



Concepts Serving Systems

Installation Manual

Please read this manual completely before attempting to install or operate this equipment!
Notify carrier of damage! Inspect all components immediately. See page 2.



April 2010

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Serial Number Information

If your unit is **heated**, the serial tag is located above the louvered panel near the on/off switch.

Refrigerated units have the serial tag located in the compressor area near the on/off switch.

Understorage units often have the serial tag located on the left inside the storage area.

All purpose counters, utility equipment or delivery carts do not require serial numbers but a model tag is placed at the top of the pylon on the back of the unit.

Always have the serial number of your unit available when calling for parts or service.

This manual covers standard units only. If you have a custom unit, consult the customer service department at the number listed below.

Receiving And Inspecting The Equipment

Even though most equipment is shipped crated, care should be taken during unloading so the equipment is not damaged while being moved into the building.



The units with LiquiTec technology cold pans contain a non-toxic eutectic fluid within a sealed inner liner. This fluid may leak if the tank is punctured so care must be taken when uncrating and setting in place. The eutectic fluid is non-toxic and may be flushed down a disposal drain. If the LiquiTec unit cold pans leak, immediately call the Delfield service department directly at 1-800-733-8821 not your local service agent.

1. Visually inspect the exterior of the package and skid or container. Any damage should be noted and reported to the delivering carrier immediately.
2. If damaged, open and inspect the contents with the carrier.
3. In the event that the exterior is not damaged, yet upon opening, there is concealed damage to the equipment notify the carrier. Notification should be made verbally as well as in written form.
4. Request an inspection by the shipping company of the damaged equipment. This should be done within 10 days from receipt of the equipment.
5. Check the lower portion of the unit to be sure legs or casters are not bent.
6. Also open the compressor compartment housing and visually inspect the refrigeration package. Be sure lines are secure and base is still intact.
7. Freight carriers can supply the necessary damage forms upon request.
8. Retain all crating material until an inspection has been made or waived.

Uncrating the Equipment

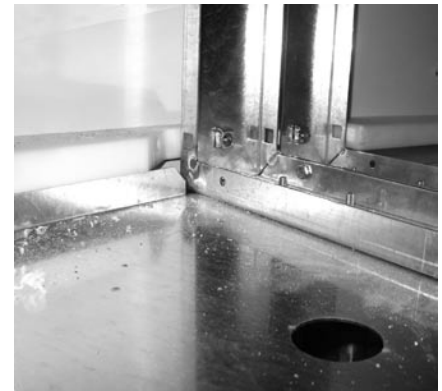
First cut and remove the banding from around the crate. Remove the front of the crate material, use of some tools will be required. If the unit is on legs remove the top of the crate as well and lift the unit off the skid. If the unit is on casters it can be "rolled" off the skid.

Line Up Installation

1. Identify where the equipment will be installed.
 - Be sure the location chosen has a floor strong enough to support the total weight and contents. Reinforce the floor as necessary to provide for maximum loading.
 - Do not install heated units near combustible objects or surfaces affected by heat or moisture.
 - For the most efficient refrigeration, be sure to provide good air circulation inside and out.
 - Inside refrigerated cabinet: Do not pack unit so full that air cannot circulate. Take care not to block air flow to the fans and allow space along the sides.
 - Outside refrigerated cabinet: Be sure the unit has access to ample air; avoid hot corners and locations near stoves and ovens. It is suggested the rear of the unit be no less than two inches from any wall, partition or any other object which will restrict exhaust air flow.
2. Place Unit #1.
3. Level Unit #1 front to back and left to right by adjusting the bullet feet.
4. Place Unit #2.
5. There are (approximately 3) holes along the top and bottom sides. Secure units together with 1/4" x 2" bolts and nuts. Do not tighten until Unit #2 is level.
6. Level Unit #2 front to back and left to right by adjusting the bullet feet.
7. Tighten the nuts and bolts that connect Unit #1 and #2.
8. Repeat steps 4-7 as you add each additional unit.



