

the blower motor passes through the A/C evaporator core.

DESCRIPTION AND OPERATION > CLIMATE CONTROL SYSTEM - VEHICLES WITH: ELECTRONIC MANUAL TEMPERATURE CONTROL (EMTC) - SYSTEM OPERATION AND COMPONENT DESCRIPTION > AIR HANDLING

There are 3 door actuators that control the air flow into the passenger compartment:

- Air distribution
- Air inlet
- Driver side temperature

All of the door actuators contain a reversible electric motor and a potentiometer. The potentiometer circuit consists of a 5-volt reference signal connected to one end of a variable resistor, and a signal ground connected to the other. A signal circuit is connected to a contact wiper, which is driven along the variable resistor by the actuator shaft. The signal to the FCIM from the contact wiper indicates the position of the actuator door. The FCIM powers the actuator motors to move the doors to the desired positions. The desired door positions are calculated by the FCIM based on the set temperature and ambient air temperature.

When an airflow mode, desired temperature, fresh air, or recirculation mode is selected, the FCIM moves the actuator motor in the desired direction.

The FCIM sends a PWM signal to the blower motor speed control to regulate the blower speed as necessary. The blower motor speed control provides variable ground feed for the blower motor based on the input from the FCIM. A delay function provides a gradual increase or decrease in blower motor speed under all conditions.

DESCRIPTION AND OPERATION > CLIMATE CONTROL SYSTEM - VEHICLES WITH: ELECTRONIC MANUAL TEMPERATURE CONTROL (EMTC) - SYSTEM OPERATION AND COMPONENT DESCRIPTION > OFF

When OFF is selected:

- the recirculated air request button is disabled.
- the air inlet door actuator closes off outside air and admits only recirculated air.
- the A/C request button is disabled.
- the blower motor is off.

DESCRIPTION AND OPERATION > CLIMATE CONTROL SYSTEM - VEHICLES WITH: ELECTRONIC MANUAL TEMPERATURE CONTROL (EMTC) - SYSTEM OPERATION AND COMPONENT DESCRIPTION > MAX A/C