



INSTALLATION INSTRUCTIONS

FCB Pinnacle 4 Flavor Wide Body Units

Thermostat Reset Upgrade Kit P/N 629088712

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Revision: C

Visit the Cornelius web site at www.cornelius.com for all your Literature needs.

The products, technical information, and instructions contained in this manual are subject to change without notice.

These instructions are not intended to cover all details or variations of the equipment, nor to provide for every possible contingency in the installation, operation or maintenance of this equipment. This manual assumes that the person(s) working on the equipment have been trained and are skilled in working with electrical, plumbing, pneumatic, and mechanical equipment. It is assumed that appropriate safety precautions are taken and that all local safety and construction requirements are being met, in addition to the information contained in this manual.

This Product is warranted only as provided in Cornelius' Commercial Warranty applicable to this Product and is subject to all of the restrictions and limitations contained in the Commercial Warranty.

Cornelius will not be responsible for any repair, replacement or other service required by or loss or damage resulting from any of the following occurrences, including but not limited to, (1) other than normal and proper use and normal service conditions with respect to the Product, (2) improper voltage, (3) inadequate wiring, (4) abuse, (5) accident, (6) alteration, (7) misuse, (8) neglect, (9) unauthorized repair or the failure to utilize suitably qualified and trained persons to perform service and/or repair of the Product, (10) improper cleaning, (11) failure to follow installation, operating, cleaning or maintenance instructions, (12) use of "non-authorized" parts (i.e., parts that are not 100% compatible with the Product) which use voids the entire warranty, (13) Product parts in contact with water or the product dispensed which are adversely impacted by changes in liquid scale or chemical composition.

Contact Information:

To inquire about current revisions of this and other documentation or for assistance with any Cornelius product contact:

www.cornelius-usa.com

800-238-3600

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This document contains the original instructions for the unit described.

CORNELIUS INC
101 Regency Drive
Glendale Heights, IL
Tel: + 1 800-238-3600

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SAFETY INSTRUCTIONS

SAFETY

WARNING:

Before starting installation, read and understand all safety label and warnings on the machine. Also review and understand all safety instructions in the owners, installation and service manuals.

Failure to comply could result in serious injury, death or damage to the equipment.

QUALIFIED SERVICE PERSONNEL

WARNING:

Only trained and certified electrical, plumbing and refrigeration technicians should service this unit.

All wiring and plumbing must conform to national and local codes. Failure to comply could result in serious injury, death or equipment damage.

SAFETY PRECAUTIONS

This unit has been specifically designed to provide protection against personal injury. To ensure continued protection observe the following:

WARNING:

Disconnect power to the unit before servicing. Follow all lock out/tag out procedures established by the user. Verify all power is off to the unit before performing any work.

Failure to comply could result in serious injury, death or damage to the equipment.

CAUTION:

Always be sure to keep area around the unit clean and free of clutter.

Failure to keep this area clean may result in injury or equipment damage.

INSTALLATION INSTRUCTIONS

IMPORTANT: This procedure is intended for use by a Qualified Service Technician.

IMPORTANT: Thermostat kit must already have been installed on the unit prior to this kit being installed (P/N 629088360).



Baldor With Thermostat



Baldor With out Thermostat

Figure 1.

NOTE: Open the Cornelius web site www.cornelius.com, search for 629088712INS, and print the instructions off in color.

Tool List

Sl. No.	Description	Qty
1	3/8" Drive Drill	1
2	7/8" Hole Knock-out	1
3	1/4" Nut Driver	1
4	Multi-Use Screwdriver	1
5	Magnetic Pick-up	1
6	11/32" Nut Driver (Deep Drive)	1
7	Multi-meter	1
8	Wire Stripper/Crimper	1
9	Set of Mixed Terminals (Red Male and Female AMP Fastens Fully Insulated)	1
10	Adjustable Wrench or Ratchet for Knock-Out	1
11	Needle Nose Pliers	1

