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# **1984**

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# **BMW 528e/533i**

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# **Electrical**

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# **Troubleshooting**

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# **Manual**

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BMW of North America, Inc.  
Montvale, New Jersey

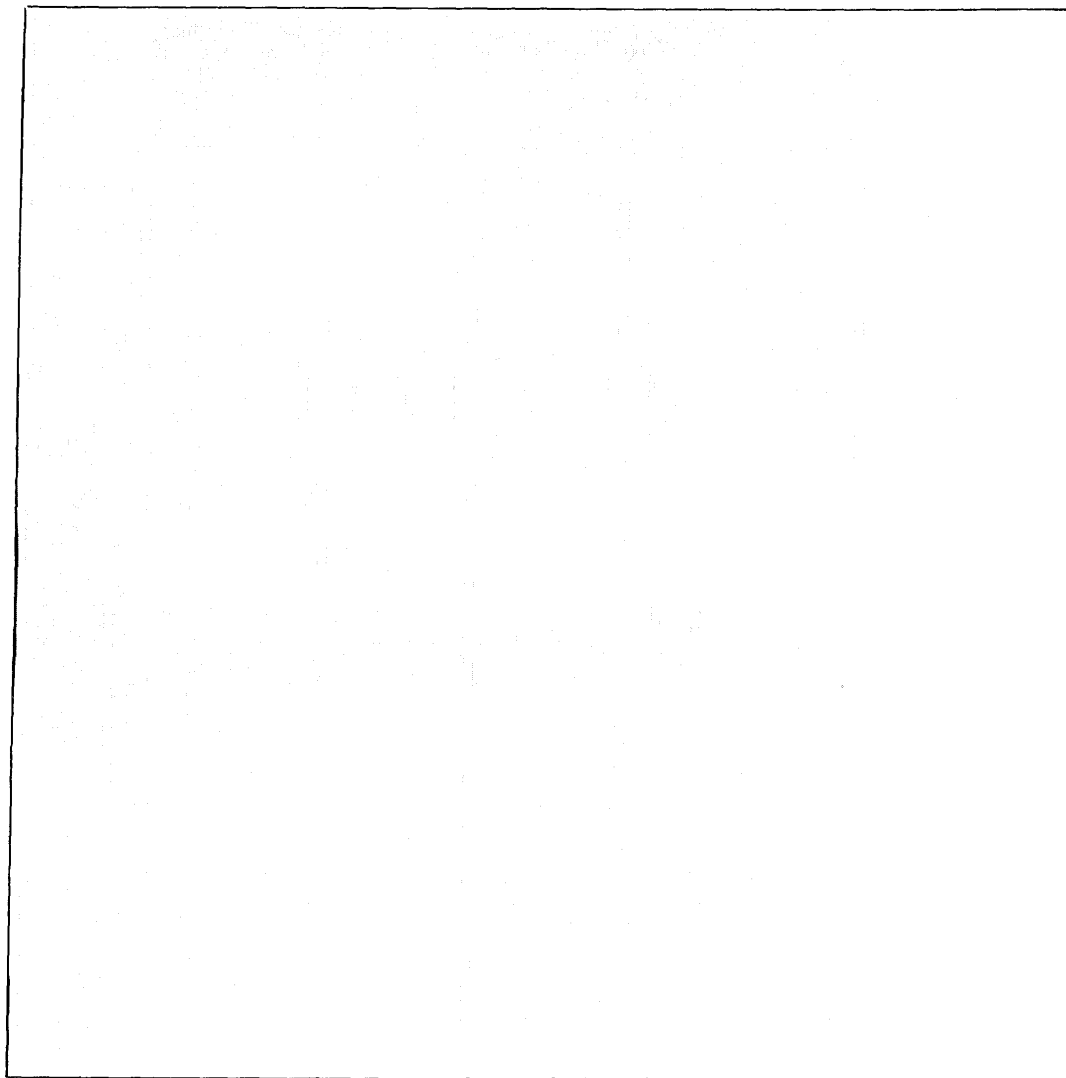
## FOREWORD

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

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**1984  
BMW 528e/533i  
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 CONVERSION CHART	
METRIC (CROSSECTIONAL AREA IN MM <sup>2</sup> )	AWG (AMERICAN WIRE GAUGE)
.5	20
.75	18
1	16
1.5	14
2	14
2.5	12
4	10
6	8
8	8
16	4
20	4
25	2
32	2

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

## 4 SYMBOLS



ENTIRE  
COMPONENT  
SHOWN



PART OF A  
COMPONENT  
SHOWN



COMPONENT  
WITH SCREW  
TERMINALS



SOLID STATE  
(INCLUDES ONLY  
ELECTRONIC PARTS)



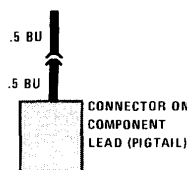
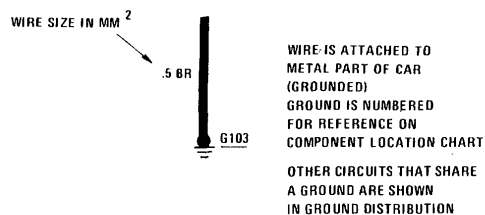
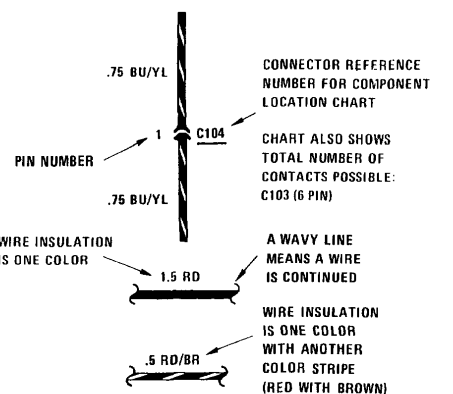
COMPONENT  
CASE IS  
DIRECTLY  
ATTACHED TO  
METAL PART  
OF CAR  
(GROUNDED)



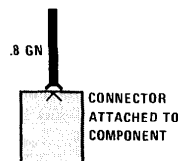
INDICATES THAT FUSE 5  
IS ALWAYS SUPPLIED  
WITH POWER



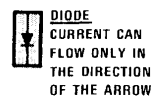
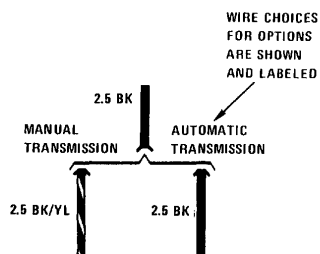
INDICATES THAT FUSE 6  
IS SUPPLIED WITH POWER  
WITH THE IGNITION  
SWITCH IN THE RUN OR  
START POSITIONS



CONNECTOR ON  
COMPONENT  
LEAD (PIGTAIL)



CONNECTOR  
ATTACHED TO  
COMPONENT



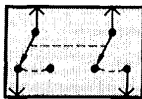
DIODE  
CURRENT CAN  
FLOW ONLY IN  
THE DIRECTION  
OF THE ARROW

CIRCUIT REFERENCE -  
A WIRE WHICH CONNECTS  
TO ANOTHER CIRCUIT

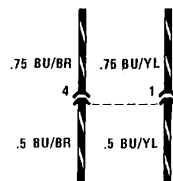




ONE POLE,  
TWO POSITION  
SWITCH



SWITCHES THAT  
MOVE TOGETHER  
DASHED LINE SHOWS  
A MECHANICAL  
CONNECTION  
BETWEEN SWITCHES

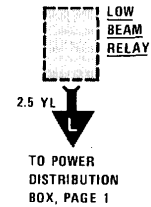
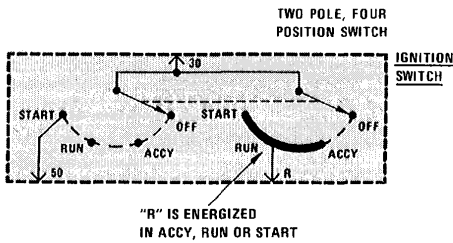
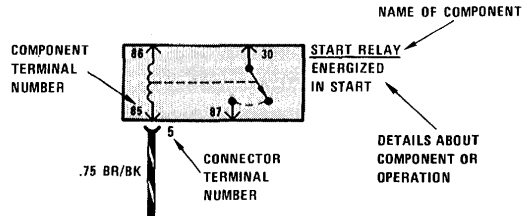


TWO CONNECTIONS  
(PINS) IN THE SAME  
CONNECTOR  
DASHED LINE SHOWS  
PARTS OF THE  
SAME CONNECTOR

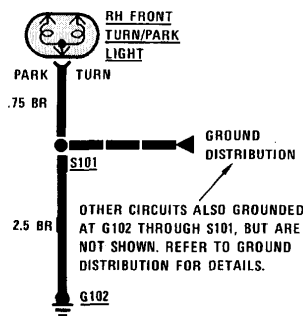
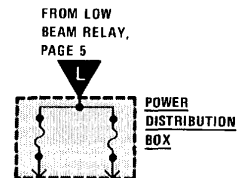


WHEN COIL IS  
ENERGIZED, SWITCH  
IS PULLED CLOSED

RELAY SHOWN  
WITH NO  
CURRENT  
FLOWING  
THROUGH  
COIL



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



LIGHT  
EMITTING  
DIODE

## 6 SYSTEMATIC TROUBLESHOOTING

### TROUBLESHOOTING PROCEDURE

#### 1. Verify the Problem

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

#### 2. Analyze the Problem

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

#### 3. Isolate the Problem

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

#### 4. Repair the Problem

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

#### 5. Check the Problem

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

### TROUBLESHOOTING TOOLS

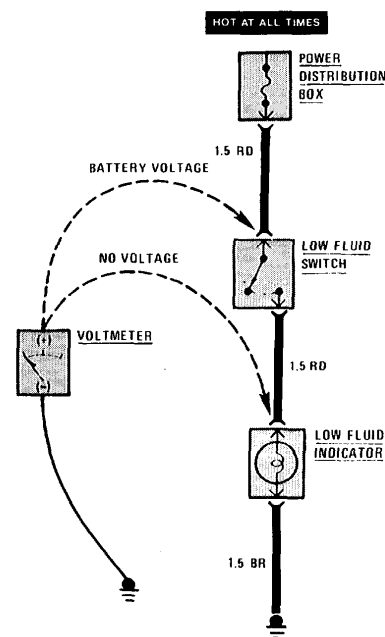
Isolating the problem (Step 3 of TROUBLESHOOTING PROCEDURES) requires the use of a **voltmeter** and/or **ohmmeter**. A voltmeter measures voltage at selected points in a circuit. An ohmmeter measures a circuit's resistance to current flow. It has an internal battery that provides current to the circuit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

### TROUBLESHOOTING TESTS

#### Voltage Test

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

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

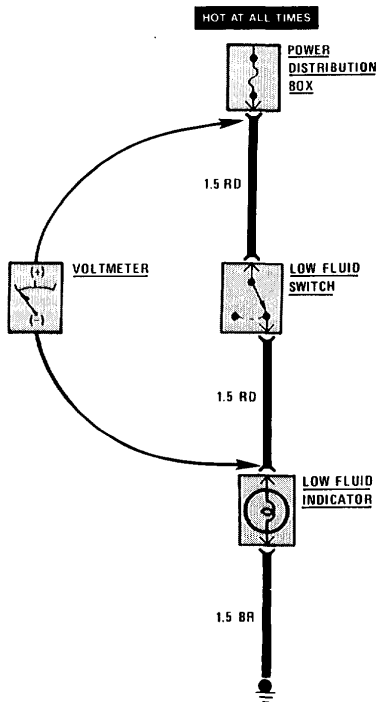


Voltage Test

### Voltage Drop Test

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

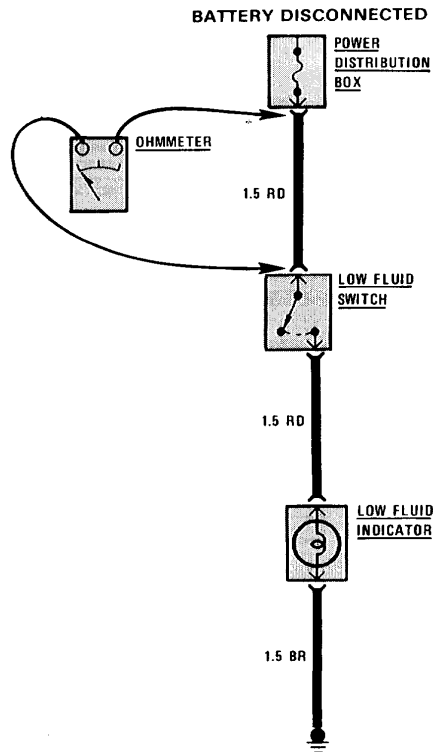
To test for voltage drop, connect the voltmeter leads to connectors at either end of the circuit's suspected problem area. The positive lead should be connected to the connector closest to the power source. The voltmeter will show the voltage drop between these two points.



Voltage Drop Test

### Continuity Test

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

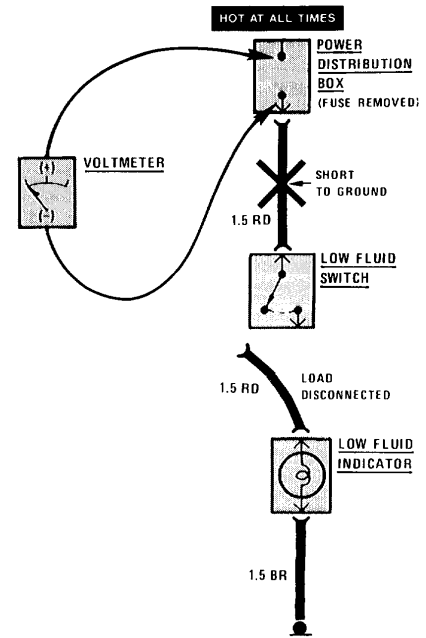


Continuity Test

### Short Test Using Voltmeter

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

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



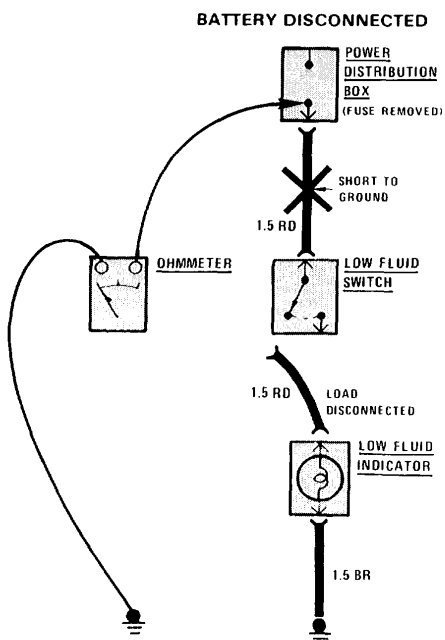
Short Test Using Voltmeter

## 8 SYSTEMATIC TROUBLESHOOTING

### Short Test Using Ohmmeter

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

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



Short Test Using Ohmmeter



102 POWER DISTRIBUTION BOX

**NOTE**  
On some cars, the position of the side mounted relays may be interchanged on their respective sides. Check relay wire colors for positive identification.

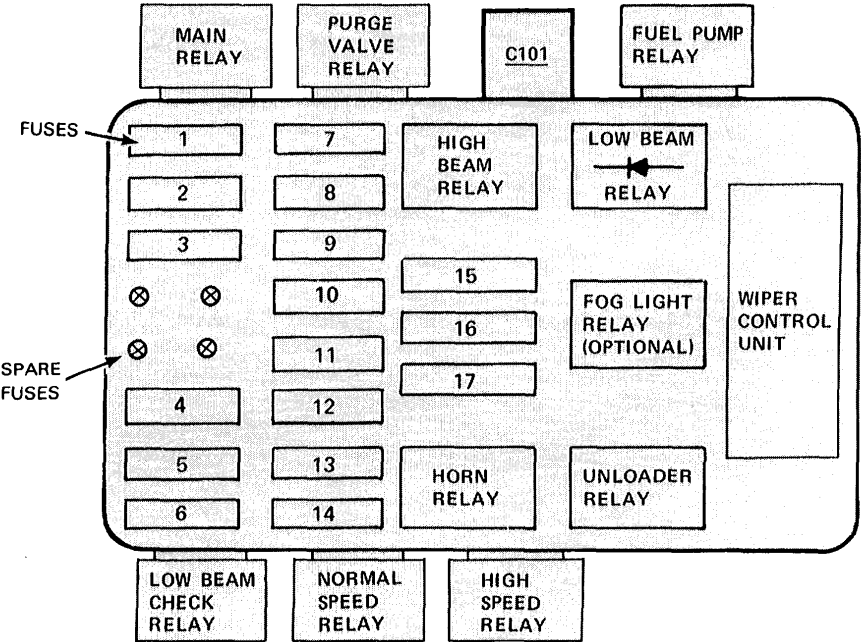


Figure 1 - Top Of Left Front Wheel Well



## FUSE DATA 103

FUSE NO.	SIZE/ COLOR	CIRCUIT NAME
1	16A (RD)	Fuel Delivery/Evaporative Control.
2	8A (WT)	Active Check Control (also fuse 5, 6, 9, 10, 11, 12); Headlights (RH Low Beam).
3	8A (WT)	Active Check Control (also fuses 5, 6, 9, 10, 11, 12); Headlights (LH Low Beam).
4	25 (BU)	Cigar Lighter; Active Check Control (also fuses 2, 3, 6, 9, 10, 11, 12); Central Locking; Gauges (also fuse 6); Glove Box Light; Heated Door Lock;
5	8A (WT)	Ignition Key Warning/Seatbelt Warning (also fuse 6); Interior Lights (also fuse 6); Lights: Turn/Hazard Warning (also fuse 11); Lights: Trunk; Auto-Charging Flashlight; Auto-Charging Flashlight; On-Board Computer (also fuses 6, 12); Radio/Power Antenna (also fuses 4, 12); Service Interval Indicator (also fuse 6).
		Active Check Control (also fuses 2, 3, 5, 9, 10, 11, 12); Back Up Lights/Transmission Range Lights; Brake Lining Warning; Cruise Control (also fuse 12); Dash Lights (also fuse 9, 14); Fog Lights (also fuses 15, 16); Gauges (also fuse 5); Heater/Air Conditioning (also fuse 14);
6	8A (WT)	Idle Speed Control; Ignition; Interior Lights (also fuse 5); On-Board Computer (also fuses 5, 12); Power Mirrors; Power Windows (also Power Window Circuit Breaker); Seatbelt Warning (also fuse 5); Service Interval Indicator (also fuse 5); Speedometer; Warning Indicators (also fuse 15).
7	8A (WT)	Headlights (RH High Beams).

FUSE NO.	SIZE/ COLOR	CIRCUIT NAME
8	8A (WT)	Headlights (LH Low Beams).
9	8A (WT)	Active Check Control (also fuses 2, 3, 5, 6, 10, 11, 12); Dash Lights (also fuses 6, 14); Lights: Front Park/Front Marker/Tail; Lights: Rear Marker/License.
10	8A (WT)	Active Check Control (also fuse 2, 3, 5, 6, 9, 11, 12); Lights: Front Park/Front Marker/Tail.
11	16A (RD)	Active Check Control (also fuse 2, 3, 5, 6, 9, 11, 12); Lights: Turn/Hazard Warning (also fuse 5); Wiper/Washer and Heater Washer Jets.
12	8A (WT)	Active Check Control (also fuses 2, 3, 5, 6, 9, 10, 11); Cruise Control; Radio (also fuses 4, 5); Stoplights; On-Board Computer (also fuses 5, 6); Power Antenna (also fuses 4, 5).
13	25A (BU)	Rear Defogger; Sunroof.
14	25A (BU)	Auxiliary Fan (also fuse 17); Dash Lights (also fuses 6, 9); Heater/Air Conditioning (also fuse 6).
15	8A (WT)	Fog Lights (RH).
16	8A (WT)	Fog Lights (LH).
17	25A (BU)	Auxiliary Fan (also fuse 14).
Power Window Circuit Breaker	25A	Power Windows (also fuse 6).

## 104 DIAGNOSTIC CONNECTOR

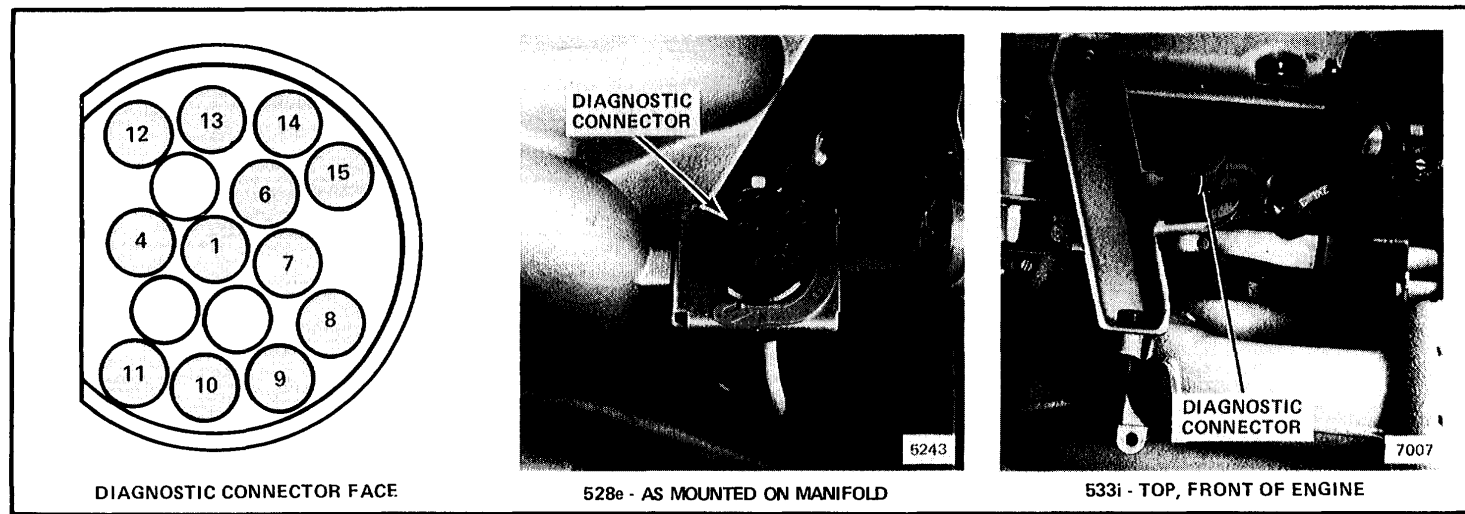
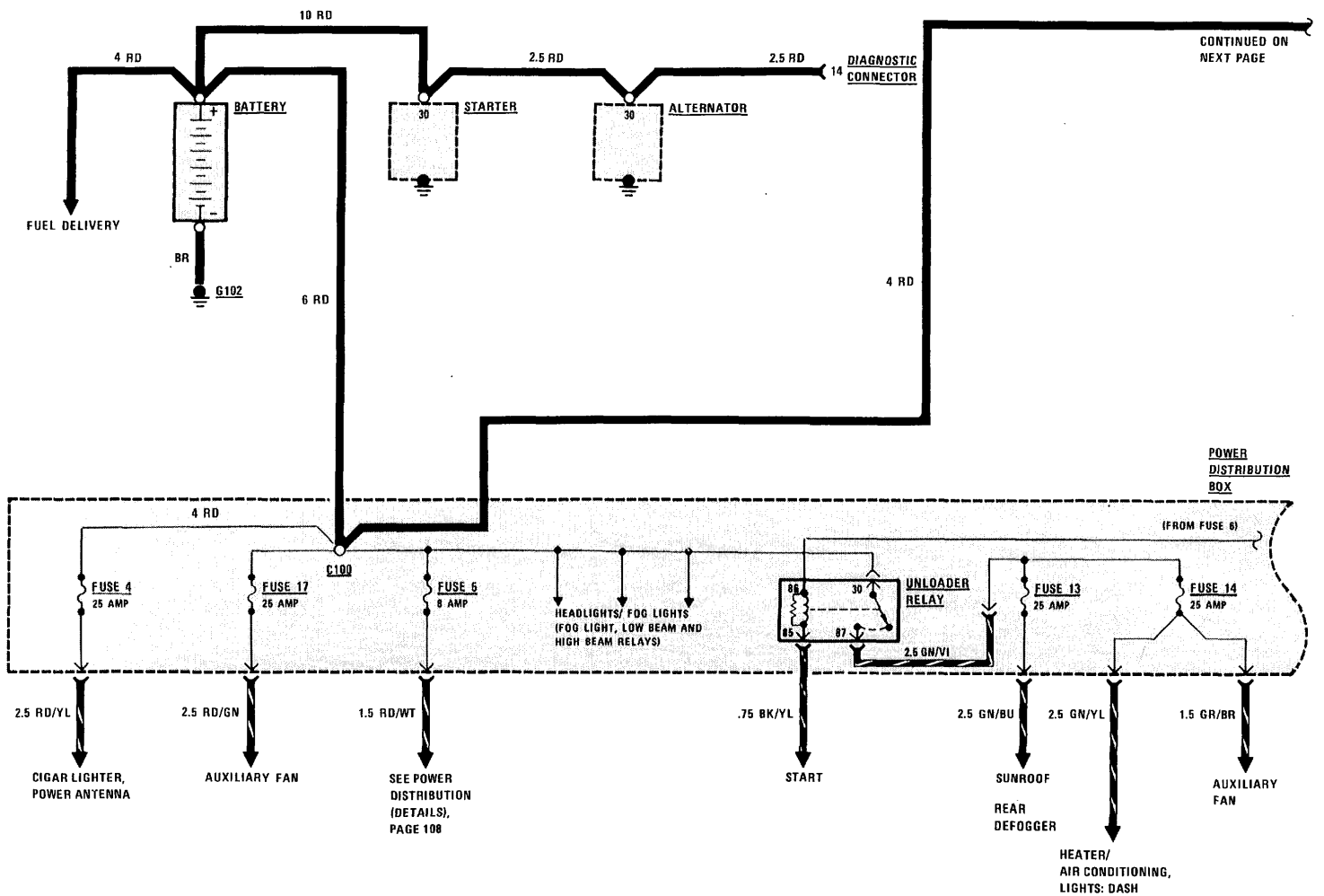


Figure 1 - Top Of Engine

PIN	WIRE SIZE	WIRE COLOR	CIRCUIT AND COMPONENT CONNECTED
1	1.5	BR	Ground Distribution, G103
4	.5	BR/VI	Gauges/Warning Indicators, Coolant Temperature Sender.
6	.5	WT/BK	Not Used
7	.5	WT/BU	Service Interval Indicator, Service Interval Processor (Reset).
8	.5	YL	Ignition, TDC Sensor.
9		SHIELD	Ignition, TDC Sensor.
10	.5	BK	Ignition, TDC Sensor.
11	2.5	BK/YL	Start, Start Signal.
12	.75	BU	Charge System, Alternator..
13	1	GN	Ignition, Ignition Coil.
14	2.5	RD	Charge System, Alternator.
15	1.5	GN/YL	Idle Speed Control, Idle Speed Control Unit.

