1987/1988 *
BMW 528e
Electrical
Troubleshooting
Manual

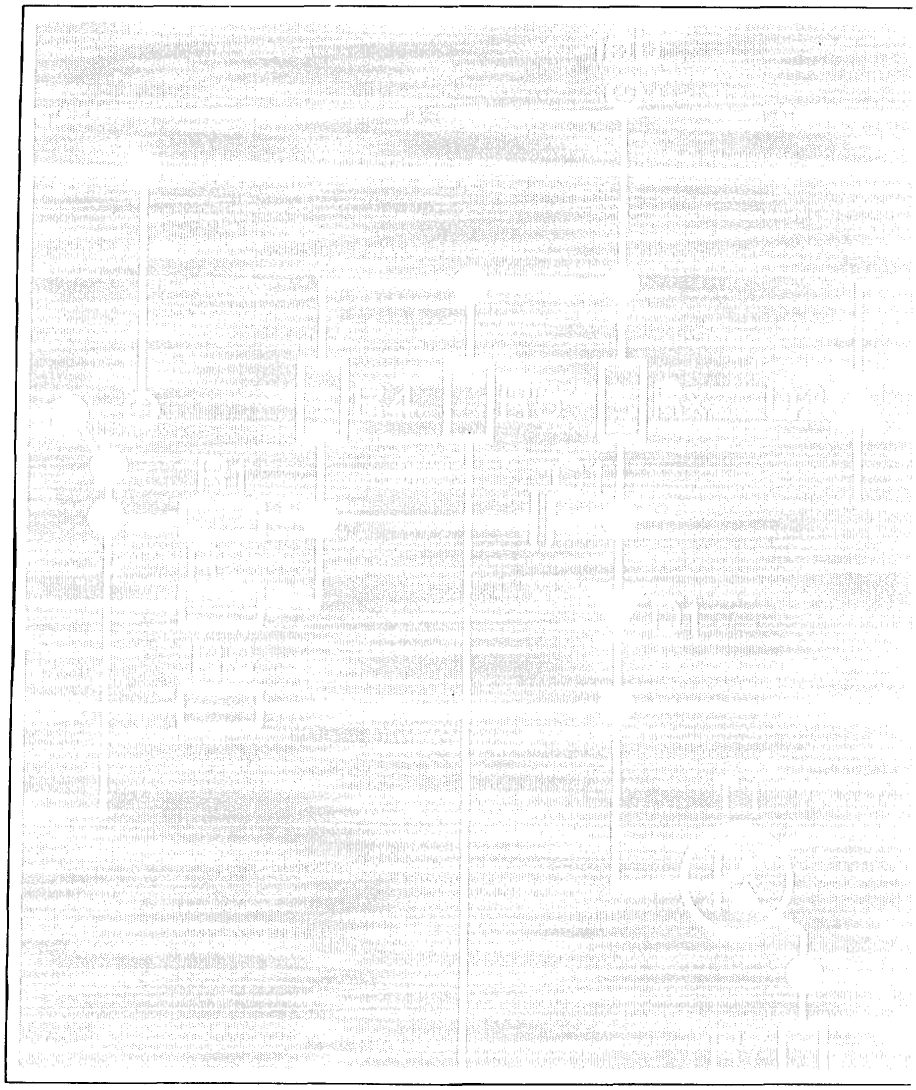
*** 1987 Vehicles Built Before 9/86 Use 1986 528e Electrical Troubleshooting Manual *For Diagnostics.***

BMW of North America, Inc.
Montvale, New Jersey

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FOREWORD

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



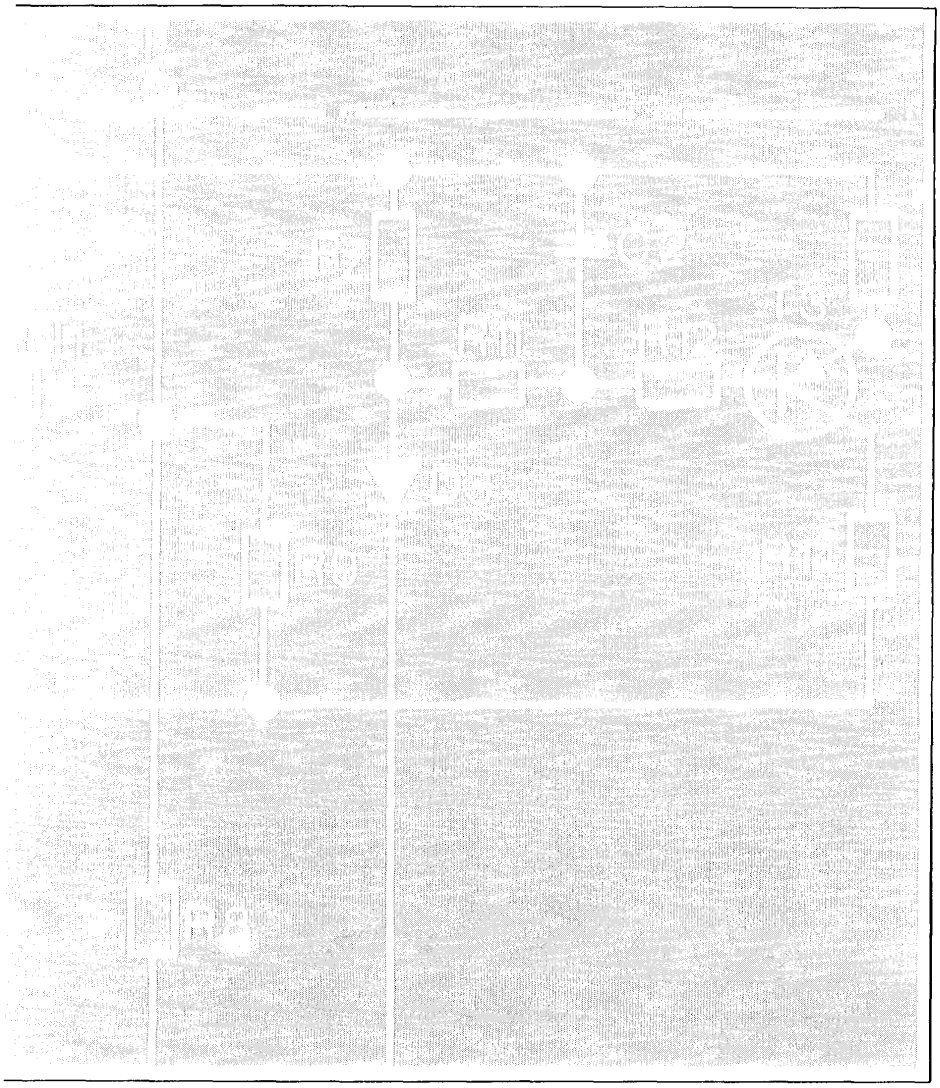
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1987/1988 * BMW 528e Electrical Troubleshooting Manual

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Alphabetical Listing of Electrical Circuits

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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

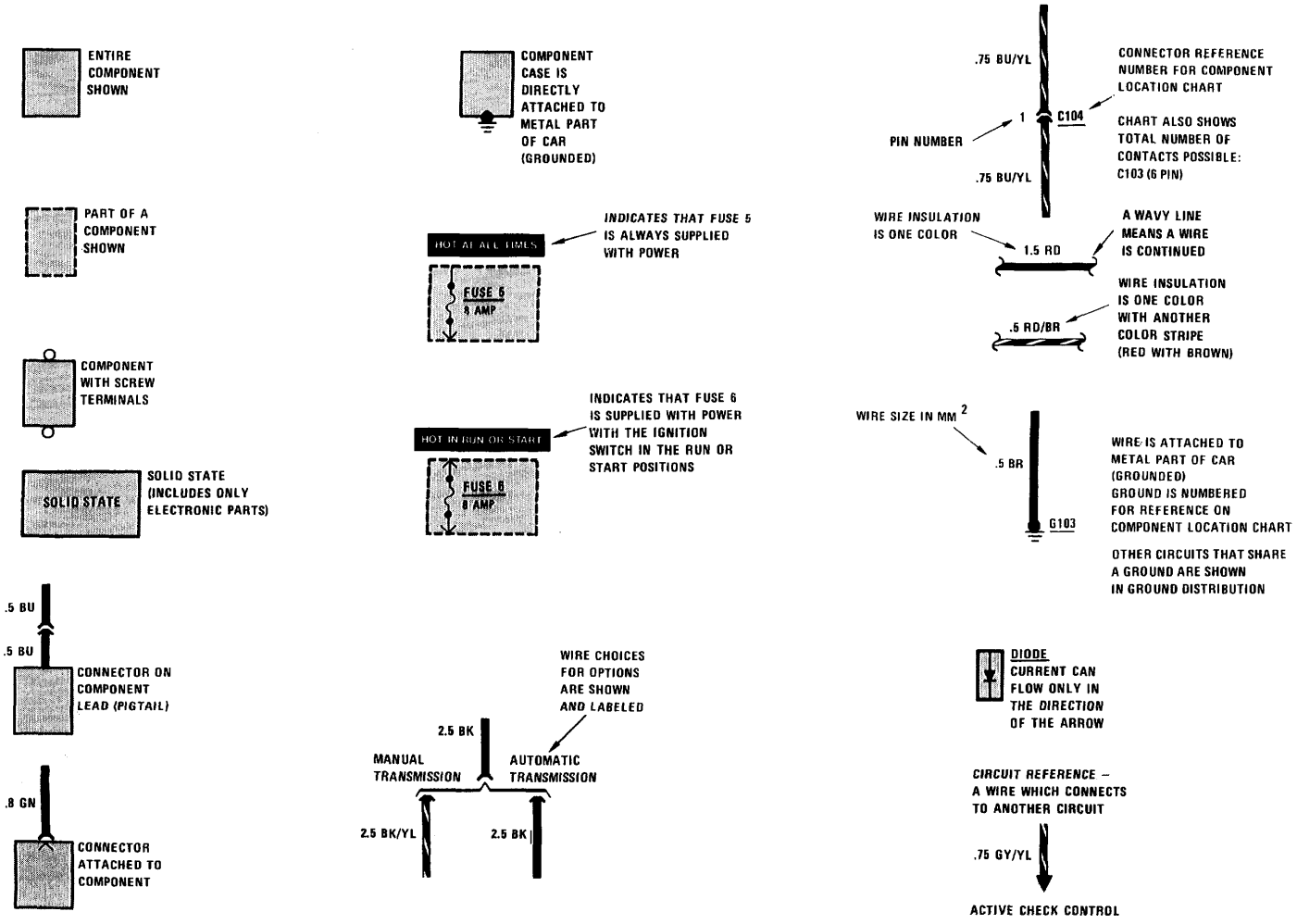
METRIC (CROSSECTIONAL AREA IN MM²)	AWG (AMERICAN WIRE GAUGE)
.5	20
.75	18
1	16
1.5	14
2	14
2.5	12
4	10
6	8
8	8
16	4
20	4
25	2
32	2

WIRE INSULATION

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

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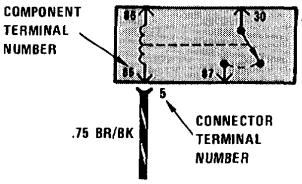
4 SYMBOLS

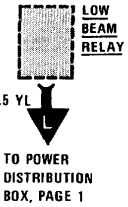


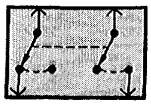
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ONE POLE,
TWO POSITION
SWITCH





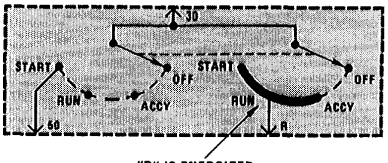


SWITCHES THAT
MOVE TOGETHER

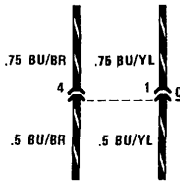
DASHED LINE SHOWS
A MECHANICAL
CONNECTION
BETWEEN SWITCHES

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

TWO POLE, FOUR
POSITION SWITCH

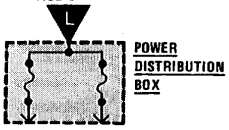


"R" IS ENERGIZED
IN ACCY, RUN OR START



TWO CONNECTIONS
(PINS) IN THE SAME
CONNECTOR

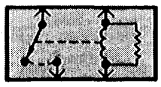
DASHED LINE SHOWS
PARTS OF THE
SAME CONNECTOR





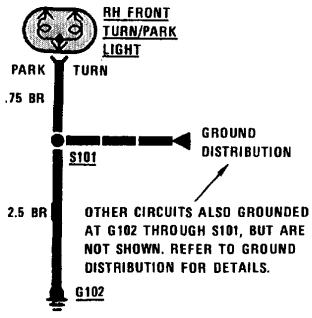
RELAY SHOWN
WITH NO
CURRENT
FLOWING
THROUGH
COIL

WHEN COIL IS
ENERGIZED, SWITCH
IS PULLED CLOSED



RELAY SHOWN
WITH RESISTOR
ACROSS COIL

RESISTOR ACROSS COIL
IS FOR NOISE
SUPPRESSION





LIGHT
EMITTING
DIODE

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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

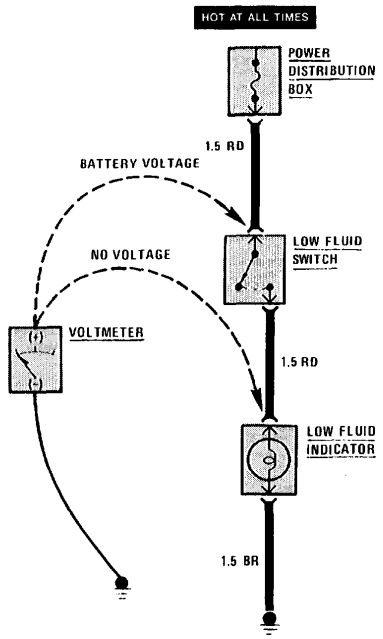
Isolating the problem (Step 3 of TROUBLESHOOTING PROCEDURES) requires the use of a **voltmeter** and/or **ohmmeter**. A voltmeter measures voltage at selected points in a circuit. An ohmmeter measures a circuit's resistance to current flow. It has an internal battery that provides current to the circuit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



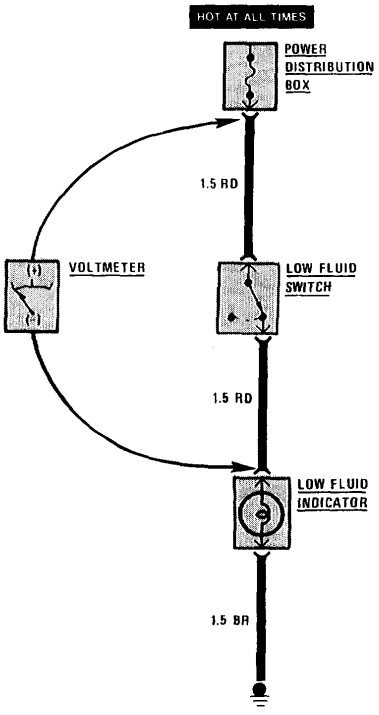
Voltage Test

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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.

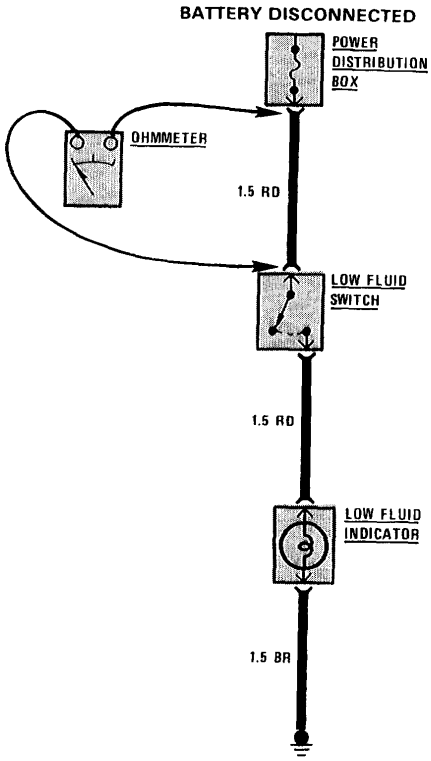
To test for voltage drop, connect the voltmeter leads to connectors at either end of the circuit's suspected problem area. The positive lead should be connected to the connector closest to the power source. The voltmeter will show the voltage drop between these two points.



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.

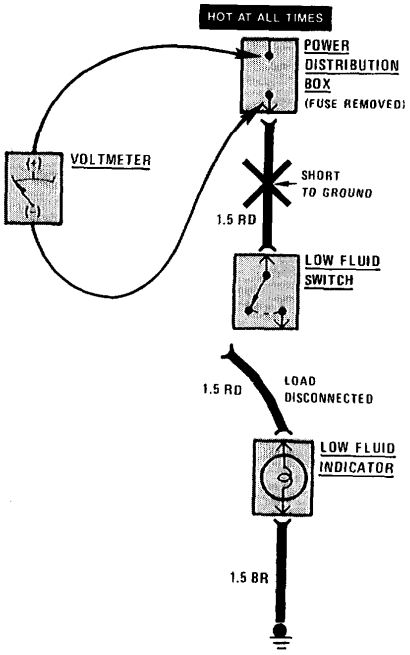


Continuity Test

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.



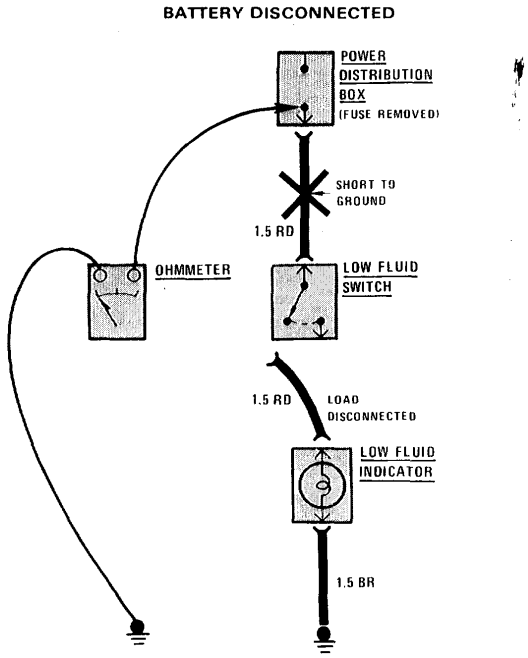
Short Test Using Voltmeter

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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

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POWER DISTRIBUTION BOX

87 MY POWER DISTRIBUTION BOX

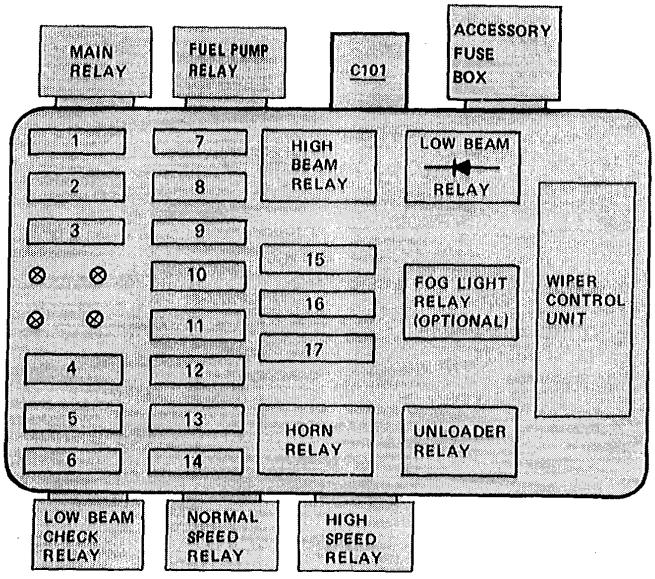


Figure 1- Top Of Left Front Wheel Well

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.

88 MY POWER DISTRIBUTION BOX

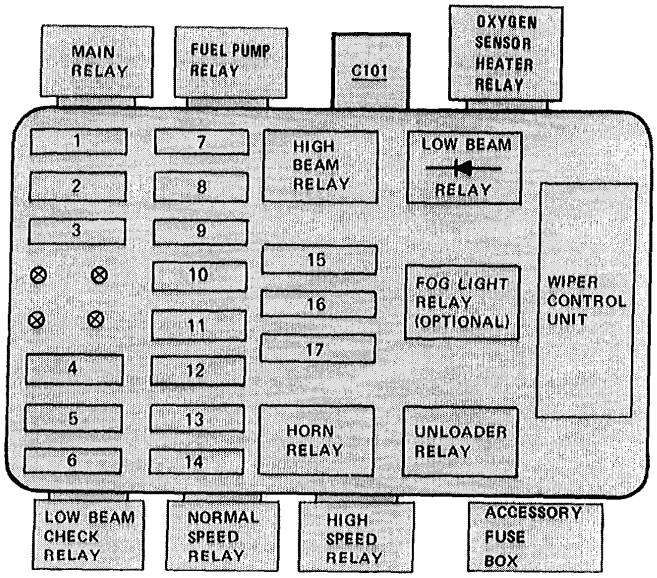


Figure 2 - Top Of Left Front Wheel Well

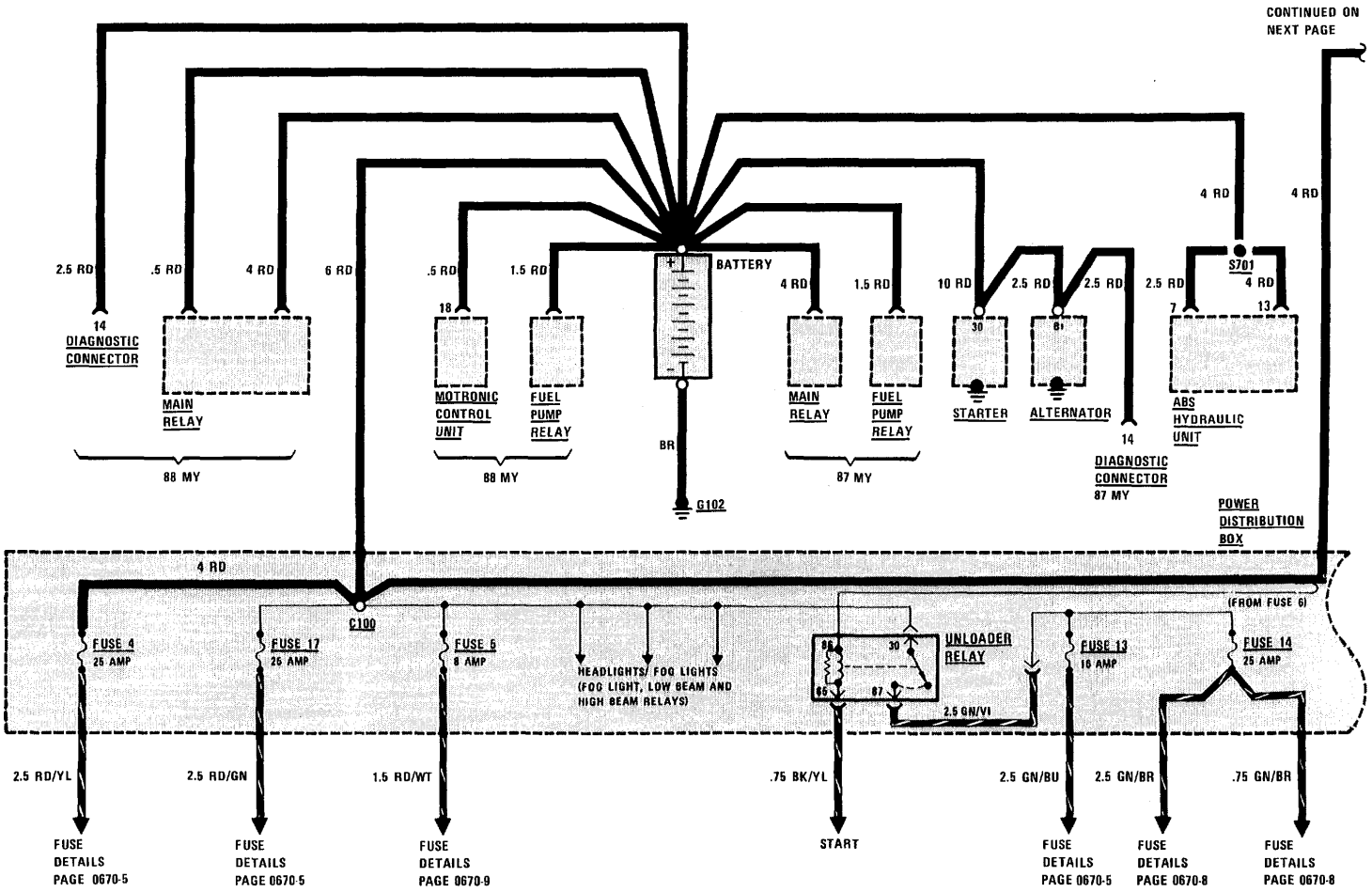
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Fuse No.	Size	Circuit Name
1	16A	Fuel Delivery
2	8A	Active Check Control (also fuses 3, 5, 6, 9, 10, 11, 12); Headlights (RH Dual Beam).
3	8A	Active Check Control (also fuses 2, 5, 6, 9, 10, 11, 12); Headlights (LH Dual Beam).
4	25	Cigar Lighter; Radio/Power Antenna (also fuses 5, 12); Power Seats.
5	8A	Active Check Control (also fuses 2, 3, 6, 9, 10, 11, 12); Heated Door Locks; Ignition Key Warning/Seatbelt Warning (also fuse 6); Interior Lights (also fuse 6); Lights: Turn/Hazard Warning (also fuse 11); Lights: Trunk; Glove Box/Auto-Charging Flashlight; Central Locking; On-Board Computer (also fuses 6, 12); Radio/Power Antenna (also fuses 4, 12); Service Interval Indicator (also fuse 6).
6	8A	Active Check Control (also fuses 2, 3, 5, 9, 10, 11, 12); Back Up Lights/Transmission Range Lights; Cruise Control; Dash Lights (also fuses 9, 14); Fog Lights (also fuses 15, 16); Gauges; Heater/Air Conditioning (also fuse 14); Idle Speed Control; Ignition; Injection Electronics; 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.
7	8A	Headlights (RH High Beams).

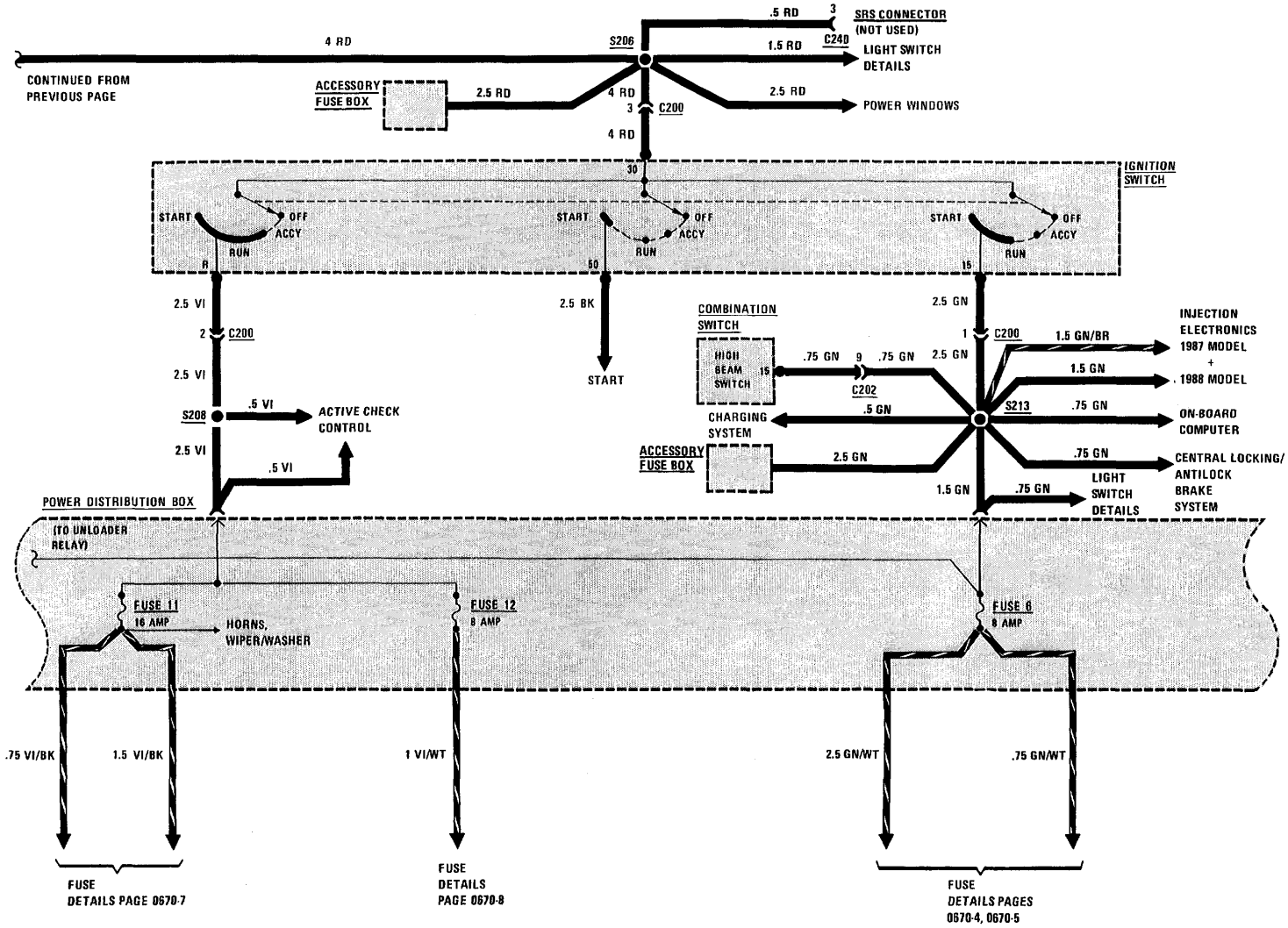
Fuse No.	Size	Circuit Name
8	8A	Headlights (LH High Beams);
9	8A	Active Check Control (also fuses 2, 3, 5, 6, 10, 11, 12); Dash Lights (also fuses 6, 14); Lights: Front Park/Front Marker/Tail: (also fuse 10); Lights: Rear Marker/License.
10	8A	Active Check Control (also fuses 2, 3, 5, 6, 9, 10, 12); Lights: Front Park/Front Marker/Tail.
11	16A	Active Check Control (also fuses 2, 3, 5, 6, 9, 11, 12); Lights: Turn/Hazard Warning (also fuse 5); Wiper/Washer and Heater Washer Jets; Horn.
12	8A	Active Check Control (also fuses 2, 3, 5, 6, 9, 10, 11); Antilock Brake System; Radio (also fuses 4, 5); Stop Lights; On-Board Computer (also fuses 5, 6); Power Antenna (also fuses 4, 5).
13	16A	Rear Defogger; Sunroof.
14	25A	Auxiliary Fan (also fuse 17); Dash Lights (also fuses 6, 9); Heater/Air Conditioning (also fuse 6).
15	8A	Fog Lights (RH).
16	8A	Fog Lights (LH).
17	25A	Auxiliary Fan (also fuse 14).
Power Window Circuit Breaker	25A	Power Windows (also fuse 6).

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0670-2 POWER DISTRIBUTION

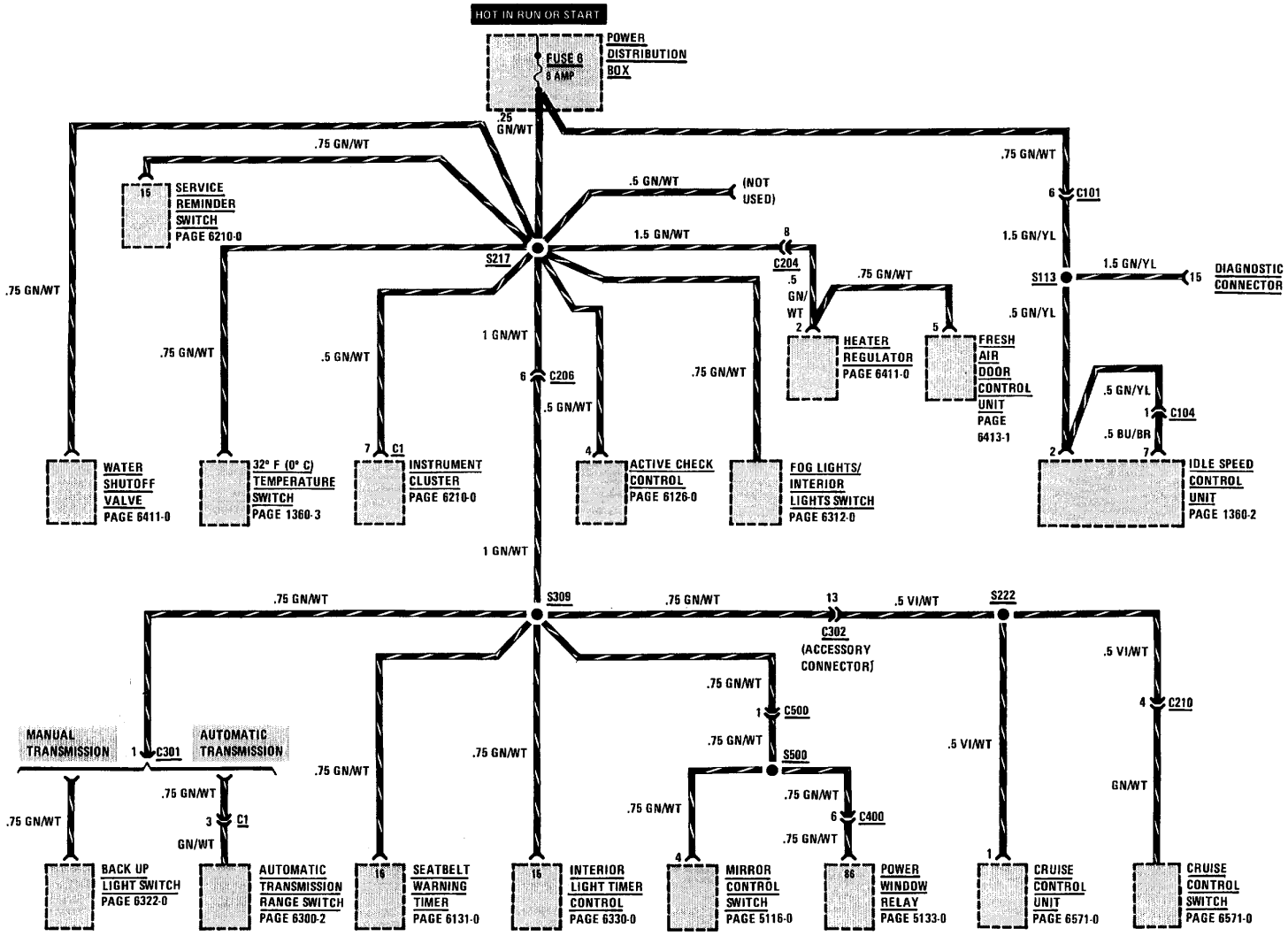


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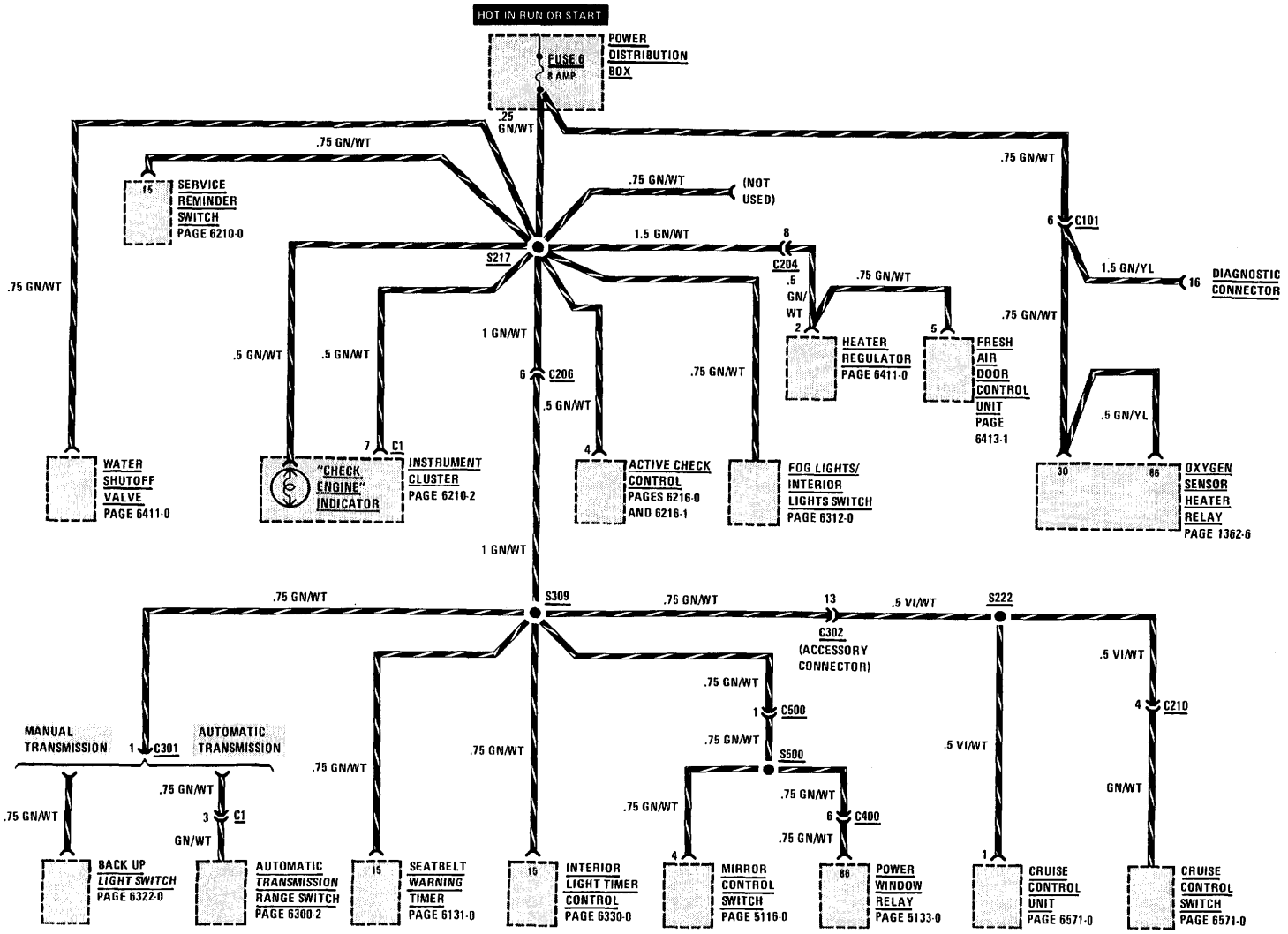
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FUSE DETAILS: FUSE 6



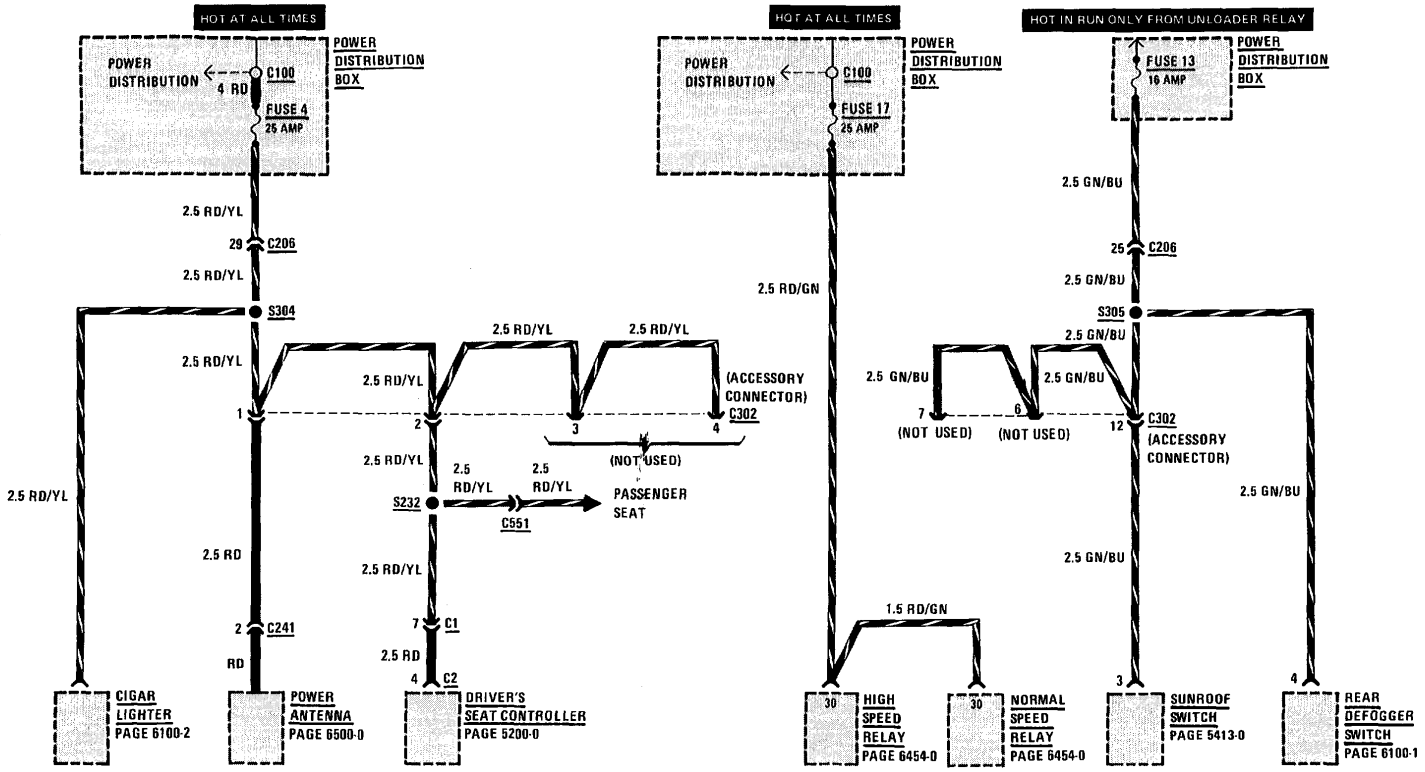
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FUSE DETAILS: FUSE 6



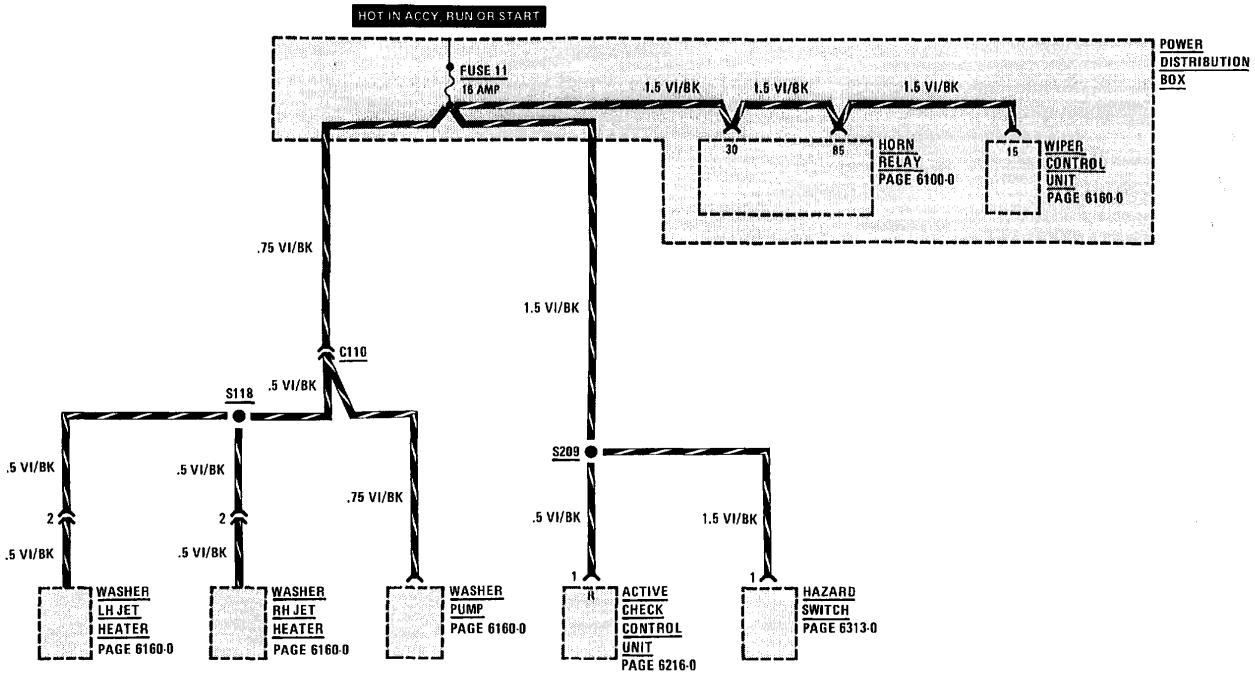
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FUSE DETAILS: FUSES 4, 17 and 13



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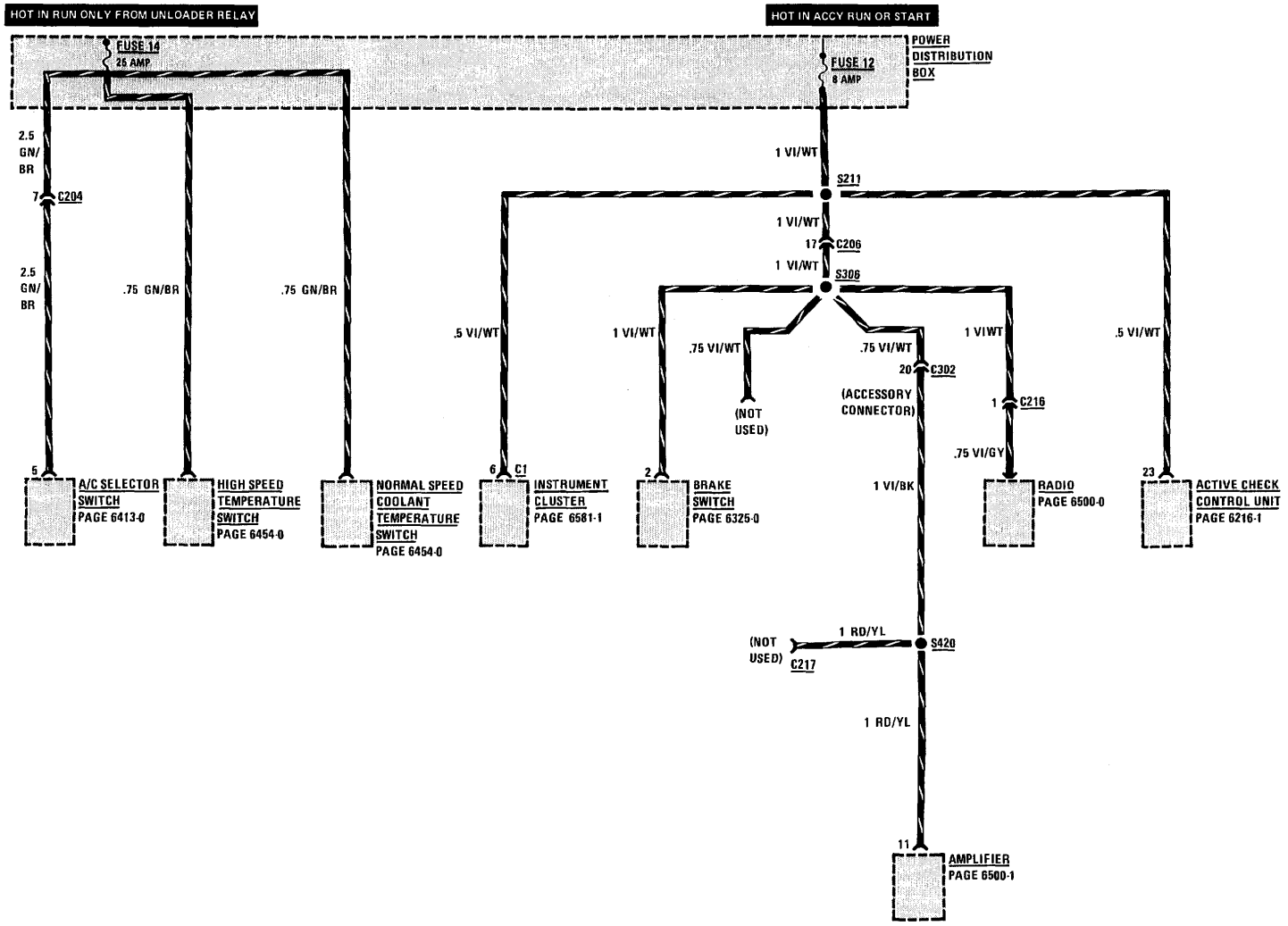
FUSE DETAILS: FUSE 5



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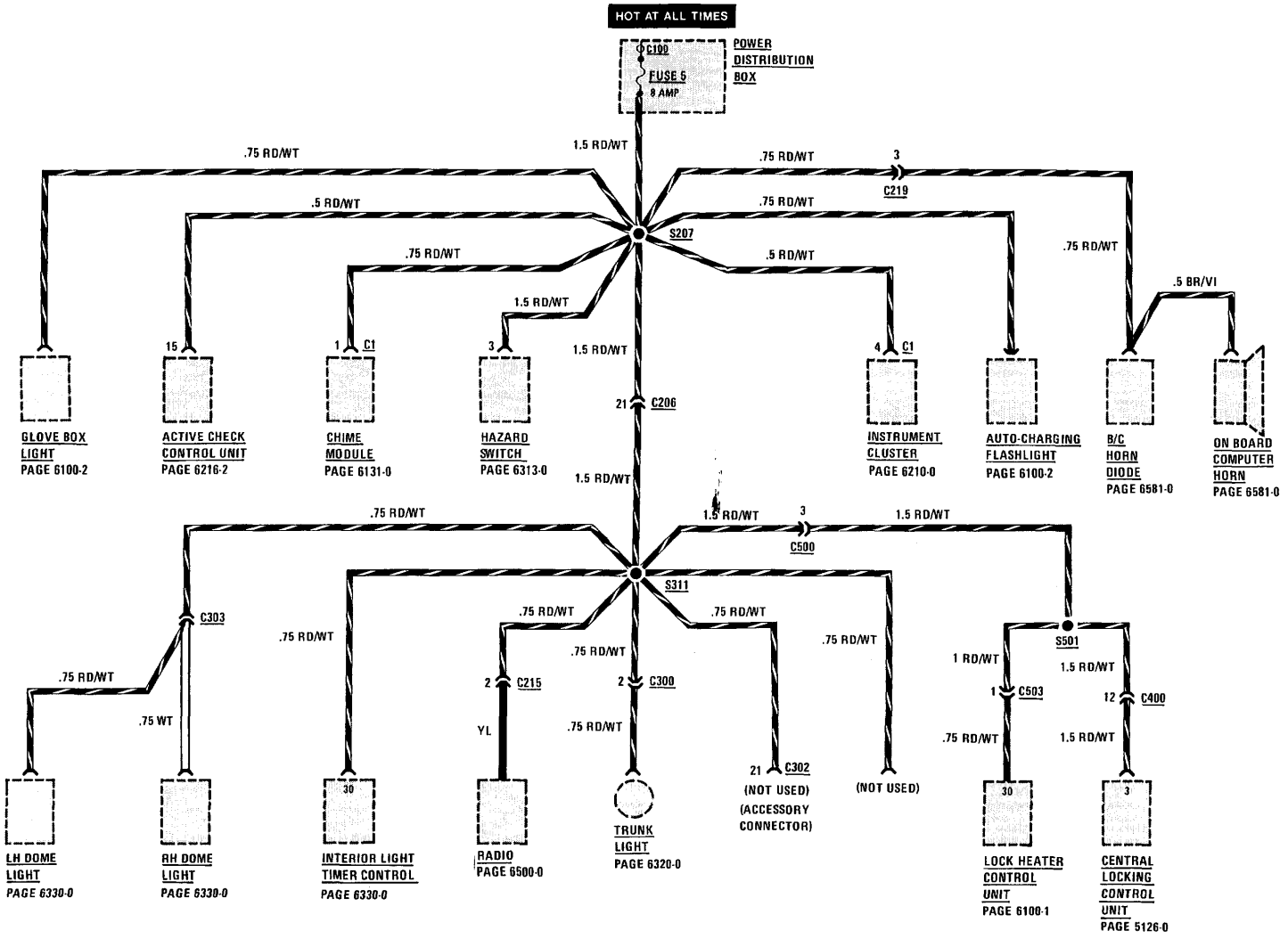
0670-8 POWER DISTRIBUTION

FUSE DETAILS: FUSES 12 AND 14



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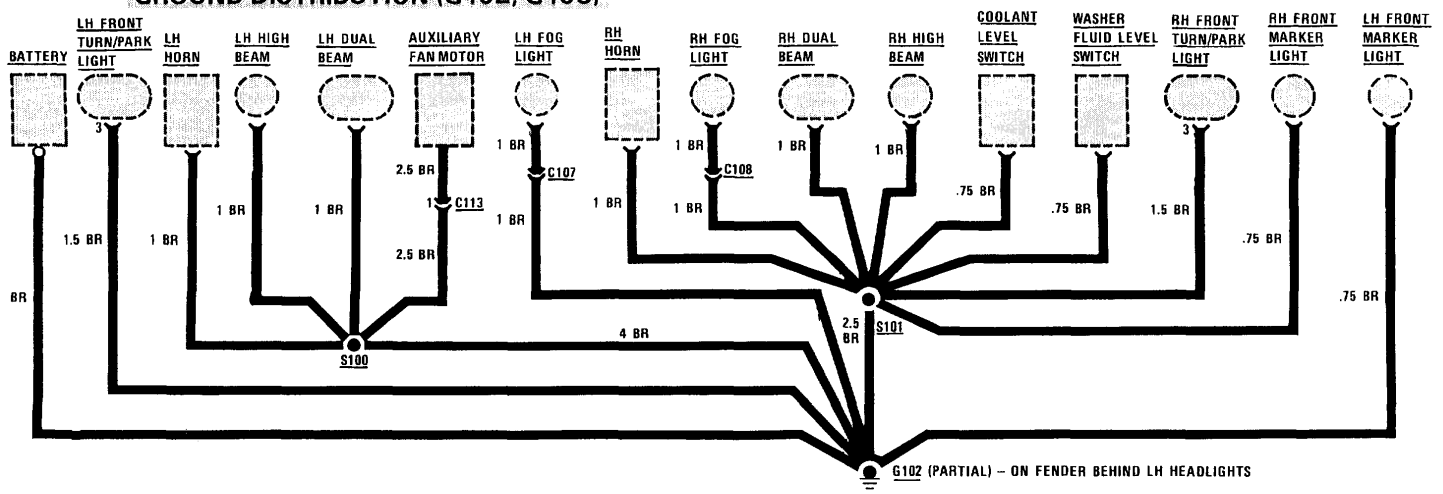
FUSE DETAILS: FUSE 5

