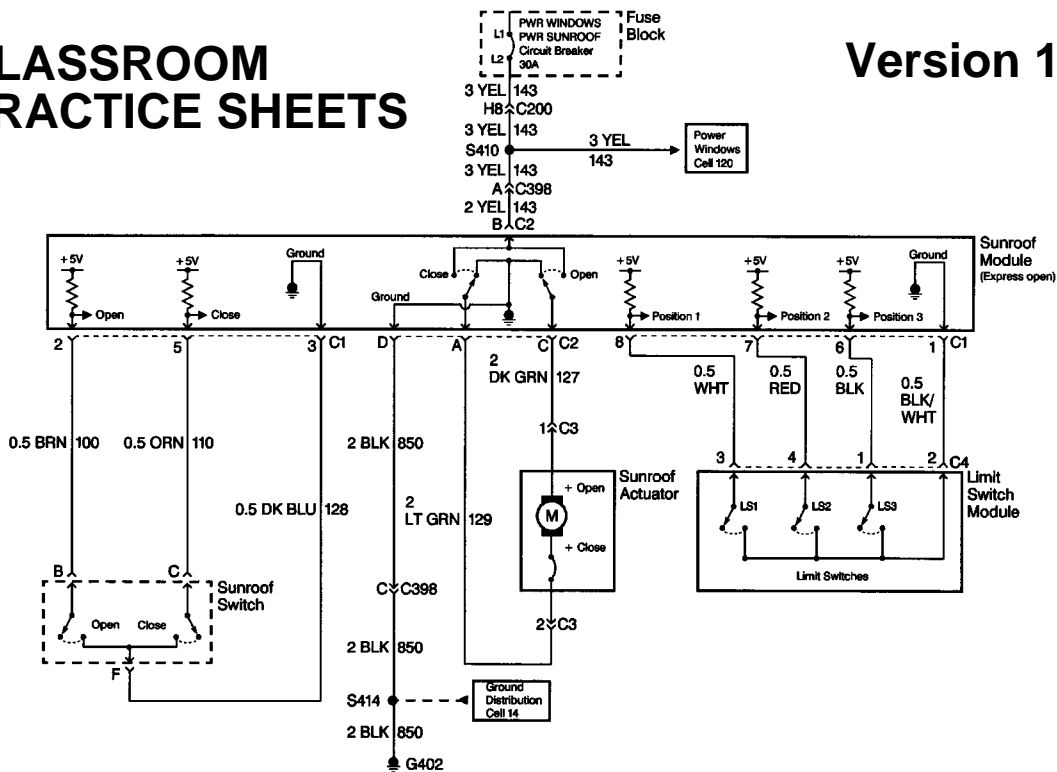


BODY ELECTRICAL

CLASSROOM
PRACTICE SHEETS

Version 1.0



GENERAL MOTORS PRACTICE ELECTRICAL WIRING DIAGRAMS

<http://www.autoshop101.com>

Compiled by Kevin R. Sullivan

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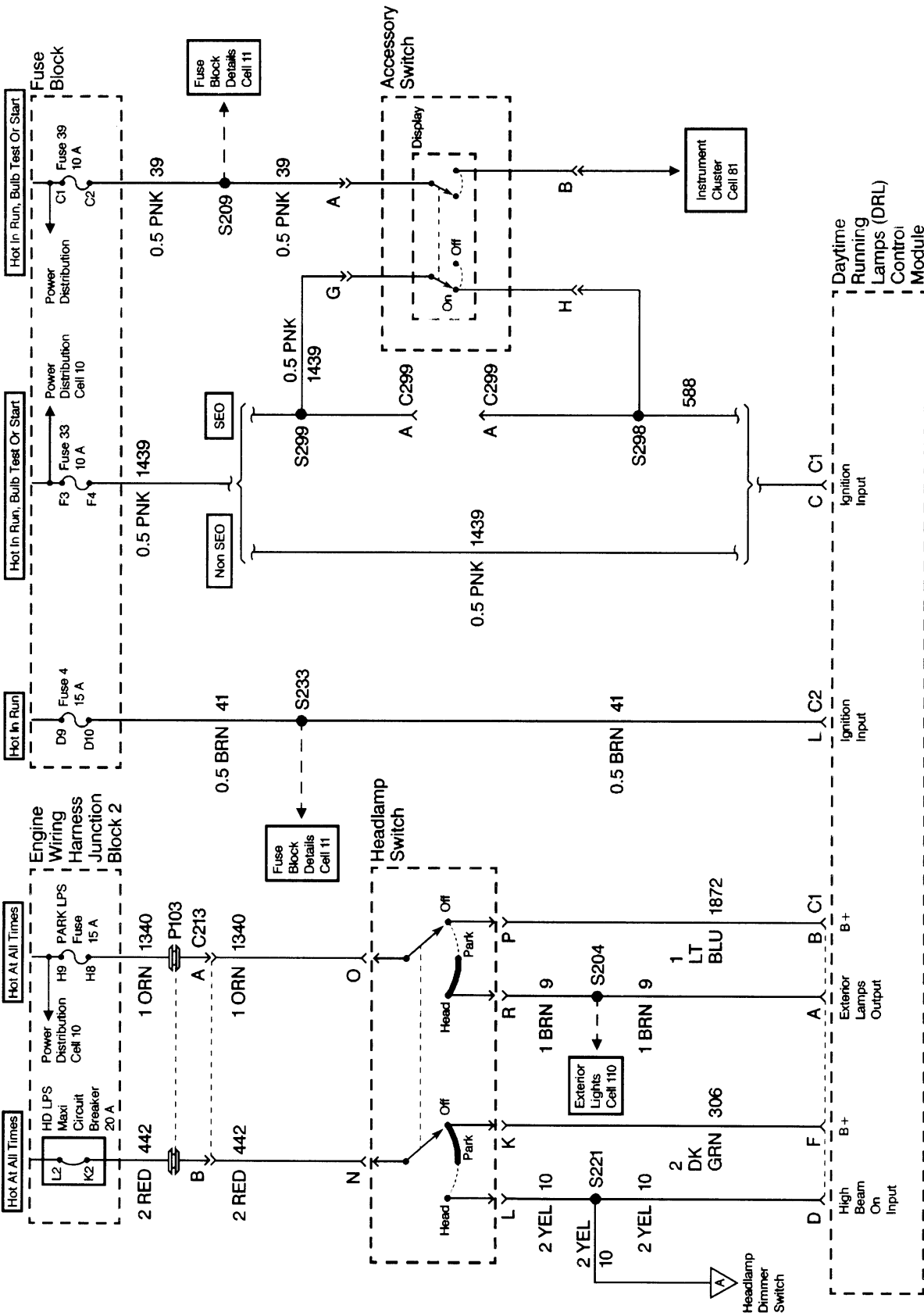
I. Lighting

