

4.2 GENERAL TROUBLE SHOOTING

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Thermostat closed, fan does not operate.	<ol style="list-style-type: none"> 1. Blown fuse. 2. Faulty thermostat. 3. Disconnected wire. 4. Faulty fan. 	<ol style="list-style-type: none"> 1. Replace. 2. Replace. 3. Repair. 4. Replace.
Thermostat closed. Fan operates. No spark.	<ol style="list-style-type: none"> 1. Loose or disconnected wire. 2. Box lid or gasket not in place. 3. Plugged pressure switch lines. 4. Plugged or restricted exhaust vent. 5. Faulty pressure switch. 6. Faulty circuit board. 7. Faulty ignitor. 	<ol style="list-style-type: none"> 1. Repair: as required. 2. Put in place. 3. Clean as necessary. 4. Remove foreign matter. 5. Replace only. Do not adjust. 6. Replace circuit control. 7. Replace.
Thermostat closed. Fan operates. Heater sparks. After 10 seconds ignitor shuts off. No reignition.	<ol style="list-style-type: none"> 1. Closed gas supply. 2. Dirty or resisted orifice. 3. Faulty valve. Disconnected wire. 4. Inlet pressure exceeds 14" W.C.P. 5. Improper electrode gap. 	<ol style="list-style-type: none"> 1. Open all gas connections. 2. Remove and clean with a soft object. 3. Replace or repair. 4. Lower inlet pressure. 5. Confirm gap size is between 3/16" & 1/4".
Thermostat closed. Fan and ignitor operate. Ignition occurs. Burner cycles off and will not recycle.	<ol style="list-style-type: none"> 1. No electrical ground. 2. Faulty circuit control. 3. Low gas pressure. 4. Open circuit control connection. 	<ol style="list-style-type: none"> 1. Connect electrical ground to junction box. 2. Replace. 3. Provide required gas pressure. 4. Repair or replace.
Thermostat closed. Fan and ignitor operate. Ignition occurs. Burner cycles off. Burner cycles on.	<ol style="list-style-type: none"> 1. Low gas pressure. 2. Baffle improperly positioned. 3. Faulty pressure switch. 4. Restricted flue vent. 5. Improper electrode gap. 	<ol style="list-style-type: none"> 1. Provide required gas pressure. 2. Reposition baffle at vent end. 3. Replace. 4. Remove foreign matter. 5. Confirm gap size is between 3/16" & 1/4".
Loss of heater efficiency.	<ol style="list-style-type: none"> 1. Low gas pressure. 2. Dirty or restricted orifice. 3. Foreign matter inside burner. 4. Unit cycles on and off. 5. Reflector is sooted and has lost its reflective ability. 6. Reflector not in place. 7. Clogged fan blower. 	<ol style="list-style-type: none"> 1. Provide required gas pressure. 2. Remove and clean with a soft object. 3. Clean as necessary. 4. Check previous symptom. 5. Clean with aluminum cleaner and soft wiping colth. 6. Put in place. 7. Clean.
Radiant tube leaking burnt gases.	<ol style="list-style-type: none"> 1. Loose tube connections. 2. Holes or cracks in radiant tubes. 	<ol style="list-style-type: none"> 1. Assure that tube is fully inserted into flared end and properly clamped. 2. Replace.
Condensation.	<ol style="list-style-type: none"> 1. Stack length too long. 2. Light gauge flue stack used. 3. Contaminated combustion air. 	<ol style="list-style-type: none"> 1. Shorten stack. 2. Minimum of 26 gauge vent pipe required. 3. Provide fresh air inlet duct.
Tube Bowing.	<ol style="list-style-type: none"> 1. Insufficient combustion air. 2. Overfired. 3. Contaminated combustion air. 4. Heater unable to expand properly. 	<ol style="list-style-type: none"> 1. Provide 2 sq. in. of free air per 5000 BTU_h of input. 2. Check gas pressure and orifice size. 3. Provide fresh air inlet duct. 4. Remount with flexible inlet or vent pipe.
Tube corroding.	<ol style="list-style-type: none"> 1. Contaminated combustion air. 	<ol style="list-style-type: none"> 1. Provide fresh air inlet duct.
Visual inspection of burner operation not possible.	<ol style="list-style-type: none"> 1. Dirty or sooted sight glass. 2. Unit mounted upside down. 	<ol style="list-style-type: none"> 1. Remove, clean or replace. 2. Mount correctly.
Stack sooting.	<ol style="list-style-type: none"> 1. Insufficient combustion air. 2. Improper gas. 	<ol style="list-style-type: none"> 1. Provide 1 sq. in. of free air for every 5000 BTU_h of input. 2. Correct with proper gas input.
Odor or fumes in space.	<ol style="list-style-type: none"> 1. Vaporized solvents decomposing when contacting radiant tubes. 2. Evaporation of oils/solvents at floor levels. 3. Lift trucks. 4. Loose tube connections. 	<ol style="list-style-type: none"> 1. Address ventilation concerns. 2. Address ventilation concerns. 3. Address ventilation concerns/repairs. 4. Tighten to 50-100 lb.-ft.