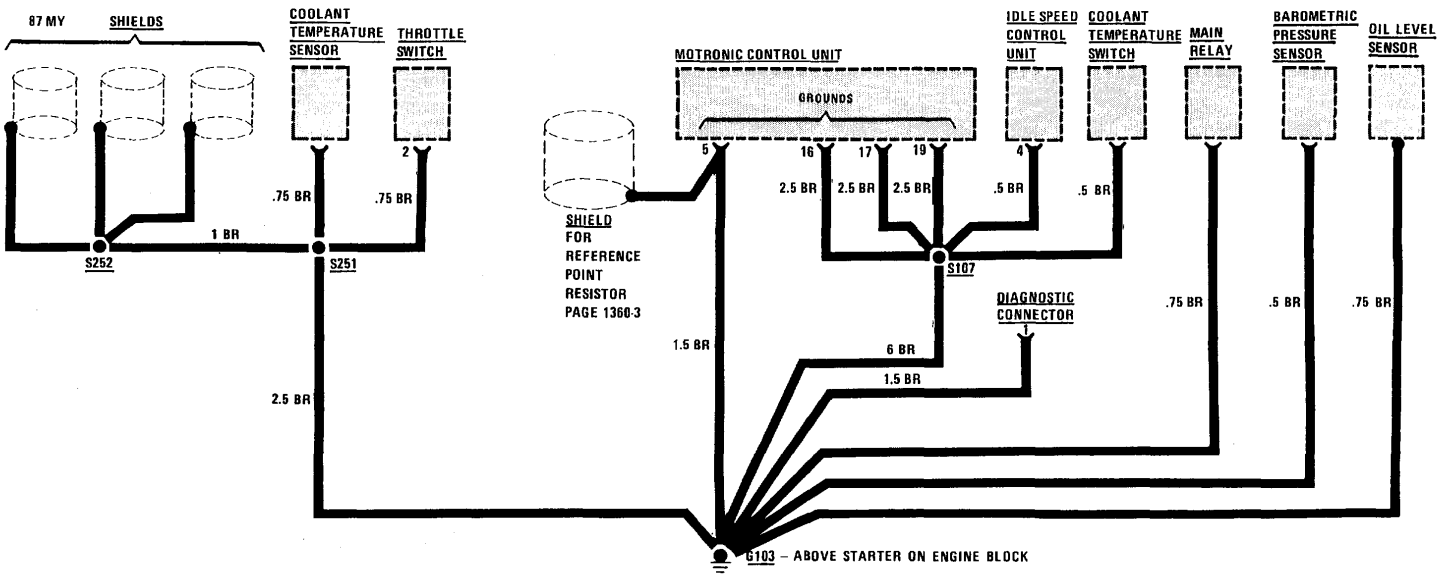


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0670-10 POWER DISTRIBUTION

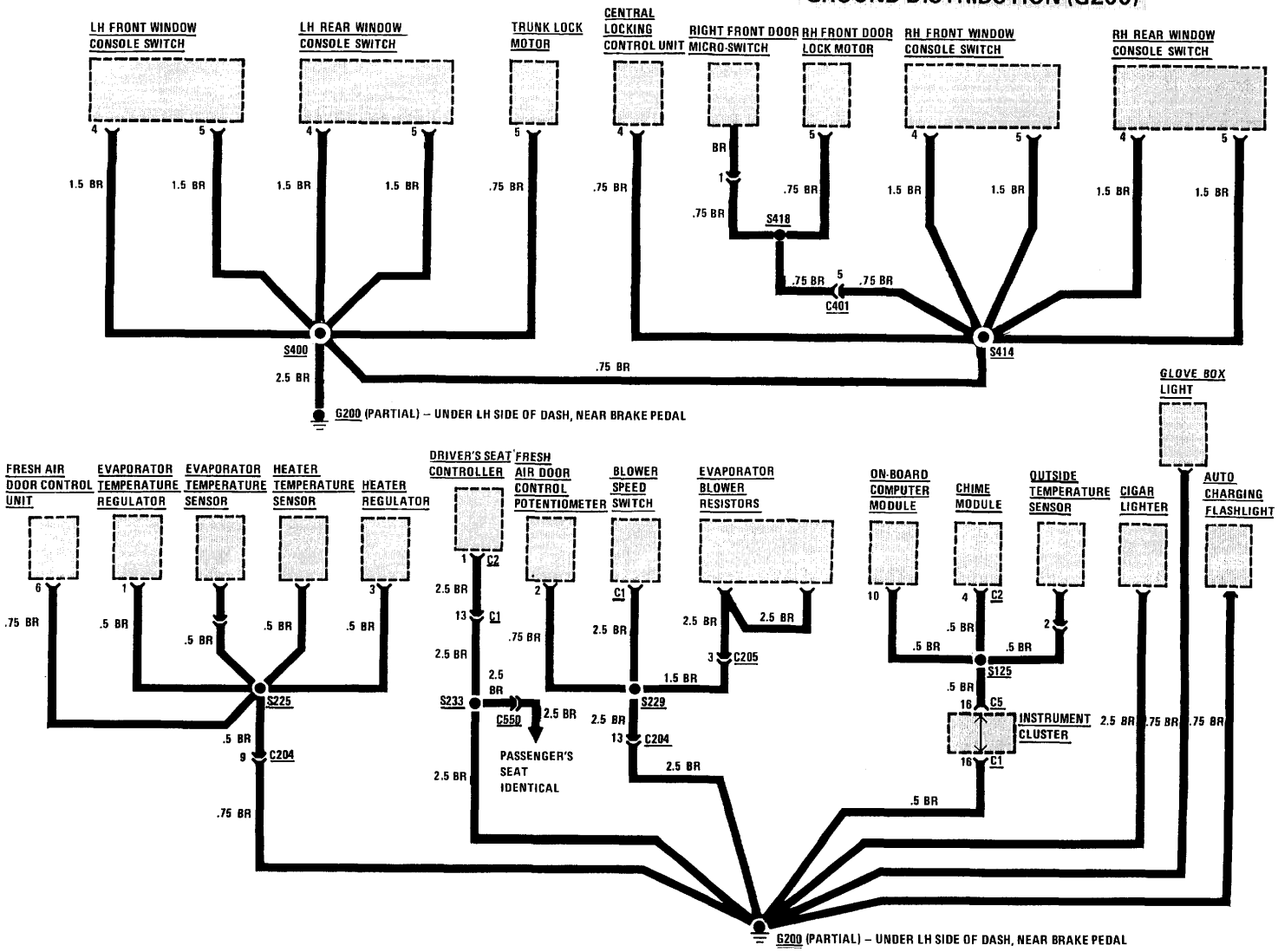
GROUND DISTRIBUTION (G102, G103)





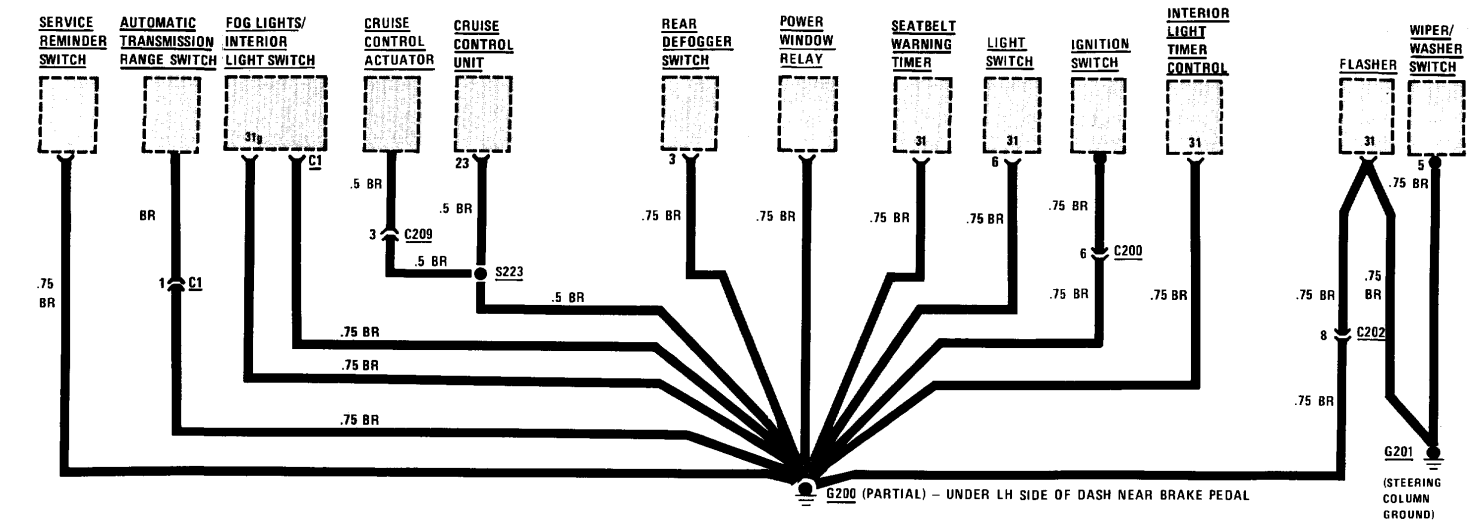
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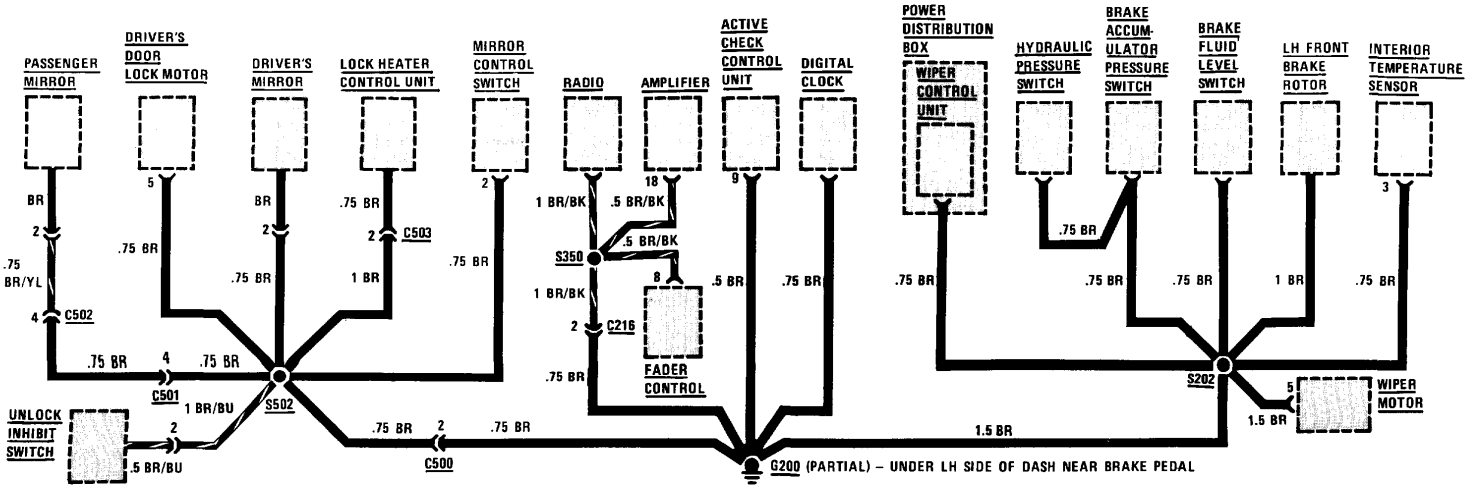
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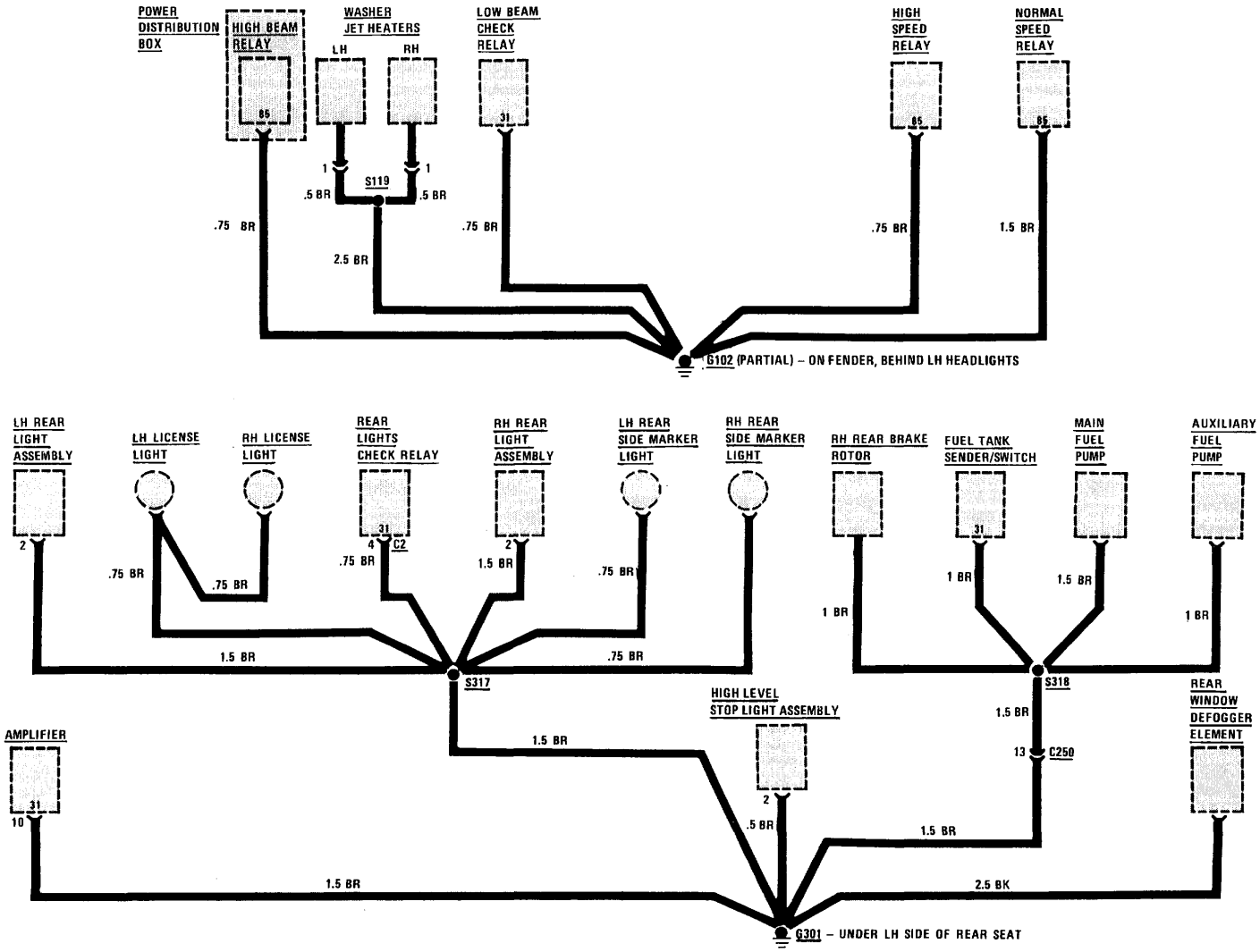
GROUND DISTRIBUTION (G200 AND G201)





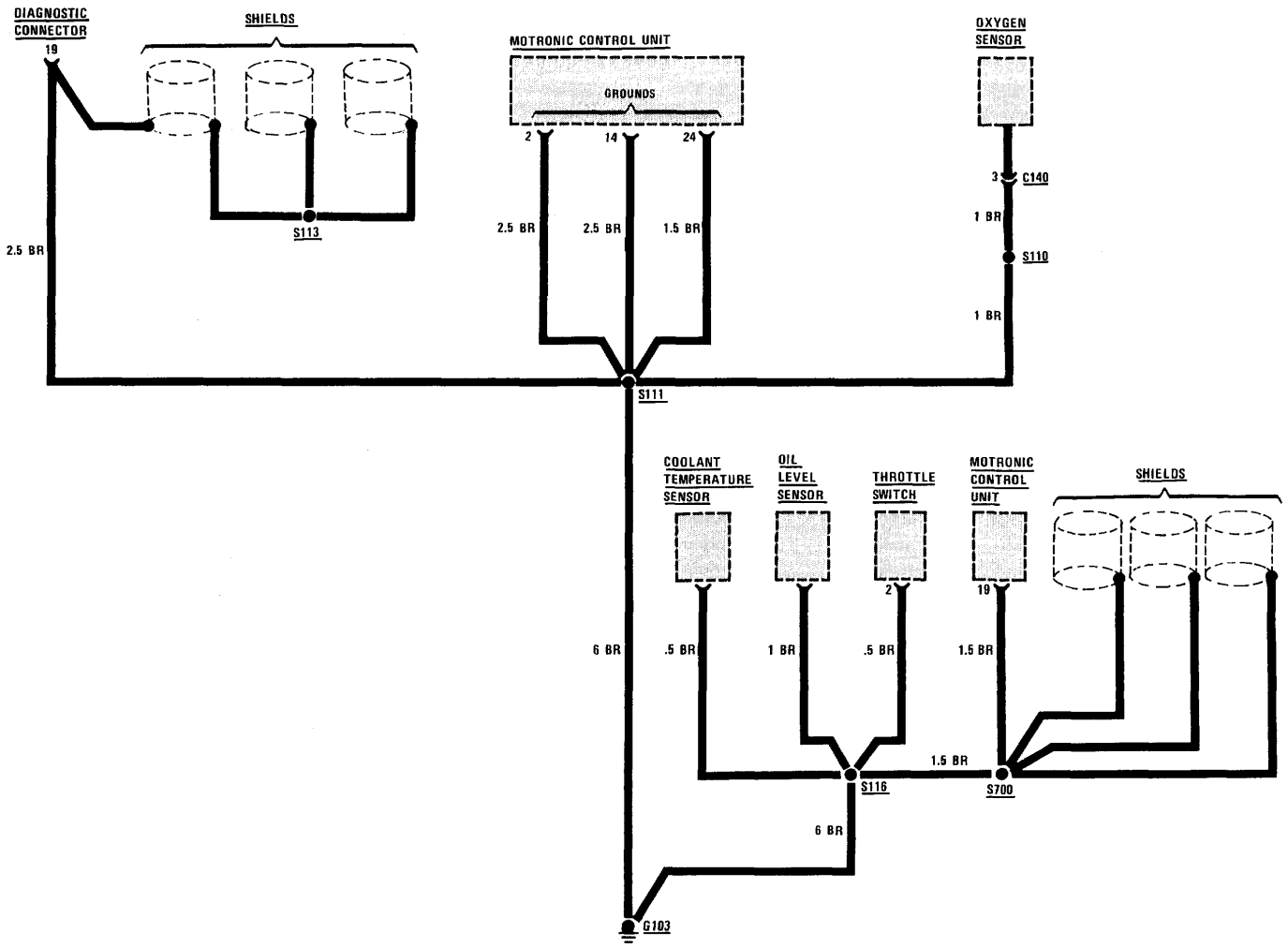
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GROUND DISTRIBUTION (G102 AND G301)



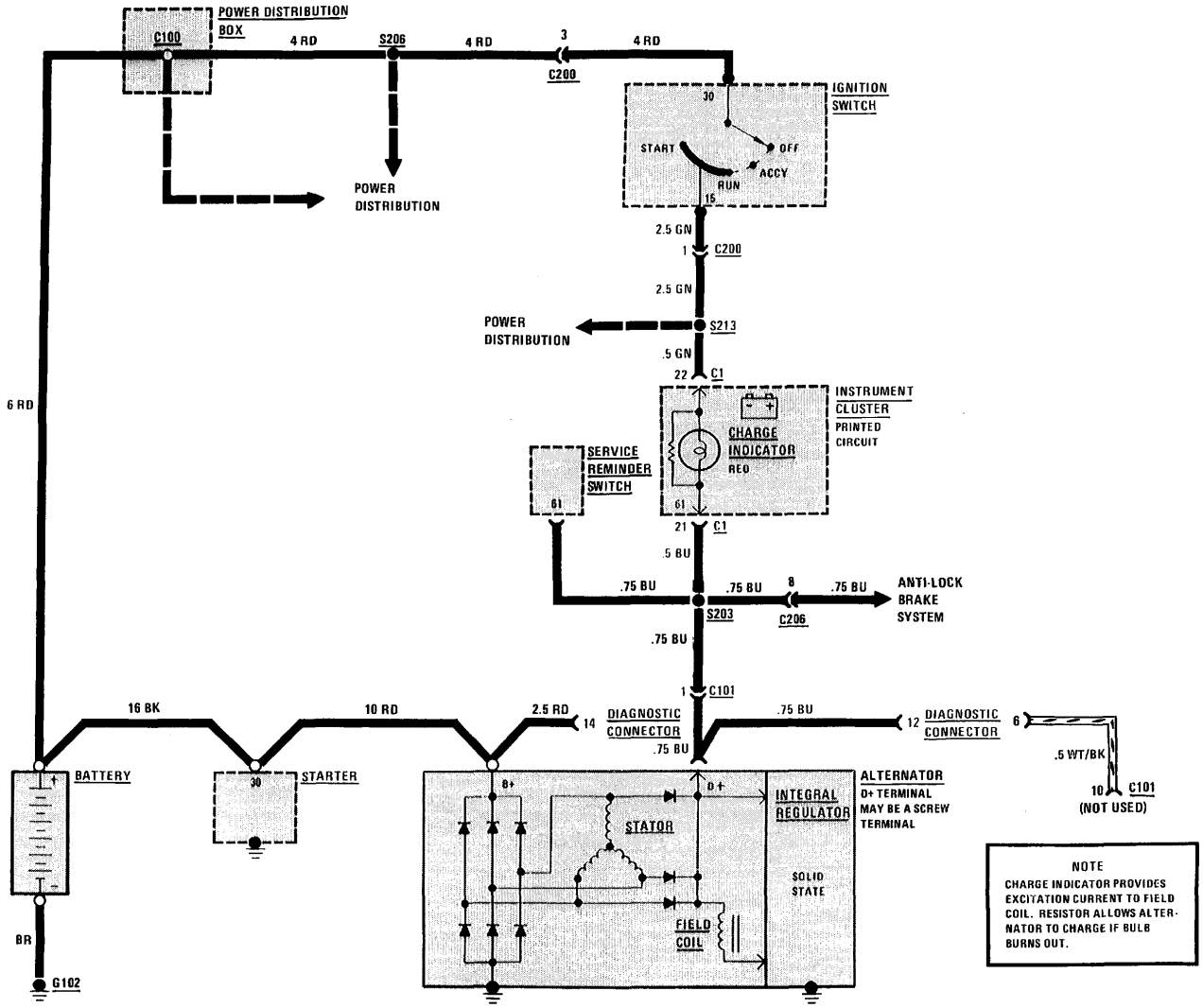
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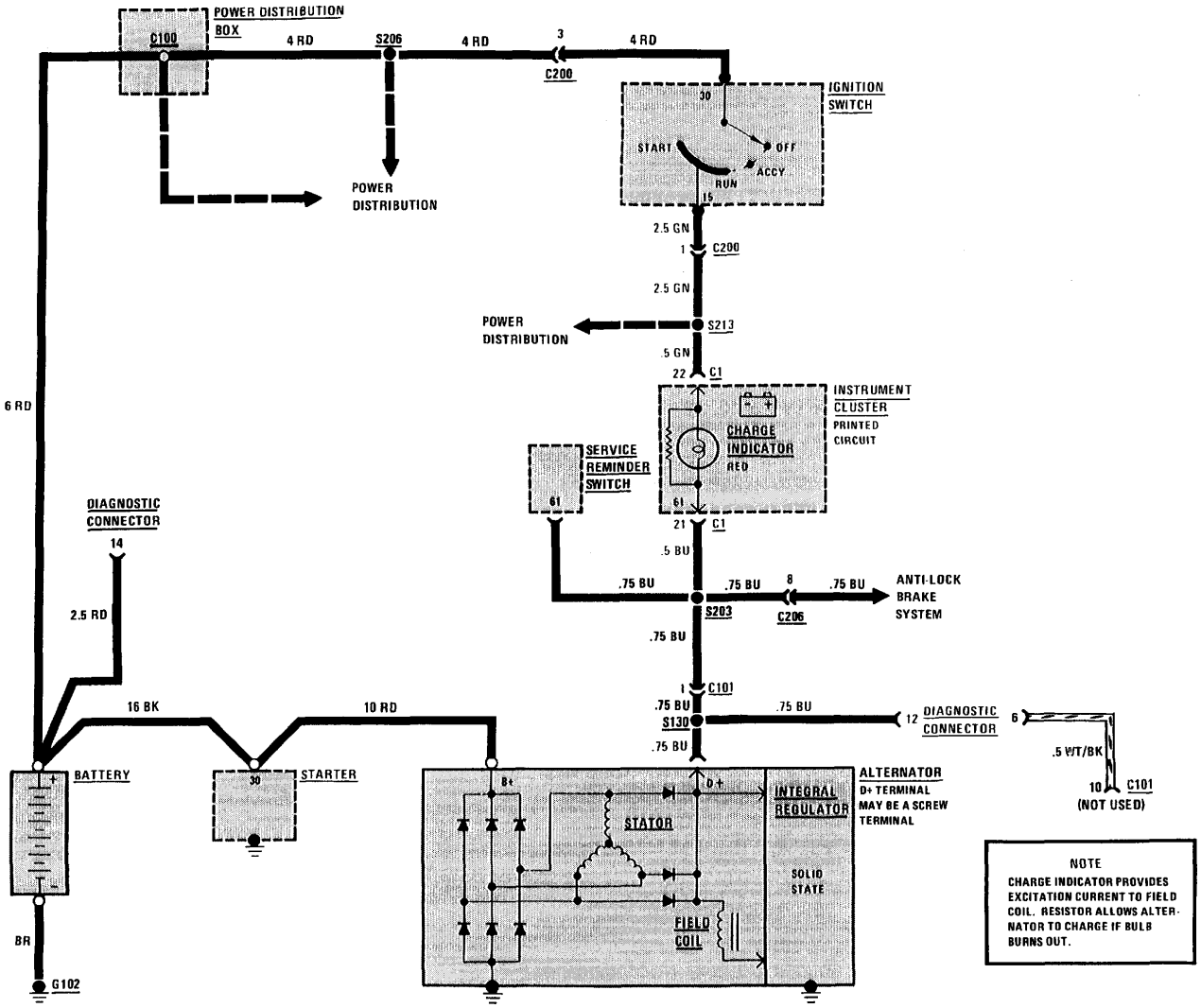


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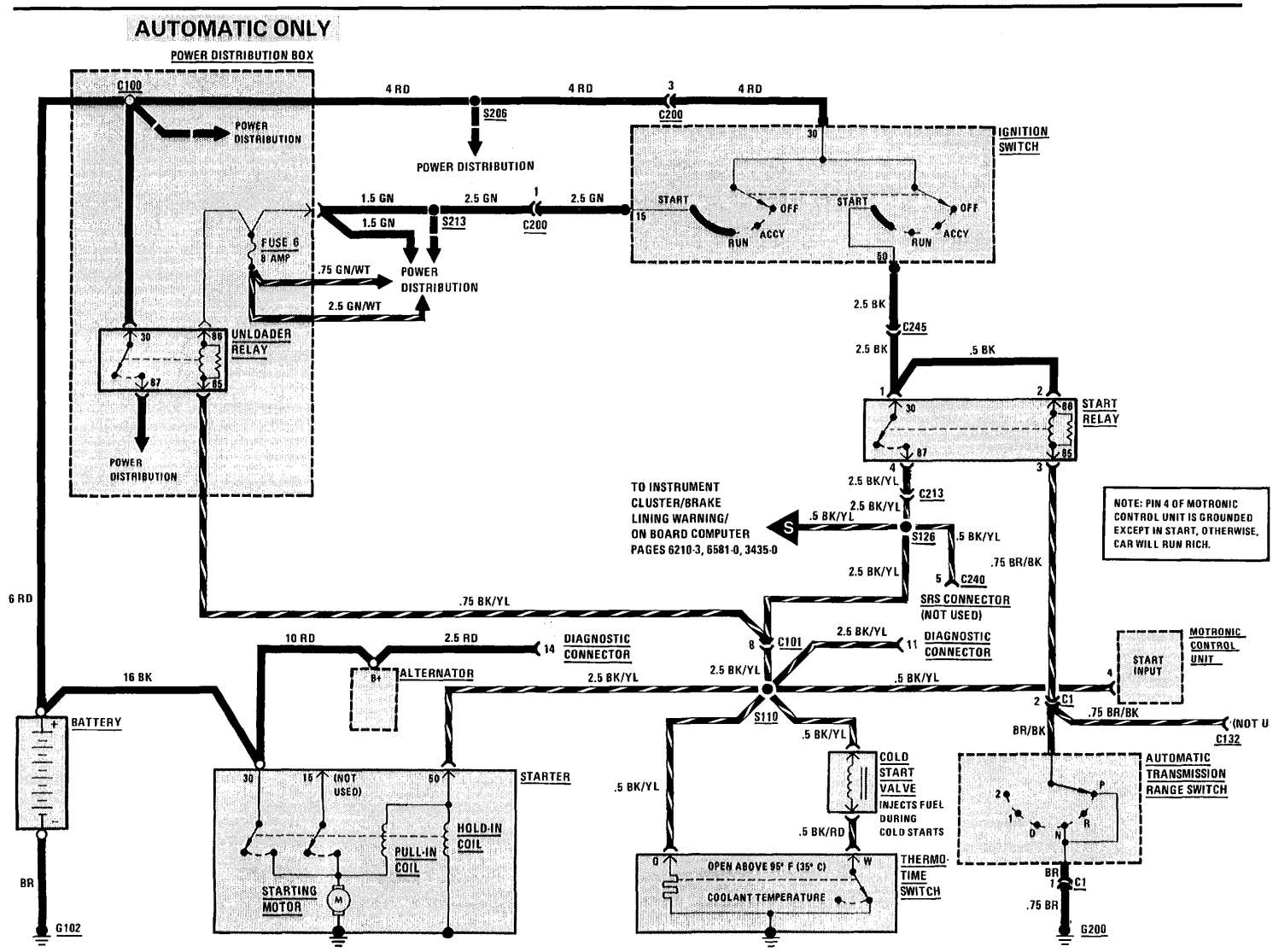
1230-0 CHARGING SYSTEM 1987 MODEL



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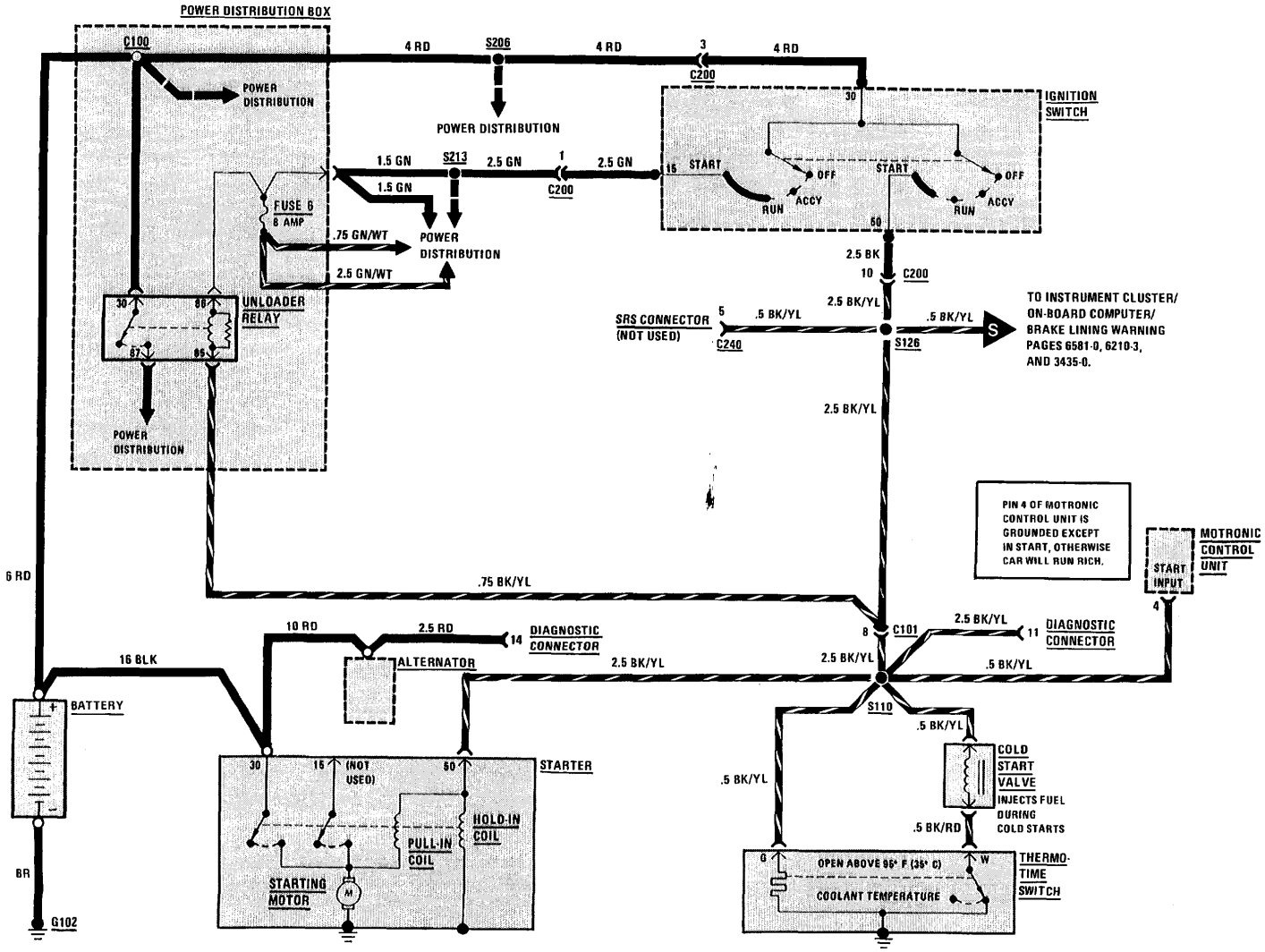


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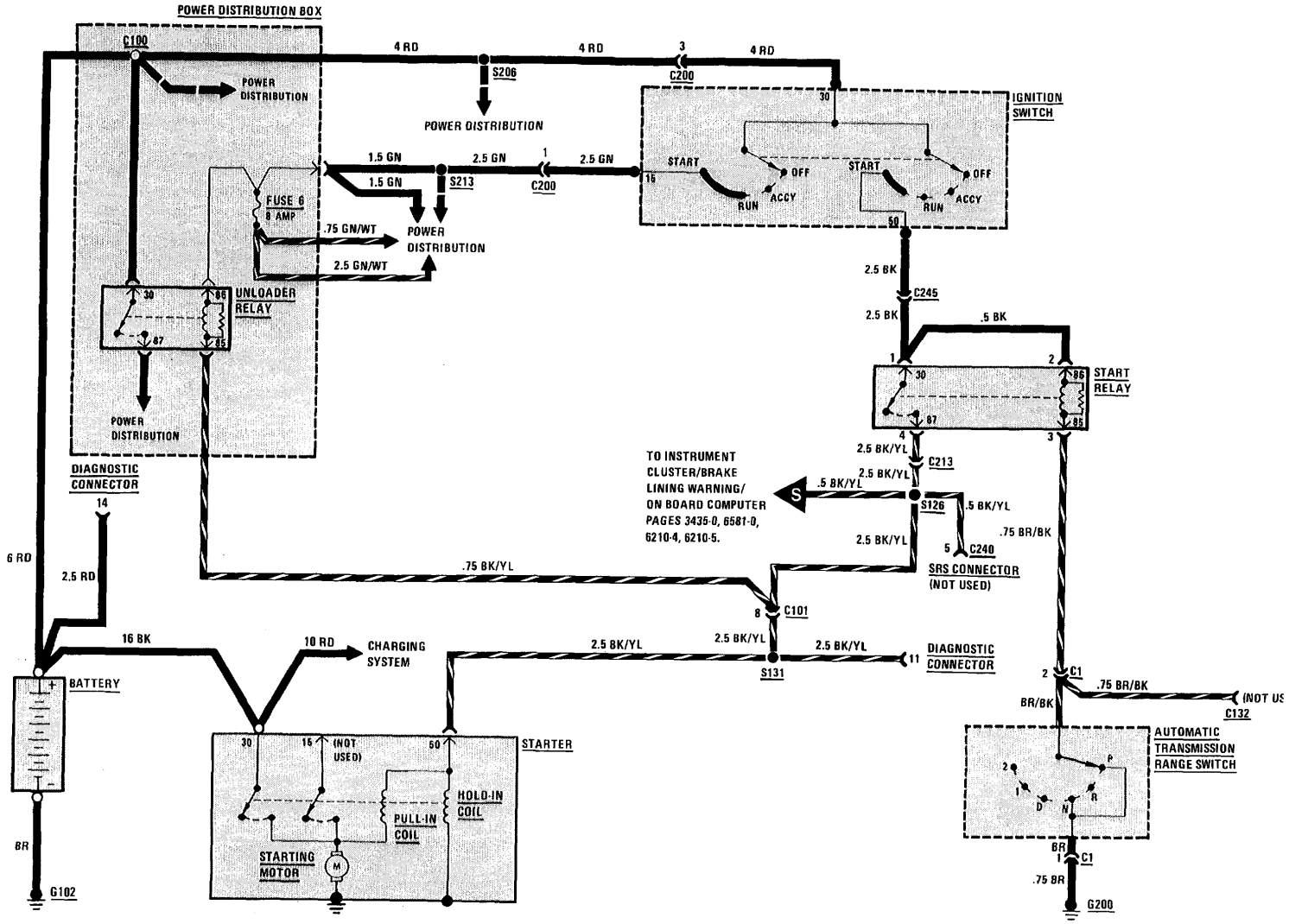
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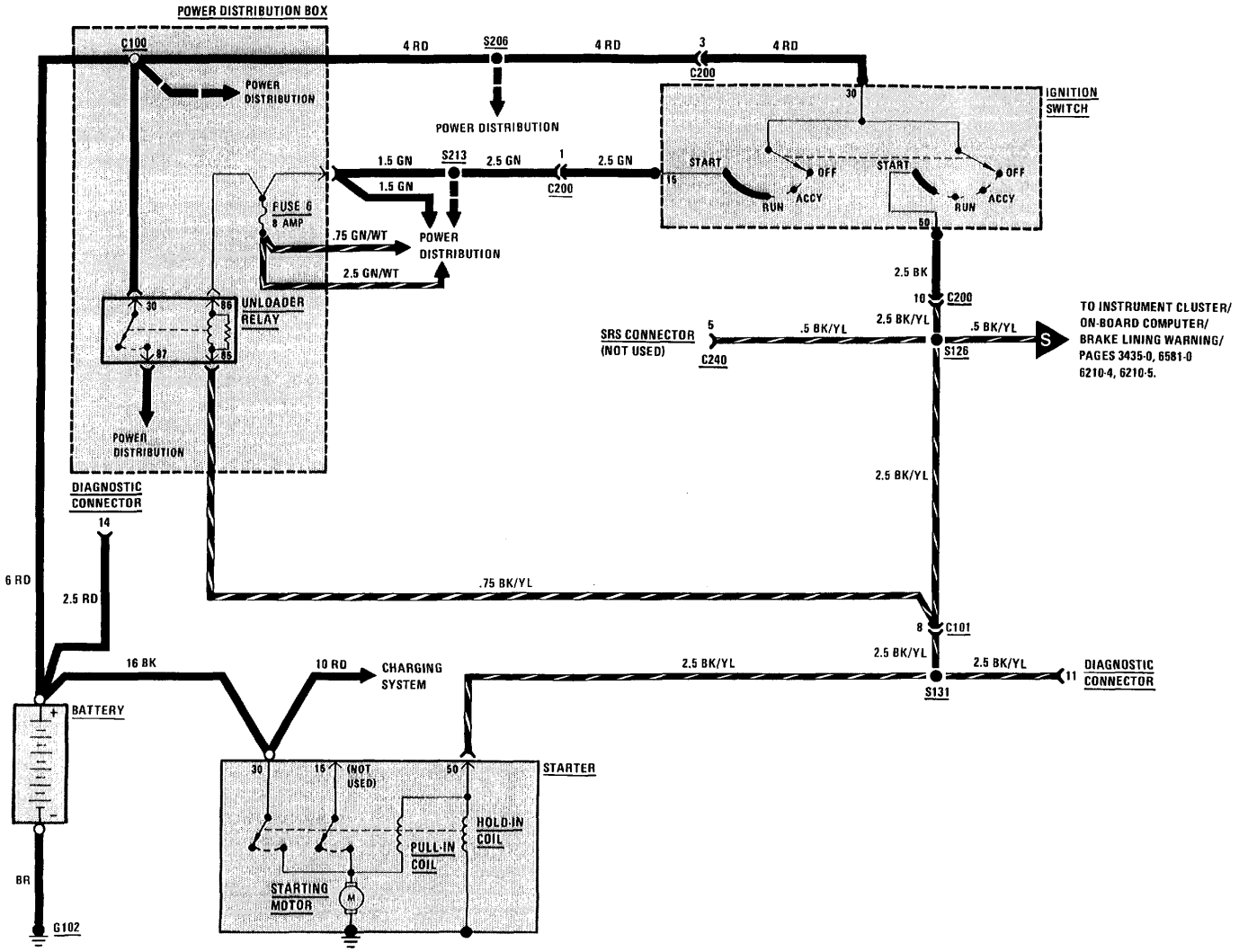
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AUTOMATIC ONLY



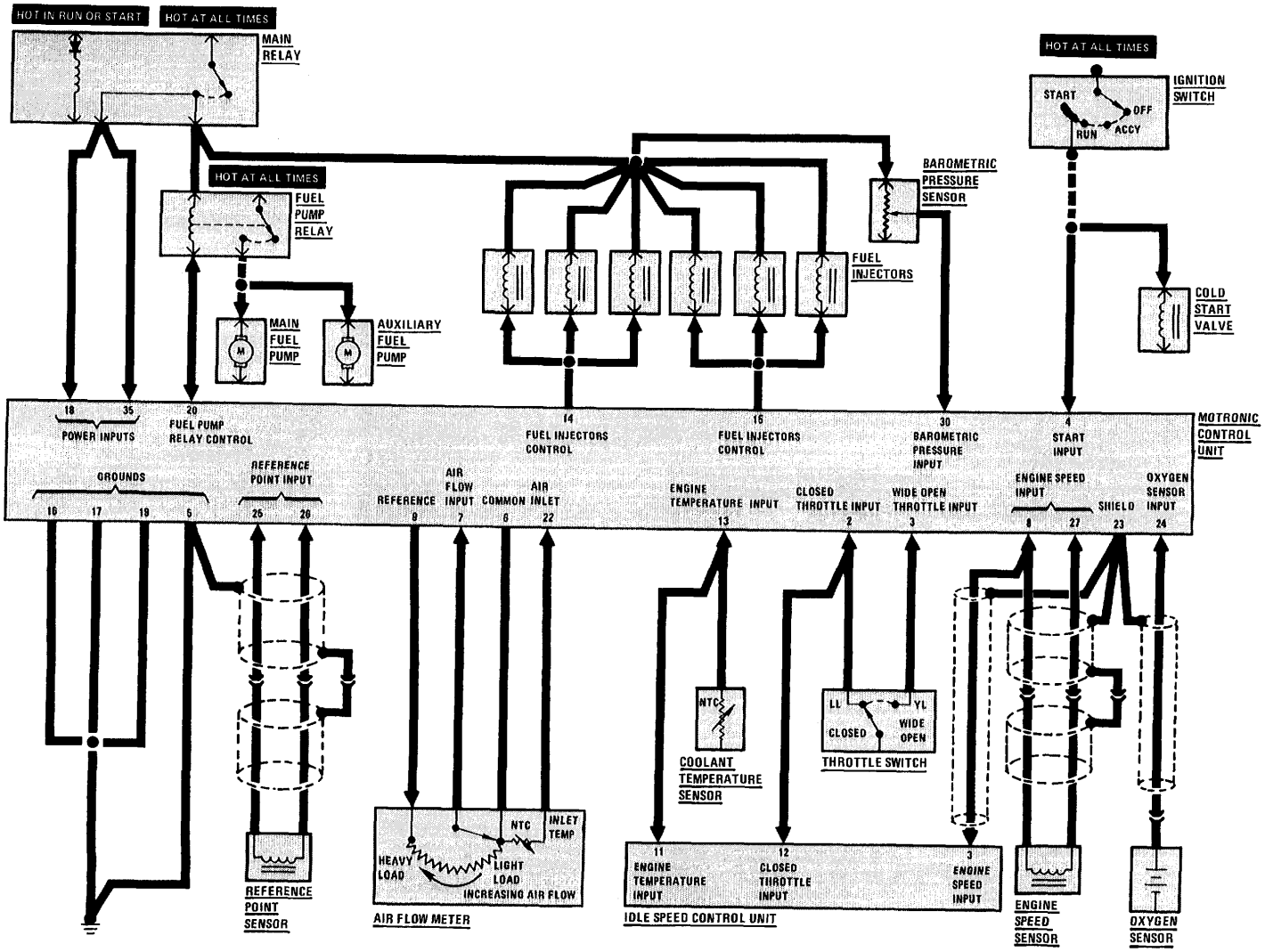
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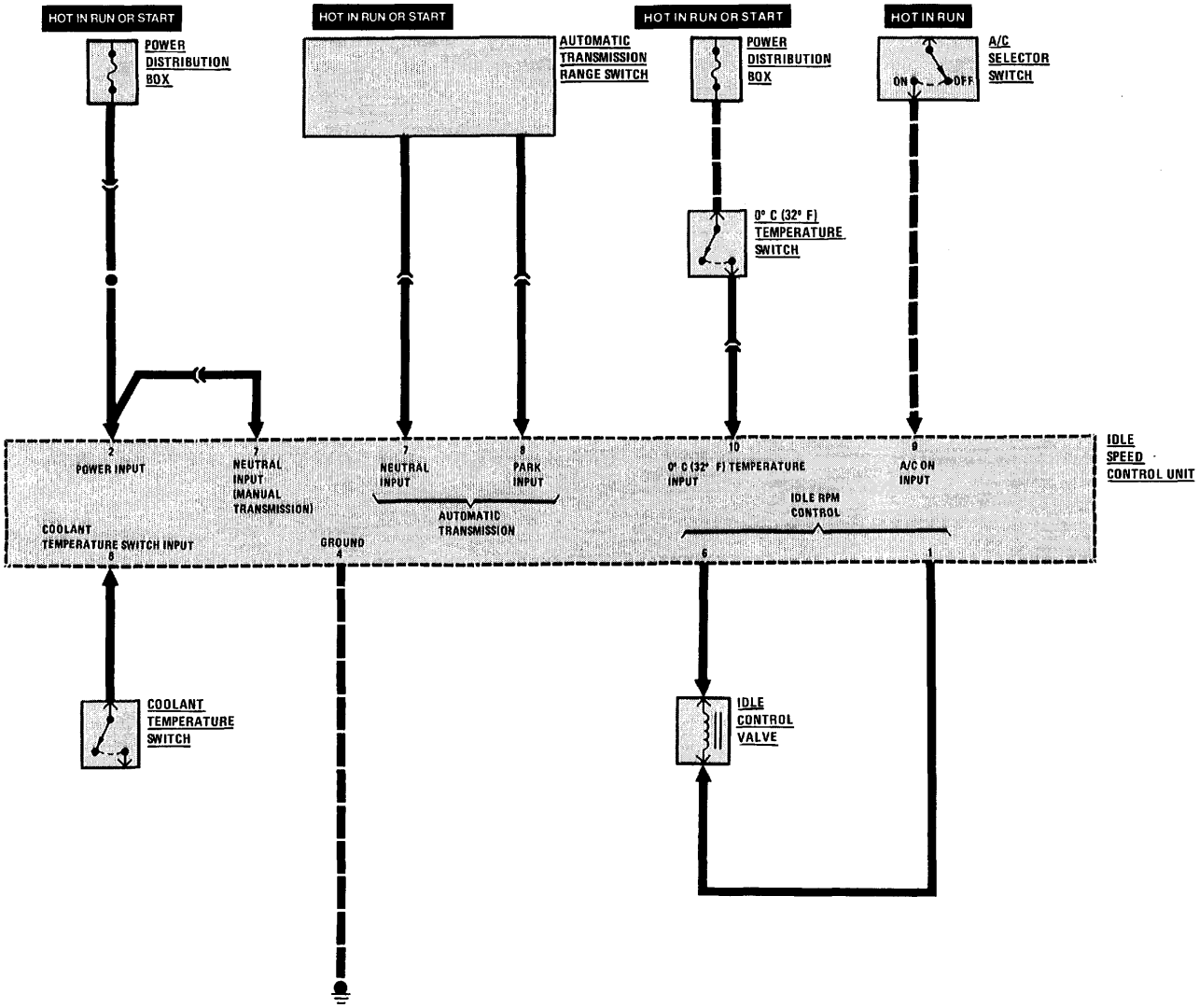
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ENGINE BLOCK DIAGRAM



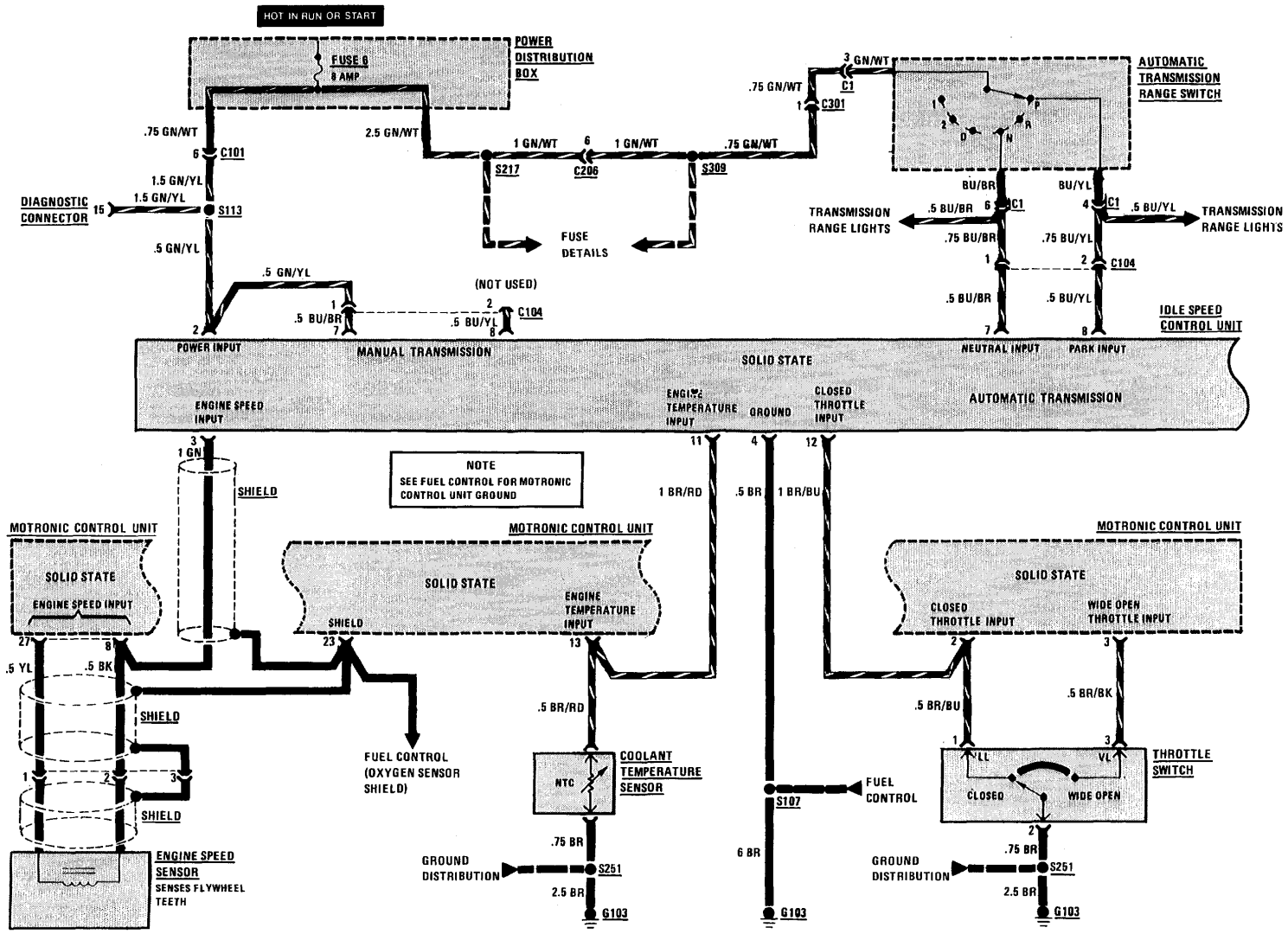
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ENGINE BLOCK DIAGRAM



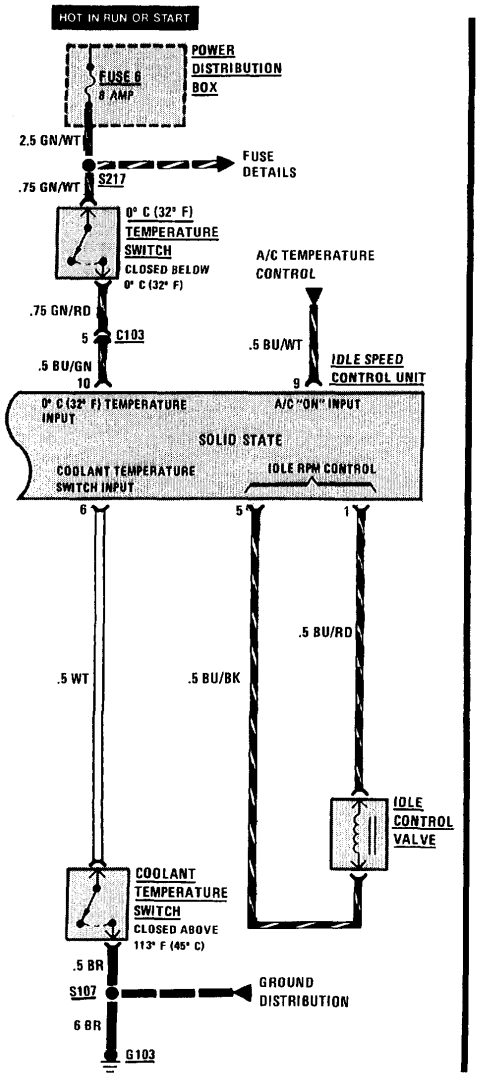
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IDLE SPEED CONTROL

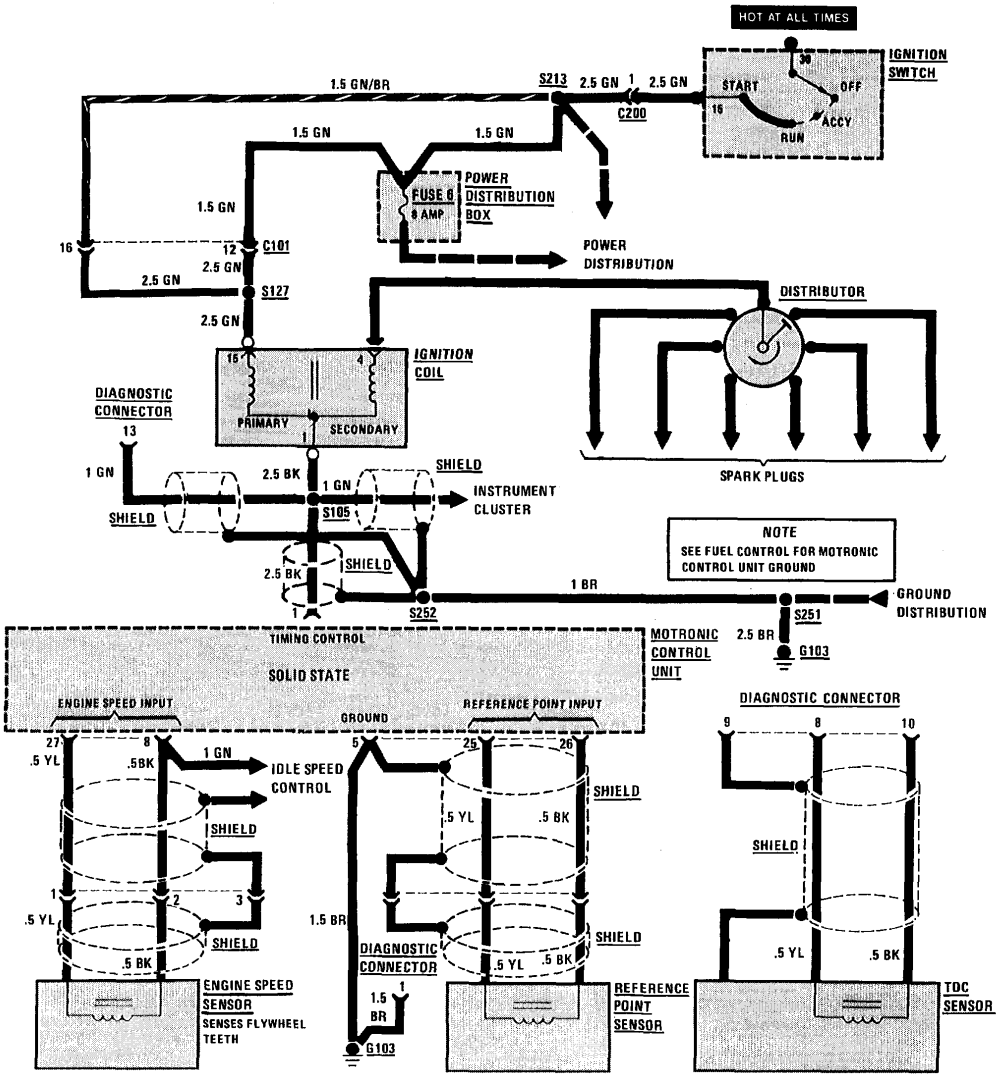


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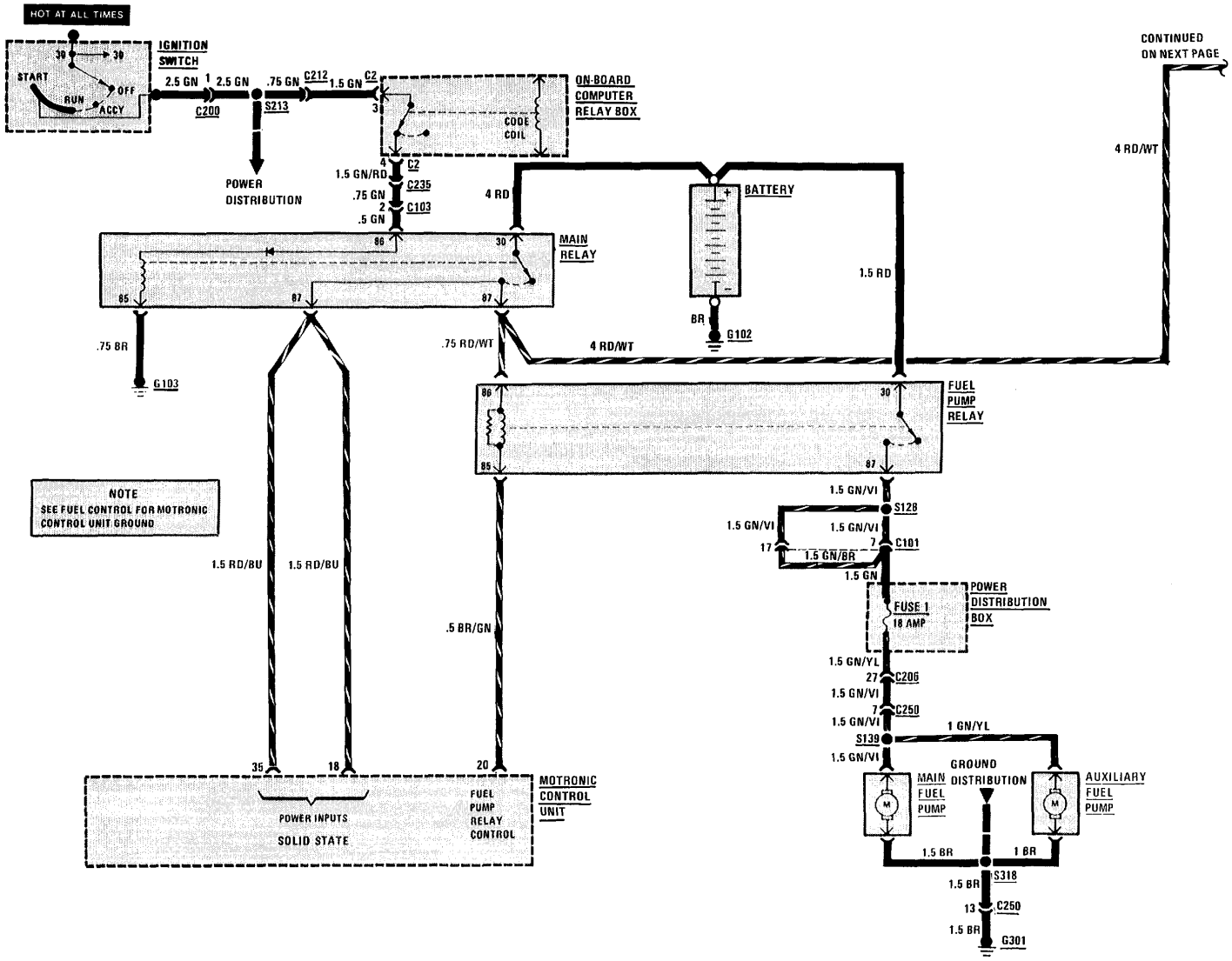