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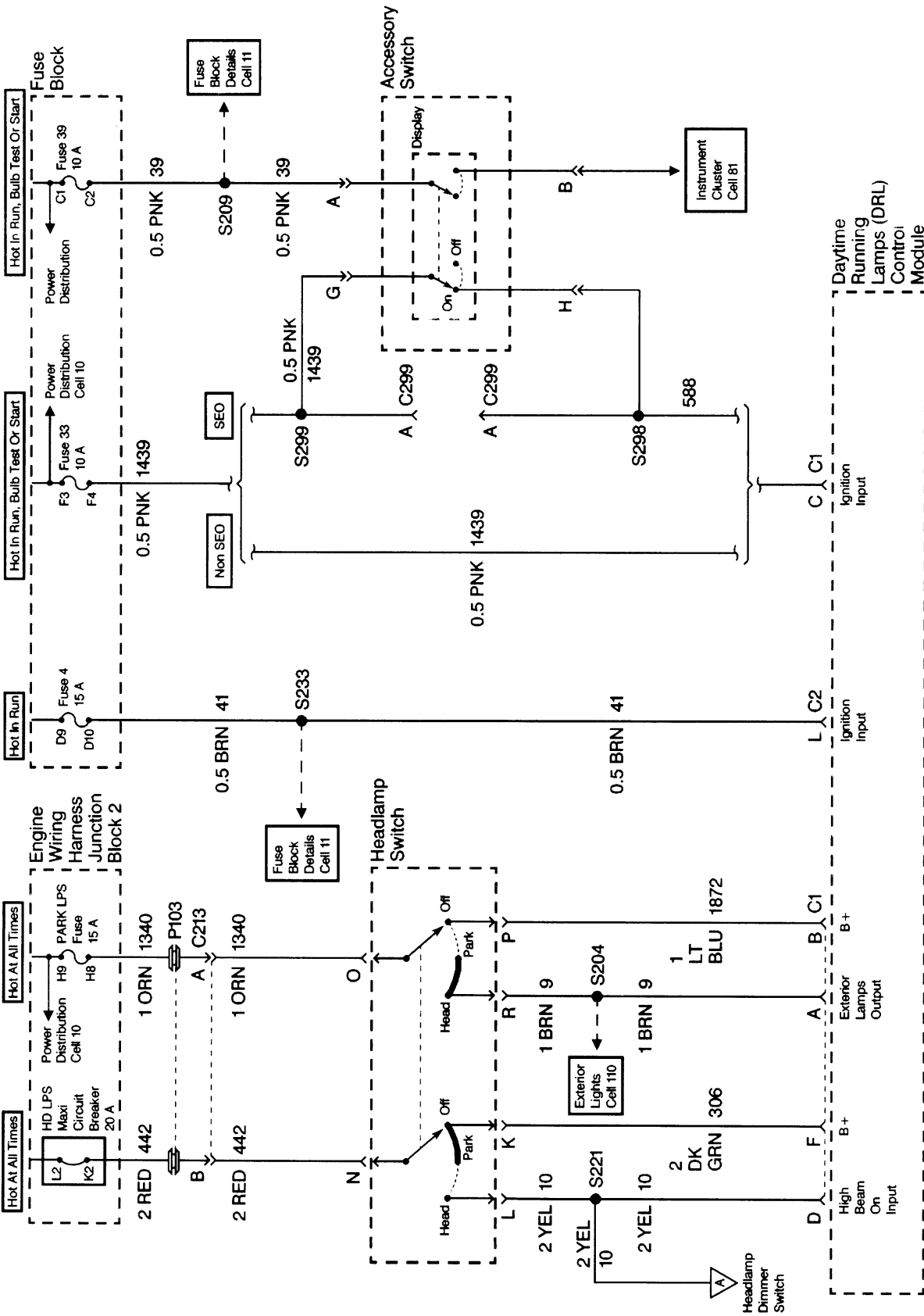
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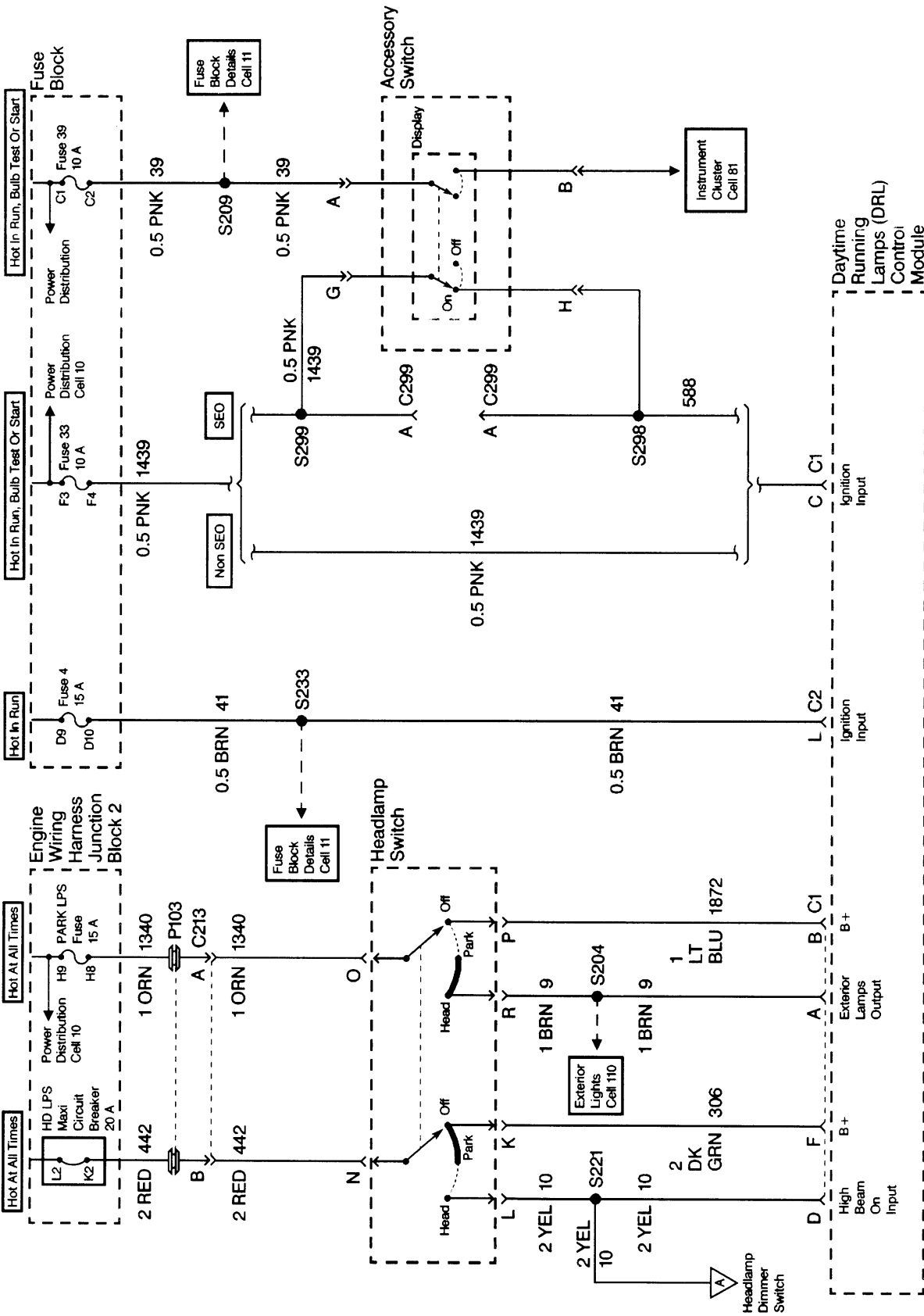
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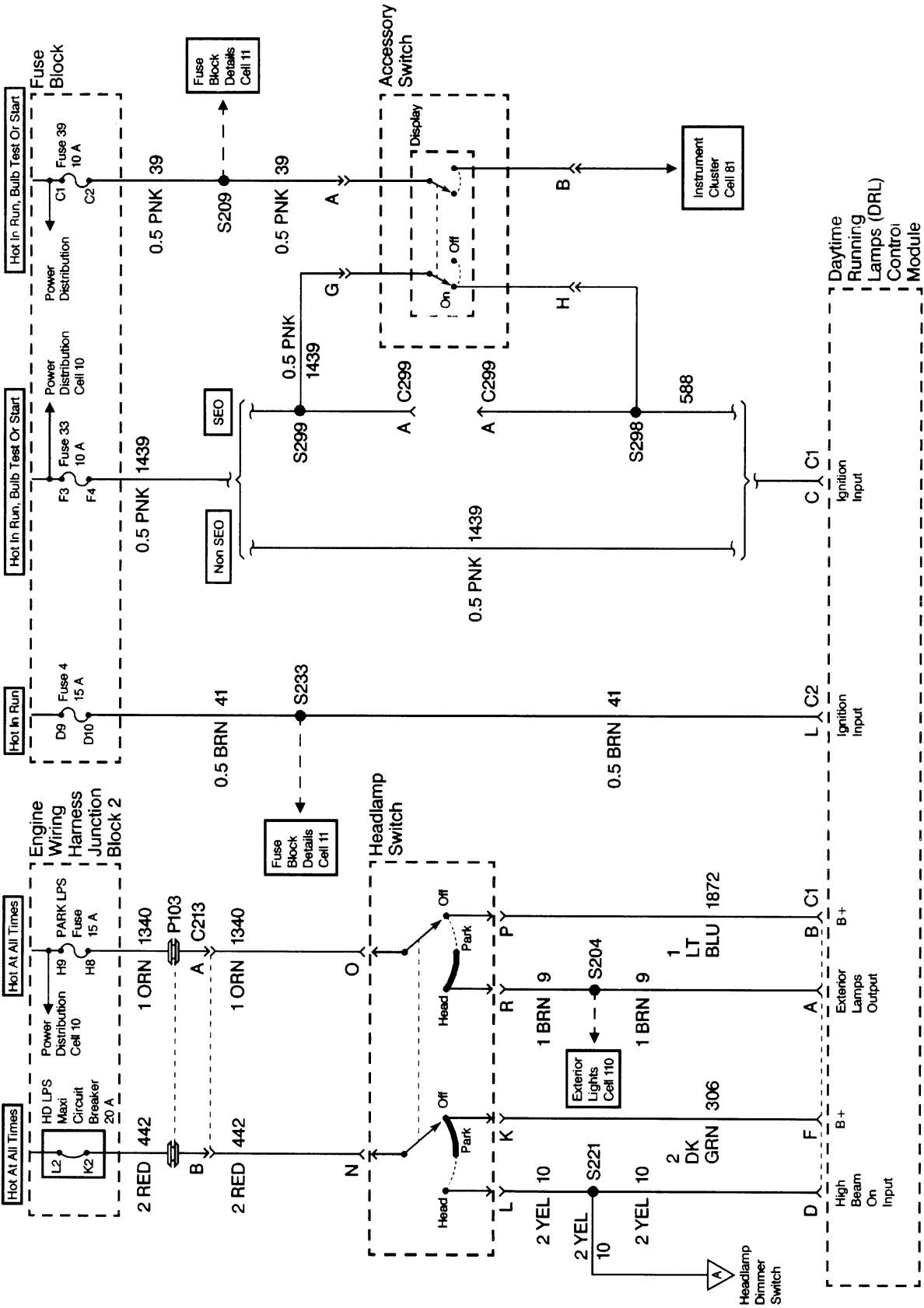
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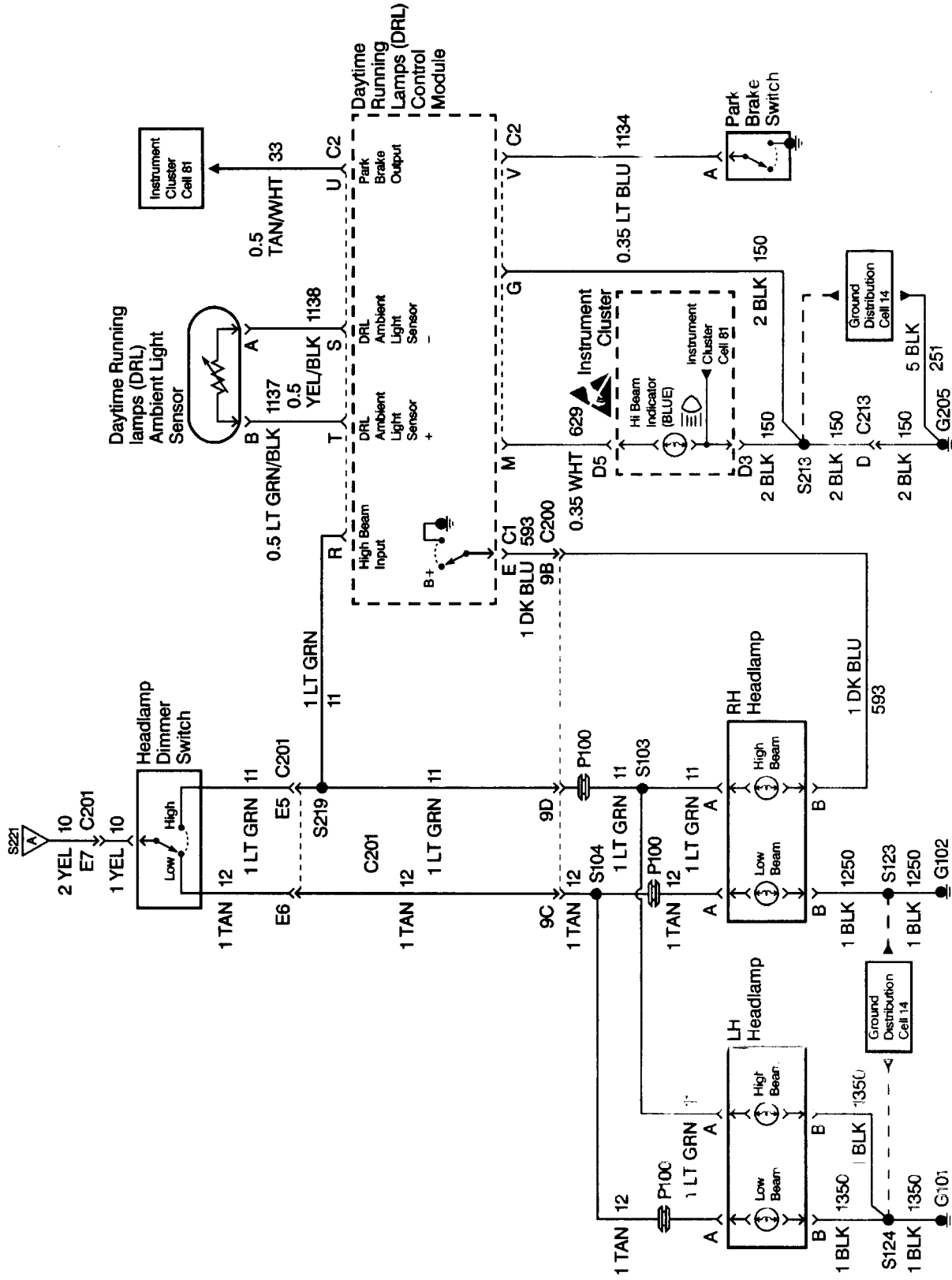
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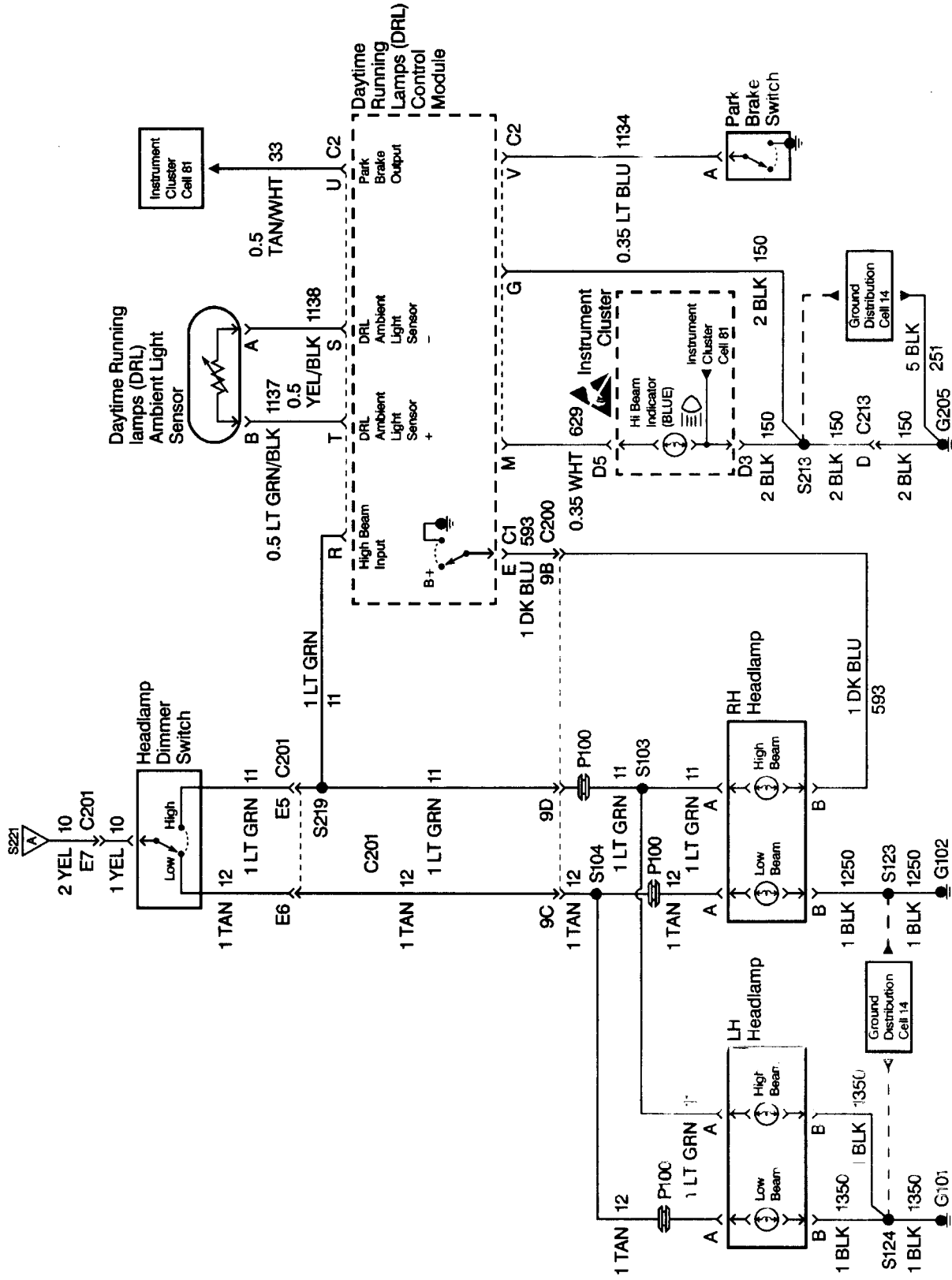
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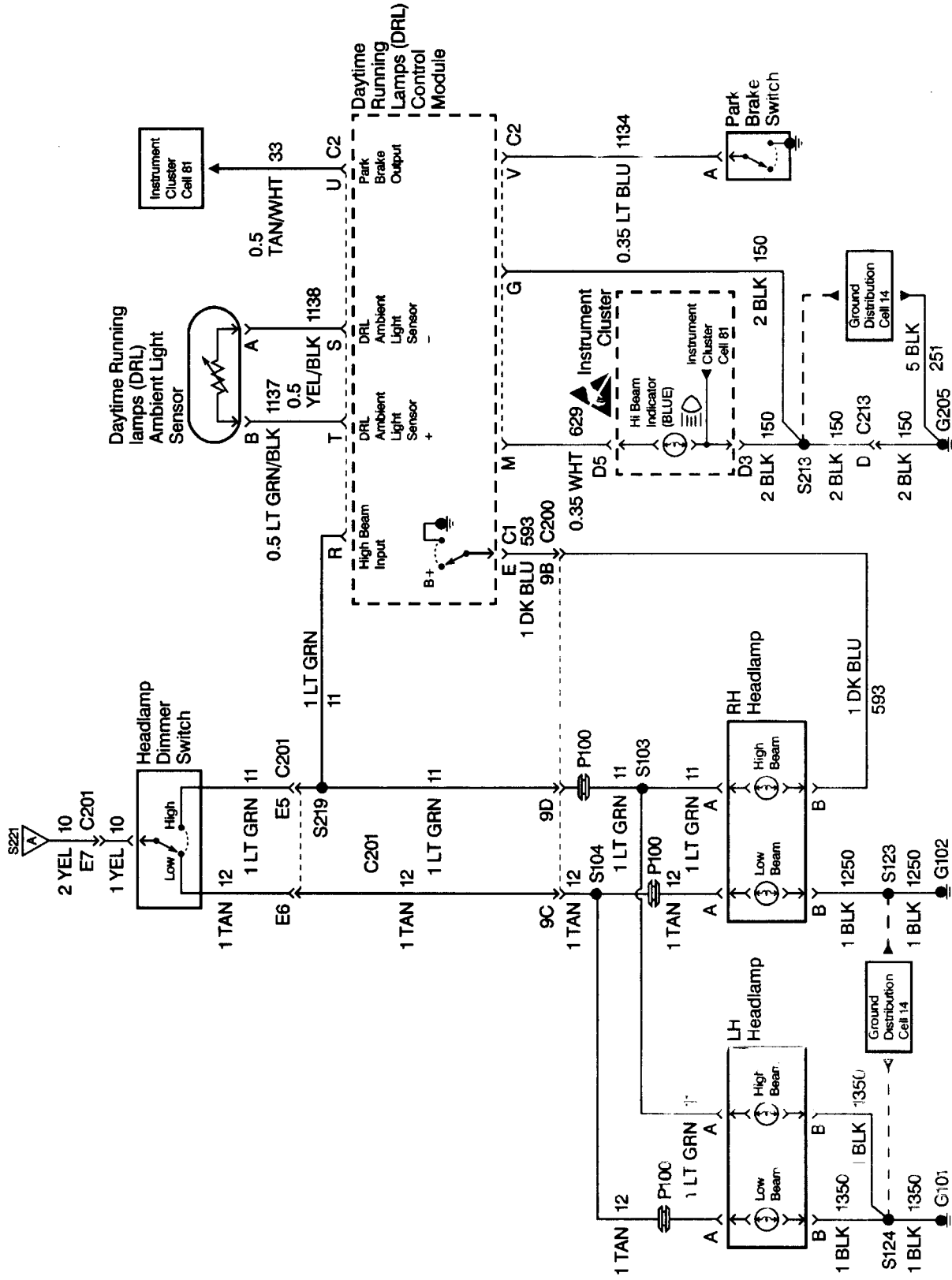
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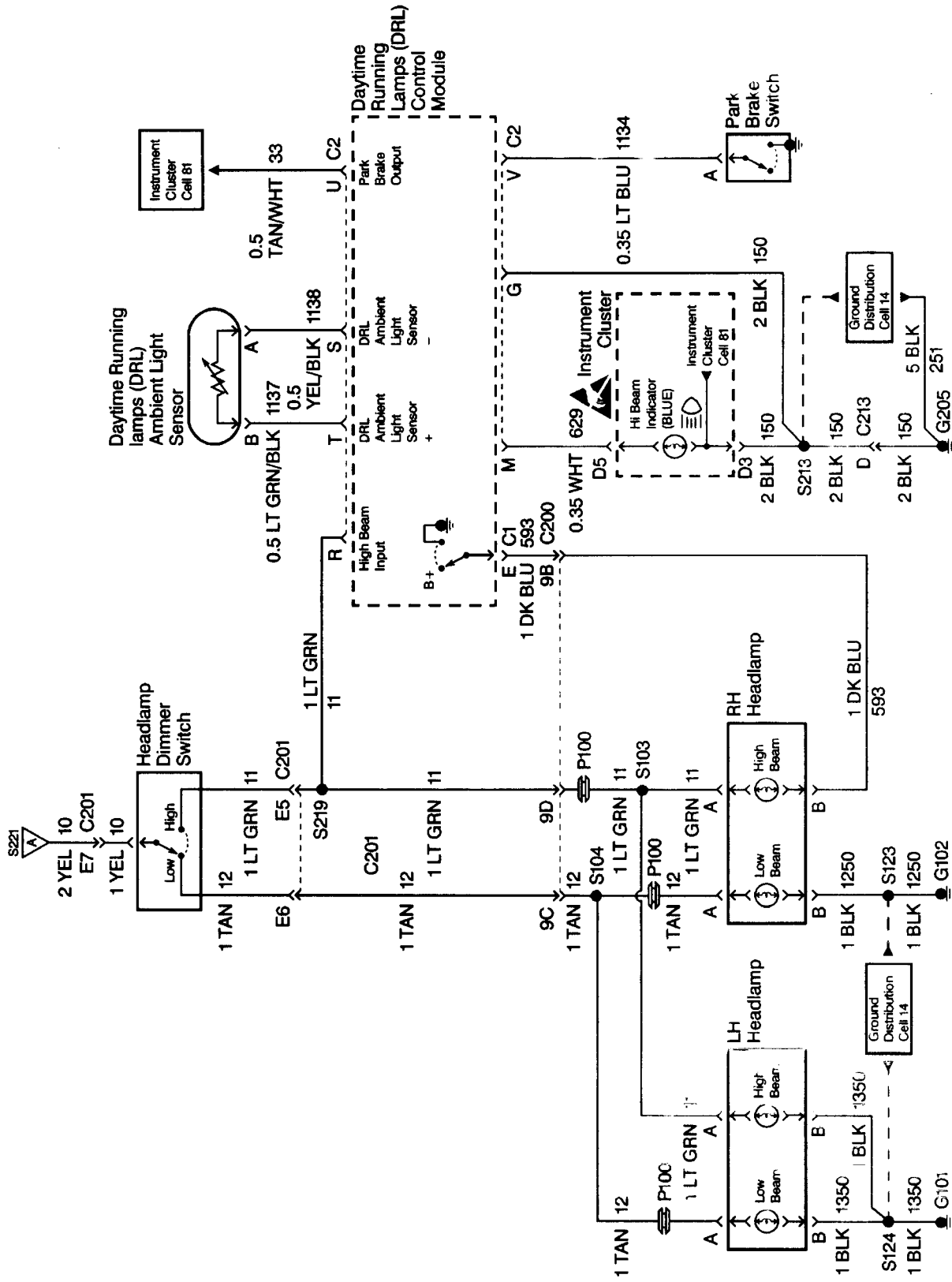
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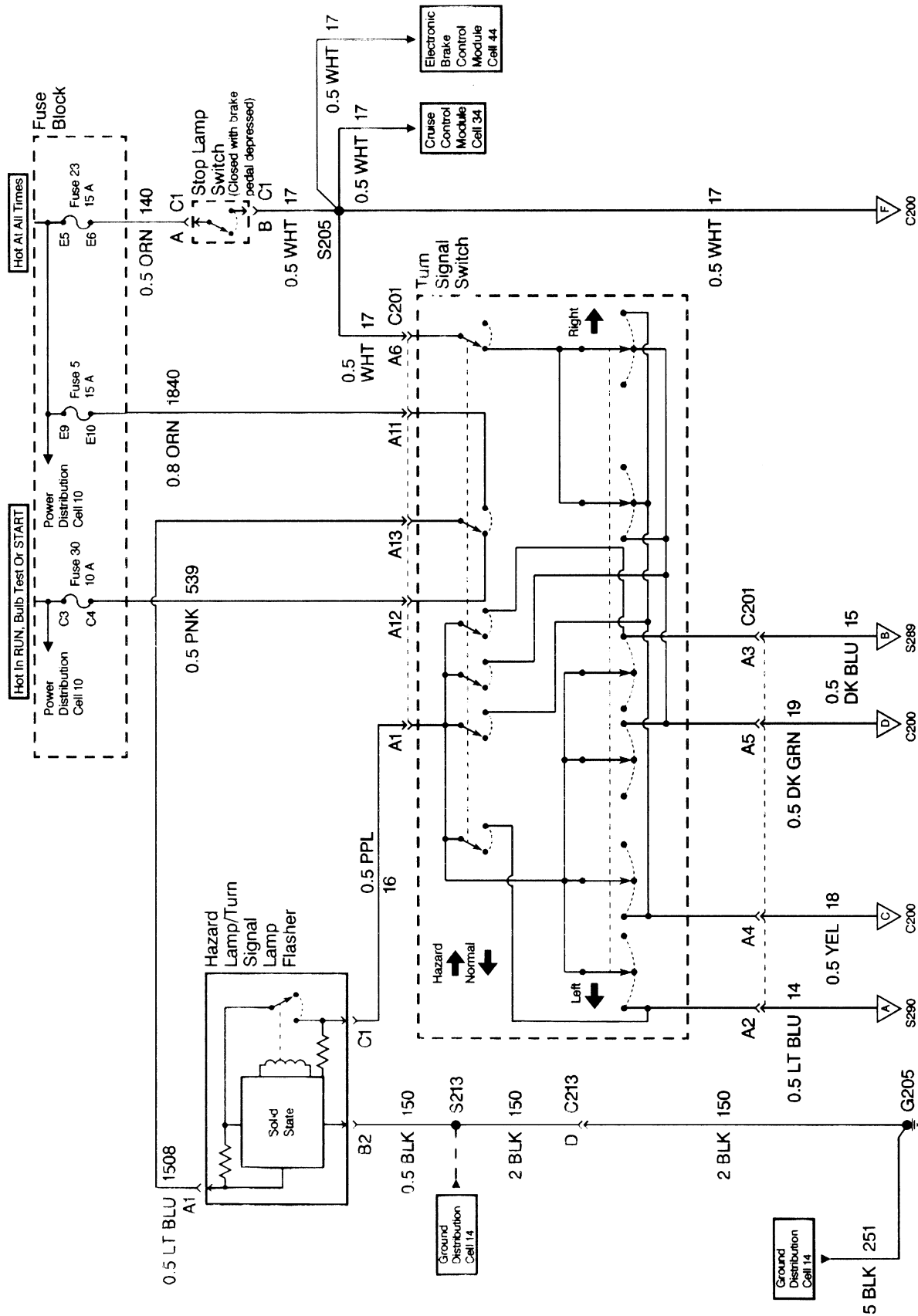
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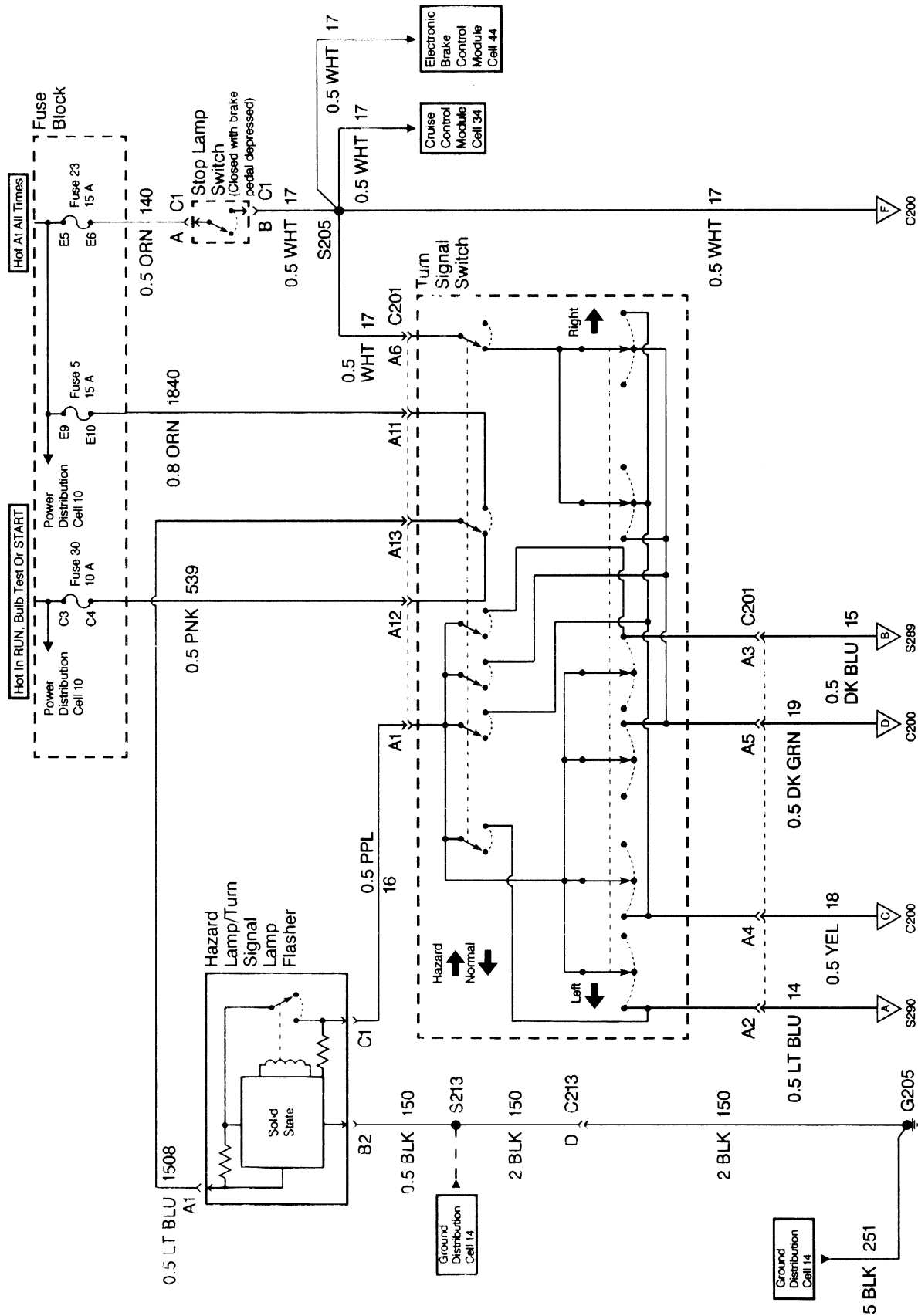
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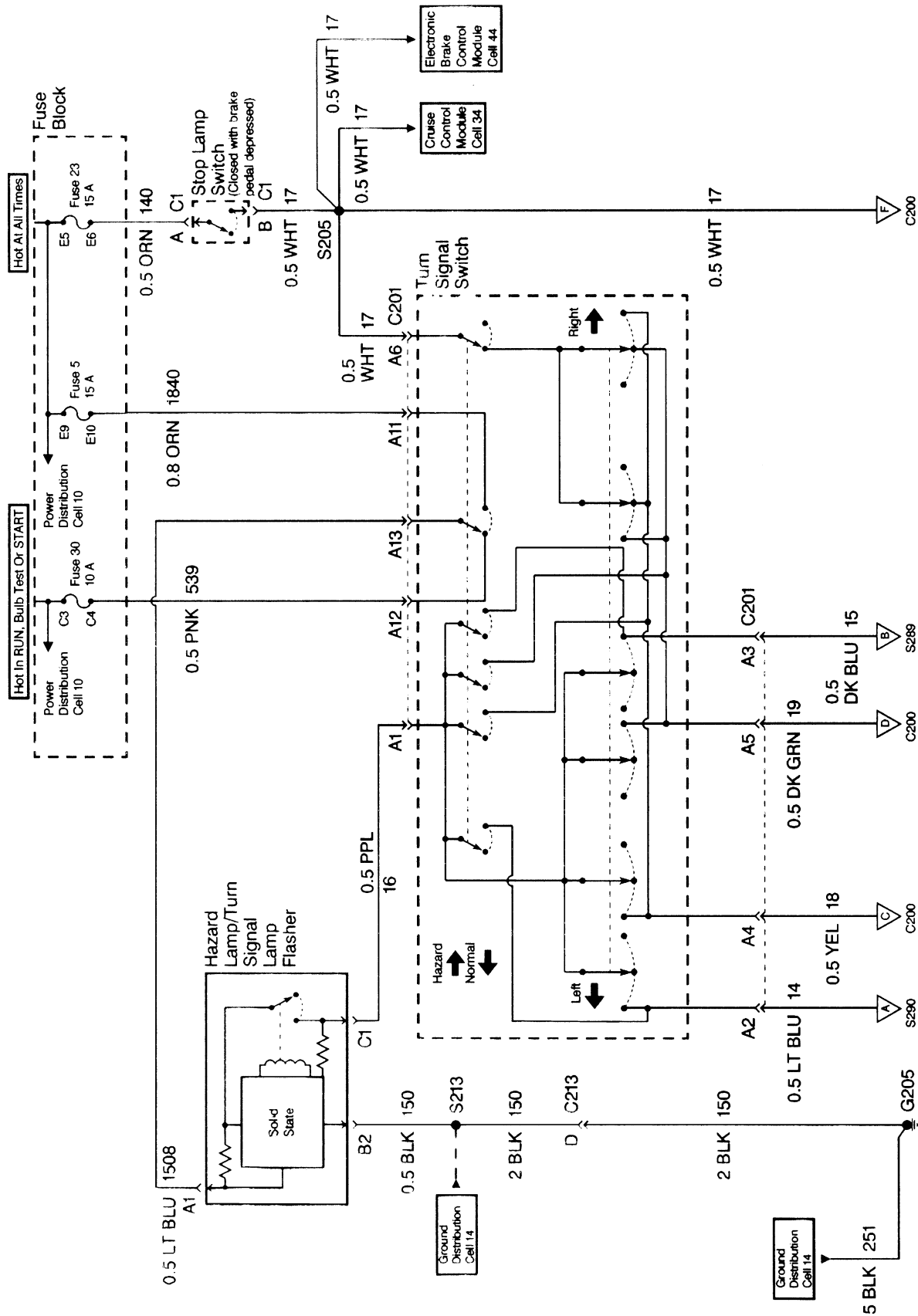
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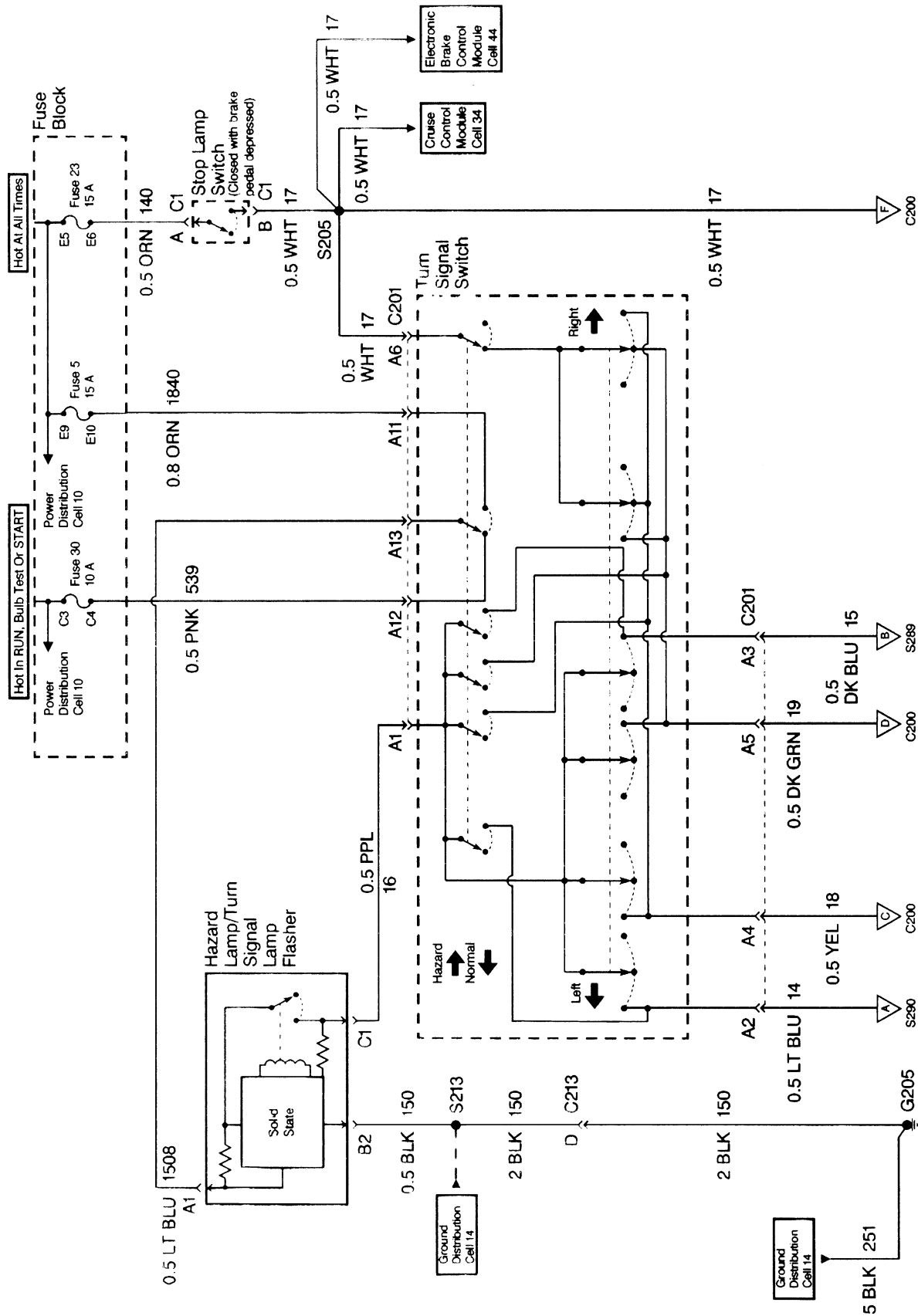
