



COMPONENT CRAFTED CUSTOM EQUIPMENT - LINE UPS

Service, Installation and Care 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.



 **CAUTION**
**IMPORTANT INFORMATION
READ BEFORE USE
PLEASE SAVE THESE INSTRUCTIONS!**

Effective Date January 2004

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RECEIVING THE EQUIPMENT

Although most Delfield equipment is shipped crated, care should be taken so the equipment is not damaged during unloading and movement into the building.

Upon receipt of the shipment, be sure all items are included and are undamaged. If there is damage, see the section on "filing Freight Claims" for information on claims procedures. All Delfield Custom Systems line-ups have been assembled at the factory before shipment. Each unit is marked with the work order number, item number and serial number. The unit item number is identical to that marked on the sales presentation drawing. Use these numbers as a guide during installation.

Bolts, screws and other accessories needed for fastening units together are in an envelope located inside one of the units. The unit is marked with a note attached to the front.

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SERIAL #
MODEL #
INSTALLATION DATE:

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.

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.

TOOLS AND SUPPLIES REQUIRED

Units represented in this manual are for indoor use only.



The following tools are either required or will make the installation easier:

- 1) A scissor jack to lift and hold heavy units off the floor so that legs can be adjusted, allowing the proper leveling of the units.
- 2) A level is needed to assist in the leveling of each unit from front to back and left to right. A 2' level is a must; a 4' level is also desirable.
- 3) Two 6' pipe clamps are useful in pulling equipment tightly together while fasteners are installed. This results in a better spline.
- 4) Vise grips will hold backsplash bars together as they are being bolted together.
- 5) A steel hammer and a block of wood can be used to make minor alterations of the stainless steel along the seam between two units, in order to perfect the seam. This is used after the units are splined.
- 6) A rubber mallet.
- 7) A socket set.
- 8) Phillips, hex head and straight blade screwdrivers.
- 9) 7/16", 9/16" and 1/2" open end wrenches.
- 10) Silicone sealant; Dow Corning #732 is ideal.

MAINTENANCE

Stainless Steel Care and Cleaning

To prevent discoloration or rust on stainless steel several important steps need to be taken. First, we need to understand the properties of stainless steel. Stainless steel contains 70-80% iron which will rust. It also contains 12-30% chromium which forms an invisible passive film over the steels surface which acts as a shield against corrosion. As long as the protective layer is intact, the metal is still stainless. If the film is broken or contaminated, outside elements can begin to breakdown the steel and begin to form rust or discoloration.

Proper cleaning of stainless steel requires soft cloths or plastic scouring pads.



NEVER USE STEEL PADS, WIRE BRUSHES OR SCRAPERS!

Cleaning solutions need to be alkaline based or non-chloride cleaners. Any cleaner containing chlorides will damage the protective film of the stainless steel. Chlorides are also commonly found in hard water, salts, and household and industrial cleaners. If cleaners containing chlorides are used be sure to rinse repeatedly and dry thoroughly upon completion.

Routine cleaning of stainless steel can be done with soap and water. Extreme stains or grease should be cleaned with a non-abrasive cleaner and plastic scrub pad. It is always good to rub with the grain of the steel. There are also stainless steel cleaners available which can restore and preserve the finish of the steels protective layer.

Early signs of stainless steel breakdown can consist of small pits and cracks. If this has begun, clean thoroughly and start to apply stainless steel cleaners in attempt to restore the passivity of the steel.



Never use an acid based cleaning solution! Many food products have an acidic content which can deteriorate the finish. Be sure to clean the stainless steel surfaces of ALL food products. Common items include, tomatoes, peppers and other vegetables.



The power must be turned off and disconnected whenever performing maintenance or repair functions.



The interior of heated storage cabinets will be hot for some time after the power is turned off. Avoid touching the interior walls and heater ducts with bare hands or arms until you are certain the unit has cooled. The use of gloves is recommended.

MAINTENANCE

Cleaning the Condenser Coil

The condenser coil requires regular cleaning, recommended is every 90 days. In some instances though you may find that there is a large amount of debris and dust or grease accumulated prior to the 90 day time frame. In these cases the condenser coil should be cleaned every 30 days.

