

***COLD WEATHER
START KIT***
Ceiling Mount 4000

Cold Weather Start Kit:
To be used in conjunction with
**Ceiling Mount 4000 (Manufactured
After 01/07/15)** cooling system.

*Whisper***KOOL**[™]
The Coolest Thing In Wine Storage

CWSK.CM4.A 051515

Conforms to ANSI/UL Std 427

Certified to CAN/CSA Std C22.2 No. 120

We manufacture, test and certify 100% of our wine cooling units in the USA. By sourcing the best components and closely controlling our manufacturing processes, we can assure the highest-quality, lowest defect manufacturing rates in the industry.

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REV 02

CWSK.CM4.A 051515

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INTRODUCTION

Customer Service

Thank you for purchasing a WhisperKOOL Cold Weather Start Kit. We strive to provide the highest quality products and the best possible customer service. If you have any questions about your system, please call us at 1-800-343-9463 or visit WhisperKOOL.com.

Using the Manual

This Owner's Manual is intended to provide detailed instructions for the installation of the Cold Weather Start Kit to the Ceiling Mount 4000 cooling system. In order to ensure the proper longevity of your cooling unit, the equipment should be installed as outlined in this Owner's Manual. It is also vital to establish a proper care and maintenance schedule. Please read and review this Owner's Manual carefully and keep it for future reference.

What is a Cold Weather Start Kit?

The Cold Weather Start Kit is designed to insure the start of your cooling system despite frigid ambient temperature that may result in failure of unit operation. The Cold Weather Start Kit will provide heat to the condensing unit when ambient temperature is too low.

How Does the Cold Weather Start Kit Work?

The Cold Weather Start Kit provides heat to specific components in the condensing unit for proper operation when the cooling system is in a below freezing setting. The Cold Weather Start Kit comes equipped with sensors to enable an ideal temperature boost every time.

WARRANTY REGISTRATION

In order to activate the warranty of your system, the Verification and Operational Documentation must be completed by the certified refrigeration technician installing your system and submitted via mail, fax or e-mail.

Mail to:

WhisperKOOL

ATTN: Warranty Registration

1738 E. Alpine Avenue

Stockton, CA 95205-2505

USA

OR

Fax to:

209-466-4606

OR

Scan and e-mail to:

warranty@whisperkool.com

For the equipment warranty to be valid, WhisperKOOL requires that the installation is performed by a certified HVAC-R technician (NATE certified technician is recommended) per the specifications outlined in this Technician's Manual. The technician shall be required to be equipped with the proper tools of the trade including: R-134a, brazing equipment, dry nitrogen, an accurate manifold gauge set (digital preferred), plus a 4 valve manifold set for evacuation, digital micron gauge, digital scale, deep vacuum pump and accurate digital thermometers. Without the proper equipment, a professional job cannot be accomplished. Evidence of the certified tech's NATE# or other certification is required.

RECEIVING & INSPECTING THE SYSTEM

Receiving and Inspecting the System

- Inspect the packaging for any obvious signs of damage or mishandling before opening the container.
- Note any discrepancies or visual damage on the Bill of Lading before signing.

Review the Packing Slip to Verify Contents

- Check the model number to ensure it is correct.
- Check that all factory options ordered are listed.

If any items listed on the packing slip do not match your order information, contact WhisperKOOL Customer Service immediately.

Before You Start

1. **Inspect the Kit before installation.** If damage is found, please contact your distributor or WhisperKOOL Customer Service at 1-800-343-9463.
2. Verify that you have received all of the items on the “Components Provided” list below and that the Kit corresponds to your specific WhisperKOOL cooling system.
3. The system is intended **for use in properly designed and constructed wine cellars.** Hire a professional wine storage consultant with a valid contractor’s license to build your wine cellar.
4. WhisperKOOL requires that all Systems and Cold Weather Start Kits be installed by a certified HVAC-R technician only.
5. The system is intended **for use in properly designed and constructed wine cellars.** Hire a professional wine storage consultant with a valid contractor’s license to build your wine cellar.
6. Warranty is not active until a Warranty Checklist has been received, reviewed, and approved.

Condensing Unit Components Provided:

- (1) Cold Weather Start Kit Electrical Box Assembly
- (1) Silicone Heater Assembly
- (1) Thermal Switch Assembly
- (1) H2 Assembly
- (1) Paper Template
- (2) Hose Clamps
- (2) Yellow Female Disconnects
- (1) Red Female Disconnect
- (2) ½” Hex Head Self Taping Screws
- (20) Zip Ties
- (1) Bag of Thermal Paste

Evaporator Unit Components Provided:

- (4) Lever Connectors
- (1) 120v/24v Transformers (with double sided tape on bottom edge for mounting)
- (5) Zip Ties (3 for install and 2 additional)
- Platinum Split/WM & FD Evaporator Unit Cold Weather Start Kit Field Installation Instructions

Tools Needed:

- #1 Philips Head Screw Driver
- #2 Philips Head Screw Driver
- 5/16” Nut Driver
- 1/4” Nut Driver
- Drill
- Wire Cutters
- Wire Strippers
- Crimpers
- Needle Nose Pliers
- Utility Knife

Components Needed (Not Included):

- 2 Wire T-Stat Wire 18-20 AWG
(Note: Enough to route from evaporator unit to condensing unit)

After verifying that you have received all of the correct components for your specific system, please keep the Cold Weather Start Kit kit in its original box until you are ready for installation. This will allow you to move the product safely without damaging it. When you are ready to remove the product from the box, refer to the installation instructions.

TIP: Save your box and all packaging materials. They provide the only safe means of transporting/shipping the unit.

BEFORE YOU START



Shut Off Power going to the Evaporator and Condensing Unit.



Disconnect both the evaporator unit (Air Handler) and the Condensing Unit from each power source.



WARNING: Failure to do so may cause electrical shock which can result in injury or death.

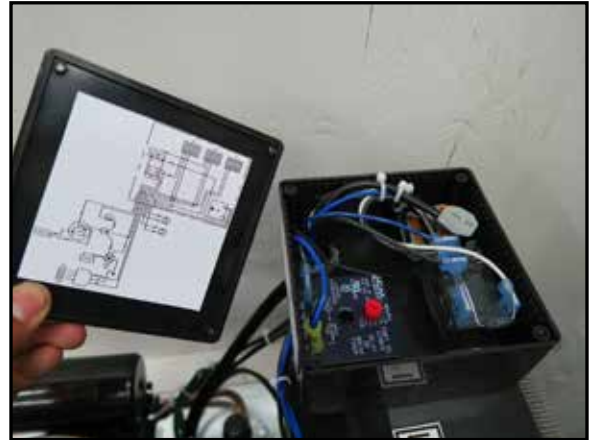


A 2 wire 18-20 awg thermostat wire will need to be ran from the evaporator unit to the condensing unit prior to installing the Cold Weather Start Kit.

Review the Tools Needed and Components Provided document prior to starting.

CONDENSING UNIT COLD WEATHER START KIT INSTALLATION INSTRUCTIONS

1 Remove the electrical box cover.



2 Remove the sticker backing from the paper jig and stick to the side of the existing electrical box as shown. (The cross should be slightly offset to the right.)



