

Electronic Heater Valves

Heater valves are used to control the rate of coolant flow through the heater core to maintain cabin and passenger temperatures and comfort. The three major types of heater valves are cable operated, which is connected to the dashboard heat selector via push-pull cable, vacuum motor operated, which uses engine vacuum to move the valve in response to the cabin selection, or electronic with a solenoid, which relies on wiring and a solenoid to operate the valve. In automatic HVAC systems, the heater valve is controlled by the vehicle's computer and could include either a vacuum or electronic valve.



Electronic Heater Valve Features & Benefits

- Externally heat tested up to 375°
- Pressure leak tested up to 25 PSI
- Engineered to meet or exceed OE fit, form and function
- Direct fit connectors for easy installation

HEATER VALVES

TYPES OF HEATER VALVES

ELECTRONIC



Commonly used on automatic temperature control (ATC) systems, this is a pulse width modulated (PWM) solenoid valve operated by the ATC control module. A second solenoid is used on dual zone systems. Other electronic heater valves use an electric rotary motor to control the coolant flow.

VACUUM OPERATED



Used on systems with an air door actuator. This valve remains fully open for all temperature settings except the coldest setting (max A/C), when it closes.

CABLE OPERATED



Normally used on systems without an air door actuator. The valve can manually be positioned from fully open (max heat) to fully closed (no heat) or anywhere in between (regulated heat).

HEATER VALVE REPLACEMENT CONSIDERATIONS

Leaking Coolant

Evidence of a leaking heater valve results in loss of coolant and will eventually lead to an overheated engine, therefore should be replaced.

Heater Hoses

When replacing a heater valve, it is important to inspect or replace all heater hoses when necessary. Heater hoses will deteriorate over time.

Corrosion

If the heater valve shows evidence of corrosion, it is recommended to replace the unit and flush the system.

INSPECT THE FOLLOWING IF YOU SUSPECT A HEATER VALVE ISSUE

- Pressure check cooling system
- Test heater valve performance
- Fill radiator reservoir with coolant
- Test heat / HVAC performance