If the build up on the coil consists of only light dust and debris the condenser coil can be cleaned with a simple brush, heavier dust build up may require a vacuum or even compressed air to blow through the condenser coil.

If heavy grease is present there are de-greasing agents available for refrigeration use and specifically for the condenser coils. The condenser coil may require a spray with the de-greasing agent and then blown through with compressed air.

Failure to maintain a clean condenser coil can initially cause high temperatures and excessive run times, continuous operation with dirty or clogged condenser coils can result in compressor failures. Neglecting the condenser coil cleaning procedures will void any warranties associated with the compressor or cost to replace the compressor.

Never use a high pressure water wash for this cleaning procedure as water can damage the electrical components located near or at the condenser coil.

Gasket Maintenance

Gaskets require regular cleaning to prevent mold and mildew build up and also to keep the elasticity of the gasket. Gasket cleaning can be done with the use of warm soapy water. Avoid full strength cleaning products on gaskets as this can cause them to become brittle and prevent proper seals. Also, never use sharp tools or knives to scrape or clean the gasket which could possibly tear the gasket and rip the bellows.

Gaskets can easily be replaced and do not require the use of tools or authorized service persons. The gaskets are "Dart" style and can be pulled out of the groove in the door and new gaskets can be "pressed" back into place.

Doors/Hinges

Over time and with heavy use doors and the hinges may become loose. If it is noticed that the door is beginning to sag, it may become necessary to tighten the screws that mount the hinge brackets to the frame of the unit. If the doors are loose or sagging this can cause the hinge to pull out of the frame which may damage both the doors and the door hinges. In some cases this can require qualified service agents or maintenance personnel.

Drain Maintenance

Each refrigerated unit has a drain located inside the unit which removes the condensation from the evaporator coil and evaporates it at an external condensate evaporator pan. Each drain can become loose or disconnected from moving or bumping the drain. If you notice excessive water accumulation on the inside of the unit be sure the drain tube is connected from the evaporator housing to the condensate evaporator drain pan. If water is collected underneath the unit you may want to check the condensate evaporator drain tube to be sure it is still located inside the drain pan. The leveling of the unit is important as the units are designed to drain properly when on a level surface, if your floor is not level this can also cause drain problems. Be sure all drain lines are free of obstructions, typically food product is found blocking drain lines causing water to back up and overflow the drain pans.

MARK 7 FASTENERS (USED ON DELFIELD MARK 7 LINE UPS)



Part# 6320019
5/16-18 x .75 Screw — Used in
caster and leg attachment.



Part# 9321353
#10 x .50 Screw — Used in attachment of coil
assembly, food wells and panel attachment.



Part# 9321355
#10-32 x .50 Screw — Used on pan cover
hinges and electric raceways.



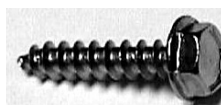
Part# 9321361
#6-32 x .75 Screw — Used on control panels
and sneeze guard brackets.



Part# 9321244
5/32 x .50 Pop steel rivet
— Used on bars and
base assemblies.



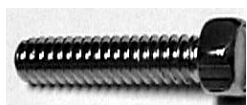
Part# 9321067
#10 x 1.75 Screw —
Used on door hinges
and refrigerator base
assembly.



Part# 9321068
#10 x .87 Screw — Used on door
hinges and drawer fronts.



Part# 9321043
1/4-20 x .75 Screw — Used on
shelf supports and compressor hold
downs.



Part# 9321146
1/4-20 x 1.00 Screw — Used in
attachment of tray slides.



Part# 9321147
1/4-20 3-Prong tee nut — Mates to part
9321146. Used in attachment of tray
slides.



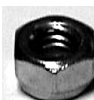
Part# 3234450
1/8 x .50 Pop stainless steel
rivet — Used on food wells.



Part# 9321119
#14 x 3/4" Lag type hex head screw
— Used for splining units together.



Part# 9321137
#8-32 Shoulder screw — Mates to part# 9321184



Part# 9321401
1/4-20 Locking nut — Used as spot stud retain-
er.



Part# 9321374
Salad pan cover hinge pin — Used on pan
cover hinges and electrical raceways.



Part# 9321131
#10 x .50 Screw — Used on coil drain
pan.



Part# 9321338
1/4-20 x .37 Stainless steel spot stud — Used
on spot stud applications.



