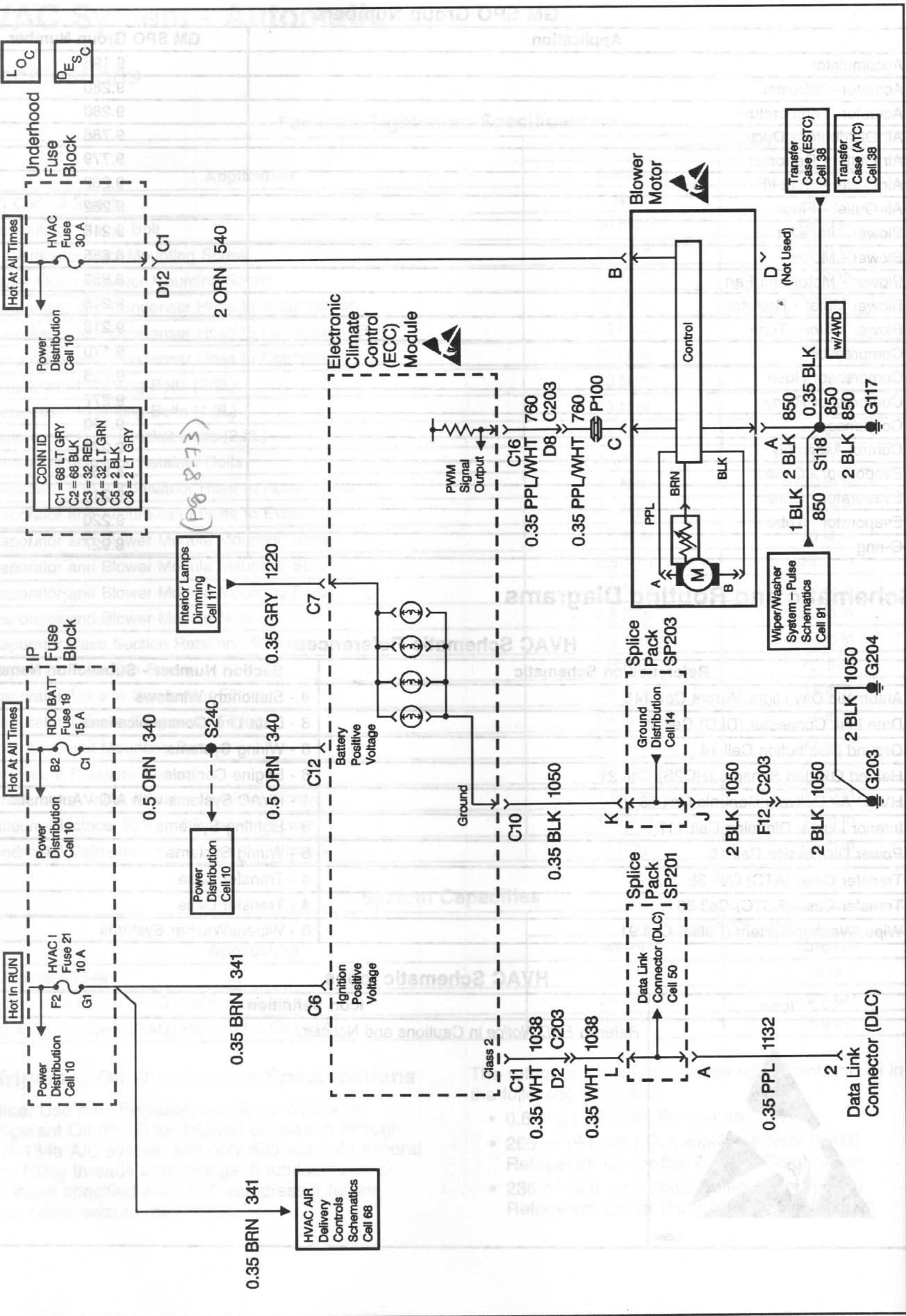
