

**Title:**

Micro Thermo Wiring Verification Prior To Unit Start-Up

## Overview

This guide outlines the wiring verification steps that must be performed by the FLō start-up contractor before starting up a FLō unit with Micro Thermo controls that were produced after September 1<sup>st</sup>, 2022.

**IMPORTANT NOTE:** Do not power the unit until these steps have been performed.

## Verification Process:

1. Inspect the Micro Thermo power relay and transformer in the unit.
  - a. Ensure that the power is correct going to the relay. Check the four wires on the top of the relay to ensure that the wires are colored the same on each side. It can be red, red on left and black, black on right, or black, black on left and red, red on right (see figure 1).
  - b. Ensure that the top/primary side of the 24VCT center tap transformer has the correct wiring routed to the top of the transformer. This needs to be red on the left and black on the right (see figure 2). This will have a 24-volt VAC reading at the top.
  - c. Ensure that the bottom/secondary side of the polarity-sensitive 24VCT center tap transformer is wired red, white, then black (left to right, see figure 2).
    - i. Red to black will be 24 volts.
    - ii. Red to white will be half of the full voltage.
    - iii. Black to white will be half of the full voltage.

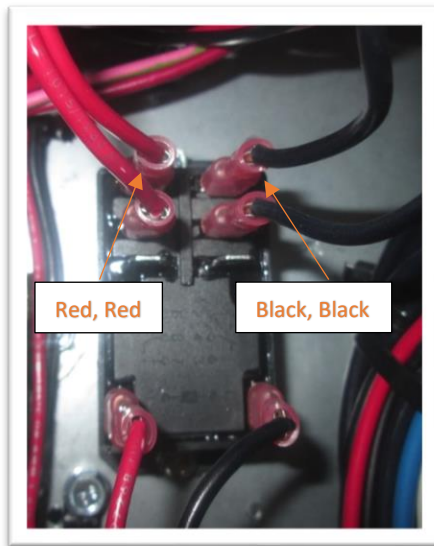


Figure 1. Relay Power Wiring

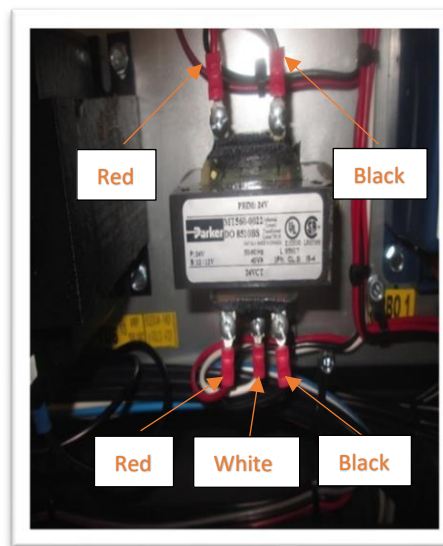


Figure 2. 24VCT Wire Routing

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2. Check for proper polarity of 24VCT power going to all of the Micro Thermo boards. The 24VCT may be wired to the upper or lower power plug, either is okay to use when powering the boards provided only one plug is being used.
  - a. Ensure that polarity follows Green – Red – White – Black in descending order (see figure 3).
    - i. Red to black will be 24 volts.
    - ii. Red to white will be half of the full voltage.
    - iii. Black to white will be half of the full voltage.

**NOTE:** Polarity must be the same across all Micro Thermo boards.
  - b. Ensure that the green wire is grounded (see figure 4).



Figure 3. Polarity Check

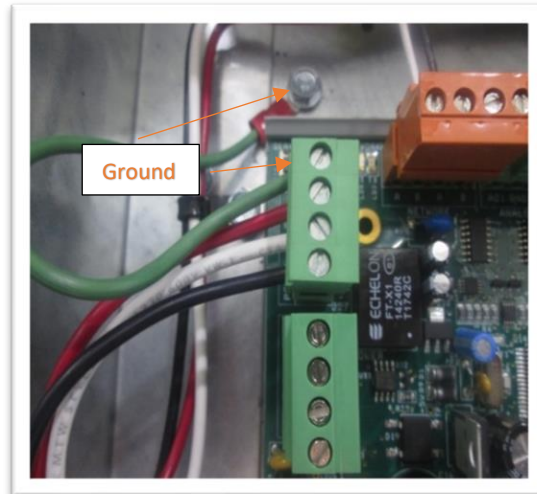


Figure 4. Ground Wire

Call Flō tech support if you have any questions or concerns (888-598-1198 opt. 1).