Part# 9321247
#10-32 x .37 Screw — Used on fan motors.



Part# 9321041
Acorn nut — Used on pan covers.



Part# 9321184
#8-32 Threaded insert — Mates to
part# 9321137. Requires special gun for
installation.



Part# 9321114
#14 x 1 1/4" Lag type hex-
head screw — Used on
counter protector installation

CHECKING THE UTILITY ROUGH-IN

Plumbing, electrical and ventilation provisions must be made in floors, walls or ceilings before the installation can begin. Utilities should be roughed-in and surfaces finished before the equipment is delivered.

Before moving equipment into place, double-check all utility rough-in dimensions and locations against the presentation drawing to insure accuracy. Check wall to wall dimensions to make sure there will be enough clearance.



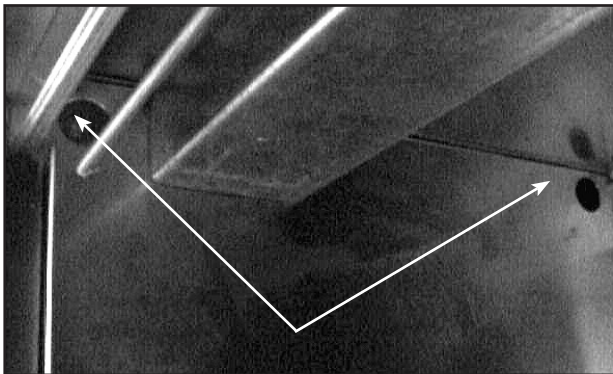
NOTE

When connecting the equipment to utilities, all plumbing, electrical and ventilation installation must meet local codes. This work should normally be done by contractors who are familiar with the codes and are licensed, if required in your area.

Plumbers, electricians and refrigeration installers should work at the same time as the equipment installers, if possible. **NOTE:** This will allow them proper access to their work before it is obstructed by the equipment.

SPLINING OVERVIEW

Delfield's Component Crafted Custom Equipment, back bar systems, chef islands and waitress stations are designed for easy alignment. Each unit has a 12-gauge spline bar on each end of the top. Match the front nosing and the backsplash, if any, and attach screws (provided by Delfield) thru the pre-punched holes in the interior of the unit. Tighten the screws so the units are securely joined. At this point it is optional to add a bead of silicone for a closed, tight seam.



With units securely fastened, they can be assembled away from the wall, and then slid into place.

In most cases, units are fastened together in two places: on the nosing and the backsplash. Cafeteria lines replace the backsplash with a second nosing.



NOTE

Your Custom Systems line-up has been pre-assembled at the factory to ensure proper fit. As the line-up was dis-assembled for shipping, a yellow sticker was placed on each unit indicating the location and direction in which fasteners are to be re-installed.

ASSEMBLY AND INSTALLATION



Be sure all electrical power to this equipment, or units already in place, has been disconnected before starting to assemble the line-up.

Starting points for an installation vary, depending on the building layout and the type of equipment included in the line-up. A good place to start assembling the line-up is where the equipment will tie-in to an end wall or to other equipment. If your line-up contains an equipment stand, it will need connections to ventilation duct work and therefore would be a good place to begin. Or you might begin with the heaviest unit, thereby reducing the amount of weight that must be moved around during installation.

Leveling

After determining the starting point, the first unit must be leveled at its work height. Check your drawings for the correct work height. Standard work height is 36" (91.4cm) but depending on the installation it may be lower or higher. The work height is the distance from the finished floor to the stainless steel top. Level the unit by turning the adjustable bullet feet on the legs. Set the level on the unit length wise first, and level the unit end to end. Next, place the level front to back and level the unit again. A longer level will be more accurate, if you can obtain one.

Units that are 72" (178cm) or longer will have six legs. On these units, adjust the two center legs' feet up until they no longer touch the floor. Adjust the four outside legs to level the unit as described previously. After the outside legs are set and the unit is level, unscrew the center legs' feet until they rest firmly on the floor.

CURB-MOUNT INSTALLATION

The same fasteners used in a standard leg-mount installation are in a curb-mount installation.

Before you begin to install the line-up, it is essential that the curb is perfectly level. All electrical, water, drain and refrigeration lines must be pre-plumbed. Condensate evaporators are not recommended for curb installations using remote units. Installation should begin at one end of the line-up.