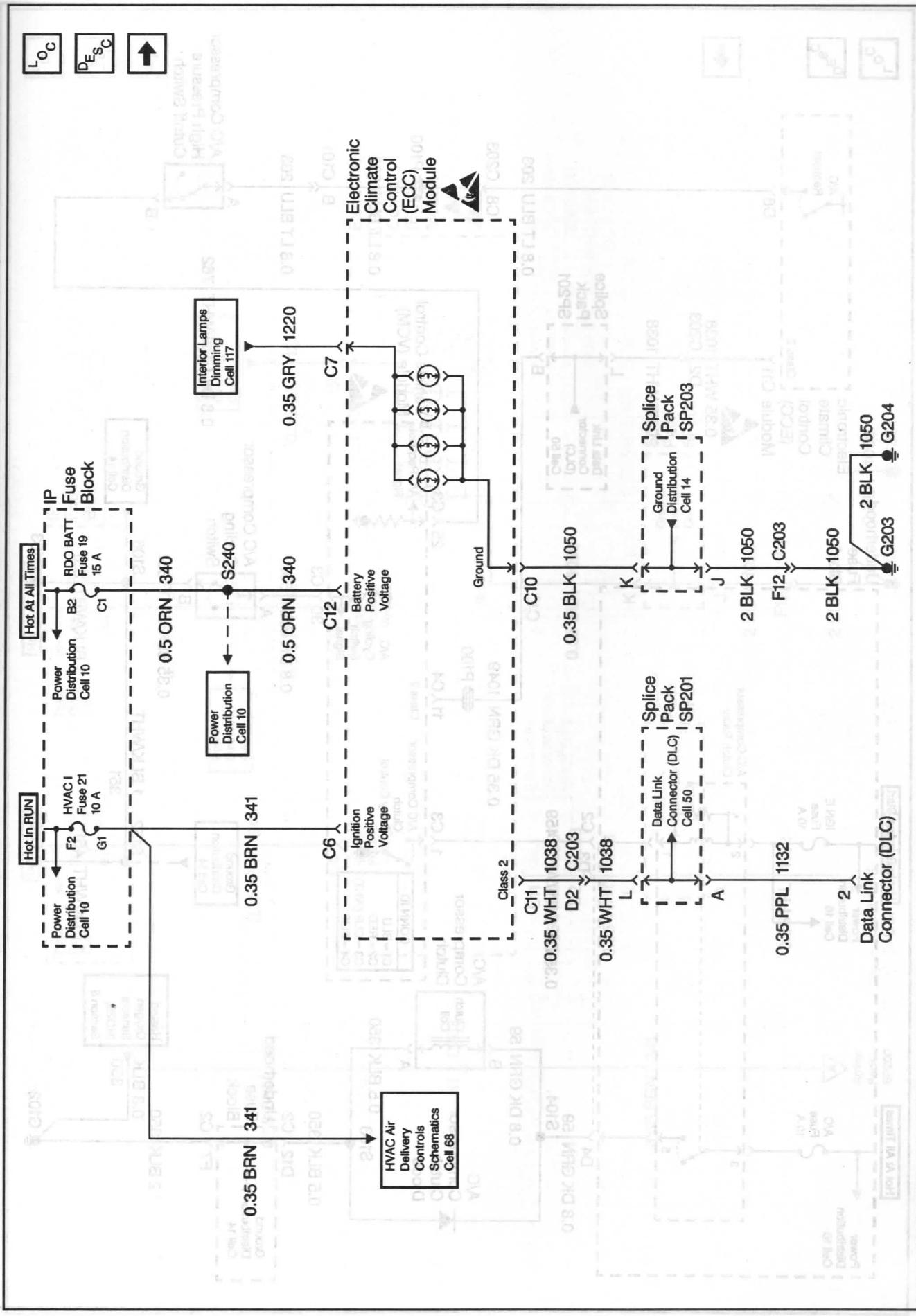


