



Compact Refrigerators & Freezers

Service and 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.



400 Series

Work-top and undercounter refrigerator or freezer bases



4000 Series

Undercounter refrigerator or freezer bases



4400 Series

Work-top and undercounter refrigerator bases



4500 Series

Work-top and undercounter freezer bases



4400N Series

Salad top refrigerator bases



4400N-M Series

Mega top refrigerated front breathers



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

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Serial Number Location

The serial number on all 400, 4000, 4400 and 4500 series compact refrigerators and freezers is printed under the top nosing directly above the door when door is in the closed position. Above the right hand door on two and three door models.

Always have the serial number of your unit available when calling for parts or service. A complete list of authorized Delfield parts depots is shown on the back cover of this manual.

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.

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. Be sure to check 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.

Specifications

MODEL NUMBER	DESCRIPTION	L	OVERALL D	H	STORAGE CUBIC FT.	SHELVES SQUARE FT.	1/6 PAN CAPACITY	H.P.	REFG. CHARGE	AMP	NEMA PLUG	SHIP WEIGHT
Work top refrigerator or freezer bases with stainless steel top & backsplash												
402	refrigerator	27"	28.5"	39.5"	5.7	7.2	—	1/5	7.0	5.0	5-15P	168
403	freezer	27"	28.5"	39.5"	5.7	7.2	—	1/4	6.5	5.0	5-15P	184
ST4048	refrigerator	48"	28.5"	39.5"	11.4	13	—	1/5	7.0	5.0	5-15P	234
ST4148	freezer	48"	28.5"	39.5"	11.4	13	—	1/3	8.0	6.0	5-15P	242
Undercounter refrigerator or freezer bases with stainless steel top												
406	refrigerator	27"	28.5"	35.5"	5.7	7.2	—	1/5	7.0	5.0	5-15P	172
407	freezer	27"	28.5"	35.5"	5.7	7.2	—	1/4	7.0	5.0	5-15P	176
UC4048	refrigerator	48"	28.5"	35.5"	11.4	13	—	1/5	7.0	5.0	5-15P	236
UC4148	freezer	48"	28.5"	35.5"	11.4	13	—	1/3	8.0	6.0	5-15P	236
Undercounter refrigerator or freezer with subtop and 3.75" casters												
406-CA	refrigerator	27"	27.75"	33.25"	5.7	7.2	—	1/5	7.0	5.0	5-15P	168
407-CA	freezer	27"	27.75"	33.25"	5.7	7.2	—	1/4	7.0	5.0	5-15P	168
Flat top refrigerator bases												
4427N	one door	27"	31.5"	36"	5.7	3.20	—	1/5	9.0	7.2	5-15P	220
