Carlin® Combustion Technology

# Model 70200 Control Message Guide

| Error/Status Message | Explanation | What to Check |
|---|---|---|
| **Motor Safety On** | • Bad motor or dead short<br>• Welded relay contacts | • Check voltage at the time of the fault<br>• If control will not reset replace the control |
| **Flame Detected** | • CAD cell seeing light<br>• Short in cad cell harness | • Check CAD cell ohms in darkness<br>• Check ohms on the cad cell harness |
| **Motor Output On** | • Bad motor or dead short<br>• Welded relay contacts<br>• Low voltage issue | • Check the motor for internal failure or dead short<br>• Replace control |
| **No Call for Heat** | • No call for heat, control in standby | |
| **Pump Prime** | • Reset button has been depressed for 10 seconds | • Check reset button |
| **No Flame** | • Flame expected, but not detected<br>• Motor, Valve and Ignitor current readings are all above the minimum | • Check CAD cell ohms in fault history<br>• Ohms above tolerance setting |
| **Recycle Limit** | • Control lockout due to reaching programed recycle limit | • Check for high vacuum<br>• Ensure oil supply sufficient<br>• Burner coupling slipping<br>• Poor flame retention |
| **Low Line Volts** | • Input voltage below 98 AC | • Check line voltage |
| **High Line Volts** | • Input voltage over 140 AC | • Check line voltage |
| **Blocked Intake** | • Control lockout due to CAP System/air intake blocked | • Check outdoor termination point or air intake for obstruction<br>• Check length of intake pipe for damage/obstruction |
| **Blocked Exhaust** | • Control lockout due to exhaust vent blocked | • Check vent/flue pipe for obstruction<br>• Check chimney for blockage<br>• Check blocked vent switch (if equipped) |
| **No Flame ck Vlv** | • Control lockout due no flame and low valve power | • Check valve connection and functionality |
| **No Flame ck Mtr** | • Control lockout due no flame and valve & ignitor power are good, but motor power is low | • Check motor connection and functionality<br>• Check voltage at time of fault<br>• Check motor running amps |
| **No Flame ck Ign** | • Control lockout due no flame and valve power is good, but ignitor power is low | • Check ignitor connection and functionality |
| **No Limit In** | • No power detected on limit input | • Check limit input wiring |
| **FlameLate Ck Cad** | • Flame not seen within first 5 seconds of TFI<br>• Delayed ignition | • Check electrode setting<br>• See other No Flame causes |
| **Ohms Low Ck Cad** | • CAD cell seeing unexpected light | • Check CAD cell, CAD cell holder, harness wires |
| **Ohms High Ck Cad** | • Flame is seen, but Ohms high, flame loss potential | • Check combustion set-up<br>• Losing flame retention<br>• High draft or vacuum |
| **Reset Stuck** | • Reset button held for too long (>10 seconds) | • Ensure reset button not being pressed/stuck |
| **Replace Control** | • Fatal control condition | • Replace control |
| **Lost Flame** | • Flame lost during normal operating sequence | • Check CAD cell ohms while the burner is running<br>• Check combustion set-up<br>• Oil line/supply issue<br>• High vacuum or draft |
| **Flame @ Preignit** | • Unexpected flame during pre-ignition | • Stuck valve<br>• RF interference/AC line noise<br>• Are tabs properly aligned with electrodes |
| **Flame @ Prepurge** | • Unexpected flame during prepurge | • Stuck valve<br>• If the burner does not have a valve, select “valve delay on” in the set up menu then select “no valve”<br>• RF interference/AC line noise<br>• Are tabs properly aligned with electrodes |
| **Flame@Postpurge** | • Unexpected flame during postpurge | • Stuck valve<br>• RF interference/AC line noise |
| **Latch Up** | • 3 consecutive lockouts in a single call for heat | • Correct cause of lockout then press and hold reset button for 30 seconds |
| **CRC Failure** | • Fatal control condition | • Replace control |
| **Loss of Flame, Post Purge** | • Control lost flame and entered post purge, followed by Recycle | • Check CAD cell ohms while the burner is running<br>• Check combustion setup<br>• Oil line/supply issue<br>• High vacuum or draft |
| **No Flame; High Motor Current** | • Lockout due to no flame + motor current not dropping below 50% from its peak startup reading | • Check motor<br>• Check pump |

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