

**Figure 4.1 • Troubleshooting Guide**

Symptom	Possible Cause	Corrective Action
Burning of gas-air mixture inside plenum (flashback).	<ul style="list-style-type: none"> <li>• Heater mounted at incorrect angle.</li> <li>• Excessive drafts.</li> <li>• Gas leaking at orifice.</li> <li>• Separation of ceramic grids.</li> <li>• Ceramic grids cracked.</li> </ul>	<ul style="list-style-type: none"> <li>• Mounting angle 0° - 30°.</li> <li>• Relocate or shield from draft.</li> <li>• Check with leak detector solution.</li> <li>• Replace burner.</li> <li>• Replace burner.</li> </ul>
Delayed ignition.	<ul style="list-style-type: none"> <li>• Electrode out of specification.</li> <li>• Low gas pressure.</li> <li>• Partially blocked orifice.</li> <li>• Improper orifice size.</li> <li>• Incorrect gas.</li> </ul>	<ul style="list-style-type: none"> <li>• See ignition system insert.</li> <li>• See section 2.0, Gas Supply.</li> <li>• Clean or replace.</li> <li>• Consult dealer.</li> <li>• See unit nameplate.</li> </ul>
Low ceramic surface temperature or excessive rollout.	<ul style="list-style-type: none"> <li>• Dirty or plugged burner ceramics.</li> <li>• Partially blocked orifice.</li> <li>• Low inlet gas pressure.</li> <li>• High or low manifold gas pressure.</li> <li>• Foreign matter in venturi tube.</li> <li>• Excessive dark spots in burner.</li> <li>• Gas supply piping too small.</li> <li>• Incorrect gas.</li> </ul>	<ul style="list-style-type: none"> <li>• See periodic maintenance instructions.</li> <li>• Remove and clean.</li> <li>• See Section 2.0, Gas Supply.</li> <li>• Adjust main valve regulator as specified.</li> <li>• See periodic maintenance instructions.</li> <li>• See periodic maintenance instructions.</li> <li>• Increase inlet pressure or replace piping.</li> <li>• See unit nameplate.</li> </ul>
Control system overheating.	<ul style="list-style-type: none"> <li>• Heater not mounted correctly.</li> <li>• Heater mounted too close to ceiling.</li> </ul>	<ul style="list-style-type: none"> <li>• Mounting angle 0° - 30°. Level left to right.</li> <li>• Observe clearance to combustibles.</li> </ul>
Gas odor.	<ul style="list-style-type: none"> <li>• Loose pipe connection.</li> </ul>	<ul style="list-style-type: none"> <li>• Check connections. Tighten as necessary.</li> </ul>
Heater cycles repeatedly.	<ul style="list-style-type: none"> <li>• Heater located in drafty area.</li> <li>• Low gas pressure.</li> <li>• Thermostat located in drafty area.</li> <li>• Defective flame electrode or circuit board.</li> </ul>	<ul style="list-style-type: none"> <li>• Relocate or shield from draft.</li> <li>• See Section 2.0, Gas Supply.</li> <li>• Relocate thermostat.</li> <li>• Replace.</li> </ul>
No spark; no ignition.	<ul style="list-style-type: none"> <li>• Lack of 120V or 24V incoming voltage.</li> <li>• Open high voltage wire.</li> <li>• Fan not operating.</li> <li>• Improper electrode gap.</li> <li>• Loose or open wire connection.</li> <li>• Pressure switch not satisfied.</li> <li>• Poor or no equipment ground.</li> <li>• Unit in "safety lockout" mode.</li> <li>• Defective "gaslighter" control.</li> </ul>	<ul style="list-style-type: none"> <li>• Check power supply.</li> <li>• Isolate an ohm for resistance, replace if 0.</li> <li>• Locate source of electrical problem or replace faulty fan.</li> <li>• See Ignition System specifications.</li> <li>• Check all wires, tighten or replace.</li> <li>• Verify fan operation. Remove obstructions.</li> <li>• Check all connections, provide positive earth ground.</li> <li>• Interrupt power source, repeat trial for ignition.</li> <li>• Replace.</li> </ul>
Heater lights and "locks out" after approximately 10 seconds.	<ul style="list-style-type: none"> <li>• Poor or no equipment ground.</li> <li>• Polarity is reversed.</li> <li>• Low gas pressure.</li> <li>• Electrode not sensing.</li> <li>• Heater mounted at incorrect angle.</li> <li>• Defective "gaslighter" control.</li> </ul>	<ul style="list-style-type: none"> <li>• Check all connections, provide positive earth ground.</li> <li>• 120V to black, neutral to white.</li> <li>• See Section 2.0, Gas Supply.</li> <li>• Relocate or replace if defective.</li> <li>• Mounting angle 0° - 30°.</li> <li>• Replace.</li> </ul>
Spark is present. No main gas operation. Unit "locks out".	<ul style="list-style-type: none"> <li>• Gas valve in "OFF" position.</li> <li>• Defective gas valve.</li> <li>• Defective "gaslighter" control.</li> </ul>	<ul style="list-style-type: none"> <li>• Turn to "ON" position.</li> <li>• Isolate and check for resistance, replace if 0.</li> <li>• Replace.</li> </ul>
Heater will not shut off.	<ul style="list-style-type: none"> <li>• Defective thermostat or wiring.</li> <li>• Gas valve stuck or open.</li> <li>• High gas pressure.</li> </ul>	<ul style="list-style-type: none"> <li>• Replace or repair.</li> <li>• Replace.</li> <li>• See Section 2.0, Gas Supply.</li> </ul>