

Troubleshooting Guide DSC

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