



# TJERNLUND PRODUCTS, INC.

1601 Ninth Street • White Bear Lake, MN 55110-6794  
 PHONE (800) 255-4208 • (651) 426-2993 • FAX (651) 426-9547  
 Visit our web site • www.tjernlund.com

## CIC1 OPERATION & WIRING CONNECTIONS

The CIC1 is the standard interlock control for use with Tjernlund's COP2 Constant Operating Pressure Control. It incorporates a UC1 burner interlock control with an isolation relay used to close the C1 and C2 actuation contacts of the COP2 Controller. This instruction covers the interface of a UC1 burner interlock control with a COP2 constant operating pressure controller. **IMPORTANT:** Follow all cautions, warnings and burner interlock directions within the UC1 instructions.

### WARNING

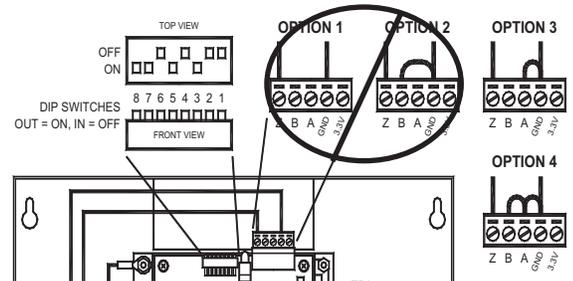
The burner interlock feature is not activated unless jumper(s) is installed as depicted in OPTION 3 or 4 of the COP2 wiring diagram. Failure to add jumper(s) will result in unsafe operation of the COP2 Control. **Do not use Option 1 or 2.**

**OPTION 3:** Exhaust with CIC1 Interlock

**OPTION 4:** Exhaust with CIC1 Interlock, No Overdraft Fault

Refer to COP2 Wiring diagram in COP2 instructions for complete diagram.

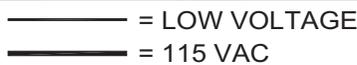
### COP2 CIRCUIT BOARD INTERFACE OPTIONS



1. Install the included activation isolation relay in the square knock-out located on top of the COP2 electrical box.
2. Wire the Black (MTR) and White (N) leads from the UC1 whip to the Black and White leads of the activation isolation relay.
3. Remove female quick connect terminals on Blue and Yellow leads from UC1 cable whip. Connect the Blue (P1) and Yellow (P2) leads from the UC1 whip to P1 and P2 of the COP2 terminal strip.
4. Connect the (2) gray leads of the activation isolation relay to C1 and C2 of the COP2 terminal strip.

Unconnected or insecure ground connections will cause improper system operation. Verify that all grounding locations are securely and properly grounded to earth.

