TROUBLESHOOTING CHART

NOTE: Before troubleshooting, familiarize yourself with the startup and checkout procedure.

START

TURN GAS SUPPLY OFF. TURN THERMOSTAT (CONTROLLER) TO CALL FOR HEAT

POWER TO MODULE (24V NOMINAL)

NO → Check line voltage power, low voltage transformer, limit controller, thermostat (controller) and wiring. Also, check air proving switch on combustion air blower system (if used) and that vent damper (if used) is open and end switch is made.

YES ↓

SPARK ACROSS IGNITER/SENSOR GAP

NO → Pull ignition lead and check spark at module. Spark okay?

- NO → On models with vent damper plug, make sure vent damper has not been installed, then removed. Replace vent damper if necessary.
- On other models, replace module.

YES ↓

- Check ignition cable, ground wiring, ceramic insulator and gap, and correct.
- Check boot of the ignition cable for signs of melting or buckling. Take protective action to shield cable and boot from excessive temperatures.

YES ↓

TURN GAS SUPPLY ON

PILOT BURNER LIGHTS?

NO →
- Check that all manual gas valves are open, supply tubing and pressures are good, and pilot burner orifice is not blocked.
- Check electrical connections between module and pilot operator on gas control.
- Check for 24 Vac across PV-MV/PV terminals on module. If voltage is okay, replace gas control; if not, replace module.

YES ↓

SPARK STOPS WHEN PILOT IS LIT?

NO →

NOTE: If S8610B,H goes into lockout, reset system.

- Check continuity of ignition cable and ground wire.
- Clean flame rod.
- Check electrical connections between flame rod and module.
- Check for cracked ceramic flame rod insulator.
- Check that pilot flame covers flame rod and is steady and blue.
- Adjust pilot flame.
- If problem persists, replace module.

YES ↓

MAIN BURNER LIGHTS?

NO →
- Check for 24 Vac across MV-MV/PV terminals. If no voltage, replace module.
- Check electrical connections between module and gas control. If okay, replace gas control or gas control operator.

YES ↓

SYSTEM RUNS UNTIL CALL FOR HEAT ENDS?

NO →

NOTE: If S8610B,H goes into lockout, reset system.

- Check continuity of ignition cable and ground wire.
  NOTE: If ground is poor or erratic, shutdowns may occur occasionally even though operation is normal at the time of checkout.
- Check that pilot flame covers flame rod and is steady and blue.
- If checks are okay, replace module.

YES ↓

CALL FOR HEAT ENDS

SYSTEM SHUTS OFF?

NO →
- Check for proper thermostat (controller) operation.
- Remove MV lead at module; if valve closes, recheck temperature controller and wiring; if not, replace gas control.

YES ↓

TROUBLESHOOTING ENDS

Repeat procedure until troublefree operation is obtained.

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