Parts List

Item	Description	Qty
1	Safety-Kit Enclosure Box (with wiring inside)	1
2	Set of Wire Ties	1
3	Short Thread Cutting Screws, 2 spare	6
4	7/8" Bushing	1
5	Label, Hot Gas Error	2
6	Brass Screws and S.S. Lock-washers	8
7	Fuse	2
8	Label, Inverter Board	2
9	Wiring Schematic	1

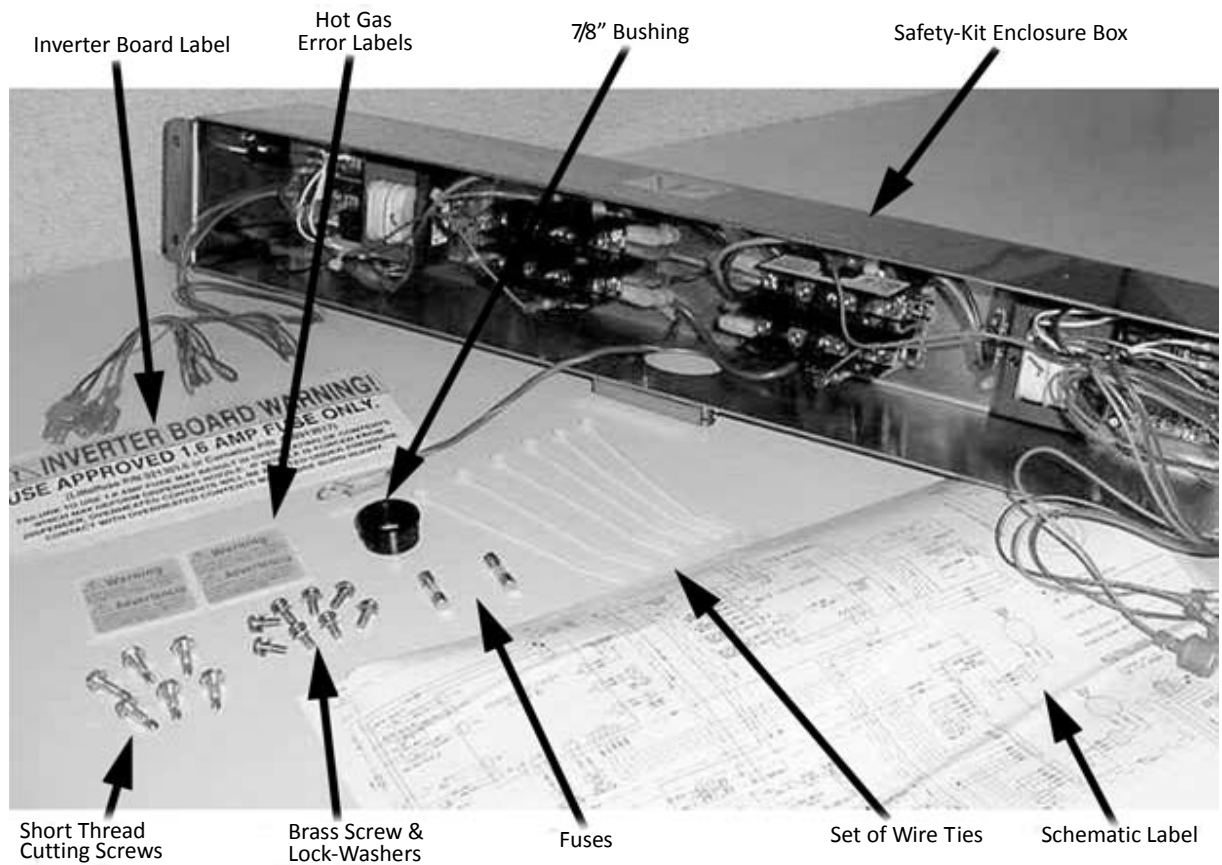


Figure 2.