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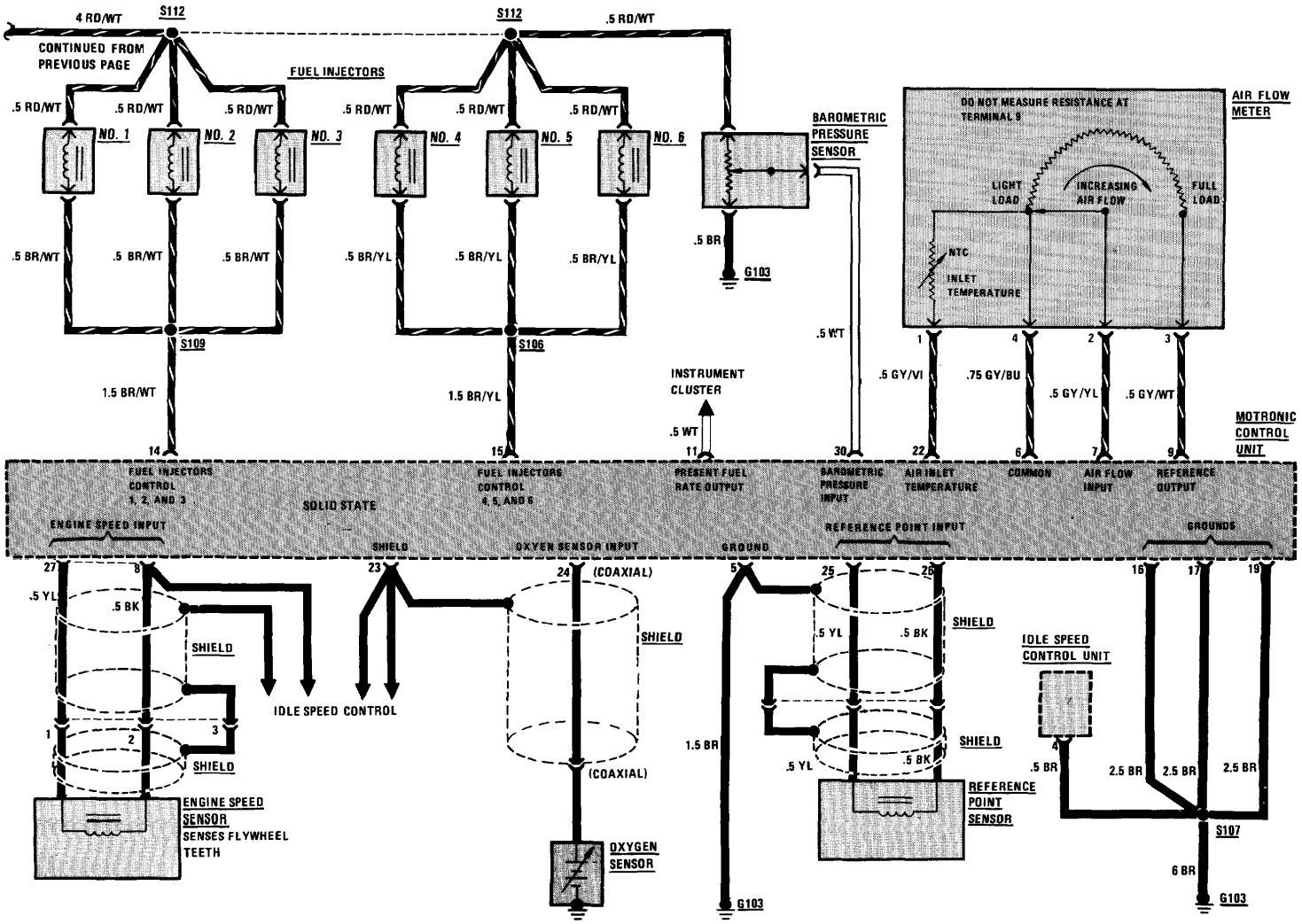
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FUEL DELIVERY



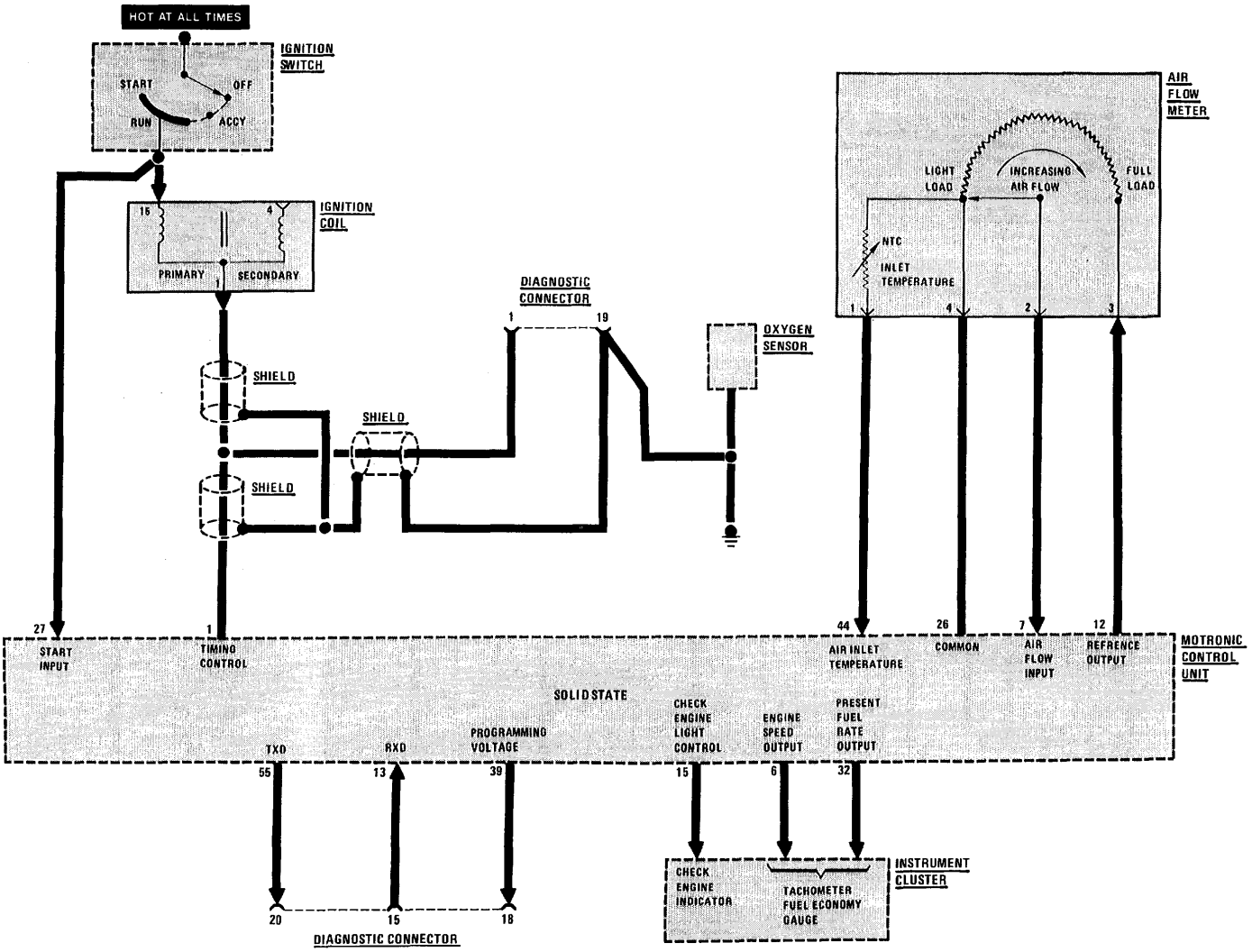
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FUEL CONTROL



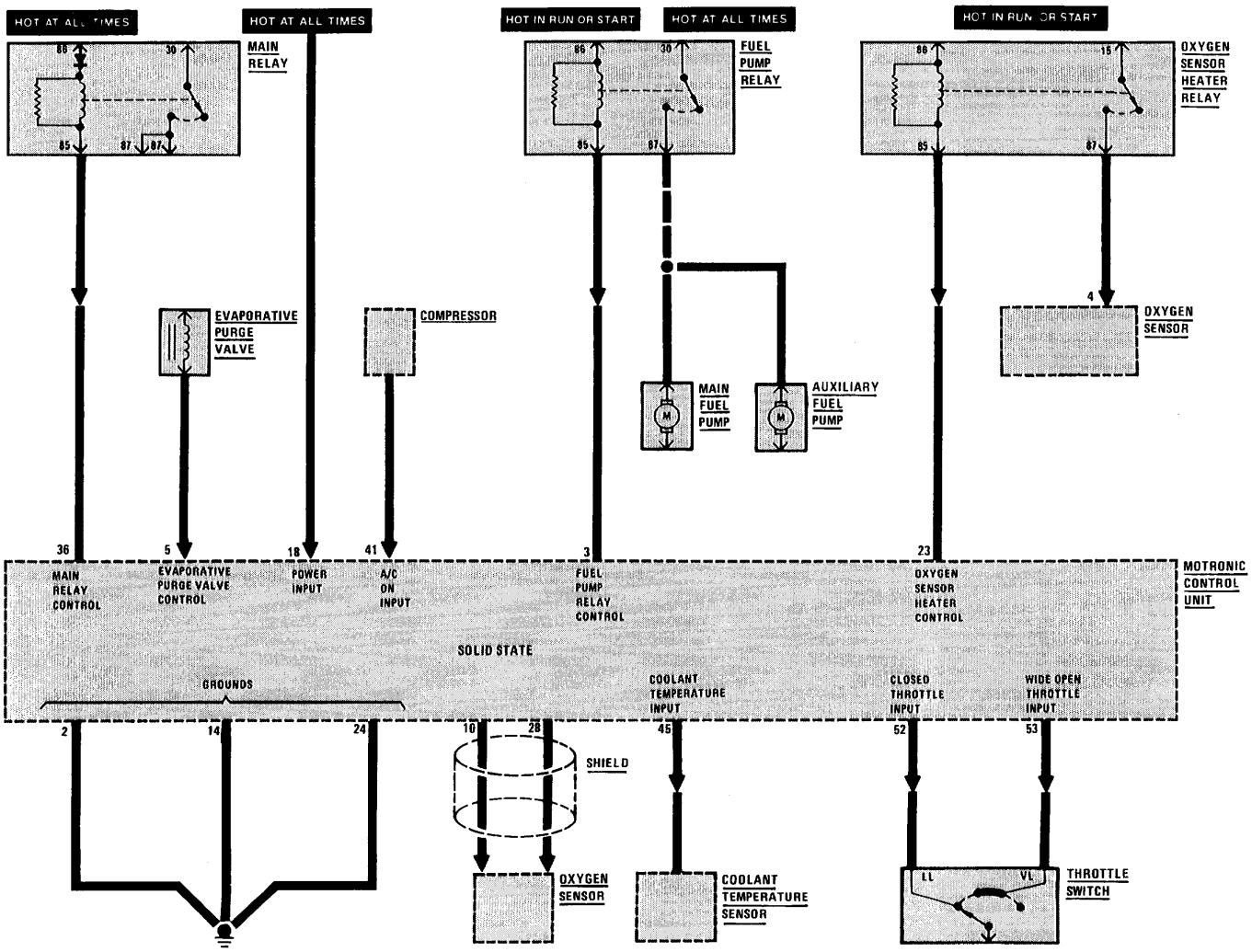
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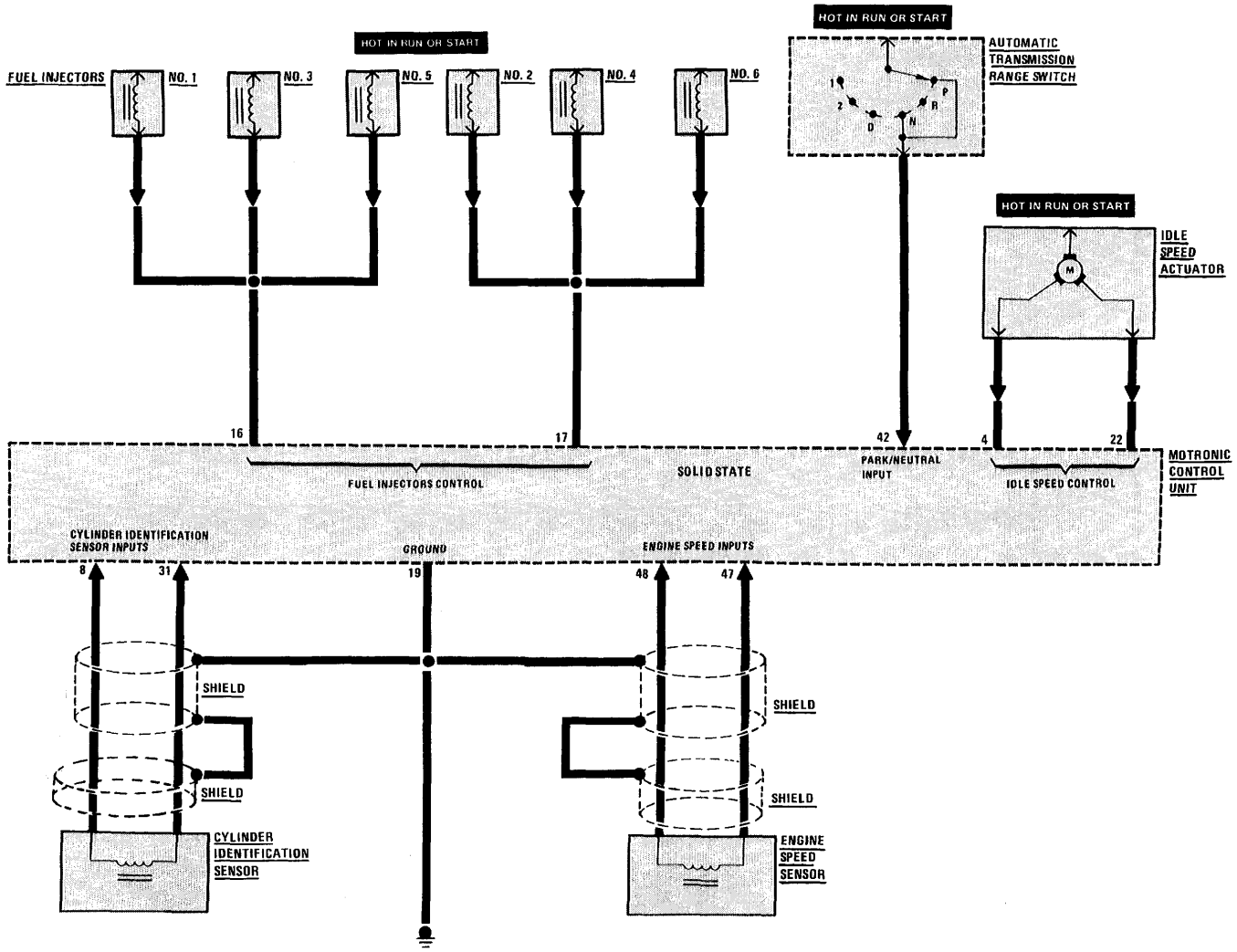
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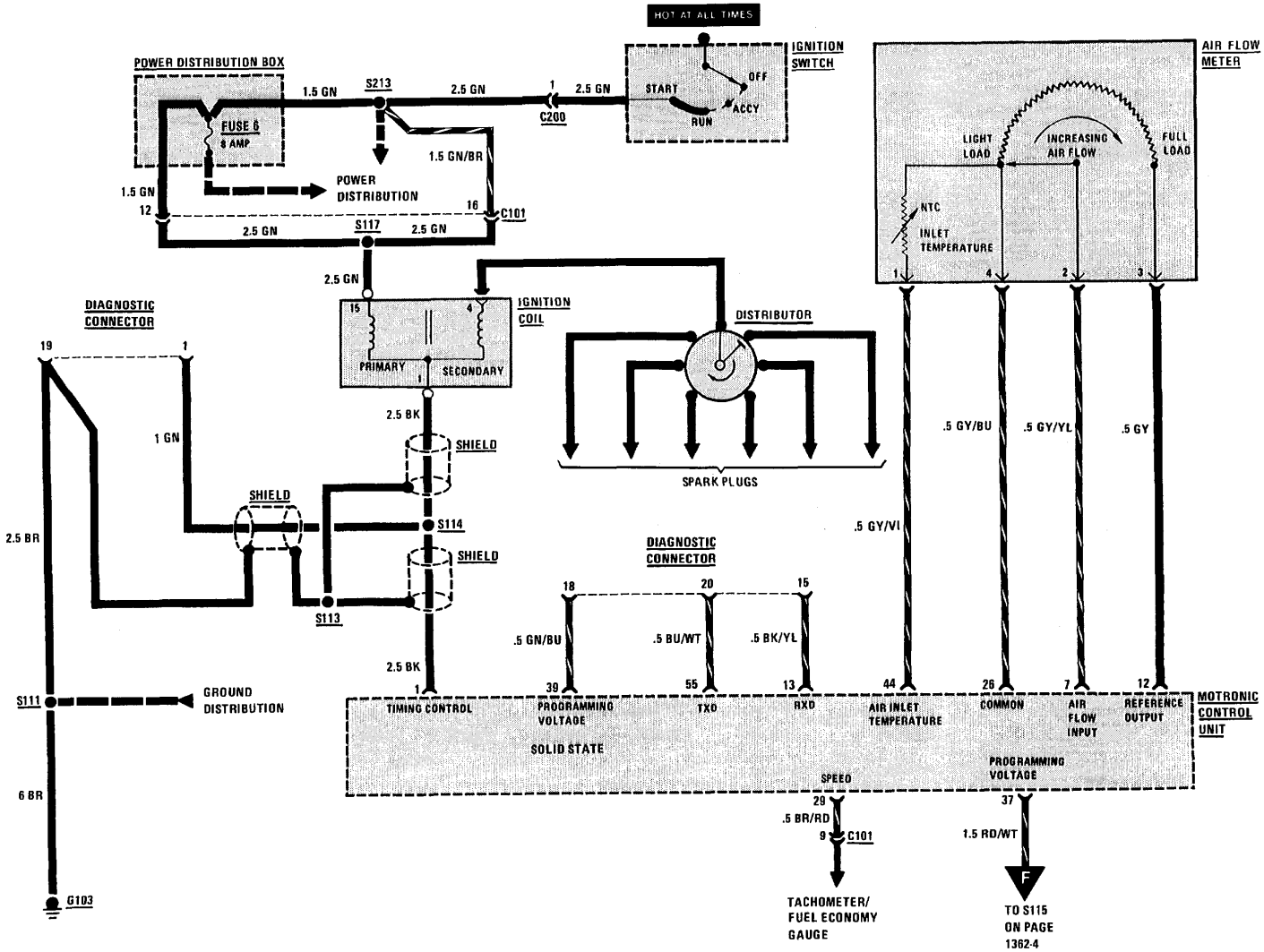


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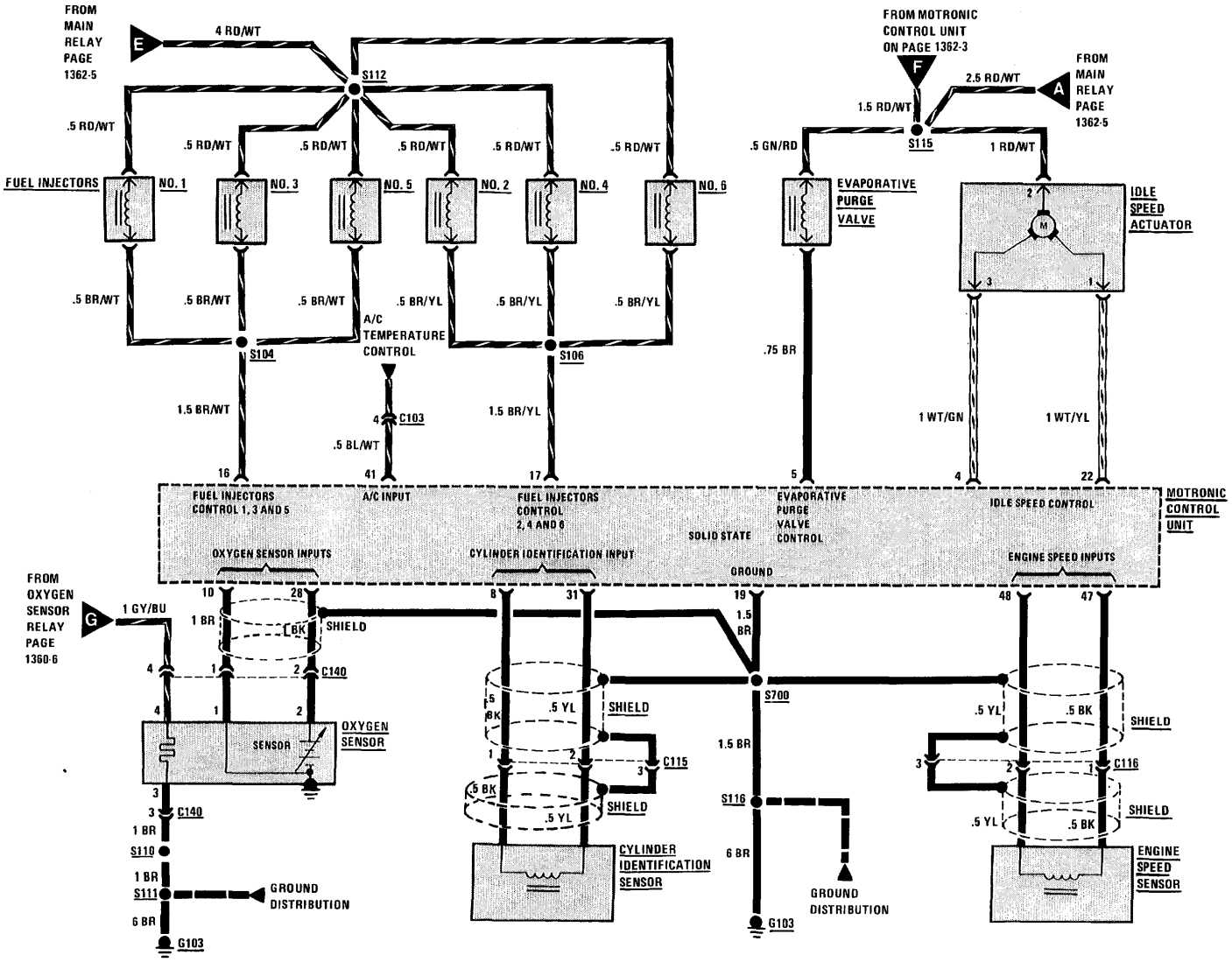
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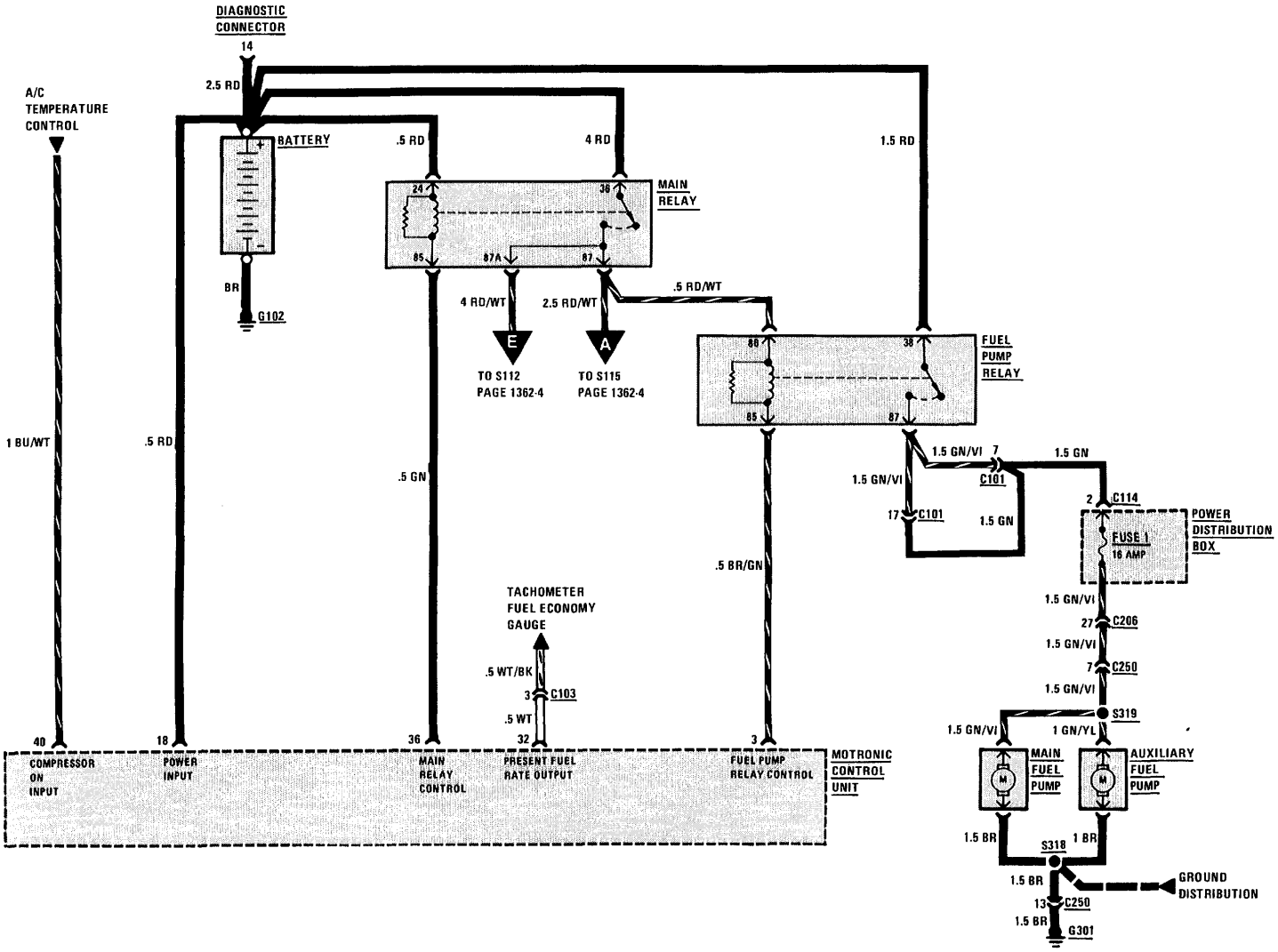
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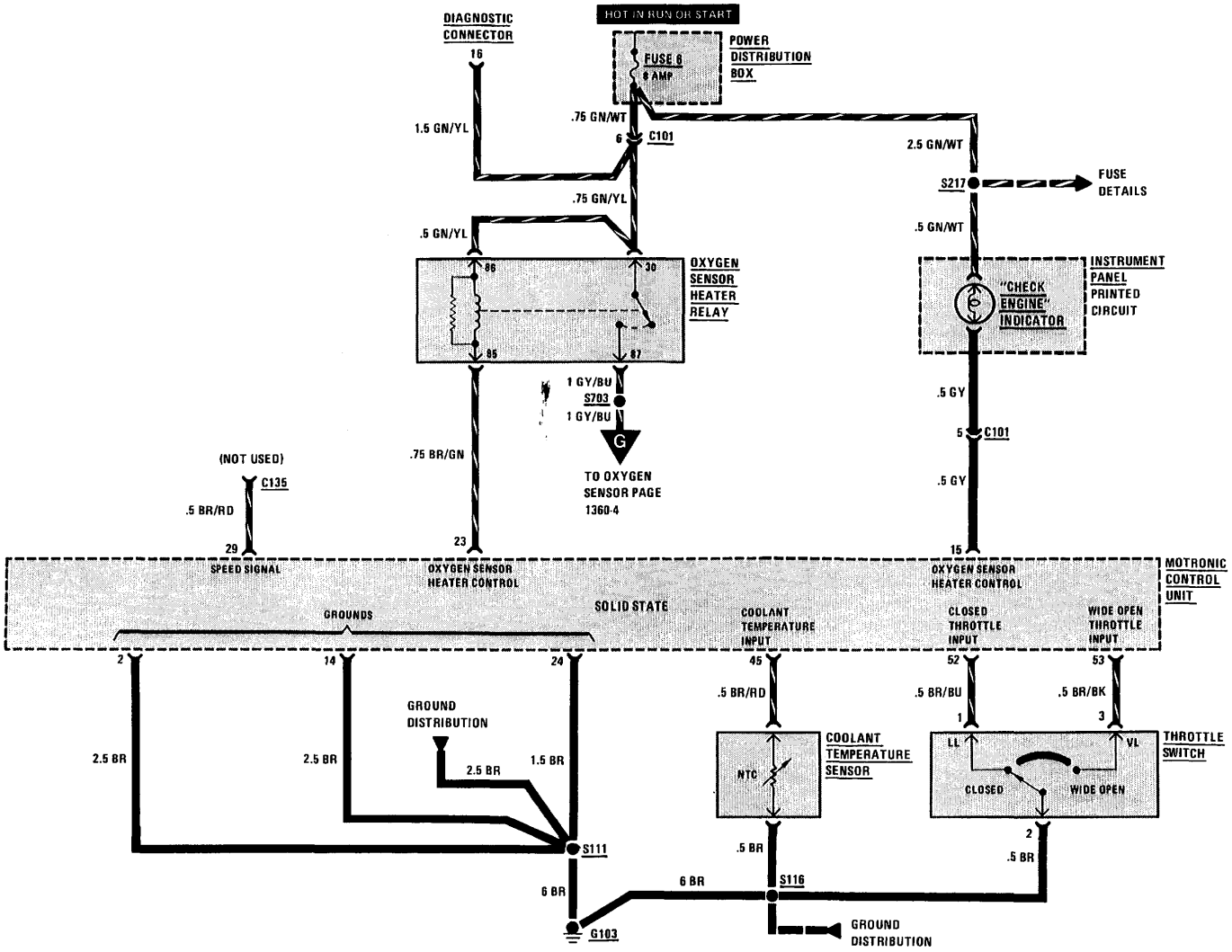
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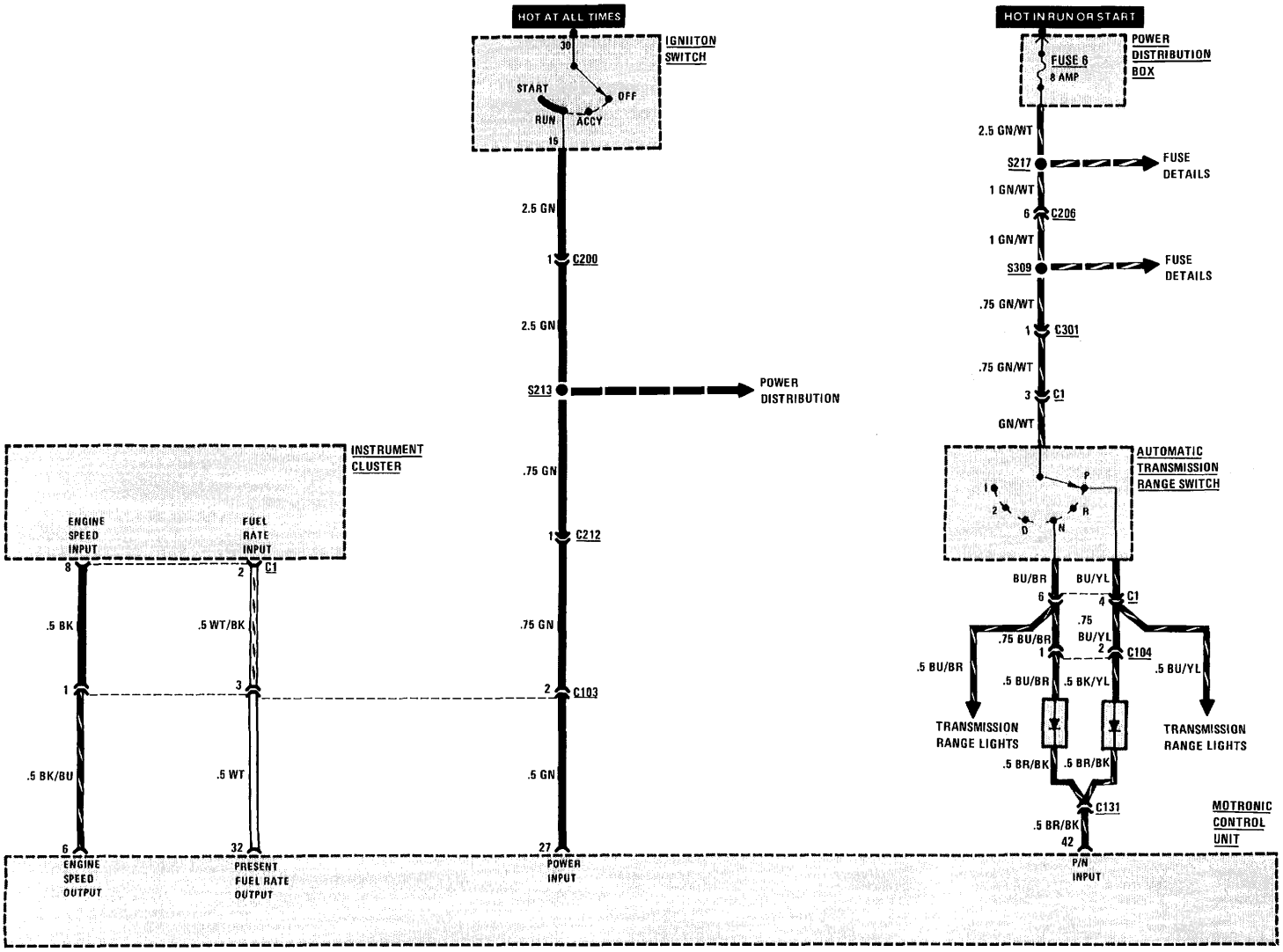
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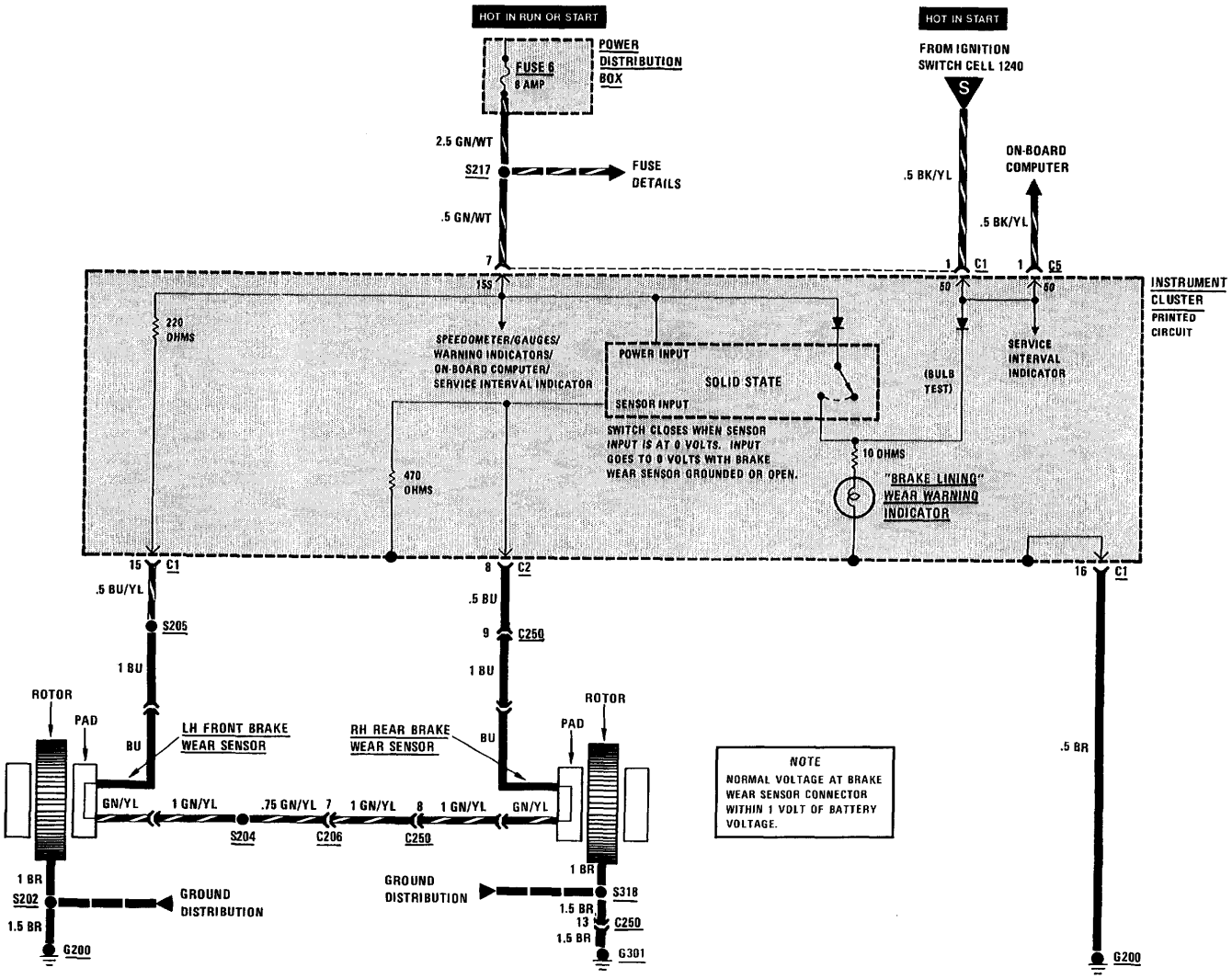


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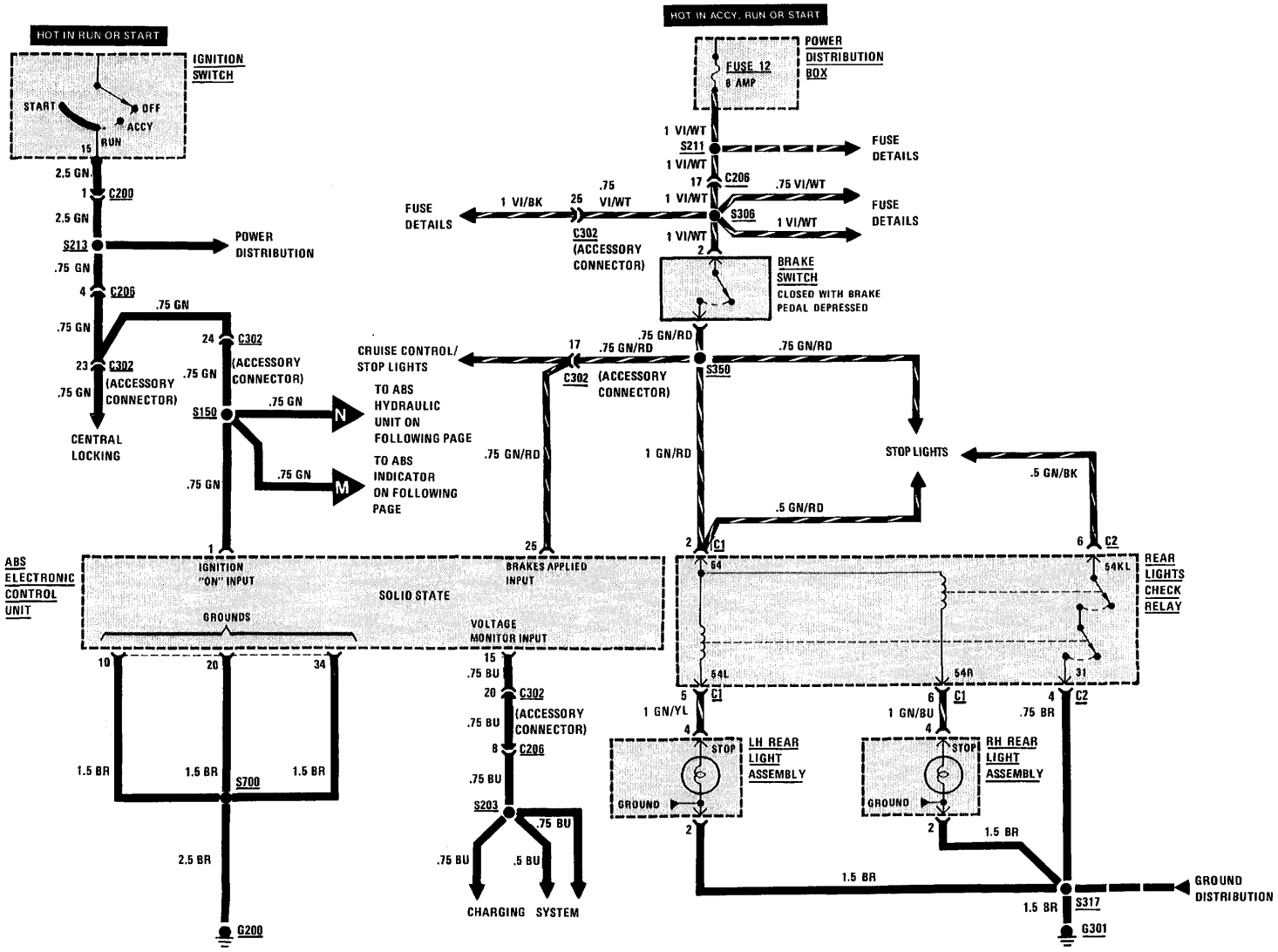


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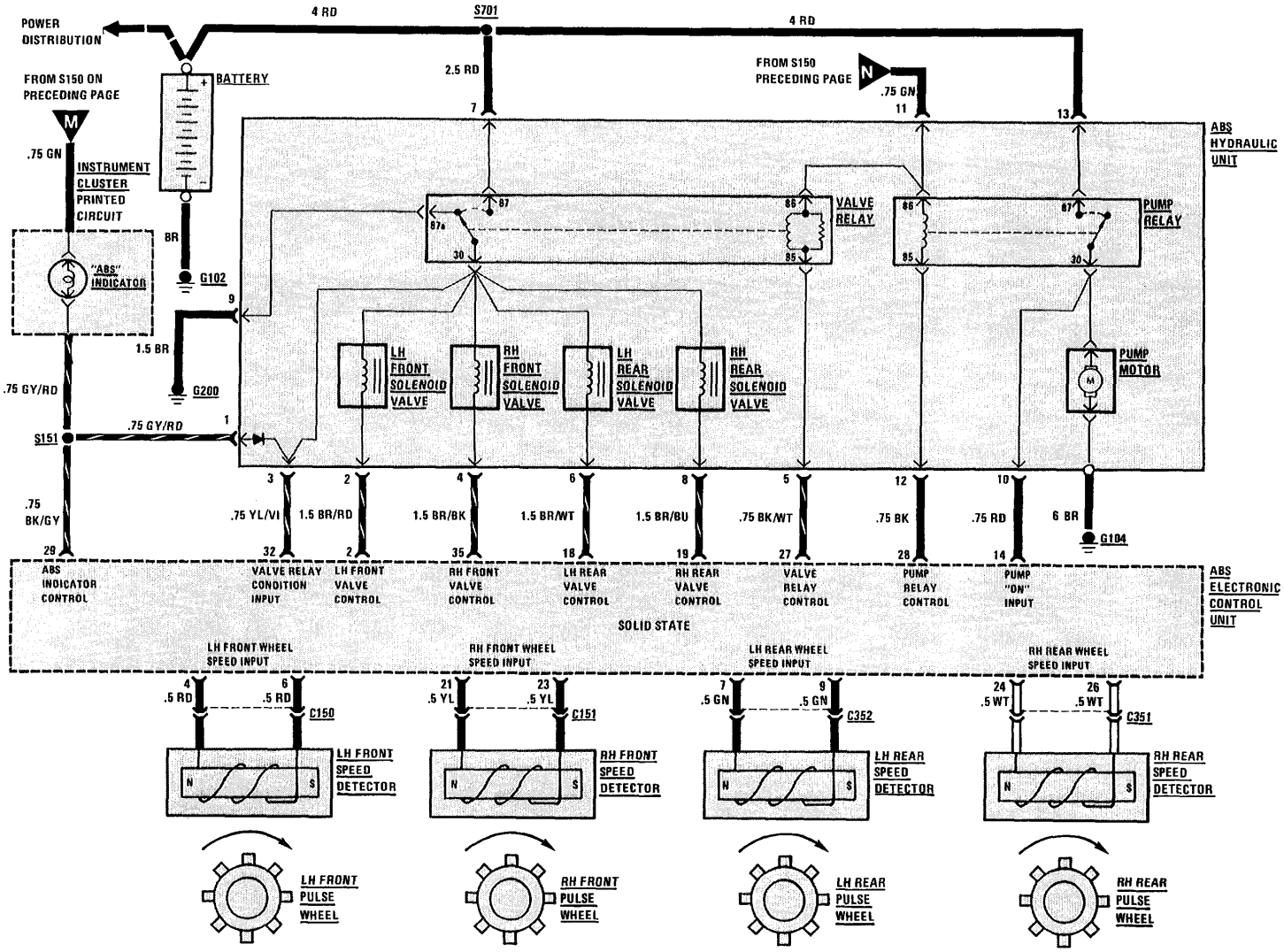
3435-0 BRAKE LINING WARNING



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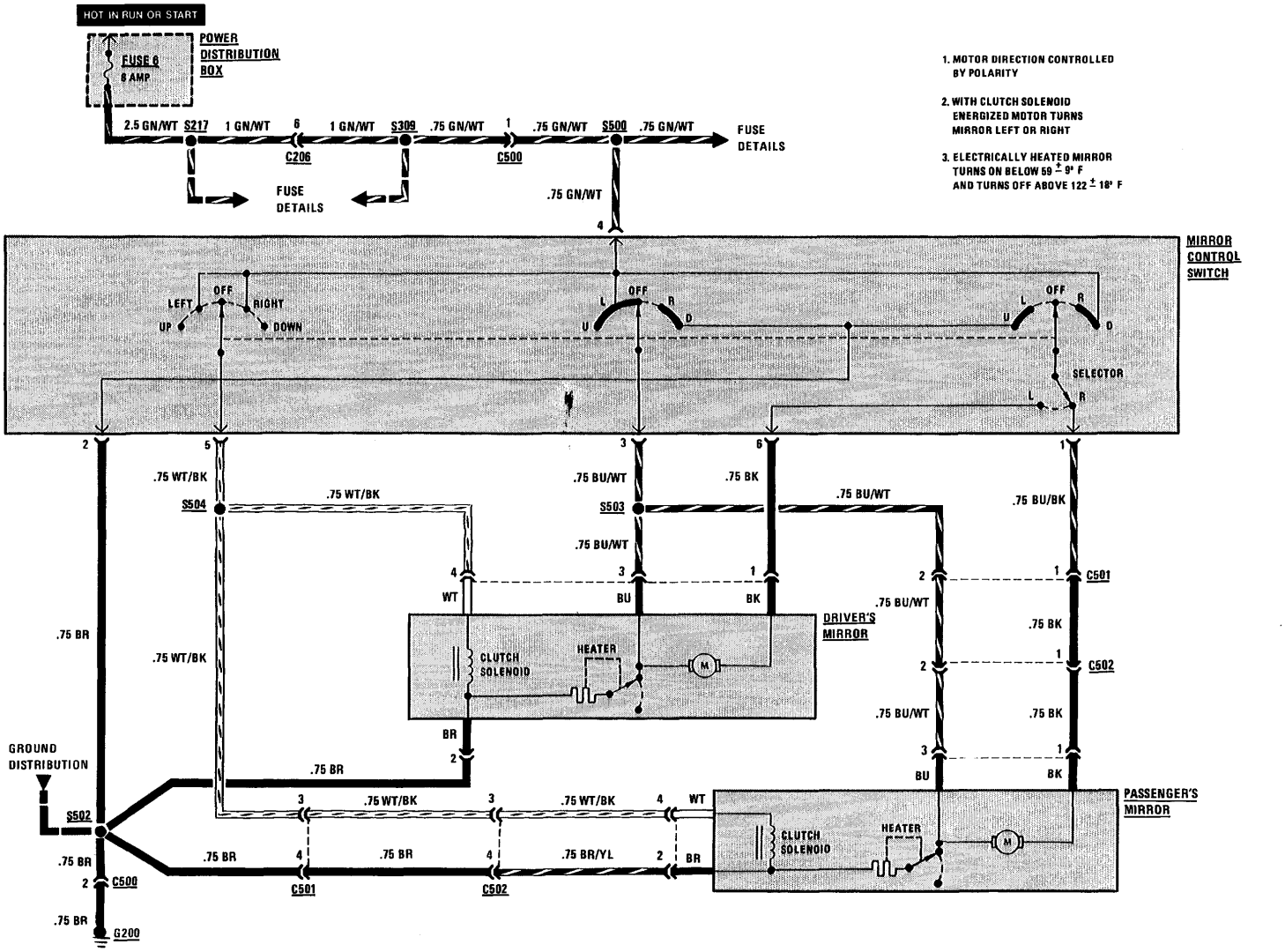


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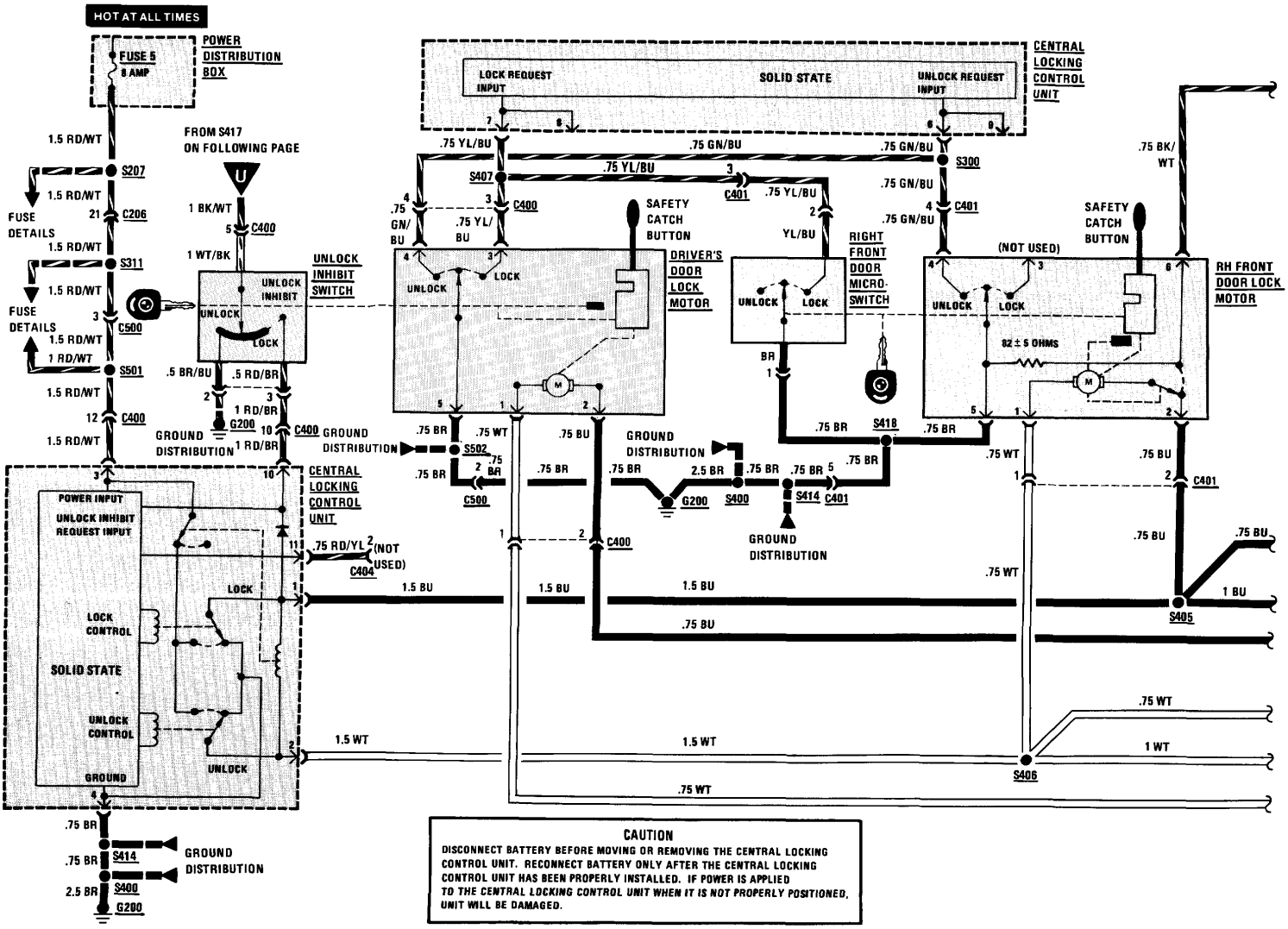


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5116-0 POWER MIRRORS



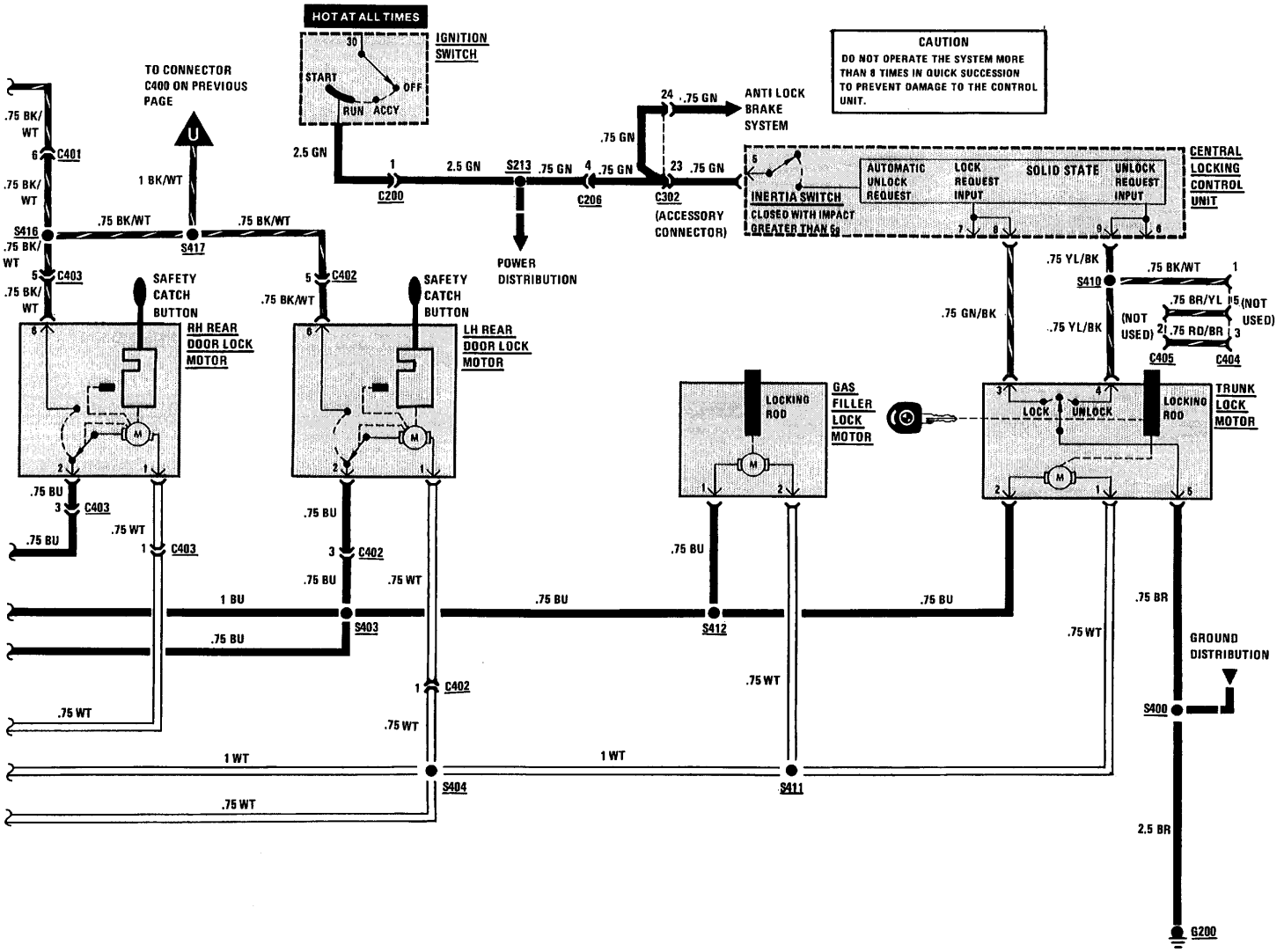
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CAUTION

DISCONNECT BATTERY BEFORE MOVING OR REMOVING THE CENTRAL LOCKING CONTROL UNIT. RECONNECT BATTERY ONLY AFTER THE CENTRAL LOCKING CONTROL UNIT HAS BEEN PROPERLY INSTALLED. IF POWER IS APPLIED TO THE CENTRAL LOCKING CONTROL UNIT WHEN IT IS NOT PROPERLY POSITIONED, UNIT WILL BE DAMAGED.

