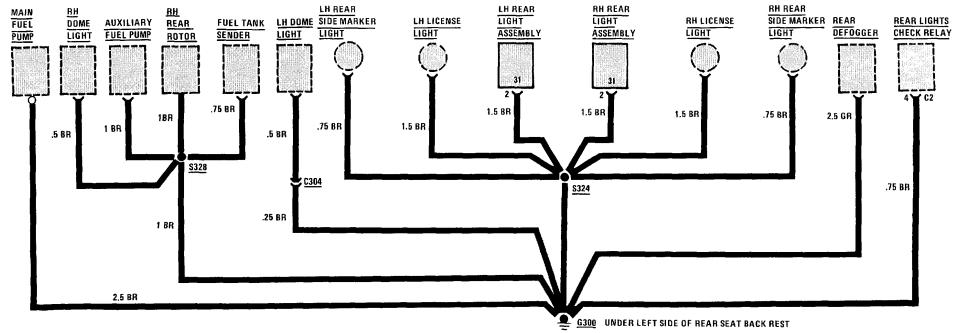
# GROUND DISTRIBUTION (G200 PARTIAL AND G201) 169



#### 170 **GROUND DISTRIBUTION (G300 AND G200 PARTIAL)**







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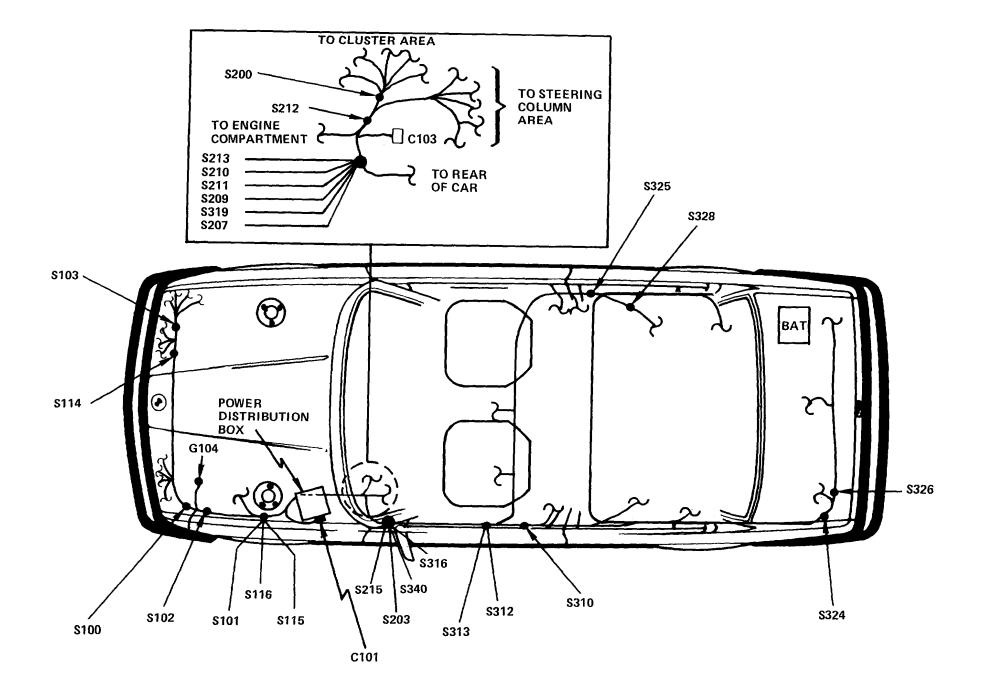
This index contains all the splices in the car, what harness each one is in, and the page that the splices appear on. The drawings after the index show how the harness is routed through the car and where the splices are located on the harness.

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| S101   | MAIN     | 172            | S308<br>S309 | DOOR            | 174            |
| S102   | MAIN     | 172            | S309<br>S310 | DOOR            | 174            |
| S103   | MAIN     | 172            | S310<br>S311 | MAIN<br>I/P     | 172<br>176     |
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| S106   | ENGINE   | 173            | S313         | MAIN            | 172            |
| S108   | ENGINE   | 173            | S310<br>S319 | MAIN            | 172            |
| S110   | ENGINE   | 173            | S319<br>S322 | DOOR            | 172            |
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| S115   | MAIN     | 172            | S324         | MAIN            | 172            |
| S116   | MAIN     | 172            | S325         | MAIN            | 172            |
| S200   | MAIN     | 172            | S326         | MAIN            | 172            |
| S201   | COMPUTER | 175            | S328         | MAIN            | 172            |
| S202   | COMPUTER | 175            | S329         | MAIN            | NOT            |
| S203   | MAIN     | 172            | 0020         |                 | SHOWN          |
| S207   | MAIN     | 172            | S330         | MAIN            | NOT            |
| S209   | MAIN     | 172            | 0000         |                 | SHOWN          |
| S210   | MAIN     | 172            | S332         | DOOR            | 174            |
| S211   | MAIN     | 172            | S333         | DOOR            | 174            |
| S212   | MAIN     | 172            | S340         | MAIN            | 172            |
| S213   | MAIN     | 172            | S402         | DOOR            |                |
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| S218   | I/P      | 176            | S411         | <b>RH FRONT</b> |                |
| S219   | I/P      | 176            |              | DOOR            | 174            |
| S220   | I/P      | 176            | S502         | LH FRONT        |                |
| S221   | I/P      | 176            |              | DOOR            | 174            |
| S300   | DOOR     | 174            | S503         | LH FRONT        |                |
| S301   | DOOR     | 174            |              | DOOR            | 174            |
| S302   | DOOR     | 174            | S504         | LHFRONT         |                |
| S303   | DOOR     | 174            |              | DOOR            | 174            |
| S305   | DOOR     | 174            | S600         | SUNROOF         | NOT            |
| S306   | I/P      | 176            |              |                 | SHOWN          |
| S307   | 1/P      | 176            | S601         | SUNROOF         | NOT            |
|        |          |                |              |                 | SHOWN          |

# **172 MAIN HARNESS SPLICE LOCATIONS**

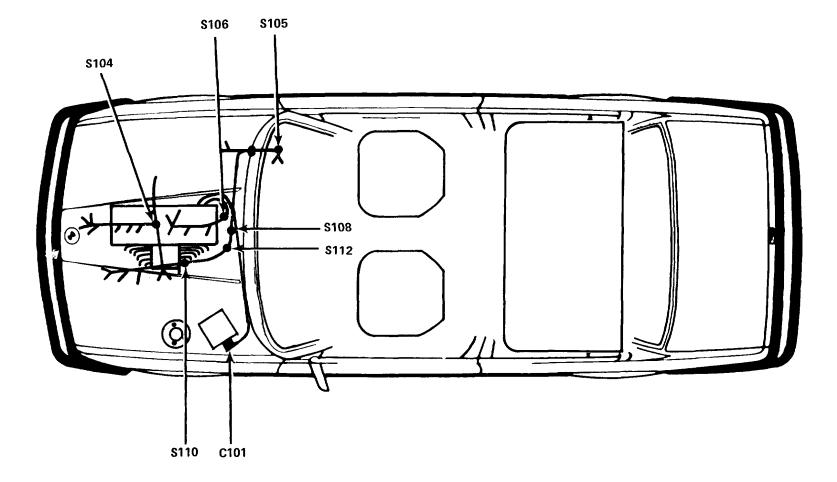
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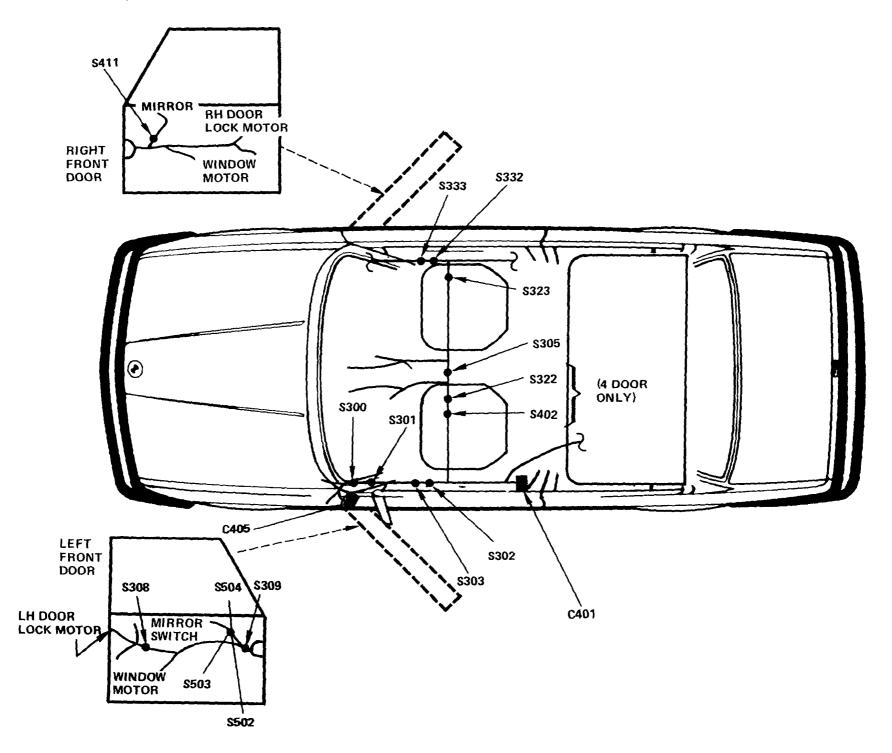
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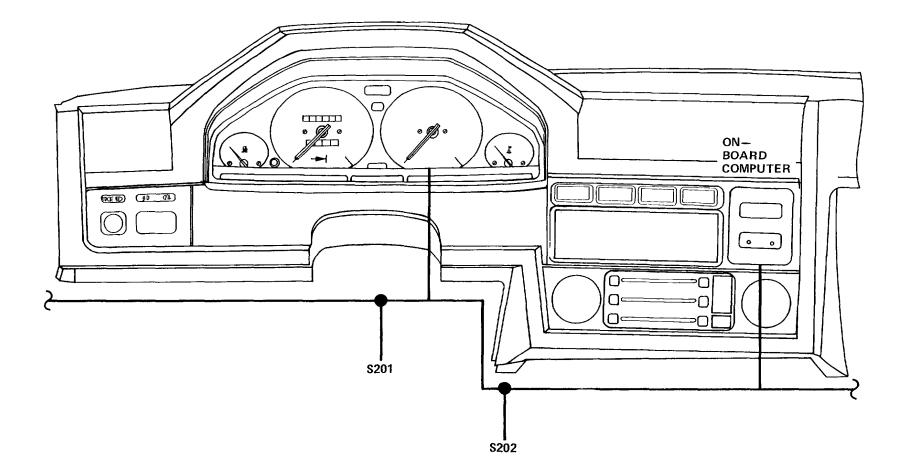


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# 174 DOOR HARNESS SPLICE LOCATIONS



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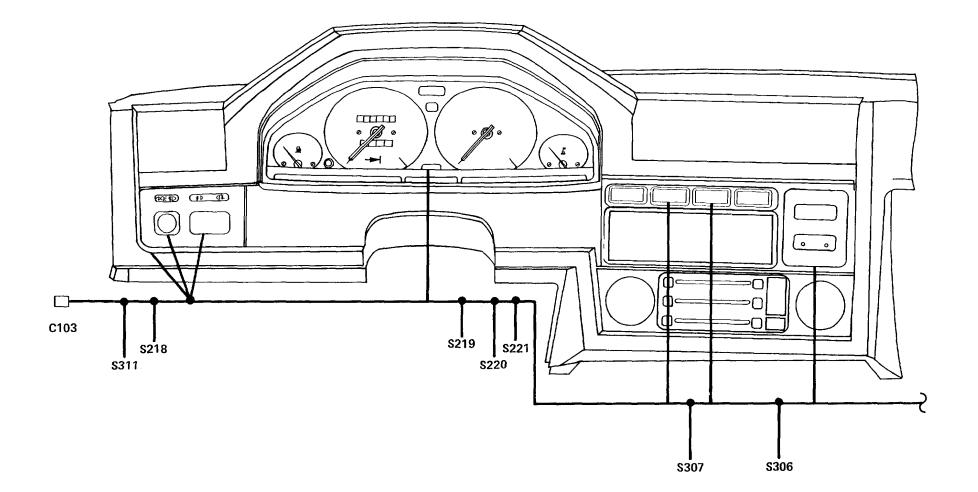


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# 176 INSTRUMENT PANEL HARNESS SPLICE LOCATIONS



**Section B** 

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# 318i

# **Schematic Diagrams**

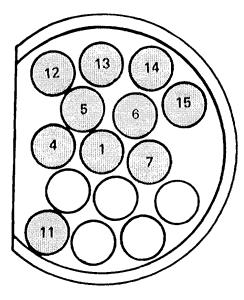
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**DIAGNOSTIC CONNECTOR** 

| PIN | WIRE<br>SIZE | WIRE<br>COLOR | CIRCUIT AND COMPONENT CONNECTED                                 |
|-----|--------------|---------------|---|
| 1   | 1.5          | BR            | Ground Distribution G101  |
| 4   | .5           | BR/WT         | Gauges/Warning Indicators, Coolant<br>Temperature Sender.       |
| 5   | .5           | WT/GN         | Fuel Control, Injector Control Module<br>(Fuel Rate).           |
| 6   | .5           | WT/BK         | Not Used (Late Production Only).                                |
| 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.                    |

### CIRCUITS USING C302 (ACCESSORY CONNECTOR)

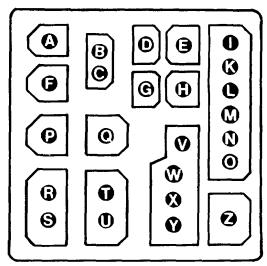


Figure 1-C302 (Accessory Connector) Front View—Under LH Side of Dash Ahead of Pedal Assembly

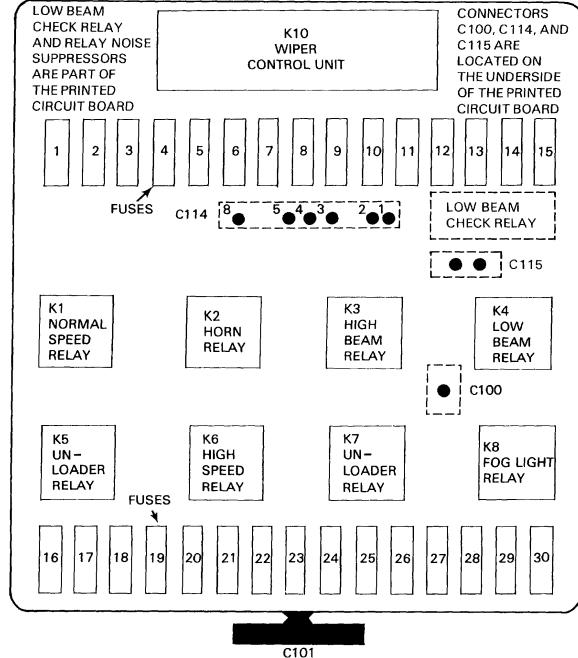
| TERMINAL | CIRCUIT         | TERMINAL | CIRCUIT        |
|----------|-----------------|----------|----------------|
| A        | Not Used        | N        | Not Used       |
| В        | Not Used        | 0        | Not Used       |
| С        | Not Used        | Р        | Not Used       |
| D        | Central Locking | Q        | Power Windows  |
| E        | Not Used        | R        | Cruise Control |
| F        | Not Used        | S        | Cruise Control |
| G        | Not Used        | Т        | Not Used       |
| н        | Not Used        | U        | Not Used       |
| 1        | Not Used        | V        | Radio          |
| J        | Not Used        | W        | Not Used       |
| К        | Not Used        | Х        | Radio          |
| L        | Not Used        | Y        | Radio          |
| м        | Not Used        | Z        | Power Antenna  |
|          |                 |          |                |

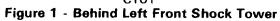
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## **102 POWER DISTRIBUTION BOX**

OF CAR



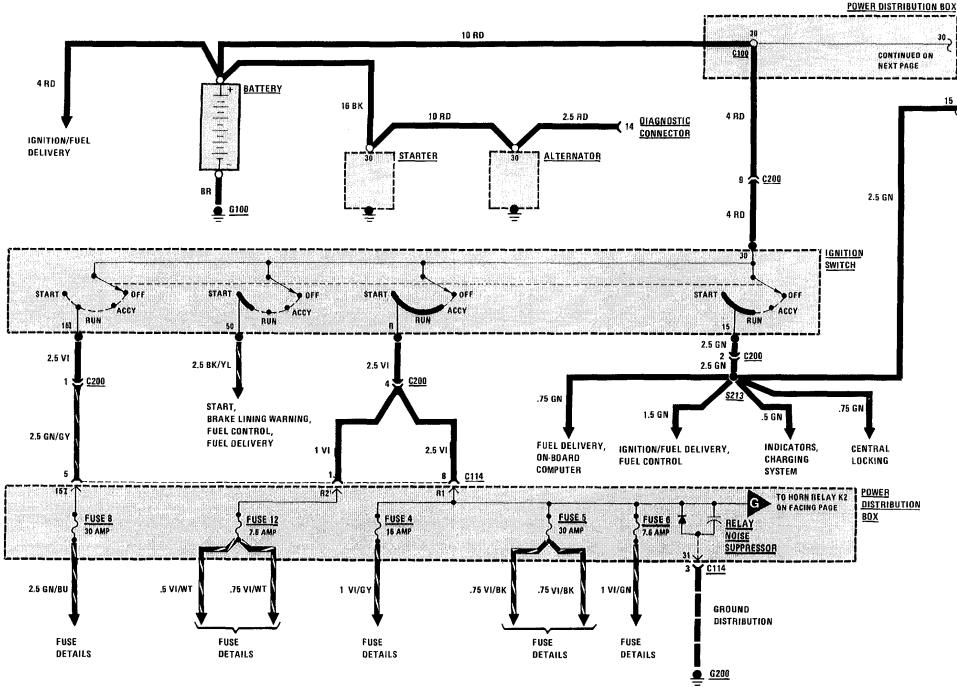


| FUSE | SIZE/       |   |
|------|-------------|---|
| NO.  | COLOR       | CIRCUIT NAME  |
| 1    | 7.5A (BR)   | Headlights (also fuses 2, 13, 14).  |
| 2    | 7.5A (BR)   | Headlights (also fuses 1, 13, 14).  |
| 3    | 15A (LT BU) | Auxiliary Fan (also fuses 18, 19).  |
| 4    | 15A (LT BU) | Lights: Turn/Hazard Warning (also fuse 24);<br>Digital Clock.   |
| 5    | 30A (LT GN) | Wiper/Washer.   |
| 6    | 7.5A (BR)   | Stoplights/Cruise Control (also fuse 10).   |
| 7    | 15A (LT BU) | Horn.   |
| 8    | 30A (LT GN) | Rear Defogger (also 23);<br>Seatbelt Warning (also fuses 10, 21);<br>Speedometer/Indicators (also fuse 12).   |
| 9    | 15A (LT BU) | Idle Speed Control/Vacuum Advance.  |
| 10   | 7.5A (BR)   | Seatbelt Warning (also fuses 8,21);<br>Service Interval Indicator (also fuse 21);<br>Tachometer/Fuel Economy Gauges<br>(also fuse 24);<br>Gauges/Indicators;<br>Brake Warning System;<br>Start, Back Up Lights;<br>Idle Speed Control (also fuse 10);<br>Stoplights/Cruise Control (also fuse 6); |
| 11   | 15A (LT BU) | Fuel Delivery.  |
| 12   | 7.5A (BR)   | Radio (also fuse 21);<br>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);<br>Interior Lights (also fuses 21, 27);<br>Power Mirrors.   |

| FUSE<br>NO. | SIZE/<br>COLOR | CIRCUIT NAME   |
|-------------|----------------|--|
| 20          | 30A (LT GN)    | Heater/Air Conditioning (also fuse 28).  |
| 21          | 7.5A (BR)      | Auto-Charging Flashlight;<br>Digital Clock;<br>Glove Box Light;<br>Ignition Key Warning/Seatbelt Warning (also<br>fuse 8, 10);<br>Interior Lights (also fuses 14, 22, 27);<br>Radio (also fuses 12);<br>Trunk Light;<br>Service Interval Indicator (also fuse 10); |
| 22          | 7.5A (BR)      | Interior Lights (also fuses 19, 21, 27);<br>Lights: Front Park/Tail (also fuse 23);<br>Lights: Front Side Marker (also fuse 23).   |
| 23          | 7.5A (BR)      | Lights: Dash;<br>Lights: Front Park/Tail (also fuse 22);<br>Lights: Front Side Marker (also fuse 22);<br>Lights: Rear Marker/License;<br>Rear Defogger (also fuse 8).  |
| 24          | 15A (LT BU)    | Lights: Turn/Hazard Warning (also fuse 4);<br>Tachometer/Fuel Economy Gauges (also fuse<br>10);<br>Service Interval Indicator (also fuse 10).  |
| 25          |                | Not Used.  |
| 26          |                | Not Used.  |
| 27          | 30A (LT GN)    | Interior Lights (also fuses 19, 21, 22);<br>Central Locking;   |
| 28          | 30A (LT GN)    | Cigar Lighter;<br>Power Antenna.   |
| 29          | 7.5A (BR)      | Fog Lights (also fuse 30).   |
| 30          | 7.5A (BR)      | Fog Lights (also fuse 29).   |

# **104 POWER DISTRIBUTION**

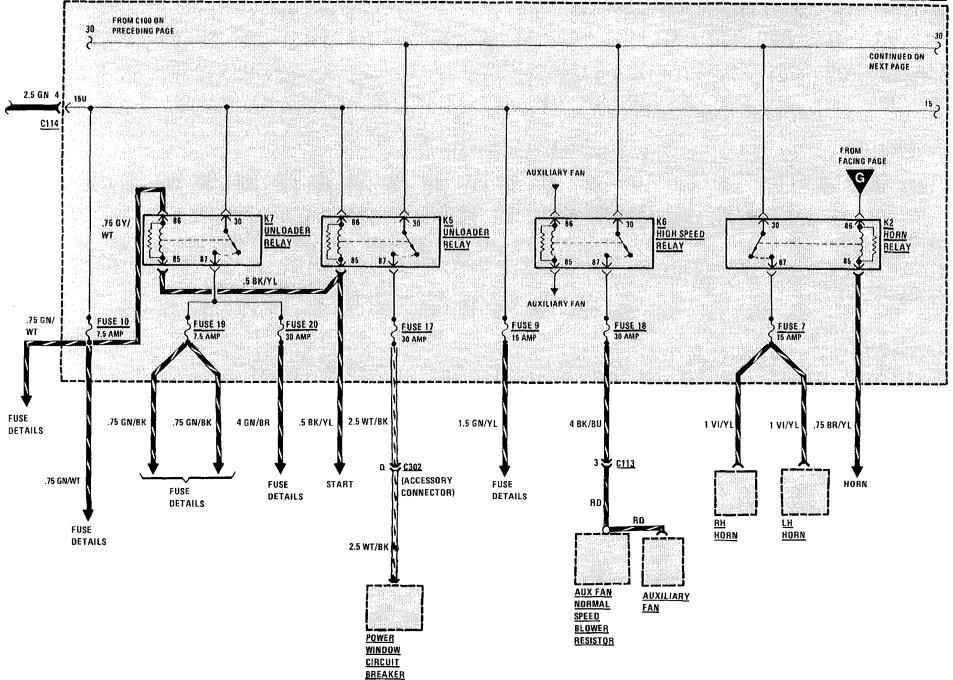
# (For Component Location See Page 213)



# POWER DISTRIBUTION 105

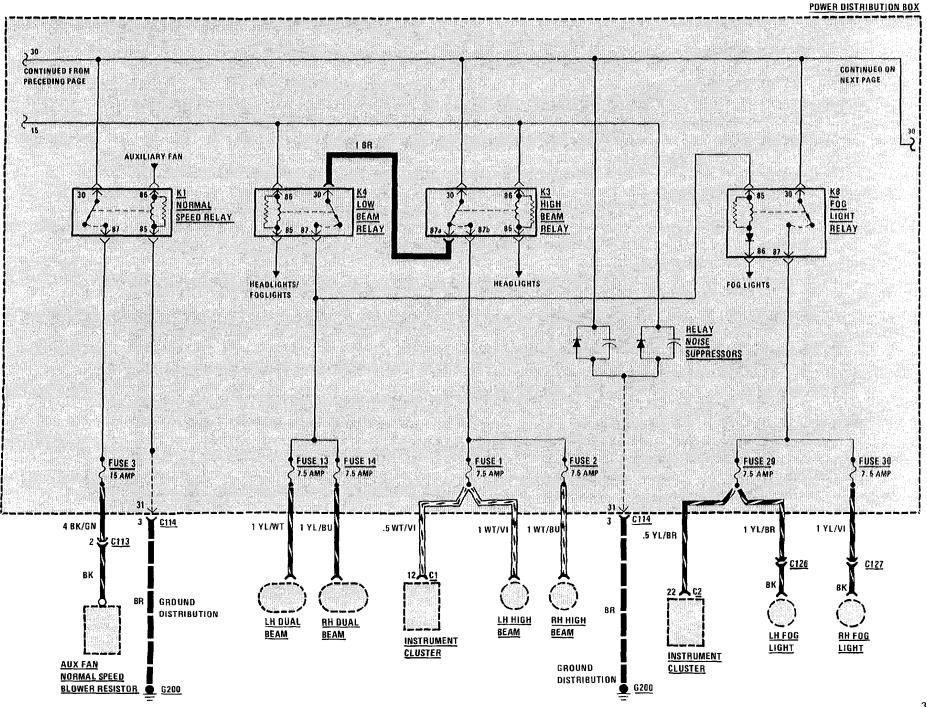
# (For Component Location See Page 213)

POWER DISTRIBUTION BOX

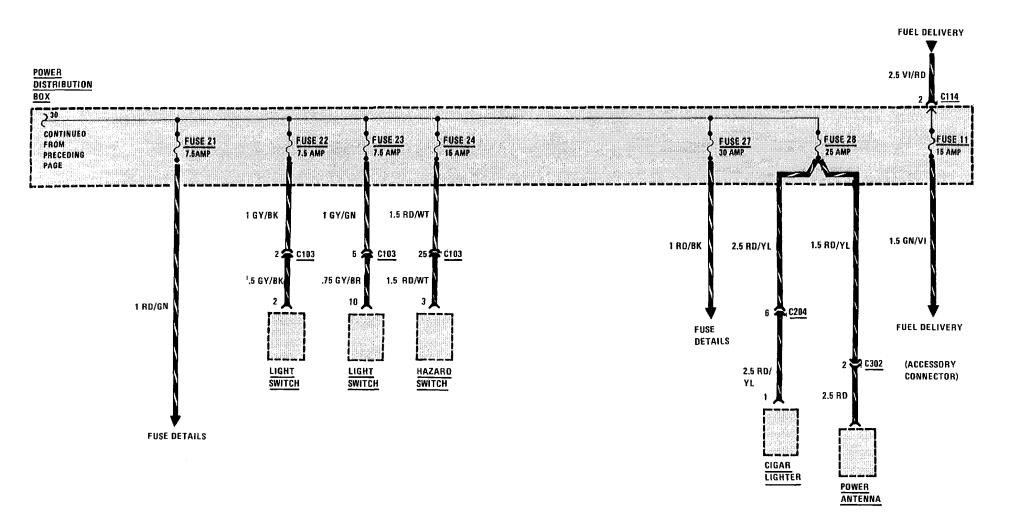


# **106 POWER DISTRIBUTION**

# (For Component Location See Page 213)



# (For Component Location See Page 213)

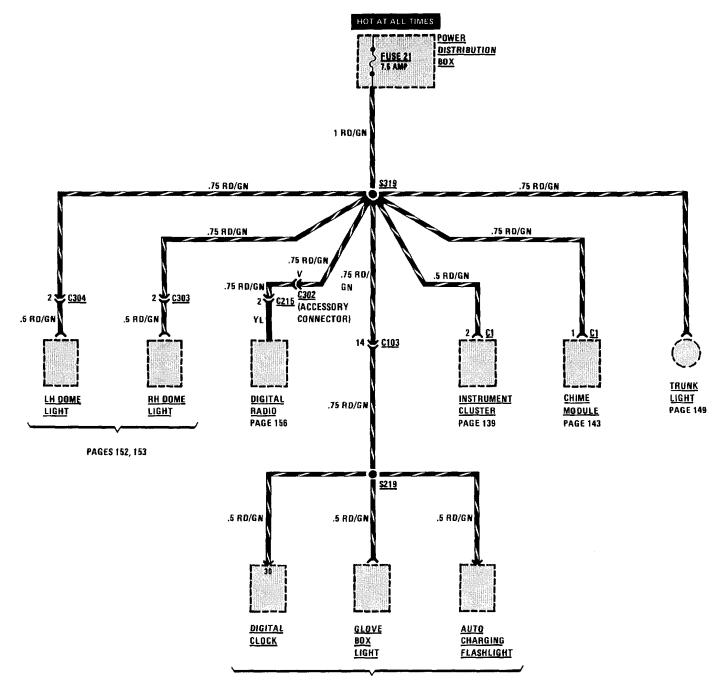


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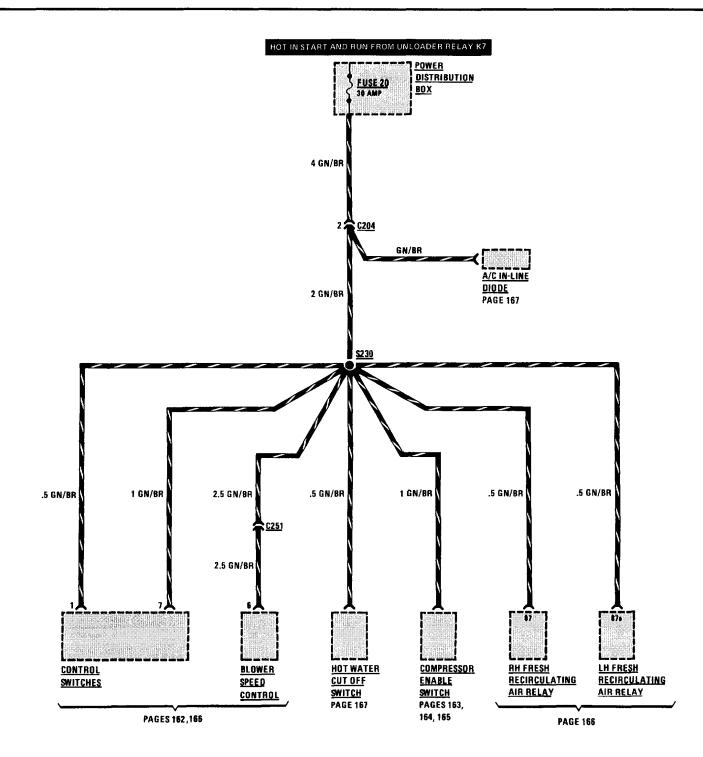
(1) 3. A # (4.1.5)