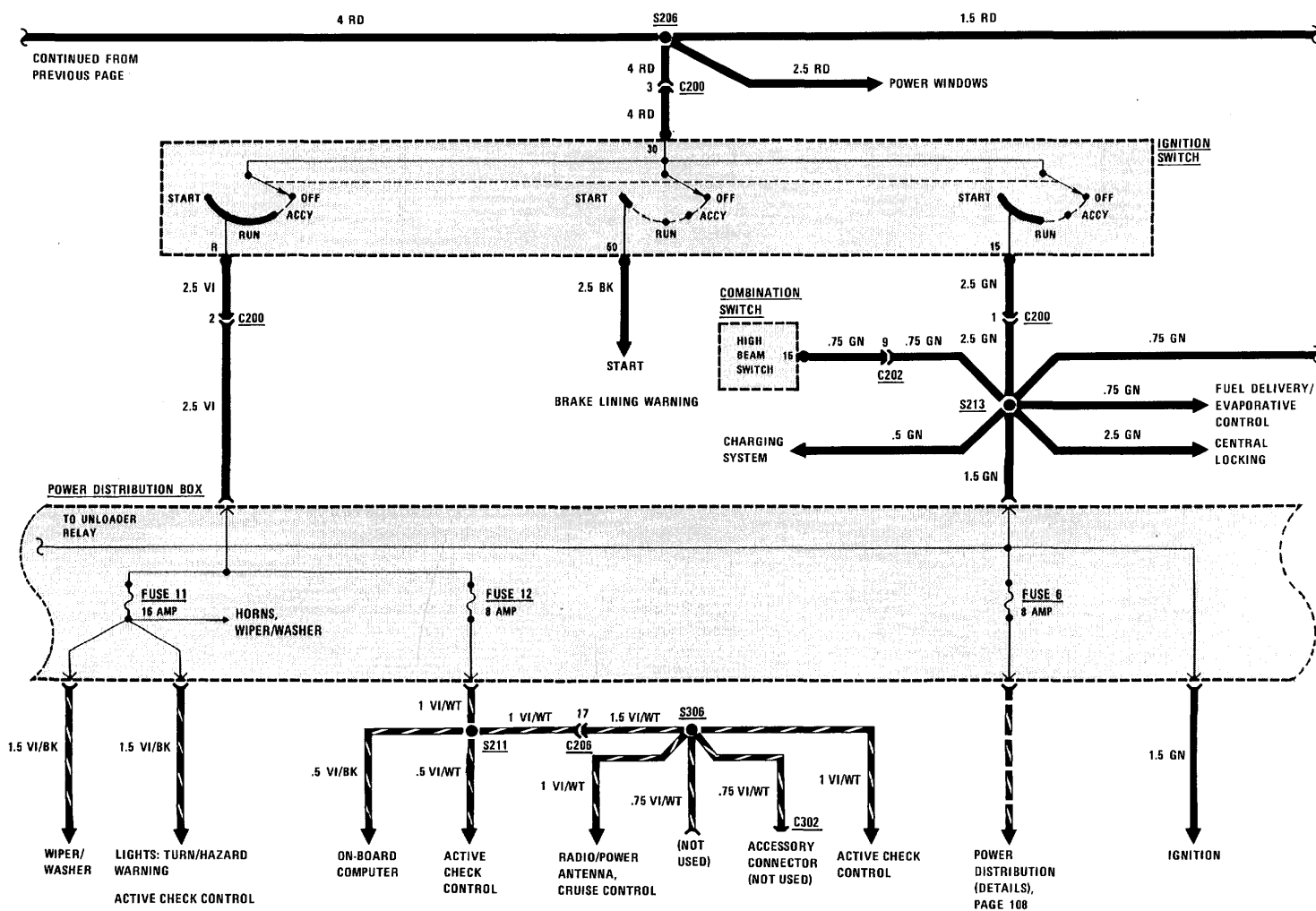
## POWER DISTRIBUTION 105

(For Component Locations See Page 210)



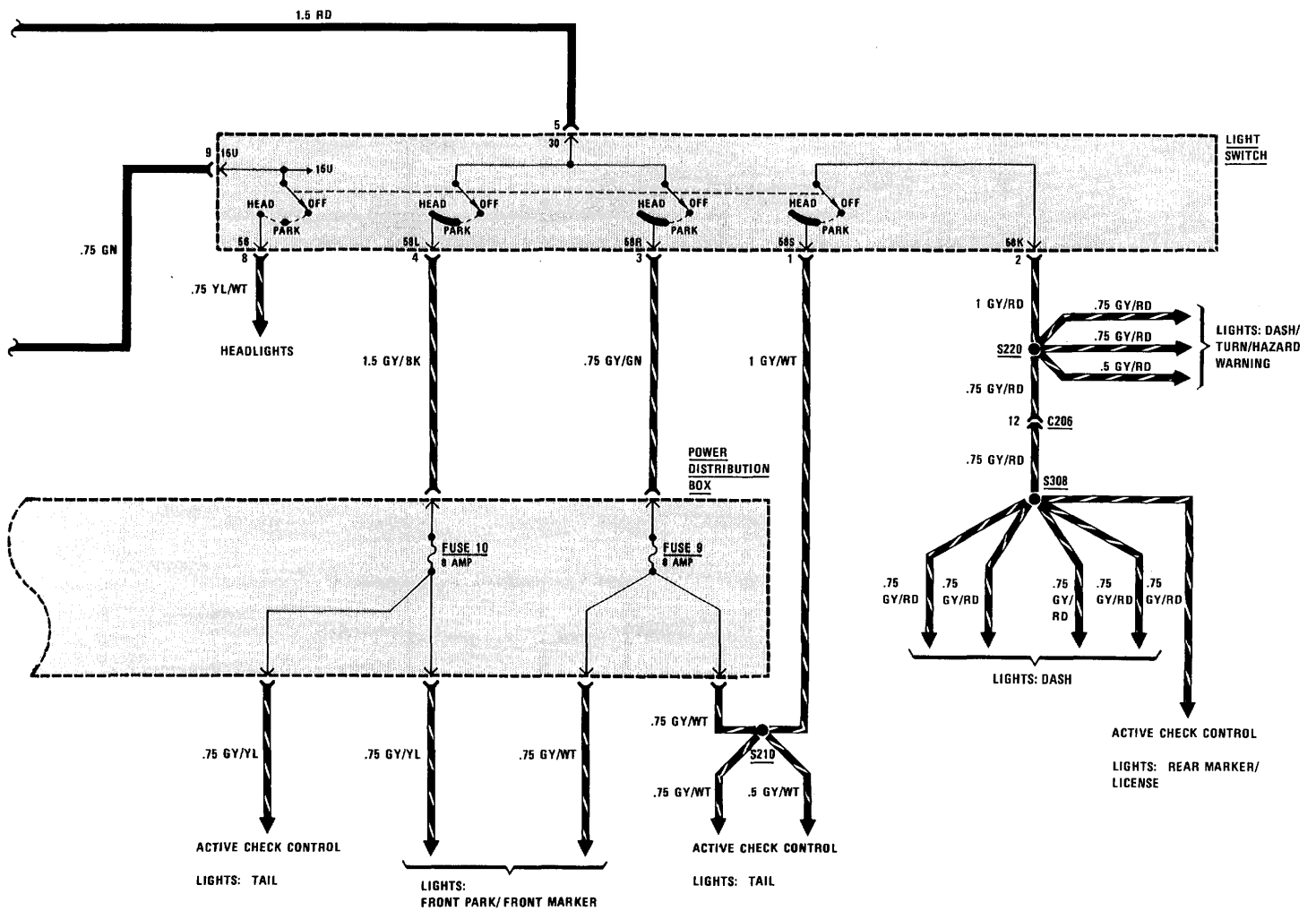
## 106 POWER DISTRIBUTION

(For Component Locations See Page 210)



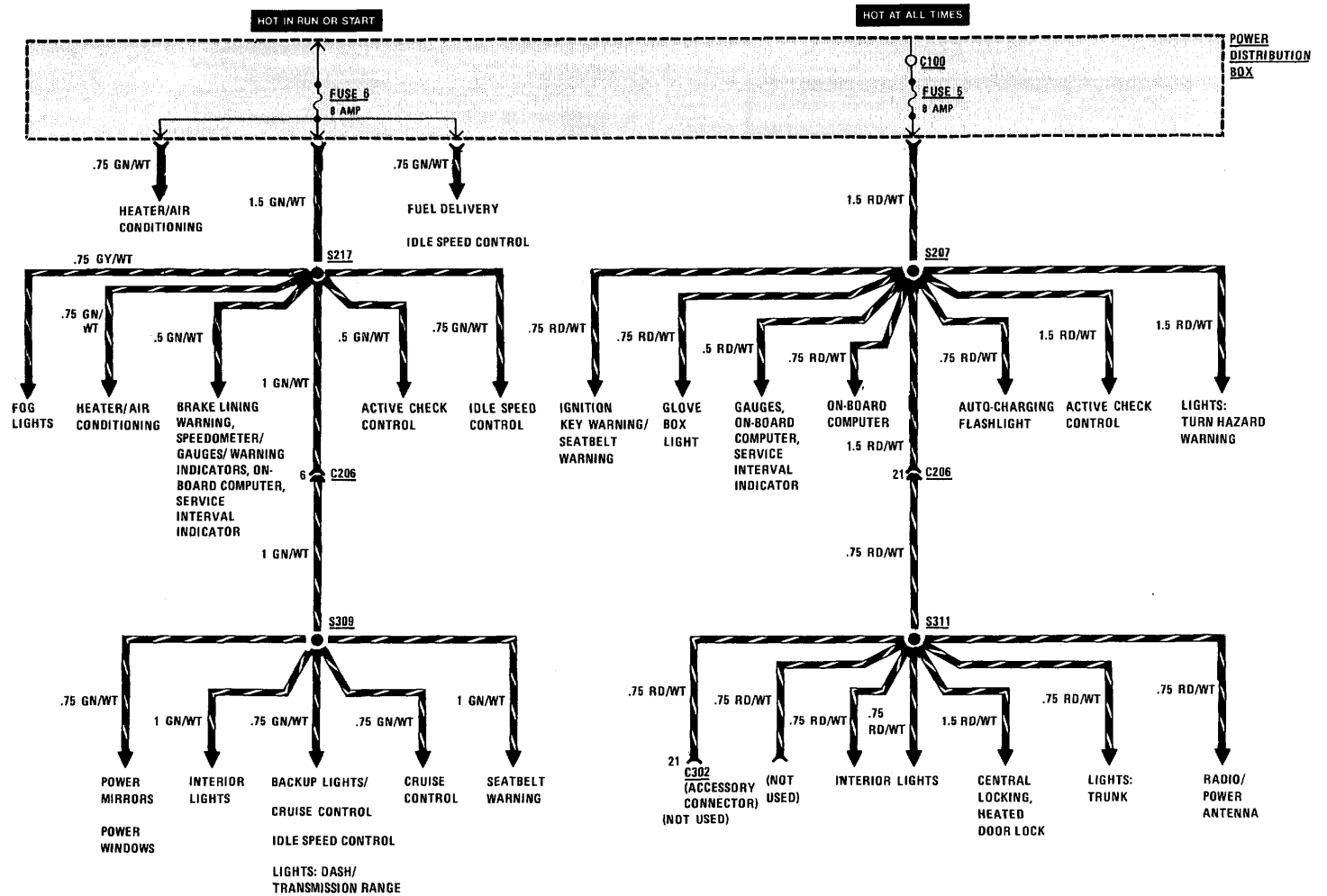
## POWER DISTRIBUTION 107

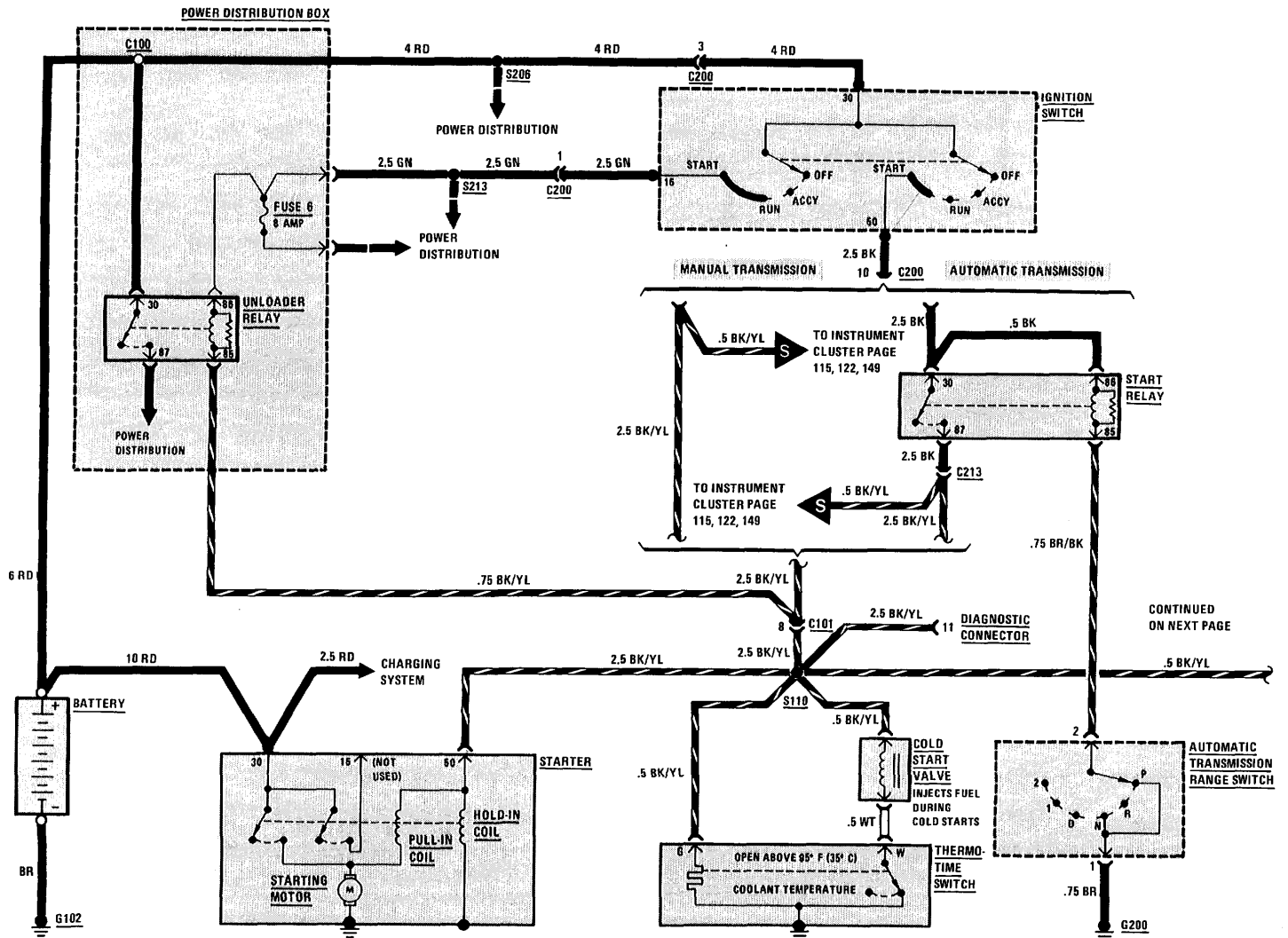
(For Component Locations See Page 210)



## 108 POWER DISTRIBUTION (DETAILS)

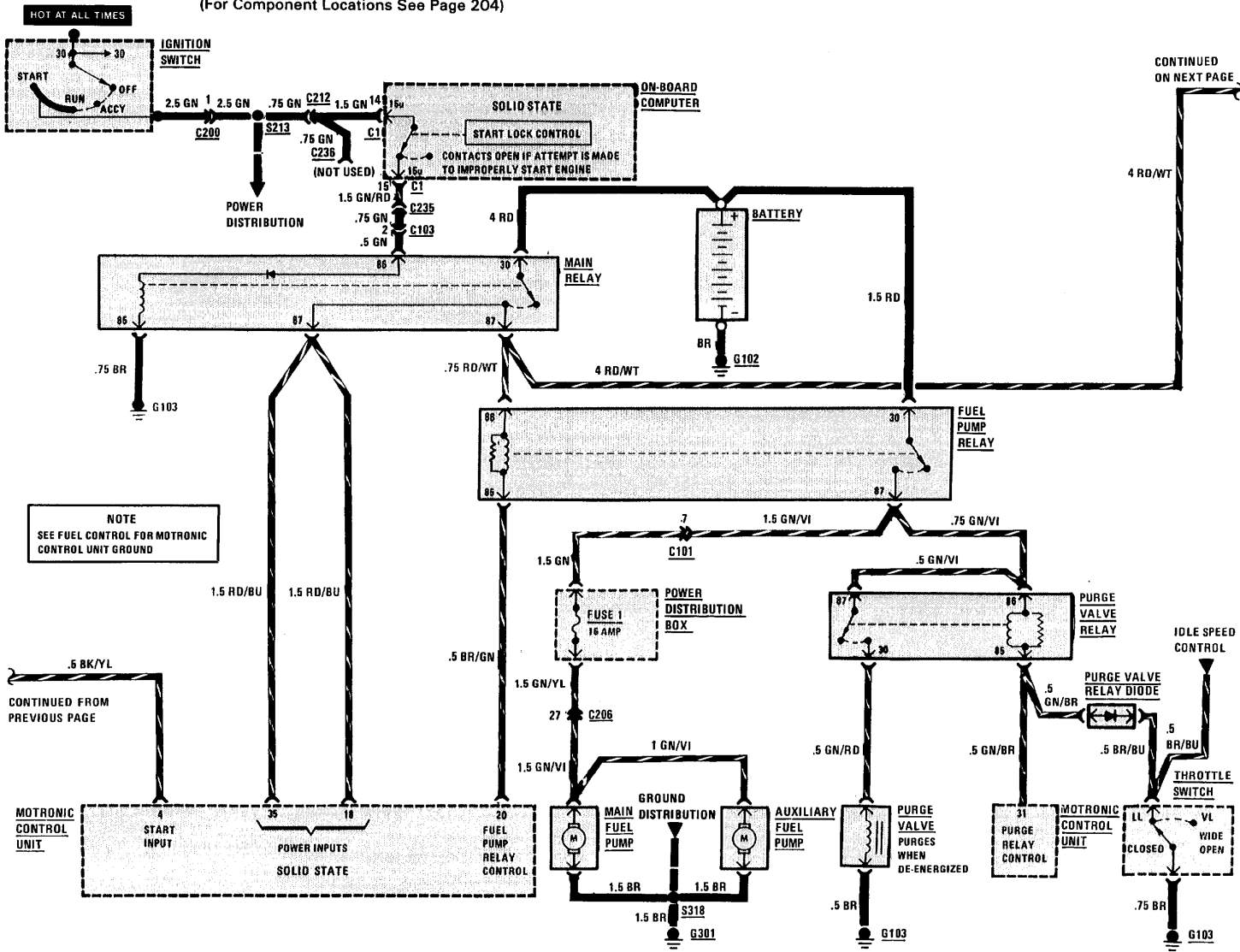
(For Component Locations See Page 210)





## 110 FUEL DELIVERY/EVAPORATIVE CONTROL

(For Component Locations See Page 204)





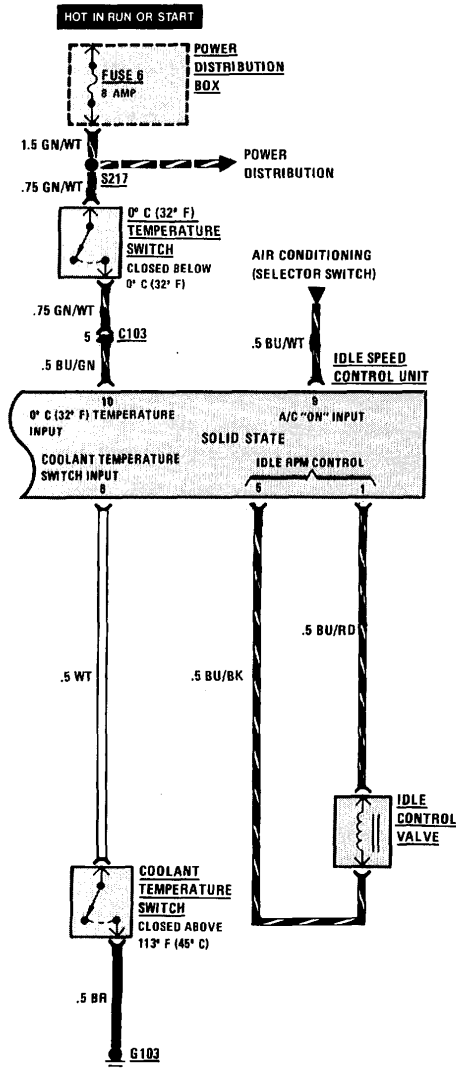
(For Component Locations See Page 204)



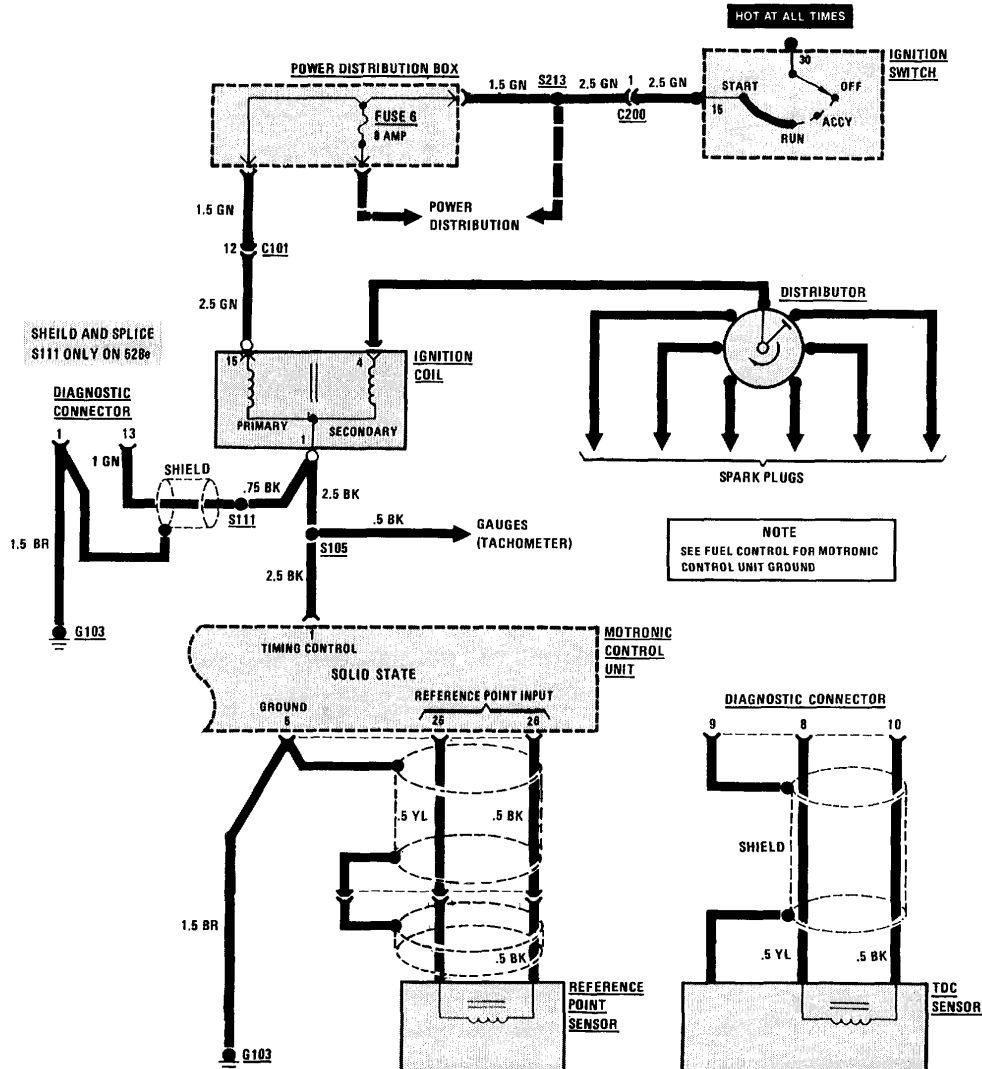
(For Component Locations See Page 206)



(For Component Locations See Page 206)

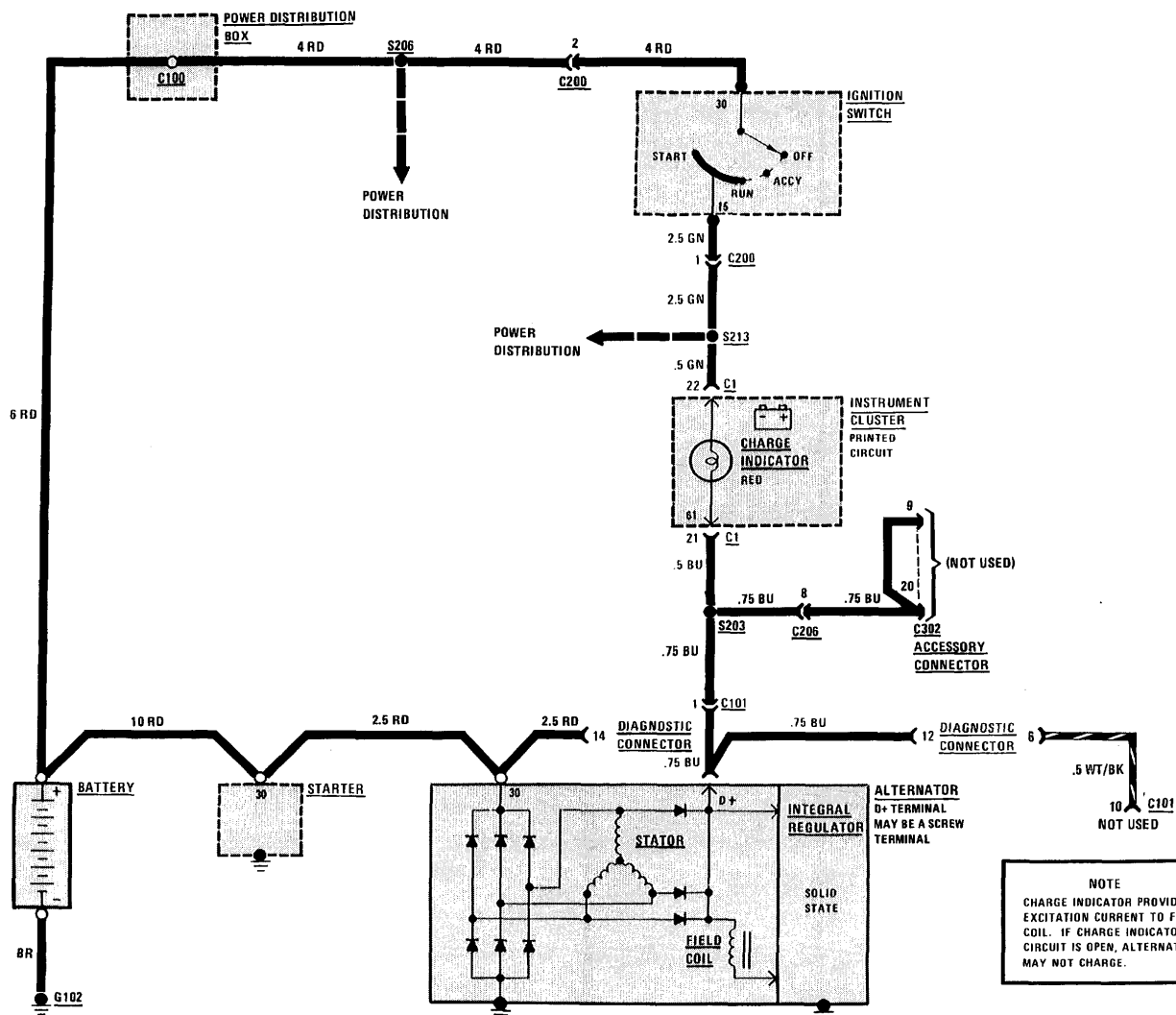


(For Component Locations See Page 207)



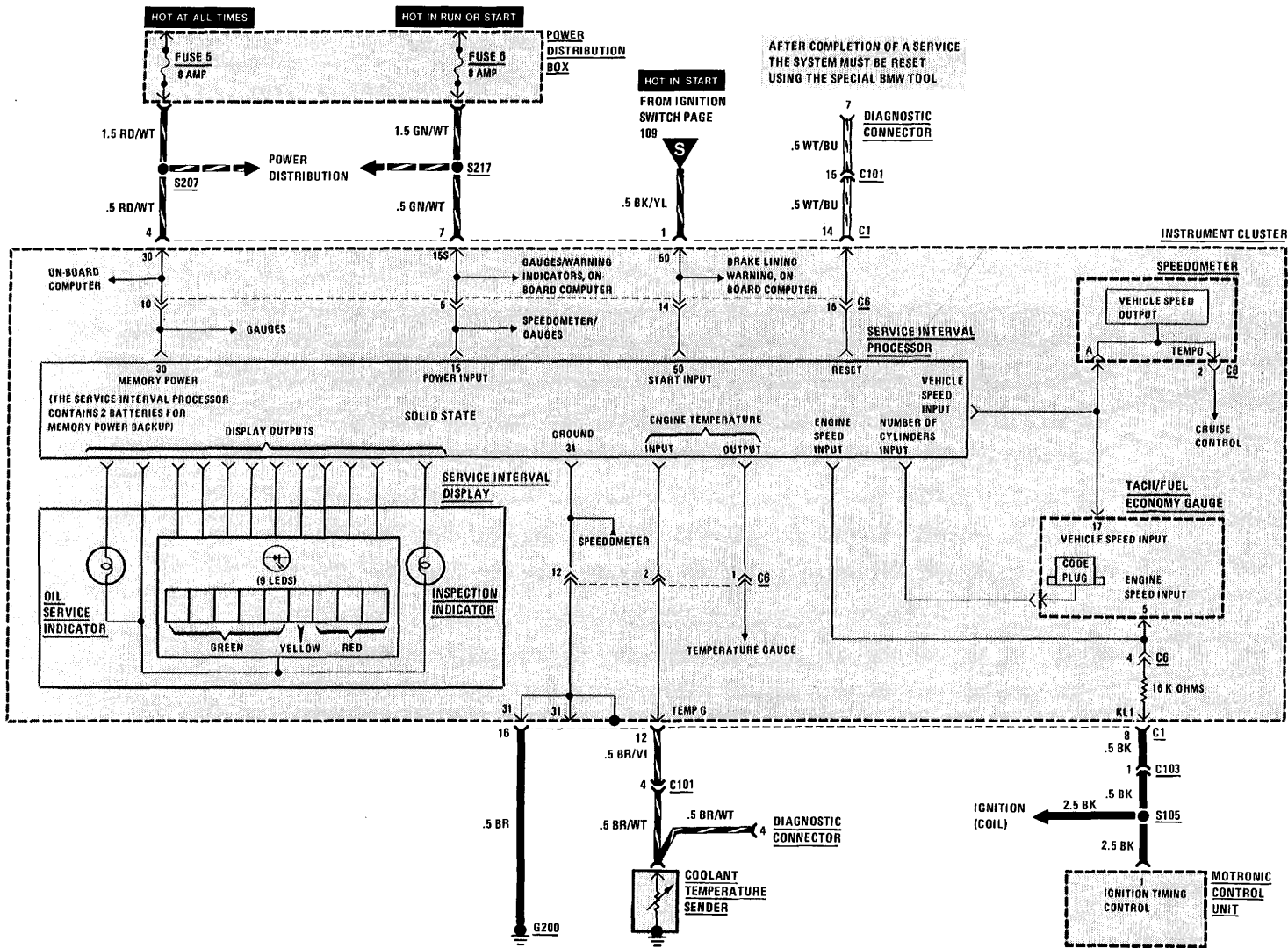
## 114 CHARGING SYSTEM

(For Component Locations See Page 203)