D4427N	two drawer	27"	31.5"	36"	1.38	—	—	1/5	9.0	7.2	5-15P	265
4432N	one door	32"	31.5"	36"	6.9	3.88	—	1/5	9.0	7.2	5-15P	280
D4432N	two drawer	32"	31.5"	36"	2.7	—	—	1/5	9.0	7.2	5-15P	315
4448N	two door	48"	31.5"	36"	10.7	4.18	—	1/5	9.0	7.2	5-15P	335
D4448N	four drawer	48"	31.5"	36"	2.7	—	—	1/5	9.0	7.2	5-15P	370
4460N	two door	60"	31.5"	36"	15.7	7.19	—	1/2	12.0	12	5-15P	340
D4460N	four drawer	60"	31.5"	36"	2.7	—	—	1/2	12.0	12	5-15P	375
4464N	two door	64"	31.5"	36"	16.7	7.76	—	1/2	12.0	12	5-15P	395
D4464N	four drawer	64"	31.5"	36"	5.4	—	—	1/2	12.0	12	5-15P	440
4472N	three door	72"	31.5"	36"	18.9	8.22	—	1/2	12.0	12	5-15P	485
D4472N	six drawer	72"	31.5"	36"	4	—	—	1/2	12.0	12	5-15P	545
Work top refrigerator bases with 4" backsplash												
ST4427N	one door	27"	31.5"	40"	5.7	3.20	—	1/5	9.0	7.2	5-15P	220
STD4427N	two drawer	27"	31.5"	40"	1.38	—	—	1/5	9.0	7.2	5-15P	265
ST4432N	one door	32"	31.5"	40"	6.9	3.88	—	1/5	9.0	7.2	5-15P	280
STD4432N	two drawer	32"	31.5"	40"	2.7	—	—	1/5	9.0	7.2	5-15P	315
ST4448N	two door	48"	31.5"	40"	10.7	4.18	—	1/5	9.0	7.2	5-15P	335
STD4448N	four drawer	48"	31.5"	40"	2.7	—	—	1/5	12.0	7.2	5-15P	370
ST4460N	two door	60"	31.5"	40"	15.7	7.19	—	1/2	12.0	12	5-15P	340
STD4460N	four drawer	60"	31.5"	40"	2.7	—	—	1/2	12.0	12	5-15P	375
ST4464N	two door	64"	31.5"	40"	16.7	7.76	—	1/2	12.0	12	5-15P	395
STD4464N	four drawer	64"	31.5"	40"	5.4	—	—	1/2	12.0	12	5-15P	440
ST4472N	three door	72"	31.5"	40"	18.7	8.22	—	1/2	12.0	12	5-15P	485
STD4472N	six drawer	72"	31.5"	40"	4	—	—	1/2	12.0	12	5-15P	545
Undercounter refrigerators												
UC4427N	one door	27"	31.5"	34.25"	5.7	3.20	—	1/5	9.0	7.2	5-15P	220
UCD4427N	two drawer	27"	31.5"	34.25"	1.38	—	—	1/5	9.0	7.2	5-15P	265
UC4432N	one door	32"	31.5"	34.25"	6.9	3.88	—	1/5	9.0	7.2	5-15P	280
UCD4432N	two drawer	32"	31.5"	34.25"	2.7	—	—	1/5	9.0	7.2	5-15P	315
UC4448N	two door	48"	31.5"	34.25"	10.7	4.18	—	1/5	9.0	7.2	5-15P	335
UCD4448N	four drawer	48"	31.5"	34.25"	2.7	—	—	1/5	9.0	7.2	5-15P	370
UC4460N	two door	60"	31.5"	34.25"	15.7	7.19	—	1/2	12.0	12	5-15P	340
UCD4460N	four drawer	60"	31.5"	34.25"	2.7	—	—	1/2	12.0	12	5-15P	375
UC4464N	two door	64"	31.5"	34.25"	16.7	7.76	—	1/2	12.0	12	5-15P	395
UCD4464N	four drawer	64"	31.5"	34.25"	5.4	—	—	1/2	12.0	12	5-15P	440
UC4472N	three door	72"	31.5"	34.25"	18.7	8.22	—	1/2	12.0	12	5-15P	485
UCD4472N	six drawer	72"	31.5"	34.25"	4	—	—	1/2	12.0	12	5-15P	545