## 108 FUSE DETAILS: FUSE 21

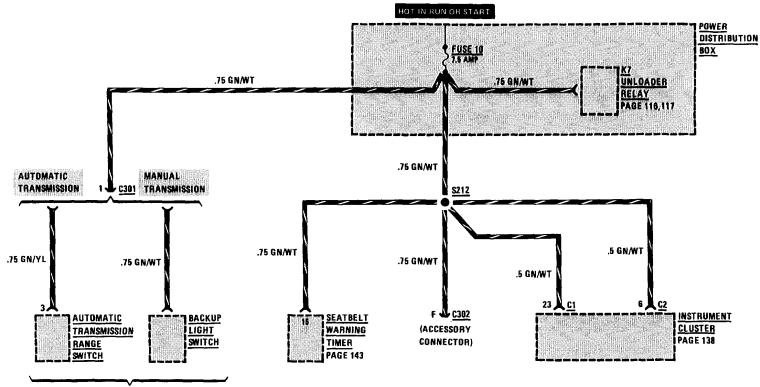
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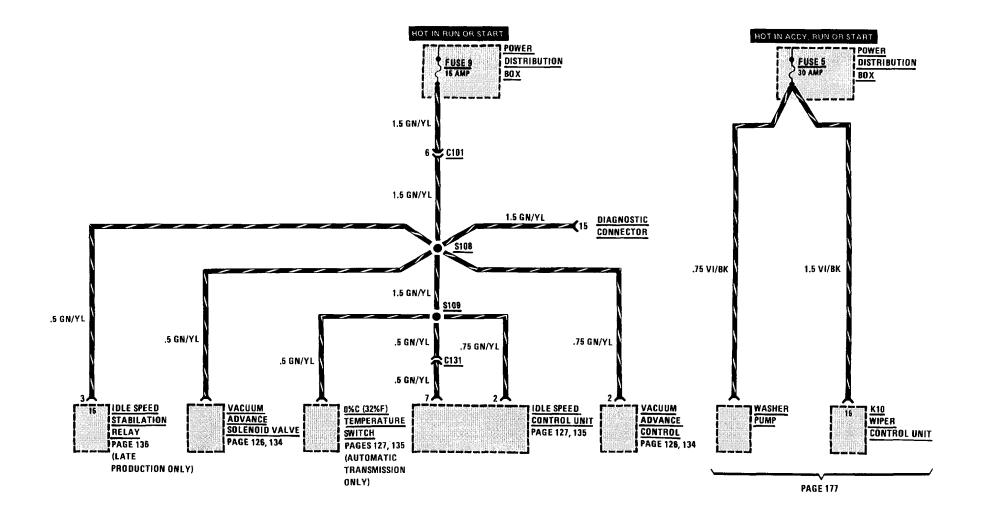
PAGE 154



# 110 FUSE DETAILS: FUSE 10



PAGE 176

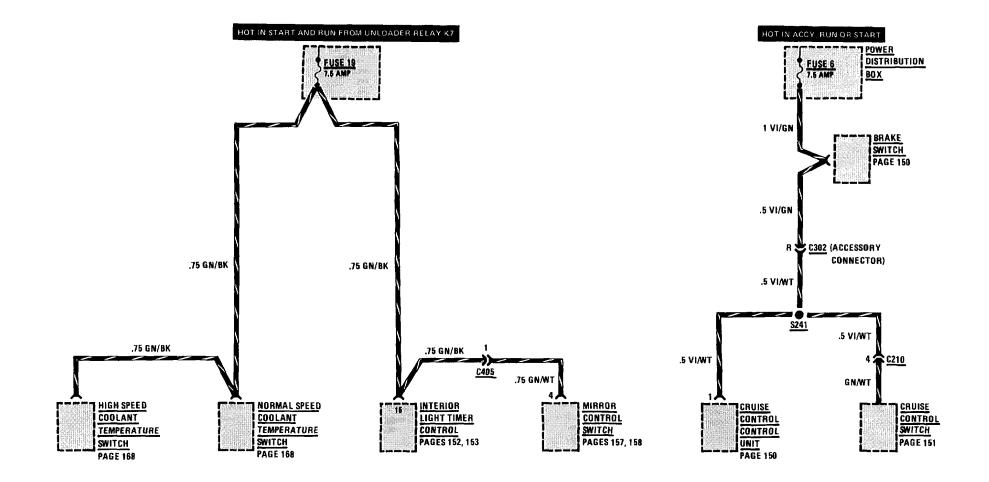


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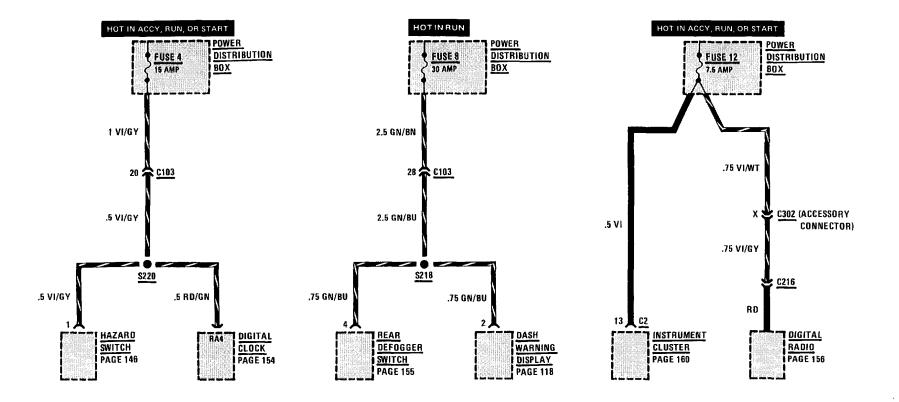
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# 112 FUSE DETAILS: FUSES 19 AND 6



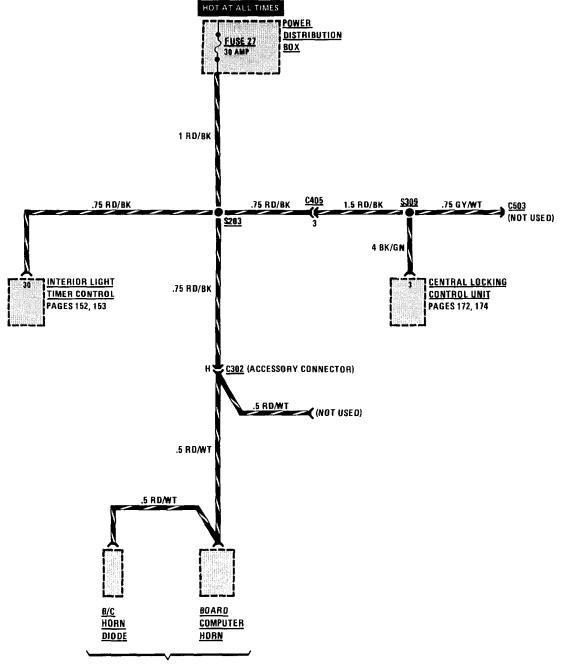
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## FUSE DETAILS: FUSES 4, 8 AND 12 113

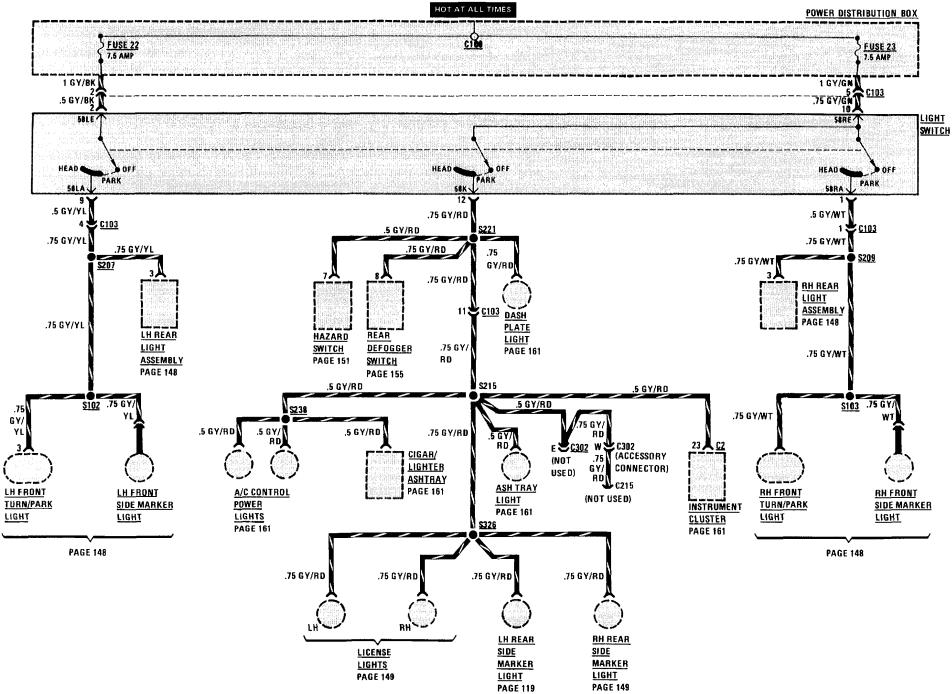


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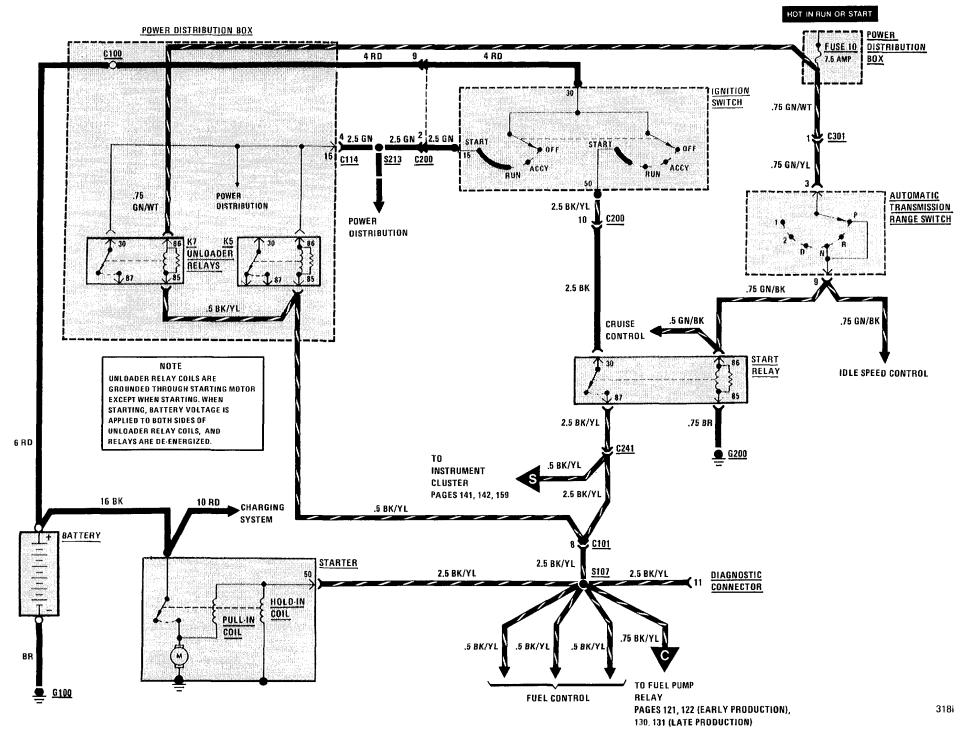


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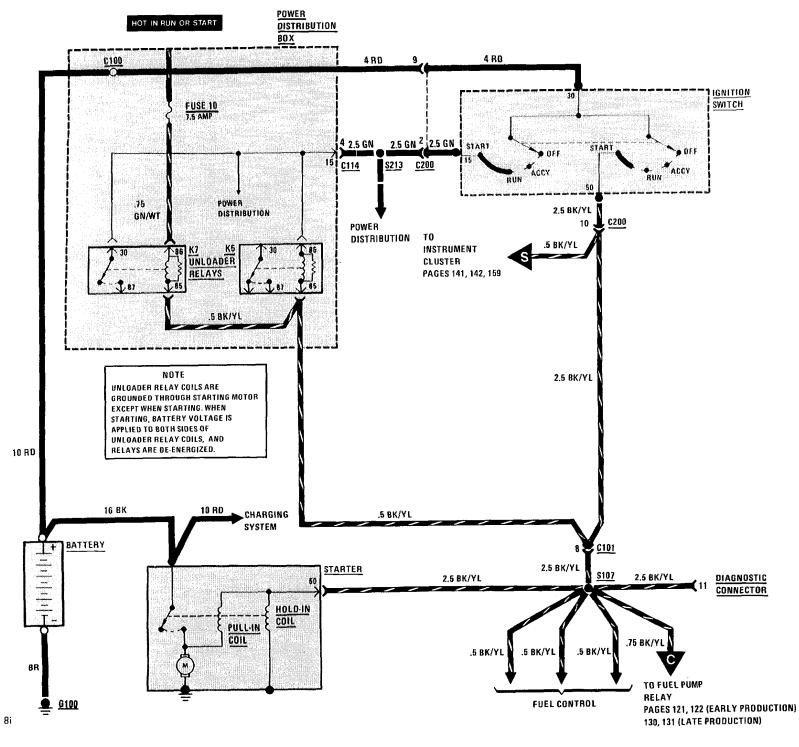
# 116 START (AUTOMATIC TRANSMISSION)

#### (For Component Location See Page 206)





#### (For Component Location See Page 206)

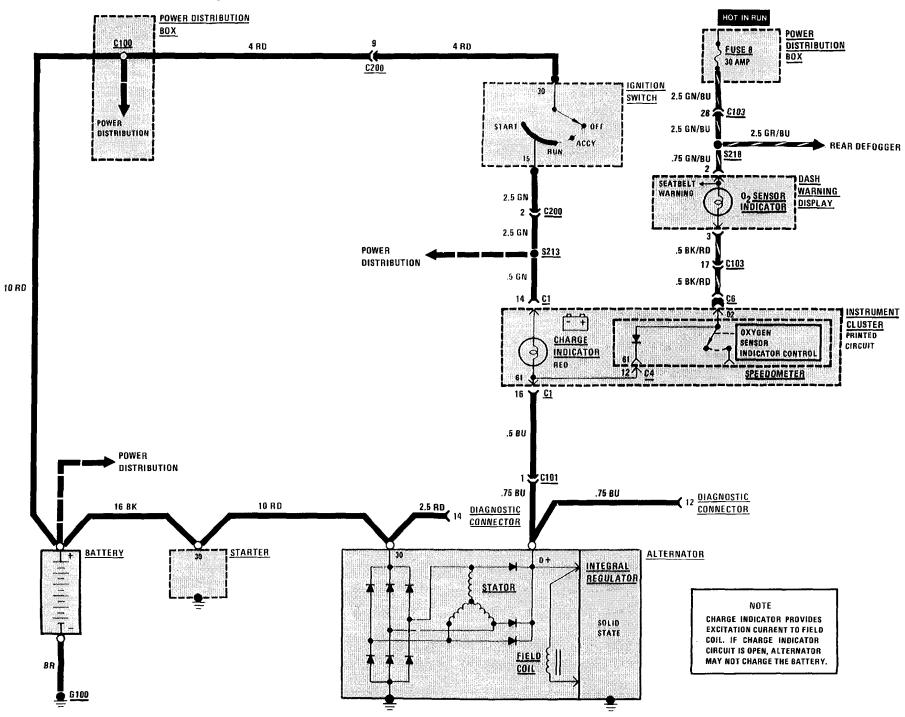


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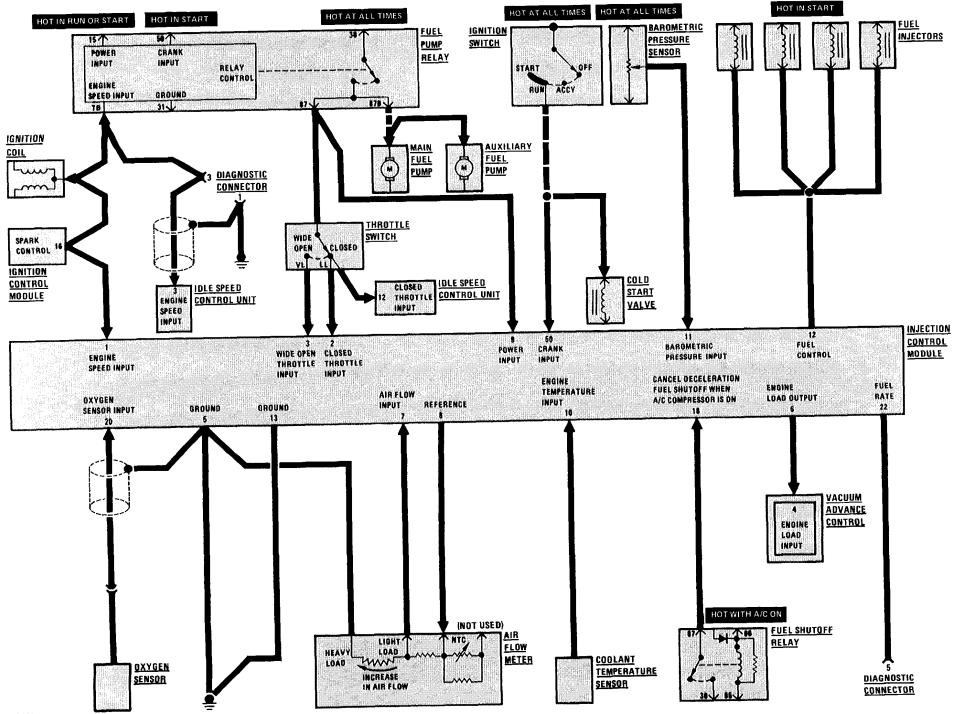
ALL ALL ADDRESS AND ADDRESS OF

# 118 CHARGING SYSTEM

#### (For Component Locations See Page 204)

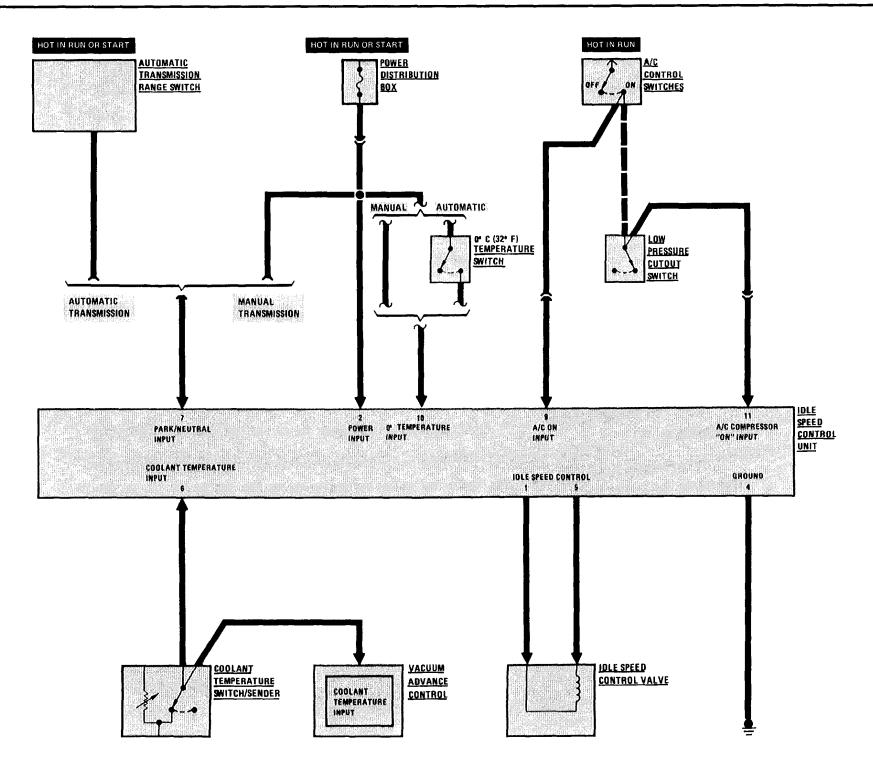


# BLOCK DIAGRAM FOR 318i (EARLY PRODUCTION) ENGINE CONTROLS 119



#### 120 BLOCK DIAGRAM FOR 318i (EARLY PRODUCTION) ENGINE CONTROLS

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318i

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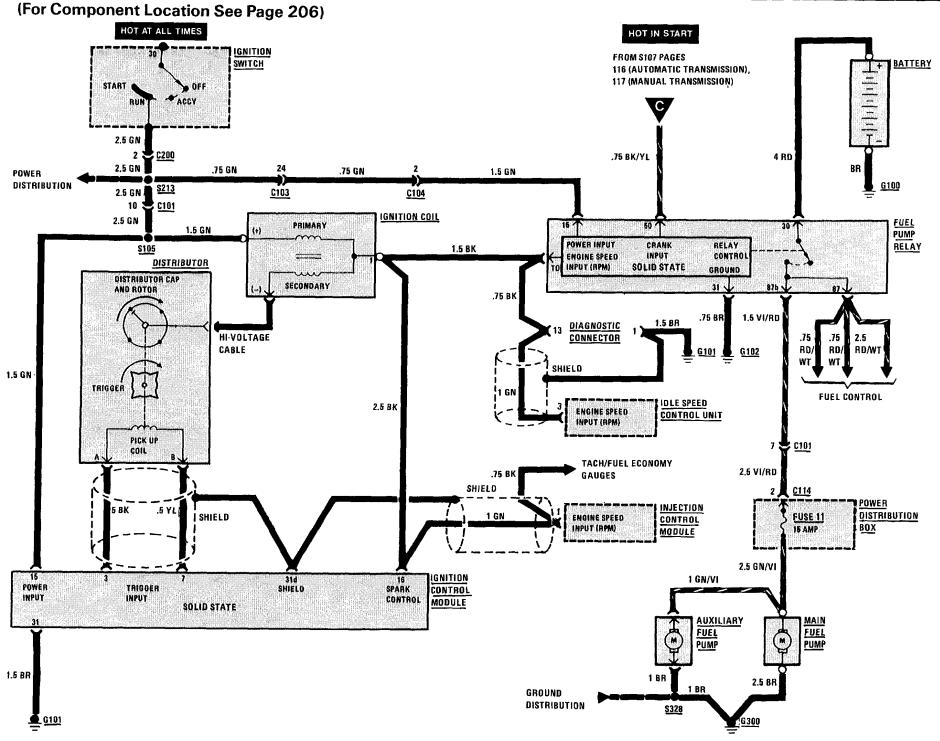
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# 122 IGNITION/FUEL DELIVERY (EARLY PRODUCTION)

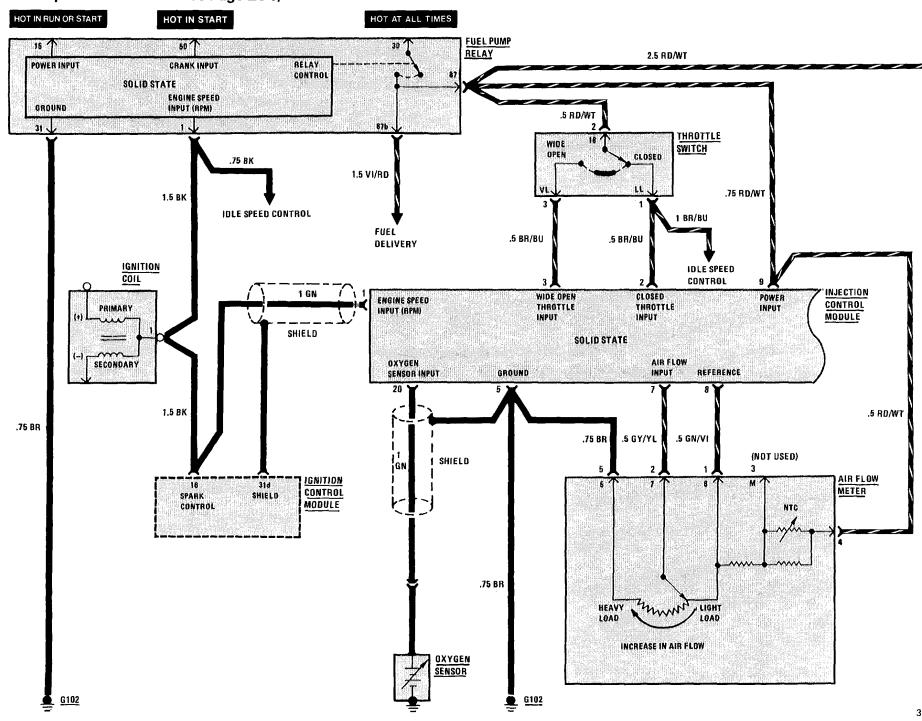


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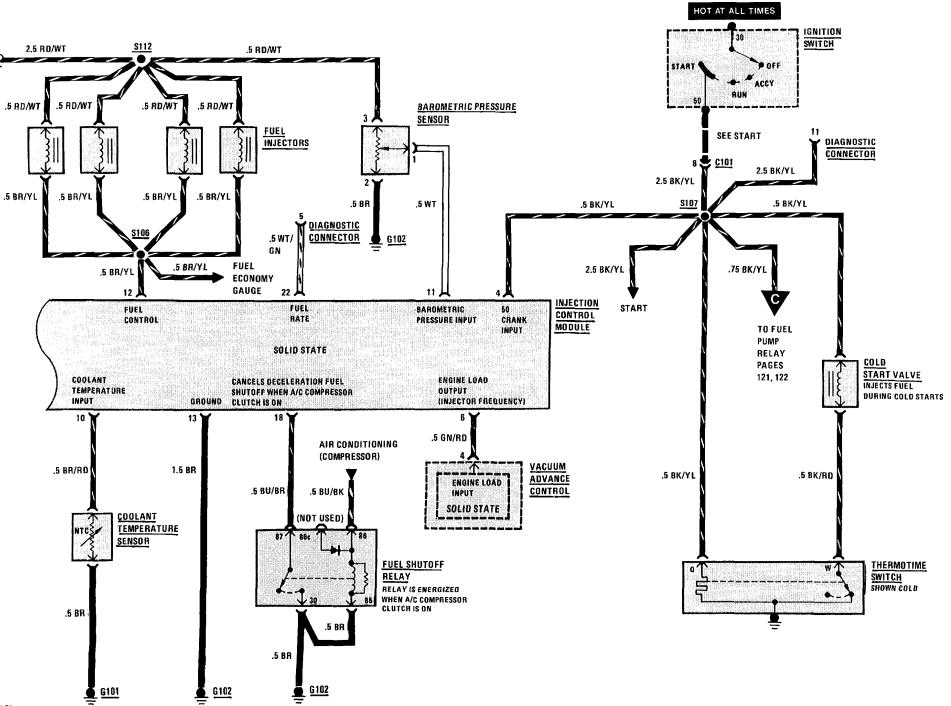
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123

#### 124 FUEL CONTROL (EARLY PRODUCTION)

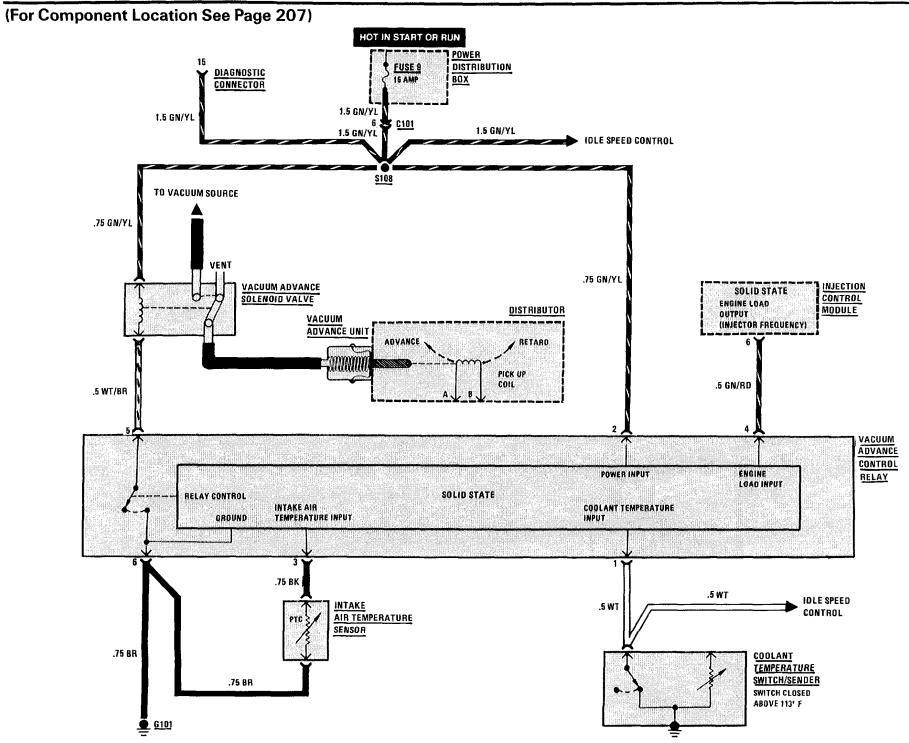


(For Component Locations See Page 204)