## SERVICE INTERVAL INDICATOR 115

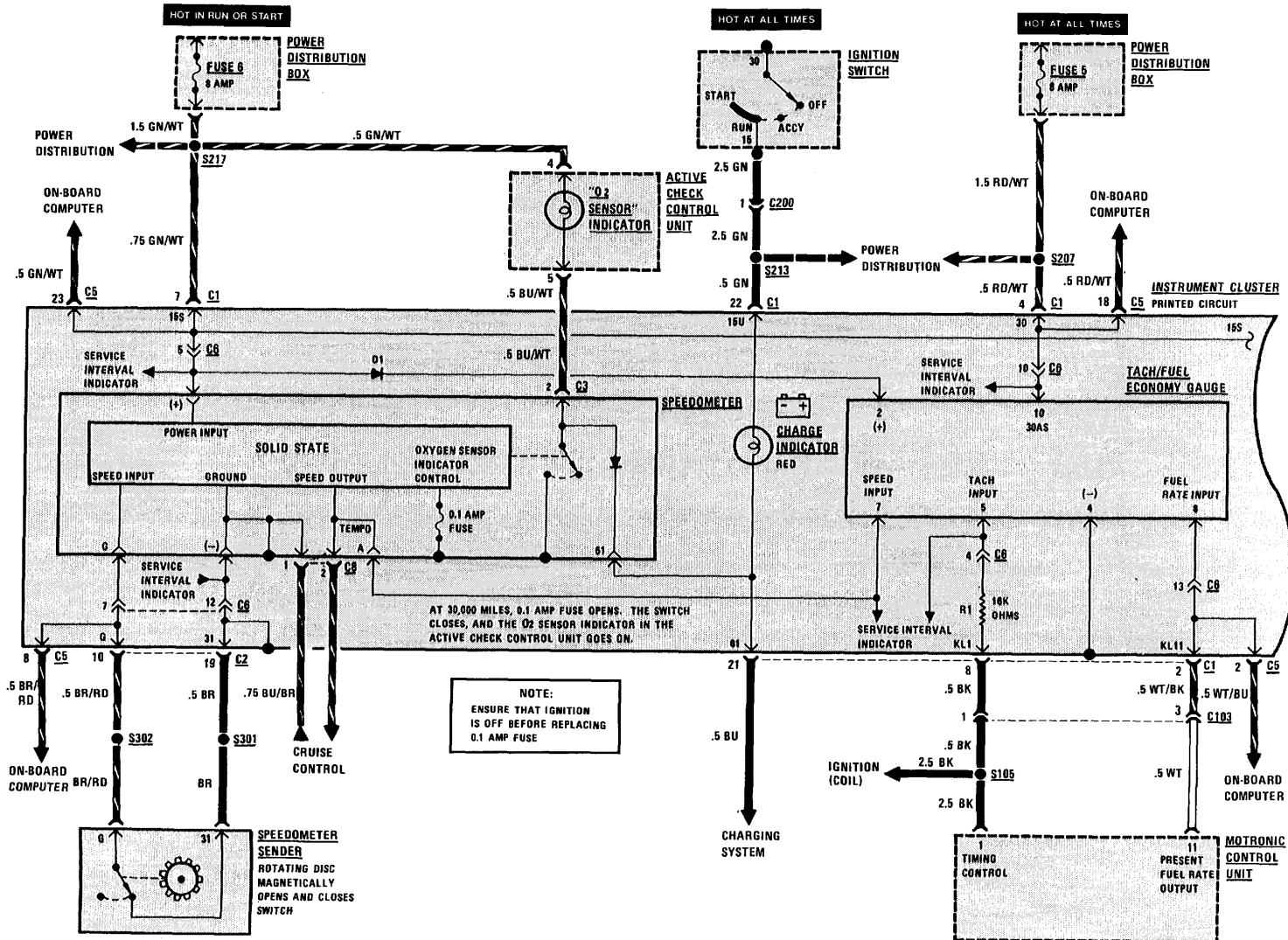
(For Component Locations See Page 211)





# 116 SPEEDOMETER/GAUGES/WARNING INDICATORS

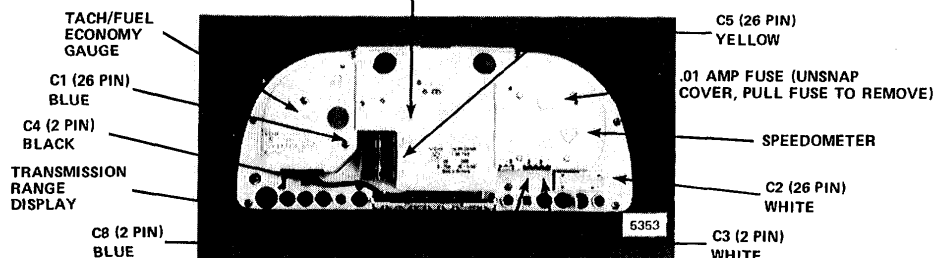
(For Component Locations See Page 216)



## GAUGES/WARNING INDICATORS 117

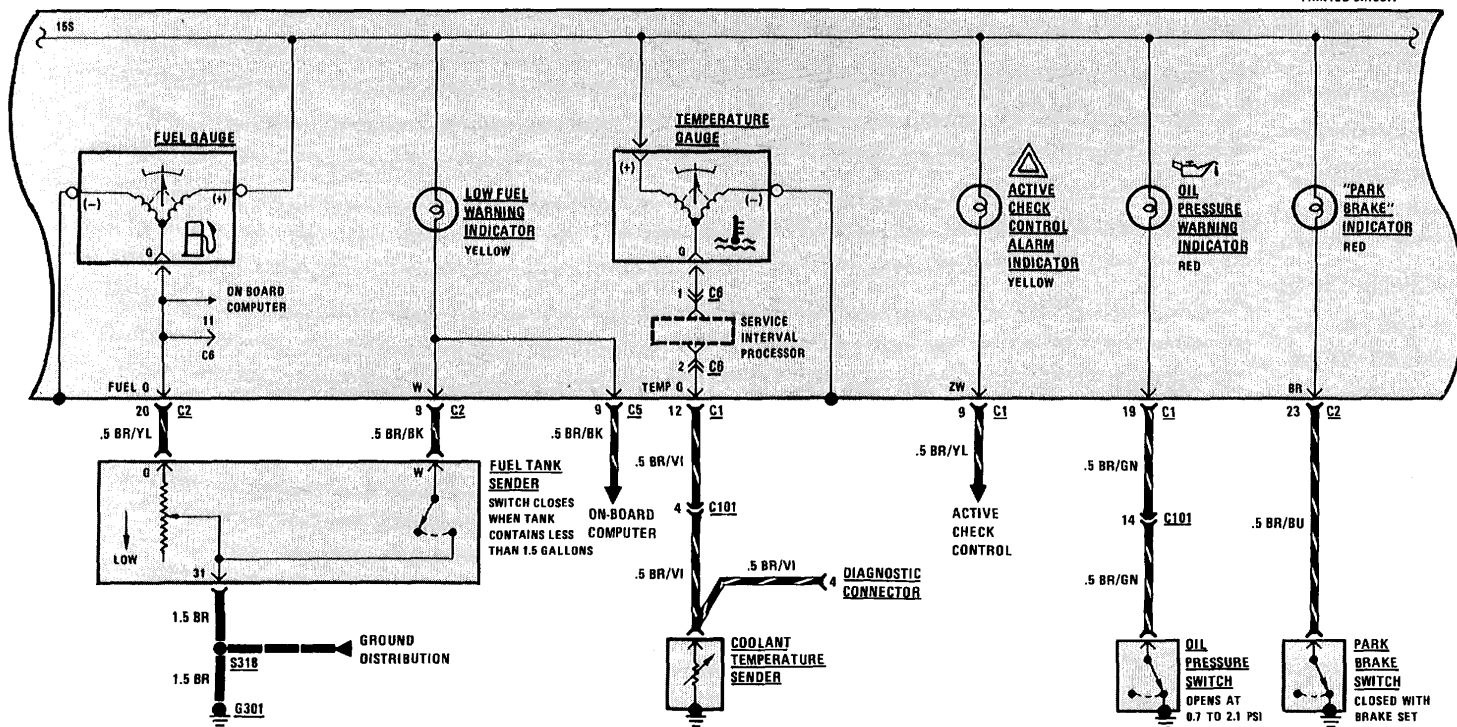
(For Component Locations See Page 216)

C6 (15 PIN)  
UNDER COVER ON  
PRINTER CIRCUIT BOARD  
NEXT TO C5



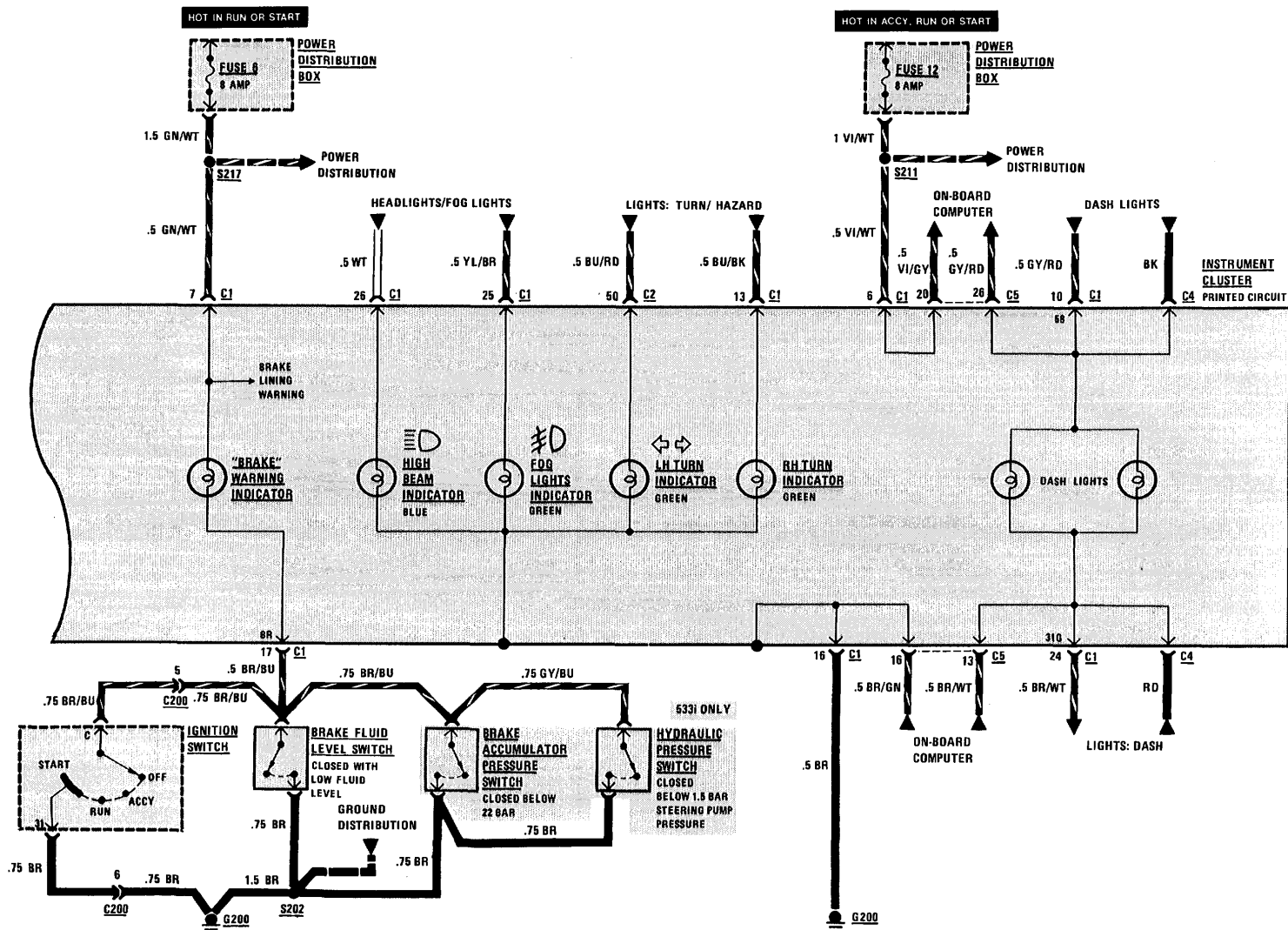
Rear Of Instrument Cluster

INSTRUMENT CLUSTER  
PRINTED CIRCUIT



## 118 WARNING INDICATORS

(For Component Locations See Page 216)





## ACTIVE CHECK CONTROL 119

(For Component Locations See Page 201)

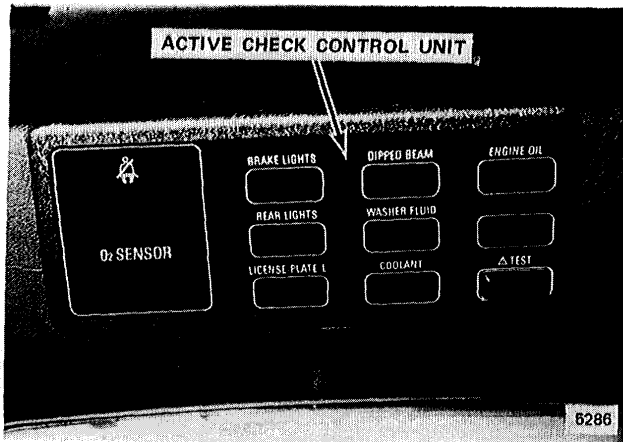
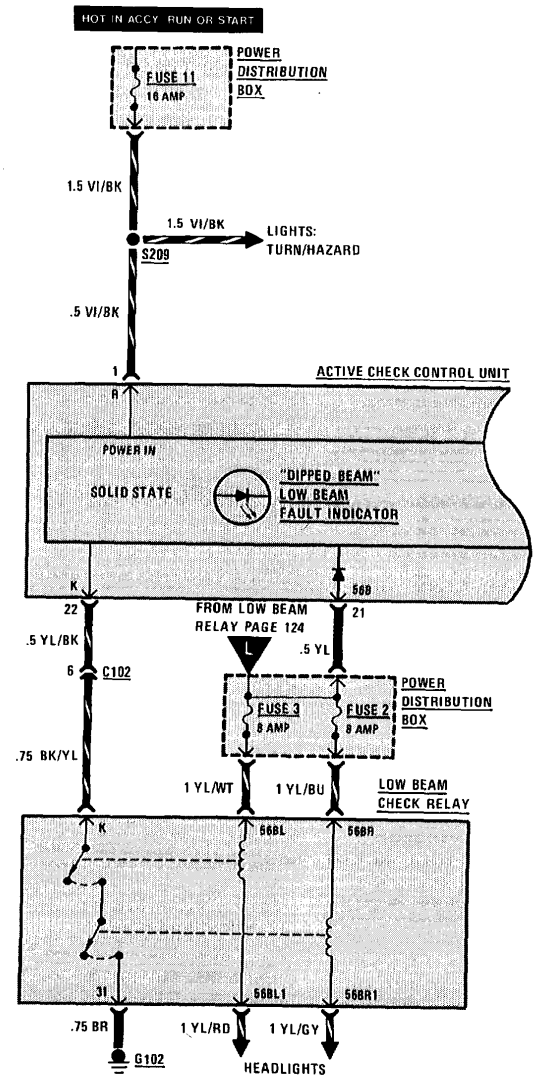


Figure 1 - Above Rear View Mirror

### ACTIVE CHECK CONTROL

1. When the Ignition Switch is initially placed in "Run," the Active Check Control Alarm 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 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.
4. To test the unit, depress the test button. The LED fault indicators and panel light should go on.

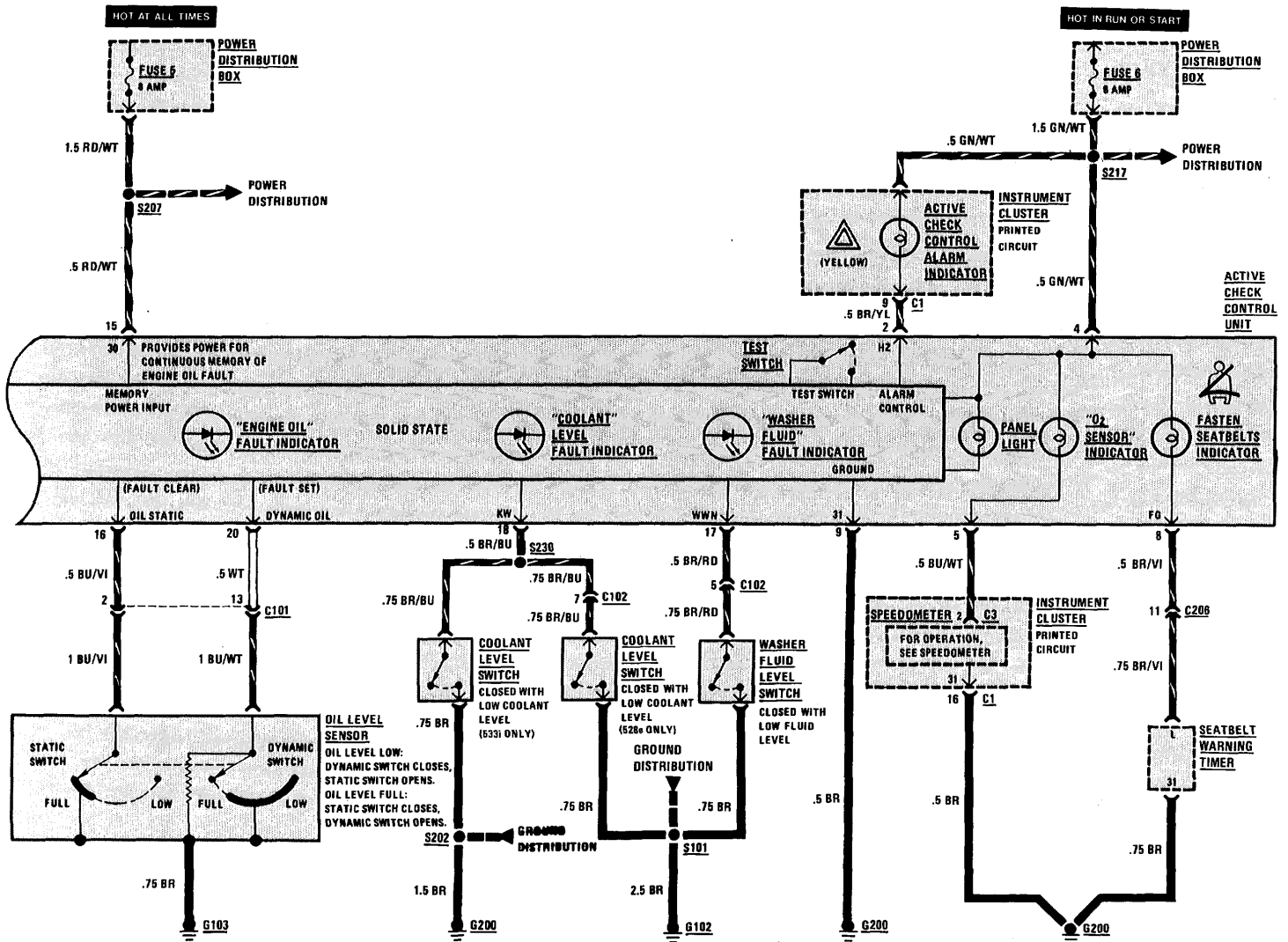


(For Component Locations See Page 201)



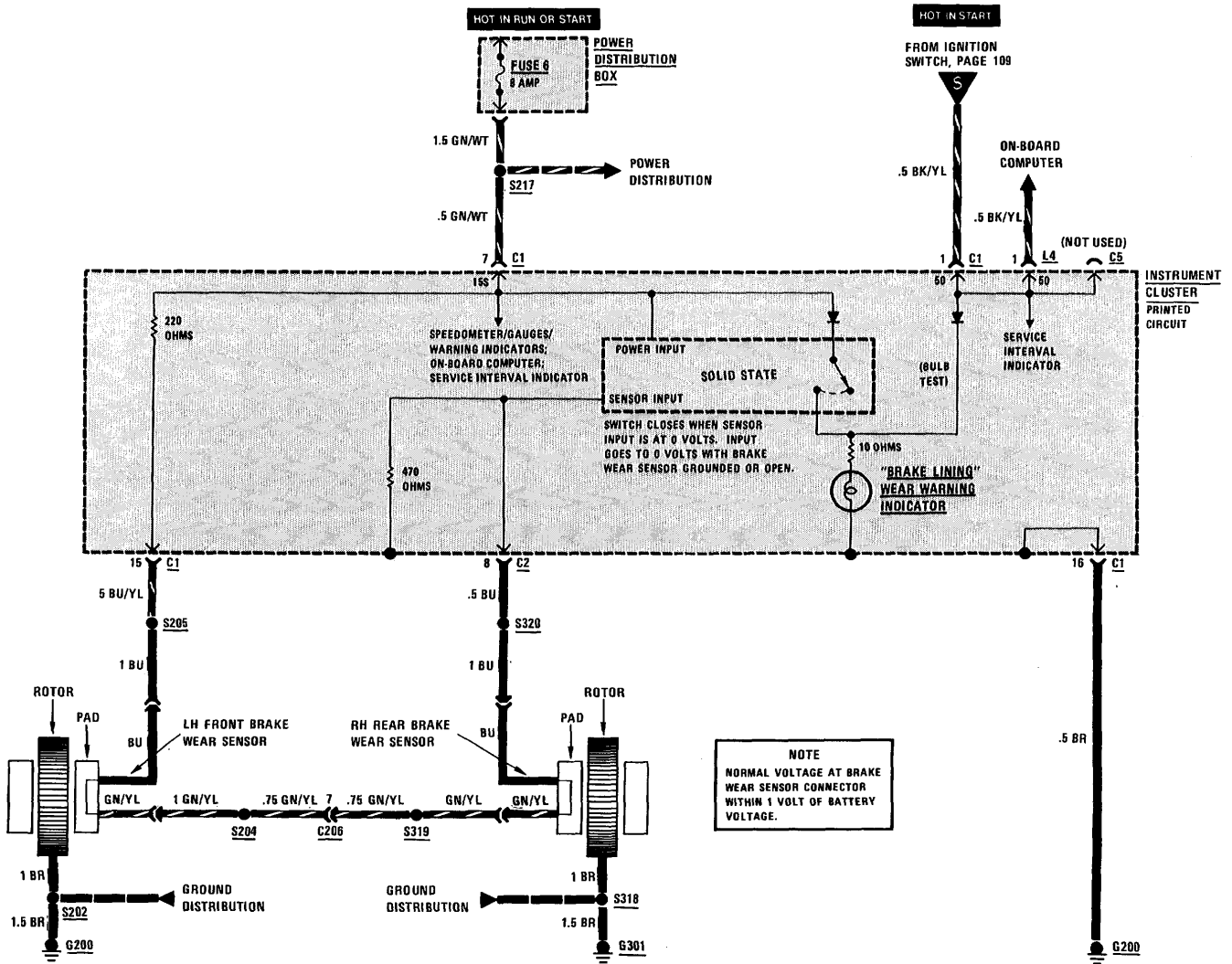
# ACTIVE CHECK CONTROL 121

(For Component Locations See Page 201)



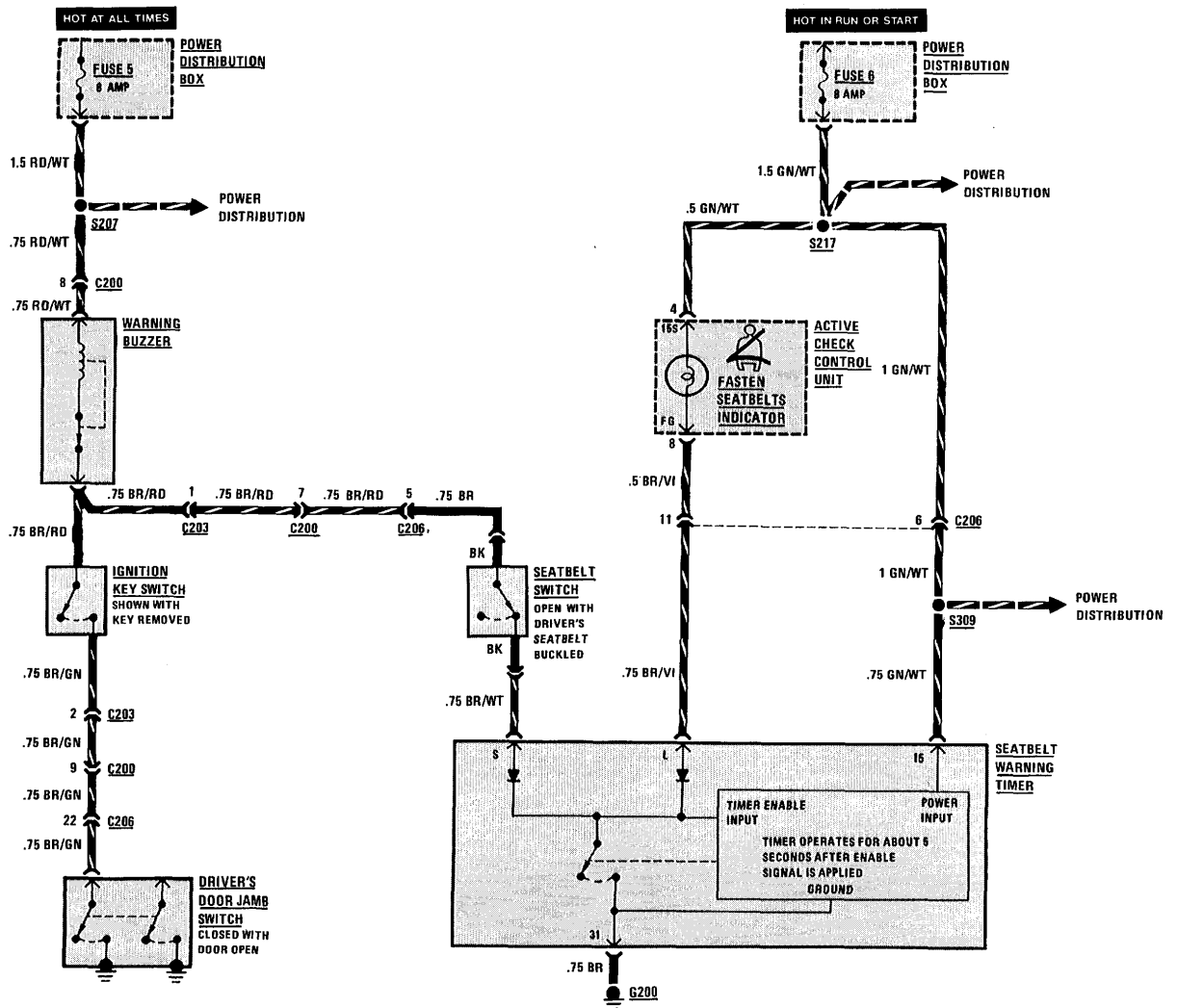
# 122 BRAKE LINING WARNING

(For Component Locations See Page 202)