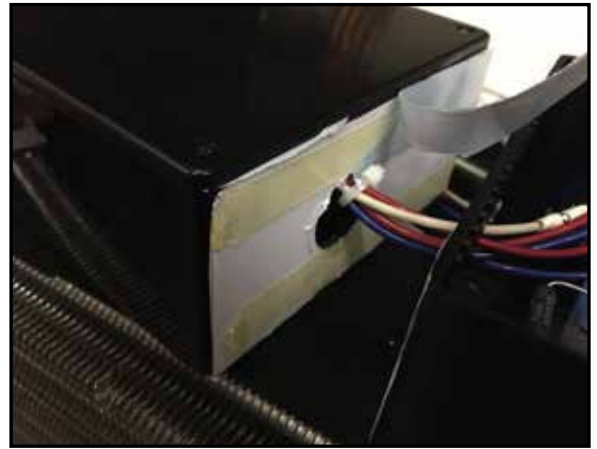
3 Using a step bit, drill a 5/8" hole through the cross. (Be sure not to drill into the electrical components.)



4 Route the 4 wires from the Cold Weather Start Kit box into the existing electrical box as shown.



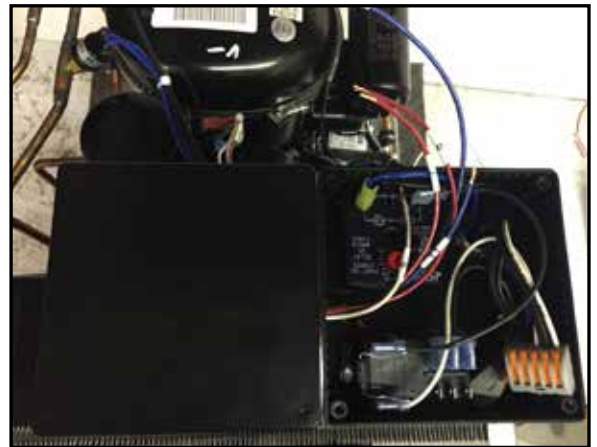
- 5** Remove the backing on the double sided tape as shown.



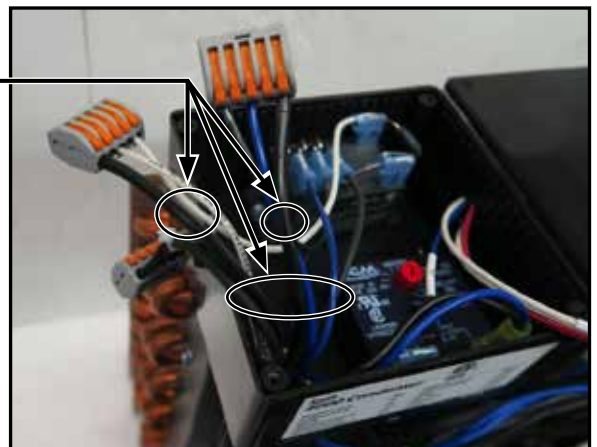
- 6** Remove the backing on the double sided tape as shown.



- 7** Line up the back of both boxes and stick the Cold Weather Start Kit box the condensing unit and existing electrical box.



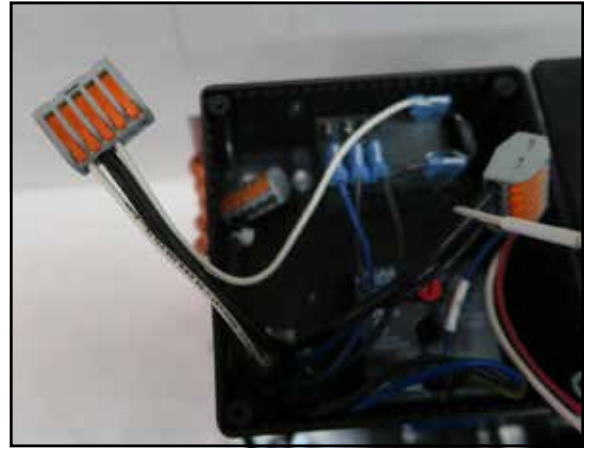
- 8** Cut the 3 zip ties around the hot and neutral wires off as shown.



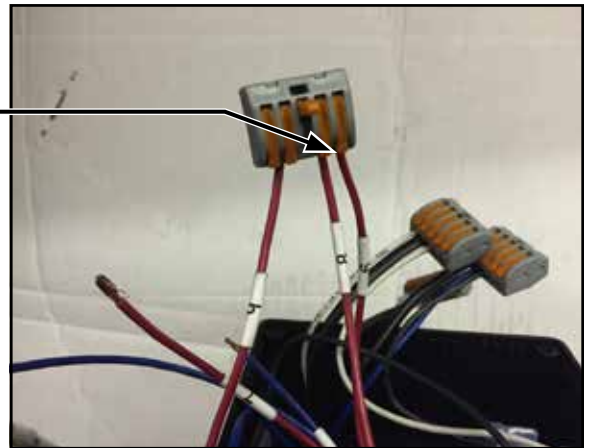
- 9** Reorganize wires in H lever connector as shown.



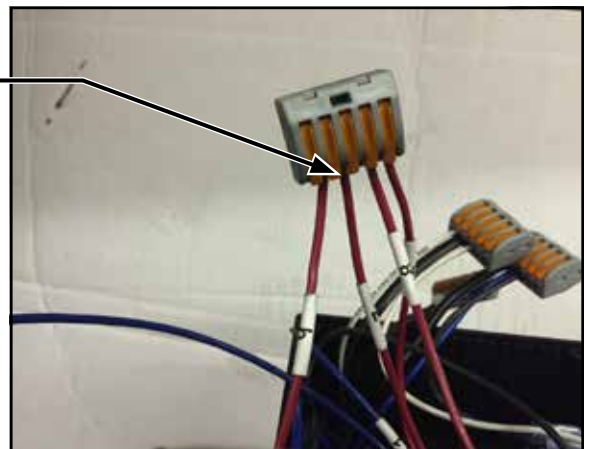
- 10** Reorganize wires in N lever connector as shown.



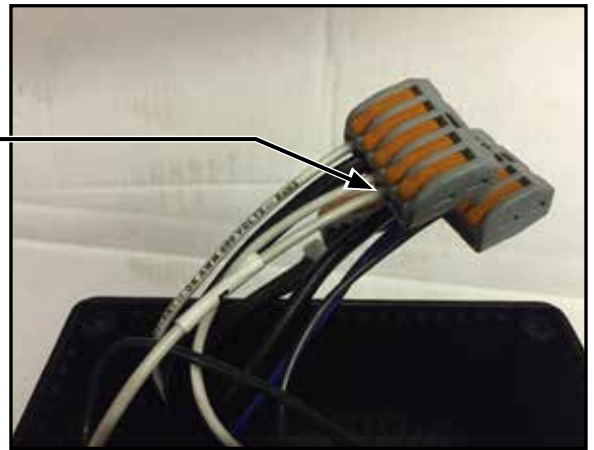
- 11** Secure the #6 wire into the H2 lever connector.



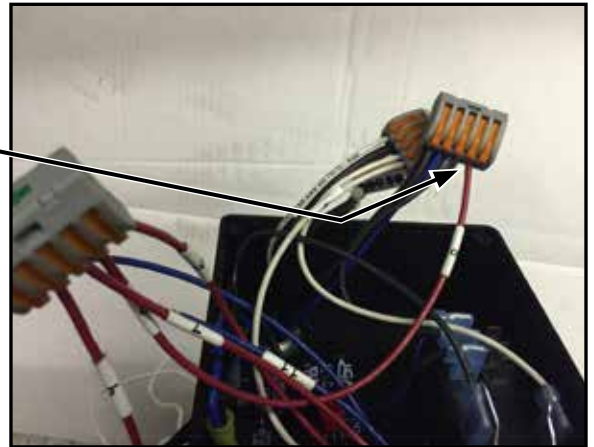
- 12** Secure the #7 wire into the H2 lever connector.