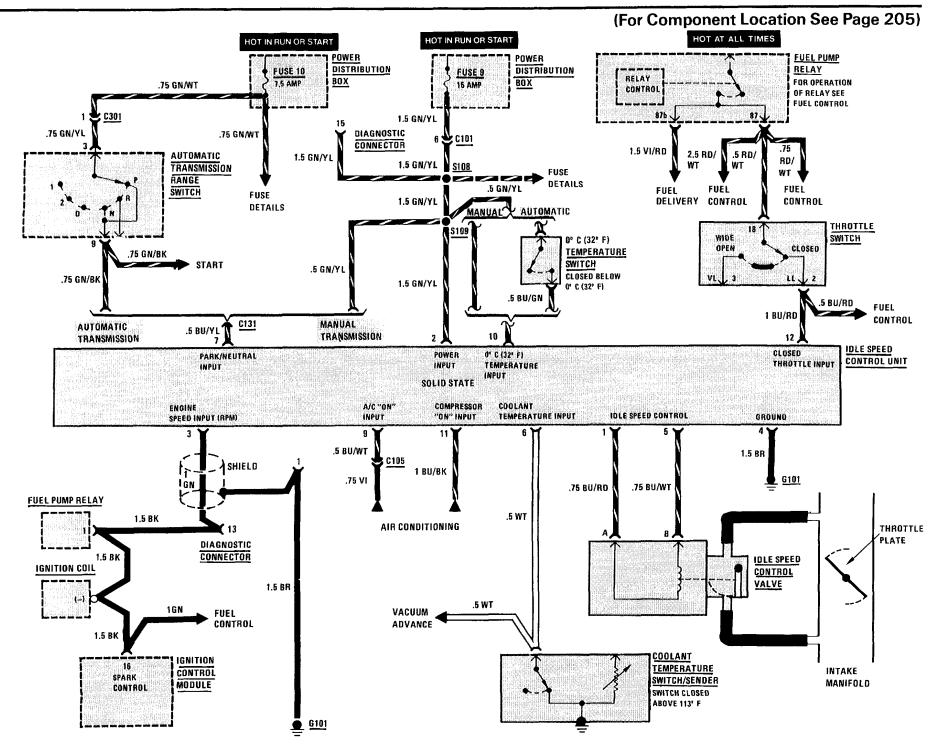


(For Component Location See Page 204)

### 126 VACUUM ADVANCE (EARLY PRODUCTION)



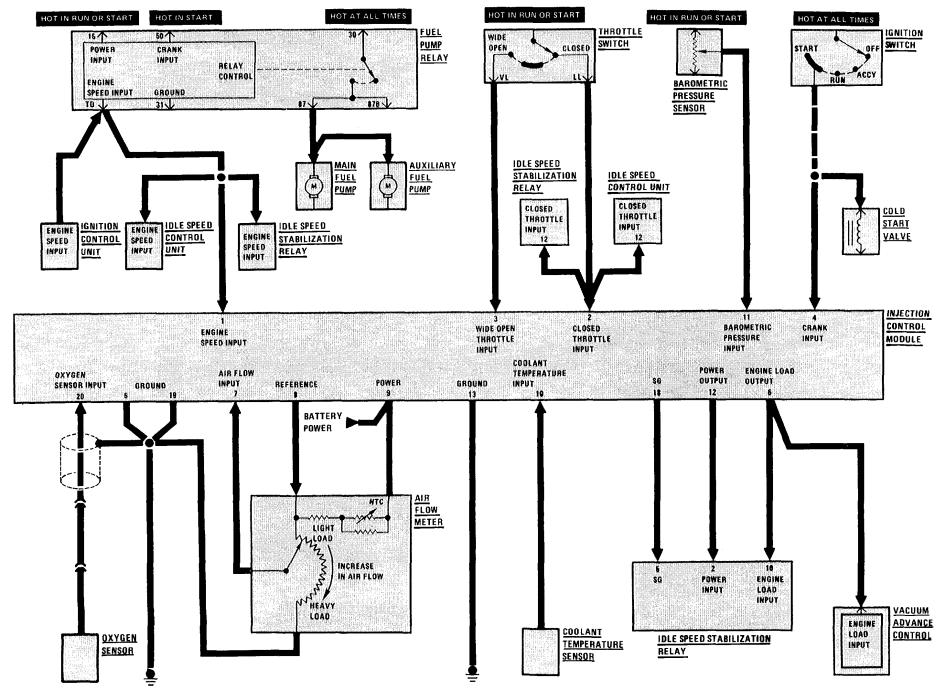
#### IDLE SPEED CONTROL (EARLY PRODUCTION) 127



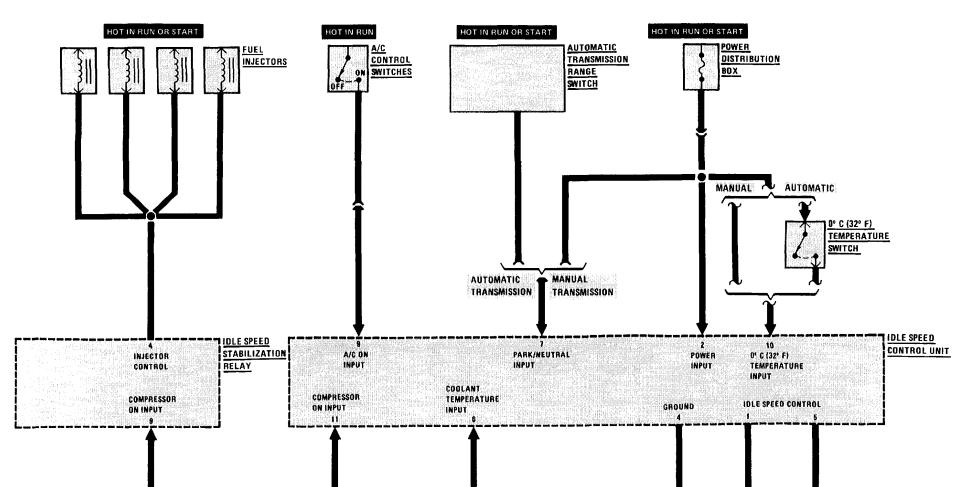
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#### 128 BLOCK DIAGRAM FOR 318i (LATE PRODUCTION) ENGINE CONTROL

4.11100-0400-



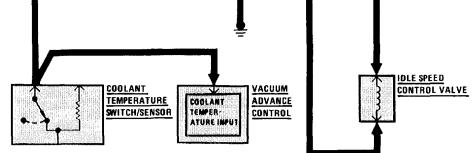
# BLOCK DIAGRAM FOR 318i (LATE PRODUCTION) ENGINE CONTROLS 129



LOW PRESSURE

CUTOUT

SWITCH

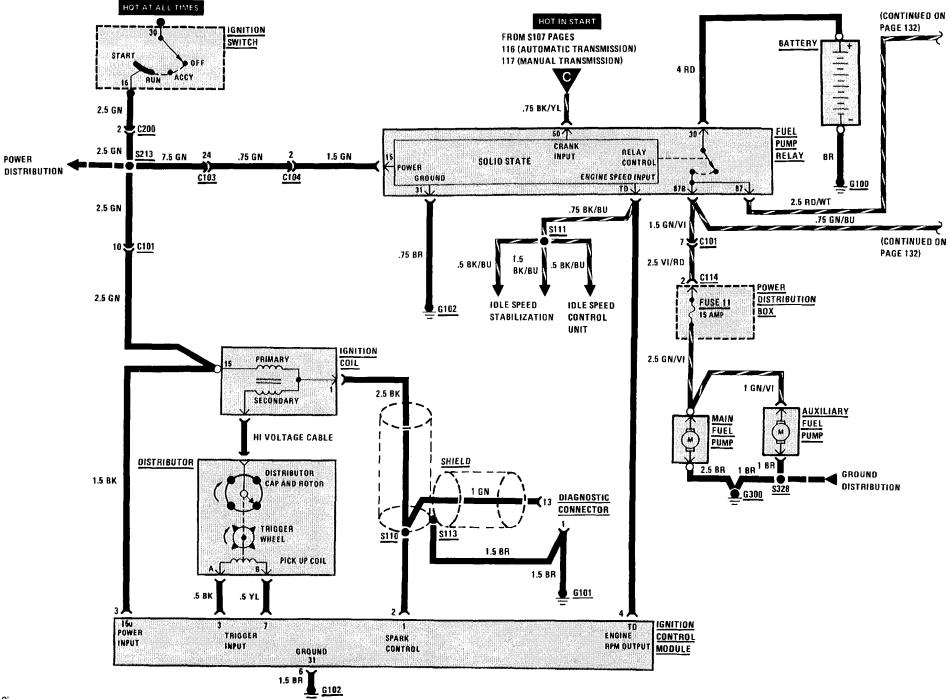


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### IGNITION/FUEL DELIVERY (LATE PRODUCTION) 131



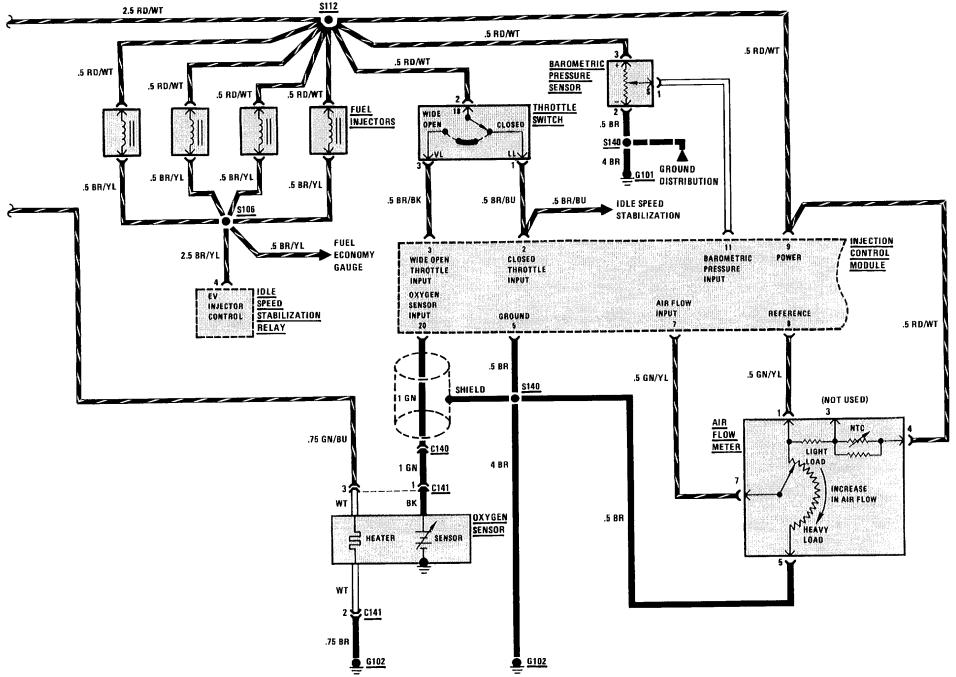
(For Component Location See Page 206)

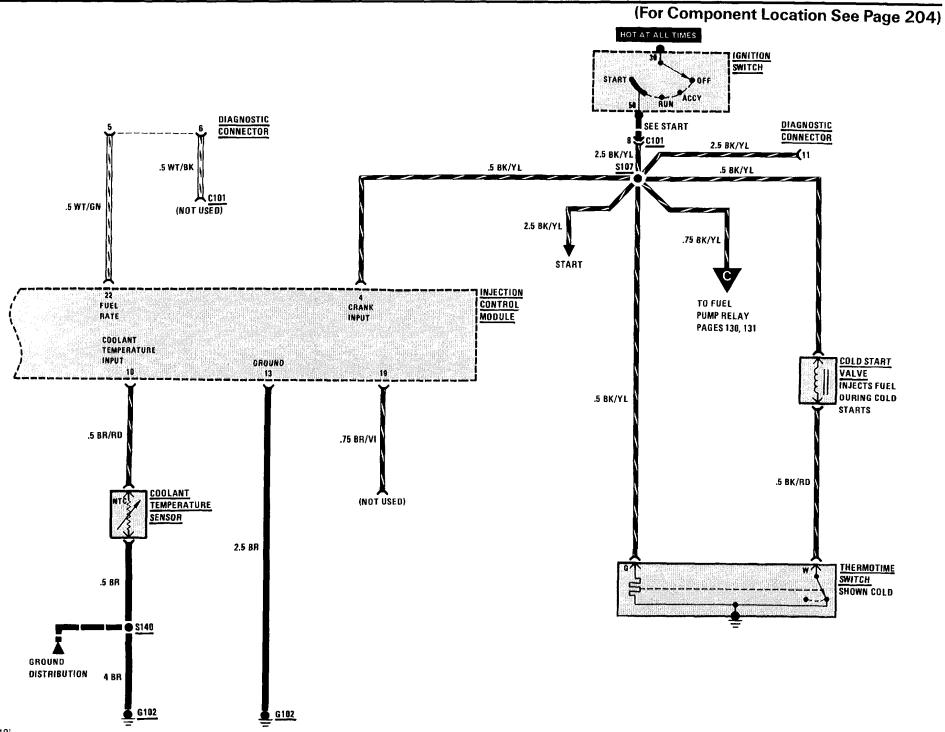
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#### 132 FUEL CONTROL (LATE PRODUCTION)

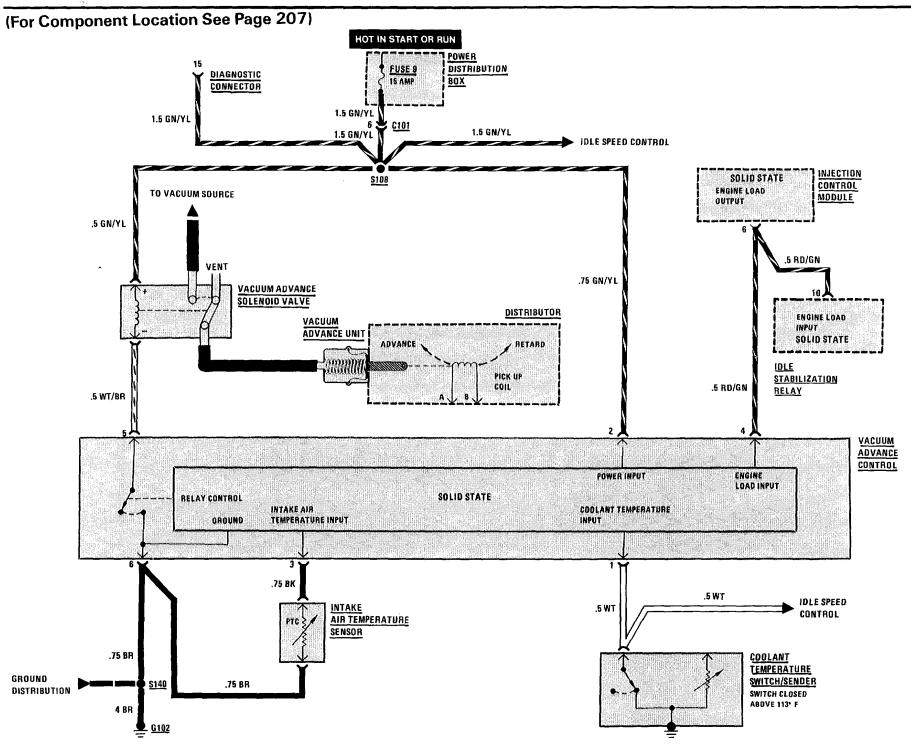
#### (For Component Location See Page 204)

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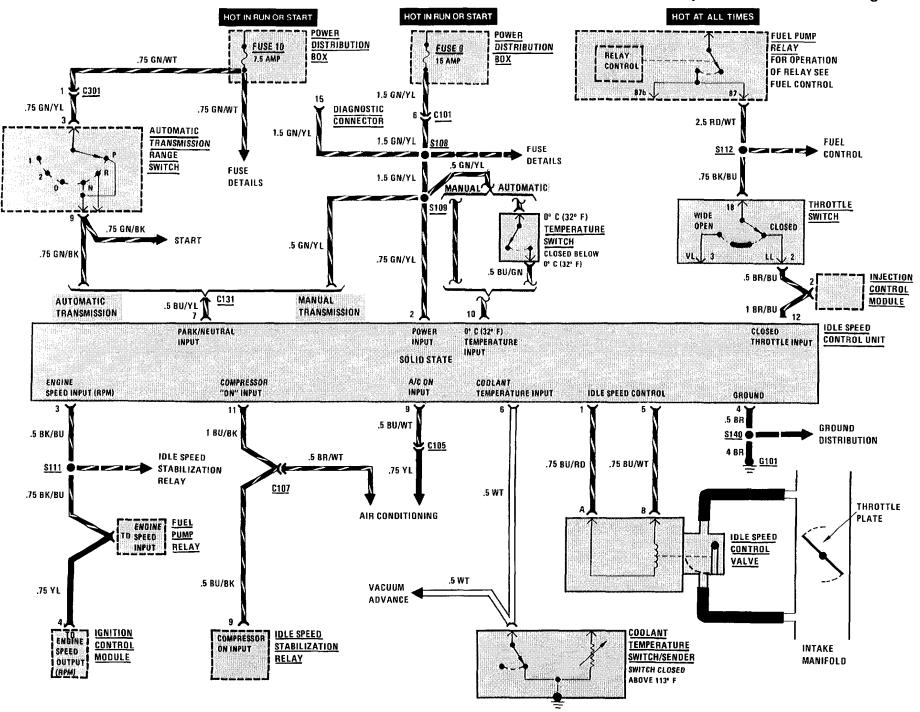




#### 134 VACUUM ADVANCE (LATE PRODUCTION)



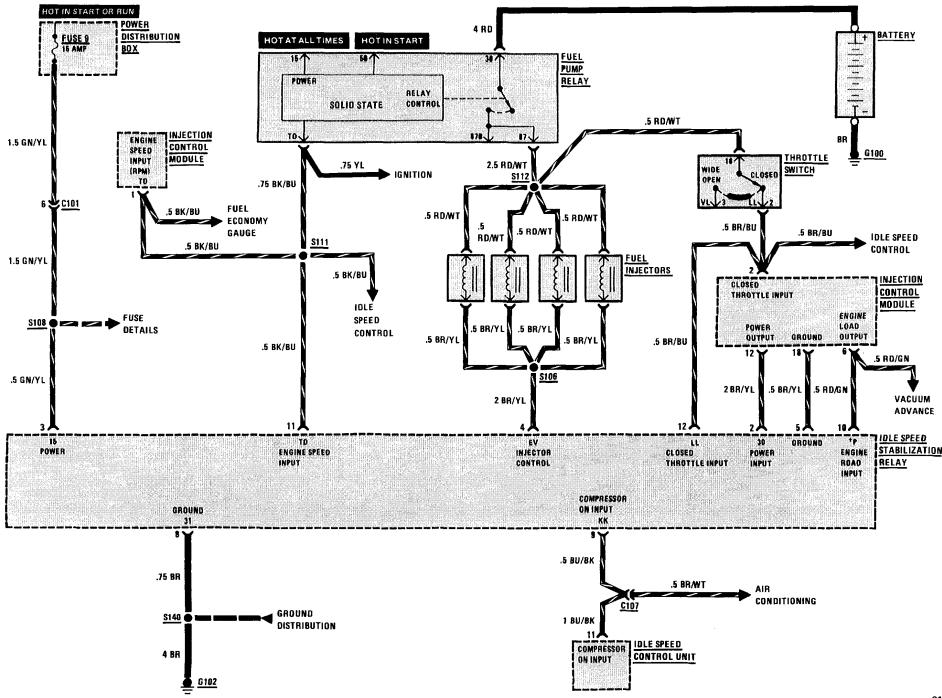
#### IDLE SPEED CONTROL (LATE PRODUCTION) 135



#### (For Component Location See Page 205)

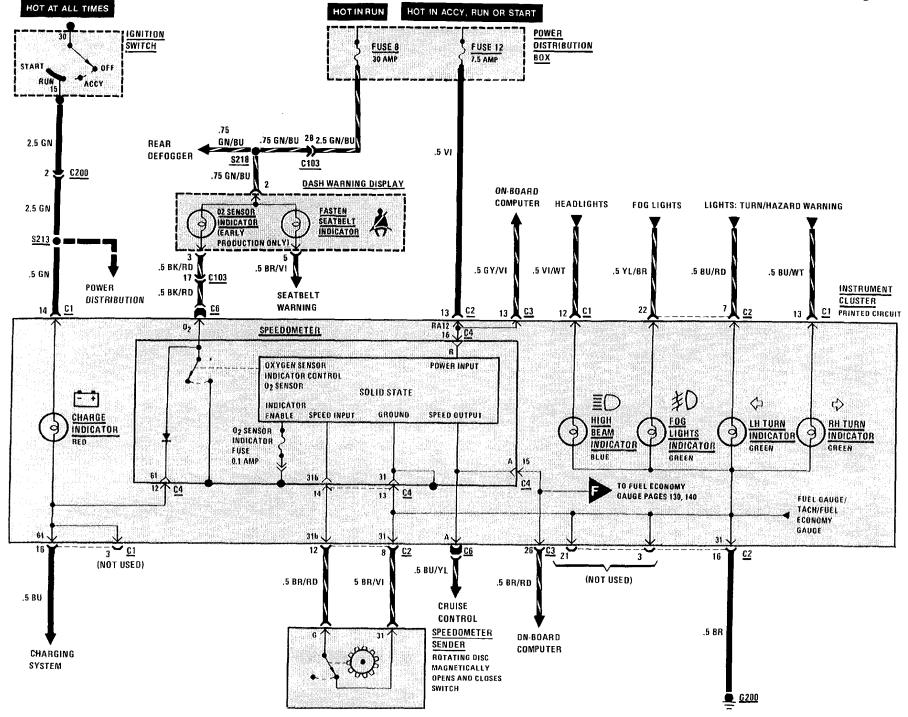
#### 136 IDLE SPEED STABILIZATION (LATE PRODUCTION)

#### (For Component Location See Page 205)



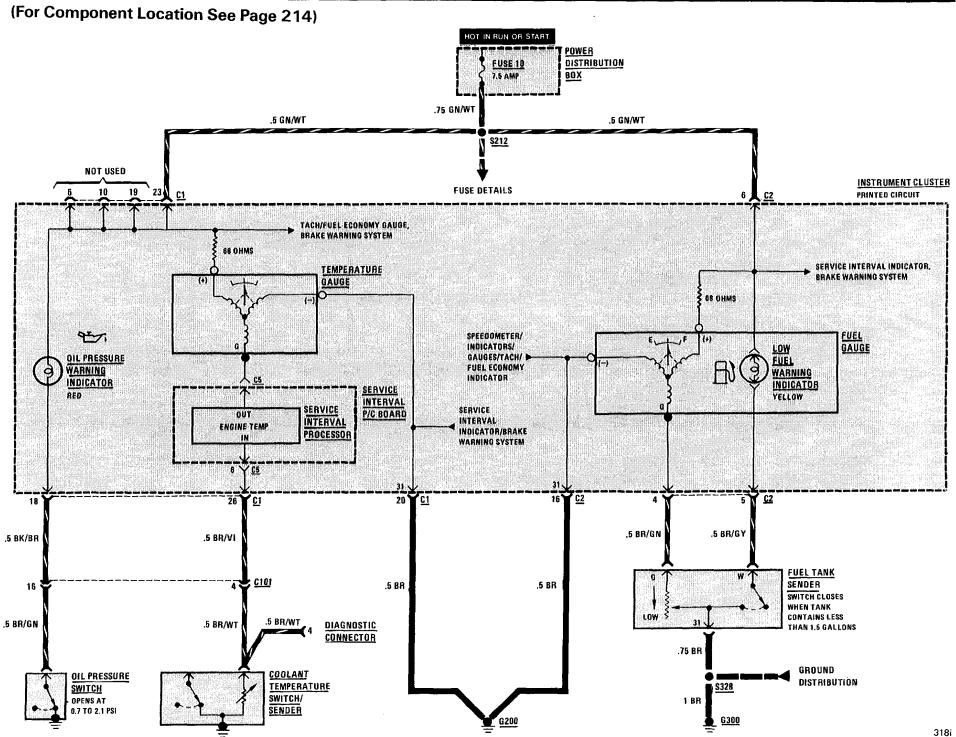
#### SPEEDOMETER/INDICATORS 137

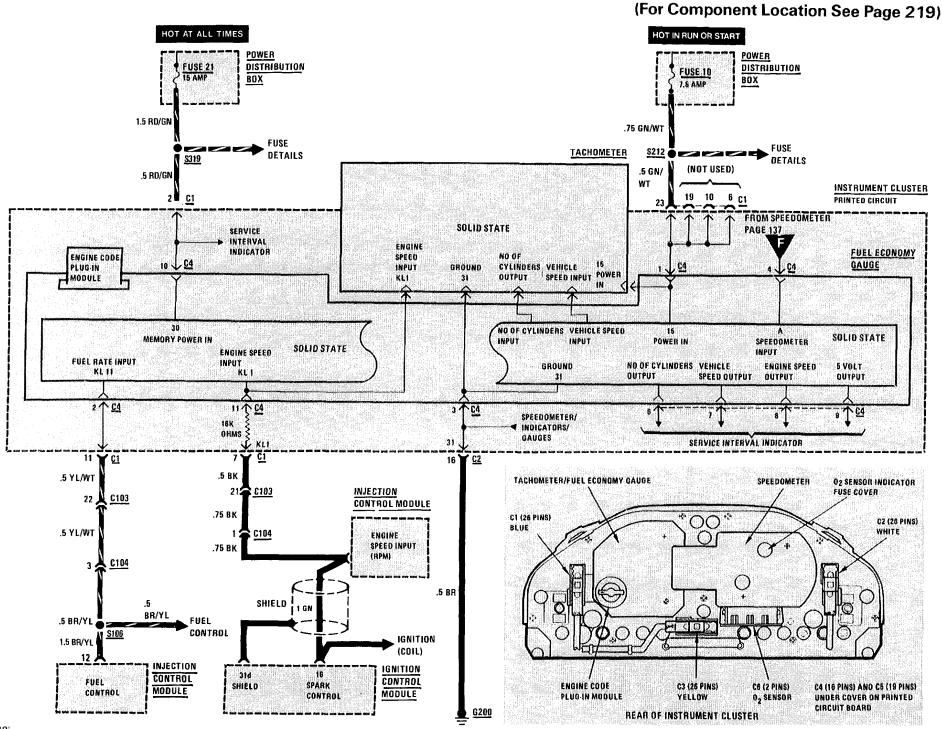




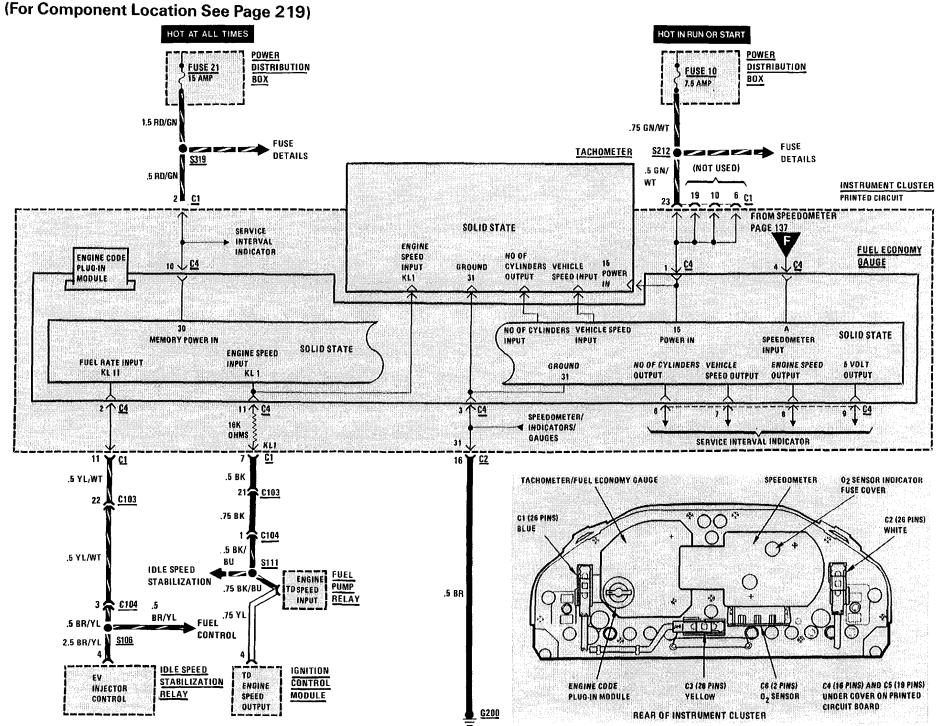
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#### **138 GAUGES/INDICATORS**

