"STATUS" LED Flash Code	Control Status	Action Recommended
Short Flash [every few seconds]	Control powered - no call for heat in place or in transition after a fault has corrected.	
Heartbeat [Bright/Dim/Bright/Dim]	Call for heat in place, normal operation [prepurge, trial for ignition, run, post purge]	
2	P/S still closed five seconds after call for heat initiated. Control waits with error code flashing until P/S opens, then proceeds with ignition sequence if call for heat still present.	Check pressure switch wiring for short or switch contact made with no input signal.
3	P/S still open 30 seconds after the inducer has been energized. Control waits with error code flashing until P/S closes, then proceeds with ignition sequence if call for heat still present.	End call for heat. Jumper pressure switch leads and initiate call for heat. If Flash Code 2 is generated, the IFC is properly sensing the switch. Check inducer [powered and running] and venting [length and restrictions] to assure appliance generated enough signal to operate the switch. Check for correct wiring and switch for proper operation.
4	Limit / rollout circuit open. Control waits with error code flashing until limit string closes. Control then completes fan off delay with the 'short flash' in place. After fan is off, a new ignition sequence begins if call for heat still present.	Check limits, rollout switches and circuit for open. Reset rollout switches if necessary. If error repeats determine why appliance if overheating.
5	Flame signal sensed out of sequence - signal still present. Control does not proceed with operation sequence. If signal goes away within a few seconds the control proceeds to light off. Otherwise control moves to soft lockout [6+5 below] when the flame signal goes away.	Check for visible flame at flame rod and valve leakage. Note if Flash Code changes to 6 + 5 the flame is not longer present. Follow procedures for that Flash Code.
6 + 1	Soft lockout - Appliance failed to light during four ignition trials	Check spark electrode condition and position, wiring, flame rod / burner contamination and proper position, proper gas flow rate during ignition trial. Cycle thermostat and observe light off sequence.
ABNORMAL EVENTS - Control moves to soft lockout if there are more than 5 abnormal events during run mode on the same call for heat. Abnormal events are 1) Limit circuit open during run, 2) Pressure switch open during run and 3) Flame failure during run. If one of these events occurs, the control will recycle when the error clears. After the 5th abnormal event [original light off and four recycles] the control will go to soft lockout. The error code flashed indicates the last abnormal event that took place.		
6 + 2	Soft lockout - 5th abnormal event this call for heat - Limit circuit opened during run is the last failure..	Check limits and roll out switches open. Reset rollout switches if necessary. Cycle thermostat and observe light off and run sequence.
6 + 3	Soft lockout - 5th abnormal event this call for heat - P/S opened during run is the last failure to occur.	Check inducer [powered and running] and venting [length and restrictions]. Cycle thermostat and observe light off and run sequence.
6 + 4	Soft lockout - 5th abnormal event this call for heat - Flame failed during run is the last failure to occur.	Check gas supply and pressure, gas valve, burner ground lead, flame sense lead, flame rod contamination.
6 + 5	Soft lockout - Flame sensed out of sequence - flame signal no longer present.	Cycle thermostat and observe two consecutive light off, run and shut down sequences. Visually check for flame when it should not be present. If error repeats with no flame at the flame rod, replace IFC
7 + 1	Fuse blown or missing	Replace fuse. Cycle secondary power.

7 + 2	Shutdown due to low secondary voltage. When secondary voltage returns to normal, the control will operate normally.	Cycle secondary power and monitor secondary voltage across 24VAC and COM terminals during an entire operating cycle. The secondary voltage should be above 18VAC at all times.
7 + 3	Lockout - communication bus / circuit fault	Check to assure no lead wire at Terminal 1 on thermostat block [unless control is in twinning application]. If present, remove connector from E-COM terminal and stat terminal 1. Cycle secondary power and generate a call heat after the control has powered up. If error returns, replace IFC. If error does not return, issue is external to the IFC.
7 + 4	Lockout - Gas Valve Fault - Indicates valve miswire or valve relay contact failed closed - NOTE: This error is listed as Error Code 7 + 5 on previous documentation.	Disconnect both gas valve leads; check lead wires not shorted. Cycle secondary power. Initiate call for heat and observe operation. If fault does not repeat, check and repair valve wiring and gas valve. If fault does repeat with gas valve disconnected, replace IFC.
7 + 5	Lockout - Flame rod / wiring leakage to chassis ground. - NOTE: This error is listed as Error Code 7 + 4 on previous documentation.	Check wiring and flame rod for shorts, damaged insulation or cracked ceramic. Check for moisture on lead wires, flame rod and circuit board. Cycle secondary power to reset.
7 + 6	Lockout - Internal Error [RAM Check / ROM Check / Watchdog / Etc.]	Cycle secondary power. Initiate call for heat. If error repeats, replace IFC
NOTES	1. Soft lockout resets after 60 minutes if call for heat remains in place. Soft lockout can also be reset by cycling thermostat call for heat [off more than 3 seconds and back on within 30 seconds	
	2. Lockout can be reset by cycling secondary power to the control [24VAC - COM terminals].	
	3. Terminal 1 on the thermostat terminal block is not used unless the control is connected in a twinned application. There should be no lead wire attached to this terminal.	
	4 The 3-pin E-COM connector on the control is not used except during appliance functional testing at the appliance manufacturer.	