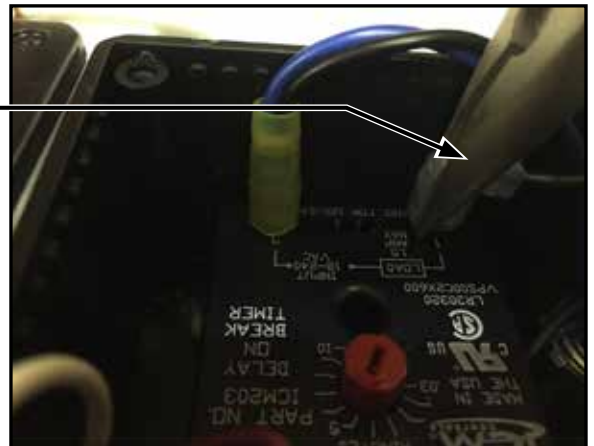
- 13** Secure the #5 wire into the N lever connector.



- 14** Secure the #8 wire into the H lever connector.



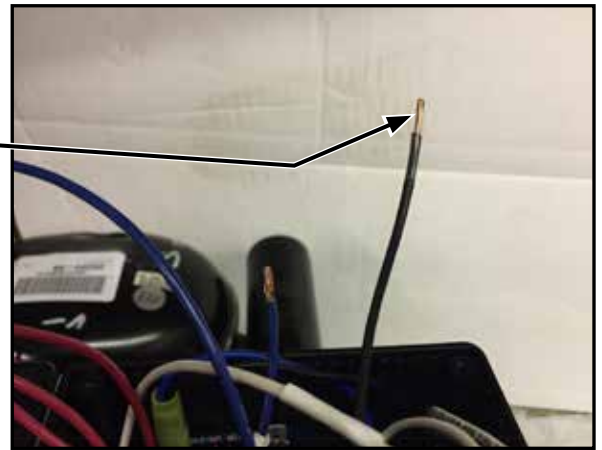
- 15** Remove the blue flag connector from the #1 terminal on the Delay on Break Timer.



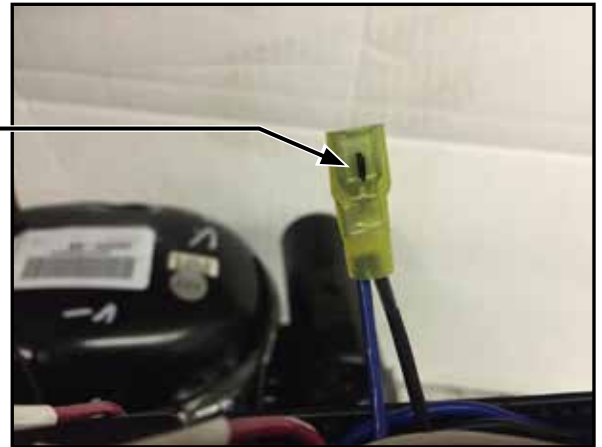
- 16** Cut the blue flag terminal off the black wire from the previous step.



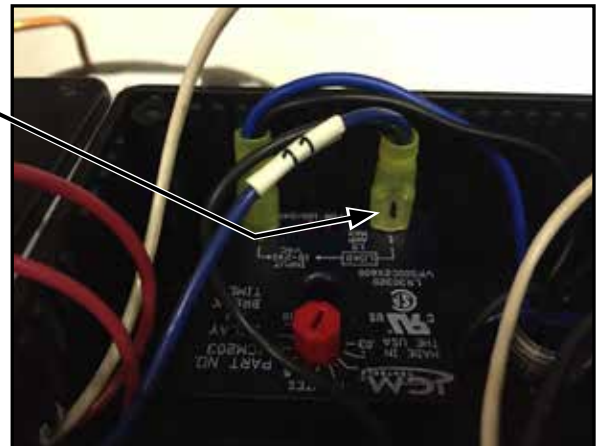
- 17** Strip the end of the black wire from the previous step to a length of 3/8".



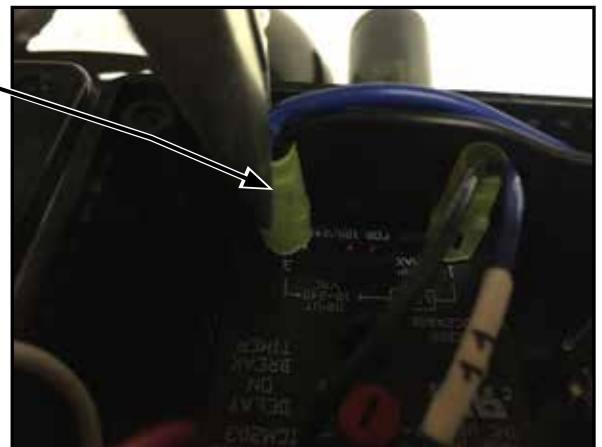
- 18** Crimp the yellow female disconnect labeled 1 onto the #11 wire and the black wire from the previous step.



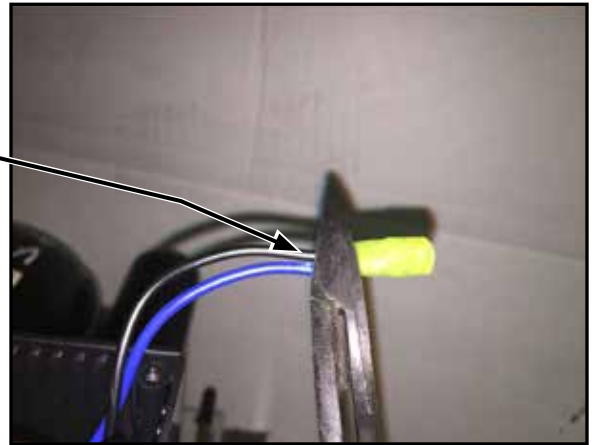
- 19** Connect the yellow female disconnect labeled 1 to the #1 terminal on the Delay on Break Timer.



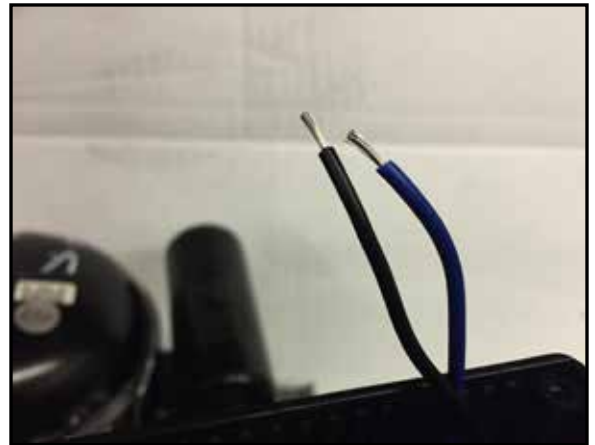
- 20** Disconnect the yellow female disconnect from the #3 terminal on the Delay on Break Timer.



- 21** Cut the yellow female disconnect off of the two wires from the previous step.



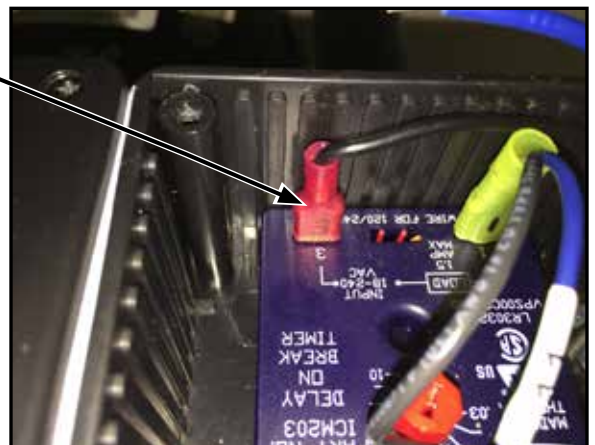
- 22** Strip the ends of each of the two wires from the previous step to a length of 3/8".