1. Pull Pinnacle away from wall. Remove the top, side, and middle back panels.
2. Remove the two contactor box covers.

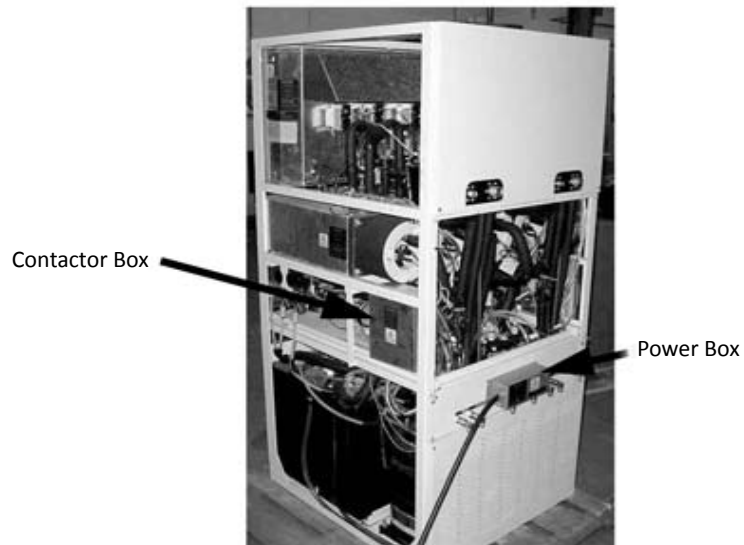


Figure 3.

3. Remove both Black thermostat wires from the contactor box. Plug the white/red lead, marked "Contactor" onto the side of the contactor where the thermostat lead was originally connected.

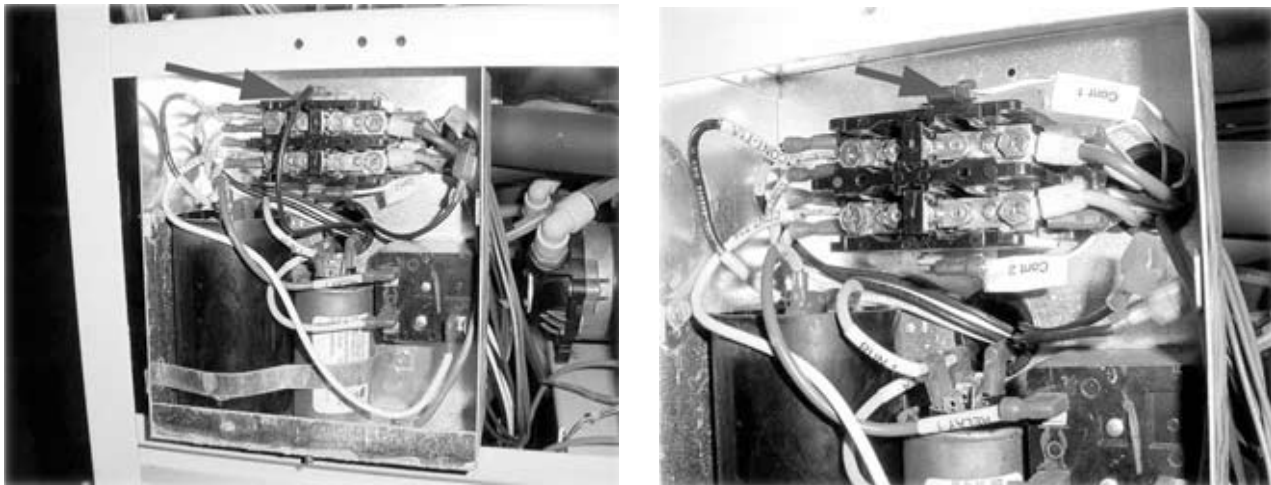


Figure 4.

4. Repeat Step 3 for both sides.
5. Remove the power box. Disconnect the main power cord and the internal power cords from the terminal block. Remove and discard the terminal block.