Connections should be made one unit at a time, as the units are installed. If the curb has imperfections, it may be necessary to use wood or metal shims to achieve level units.

Reconnections and final connection should be checked by a certified technician.

Unit alignment procedure



1) Pull the next unit into position and level as described in the previous section at its work height. Clean the spline bars of all dust, oils, packing materials, residue or other foreign matter, in order to ensure a good seal between the units.

2) Pull the units together, inserting the screws into the matching holes in the adjacent unit (see photo on page 5). Draw the units tightly together with #14 x 3/4" lag type hex head sheet metal screws. A bead of NSF listed silicone can be added for a closed, tight seam.

Realigning damaged joints

Delfield's splining process is designed to achieve a hairline joint. Your equipment line-up was pre-assembled and fitted together at the factory to ensure a perfect seam.

Although stainless steel is a very hard material, it is also malleable. During shipment damage may occur, leaving the splines out of alignment when the units are brought together. Inspect all seams carefully. If high spots are found along a seam, place a hardwood block over the spot and strike the block several times with a heavy hammer.



Never strike the stainless steel directly with the hammer or any other heavy object! This will permanently damage the finish of your equipment.



Lifting and placement of these heavy units can be difficult and even dangerous job. Never attempt to lift or move these units by yourself. The use of mechanical lift will make the job much easier.

ATTACHMENT METHODS

Non-refrigerated bases (shelving units)

The alignment of shelving units, whether open shelf, hinged or sliding door or drawer base, is achieved with screws. 1" (2.5cm) diameter holes are located at the top of the interior sides to allow the unit to be fastened to the adjacent unit with #14 x 3/4" lag type hex head sheet metal screws. A yellow sticker will indicate where the units are to be fastened together.

Refrigerated bases



If a refrigerated base does not have a condensate evaporator supplied, you must connect the condensate line to a suitable drain. Otherwise, water will collect on the floor, causing a potentially hazardous situation.

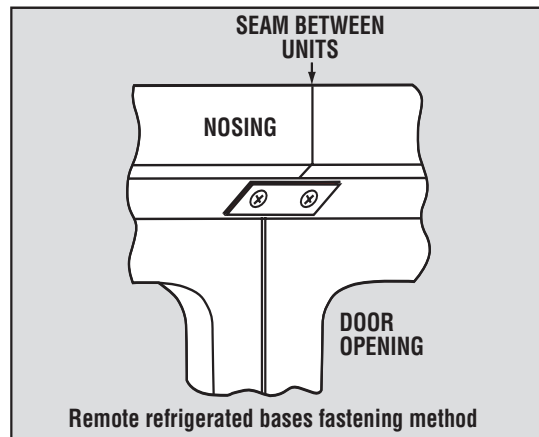
As with non-refrigerated bases (shelving units), refrigerated bases use screws. The location for fastening two units together is in the machine compartment (behind the louver panel) on self-contained units. Use #14 x 1.25" hex head screws.

Two remote refrigerated units present a problem, however, because there is no access to the bare stainless steel side. These must be splined behind the units at the backsplash, using 1/4"-20 x 3/4" hex head bolts in combination with 1/4" medium lock washers and 1/4"-20 hex nuts. In the front,

a small stainless steel strap is used under the front nosing to join the units (see illustration at right), fastened with Phillips truss head sheet metal screws.

Equipment stands

Equipment stands are fastened to other line-up units in two places. First, look for a pre-drilled hole in the mullion end. This hole is located approximately 2" (5.1cm) from the front and 1.5" (3.8cm) down from the top. Use 1/4"-20 x 2" slotted truss head machine screws in this hole. Next, check behind the backsplash. A 1" (2.5cm) diameter hole is located 1" (2.5cm) in from the edge and 1.5" (3.8cm) down from the top of the side. Use a #14 x 1.25" hex head sheet metal screw to secure this spline.



Reconnections and final connection should be checked by a certified technician.

Power Supply Information

Electrical requirements may vary based on the many different models which comprise custom line ups. Check the ratings listed on the serial tag (example at right) for requirements.

