Midwest Metal Werks LLC.

ELEMENT TROUBLESHOOTING

Issue's with elements not functioning properly or having power shortage issues can be caused by multiple reasons. Usually this never occurs unless one of the following is to blame. See below for issues and ways to diagnose the issue.

1) **The element is factory bad or has been damaged**
   - To fix this, a replacement element is needed (warranty swap if within time frame)

2) **There is incorrect incoming power than what is needed and what the panel is internally setup for**
   - To fix this, confirm the incoming power source is a two hot wire, one neutral wire source and not a two hot wire, one ground source, or wired correctly for single/three phase systems
   - Confirm the voltage coming in is a minimum of 208 volts and a maximum of 240 volts as the elements are 208-240 volt capable for max load
   - Confirm you are running on a SINGLE-PHASE system or a THREE-PHASE system

3) **The contactor is bad or not functioning properly**
   - Use a multimeter and confirm the contactor has power incoming to the side posts and the top lines (hot lines only)
   - Use a multimeter and make sure the bottom element feed wires (white braided wires) have equal and correct outbound power to the elements
   - Make sure the element outbound wires are separately placed on different posts, no two same colored wires are to be on the same leg (red on line 1, red on line 2, not two reds on line 1 or 2)
   - Replace the contactor with a new one (warranty swap)

4) **The internal element wire is snagged or damaged**
   - Remove the element or rear/side wall panels and check for damaged wires

5) **The internal panel has been incorrectly wired or changed**
   - Please call and speak with one of our techs to check internal component function and wiring is correct ***(630-408-8982)***

**** THESE TESTS NEED TO BE DONE WHILE THE UNIT IS ON, PLEASE BE SAFE ****
**** THIS SHOULD BE DONE BY A LICENSED OR EXPERIENCED ELECTRICIAN ****