HVAC Blower Control Schematics (Cell 66)

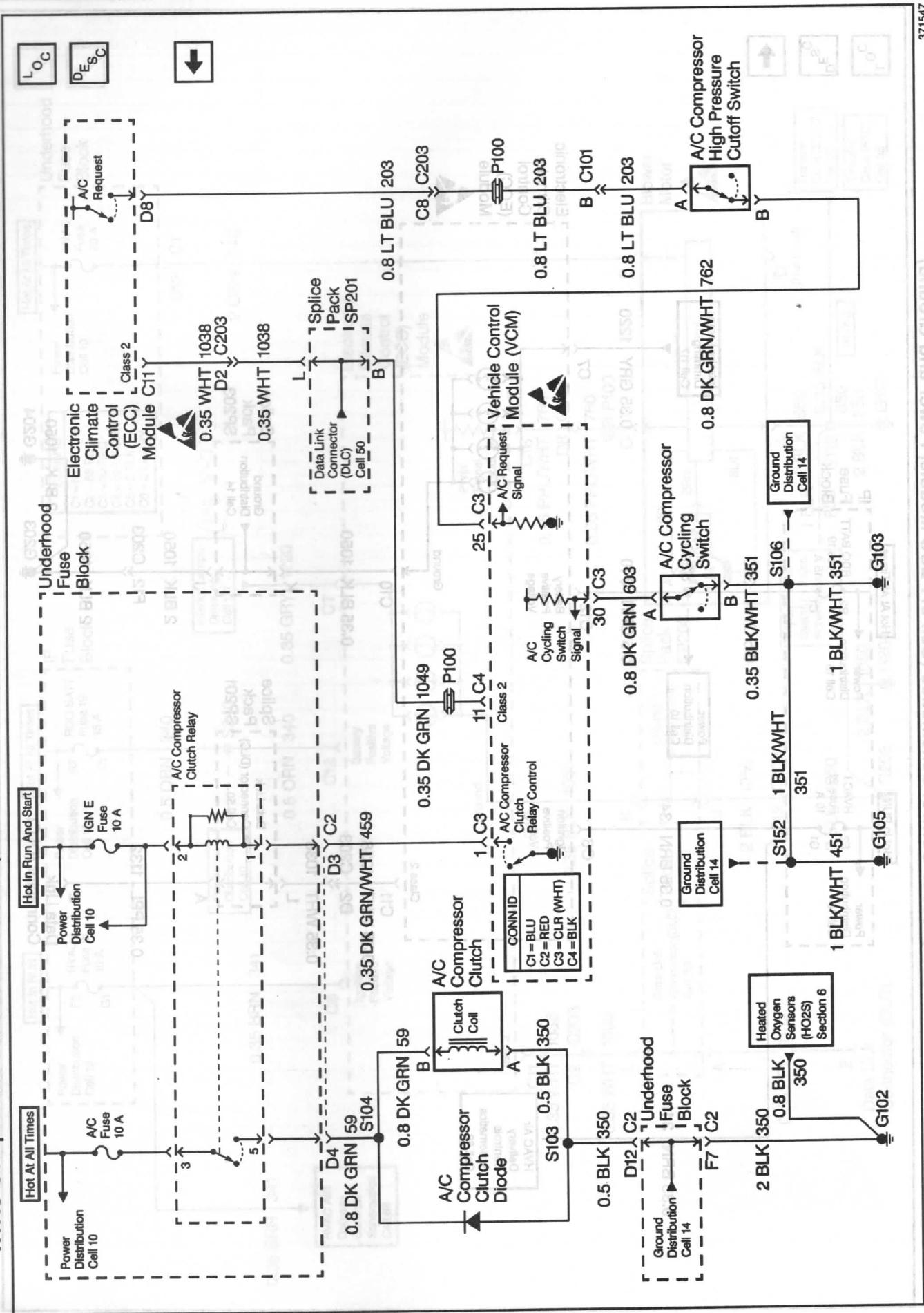


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HVAC Compressor Control Schematics (Cell 67: ECC Module, Power and Ground)