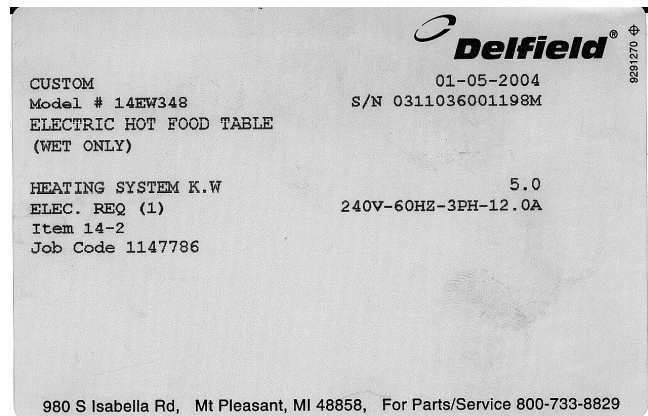
CAUTION

THIS PRODUCT HAS TWO POWER SUPPLY CORDS. CONNECT EACH PLUG TO A RECEPTACLE THAT IS CONNECTED TO AN INDIVIDUAL BRANCH CIRCUIT. UNPLUG ALL CORDS BEFORE MOVING OR SERVICING THIS APPLIANCE

CAUTION

THIS PRODUCT HAS TWO POWER SUPPLY CORDS WITH DIFFERENT RATINGS. EACH CORD REQUIRES AN INDIVIDUAL BRANCH CIRCUIT

CORD	PLUG	RATING	CIRCUIT AMPACITY
1	NEMA X-XXP	XXX VOLT, XX AMP	XX
2	NEMA Z-ZZP	ZZZ VOLT, ZZ AMP	ZZ



TOE PLATE INSTALLATION

Install the toe plate by hooking it over the top of the galvanized bracket at the bottom of the unit. The toe plate then drops down and fits under the galvanized bracket without the use of fasteners (see photo at right). The toe plate will stay in place but can also be easily removed for cleaning under the units.



Toe plate installation.

Avoid using cleaning products containing chlorine on the Plexiglas panels of your counter protectors. It can cause cracking of the Plexiglas.

OVERSHELF AND COUNTER PROTECTOR INSTALLATION

Install the tubular legs of the overshelf over the bushings. A #8 x 3/8" Phillips oval head sheet metal screw serves as a set screw to hold the overshelf legs securely against the bushing.

If two overshelves are mounted adjacent to each other, they will have a spline joint similar to those found on base units. Use 1/4"-20 x 3/4" hex head bolts in combination with 1/4"

medium lock washers and 1/4"-20 hex nuts to secure the overshelves.

Overshelves with heat lamps or other electrical accessories will have a two-piece channel provided at one end for an electrical raceway. The cover can be removed to allow wiring of accessory items (see photo 1).

Overshelves wider than 14" (35.6cm) have 6" (15.2cm) wide channel under the shelf for added support. Overshelves come equipped with a 6" wide channel under the shelf for added support. There are two channels on units wider than 18".



Photo 1: Overshelf vertical electrical raceway.



Photo 2: Overshelf support/raceway.

FINISHED BACK PANEL INSTALLATION

Depending on the length of the panel, more than one person may be required. If the unit is on casters, secure the brake so the unit does not move. Align the panel at both ends of the unit, inserting the top in the channel as show in the photo at right. Push the panel to the top of the channel. After it is inserted in the channel, lower the panel toward the unit fitting it into the groove at the bottom. The panel will fit securely; no fasteners are needed.



TRAY SLIDE INSTALLATION

There are two styles of tray slides that may be provided with a Delfield Component Crafted Custom Equipment line-up: Three-bar tubular and solid-V Type.