First view of units placed next to each other




Second view of units placed next to each other



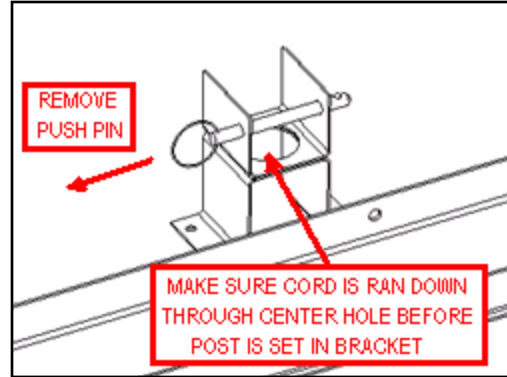
Third view of units placed next to each other

Line Up Installation, continued

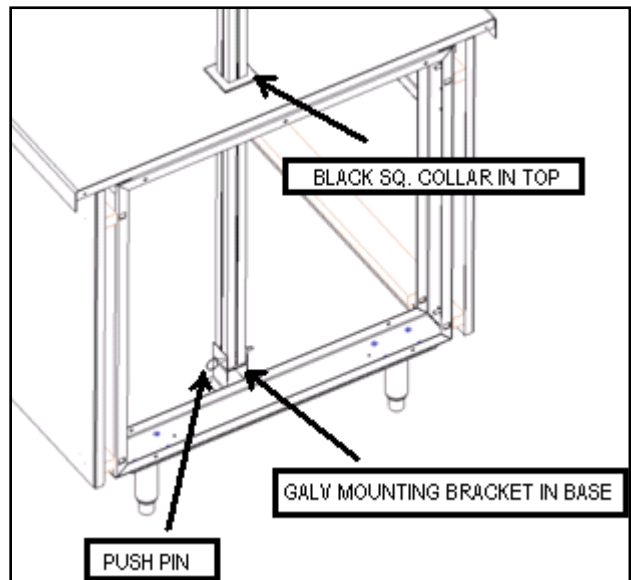
9. Do as much plumbing as possible with the tops off.
 10. Connect the electrical quick connects in the bases.
 11. Have the top installed. Verify it is secure and level.
 12. Install cold pans into unit. Ensure the gasket is visible.
 13. Install hot wells into unit. Ensure the gasket is visible.
 14. Make electrical connections on cold pans and hot wells.
 15. Make plumbing and drain connections on cold pans and hot wells.
-  **Moisture collecting from improper drainage can create a slippery surface on the floor and a hazard to employees. It is the owner's responsibility to provide proper drainage.**
- CAUTION
16. Install signage, lighting and food shields as required. Instructions are found on the following pages.
 17. Unit is ready for final utility hookups.
 18. Install tray slides.
 19. Before the heated units are used the first time for serving:
Turn the temperature knob to "10" and heat the well for 15 minutes.
Do not be alarmed if smoke appears; this preheat should burn off any residue or dust that has adhered to the food well element.

Fixed Height Signage Installation

1. Verify that black square collars are mounted in the 2" square holes in the unit top. If they are not, locate them in the crate and place them back in the holes in top.
2. Make sure the push pins are removed from the mounting brackets in the bottom of the base.
3. With a person supporting each post of the signage, pick up and hold vertically over top of the collared holes in top.
4. If electrical cord is coming out the bottom of one of the posts, lower it through the collared hole.
5. Next, lower signage posts down through collared holes in top.
6. Secure in place by sliding push pin through bracket and post.
7. If electrical cord is present, plug into the outlet in the base.



Prepare base.



Signage post installed in base.

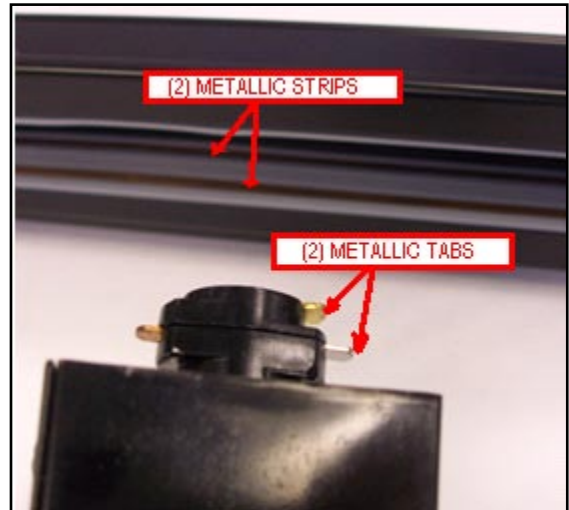
Signage Lighting Installation

To mount decorative lamps:

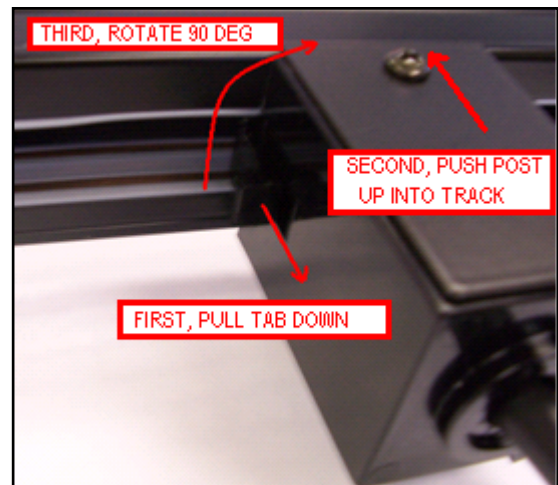
1. Pull down on the tab on the side of the lamp's connection box, push the connection post up into the track, then rotate it 90 degrees until the connector locks into place.
2. Make sure to twist the connection box so that the side of the connection post with (2) metallic tabs aligns with the side of the track with the (2) copper strips
3. If the light is mounted with the (2) metallic tabs toward the side of the track with only (1) copper strip, the light will not work. To correct this, simply pull down on the tab on the side of the lamp's connection box and twist it 90 degrees until it releases from the track. Then, rotate it 180 degrees and mount back into the track using the directions above.

To mount flexible spotlights:

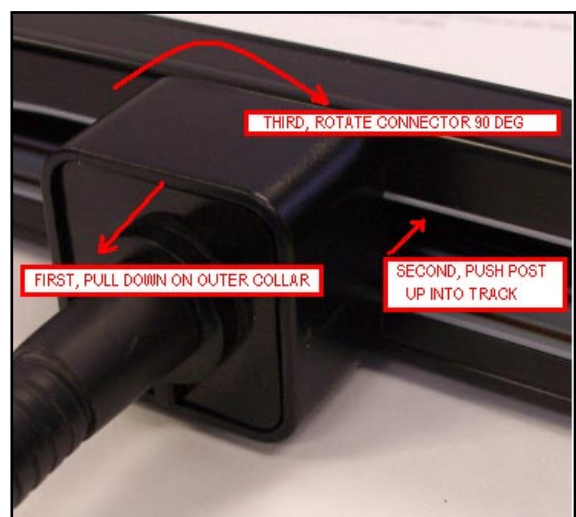
1. Pull down on the collar that encompasses the connection box, push the connection post up into the track and then rotate it 90 degrees until it locks into place.
2. Make sure to twist the connection box so that the side of the connection post with (2) metallic tabs aligns with the side of the track with the (2) copper strips.
3. If the light is mounted with the (2) metallic tabs toward the side of the track with only (1) copper strip, the light will not work. To correct this, simply pull down on the tab on the side of the lamp's connection box and twist it until it is released from the track. Then, rotate it 180 degrees and mount back into the track using the directions above.



Locate the metallic tabs and strips.



Decorative lamp installation steps.



Flexible spotlight installation steps.

FlexiShield® Food Shields Installation

1. Set food shield on base unit. See Figure 1.
2. Mark hole locations.
 - For counter top mounting mark the flange holes. See Figure 2.
 - For under counter mounting mark the leg locations.
3. Drill holes in base unit.
 - For counter top mounting drill 5/32" holes.
 - For under counter mounting drill 3/8" holes.
4. Install with screws provided.
 - For counter top mounting install with screws through the flanges.
 - For under counter mounting install with 1/4"-20 bolts and washers from beneath the counter. See Figure 3.
5. Make any necessary electrical connections.
6. If applicable test lights, heat lamps etc.
7. Adjust glass for proper alignment.
8. Clean food shield and glass with a glass cleaning agent.

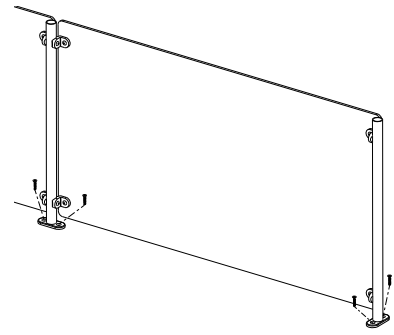


Figure 1. By placing the food shield on the base unit, hole locations can be marked.