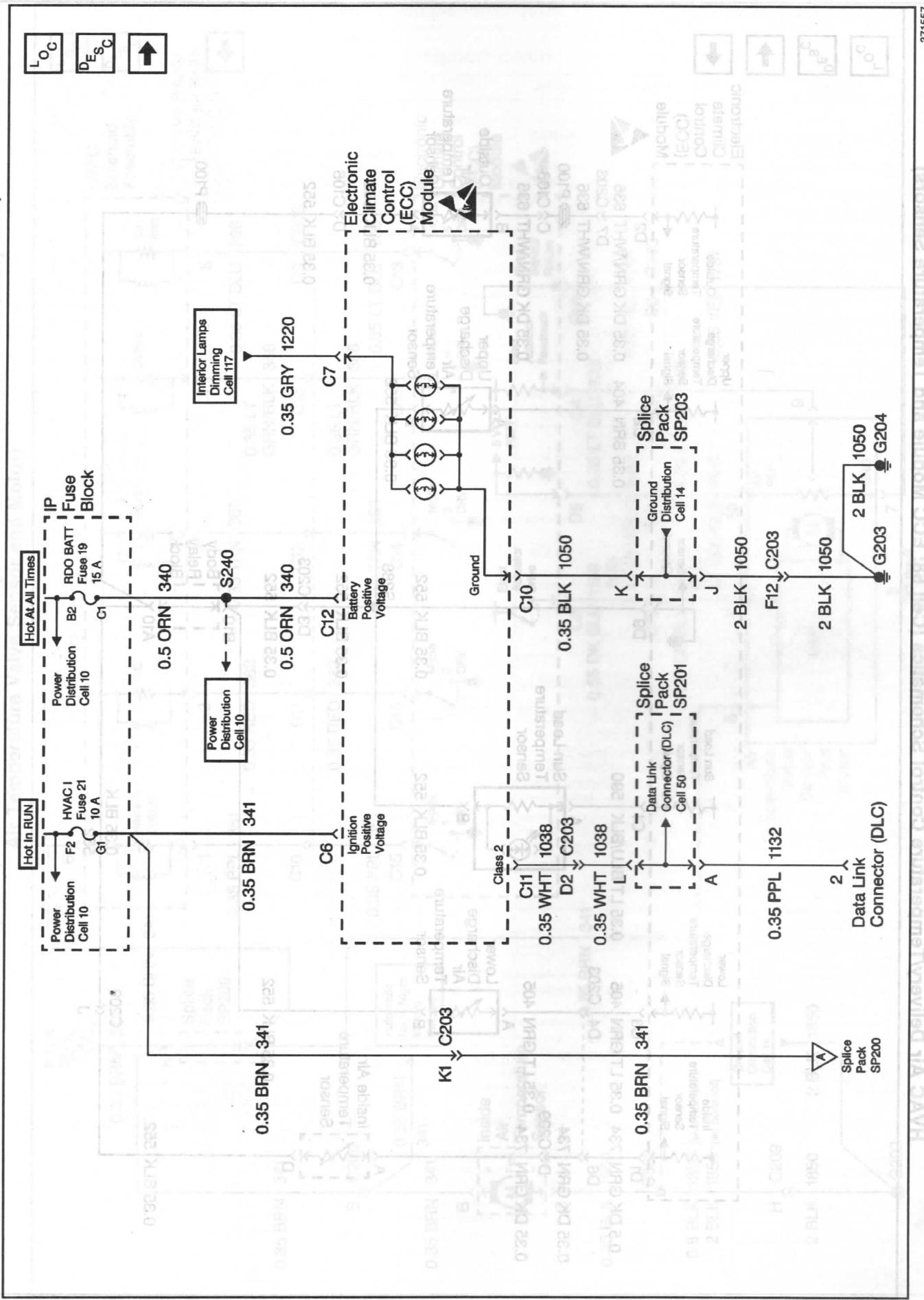
HVAC Compressor Control Schematics (Cell 67: A/C Compressor Clutch, Relay, Diode and High Pressure Cutoff Switch)