# IGNITION KEY WARNING/SEATBELT WARNING 123

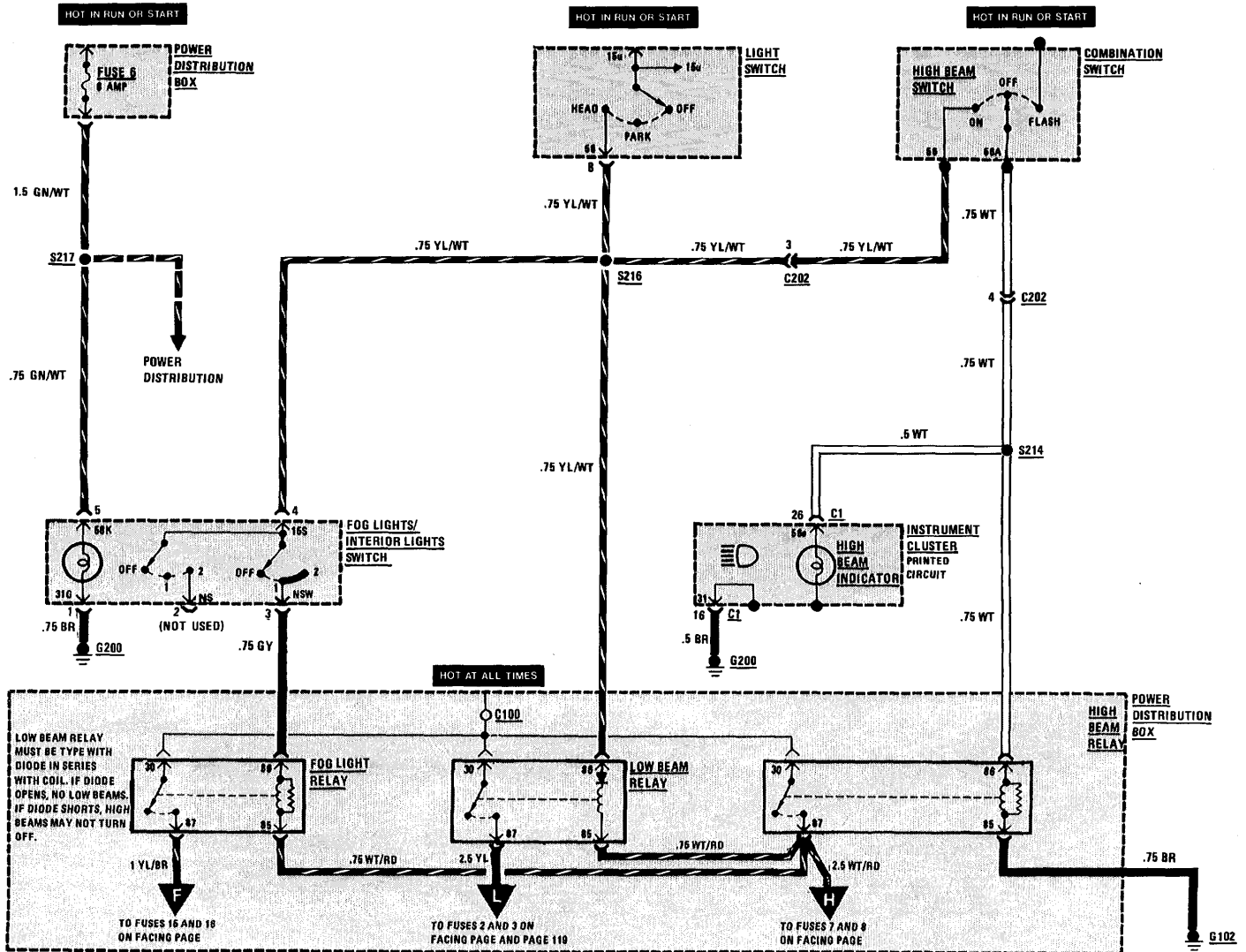
(For Component Locations See Page 207)





## 124 HEADLIGHTS (CONTROL)/FOG LIGHTS (CONTROL)

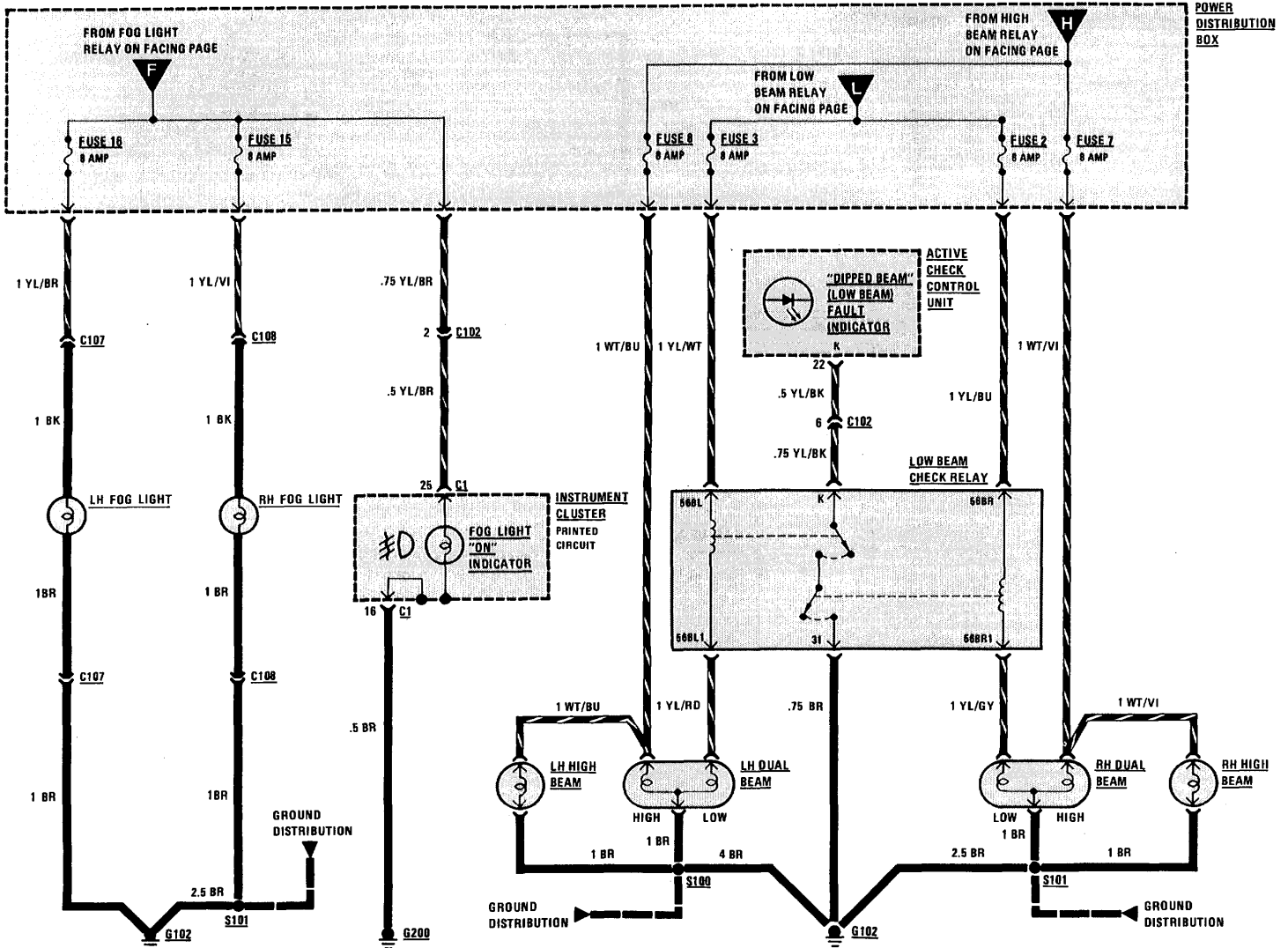
(For Component Locations See Page 205)



CONTINUED ON PAGE 125

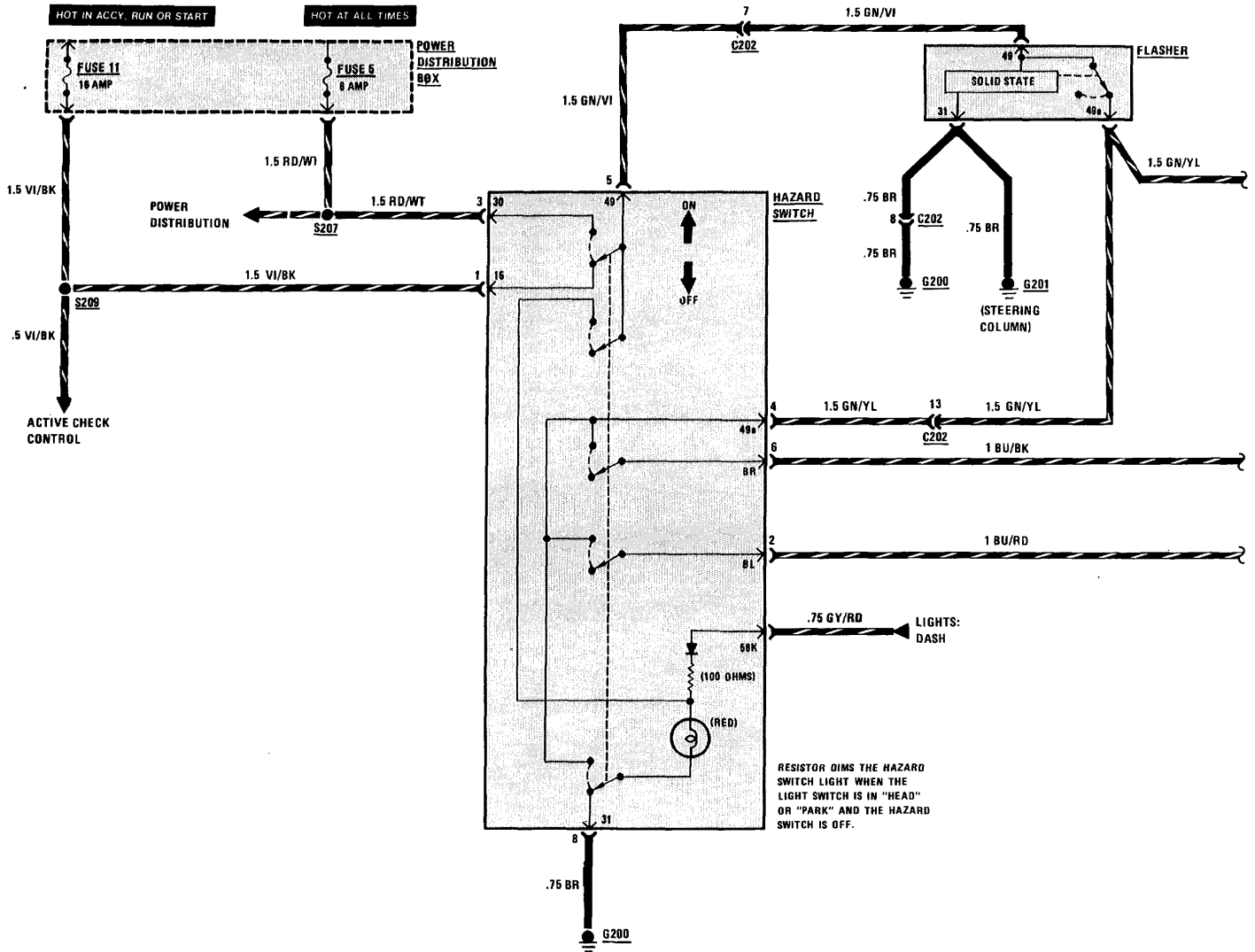
**HEADLIGHTS (POWER)/FOGLIGHTS (POWER) 125**

(For Component Locations See Page 205)



## 126 LIGHTS: TURN/HAZARD WARNING

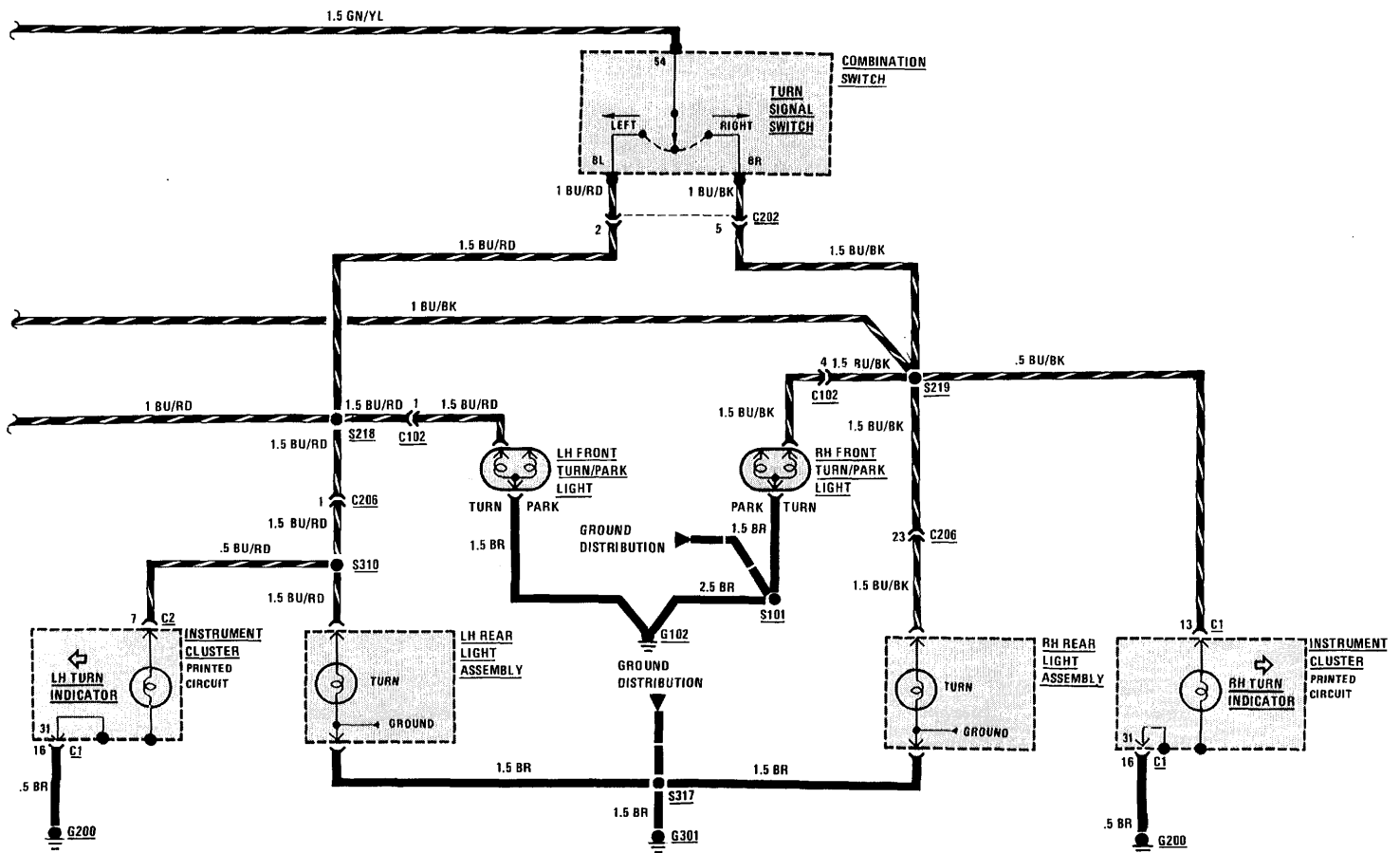
(For Component Locations See Page 209)





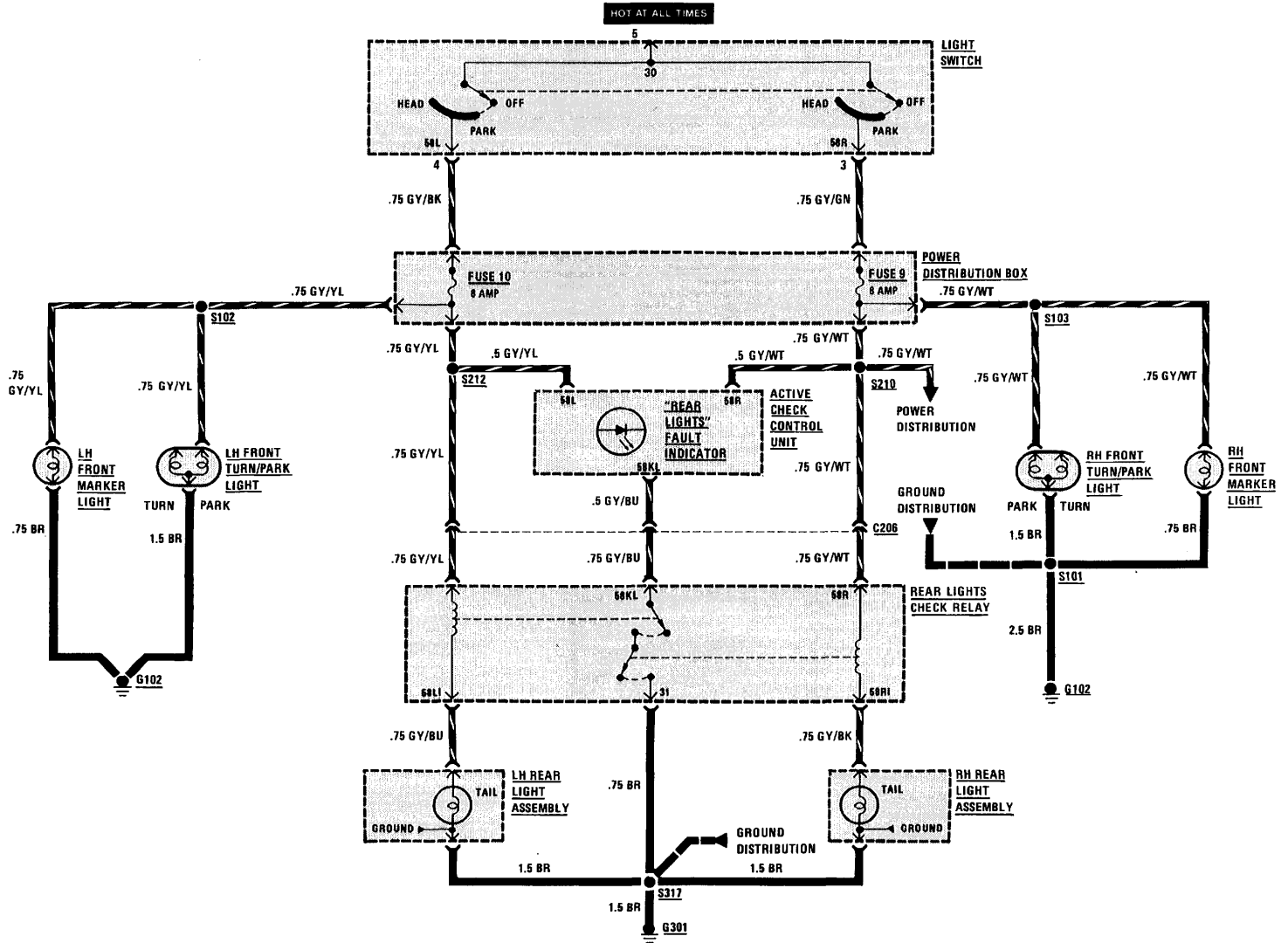
# LIGHTS: TURN/HAZARD WARNING 127

(For Component Locations See Page 209)



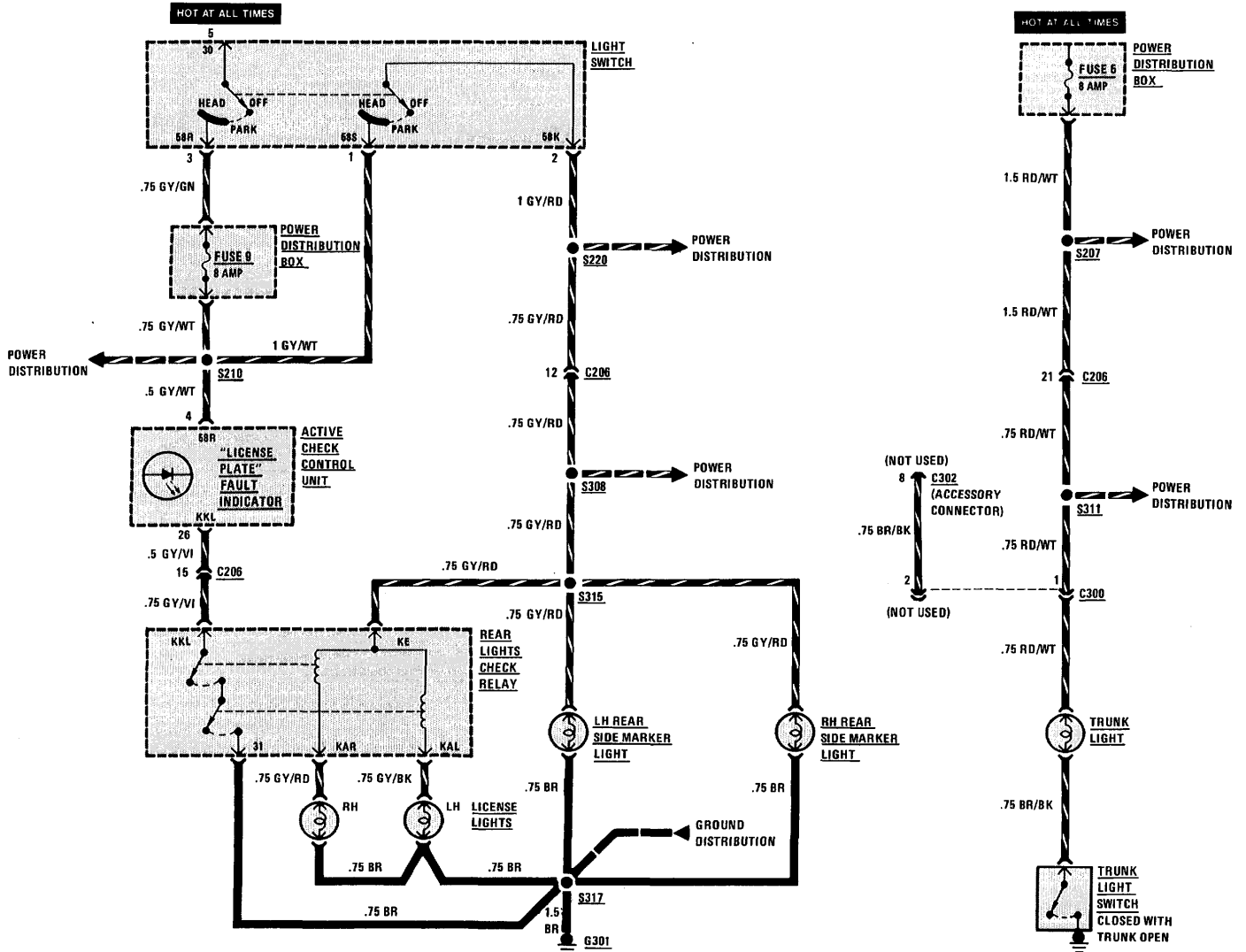
## 128 LIGHTS: FRONT PARK/FRONT MARKER/TAIL

(For Component Locations See Page 208)



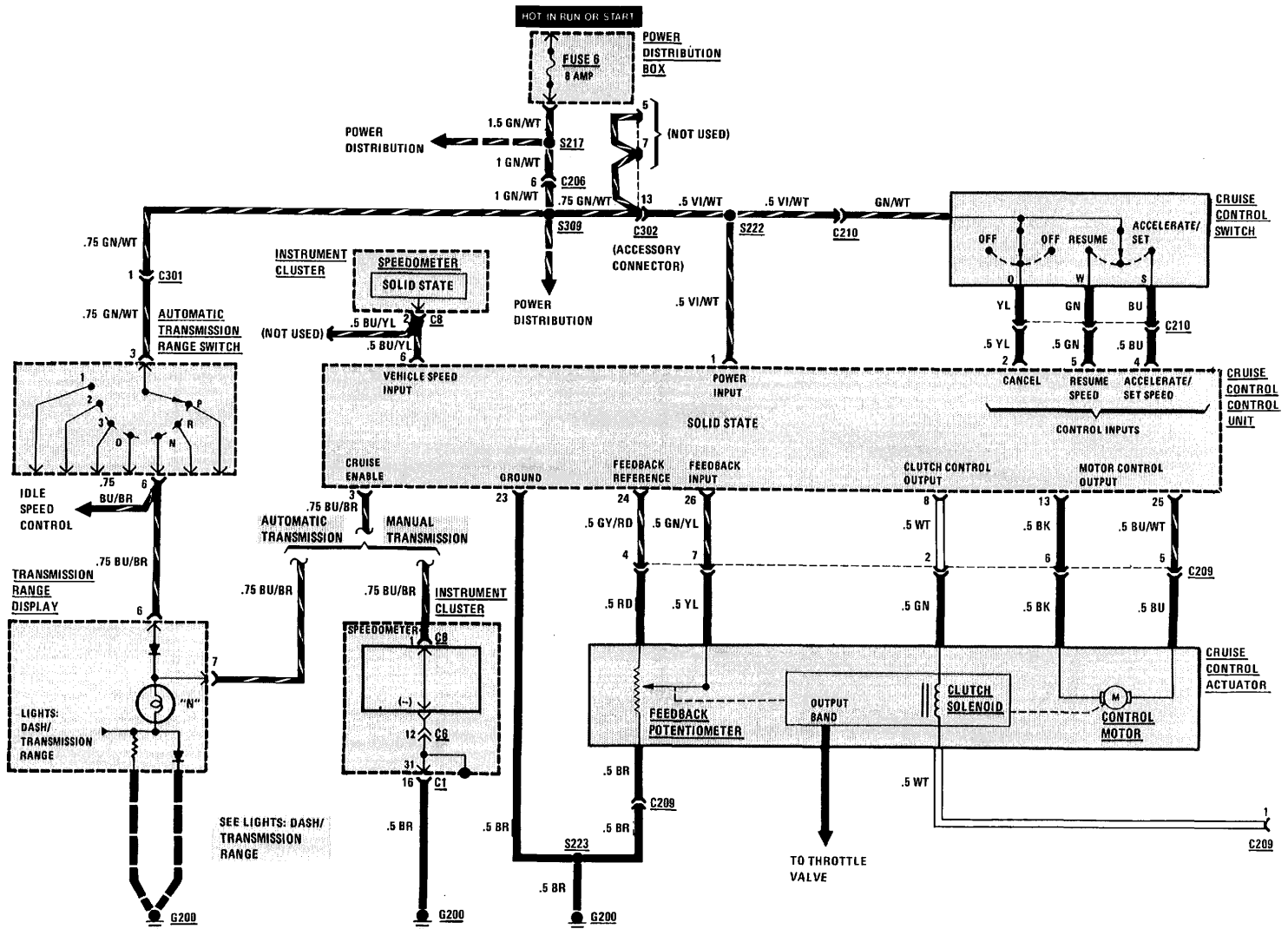
# LIGHTS: REAR MARKER/LICENSE/TRUNK 129

(For Component Locations See Page 208)



