

# Safety Pilot Control Trouble Shooting Guide

- Pilot light won't light
  - Check gas supply is on.
  - Check for air in line by bleeding gas through ember burner until all air is out of line. Bleeding through the pilot burner is not effective.
  - Check aluminum tubing for kinks or cracks, replace if present.
- Pilot light won't stay lit after releasing knob
  - Check contact between valve and thermocouple by tightening the fitting that connects them.
  - If pilot flame is too strong it will blow itself out. Adjust the flame on the pilot burner in accordance with the pilot control instructions, or replace the pilot orifice with a larger orifice.
  - Check that pilot flame is not too low, as it will not transmit enough electricity to pilot valve. Adjust the flame on the pilot burner in accordance with pilot control instructions, or replace the pilot orifice with a larger one.
  - Check that pilot flame does not hit thermocouple too close to cold junction. The cold junction is located on the lower 1/3 of the thermocouple. The pilot flame must hit only the top ¼ of the thermocouple or the cold junction will overheat and shut the system off.
  - Every thermocouple has been factory tested prior to shipment, however there are rare instances where the thermocouple needs to be replaced.
- Pilot light goes out after being lit
  - Check for down draft that may be blowing out flame and correct chimney draft problems.
  - If pilot flame is too strong it will blow itself out. Adjust the flame on the pilot burner in accordance with the pilot control instructions, or replace the pilot orifice with a larger orifice.
  - Check that pilot flame does not hit thermocouple too close to cold junction. The cold junction is located on the lower 1/3 of the thermocouple. The pilot flame must hit only the top ¼ of the thermocouple or the cold junction will overheat and shut the system off.
  - Turn gas to ember burner on slower as it may rob gas from line feeding the pilot light.
- Pilot light is noisy
  - Adjust the flame on the pilot burner in accordance with the pilot control instructions, or replace the pilot orifice with a larger orifice.
- Delayed ignition of ember burner (Gas should ignite in 4 seconds)
  - If gas is not getting to pilot light quick enough, clear passageway through sand to allow easier and quicker access for gas from ember burner to pilot light.
  - Assure pilot light directs flame over ember burner pan as well as properly hitting the thermocouple.
- System shuts down after burner 0-5 minutes
  - Check for overheating of cold junction on the thermocouple by assuring thermocouple and pilot burner assembly are mounted on the back side of the ember burner pan per safety pilot control instructions. Assure the assembly is free from contact with sand or other materials.
  - Check for leaks resulting in improper flame hitting the thermocouple.
- System shuts down after burning more than 5 minutes
  - Assure front log is positioned on its edge such that the flat side is facing the back of the fireplace; this reflects the flame and heat onto the thermocouple.
  - Assure thermocouple is in its assembly so that the grate does not interfere.
  - Assure copper tubing is not touching any materials and is routed approximately one inch off the fireplace floor and has a minimum of ½" air space surrounding the tubing.
  - If your fireplace has glass doors they must remain fully open. Make sure the damper is completely open during burning. Do not install safety pilot controls in stoves.
  - Check for down draft that may be blowing out flame and correct chimney draft problems.
- Pilot valve will not shut gas off
  - Shield the valve from heat, or move valve out of firebox. Assure that gaskets or seals have not been damaged and are causing leaks. Turn off gas at a secondary shut off. Correct reason for overheating and replace valve.