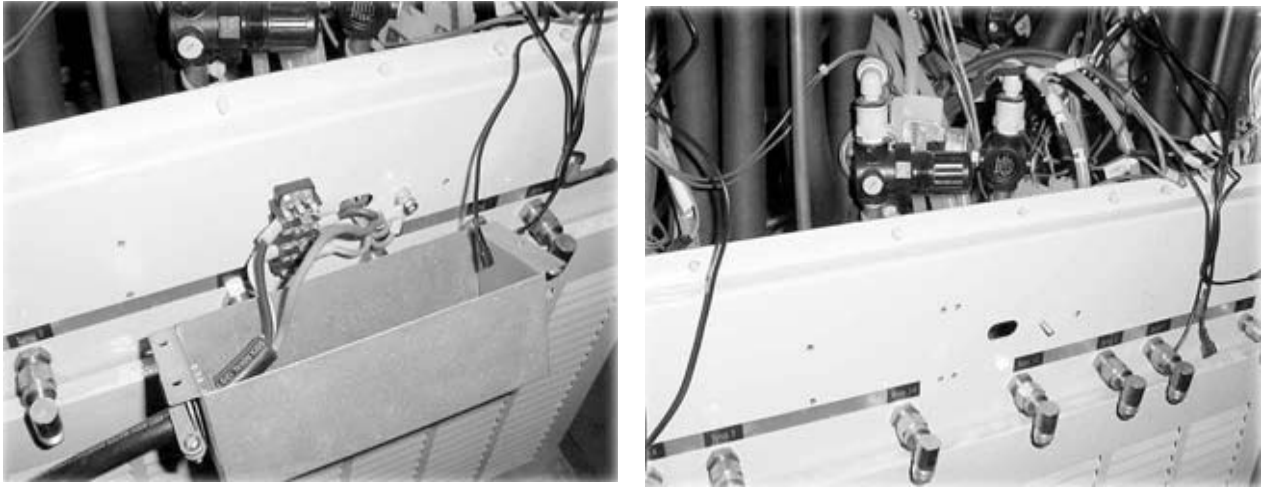


Figure 5.

6. If the hole in the frame for the power cord is oval, use the 7/8" knock-out to increase the hole size.
7. File down any burrs on all holes and carefully clean up all metal shavings (a magnetic pick-up tool helps).



Figure 6.

8. Place the 7/8" bushing into the hole. It is tight, but you can feed the orange and red wires through the bushing as well as the 2 power leads.



Figure 7.

9. Remove the strain relief from the safety circuit box and place on the upgrade box. Thread the main power cord through the strain relief and attach the leads to either contactor, as shown.

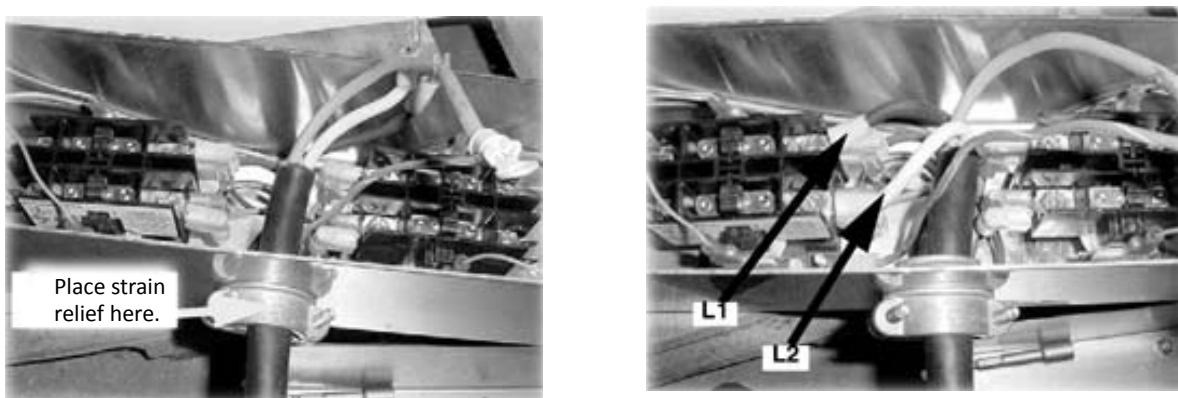


Figure 8.