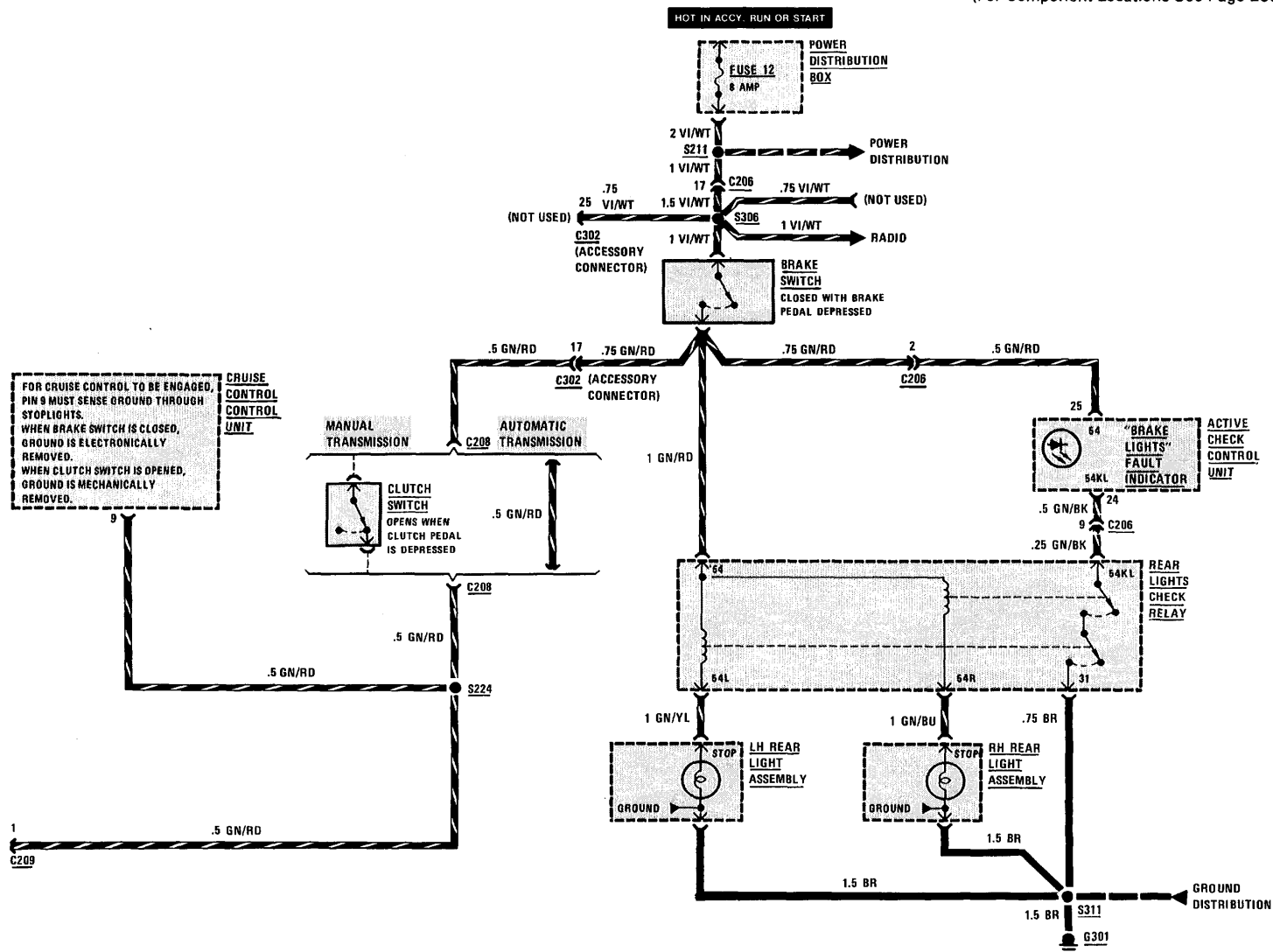
## 130 CRUISE CONTROL/STOPLIGHTS

(For Component Locations See Page 203)



**CRUISE CONTROL/STOPLIGHTS 131**

(For Component Locations See Page 203)



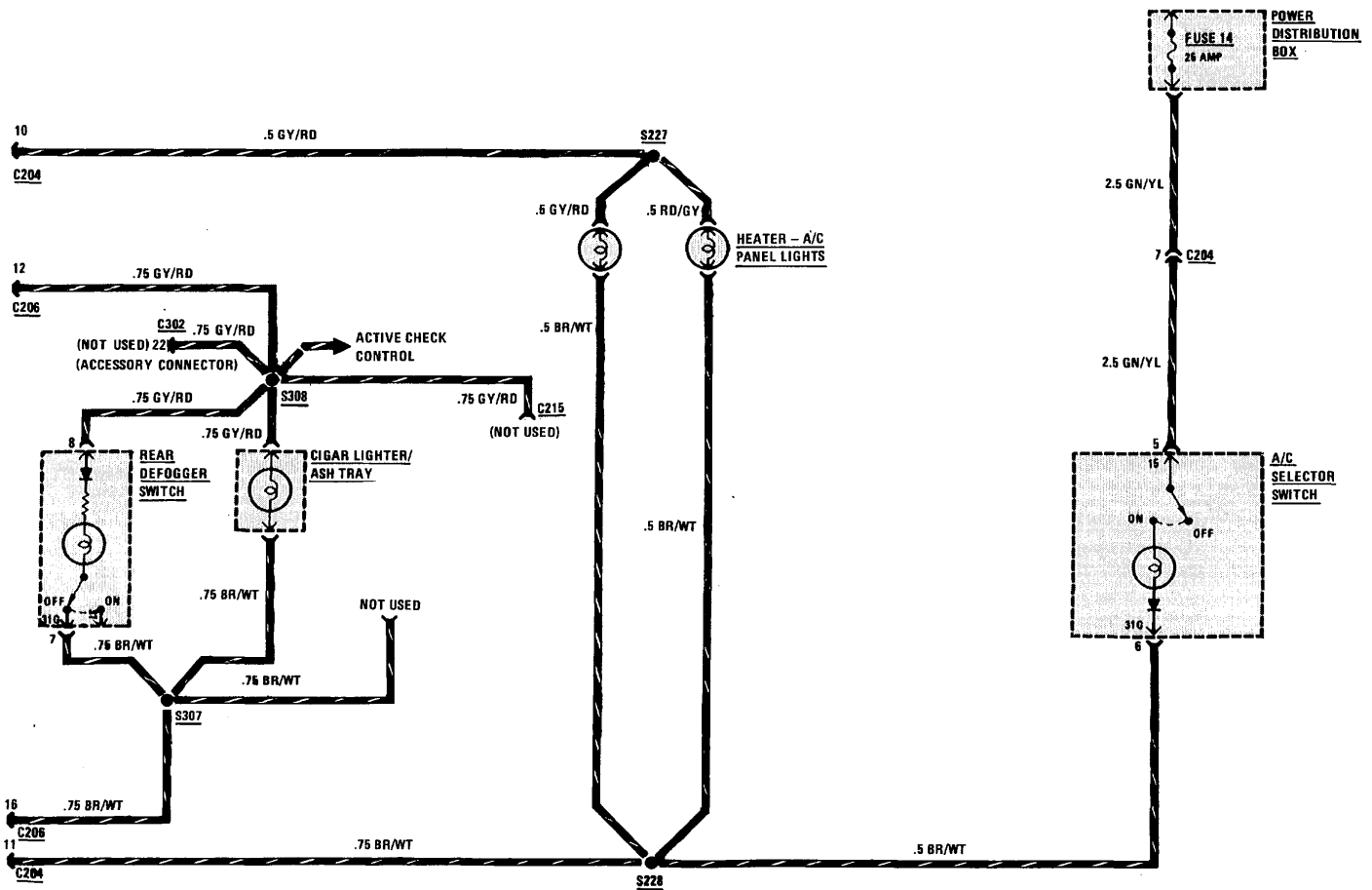
(For Component Locations See Page 208)



## LIGHTS: DASH/TRANSMISSION RANGE 133

(For Component Locations See Page 208)

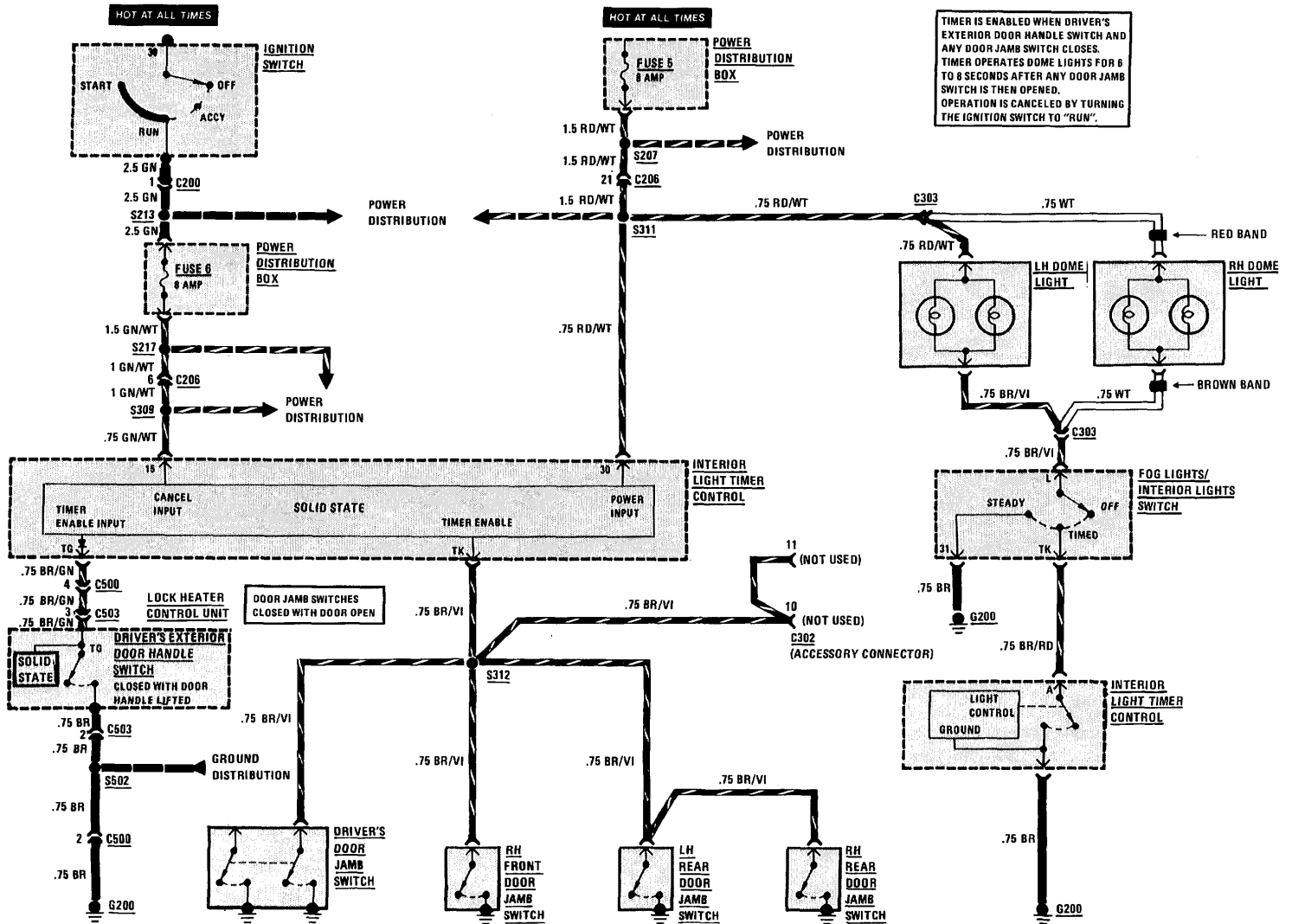
HOT IN RUN ONLY FROM UNLOADER RELAY





## 134 INTERIOR LIGHTS

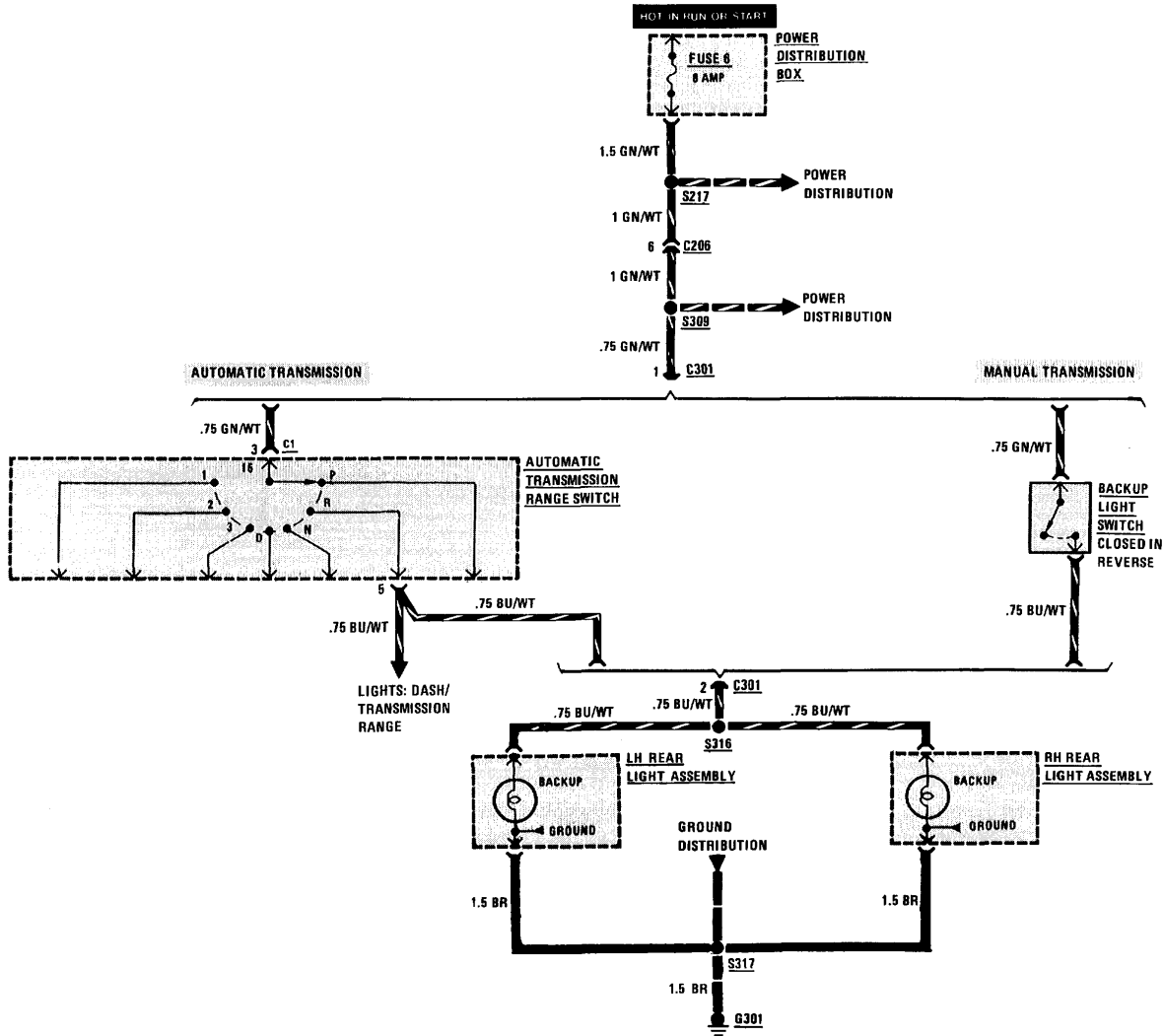
(For Component Locations See Page 207)





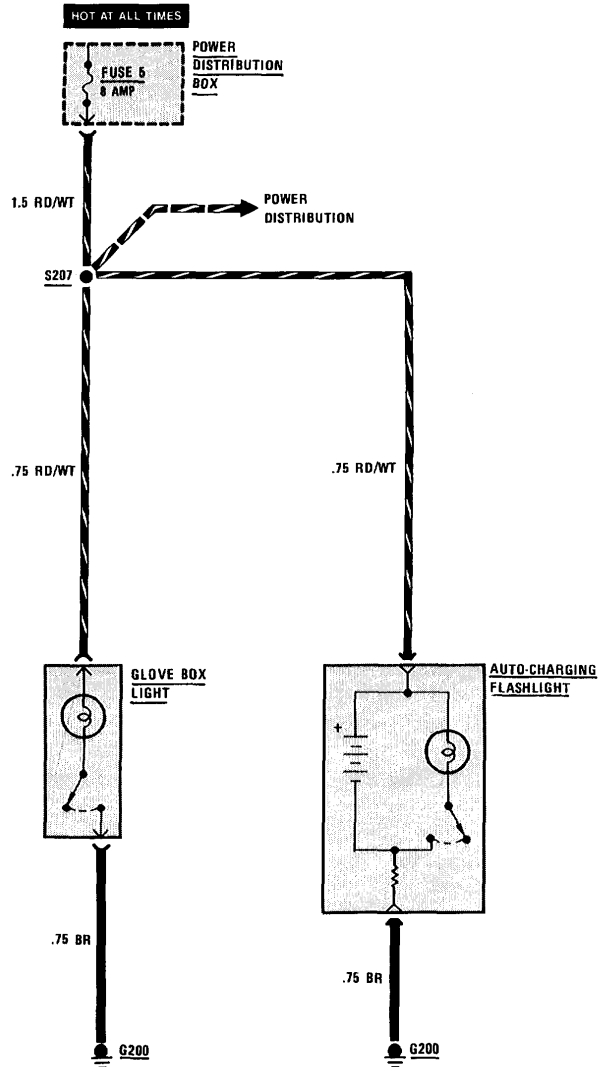
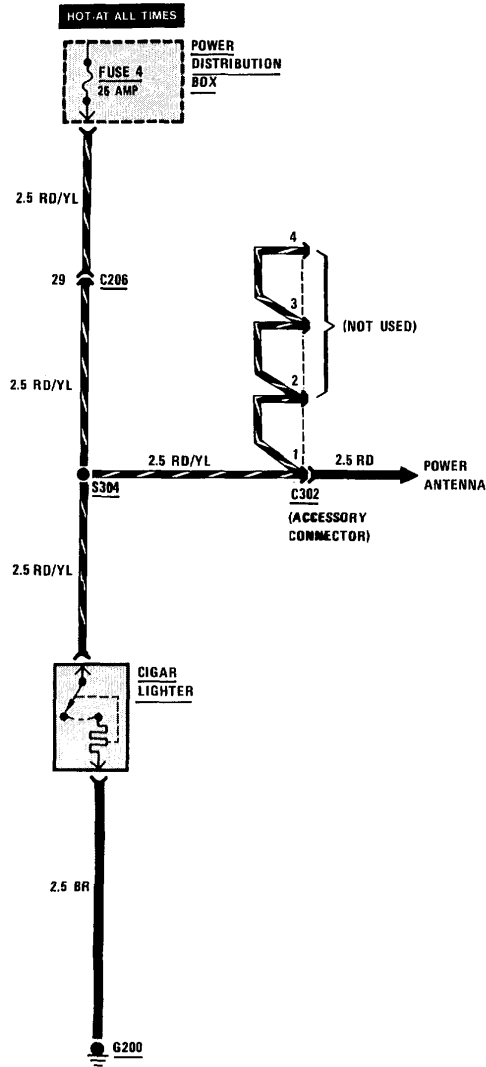
## BACKUP LIGHTS 135

(For Component Locations See Page 202)



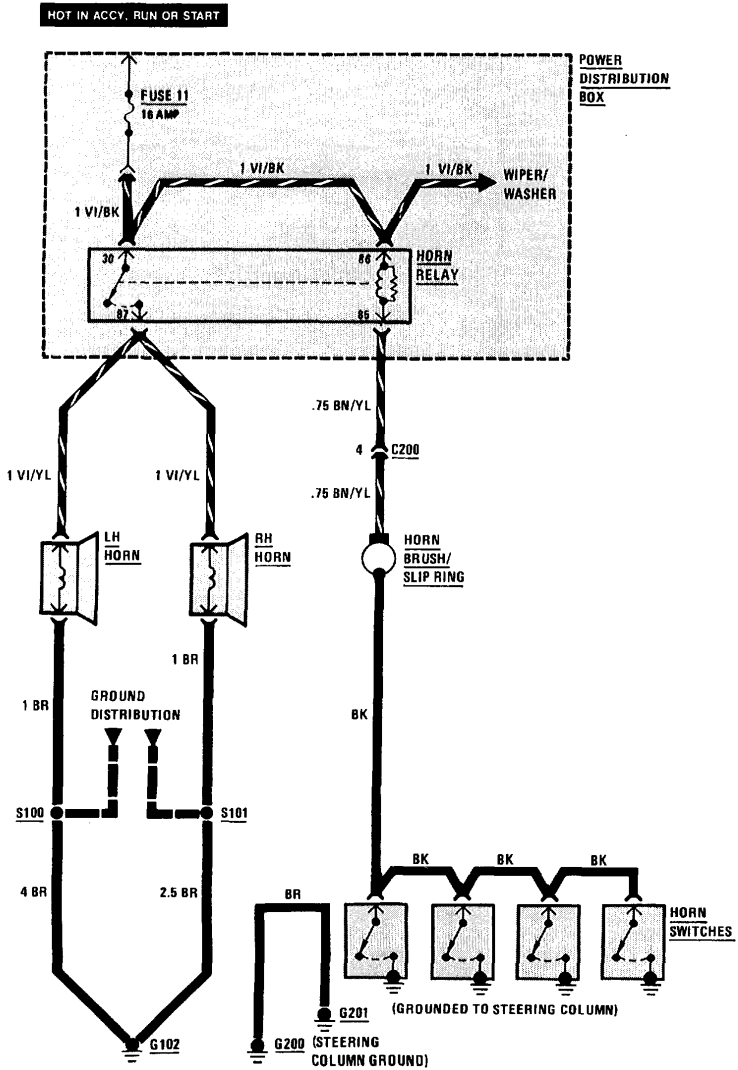
136 CIGAR LIGHTER/GLOVE BOX LIGHT/AUTO-CHARGING FLASHLIGHT

(For Component Locations See Page 203)



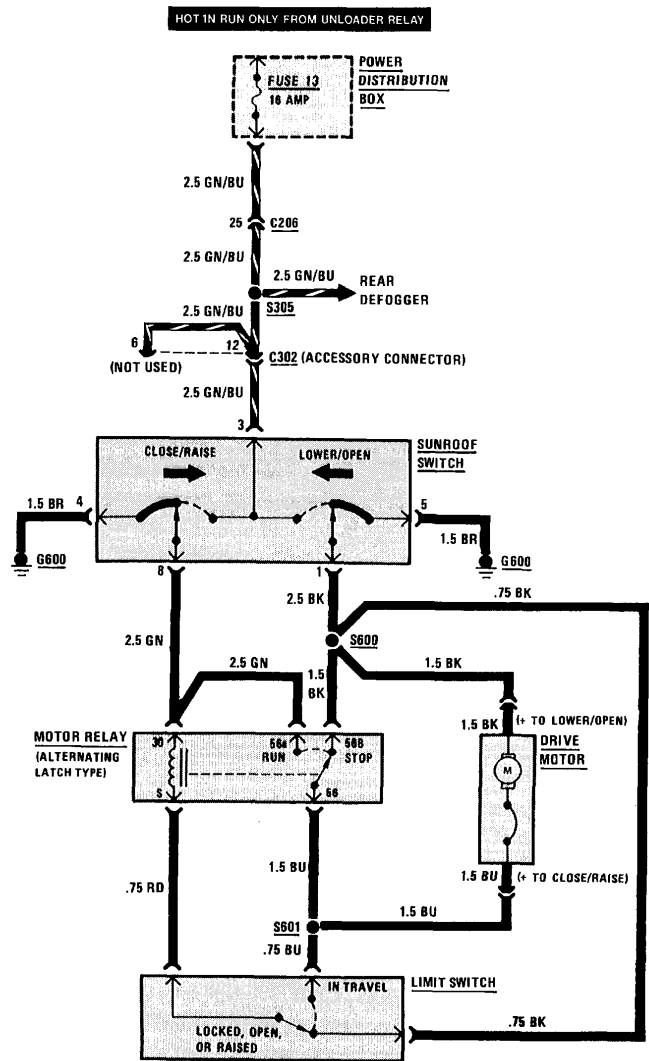
## HORN

(For Component Locations See Page 206)

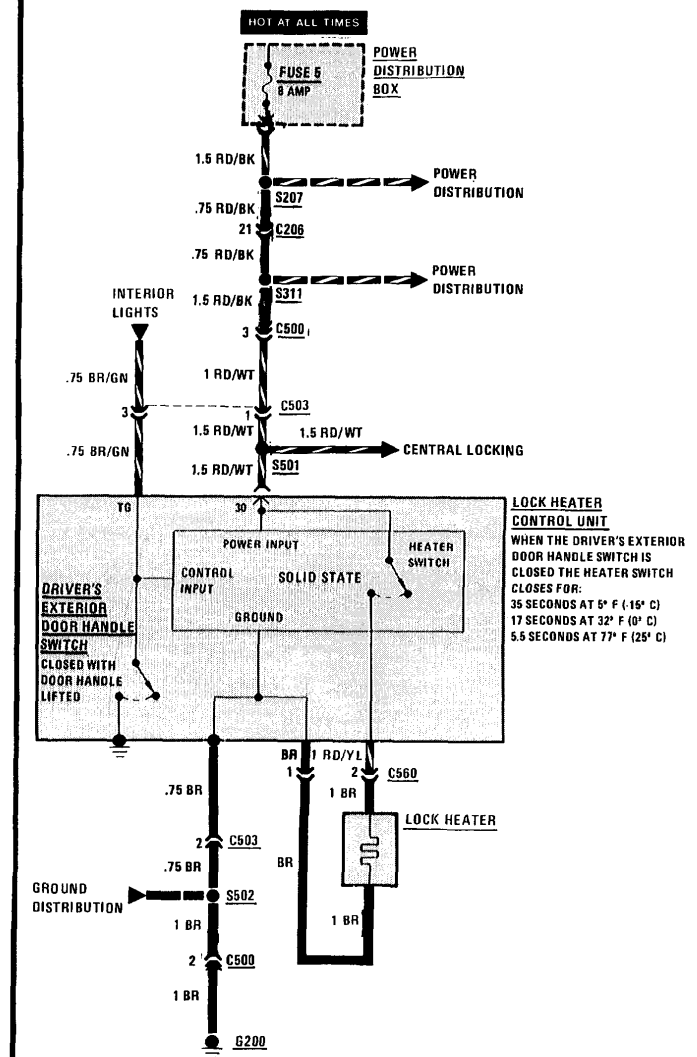


## SUNROOF

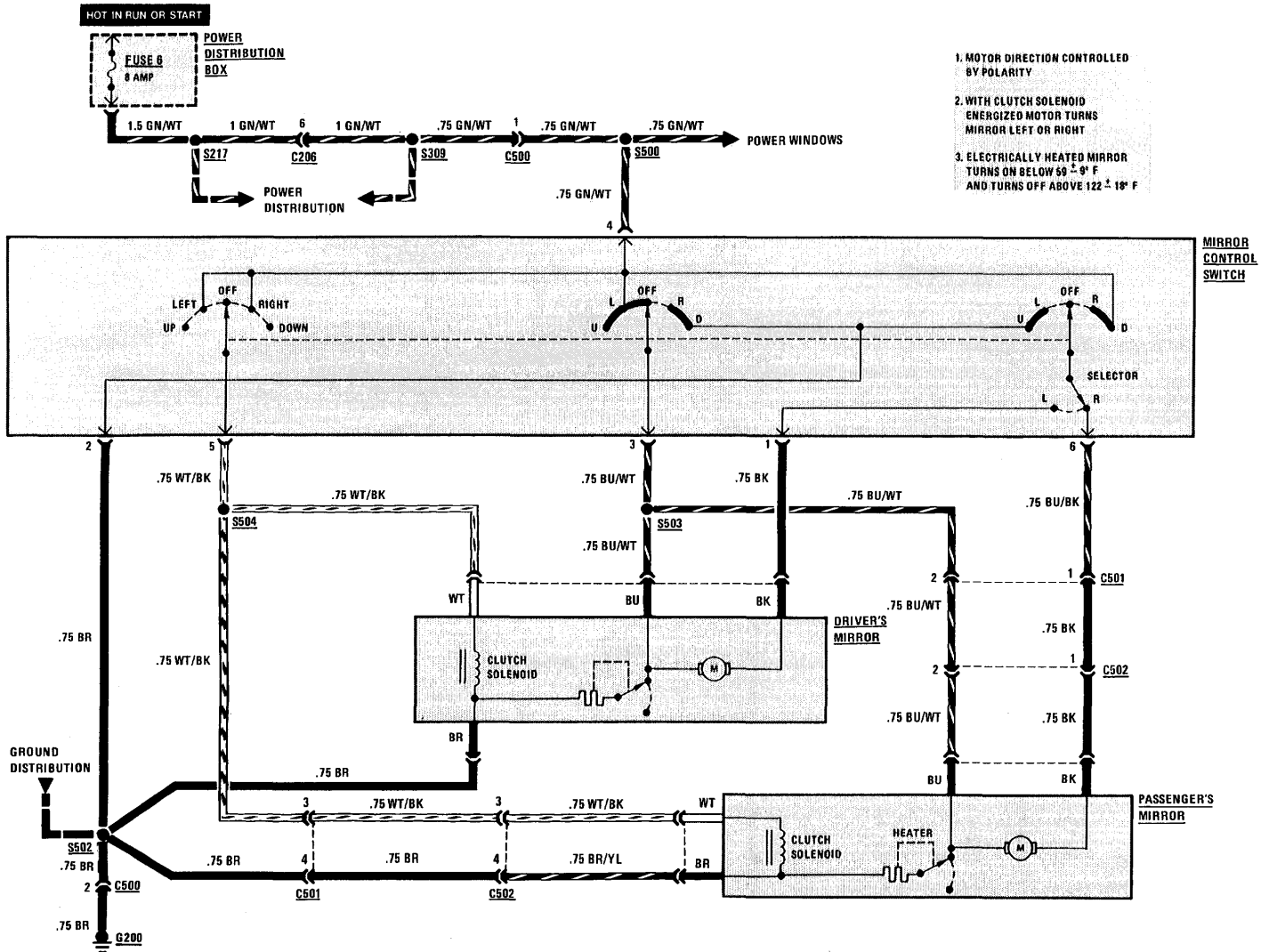
(For Component Locations See Page 206)