Three-bar tubular tray slides

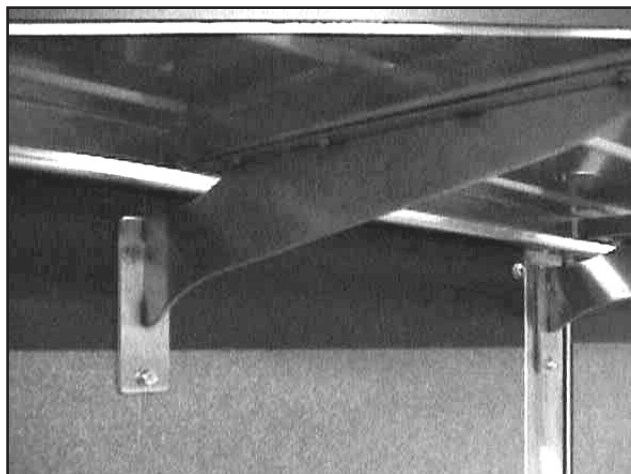
Tubular tray slides are attached to the provided brackets by the use of the screws located on the underside of the brackets. When splines are necessary, 0.87" (2.2cm) diameter rods are inserted into one end of the tubing. The matching tubing from the adjacent tray slide is then slipped over the rod to achieve the spline. Set screws are used on the underside of the tubing to hold the joint together.

Solid-V type tray slides

Solid-V type tray slides are provided with channels on approximately 48" (121.9cm) centers. The brackets are fastened to these channels using #6-32 x .75 screws. If two solid-V type tray slides are mounted adjacent to each other, both ends will be finished, requiring no spline process.

Mounting on finished back panels

Finished back panels have 1/4"-20 tee nuts inserted into the back of the panel. Fasten the tray slide brackets to the finished back panels of the equipment, matching a 1/4"-20 x 1" hex head machine screw with each tee nut in the back panel.



STANDARD LABOR GUIDELINES TO REPAIR OR REPLACE PARTS ON DELFIELD EQUIPMENT

Advice and recommendations given by Delfield Service Technicians do not constitute or guarantee any special coverage.

- 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. You must submit the number with the service claim.

LABOR OF 1-HOUR IS ALLOWED TO REPLACE:

- Thermostat
- Infinite Switch
- Door Jamb Switch
- Solenoid Coil
- Hi-limit/Thermal Protector Switch
- Fan Delay/Defrost Termination Switch
- Compressor Start Components and Overload Protector
- Defrost Timer
- Thermometer
- Gear Box
- Contactor/Relay
- Transformer
- Evaporator/Condenser Fan Motor and Blade
- Circulating Fan Motor and Blade
- Microprocessor Control
- Water Level Sensor/Probe
- Door Hinges, Locks, and Gaskets
- Condensate Element
- Springs/Lowerator

LABOR OF 2 HOURS TO REPLACE:

- Drawer Tracks/Cartridges
- Pressure Control
- Solenoid Valve
- Defrost Element
- Heating Element
- Locate/Repair Leak

LABOR OF 3 HOURS TO REPLACE:

- EPR or CPR Valve
- Expansion Valve
- Condenser or Evaporator Coil

LABOR OF 4 HOURS TO REPLACE

- Compressor

This includes recovery of refrigerant and leak check.

\$35.00 maximum reimbursement for refrigerant recovery (includes recovery machine, pump, torch, oil, flux, minor fittings, solder, brazing rod, nitrogen, or similar fees.)

REFRIGERANTS

- R22 A maximum of \$4.00/lb. or 25¢/oz. will be reimbursed.
- R134A A maximum of \$5.00/lb. or 31¢/oz. will be reimbursed.
- R404A A maximum of \$12.00/lb. or 75¢/oz. will be reimbursed.

STANDARD ONE YEAR WARRANTY (ONE YEAR PARTS, 90 DAYS 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. The Original purchaser will pay all labor, crating, freight and related costs incurred in the removal of the Unit of defective component and shipment to Delfield, except that during a period of either ninety (90) days 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, ninety (90) days from the date of installation Delfield will pay all related labor costs. 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 THE CUSTOMER IS USING A PART THAT RESULTS IN A VOIDED WARRANTY AND A DELFIELD AUTHORIZED REPRESENTATIVE TRAVELS TO THE INSTALLATION ADDRESS TO PERFORM WARRANTY SERVICE, THE SERVICE REPRESENTATIVE WILL ADVISE CUSTOMER THE WARRANTY IS VOID. SUCH SERVICE CALLS WILL BE BILLED TO CUSTOMER AT THE AUTHORIZED SERVICE CENTER'S THEN APPLICABLE TIME AND MATERIALS RATES. CONSIDER: CUSTOMER MAY INITIATE A SERVICE AGREEMENT WITHOUT PARTS COVERAGE.

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.