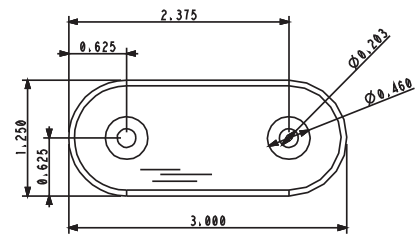


Figure 2. Flange dimensions

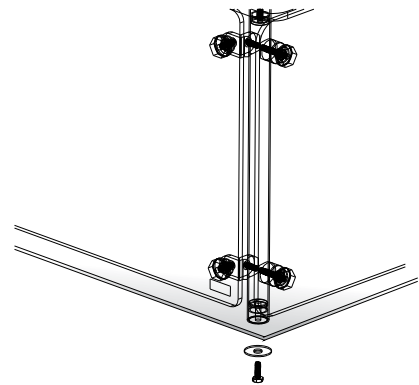
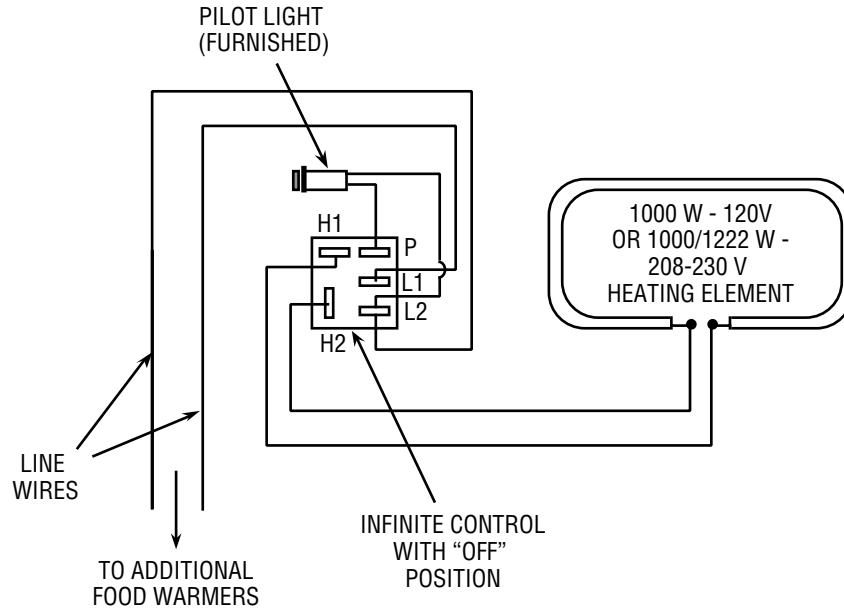


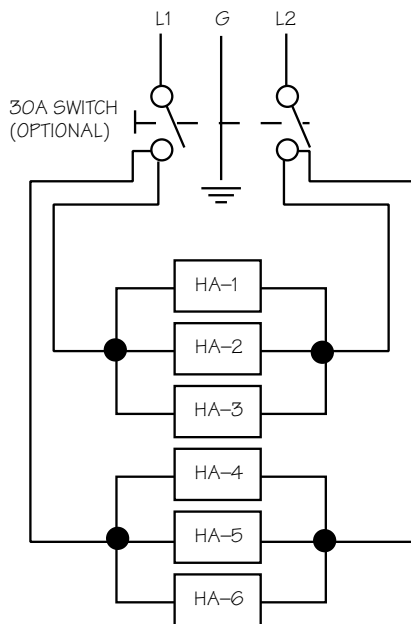
Figure 3. Bolt and washer beneath counter.