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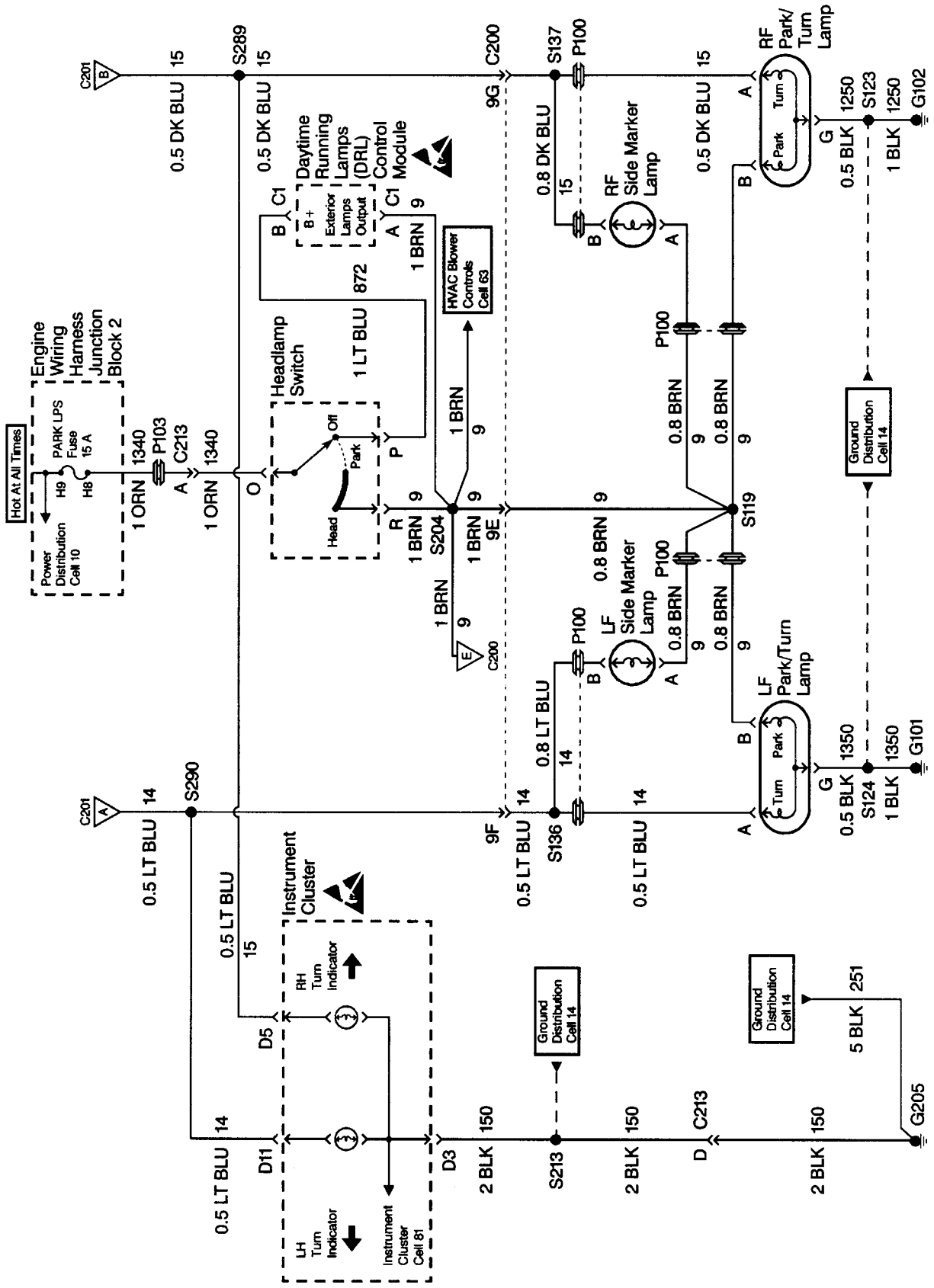
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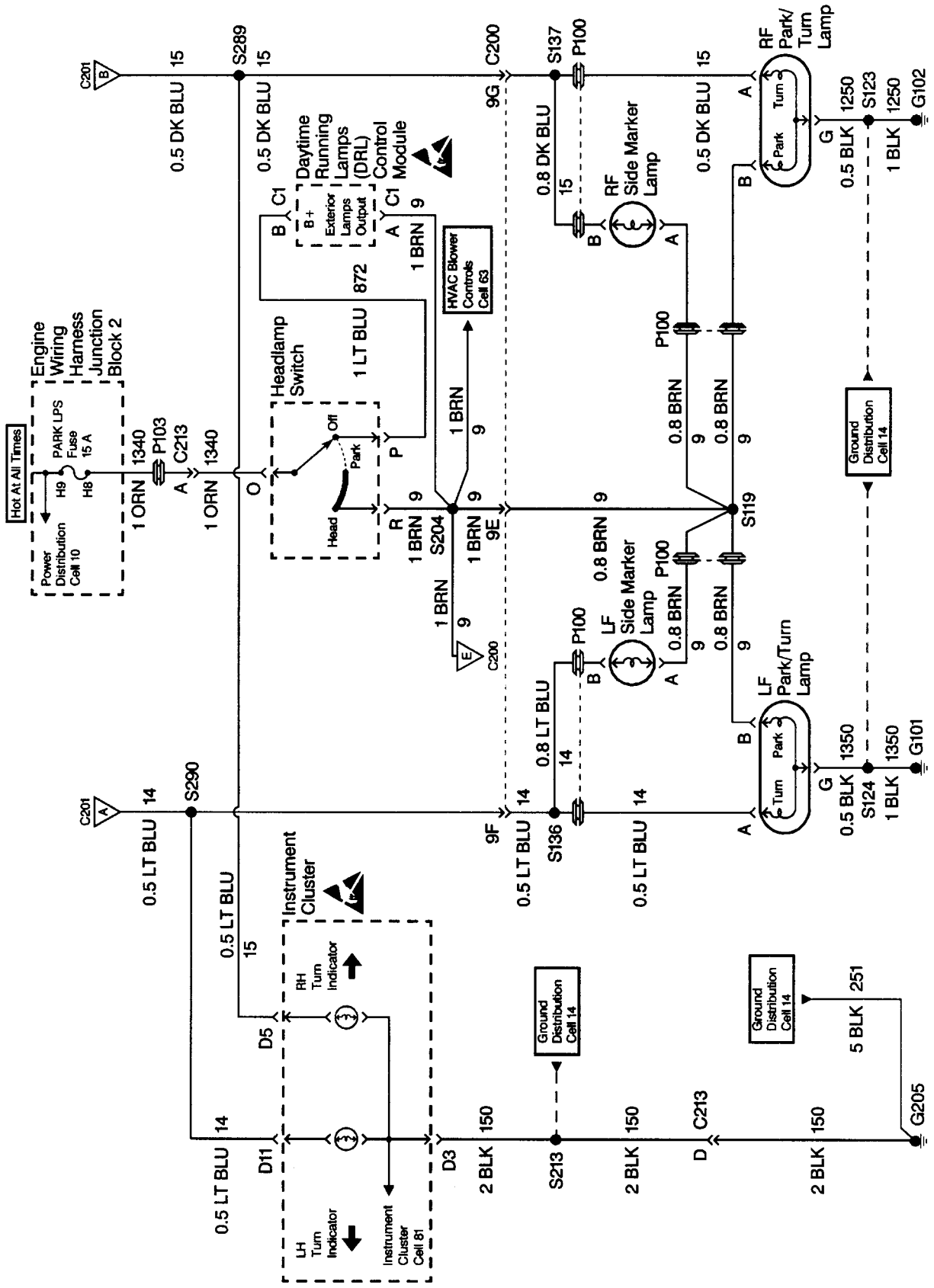
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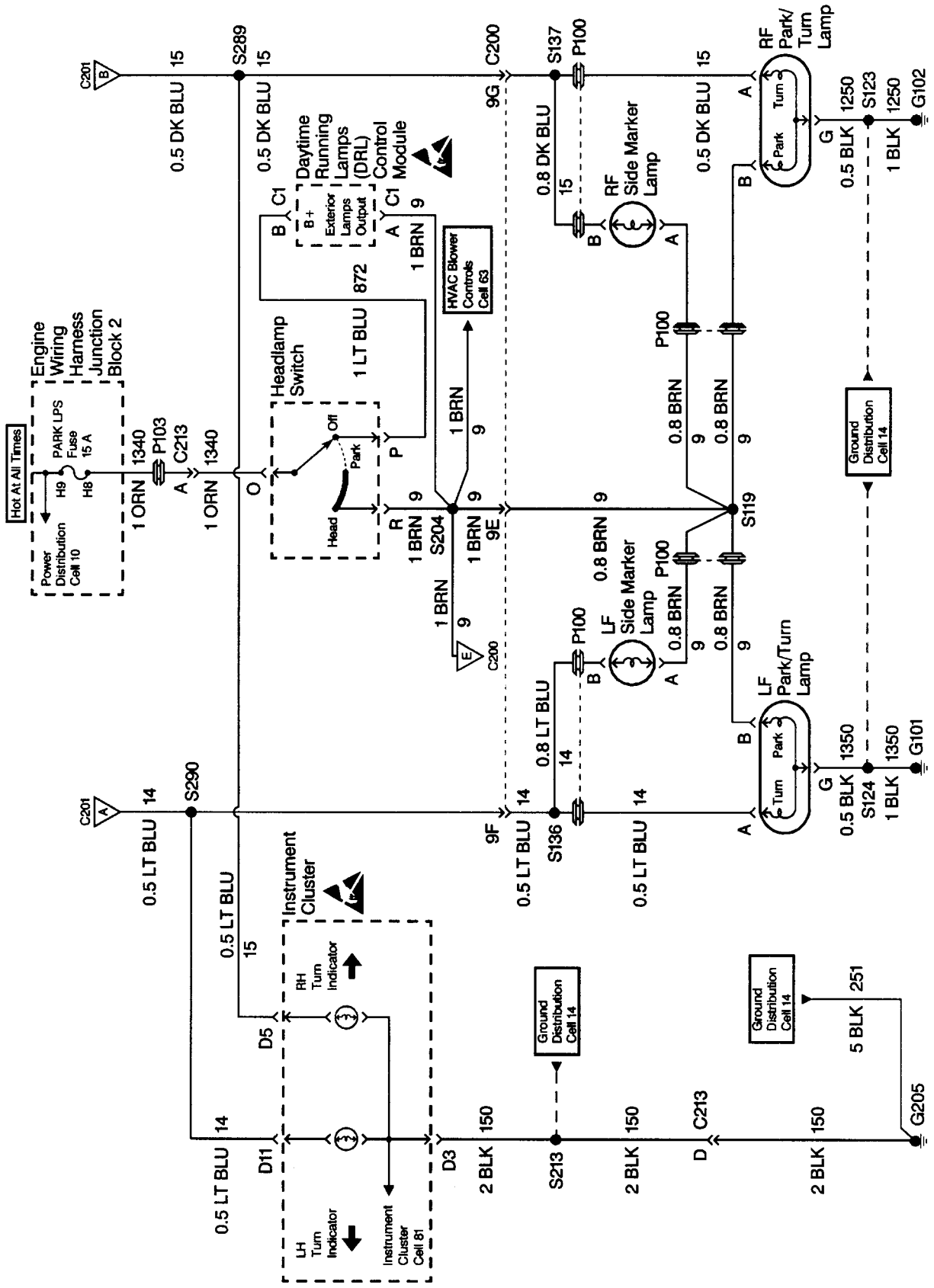
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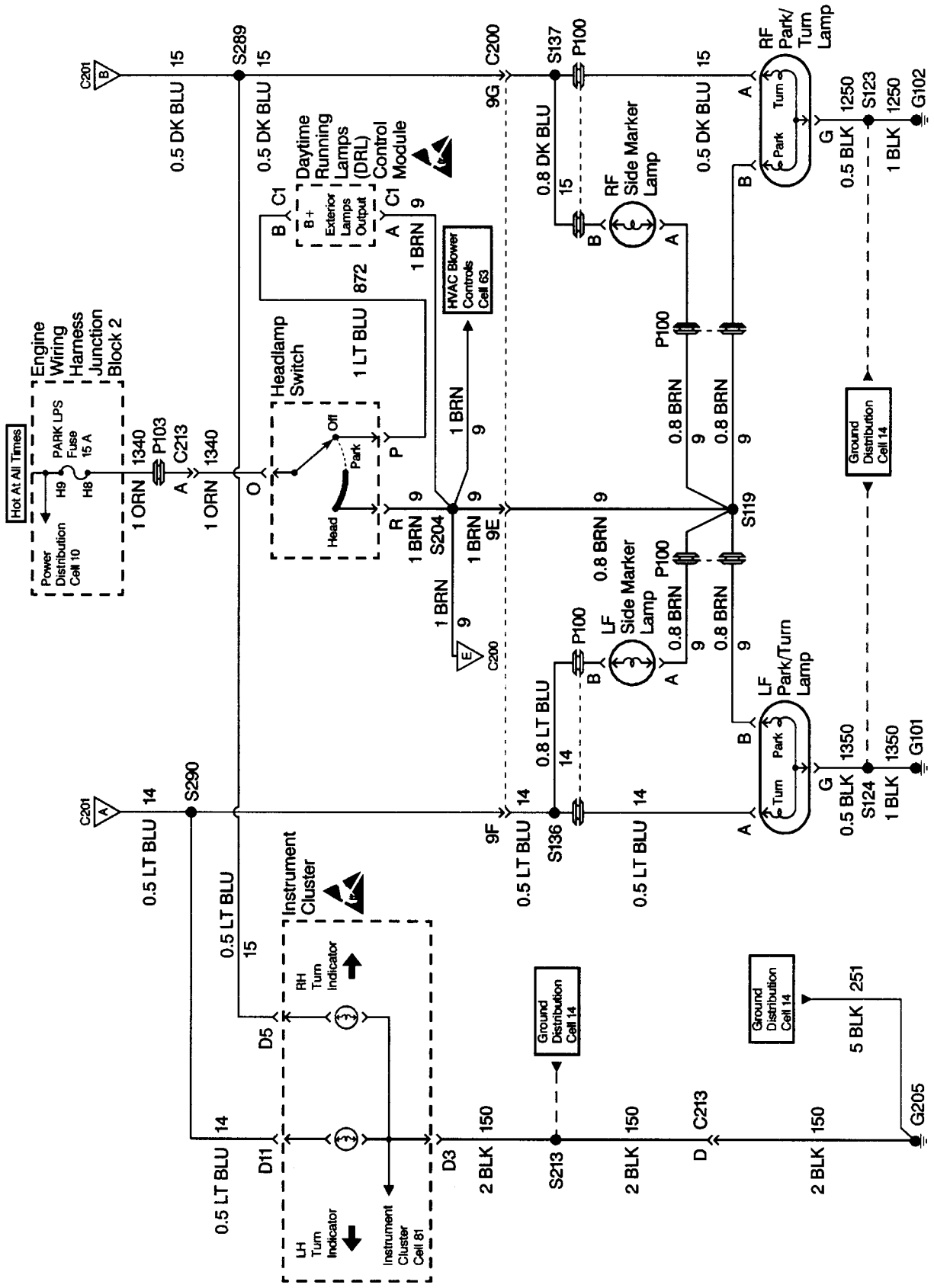
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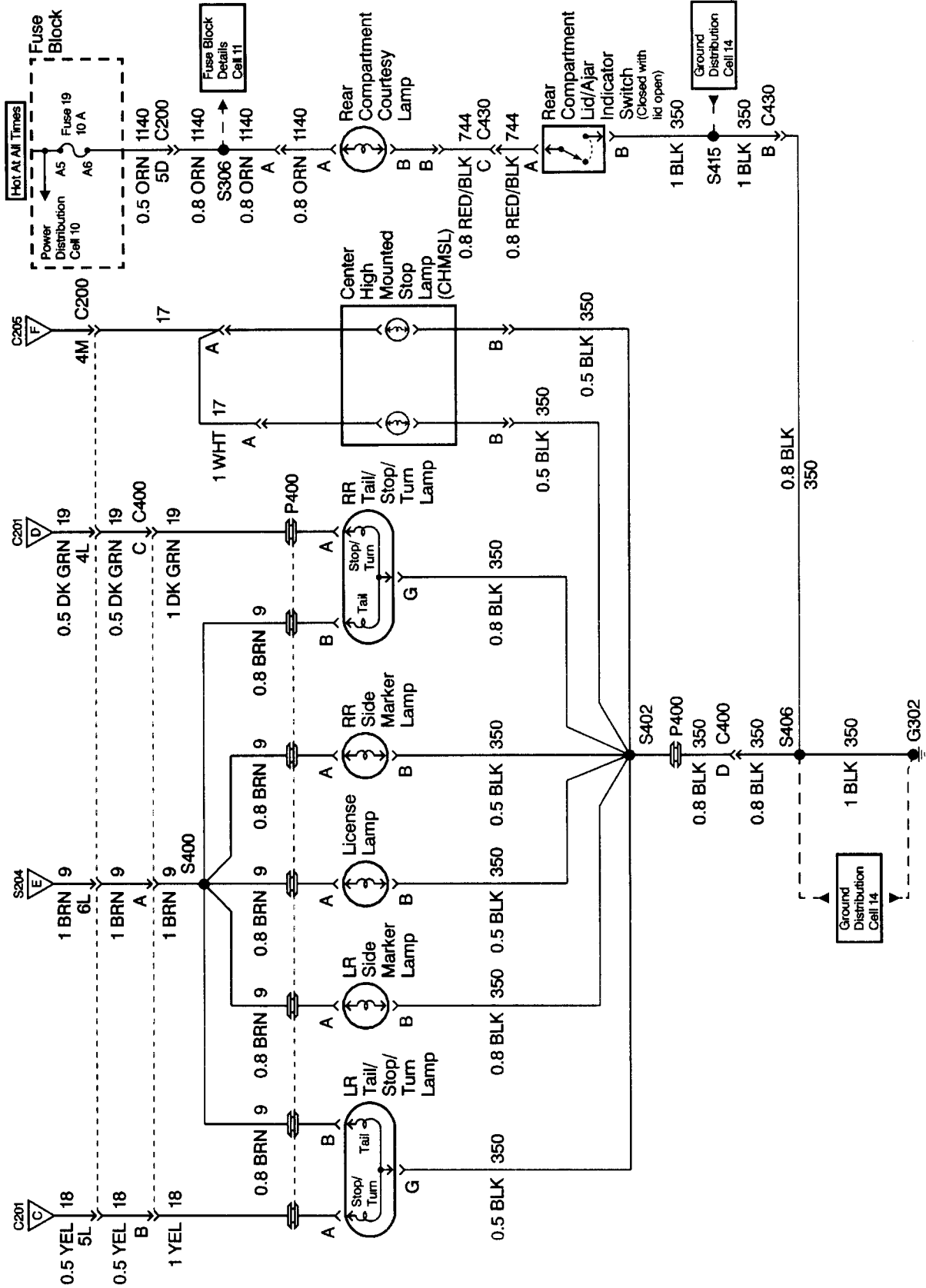
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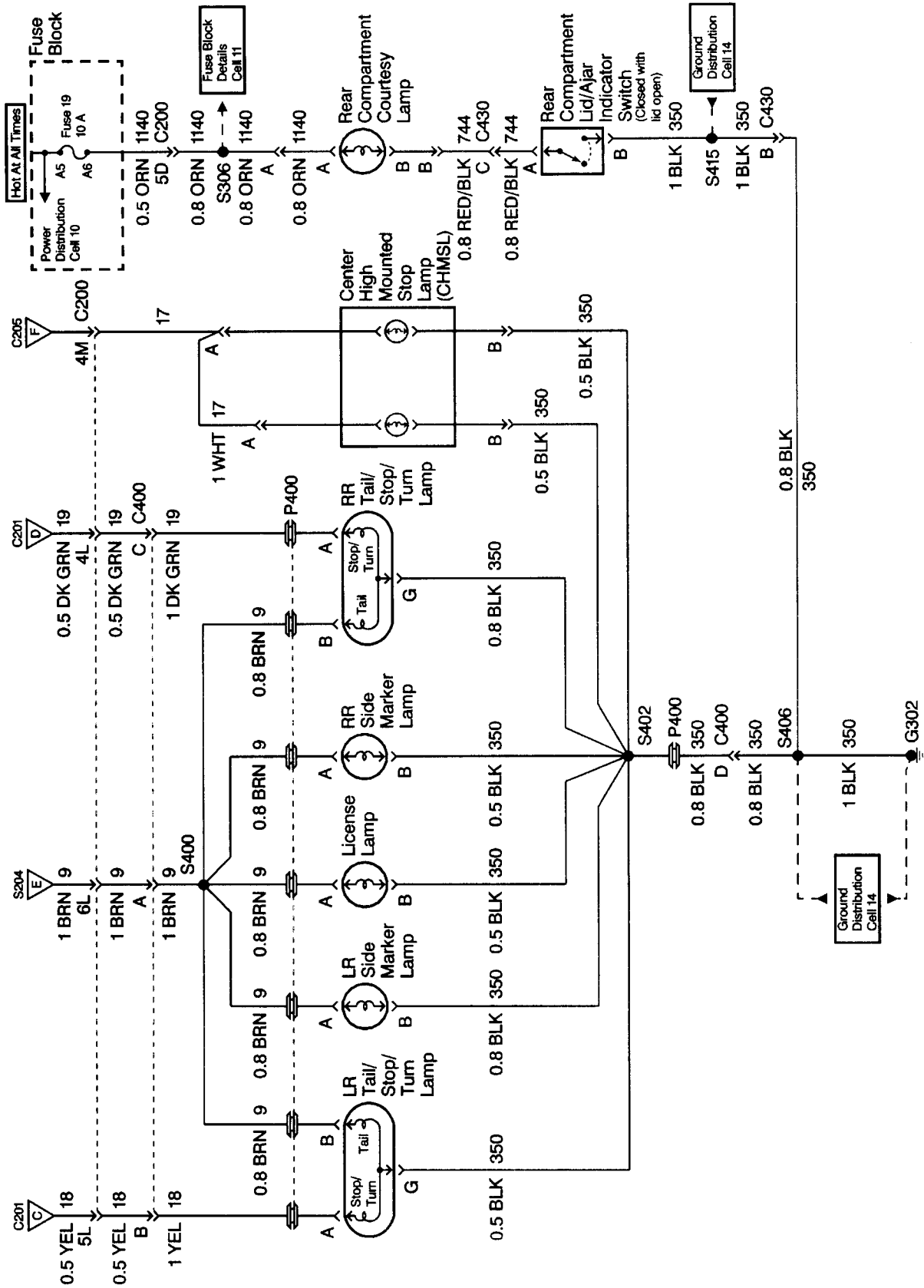
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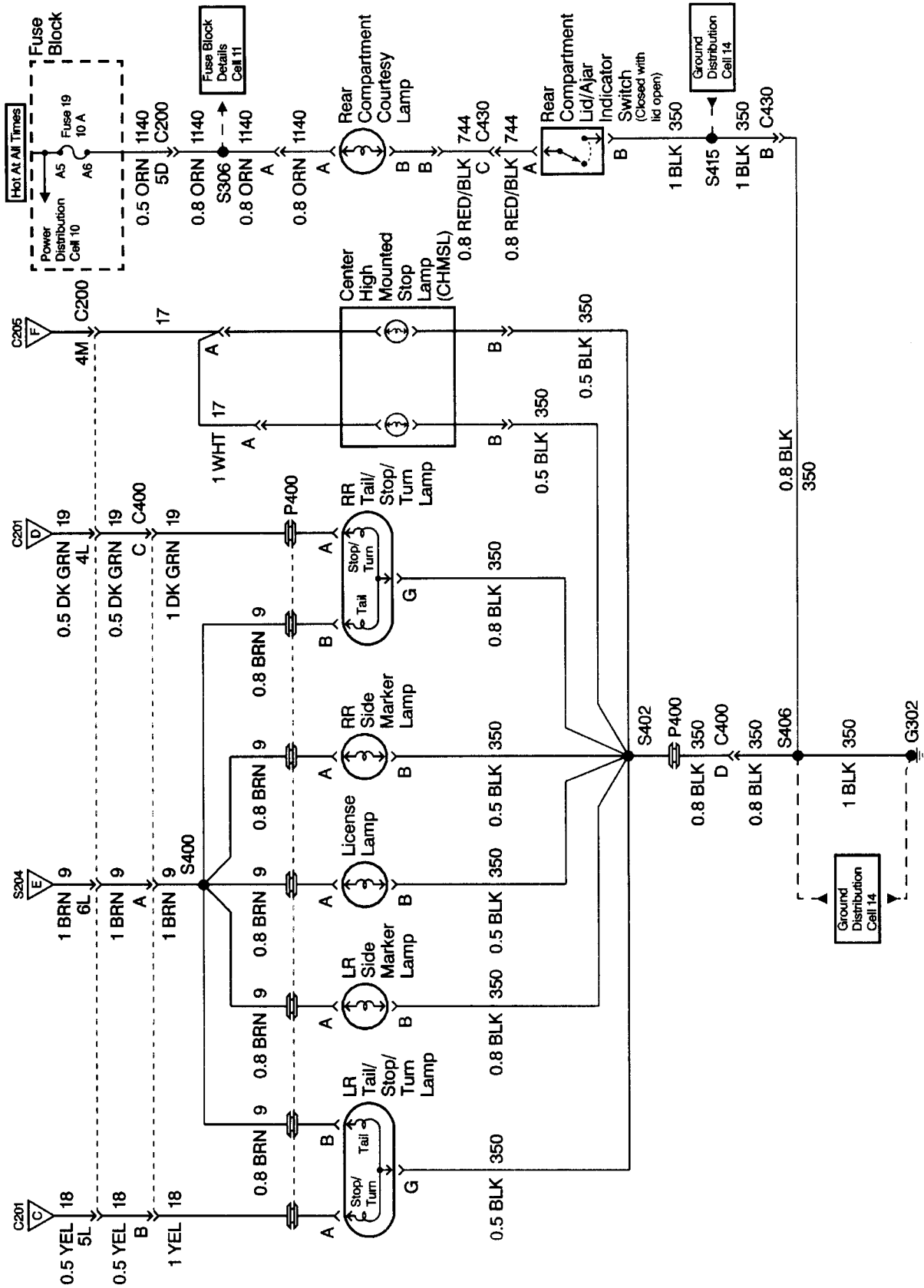
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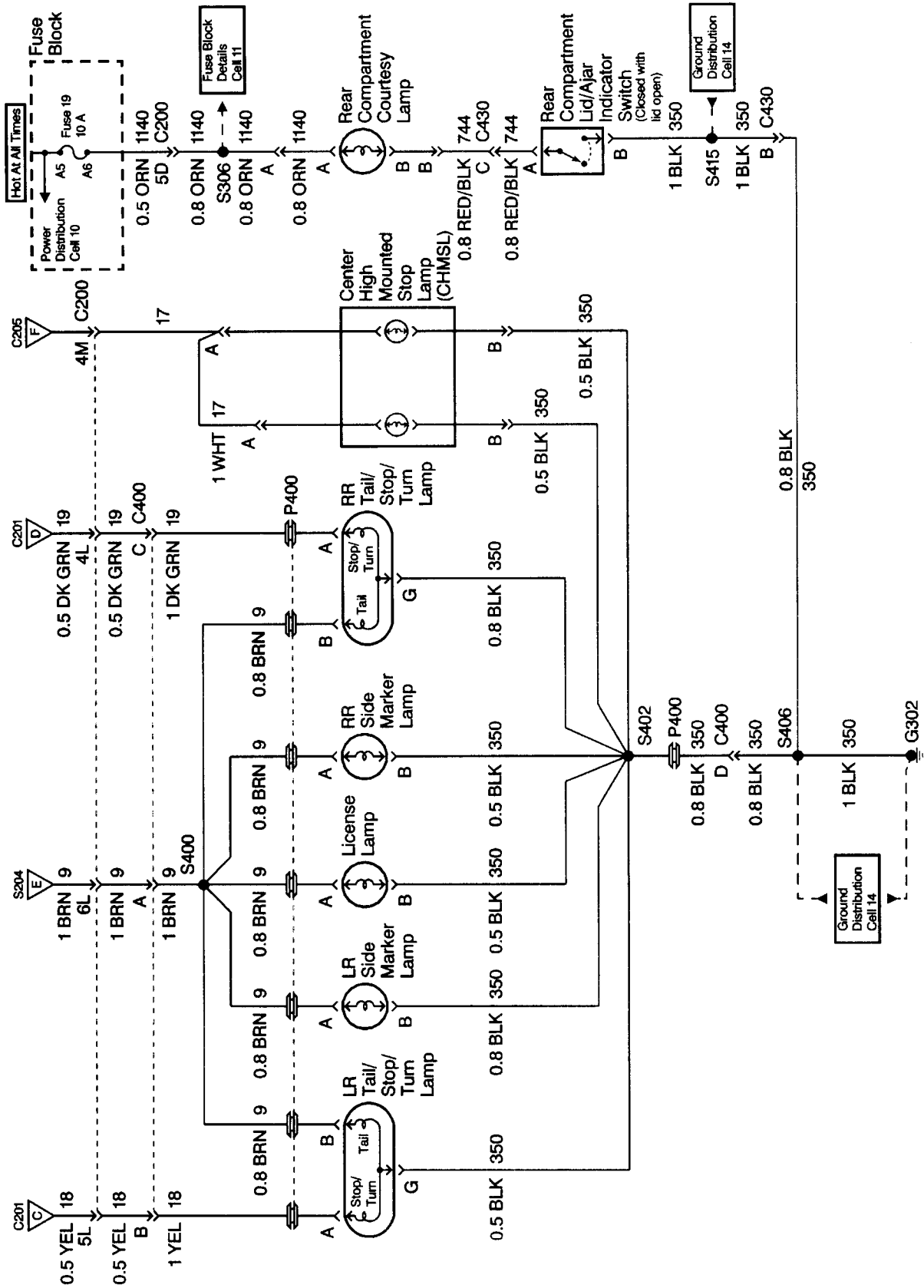
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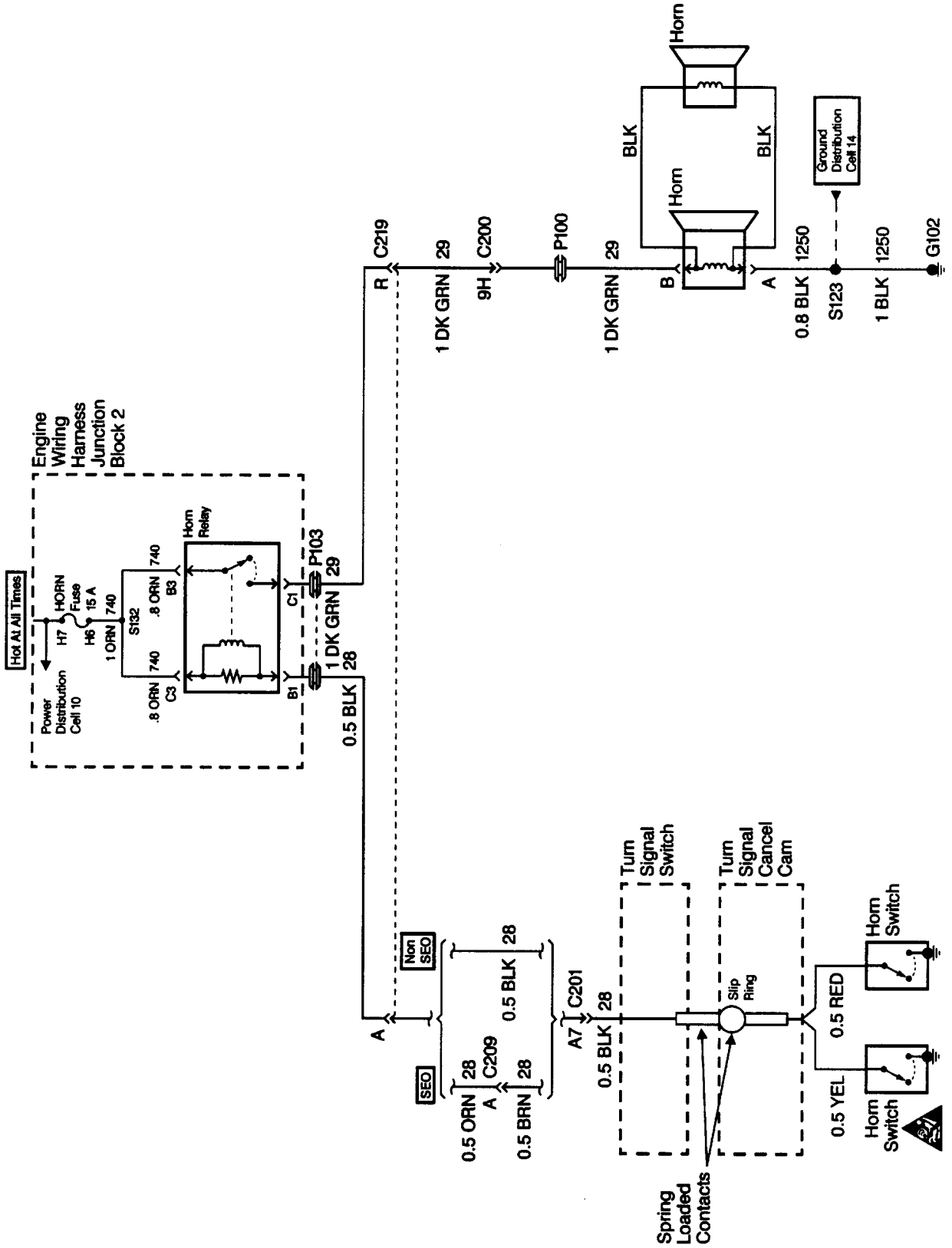
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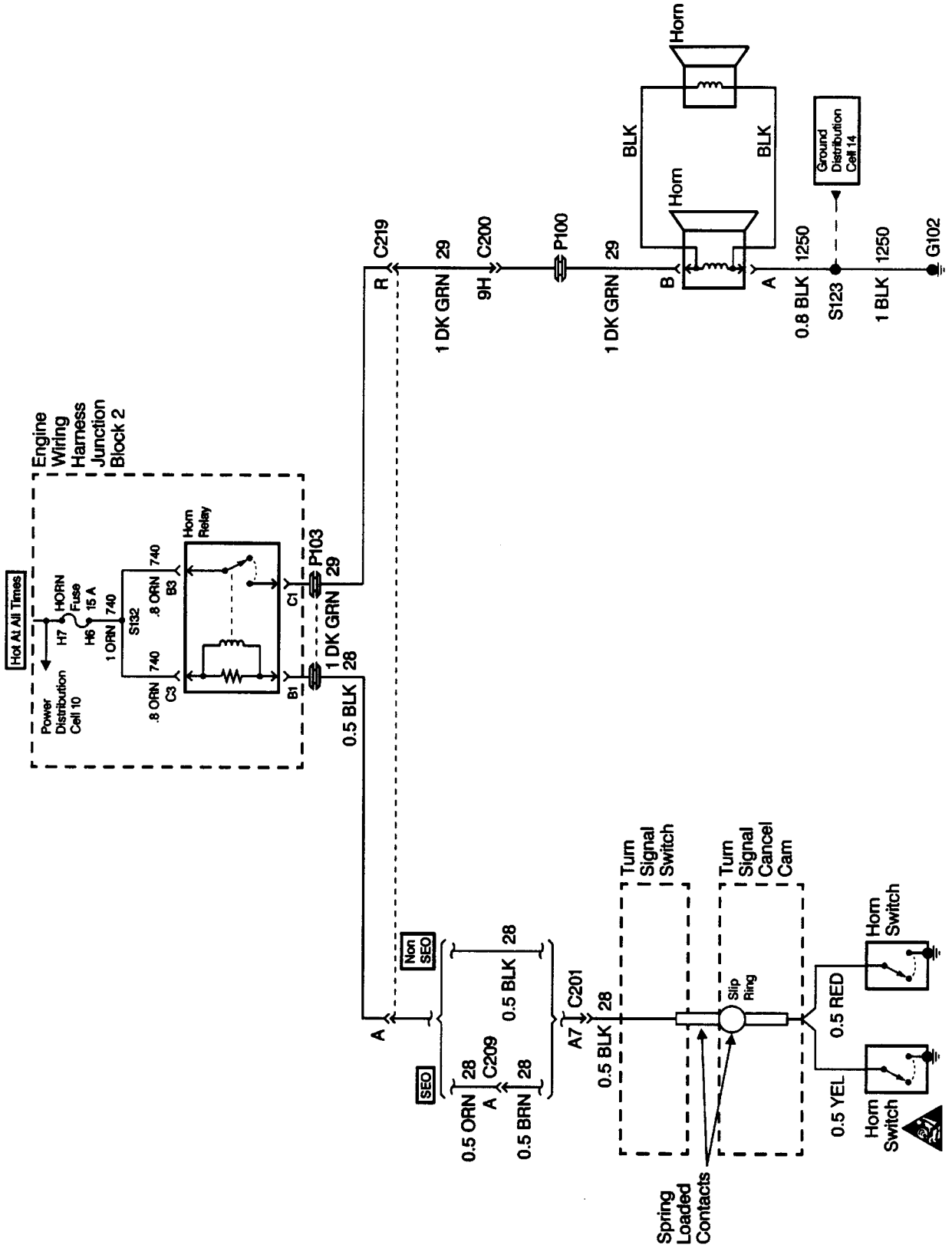
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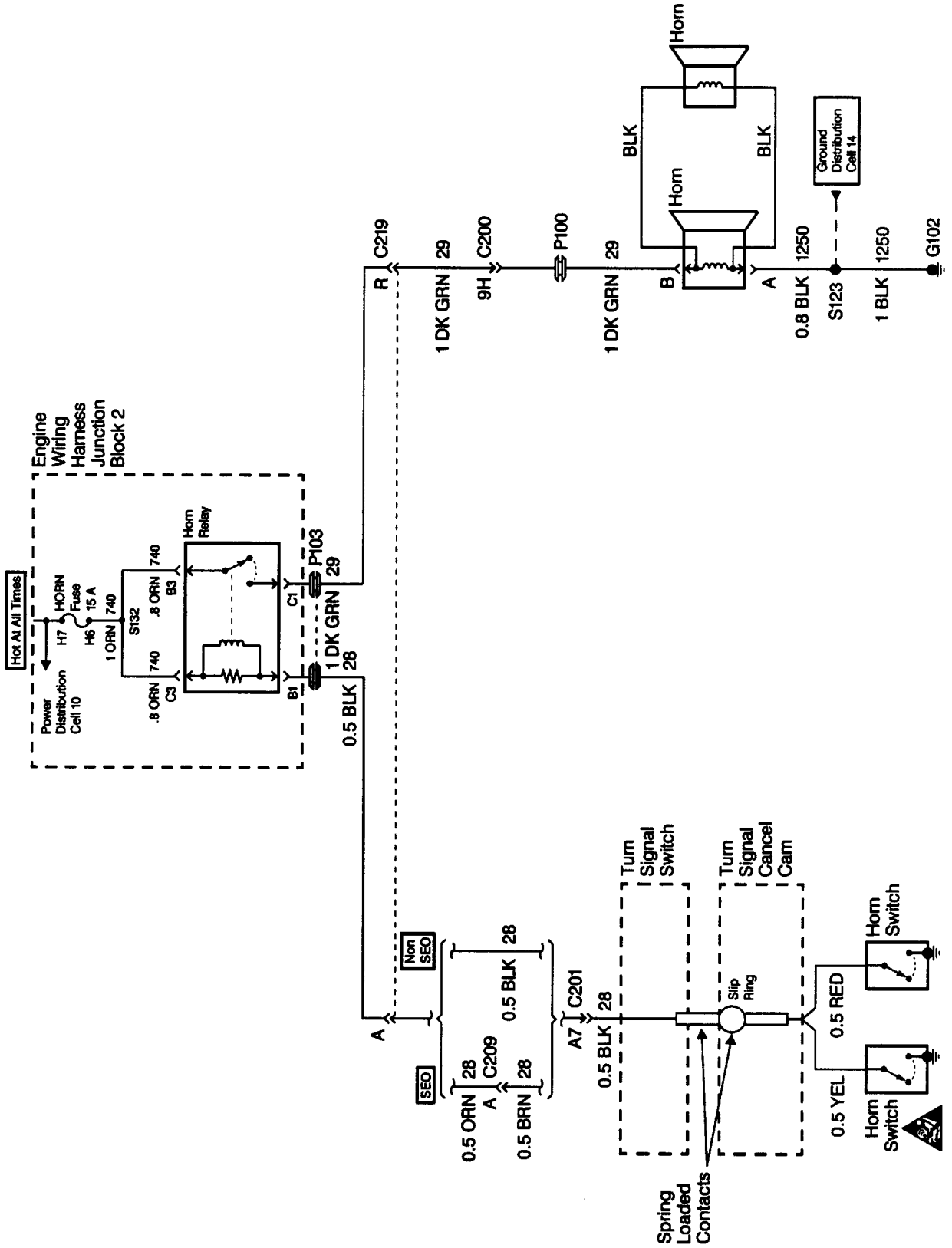
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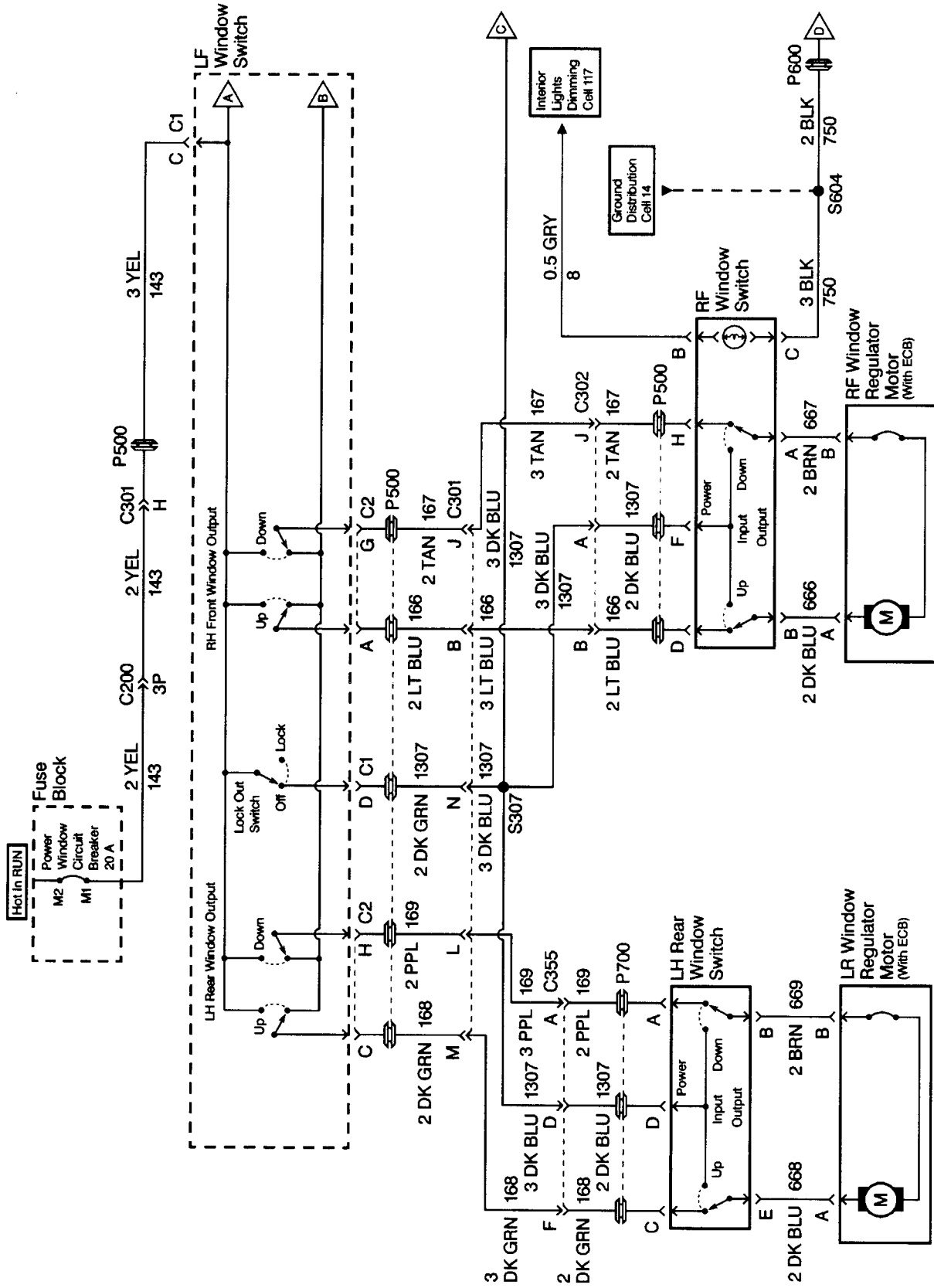