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TROUBLESHOOTING HINTS

Check Fuse by operating the Digital Radio.

SYSTEM CHECK

- **Operate controls in the sequence listed in the System Check Table.**
- **Refer to Repair Action for the Response received. (Tests follow the System Check Table.)**
- **After any repair, repeat System Check to verify proper system operation.**

NOTE: Before replacing any system component, check all connectors, splices, and wiring to that component.

SYSTEM CHECK TABLE

OPERATION	RESPONSE	REPAIR ACTION
1. Insert the key in the driver's door and turn to LOCK	All doors lock	None, proceed to Operation 2
	Some doors lock	Repair/replace the suspect Door Lock Motor and circuit
	No doors lock	Proceed to Operation 4
2. Turn the key to UNLOCK INHIBIT (clockwise until key is horizontal) Check UNLOCK INHIBIT position by pulling up the Safety Catch Buttons (they should not release)	All doors double lock (Safety Catch Buttons cannot be pulled up by hand)	None, proceed to Operation 3
	Driver's door double locks and only some of the other doors double lock	Repair/replace the suspect Door Lock Motor and circuit
	Driver's door double locks but all the other doors do not double lock	Perform Test B
	Driver's door does not double lock	Mechanical problem, see BMW Troubleshooting Manual

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SYSTEM CHECK TABLE (CONT'D)

OPERATION	RESPONSE	REPAIR ACTION
3. Turn the key to UNLOCK	All doors unlock	None, proceed to Operation 4
	Some doors unlock	Repair/replace the suspect Door Lock Motor and circuit
	No doors unlock	Proceed to Operation 5
4. Insert the key in the passenger's door and turn to LOCK	All doors lock	If the doors did not lock in Operation 1, repair/replace the Driver's Door Lock Switch, otherwise proceed to Operation 5
	Some doors lock	Repair/replace the suspect Door Lock Motor and circuit
	No doors lock	If all the doors locked in Operation 1, repair/replace the Right Front Door Microswitch If the doors did not lock in Operation 1, perform Test A
5. Insert the key in the passenger's door and turn to UNLOCK	All doors unlock	If all the doors did not unlock in Operation 3, repair/replace the Driver's Door Lock Switch, otherwise proceed to Operation 6
	Some doors unlock	Repair/replace the suspect Door Lock Motor and circuit
	No doors unlock	If all the doors unlocked in Operation 3, repair/replace the Passenger's Door Lock Switch Otherwise, check for blown fuse If Fuse is blown, check for a short to Battery in WT/BK and BK/WT wires to motors If Fuse is not blown, perform test C
6. Get in the car and close and lock all doors Turn the Ignition Switch to RUN	Doors remain locked	None, proceed to Operation 7
	Doors unlock	Repair/replace the Central Locking Control Unit
7. Get out of the car Insert the key in the driver's door and turn to LOCK Unlock each of the doors by pulling up the Safety Catch Buttons	All doors can be unlocked	None, proceed to Operation 8
	All doors remain secure	Replace Unlock Inhibit Switch

(Continued on next page)

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SYSTEM CHECK TABLE (CONT'D)

OPERATION	RESPONSE	REPAIR ACTION
8. Insert the key in the Trunk Cylinder Switch Turn the key to LOCK	Trunk locks	None, proceed to Operation 9
	Trunk does not lock	If the doors lock, repair/replace the Trunk Lock Motor circuit or Trunk Lock Motor If the doors do not lock, repair/replace the Trunk Switch Repair/replace the Central Locking Control Unit if the Trunk Switch circuit is OK
9. Turn the key to UNLOCK	Trunk unlocks	None, proceed to Operation 10
	Trunk does not unlock	If the doors unlock, repair/replace the Trunk Lock Motor circuit or Trunk Lock Motor If the doors do not unlock, repair/replace the Trunk Switch Repair/replace the Central Locking Control Unit if the Trunk Switch circuit is OK
10. Turn the key back to LOCK	Gas Filler locks	None, proceed to Operation 11
	Gas Filler does not lock	Repair/replace the Gas Filler Lock Motor circuit
11. Turn the key to UNLOCK	Gas Filler unlocks	None
	Gas Filler does not unlock	Repair/replace the Gas Filler Lock Motor circuit

- **If all results are normal, the system is OK.**

SYSTEM DIAGNOSIS

- **Do the following tests when directed by the System Check Table.**

A: CONTROL UNIT LOCK TEST (TABLE 1)

Measure: VOLTAGE
At: CONTROL UNIT CONNECTOR (Connected)

Measure Between	Correct Voltage	For Diagnosis
3 & Ground	Battery	See 1
3 & 4	Battery	See 2

- If the voltages are correct, proceed to Table 2.

1. Check the wire to terminal 3 for an open.
2. Check the wire from terminal 4 for an open to ground (see schematic).

A: CONTROL UNIT LOCK TEST (TABLE 2)

Connect: A FUSED JUMPER
At: CONTROL UNIT CONNECTOR (Connected)

Jumper Between	Correct Result	For Diagnosis
7 & Ground	Doors lock	See 1

- If the result is correct, repair/replace the switches and related wiring (see schematic).

1. Proceed to Table 3.

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A: CONTROL UNIT LOCK TEST (TABLE 3)

Connect: FUSED JUMPERS
At: CONTROL UNIT CONNECTOR (Disconnected)

Jumper Between	Correct Result	For Diagnosis
1 & 3 2 & 4	Doors lock	See 1

- If the result is correct, replace the Central Locking Control Unit.

1. Check the wire from terminal 1 to splice and the wire from terminal 3 to splice for opens (see schematic).

B: UNLOCK INHIBIT TEST (TABLE 1)

Measure: RESISTANCE
At: CONTROL UNIT CONNECTOR (Disconnected)
Condition:
- **UNLOCK Inhibit Switch: UNLOCK INHIBIT**

Measure Between	Correct Resistance	For Diagnosis
10 & Ground	82 ± 5 ohms	See 1

- If the resistance is correct but the Unlock Inhibit only operates on the Driver's Lock, replace the Central Locking Control Unit.

1. Check for opens in the wires from terminal 10 to the Unlock Inhibit Switch and from the Unlock Inhibit Switch to connector C401, terminal 6. Also check wire from C401, terminal 5 to ground. If OK, go to Table 2.

B: UNLOCK INHIBIT TEST (TABLE 2)

Measure: RESISTANCE
At: CONNECTOR C401 (FEMALE HALF) (Disconnected)

Measure Between	Correct Resistance	For Diagnosis
6 & 5	82 ± 5 ohms	See 1

- If the resistance is correct, replace the Unlock Inhibit Switch.

1. Check wires from connector C401 to RH Front Door Lock Motor for opens. If OK, replace RH Front Door Lock Motor.

C: CONTROL UNIT UNLOCK TEST

Connect: A FUSED JUMPER
At: CONTROL UNIT CONNECTOR (Connected)

Jumper Between	Correct Result	For Diagnosis
6 & Ground	Doors unlock	See 1

- If the result is correct, repair/replace the switches and related wiring (see schematic).

1. Replace the Central Locking Control Unit.

CIRCUIT OPERATION

The Central Locking System is controlled by the Central Locking Control Unit. This unit senses when a lock switch is moved by a key, and sends the appropriate signal to drive the motors. The Central Locking Control Unit controls the Door Locks, Gas Filler Lock and Trunk Lock. The unit also has an Inertia Switch which closes on impact greater than 5g. If Ignition Switch is in RUN or START, the locks are then unlocked.

Lock

When the key is inserted into a lock and turned clockwise, the lock switch moves to LOCK and grounds terminal 7 of the Central Locking Control Unit. The unit then activates the Lock Relay and applies voltage from the Fuse to the Lock Motor, which is grounded through the Central Locking Control Unit, terminal 2. The Lock Motor then pulls the Safety Catch Button. As the motor runs, a switch is moved from terminal 2 to terminal 6 of all the motors except the Driver's Lock Motor. At terminal 6, the switch position breaks the current flow from the Central Locking Unit Control Unit.

Unlock

When the key is turned counterclockwise, terminal 6 of the Central Locking Control Unit is grounded through the lock switch. The Central Locking Control Unit then activates the Unlock Relay and applies voltage from the Fuse through terminal 2 to the Lock Motor. The motor is grounded through the Central Locking Control Unit, terminal 1. The polarity is reversed and the motor pushes the Safety Catch Button lock up.

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Unlock Inhibit

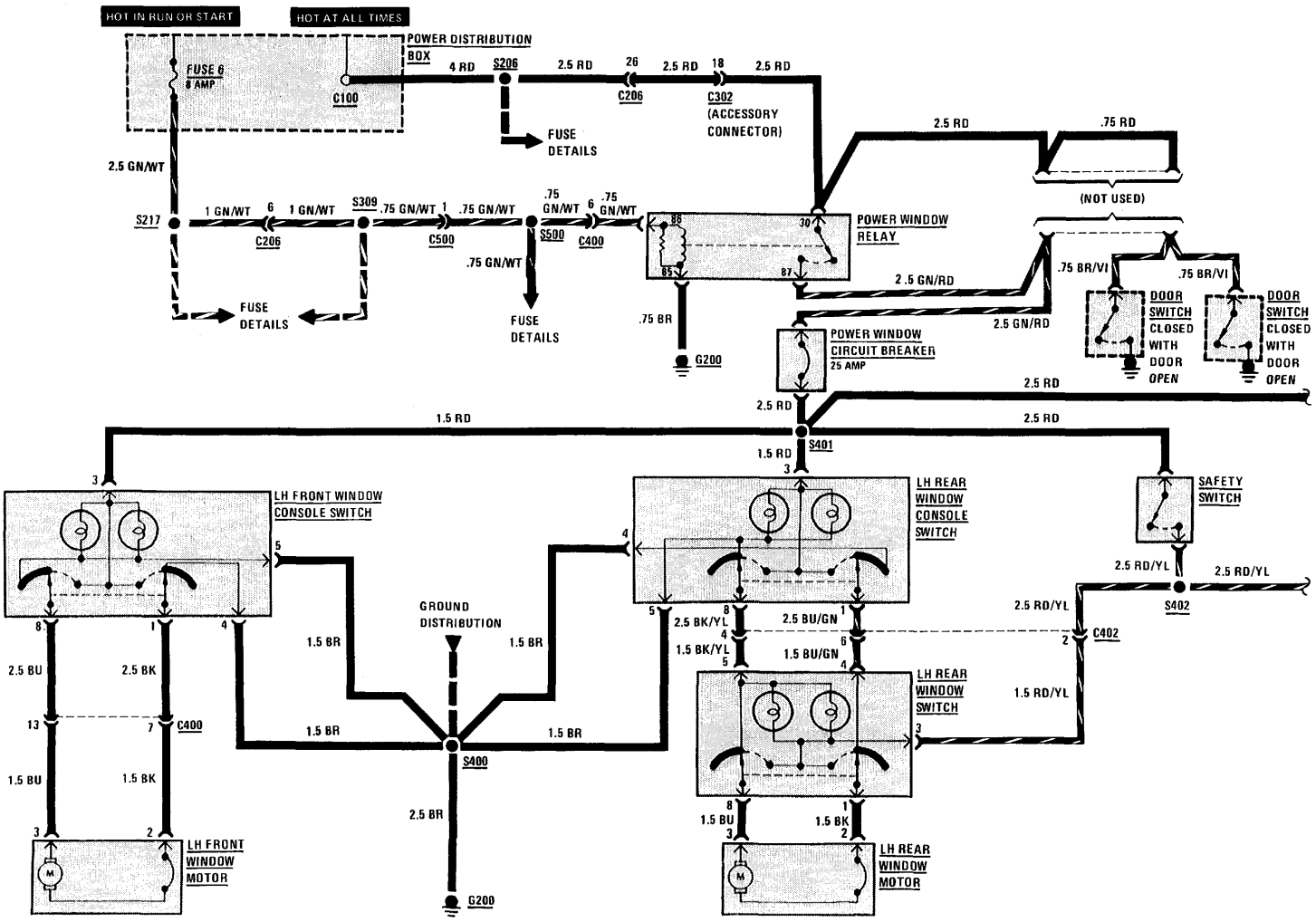
When the key is inserted into the driver's lock and turned clockwise past the LOCK position, the Unlock Inhibit mechanism is engaged. This mechanically inserts a bar into the driver's lock and prevents unlocking through use of the Safety Catch Button. When in the UNLOCK INHIBIT, the Central Locking Control Unit is grounded at terminal 10. The unit then activates the Lock Relay and voltage is now applied to the motors through the Unlock Inhibit Switch and wires to terminal 6 of the motor. The motors are again activated and engage their Unlock Inhibit mechanisms.

Trunk Lock

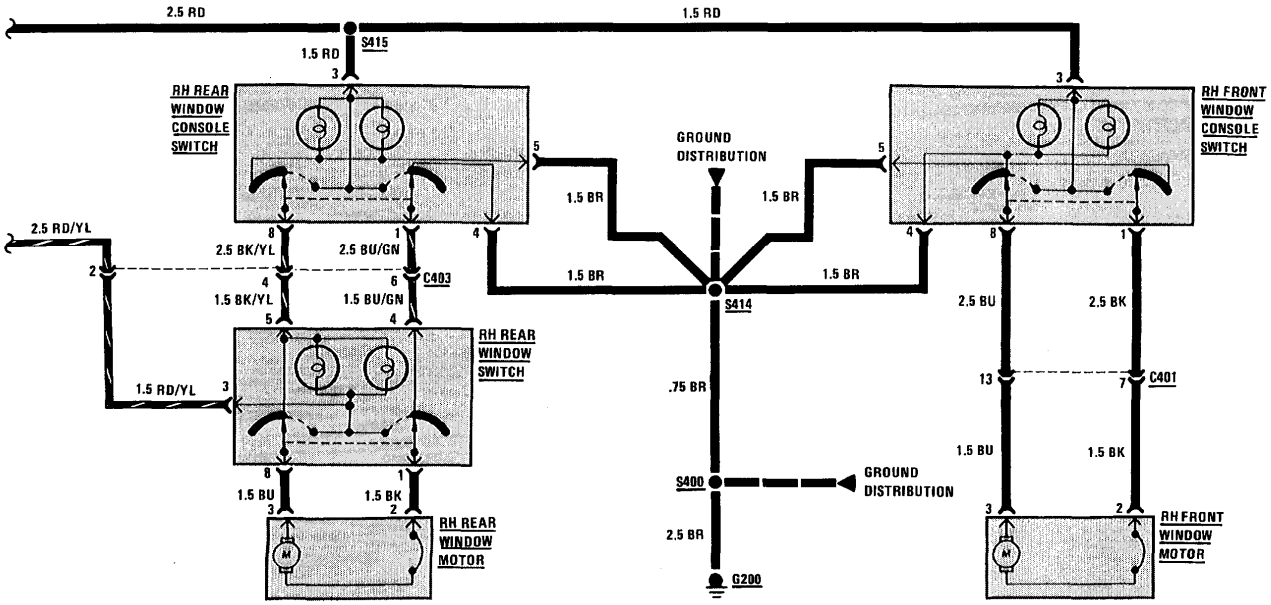
The Trunk Lock operates in a manner similar to the door locks.

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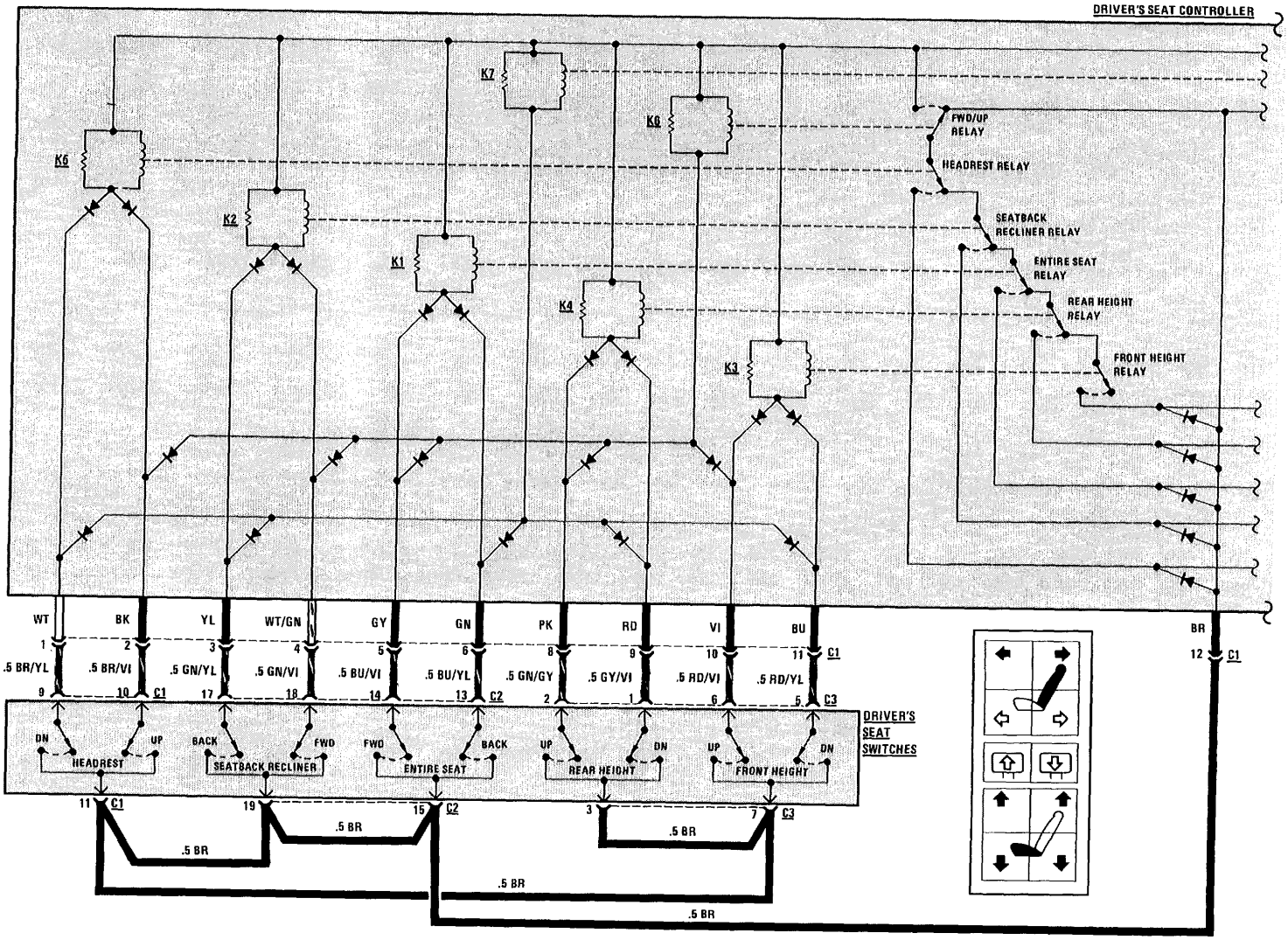
5133-0 POWER WINDOWS



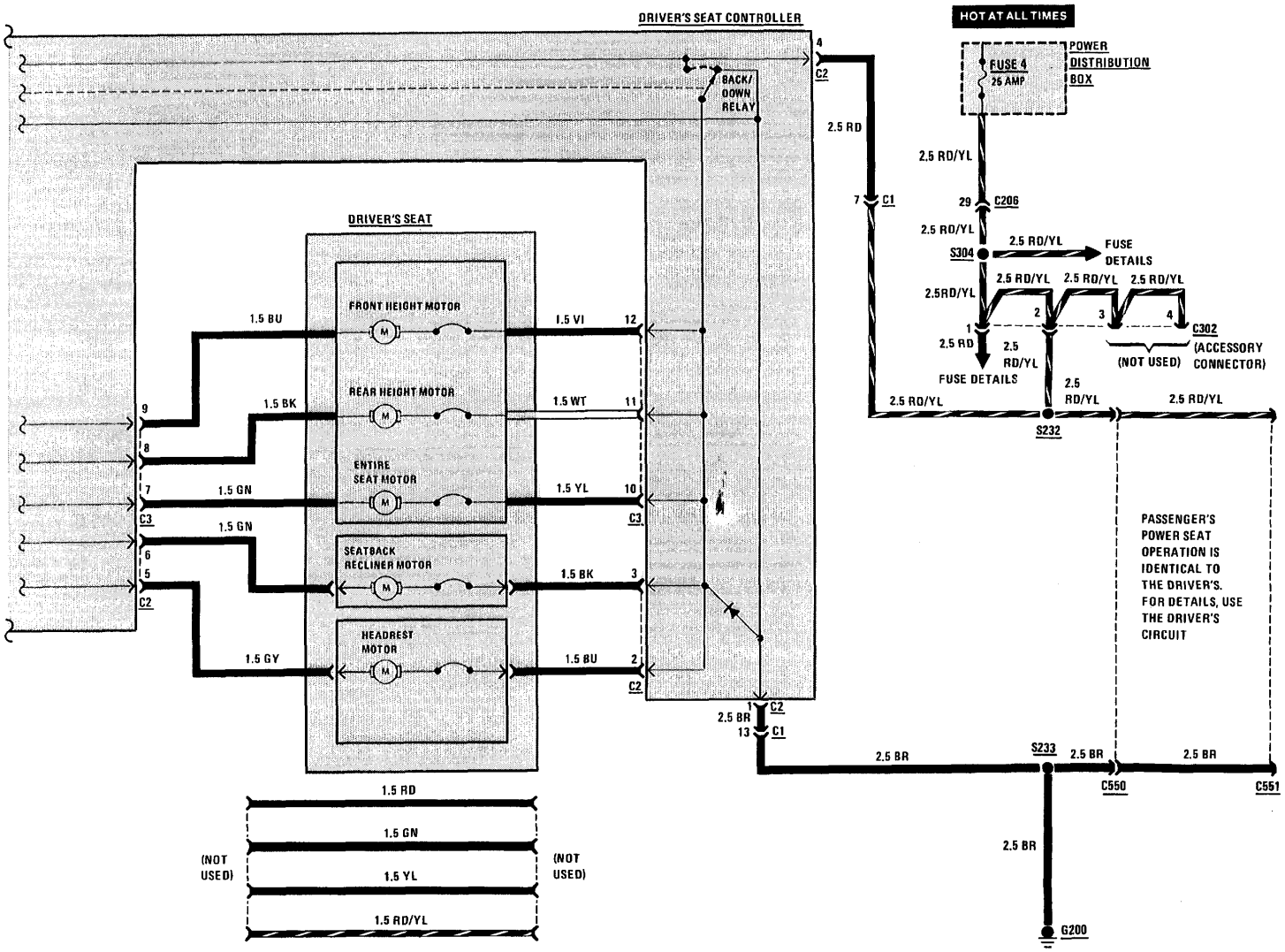
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CIRCUIT OPERATION

Driver's Seat and Passenger's Seat - Manual Operation

There are five reversible Motors that operate the Power Seat. The seat height is controlled by two Motors: one for Front Height and the other for Rear Height; these two Motors operate indepedently of each other. The other three Motors provide positioning for Headrest Height, Seatback Reclining, and the Entire Seat Forward/Backward.

When any Seat Switch is depressed, a path to ground is provided for two Relays inside the Control Unit. One Relay controls the Motor for the seat function depressed and the other controls the polarity of the voltage to the Motor selected. An example of this action is as follows: The Front Height UP Switch is depressed, energizing the coils of the Front Height and Fwd/Up Relays. The Relay Switch contacts close and voltage is applied to the Front Height Motor. This drives the front of the seat up as long as the Front Height UP Switch is depressed, or until end of travel. When the Front Height Down Switch is depressed, the Front Height and the Back/Down Relays are energized. Polarity to the motor is reversed, which drives the seat down. The operation of the other seat function is similar to the operation of the Front Height control.

TROUBLESHOOTING HINTS

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

1. If both Power Seats do not operate, check Fuse 4 and the power lead to the splice.

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

SYSTEM CHECK

- **Use the System Check Table as a guide to normal operation.**

SYSTEM CHECK TABLE

ACTION	NORMAL RESULT
1. Operate the Seatback Recliner Switch in the BACK and FWD positions.	Back of the seat moves backward and forward in response to operation of Seat Switch.
2. Operate the Rear Height Switch in the UP and DN positions.	The rear seat height moves up and down.
3. Operate the Front Height Switch in the UP and DN positions.	The front seat height moves up and down.
4. Operate the Entire Seat Switch in the FWD and BACK positions.	The seat moves forward and back.
5. Operate the Headrest Switch in the UP and DN positions.	The headrest moves up and down.

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

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SYSTEM DIAGNOSIS

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

SYMPTOM TABLE

A: No seat functions work
B: Some seat functions work

A: NO SEAT FUNCTIONS WORK

Measure: VOLTAGE
At: PASSENGER'S SEAT CONTROLLER CONNECTORS C1 & C2 (Connected)

Measure Between	Correct Voltage	For Diagnosis
C2/4 & Ground	Battery	See 1
C2/4 & C2/1	Battery	See 2
C2/4 & C1/12	Battery	See 3

- If all voltages are correct, go to Test B.

1. Check wire to connector C2, terminal 4 (see schematic). Check Fuse 26.
2. Check wire from connector C2, terminal 1 (see schematic). Check ground G200.
3. Replace Passenger's Seat Controller.

B: SOME SEAT FUNCTIONS WORK (TABLE 1)

Measure: RESISTANCE
At: PASSENGER'S SEAT CONTROLLER CONNECTOR C1 (Disconnected)
Condition:
• Headrest Switch: DOWN

Measure Between	Correct Resistance	For Diagnosis
1 (female) & 12 (female)	0 Ohms	See 1
• Headrest Switch: UP		
2 (female) & 12 (female)	0 Ohms	See 1
• Seatback Recliner Switch: BACK		
3 (female) & 12 (female)	0 Ohms	See 1
• Seatback Recliner Switch: FWD		
4 (female) & 12 (female)	0 Ohms	See 1
• Entire Seat Switch: FWD		
5 (female) & 12 (female)	0 Ohms	See 1
• Entire Seat Switch: BACK		
6 (female) & 12 (female)	0 Ohms	See 1
• Rear Height Switch: UP		
8 (female) & 12 (female)	0 Ohms	See 1
• Rear Height Switch: DN		
9 (female) & 12 (female)	0 Ohms	See 1
• Front Height Switch: UP		
10 (female) & 12 (female)	0 Ohms	See 1
• Front Height Switch: DN		

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11 (female) & 12 (female)	0 Ohms	See 1

- If all results are correct, reconnect connector and go to Table 2.

1. Check wire to Passenger's Seat Switches (see schematic). If wire is good, replace Passenger's Seat Switches.

B: SOME SEAT FUNCTIONS WORK (TABLE 2)

Measure: VOLTAGE
At: PASSENGER'S SEAT CONTROLLER CONNECTORS C2 & C3 (Connected)
Condition:
• Headrest Switch: UP and DN

Measure Between	Correct Voltage	For Diagnosis
C2/2 & C2/5	Battery	See 1
• Seatback Recliner Switch: FWD and BACK		
C2/3 & C2/6	Battery	See 1
• Entire Seat Switch: FWD and BACK		
C3/7 & C3/10	Battery	See 1
• Rear Switch: UP and DN		
C3/8 & C3/11	Battery	See 1
• Front Switch: UP and DN		
C3/9 & C3/12	Battery	See 1

- If all voltages are correct, repair/replace suspect Motor.

1. Replace Passenger's Seat Controller.

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SYSTEM DIAGNOSIS

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

SYMPTOM TABLE

A: No seat functions work
B: Some seat functions work
C: Memory functions do not work
D: Bolster support does not work

A: NO SEAT FUNCTIONS WORK (TABLE 1 - SEAT WITHOUT MEMORY)

Measure: VOLTAGE
At: PASSENGER'S SEAT CONTROLLER CONNECTORS C1 & C2 (Connected)

Measure Between	Correct Voltage	For Diagnosis
C2/4 & Ground	Battery	See 1
C2/4 & C2/1	Battery	See 2
C2/4 & C1/12	Battery	See 3

- If all voltages are correct, go to Test B.

1. Check wire to connector C2, terminal 4 (see schematic). Check Fuse 26.
2. Check wire from connector C2, terminal 1 (see schematic). Check ground G200.
3. Replace Passenger's Seat Controller.

A: NO SEAT FUNCTIONS WORK (TABLE 2 - SEAT WITH MEMORY)

Measure: VOLTAGE
At: MEMORY SEAT CONTROL MODULE CONNECTORS C1 (26-pin Connecting Lead and Universal Adapter Connected) & C4 (Connected)
Condition:
- **Ignition Switch: RUN**

Measure Between	Correct Voltage	For Diagnosis
C4/8 & Ground	Battery	See 1
C4/8 & C4/10	Battery	See 2
C1/3 & Ground	Battery	See 3
C1/3 & C1/26	Battery	See 4

- If all voltages are correct, go to Test B.

1. Check wire to connector C4, terminal 84 for an open (see schematic). Check Fuse 26.
2. Check wire from connector C4, terminal 10 for an open (see schematic). Check ground G200.
3. Check wire to connector C1, terminal 3 for an open (see schematic).
4. Replace Memory Seat Control Module.

B: SOME SEAT FUNCTIONS WORK (TABLE 1 - SEAT WITHOUT MEMORY)

Measure: RESISTANCE
At: PASSENGER'S SEAT CONTROLLER CONNECTOR C1 (Disconnected)
Condition:
- **Headrest Switch: DOWN**

Measure Between	Correct Resistance	For Diagnosis
1 (female) & 12 (female)	0 Ohms	See 1
• Headrest Switch: UP		
2 (female) & 12 (female)	0 Ohms	See 1
• Seatback Recliner Switch: BACK		
3 (female) & 12 (female)	0 Ohms	See 1
• Seatback Recliner Switch: FWD		
4 (female) & 12 (female)	0 Ohms	See 1
• Entire Seat Switch: FWD		
5 (female) & 12 (female)	0 Ohms	See 1
• Entire Seat Switch: BACK		
6 (female) & 12 (female)	0 Ohms	See 1
• Rear Height Switch: UP		
8 (female) & 12 (female)	0 Ohms	See 1
• Rear Height Switch: DN		
9 (female) & 12 (female)	0 Ohms	See 1

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• Front Height Switch: UP		
10 (female) & 12 (female)	0 Ohms	See 1
• Front Height Switch: DN		
11 (female) & 12 (female)	0 Ohms	See 1
• If all results are correct, reconnect connector and go to Table 2.		
1. Check wire to Passenger's Seat Switches (see schematic). If wire is good, replace Passenger's Seat Switches.		

B: SOME SEAT FUNCTIONS WORK (TABLE 2 - SEAT WITHOUT MEMORY)

Measure: VOLTAGE
At: PASSENGER'S SEAT CONTROLLER CONNECTORS C2 & C3 (Connected)
Condition:
• Headrest Switch: UP and DN

Measure Between	Correct Voltage	For Diagnosis
C2/2 & C2/5	Battery	See 1
• Seatback Recliner Switch: FWD and BACK		
C2/3 & C2/6	Battery	See 1
• Entire Seat Switch: FWD and BACK		
C3/7 & C3/10	Battery	See 1
• Rear Switch: UP and DN		
C3/8 & C3/11	Battery	See 1
• Front Switch: UP and DN		
C3/9 & C3/12	Battery	See 1
• If all voltages are correct, repair/replace suspect Motor.		
1. Replace Passenger's Seat Controller.		

B: SOME SEAT FUNCTIONS WORK (TABLE 3 - SEAT WITH MEMORY)

Measure: RESISTANCE
At: MEMORY SEAT CONTROL MODULE CONNECTOR C1 (Disconnected)
Condition:
• Headrest Switch: DOWN

Measure Between	Correct Voltage	For Diagnosis
17 & 26	0 Ohms	See 1
• Headrest Switch: UP		
5 & 26	0 Ohms	See 1
• Seatback Recliner Switch: BACK		
18 & 26	0 Ohms	See 1
• Seatback Recliner Switch: FWD		
24 & 26	0 Ohms	See 1
• Entire Seat Switch: FWD		
15 & 26	0 Ohms	See 1
• Entire Seat Switch: BACK		
20 & 26	0 Ohms	See 1
• Rear Height Switch: UP		
21 & 26	0 Ohms	See 1
• Rear Height Switch: DN		
16 & 26	0 Ohms	See 1
• Front Height Switch: UP		
22 & 26	0 Ohms	See 1
• Front Height Switch: DN		
23 & 26	0 Ohms	See 1
• If all resistances are correct, reconnect connector and go to Table 2.		
1. Check wire to Driver's Seat Switches (see schematic). If wire is good, replace Driver's Seat Switches.		

B: SOME SEAT FUNCTIONS WORK (TABLE 4 - SEAT WITH MEMORY)

Measure: VOLTAGE
At: MEMORY SEAT CONTROL MODULE CONNECTORS C2 & C3 (Connected)
Condition:
• Headrest Switch: UP and DN

Measure Between	Correct Voltage	For Diagnosis
C3/11 & C3/7	Battery	See 1
• Seatback Recliner Switch: FWD and BACK		
C3/6 & C3/12	Battery	See 1
• Entire Seat Switch: FWD and BACK		
C2/1 & C2/4	Battery	See 1
• Rear Height Switch: UP and DN		
C2/5 & C2/2	Battery	See 1
• Front Height Switch: UP and DN		
C2/3 & C2/6	Battery	See 1
• If all voltages are correct, repair/replace suspect motor.		
1. Replace Memory Seat Control Module.		

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C: MEMORY FUNCTIONS DO NOT WORK (TABLE 1 - SEAT WITH MEMORY)

Measure: RESISTANCE
At: MEMORY SWITCHES CONNECTOR (Disconnected)
Condition:
• STOP Switch: PRESSED

Measure Between	Correct Resistance	For Diagnosis
5 & 7	Infinite Ohms	See 1
• STOP Switch: RELEASED		
5 & 7	0 Ohms	See 1
2 & 3	Approximately 2.2 K Ohms	See 1
3 & 4	Approximately 2.2K Ohms	See 1
• MEMORY 1: PRESSED		
3 & 4	Approximately 170 Ohms	See 1
• MEMORY 2: PRESSED		
3 & 4	Approximately 340 Ohms	See 1
• MEMORY 3: PRESSED		
3 & 4	Approximately 800 Ohms	See 1
• Store MEMORY 1: PRESSED		
2 & 3	Approximately 170 Ohms	See 1
• Store MEMORY 2: PRESSED		

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2 & 3	Approximately 340 Ohms	See 1
• Store MEMORY 3: PRESSED		
2 & 3	Approximately 800 Ohms	See 1
• If all resistances are correct, go to Table 2.		
1. Replace Memory Switches.		

C: MEMORY FUNCTIONS DO NOT WORK (TABLE 2 - SEAT WITH MEMORY)

Measure: VOLTAGE
At: MEMORY SEAT CONTROL MODULE CONNECTOR C5 (26-pin Connecting Lead And Universal Adapter) (Connected)
Condition:
• Ignition Switch: RUN

Measure Between	Correct Voltage	For Diagnosis
3 & 16	Greater than 4 Volts	See 1
1 & 14	Greater than 4 Volts	See 1
2 & 15	Greater than 4 Volts	See 1
4 & 17	Greater than 4 Volts	See 1
5 & 18	Greater than 4 Volts	See 1
• If all voltages are correct, go to Table 3.		
1. Replace Memory Seat Control Module.		

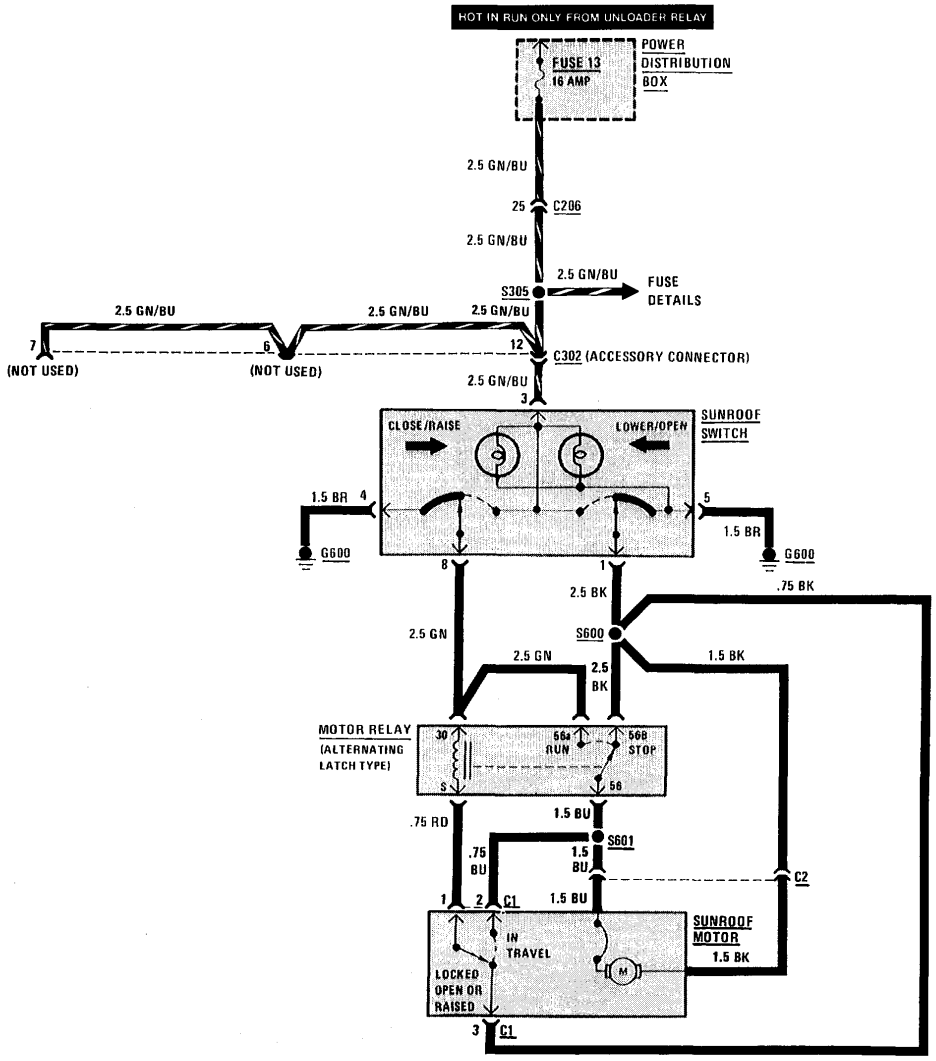
C: MEMORY FUNCTIONS DO NOT WORK (TABLE 3 - SEAT WITH MEMORY)

Measure: VOLTAGE
At: MEMORY SEAT CONTROL MODULE CONNECTOR C5 (26-pin Connecting Lead And Universal Adapter) (Connected)
Conditions:
• Ignition Switch: RUN
• Headrest Switch: UP or DOWN

Measure Between	Correct Voltage	For Diagnosis
10 & Ground	Varies between 1 & 5 Volts	See 1
• Seatback Recliner Switch: FWD or BACK		
8 & Ground	Varies between 1 & 5 Volts	See 1
• Entire Seat Switch: FWD or BACK		
9 & Ground	Varies between 1 & 5 Volts	See 1
• Rear Height Switch: UP or DOWN		
11 & Ground	Varies between 1 & 5 Volts	See 1
• Front Height Switch: UP or DOWN		
12 & Ground	Varies between 1 & 5 Volts	See 1
• If all voltages are correct, replace Memory Seat Control Module.		
1. Check wire to Position Sensor (see schematic). If wire is good, replace Position Sensor.		

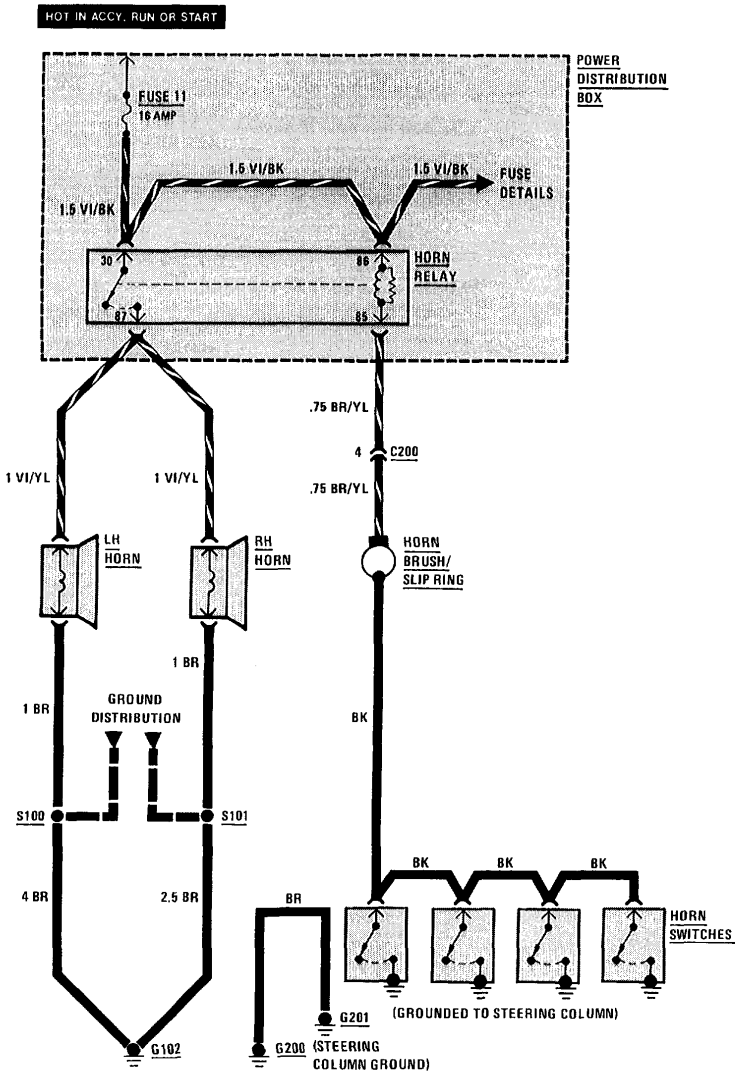
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5413-0 SUNROOF



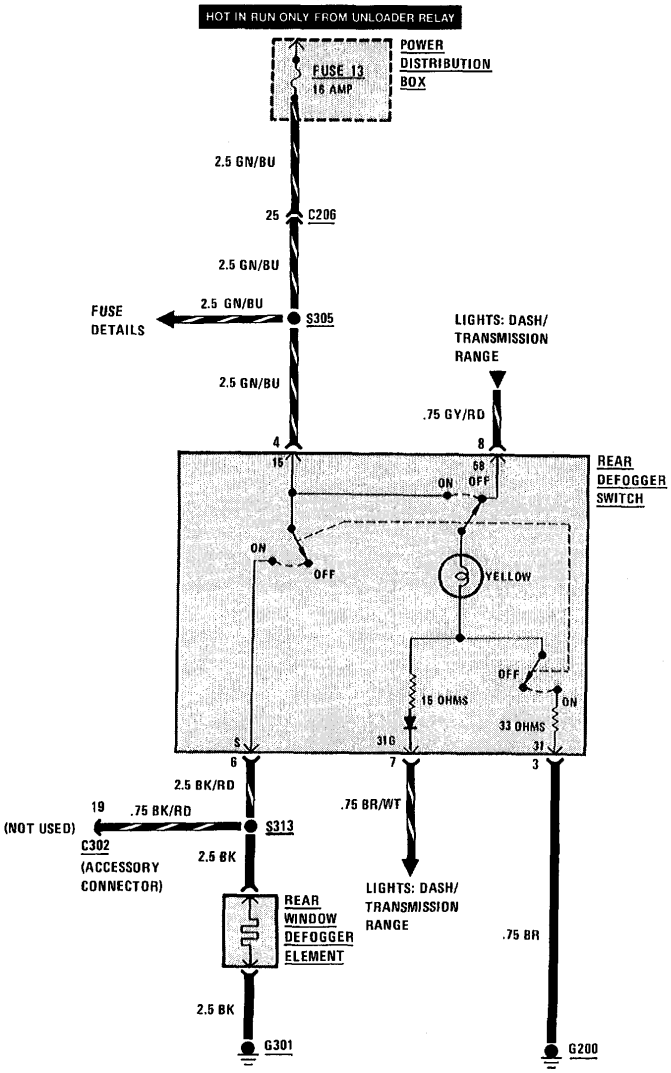
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HORN

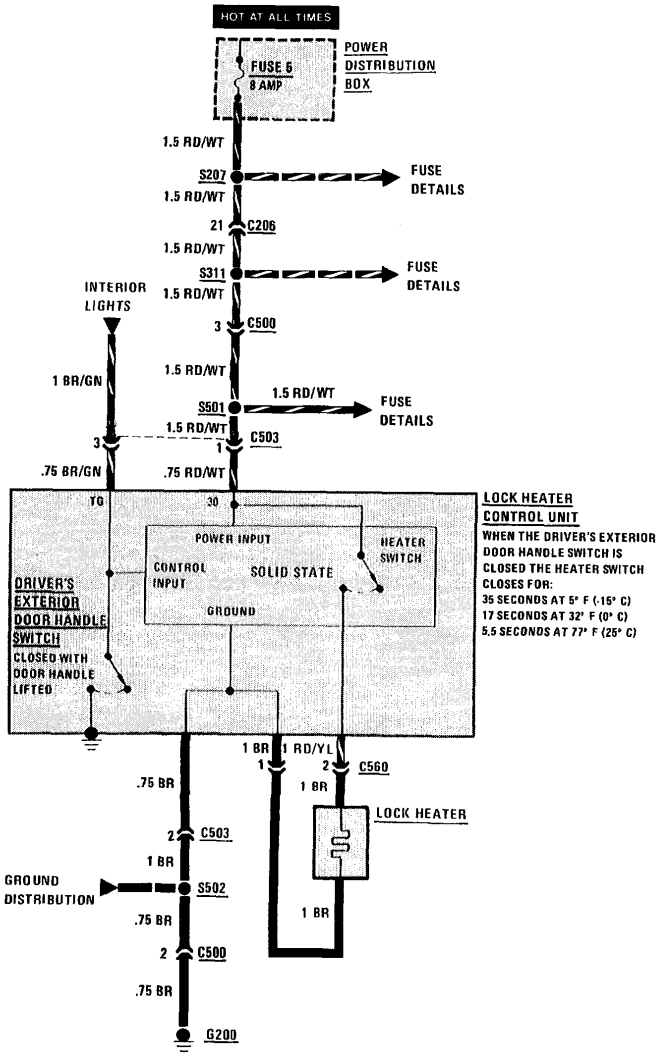


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REAR DEFOGGER

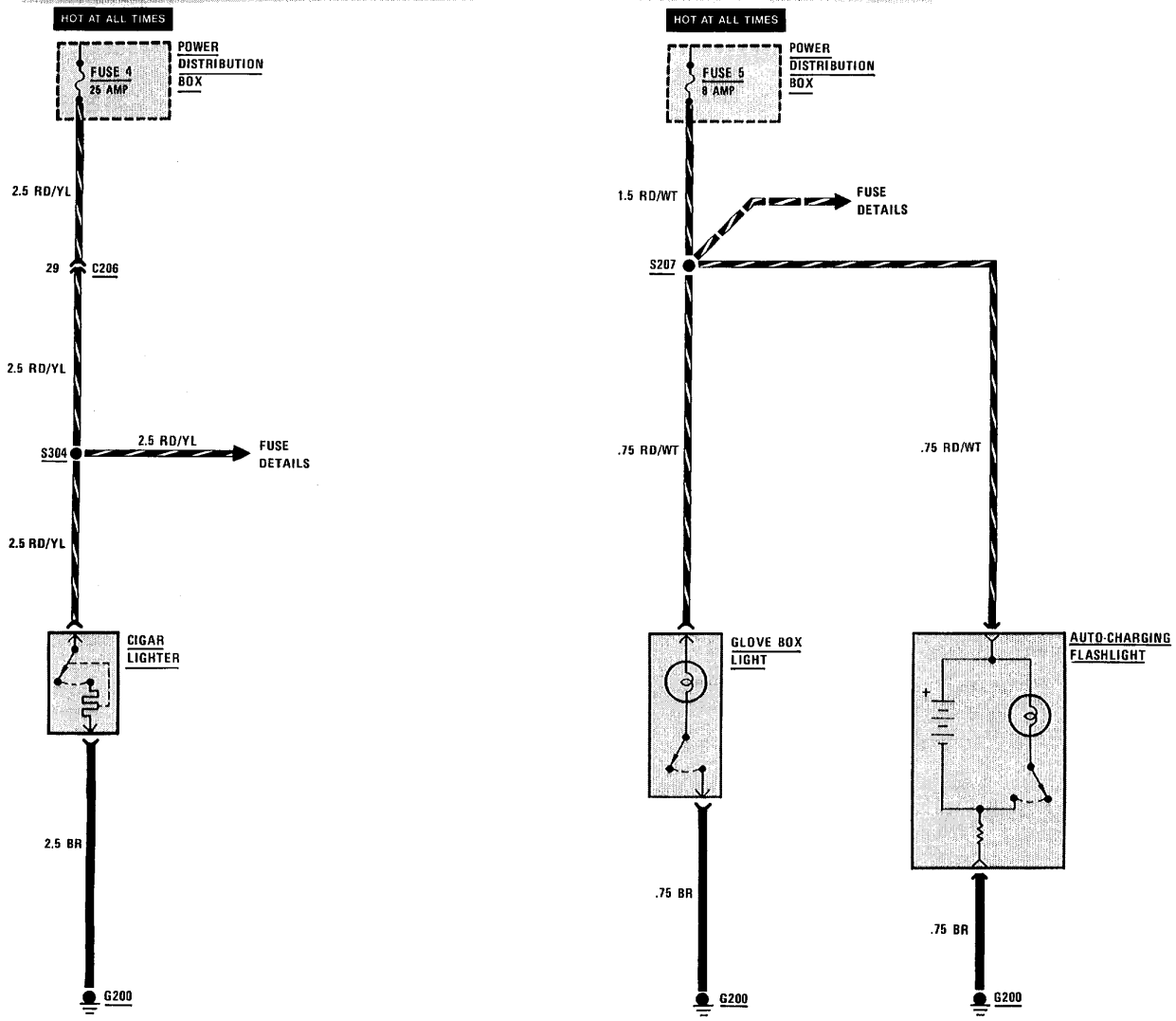


HEATED DOOR LOCKS



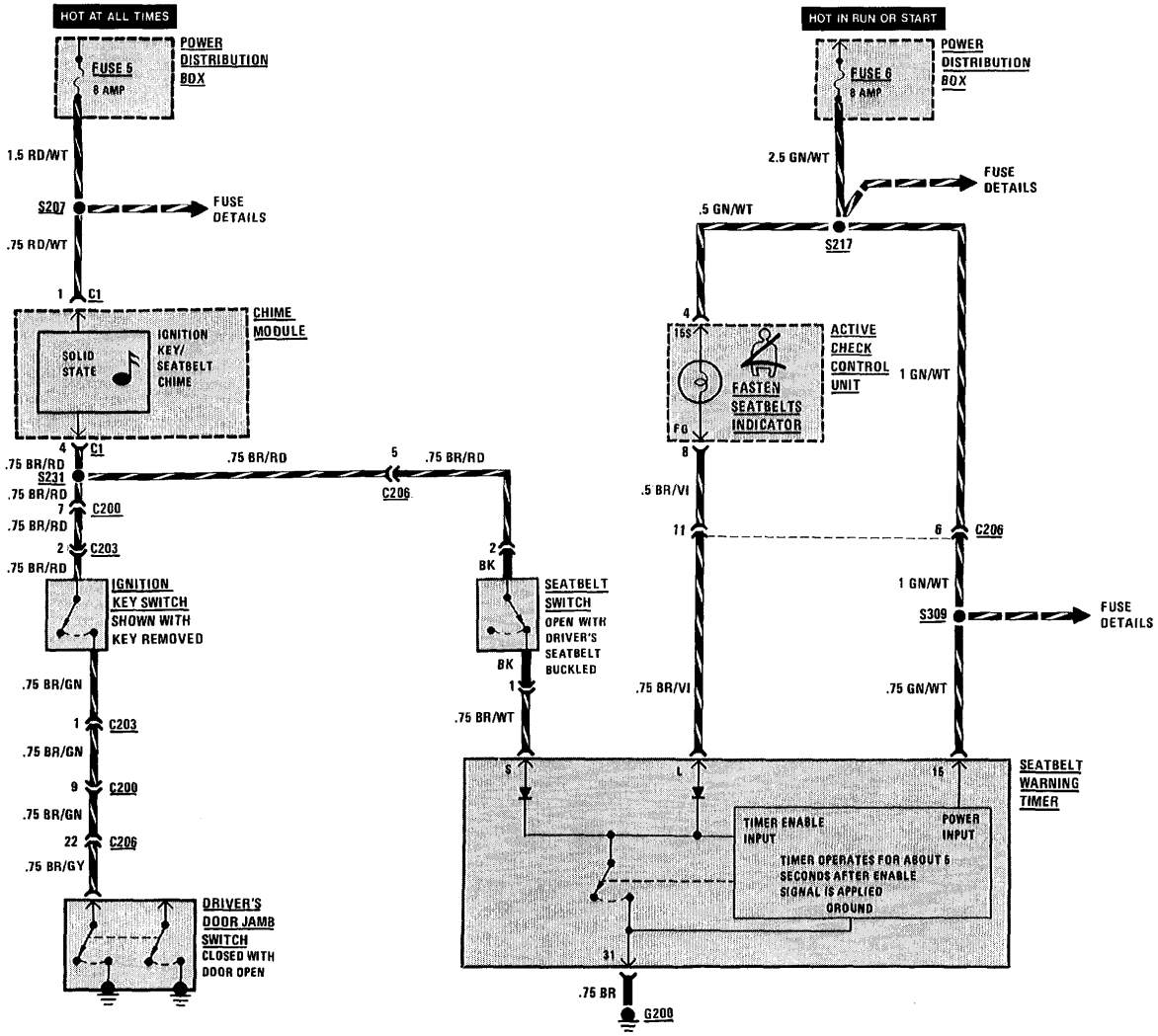
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CIGAR LIGHTER/GLOVE BOX LIGHT/AUTO-CHARGING FLASHLIGHT