Wiring Diagram, Heated Serving Counter



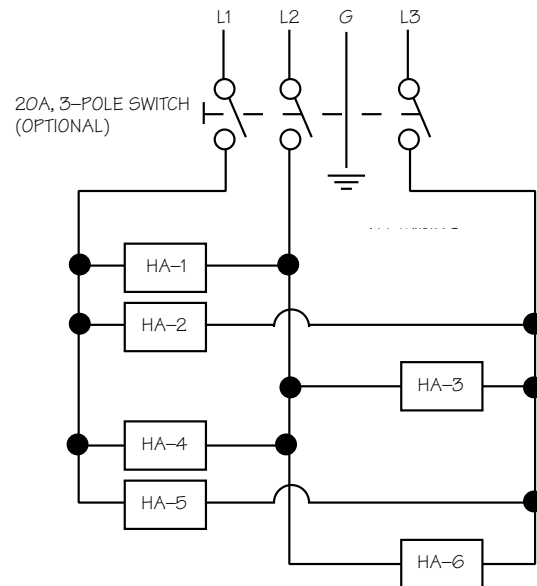
AMPERES IN LINE WIRES

# OF WARMERS	120V, 1 PHASE	208V, 1 PHASE	230V, 1 PHASE	208-230V, 3 PHASE		
				L1	L2	L3
2	16.7	9.6	10.6			
3	25	14.4	15.9	14.4/15.9	14.4/15.9	14.4/15.9
4	33.3	19.2	21.3	19.2/21.3	19.2/21.3	14.4/15.9
5		24	26.6	24/26.1	19.2/21.3	19.2/21.3
6		28.8	31.3	28.8/31.3	28.8/31.3	28.8/31.3



HA = HEATER ASSEMBLY

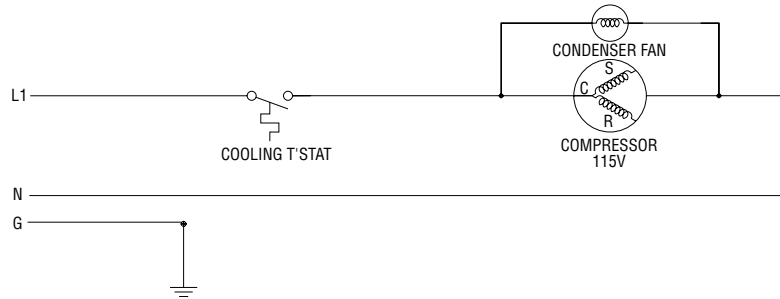
Standard Single Phase



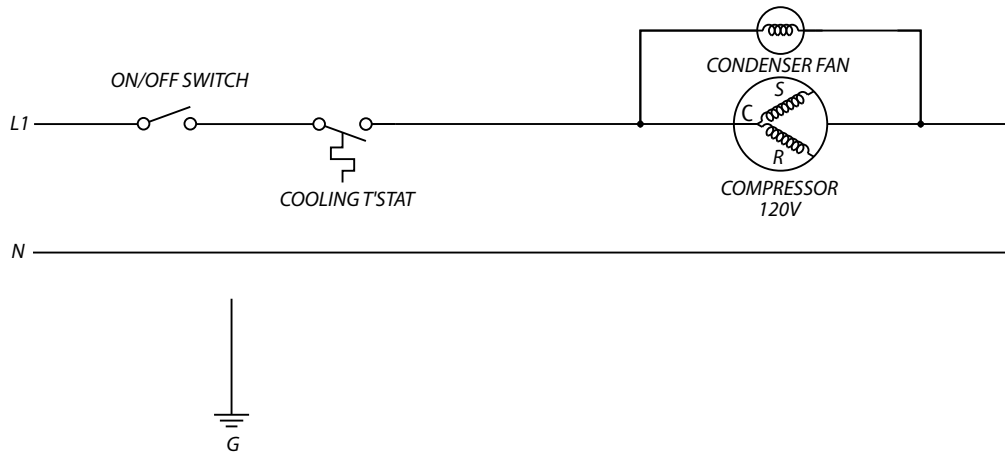
HA = HEATER ASSEMBLY

Optional Three Phase

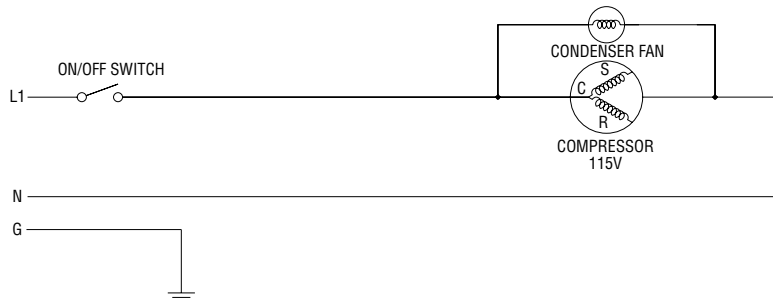
Wiring Diagram, Self-Contained Mechanically Cooled Serving Counter



Wiring Diagram, Self-Contained LiquiTec® Cold Pan Serving Counter



Wiring Diagram Self-Contained Frost Top Serving Counter



Standard One Year Warranty (One year parts and labor)