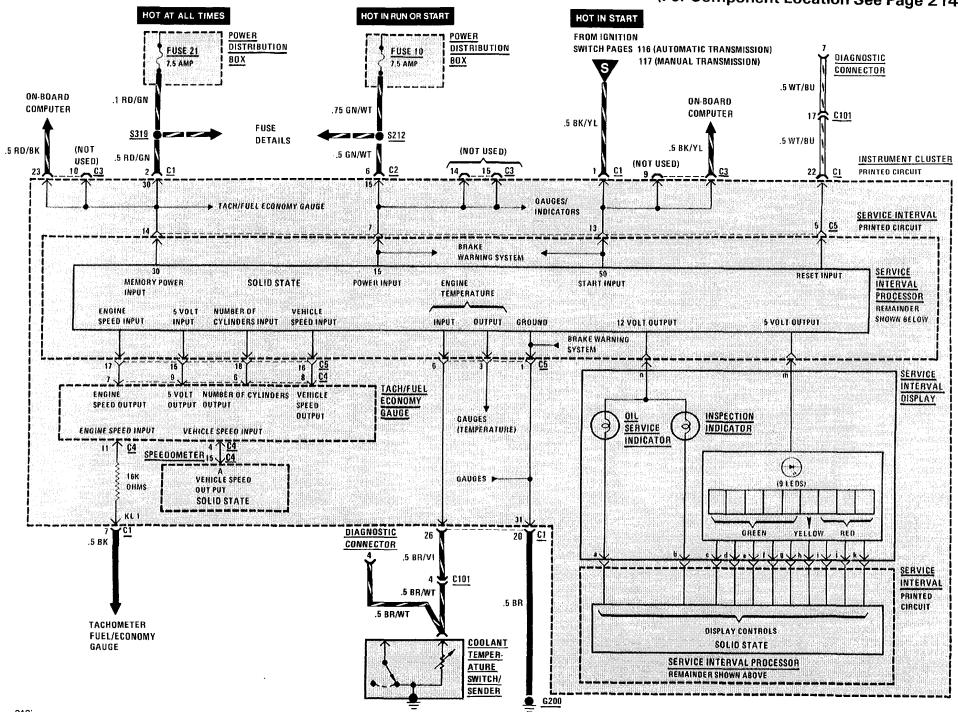




# 140 TACHOMETER/FUEL ECONOMY GAUGE (LATE PRODUCTION)



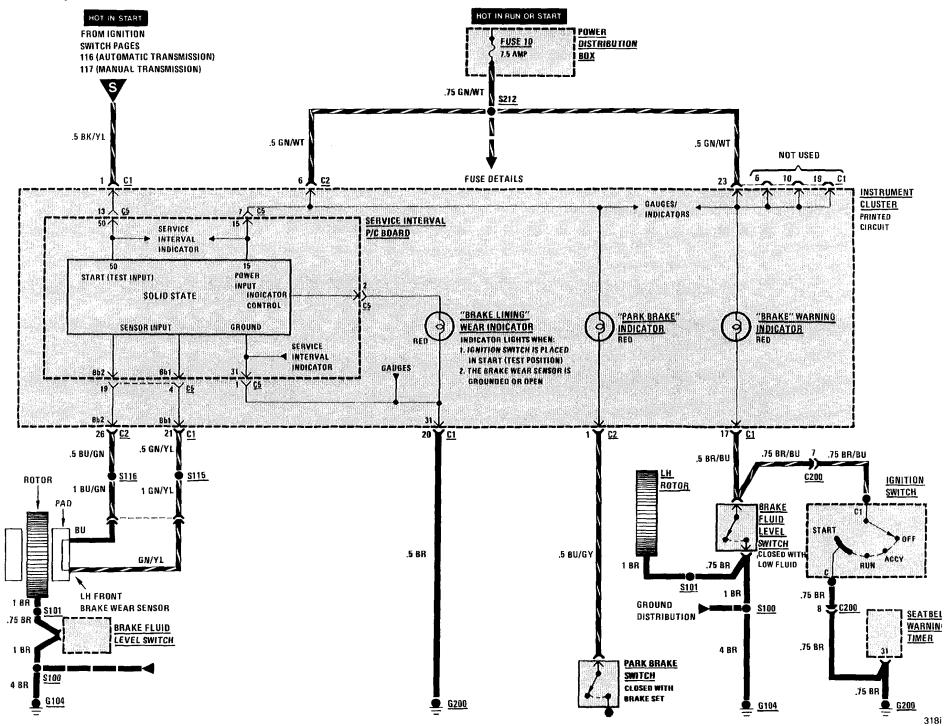
#### SERVICE INTERVAL INDICATOR 141



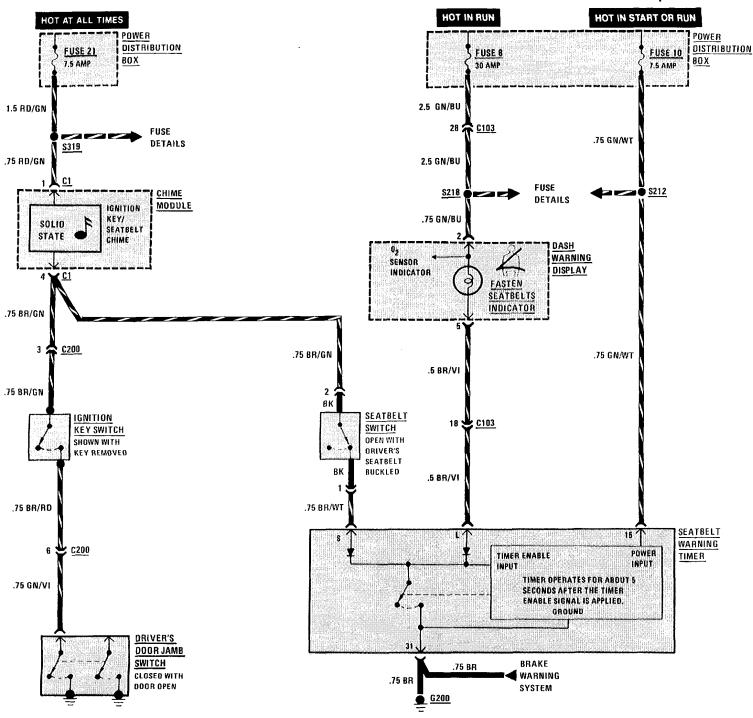
(For Component Location See Page 214)

#### 142 BRAKE WARNING SYSTEM

#### (For Component Location See Page 202)



#### IGNITION KEY WARNING/SEATBELT WARNING 143



#### (For Component Location See Page 211)

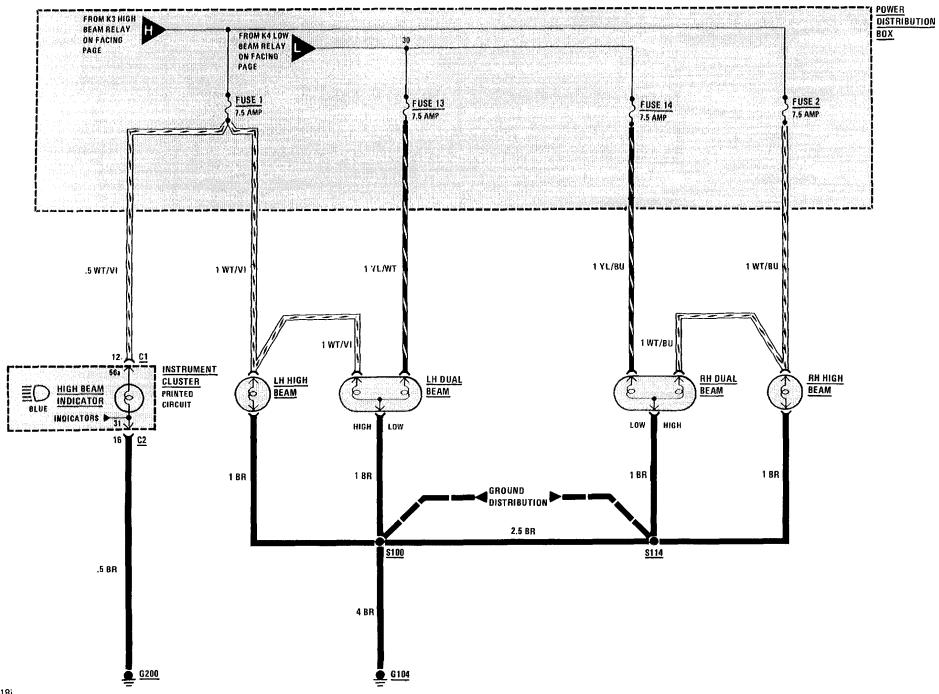
### 144 HEADLIGHTS (CONTROL)/FOG LIGHTS

#### (For Component Location See Page 210) HOT IN RUN OR START HOT AT ALL TIMES POWER DISTRIBUTION POWER DISTRIBUTION BOX POWER <u>C100</u> DISTRIBUTION K3 <u>HIGH BEAM</u> K<u>8</u> Fog light 86 30 30 85 RELAY RELAY 85 67 ,87a 86 87 1 8R <u>K4</u> **T 86** LOW BEAM RELAY FUSE 30 FUSE 29 . 85 7.5 AMP 7.5 AMP H TO FUSES I AND 2 **TO FUSES** ON FACING PAGE 13 AND 14 **ON FACING PAGE** .75 WT .5 GY C202 12 📥 C103 .5 G Y .75 WT 1YL/VI 1 YL/BR .5 YL/BR FOG COMBINATION .5 GN/YL 56. HIGH LIGHT SWITCH BEAM SWITCH . OFF ON SWITCH <u>C127</u> <u>C 126</u> FLASH HIGH BK BK <u>C2</u> 22 LH RΗ LOW <u>FOG</u> Lights INSTRUMENT 31 FOG LIGHTS .5 9 CLUSTER O 10 3 .5 GN/YL INDICATOR 3 GN/YL .75 YL 5 GN/YL PRINTED CIRCUIT FLASHER .75 BR a #D GREEN BR BR C202 <u>C103</u> 3 <u>C127</u> <u>C126</u> LIGHT 31 56 -INDICATORS SWITCH .75 BR 16 ¥ <u>C2</u> GROUND HEAD OFF <u>g201</u> Steering DISTRIBUTION 1 BR PARK .75 BR COLUMN 1 BR GROUND 8 8 💐 <u>C202</u> .5 BR .75 BR 1 BR <u>\$114</u> <u>s100</u> • GROUND .75 BR DISTRIBUTION 1.5 BR 4 BR 9 💐 <u>C103</u> 1.5 BR <u>G104</u> G200 <u>G200</u> G200 9

### HEADLIGHTS (POWER) 145

#### (For Component Location See Page 210)

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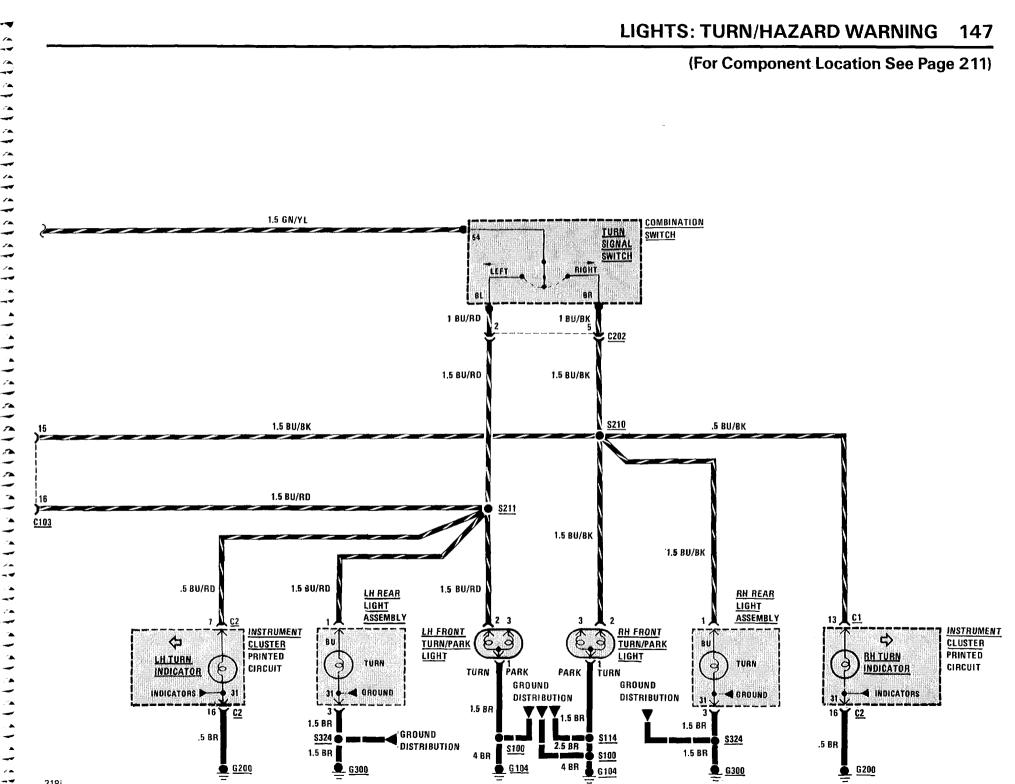
# 146 LIGHTS: TURN/HAZARD WARNING

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#### (For Component Location See Page 211) HOT IN ACCY. RUN OR START HOT AT ALL TIMES POWER DISTRIBUTION 1.5 GN/VI 1.5 GN/VI FUSE 4 FUSE 24 15 AMP C202 BOX 15 AMP 49 1 FLASHER COMBINATION 26 📥 <u>C103</u> SOLID STATE SWITCH 31 49+ 1.5 GN/VI 10 1.5 RD/WT 25 📥 C103 1 VI/GY .75 BR 1.5 GN/YL 5 .75 BR HAZARD 1.5 GN/YL 1.5 RD/WT 3 30 49 ON SWITCH 8 💐 🖸 202 .75 BR 1 .75 BR 13 불 <u>C202</u> 20 1.5 VI/GY S220 1.5 VI/GY G200 V OFF <u>C103</u> (STEERING COLUMN) .5 VI/GY 1.5 GN/YL 27 1.5 GN/YL FUSE 492 DETAILS C103 1 BU/BK 15 88 1 BU/RD 16 BL. <u>C103</u> .5 GY/RD 🛋 LIGHTS: DASH 58K (150 OHMS) (RED) q **RESISTOR DIMS THE HAZARD** HAZARD SWITCH LIGHT WHEN THE SWITCH LIGHT SWITCH IS IN "HEAD" LIGHT OR "PARK" AND THE HAZARD 310 SWITCH IS OFF. 8 .5 BR/WT LIGHTS: DASH

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#### 318i

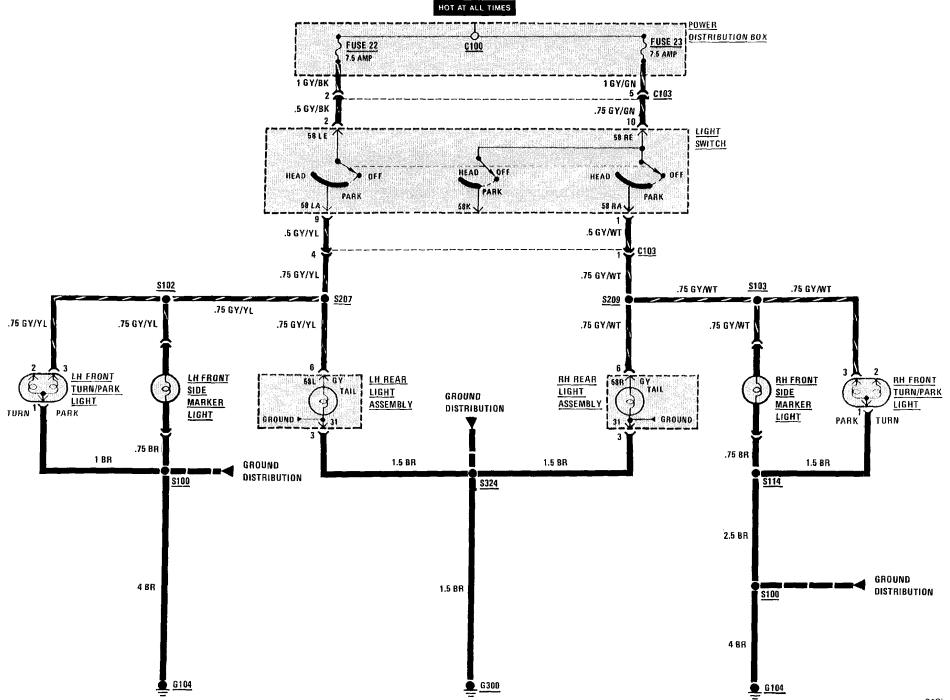
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# 148 LIGHTS: FRONT PARK/FRONT SIDE MARKER/TAIL

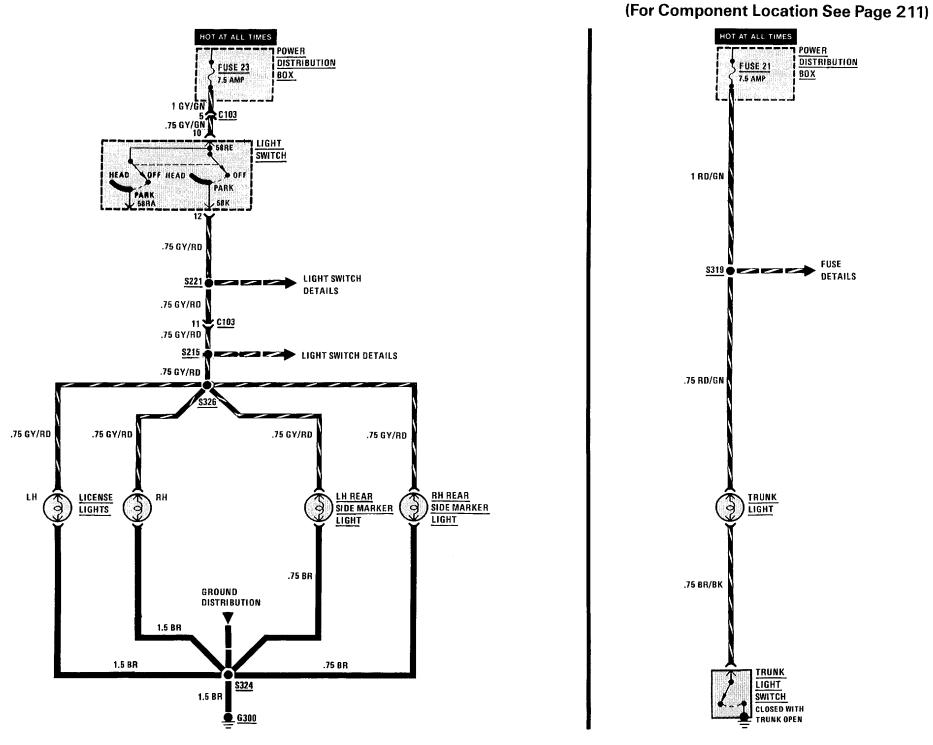
#### (For Component Location See Page 211)

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#### LIGHTS: REAR MARKER/LICENSE

#### TRUNK LIGHT 14



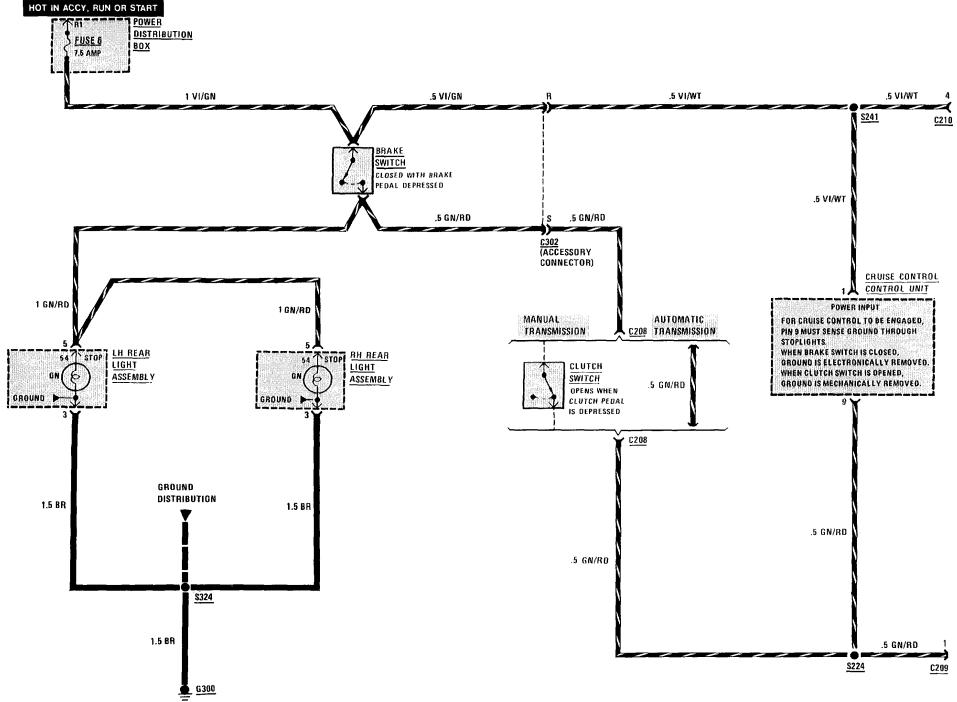
149

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### 150 STOPLIGHTS/CRUISE CONTROL

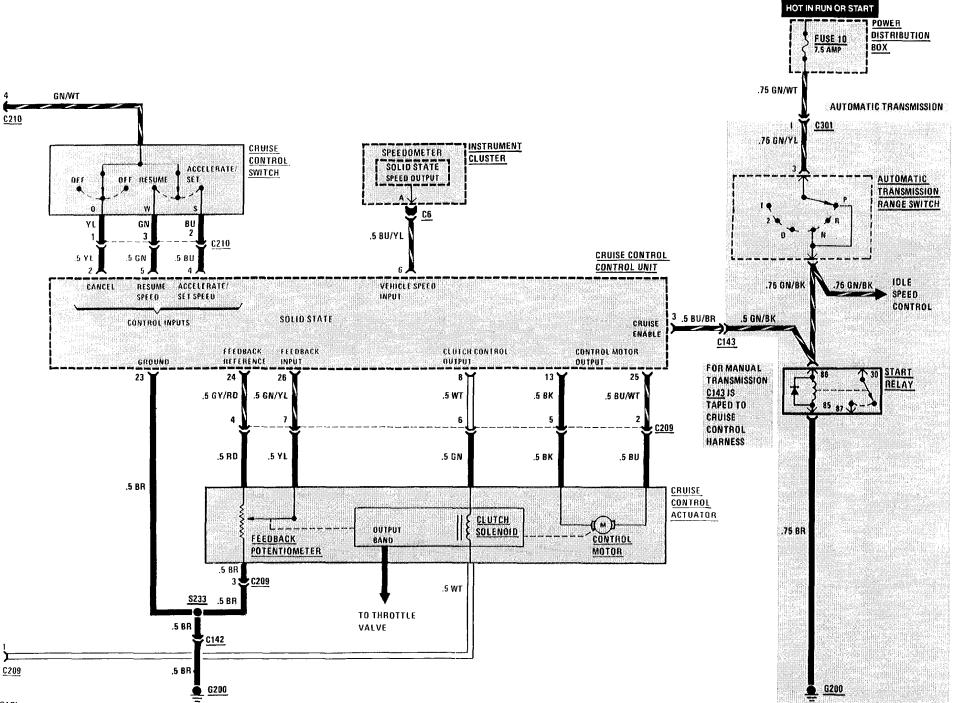


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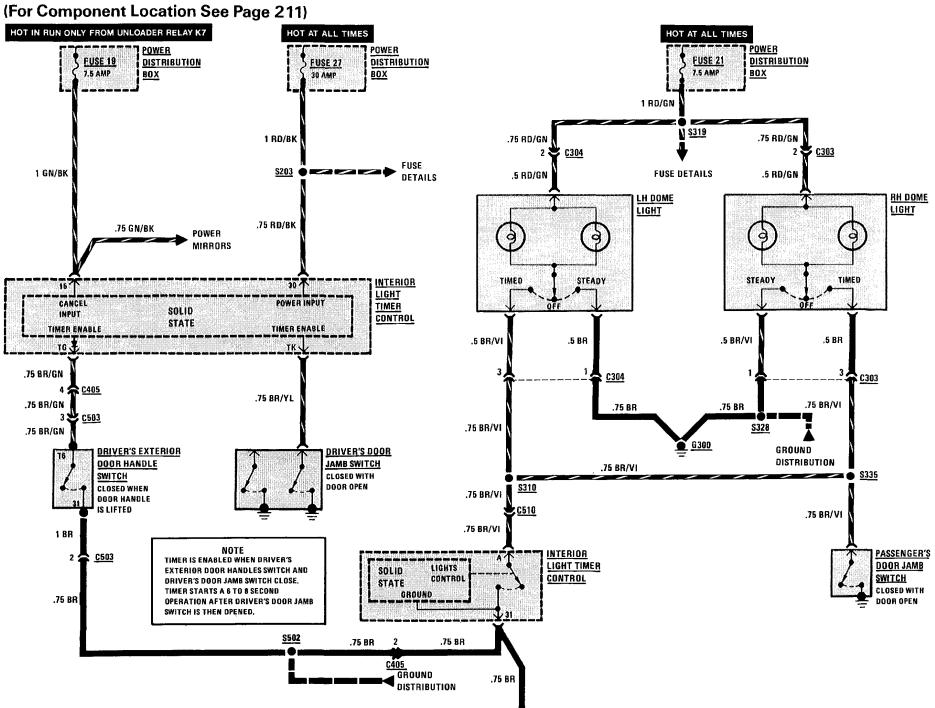
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(For Component Locations See Page 203)

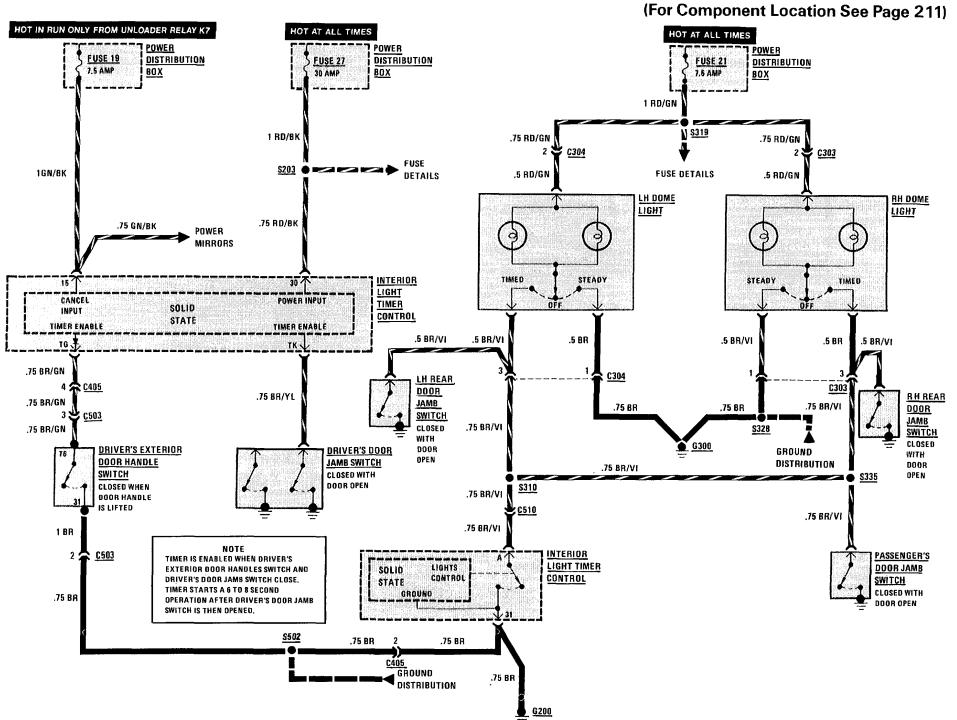
# 152 INTERIOR LIGHTS (2 DOOR)



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#### <u>G200</u>

**INTERIOR LIGHTS (4 DOOR)** 153

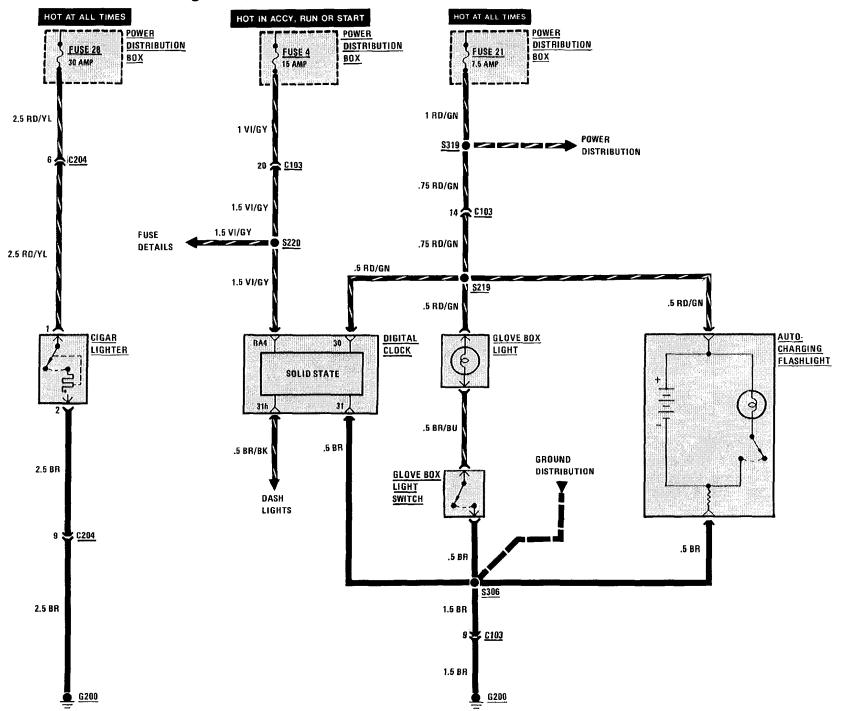


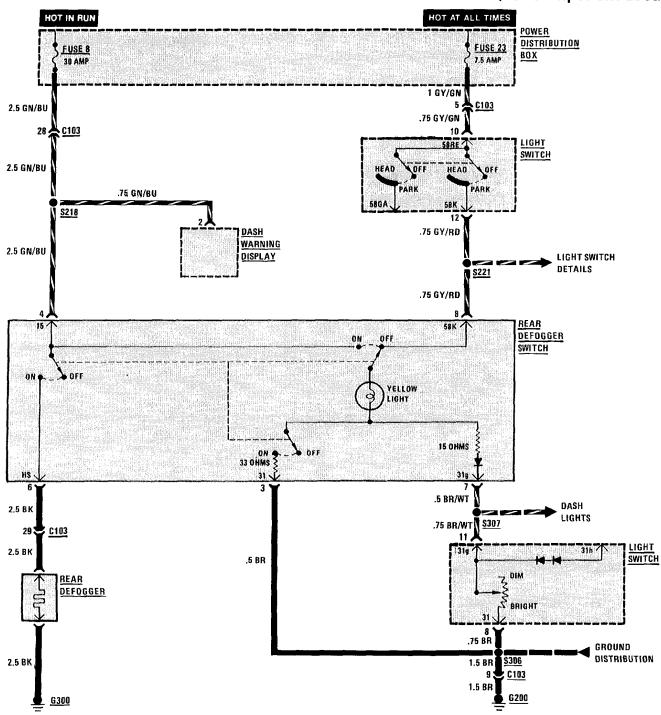
# 154 CIGAR LIGHTER/DIGITAL CLOCK/GLOVE BOX LIGHT/AUTO-CHARGING FLASHLIGHT

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(For Component Location See Page 203)