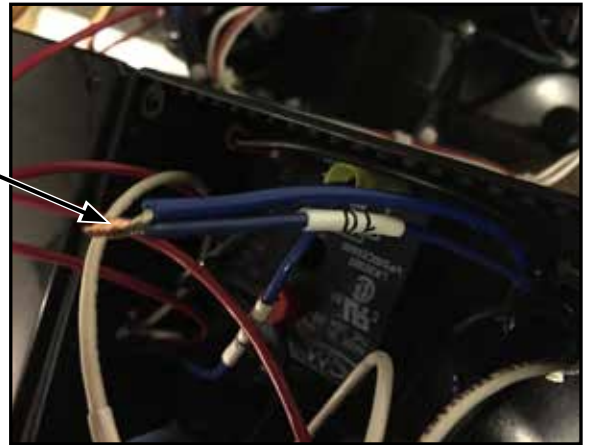
- 23** Crimp the red female disconnect labeled 3 onto the black wire from the previous step.



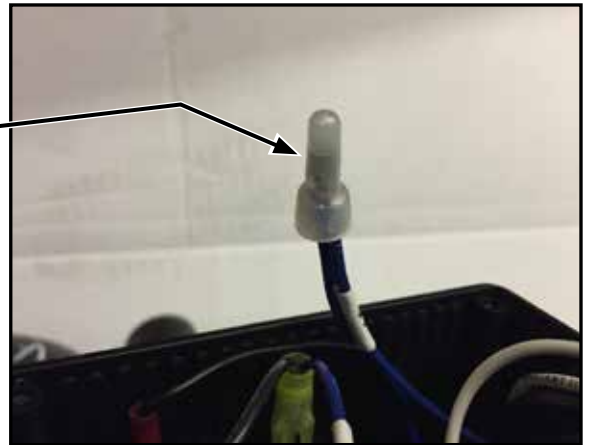
- 24** Connect the red female disconnect labeled 3 to the #3 terminal on the Delay on Break Timer.



- 25** Twist the strands of the blue wire from 3 steps ago with the #10 wire.



- 26** Crimp the closed end terminal onto the #10 wire and the blue wire from the previous step.



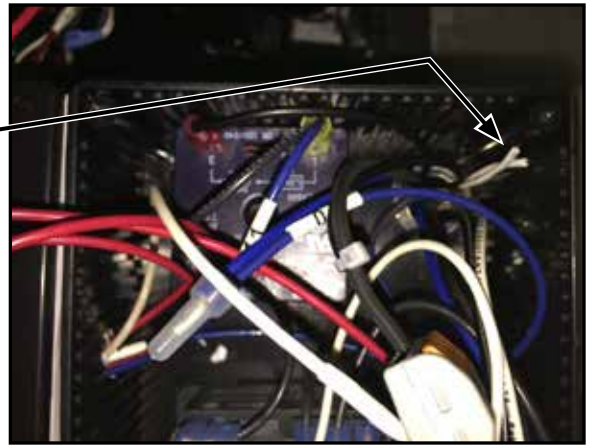
- 27** Locate the silicone heater assembly.



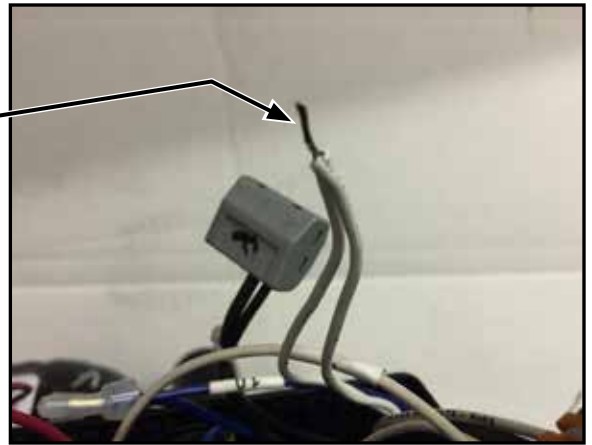
- 28** Loosen the two screws on the cord squeeze on the existing electrical box.



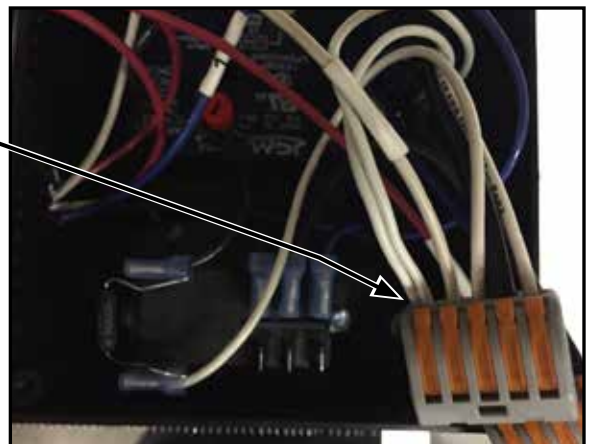
- 29** Route the two long white wires from the silicone heaters up into the electrical box.



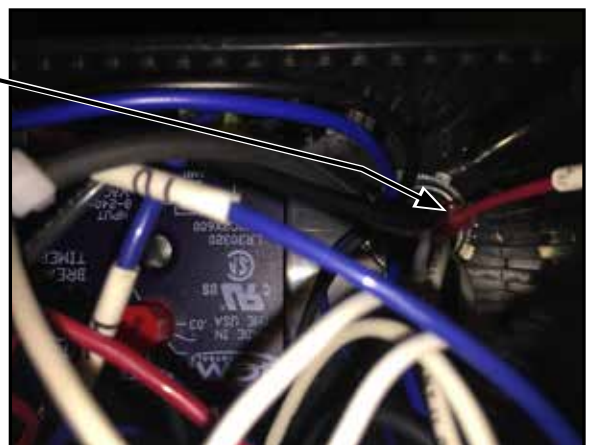
- 30** Twist the strands of each heater wire together.



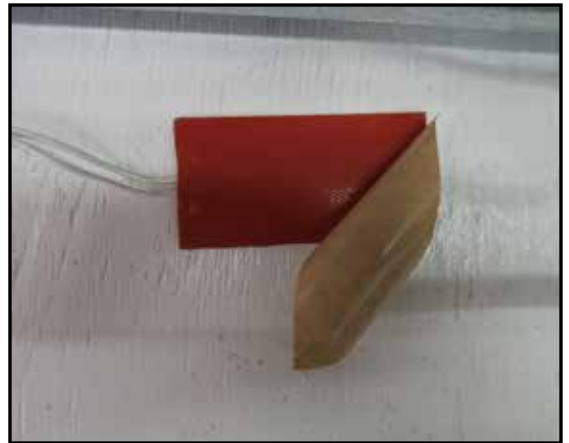
- 31** Secure the two heater wires into the N Lever connector.



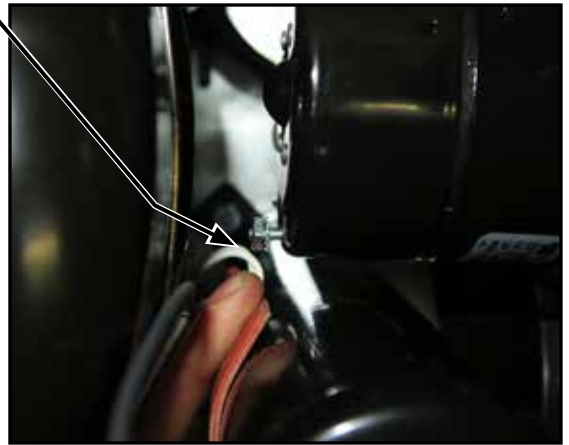
- 32** Route the #9 wire with the red disconnect labeled T down through the cord squeeze.