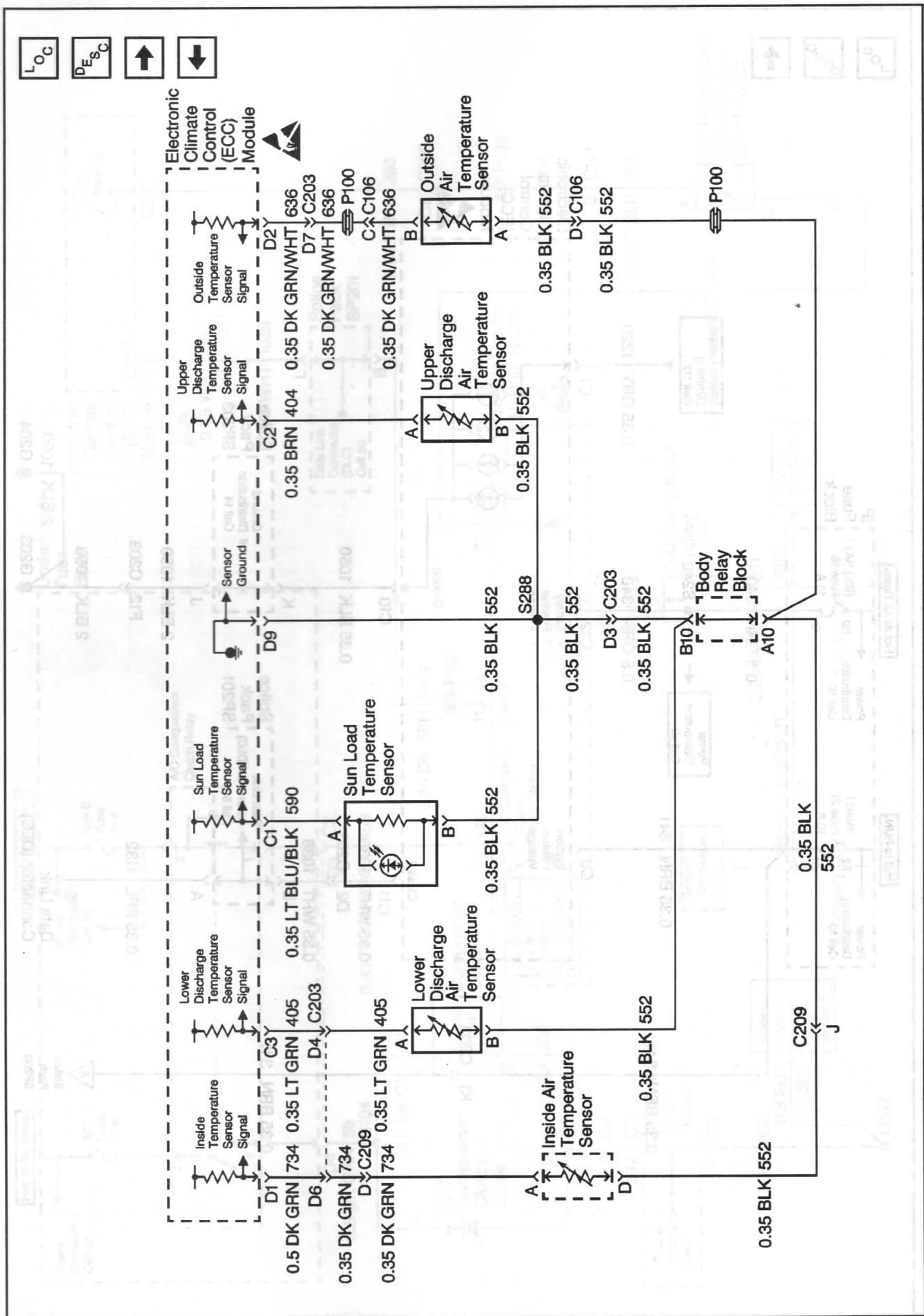
HVAC Compressor Control Sequence (Cell 67: ECC Module Power and Ground)