### LEGEND



## UC1 TO COP2 WIRING

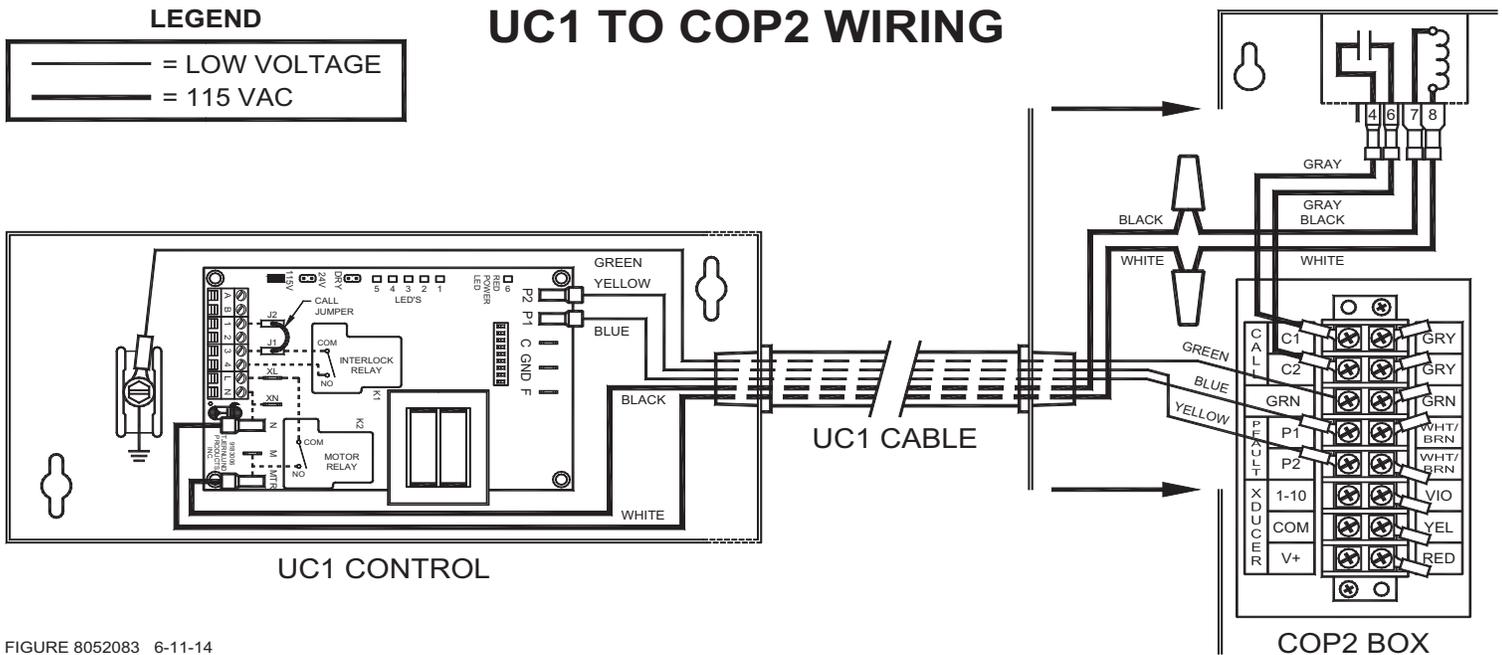
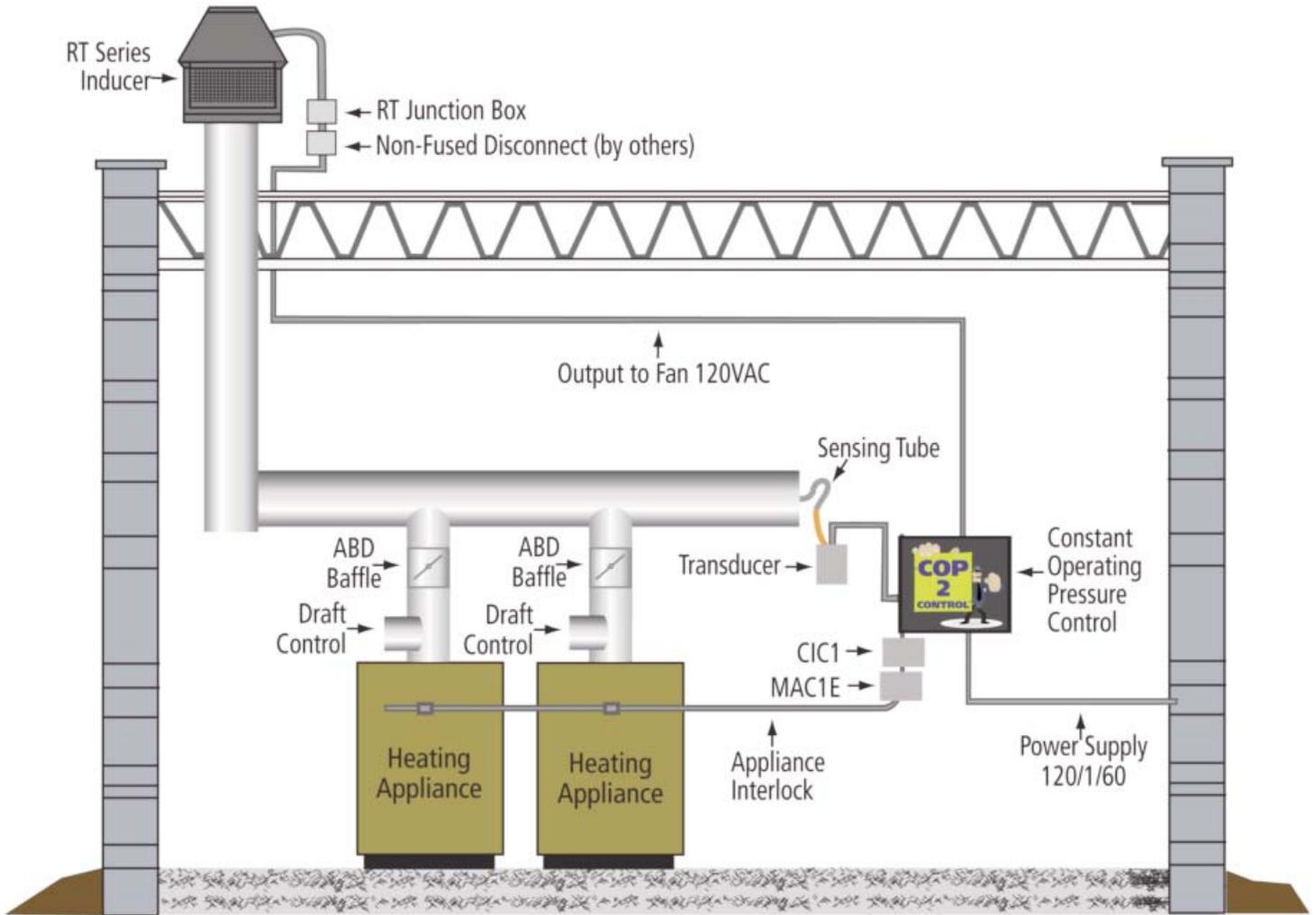


FIGURE 8052083 6-11-14

### SAFETY INTERLOCK TEST

After the installation is completed, including all wiring connections perform the following interlock test: Allow for a call for heat. Verify that the exhaust fan is operating prior to the blue LED on the UC1 circuit board being illuminated. Once the blue LED is lit pull the insulated connector from terminal P1 of the UC1 circuit board off and verify that 10 seconds later that burner operation is disrupted. If not correct any wiring errors and repeat interlock test. Call 800-255-4208 for assistance.

# COP2 WITH MULTIPLE HEATERS - SAMPLE LAYOUT DIAGRAM



## Multiple Heaters