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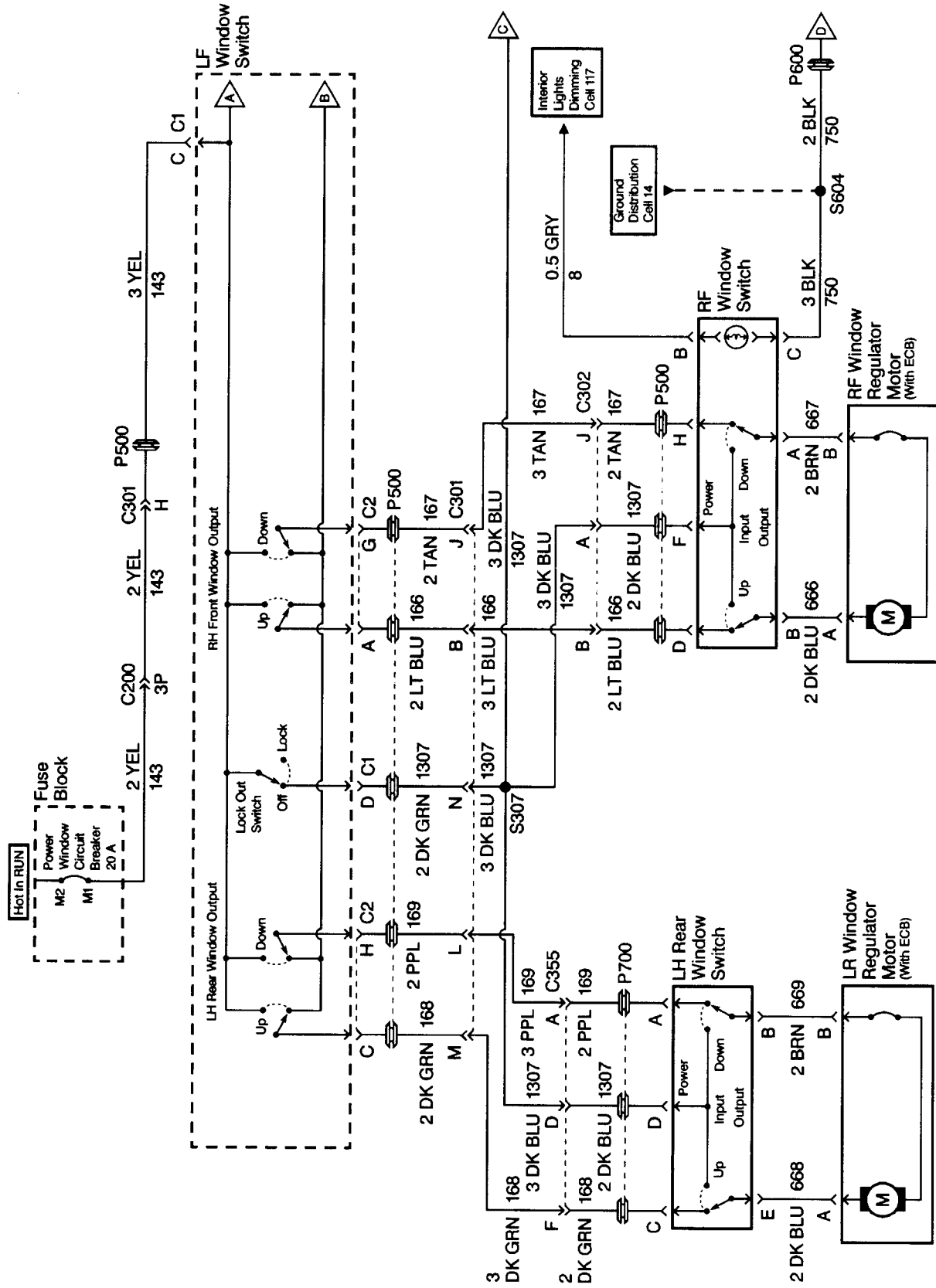
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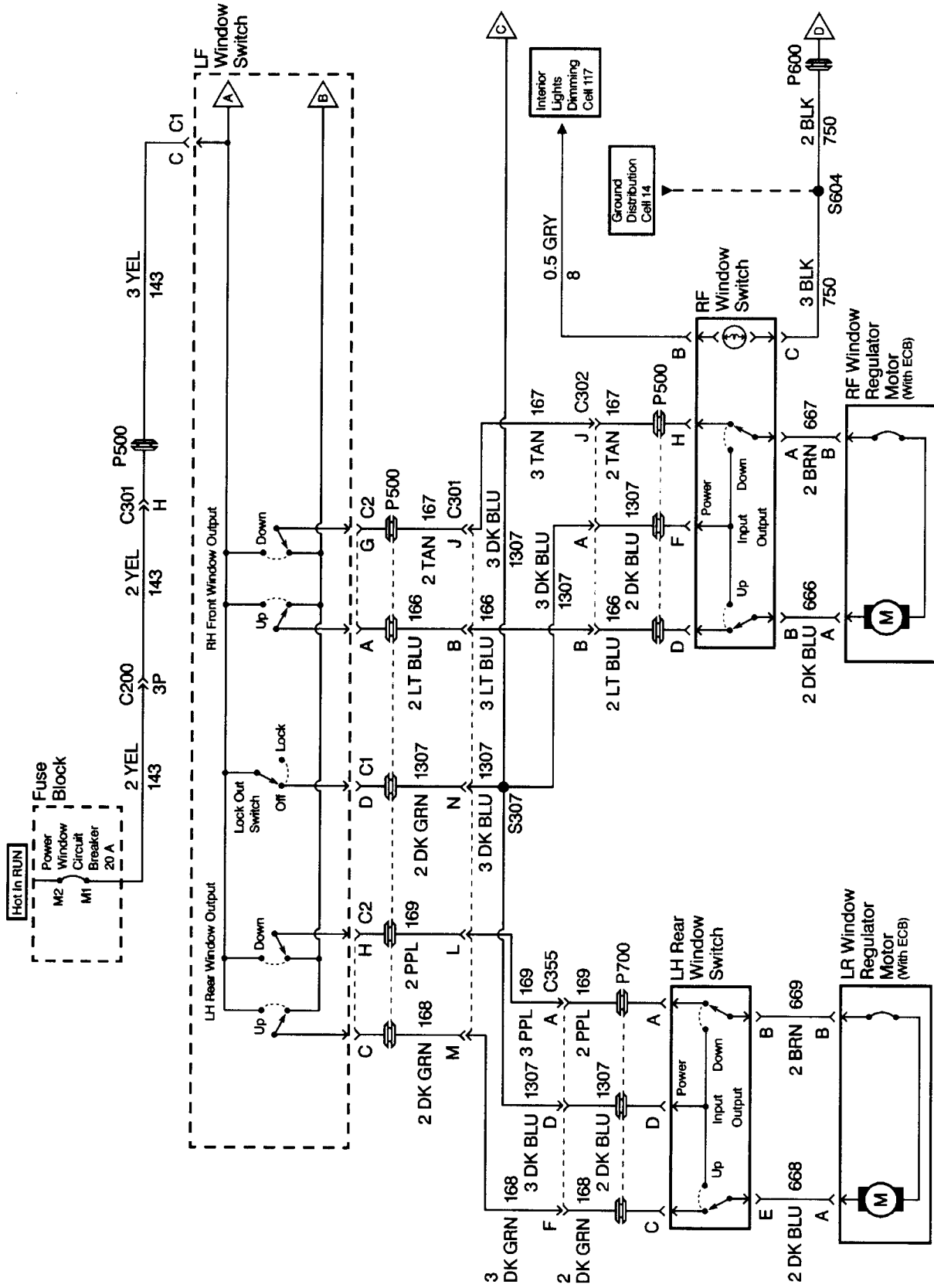
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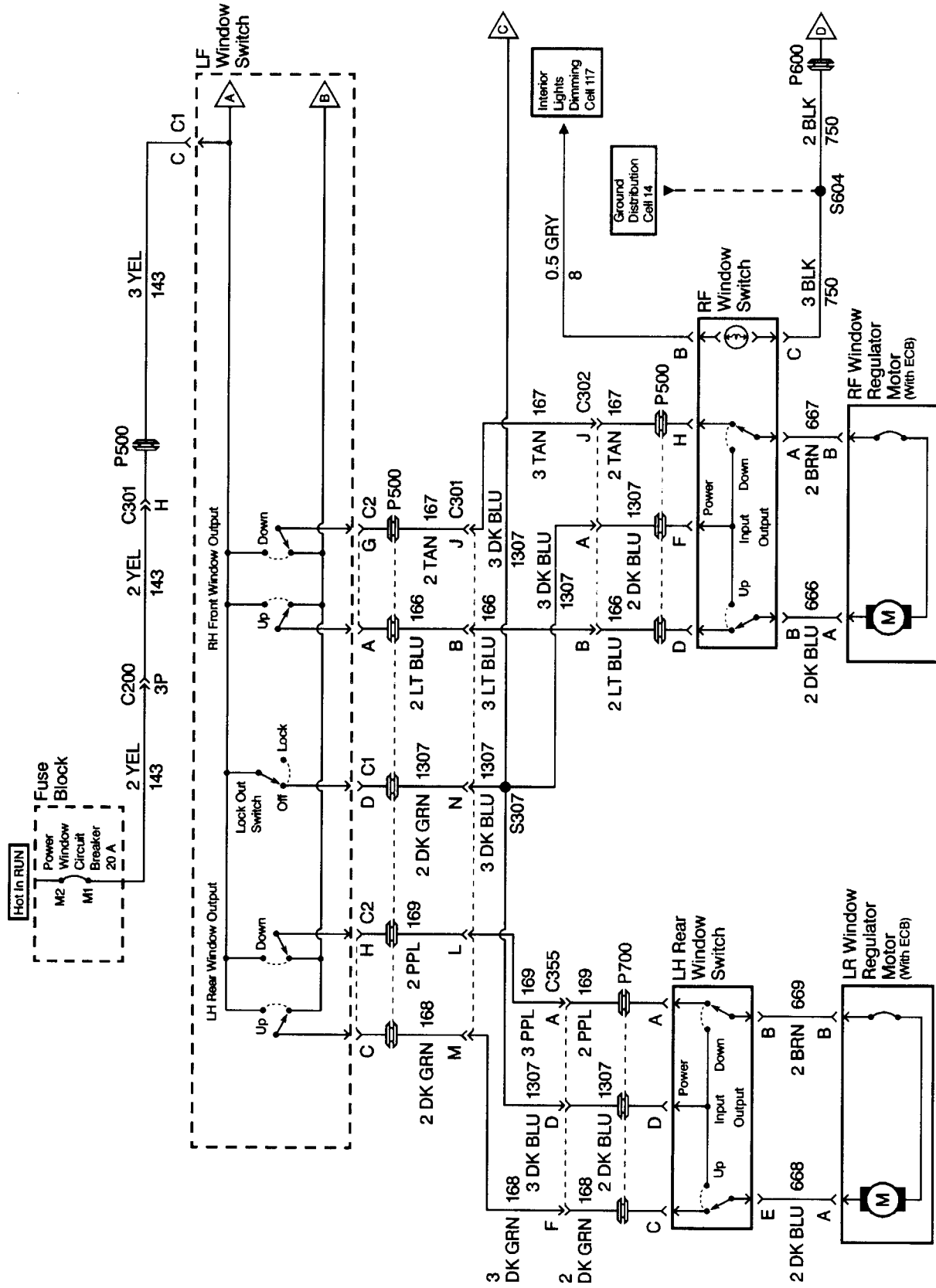
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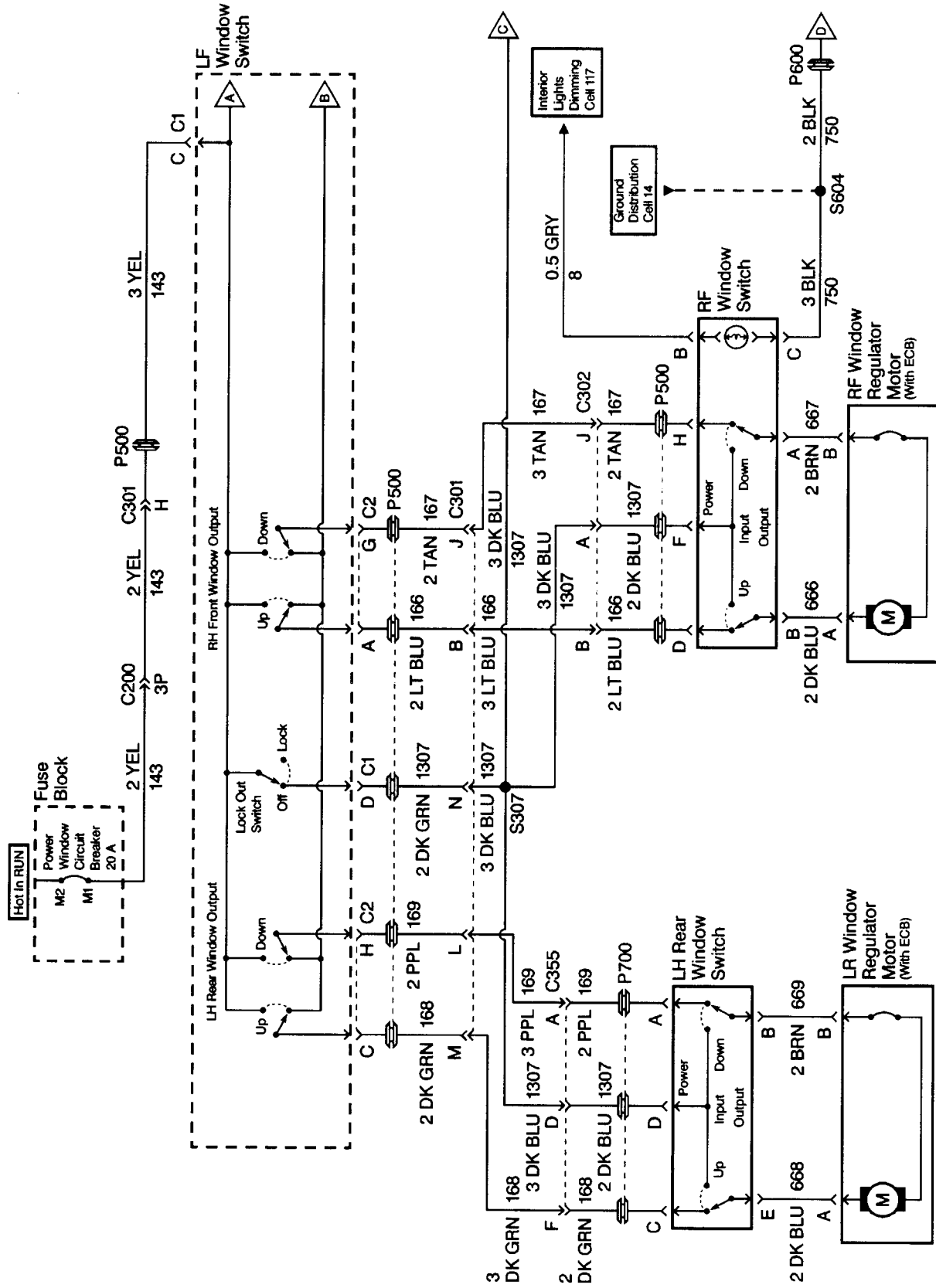
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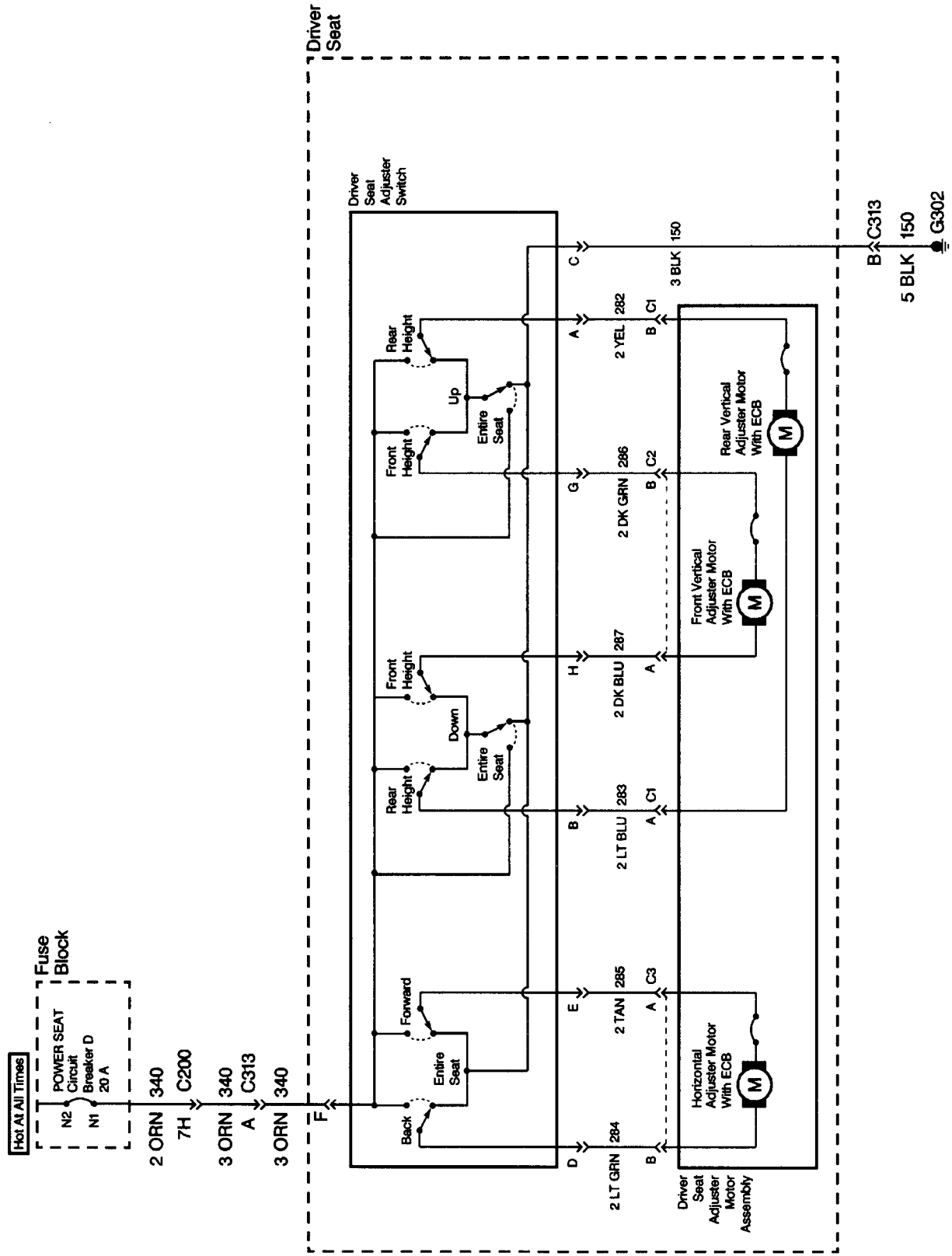
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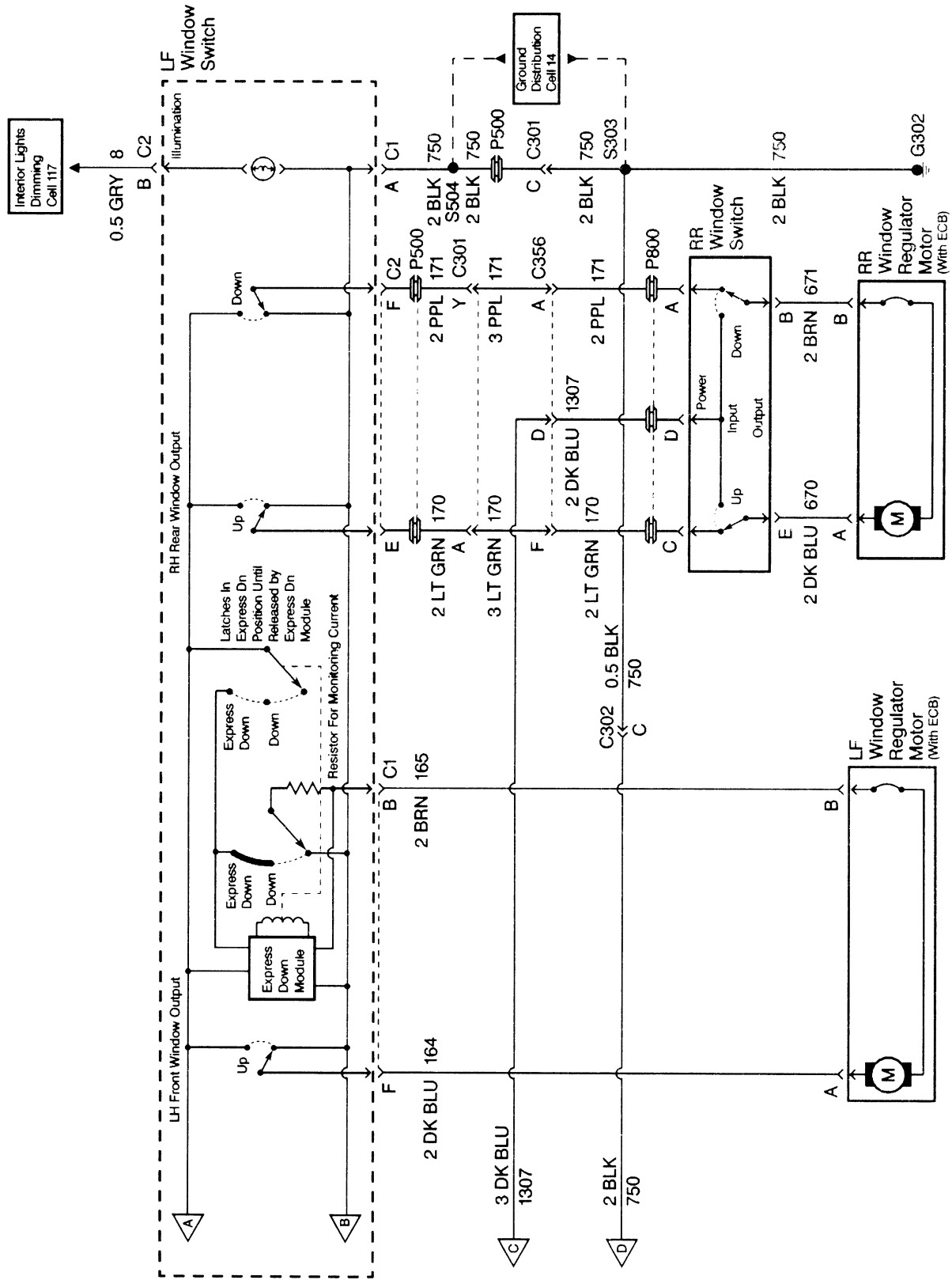
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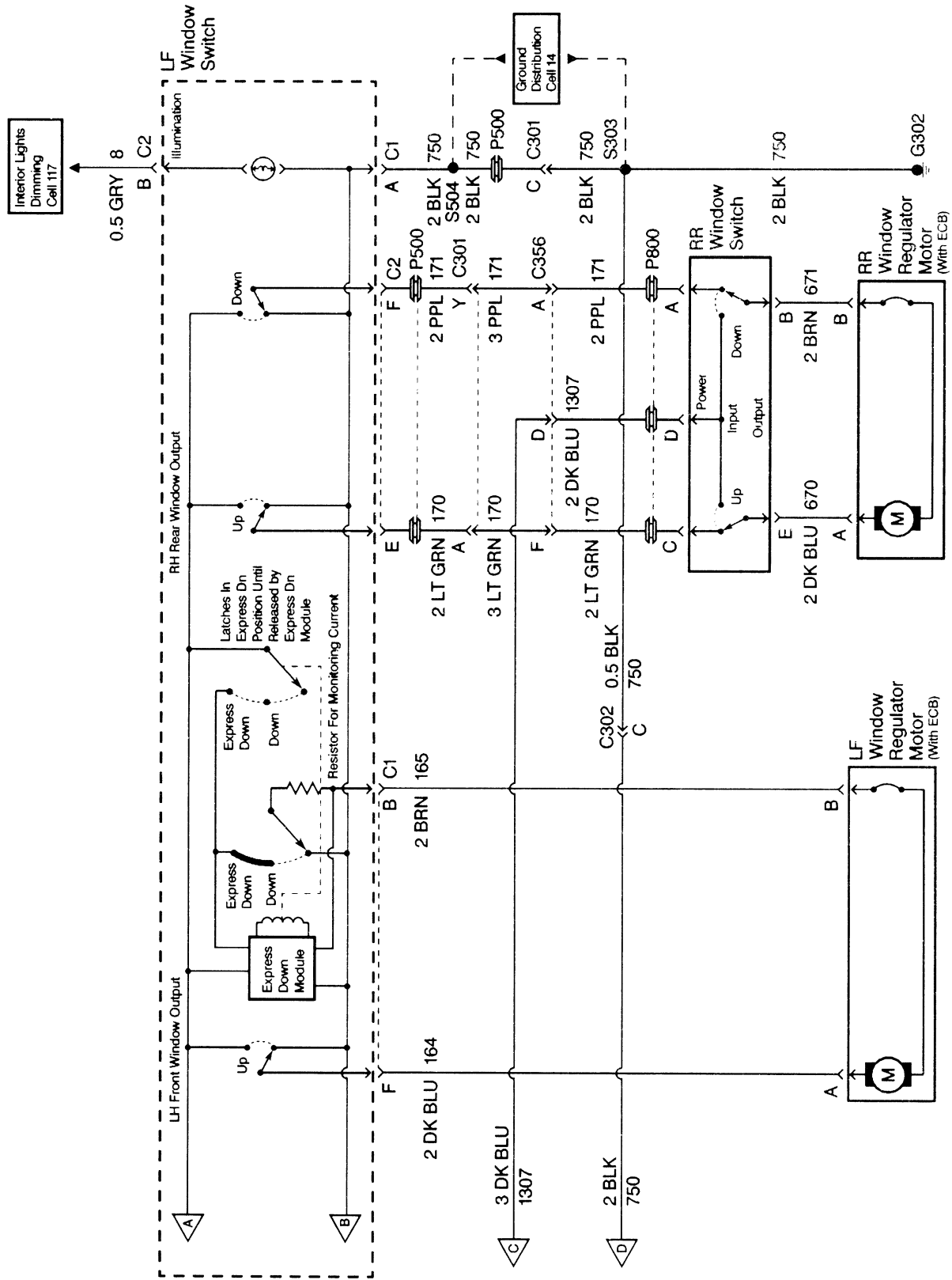
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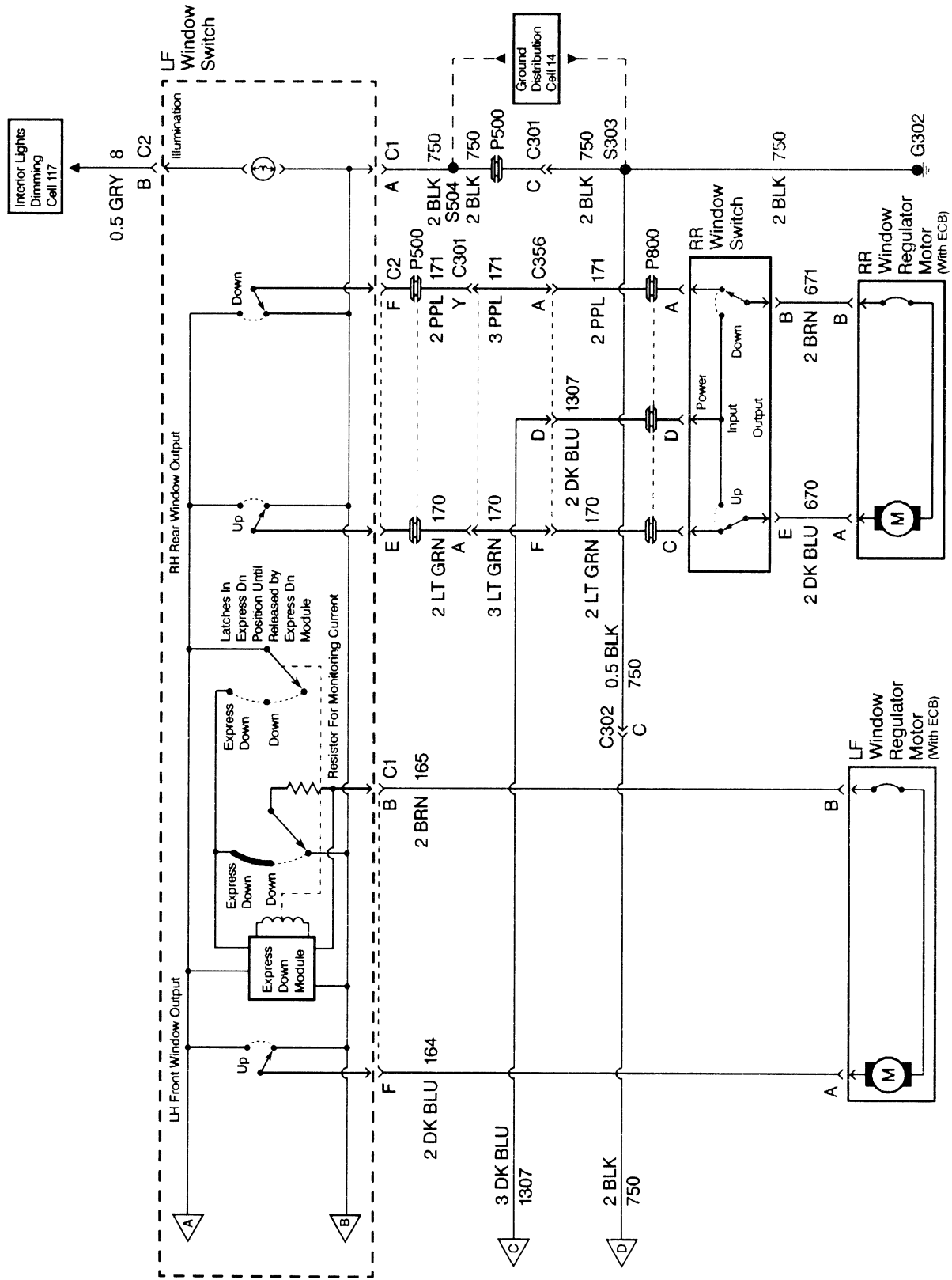
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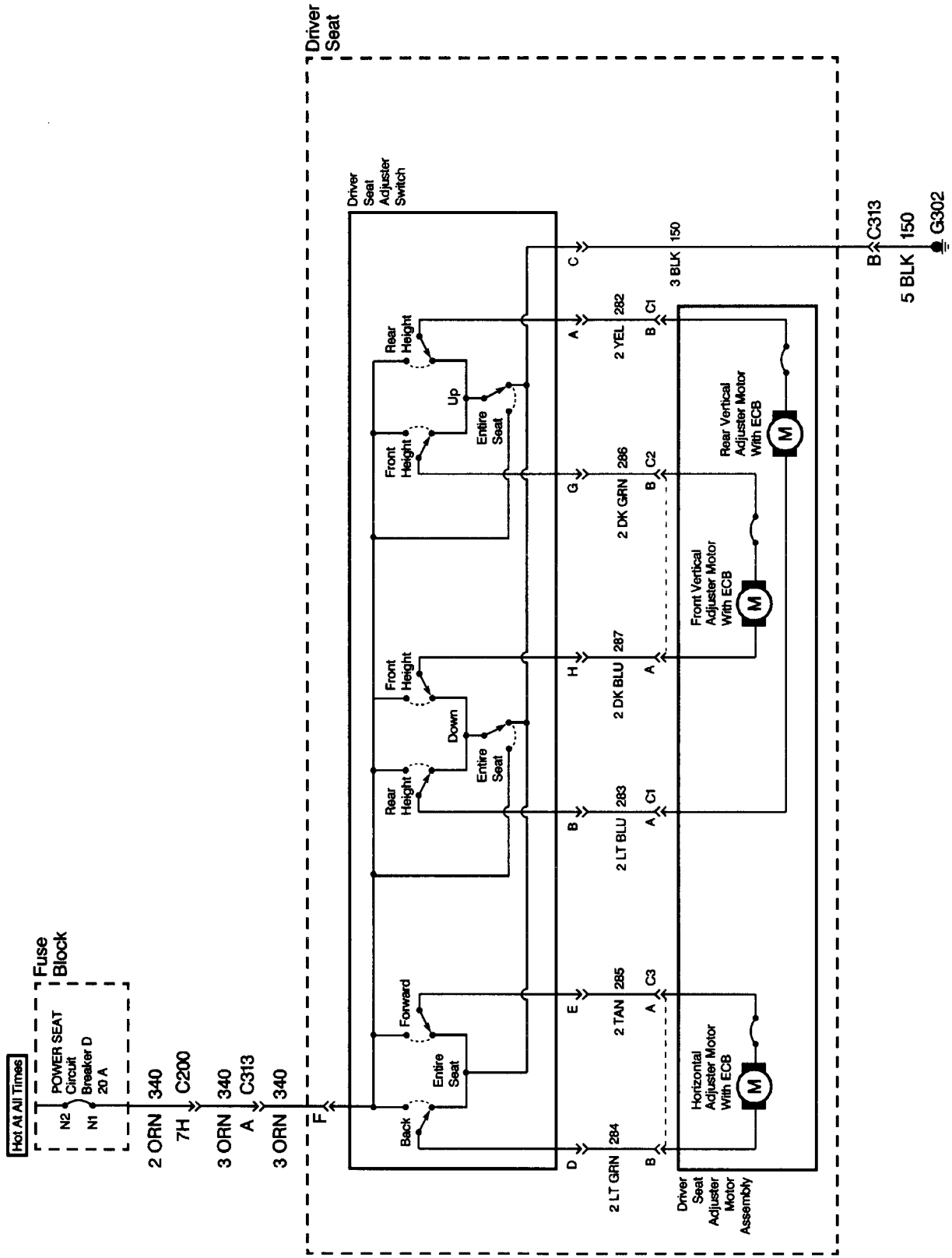
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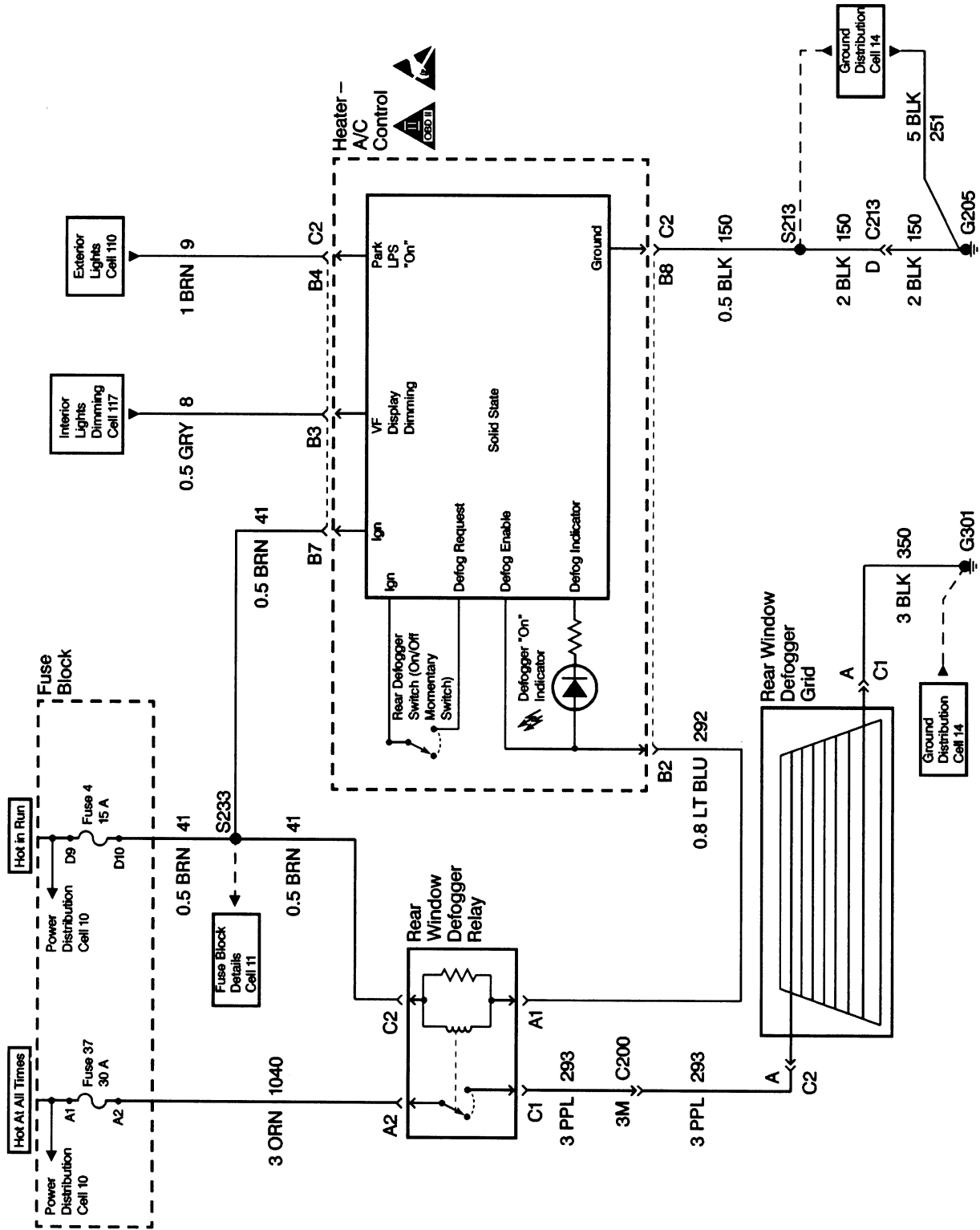
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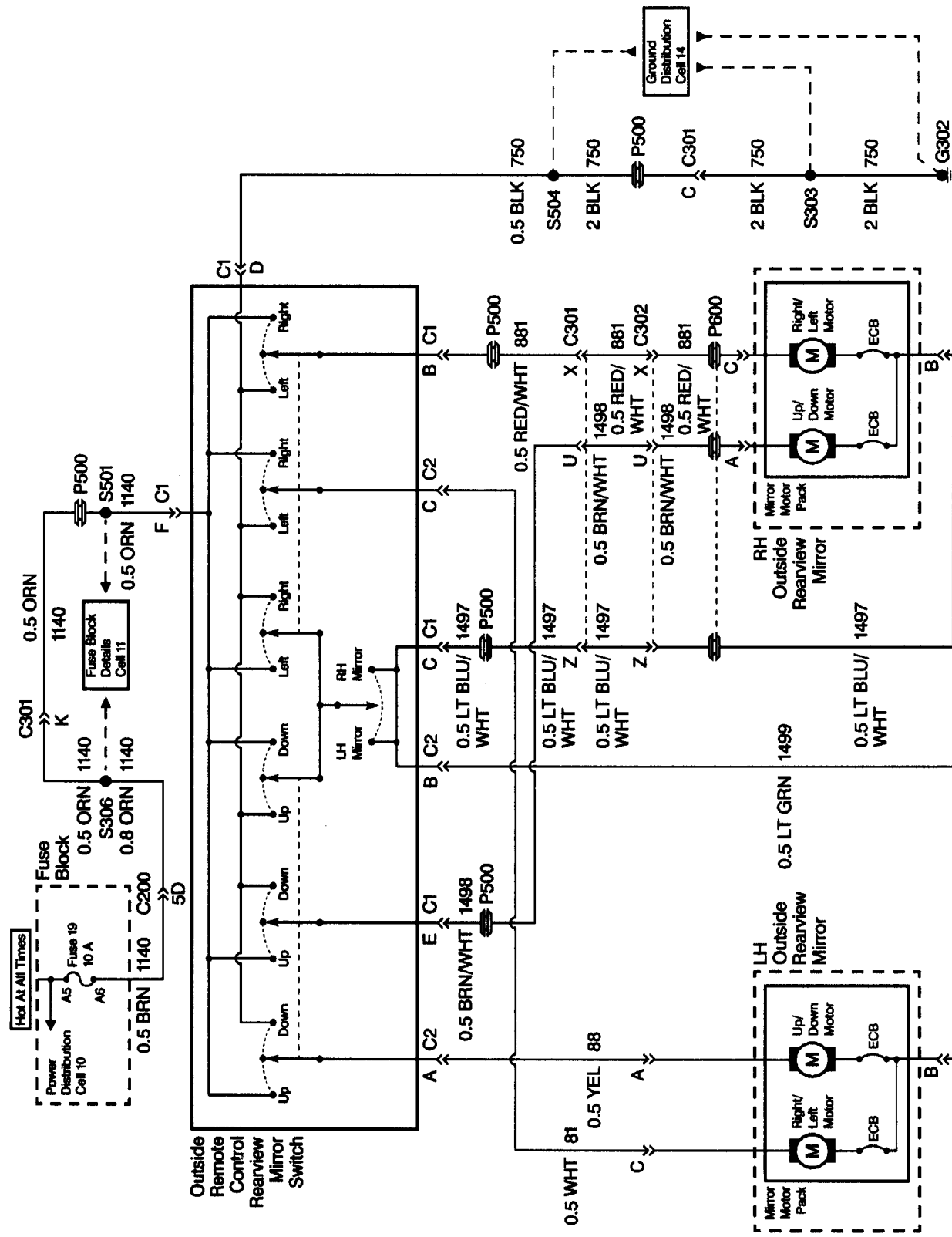