10. Connect brown and blue terminals T1 and T2 to the outer contactor screw terminals as shown. Make sure colors match existing contactor wiring. Re-attach ground wires to appropriate studs on frame.

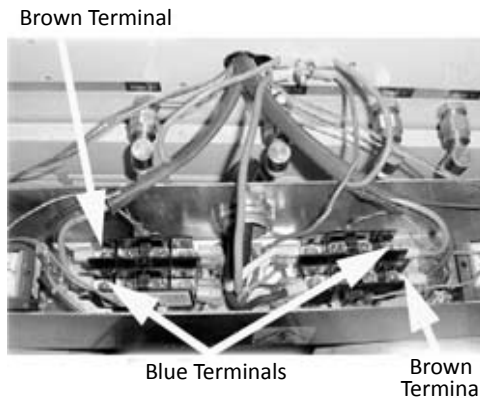


Figure 9.

11. Thread the Red and Orange Thermostat wires through the holes.

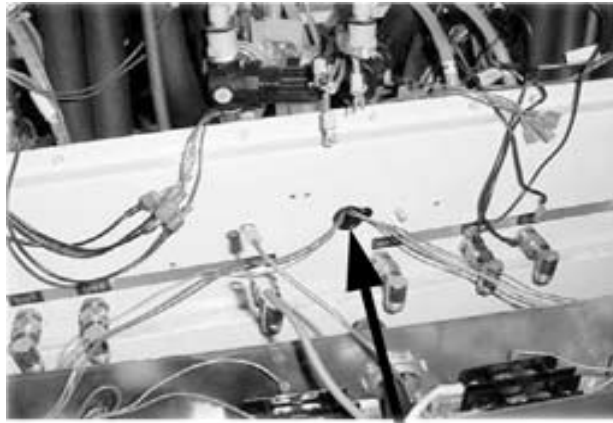


Figure 10. Red and Orange Thermostat Wires

12. Connect the orange thermostat wires with the thermostat wires from the left most barrel (looking at the unit from the rear). Connect the red thermostat wires with the thermostat wires from the barrel on the right. Bundle and wire tie as needed.

IMPORTANT: Make sure to keep the left and right side thermostat wires on the same side as the new box.

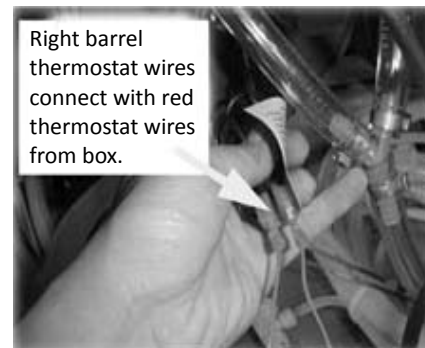
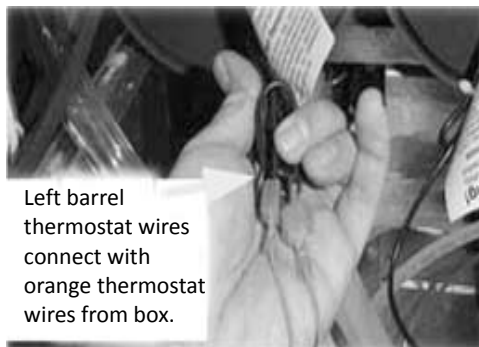


Figure 11.

13. Repeat Steps 11 and 12 for the right side of the unit.
14. Change out the screws in the back of the thermostat with the supplied brass and stainless steel lock-washers. Emerson drive shown for clarity, Baldor drive units are the same process.

NOTE: Only remove one screw at a time. DO NOT remove both screws at the same time or the thermostat can fall and be damaged.

