

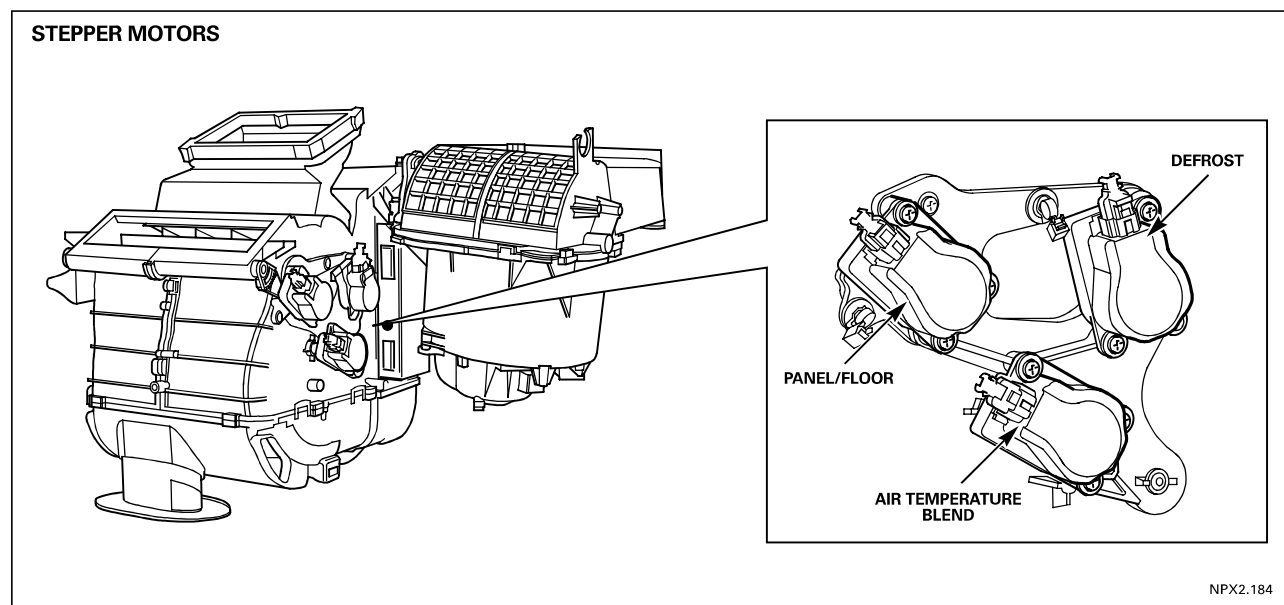
Stepper Motors

Three stepper motors are used for controlling the door positions:

- Defrost
- Panel/floor
- Air temperature blend

Each stepper motor has five wires:

- One 12v supply from the CM
- Four wires pulsed in pairs



There are no feedback pots; position of the door is purely down to counting the steps of rotation.

Do not try to measure an output. Any fault concerns are covered by DTCs and are very effective.

Stepper motors will cease rotation on engine cranking and continue after the engine has started; this is to prevent any low battery voltage problems. The stepper motor can stall if the battery voltage is too low. Air flow force can interrupt door movements when current available to drive the stepper motor is low.

If, for some reason, a panel is disconnected without the battery being isolated, be sure to refit the black connector first, the white connector second. This enables power to be at the stepper motors prior to powering the climate control panel software.

The control module recalibrates stepper motors by driving the motors end-to-end when a battery reconnection occurs. After 85 ignition cycles, the stepper motors will recalibrate 2 minutes after ignition off.