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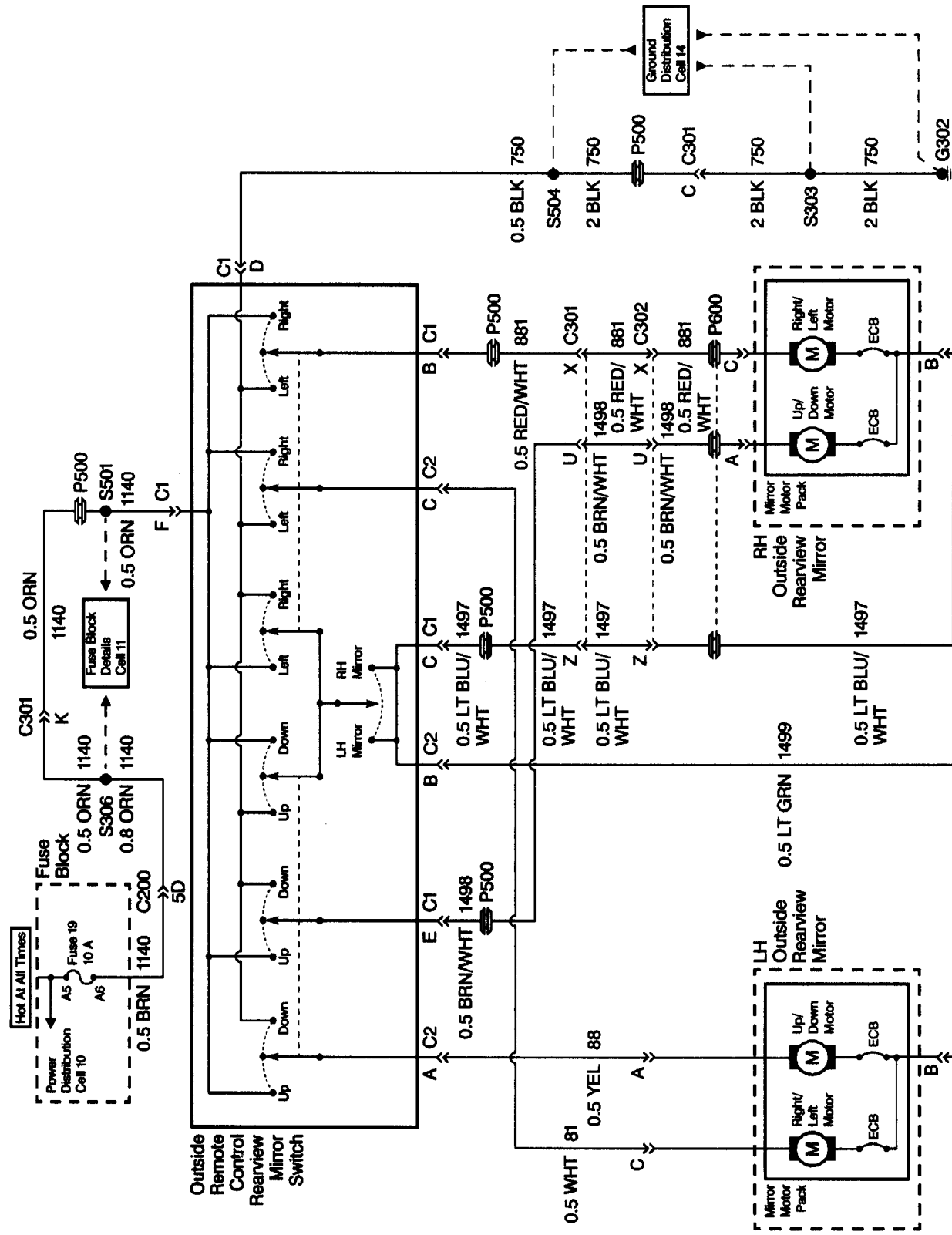
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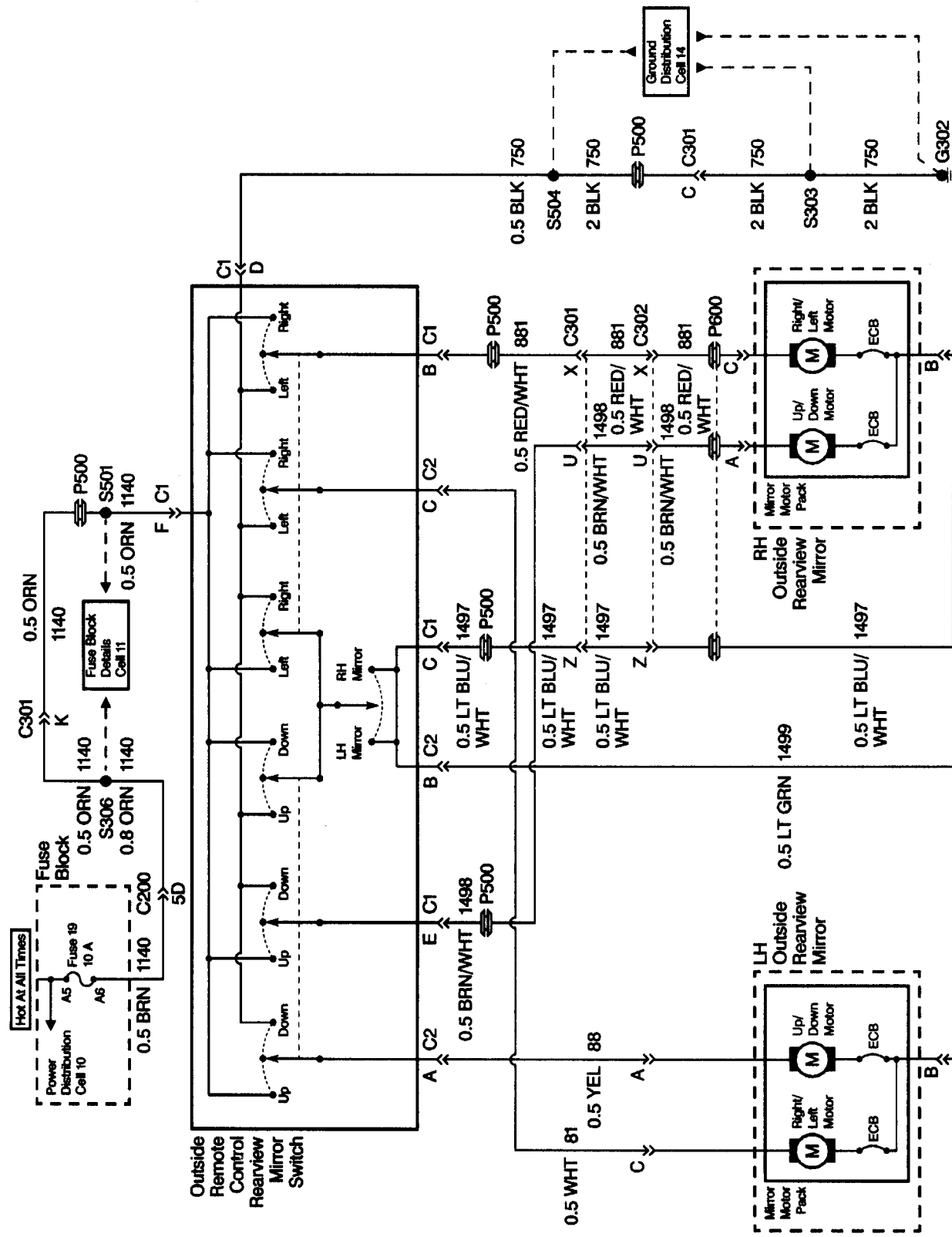
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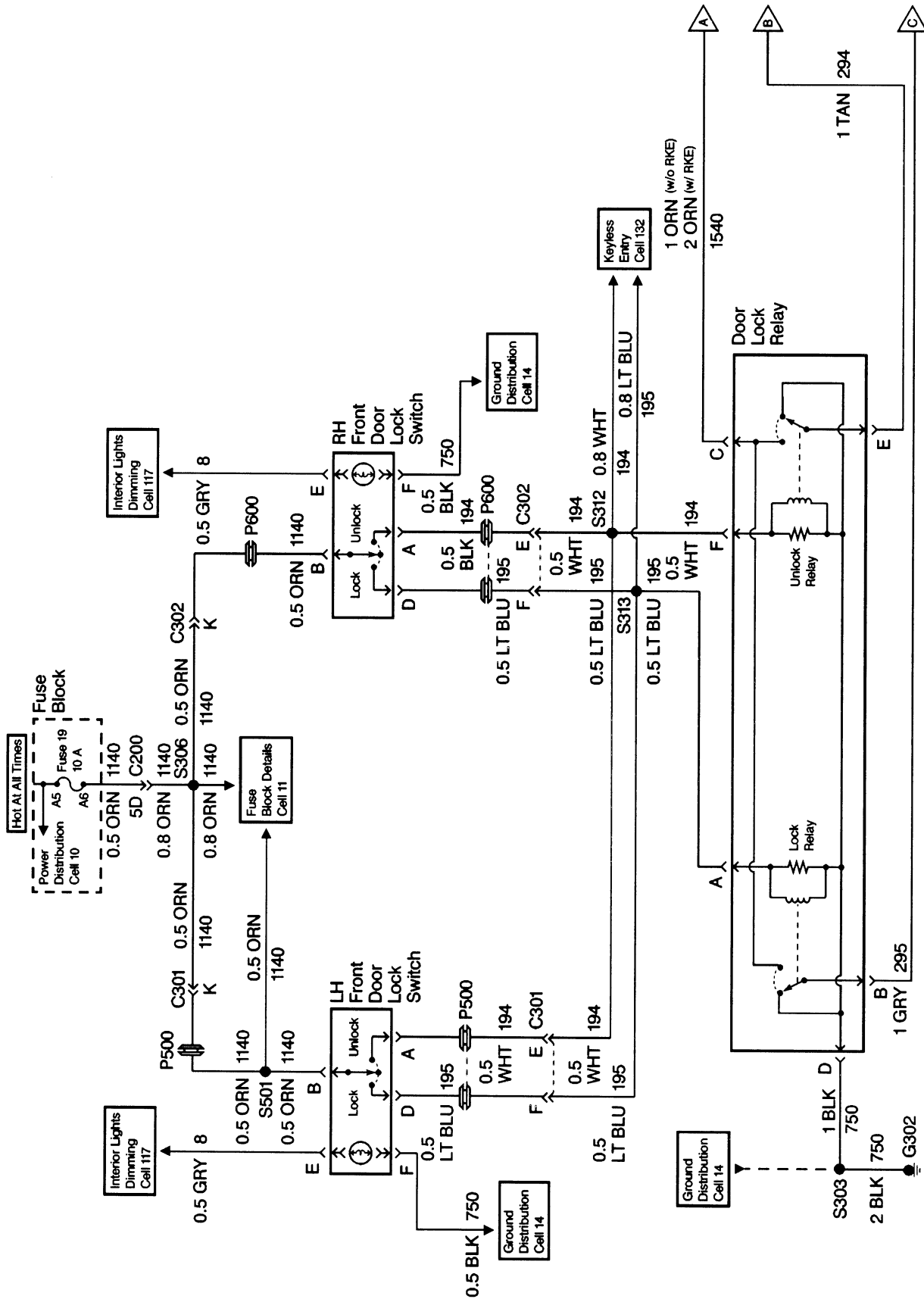
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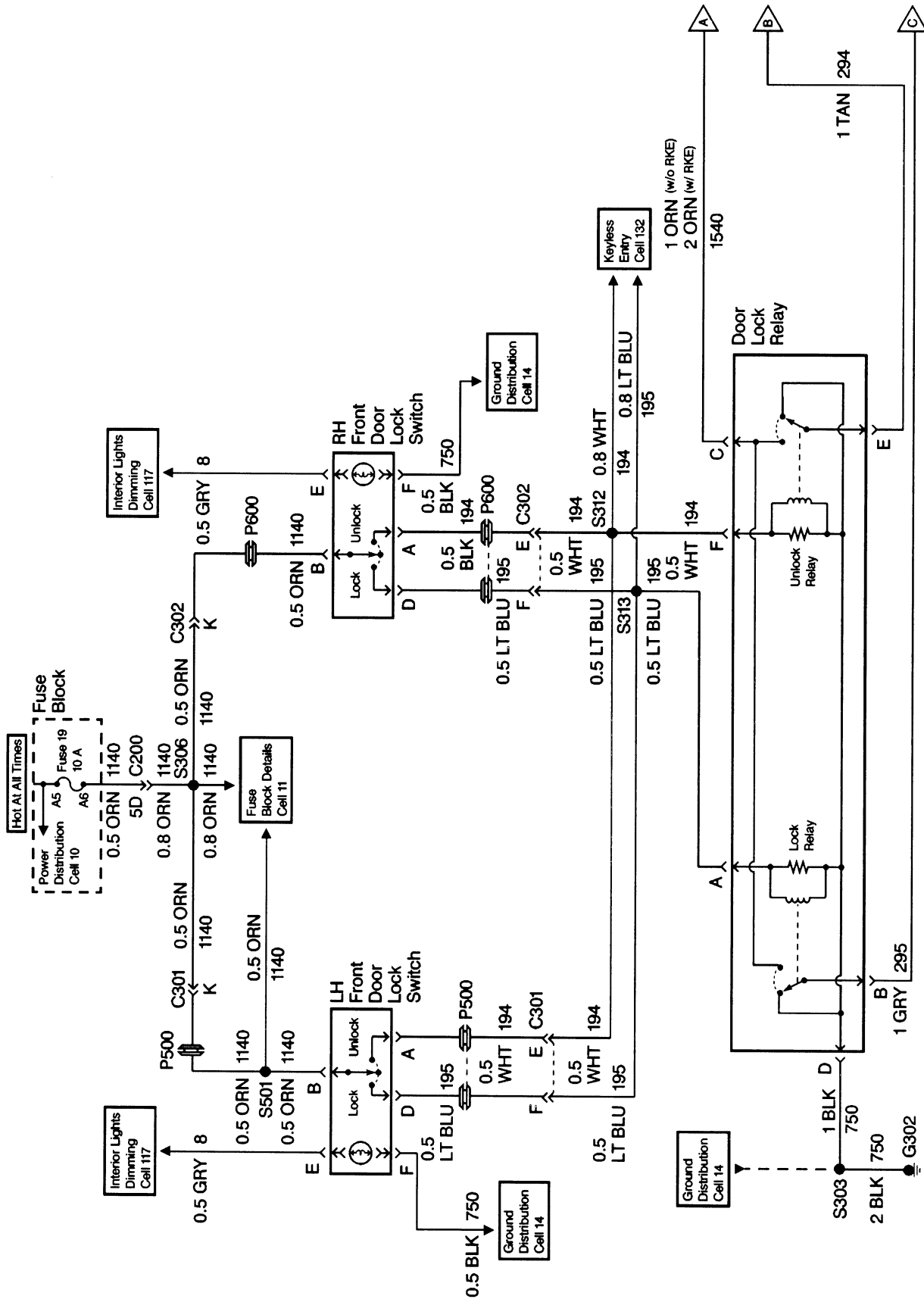
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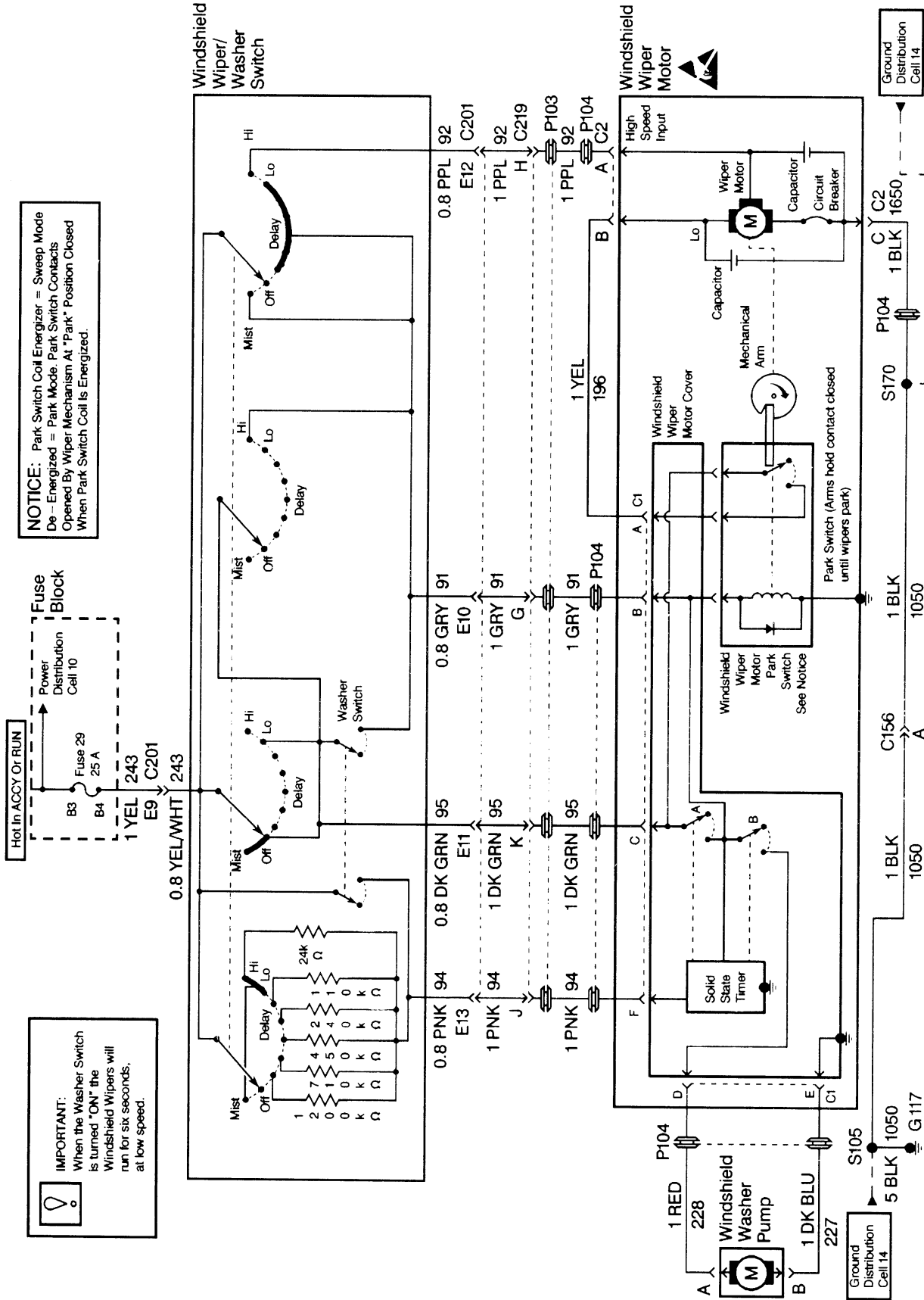
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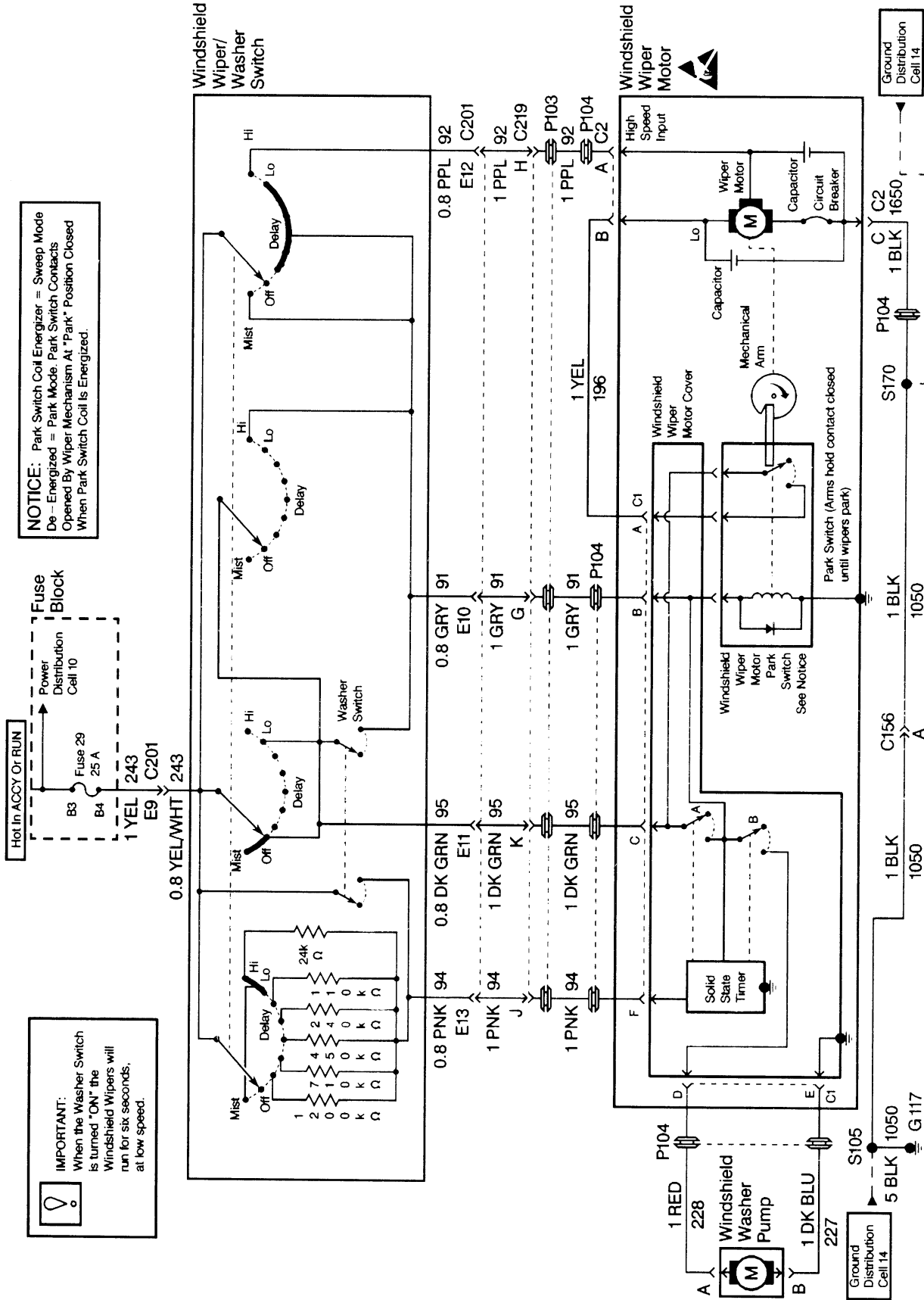
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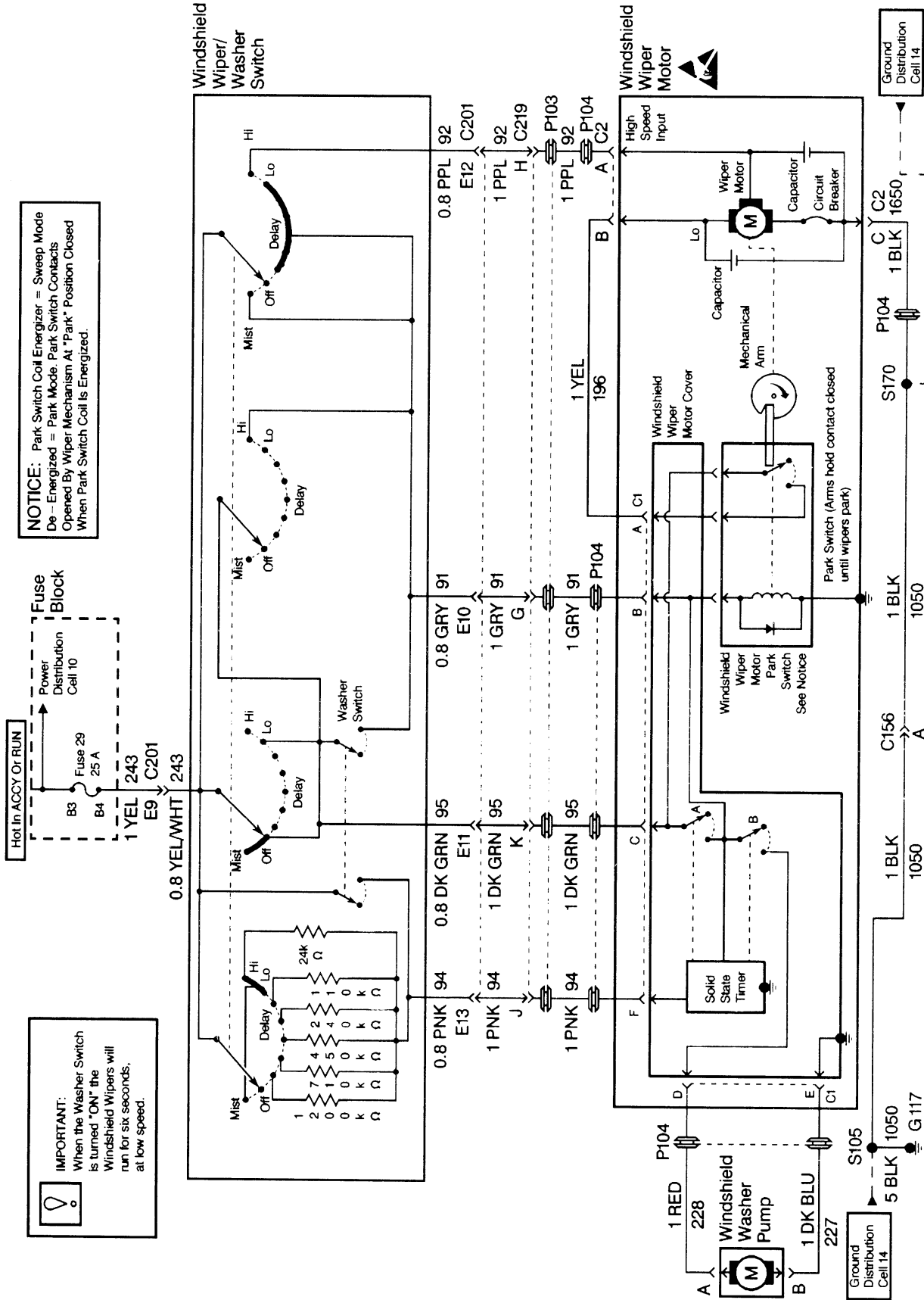
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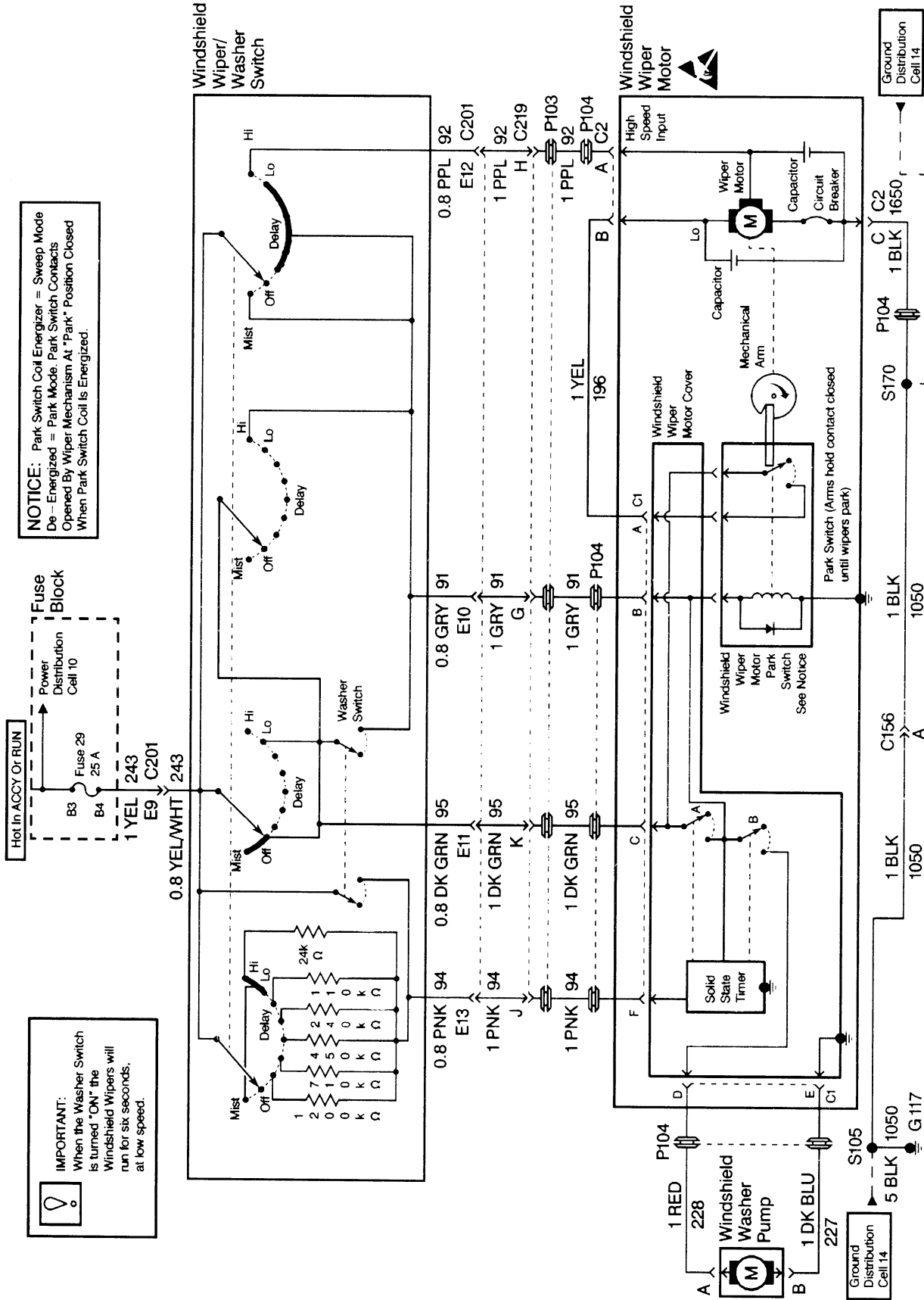
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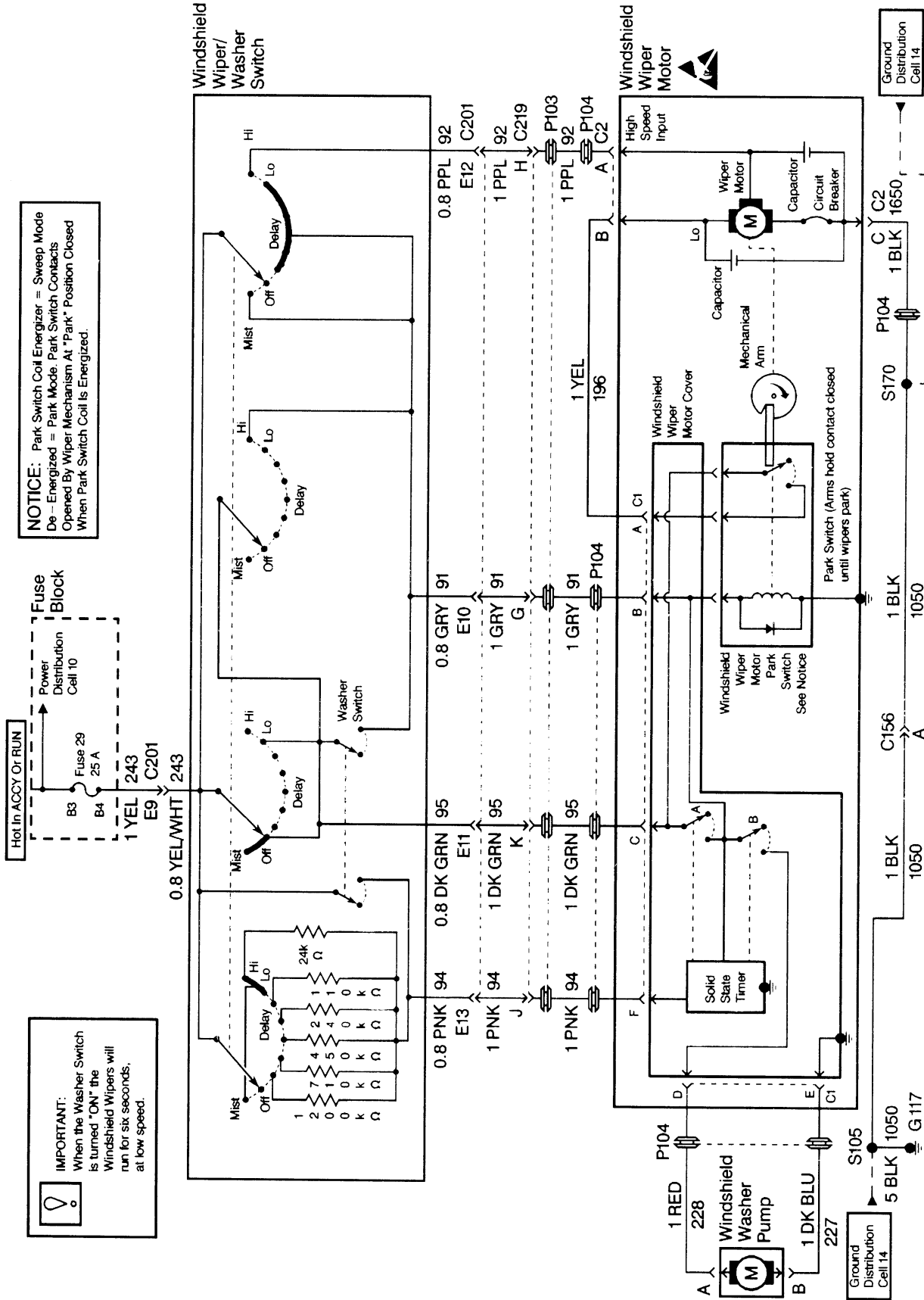
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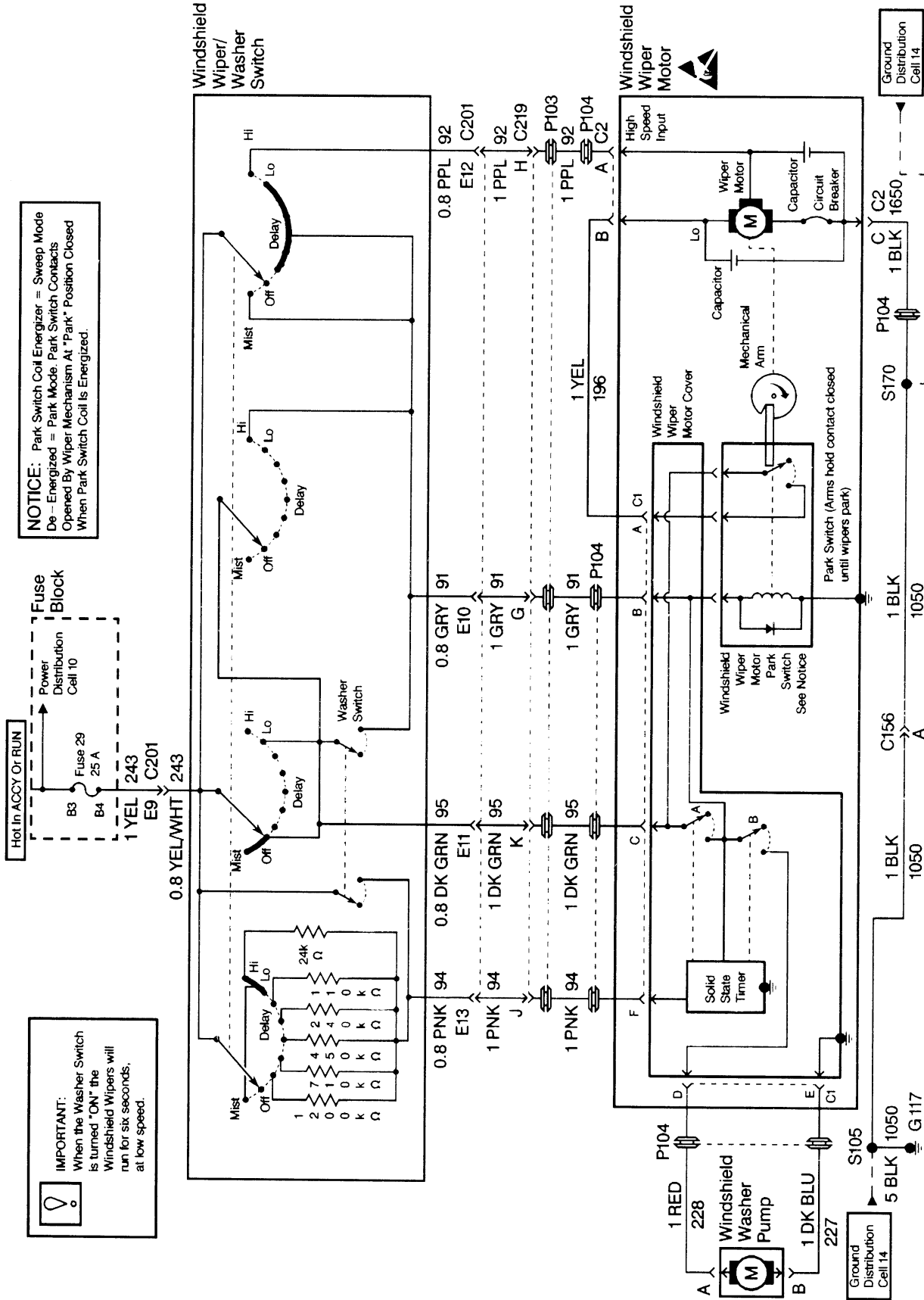
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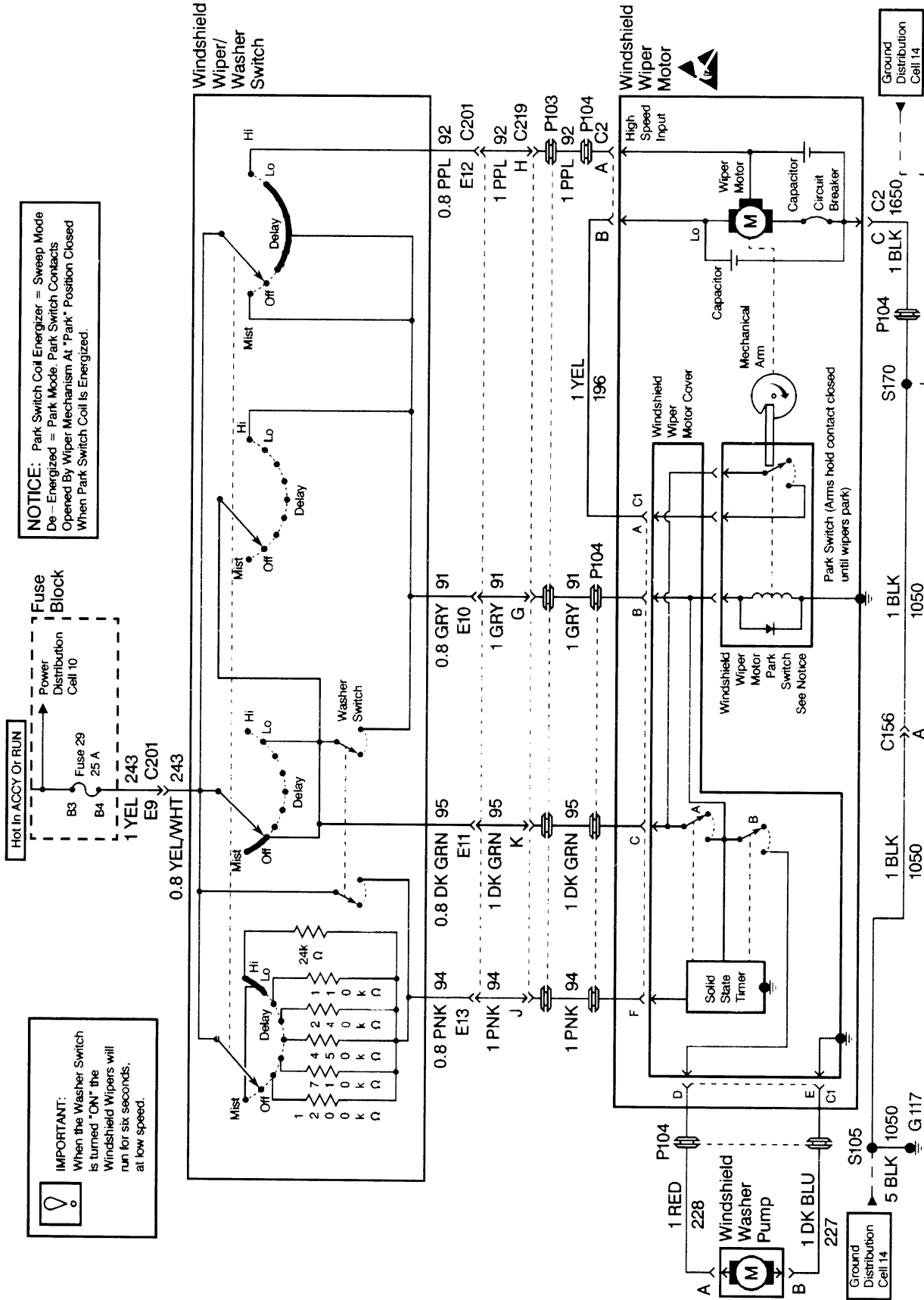
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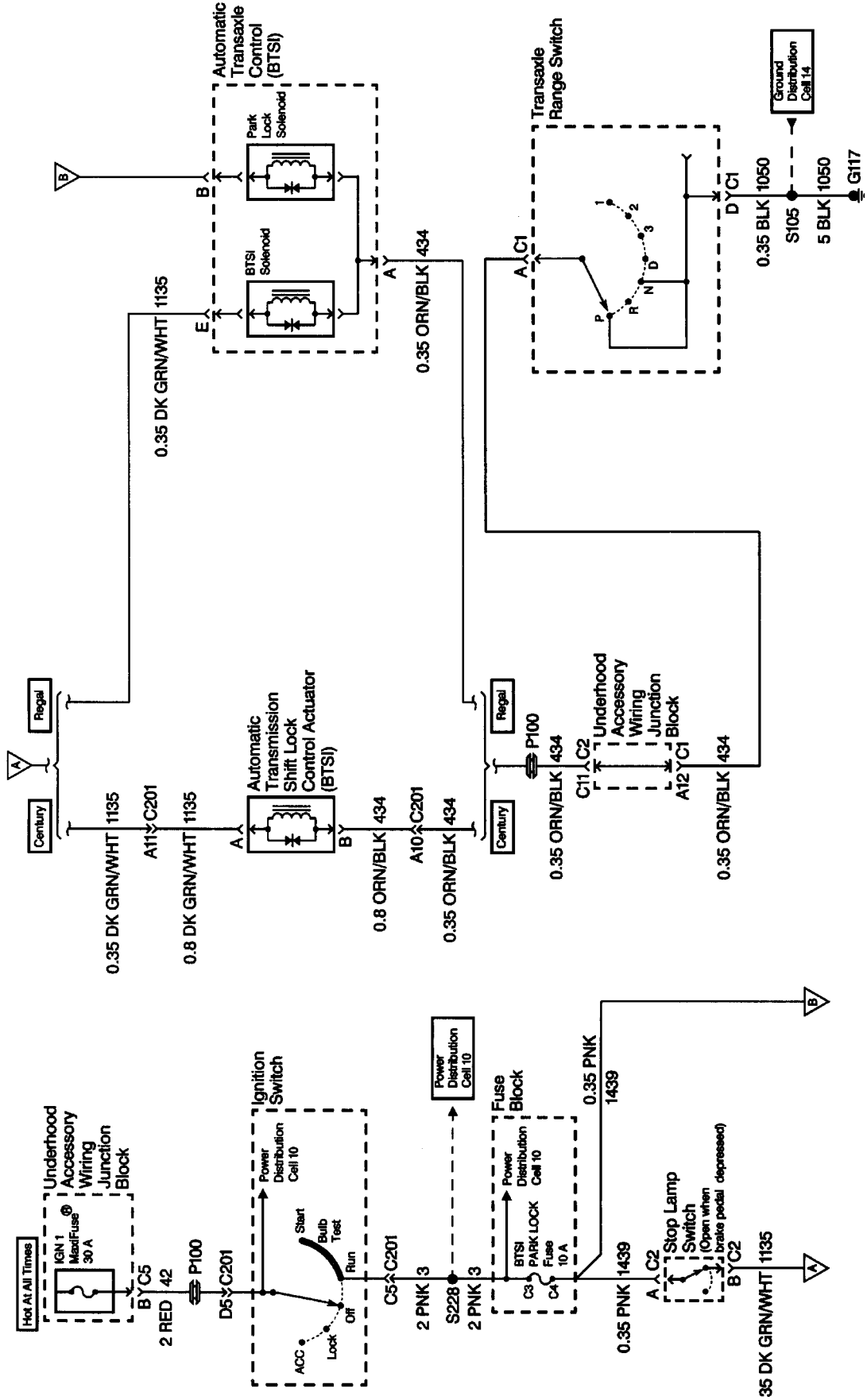
