

temperature imbalance the PCM does not allow the A/C clutch to engage. For more information on PCM sensors, Refer to ENGINE CONTROLS - INTRODUCTION (EXCEPT DIESEL & HYBRID) .

The PCM monitors the discharge pressure measured by the A/C pressure transducer. The PCM interrupts A/C compressor operation in the event the A/C pressure transducer indicates high system discharge pressures. It is also used to sense low charge conditions. If the pressure is below a predetermined value for a given ambient temperature, the PCM does not allow the A/C clutch to engage.

The FCIM may adjust the air inlet door depending on the humidity measured by the in-vehicle temperature and humidity sensor.

The sunload sensor supplies information to the FCIM indicating the intensity of the sun on the vehicle. The FCIM adjusts the system based on the intensity.

DESCRIPTION AND OPERATION > CLIMATE CONTROL SYSTEM - VEHICLES WITH: DUAL AUTOMATIC TEMPERATURE CONTROL (DATC) - SYSTEM OPERATION AND COMPONENT DESCRIPTION > HEATING AND VENTILATION

The heating and ventilation system:

- controls the temperature of the air inside the vehicle.
- reduces the relative humidity of the air inside the vehicle (during A/C compressor operation).
- delivers heated or cooled air to maintain the vehicle interior temperature and comfort level.

The heating and ventilation system uses a reheat method to provide conditioned air to the passenger compartment. Temperature blending is controlled by the temperature doors, which regulate the amount of air that flows through and around the heater core, where it is then mixed and distributed. All airflow from the blower motor passes through the A/C evaporator core.

Vehicles equipped with Auto Start-Stop have a cabin heater coolant pump.

DESCRIPTION AND OPERATION > CLIMATE CONTROL SYSTEM - VEHICLES WITH: DUAL AUTOMATIC TEMPERATURE CONTROL (DATC) - SYSTEM OPERATION AND COMPONENT DESCRIPTION > AIR HANDLING

There are 4 door actuators that control the air flow into the passenger compartment:

- Air distribution
- Air inlet
- Driver side temperature
- Passenger 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