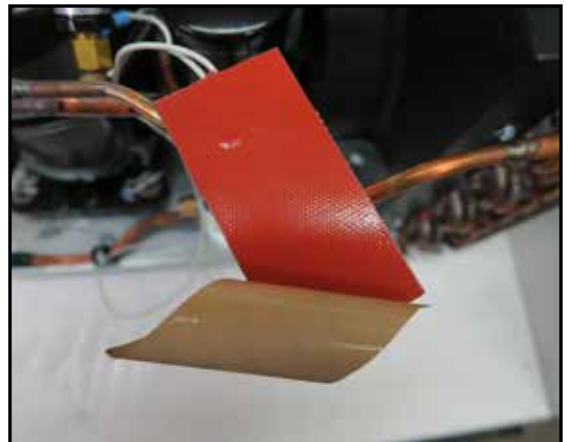
33 Remove the backing from one silicone heater.



34 Stick the silicone heater to the receiver as shown. Line up silicone heater wires with the stud on the back of the fan motor. The top of the heater should be 2.5" from the top of the receiver.



35 Remove the backing from the other silicone heater.



36 Line up the back edge of the second heater with the back edge silicone heater already on the receiver and stick into place.



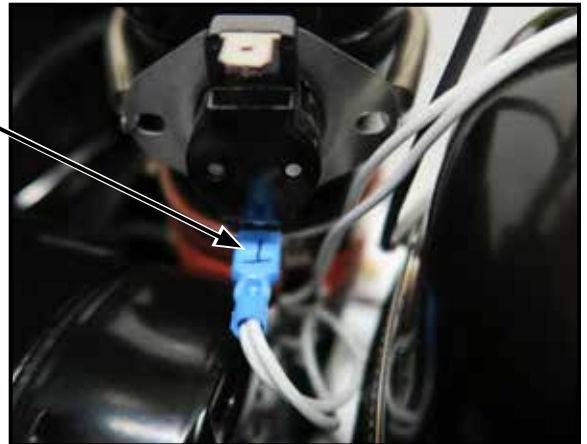
- 37** Secure 2 hose clamps around the top and bottom of the silicone heaters as shown.



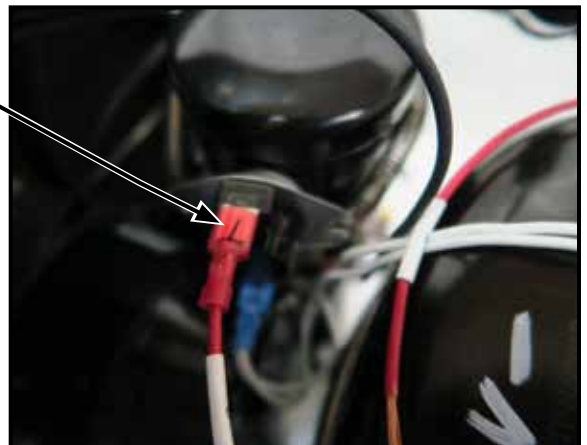
- 38** Slide the thermal switch assembly over the top of the receiver as shown.



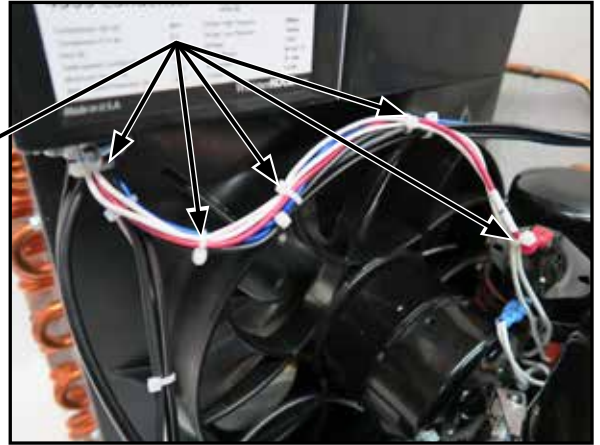
- 39** Secure the blue female disconnect labeled T onto the bottom terminal of the thermal switch.



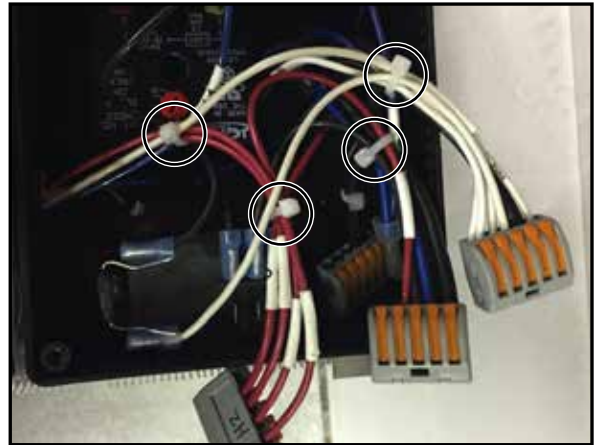
- 40** Secure the red female disconnect labeled T onto the top terminal of the thermal switch.



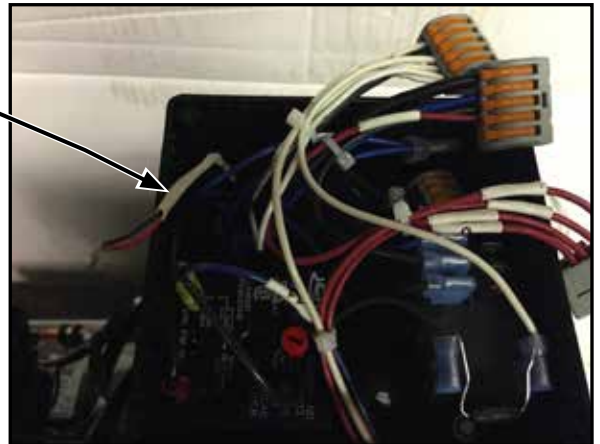
- 41** Zip tie thermal switch and heater wires as shown. (5x)



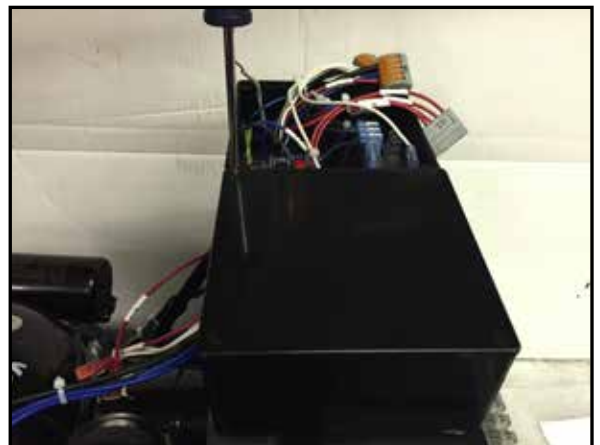
- 42** Zip tie wires in locations shown.