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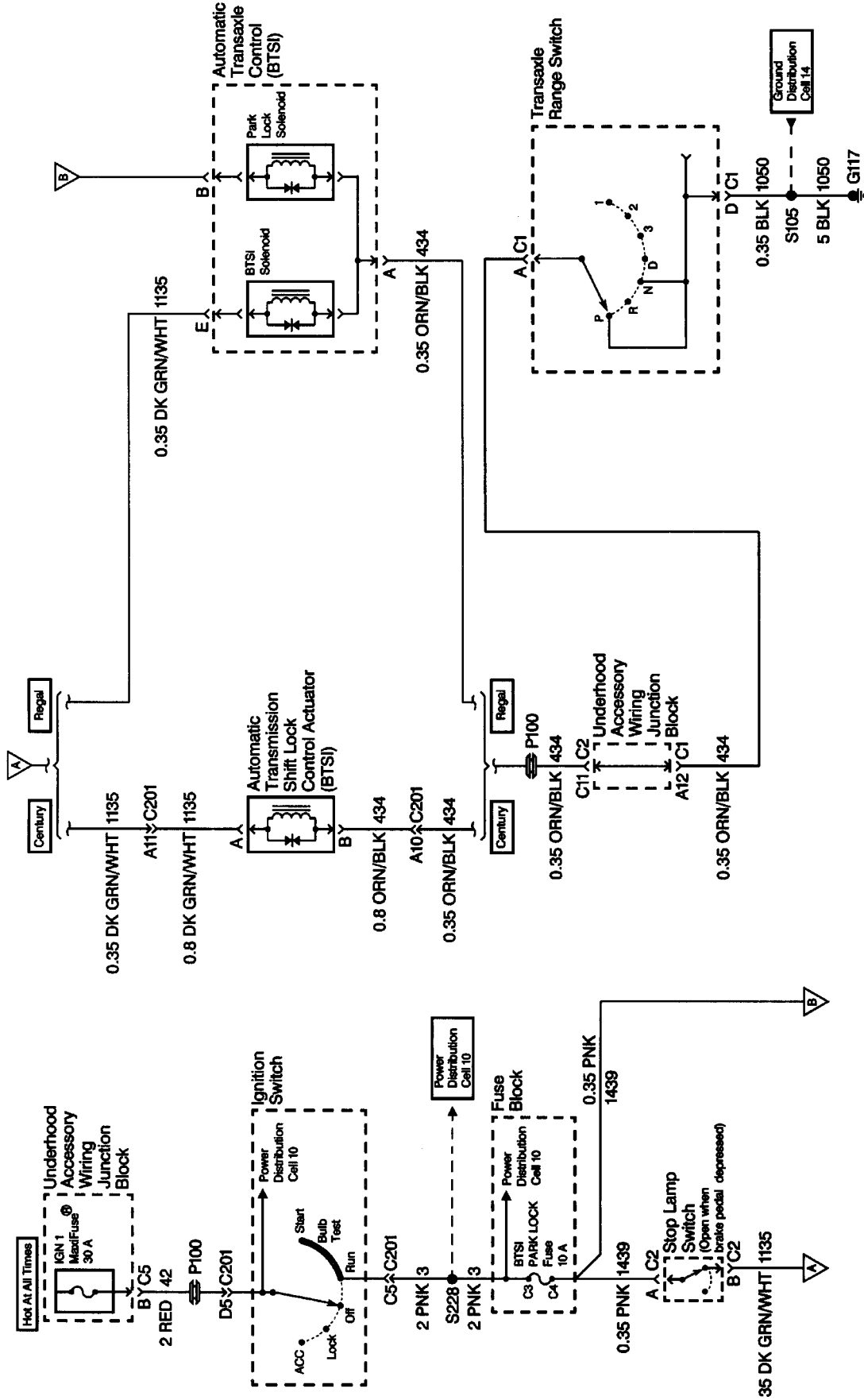
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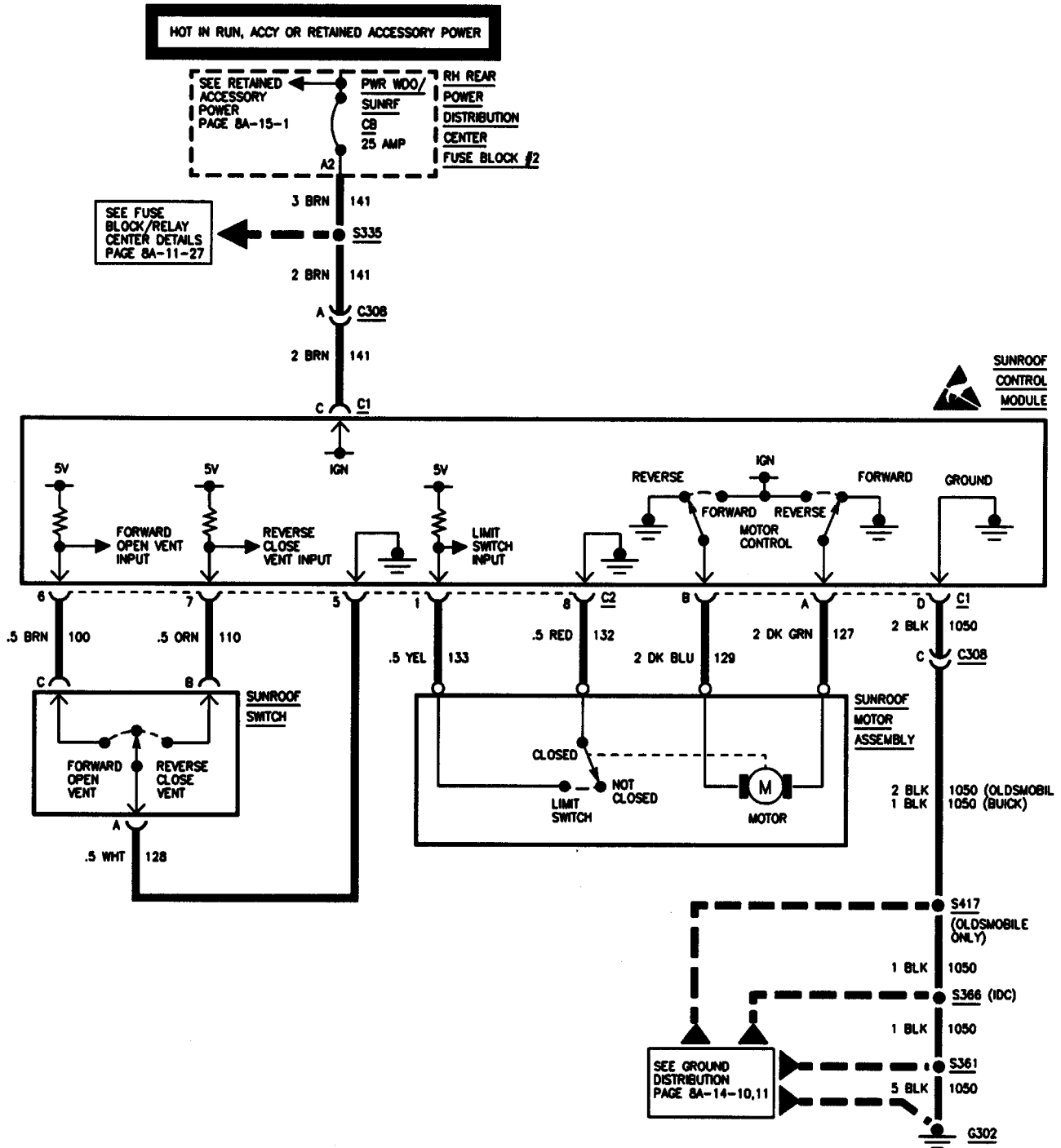
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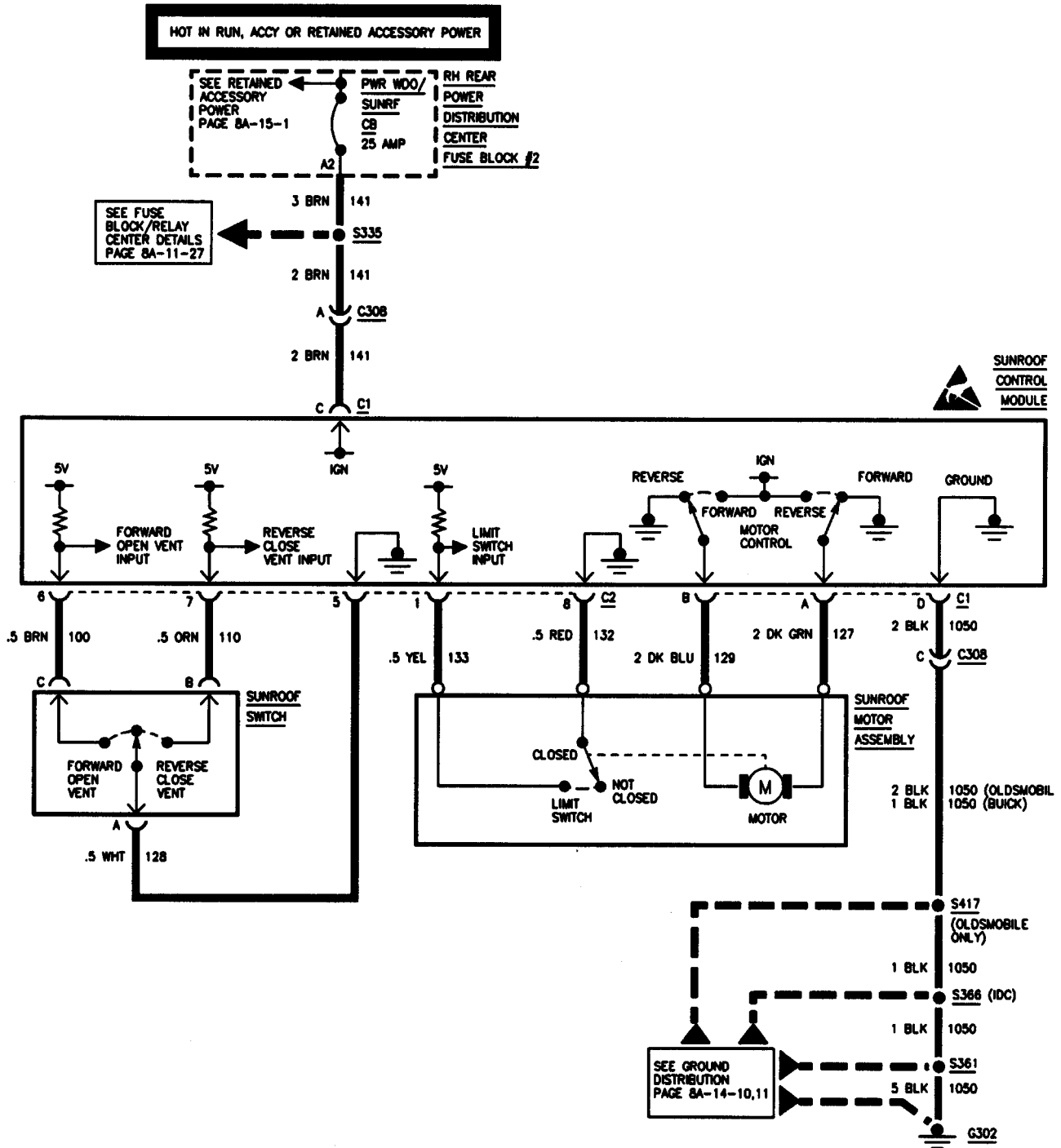
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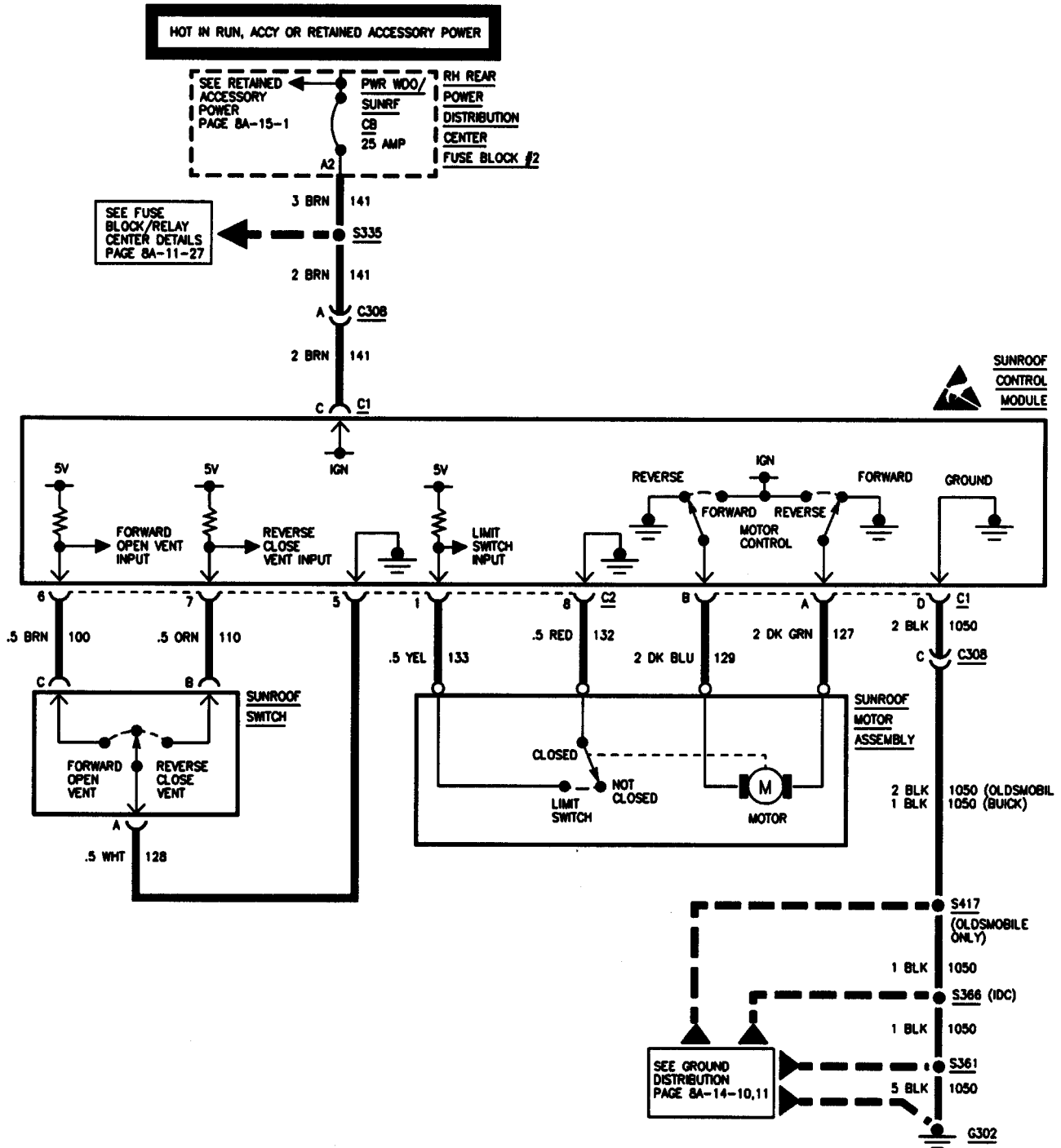
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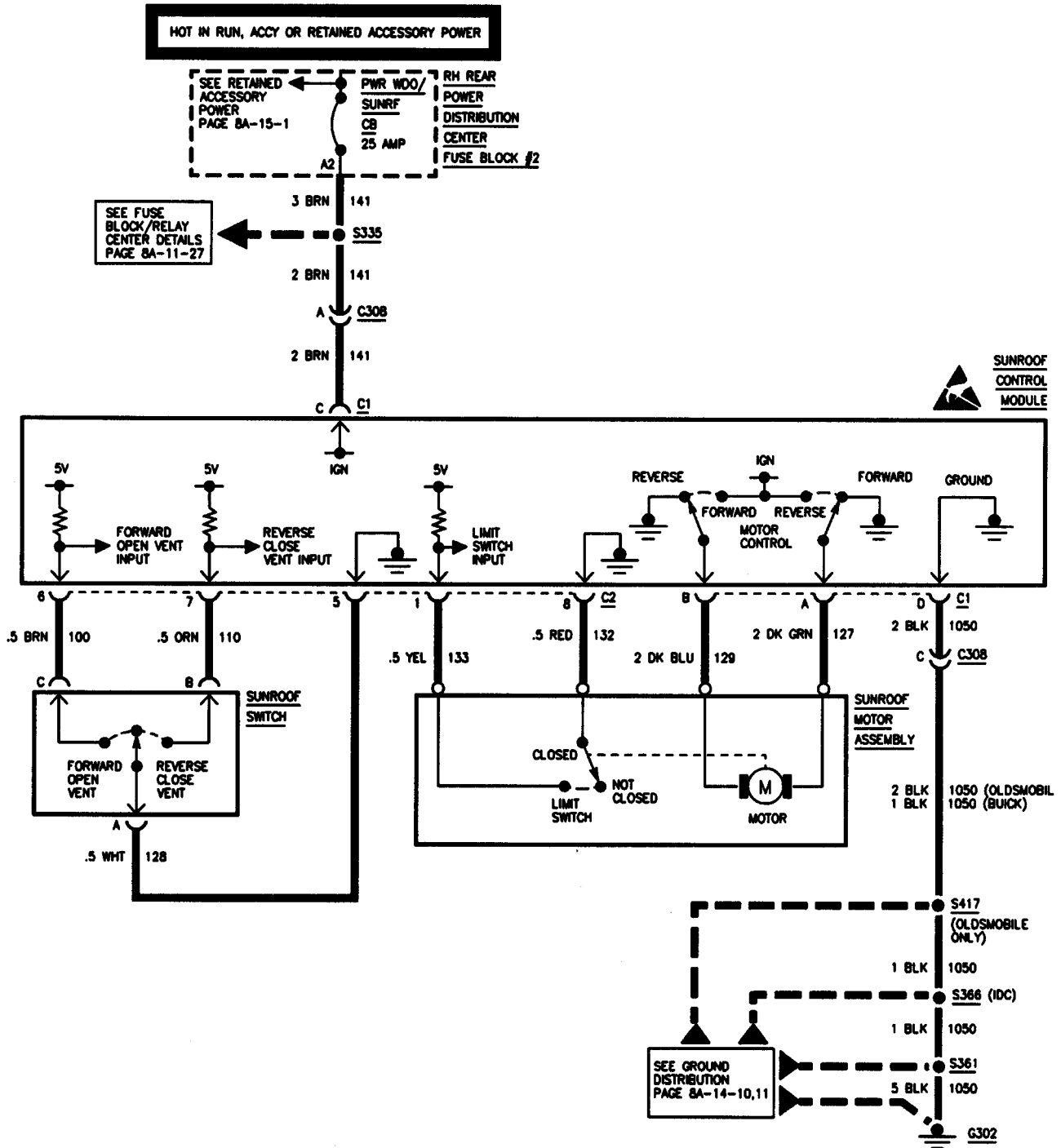
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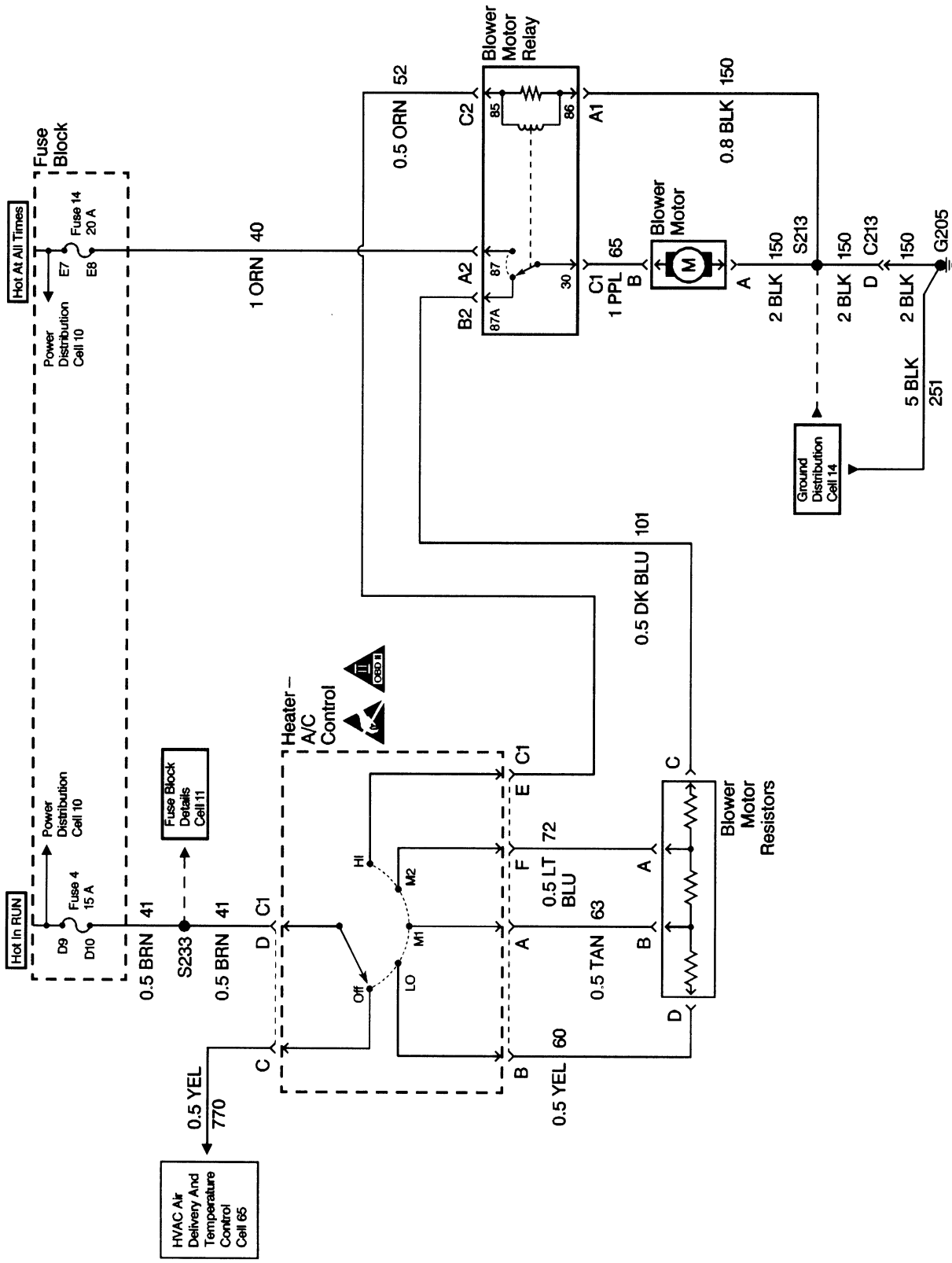
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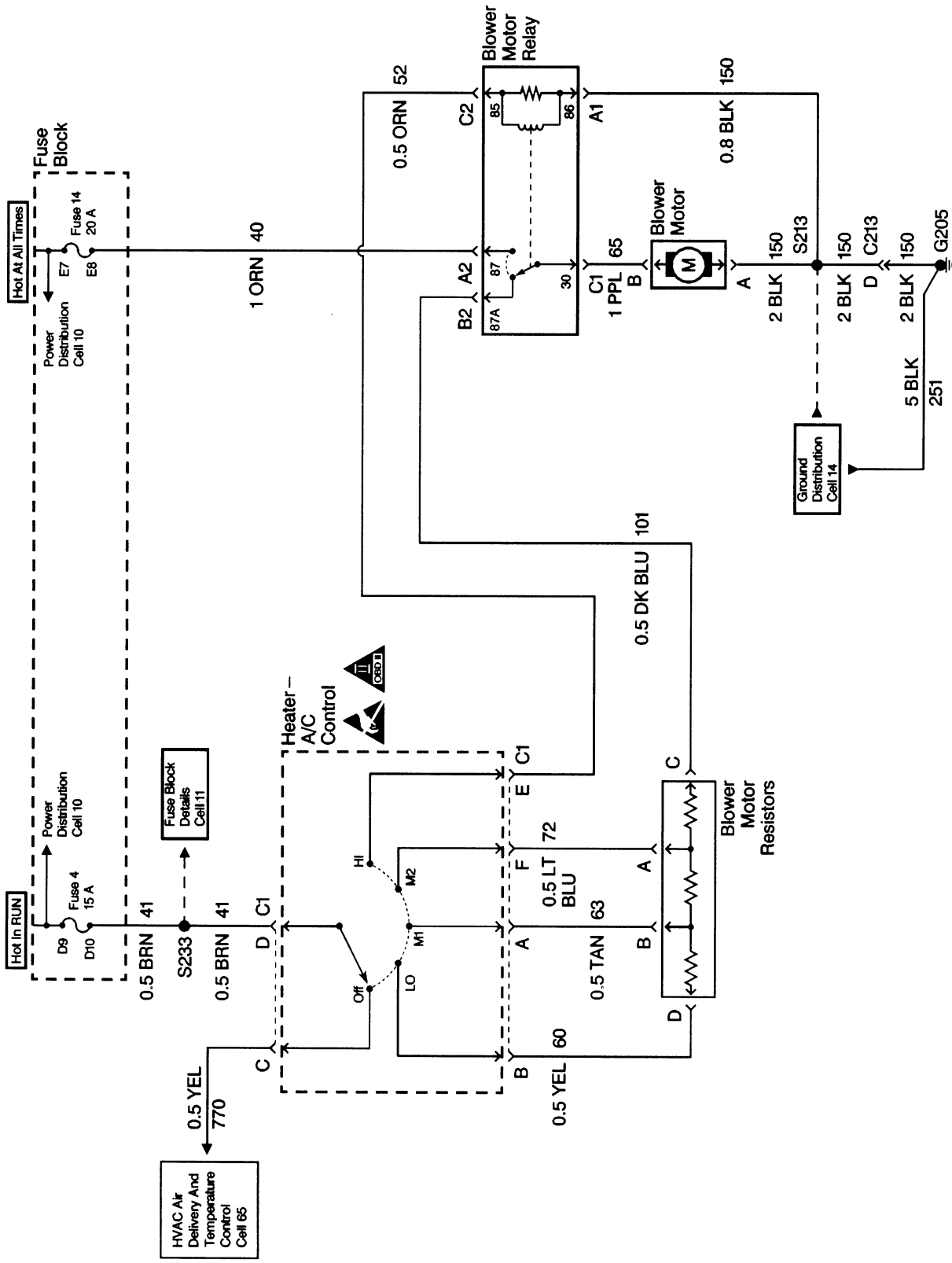
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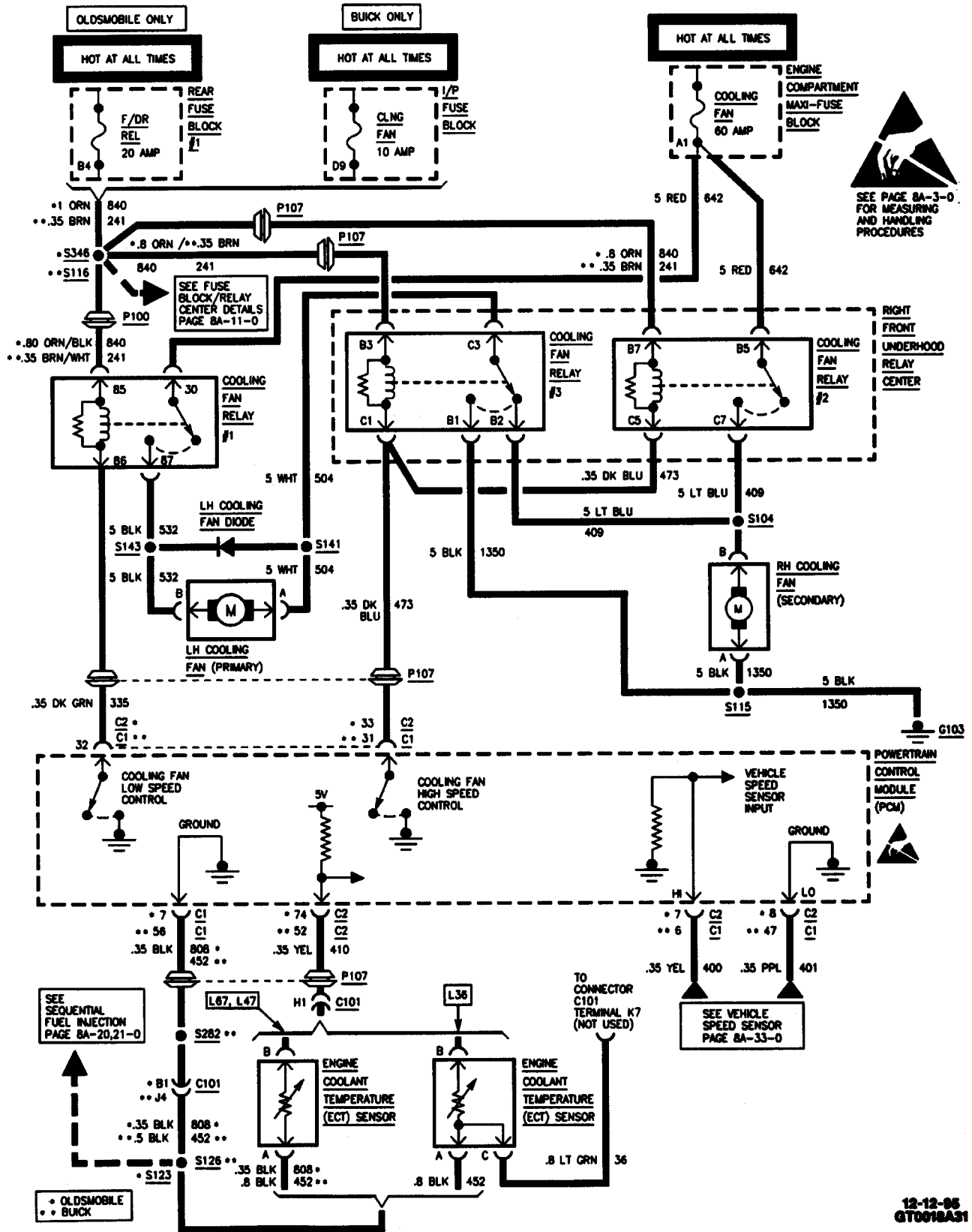
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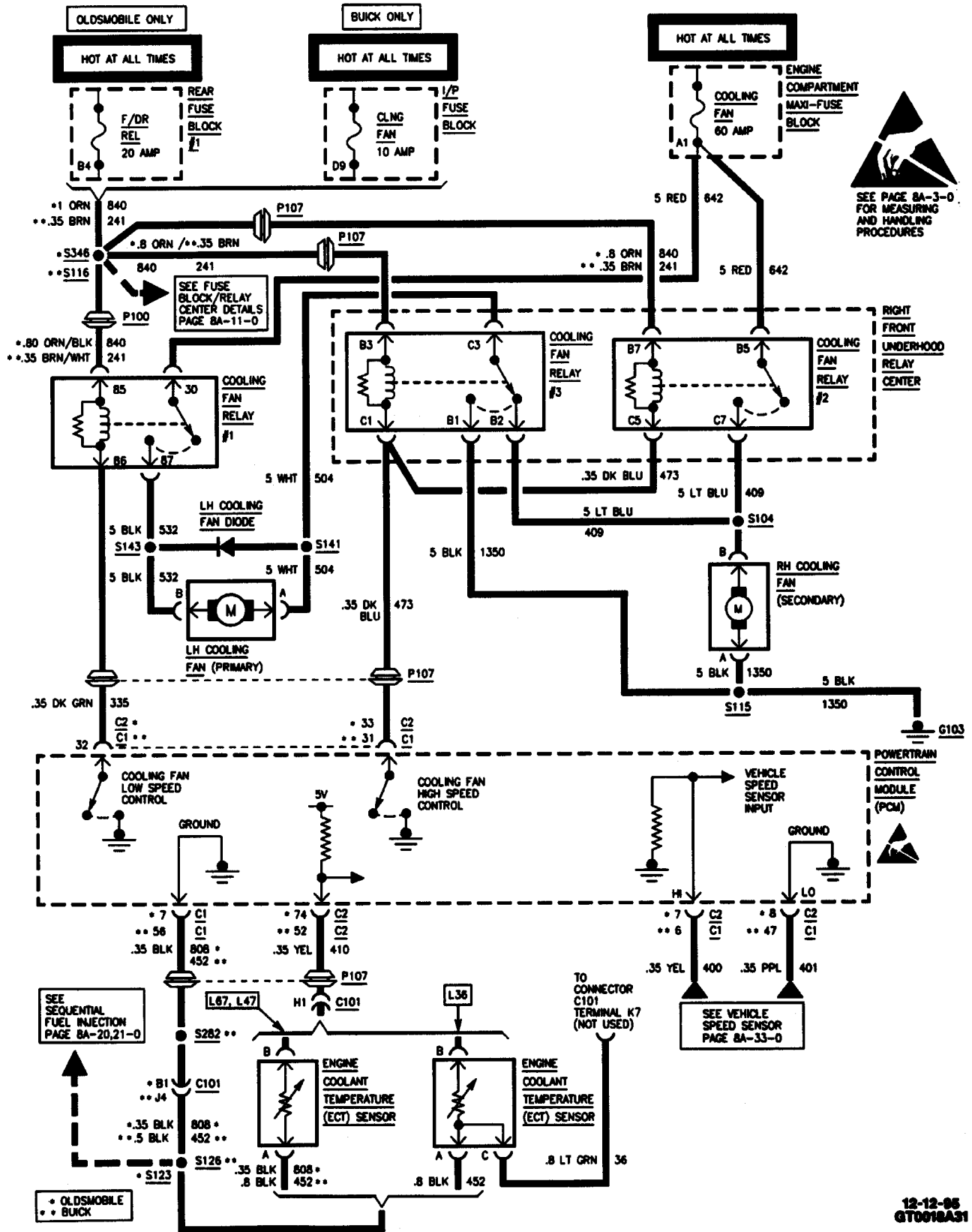
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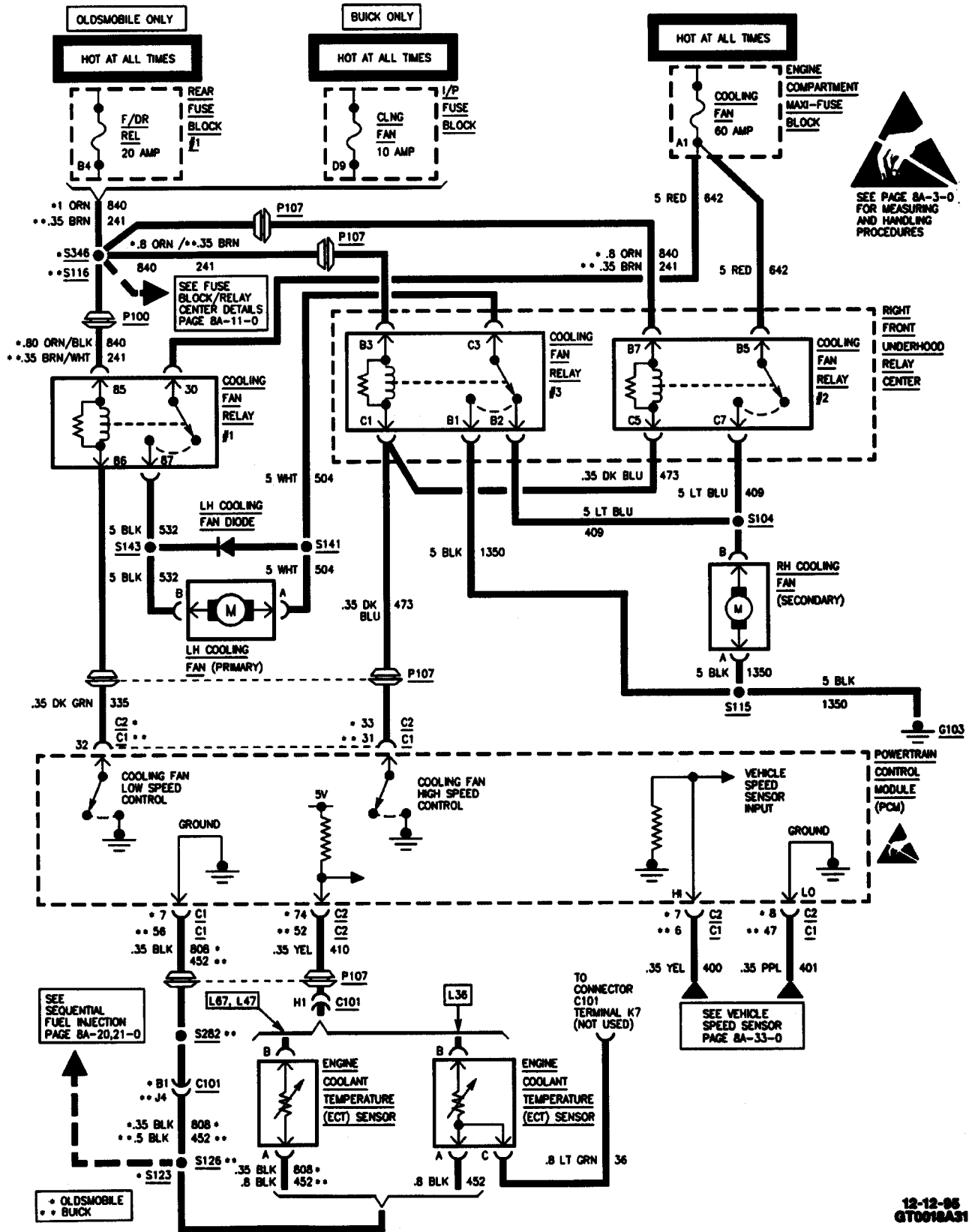
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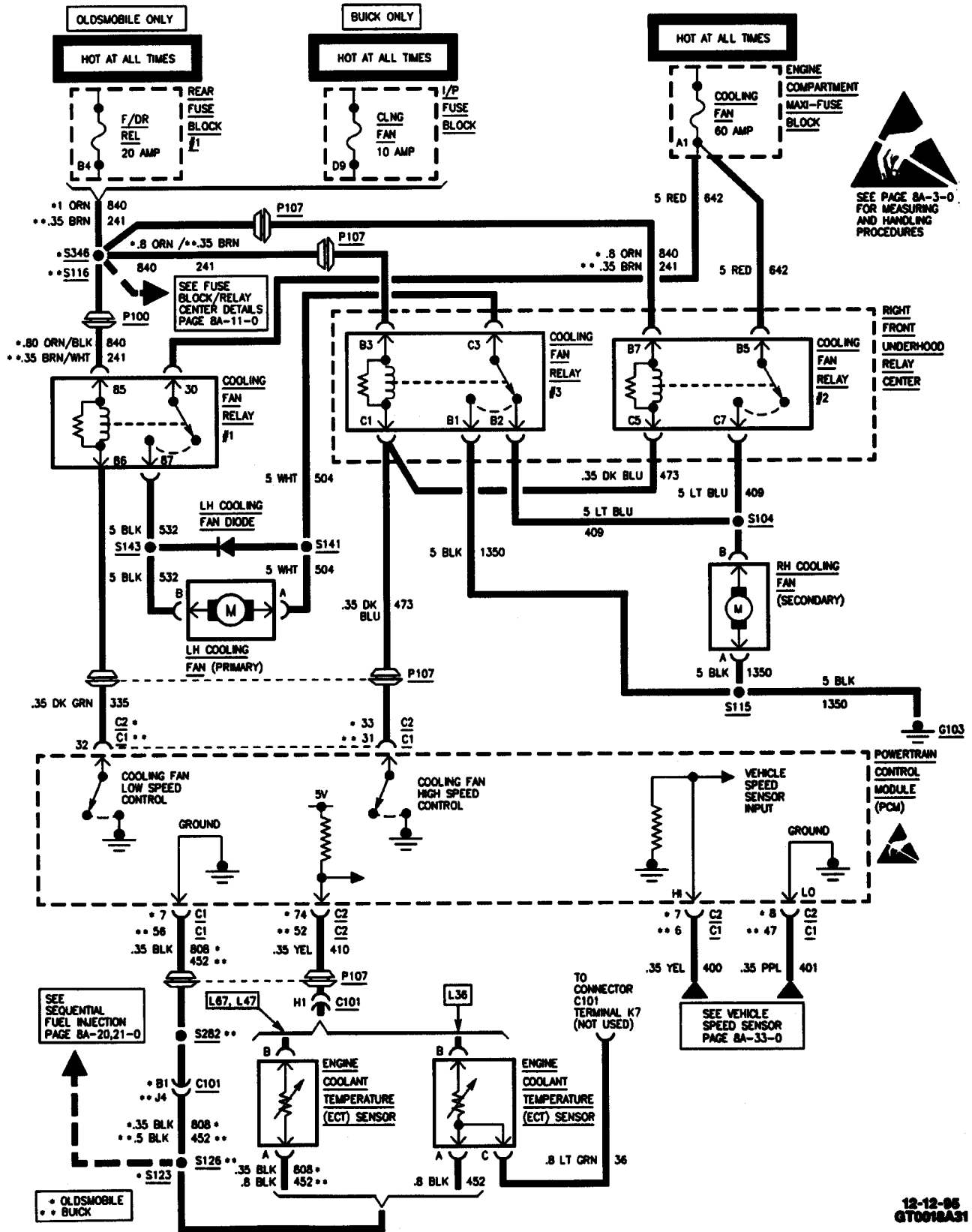