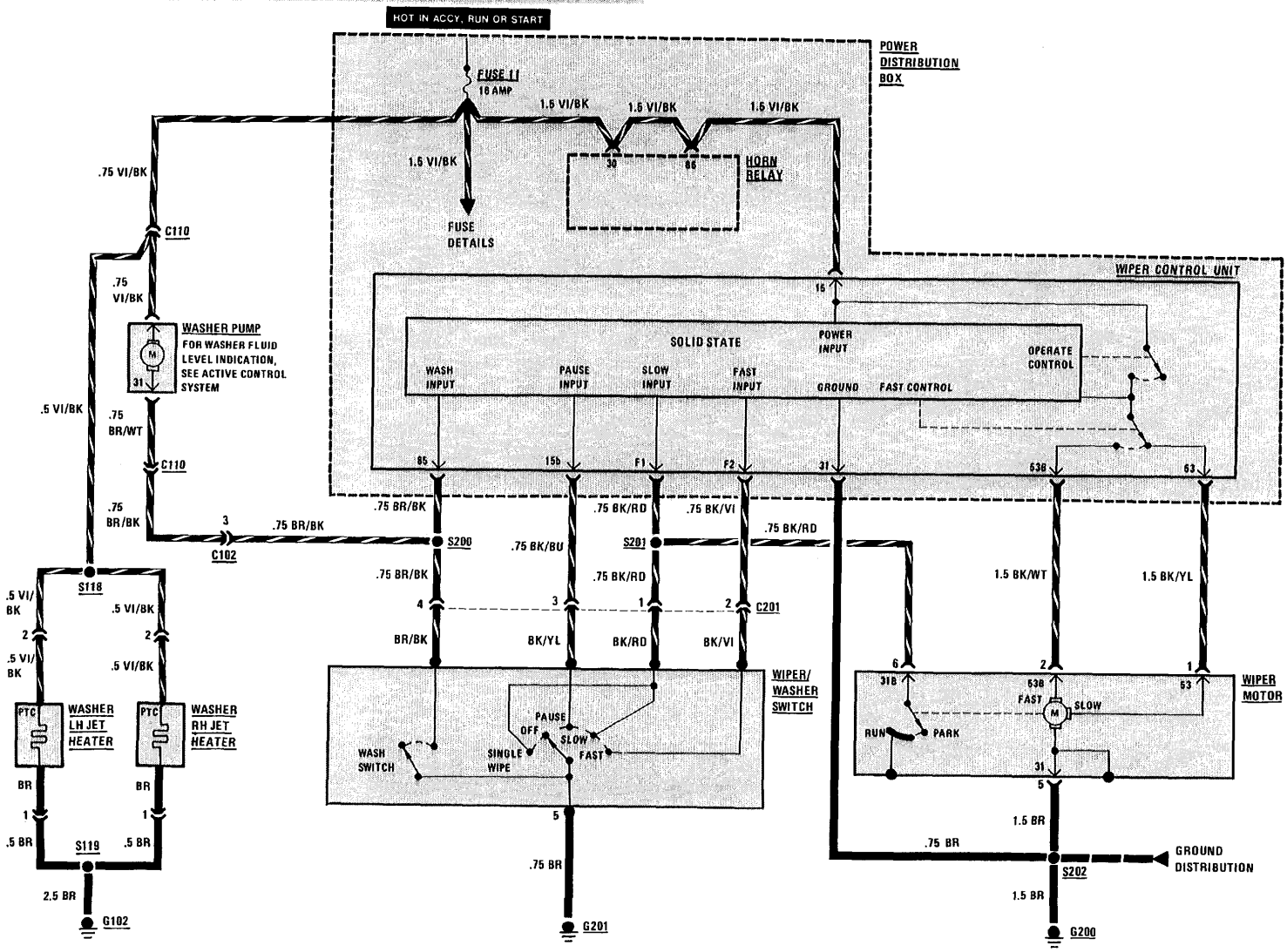
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6131-0 IGNITION KEY WARNING/SEATBELT WARNING



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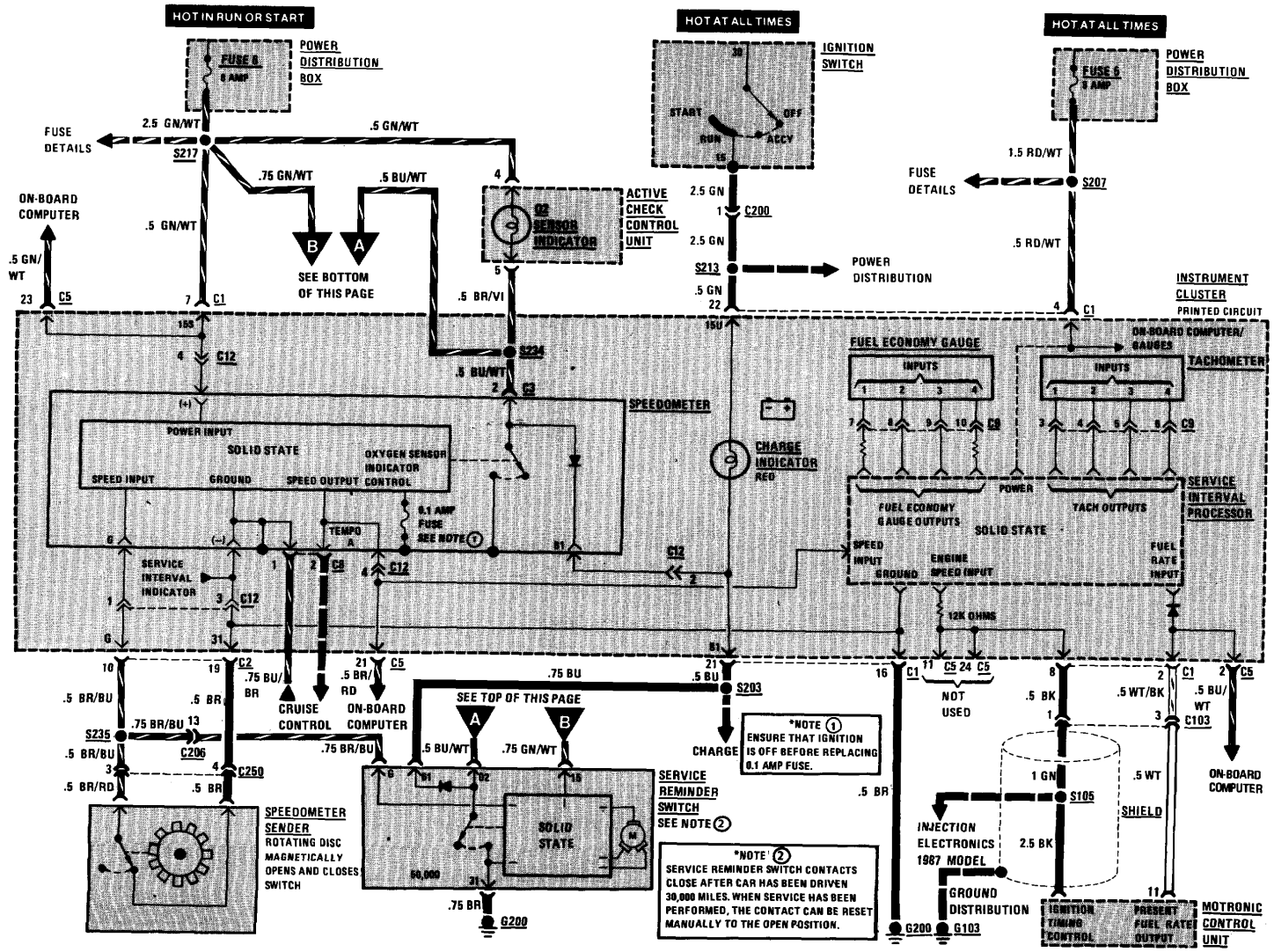
WIPER/WASHER AND HEATED WASHER JETS



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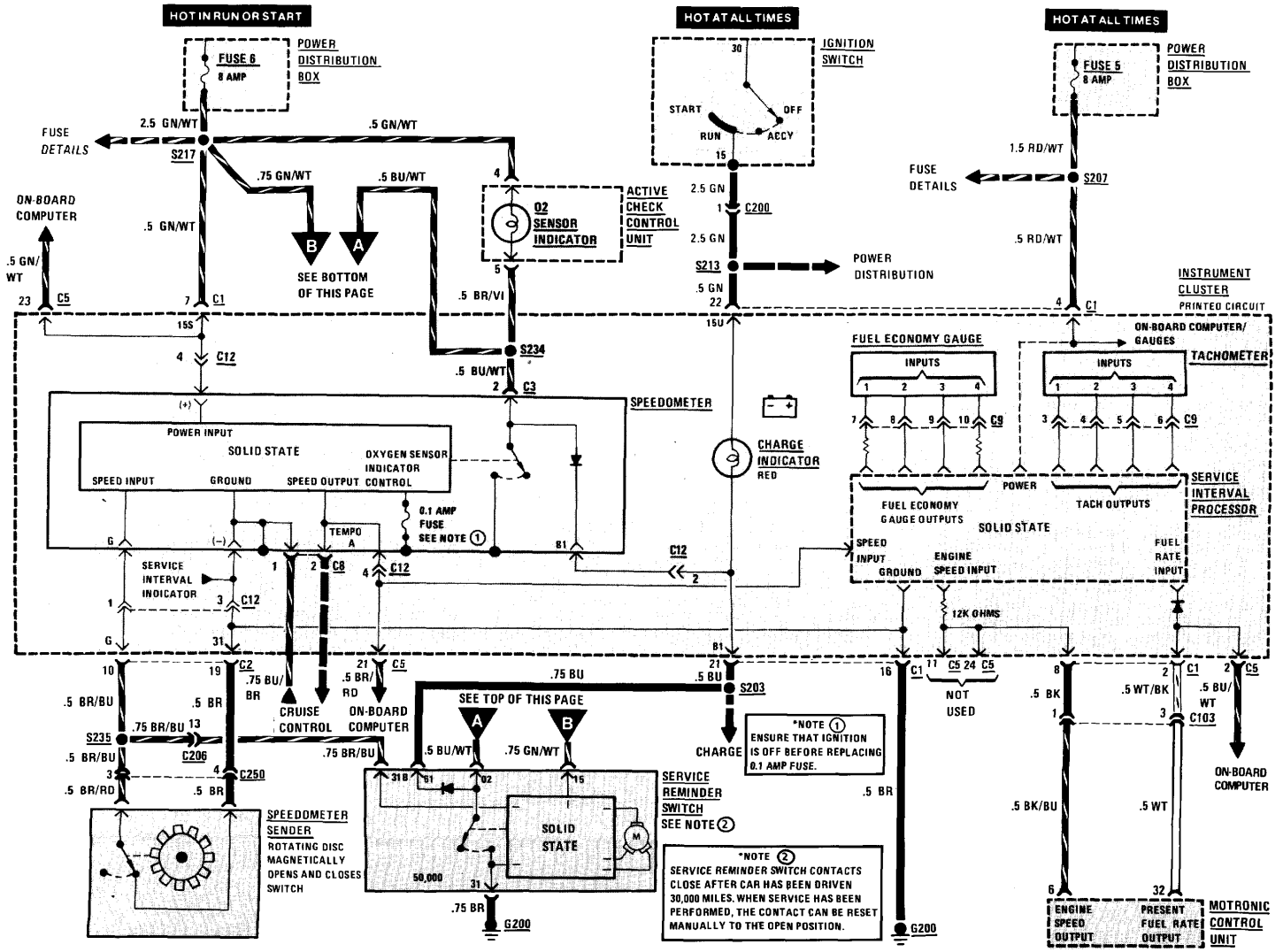
6210-0 INSTRUMENT CLUSTER

SPEEDOMETER/GAUGES/WARNING INDICATORS

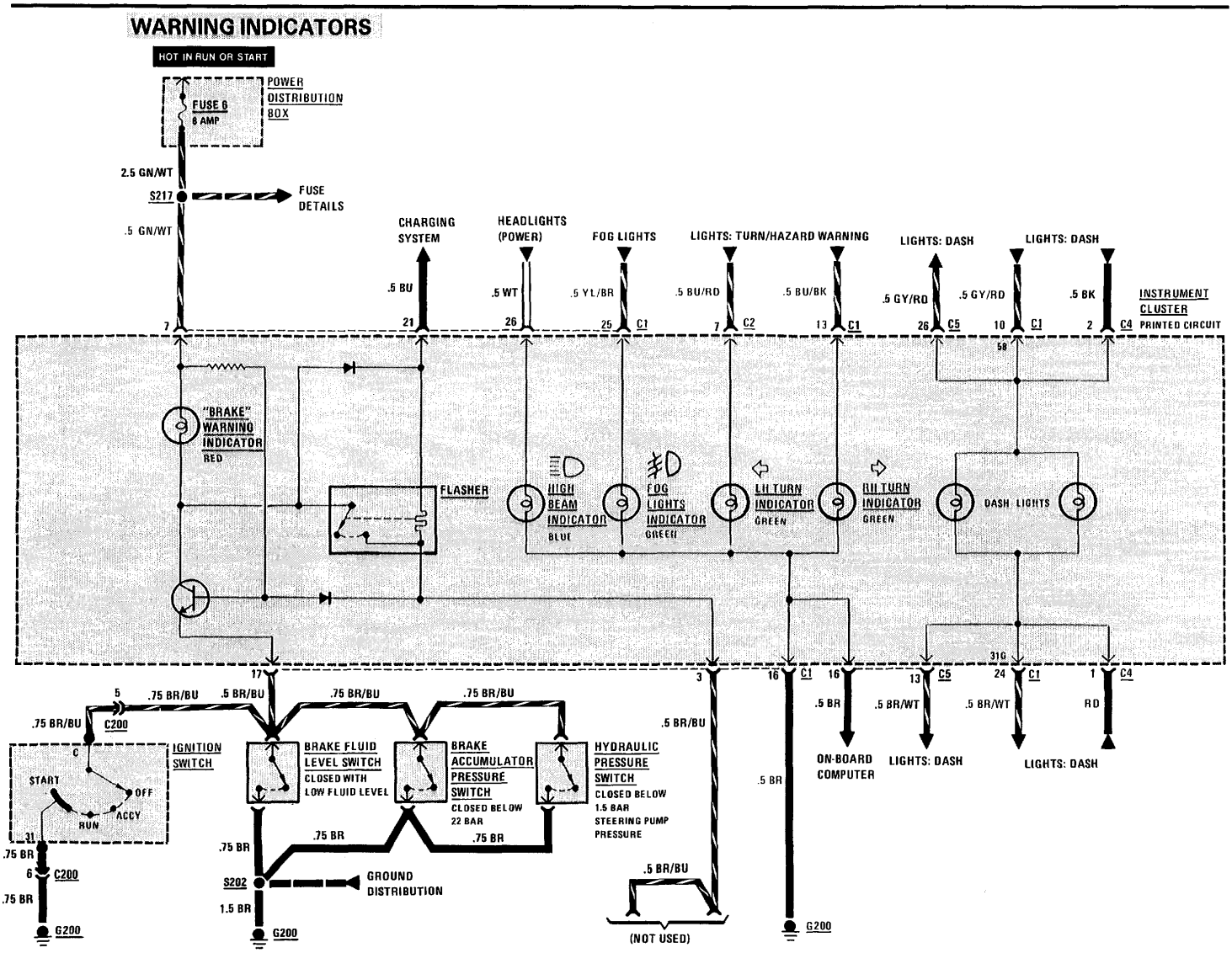


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SPEEDOMETER/GAUGES/WARNING INDICATORS

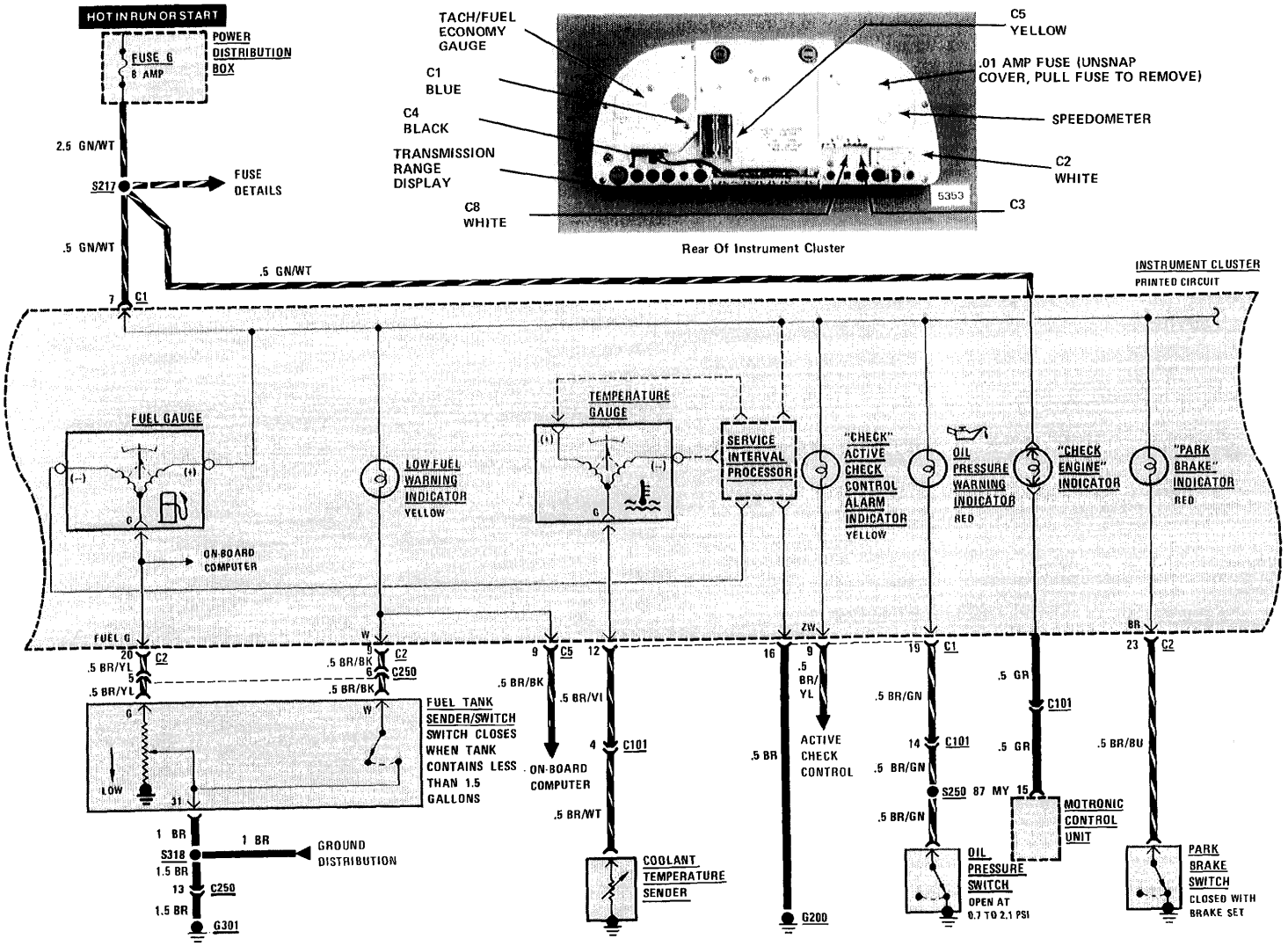


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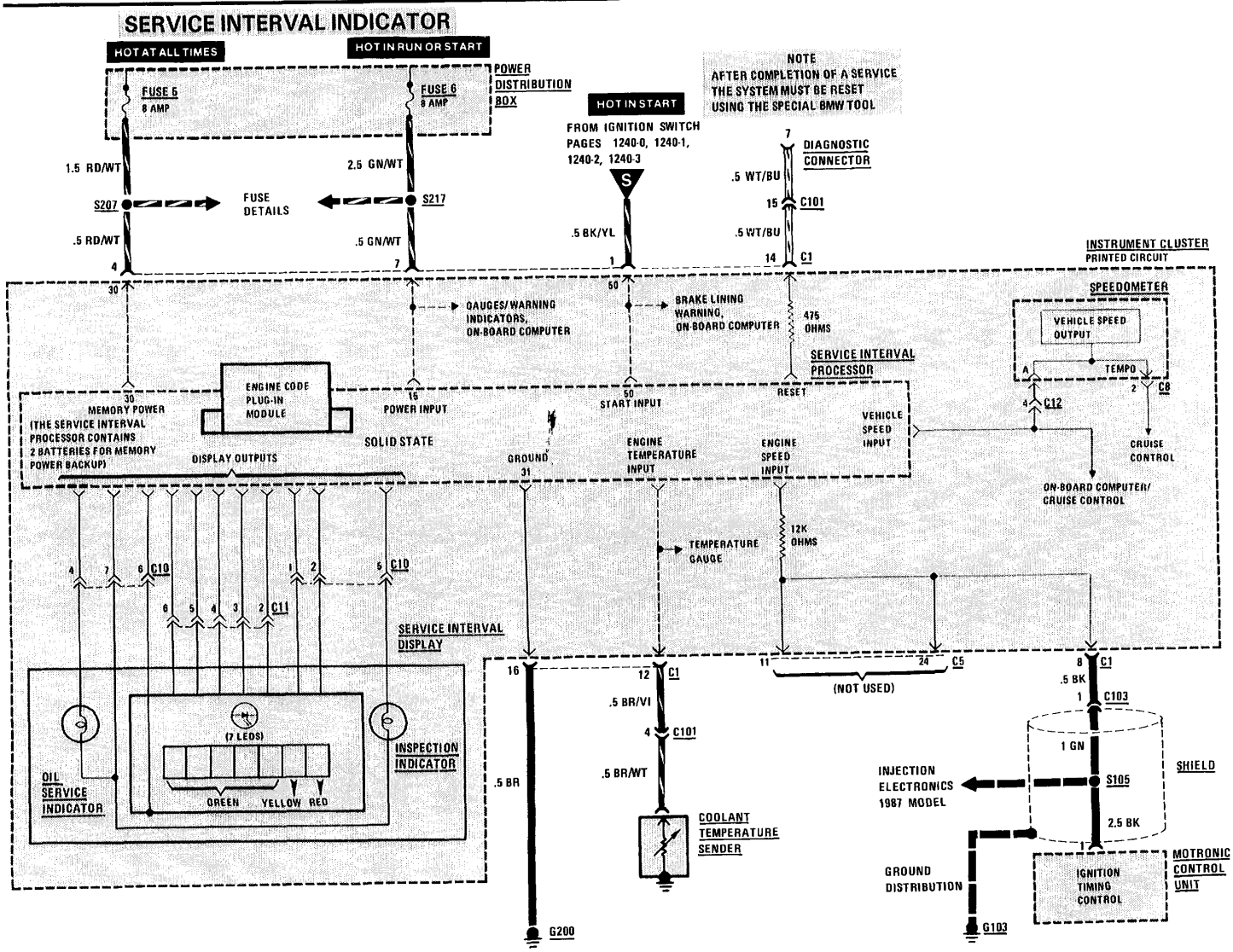


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GAUGES/WARNING INDICATORS

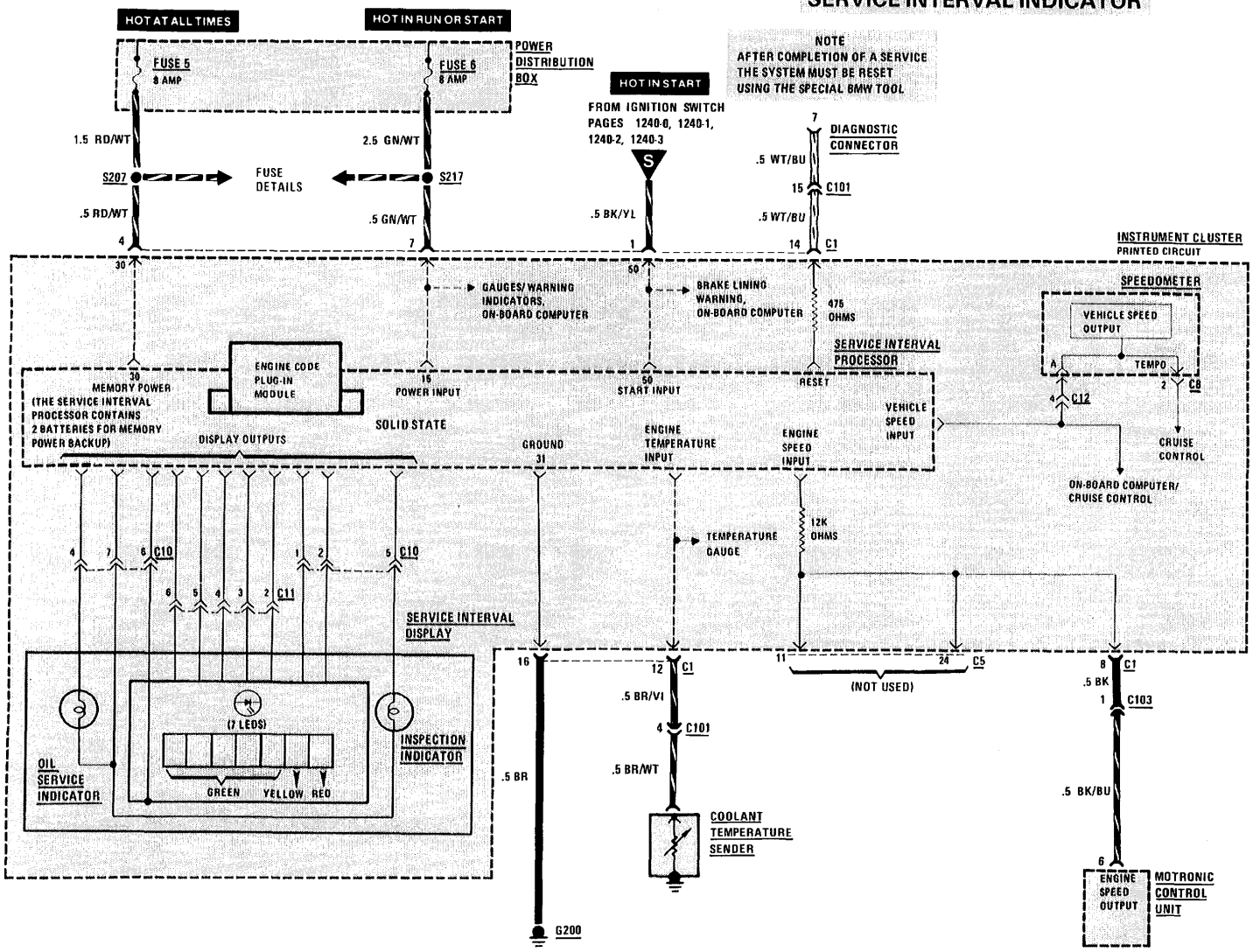


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SERVICE INTERVAL INDICATOR



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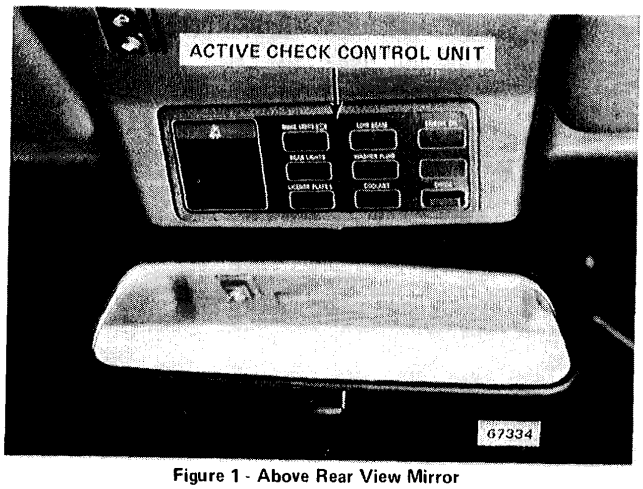


Figure 1 - Above Rear View Mirror

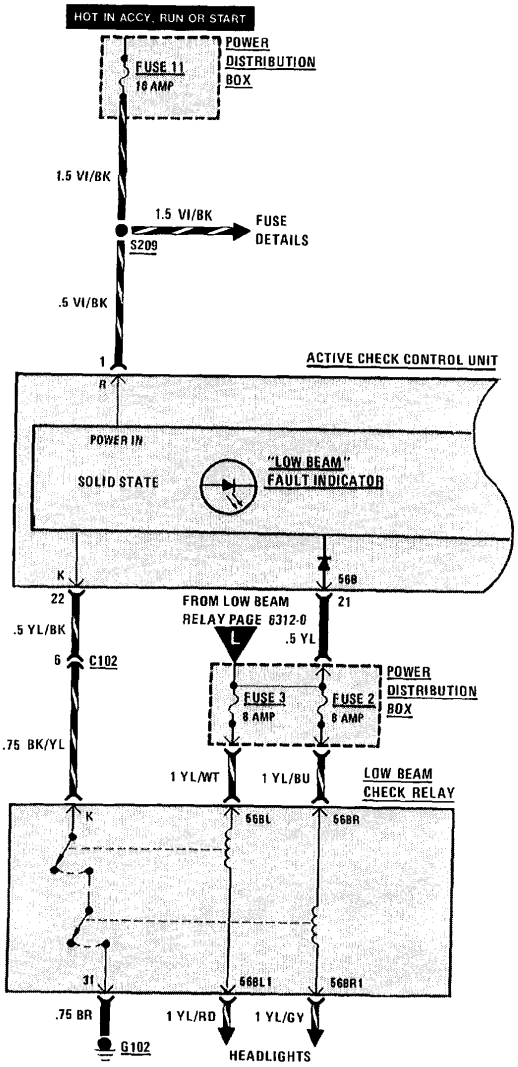
ACTIVE CHECK CONTROL

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.

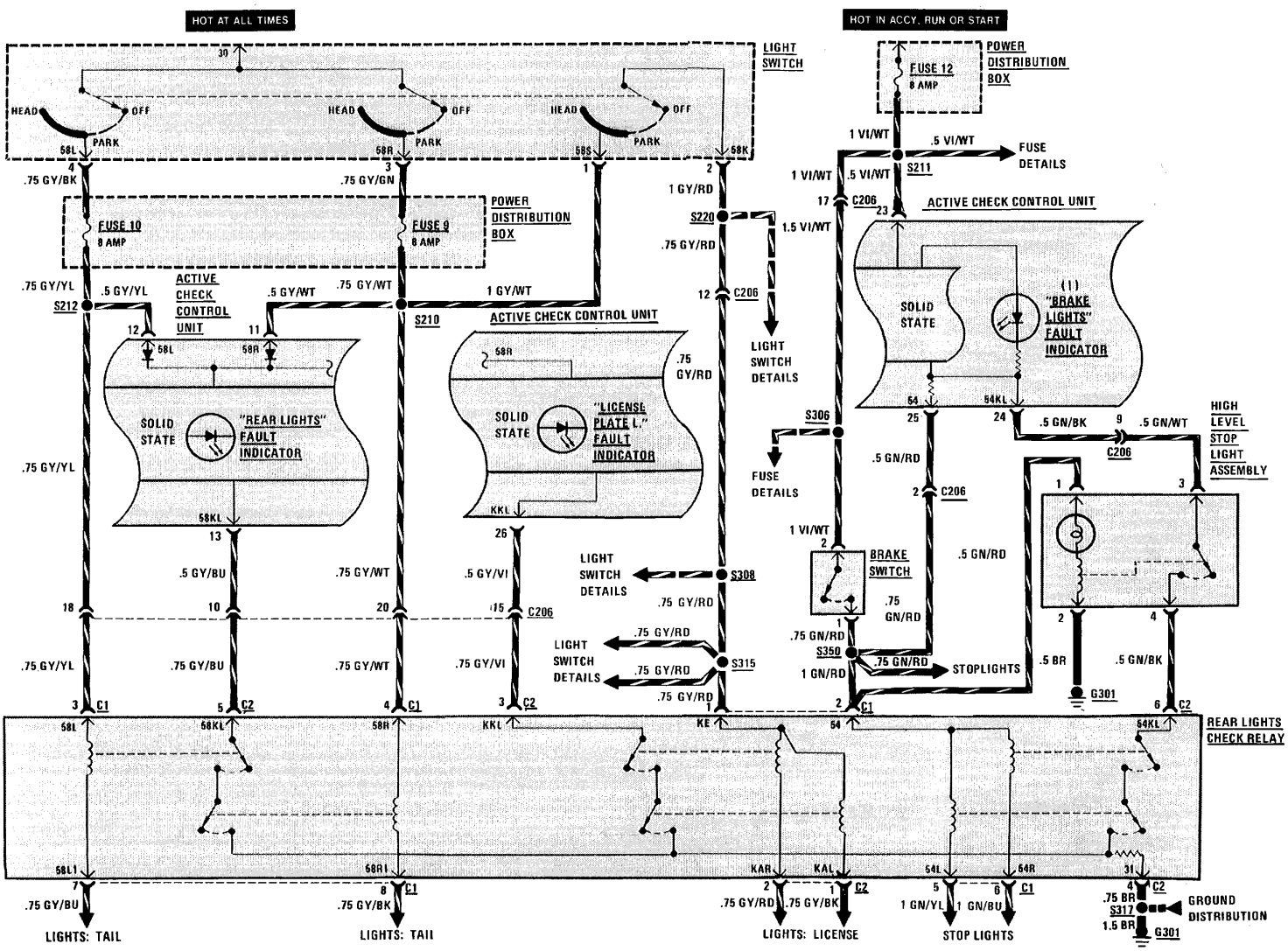
2. When the Ignition Switch is placed in "Run," fault monitoring begins. To monitor the low beams, rear lights, or license lights, those circuits must be on. The brake lights are monitored only while the brake pedal is depressed.

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 lights should go on.

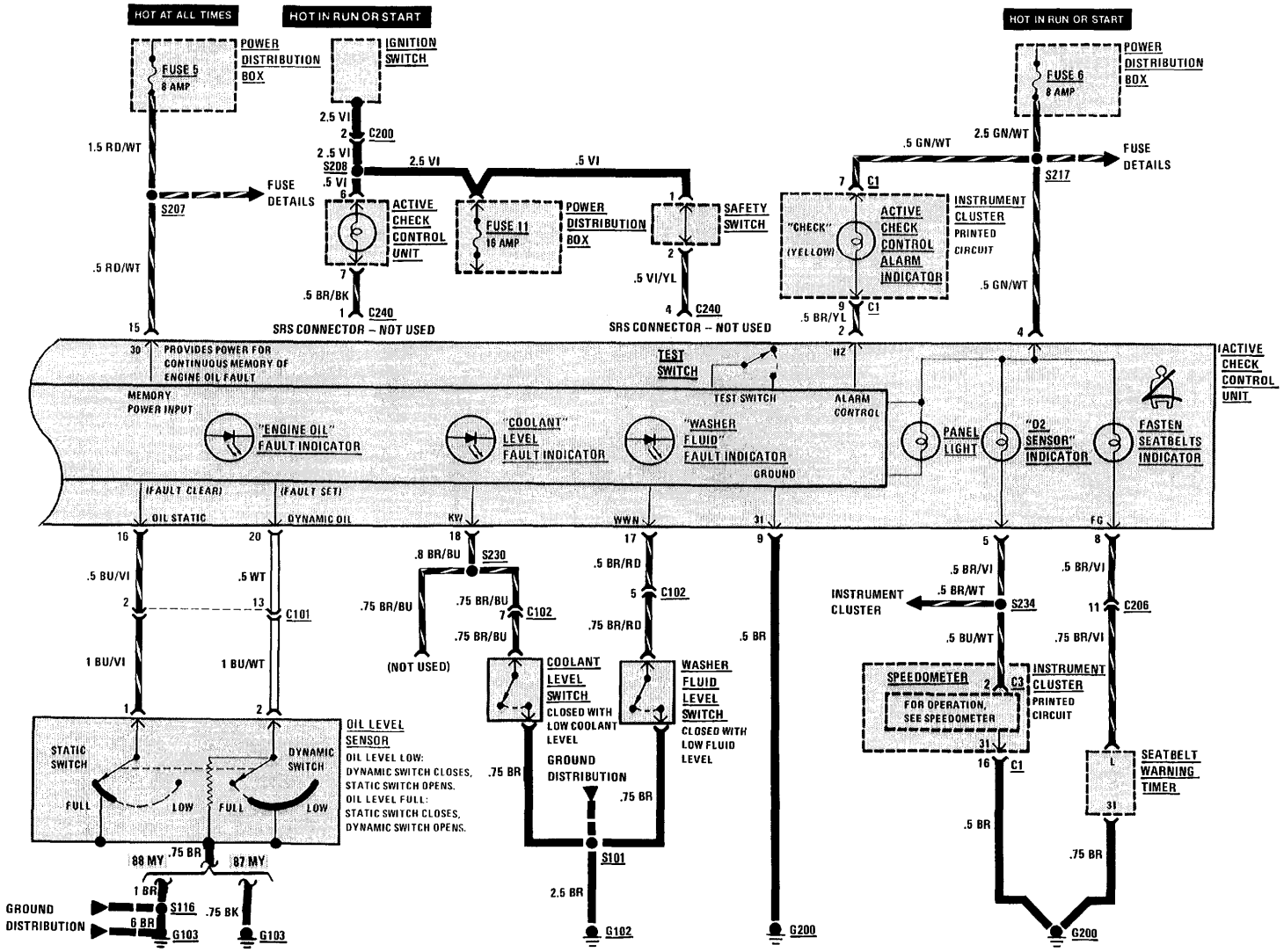


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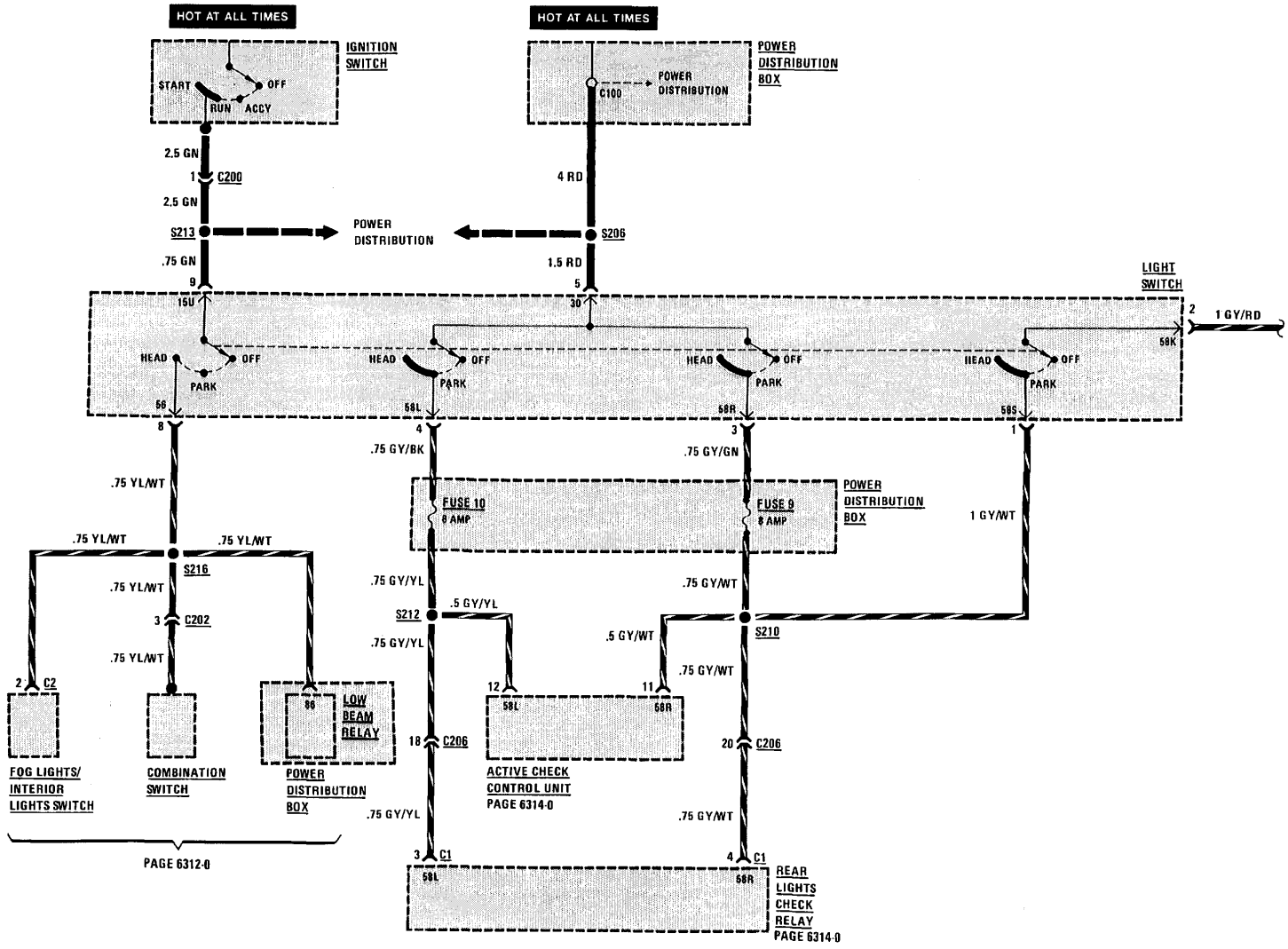
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6216-2 ACTIVE CHECK CONTROL

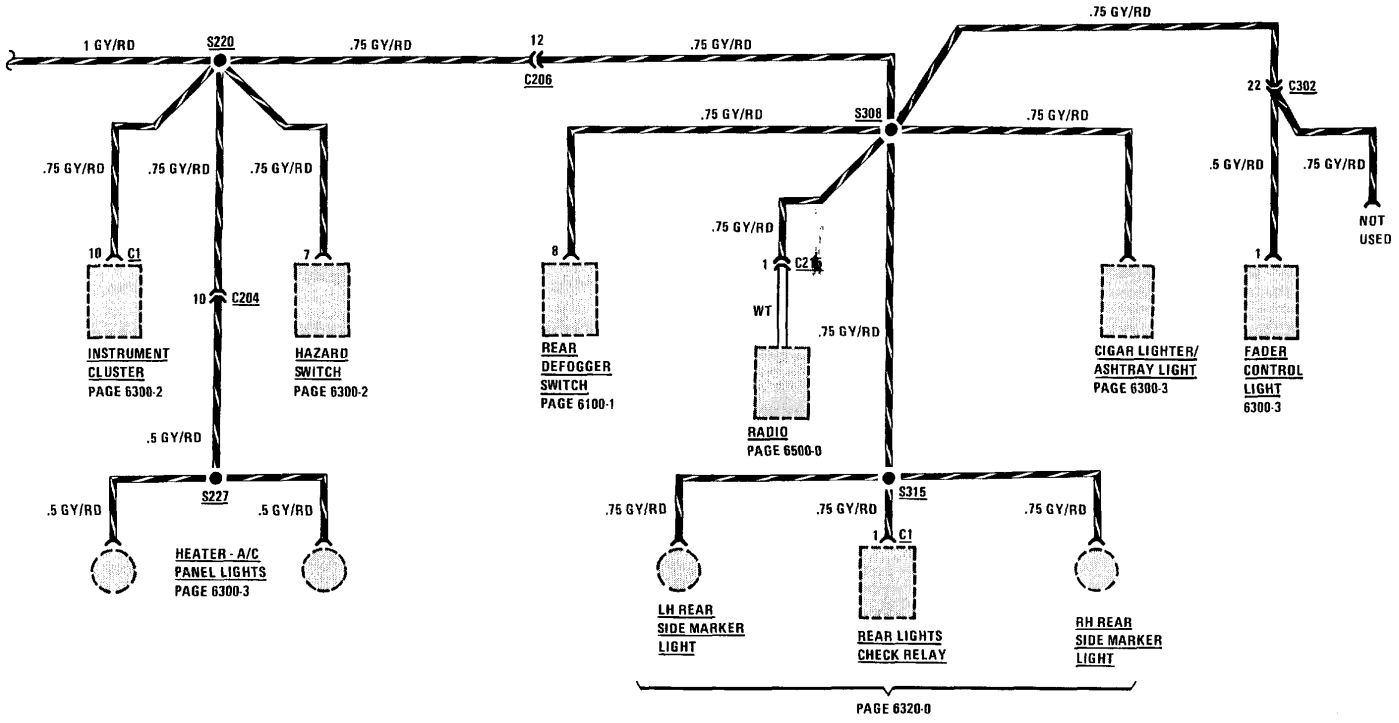


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6300-0 LIGHT SWITCH DETAILS



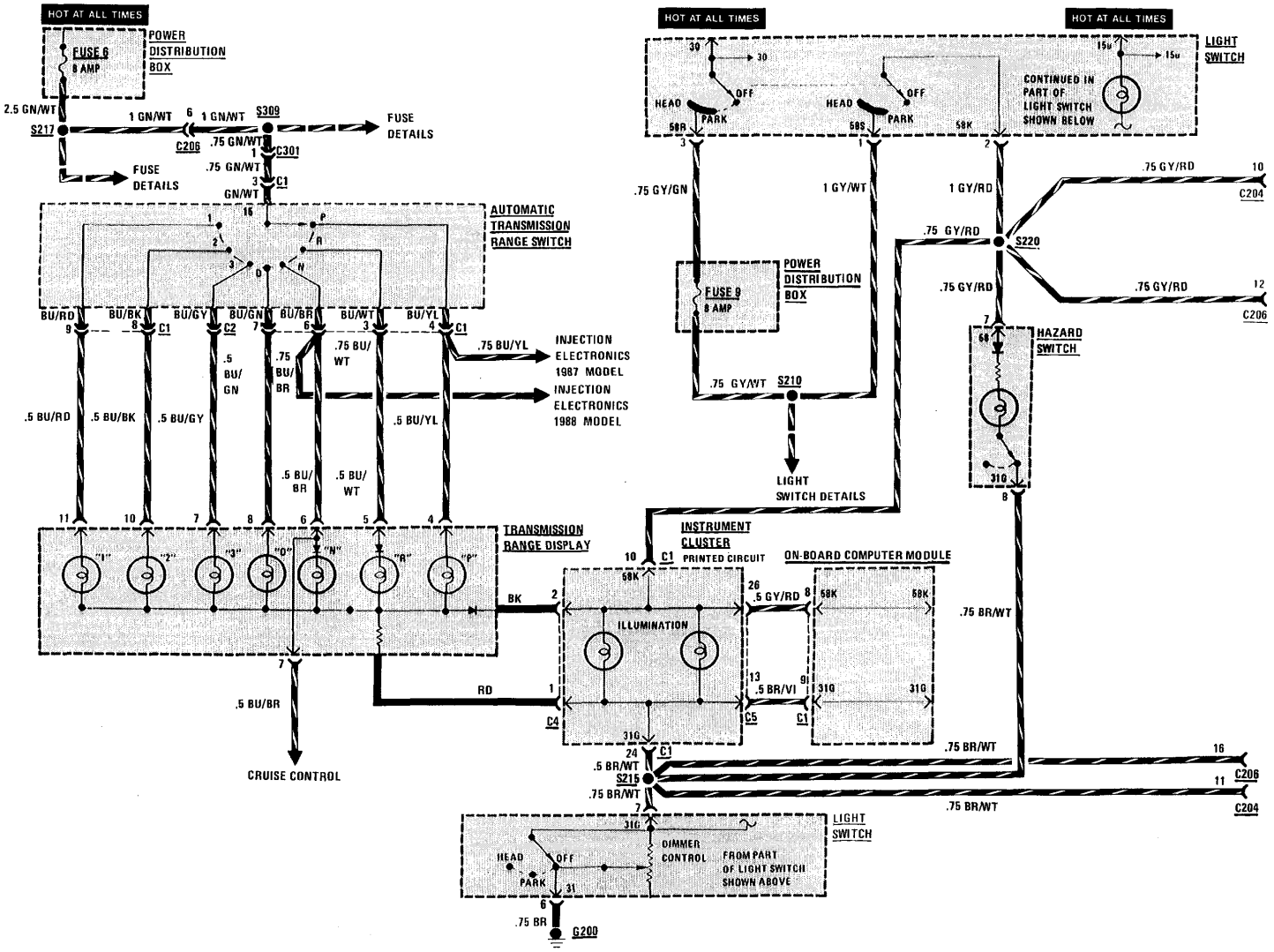
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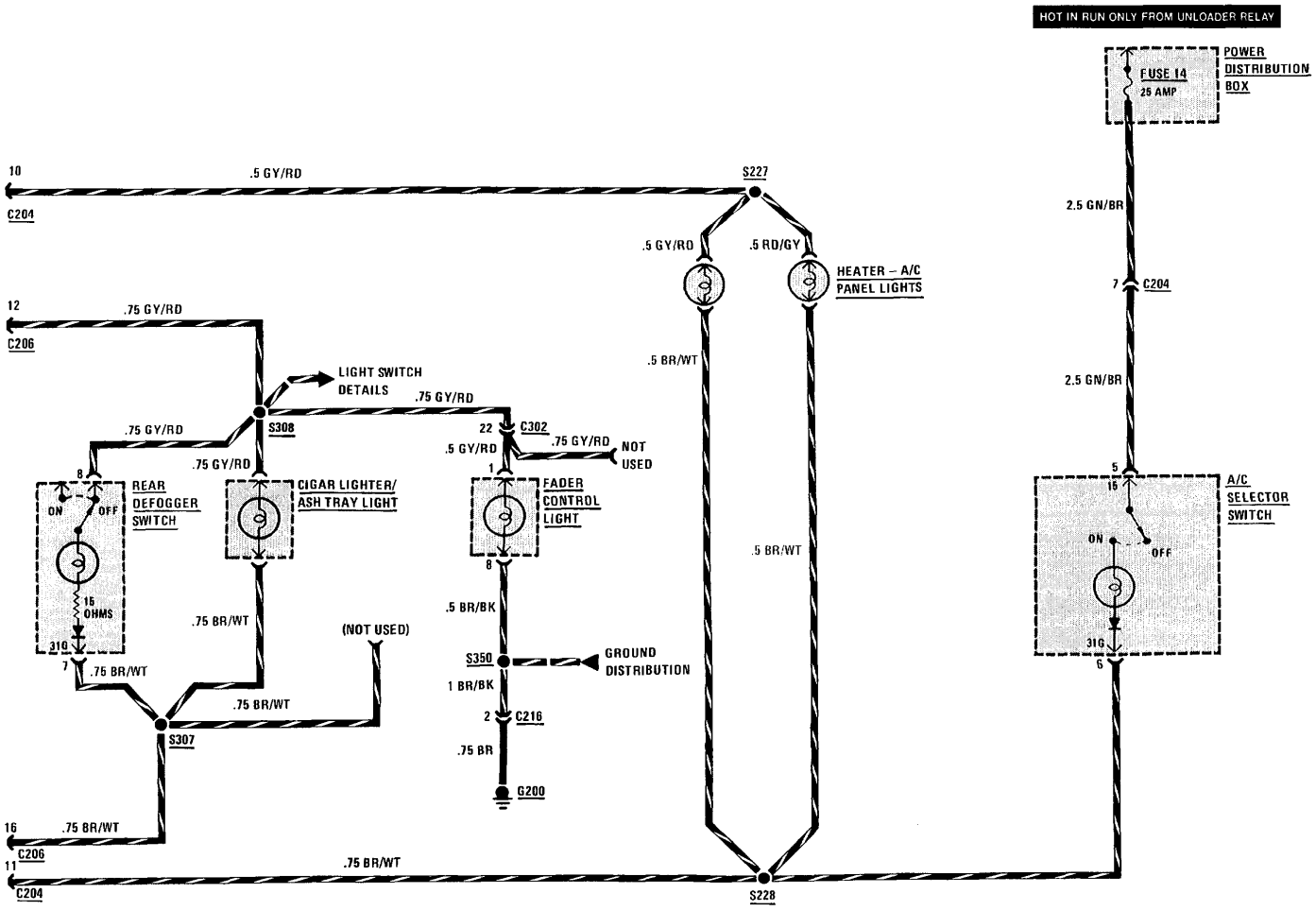
6300-2 LIGHT SWITCH DETAILS

LIGHTS: DASH/TRANSMISSION RANGE



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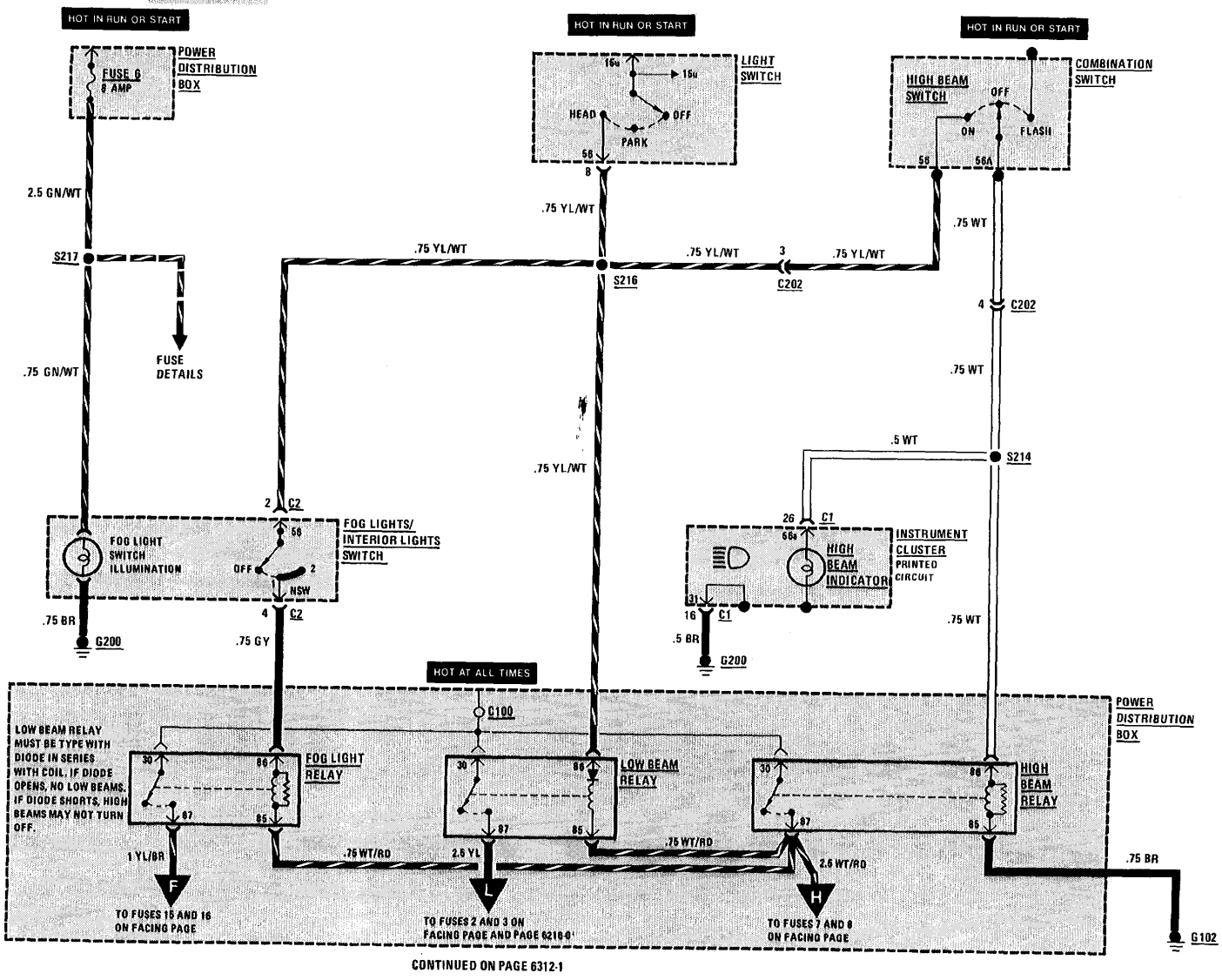
LIGHTS: DASH/TRANSMISSION RANGE



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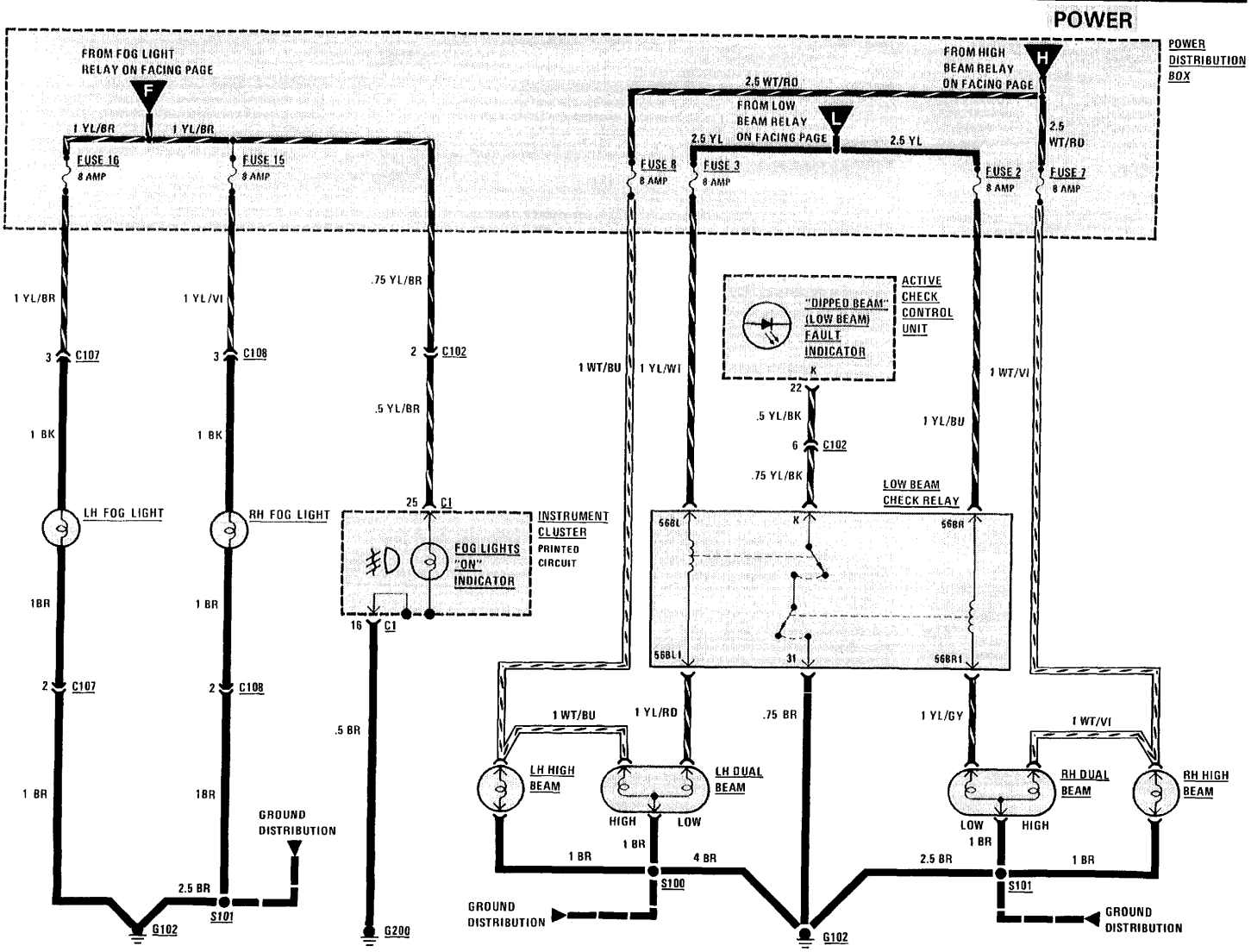
6312-0 HEADLIGHTS/FOG LIGHTS