Specifications continued on the next page.



Specifications (continued)

MODEL NUMBER	DESCRIPTION	L	OVERALL D	H	STORAGE CUBIC FT.	SHELVES SQUARE FT.	1/6 PAN CAPACITY	H.P.	REFG. CHARGE	AMP	NEMA PLUG	SHIP WEIGHT
Flat top freezer bases												
4532N	one door	32"	31.5"	36"	6.9	3.88	—	1/3	9.0	9.5	5-15P	335
D4532N	two drawer	32"	31.5"	36"	2.7	—	—	1/3+	9.5	12	5-15P	370
4560N	two door	60"	31.5"	36"	15.7	7.19	—	1/3+	13.0	12	5-15P	340
Work top freezer bases with 4" backsplash												
ST4532N	one door	32"	31.5"	40"	6.9	3.88	—	1/3	9.0	9.5	5-15P	335
STD4532N	two drawer	32"	31.5"	40"	2.7	—	—	1/3+	9.5	12	5-15P	370
ST4560N	two door	60"	31.5"	40"	15.7	7.19	—	1/3+	13.0	12	5-15P	340
Undercounter freezers												
UC4532N	one door	32"	31.5"	34.25"	6.9	3.88	—	1/3	9.0	9.5	5-15P	335
UCD4532N	two drawer	32"	31.5"	34.25"	2.7	—	—	1/3+	9.5	12	5-15P	370
UC4560N	two door	60"	31.5"	34.25"	15.7	7.19	—	1/3+	13.0	12	5-15P	340
Salad top refrigerator bases												
4427N-6	one door	27"	31.5"	36"	5.7	3.24	6	1/5	9.0	7.2	5-15P	240
D4427N-6	two drawer	27"	31.5"	36"	1.38	—	6	1/5	9.0	7.2	5-15P	290
4448N-8	two door	48"	31.5"	36"	10.7	5.48	8	1/5	9.0	7.2	5-15P	320
D4448N-8	four drawer	48"	31.5"	36"	2.7	—	8	1/5	9.0	7.2	5-15P	395
4448N-12	two door	48"	31.5"	36"	10.7	5.48	12	1/5	9.0	7.2	5-15P	320
D4448N-12	four drawer	48"	31.5"	36"	2.7	—	12	1/5	9.0	7.2	5-15P	395
4460N-8	two door	60"	31.5"	36"	15.7	7.19	8	1/2	12.0	12	5-15P	345
D4460N-8	four drawer	60"	31.5"	36"	2.7	—	8	1/2	12.0	12	5-15P	450
4460N-12	two door	60"	31.5"	36"	15.7	7.19	12	1/2	12.0	12	5-15P	345
D4460N-12	four drawer	60"	31.5"	36"	2.7	—	12	1/2	12.0	12	5-15P	450
4464N-8	two door	64"	31.5"	36"	16.7	7.76	8	1/2	12.0	12	5-15P	435
D4464N-8	four drawer	64"	31.5"	36"	5.4	—	8	1/2	12.0	12	5-15P	495
4464N-12	two door	64"	31.5"	36"	16.7	7.76	12	1/2	12.0	12	5-15P	435
D4464N-12	four drawer	64"	31.5"	36"	5.4	—	12	1/2	12.0	12	5-15P	495
4464N-16	two door	64"	31.5"	36"	16.7	7.76	16	1/2	12.0	12	5-15P	435
D4464N-16	four drawer	64"	31.5"	36"	5.4	—	16	1/2	12.0	12	5-15P	495
4472N-12	three door	72"	31.5"	36"	18.9	8.22	12	1/2	12.0	12	5-15P	485
D4472N-12	six drawer	72"	31.5"	36"	4	—	12	1/2	12.0	12	5-15P	545
4472N-18	three door	72"	31.5"	36"	18.9	8.22	18	1/2	12.0	12	5-15P	485
D4472N-18	six drawer	72"	31.5"	36"	4	—	18	1/2	12.0	12	5-15P	545
Mega Top refrigerated front breathers												
4427N-9M	one door	27"	31.5"	36"	5.7	3.20	9	1/5	9.0	7.2	5-15P	290
D4427N-9M	two drawer	27"	31.5"	36"	1.38	—	9	1/5	9.0	7.2	5-15P	325
4432N-12M	one door	32"	31.5"	36"	6.9	3.88	12	1/5	9.0	7.2	5-15P	315
D4432N-12M	two drawer	32"	31.5"	36"	2.7	—	12	1/5	9.0	7.2	5-15P	350
4448N-18M	two door	48"	31.5"	36"	10.7	5.48	18	1/5	9.0	7.2	5-15P	360
D4448N-18M	four drawer	48"	31.5"	36"	1.5	—	18	1/5	9.0	7.2	5-15P	395
4460N-12M	two door	60"	31.5"	36"	15.7	7.19	12	1/2	12.0	12	5-15P	430
D4460N-12M	four drawer	60"	31.5"	36"	2.7	—	12	1/2	12.0	12	5-15P	465
4460N-18M	two door	60"	31.5"	36"	15.7	7.19	18	1/2	12.0	12	5-15P	430
D4460N-18M	four drawer	60"	31.5"	36"	2.7	—	18	1/2	12.0	12	5-15P	465
4460N-24M	two door	60"	31.5"	36"	15.7	7.19	24	1/2	12.0	12	5-15P	430
D4460N-24M	four drawer	60"	31.5"	36"	2.7	—	24	1/2	12.0	12	5-15P	465
4464N-12M	two door	64"	31.5"	36"	16.7	7.76	12	1/2	12.0	12	5-15P	435
D4464N-12M	four drawer	64"	31.5"	36"	5.4	—	12	1/2	12.0	12	5-15P	470
4464N-18M	two door	64"	31.5"	36"	16.7	7.76	18	1/2	12.0	12	5-15P	435
D4464N-18M	four drawer	64"	31.5"	36"	5.4	—	18	1/2	12.0	12	5-15P	470
4464N-24M	two door	64"	31.5"	36"	16.7	7.76	24	1/2	12.0	12	5-15P	435
D4464N-24M	four drawer	64"	31.5"	36"	5.4	—	24	1/2	12.0	12	5-15P	470
4472N-18M	three door	72"	31.5"	36"	18.7	8.22	18	1/2	12.0	12	5-15P	485
D4472N-18M	six drawer	72"	31.5"	36"	4	—	18	1/2	12.0	12	5-15P	545
4472N-24M	three door	72"	31.5"	36"	18.7	8.22	24	1/2	12.0	12	5-15P	485
D4472N-24M	six drawer	72"	31.5"	36"	4	—	24	1/2	12.0	12	5-15P	545
4472N-30M	three door	72"	31.5"	36"	18.7	8.22	30	1/2	12.0	12	5-15P	485
D4472N-30M	six drawer	72"	31.5"	36"	4	—	30	1/2	12.0	12	5-15P	545