GM COOLING FAN



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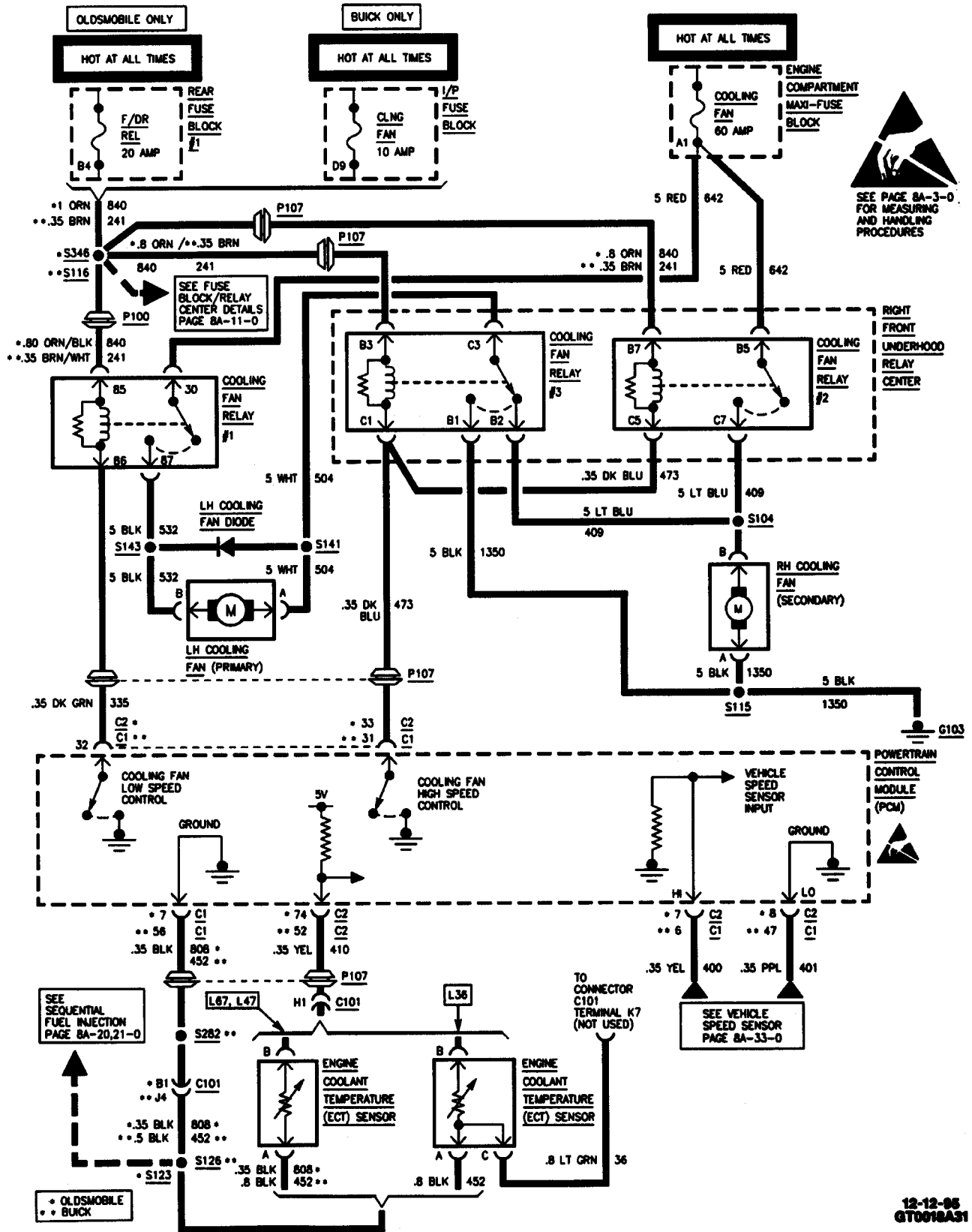
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SEE PAGE 8A-3-0 FOR MEASURING AND HANDLING PROCEDURES

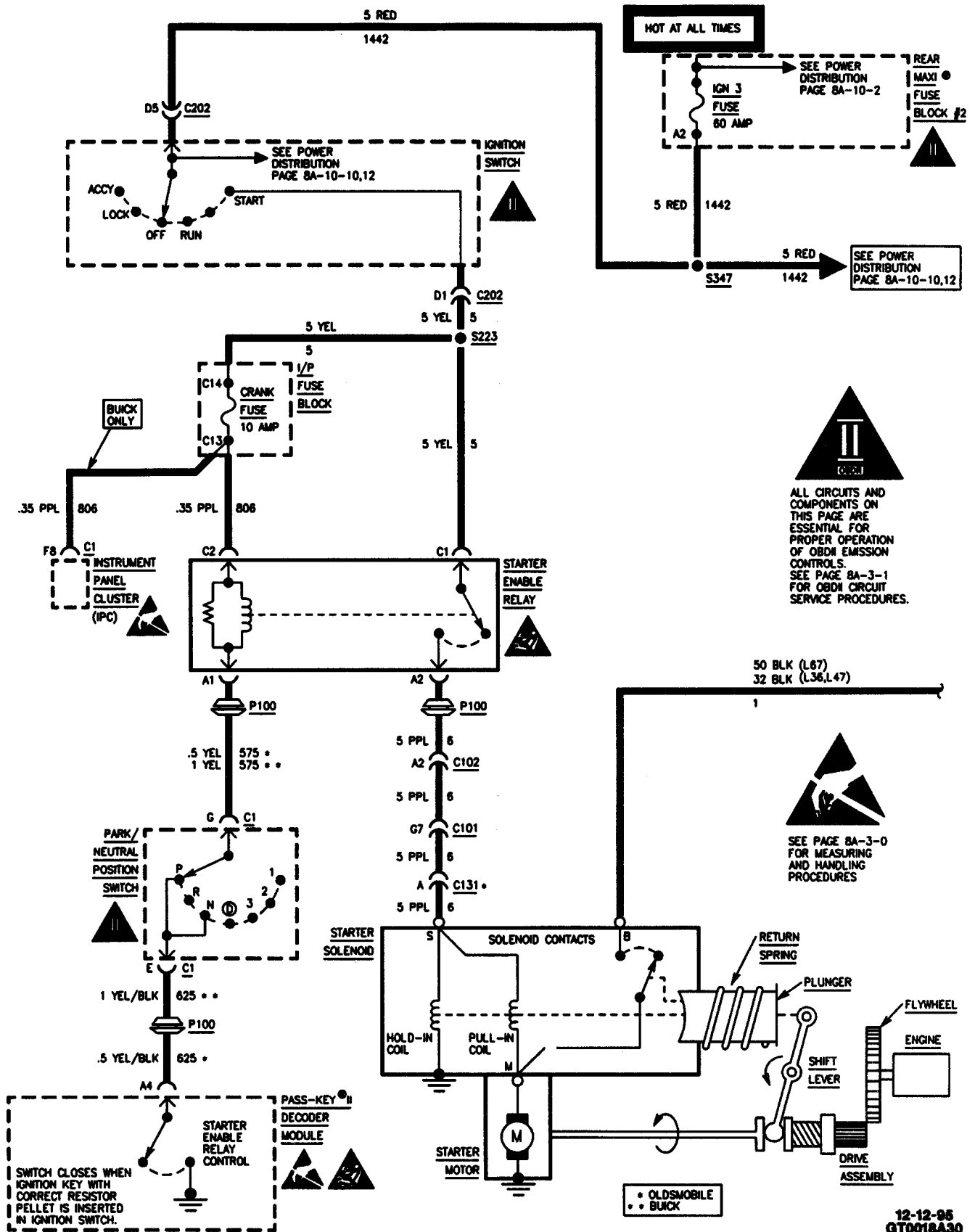
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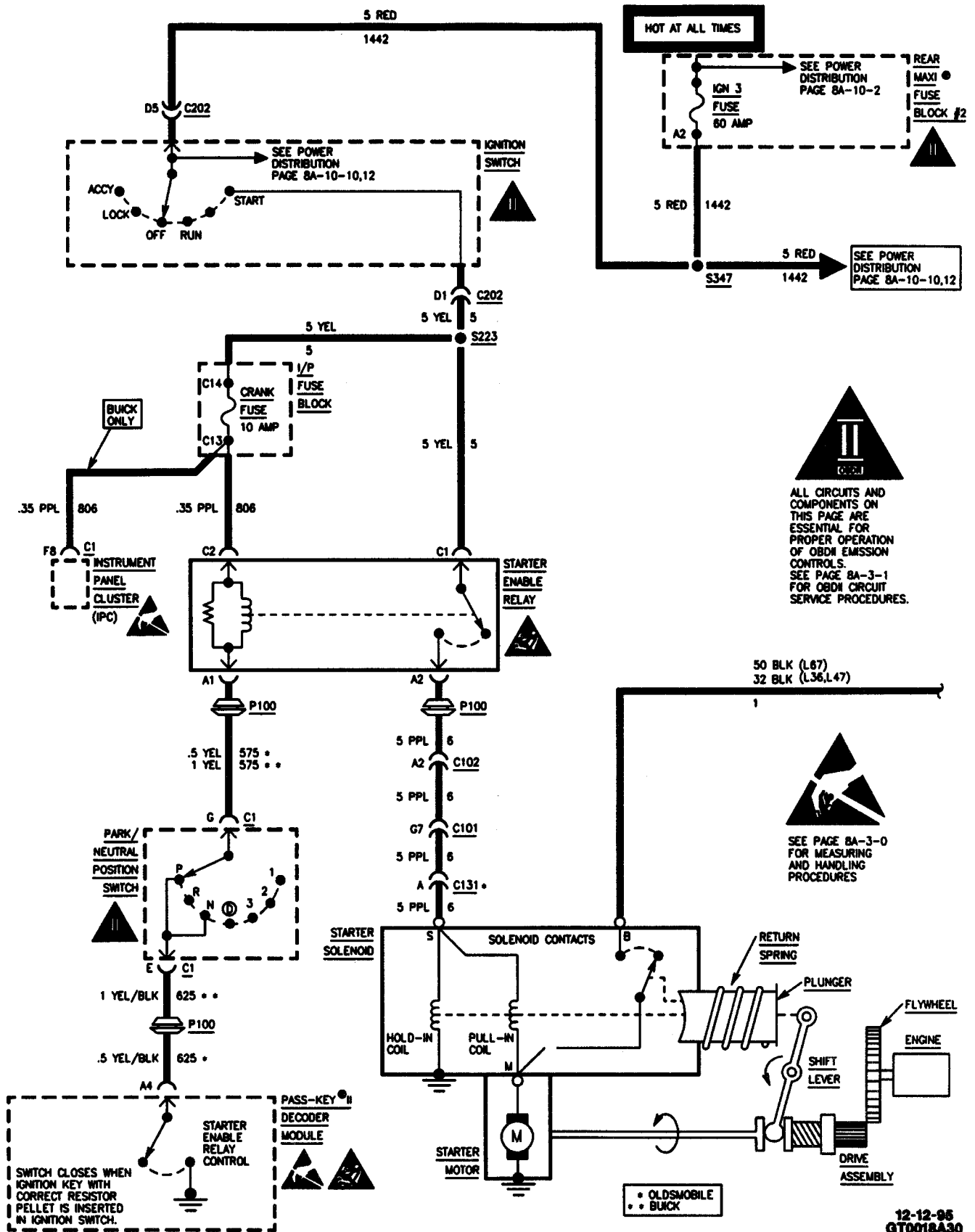


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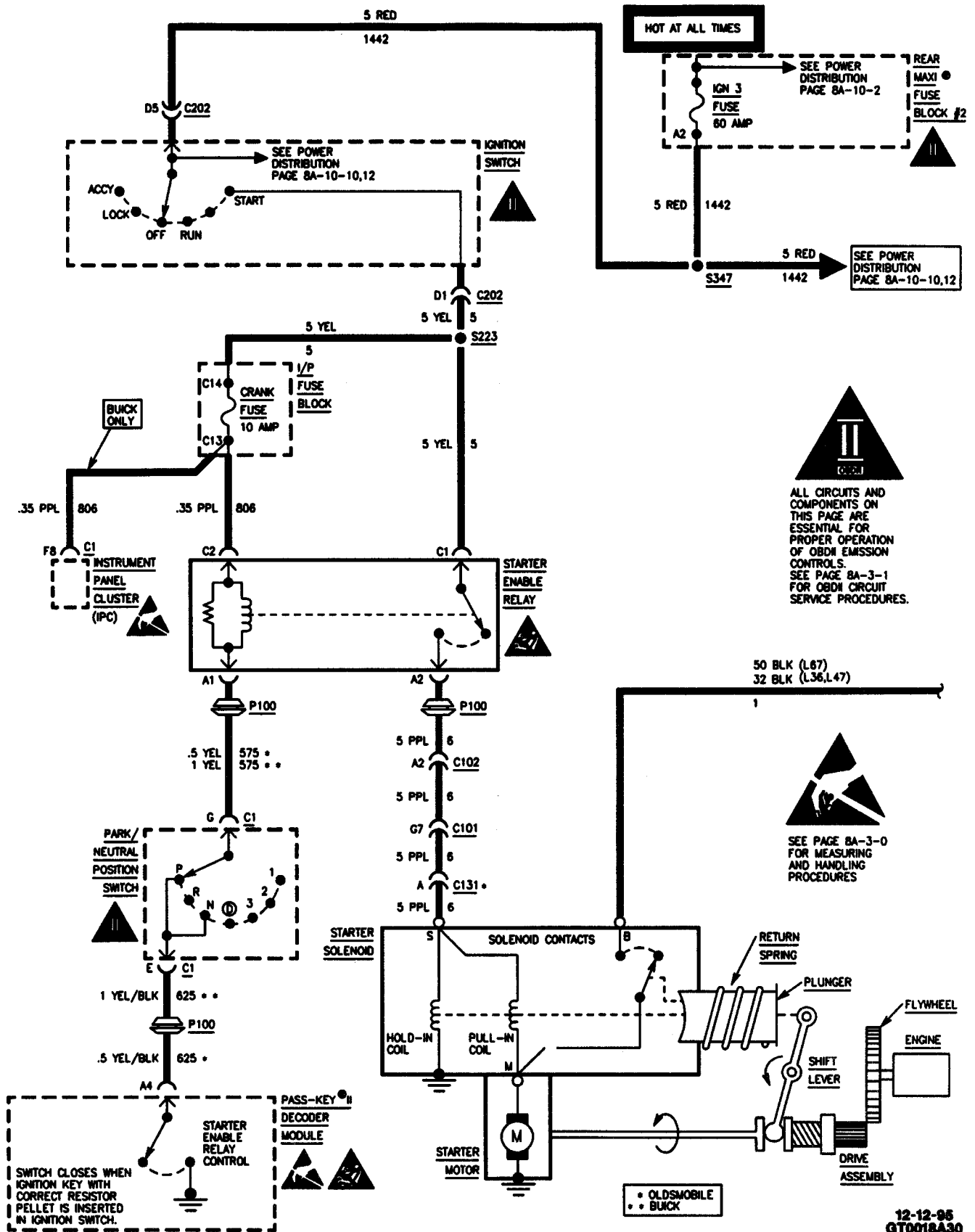
GM STARTING / CHARGING - PART A