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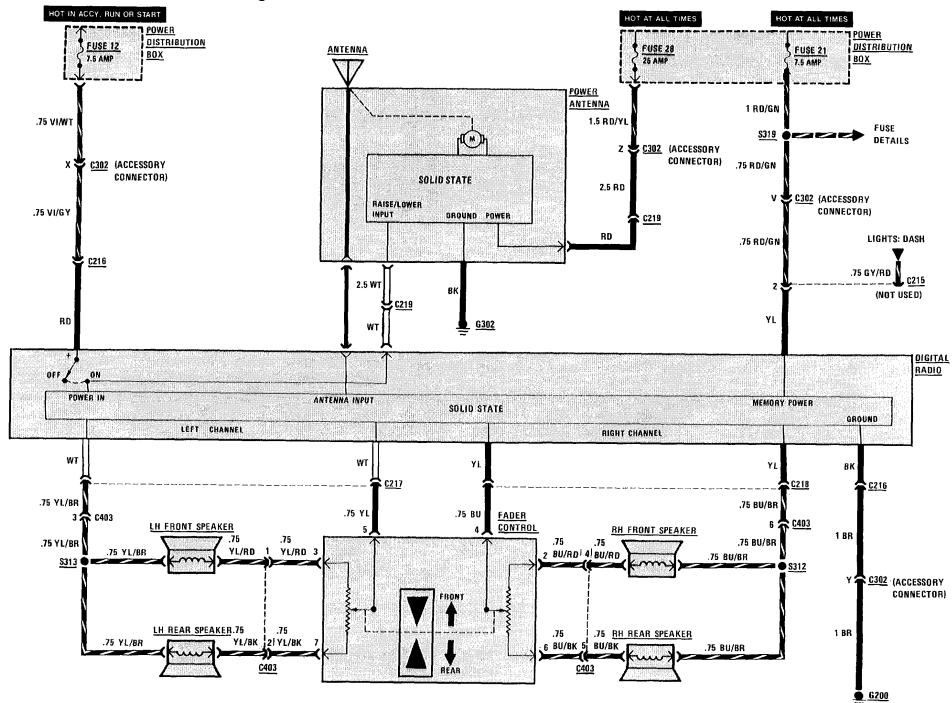


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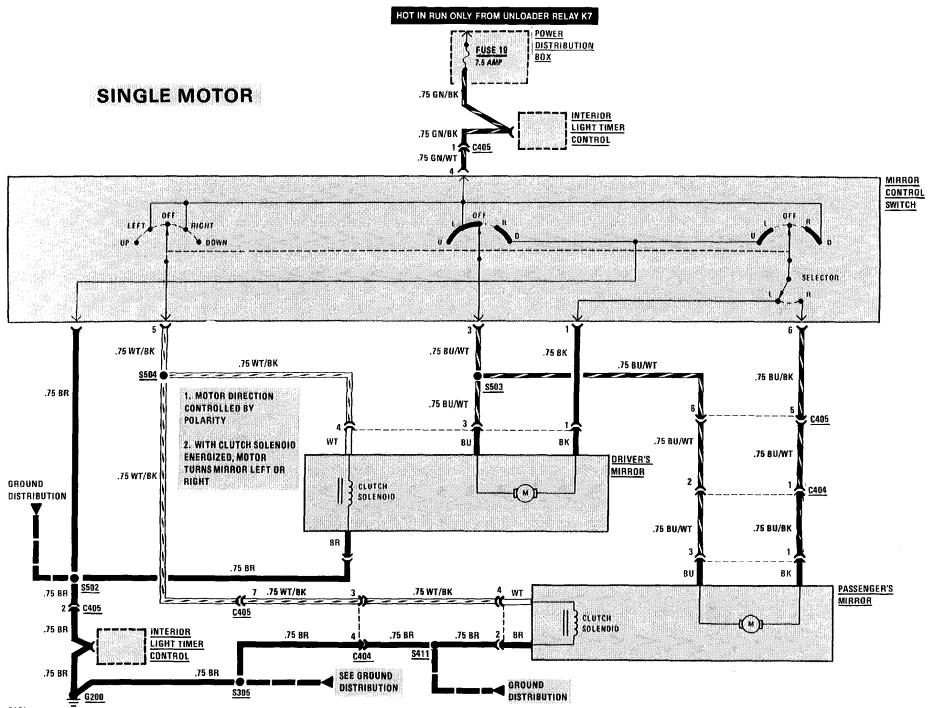
#### (For Component Location See Page 214)



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## POWER MIRRORS 157

#### (For Component Location See Page 213)

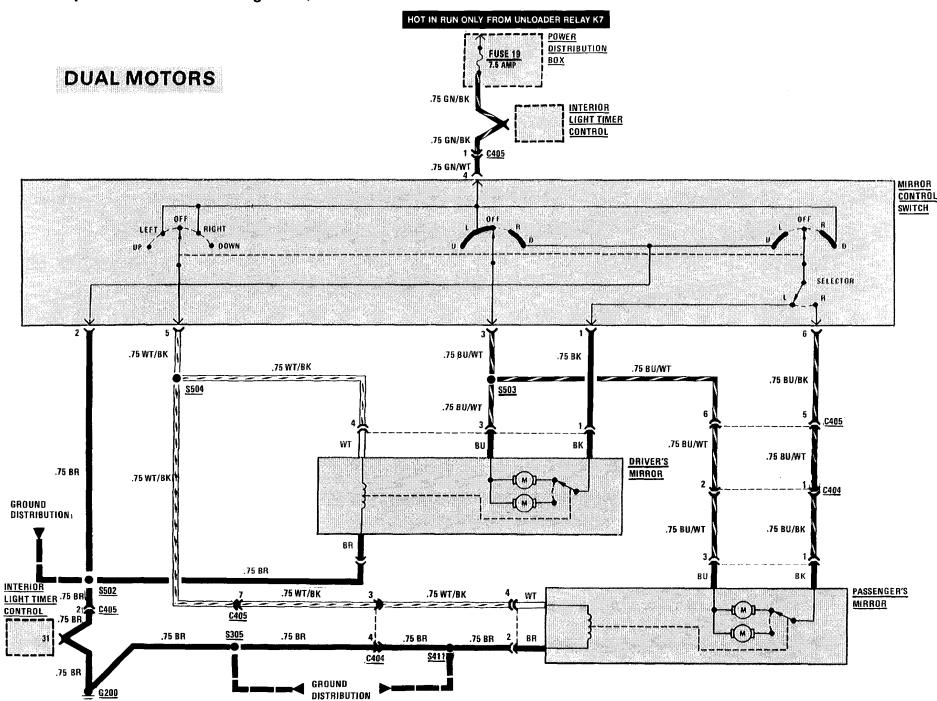


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# **158 POWER MIRRORS**

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#### (For Component Location See Page 213)



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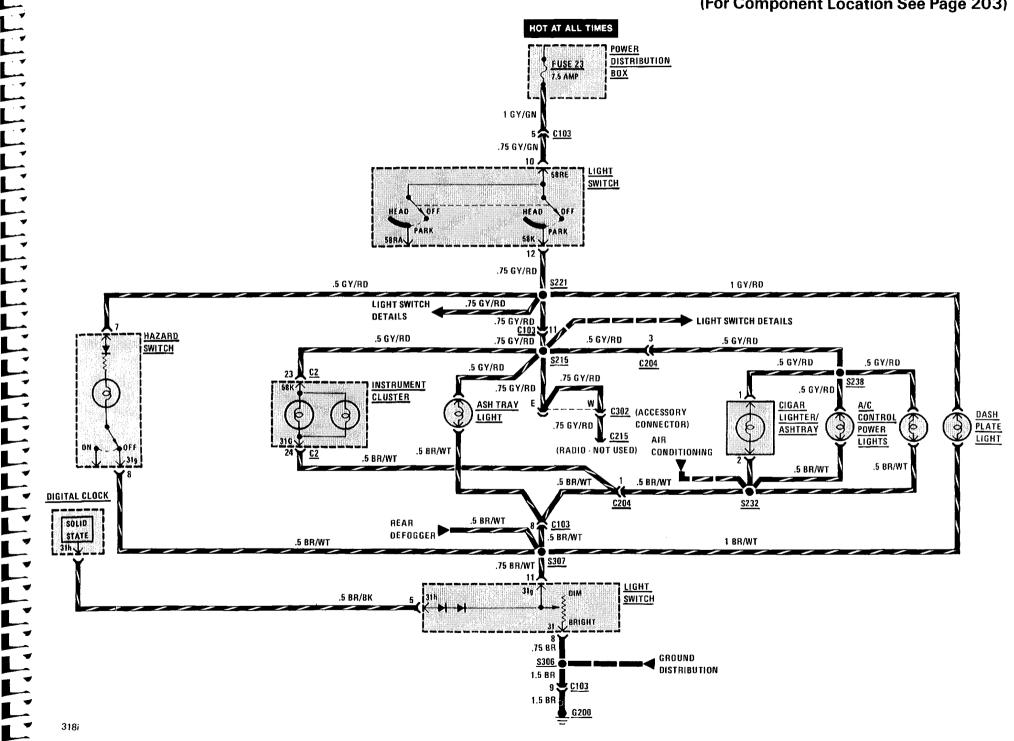
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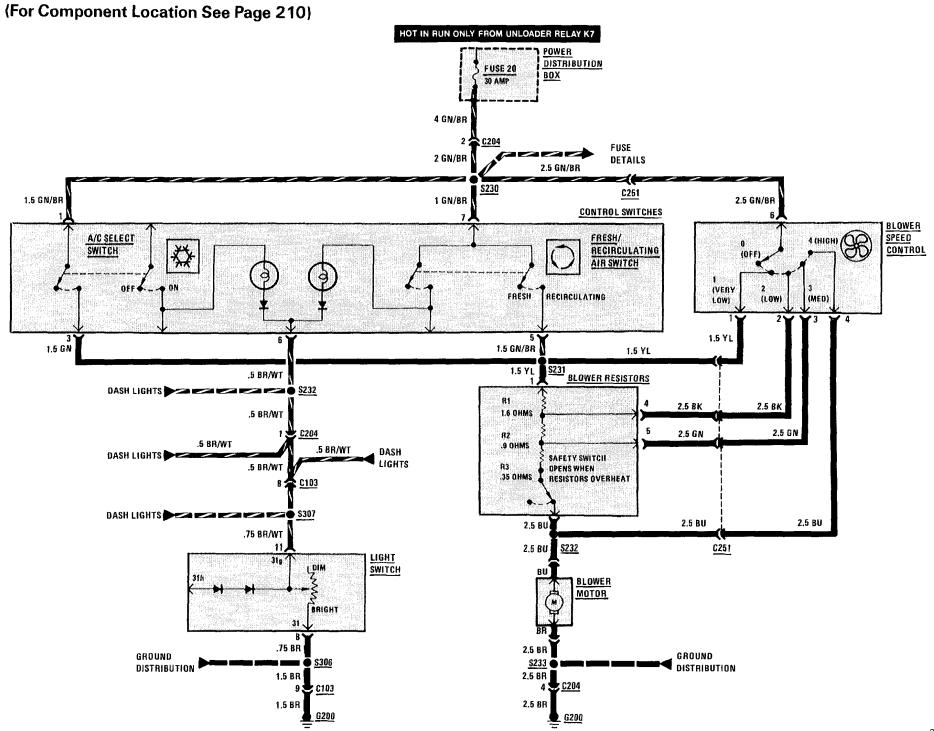
#### **DASH LIGHTS** 161

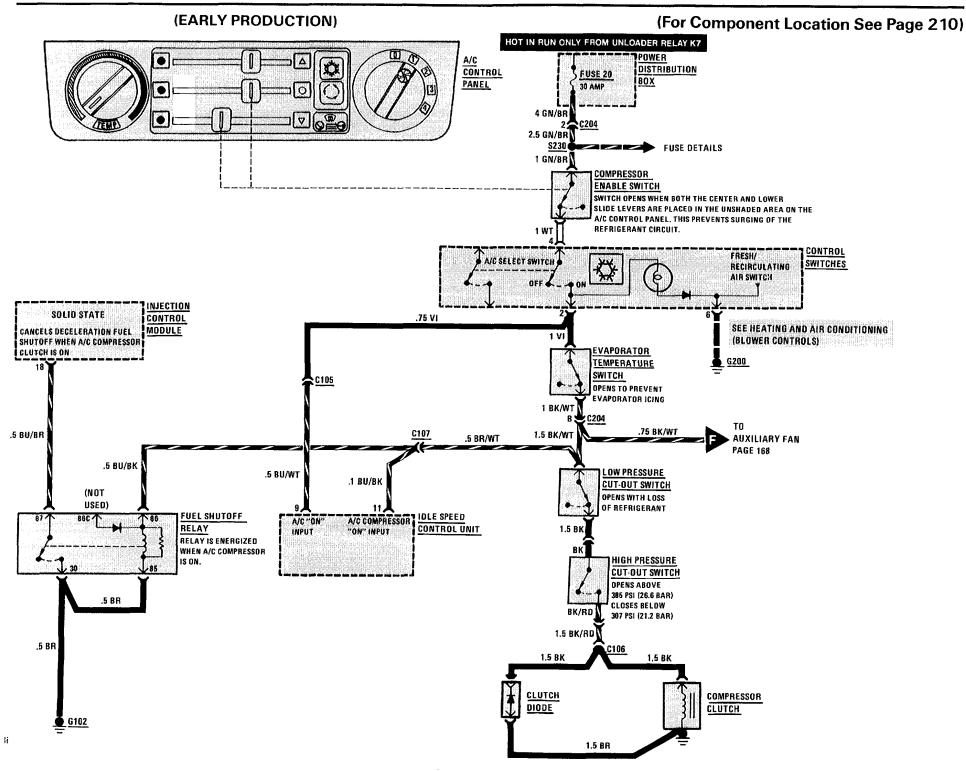
#### (For Component Location See Page 203)



# 162 HEATING AND AIR CONDITIONING (BLOWER CONTROLS

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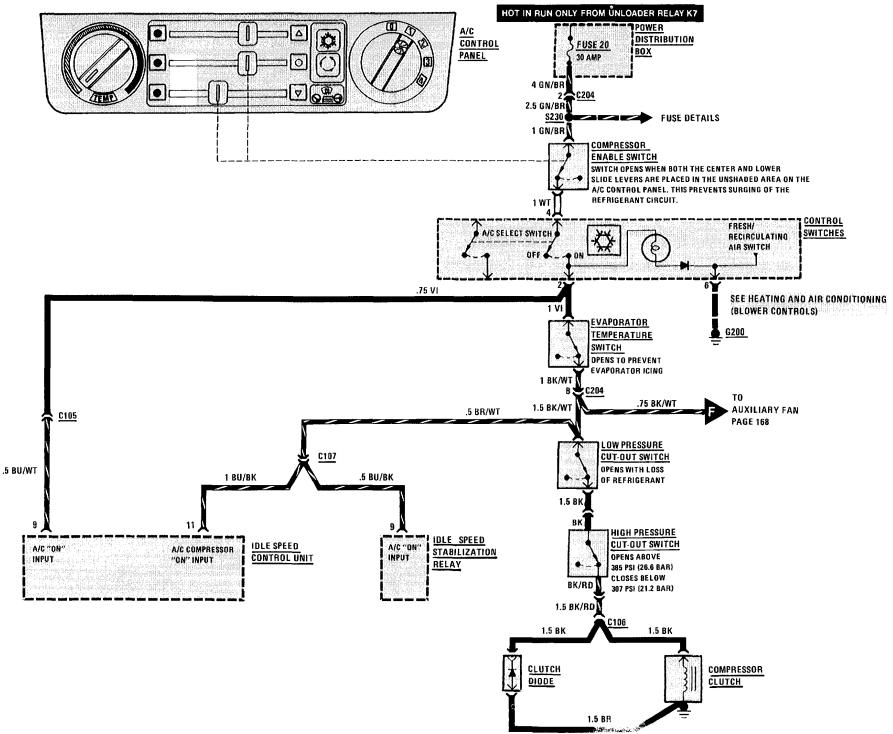


# 164 HEATING AND AIR CONDITIONING (COMPRESSOR CONTROLS)

#### (For Component Location See Page 210)

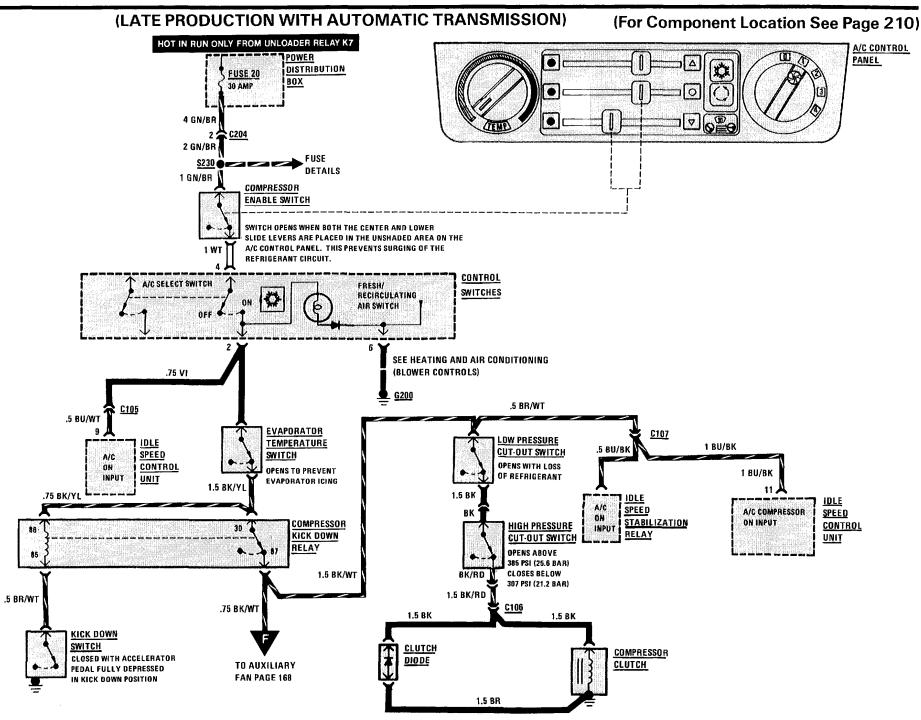
#### (LATE PRODUCTION WITH MANUAL TRANSMISSION)

318i



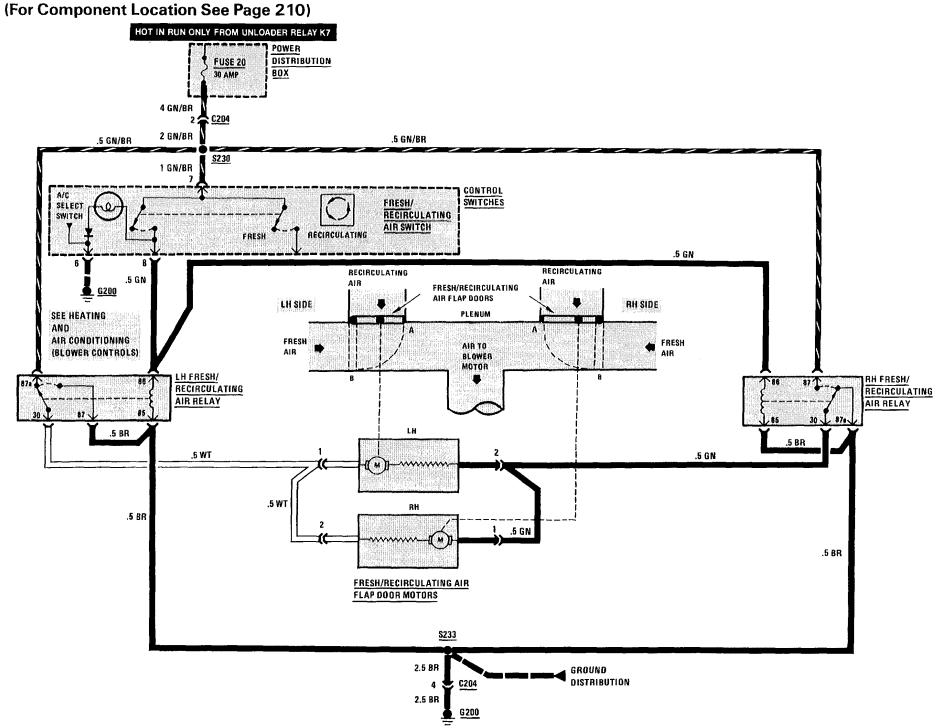
190 A. S. S.

# HEATING AND AIR CONDITIONING (COMPRESSOR CONTROLS) 165

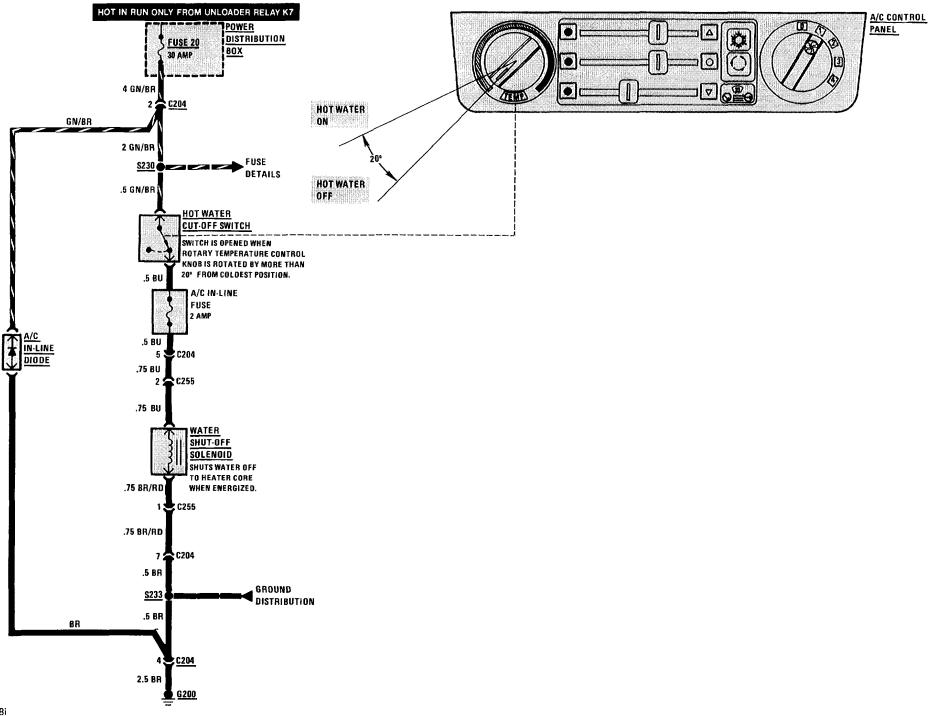


#### 166 HEATING AND AIR CONDITIONING (FRESH/RECIRCULATING AIR CONTROL)

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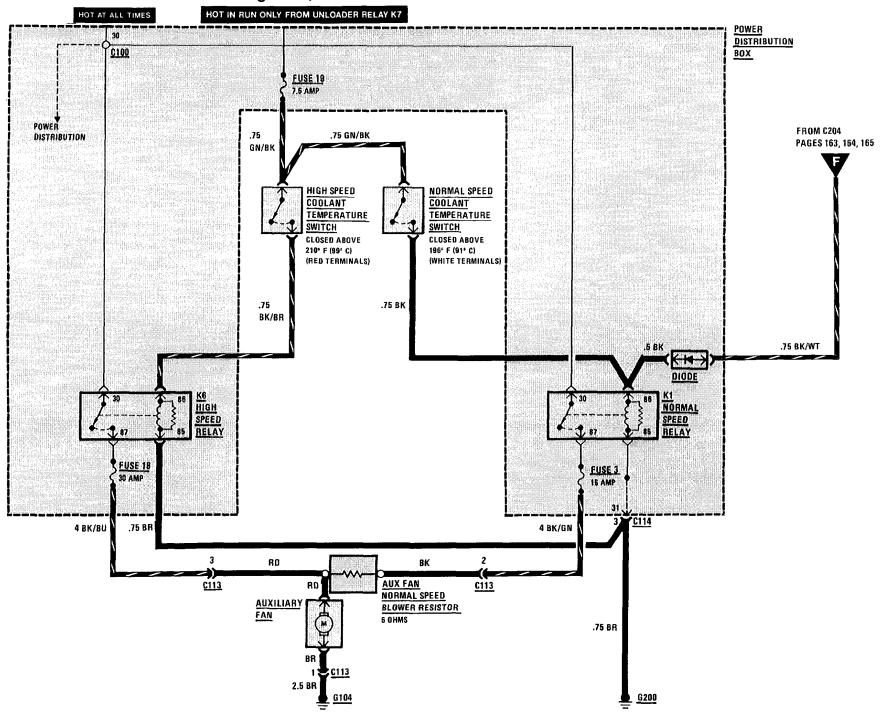


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(For Component Location See Page 210)

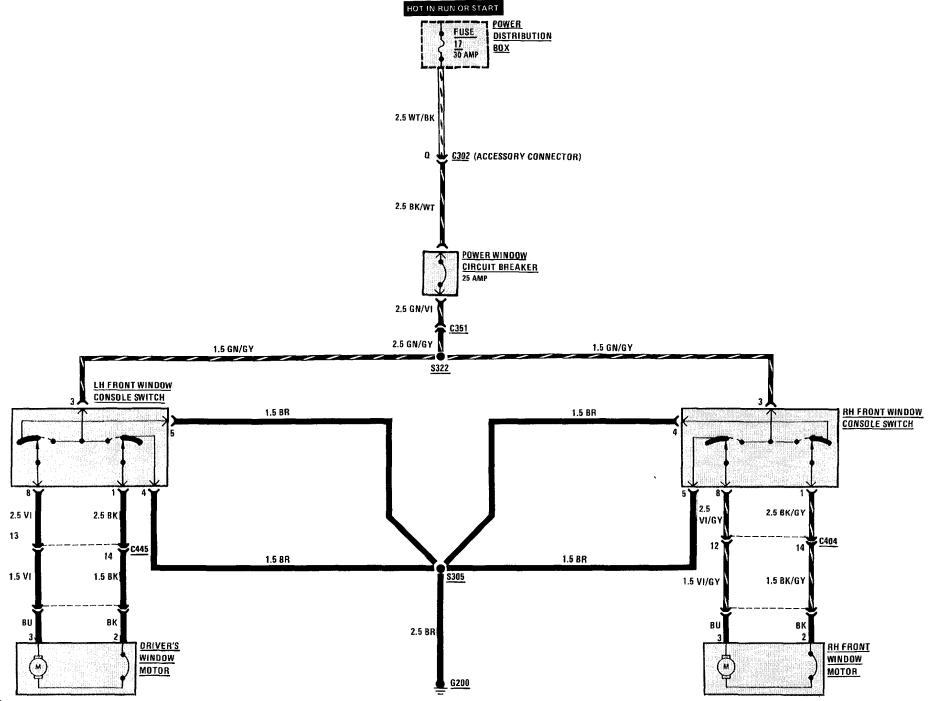
# 168 AUXILIARY FAN

### (For Component Location See Page 201)



# POWER WINDOWS (2 DOOR) 169

### (For Component Location See Page 213)

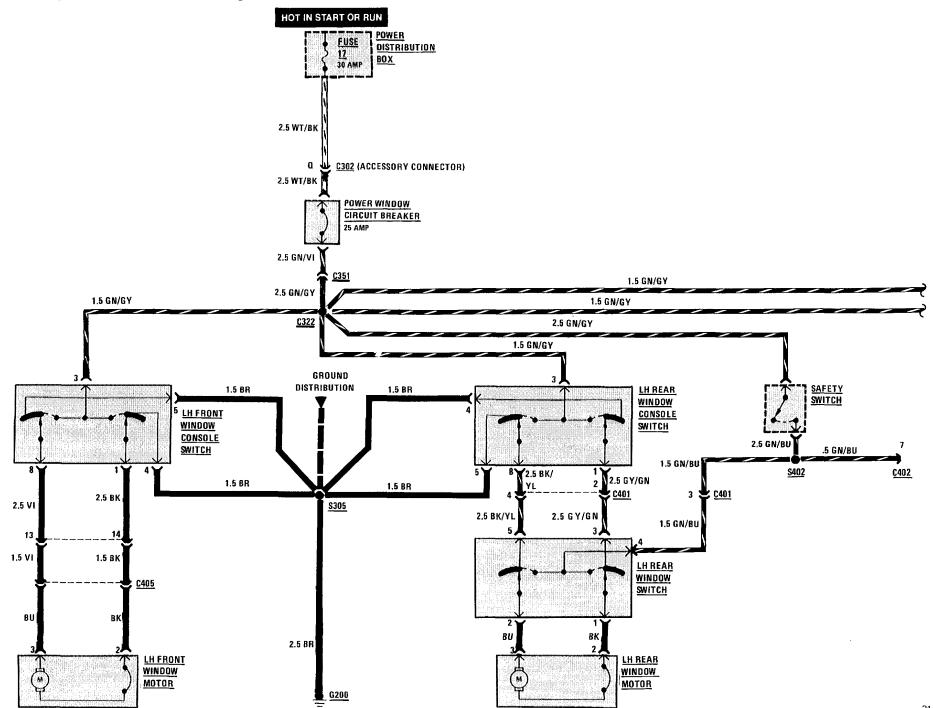


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# 170 POWER WINDOWS (4 DOOR)