CONTROL



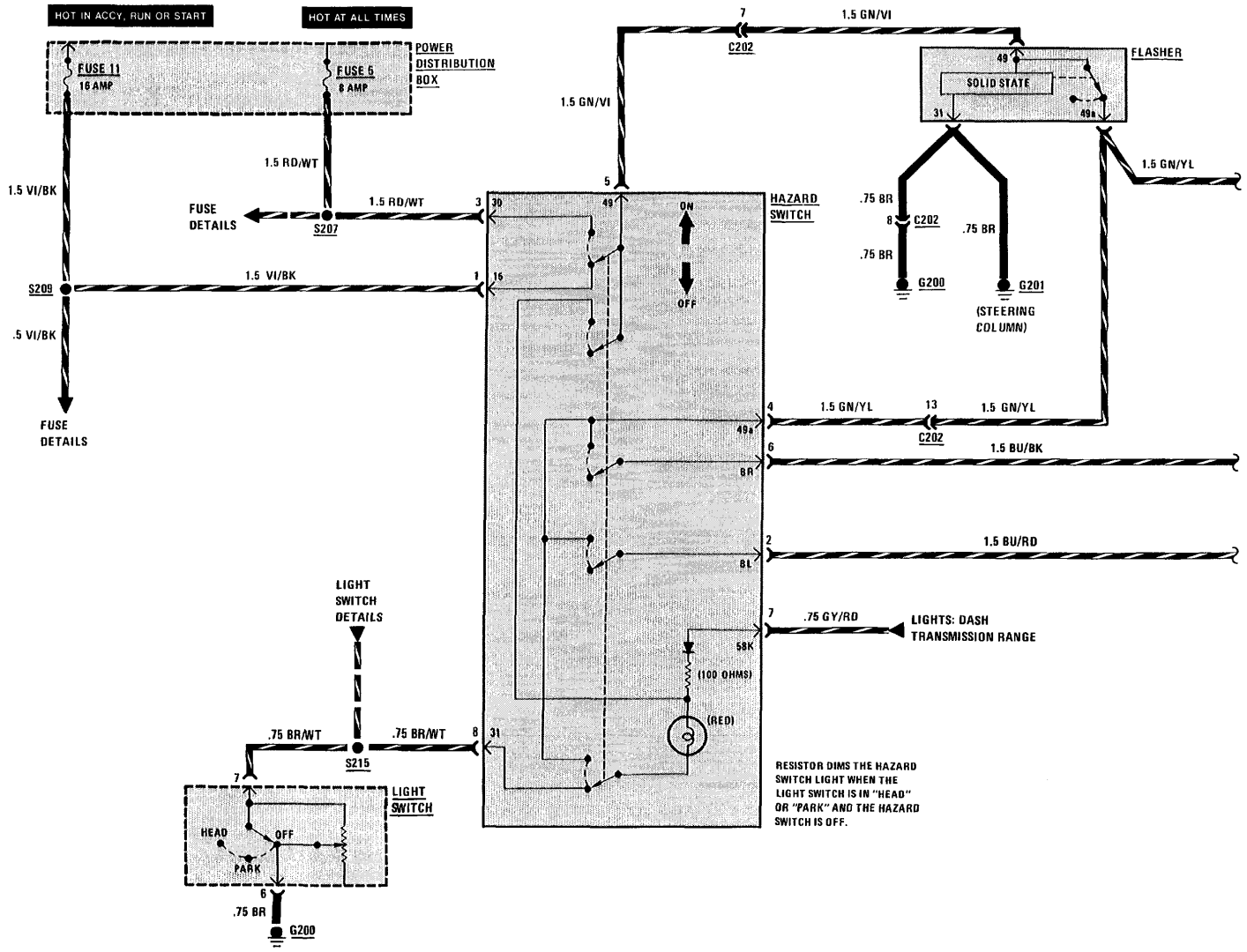
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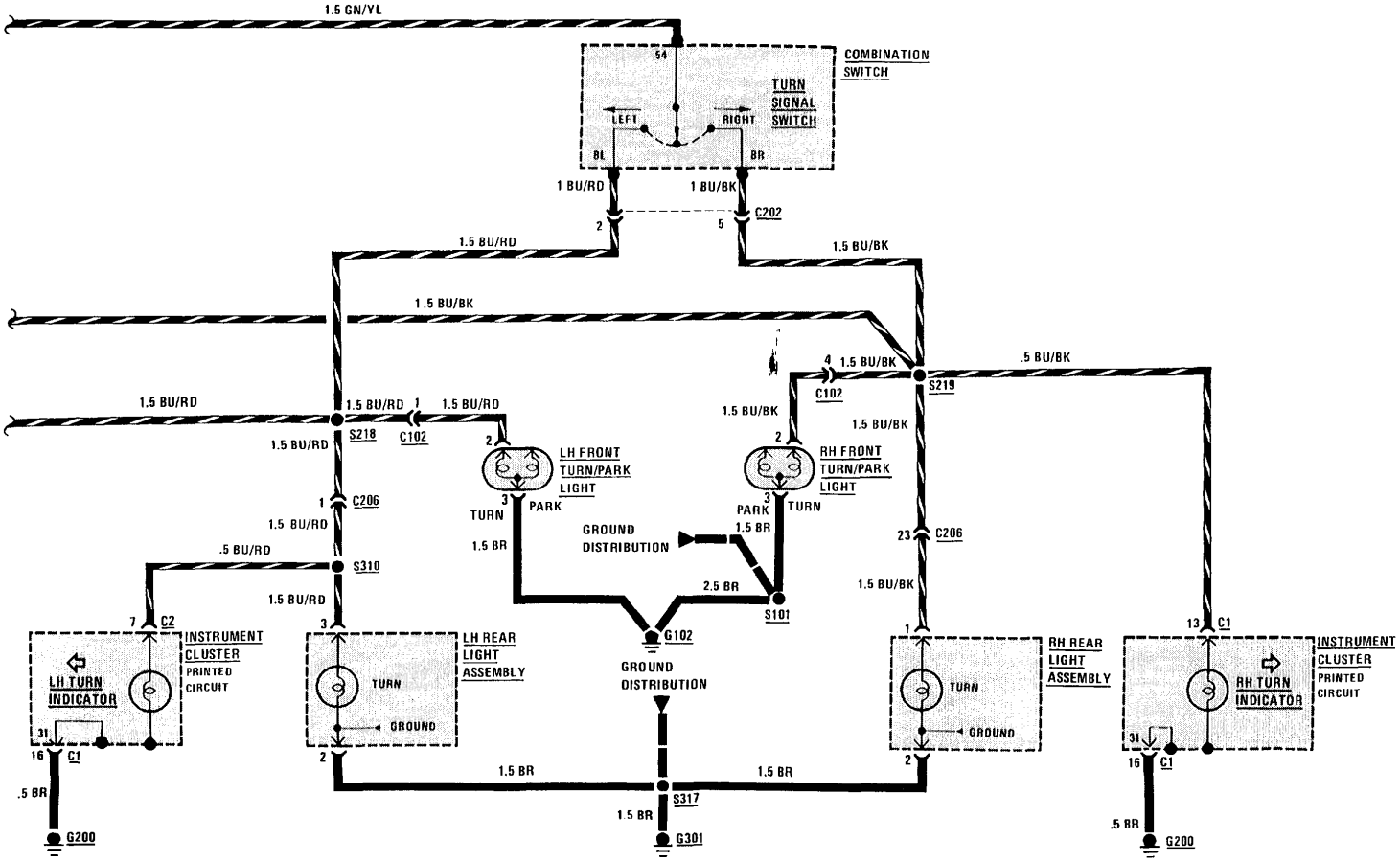


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6313-0 TURN/HAZARD LIGHTS

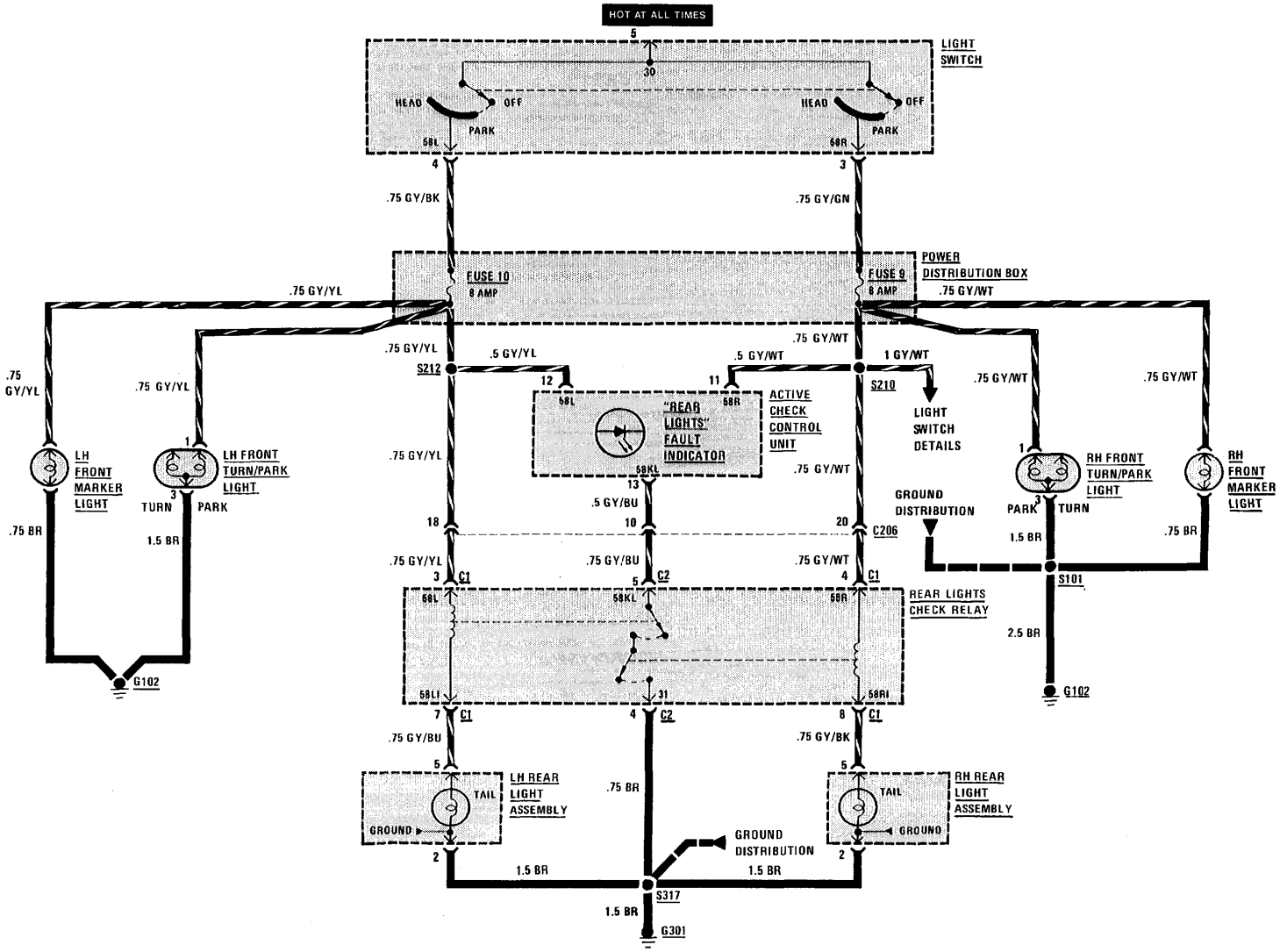


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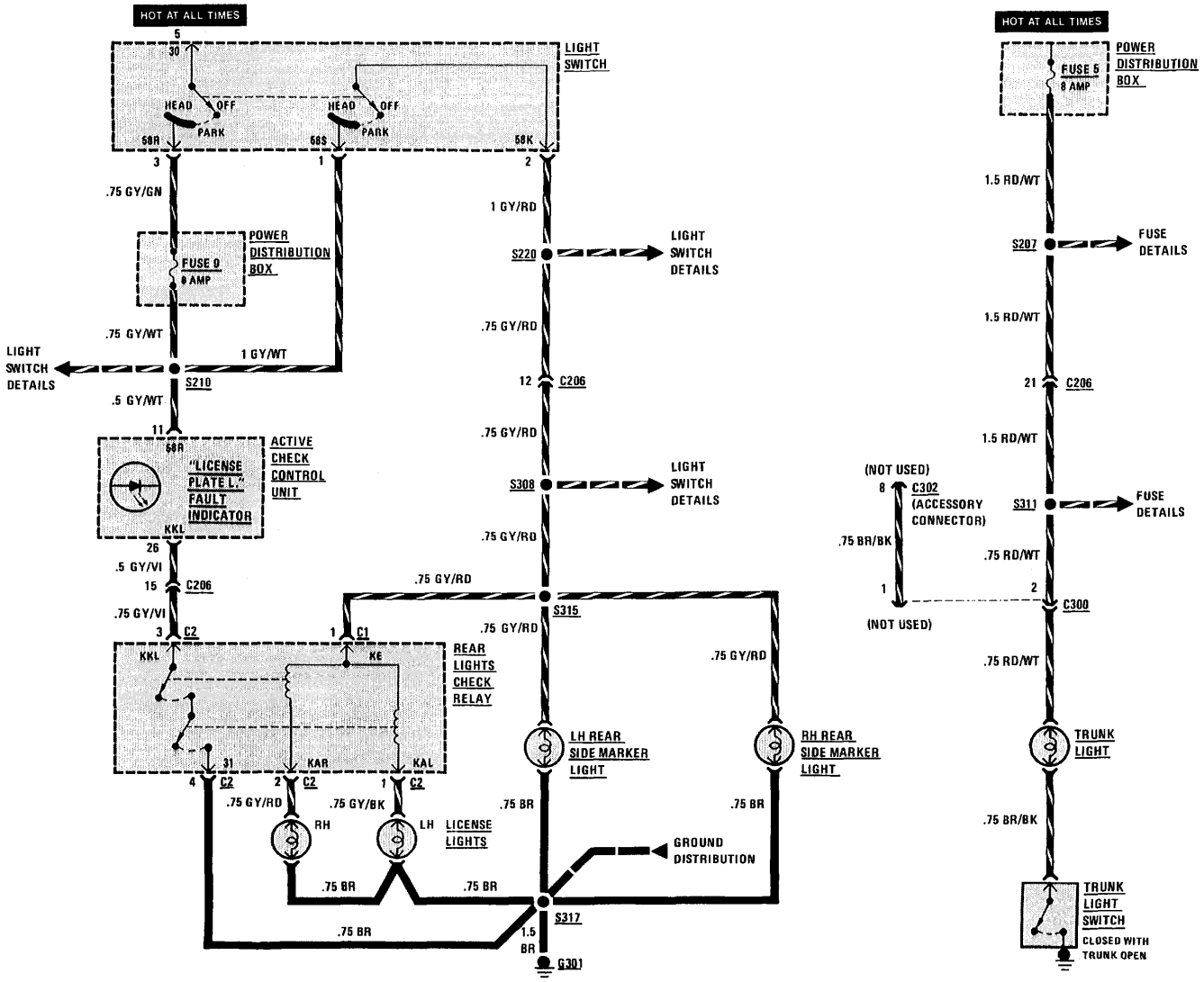
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6314-0 FRONT PARK/FRONT MARKER/TAIL LIGHTS



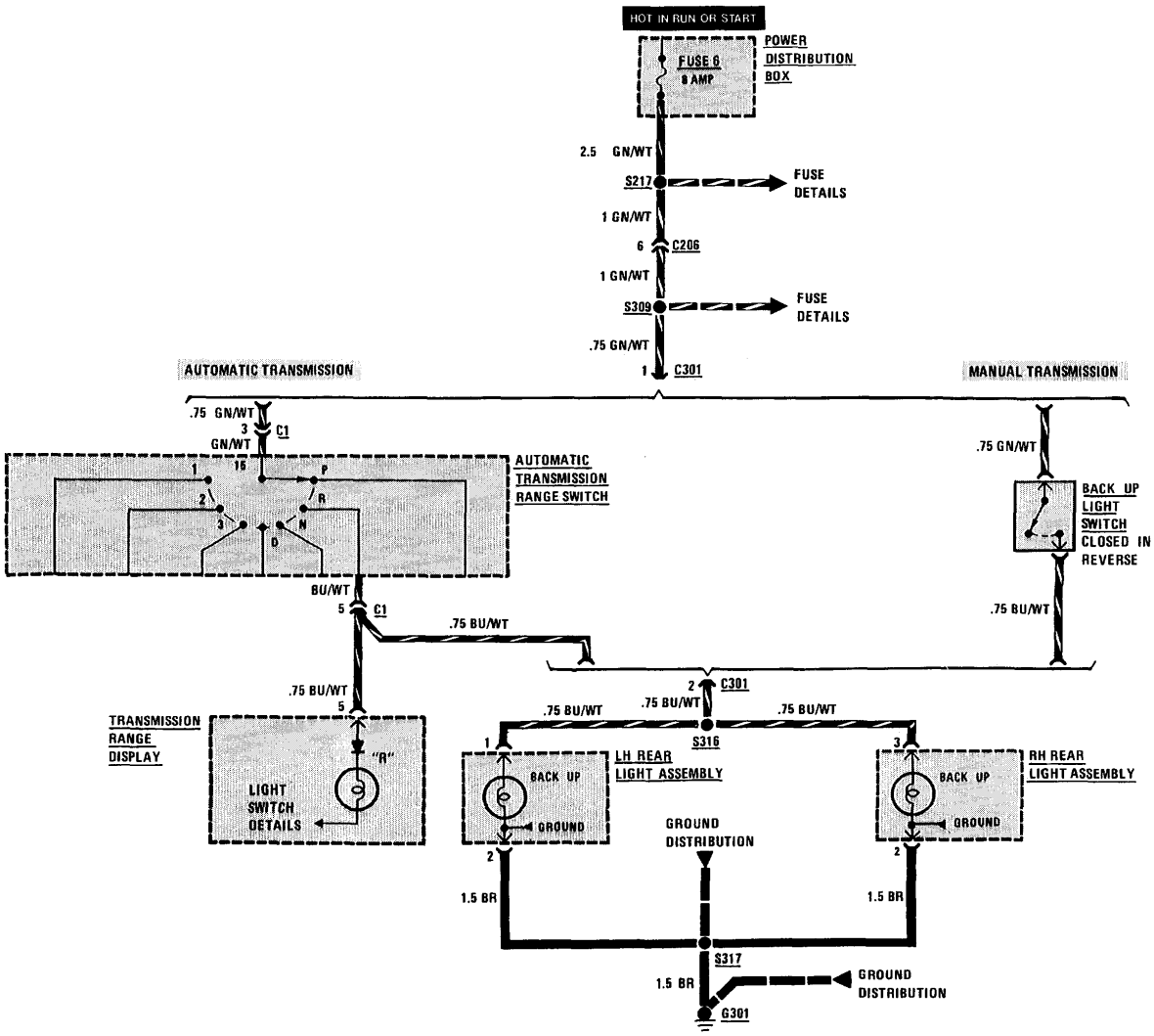
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6320-0 REAR MARKER/LICENSE/TRUNK LIGHTS



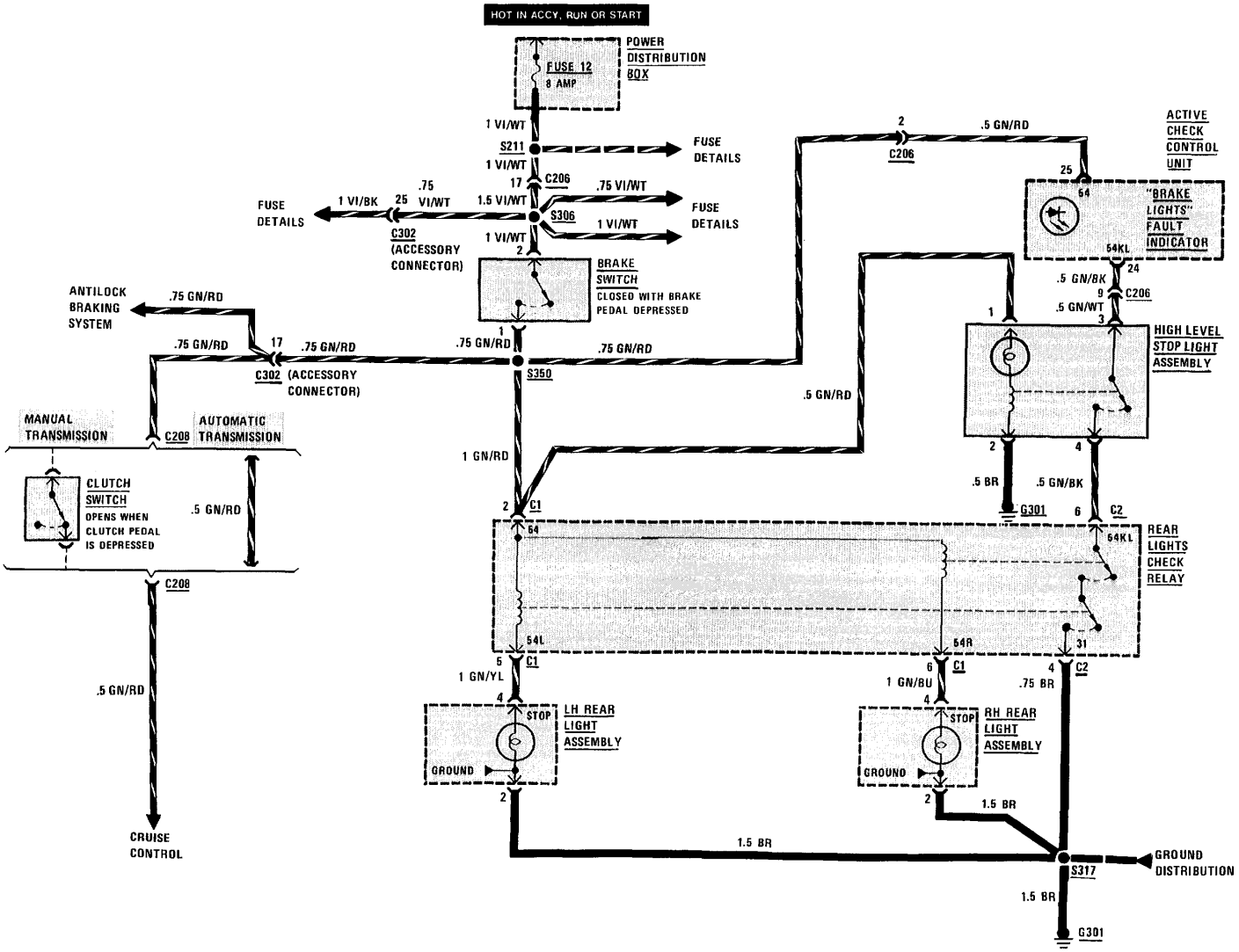
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6322-0 BACKUP LIGHTS



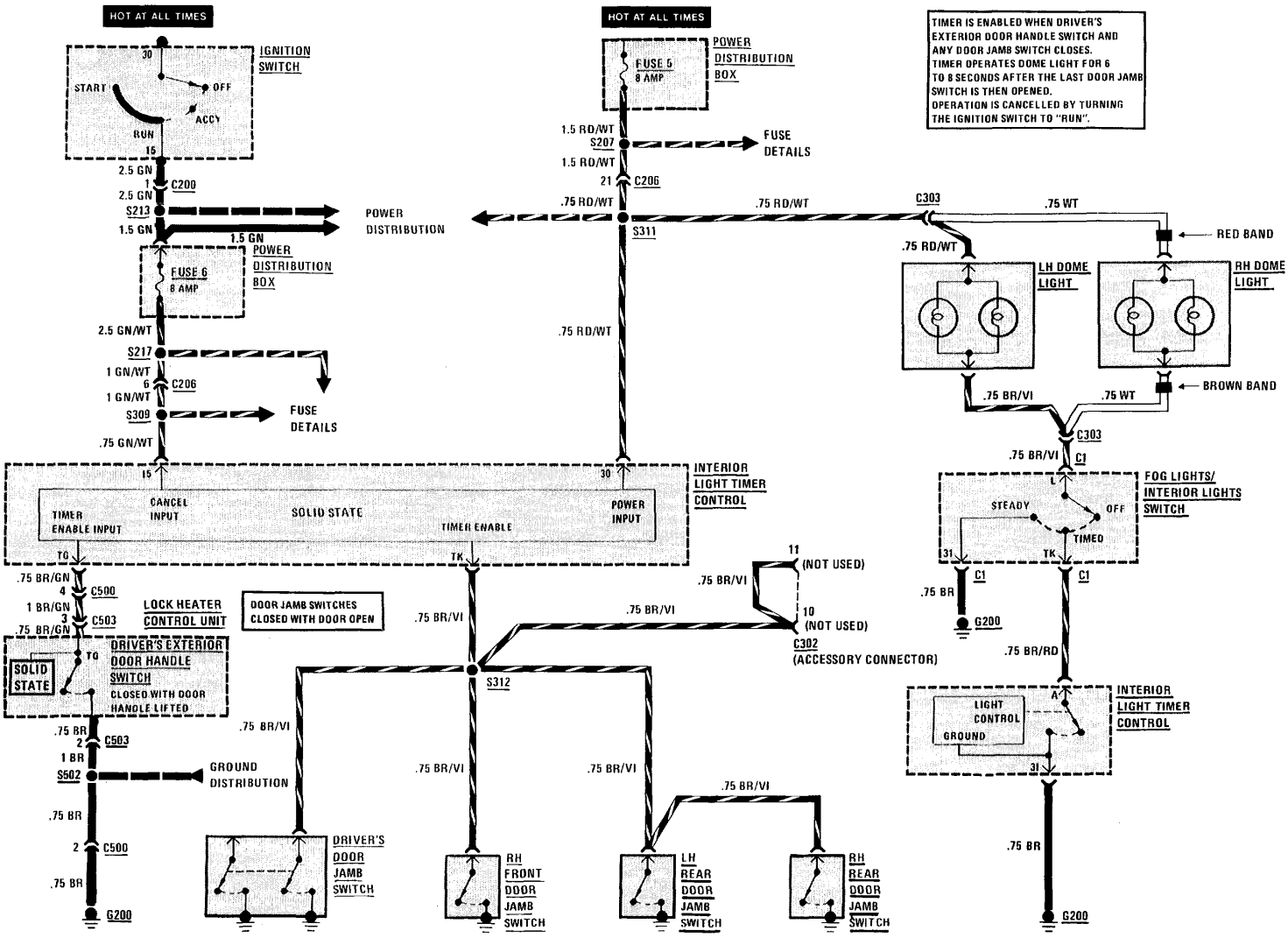
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6325-0 STOP LIGHTS



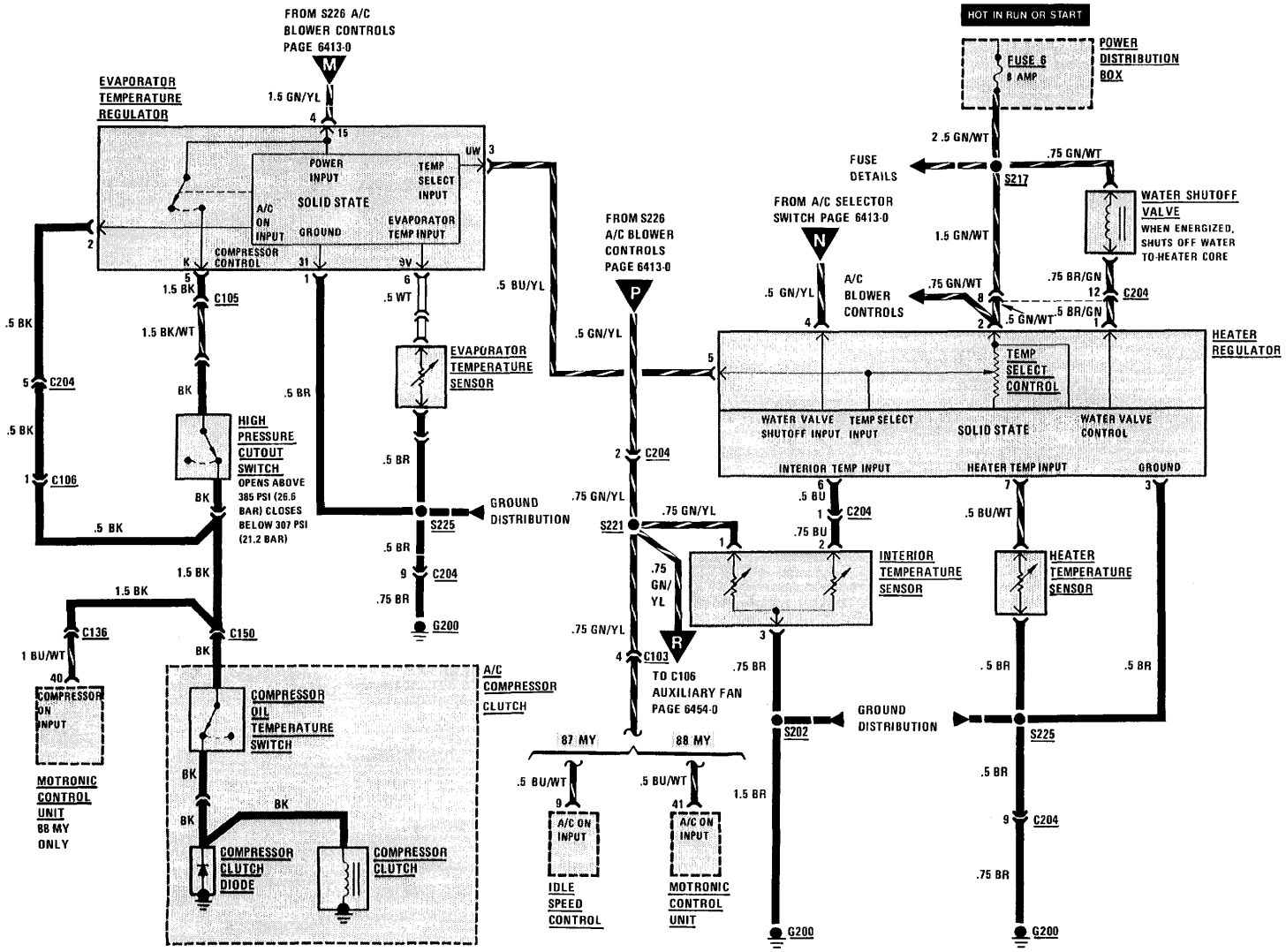
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6330-0 INTERIOR LIGHTS



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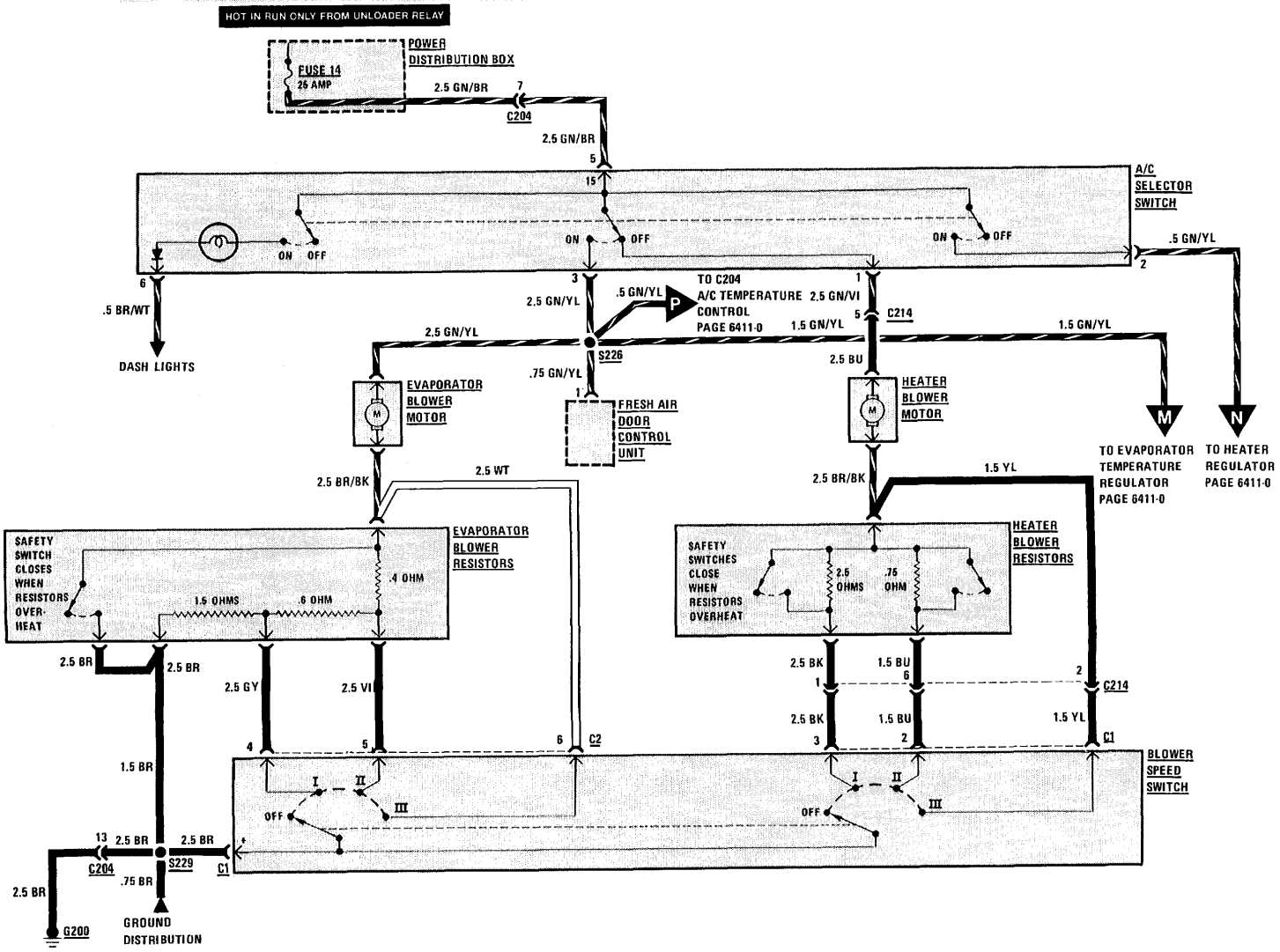
HEATER AND A/C TEMPERATURE CONTROL



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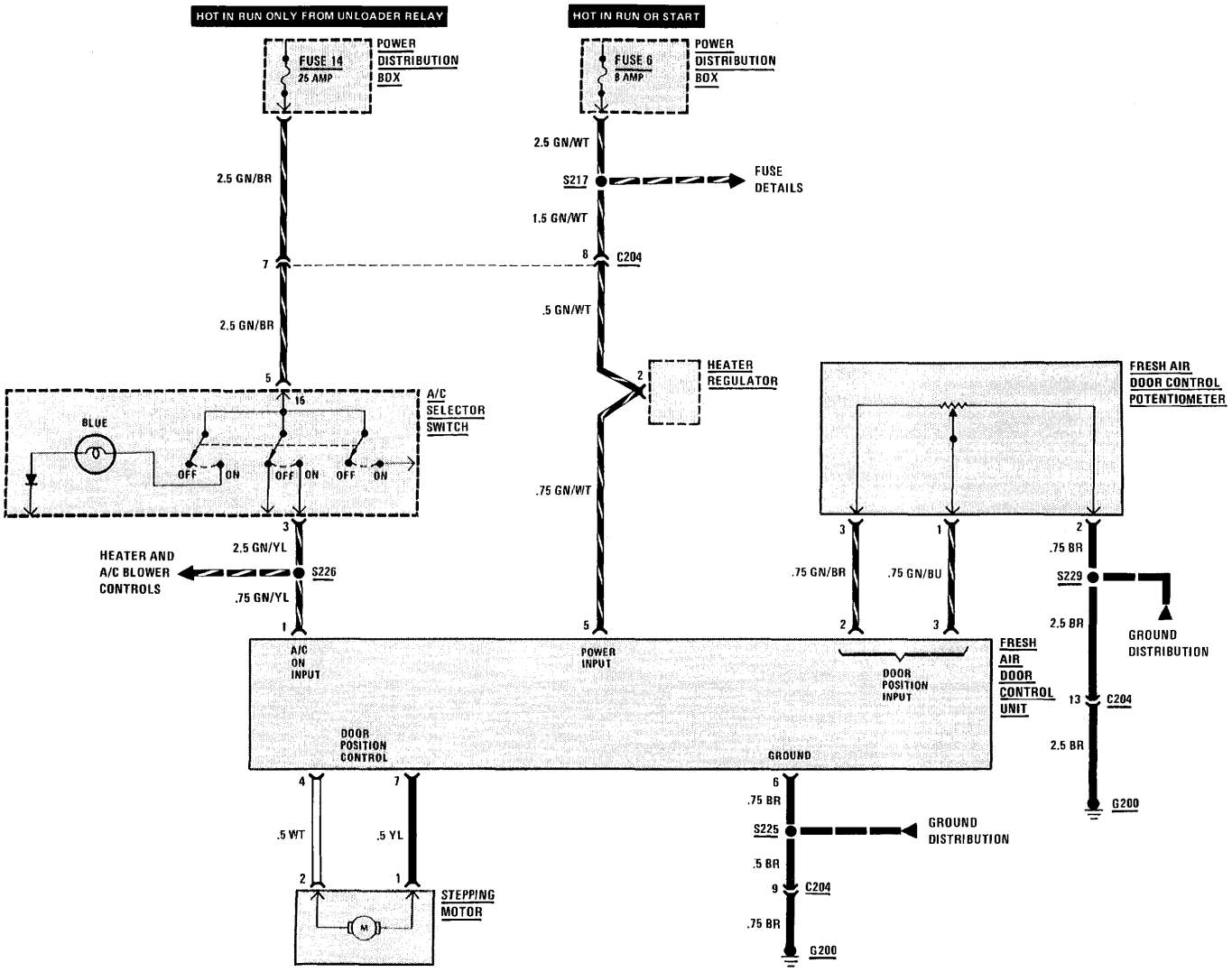
6413-0 A/C BLOWER CONTROLS

HEATER AND A/C BLOWER CONTROLS



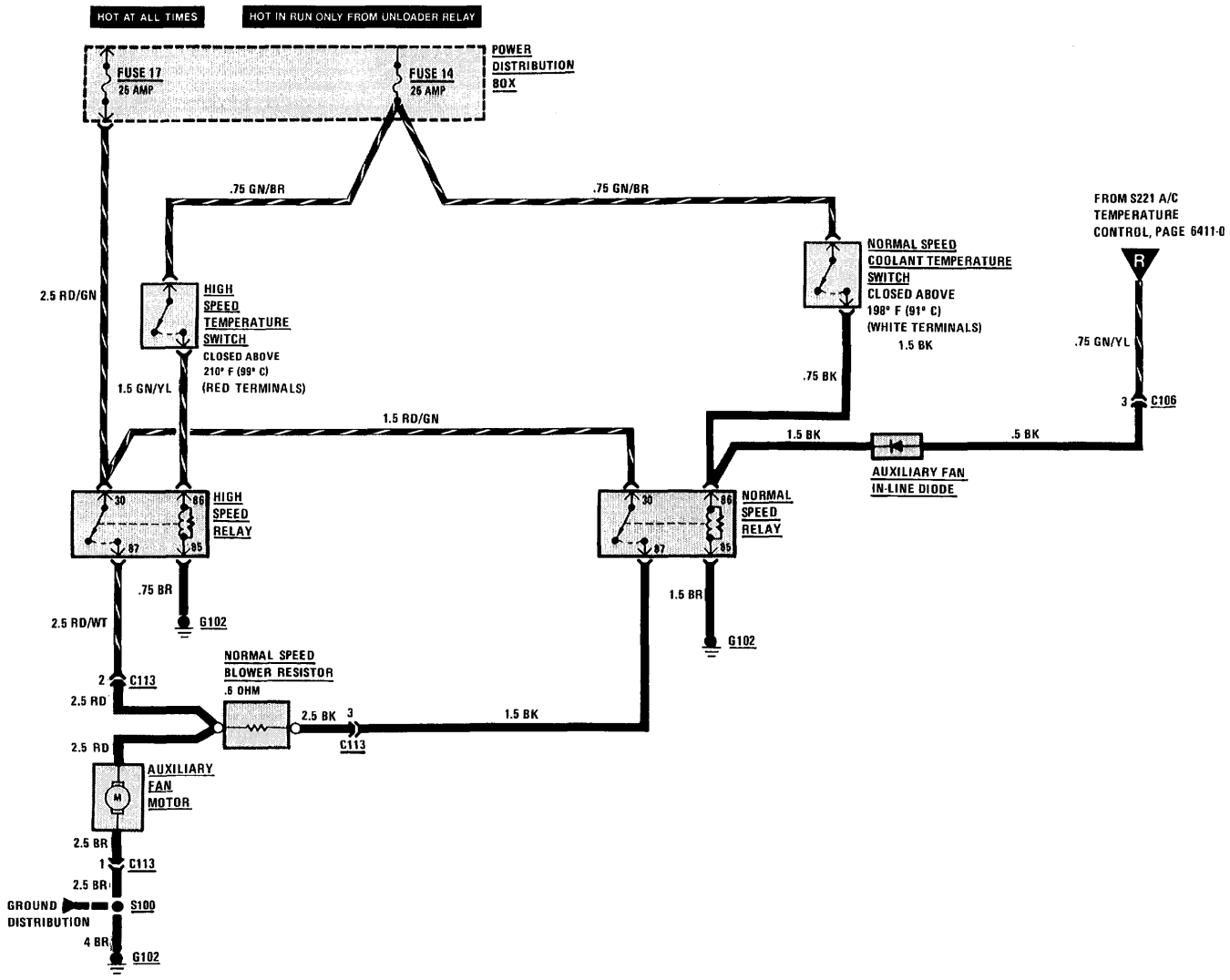
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A/C FRESH AIR DOOR CONTROL



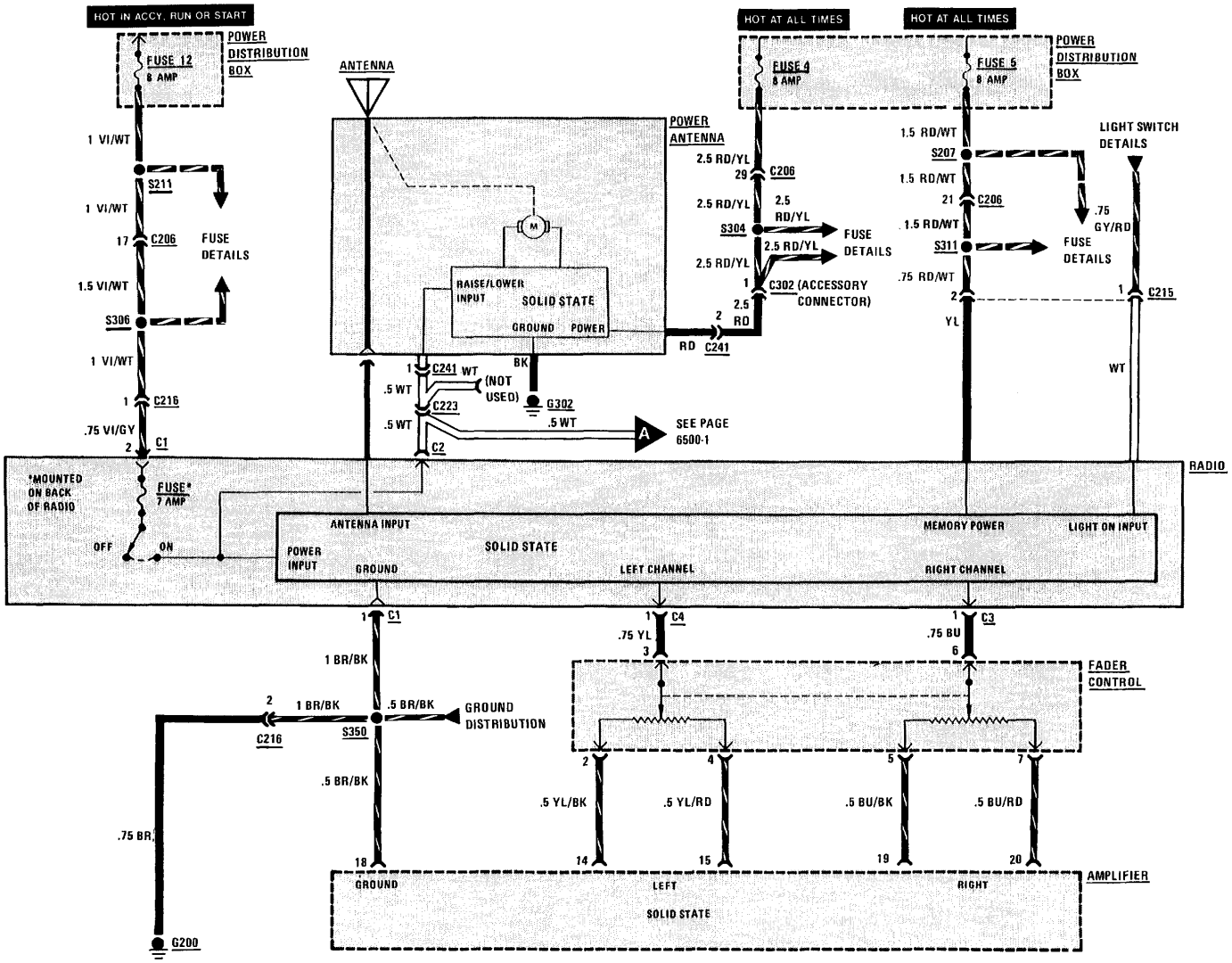
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6454-0 AUXILIARY FAN

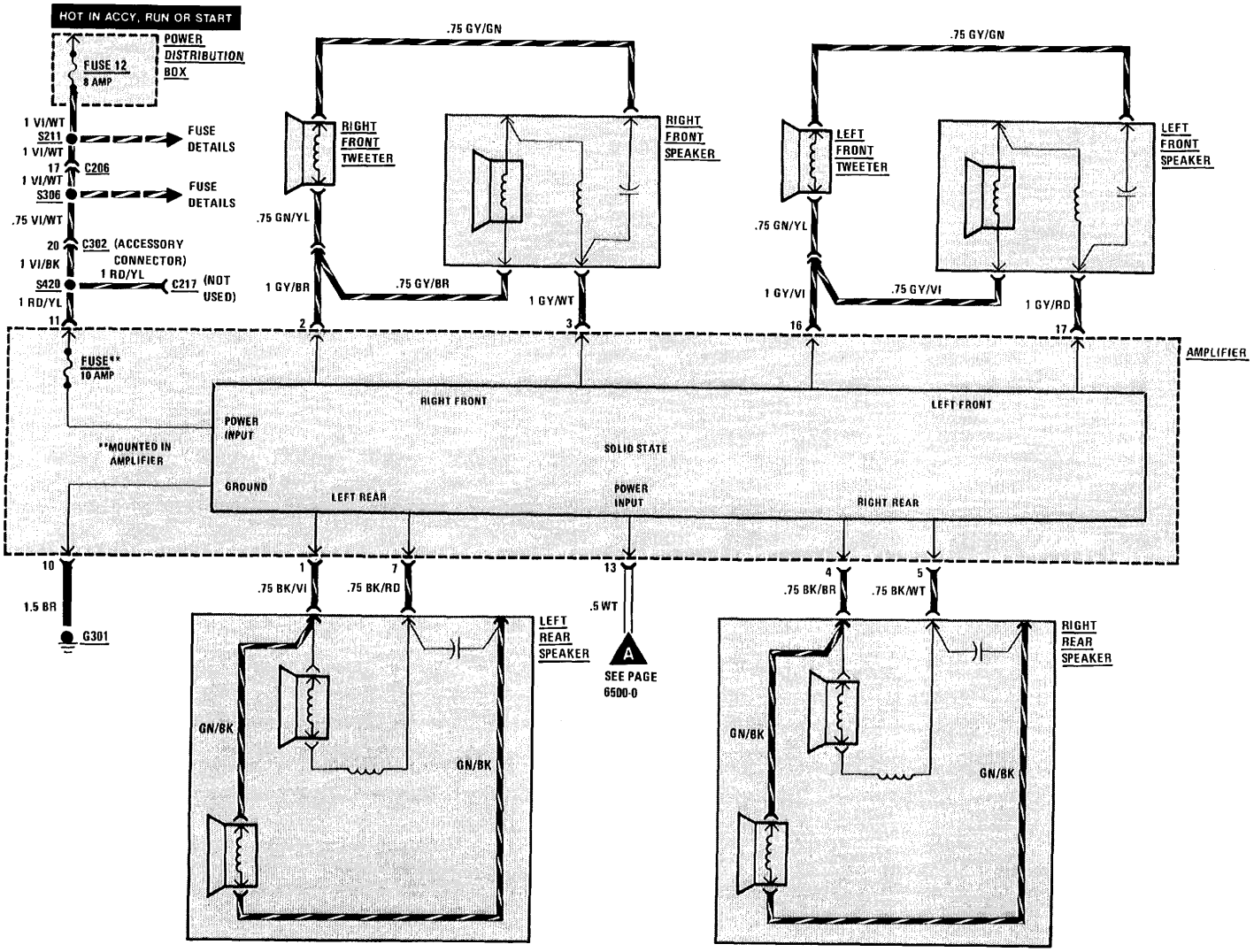


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6500-0 RADIO/POWER ANTENNA



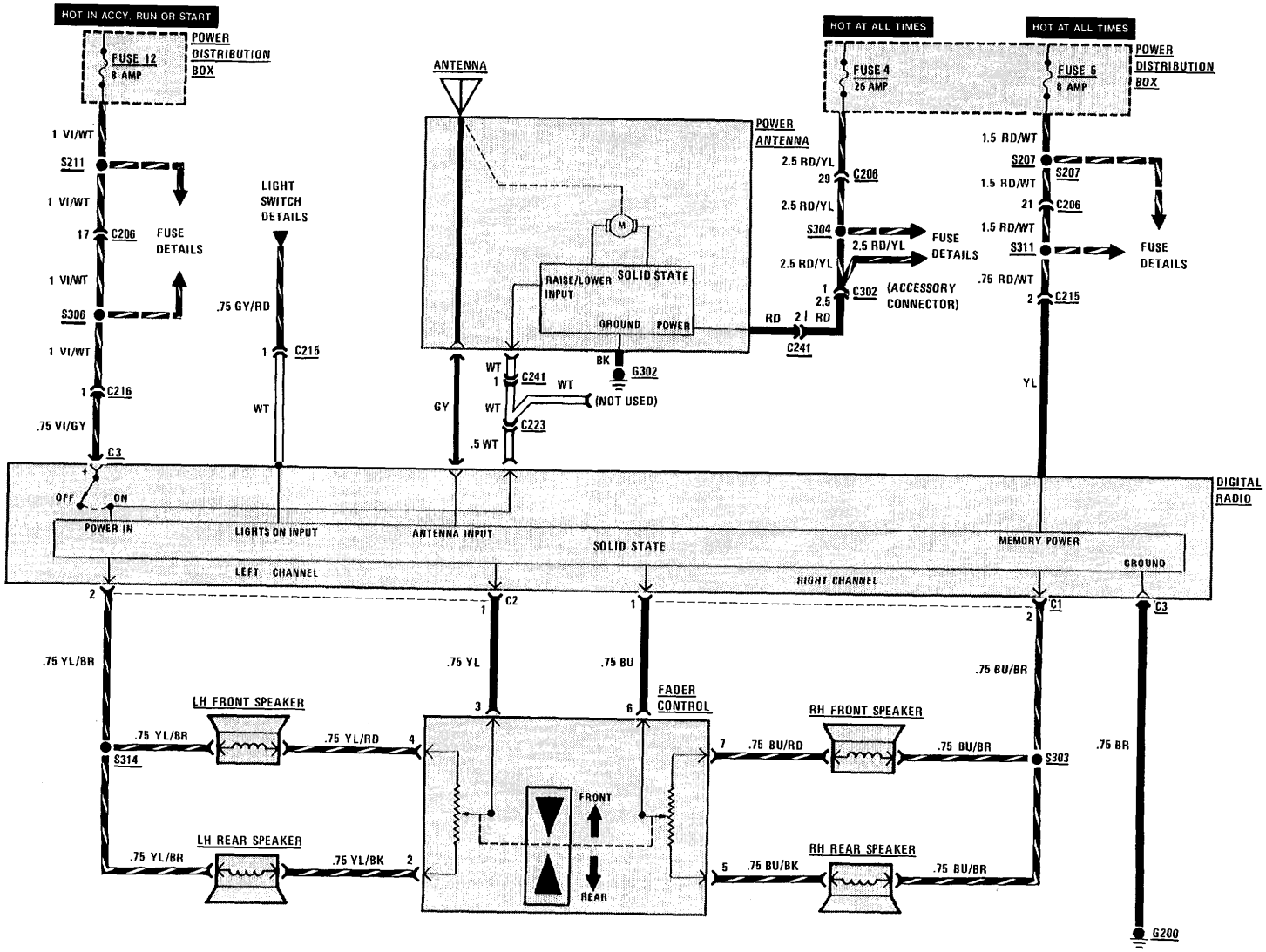
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6500-2 RADIO/POWER ANTENNA

WITHOUT SOUND SYSTEM



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CIRCUIT OPERATION

With the Ignition Switch in ACCY, RUN or START, Fuse 12 provides voltage to turn on the three components in the system. When the Radio Switch is on, voltage is applied to the Radio, the Power Antenna Raise/Lower Input, and the Amplifier. This voltage is used to control the individual unit's main power supply.

When the Raise/Lower Input of the Power Antenna receives voltage, power is supplied from Fuse 28 to run the motor and raise the Antenna. When voltage is no longer present at the Raise/Lower Input, the Antenna is lowered.

Fuse 21 constantly supplies voltage to the Memory Power Input of the Radio. This allows the Radio to maintain the present settings while it is turned off.

The Amplifier receives constant power at terminal 11 from Fuse 28. When the Radio is on, voltage is applied to terminal 13 to enable the Amplifier.

The actual Radio signal originates at the Antenna. It is supplied to the Radio, processed, and output from the Left Channel and Right Channel Outputs to the Fader Control. The Fader Control alters the front to rear volume by decreasing the resistance to the desired higher volume outputs. The signal is then input to the Left Front, Left Rear, Right Front, and Right Rear Inputs to the Amplifier. After amplification, the signal is output to the corresponding speakers.

TROUBLESHOOTING HINTS

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

1. Check power input to the Radio by observing if Instrument Cluster Indicators light.
2. Check power input to Antenna by observing the Cigar Lighter.
3. Check memory power to Radio by checking operation of the Glove Box Light.
4. Check power input to the Amplifier.
5. If Fader Control has no effect, but sound is heard from all speakers, replace the Fader Control.
6. Check that the Antenna is properly connected.
7. Before troubleshooting a suspect Speaker, check all connections to that Speaker.
8. If display shows "CODE" and Radio will not operate, the individual Anti-Theft Code must be entered. Refer to "Anti-Theft" instruction booklet.
9. Check Radio Fuse located on back of Radio.
10. Check Amplifier Fuse located on back of Amplifier.

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

SYSTEM CHECK

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

SYSTEM CHECK TABLE

ACTION	NORMAL RESULT
With Ignition Switch in RUN, turn Radio ON.	Antenna extends. Digital display lights. Sound is emitted from all Speakers.
Operate Fader Control.	Sound volume varies from front to rear.

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

SYSTEM DIAGNOSIS

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

SYMPTOM TABLE

SYMPTOM	FOR DIAGNOSIS
Radio does not work (no display, no sound).	Do Test A
Digital display lights, but there is no sound.	Do Test B
LH Speakers or RH Speakers do not operate.	Do Test C

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Antenna does not extend or retract.	Check ground wire for an open. Make sure ground G302 is clean and tight. Check wire to Power Antenna for opens. If OK, replace Power Antenna.
An individual Speaker does not operate.	Do Test D
Excessive noise comes from all Speakers.	Do Test E

A: RADIO POWER TEST

Measure: VOLTAGE
At: RADIO CONNECTOR C1 (Disconnected) or CONNECTOR C215 (Disconnected)
Condition:
- **Ignition Switch: RUN**

Measure Between	Correct Voltage	For Diagnosis
C1/2 & Ground	Battery	See 1
C1/2 & C1/1	Battery	See 2
C215/2 & Ground	Battery	See 3

- If all voltages are correct, check wire from connector C215 to Radio for an open. If wire is OK, remove Radio for service.