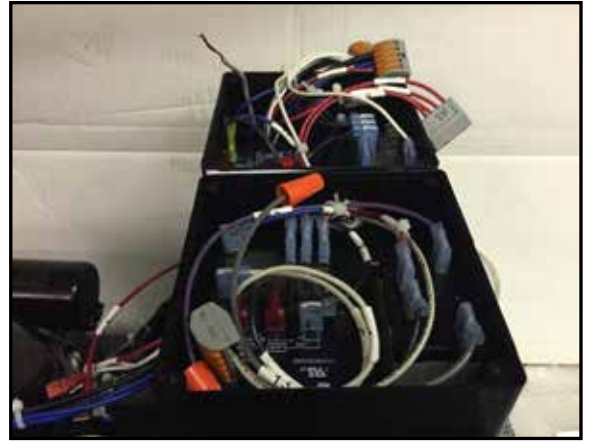
- 43** Route the 24v thermostat wires through the cord squeeze into the electrical box.



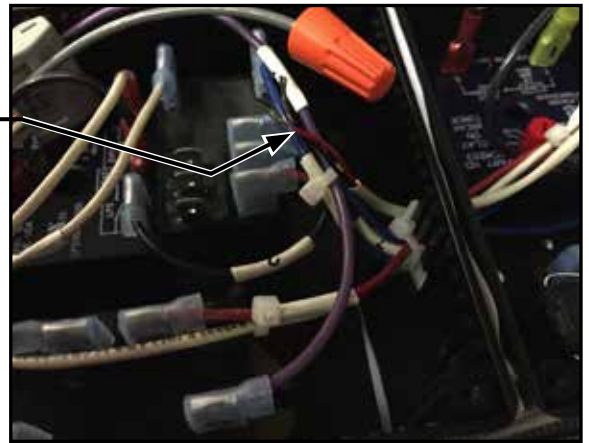
- 44** Remove the 4 Phillips head screws on the Cold Weather Start Kit Electrical Box.



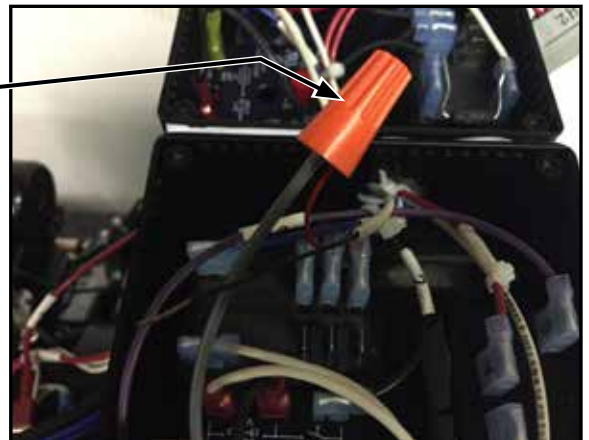
- 45** Remove the top cover from the on Cold Weather Start Kit Electrical Box.



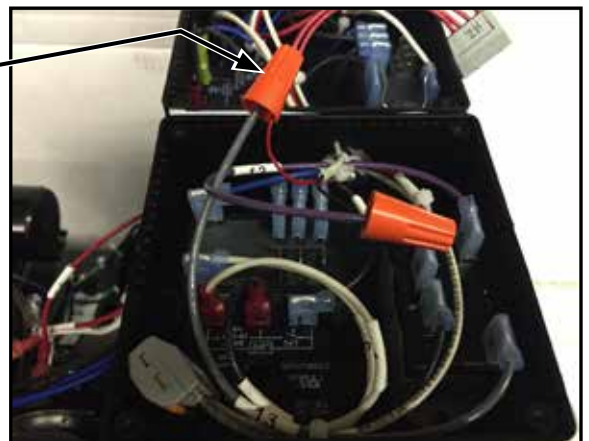
- 46** Route the 24v thermostat wire through the hole in the boxes into the Cold Weather Start Kit Electrical Box.



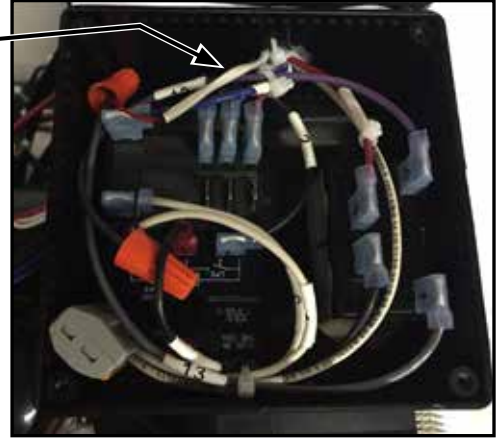
- 47** Connect one of the 24v thermostat wires to the #13 wire using the wire nut provided.



- 48** Connect the 24v thermostat wire to the #12 wire using the wire nut provided.



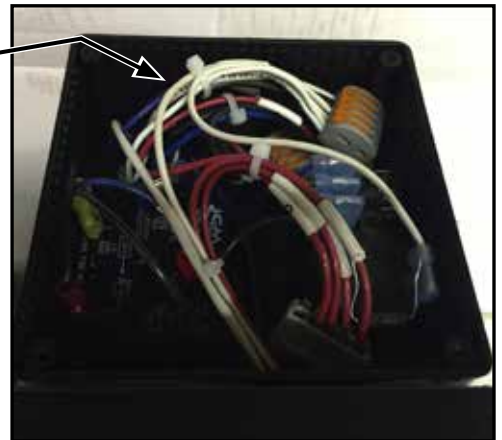
49 Tuck wires in Cold Weather Start Kit Electrical Box as shown.



50 Using the 2 provided 1/2" self tapping screws, secure the 24V coil relay to the Cold Weather Start Kit box through the predrilled holes. (Failing to use the provided screws and mounting locations may result in a punctured coil.)



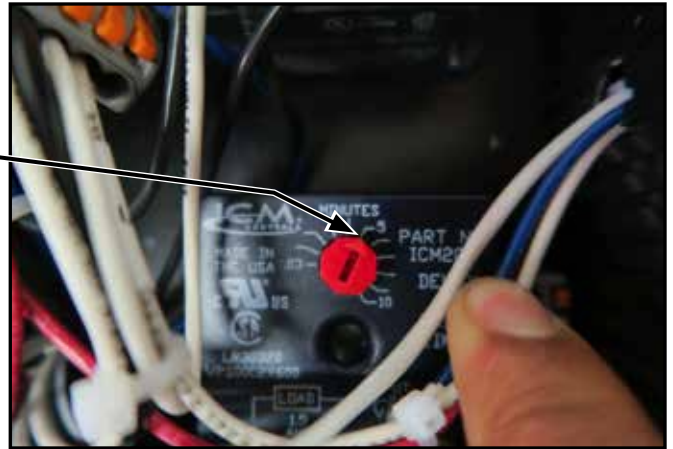
51 Tuck wires in electrical box as shown.



52 Make sure that the Bypass Timer is set to 1000 seconds.



- 53** Make sure that the Delay On Break relay is set to 5 minutes.



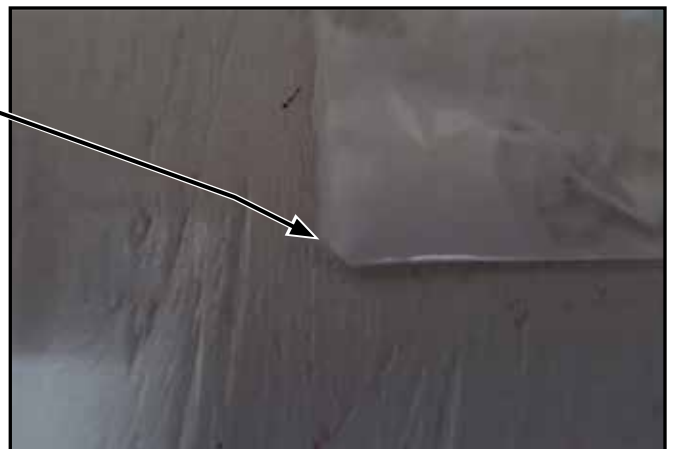
- 54** Secure the 2 screws on the cord squeeze.