15. Using hand tools remove one screw

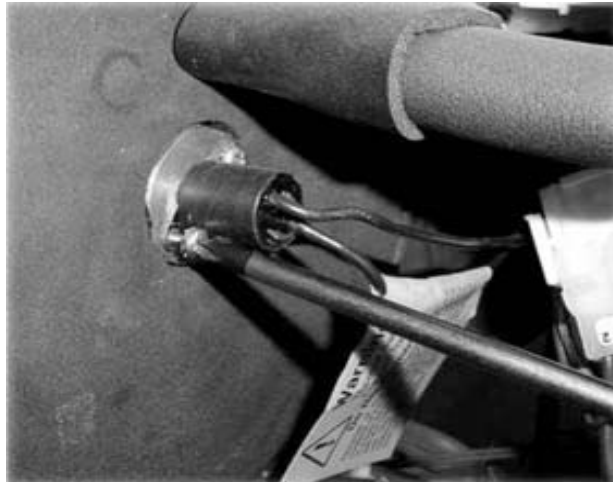


Figure 12.

16. Place the stainless steel lock-washer over the brass screw and thread it in (a “screw starter” screwdriver makes this much easier).

NOTE:

- A. Make sure both screws are in place and secure.
- B. **DO NOT** use power tools to drive screws.
- C. Use caution not to overtighten the screw.



Figure 13.

17. Ensure screw is flush and sealed against lock washer, as shown.
18. Repeat procedure for second screw.

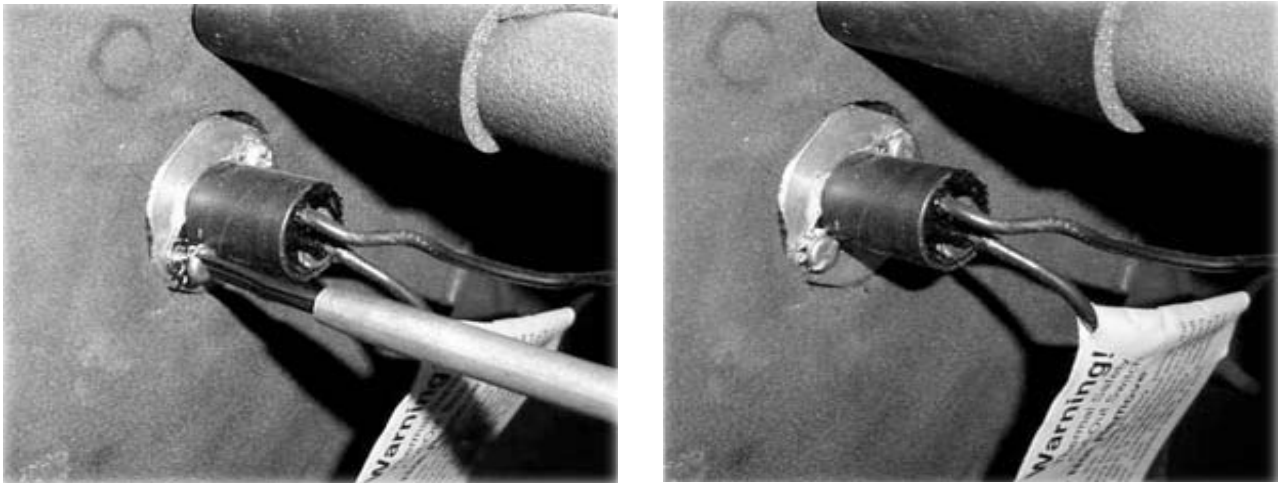


Figure 14.

19. Repeat steps 18-21 for all barrels.

If the existing screws **do not** come out or they break during this change, call Cornelius Service at 800-238-3600.

20. After screw replacements, ensure thermostat is flush against brass retaining nut, by grasping the body of the thermostat with your finger and gently trying to wiggle it. No movement should be detected. If movement is detected tighten screws and re-check.



Correct

Incorrect

Check

Figure 15.