IF DURING THE WARRANTY PERIOD, CUSTOMER USES A PART FOR THIS DELFIELD EQUIPMENT OTHER THAN AN UNMODIFIED NEW OR RECYCLED PART PURCHASED DIRECTLY FROM DELFIELD OR ANY OF ITS AUTHORIZED SERVICE CENTERS AND/OR THE PART BEING USED IS MODIFIED FROM ITS ORIGINAL CONFIGURATION, THIS WARRANTY WILL BE VOID. FURTHER, DELFIELD AND ITS AFFILIATES WILL NOT BE LIABLE FOR ANY CLAIMS DAMAGES OR EXPENSES INCURRED BY THE CUSTOMER WHICH ARISE DIRECTLY OR INDIRECTLY, IN WHOLE OR IN PART, DUE TO THE INSTALLATION OF ANY MODIFIED PART AND/OR PART RECEIVED FROM AN UNAUTHORIZED SERVICE CENTER. If the warranty becomes void, Customer may purchase from Delfield, if available, a Service Agreement or service at the then current time and materials rate.

For more information on Delfield warranty's log on and check out the service section of our web site at www.delfield.com.



ADDITIONAL FOUR YEAR PROTECTION PLAN (FOR MOTOR-COMPRESSOR ONLY)

Delfield Model#	Serial #	Installation Date

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 Purchasers 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.

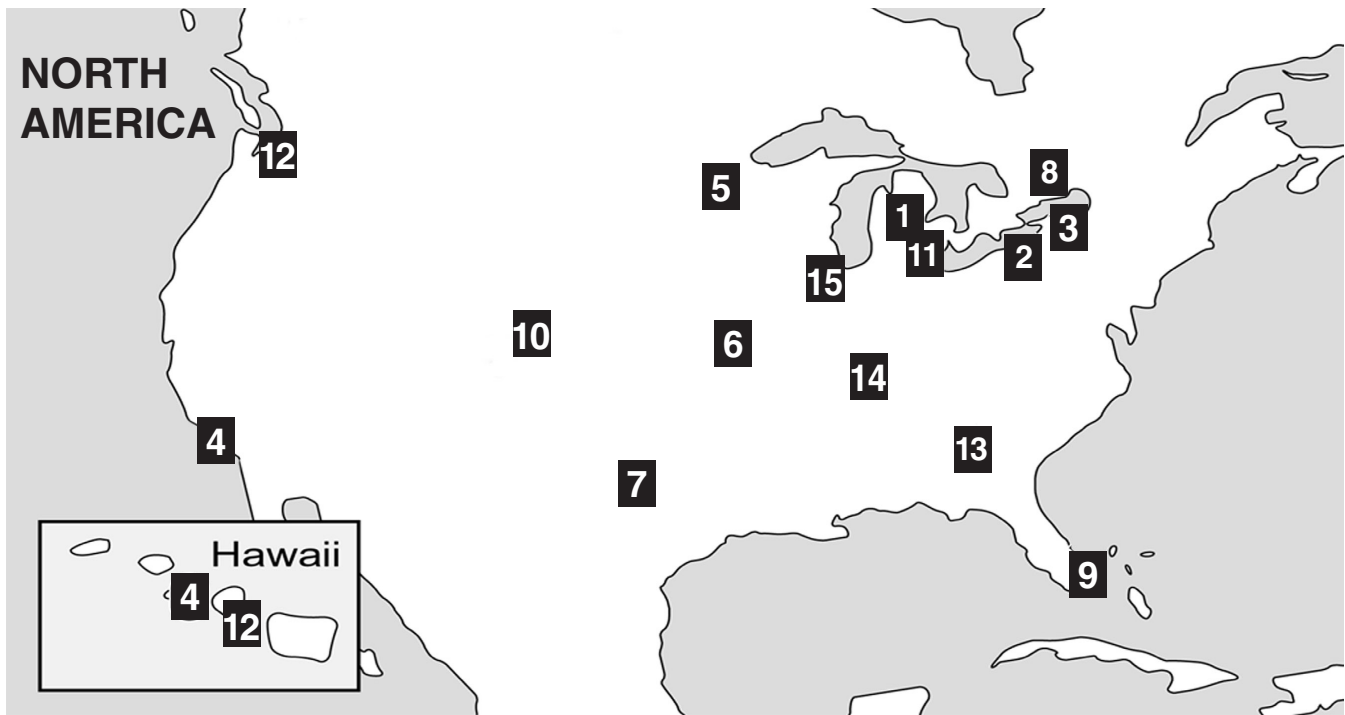
Expressly excluded from this warranty are damages resulting from spoilage of goods.