Installation

Location

Units represented in this manual are intended for indoor use only. Be sure the location chosen has a floor strong enough to support the total weight of the cabinet and contents. Reinforce the floor as necessary to provide for maximum loading.

For the most efficient refrigeration, be sure to provide good air circulation inside and out.

Inside cabinet: Do not pack refrigerator so full that air cannot circulate.

Outside cabinet: Be sure that the unit has access to ample air. On all 400 and 4000 Series equipment, (for 4400 Series Equipment door and drawer models see below), a minimum space of 3" (7.6cm) at the back of the unit and 1" (2.5cm) at the top and sides is required to conform to Underwriters Laboratories' standards. On undercounter units it is imperative that the proper air flow be maintained. The refrigeration system is designed so air will flow under the unit, over the compressor/condenser area, and out at the top rear of the unit. Avoid hot corners and locations near stoves and ovens.

4400 Series equipment door and drawer models: These units have Delfield's "front-breathing" design. They may be installed flush against a wall or built into a counter as required. **The louver at the floor level must be kept completely clear of any obstructions.** Proper operation of these models is dependent on air being able to flow freely through the front louver. The louver at the back of the unit is not necessary for proper operation, but any air flow through is beneficial.



Any restriction of the proper air flow outlined above, total or partial, will void the warranty on the unit.

Leveling

A level cabinet will perform better because the drain pan will drain properly, the drawers or doors will line up with the frames and the cabinet will not be subject to undue strain.

All four legs are adjustable. Adjust each leg until the unit is stable and level left to right. If necessary adjusting the front legs slightly higher than the rear by about 1/8" (0.3cm) will help the door or drawers remain closed.



Never stand on the unit or its drawers! Doing so may result in bodily injury. They are not designed to hold the weight of an adult and will collapse if misused in this manner.

Stabilizing

Some models are supplied on casters for your convenience, for ease of cleaning underneath and mobility.



The unit must be installed in a stable condition with the front wheels locked. Locking the front casters after installation is the owner's and operator's responsibility.

Plumbing

Self-contained models are standard with a condensate evaporator. If, for some reason, a unit does not have a condensate evaporator, or the evaporator fails, the unit's drain must have an outlet to an appropriate drainage area or container.



Moisture collecting from improper drainage can create a slippery surface on the floor and a hazard to employees. It is the owner's and operator's responsibility to provide a container or outlet for drainage.

Electrical connection

Refer to the amperage data on page 3-4, the serial tag, your local code or the National Electrical Code to be sure the unit is connected to the proper power source. A protected circuit of the correct voltage and amperage must be run for connection of the line cord, or permanent connection to the unit.

A 7' (2.1 m) long grounded supply cord and plug are provided with standard units. Simply plug the unit in to begin operation.



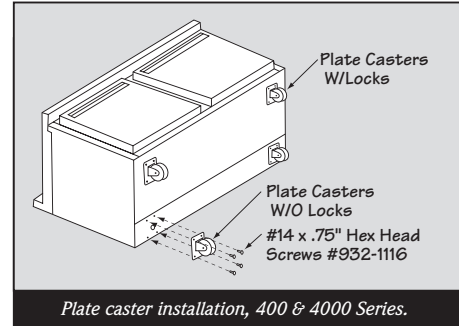
The thermostat must be turned to OFF and the unit disconnected from the power source whenever performing service, maintenance functions or cleaning the refrigerated area.