⚠ WARNING:

If thermostat is loose, it will not correctly detect an over temperature condition. This could allow product to overheat without being detected.

21. Before connecting power, check the following:

- A. Verify that all connections are placed properly as per the instructions.
- B. Verify that all connections are firmly attached.
- C. Verify that the ground connection does not touch a terminal on the contactor in the Retro-fit enclosure.

- D. Verify that incoming power L1 and L2 are on the inner connections of the contactor.
- E. Verify that the unit power leads T1 and T2 are on the outer connections of the contactor.
- 22. After verifying that the unit is wired correctly, connect power to the unit and verify. If the unit does not power up and the red LED is illuminated, call Cornelius Service at 800-238-3600. If the unit powers up normally, disconnect power and complete the install.
- 23. Make sure all wires are in the Retro-fix box, hold box in place against the frame, and drive 4 screws through retro-kit box into frame.



Figure 16.

- 24. Replace all panels of unit. Move unit back into place for operation. Open the front control box to change the inverter board fuse.
- 25. Change out inverter board fuse.

⚠ DANGER:

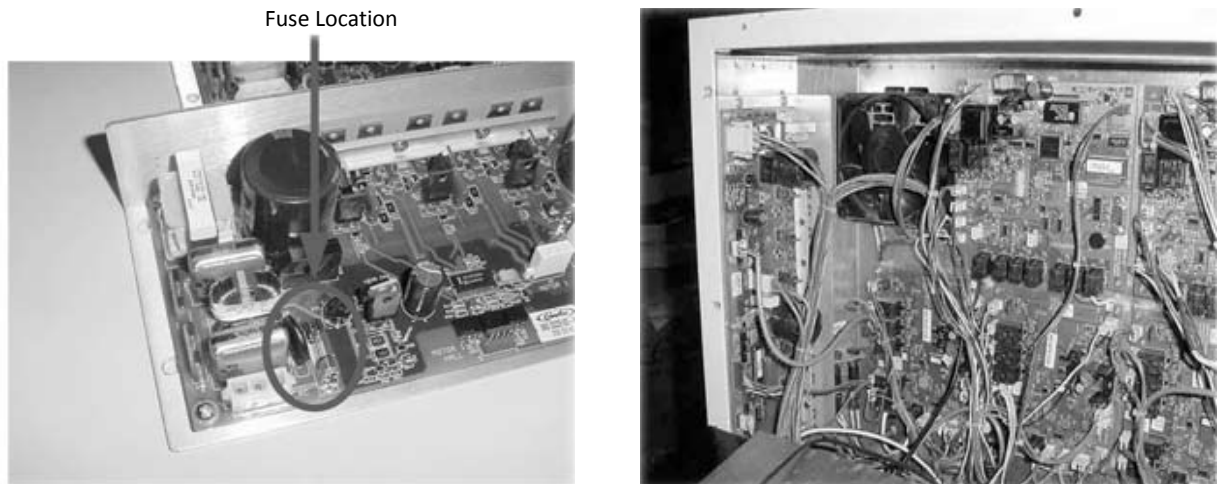
HIGH VOLTAGE: After disconnecting power, wait for approximately 5 minutes to work on the unit. Working on the unit before the 5 minutes have passed could result in electrical shock or death!

- 26. Open up the control panel.



Figure 17. Baldor Inverter Board Configurations

27. Identify location of the fuse (2 fuse on a 4 flavor unit). The fuse may be located behind wire harnesses.
28. Remove and discard existing fuse. Tools may cause the glass cartridge of the fuse to break. Please use caution.
29. Install the new fuse. Make sure it snaps securely in to the fuse holder.



Fuse location on a Baldor Inverter Board

Figure 18.

30. Close the control panel and place the Warning label, as shown.
31. Place Hot Gas Error Warning labels directly next to the display panels on the front of the unit. Close the merchandiser door.



Figure 19.

32. Reconnect power to the unit. Installation is complete and the unit is ready for normal operation.



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