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HVAC Air Delivery/Temperature Control Schematics (Cell 68: ECC Module, Power and Ground)



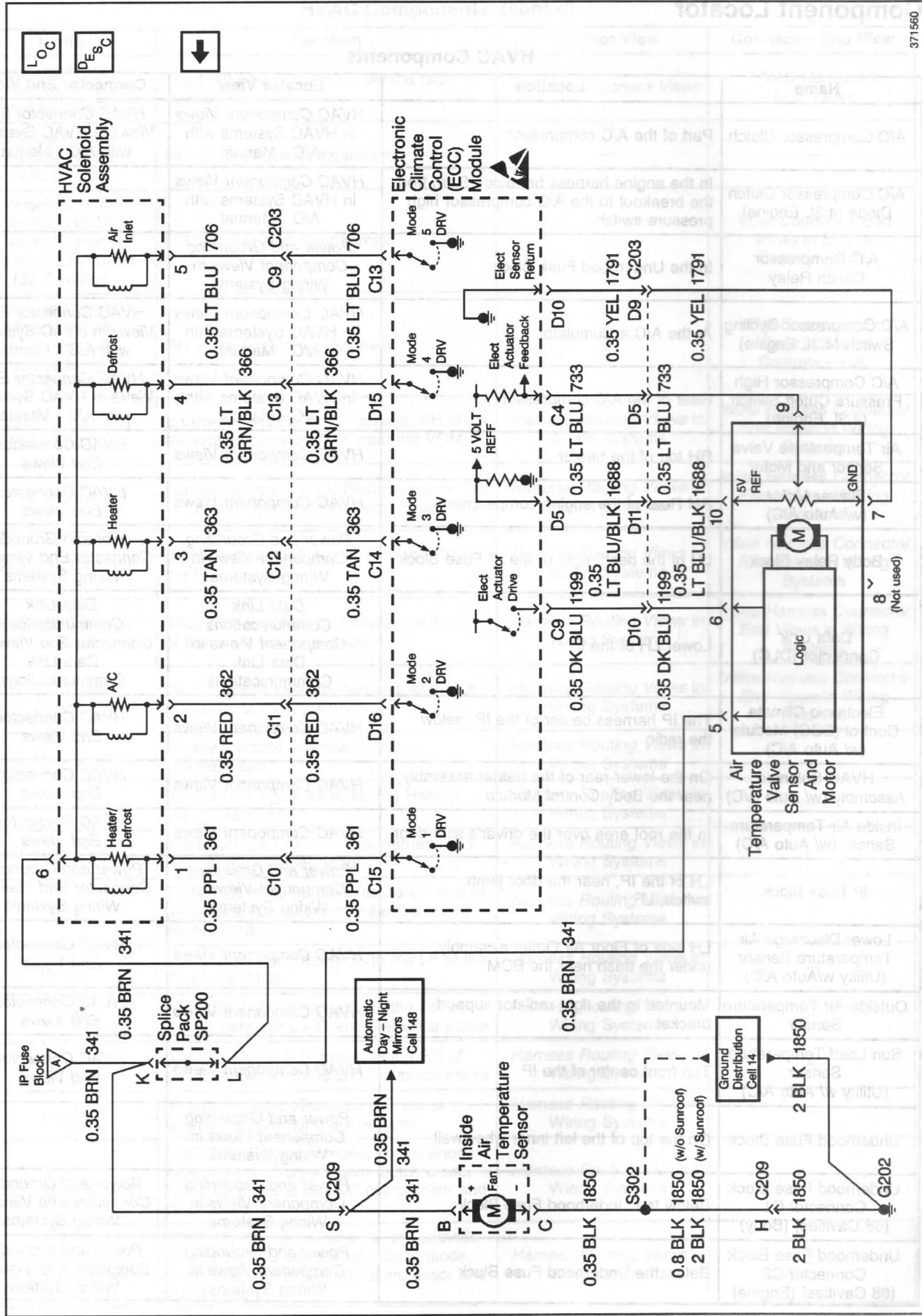
HVAC Air Delivery/Temperature Control Schematics (Cell 68: ECC Module and Temperature Sensors)