## HEATED DOOR LOCK



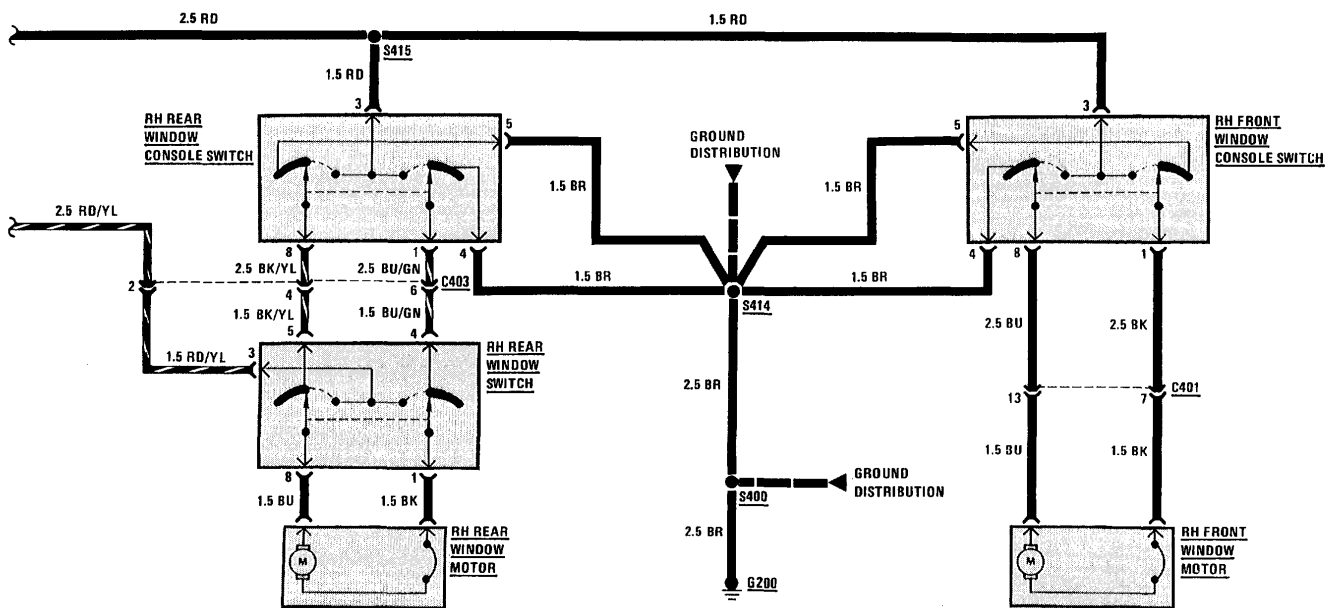
(For Component Locations See Page 210)



(For Component Locations See Page 210)



(For Component Locations See Page 210)



(For Component Locations See Page 202)







(For Component Locations See Page 211)



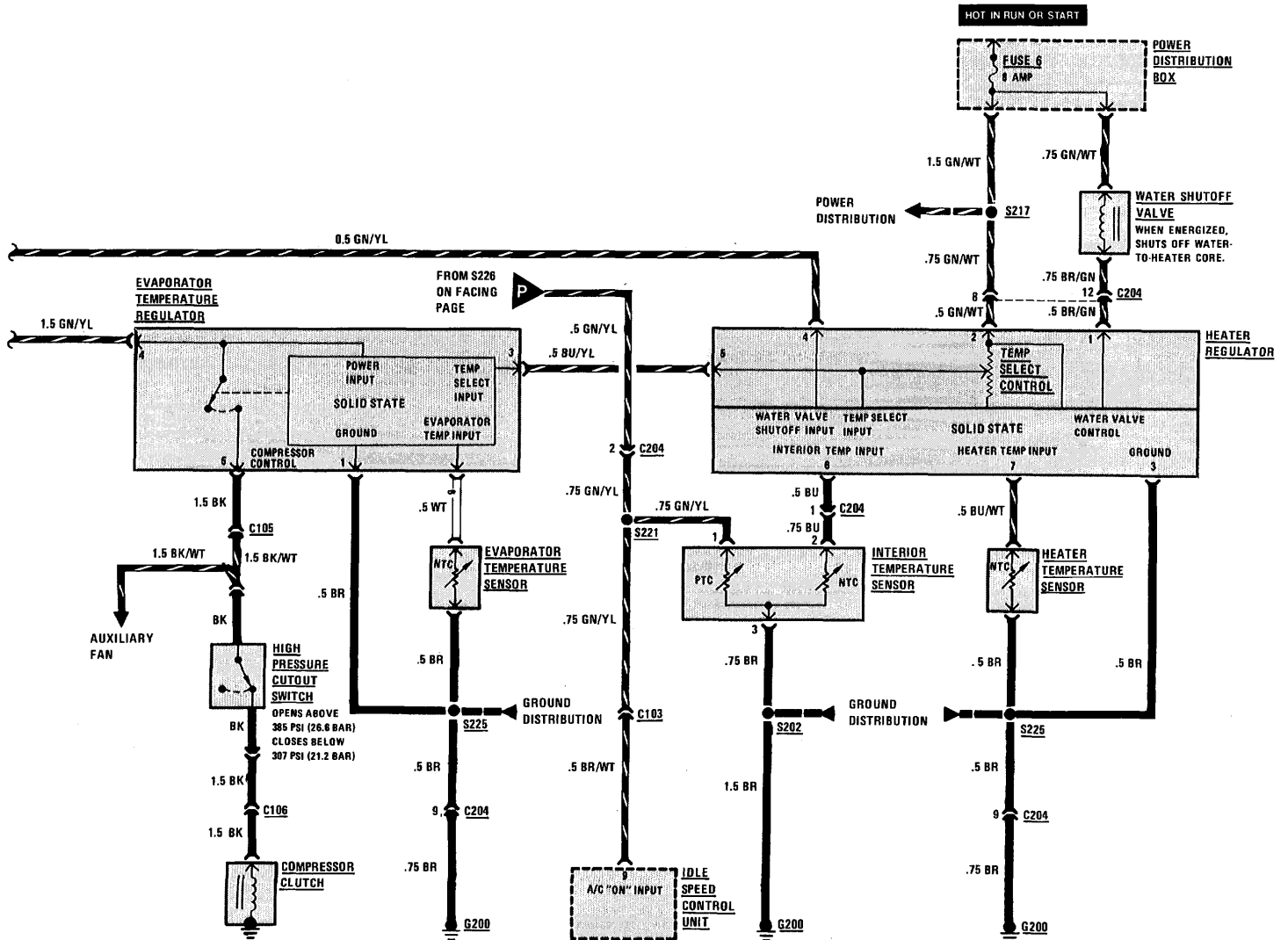
(For Component Locations See Page 201)



(For Component Locations See Page 205)



(For Component Locations See Page 205)



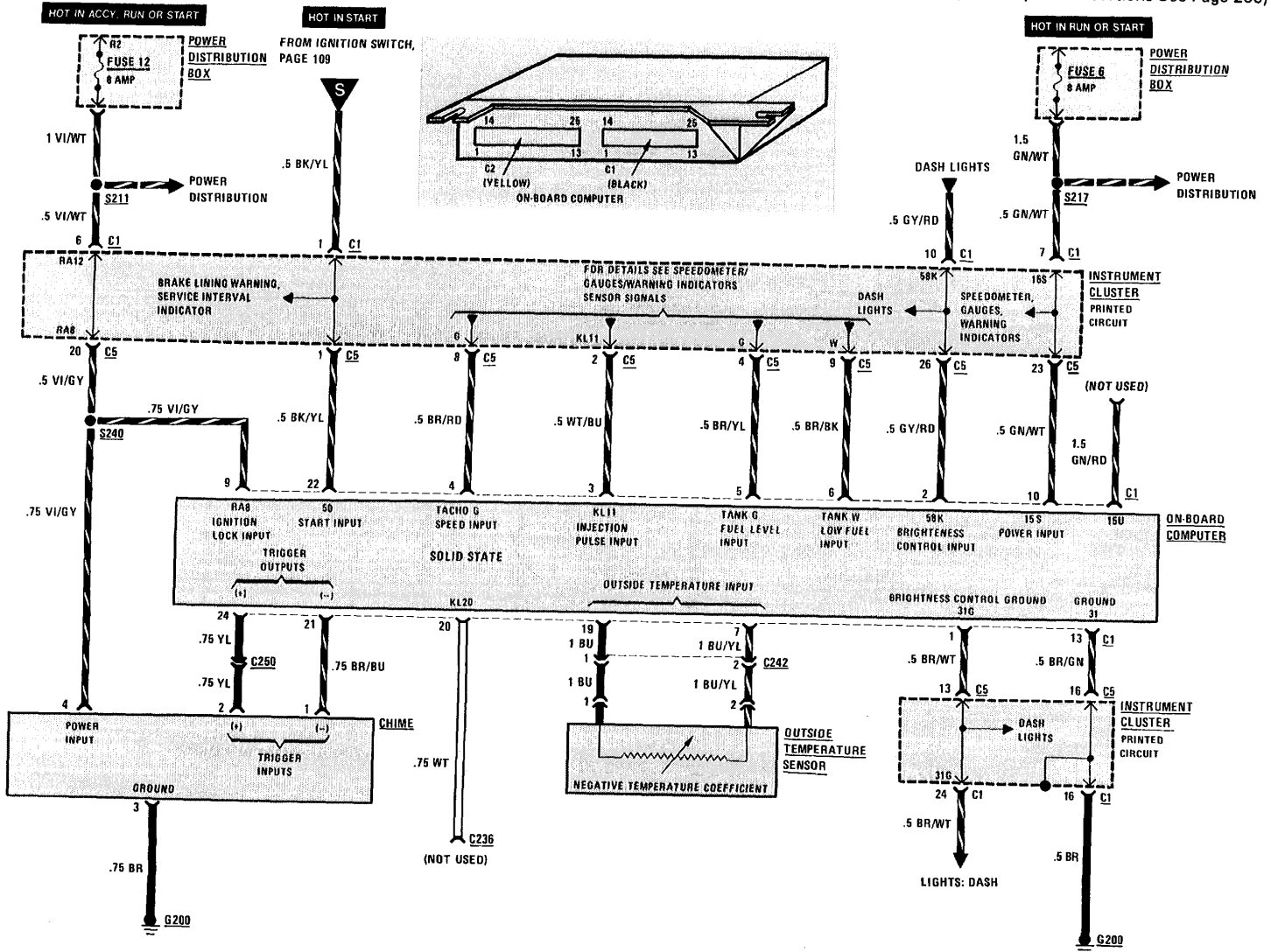
(For Component Locations See Page 209)





## ON-BOARD COMPUTER 149

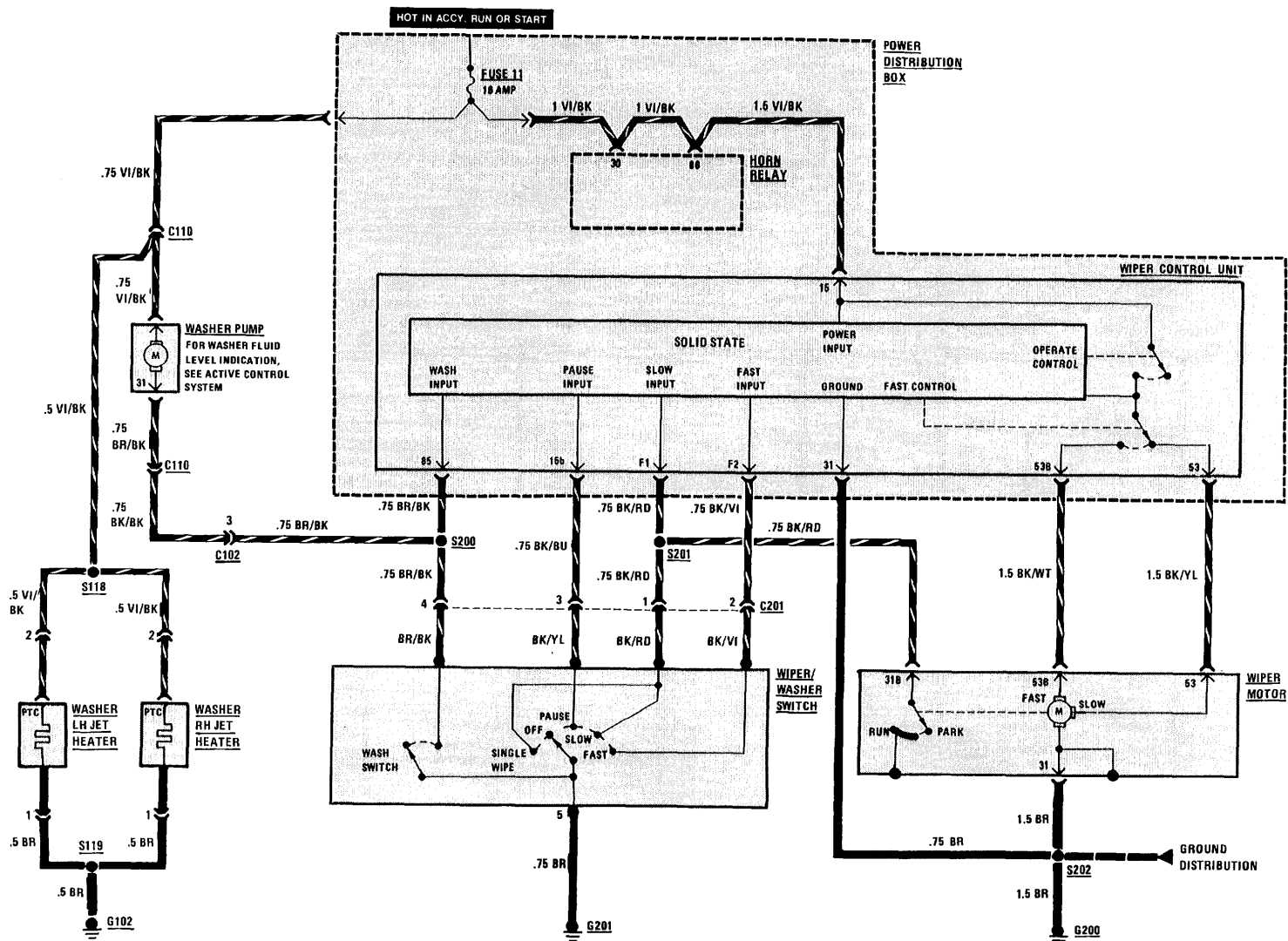
(For Component Locations See Page 209)





## 150 WIPER/WASHER AND HEATER WASHER JETS

(For Component Locations See Page 217)



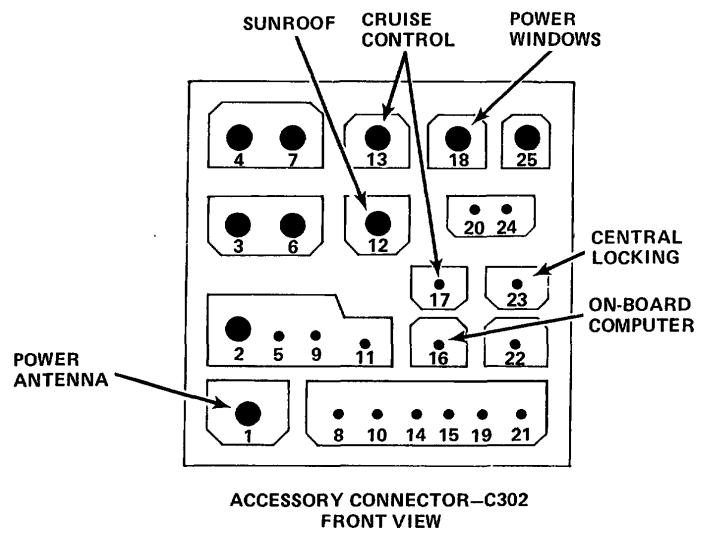
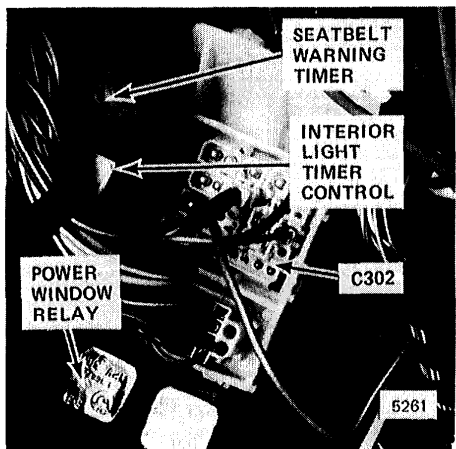
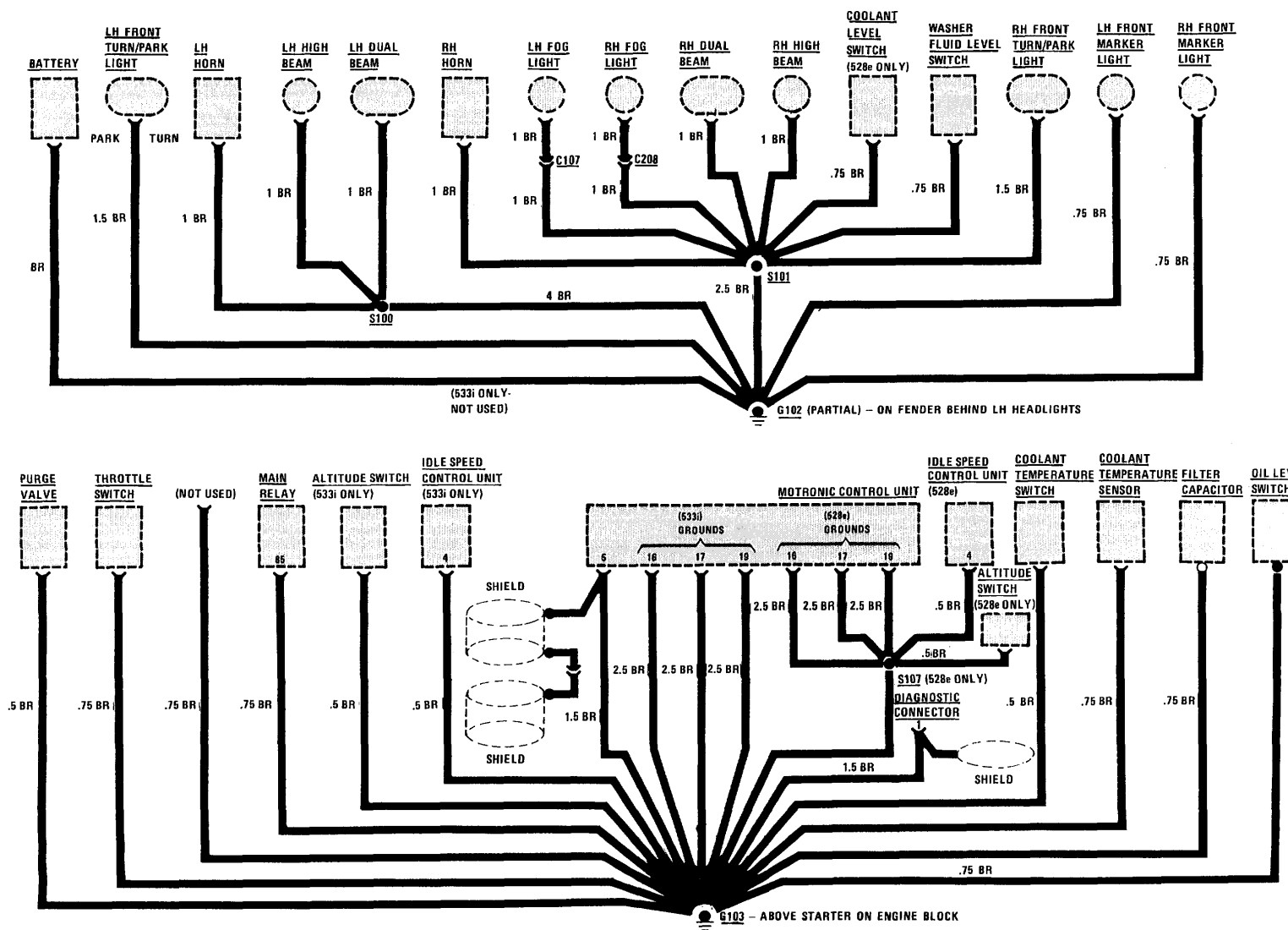
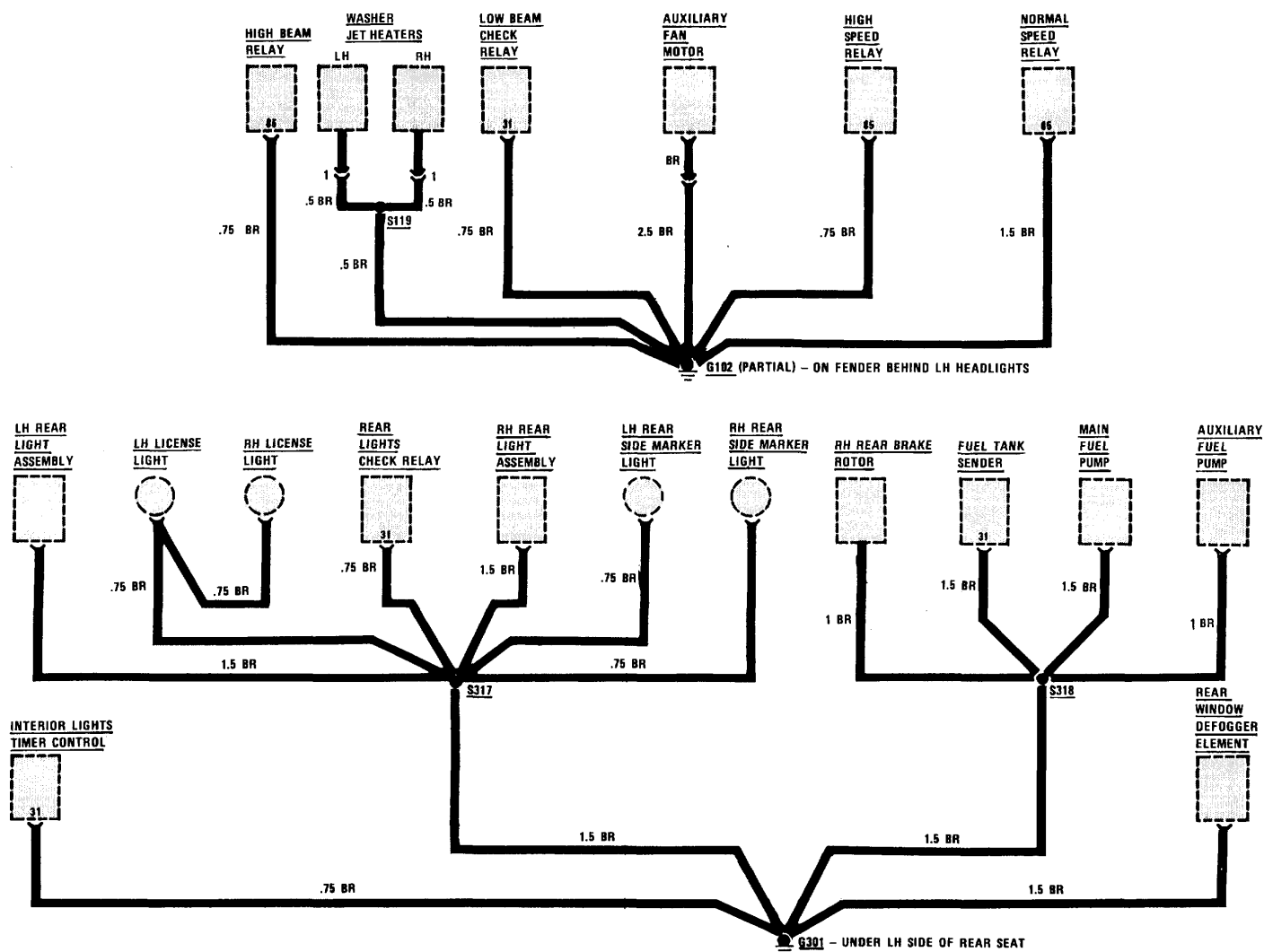


