Safety Valve and Thermocouple Diagnostics

Problem

- Refrigerator will not stay lit when safety button is released
- Refrigerator goes out intermittently or after cooling down the first time after lighting

Discussion

If the refrigerator goes out as soon as you release the safety button, it is likely that the thermocouple is bad. Check the end to see if it is burned off or has a hole in it. Also check for a kink where it may be cracked or broken. If everything looks good, you can perform a millivolt test to check electric output. If output looks good, a new safety valve is in order. We swap out the safety valve insert instead of the entire valve—an easier fix—unless the button sticks on the existing valve.

Note

On the older Diamond refrigerators, occasionally the black knob that turns the gas on and off (also used to light the refrigerator) may slide in on the stem. In this case the refrigerator may light but will not remain lit when the knob is released due to the knob bottoming out, but not the stem. If you suspect this to be the case, pull the knob off and just push the stem in when lighting the refrigerator. If this works, the knob needs to be trimmed or backed off the stem via the set screw.

Courtesy of Clarence Imhoff, Hardware Service Tech