

Unit Heater Top Ten Troubleshooting Guide

	COMPLAINT	LED CODE	POSSIBLE CAUSE/SOLUTION
1	Exhaust blower runs constantly with 120volts applied and no thermostat wires connected to the unit.	2 flash	The gas valve may be faulty and has to be replaced. Check the polarity and make sure the unit has a good ground. If setup for Propane, the inlet gas pressure switch may be open. Ensure inlet pressure is set per the rating plate. If pressure is good change the switch.
2	Nothing operates.	LED light not on	Make sure power is applied to the unit.
			Check 3 amp fuse on the board and replace if blown.
			Make sure 120 volts are present at the transformer (black & white) wires. If not, check the supply power. If there is, check for 24 volts across the (blue & yellow) wires. If 24 volts are not present, then the transformer is bad.
		Steady slow flash	Turn thermostat above room temperature. Thermostat wires should be connected to the "R" terminal and "W" terminal on the control board.
		Steady fast flash	If the exhaust blower does not come on, check for 120 volts at the CMB terminal on the control board. If 120 volts are present, replace the motor, if not replace the board.
3	Heater is short cycling. Runs for a few minutes then shuts off and does not lock out.	Steady fast flash	Check to see if the pressure switch is opening during operation. If so, check pressure going to the pressure switch. If it drops down below the switch setting, inspect the tubing for cuts or nicks and clean out the barbed connectors on the exhaust blower. If pressure does not drop to switch setting and the pressure switch is opening, then the switch is bad.
4	Unit locked out after three trials. Sparks but will not light.	2 flash	Ensure the gas valve is in the on position. Check the spark igniter gap. It should be 1/8". Some LP models have an inlet gas pressure switch mounted on the gas valve. Refer to the installation manual and make sure the gas supply pressure meets the minimum requirements. If it does, purge air out of the gas supply line. Are 24 volts present at the valve? If not, replace the board. If 24 volts are present and the valve will not open, then the transformer may be too weak to handle the load.
5	Will light, but will not stay lit. Unit goes into lock out.	2 flash	Gas pressure must be set according to the rating plate. Heater must have a good ground for proper ignition and flame sensor operation. Check to see if the flame sensor is cracked or grounded. Check the sensor wire for continuity. Ensure proper flame current signal from the flame sensor. Flame signal should be at least .6 micro amps.
6	Unit fires up, but the fan motor will not come on, causing the limit to open.	4 flash	There should be 120 volts at the ACC terminal on the control board, if not the board is bad. If there is, then the fan motor is bad. Fan motor neutral wire not connected to the supply voltage neutral.
7	Upper rollout limit keeps tripping.	4 flash	Ensure the manifold pressure is set per the installation manual. If manifold pressure is correct, replace switch with part number 65361900. Visually check for proper flame at heat exchanger inlet.
8	Exhaust blower comes on but nothing else happens.	3 flash	Make sure the tubing is connected to the pressure switch and the exhaust blower. If it is, inspect it for cuts or nicks. If the tubing looks good, replace the pressure switch.
9	When the heater receives a call for heat, it goes into a lock out.	3 flash	If the pressure switch is closed before the exhaust blower comes on, replace the pressure switch.
10	Installed a control board conversion kit, and the fans run constantly.	4 flash	Unit was wired incorrectly. Refer back to the kit instructions. Limit circuit and pressure switch circuit may be cross wired.