1. Check power input wire for an open.
2. Check ground wire for an open to ground. Make sure ground G200 is clean and tight.
3. Check memory power supply wire for an open.

B: AMPLIFIER POWER TEST

Measure: VOLTAGE
At: AMPLIFIER CONNECTOR (Disconnected)
Conditions:
- **Ignition Switch: RUN**
- **Radio: ON**

Measure Between	Correct Voltage	For Diagnosis
11 & Ground	Battery	See 1
11 & 18	Battery	See 2
13 & Ground	Battery	See 3
11 & 10	Battery	See 4

- If all voltages are correct, go to Test C.

1. Check power supply wire for an open.
2. Check Amplifier ground to Amplifier for an open to ground. Make sure ground G200 is clean and tight.
3. Check Amplifier "Radio On" wire for an open.
4. Check wire from terminal 10 for an open to ground. Make sure ground G302 is clean and tight.

C: FADER SIGNAL TEST (TABLE 1)

Measure: VOLTAGE
At: FADER CONTROL CONNECTOR (Disconnected)
Conditions:
- **Ignition Switch: RUN**
- **Radio: ON**

Measure Between	Correct Voltage	For Diagnosis
3 & Ground	Approximately 6 Volts	See 1
6 & Ground	Approximately 6 Volts	See 2

- If both voltages are correct, check for AC voltage at Radio outputs with Radio tuned to a strong signal. If AC voltage is present, go to Table 2. Remove Radio for service if AC voltage is not present.

1. Check wire from Left Channel on Radio for an open. If wire is good, remove Radio for service.
2. Check wire from Right Channel on Radio for an open. If wire is good, remove Radio for service.

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C: FADER SIGNAL TEST (TABLE 2)

Measure: VOLTAGE
At: AMPLIFIER CONNECTOR (Disconnected)
Conditions:
- **Ignition Switch: RUN**
- **Radio: ON**

Measure Between	Correct Voltage	For Diagnosis
14 & Ground	Approximately 6 Volts	See 1
15 & Ground	Approximately 6 Volts	See 2
19 & Ground	Approximately 6 Volts	See 3
20 & Ground	Approximately 6 Volts	See 4

- If all voltages are correct but sound was not present, remove Amplifier for service.

1. Check between pin 2 (Fader) to pin 14 (Amplifier) for an open in the wiring. If wire is OK, replace Fader Control.
2. Check between pin 4 (Fader) to pin 15 (Amplifier) for an open in the wiring. If wire is OK, replace Fader Control.
3. Check between pin 5 (Fader) to pin 19 (Amplifier) for an open in the wiring. If wire is OK, replace Fader Control.
4. Check between pin 7 (Fader) to pin 20 (Amplifier) for an open in the wiring. If wire is OK, replace Fader Control.

D: SUSPECT SPEAKER TEST

Connect: OHMMETER
At: SUSPECT SPEAKER (Disconnected)
Condition:
- **Ohmmeter set on Rx 1 scale or Diode Check Scale**

Action	Correct Result	For Diagnosis
Connect Ohmmeter across Speaker Terminals	Speaker "pops"	See 1

- If the result is correct, check wires to the Amplifier for opens or shorts. If wires are OK, check the related wire between Fader and Amplifier.

1. Replace the suspect Speaker.

E: NOISE DIAGNOSIS

With Radio on and noise present, unplug the Antenna at the back of the Radio.

- If noise is no longer present, it was being picked up by the Antenna. Perform Antenna Noise Test.
- If noise persists, it is coming in the Radio wiring. Refer to the following Noise Symptom Table.

ANTENNA NOISE TEST

Measure: RESISTANCE
At: ANTENNA

Measure Between	Correct Resistance	For Diagnosis
Antenna Plug Base & Ground	Less than 3 Ohms	See 1
Antenna Plug Tip & Antenna Plug Base	Greater than 1 Megaohm (open circuit)	See 2

- If both resistances are correct, check the hood ground strap. If hood ground strap is OK, substitute a different Antenna at Radio. If the new Antenna is good, replace Antenna. If noise is still present, refer to Noise Symptom Table.

1. Check ground contact at Antenna base. If necessary, install a braided ground strap from the Antenna Base to Chassis ground. Check for an open in the Antenna Cable.
2. Check for a short to ground at the Antenna or Antenna cable.

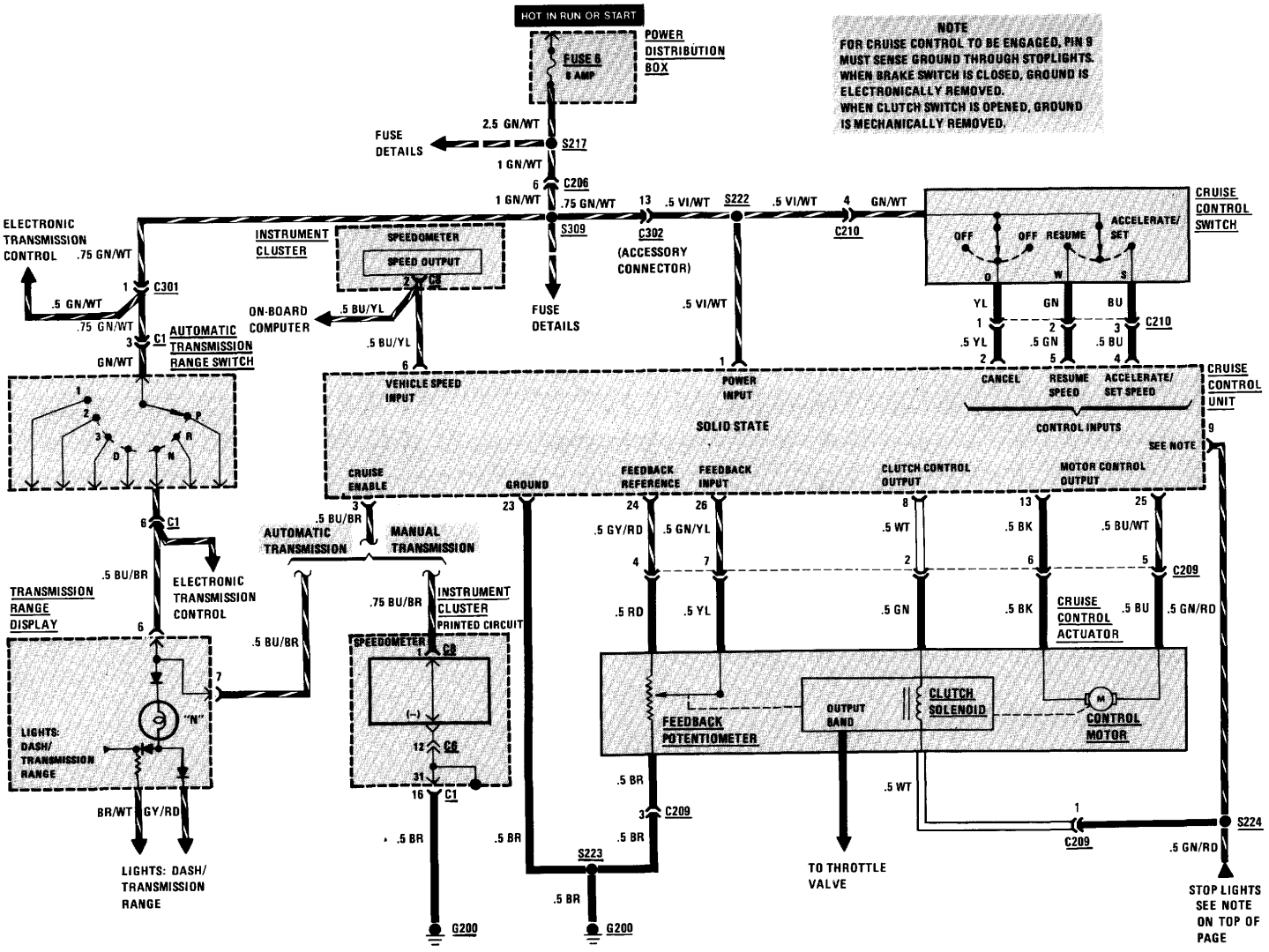
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NOISE SYMPTOM TABLE

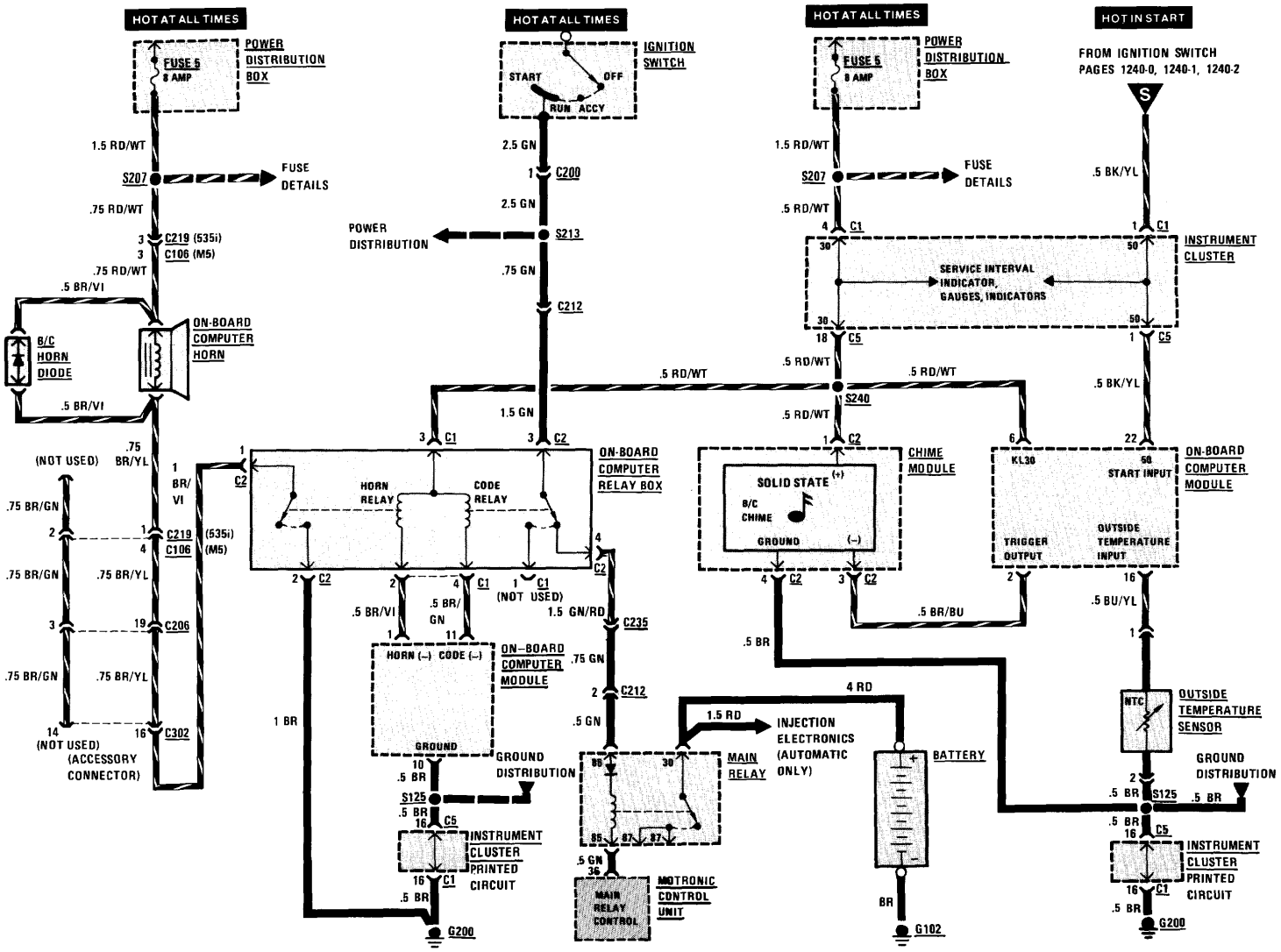
SYMPTOM	POSSIBLE CAUSE	REPAIR ACTION
Harsh popping or crackling noise present when ignition on-changes with engine rpm.	Ignition Noise	• Check for proper distributor cap shielding. • Check shielding ground strap. If not present, install. • Check for defective spark plug or spark plug wire. • Reroute spark plug wires laying against anything that could be transmitting noise to the Radio (wiring or sensor leads traveling into the passenger compartment). • Check engine/firewall ground strap and engine hood/body ground strap. • Check if engine hood is closing properly. • Connect dedicated ground strap to Radio. • Replace distributor cap and rotor.
High whine or howling that changes with engine rpm.	Alternator noise	• Connect dedicated ground strap to Radio. • Run a direct wire from Battery to Alternator.
AM only is weak and noisy.	AM alignment	• Remove Radio for service.
FM only is weak and noisy.	FM alignment	• Remove Radio for service.

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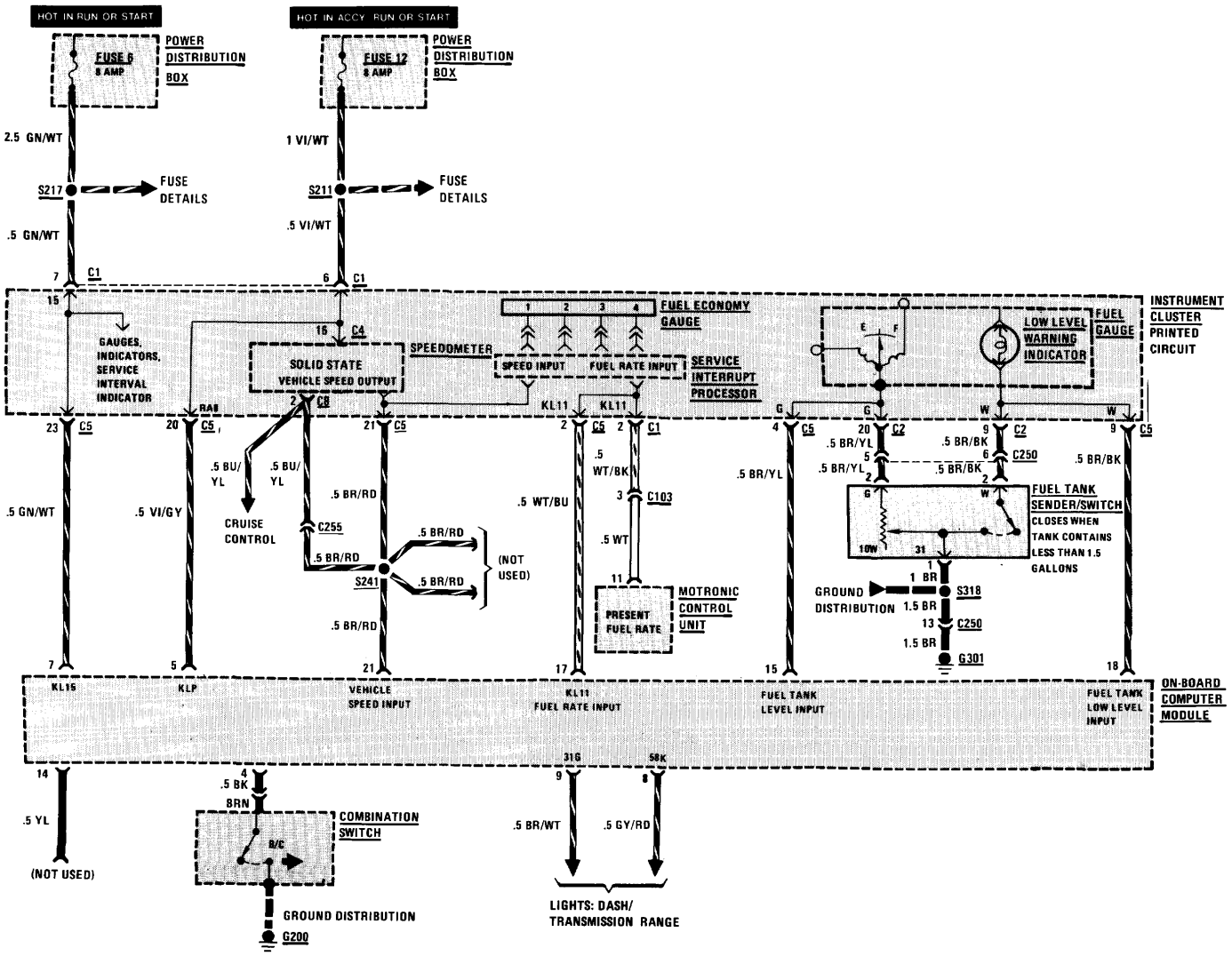
6571-0 CRUISE CONTROL



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7000-0 COMPONENT LOCATION VIEWS

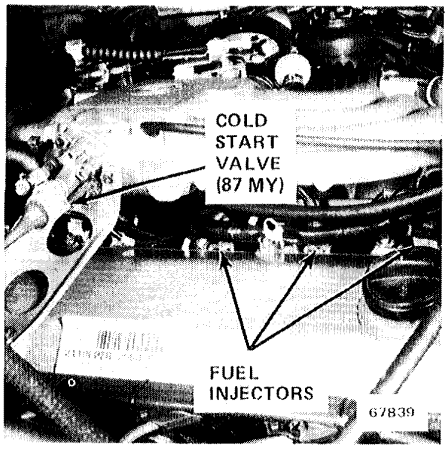


Figure 1 - Center of Engine

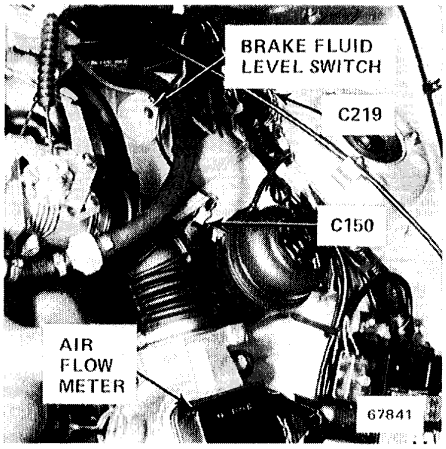


Figure 3 - LH Rear of Engine Compartment

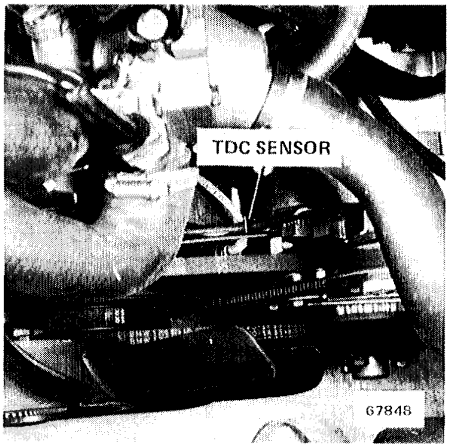


Figure 5 - Front of Engine

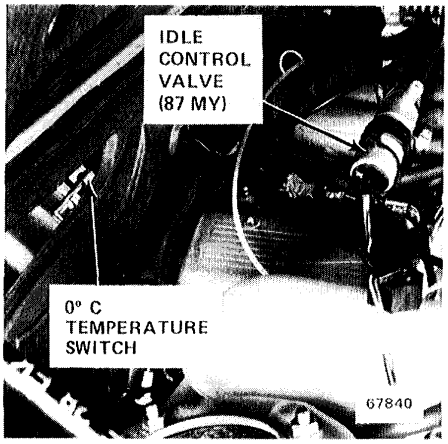


Figure 2 - RH Rear of Engine Compartment

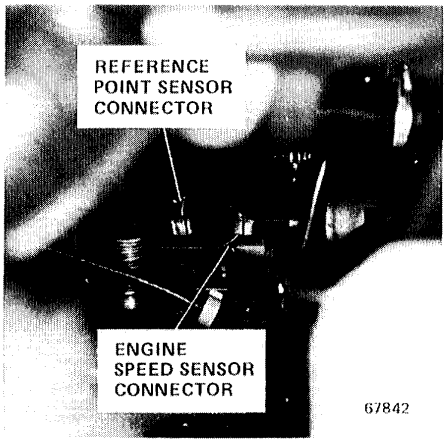


Figure 4 - LH Side of Engine, Near Shifter (87 MY)

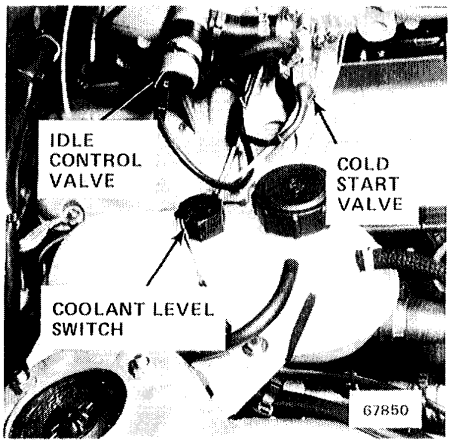


Figure 6 - RH Rear of Engine Compartment

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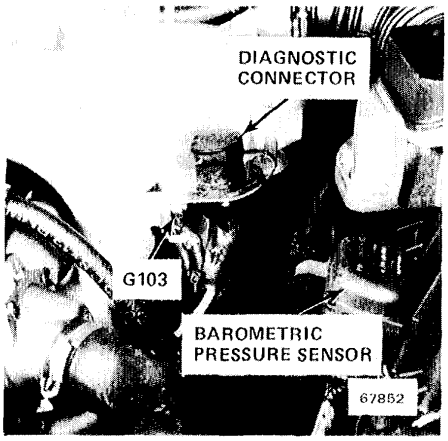


Figure 1 - LH Front of Engine Compartment

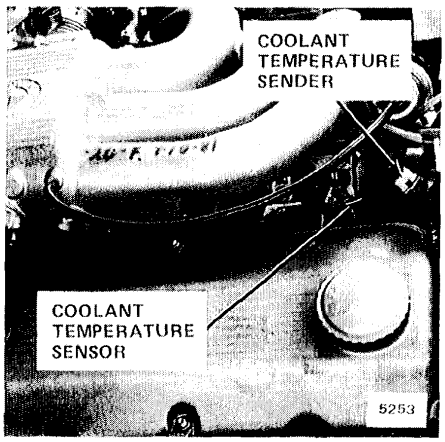


Figure 3 - Top RH Front of Engine

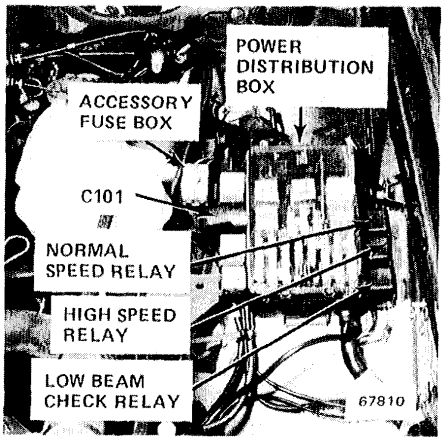


Figure 5 - LH Front of Engine Compartment

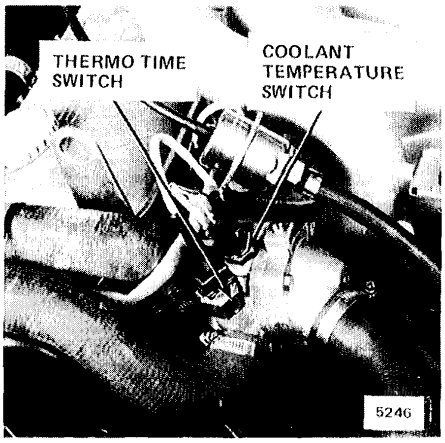


Figure 2 - Front of Engine

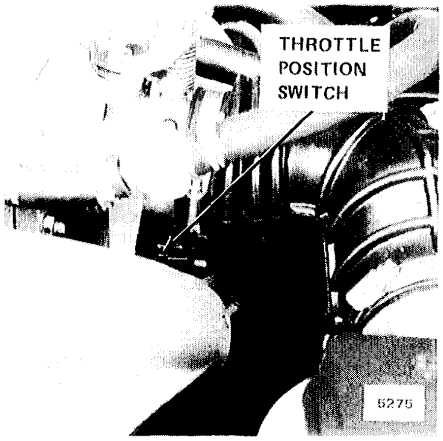


Figure 4 - Below Throttle of 87 MY Engine

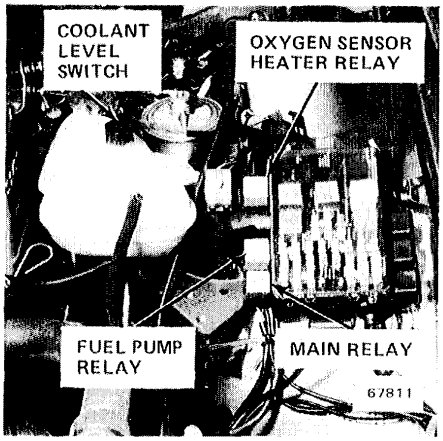


Figure 6 - LH Front of Engine Compartment

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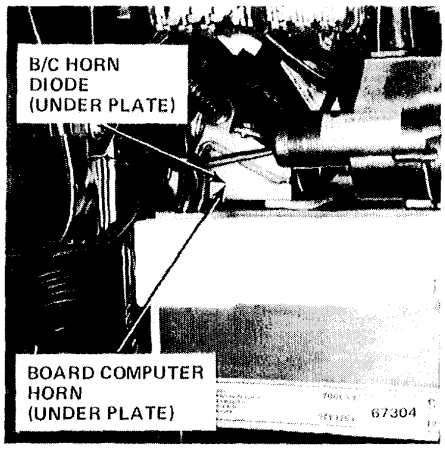


Figure 1 - LH Front of Engine Compartment, Behind Battery

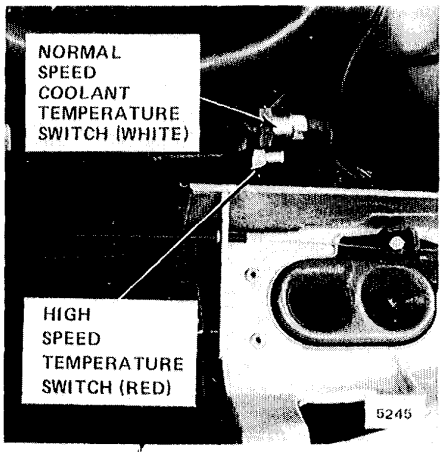


Figure 3 - LH Front of Engine Compartment, Above Battery

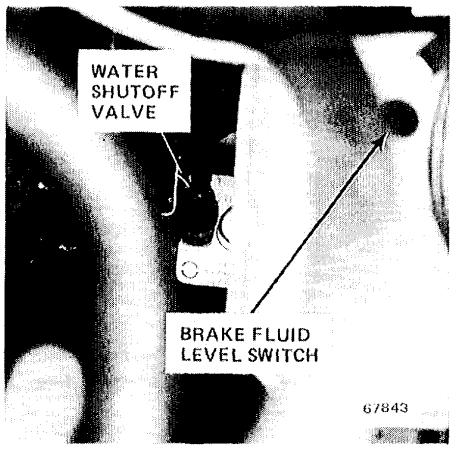


Figure 5 - LH Rear of Engine Compartment

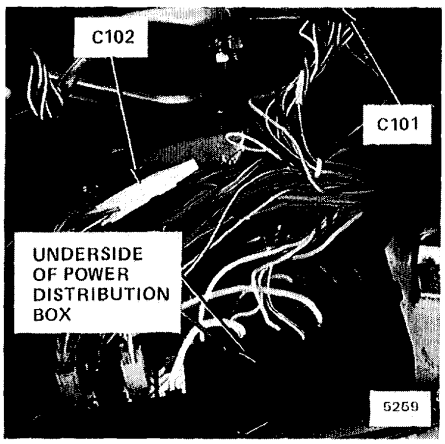


Figure 2 - Top of LH Front Wheel Well

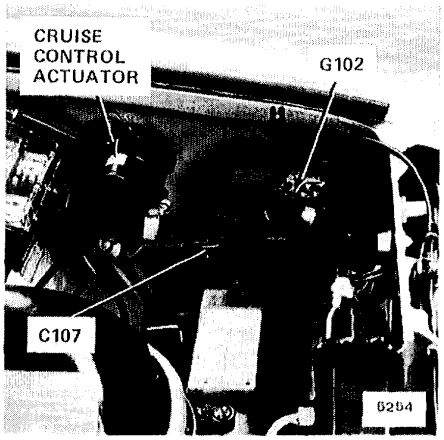


Figure 4 - LH Side of Radiator

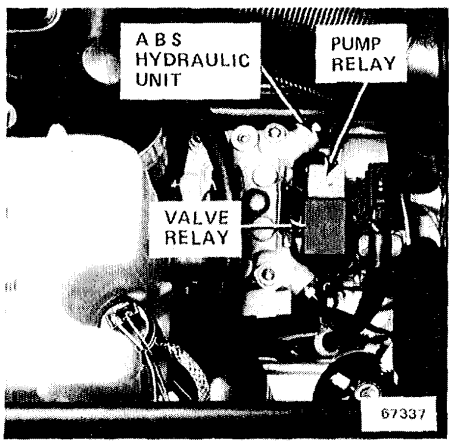


Figure 6 - RH Front of Engine Compartment

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Figure 1 - RH Front of Engine Compartment



Figure 3 - RH Side of Engine Compartment, Inside Shock Tower



Figure 5 - In Front of Radiator

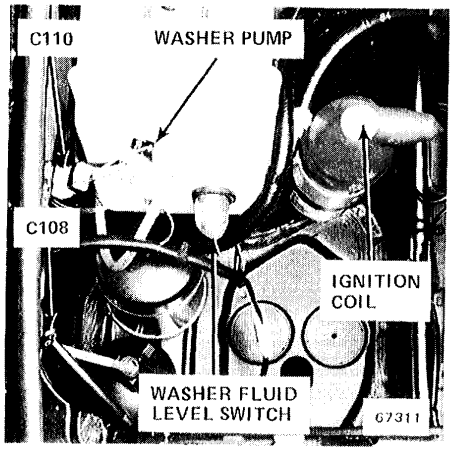


Figure 2 - RH Front of Engine Compartment

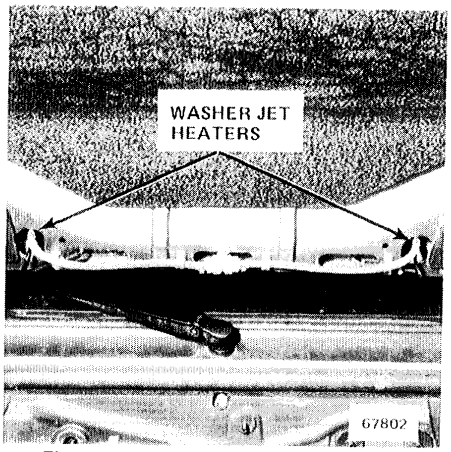


Figure 4 - Inside Center of Hood

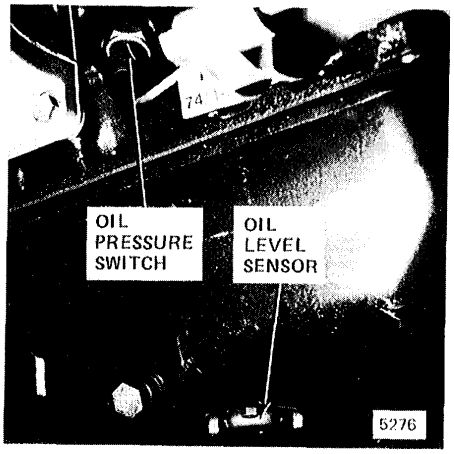


Figure 6 - RH Side of Engine Oil Pan

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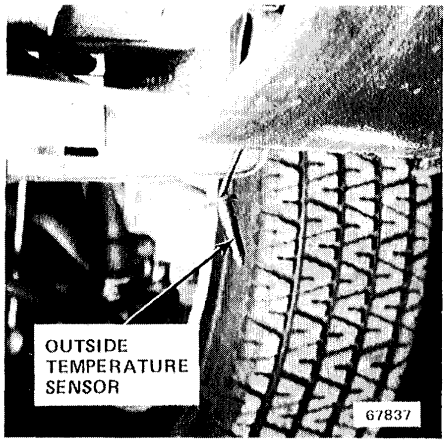


Figure 1 - Under LH Side of Front Bumper

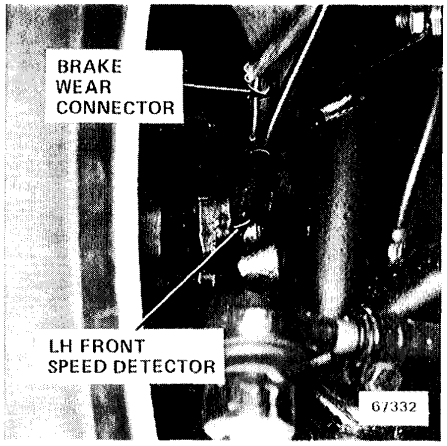


Figure 2 - Behind Wheel Dust Shield

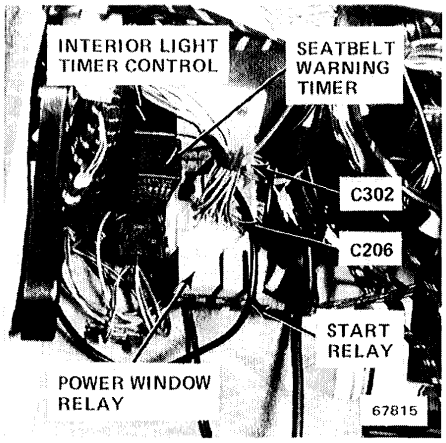


Figure 3 - Behind LH Dash Panel

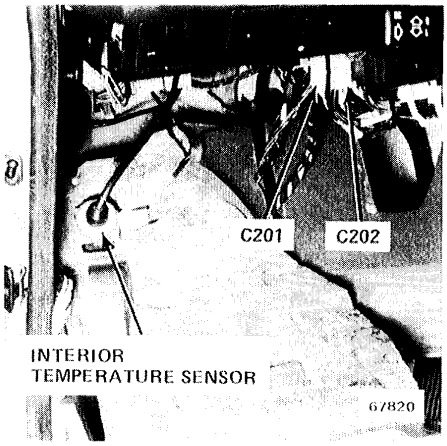


Figure 4 - Behind LH Dash Panel

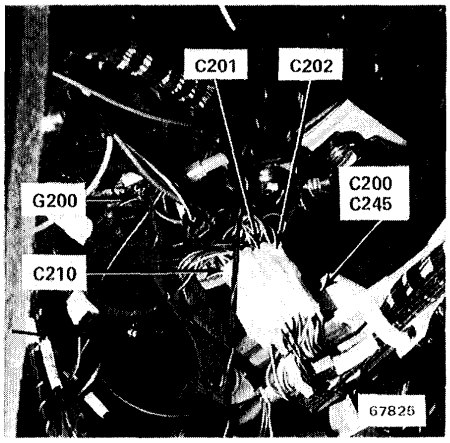


Figure 5 - Behind LH Dash Panel

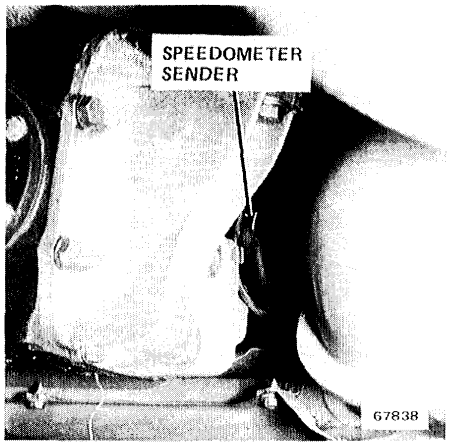


Figure 6 - Rear of Differential

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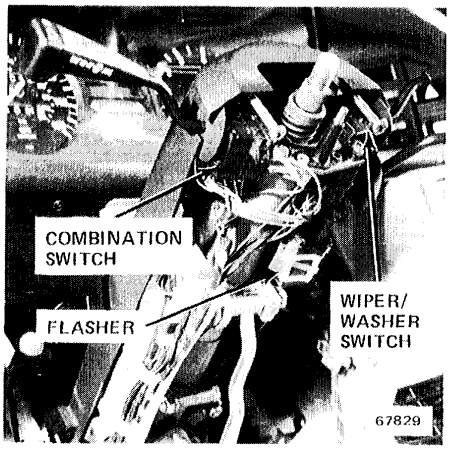


Figure 1 - Upper Part of Steering Column

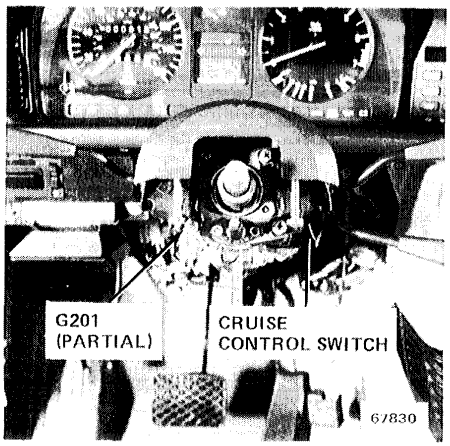


Figure 2 - Upper Part of Steering Column



Figure 3 - Behind LH Dash Panel

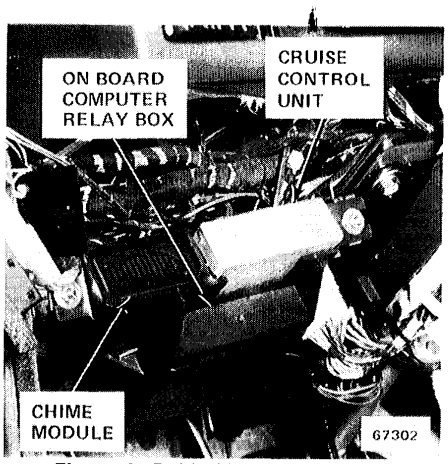


Figure 4 - Behind LH Dash Panel

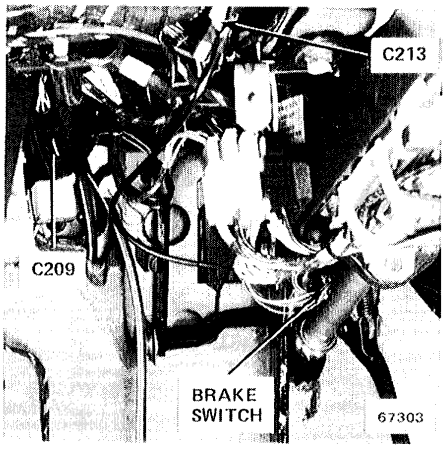


Figure 5 - Behind LH Dash Panel

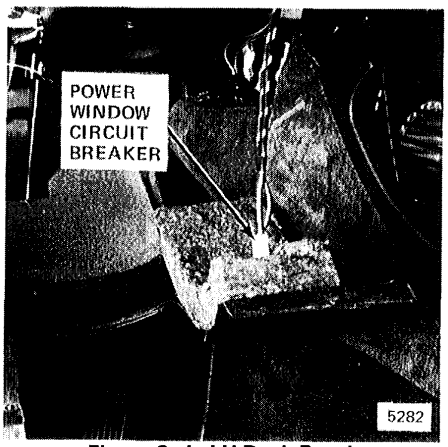


Figure 6 - In LH Dash Panel

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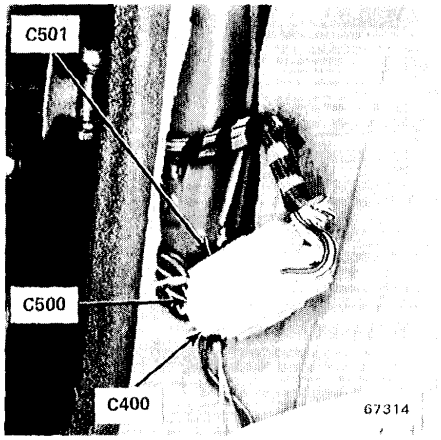


Figure 1 - Behind LH Front Speaker

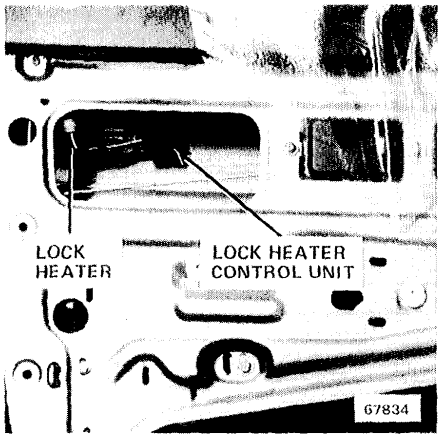


Figure 2 - Inside LH Front Door

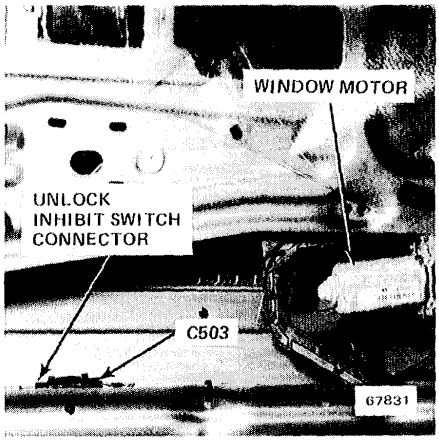


Figure 3 - Inside LH Front Door

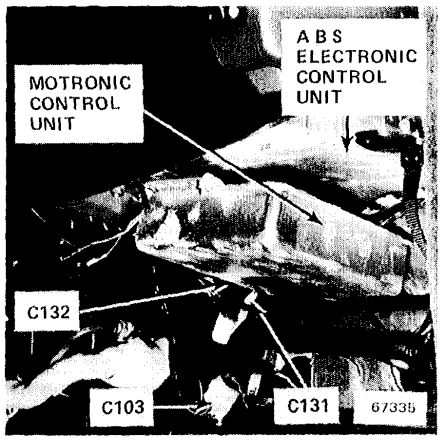


Figure 4 - Under RH Side of Dash

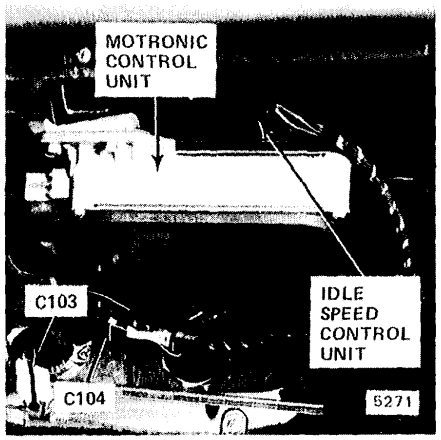


Figure 5 - Under RH Side of Dash

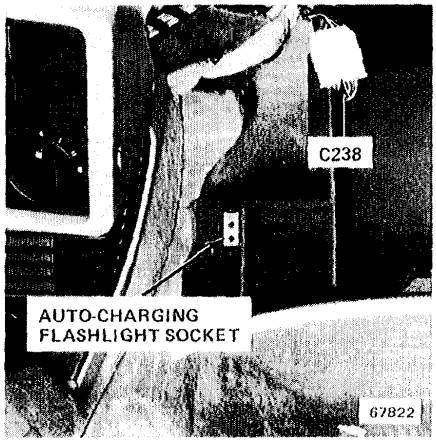


Figure 6 - Inside Glove Box

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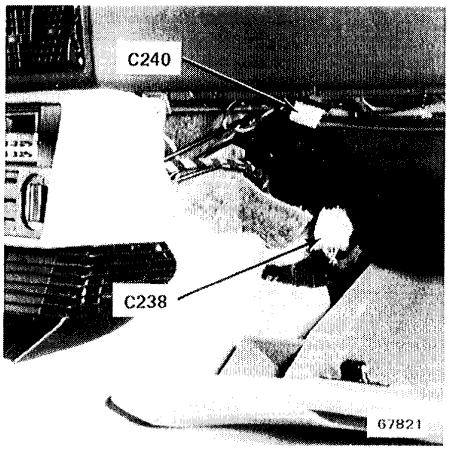


Figure 1 - Under RH Side of Dash, Beside Glove Box

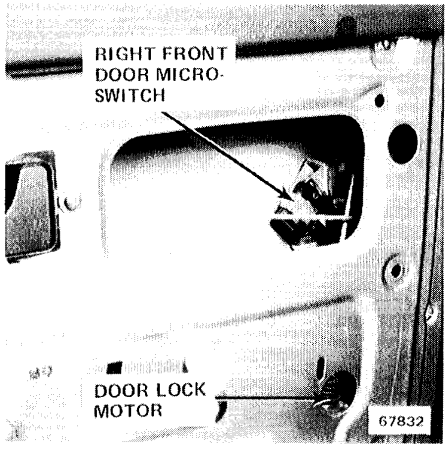


Figure 3 - Inside RH Front Door

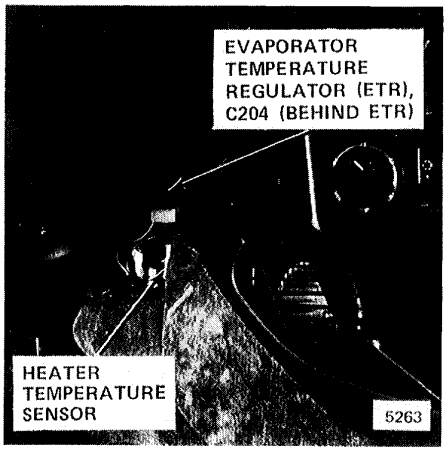


Figure 5 - LH Side of Upper Console

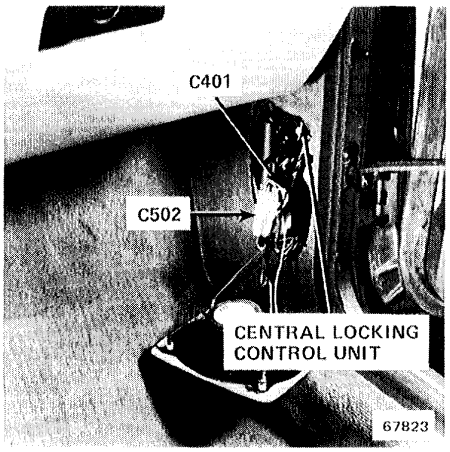


Figure 2 - Behind RH Front Speaker

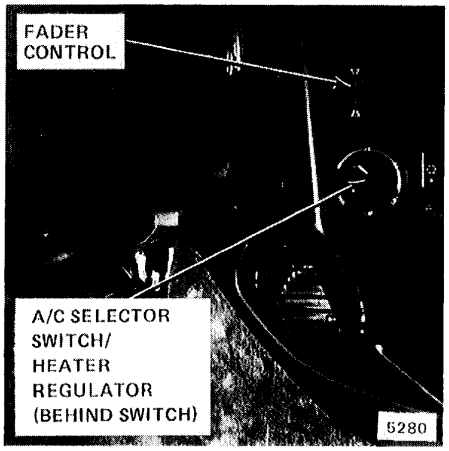


Figure 4 - LH Side of Upper Console



Figure 6 - RH Side of Upper Console

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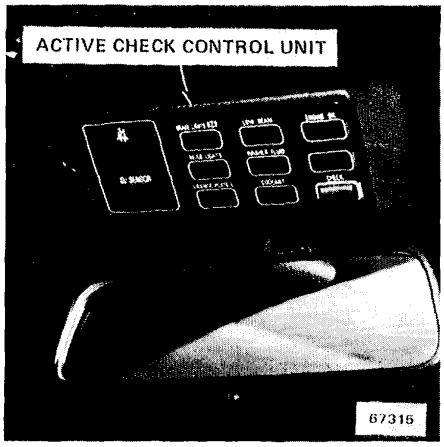


Figure 1 - Above Rear View Mirror

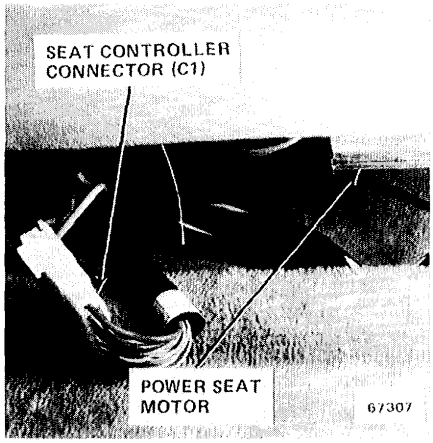


Figure 3 - Underneath Seat

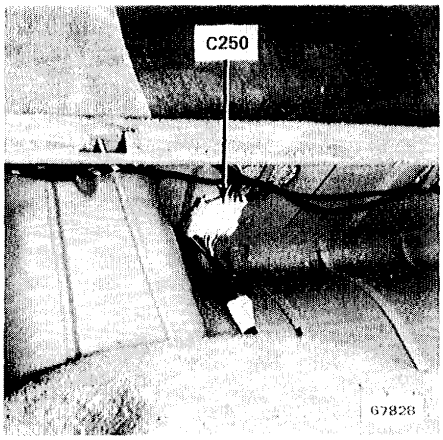


Figure 5 - Under RH Side of Rear Seat

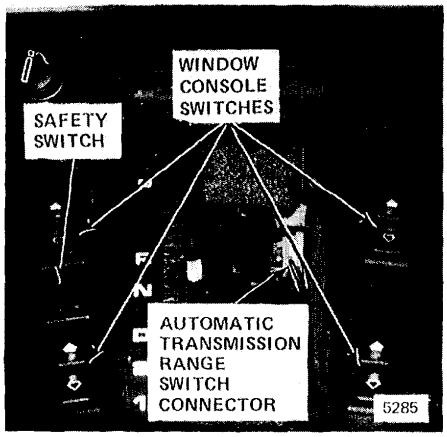


Figure 2 - Center Console, Near Shift Lever

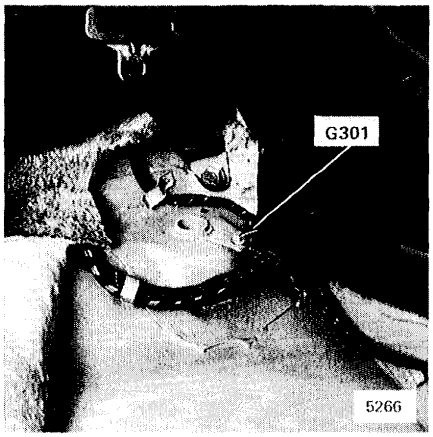


Figure 4 - Under LH Side of Rear Seat

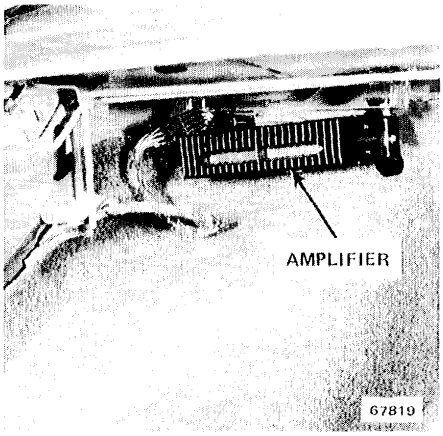


Figure 6 - LH Front of Trunk

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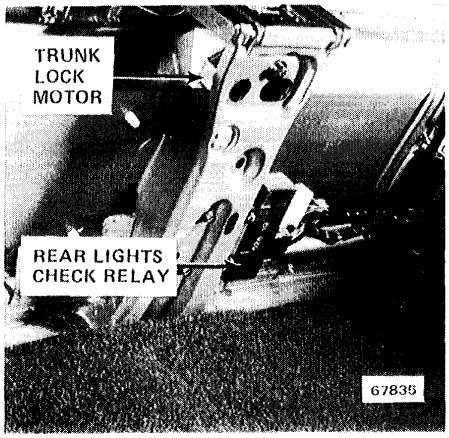


Figure 1 - In Rear Panel of Trunk

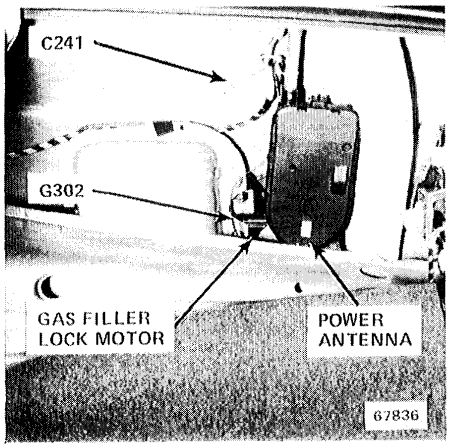


Figure 2 - RH Side of Trunk

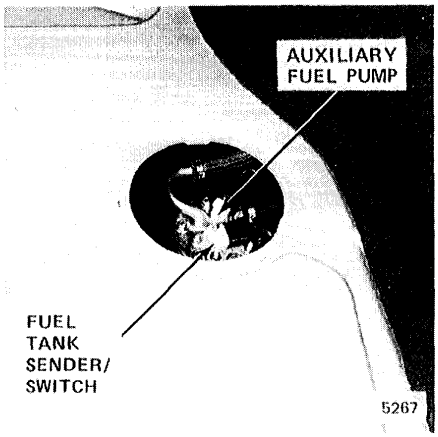


Figure 3 - Bottom RH Side of Trunk, Under Access Plate

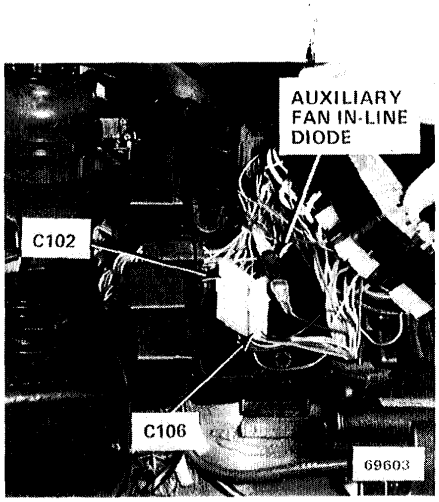


Figure 4 - LH Side of Engine Compartment (88 MY)

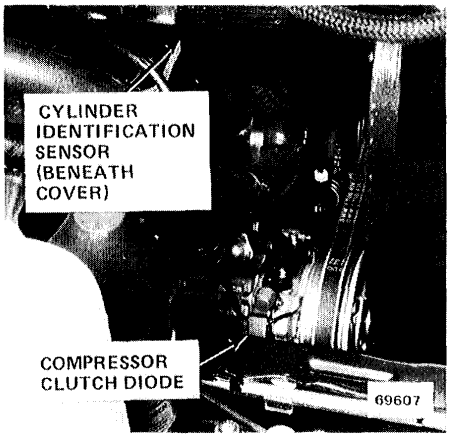


Figure 5 - RH Front of Engine Compartment

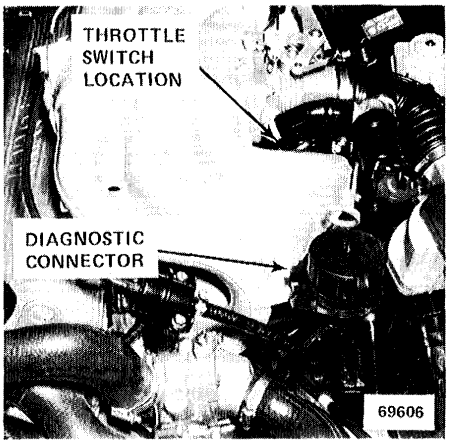


Figure 6 - Center of Engine (88 MY)

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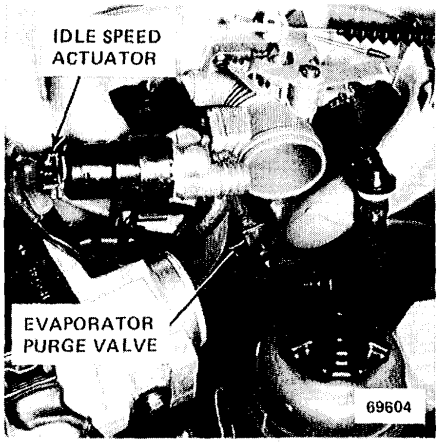


Figure 1 - LH Side Of Engine (88 MY)

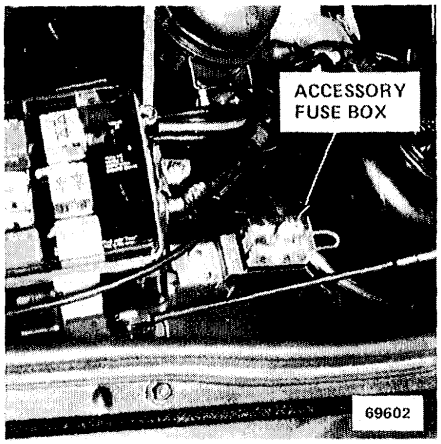


Figure 3 - LH Front of Engine Compartment (88 MY)