The Delfield Company ("Delfield") warrants to the Original Purchaser of the Delfield product (herein called the "Unit") that such Unit, and all parts thereof, will be free from defects in material and workmanship under normal use and service for a period of one (1) year from the date of shipment of the Unit to the Original Purchaser or, if the Original Purchaser returns the warranty card completely filled out including the date of installation within thirty (30) days of receipt of the Unit, one (1) year from the date of installation. During this one year warranty period, Delfield will repair or replace any defective part or portion thereof returned to Delfield by the Original Purchaser which Delfield determines was defective due to faulty material or workmanship. During this one year warranty period, Delfield will pay labor, crating, and freight incurred in the removal of the Unit of defective component and shipment to Delfield. A maximum of 1-hour is allowed to diagnose a defective component. A maximum of 1-hour is allowed for retrieval of parts not in stock. A maximum travel distance of 100 miles round trip and 2-hours will be reimbursed. Overtime, installation/start-up, normal control adjustments, general maintenance, glass breakage, freight damage, and/or correcting and end-user installation error will not be reimbursed under warranty unless pre-approved with a Service Work Authorization from Delfield. Delfield will pay the return costs if the Unit or part thereof was defective.

The term "Original Purchaser" as used herein means that person, firm, association, or corporation for whom the Unit was originally installed.

This warranty does not apply to any Unit or part thereof that has been subjected to misuse, neglect, alteration, or accident, such as accidental damage to the exterior finish, operated contrary to the recommendations specified by Delfield; or repaired or altered by anyone other than Delfield in any way so as to, in Delfield's sole judgement, affect its quality or efficiency. This warranty does not apply to any Unit that has been moved from the location where it was originally installed. This warranty also does not cover the refrigerator drier or the light bulbs used in the Unit. The warranty is subject to the user's normal maintenance and care responsibility as set forth in the Service and Installation Manual, such as cleaning the condenser coil, and is in lieu of all other obligations of Delfield. Delfield neither assumes, nor authorizes any other person to assume for Delfield, any other liability in connection with Delfield's products.

Removal or defacement of the original Serial Number or Model Number from any Unit shall be deemed to release Delfield from all obligations hereunder or any other obligations, express or implied.

Parts furnished by suppliers to Delfield are guaranteed by Delfield only to the extent of the original manufacturer's express warranty to Delfield. Failure of the Original Purchaser to receive such manufacturer's express warranty to Delfield. Failure of the Original Purchaser to receive such manufacturer's warranty shall in no way create any warranty, expressed or implied, or any other obligation or liability on Delfield's part in respect thereof.

If shipment of a replacement part is requested prior to the arrival in the Delfield factory of the part claimed to be defective, the Original Purchaser must accept delivery of the replacement part of a C.O.D. basis, with credit being issued after the part has been received and inspected at Delfield's plant and determined by Delfield to be within this warranty.

Under no condition does this warranty give the Original Purchaser the right to replace the defective Unit with a complete Unit of the same manufacturer or of another make. Unless authorized by Delfield in writing, this warranty does not permit the replacement of any part, including the motor-compressor, to be made with the part of another make or manufacturer.

No claims can be made under this warranty for spoilage of any products for any reason, including system failure.

The installation contractor shall be responsible for building access, entrance and field conditions to insure sufficient clearance to allow any hood(s), vent(s), or Unit(s) if necessary, to be brought into the building. Delfield will not be responsible for structural changes or damages incurred during installation of the Unit or any exhaust system.

Delfield shall not be liable in any manner for any default or delay in performance hereunder caused by or resulting from any contingency beyond Delfield's control, including, but not limited to, war, governmental restrictions or restraints, strike, lockouts, injunctions, fire, flood, acts of nature, short or reduced supply of raw materials, or discontinuance of the parts by the original part manufacturer.

Except as provided in any Additional Four Year Protection Plan, if applicable, and the Service Labor Contract, if applicable, the foregoing is exclusive and in lieu of all other warranties, whether written or oral, express or implied. This warranty supersedes and excludes any prior oral or written representations or warranties. Delfield expressly disclaims any implied warranties of merchantability, fitness for a particular purpose of compliance with any law, treaty, rule or regulation relating to the discharge of substances into the environment. The sole and exclusive remedies of any person relating to the Unit, and the full liability of Delfield for any breach of this warranty, will be as provided in this warranty.

Other than this Delfield Standard One Year Limited Warranty, any applicable Delfield Additional Four Year Protection Plan or applicable Delfield Service Labor Contract, the Original Purchaser agrees and acknowledges that no other warranties are offered or provided in connection with or for the unit or any other part thereof.