Caster Installation - 400 & 4000 Series

400 & 4000 Series caster installation

- 1) Carefully place the unit on its back (see illustration at right).
- 2) Remove legs by unscrewing them in a counter clockwise direction.
- 3) Located on each end of the compressor channel are 4 hex head screws, for a total of 8 screws. Remove them. 8 additional screws are provided with your casters.
- 4) Place a locking plate caster over one of the front holes, matching the 4 mounting holes to the pre-drilled holes in the underside of the unit. Insert 4 hex head screws and tighten. Repeat with the other locking front casters.
- 5) Repeat step 4 with the non-locking casters in the rear of the unit.
- 6) Carefully lift the unit upright.
- 7) After installing casters, the unit should be left in an upright position for at least twenty-four (24) hours before starting.

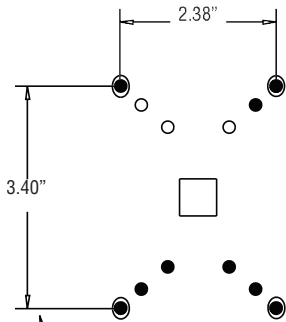
NOTE: Check parts list for correct caster application.



Caster/Leg Mounting Detail

2", 3" and 5" Caster and Leg Mounting Detail

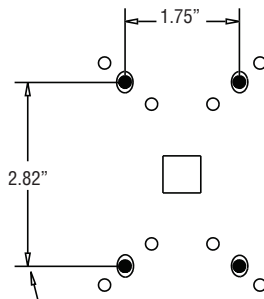
A universal bolt hole pattern is provided on the bottom of the cabinet. It will accommodate any leg or caster. Simply line up the plate holes with the corresponding cabinet holes.



NOTE:

If hole pattern on caster/leg matches the one above mount in outer set of holes.

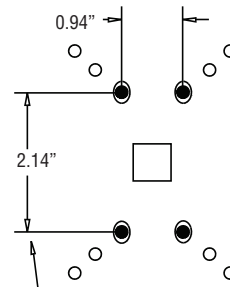
6" Leg - 3234569



NOTE:

If hole pattern on caster/leg matches the one above mount in middle set of holes.

3" Caster - 3234024
5" Caster - 3234161



NOTE:

If hole pattern on caster/leg matches the one above mount in inner set of holes.

2" Caster - 3234148

Operation

After the unit is connected to power it will automatically begin operating. With the covers and doors closed, the temperature of the cabinet should reach 36°F to 40°F (2°C to 4°C) on refrigerators or 0°F (-18°C) on freezers in about one hour. Temperature in salad top will maintain 33°F to 41°F (1°C to 4°C) with pans recessed 2.5" (6.5cm) at 86°F ambient room temperature for a period of four hours, meeting NSF-7 requirements. The temperature control, located on the back panel inside the refrigerator, can be adjusted to meet the current conditions.

Temperature control instruction

Refrigerators: A thermostat located in the evaporator housing on interior rear of the unit, controls the temperature in the box. The factory setting for the control is "4" and maintains about 38°F (3°C) in the box. Set toward "1" for higher temperatures and toward "7" for lower temperatures.

Freezers: A thermostat located in the evaporator housing

on interior rear of the unit, controls the temperature in the box. The factory setting for the control is "4" and maintains about -3°F (-18°C) in the box. Set toward "1" for higher temperatures and toward "7" for lower temperatures.



Units with pans should be operated with pans in place. Operating the unit without all pans in place will lessen efficiency of the unit and may damage the unit.

Continuous opening and closing of the doors will hamper the unit's ability to maintain optimum refrigeration temperature.

Top section is not intended for overnight storage. Product should be removed from pans. Pans can remain in unit while empty.

Door Maintenance

Adjusting door hinges

Doors have been adjusted at the factory. If it becomes necessary to adjust a door, follow these instructions:

- 1) If the door needs lowering at the handle, use a 5/16" wrench to loosen the hinge screws and install a spacer outside of the hinge (see illustration 1). Tighten the screws.
- 2) If the door needs to be higher at the handle, use a 5/16" wrench to loosen the hinge screws and install a spacer inside of the hinge (see illustration 2). Tighten the screws.