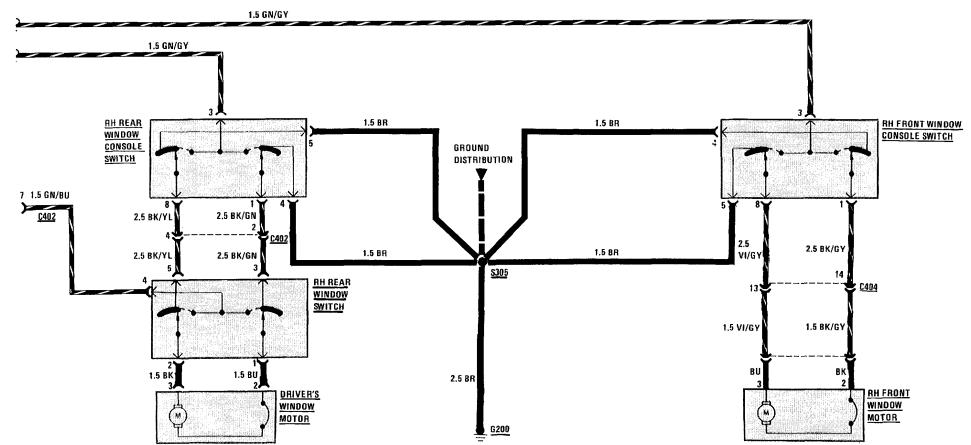
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#### (For Component Location See Page 213)

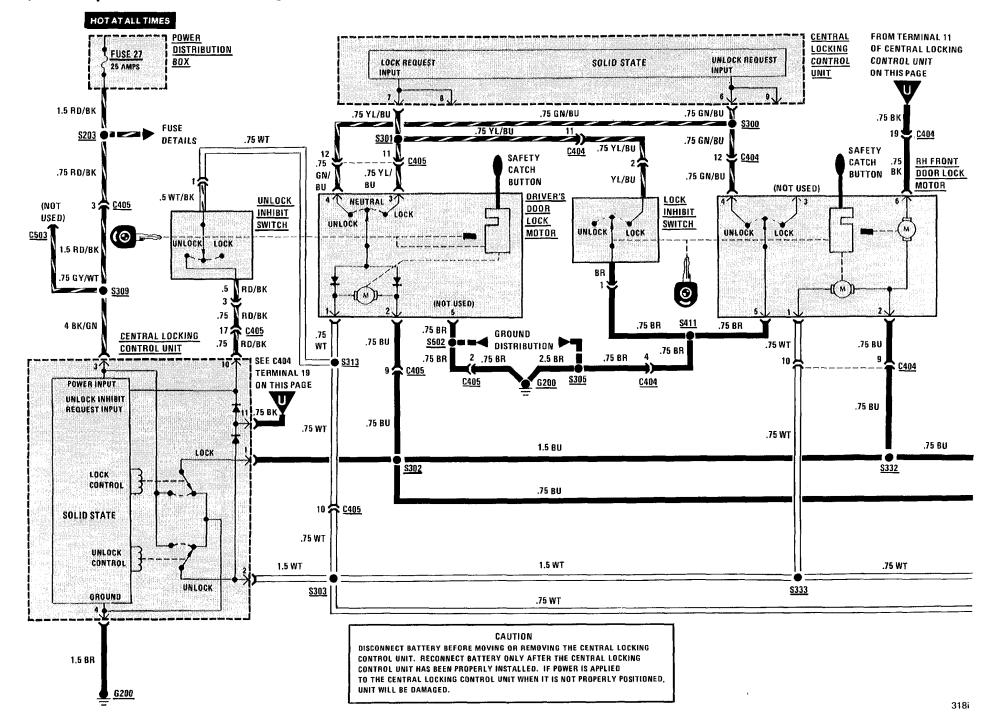


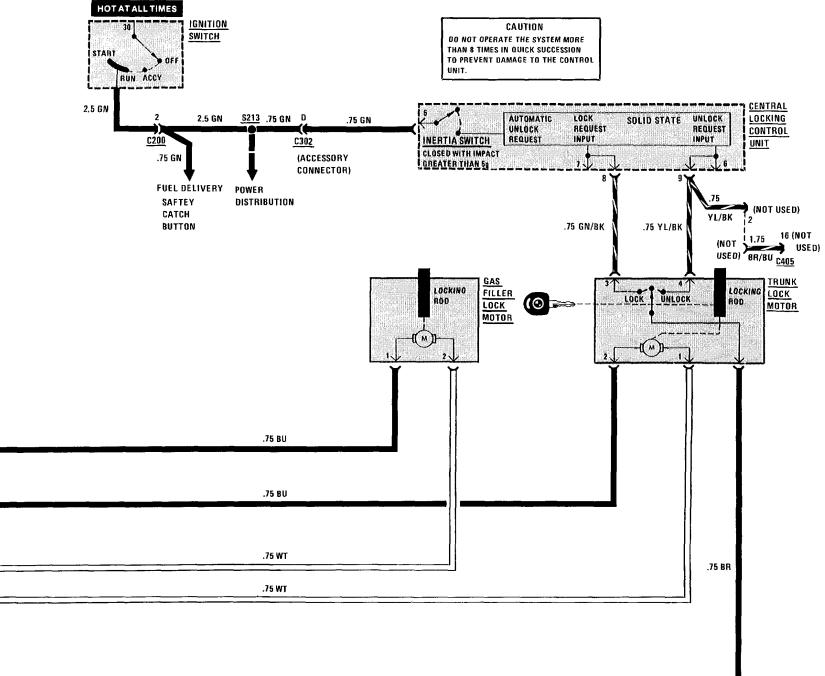
# POWER WINDOWS (4 DOOR) 171

(For Component Location See Page 213)

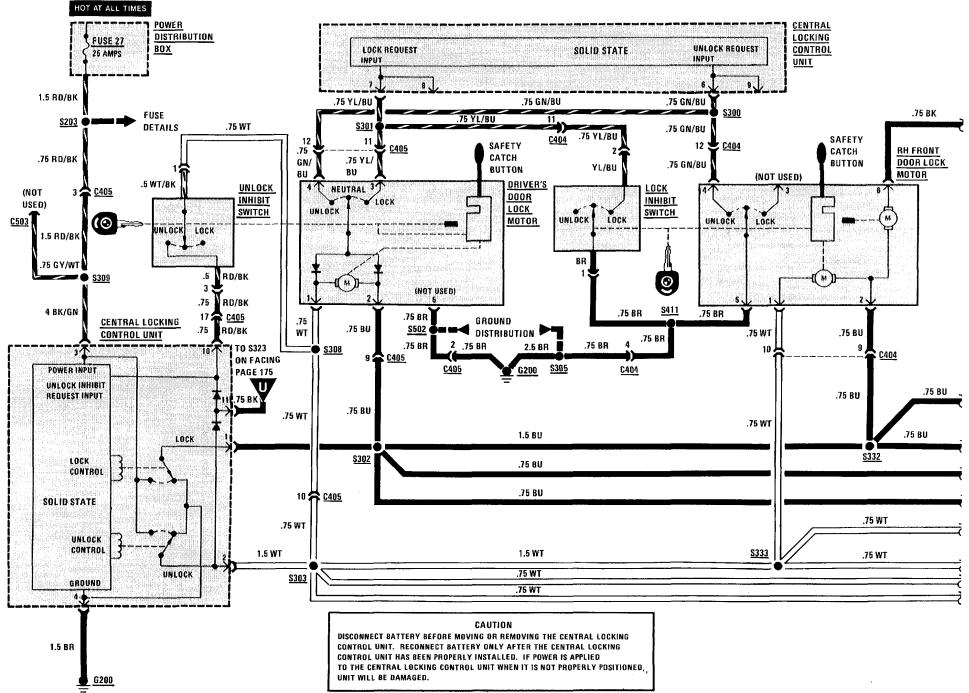


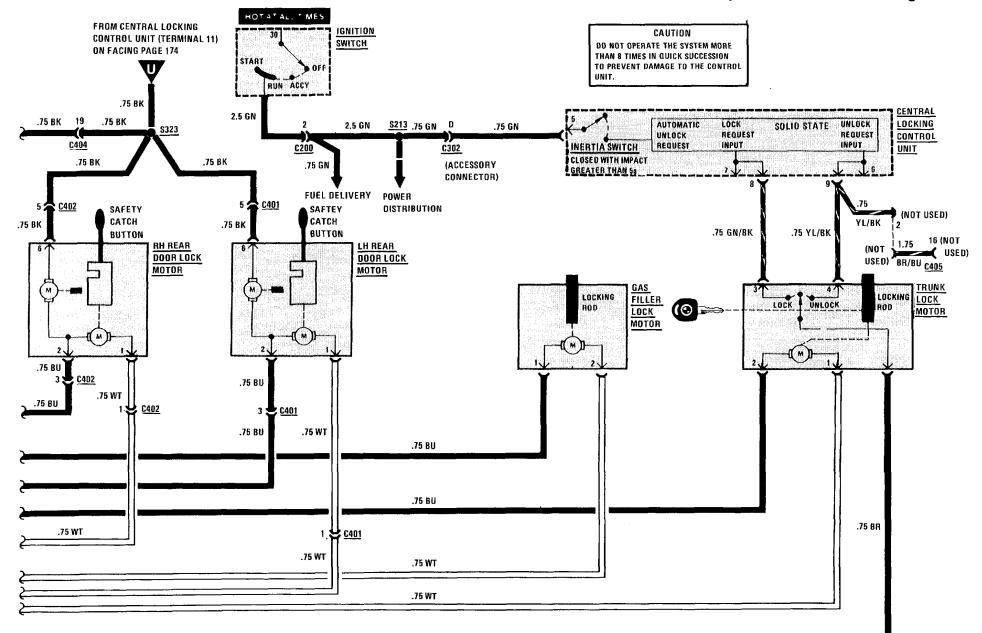
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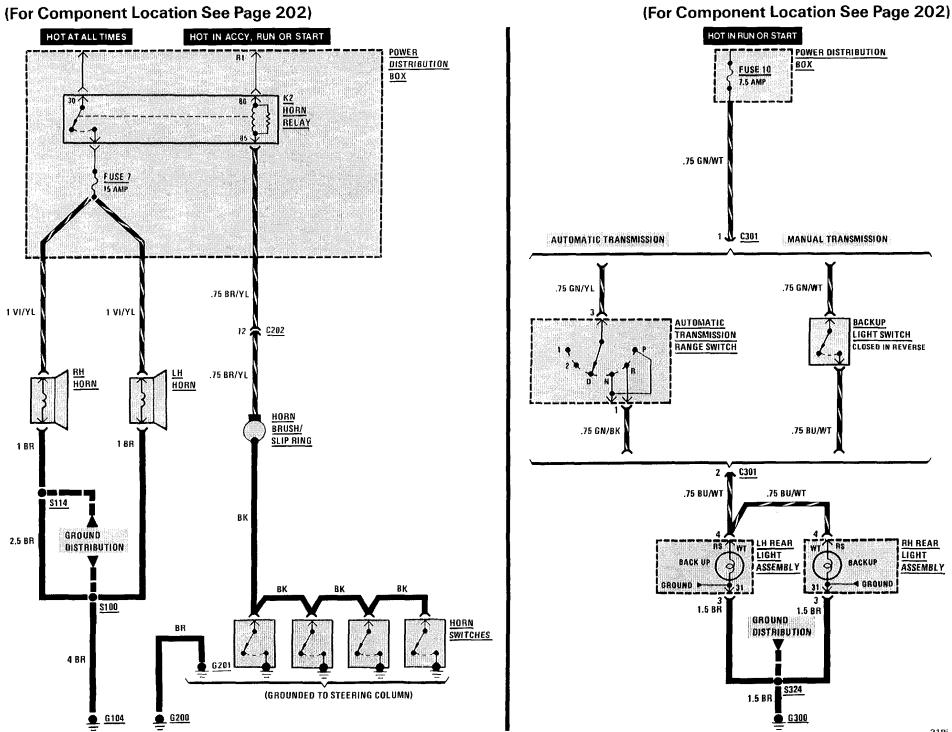




# 176 HORNS

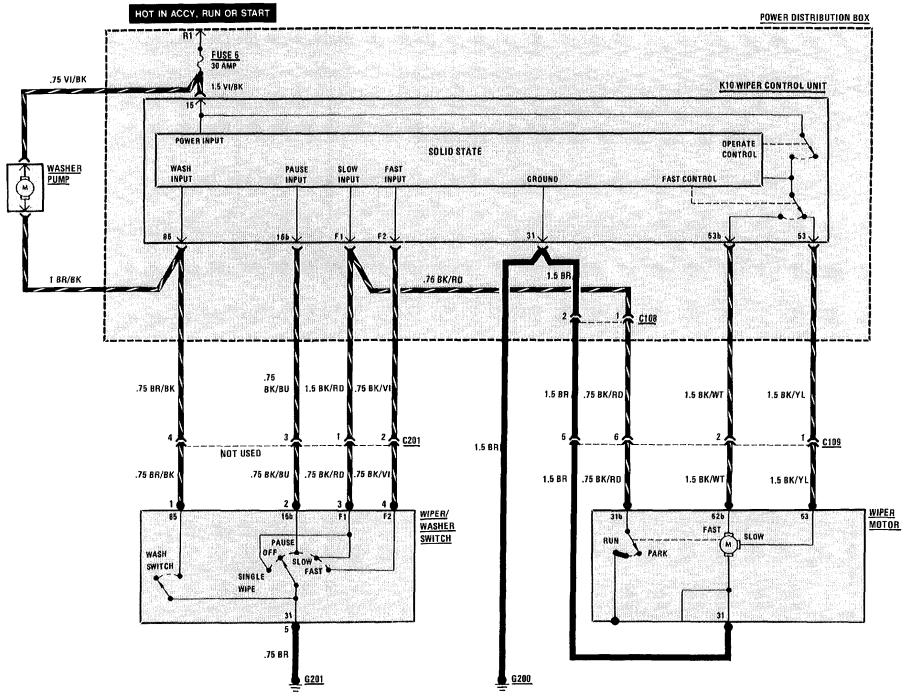
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# **BACK UP LIGHTS**



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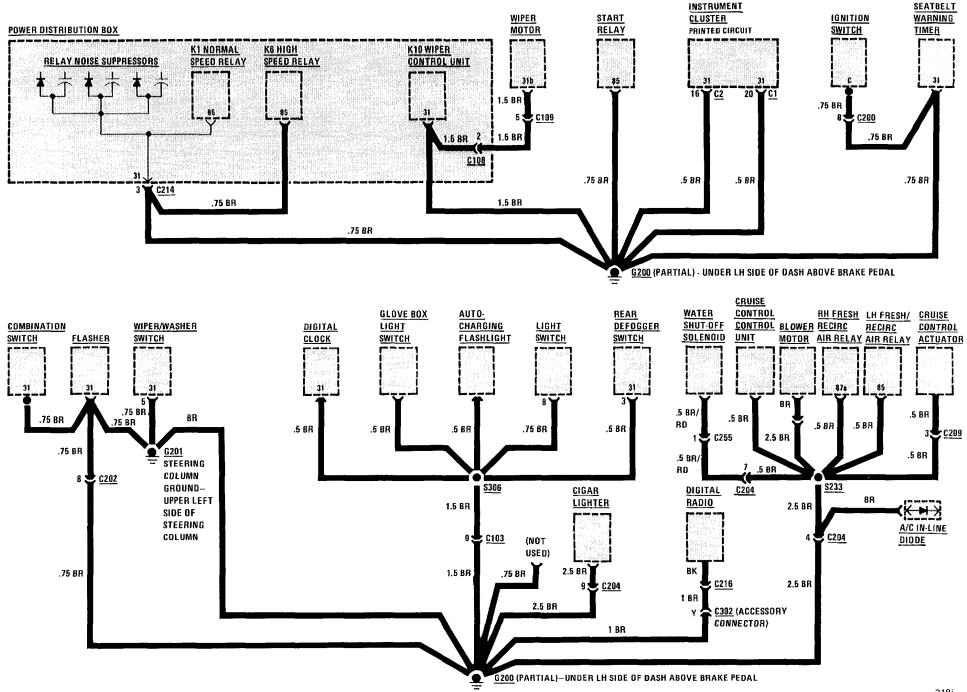
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#### 178 **GROUND DISTRIBUTION (G200 PARTIAL AND G201)**

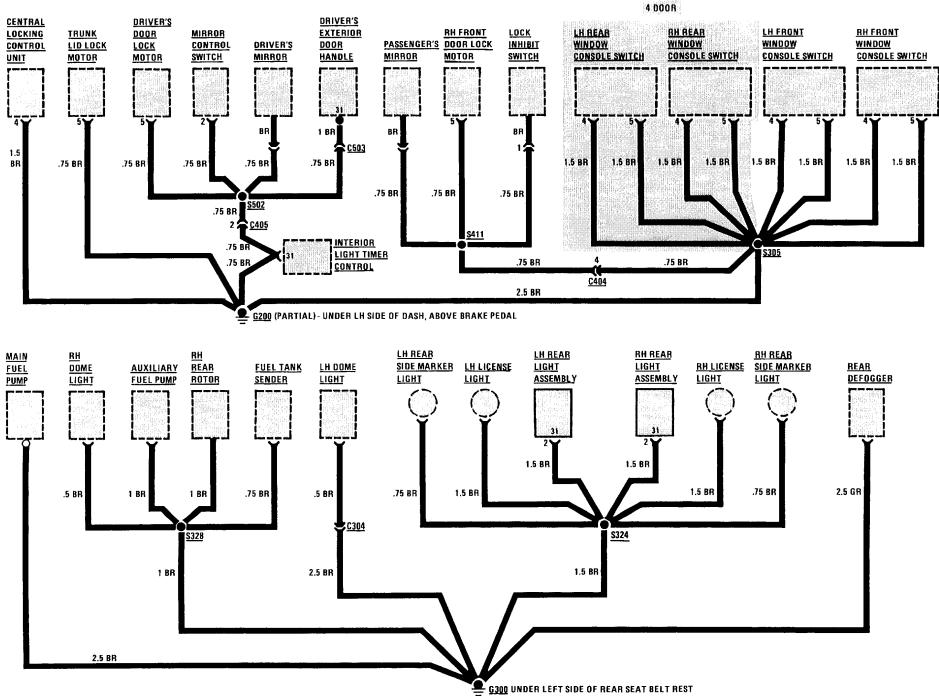
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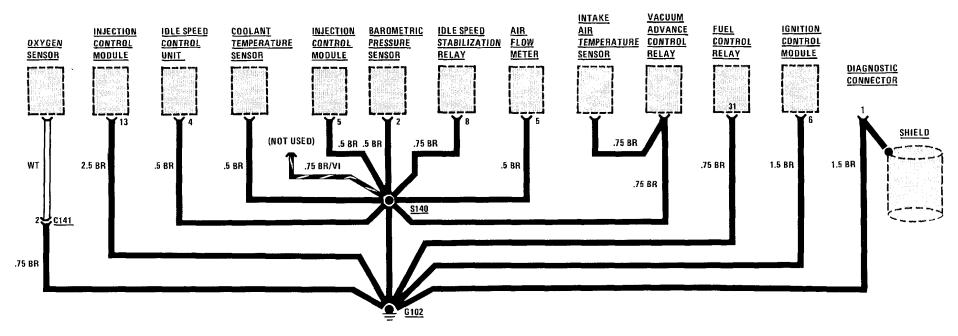
## GROUND DISTRIBUTION (G300 AND G200 PARTIAL) 179



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#### 180 GROUND DISTRIBUTION (G101, G102)

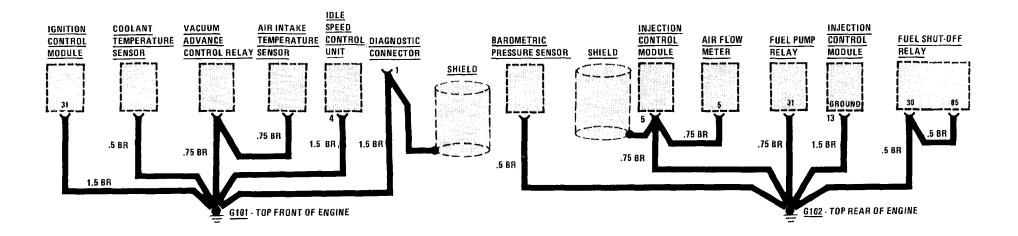


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(LATE PRODUCTION)

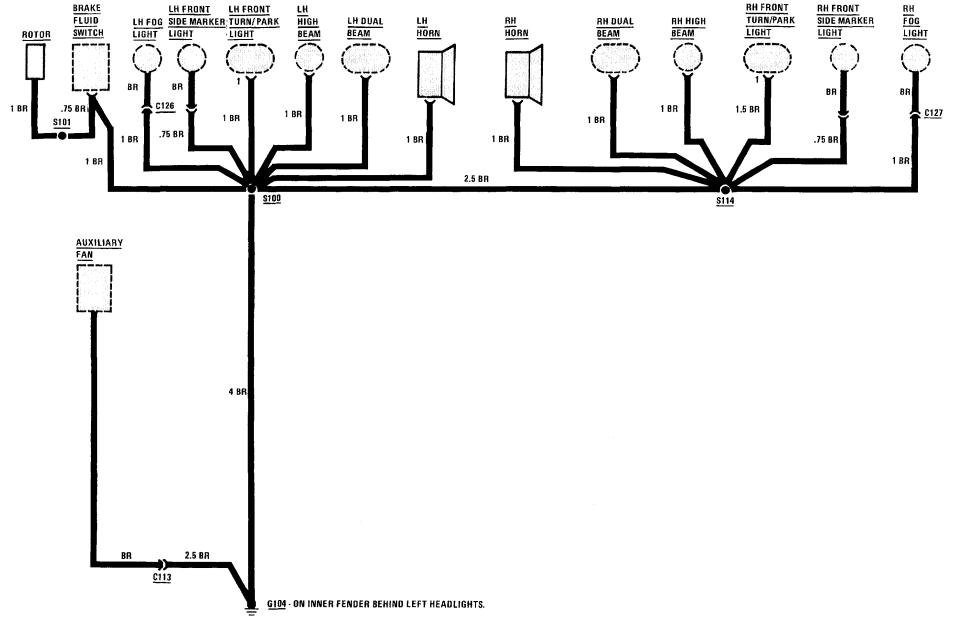
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(EARLY PRODUCTION)



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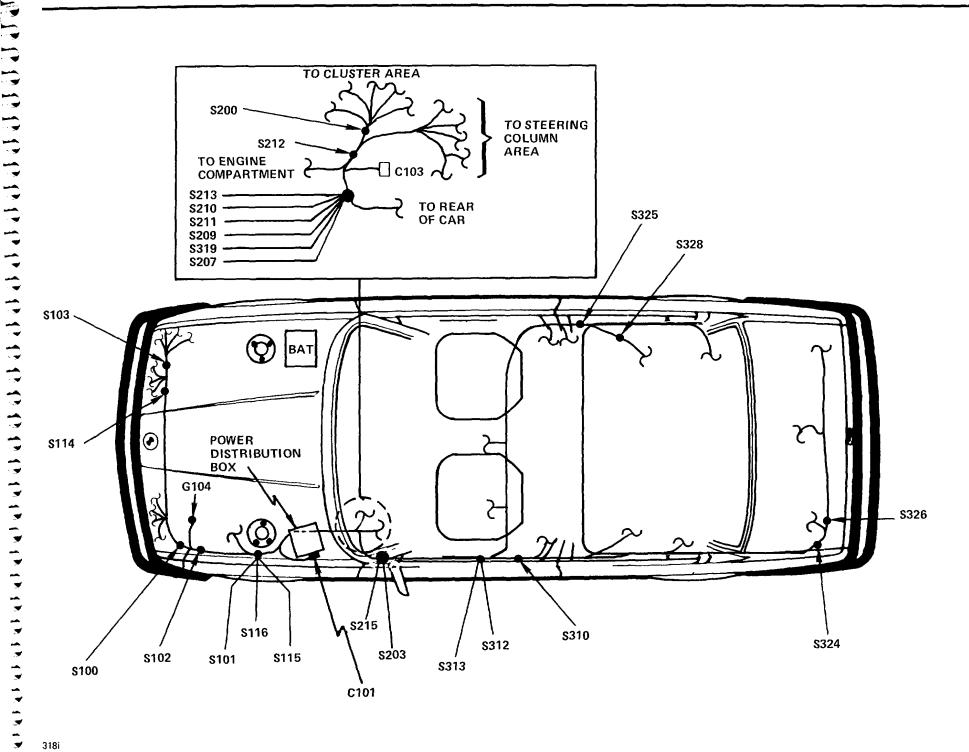
This index contains all the splices in the car, what harness each one is in, and the page that the splices appear on. The drawings after the index show how the harness is routed through the car and where the splices are located on the harness.

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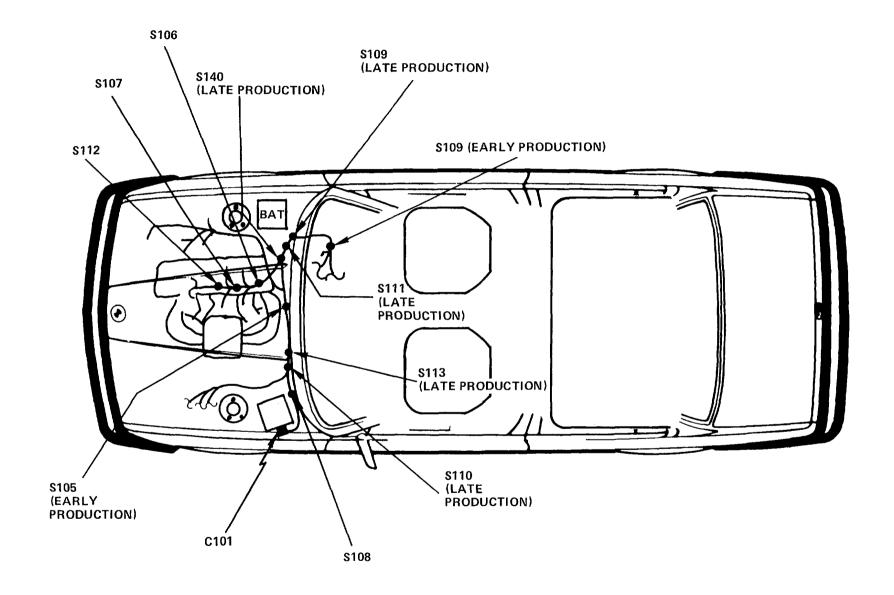
| SPLICE | HARNESS | PAGE<br>NUMBER | SPLICE | HARNESS     | PAGE<br>NUMBER |
|--------|---------|----------------|--------|-------------|----------------|
| S100   | MAIN    | 183            | S301   | DOOR        | 187            |
| S100   | MAIN    | 183            | S302   | DOOR        | 187            |
| S102   | MAIN    | 183            | \$303  | DOOR        | 187            |
| S103   | MAIN    | 183            | S305   | DOOR        | 187            |
| S105   | ENGINE  | 184            | S306   | I/P         | 185            |
| S106   | ENGINE  | 184            | S307   | I/P         | 185            |
| S107   | ENGINE  | 184            | S308   | DOOR        | 187            |
| S108   | ENGINE  | 184            | S309   | DOOR        | 187            |
| S109   | ENGINE  | 184            | S310   | MAIN        | 183            |
| S111   | ENGINE  | 184            | S312   | MAIN        | 183            |
| S112   | ENGINE  | 184            | S313   | MAIN        | 183            |
| S113   | ENGINE  | 184            | S319   | MAIN        | 183            |
| S114   | MAIN    | 183            | S322   | DOOR        |                |
| S115   | MAIN    | 183            |        | (4 DR ONLY) | 187            |
| S116   | MAIN    | 183            | S323   | DOOR        | 187            |
| S140   | ENGINE  | 184            | S324   | MAIN        | 183            |
| S200   | MAIN    | 183            | S325   | MAIN        | 183            |
| S203   | MAIN    | 183            | S326   | MAIN        | 183            |
| S207   | MAIN    | 183            | S328   | MAIN        | 183            |
| S209   | MAIN    | 183            | S332   | DOOR        | 187            |
| S210   | MAIN    | 183            | S333   | DOOR        | 187            |
| S211   | MAIN    | 183            | S402   | DOOR        |                |
| S212   | MAIN    | 183            |        | (4 DR ONLY) | 187            |
| S213   | MAIN    | 183            | S411   | DOOR        | 187            |
| S215   | MAIN    | 183            | S502   | DOOR        | 187            |
| S218   | I/P     | 185            | S503   | DOOR        | 187            |
| S219   | I/P     | 185            | S504   | DOOR        | 187            |
| S220   | I/P     | 185            | S600   | SUNROOF     | NOT            |
| S221   | I/P     | 185            |        |             | SHOWN          |
| S300   | DOOR    | 187            | S601   | SUNROOF     | NOT<br>SHOWN   |