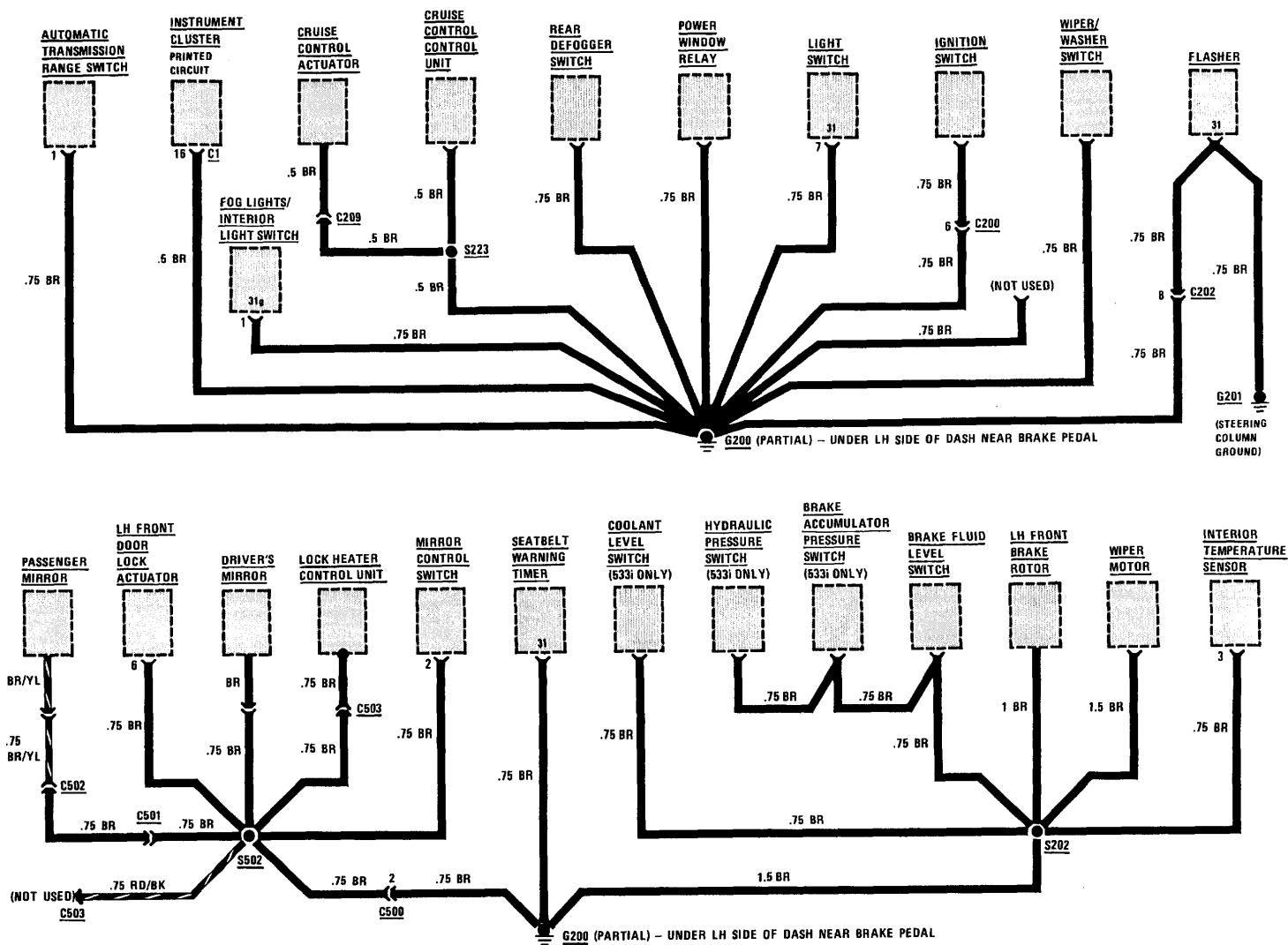
Figure 1 - Under Left Side Of Dash

## 152 GROUND DISTRIBUTION (G102, G103)

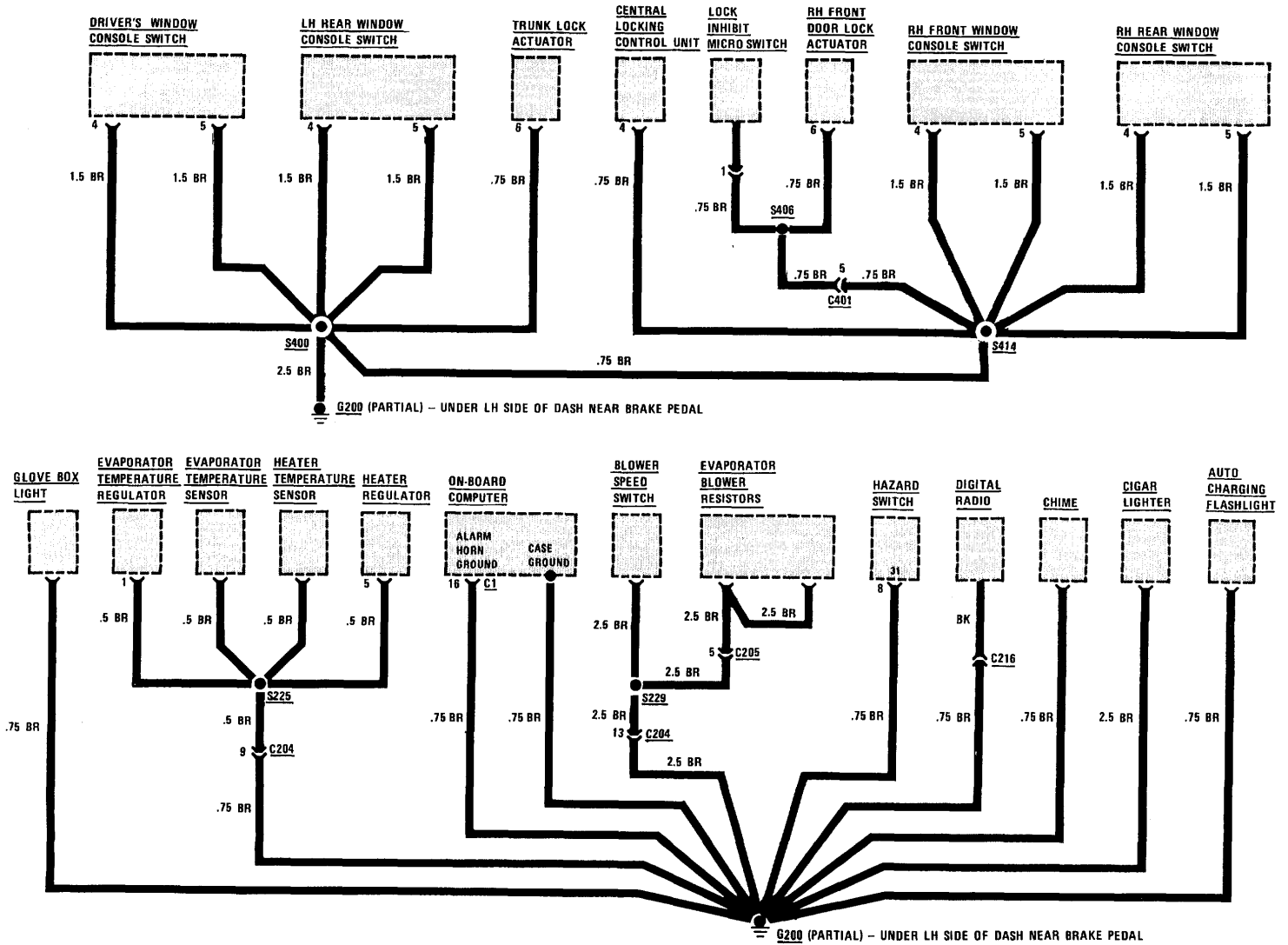




## 154 GROUND DISTRIBUTION (G200)



## GROUND DISTRIBUTION (G200) 155



## ACTIVE CHECK CONTROL

Active Check Control Unit.....	Above rear view mirror .....	119-1
Brake Switch .....	Above brake pedal .....	213-2
Coolant Level Switch (528 e) ...	On RH front wheel well, in coolant reservoir .....	212-3
Coolant Level Switch (533 i) ...	On LH front wheel well, in coolant reservoir .....	212-6
Low Beam Check Relay.....	Attached to power distribution box.....	102-1
Oil Level Sensor .....	Bottom of engine oil pan .....	210-2
Power Distribution Box .....	On LH front wheel well .....	102-1
Rear Lights Check Relay.....	Mounted on trunk lock support.....	201-1
Seatbelt Warning Timer.....	Under LH side of dash .....	212-1
Washer Fluid Level Switch ....	In reservoir, behind RH headlights .....	211-1
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i).....	In power distribution box .....	215-2
C102 (7 pin) .....	In power distribution box .....	205-1
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
G102 (Main Body Ground) ....	On fender well behind LH headlights .....	203-1
G103 (Engine Ground) (533 i) .	Top rear of engine .....	202-1
G200 (Front Interior Ground) ..	Under LH side of dash, near brake bracket .....	
G301 (Rear Interior Ground)...	Under LH side of rear seat.....	208-1

## AUXILIARY FAN

Auxiliary Fan Motor .....	Forward of radiator.....	214-3
Evaporator Temp. Regulator ...	On LH side of heater/evaporator housing .....	214-5
High Pressure Cut-Out Switch ..	On receiver-drier behind RH headlights .....	207-1
High Speed Cool. Temp. Switch	On upper LH side of radiator (red terminals).....	214-2
High Speed Relay .....	Attached to power distribution box.....	102-1
Normal Speed Blower Resistor .	Ahead of radiator, on auxiliary fan shield .....	214-3
Normal Speed Cool. Temp. Switch	On upper LH side of radiator (white terminals) .....	214-2
Normal Speed Relay.....	Attached to power distribution box.....	102-1
Power Distribution Box .....	On LH front wheel well .....	102-1
C105 (1 pin) (528 e) .....	At RH wheel well, below coolant reservoir .....	212-3
C105 (1 pin) (533 i) .....	At RH wheel well, below coolant reservoir .....	
C106 (1 pin) (528 e) .....	Near air conditioning compressor .....	214-4
C106 (1 pin) (533 i) .....	Near air conditioning compressor .....	
G102 (Main Body Ground) ....	On fender well behind LH headlights .....	203-1

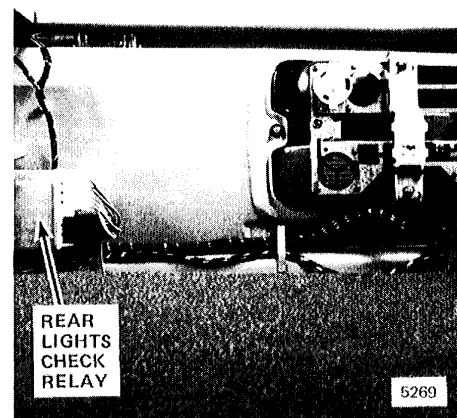


Figure 1 - Rear LH Side Of Trunk

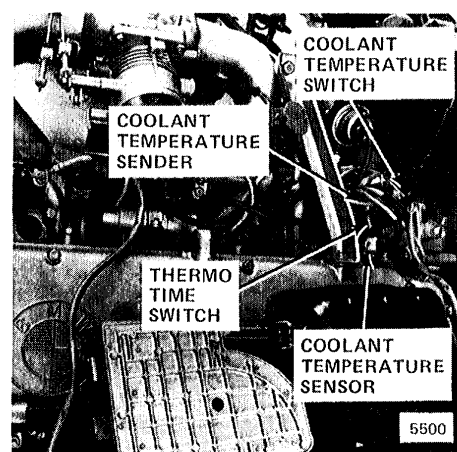


Figure 2 - Top Front Of 533i Engine



202 COMPONENT LOCATIONS

BACKUP LIGHTS

Auto. Trans. Range Switch ...	At base of shift lever .....	215-5
Backup Light Switch .....	On LH side of transmission	
Power Distribution Box .....	On LH front wheel well .....	102-1
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C301 (2 pin) .....	In center console, ahead of shift lever	
G301 (Rear Interior Ground) ..	Under LH side of rear seat.....	208-1

BRAKE LINING WARNING

Power Distribution Box .....	On LH front wheel well .....	102-1
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
G200 (Front Interior Ground) ..	Under LH side of dash, near brake bracket	
G301 (Rear Interior Ground) ..	Under LH side of rear seat.....	208-1

CENTRAL LOCKING

Central Locking Control Unit ..	Above right front speaker	
Gas Filler Lock Motor .....	In trunk, right of power antenna	
Ignition Switch.....	Upper part of steering column	
LH Front Door Lock Actuator ..	In LH front door	
LH Rear Door Lock Motor ...	In LH rear door	
Lock Inhibit Micro Switch .....	In RH front door near door lock cylinder	
Power Distribution Box .....	On LH front wheel well .....	102-1
RH Front Door Lock Actuator ..	In RH front door	
RH Rear Door Lock Motor ...	In RH rear door	
Trunk Lock Actuator .....	In rear panel of trunk	
C200 (10 pin) .....	On LH side of steering column .....	203-2
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector) ..	Under LH side of dash .....	212-1
C400 (13 pin) .....	Behind RH front speaker	
C401 (13 pin) .....	Behind RH front speaker .....	213-3
C402 (6 pin) .....	At LH rear door grommet	
C403 (6 pin) .....	At RH rear door grommet	
C404 (4 pin) .....	In bottom rear of driver's door .....	202-2
C405 (2 pin) .....	In trunk near trunk lock.	
C500 (6 pin) .....	Behind LH front speaker	
G200 (Front Interior Ground) ..	Under LH side of dash, near brake bracket	

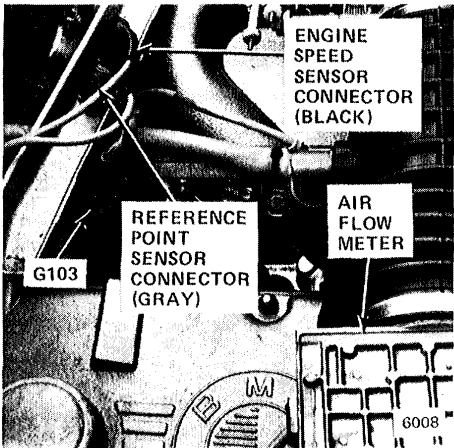


Figure 1 - Top Retail Of 533i Engine

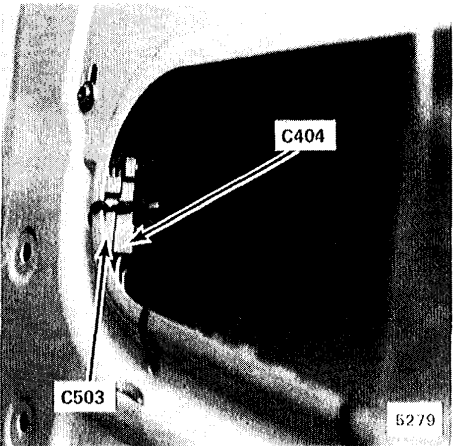


Figure 2 - Inside Driver's Door

## CHARGING SYSTEM

Diagnostic Connector (528 e)	LH side of engine	104-1
Diagnostic Connector (533 i)	Top front of engine	104-1
Ignition Switch	Upper part of steering column	
Power Distribution Box	On LH front wheel well	102-1
Starter	Lower rear LH side of engine	
C101 (17 pin) (528 e)	In power distribution box	205-1
C101 (17 pin) (533 i)	In power distribution box	215-2
C200 (10 pin)	On LH side of steering column	203-2
C206 (29 pin)	On connector bracket under LH side of dash	206-1
C302 (accessory connector)	Under LH side of dash	212-1
G102 (Main Body Ground)	On fender well behind LH headlights	203-1

## CIGAR LIGHTER/GLOVE BOX LIGHT/AUTO-CHARGING FLASHLIGHT

Auto-Charging Flashlight	In glove box	
Power Distribution Box	On LH front wheel well	102-1
C206 (29 pin)	On connector bracket under LH side of dash	206-1
C302 (accessory connector)	Under LH side of dash	212-1
G200 (Front Interior Ground)	Under LH side of dash, near brake bracket	

## CRUISE CONTROL/STOP LIGHTS

Active Check Control Unit	Above rear view mirror	119-1
Auto. Trans. Range Switch	At base of shift lever	215-5
Brake Switch	Above brake pedal	213-2
Clutch Switch	Above clutch pedal	
Cruise Control Actuator (528 e)	Forward of power distribution box	203-1
Cruise Control Actuator (533 i)	Forward of power distribution box	215-2
Cruise Control Control Unit	Mounted on left under dash cover	203-2
Cruise Control Switch	On RH side of steering column	209-1
Power Distribution Box	On LH front wheel well	102-1
Rear Lights Check Relay	Mounted on trunk lock support	201-1
C206 (29 pin)	On connector bracket under LH side of dash	206-1
C208 (2 pin)	Near clutch pedal	206-1
C209 (7 pin)	Near cruise control unit	203-2
C210 (4 pin)	On LH side of steering column	203-2
C301 (2 pin)	In center console, ahead of shift lever	
C302 (accessory connector)	Under LH side of dash	212-1
G200 (Front Interior Ground)	Under LH side of dash, near brake bracket	
G301 (Rear Interior Ground)	Under LH side of rear seat	208-1

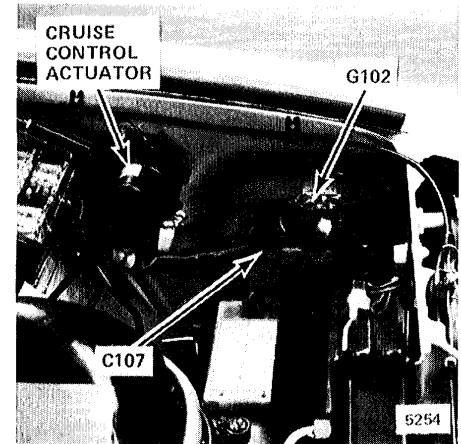


Figure 1 - Above Battery

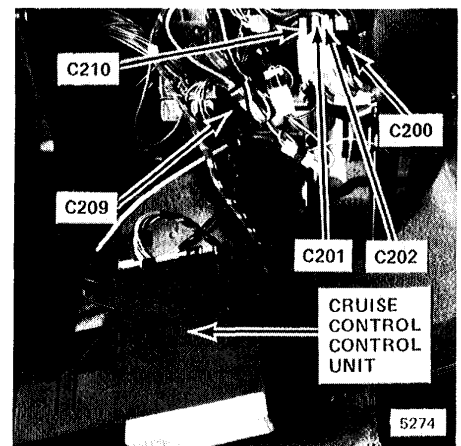


Figure 2 - Lower LH Side Of Dash

## 204 COMPONENT LOCATIONS

### FUEL CONTROL

Air Flow Meter (528 e) .....	LH side of engine .....	212-2
Air Flow Meter (533 i) .....	Top right side of engine .....	202-1
Altitude Switch (528e) .....	Near the air flow meter	
Altitude Switch (533i) .....	Near rear corner of engine compartment	
Idle Speed Control Unit .....	Under RH side of dash, above glove box .....	204-1
Motronic Control Unit .....	Above glove box .....	204-1
Oxygen Sensor (528 e) .....	In exhaust manifold at rear of engine .....	212-3
Oxygen Sensor (533 i) .....	Rear of engine, in exhaust manifold	
G103 (Engine Ground) (528 e) ..	Above starter on engine block .....	214-1
G103 (Engine Ground) (533 i) ..	Top rear of engine .....	202-1

### FUEL DELIVERY/EVAPORATIVE CONTROL

Auxiliary Fuel Pump .....	In fuel tank, under trunk .....	213-5
Diagnostic Connector (528 e) ..	LH side of engine .....	104-1
Diagnostic Connector (533 i) ..	Top front of engine .....	104-1
Fuel Pump Relay .....	On power distribution box .....	102-1
Ignition Switch .....	Upper part of steering column	
Main Fuel Pump .....	Forward and right of differential housing	
Main Relay .....	On power distribution box .....	102-1
Motronic Control Unit .....	Above glove box .....	204-1
On-Board Computer .....	Mounted on left under dash cover	
Power Distribution Box .....	On LH front wheel well .....	102-1
Purge Valve Relay .....	On power distribution box .....	102-1
Purge Valve .....	Behind RH headlights .....	207-1
Purge Valve Relay Diode .....	In jumper harness between the purge valve relay and throttle switch	
Throttle Switch (528e) .....	Top LH side of engine, below throttle body .....	212-5
Throttle Switch (533i) .....	Top LH side of engine, below throttle body .....	213-1
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i) .....	In power distribution box .....	215-2
C103 (6 pin) .....	RH side of dash near Motronic control unit .....	204-1
C200 (10 pin) .....	On LH side of steering column .....	203-2
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C212 (1 pin) .....	Under LH side of dash taped to harness	
C235 (1 pin) .....	Under LH side of dash, near on-board computer	
C236 (2 pin) .....	Under LH side of dash, near on-board computer	
G102 (Main Body Ground) .....	On fender well behind LH headlights .....	203-1
G103 (Engine Ground) (528 i) ..	Above starter on engine block .....	214-1
G103 (Engine Ground) (533 i) ..	Top rear of engine .....	202-1
G301 (Rear Interior Ground) ...	Under LH side of rear seat .....	208-1

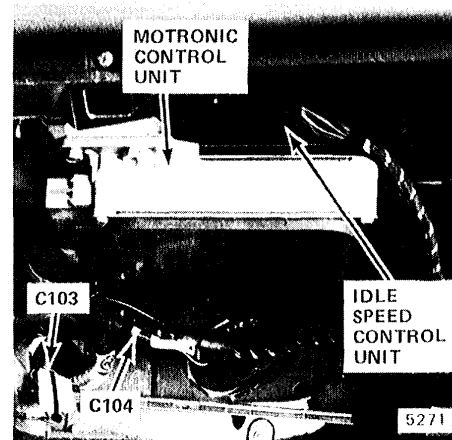


Figure 1 - Below RH Side Of Dash

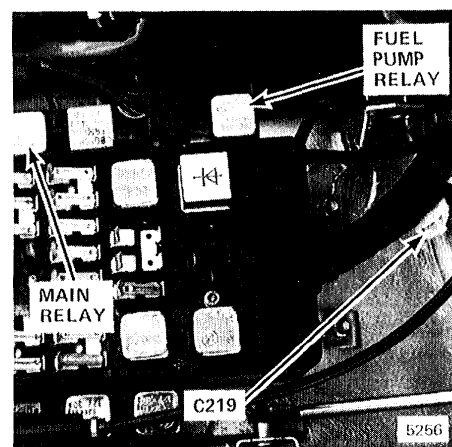


Figure 2 - Top Of LH Front Wheel Well

# HEADLIGHTS (CONTROL/POWER)/FOG LIGHTS (CONTROL/POWER)

Active Check Control Unit.....	Above rear view mirror .....	119-1
Combination Switch .....	On LH side of steering column .....	209-1
Low Beam Check Relay.....	Attached to power distribution box.....	102-1
Power Distribution Box .....	On LH front wheel well .....	102-1
C102 (7 pin) .....	In power distribution box .....	205-1
C107 (2 pin) .....	Behind LH headlights .....	203-1
C108 (2 pin) .....	Behind RH headlights.....	211-1
C202 (13 pin).....	On LH side of steering column .....	203-2
G102 (Main Body Ground) .....	On fender well behind LH headlights .....	203-1
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

# HEATER/AIR CONDITIONING

Blower Speed Switch.....	In center console .....	214-6
Evaporator Blower Motor .....	Under center of dash .....	205-2
Evaporator Blower Resistors ...	On RH side of evaporator housing .....	205-2
Evaporator Temp. Regulator ...	On LH side of heater/evaporator housing .....	214-5
Evaporator Temp. Sensor .....	In evaporator, above evaporator blower motor	
Heater Blower Motor .....	Below windshield, behind cover panel	
Heater Blower Resistors.....	Below heater cover motor	
Heater Regulator .....	Behind A/C selector switch .....	210-1
Heater Temperature Sensor ...	LH side heater/evaporator, near heater core .....	214-5
High Pressure Cut-Out Switch ..	On receiver-drier behind RH headlights .....	207-1
Idle Speed Control Unit.....	Under RH side of dash, above glove box .....	204-1
Interior Temp. Sensor.....	Mounted in left under dash cover .....	213-2
Power Distribution Box .....	On LH front wheel well .....	102-1
Water Shutoff Valve (528 e) ...	Below brake master cylinder	
Water Shutoff Valve (533 i) ...	Center rear of engine compartment .....	215-3
C103 (6 pin) .....	RH side of dash near Motronic control unit.....	204-1
C105 (1 pin) (528 e) .....	At RH wheel well, below coolant reservoir .....	212-3
C105 (1 pin) (533 i) .....	At RH wheel well, below coolant reservoir .....	
C106 (1 pin) (528 e) .....	Near air conditioning compressor .....	214-4
C106 (1 pin) (533 i) .....	Near air conditioning compressor	
C204 (13 pin).....	On LH side of heater/evaporator housing .....	214-5
C205 (6 pin) .....	On RH side of heater/evaporator housing .....	205-2
C214 (6 pin) .....	Behind center of dash, near heater blower	
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

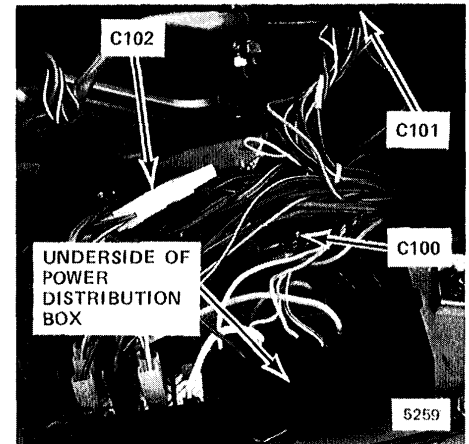


Figure 1 - Top Of LH Front Wheel Well

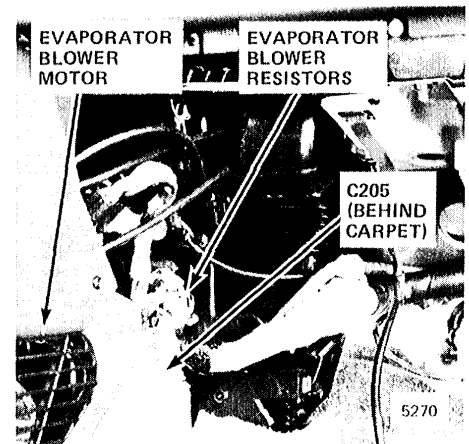


Figure 2 - RH Side Of Upper Console

## 206 COMPONENT LOCATIONS

### HORN/SUNROOF

Horn Brush/Slip Ring .....	Below hub of steering wheel .....	207-2
Horn Switches .....	In each spoke on steering wheel	
Limit Switch .....	Behind header, above rear view mirror	
Motor Relay .....	Behind header, above rear view mirror	
Power Distribution Box .....	On LH front wheel well .....	102-1
Sunroof Drive Motor .....	Behind header, above rear view mirror	
Sunroof Switch .....	Above rear view mirror	
C200 (10 pin) .....	On LH side of steering column	203-2
C206 (29 pin) .....	On connector bracket under LH side of dash	206-1
C302 (accessory connector)...	Under LH side of dash .....	212-1
G102 (Main Body Ground) .....	On fender well behind LH headlights .....	203-1
G200 (Front Interior Ground)...	Under LH side of dash, near brake bracket	
G600 .....	Near sun roof switch	

### IDLE SPEED CONTROL

0°C Temperature Switch .....	On right inlet of heater blower housing	
Auto. Trans. Range Switch ....	At base of shift lever .....	215-5
Coolant Temp. Sensor (528 e) .	Front of engine, top of thermostat housing .....	206-2
Coolant Temp. Sensor (533 i) .	Front of engine, top of thermostat housing .....	201-2
Coolant Temp. Switch (528 e) .	Front of engine, top of thermostat housing .....	211-2
Coolant Temp. Switch (533 i) .	Front of engine, back of thermostat housing .....	201-2
Diagnostic Connector (528 e) .	LH side of engine .....	104-1
Diagnostic Connector (533 i) .	Top front of engine .....	104-1
Engine Speed Sensor (528 e) .	On transmission bell housing .....	212-4
Engine Speed Sensor (533 i) .	On transmission bell housing .....	202-1
Idle Control Valve (528 e) ....	Top rear RH side of engine .....	212-3
Idle Control Valve (533 i) ....	Top center of engine .....	213-1
Idle Speed Control Unit .....	Under RH side of dash, above glove box .....	204-1
Motronic Control Unit .....	Above glove box .....	204-1
Power Distribution Box .....	On LH front wheel well .....	102-1
Throttle Switch (528 e) .....	Top LH side of engine, below throttle body .....	212-5
Throttle Switch (533 i) .....	Top LH side of engine, below throttle body .....	213-1
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i) .....	In power distribution box .....	215-2
C103 (6 pin) .....	RH side of dash near Motronic control unit .....	204-1
C104 (2 pin) .....	RH side of dash near Motronic control unit .....	204-1
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C301 (2 pin) .....	In center console, ahead of shift lever	
G103 (Engine Ground) (533 i) ..	Above starter on engine block .....	214-1
G103 (Engine Ground) (528 e) .	Top rear of engine .....	202-1

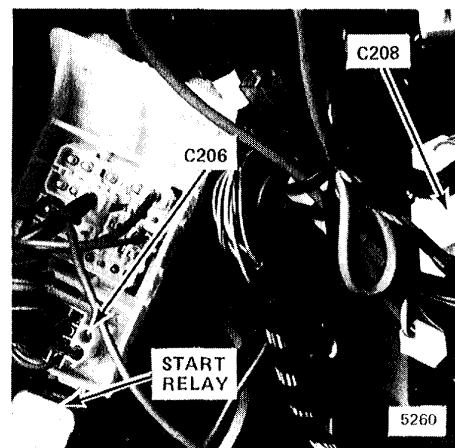


Figure 1 - Lower LH Side Of Dash

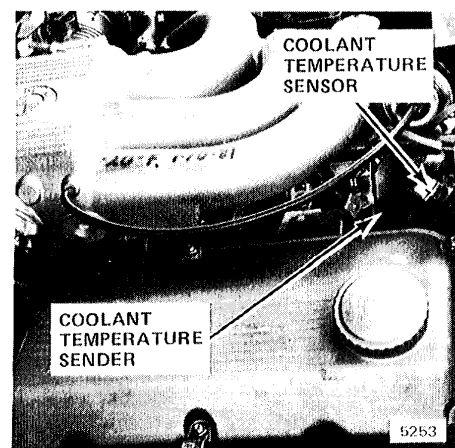


Figure 2 - Top RH Side Of 528e Engine



## IGNITION

Diagnostic Connector (528 e) .	LH side of engine .....	104-1
Diagnostic Connector (533 i) .	Top front of engine .....	104-1
Ignition Coil .....	On fender well, behind RH headlights .....	207-1
Ignition Switch .....	Upper part of steering column	
Motronic Control Unit .....	Above glove box .....	204-1
Power Distribution Box .....	On LH front wheel well .....	102-1
Reference Point Sensor (528 e)	On transmission bell housing .....	212-4
Reference Point Sensor (533 i)	On transmission bell housing .....	202-1
TDC Sensor .....	Above crankshaft vibration damper	
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i) .....	In power distribution box .....	215-2
C200 (10 pin) .....	On LH side of steering column .....	203-2
G103 (Engine Ground) (528 e) .	Above starter on engine block .....	214-1
G103 (Engine Ground) (533 i) .	Top rear of engine .....	202-1

## IGNITION KEY WARNING/SEATBELT WARNING

Active Check Control Unit .....	Above rear view mirror .....	119-1
Ignition Key Switch .....	In upper portion steering column	
Power Distribution Box .....	On LH front wheel well .....	102-1
Seatbelt Switch .....	In driver's seatbelt buckle	
Seatbelt Warning Timer .....	Under LH side of dash .....	212-1
Warning Buzzer .....	In upper part of steering column .....	207-2
C200 (10 pin) .....	On LH side of steering column .....	203-2
C203 (2 pin) .....	At upper end of steering column .....	208-2
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

## INTERIOR LIGHTS

Ignition Switch .....	Upper part of steering column	
Interior Light Timer Control .....	Under LH side of dash .....	212-1
Lock Heater Control Unit .....	In LH front door .....	213-4
Power Distribution Box .....	On LH front wheel well .....	102-1
C200 (10 pin) .....	On LH side of steering column .....	203-2
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector) ...	Under LH side of dash .....	212-1
C303 (2 pin) .....	In headliner, near LH dome light	
C500 (6 pin) .....	Behind LH front speaker	
C503 (8 pin) .....	In driver's door driver's door .....	202-2
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