In no event will Delfield be liable for special, incidental or consequential damages, or for damages in the nature of penalties.

Additional Four Year Protection Plan (for Motor-Compressor only)

Delfield Model#	Serial #	Installation Date
<input type="text"/>	<input type="text"/>	<input type="text"/>

In addition to the Standard One Year Warranty on the Motor-Compressor contained in the above listed Delfield product (the "Unit"), The Delfield Company ("Delfield") also agrees to repair, or exchange with similar or interchangeable parts in design and capacity at Delfield's option, the defective Motor-Compressor contained in the Unit (the "Motor-Compressor"), or any part thereof, for the Original Purchaser only, at any time during the four (4) years following the initial one (1) year period commencing on the date of installation for the Original Purchaser. **Failure of the Original Purchaser to register the registration card containing the Original Purchaser's name, address, date of installation, model number and serial number of the Unit containing the Motor-Compressor within 30 days from the date of installation shall void this warranty.** This additional warranty is only available if the Motor-Compressor is inoperative due to defects in material or factory workmanship, as determined by Delfield in its sole judgement and discretion. The Original Purchaser shall be responsible for returning the defective Motor-Compressor to Delfield prepaid, F.O.B. at the address shown on the back cover of this manual.

The term "Original Purchaser" as used herein means that person, firm, association, or corporation for whom the Unit was originally installed.

The term "Motor-Compressor" as used herein does not include unit base, air or water cooled condenser, receiver, electrical accessories such as relay, capacitors, refrigerant controls, or condenser fan/motor assembly. This warranty does not cover labor charges incidental to the replacement of parts. This warranty further does not include any equipment to which said condensing unit is connected, such as cooling coils, temperature controls or refrigerant metering devices. This warranty shall be void if the Motor-Compressor, in Delfield's sole judgement, has been subjected to misuse, neglect, alteration or accident, operated contrary to the recommendations specified by the Unit manufacturer, repaired or altered by anyone other than Delfield in any way so as, in Delfield's sole judgment, to affect its quality or efficiency or if the serial number has been altered, defaced or removed. This Warranty does not apply to a Motor-Compressor in any Unit that has been moved from the location where it was originally installed. The addition of methyl chloride to the condensing unit or refrigeration system shall void this warranty.

General Conditions

Delfield shall not be liable in any manner for any default or delay in performance hereunder caused by or resulting from any contingency beyond Delfield's control, including, but not limited to, war, governmental restrictions or restraints, strike, lockouts, injunctions, fire, flood, acts of nature, short or reduced supply of raw materials, or discontinuance of any part or the Motor-Compressor by the unit manufacturer.

Replacement of a defective Motor-Compressor is limited to one (1) Motor-Compressor by us during the four (4) year period. Delfield shall replace the Motor-Compressor at no charge.

This warranty does not give the Original Purchaser of the Motor-Compressor the right to purchase a complete replacement Motor-Compressor of the same make or of another make. It further does not permit the replacement to be made with a Motor-Compressor of another kind unless authorized by Delfield. In the event Delfield authorizes the Original Purchaser to purchase a replacement Motor-Compressor locally, only the wholesale cost of the Motor-Compressor is refundable.

Expressly excluded from this warranty are damages resulting from spoilage of goods.

Except as provided in any applicable Standard One Year Limited Warranty or applicable Service Labor Contract, the foregoing is exclusive and in lieu of all other warranties, whether written or oral, express or implied. This Warranty supersedes and excludes any prior oral or written representations or warranties. Delfield expressly disclaims any implied warranties of merchantability, fitness for a particular purpose or compliance with any law, treaty, rule or regulation relating to the Motor-Compressor, and the full liability of Delfield for any breach of this warranty, will be as provided in this warranty.

Other than any applicable Delfield Standard One year Limited Warranty, this Delfield Additional Four Year Protection Plan and any applicable Delfield Service Labor Contract, the Original Purchaser agrees and acknowledges that no other warranties are offered or provided in connection with or for the Motor-Compressor or any part thereof.

In no event will Delfield be liable for special, incidental or consequential





Mt. Pleasant, MI



Covington, TN

Thank you for choosing Delfield!

Help is a phone call away. Help our team of professional, courteous customer service reps by having your model number and serial number available at the time of your call (800) 733-8829

Model: _____ S/N: _____

Installation Date: _____



For a list of Delfield's authorized parts depots,
visit our website at www.delfield.com

