

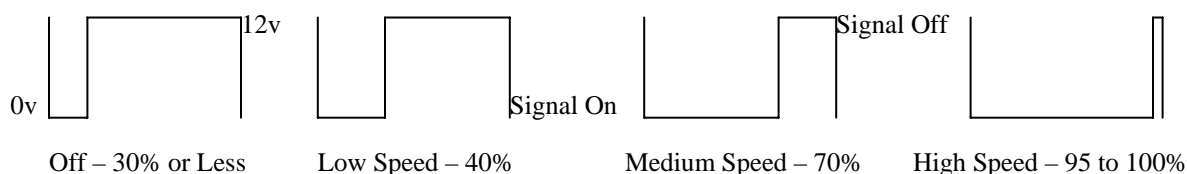
TECH TIP

Cadillac Blower Motor

In 1994, Cadillac started using a brushless blower motor. It is easily recognizable by the low profile motor design and three-wire plug connector. The motor has an electronic control module built inside. The control module regulates blower speeds by pulsing the ground circuit.

Pulsing of the ground circuit will show on a scanner as a 'duty cycle'. With a duty cycle of 100%, the blower will be at high speed. A duty cycle of about 40% will run the blower at low speed.

The A/C programmer supplies the signal to the controller for correct blower speed. The signal is based on the A/C control panel settings and various sensor inputs.



To test, take voltage readings, with a digital volt/ohm meter (DVOM), on the three wires at the blower motor.

Terminal C: power supply; should measure battery voltage from fuse.

Terminal A: ground; should measure 0 volt.

Terminal B: signal; varying voltage:

- less than 4 volts – high speed
- between 4 and 9 volts – intermediate speeds
- 9 to 10 volts – low speed
- 11 to 12 volts – off.

Diagnosis:

- Low or no voltage at terminal C – replace fuse and/or repair wiring.
- Greater than .2v on terminal A – repair ground connections and/or wiring.
- No voltage on terminal B – replace blower motor.
- Varying voltage signal on terminal B – with no blower operation or blower speed will not change as signal changes – replace blower motor.
- No change in voltage on terminal B – blower motor is okay – testing of A/C programmer and A/C control panel is required.