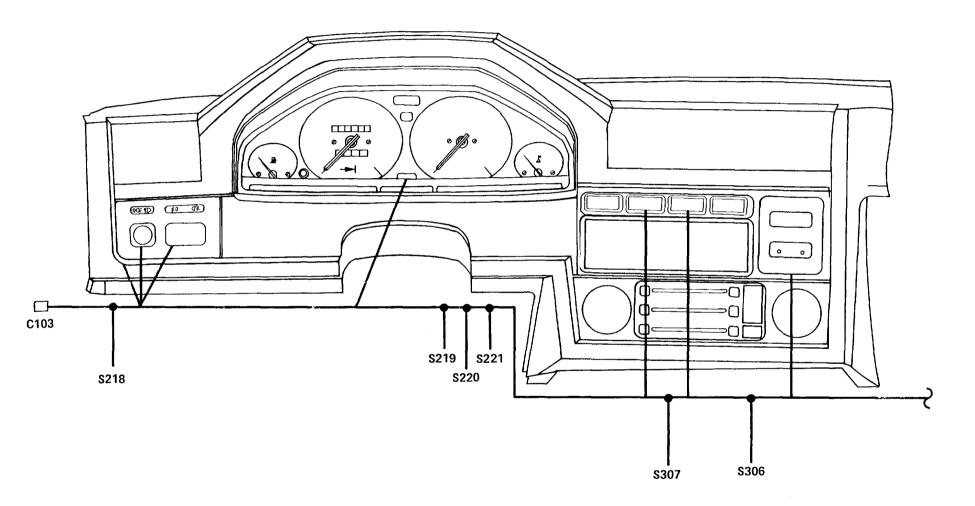


318i

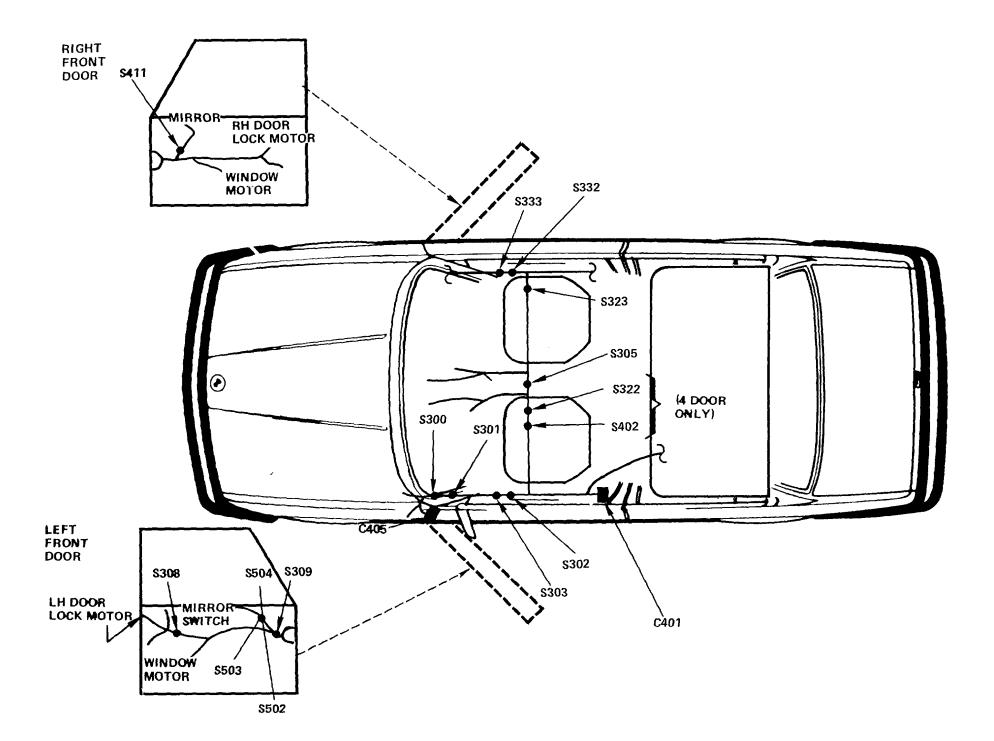
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# **186 DOOR HARNESS SPLICE LOCATIONS**



FIGURE

#### ACTIVE CHECK CONTROL (325e)

| Brake Switch           |   | 220-1<br>214-1<br>217-4 |
|------------------------|---|-------------------------|
|                        | At top rear of left front wheel well  | 202-1                   |
| Seatbelt Warning Timer | Under LH side of dash on electrical bracket<br>In reservoir, behind RH headlights<br>On power distribution box Under LH side of dash on body electrical | 218-3<br>216-5<br>202-1 |
| G200                   | bracket<br>On inner fender behind LH headlights<br>Under LH side of dash above brake pedal<br>Behind LH side of rear seat                               | 211-1<br>210-2<br>209-2 |

#### AUXILIARY FAN

| Auxiliary Fan                     | Behind A/C face plate                      |                |
|-----------------------------------|--|----------------|
| (318i)                            | Bottom left rear of radiator               | 207-2          |
| High Speed Temperature Switch     | Top left side of vedictor                  | 010.0          |
| Normal Speed Auxiliary Fan Blower | Top left side of radiator                  | 216-6          |
| Resistor                          | Front of A/C condenser                     | 218-2          |
| Normal Speed Temperature Switch   |  |                |
|                                   | Bottom left rear of radiator               | 207-2          |
| Normal Speed Coolant Temperature  |  |                |
|                                   | Top left side of radiator.                 | 216-6          |
| Power Distribution Box            |  | 044 4          |
| $C_{10}(0 \text{ pins}) = 225e$   | Behind left headlights                     | 211-1          |
| G104                              | On inner fender, behind left headlights    | 214-1          |
|                                   | Under left side of dash, above brake pedal | 211-1<br>210-2 |
| 0200                              | onder on ash, above blake pedal            | 210-2          |

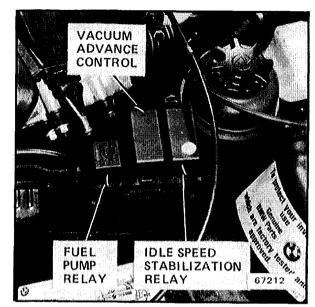


Figure 1 - Forward Of Left Front Shock Tower (318i Late Production)

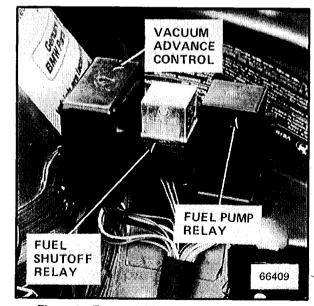


Figure 2 - Forward Of Left Front Shock Tower (318i Early Production)

#### **BACK UP LIGHTS/HORN**

| Automatic Trans. Range Switch | At base of shift lever                    |       |
|-------------------------------|---|-------|
| Backup Light Switch           | On transmission                           |       |
| Horn/Brush Slip Ring          | In upper steering column                  |       |
|                               | At top rear of left front wheel well      | 202-1 |
| C202 (9 pins)                 | Under LH side of dash, on steering column | 210-1 |
| C301 (2 pins)                 | At base of shift lever                    |       |
| G104                          | On inner fender behind left headlights    | 211-1 |
| G300                          | Under left side of rear seat              | 209-2 |
|                               |   |       |

#### **BRAKE WARNING SYSTEM**

| Brake Fluid Level Switch Left of engine, on brake fluid reservoir Ignition Switch Upper part of steering column | 208-1 |
|---|-------|
| Park Brake Switch At base of parking brake  |       |
| Power Distribution Box At top rear of left front wheel well   | 202-1 |
| Seatbelt Warning Timer Above brake pedal  | 210-2 |
| C200 (9 pins) Under left side of dash, on steering column   | 210-1 |
| G104 G104 G104 Gn inner fender, behind left headlights  | 211-1 |
| G200 Under left side of dash, above brake pedal   |       |

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Figure 1 - Power Distribution Box

#### **CENTRAL LOCKING SYSTEM**

| Central Lock Control Unit     | Below and behind left front speaker         |       |
|-------------------------------|---|-------|
| Door Lock Motors              | Rear part of each door                      |       |
| Gas Filler Lock Motor         | Behind right rear inner wheel well          |       |
| Ignition Switch               | Upper part of steering column               |       |
| Lock Inhibit Switch           |   |       |
| Power Distribution Box        | At top rear of left front wheel well        | 202-1 |
| Trunk Lock Motor              | On trunk lock center support                |       |
| Unlock Inhibit Switch         | Rear of LH front 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.     | 213-1 |
| C401 (7 pins) 4 Door Only     | In left B pillar                            |       |
| C402 (7 pins) 4 Door Only     |   |       |
| C404 (21 pins)                |   |       |
| C405 (21 pins)                | Above left front door jamb switch           |       |
|                               | Under left side of dash, above brake pedal  | 210-2 |

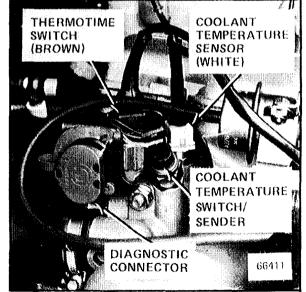


Figure 2 - Top Left Front Of Engine (318i)

#### CIGAR LIGHTER/DIGITAL CLOCK/GLOVE BOX LIGHT/AUTO-CHARG-ING FLASHLIGHT FIGURE

| 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       | 202-1 |
| C103 (29 pins)           | Upper left corner of driver's footwell     | 213-1 |
| C204 (9 pins)            | Under left side of dash                    | 214-1 |
| G200                     | Under left side of dash, above brake pedal | 210-2 |

#### **CRUISE CONTROL/STOP LIGHTS**

| Active Check Control Unit Auto Trans. Range Switch |  |       |
|--|--|-------|
|  | Above brake pedal                            | 214-1 |
|  | Forward of LH front shock tower              | 216-2 |
| Cruise Control Control Unit                        | Mounted under RH side of dash                | 218-6 |
| Cruise Control Switch                              | On RH side of steering column                |       |
|  | At top rear of LH front wheel well           | 202-1 |
| Rear Lights Check Relay                            | In trunk above left wheel well               |       |
| Start Relay  | Upper LH corner of driver's footwell         | 218-4 |
|  | Under LH side of dash above steering column. | 218-3 |
| C143 (1 pin)                                       | Under LH side of dash near body electrical   |       |
|  | bracket                                      | 218-4 |
|  | Under left side of dash on steering column   | 210-1 |
|  | Near brake pedal support bracket             | 218-3 |
| C209 (7 pins)                                      |  |       |
| C210 (4 pins)                                      |  |       |
| C301 (2 pins)                                      |  |       |
| C302 (25 pins) Accy Connector                      | Under left side of dash on body electrical   |       |
|  | bracket                                      | 213-1 |
|  | On inner fender, behind left headlights      | 211-1 |
| G200   | Under left side of dash, above brake pedal   | 210-2 |
| G201 (Steering Column Ground)                      |  |       |
| G300   | Under left side of rear seat                 | 209-2 |

#### DASH LIGHTS

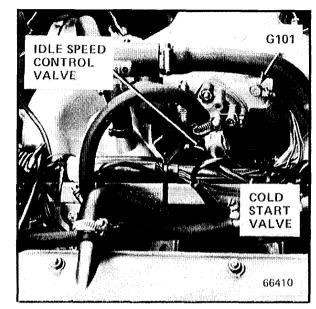


Figure 1 - Top Center Of Engine (318i Early Production)

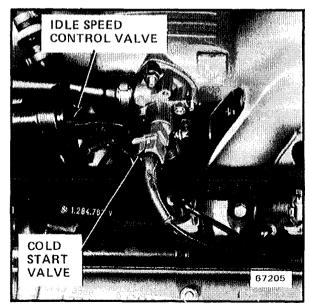


Figure 2 - Top Center Of Engine (318i Late Production)

#### ENGINE: 318i

#### **CHARGING SYSTEM (318i)**

| *               | Top front of engine   | 202-2 |
|-----------------|---|-------|
| Ignition Switch | Upper part of steering column<br>At top rear of left front wheel well | 202-1 |
|                 | On power distribution box   |       |
| •               | Upper left corner of driver's footwell                                |       |
| C200 (9 pins)   | Upper left side of dash, on steering column                           | 210-1 |
| 0100            | Definite right from Shock tower                                       |       |

#### FUEL CONTROL (318i)

| Air Flow Meter                       | Behind air cleaner                             | 204-1 |
|--------------------------------------|--|-------|
| (Early Production)                   | Mounted on air intake housing                  | 205-2 |
| Production)                          | Mounted on air intake housing                  | 205-1 |
| Cold Start Valve (Early Production). | Top center of engine                           | 203-1 |
| Cold Start Valve (Late Production) . | Top center of engine                           | 203-2 |
| Coolant Temperature Sensor           | Front of engine, top of thermostat housing     | 202-2 |
| Diagnostic Connector.                | Top front of engine                            | 202-2 |
| Fuel Pump Relay (Early Production)   | On bracket in front of left front shock tower. | 201-2 |
| Fuel Shutoff Relay                   |  |       |
| (Early Production)                   | On bracket in front of left front shock tower  | 201-2 |
| Idle Speed Stabilization Relay       |  |       |
| (Late Production)                    |  | 201-1 |
| Ignition Coil                        | On right front wheel well                      |       |
| Ignition Control Module              |  |       |
| (Early Production)                   |  | 215-2 |
| Ignition Switch                      | Upper part of steering column                  |       |
| Injection Control Module             | Right side of dash, above glove box            | 213-2 |
| Oxygen Sensor                        | RH rear of engine, in exhaust manifold         |       |
| Thermotime Switch                    |  | 202-2 |
| Throttle Switch                      | Below rear of throttle body                    |       |
| Vacuum Advance Control (Early        |  |       |
|                                      | On bracket in front of left front shock tower  | 201-2 |
| C101 (19 pins)                       |  | 202-1 |
| C140 (Late Production)               |  |       |
| C141 (Late Production)               | ÷ ,  | 000 1 |
| G101                                 | Top front of engine.                           | 203-1 |
| G102                                 | Top rear of engine                             |       |

AIR FLOW METER

Figure 1 - Left Front Corner Of Engine Compartment (318i)

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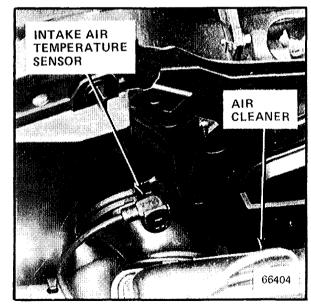


Figure 2 - Left Front Corner Of Engine Compartment (318i)

#### **IDLE SPEED CONTROL (318i)**

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| 0°C (32°F) Temp Switch On b<br>Automatic Trans. Range Switch At b<br>Coolant Temperature Switch/                                 | oulkhead, behind distributor  | 207-1                                     |
|--|---|---|
| Sender From<br>Diagnostic Connector Top<br>Fuel Pump Relay (Early Production) On the<br>Fuel Pump Relay (Late Production) On the | t of engine, top of thermostat housing<br>front of engine   | 202-2<br>202-2<br>201-2<br>201-1<br>213-2 |
| (Early Production)   | rear of engine  | 203-1                                     |
| Ignition Coil (Early Production) On r  | bracket in front of left front shock tower<br>ight front wheel well<br>bulkhead, above brake vacuum booster | 201-1                                     |
|  | t side of dash, above glove box   | 213-2                                     |
|  | op rear of left front wheel well  | 202-1                                     |
| C101 (9 pins) On p   | ower distribution box   | 202-1                                     |
|  | t side of evaporator housing  | 214-2                                     |
| C131 (1 pin) Righ  | t side of dash, above glove box<br>ase of shift lever   | 214-2                                     |
|  | front of engine   | 203-1                                     |

#### IDLE SPEED STABILIZATION (LATE PRODUCTION) (318i)

| Fuel Pump Relay On bracket in front of left front shock tower.                | . 201-1 |
|---|---------|
| Idle Speed Control Unit Under RH side of dash near glove box                  | . 213-2 |
| Idle Speed Stabilization Relay On bracket in front of left front shock tower. | . 201-1 |
| Injection Control Module Right side of dash above glove box                   | . 213-2 |
| Power Distribution Box At top of left front wheel well                        | . 202-1 |
| Throttle Switch Below rear of throttle body                                   |         |
| C101 On power distribution box  | . 202-1 |
| C107 Near washer pump   | . 206-2 |
| G100Behind right front shock tower  |         |
| G102  |         |

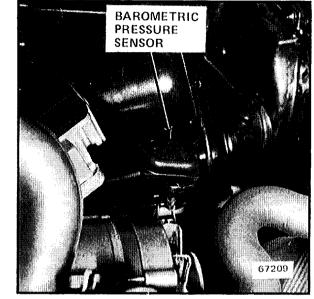


Figure 1 - Left Front Corner Of Engine Compartment (318i Late Production)



Figure 1 - Left Front Corner Of Engine Compartment (318i Early Production)

#### **IGNITION/FUEL DELIVERY (318i)**

| Auxiliary Fuel Pump Diagnostic Connector Fuel Pump Relay (Early Production) Fuel Pump Relay (Late Production) . Idle Speed Control Unit | On bracket in front of left front shock tower<br>On bracket in front of left front shock tower<br>Right side of dash, above glove box | 209-1<br>202-2<br>201-2<br>201-1<br>213-2 |
|---|---|---|
| (Early Production)  | On bulkhead, above brake booster  | 215-2                                     |
| Ignition Control Module   |   | 015 0                                     |
|   | On bulkhead, above brake booster  | 215-3                                     |
| Ignition Switch   |   |   |
|   | Right side of dash, above glove box   | 213-2                                     |
|   | Under car, in front of left rear wheel  |   |
|   | At top rear of left front wheel well  | 202-1                                     |
|   | On power distribution box   | 202-1                                     |
| C103 (23 pins)  | Upper left corner of driver's footwell  | 213-1                                     |
| C104 (3 pins)   | Right side of dash above glove box  | 213-2                                     |
| C200 (9 pins)   | Under left side of dash, on steering column   | 210-1                                     |
| C212 (2 pins)   | Under LH side of dash near accessory  |   |
|   | connector   | 218-4                                     |
| C235 (3 pins)   | Under LH side of dash, near accessory   |   |
|   | connector   |   |
| G100  |   |   |
| •   | Top front of engine   | 203-1                                     |
| G102  | Top rear of engine  |   |
| G300  | Under left side of rear seat  | 209-2                                     |

#### **START (318i)**

| Automatic Trans. Range Switch | At base of shift lever                      |       |
|-------------------------------|---|-------|
| Diagnostic Connector.         | Top front of engine                         | 202-2 |
| Ignition Switch               |   |       |
| Power Distribution Box        | At top rear of left front wheel well        | 202-1 |
| Start Relay                   | Upper left corner of driver's footwell      |       |
| C101 (19 pins)                | On power distribution box                   | 202-1 |
| C200 (9 pins)                 | Under left side of dash, on steering column | 210-1 |
| C241 (1 pin) (Automatic       |   |       |
| Transmission Only)            | Behind instrument panel, above steering     |       |
|                               | column                                      |       |

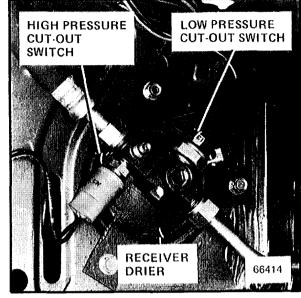


Figure 1 - Behind Right Headlights

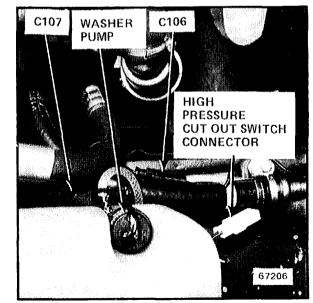


Figure 2 - Right Front Corner Of Engine Compartment

#### (continued)

| C301 (2 pins) |  | Haone |
|---------------|--|-------|
| G100          | Behind right front shock tower             |       |
| G200          | Under left side of dash, above brake pedal | 210-2 |

#### VACUUM ADVANCE (318i)

#### Coolant Temperature Switch/

| Sender Front of engine, top of the Diagnostic Connector Top front of engine                            |                      | 202-2<br>202-2          |
|--|----------------------|-------------------------|
| Idle Speed Stabilization (Late<br>Production) On bracket in front of lef                               | ft front shock tower | 201-1                   |
| Ignition Control Module (Early<br>Production) On bulkhead, above brak<br>Ignition Control Module (Late | ke vacuum booster    | 215-2                   |
| Production)  | ke vacuum housing    | 215-3                   |
| Production)  | headlights           | 213-2<br>204-2<br>202-1 |
| Production)  | ft front shock tower | 201-2                   |
| Production) On bracket in front of lef<br>Vacuum Advance Solenoid Valve                                | ft front shock tower | 201-1                   |
| (Early Production) On bulkhead, above brak<br>Vacuum Advance Solenoid Valve                            | ke vacuum booster    | 215-4                   |
| (Late Production) On bulkhead, above brak<br>Vacuum Advance Unit On distributor                        | ke vacuum booster    | 215-3                   |
| C101 (19 pins) On power distribution be<br>G101  |                      | 202-1<br>203-1          |

#### ENGINE: 325e

#### CHARGING SYSTEM (325e)

| Battery                | In RH rear of trunk                    |       |
|------------------------|--|-------|
|                        | Engine compartment or RH bulkhead      | 217-3 |
| Diagnostic Connector.  | Top LH front of engine                 | 216-3 |
| Ignition Switch        | Upper part of steering column          |       |
| Power Distribution Box | At top rear of left front wheel well   | 202-1 |
| C101 (19 pins)         | On power distribution box              | 202-1 |
| C103 (29 pins)         | Upper left corner of driver's footwell | 213-1 |

#### FIGURE

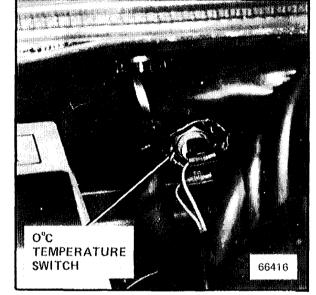


Figure 1 - Bulkhead Behind Distributor (318i Early Production)

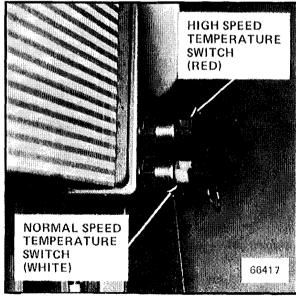


Figure 2 - Bottom Left Rear Of Radiator (318i)

#### (continued)

C200 (9 pins) . . . . . . . . . . . Under left side of dash, on steering column . . 210-1 G100 (325e). . . . . . . . . . . . . RH rear of trunk behind battery

#### FUEL DELIVERY/FUEL CONTROL (325e)

| Air Flow Meter              | In intake duct, above rear of air cleaner      |       |
|-----------------------------|--|-------|
|                             | housing  | 216-4 |
| Auxiliary Fuel Pump         | In fuel tank                                   | 209-1 |
|                             | Near top left rear of radiator                 | 216-6 |
| Battery Junction Block      | Engine compartment on RH bulkhead              | 217-3 |
| Fuel Injectors              | Above intake manifold at each port             |       |
| Fuel Pump Relay             | On bracket in front of left front shock tower. | 216-4 |
| Ignition Switch             | Upper part of steering column                  |       |
|                             | Under car, in front of left rear wheel         |       |
| Main Relay                  | On bracket in front of left front shock tower. | 216-4 |
|                             | Under RH side of dash, above glove box         | 218-5 |
| On-Board Computer Module    | In center console, right of radio              |       |
| On-Board Computer Relay Box | Under LH side of dash above hood release       | 218-4 |
| Oxygen Sensor               | In exhaust pipe, near rear transmission mount  |       |
| Power Distribution Box      | At top rear of left front wheel well           | 202-1 |
| C103 (19 pins)              | On power distribution box                      | 213-1 |
| C104 (3 pins)               | RH side of dash above glove box                | 213-2 |
| C140 (3 pins)               | Near RH rear side of engine                    | 217-5 |
| C141 (3 pins)               | Under RH side of car below passengar side      | 218-1 |
| C200 (9 pins)               | Under LH side of dash on steering column       | 210-1 |
| C212 (2 pins)               | Under LH side of dash near accessory           |       |
|                             | connector                                      | 218-4 |
| C235 (3 pins)               | RH side of dash above glove box                |       |
| G103                        | On left side of engine block above starter     |       |
| G300                        | Behind LH side of rear seat                    | 209-2 |
|                             |  |       |

#### **IDLE SPEED CONTROL (325e)**

Automatic Transmission Range

| Switch In                     | n center console at base of shift lever     |       |
|-------------------------------|---|-------|
| Coolant Temperature Sensor Fr | ront of engine on thermostat housing        | 217-1 |
| Coolant Temperature Switch Fr | ront of engine on thermostat housing        | 217-1 |
| Engine Speed Sensor Lo        | ower LH side of transmission bell housing   |       |
| Idle Control Valve Te         | op rear side of engine                      | 217-4 |
| Idle Speed Control Unit.      | Inder RH side of dash, above glove box      | 213-2 |
| Motronic Control Unit.        | Inder RH side of dash, above glove box      | 218-5 |
| 0°C Temperature Switch 0      | In bulkhead, left of battery junction block | 217-3 |

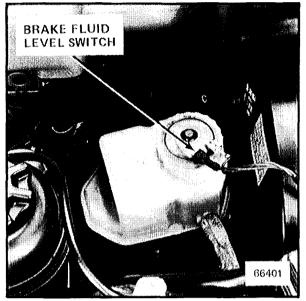


Figure 1 - LH Rear Of Engine Compartment

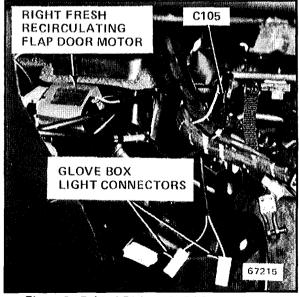


Figure 2 - Behind Right Side Of Center Console

| (continued)                                   |   | FIGURE |
|---|---|--------|
| Power Distribution Box                        | On bracket in front of left front shock tower<br>At top rear of left wheel well |        |
| C131 (1 pin)<br>C132 (1 pin)<br>C301 (2 pins) | Near automatic transmission range switch  | 202-1  |

#### **IGNITION (325e)**

|                        | Top LH front of engine                   | 216-3 |
|------------------------|--|-------|
| Ignition Coil          | Forward of RH shock tower                |       |
| Ignition Switch        | Upper part of steering column            |       |
| Motronic Control Unit  | Under RH side of dash above glove box    | 218-5 |
| Reference Point Sensor | RH rear side of engine                   | 217-5 |
| TDC Sensor             | Above crankshaft vibration dampener      |       |
| C101 (19 pins)         | On power distribution box                | 202-1 |
| C200 (9 pins)          | Under LH side of dash on steering column | 210-1 |
| G103                   | On LH side of engine block above starter |       |

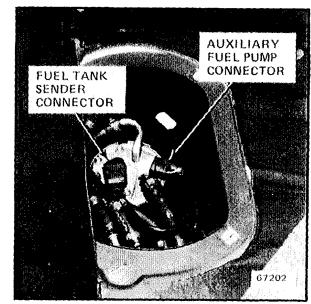


Figure 1 - Under Right Side Of Rear Seat

### START (325e)

| Automatic Trans. Range Switch<br>Battery (325e) |   |       |
|---|---|-------|
|   | Engine compartment on RH bulkhead           | 217-3 |
|   | Top RH side of intake manifold              | 217-4 |
| Diagnostic Connector                            | Top LH front of engine                      | 216-3 |
| Ignition Switch                                 | Upper part of steering column               |       |
| Power Distribution Box                          | At top rear of left front wheel well        | 202-1 |
| Start Relay                                     | Upper left corner of driver's footwell      |       |
| Thermo-Time Switch                              | Top front of coolant thermostat housing     | 216-3 |
| C101 (19 pins)                                  | On power distribution box                   | 202-1 |
| C200 (9 pins)                                   | Under left side of dash, on steering column | 210-1 |
| C241 (1 pin)                                    | Behind instrument panel, above steering     |       |
| C301 (2 pins)                                   |   |       |
| G100  | RH rear of trunk behind battery             |       |
|   | Under left side of dash, above brake pedal  | 210-2 |

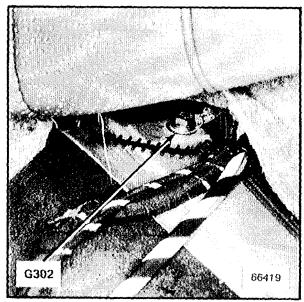


Figure 2 - Left Side Of Rear Seat Back Rest

#### **HEADLIGHTS/FOG LIGHTS**

| Active Check Control Unit Ab<br>Combination Switch Up<br>Flasher | oper left side of steering column<br>oper part of steering column |       |
|--|---|-------|
| Fog Light Switch Or  | h dash, left of steering column                                   |       |
| Power Distribution Box At  | top of rear of left front wheel well                              | 202-1 |
| C103 (29 pins) Up  | oper left corner of driver's footwell                             | 213-1 |
| C126 (2 pins) Be   | hind left headlights  | 211-1 |
| C127 (2 pins) Be   | hind right headlights   | 211-2 |
| C202 (13 pins) Un  | nder left side of dash, on steering column                        | 210-1 |
| G104Or   | n inner fender, behind left headlights                            | 211-1 |
| G200 Un  | nder left side of dash, above brake pedal                         | 210-2 |

#### HEATING AND AIR CONDITIONING

|   | t side of evaporator housing<br>hind center console, in evaporator housing<br>hind center console, in evaporator housing<br>ar washer pump<br>hind A/C face plate |                         |
|---|---|-------------------------|
| Production) On  | bracket in front of left front shock tower<br>receiver dryer , behind right headlight   | 201-2<br>206-2          |
|   | bracket in front of left front shock tower  | 201-1                   |
| Fresh/Recir. Air Flap Door Motors Beh<br>Hot Water Cut-Off Switch Beh | hind A/C face plate   | 208-2                   |
| Ignition Control Module On<br>Low Pressure Cut-Out Switch Beh         | ht side of dash, above glove box<br>bulkhead, above brake vacuum booster<br>hind right headlights   | 215-2<br>206-1<br>202-1 |
| C103 (29 pins) Upp<br>C105 (1 pin) Beh                                | t side of evaporator housing<br>per left corner of driver's footwell<br>nind right side of dash<br>ar washer pump   | 213-1<br>214-2<br>206-2 |
| C107 (2 pins) Nea   | ar washer pump  | 200-2<br>206-2<br>214-1 |
| C255 Lef  |   | 210-2                   |