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 damages, or for damages in the nature of penalties.





1) The Delfield Company
 980 South Isabella Road
 Mt. Pleasant, MI 48858
 800.733.8829
 989.773.7981
 989.773.3210 FAX
 custom parts direct from Delfield

2) A.I.S. Commercial Parts & Service
 1816 West 26th Street
 Erie, PA 16508-1149
 800.332.3732
 814.456.3732
 814.452.4843 FAX
 serves: MD, NJ, OH, PA, VA, WV

3) Appliance Installation Service
 1336 Main Street
 Buffalo, NY 14209
 800.722.1252
 716.884.7425
 716.884.0410 FAX
 serves: CT, DC, DE, MA, MD, ME,
 NH, NJ, NY, PA, RI, VA, VT, WV

4) Pacific Coast Parts
 15024 Staff Court
 Gardena, CA 90248
 1.800.531.1111
 1.800.782.5747
 Email: orders@pacparts.com
 www.pacparts.com
 serves: AZ, CA, HI, NV, OR

5) Contract Ice
 14450 Ewing Ave S. #100
 Burnsville, MN 55306
 800.422.2823
 952.894.4427
 952.894.2164 FAX
 serves: IA, MN, MT, ND, SD, WI

6) E.M.C.O. Sales & Distributors
 3909 St. Timothy Lane
 St. Ann, MO 63074
 800.972.7670
 314.427.7477
 314.427.8190 FAX
 serves: AR, IA, IL, KS,
 KY, MO, NE, OK, TX, NM, LA

7) Stove Parts Supply/GCS Service
 2120 Solona St.
 PO Box 14009
 Fort Worth, TX 76117-0009
 1.800.433.1804 toll free
 1.800.272.7358 fax
 serves: AR, LA, NM, OK, TX

8) Garland Group
 1177 Kamato Road
 Mississauga, Ontario L4W1X4
 800.427.6668
 800.361.7745 FAX
 serves: Canada

9) Global Parts and Supplies
 2920 N.W. 109th Avenue
 Miami, FL 33172
 305.994.9994
 305.994.9992 FAX
 International parts depot

10) Hawkins Commercial Appl. Serv.
 3000 S. Wyandot
 Englewood, CO 80110
 (800) 624-2117
 (303) 7618861 FAX
 serves: AZ, CO, KS, NE, NM, OK, UT, WY

11) MicroDine, Inc.
 44792 Helm
 Plymouth, MI 48170
 888.828.4454
 734.451.2043
 734.451.3215 FAX
 serves: MI, IN, WI, OH

12) Performance Refrigeration Parts
 9923 S.W. 178th St.
 Vashon, WA 98070
 888.872.2465
 206-463-1772
 206.463.4431 FAX
 serves: AK, HI, ID, MT, OR, WA

13) Southeastern Restaurant Services
 2200 Norcross Parkway, Suite 210
 Atlanta, GA 30071
 800.235.6516
 770.446.6177
 770.446.3157 FAX
 serves: FL, GA, MS, NC, SC, VA

14) T.M.A.
 2916 Sidco Drive
 Nashville, TN 37204
 615.726.0351
 800.737.0351
 615.259.4100 FAX
 serves: TN, AL

15) Heritage Food Serv. Equip. Inc.
 5130 Executive Blvd.
 Fort Wayne, IN 46808
 800.458.5593
 800.800.4981 FAX
 serves: IL, IN, MI, OH, WI

Delfield has 15 conveniently located Parts Depots to ensure parts are handled promptly and accurately.
 Delfield reserves the right to update or make changes to this list without prior notice. Please call 1-800-733-8829 or check the web at www.delfield.com for a list of the current Parts Depots.



980 S. Isabella Rd., Mt. Pleasant, MI 48804-0470, U.S.A. • (989) 773-7981 or (800) 733-8829 • Fax (989) 773-3210 • www.delfield.com
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