

Gas Refrigerator Thermostat Diagnostics

Problem

- Refrigerator will not cool at all, regardless of thermostat setting
- Refrigerator cools only when thermostat is at maximum setting
- Refrigerator always cools, even with thermostat at lowest setting, causing refrigerator contents to freeze and ice buildup.

Discussion

If the refrigerator will not cool at all, check the flame to see if it changes in size. If the flame is high and the thermostat is not at the maximum setting, the thermostat is likely working and the unit may need service.

If the refrigerator is not cooling and the flame size is small (unless the thermostat is at maximum setting), or if the refrigerator is getting too cold and the flame never shuts down to pilot, the thermostat is likely bad and will need to be replaced.

Note

When checking whether the thermostat needs to be turned to its maximum setting in order to function, check the refrigerator temperature and make sure it is not so cold that the thermostat is not signaling the refrigerator to cool. Also make sure that the thermostat wire running into the refrigerator is not encased in ice. A super cooled thermostat wire cannot correctly read the refrigerator temperature. Check the fins as well. If the fins have ice buildup interfering with their connection to the thermostat wire, the thermostat may not be able to read that the refrigerator is properly cooling.

Courtesy of Clarence Imhoff, Hardware Service Tech