



# HVAC

## – How the Circuit Works

### except Climate Control

The heater control panel receives battery voltage at all times through fuse 18 (in the under-dash fuse/relay box). With the ignition switch in ACC (I) or ON (II), voltage is supplied to the control panel through fuse 16 (in the under-dash fuse/relay box). The control panel, which is grounded at G404, controls the blower motor, and supplies a 5V DC reference voltage to the air mix control motor.

### Blower Controls

The blower motor is controlled by the heater control panel which receives battery voltage at all times through fuse 18 (in the under-dash fuse/relay box). With the ignition switch in ACC (I) or ON (II), battery voltage is supplied to the heater control panel through fuse 16 (in the under-dash fuse/relay box). The heater control panel is grounded at G404.

Battery voltage is applied through fuse 12 (in the under-hood fuse/relay box) to the blower motor relay contacts at all times. With the ignition switch in ACC (I) or ON (II) and the engine not cranking, the blower motor relay in the under-hood fuse/relay box is energized which feeds battery voltage to the blower motor. The blower power transistor controls the blower motor in all speeds except HIGH. The blower power transistor is controlled by the heater control panel. When the heater control panel requests HIGH blower speed, it grounds the blower motor through the contacts of the blower motor high relay, making the blower run at high speed.

Refer to the Service Manual (Section 21, HVAC) for specific tests or troubleshooting procedures.

### Air Delivery

The air mix and mode control motors each receive inputs from the control panel. The air mix motor regulates the mixture of cold and hot air by varying the position of the heater door. The mode control motor controls the direction and volume of outlet air. The air flow can be directed to the dashboard vents or the corner vent on the passenger's side. Both the air mix control motor and mode control motor are grounded by the control panel.

The recirculation control motor receives battery voltage through fuse 16 when the ignition switch is in ACC (I) or ON (II). It regulates the position of the fresh/recirc door, and is controlled by two position inputs from the control panel ("Recirc" and "Fresh").

Refer to the Service Manual (Section 21, HVAC) for specific tests and troubleshooting procedures.