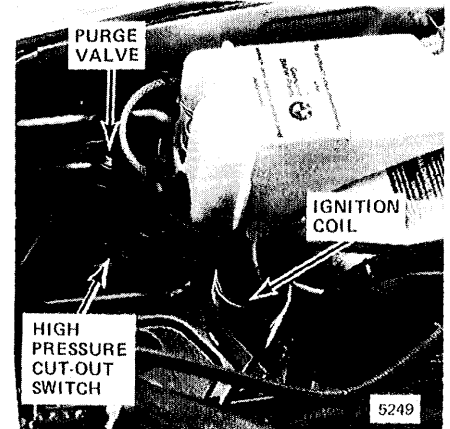


Figure 1 - Forward Of Washer Reservoir

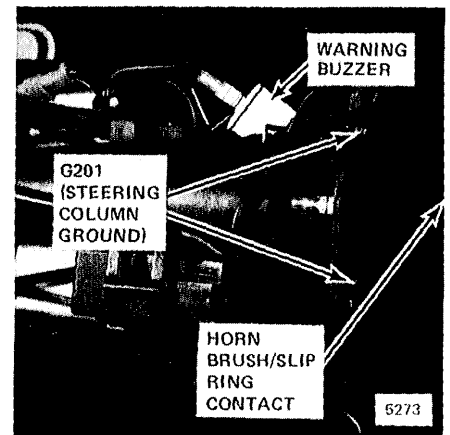


Figure 2 - Upper Part Of Steering Column

## 208 COMPONENT LOCATIONS

### LIGHTS: DASH/TRANSMISSION RANGE

Auto. Trans. Range Switch	At base of shift lever	215-5
Fog Light Switch	Under LH side of instrument cluster	213-2
Hazard Switch	To right of instrument cluster	
Heater-A/C Panel Lights	Behind heater-air conditioning control panel	
On-Board Computer	Mounted on left under dash cover	
Power Distribution Box	On LH front wheel well	102-1
C204 (13 pin)	On LH side of heater/evaporator housing	214-5
C206 (29 pin)	On connector bracket under LH side of dash	206-1
C215 (2 pin)	Behind radio	
C301 (2 pin)	In center console, ahead of shift lever	
C302 (accessory connector)	Under LH side of dash	212-1
G200 (Front Interior Ground)	Under LH side of dash, near brake bracket	

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

Active Check Control Unit	Above rear view mirror	119-1
Power Distribution Box	On LH front wheel well	102-1
Rear Lights Check Relay	Mounted on trunk lock support	201-1
C206 (29 pin)	On connector bracket under LH side of dash	206-1
G102 (main body ground)	On fender well behind LH headlights	203-1
G301 (rear interior ground)	Under LH side of rear seat	208-1

### LIGHTS: REAR MARKER/LICENSE/TRUNK

Active Check Control Unit	Above rear view mirror	119-1
Power Distribution Box	On LH front wheel well	102-1
Rear Lights Check Relay	Mounted on trunk lock support	201-1
Trunk Light Switch	In trunk lid near trunk lock	
C206 (29 pin)	On connector bracket under LH side of dash	206-1
C300 (2 pin)	Near trunk light	
C302 (accessory connector)	Under LH side of dash	212-1
G301 (Rear Interior Ground)	Under LH side of rear seat	208-1

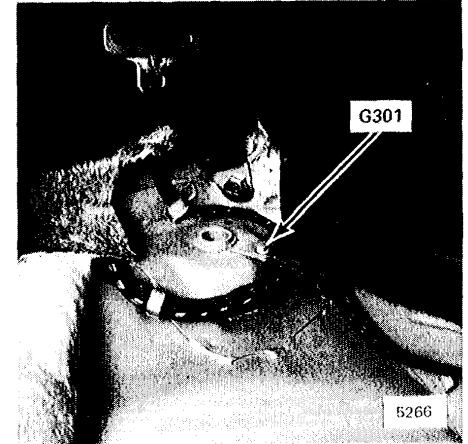


Figure 1 - Under LH Rear Seat

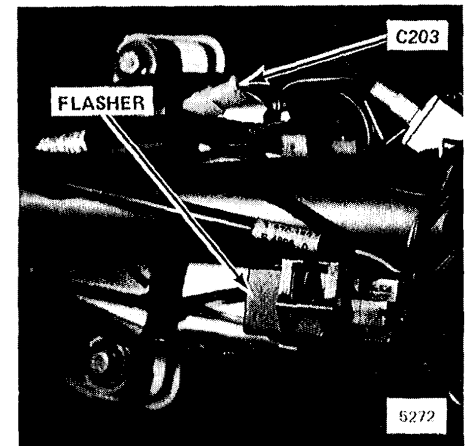


Figure 2 - Upper Part Of Steering Column



**LIGHTS TURN/HAZARD WARNING**

Combination Switch .....	On LH side of steering column .....	209-1
Flasher .....	Upper part of steering column .....	208-2
Hazard Switch .....	To right of instrument cluster .....	
Power Distribution Box .....	On LH front wheel well .....	102-1
C102 (7 pin) .....	In power distribution box .....	205-1
C202 (13 pin) .....	On LH side of steering column .....	203-2
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
G102 (Main Body Ground) ....	On fender well behind LH headlights .....	203-1
G200 (Front Interior Ground) ..	Under LH side of dash, near brake bracket .....	
G201 (Steering Column Ground)	Upper part of steering column .....	207-2
G301 (Rear Interior Ground) ..	Under LH side of rear seat .....	208-1

**ON-BOARD COMPUTER**

Alarm Horn .....	Behind battery .....	215-4
Chime .....	Mounted on left under dash cover .....	
Filter Capacitor .....	Behind battery .....	215-4
Ignition Switch .....	Upper part of steering column .....	
Main Relay .....	On power distribution box .....	102-1
On-Board Computer .....	Mounted on left under dash cover .....	
Outside Temp. Sensor .....	Under front bumper, left side .....	
Power Distribution Box .....	On LH front wheel well .....	102-1
C103 (6 pin) .....	RH side of dash near Motronic control unit .....	204-1
C200 (10 pin) .....	On LH side of steering column .....	203-2
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C212 (1 pin) .....	Under LH side of dash taped to harness .....	
C219 (3 pin) .....	Taped to harness, near power distribution box .....	204-2
C235 (1 pin) .....	Under LH side of dash, near on-board computer .....	
C236 (2 pin) .....	Under LH side of dash, near on-board computer .....	
C242 (2 pin) .....	Ahead of on-board computer .....	
C250 (1 pin) .....	Under left side of dash, near on-board computer .....	
C251 (1 pin) .....	Behind battery .....	215-4
C302 (accessory connector) ...	Under LH side of dash .....	212-1
G102 (Main Body Ground) ....	On fender well behind LH headlights .....	203-1
G103 (Engine Ground) (528 e) .	Above starter on engine block .....	214-1
G103 (Engine Ground) (533 i) .	Top rear of engine .....	202-1
G200 (Front Interior Ground) ..	Under LH side of dash, near brake bracket .....	

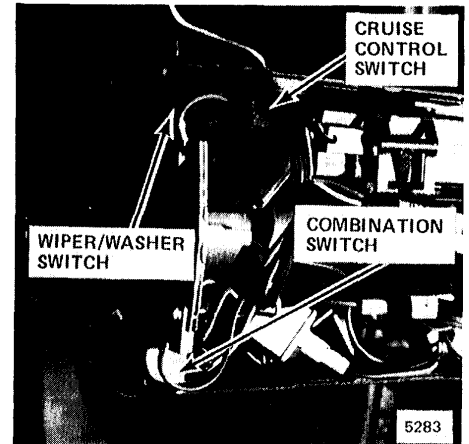


Figure 1 - Upper Part Of Steering Column

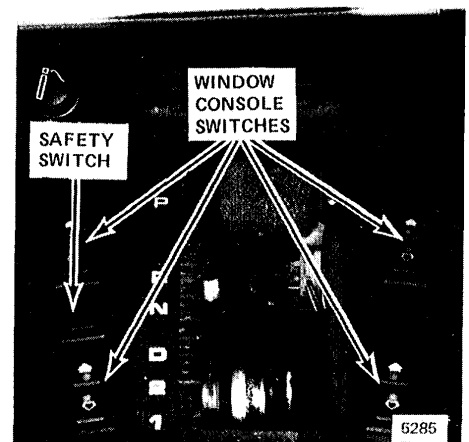


Figure 2 - Shift Console Near Shift Lever

## 210 COMPONENT LOCATIONS

### POWER DISTRIBUTION

Combination Switch .....	On LH side of steering column .....	209-1
Diagnostic Connector (528 e) ..	LH side of engine .....	104-1
Diagnostic Connector (533 i) ..	Top front of engine .....	104-1
Ignition Switch .....	Upper part of steering column	
Low Beam Check Relay .....	Attached to power distribution box .....	102-1
Power Distribution Box .....	On LH front wheel well .....	102-1
Starter .....	Lower rear LH side of engine	
C200 (10 pin) .....	On LH side of steering column .....	203-2
C202 (13 pin) .....	On LH side of steering column .....	203-2
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector) ..	Under LH side of dash .....	212-1
G102 (Main Body Ground) .....	On fender well behind LH headlights .....	203-1

### POWER MIRRORS

Mirror Control Switch .....	On driver's door	
Power Distribution Box .....	On LH front wheel well .....	102-1
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C500 (6 pin) .....	Behind LH front speaker	
C501 (4 pin) .....	Behind LH front speaker	
C502 (4 pin) .....	Behind RH front speaker .....	213-3
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

### POWER WINDOWS

Power Distribution Box .....	On LH front wheel well .....	102-1
Power Window Circuit Brkr ...	Mounted in left under dash cover .....	213-6
Power Window Relay .....	Under LH side of dash .....	102-1
Safety Switch .....	On shift console .....	209-2
Window Console Switches ....	On shift console .....	209-2
Window Motors .....	In each door	
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector) ..	Under LH side of dash .....	212-1
C400 (13 pin) .....	Behind RH front speaker	
C401 (13 pin) .....	Behind RH front speaker .....	213-3
C402 (6 pin) .....	At LH rear door grommet	
C403 (6 pin) .....	At RH rear door grommet	
C500 (6 pin) .....	Behind Left front speaker	
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

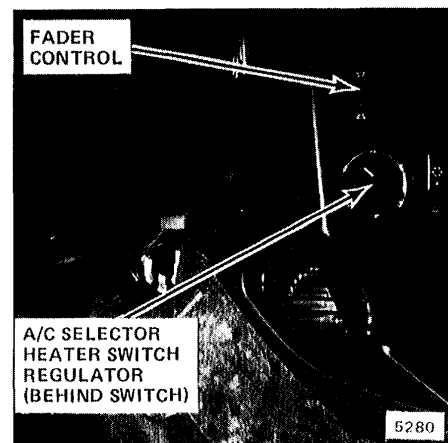


Figure 1 - Upper Console Below Dash



Figure 2 - RH Side Of Oil Pan

## RADIO/POWER ANTENNA

Fader Control .....	In upper part of center console .....	210-1
Power Distribution Box .....	On LH front wheel well .....	102-1
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C215 (2 pin) .....	Behind radio	
C216 (2 pin) .....	Behind radio	
C217 (2 pin) .....	Behind radio	
C218 (2 pin) .....	Behind radio	
C302 (accessory connector) ...	Under LH side of dash .....	212-1
G200 (Front Interior Ground)...	Under LH side of dash, near brake bracket	

## REAR DEFOGGER/HEATER DOOR LOCK

Lock Heater Control Unit .....	In LH front door .....	213-4
Lock Heater .....	In LH front door	
Power Distribution Box .....	On LH front wheel well .....	102-1
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector)...	Under LH side of dash .....	212-1
C500 (6 pin) .....	Behind LH front speaker	
C503 (8 pin) .....	In driver's door .....	202-2
C560 (2 pin) .....	In LH front door	
G200 (Front Interior Ground)...	Under LH side of dash, near brake bracket	
G301 (Rear Interior Ground) ...	Under LH side of rear seat .....	208-1

## SERVICE INTERVAL INDICATOR

Coolant Temp. Sender (528 e) ..	Front of engine, on thermostat housing .....	206-2
Coolant Temp. Sender (533 i) ..	Front of engine, on thermostat housing .....	201-2
Diagnostic Connector (528 e) ..	LH side of engine .....	104-1
Diagnostic Connector (533 i) ..	Top front of engine .....	104-1
Motronic Control Unit .....	Above glove box .....	204-1
Power Distribution Box .....	On LH front wheel well .....	102-1
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i) .....	In power distribution box .....	215-2
C103 (6 pin) .....	RH side of dash near Motronic control unit .....	204-1
G200 (Front Interior Ground)...	Under LH side of dash, near brake bracket	

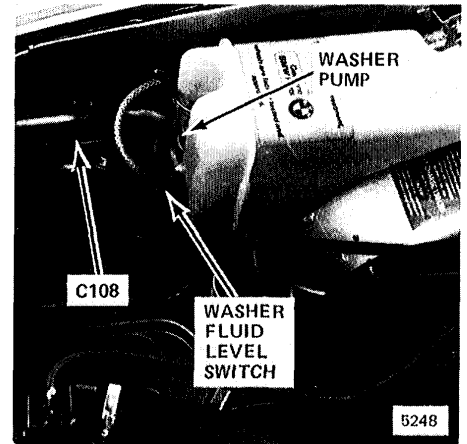


Figure 1 - Forward Of Washer Reservoir



Figure 2 - Top Front Of 528e Engine

## 212 COMPONENT LOCATIONS

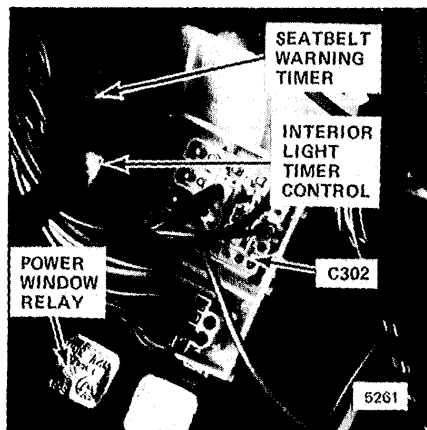


Figure 1 - Lower LH Side Of Dash

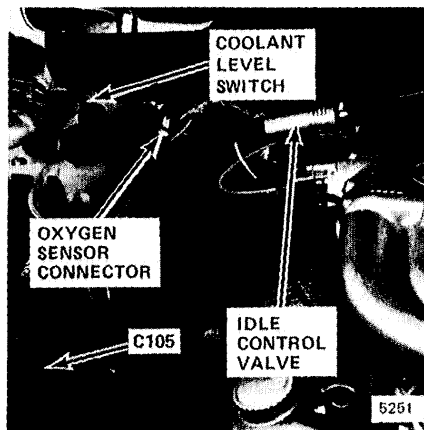


Figure 3 - Left Of 528e RH Front Wheel Well

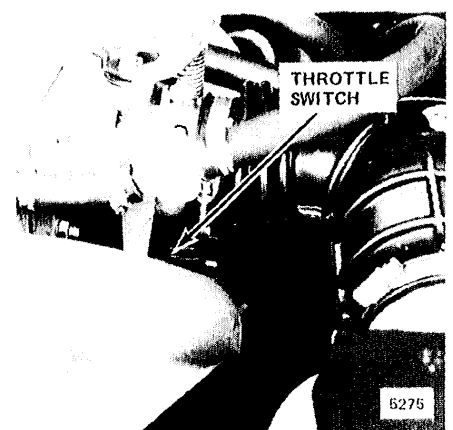


Figure 5 - Below Throttle Of 528e Engine

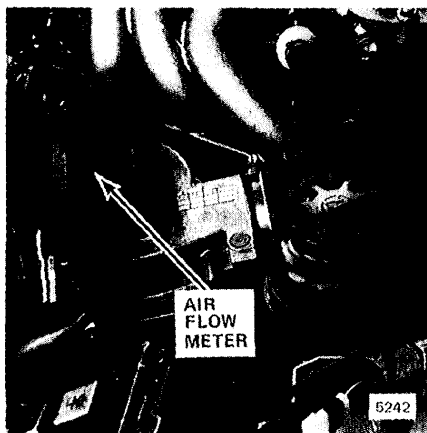


Figure 2 - Top Front LH Side Of 528e Engine

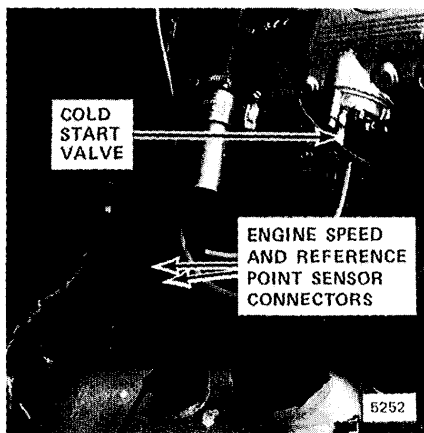


Figure 4 - RH Rear Side Of 528e Engine



Figure 6 - Left Of 533i RH Front Wheel Well

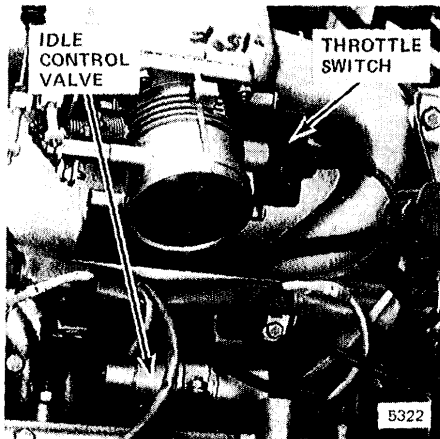


Figure 1 - Top Center Of 533i Engine

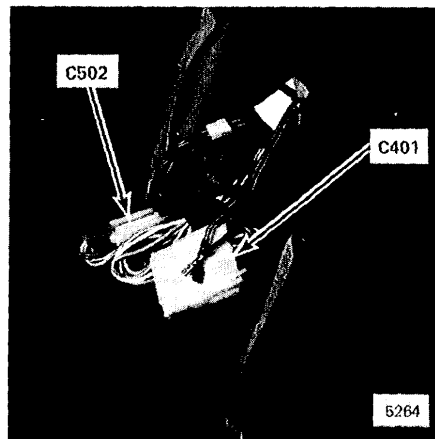


Figure 3 - Behind Right Front Speaker

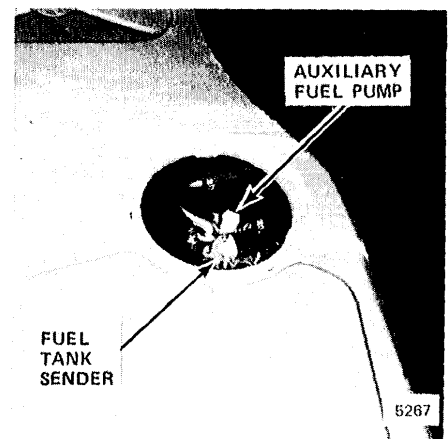


Figure 5 - Bottom RH Side Of Trunk

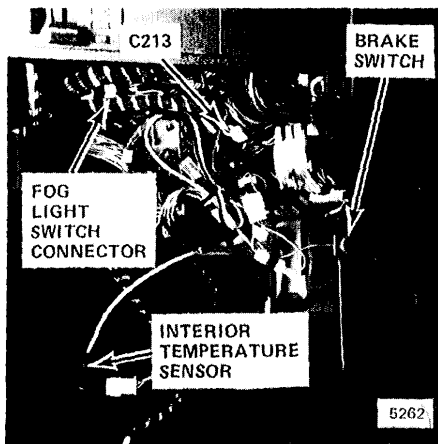


Figure 2 - Lower LH Side Of Dash

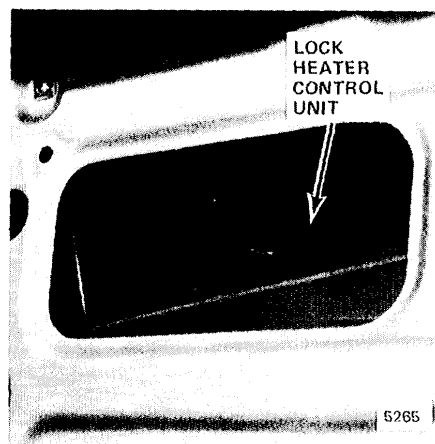


Figure 4 - Inside Driver's Door



Figure 6 - Left Of Upper Console

## 214 COMPONENT LOCATIONS

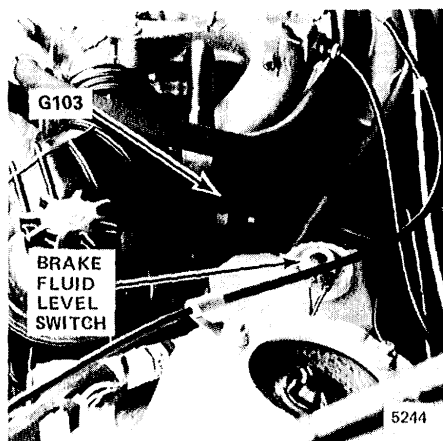


Figure 1 - LH Rear Of Side Of 528e Engine



Figure 3 - Forward Of Radiator

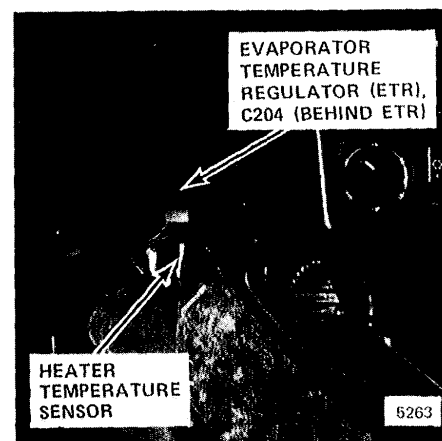


Figure 5 - LH Side Of Upper Console

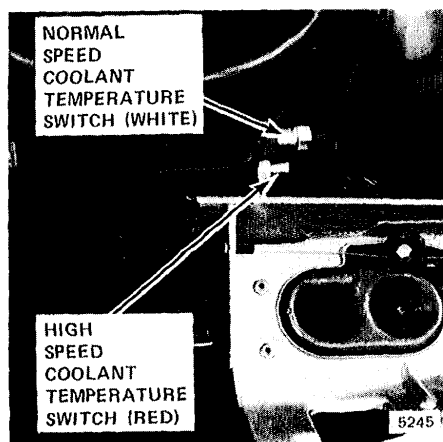


Figure 2 - LH Side Of Radiator

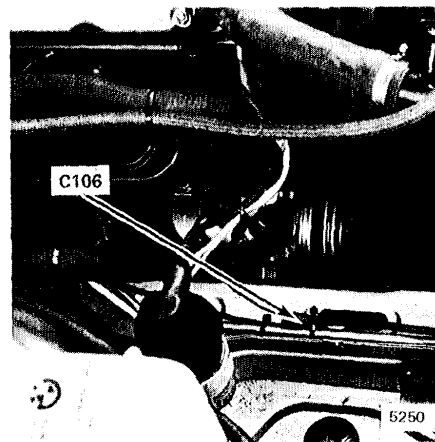


Figure 4 - Below Washer Reservoir Of 528e



Figure 6 - RH Side Of Upper Console

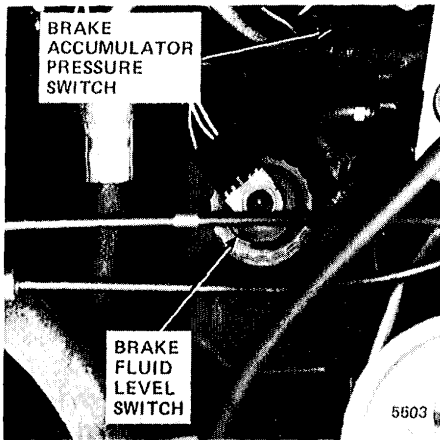


Figure 1 - LH Rear Side Of 533i Engine

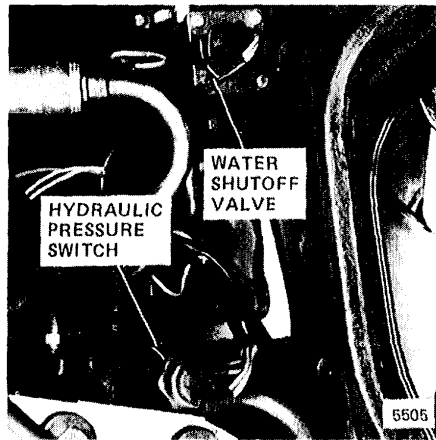


Figure 3 - Front Of LH Wheel Well



Figure 5 - Console, At Gear Shift Selector

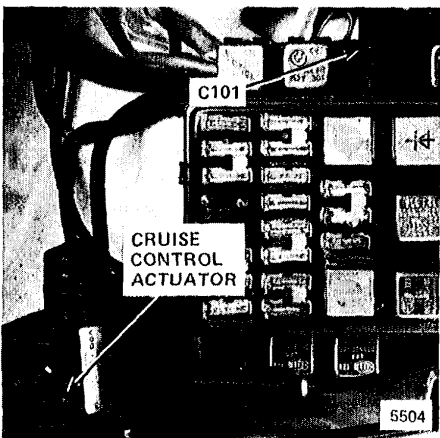


Figure 2 - LH Rear Side Of 533i Engine

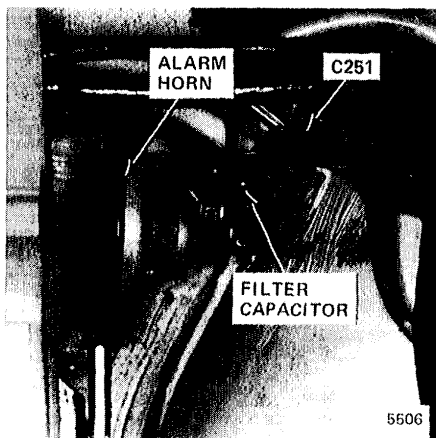


Figure 4 - Behind Battery



## 216 COMPONENT LOCATIONS

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### SPEEDOMETER/GAUGES/WARNING INDICATORS

Active Check Control Unit.....	Above rear view mirror .....	119-1
Brake Accumulator Pres. Switch	Right of left front shock tower .....	215-1
Brake Fluid Level Switch (528e)	LH rear of engine, on brake fluid reservoir .....	214-1
Brake Fluid Level Switch (533 i)	LH rear of engine, on brake fluid reservoir .....	215-1
Coolant Temp. Sender (528 e)	Front of engine, on thermostat housing .....	206-2
Coolant Temp. Sender (533 i)	Front of engine, on thermostat housing .....	201-2
Diagnostic Connector (528 e)	LH side of engine .....	104-1
Diagnostic Connector (533 i)	Top front of engine .....	104-1
Fuel Tank Sender .....	Under trunk, top RH side of fuel tank .....	213-5
Hydraulic Pressure Switch.....	Right of left front shock tower .....	215-3
Ignition Switch.....	Upper part of steering column	
Motronic Control Unit .....	Above glove box .....	204-1
Oil Pressure Switch .....	RH side of engine, below oil filter .....	210-2
Parking Brake Switch .....	In shift console at base of parking brake	
Power Distribution Box .....	On LH front wheel well .....	102-1
Speedometer Sender .....	In rear of differential	
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i).....	In power distribution box .....	215-2
C103 (6 pin) .....	RH side of dash near Motronic control unit.....	204-1
C200 (10 pin) .....	On LH side of steering column .....	203-2
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	
G301 (Rear Interior Ground) ...	Under LH side of rear seat.....	208-1

## START

Auto. Trans. Range Switch ...	At base of shift lever .....	215-5
Cold Start Valve (528 e).....	RH side of engine.....	212-4
Cold Start Valve (533 i) .....	Between intake ports 3 and 4	
Diagnostic Connector (528 e)	LH side of engine .....	104-1
Diagnostic Connector (533 i)	Top front of engine .....	104-1
Ignition Switch.....	Upper part of steering column	
Power Distribution Box .....	On LH front wheel well .....	102-1
Start Relay .....	On connector bracket under LH side of dash .....	206-1
Starter .....	Lower rear LH side of engine	
Thermo-Time Switch (533 i) ...	Front of engine, top of thermostat housing .....	201-2
Thermo-Time Switch (528 e) ..	Front of engine, top of thermostat housing .....	211-2
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i).....	In power distribution box .....	215-2
C200 (10 pin) .....	On LH side of steering column .....	203-2
C213 (1 pin) .....	Near start relay under LH side of dash .....	213-2
G102 (Main Body Ground) ...	On fender well behind LH headlights .....	203-1
G200 (Front Interior Ground) ..	Under LH side of dash, near brake bracket	

## WIPER/WASHER

Power Distribution Box .....	On LH front wheel well .....	102-1
Washer Jet Heaters .....	On washer jet nozzles	..
Washer Pump .....	Forward of RH front wheel well, in reservoir .....	211-1
Wiper Motor.....	Above brake master cylinder	
Wiper/Washer Switch .....	On RH side of steering column.....	209-1
C102 (7 pin) .....	In power distribution box .....	205-1
C110 (2 pin) .....	Near washer pump	
C201 (6 pin) .....	On LH side of steering column .....	203-2
G200 (Front Interior Ground) .	Under LH side of dash, near brake bracket	
G201 (Steering Column Ground)	Upper part of steering column.....	207-2