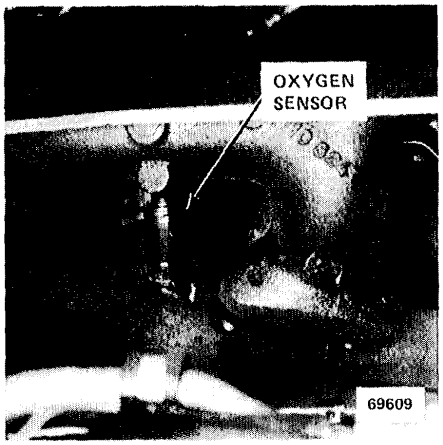


Figure 5 - Lower RH Rear of Engine

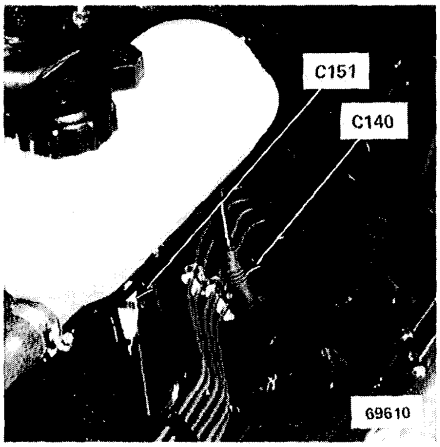


Figure 2 - RH Rear Corner of Engine Compartment (88 MY)

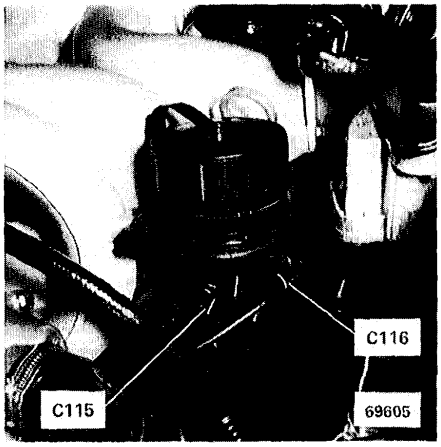


Figure 4 - LH Front of Engine (88 MY)

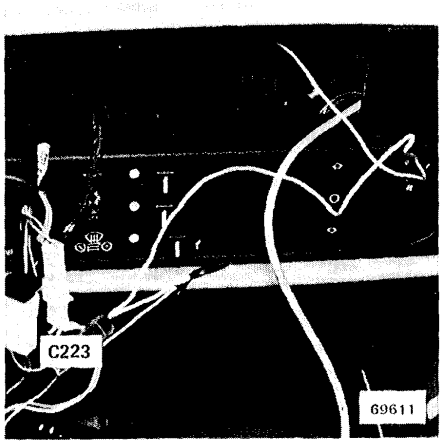


Figure 6 - Center of Dash (Radio Removed)

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8000-0 SPLICE LOCATION VIEWS

INDEX

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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S106	ENGINE (87 MY)	8000-2
S106	ENGINE (88 MY)	8000-3
S107	ENGINE (87 MY)	8000-2
S107	ENGINE (88 MY)	8000-3
S109	ENGINE (87 MY)	8000-2
S110	ENGINE (87 MY)	8000-2
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S207	MIDDLE	8000-5
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S312	REAR	8000-6
S314	REAR	8000-6
S315	REAR	8000-6
S316	REAR	8000-6

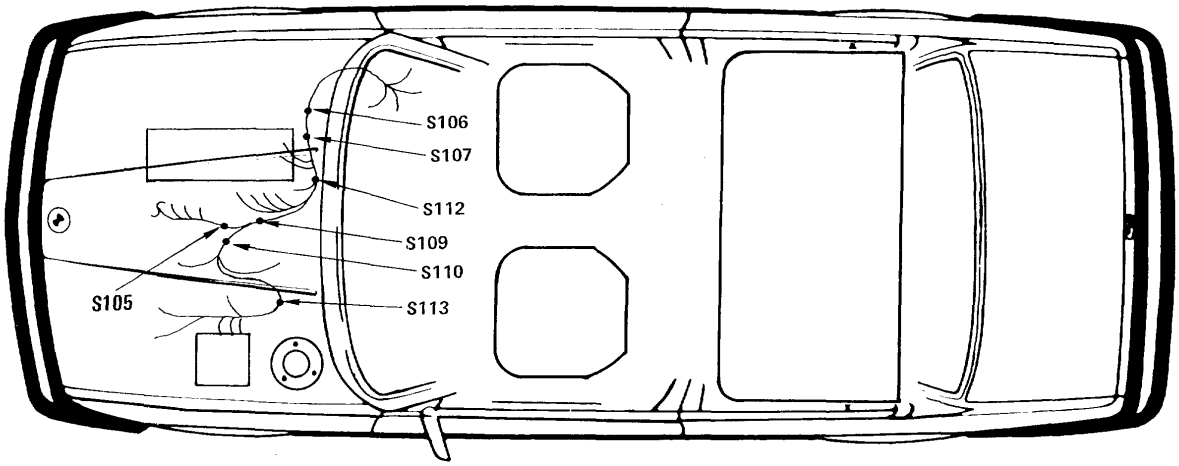
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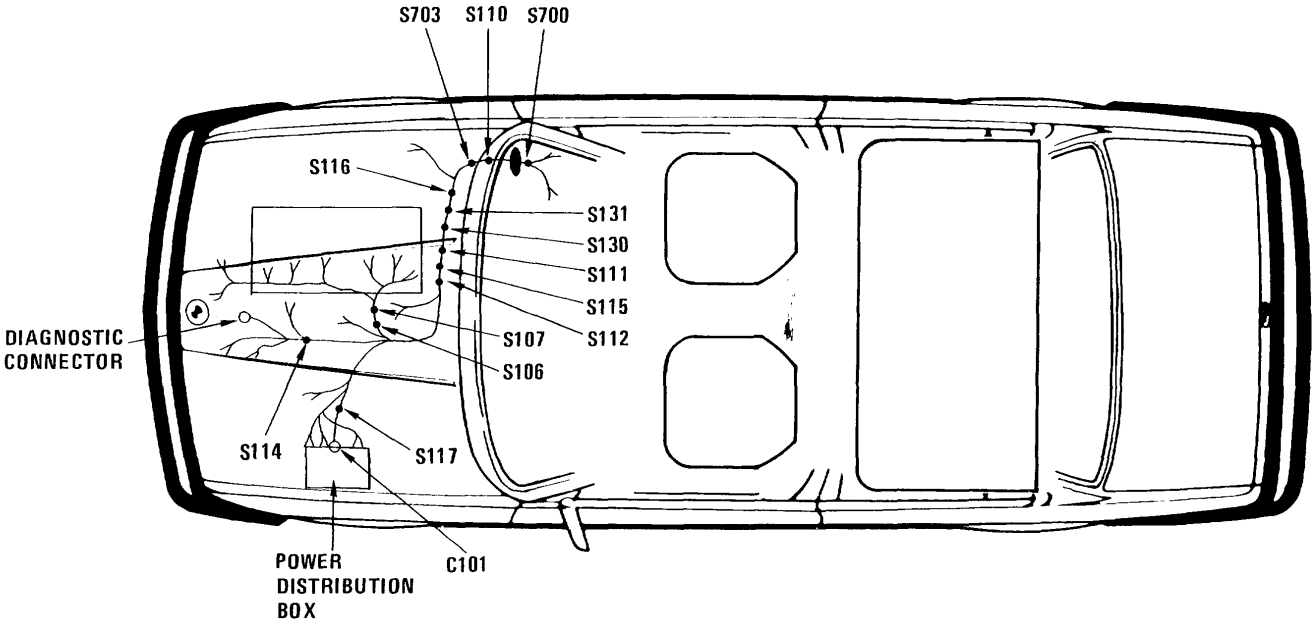
SPLICE	HARNESS	PAGE NUMBER
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ENGINE HARNESS



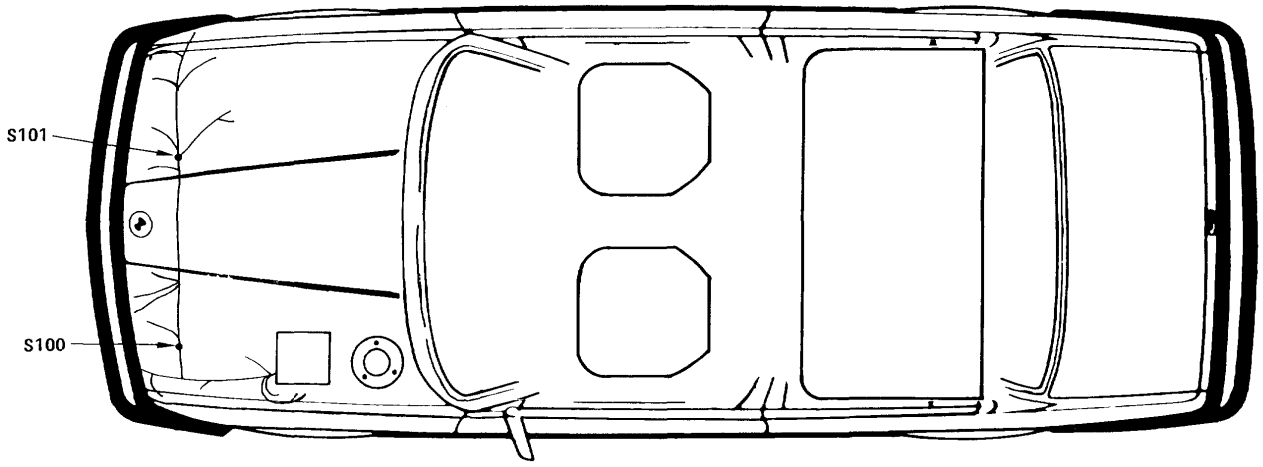
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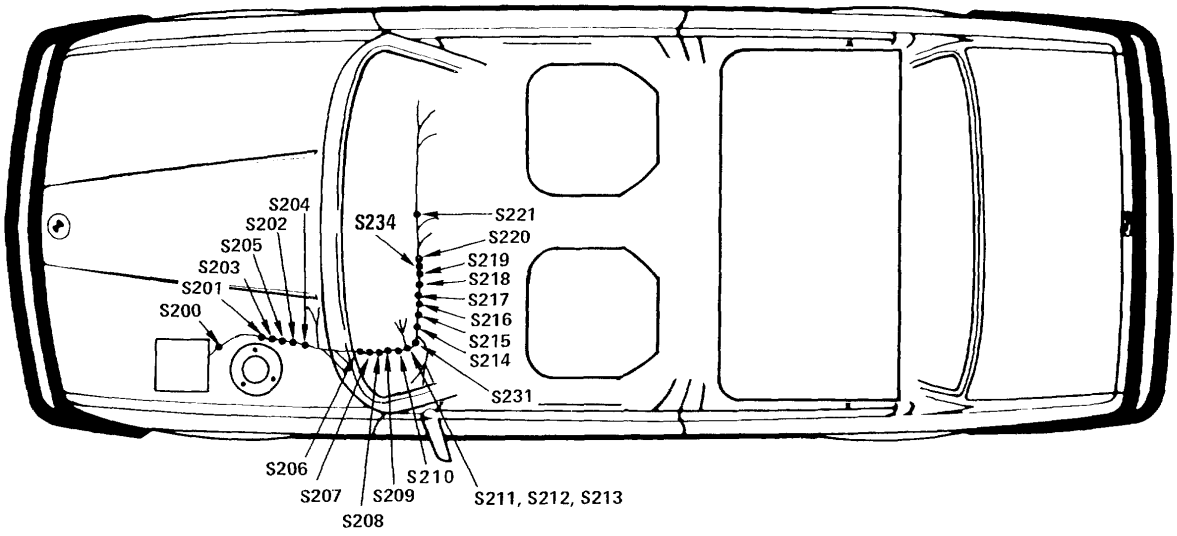
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8000-4 SPLICE LOCATION VIEWS

FRONT HARNESS



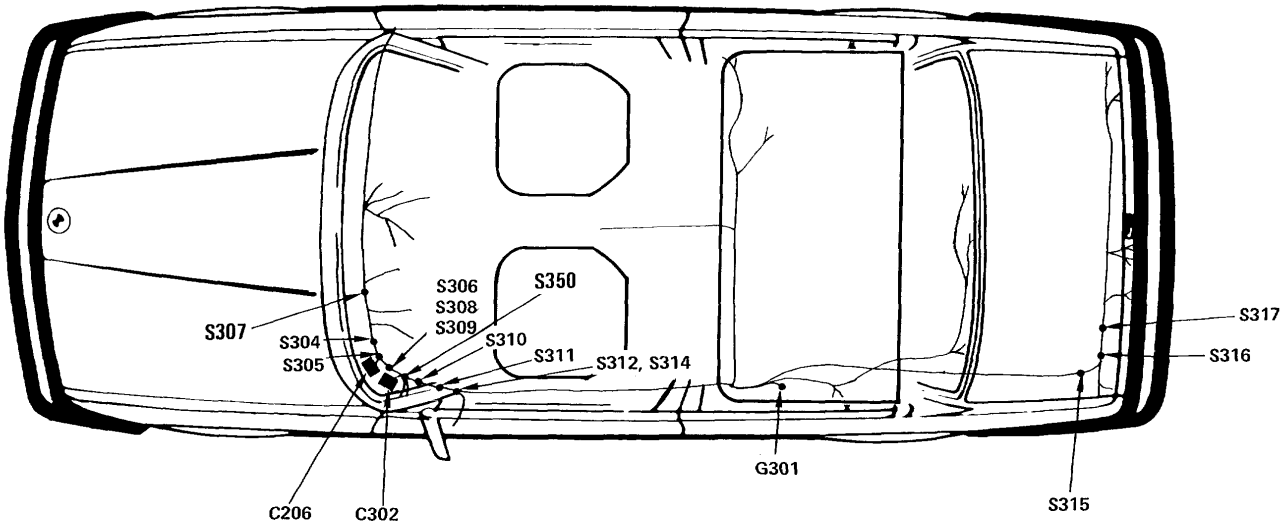
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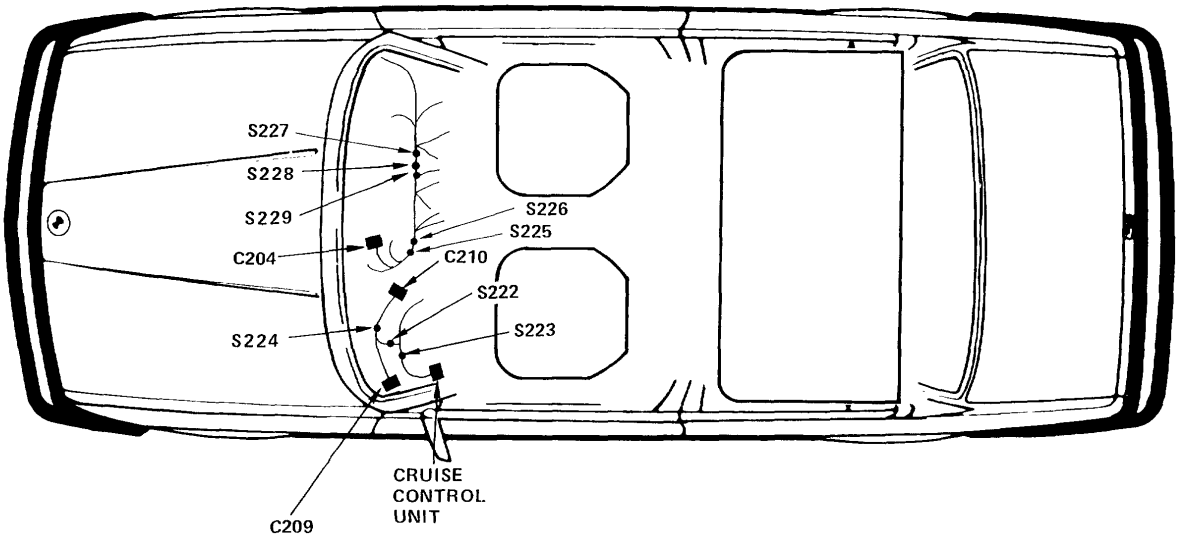
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8000-6 SPLICE LOCATION VIEWS

REAR HARNESS



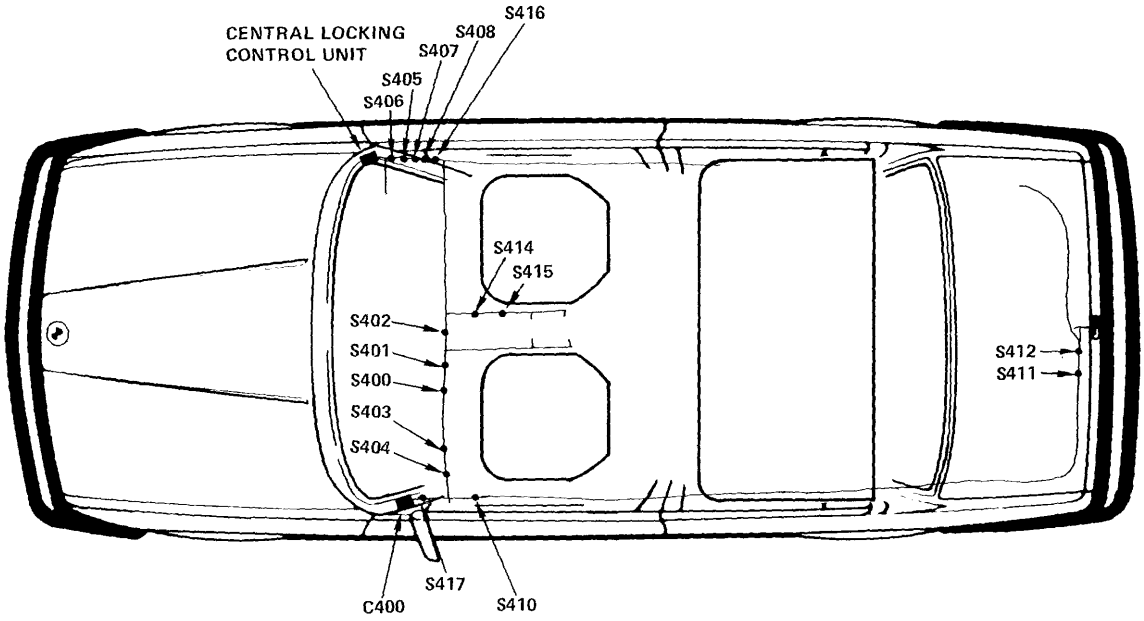
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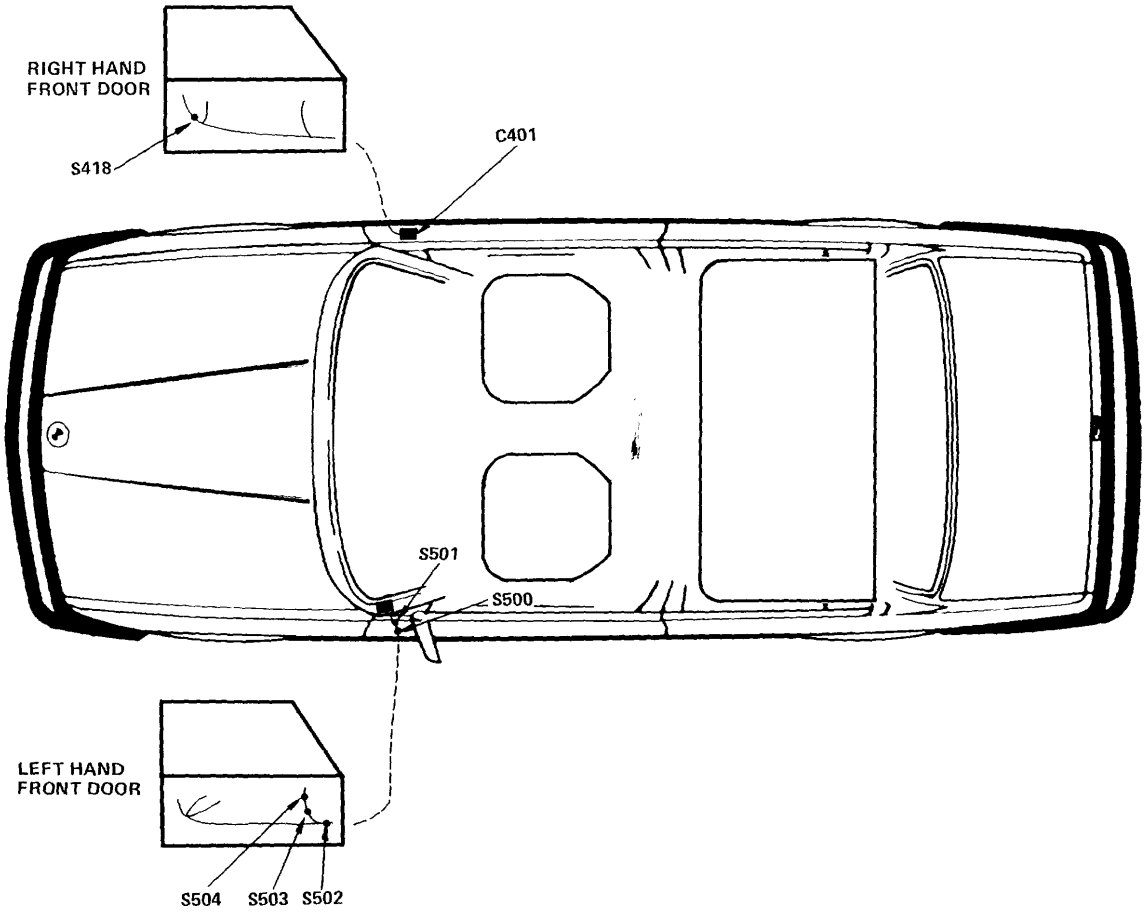
8000-8 SPLICE LOCATION VIEWS

CENTRAL LOCKING HARNESS



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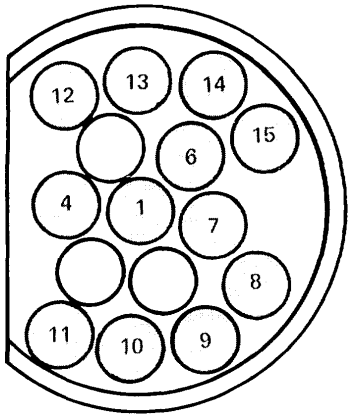
DOOR HARNESS



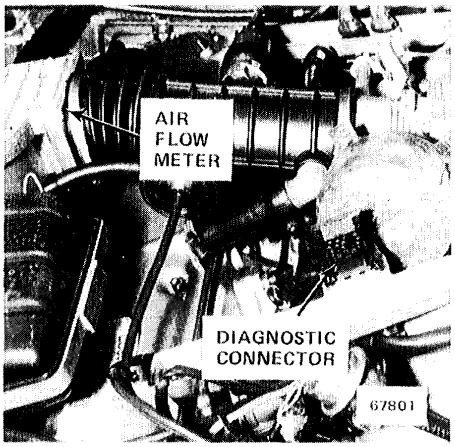
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8500-0 CONNECTOR VIEWS 1987 MODEL

DIAGNOSTIC CONNECTOR



DIAGNOSTIC CONNECTOR FACE



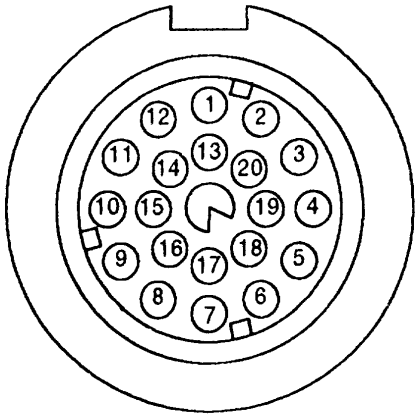
MOUNTED ON MANIFOLD

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	SRS Connector (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	Starter, 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, Idle Speed Control Unit

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DIAGNOSTIC CONNECTOR



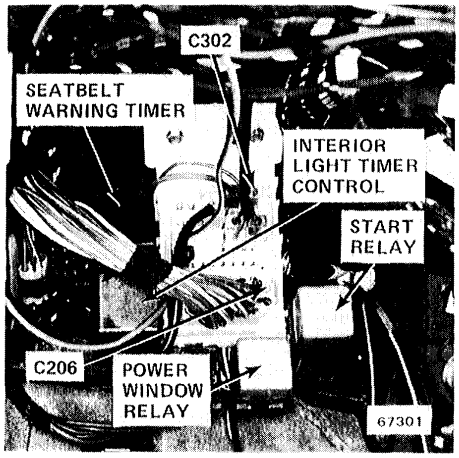
DIAGNOSTIC CONNECTOR FACE

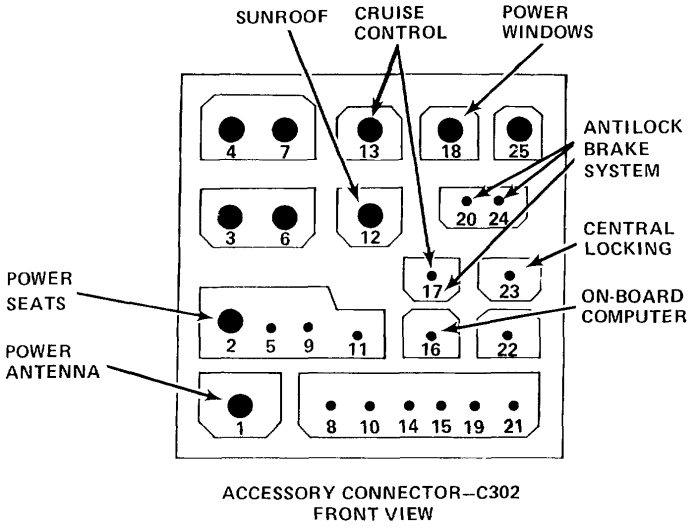
Pin	Wire Size	Wire Color	Circuit and Component Connected
1	1	BK	Ignition Coil, Motronic Control Unit
6	.5	WT/BK	SRS Connector (Not Used)
7	.5	WT/BU	Service Interval Indicator, Service Interval Processor (Reset)
11	2.5	BK/YL	Starter, Start Signal (50)
12	.75	BU	Charge, Alternator (D+)
14	2.5	RD	Battery (+)
15	.5	BK/YL	Motronic Control Unit (RXD)
16	1.5	GN/YL	Oxygen Sensor
18	.5	GN/BU	Motronic Control Unit (Programming Voltage)
19	2.5	BR	Ground Distribution (G103)
20	.5	WT/VI	Motronic Control Unit (TXD)

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8500-2 CONNECTOR VIEWS

ACCESSORY CONNECTOR



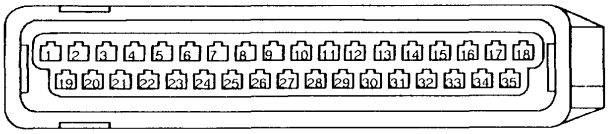


ACCESSORY CONNECTOR–C302
FRONT VIEW

Figure 1 - Under Left Side Of Dash

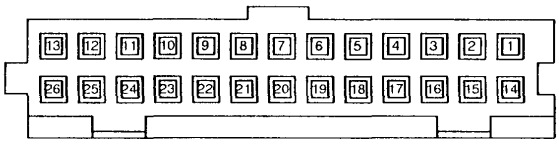
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B350002



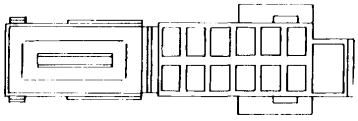
Wiring Face

ABS ELECTRONIC CONTROL UNIT



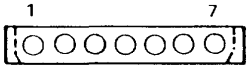
Wiring Face

ACTIVE CHECK CONTROL UNIT



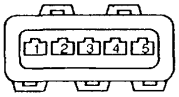
Wiring Face

ABS HYDRAULIC UNIT



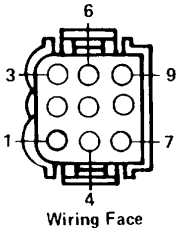
Wiring Face

AIR DOOR CONTROL



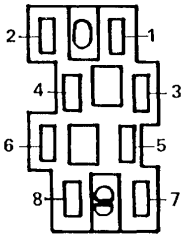
Wiring Face

AIR FLOW METER



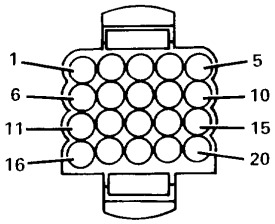
Wiring Face

AUTOMATIC TRANSMISSION RANGE SWITCH



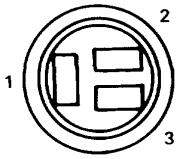
Mating Face

A/C SELECTOR SWITCH



Wiring Face

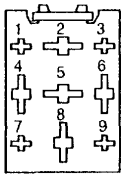
AMPLIFIER



Wiring Face

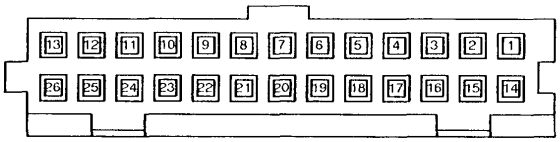
AUXILIARY FAN

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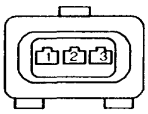
Wiring Face

AUXILIARY FAN RELAY



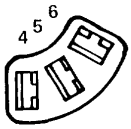
Wiring Face

CRUISE CONTROL UNIT



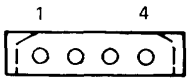
Mating Face

BAROMETRIC PRESSURE SENSOR



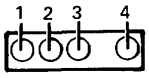
Wiring Face

BLOWER SPEED SWITCH (C2)



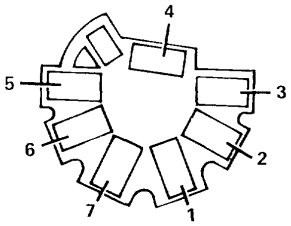
Wiring Face

CHIME MODULE (C1)



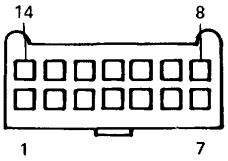
Wiring Face

CHIME MODULE (C2)



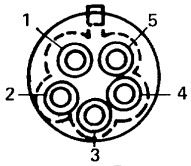
Wiring Face

BLOWER SPEED SWITCH



Wiring Face

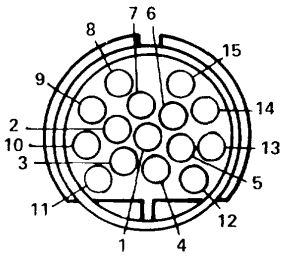
CENTRAL LOCKING CONTROL UNIT



Wiring Face

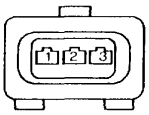
DASH WARNING DISPLAY

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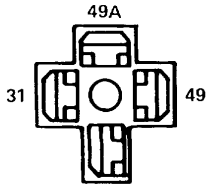
Mating Face

DIAGNOSTIC CONNECTOR



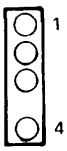
Wiring Face

ENGINE SPEED SENSOR



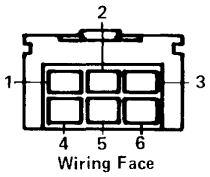
Wiring Face

FLASHER



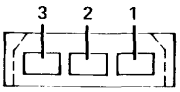
Wiring Face

DIGITAL CLOCK



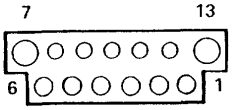
Wiring Face

EVAPORATOR TEMPERATURE REGULATOR



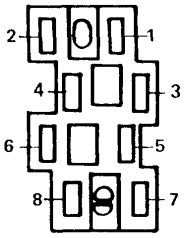
Wiring Face

FLASHER RELAY



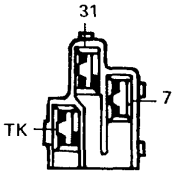
Wiring Face

DRIVER'S SEAT CONTROLLER (C1)



Mating Face

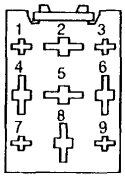
FADER CONTROL



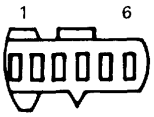
Wiring Face

FOG LIGHTS/INTERNAL LIGHTS SWITCH (C1)

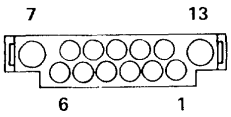
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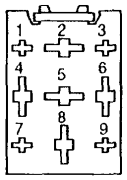
Wiring Face
FUEL HEATER RELAY



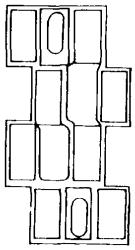
Wiring Face
GAS FILLER LOCK MOTOR



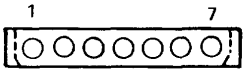
Wiring Face
HEATER CONTROL



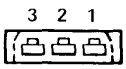
Wiring Face
FUEL PUMP RELAY



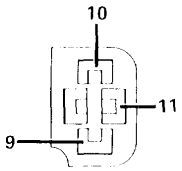
Wiring Face
HAZARD SWITCH



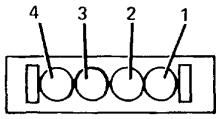
Wiring Face
HEATER REGULATOR



Wiring Face
FUEL TANK SENDER

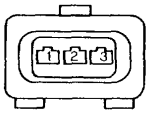


Wiring Face
HEADREST CONTROL SWITCH



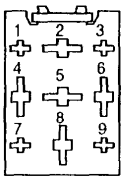
Wiring Face
HIGH LEVEL STOP LIGHT

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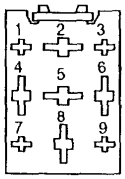
Wiring Face

IDLE SPEED ACTUATOR



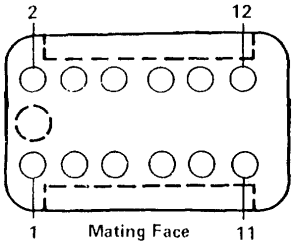
Wiring Face

INTERIOR LIGHT
TIMER CONTROL

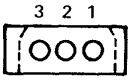


Mating Face

LOW BEAM
CHECK RELAY

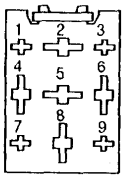


IDLE SPEED CONTROL



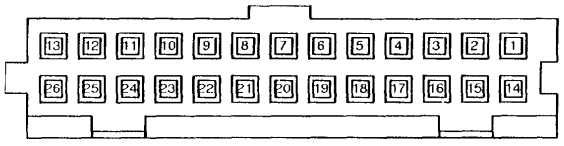
Wiring Face

INTERIOR TEMPERATURE SENSOR



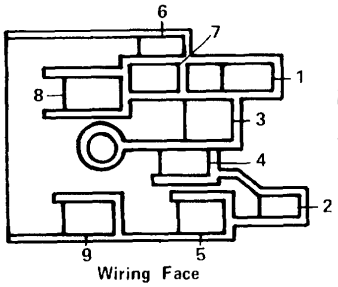
Wiring Face

MAIN RELAY



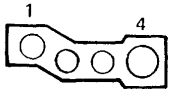
Mating Face

INSTRUMENT CLUSTER



Wiring Face

LIGHT SWITCH

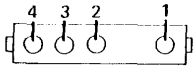


Wiring Face

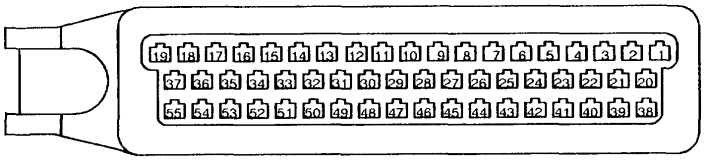
MEMORY SEAT ACCESSORY
CONNECTOR (C302)

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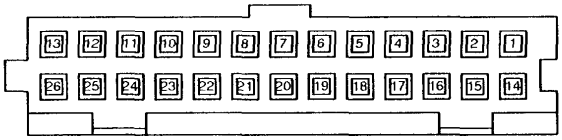
8500-8 CONNECTOR VIEWS



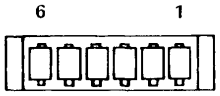
Wiring Face
MIRROR



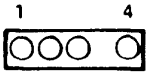
MOTRONIC CONTROL UNIT
(88 MY)



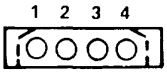
Wiring Face
ON BOARD COMPUTER
MODULE



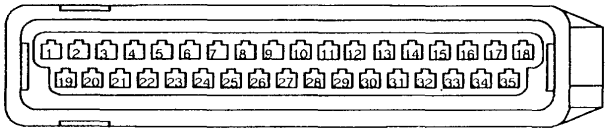
Wiring Face
MIRROR CONTROL SWITCH



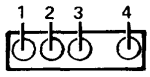
Wiring Face
ON BOARD COMPUTER
RELAY BOX (C1)



Wiring Face
ON BOARD COMPUTER
RELAY BOX (C2)

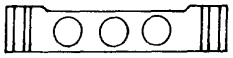


Mating Face
MOTRONIC CONTROL UNIT
(87 MY)



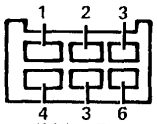
Wiring Face
OUTSIDE MIRROR

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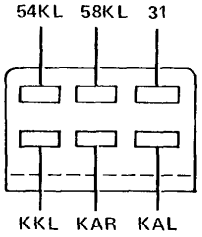
Wiring Face

POTENTIOMETER



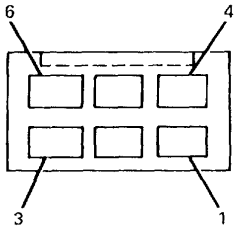
Wiring Face

REAR LIGHT ASSEMBLY



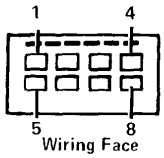
Wiring Face

REAR LIGHTS CHECK RELAY (C2)



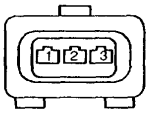
Wiring Face

POWER SEAT CONTROL UNIT (C2)



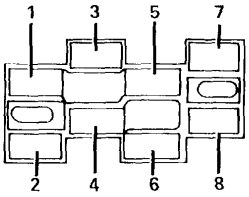
Wiring Face

REAR LIGHTS CHECK RELAY



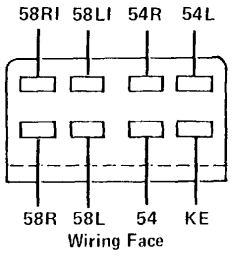
Wiring Face

REFERENCE POINT SENSOR



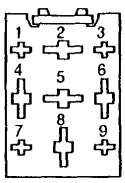
Wiring Face

REAR DEFOGGER



Wiring Face

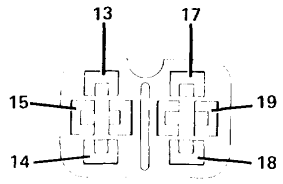
REAR LIGHTS CHECK RELAY (C1)



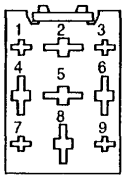
Wiring Face

SEATBELT WARNING TIMER

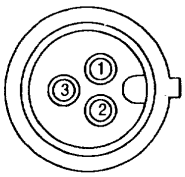
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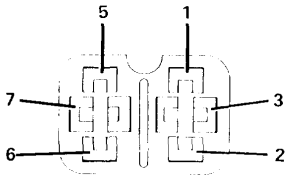
Wiring Face
SEAT SWITCHES BACK
& SEAT CUSHIONS



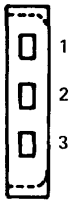
Wiring Face
START RELAY



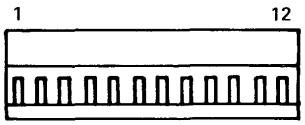
Wiring Face
THROTTLE POSITION SENSOR



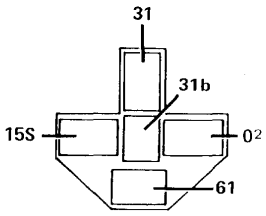
Wiring Face
SEAT SWITCHES FRONT
& REAR HEIGHT



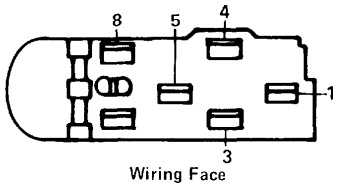
Wiring Face
SUNROOF MOTOR (CI)



Wiring Face
TRANSMISSION RANGE DISPLAY

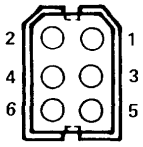


Wiring Face
SERVICE REMINDER SWITCH

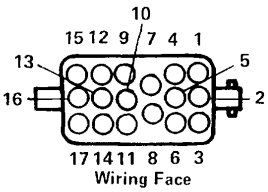


Wiring Face
SUNROOF SWITCH

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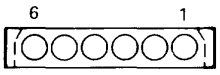
Wiring Face
WIPER MOTOR



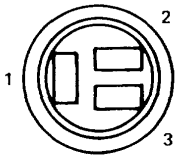
Wiring Face
C101



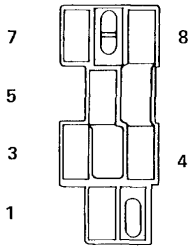
Wiring Face
C103



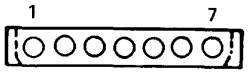
Wiring Face
WIPER SWITCH



Wiring Face
C113



Wiring Face
WINDOW SWITCHES



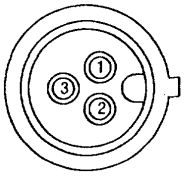
Wiring Face
C102



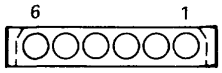
Wiring Face
C114

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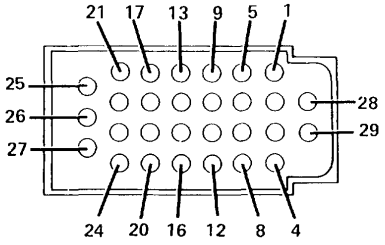
8500-12 CONNECTOR VIEWS



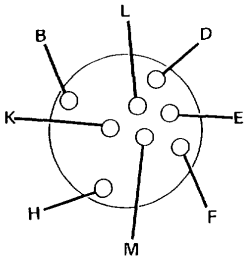
Wiring Face
C141



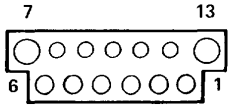
Wiring Face
C201



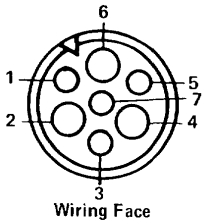
Wiring Face
C206



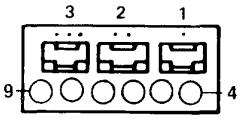
Wiring Face
C152



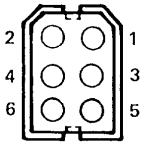
Wiring Face
C202



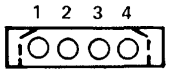
Wiring Face
C209



Wiring Face
C200

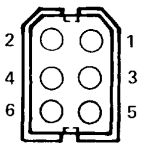


Wiring Face
C205

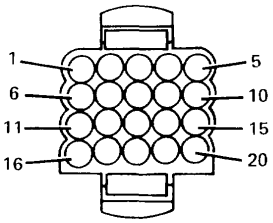


Wiring Face
C210

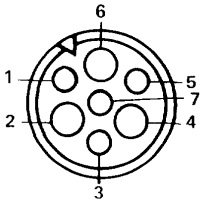
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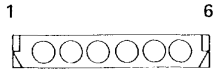
Wiring Face
C214



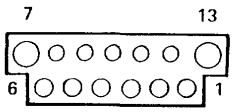
Wiring Face
C320



Wiring Face
C402



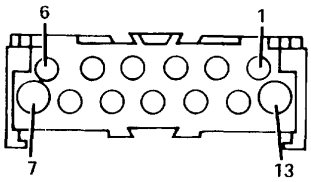
Wiring Face
C240



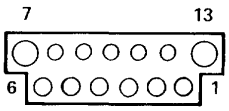
Wiring Face
C400



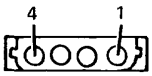
Wiring Face
C500



Wiring Face
C250

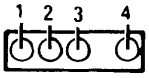


Wiring Face
C401



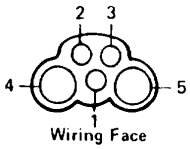
Wiring Face
C501

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Wiring Face

C502



Wiring Face

C550

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9000-0 COMPONENT LOCATION CHART

COMPONENTS		Page-Figure
0 Degrees C Temperature Switch	On right inlet of heater blower housing	7000- 0-2
A/C Compressor Clutch	On front of A/C compressor	
ABS Electronic Control Unit	Under RH side of dash	7000- 6-4
ABS Hydraulic Unit	RH front of engine compartment	7000- 2-6
Accessory Fuse (87 MY)	On power distribution box	7000- 1-5
Accessory Fuse Box (88 MY)	LH side of engine compartment, rear of power distribution box	7000-10-3
Active Check Control Unit	Above rear view mirror	7000- 8-1
Air Flow Meter	LH side of engine	7000- 0-3
Amplifier	LH side of trunk, below rear shelf	7000- 8-6
Auto-Charging Flashlight	In glove box	7000- 6-6
Auto. Trans. Range Switch	At base of shift lever	7000- 8-2
Auxiliary Fan In-Line Diode (87 MY)	RH side of engine compartment, in harness, behind headlights	
Auxiliary Fan In-Line Diode (88 MY)	LH side of engine compartment, inside power distribution box	7000- 9-4
Auxiliary Fan Motor	In front of radiator	7000- 3-5
Auxiliary Fuel Pump	In fuel tank, below trunk RH side access plate	7000- 9-3
Backup Light Switch	On LH side of transmission	
Barometric Pressure Sensor	On RH front of air cleaner housing	7000- 1-1
B/C Horn Diode	LH front of engine compartment, behind battery	7000- 2-1
Blower Speed Switch	RH side of upper console	
Brake Accumulator Pres. Switch	LH rear of engine compartment	
Brake Fluid Level Switch	LH rear of engine compartment, on brake fluid reservoir	7000- 0-3
Brake Switch	Above brake pedal	7000- 5-5
Brake Wear Sensor	Inside respective wheel rims, on brake pads	
Central Locking Control Unit	Behind RH kick panel, above speaker	7000- 7-2
Chime Module	Under LH side of dash	7000- 5-4
Clutch Switch	Above clutch pedal	
Cold Start Valve	RH side of engine, above valve cover	7000- 0-6
Combination Switch	On LH side of steering column	7000- 5-1
Compressor Clutch Diode	Lower RH front of engine, on A/C compressor	7000- 9-5
Coolant Level Switch	RH side of engine compartment, in coolant reservoir	7000- 0-6
Coolant Temperature Sender	Front of engine, on thermostat housing	7000- 1-3
Coolant Temperature Sensor	Front of engine, top of thermostat housing	7000- 1-3
Coolant Temperature Switch	Front of engine, top of thermostat housing	7000- 1-2
Cruise Control Actuator	LH front of engine compartment, in front of power distribution box	7000- 2-3

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COMPONENTS		Page-Figure
Cruise Control Switch	On RH side of steering column	7000- 5-2
Cruise Control Unit	Under LH side of dash	7000- 5-4
Cylinder Identification Sensor	Top RH side of engine, under distributor cover	7000- 9-5
Diagnostic Connector (87 MY)	LH side of engine, on intake manifold	7000- 1-1
Diagnostic Connector (88 MY)	Top LH front of engine	7000- 9-6
Door Lock Motors	Center rear of respective door	7000- 7-3
Engine Speed Sensor (87 MY)	On transmission bell housing	7000- 0-4
Engine Speed Sensor (88 MY)	Lower RH front of engine, above oil pan	7000- 9-5
Evaporative Purge Valve	Upper LH rear of engine, below throttle body	7000-10-1
Evaporator Blower Motor	Under center of dash	7000- 7-6
Evaporator Blower Resistors	On RH side of evaporator housing	7000- 7-6
Evaporator Temperature Regulator	LH side of upper console	7000- 7-5
Evaporator Temperature Sensor	In evaporator, above evaporator blower motor	
Fader Control	LH side of upper console	7000- 7-4
Flasher	Upper part of steering column	7000- 5-1
Fresh Air Door Control Potentiometer	Under dash, behind console	
Fresh Air Door Control Unit	Under dash, behind console	
Fuel Injectors	Mounted in intake port of each cylinder	7000- 0-1
Fuel Pump Relay	On power distribution box	7000- 1-6
Fuel Tank Sender/Switch	In fuel tank, below trunk, RH side access plate	7000- 9-3
Gas Filler Lock Motor	In trunk, right of power antenna	7000- 9-2
Hazard Switch	To right of instrument cluster	
Heater Blower Motor	Below windshield, behind cover panel	
Heater Blower Resistors	Below heater cover motor	
Heater Regulator	Behind A/C selector switch	7000- 7-4
Heater Temperature Sensor	LH side of upper console	7000- 7-5
Heater-A/C Panel Lights	Behind heater-air conditioning control panel	
High Pressure Cut-Out Switch	RH front of engine compartment, on receiver-drier	7000- 3-1
High Speed Relay	Attached to power distribution box	7000- 1-5
High Speed Temperature Switch	On upper LH side of radiator (red terminals)	7000- 2-4
Horn Brush/Slip Ring	Below hub of steering wheel	
Horn Switches	In each spoke on steering wheel	
Hydraulic Pressure Switch	LH rear of engine compartment	
Idle Control Valve	Top rear RH side of engine	7000- 0-2
Idle Speed Actuator	Front LH side of engine	7000-10-1
Idle Speed Control Unit	Under RH side of dash, above glove box	7000- 6-5
Ignition Coil	RH front of engine compartment	7000- 3-2
Ignition Key Switch	In upper part of steering column	
Ignition Switch	Upper part of steering column	
Interior Light Timer Control	Under LH side of dash	7000- 4-3

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9000-2 COMPONENT LOCATION CHART

COMPONENTS		Page-Figure
Interior Temperature Sensor	Mounted in LH side of dash, under dash cover	7000- 4-4
Lock Heater	In LH front door	7000- 6-2
Lock Heater Control Unit	In LH front door	7000- 6-2
Low Beam Check Relay	Attached to power distribution box	7000- 1-5
Main Fuel Pump	Forward and right of differential housing	
Main Relay	On power distribution box	
Mirror Control Switch	On LH front door	
Motor Relay	Behind header, above rear view mirror	
Motronic Control Unit	Under RH side of dash, above glove box	7000- 6-4
Normal Speed Blower Resistor	In front of radiator, on top of auxiliary fan shield	7000- 3-5
Normal Speed Coolant Temperature Switch	On upper LH side of radiator (white terminals)	7000- 2-4
Normal Speed Relay	Attached to power distribution box	7000- 1-5
Oil Level Sensor	Bottom of engine oil pan	7000- 3-6
Oil Pressure Switch	RH side of engine, below oil filter	7000- 3-6
On-Board Computer Horn	LH front of engine compartment, behind battery	7000- 2-1
On-Board Computer Module	On dash, right of instrument cluster	
On-Board Computer Relay Box	Under LH side of dash	7000- 5-4
Outside Temperature Sensor	Under left side of front bumper	7000- 4-1
Oxygen Sensor	In exhaust manifold, at rear of engine	7000-10-5
Oxygen Sensor Heater Relay	On power distribution box	7000- 1-6
Parking Brake Switch	In shift console, at base of parking brake	
Power Antenna	RH side of trunk	7000- 9-2
Power Distribution Box	On LH front wheel well	7000- 1-5
Power Window Circuit Breaker	Mounted in left, under dash cover	7000- 5-6
Power Window Relay	Under LH side of dash	7000- 4-3
Rear Lights Check Relay	Mounted on trunk lock support	7000- 9-1
Reference Point Sensor	On transmission bell housing	7000- 0-4
Right Front Door Micro Switch	Inside RH front door, mounted on door lock	7000- 7-3
Safety Switch	On shift console, next to shift lever	7000- 8-2
Seat Controllers	Under respective seat, on frame	7000- 8-3
Seatbelt Switch	In driver's seatbelt buckle	
Seatbelt Warning Timer	Under LH side of dash	7000- 4-3
Service Reminder Switch	Behind LH dash panel, mounted on RH side of steering column	7000- 5-3
Speed Detector	Behind wheel dust shield	7000- 4-2
Speedometer Sender	In rear of differential	7000- 4-6
Start Relay	On connector bracket, under LH side of dash	7000- 4-3
Starter	Lower rear LH side of engine	
Stepping Motor	Under dash, behind console	
Sunroof Motor	Behind header, above rear view mirror	
Sunroof Switch	Above rear view mirror	

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COMPONENTS		Page-Figure
TDC Sensor	Above crankshaft vibration damper	7000- 0-5
Thermo-Time Switch	Front of engine, top of thermostat housing	7000- 1-2
Throttle Position Switch (87 MY)	Top LH side of engine, below throttle body	7000- 1-4
Throttle Position Switch (88 MY)	Top LH side of engine, front of throttle body	7000- 9-6
Trunk Lock Motor	In rear panel of trunk	7000- 9-1
Unlock Inhibit Switch	In LH front door, on door lock	7000- 6-3
Washer Fluid Level Switch	RH front of engine compartment, in washer reservoir	7000- 3-2
Washer Jet Heaters	Attached to washer jet nozzles	7000- 3-4
Washer Pump	RH front of engine compartment, in washer reservoir	7000- 3-2
Water Shut-Off Valve	Below brake master cylinder	7000- 2-5
Window Console Switches	On shift console, next to shift lever	7000- 8-2
Window Motors	In each door	7000- 6-3
Wiper Motor	Above brake master cylinder	
Wiper/Washer Switch	On RH side of steering column	7000- 5-1
CONNECTORS		
C101 (17 pins)	Engine compartment, on RH side of power distribution box	7000- 1-5
C102 (7 pins)	In power distribution box	7000- 2-2
C103 (6 pins)	RH side of dash, near motronic control unit	7000- 6-4
C104 (2 pins)	RH side of dash, near motronic control unit	7000- 6-5
C105 (1 pin)	At RH wheel well, below coolant reservoir	
C106 (2 pins)	LH side of engine compartment, inside power distribution box	7000- 9-4
C107 (2 pins)	LH front of engine compartment	7000- 2-3
C108 (2 pins)	RH front of engine compartment	7000- 3-2
C110 (2 pins)	RH front of engine compartment	7000- 3-2
C113 (3 pins)	Forward of radiator, on auxiliary fan shield	
C115 (3 pins)	LH front of engine, below diagnostic connector	7000-10-4
C116 (3 pins)	LH front of engine, below diagnostic connector	7000-10-4
C131 (1 pin)	RH side of dash, near motronic control unit	7000- 6-4
C132 (1 pin)	RH side of dash, near motronic control unit	7000- 6-4
C140 (4 pins)	Lower RH rear of engine compartment	7000-10-2
C150 (2 pins)	LH side of engine compartment, in shock tower	7000- 0-3
C151 (2 pins)	RH side of engine compartment, in shock tower	7000- 3-3
C200 (10 pins)	On LH side of steering column	7000- 4-5
C201 (6 pins)	On LH side of steering column	7000- 4-5
C202 (13 pins)	On LH side of steering column	7000- 4-5
C203 (2 pins)	At upper end of steering column	

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COMPONENTS		Page-Figure
C204 (13 pins)	On LH side of heater/evaporator housing	7000- 7-5
C206 (29 pins)	On connector bracket, under LH side of dash	7000- 4-3
C208 (2 pins)	Near clutch pedal	
C209 (7 pins)	Under LH side of dash	7000- 5-5
C210 (4 pins)	On LH side of steering column	7000- 4-5
C212 (1 pin)	Under LH side of dash, taped to harness	
C213 (1 pin)	Under LH side of dash	7000- 5-5
C214 (6 pins)	Behind center of dash, near heater blower	
C215 (2 pins)	Behind radio	
C216 (2 pins)	Behind radio	
C217 (2 pins)	Behind radio	
C219 (3 pins)	Taped to harness, near LH shock tower	7000- 0-3
C220 (1 pin)	Under LH side of dash	
C223 (1 pin)	Center console, behind radio	7000- 7-2
C235 (1 pin)	Under LH side of dash, near on-board computer	
C241 (2 pins)	RH side of trunk, near power antenna	7000- 9-2
C245 (1 pin)	On LH side of steering column	
C250 (13 pins)	Under center of rear seat	7000- 8-5
C300 (2 pins)	Near trunk light	
C301 (2 pins)	In center console, ahead of shift lever	
C302 (Accessory Connector)	Under LH side of dash	7000- 4-3
C303 (2 pins)	In headliner, near LH dome light	
C351 (2 pins)	Under RH side of rear seat, behind grommet	
C352 (2 pins)	Under LH side of rear seat, behind grommet	
C400 (13 pins)	Behind LH front speaker	7000- 6-1
C401 (13 pins)	Behind RH front speaker	7000- 7-2
C402 (7 pins)	In LH B pillar	
C403 (7 pins)	In RH B pillar	
C404 (5 pins)	In bottom rear of LH front door	
C405 (2 pins)	In trunk, near trunk lock	
C500 (6 pins)	Behind LH front speaker	7000- 6-1
C501 (4 pins)	Behind LH front speaker	7000- 6-1
C502 (4 pins)	Behind RH front speaker	7000- 7-2
C503 (8 pins)	In LH front door	7000- 6-3
C550 (2 pins)	Under center console	
C551 (2 pins)	Under center console	
C560 (2 pins)	In LH front door	
GROUNDS		
G102 (Main Body Ground)	LH front of engine compartment, on fender well	7000- 2-3
G103 (Engine Ground)	Front of engine, under diagnostic connector	7000- 1-1
G104	Lower RH front of engine compartment	7000- 1-3
G200 (Front Interior Ground)	Under LH side of dash, near brake bracket	7000- 4-5

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COMPONENTS		Page-Figure
G201 (Steering Column Ground)	Upper part of steering column	7000- 5-2
G301 (Rear Interior Ground)	Under LH side of rear seat	7000- 8-4
G302	RH side of trunk	7000- 9-2
G600	Near sunroof switch	

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