- 55** Secure both tops back onto the electrical boxes using the removed screws.



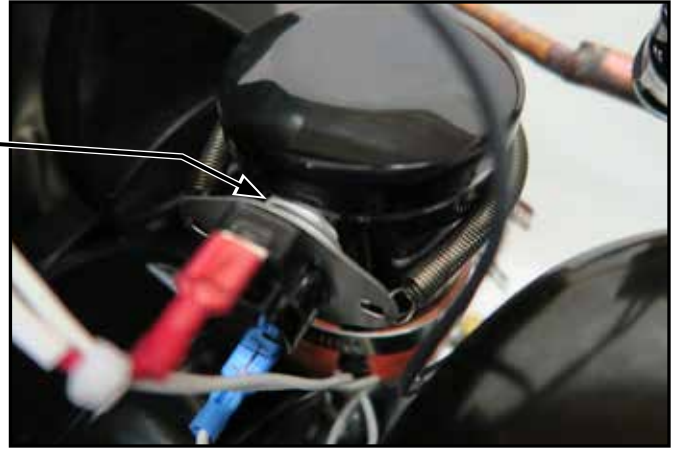
- 56** Cut the corner of the bag off as shown.



- 57** Place thermal paste on the flat surface of the thermal switch.



- 58** Be sure the thermal switch is making good contact with the receiver under the ridge.



The Cold Weather Start Kit has been successfully installed on the condensing unit, next proceed to the evaporator unit instructions.

NOTES

EVAPORATOR UNIT COLD WEATHER START KIT INSTALLATION INSTRUCTIONS

- 1** Before beginning the installation process, locate the Evaporator Unit Cold Weather Start Kit. All parts for the Evaporator Unit are located inside of this box.



- 2** Open box and remove the 24v transformer and the zip lock bag.



- 3** The kit will include five zip ties, four lever connectors, one 6/32 kee nut, and one 120v/24v step down transformer.



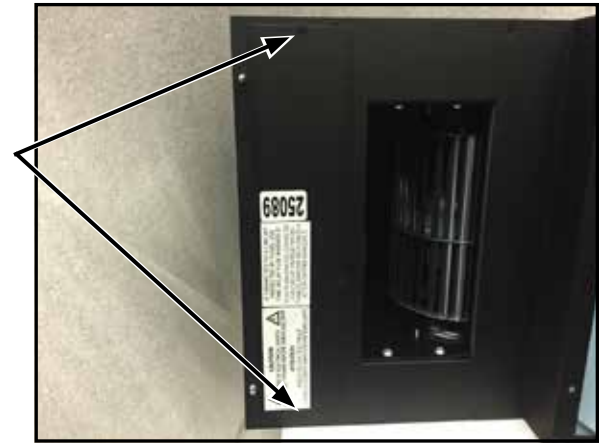
- 4** Using a Phillips head screw driver remove the 8 screws holding the grill in place. (Set screws aside for later use)



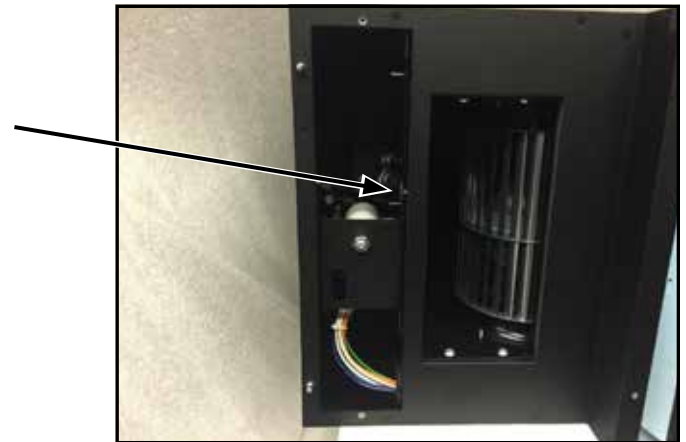
5 Remove the grill.



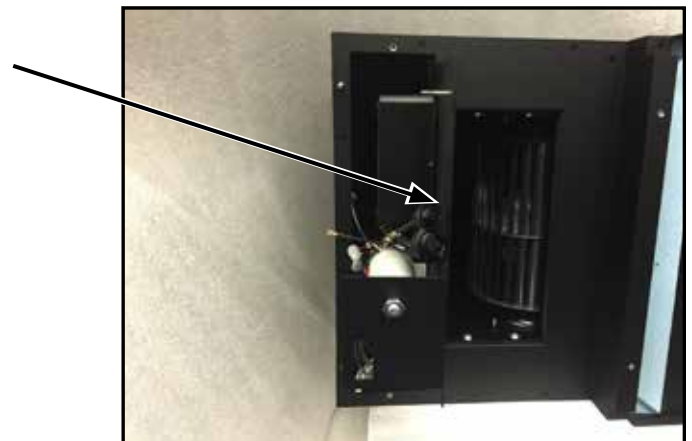
6 Locate the electrical panel access door, and remove the two Phillips head screws. (Set screws and panel aside for later use)



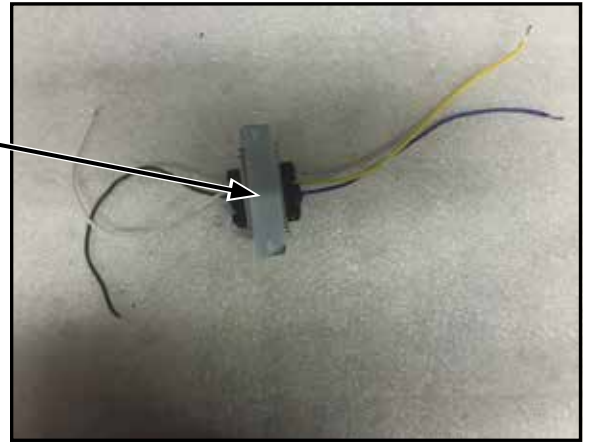
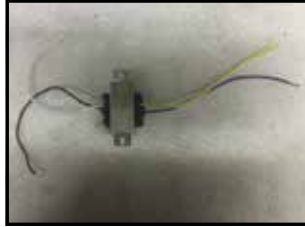
7 Remove the thumbscrew by rotating it counter clockwise. (Set thumbscrew aside for later use)



8 Pull electrical panel down as shown.

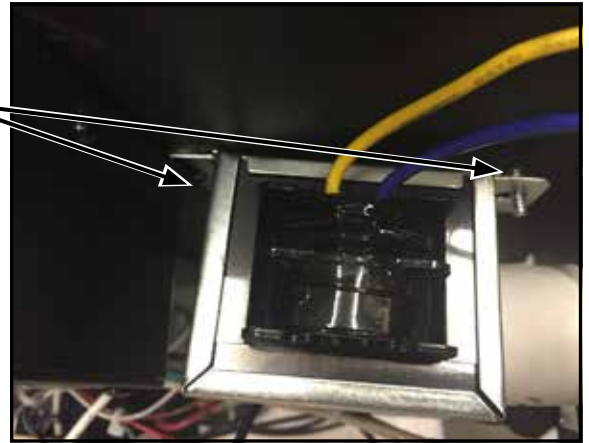


- 9** Remove the backing from the double sided tape on the transformer.



