



Thermoelectric Gas Valve:

Thermoelectric gas valve (figure 1) controls the gas flow to the unit. If working properly the valve will allow gas to flow to the burner and remain lit until the valve is turned off by the operator.

How it works:

Thermoelectric gas valve is controlled by the thermocouples DC voltage (figure 2). The valve receives the DC voltage that the thermocouple generates by being heated and magnetizes the power cell located inside the body of the gas valve. The power coil needs the DC voltage to stay compressed to allow the gas to flow through the valve.

How to Troubleshoot:

To troubleshoot a thermoelectric gas valve, first check to be sure the thermocouple is generating the proper amount of DC volts. Once the thermocouple has been tested, clean any debris from the threads and re-tighten (figure 3) the thermocouple onto the body of the valve. If the thermocouple is equipped with electrical interrupter be sure that it is jumped out (only for testing purposes) Heat the thermocouple for about 30 seconds, with the thermocouple heated, depress the push button on the valve. If the button pops back out then the valve is bad and needs replacing, if the button stays in, the valve is receiving the DC voltage from the thermocouple and problem is elsewhere in the unit.