GM STARTING / CHARGING - PART A

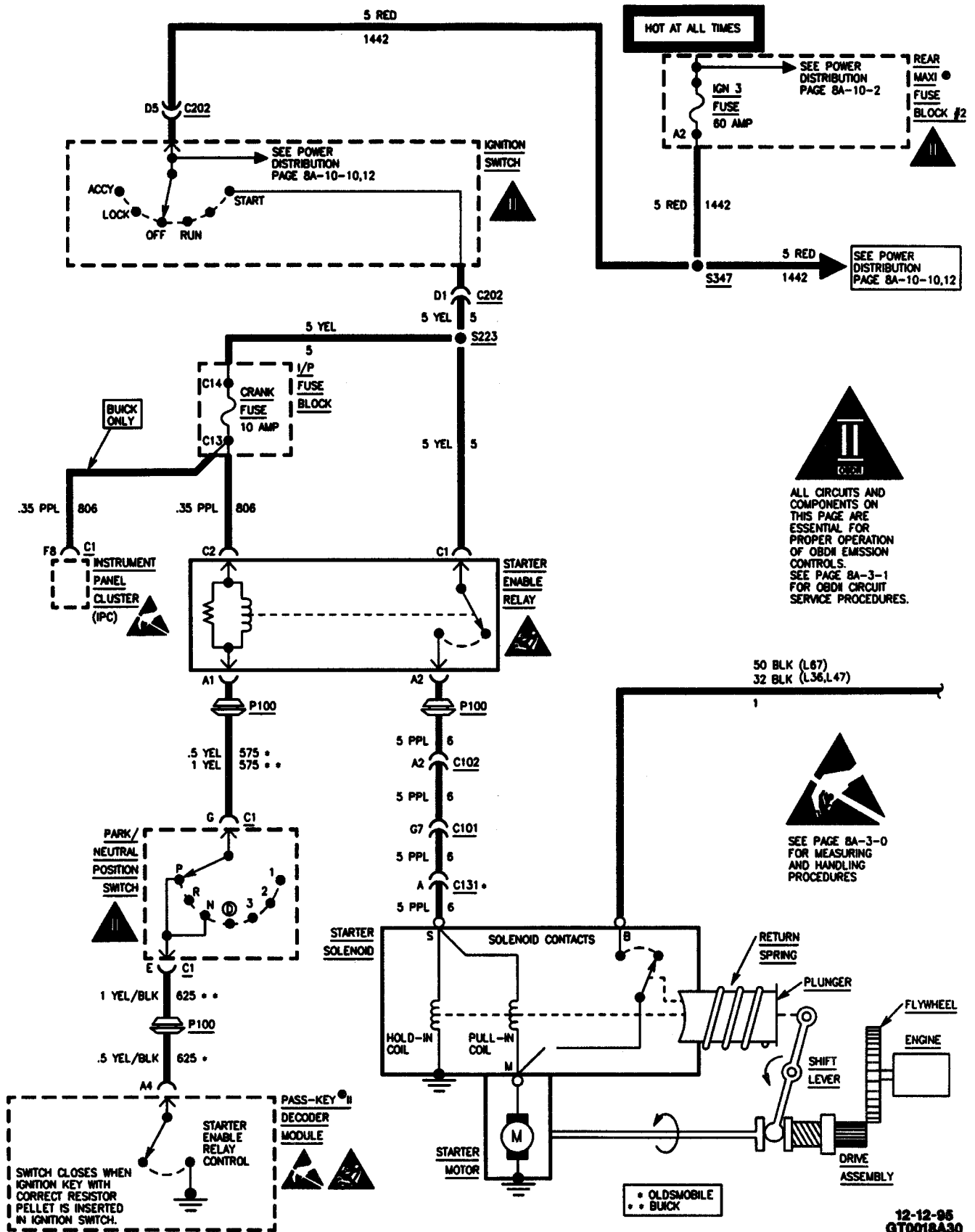


GM STARTING / CHARGING - PART A



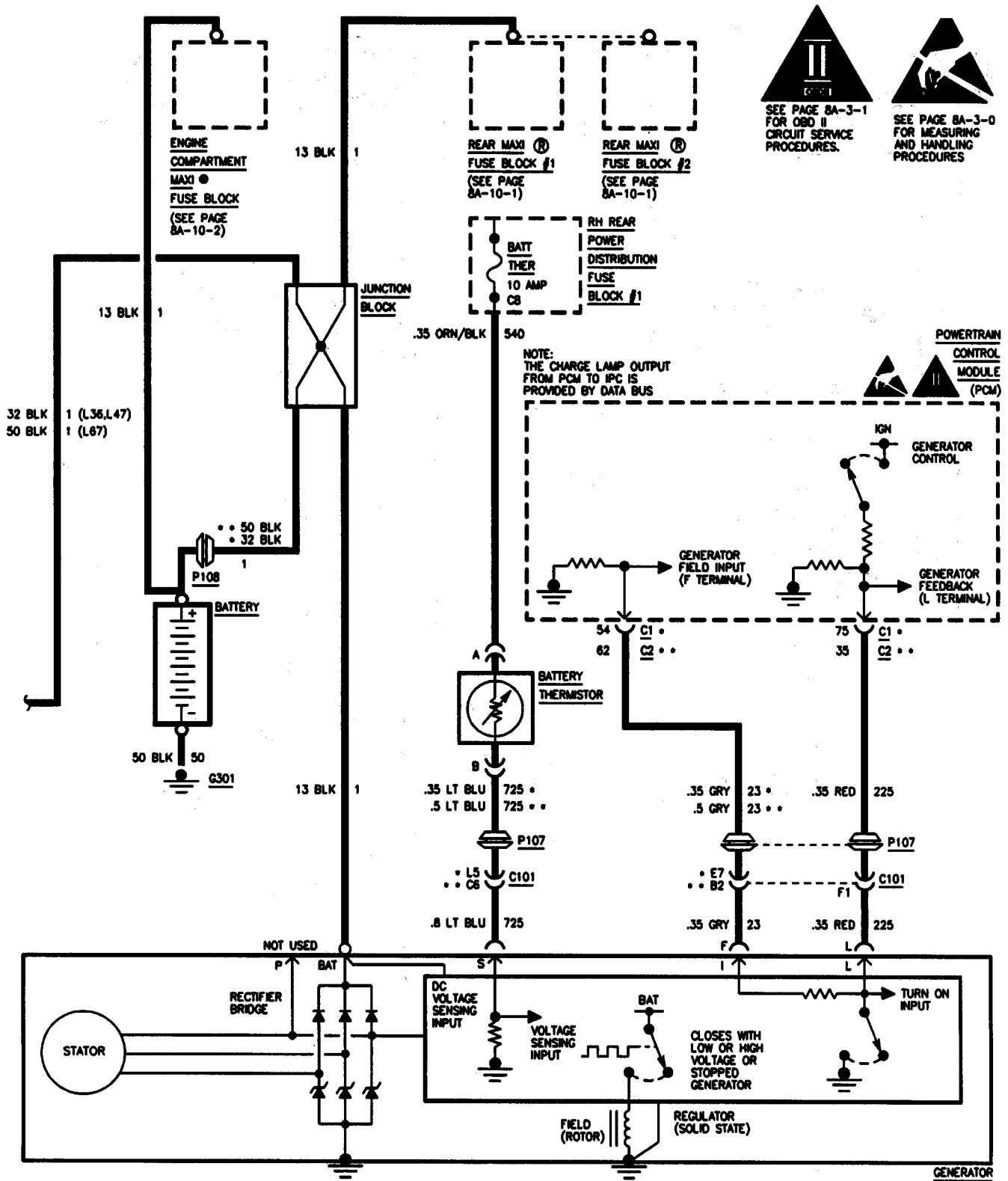
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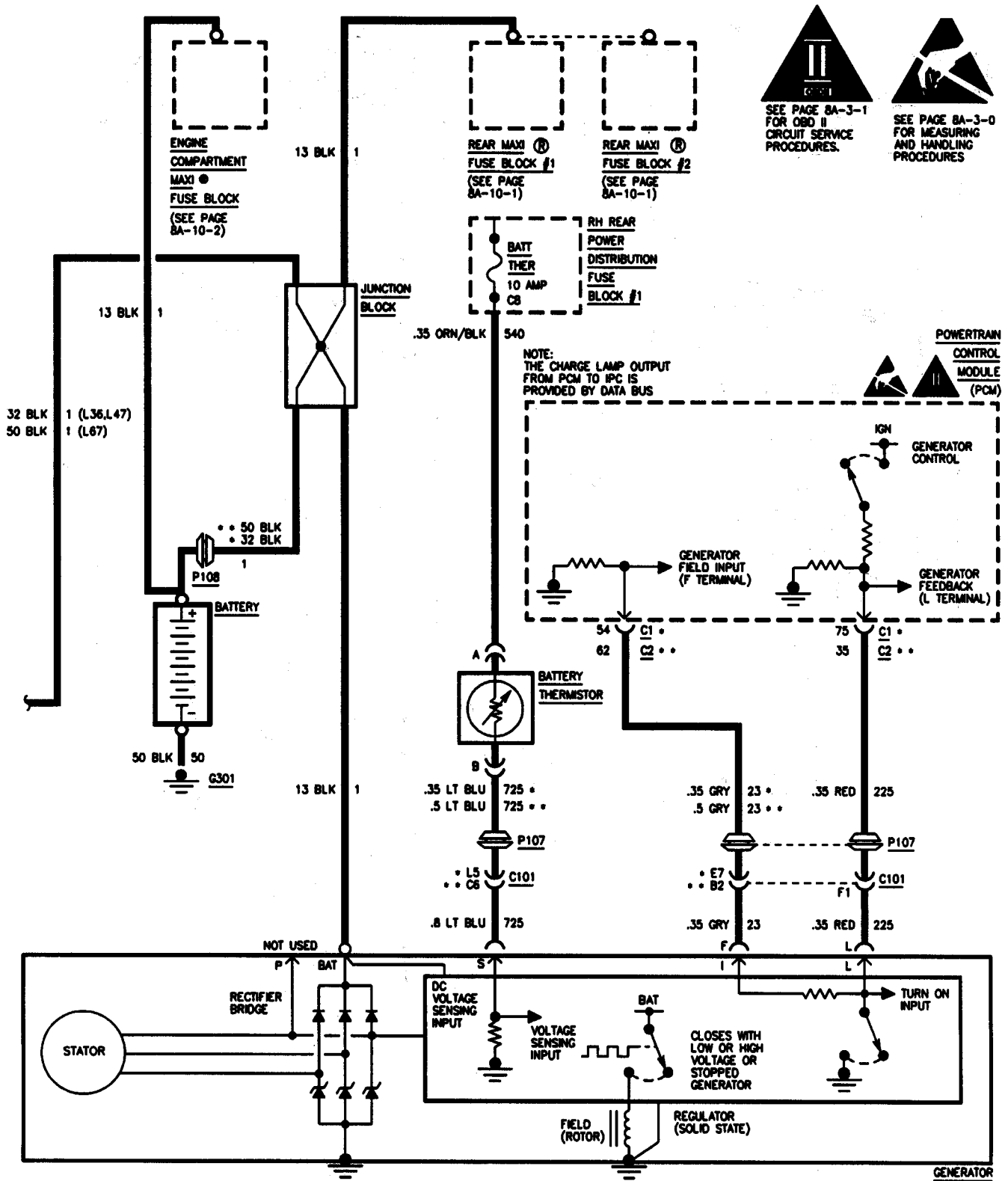


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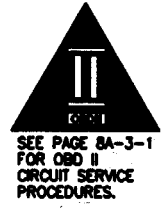
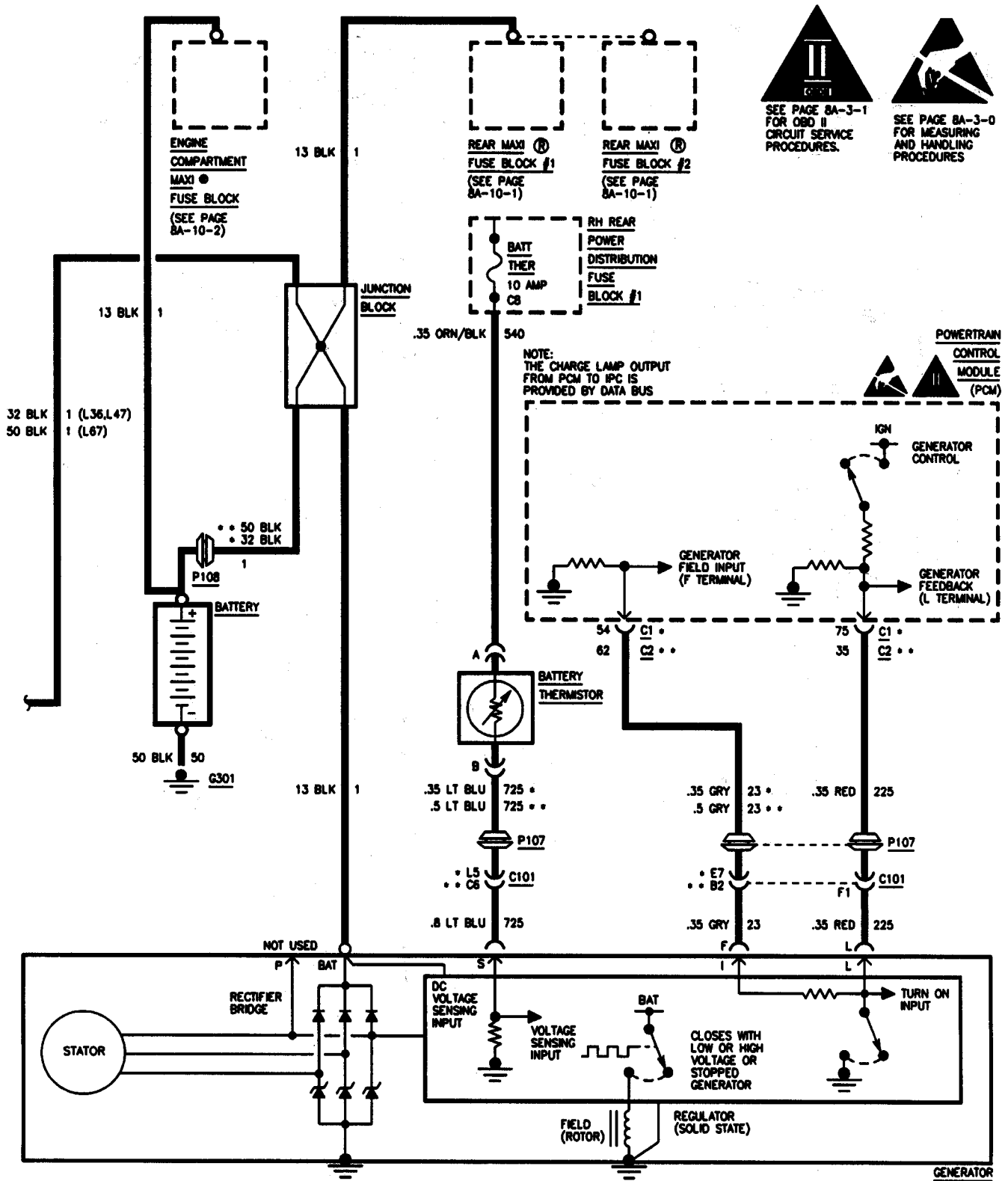
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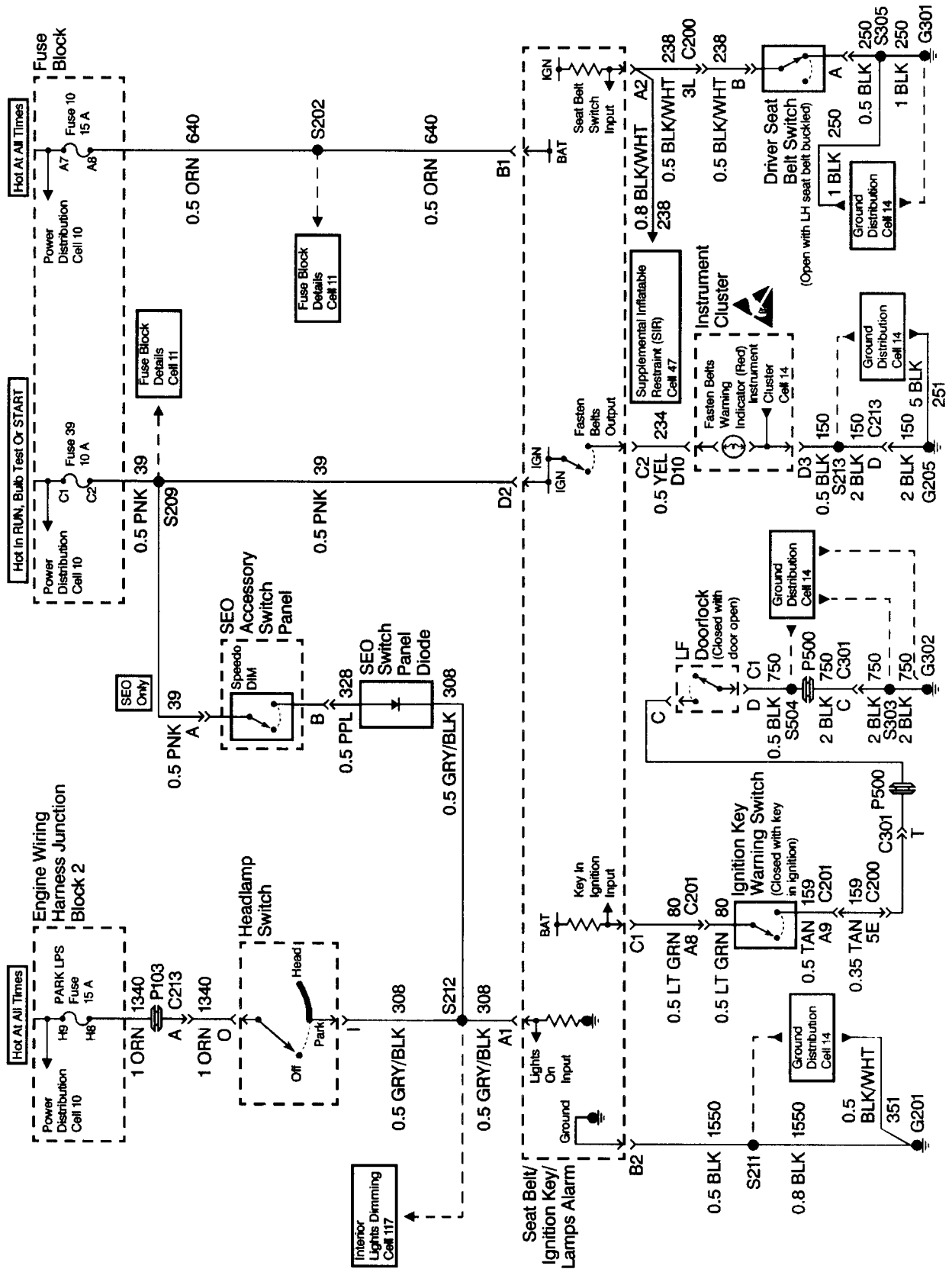
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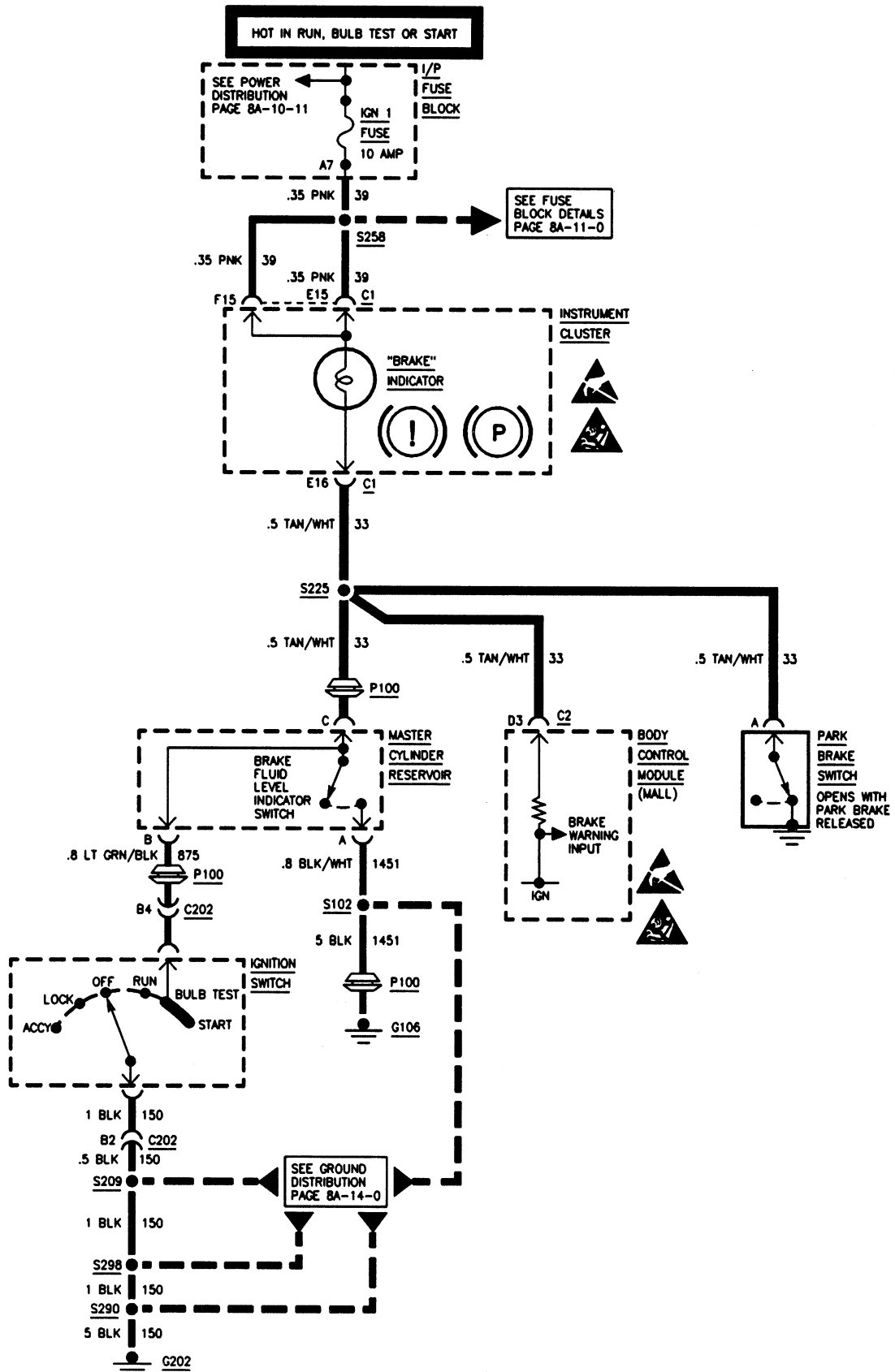
GM STARTING / CHARGING - PART A



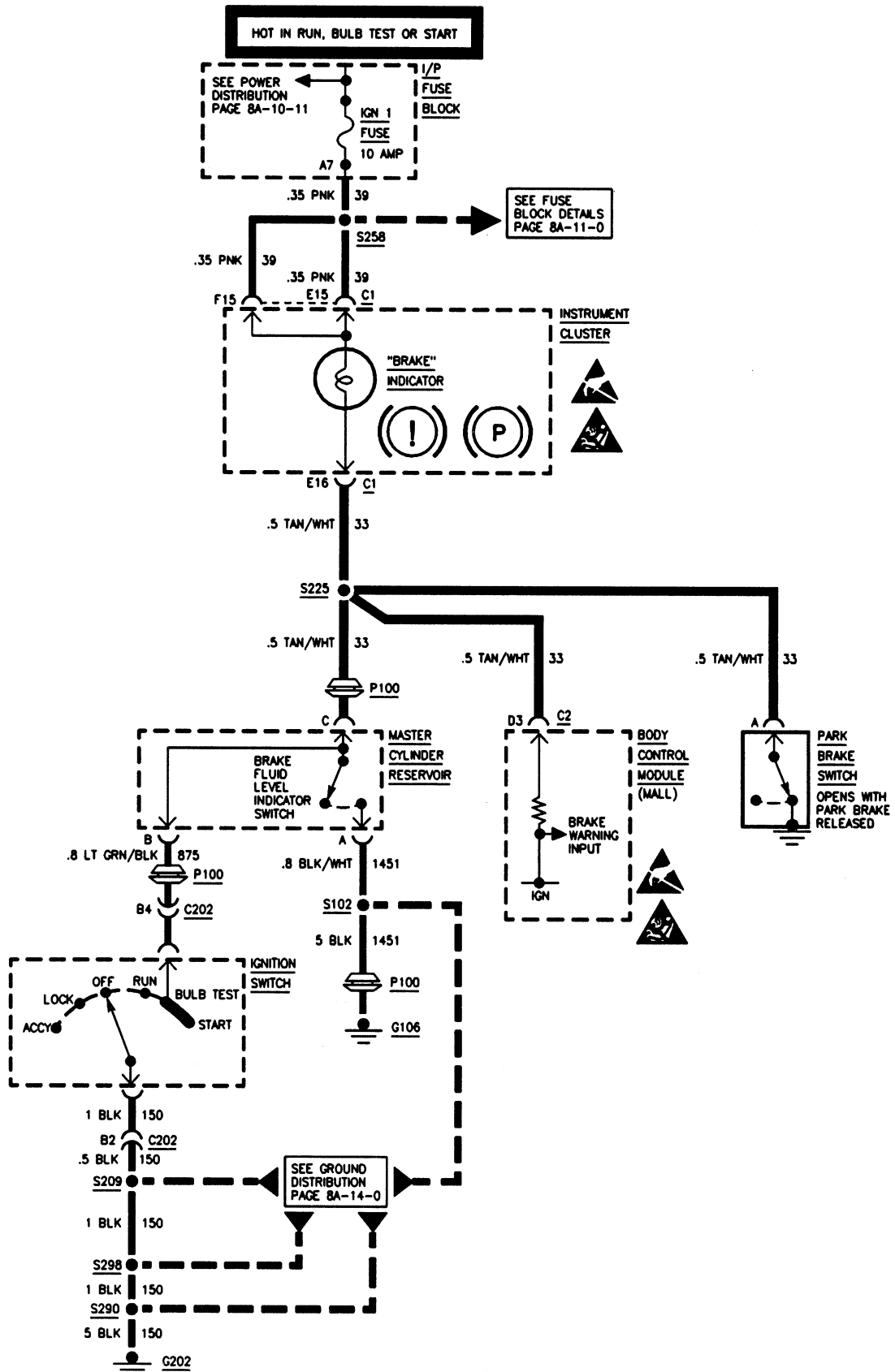
GM AUDIBLE WARNING



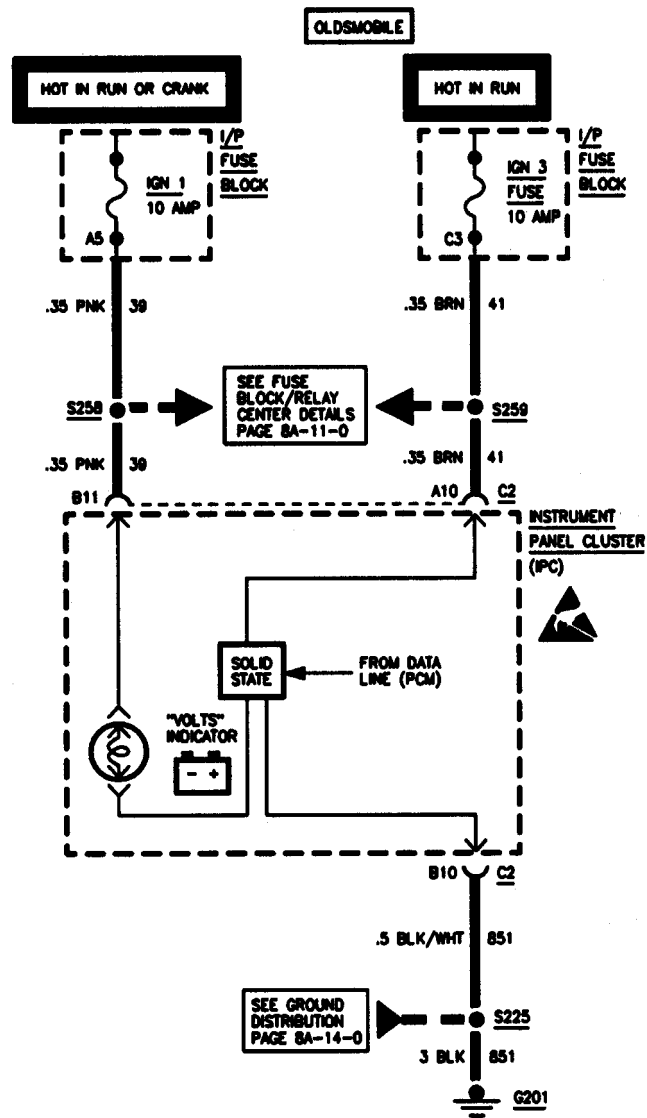
GM BRAKE WARNING



GM BRAKE WARNING



GM CHARGE WARNING



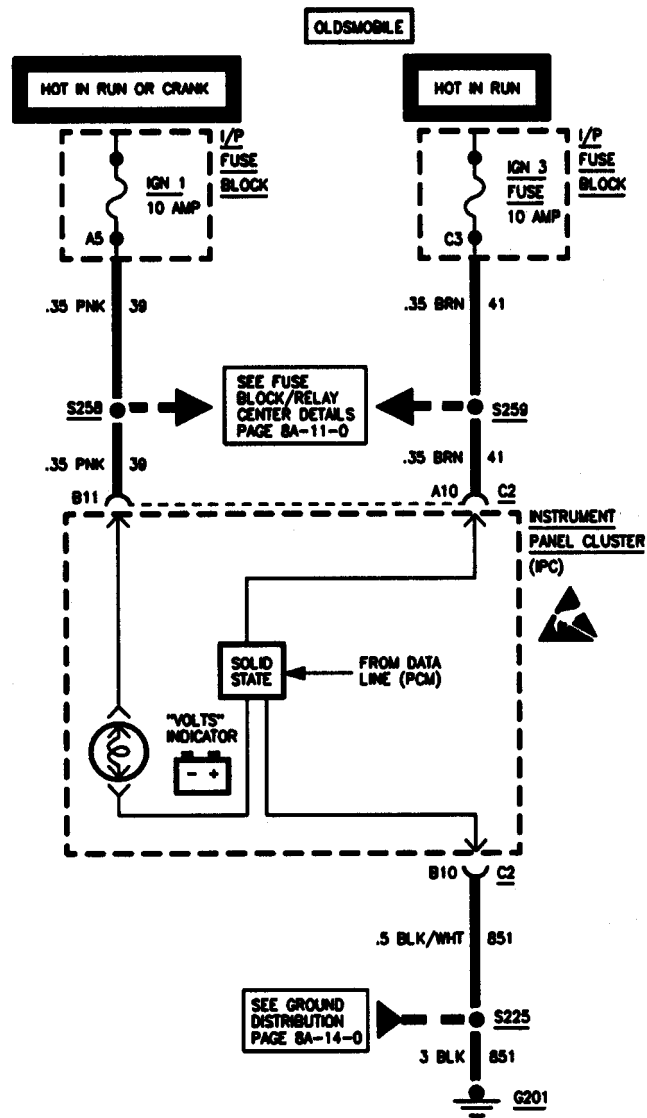
VOLTS INDICATOR

The PCM sends ignition voltage through circuit 225 to the L terminal of the generator. The voltage regulator acknowledges this voltage along with generator rotation. If the generator is not turning (engine off) with the ignition in the RUN position, it will ground the L terminal of the generator. The PCM senses this, and sends a signal over the data line to the instrument cluster. The instrument cluster, in turn lights the VOLTS indicator.

If the generator is turning (engine running), the PCM senses current being produced and commands the VOLTS indicator off.

Whenever the voltage regulator senses a fault condition, it grounds the L terminal of the generator. The PCM senses this and commands the VOLTS indicator on.

GM CHARGE WARNING



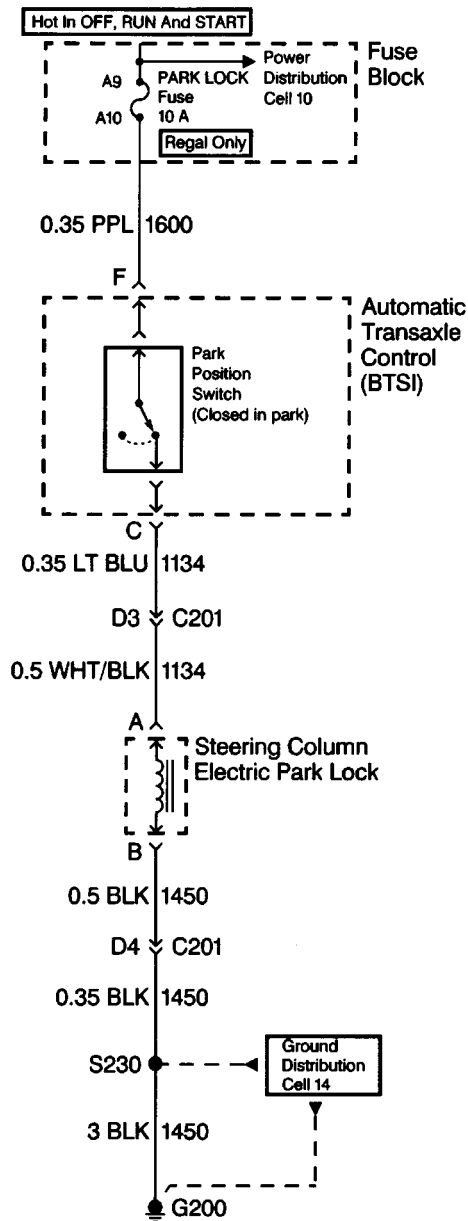
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Whenever the voltage regulator senses a fault condition, it grounds the L terminal of the generator. The PCM senses this and commands the VOLTS indicator on.

GM COLUMN LOCK



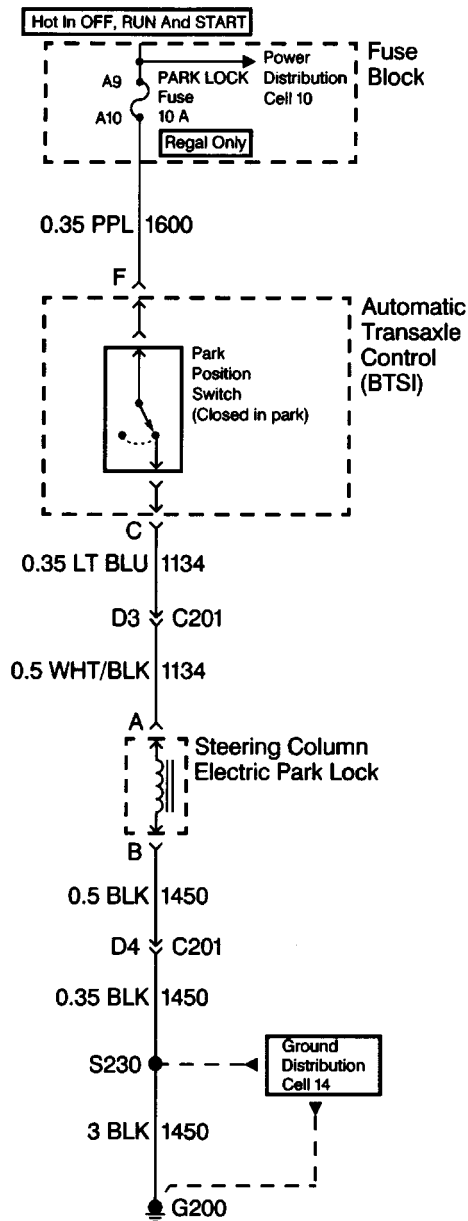
Circuit Operation

The steering column electric park lock prevents the ignition key from being turned to the LOCK position from the RUN, BULB TEST, or START position, when the transaxle is in a non-PARK position. Once the vehicle is shifted out of the PARK position, the park position switch opens de-energizing the steering column electric park lock. The mechanical lock within the ignition lock cylinder disables the ignition key from moving so the key cannot be taken out of the cylinder. Battery voltage is supplied to the park position switch through circuit 1600 when the ignition key is in the RUN, BULB TEST, or START position. When the shifter is in the PARK position, the park position switch within the automatic transaxle control closes, supplying voltage through circuit 1134 to the steering column electric park lock energizing it. When the steering column electric park lock is energized it pulls the mechanical lock in the ignition key cylinder away from the cylinder allowing the ignition key to be turned to the LOCK position and be taken out of the cylinder.

Shift Lock Release

If the vehicle's battery should go dead, there are two override access slots for the console shift that will allow you to override the steering column electric park lock. The first is located underneath the steering column. Insert another key or a screwdriver into the access slot and rotate the lock cylinder. You will now be able to remove the key from the ignition. The second access slot is located on the upper, right-hand side of the console shift panel. To use this slot, first remove the cap. Insert a key or a screwdriver into the slot. Press down and hold. You will now be able to shift the vehicle out of the PARK position. Be sure to replace the cap after use.

GM COLUMN LOCK



Circuit Operation

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