HVAC Air Delivery/Temperature Control Schematics (Cell 68: ECC Module and Temperature Sensors)

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HVAC Air Delivery/Temperature Control Schematics (Cell 68: HVAC Solenoid Assembly and Air Temperature Valve Sensor and Motor)



The ECC module determines the appropriate blower motor speed and sends a pulse width modulated (PWM) signal to the blower motor. The ECC module may produce the blower motor speed signal in two modes of operation:

- Automatic operation
- Manual operation

In the manual operation mode 13 speed settings are available and, once selected, the fan speed remains constant until a new speed is selected. In the automatic operation mode the ECC module will determine what blower speed is necessary in order to maintain customer selected temperature.

The blower motor speed signal produced by the ECC module has the following route:

1. ECC module to CKT 760 (PPL/WHT)
2. CKT 760 (PPL/WHT) to the blower motor

Battery voltage for the blower motor is provided by the following components:

- The HVAC fuse
- CKT 540 (ORN)

The ground path is provided by CKT 850 (BLK) to ground G117.

HVAC Air Delivery/Temperature Control Circuit Description

The electronic climate control (ECC) module serves as an interface between the passenger and the air delivery system. The ECC module compares passenger selections with environmental conditions and will adjust air delivery accordingly.

The following air delivery modes are available:

- Defrost
- Blend
- Floor
- Bi-level
- Panel
- External air circulation
- Internal air circulation

The ECC module requires two voltage sources in order to operate. Voltage is available at all times through the RDO BATT fuse 19 and CKT 340 (ORN).

When the ignition switch is in the RUN position, voltage is available through the HVAC I fuse 21 and CKT 341 (BRN).

A path to ground for the ECC module is provided by CKT 1050 (BLK) to grounds G203/G204.

The ECC module receives inputs from the following temperature sensors:

- The inside air temperature sensor and CKT 734 (DK GRN)
- A fan located internally to the inside air temperature sensor housing continually draws passenger compartment air over the sensor increasing accuracy of the temperature reading. The HVAC I fuse applies voltage to CKT 341 (BRN) for the fan motor when the ignition switch is in the RUN position. A path to ground for the fan motor is provided by CKT 1850 (BLK) to ground G202.
- The outside air temperature sensor and CKT 636 (DK GRN/WHT)
- The sun load temperature sensor and CKT 590 (LT BLU/BLK)
- The upper discharge air temperature sensor and CKT 404 (BRN)
- The lower discharge air temperature sensor and CKT 405 (LT GRN)

CKT 552 (BLK) provides the common ground path for the sensors back to the ECC module.

The ECC module will use the sensor information in order to determine how much airflow to the heater core is required and will adjust the air temperature valve accordingly. The air temperature valve is located internally to the heater core housing. The position of the air temperature valve is reported to the ECC module by the air temperature valve sensor and motor. The HVAC I fuse applies voltage to CKT 341 (BRN) for the air temperature valve sensor and motor when the ignition switch is in the RUN position.

Operation of the air temperature valve sensor and motor is supported by the following circuits:

- CKT 1688 (LT BLU/BLK) for the 5 volt reference
- CKT 1791 (YEL) for the ground reference
- CKT 733 (LT BLU) for the signal return path
- CKT 1199 (DK BLU) for the motor drive signal

The ECC module will control the actuation of individual solenoids of the HVAC solenoid assembly in order to direct air to the appropriate outlets. The HVAC I fuse applies voltage to CKT 341 (BRN) for the HVAC solenoid assembly when the ignition switch is in the RUN position. With voltage available the ECC module will complete the current path to ground.

The ECC module control of the HVAC solenoid assembly is supported by the following circuits:

- CKT 361 (PPL)
- CKT 362 (RED)
- CKT 363 (TAN)
- CKT 366 (LT GRN/BLK)
- CKT 706 (LT BLU)