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STEERING

Figure 1 - Under Left Side Of Dash

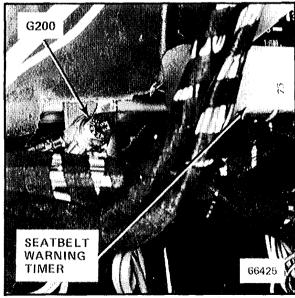


Figure 2 - Above Pedal Assembly

FIGURE

C20

## **IGNITION KEY WARNING/SEATBELT WARNING**

| Active Check Control Unit (325e) . Above rea | r view mirror                          |
|--|--|
| Chime Module Mounted c                       | on left under dash cover               |
| Dash Warning Display (318i) Top center       | of dash                                |
| Power Distribution Box At top rear           | of left front wheel well 202-1         |
| Seatbelt Switch In driver's                  | seatbelt buckle                        |
| Seatbelt Warning Timer Above bra             | ke pedal                               |
| C103 (29 pins) Upper left                    | corner of driver's footwell 213-1      |
| C200 (9 pins) Under left                     | side of dash, on steering column 210-1 |
| G200 Under left                              | side of dash, above brake pedal 210-2  |

### **INTERIOR LIGHTS**

)

|                              | In rear of left door                      | 213-2 |
|------------------------------|---|-------|
| Interior Light Timer Control | Below left front speaker                  |       |
| Power Distribution Box       | At top rear of left front wheel well      | 202-1 |
| C303 (3 pins)                | At base of right ''B'' pillar             |       |
| C304 (3 pins)                | At base of left ''B'' pillar              |       |
| C405 (21 pins)               | Above right front door jamb switch        |       |
| C503 (3 pins)                | In rear of door                           |       |
| C510 (1 pin)                 | Behind and above left front speaker       |       |
| G200                         | Under left side of dash above brake pedal | 210-2 |
| G300                         | Upper left side or rear seat              | 209-2 |

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

| Active Check Control Unit (325e) . | Above rear view mirror                  |       |
|------------------------------------|---|-------|
| Power Distribution Box             | At top of left front wheel well         | 202-1 |
| Rear Lights Check Relay (325e)     | In trunk above wheel well               |       |
| C103 (29 pins)                     | Upper left corner of driver's footwell  | 213-1 |
| G104                               | On inner fender, behind left headlights | 211-1 |
| G300                               | Under left side of rear seat            | 209-2 |

#### LIGHTS: TURN/HAZARD WARNING

| Combination Switch |  |       |
|--------------------|--|-------|
|                    | In center console, above radio         | 215-1 |
|                    | At top rear of left front wheel well   |       |
| C103 (29 pins)     | Upper left corner of driver's footwell | 213-1 |

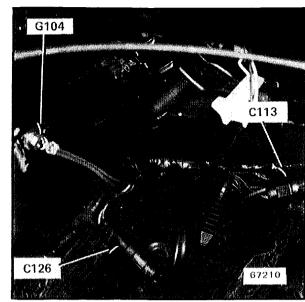


Figure 1 - Behind Left Headlights

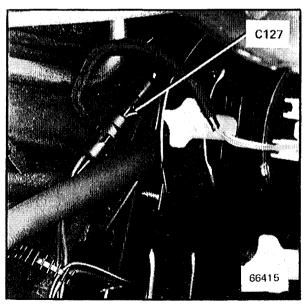


Figure 2 - Behind Right Headlights

| (continued)                   |   | FIGURE |
|-------------------------------|---|--------|
| C200 (9 pins)                 | Upper left side of dash, on steering column | 210-1  |
|                               | Under left side of dash, on steering column |        |
| G104                          | On inner fender, behind left headlights     | 211-1  |
| G200                          | Under left side of dash, above brake pedal  | 210-2  |
| G201 (Steering Column Ground) |   |        |
| G300                          | Under left side of rear seat                | 209-2  |

#### **ON-BOARD COMPUTER**

| Battery (318i) Behind RH front shock<br>Battery (325e) In rear of trunk | tower                  |       |
|---|------------------------|-------|
| Battery Junction Block (325e) Engine compartment of                     | n BH bulkhead          | 217-3 |
|   | wer.                   | 216-1 |
|   | wer                    | 216-1 |
|   | dash cover             | 217-6 |
| Combination Switch Upper left side of steer                             |                        | 2170  |
|   | eft front shock tower. | 201-2 |
|   |                        | 201-2 |
|   |                        | 203-1 |
| Ignition Switch   |                        | 213-2 |
|   | h                      | 213-2 |
|   | eft front shock tower. | 218-4 |
|   | above glove box        | 218-5 |
| On-Board Computer Module In center console right                        |                        | 010 / |
|   | above hood release     | 218-4 |
| Outside Temperature Sensor Near LH fog light                            |                        | 000 1 |
|   | wheel well             | 202-1 |
| C103 (29 pins) Under LH side of dash                                    |                        | 213-1 |
| C200 (9 pins) Under LH side of dash                                     |                        | 210-1 |
| C212 (2 pins) Under LH side of dash connector                           | near accessory         | 218-4 |
| C224 (2 pins) Under LH side of dash                                     |                        |       |
| connector   | ,                      |       |
| C235 (3 pins) RH side of dash above                                     | alove box              |       |
| C302 (3 pins) Under LH side of dash                                     |                        |       |
|   |                        | 213-1 |
| G100 (318i) Behind right front shoc                                     | k tower                |       |
| G100 (325e) RH rear of trunk behind                                     |                        |       |
| G102 (318i) Top rear of engine  | ,                      |       |
| G103 (325e) On left side of engine b                                    | llock, above starter   |       |
|   | above brake pedal      | 210-2 |
| G300  |                        | 209-2 |
|   |                        |       |

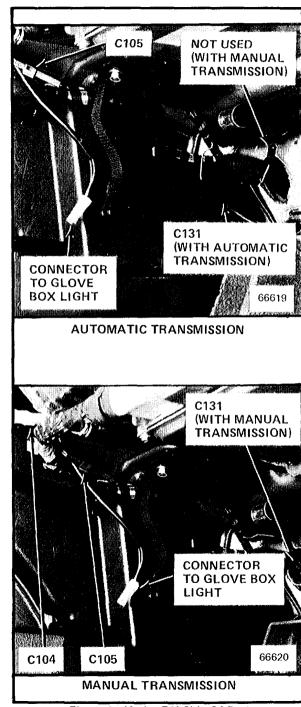


Figure 1 - Under RH Side Of Dash

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### POWER DISTRIBUTION

| Battery (318i)                |   |       |
|-------------------------------|---|-------|
|                               | Engine compartment on RH bulkhead           | 217-3 |
| Diagnostic Connector (318i)   | Top front of engine                         | 202-2 |
| Diagnostic Connector (325e)   | Top LH front of engine                      | 216-3 |
| Ignition Switch               | Upper part of steering column               |       |
| Power Distribution Box        | At top rear of left front wheel well        | 202-1 |
| 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      | 213-1 |
| G100 (318i)                   | Behind right front shock tower              |       |
| G100 (325e)                   | RH rear of trunk behind battery             |       |
| G200                          | Under left side of dash, above brake pedal  | 210-2 |

#### **POWER MIRRORS**

| Interior Light Timer Control | Below left front speaker                   |       |
|------------------------------|--|-------|
| Mirror Control Switch        | On driver's door, above arm rest           |       |
| Power Distribution Box       | At top rear of left front wheel well       | 202-1 |
| C404 (21 pins)               | Above right front door jamb switch         |       |
| C405 (21 pins)               | Above left front door jamb switch          |       |
| G200                         | Under left side of dash, above brake pedal | 210-2 |

#### **POWER WINDOWS**

| Ignition Switch               |   | 0004  |
|-------------------------------|---|-------|
|                               | At top rear of left front wheel well        | 202-1 |
| Power Window Circuit Breaker  | On center console, above radio              |       |
| Power Window Motors           |   |       |
| 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      | 213-1 |
| C351 (1 pin)                  | Behind center console                       |       |
| C401 (7 pins) 4 Door Only     | In left ''B'' pillar                        |       |
| C402 (7 pins) 4 Door Only     | In right ''B'' pillar                       |       |
| C404 (21 pins)                | Above right front door jamb switch          |       |
| C405 (21 pins)                | Above left front door jamb switch           |       |
| G200                          | Under left side of dash, above brake pedal  | 210-2 |

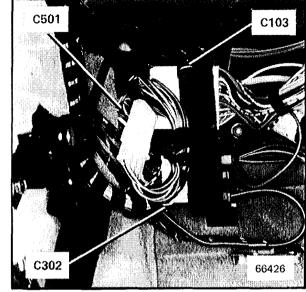


Figure 1 - Under Left Side Of Dash Ahead Of Pedal Assembly

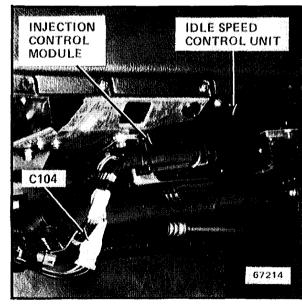


Figure 2 - Below Right Side Of Dash

### **RADIO/POWER ANTENNA**

|                               | In trunk                                   |       |
|-------------------------------|--|-------|
| Power Distribution Box        | At top rear of left front wheel well       | 202-1 |
| C219 (1 pin)                  | At top of power antenna                    | 220-2 |
| C403 (6 pins)                 | Behind right side of center console        | 208-2 |
| C302 (25 pins) Accy Connector | Upper left corner of driver's footwell     | 213-1 |
| G200                          | Under left side of dash, above brake pedal | 210-2 |
| G302                          | On power antenna mounting bracket          | 220-2 |

#### **REAR DEFOGGER**

| Dash Warning Display (318i) | Top center of dash                         |       |
|-----------------------------|--|-------|
| Power Distribution Box      | At top rear of left front wheel well       | 202-1 |
| C103 (29 pins)              | Upper left corner of driver's footwell     | 213-1 |
| G200                        | Under left side of dash, above brake pedal | 210-2 |
| G300                        | Under left side of rear seat               | 209-2 |
|                             |  |       |

#### SERVICE INTERVAL INDICATOR

Coolant Temperature Switch/

| Sender (318i)                       | Front of engine, top of thermostat housing | 202-2 |
|-------------------------------------|--|-------|
| Coolant Temperature Sender          |  |       |
| (325e)                              | Front of engine on thermostat housing      | 217-1 |
| Diagnostic Connector (318i)         | Top front of engine                        | 202-2 |
| Diagnostic Connector (325e)         | Top LH front of engine                     | 216-3 |
| Ignition Control Module (318i Early |  |       |
| Production)                         | On bulkhead, above brake vacuum booster    | 215-2 |
| Ignition Control Module (318i Late  |  |       |
| Production)                         | On bulkhead above brake vacuum booster     | 215-3 |
| Injection Control Module (318i)     | Right side of dash, above glove box        | 213-2 |
| Motronic Control Unit               | Under RH side of dash, above glove box     | 218-5 |
| Power Distribution Box              | At top rear of left front wheel well       | 202-1 |
| C101 (19 pins)                      | On power distribution box                  | 202-1 |
| C103 (29 pins)                      | Upper left corner of driver's footwell     | 213-1 |
| C104 (3 pins)                       | Right side of dash, above glove box        | 213-2 |
|                                     | Under left side of dash, above brake pedal | 210-2 |

#### SPEEDOMETER/INDICATORS/GAUGES

| Coolant Temperature Switch/ |  |       |
|-----------------------------|--|-------|
| Sender (318i)               | Front of engine, on thermostat housing | 202-2 |
| Coolant Temperature Sender  |  |       |
| (325e)                      | Front of engine on thermostat housing  | 217-1 |



Figure 1 - Under LH Side Of Dash

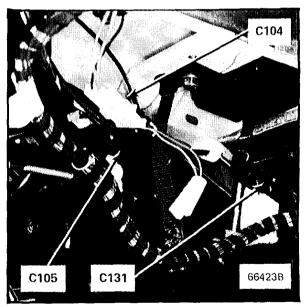


Figure 2 - Behind Right Side Of Dash

| (continued)        |   | FIGURE                                    |
|--------------------|---|---|
|                    | Top front of engine<br>Top LH front of engine   |   |
| Speedometer Sender | At top rear of left front wheel well<br>In rear of differential<br>On power distribution box<br>Upper left corner of driver's footwell<br>Under left side of dash, on steering column<br>Under left side of dash, above brake pedal<br>Under left side of rear seat | 220-3<br>202-1<br>213-1<br>210-1<br>210-2 |

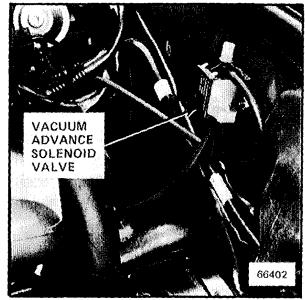


Figure 4 - Above Brake Vacuum Booster (318i Early Production)

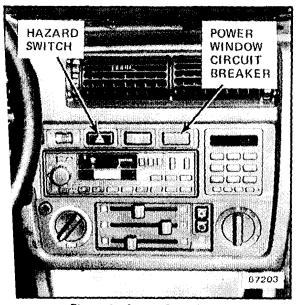


Figure 1 - Center Console

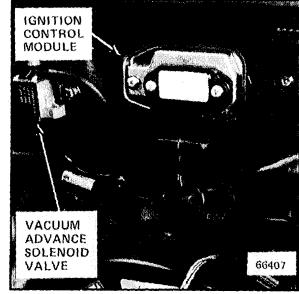


Figure 2 - Rear Of Left Door

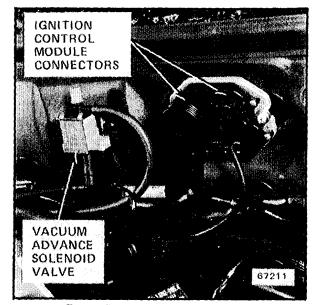


Figure 3 - LH Rear Corner Of Engine Compartment (318i Late Production)



Figure 1 - LH Rear Of Engine Compartment (325)

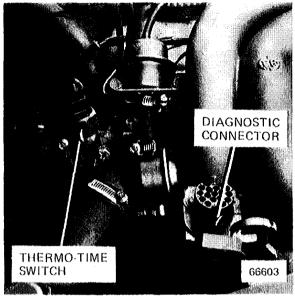


Figure 3 - Top Left Front Of Engine (325e)

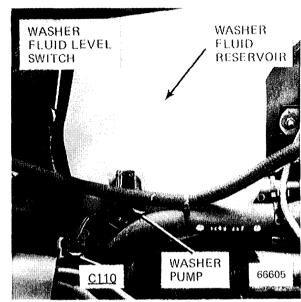


Figure 5 - Behind RH Lights (325)



Figure 2 - Behind LH Headlights



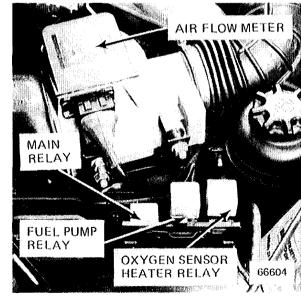


Figure 4 - Forward of LH Shock Tower (325)

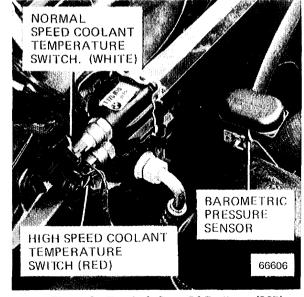
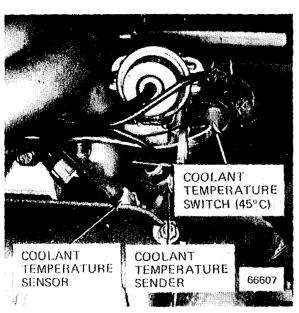


Figure 6 - Top Left Rear Of Radiator (325)



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Figure 1 - Top Front Of Engine (325)

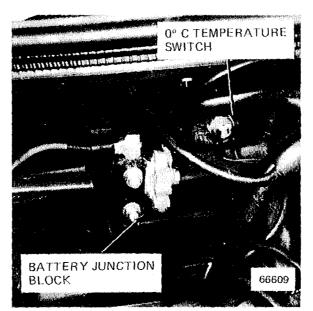


Figure 3 - RH Side Of Engine Bulkhead (325)

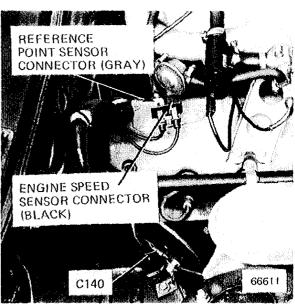


Figure 5 - RH Rear Side Of Engine (325)

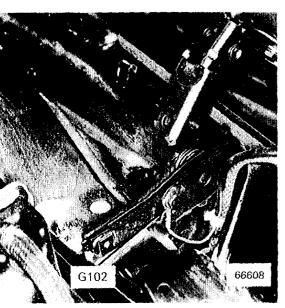


Figure 2 - At RH Hood Hinge (325)

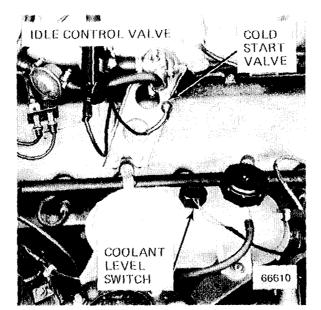


Figure 4 - RH Rear Side Of Engine (325)

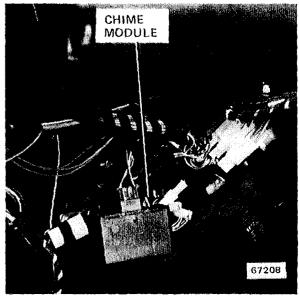


Figure 6 - LH Under Dash Cover Lowered

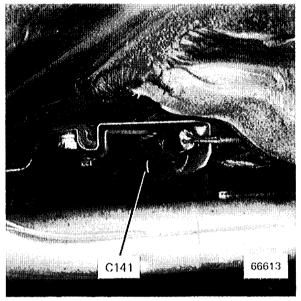


Figure 1 - Under RH Side Of Car Below Passenger Side



Figure 3 - Under LH Side Of Dash

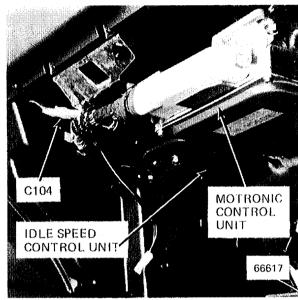


Figure 5 - Under RH Side Of Dash Above Glovebox (325)



Figure 2 - Front Of A/C Condensor

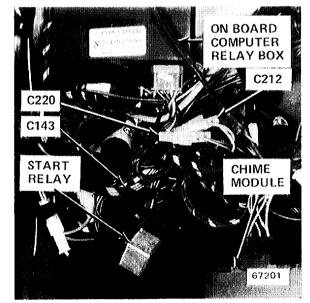


Figure 4 - Under LH Side Of Dash Near Hood Release Lever

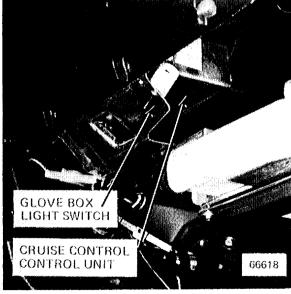


Figure 6 - Under RH Side Of Dash Above Glovebox (325)

## SUNROOF

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|                               | Behind header above rear view mirror<br>Behind header above rear view mirror |       |
|-------------------------------|--|-------|
| Sunroof Switch                | Above rear view mirror   |       |
| Power Distribution Box        | •  |       |
| C302 (25 pins) Accy Connector | Upper LH corner of driver's footwell   | 213-1 |
| C600                          | Near sunroof switch  |       |

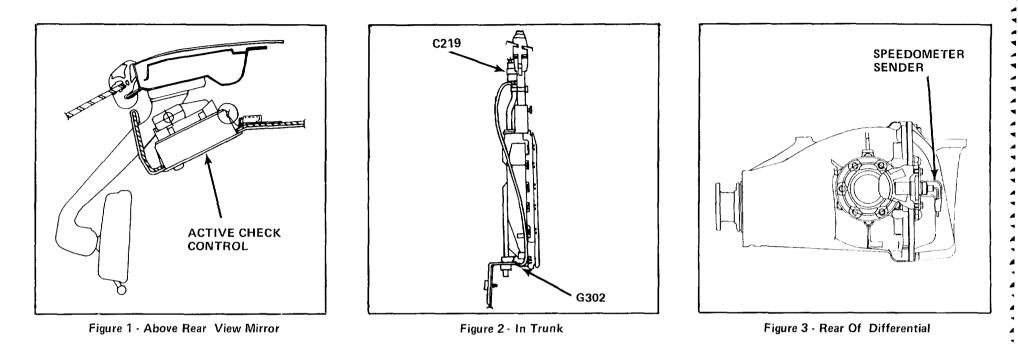
#### TACHOMETER/FUEL ECONOMY GAUGE

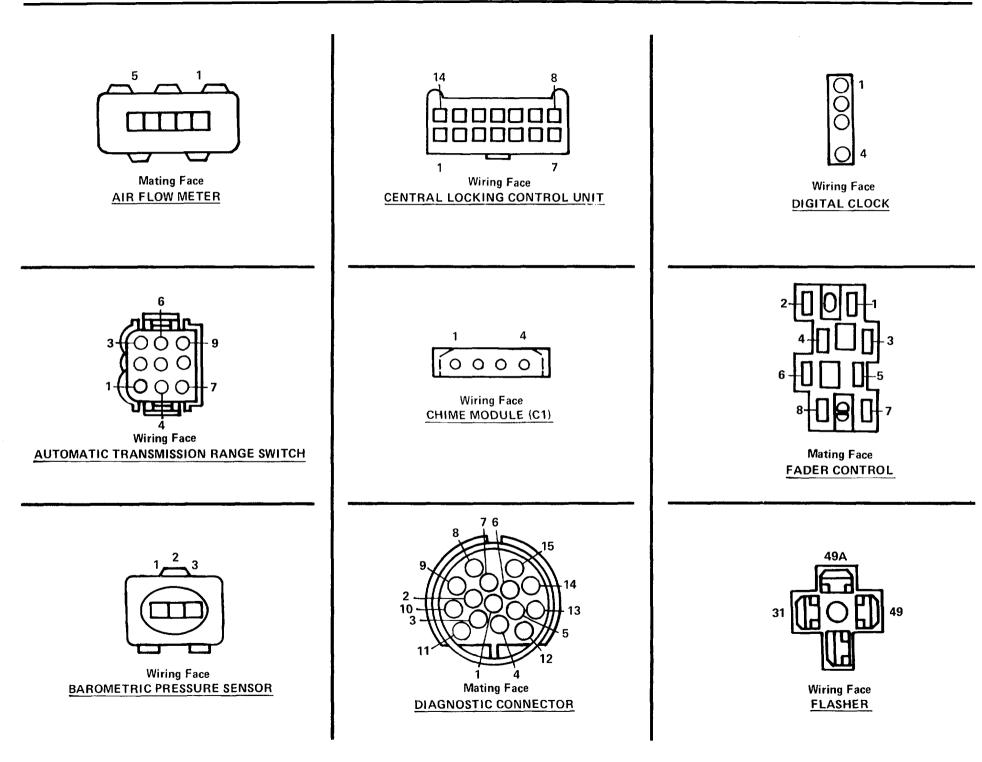
| Idle Speed Stabilization (318i Late<br>Production) On bracket in front of left front shock tower<br>Ignition Coil Forward of RH shock tower<br>Ignition Control Module (318i Early   | 201-1 |
|--|-------|
| Production)boxecond boxecond boxe | 215-2 |
| Ignition Control Module (318i Late   |       |
| Production)  | 215-3 |
| Injection Control Module (318i) Right side of dash, above glove box  | 213-2 |
| Motronic Control Unit (325e) Under RH side of dash, above glove box  | 218-5 |
| Power Distribution Box At top rear of left front wheel well  |       |
| C103 (29 pins) Upper left corner of driver's footwell  | 213-1 |
| C104 (3 pins) Right side of dash, above glove box  | 213-2 |
| C235 (3 pins) RH side of dash above glove box  |       |
| G200 Under left side of dash, above brake pedal  | 210-2 |

#### WIPER/WASHER

|                     | At top rear of left front wheel well   | 202-1          |
|---------------------|--|----------------|
|                     | Ahead of right front wheel well, on reservoir .<br>Under left side of fresh air intake cowl          | 206-2          |
| Wiper/Washer Switch | Upper right side of steering column<br>Under left side of dash, on steering column                   | 210-1          |
| C109                | •  |                |
| -                   | Near washer reservoir  | 216-5          |
|                     | At RH hood hinge<br>Under left side of dash, above brake pedal<br>Upper left side of steering column | 217-2<br>210-2 |

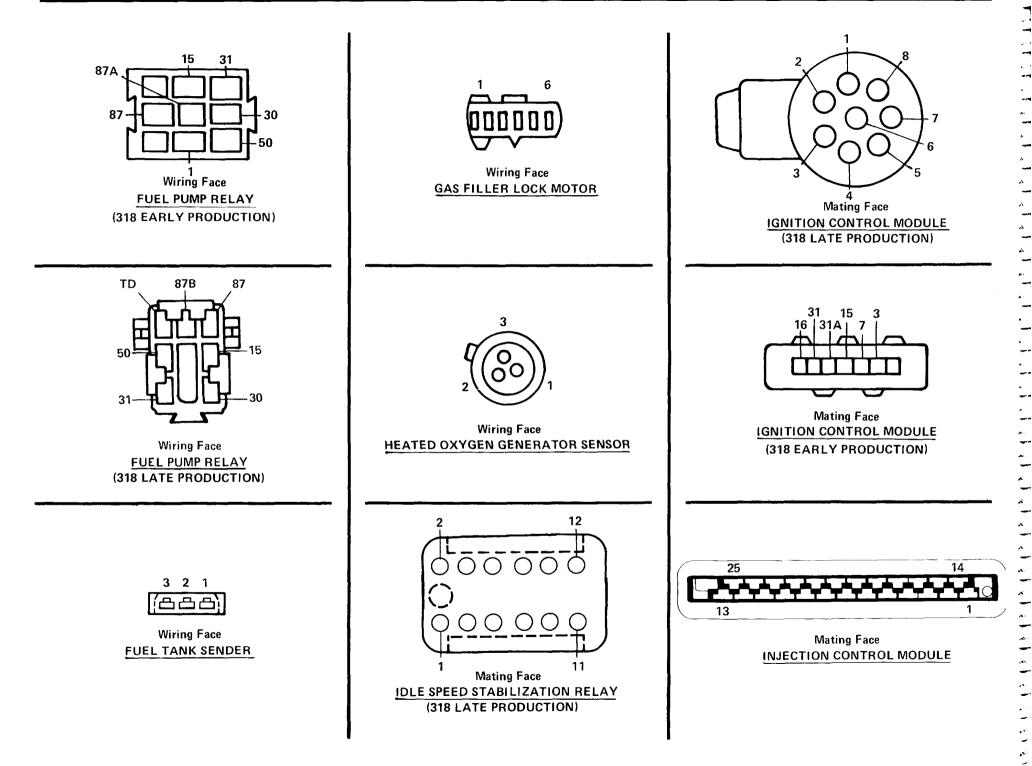
#### FIGURE

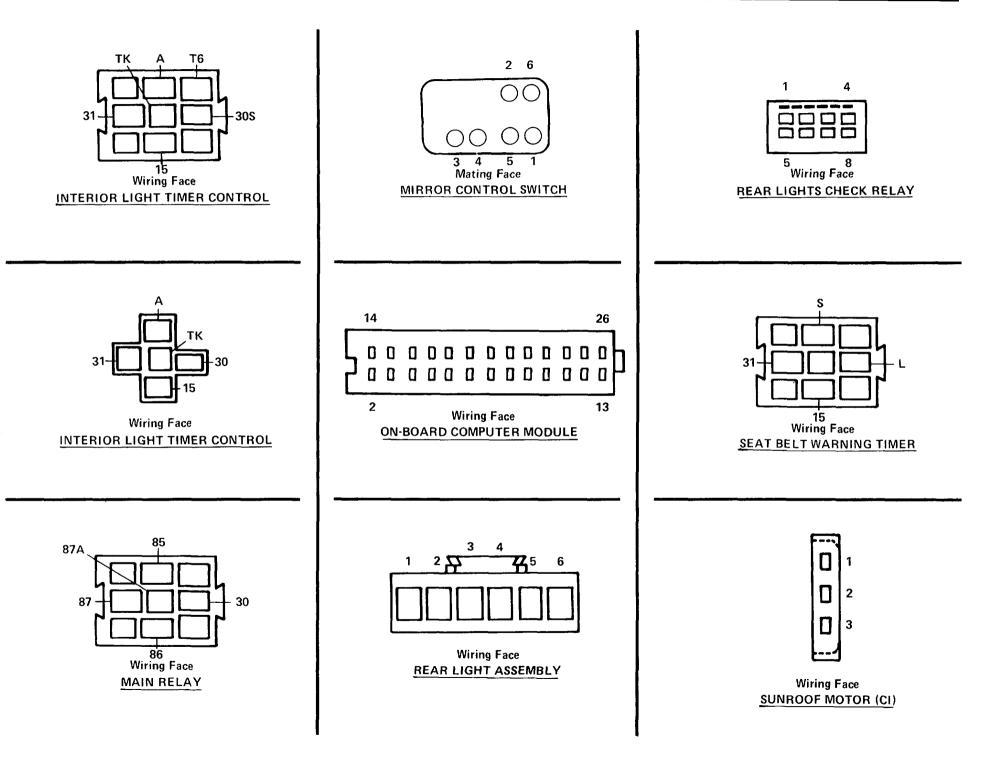




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