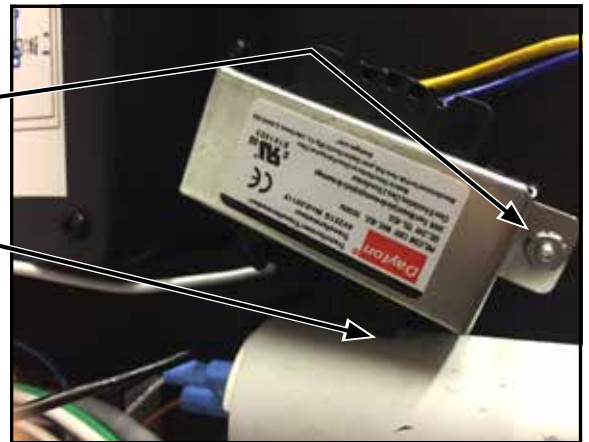
- 10** Place one edge of the transformer under the control box and the other edge over the 6/32 stud.

See next step for transformer orientation for units equipped with the humidity option.

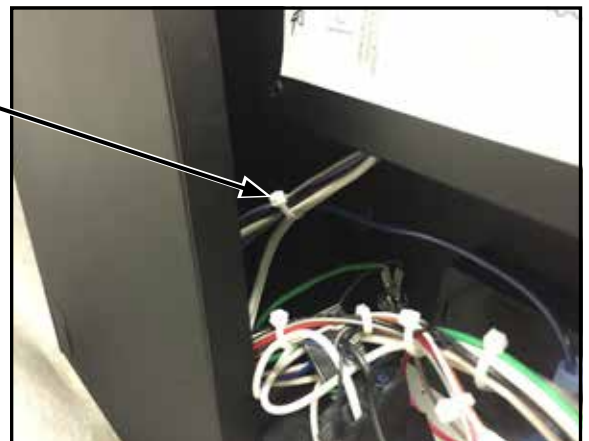


- 12** Push transformer against the electrical panel and secure it in place using the 6/32 nut provided.

Make sure there is a distance of 1/16" between the transformer and the capacitor.



- 13** Cut the zip tie off the wires entering the control box.



- 14** Locate the blue wire entering the control box.



- 15** Cut the blue wire and strip each end to a length of 3/8"



- 16** Secure the two blues from the unit and the black wire from the transformer into a lever connector.

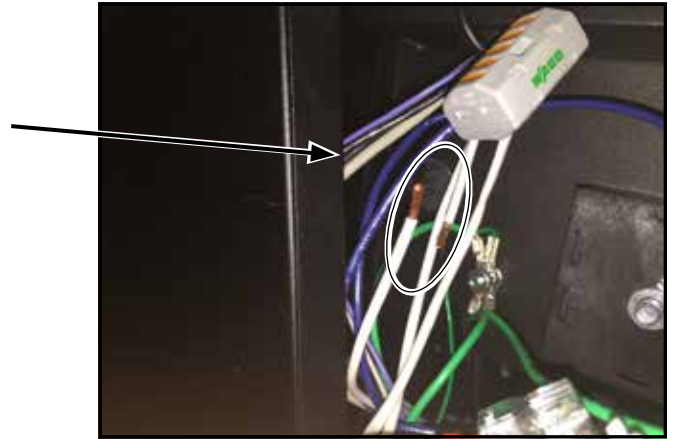


- 17** Locate the white 16awg white wire coming out of the control box.

Note: There may be other wires with white insulation around them, they will be a little thicker do not cut those wires.



- 18** Cut the white wire and strip each end to a length of 3/8".

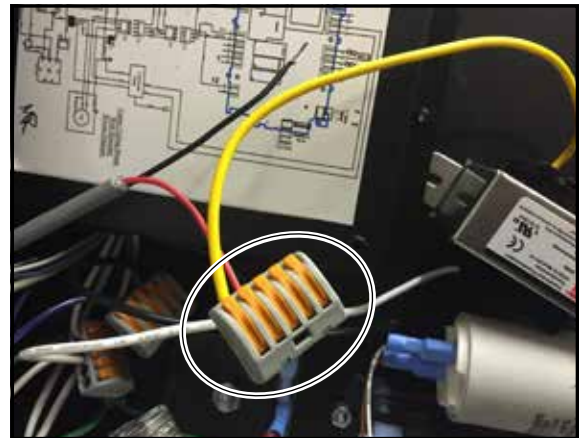


- 19** Secure the two white wires from the unit and the white wire from the transformer into a lever connector.



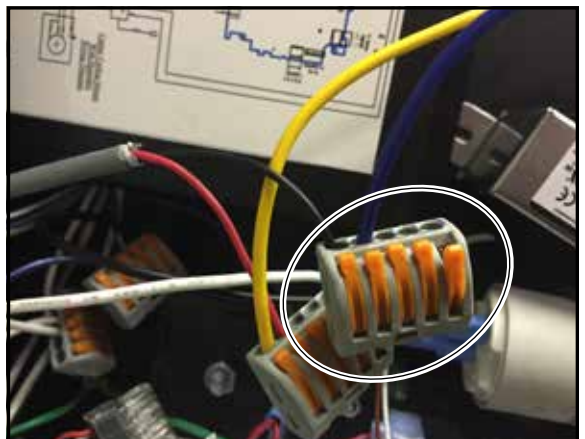
- 20** Secure one of the thermostat wires and the yellow wire from the transformer into a lever connector.

Note: The thermostat wire is the wire that was ran from the evaporator unit to the condensing unit.



- 21** Secure the other thermostat wire and the blue wire from the transformer into a lever connector.

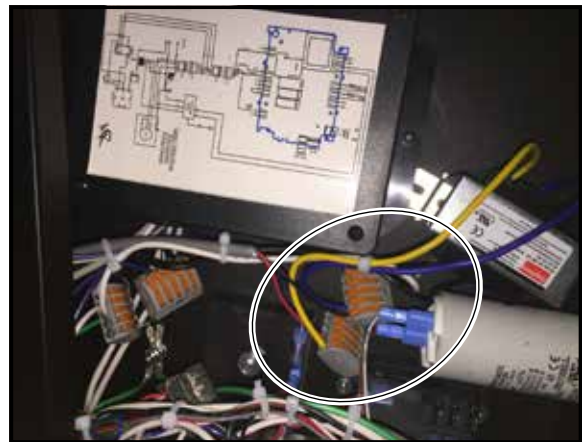
Note: The thermostat wire is the wire that was ran from the evaporator unit to the condensing unit.



22 Zip tie wires in locations shown.



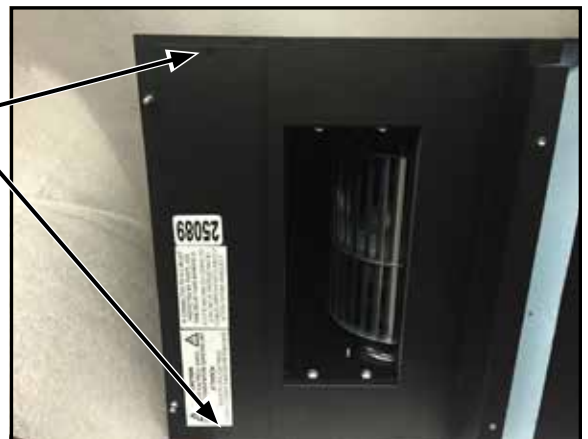
23 Tuck lever connectors into location shown.



24 Push electrical panel back up inside the unit and reinstall the thumbscrew removed in step #8.



25 Re-install the electrical panel using the 2 Phillips head screws removed in step #7.



- 26** Install the grill back on the evaporator unit and secure it to the unit using the 8 Phillips head screws removed in step #5.



The Cold Weather Start Kit has been successfully installed on the Evaporator Unit. If the installation process is complete on the condensing unit as well, plug both the condensing unit and evaporator units back into a power source.

*Whisper***KOOL™**

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