### C) TROUBLESHOOTING CHART

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| **Heater is not glowing red...** | ✪ The supply gas pressure is too low.  
✪ Improper size of gas piping.  
✪ The orifice is clogged.  
✪ Incorrect orifice size. | ✪ Check the manifold gas pressure and adjust if necessary.  
✪ If you are not sure of the performance, use the NFPA 54 gas pipe sizing table.  
✪ Clean the orifice.  
✪ See the instructions for correct orifice size and replace if necessary. |
| **Heater will not attain the desired temperature...** | ✪ There is insufficient heat in the building for heat loss (i.e., not enough heaters).  
✪ The thermostat sensing bulb is incorrectly placed.  
✪ The thermostat is out of calibration. | ✪ Conduct heat loss and add heaters or other source of heat as necessary.  
✪ Reposition as necessary for proper operation.  NOTE: The sensing bulb should be shielded from direct radiation to prevent short cycling of the heater.  
✪ Recalibrate (if possible) or replace. |
| **Flames flaring up, outside of emitter surface...** | ✪ The gas pressure is too high.  
✪ Incorrect orifice size.  
✪ Incorrect type of gas supplied to the heater.  
✪ Not enough combustion air. | ✪ Check the manifold gas pressure and adjust if necessary.  
✪ See instructions for correct orifice size and replace if necessary.  
✪ Check the nameplate to identify the correct type of gas the heater is equipped to operate.  
✪ Clean the emitter with compressed air. |
C) TROUBLESHOOTING CHART

Continued

- Turn up thermostat to call for heat. Does the electrode spark? NO
  - Is there 24V at the module? YES
    - Does the module have a steady red LED? YES
      - Check the spark gap. Is it 3/16"? YES
        - Swap out the electrodes from a working heater, does it spark? YES
          - Check ignition cable for continuity. Replace if necessary PN 30314100
        - NO
          - Replace ignition module, PN 30632030
      - NO
        - Replace electrode assembly, PN 30296520
    - NO
      - Adjust spark gap and retry ignition.
  - NO
    - Is there 115V into the transformer? YES
      - Check building wiring and repair as necessary.
    - NO
      - Check building wiring and repair as necessary.
  - NO
    - Clean out orifice.

- Does the burner ignite? NO
  - Does the burner stay lit? NO
    - Check the gas line, are all valve shut off in the off position and have the line been purged of air? NO
      - Turn on the shut off's and purge the pipework of air.
    - YES
      - Contact dealer for further assistance.
  - NO
    - Check the flame current to the module see section 12. Is the current less than 0.7mA? NO
      - Replace ignition module, PN 30632030
    - YES
      - Yes

- Swap out the electrodes from a working heater, does it stay lit? NO
  - Check ignition cable does it have continuity? YES
    - Check the orifice Is it blocked, NO
      - Contact dealer for further assistance,
    - YES
      - Check the gas valve outlet pressure see section 7. Is the gas pressure correct? NO
        - Check the inlet gas pressure is higher than the minimum required and adjust the outlet gas pressure per section 7.
  - YES
    - Replace electrode assembly PN 30296520
  - NO
    - Replace ignition cable PN 30314100
    - Clean out orifice.

Burner operation trouble shoot ends