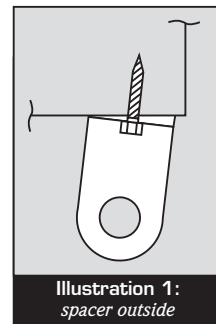


Illustration 1:
spacer outside

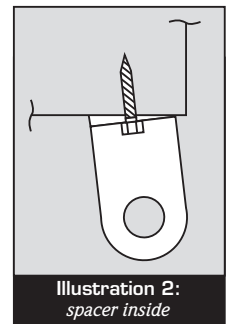


Illustration 2:
spacer inside

Defrosting

Refrigerators

Refrigerators defrost automatically with every cycle of the compressor. The water generated is routed to a pan on the rear of the unit and is evaporated by the heat given off by the compressor.

Freezers

When defrost control goes into defrost, power to the condensing unit and evaporator fans is interrupted and the defrost heater is energized. The defrost heater warms the evaporator coil thereby melting all frost accumulated during the previous refrigeration cycle. Once all frost is eliminated, the temperature of the coil continues to rise until it reaches 27 minutes. The defrost control switches to refrigeration mode. Defrost will initiate every six hours.



Turn the screw ONLY in a clockwise direction, turning the screw counter-clockwise will break the cam motor.

MAINTENANCE



The thermostat must be turned to OFF and the unit disconnected from the power source whenever performing service, maintenance functions or cleaning the refrigerated area.

Refrigerators and Freezers

The interior and exterior can be cleaned using soap and warm water. If this isn't sufficient, try ammonia and water or a nonabrasive liquid cleaner. When cleaning the exterior, always rub with the "grain" of the stainless steel to avoid marring the finish.

Do not use an abrasive cleaner because it will scratch the stainless steel and plastic and can damage the breaker strips and gaskets.

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.

In order to maintain proper refrigeration performance, the condenser fins must be cleaned of dust, dirt and grease regularly. It is recommended that this be done at least every three months. If conditions are such that the condenser is totally blocked in three months, the frequency of cleaning should be increased. Clean the condenser with a vacuum cleaner or stiff brush. If extremely dirty, a commercially available condenser cleaner may be required.

Stainless Steel Care and Cleaning

To prevent discoloration of 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 steel's 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 steel's 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.

MAINTENANCE CONTINUED

If your freezer seems to vibrate excessively when the compressor is running, loosen (but do not remove) the bolts on the compressor. Semi hermetic models should be loosened before operating.

BASIC MAINTENANCE

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 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 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.

Refrigeration cycle

Refrigerators: During the refrigeration cycle the evaporator fans will run continuously with the exception of door openings. The door switch will activate the lights when opened and turn power off to the evaporator fan motors.

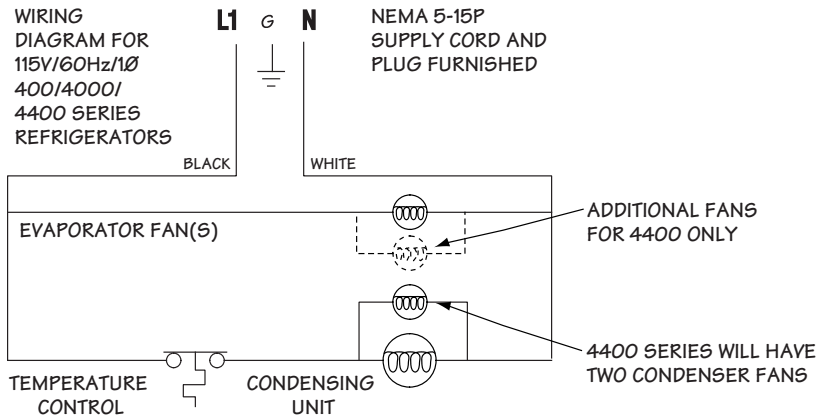
1. The temperature control allows for the evaporator coil to clear after each off cycle and before the compressor runs again.

Freezers: During the refrigeration cycle the timer supplies power to the temperature control (for power to the condensing unit) and evaporator fan motors. The evaporator fans will run at any time when the compressor is running, they will also cycle off during door openings and during a defrost period. The door switch will activate the lights when opened and turn power off to the evaporator fan motors.

1. See Defrost Cycle

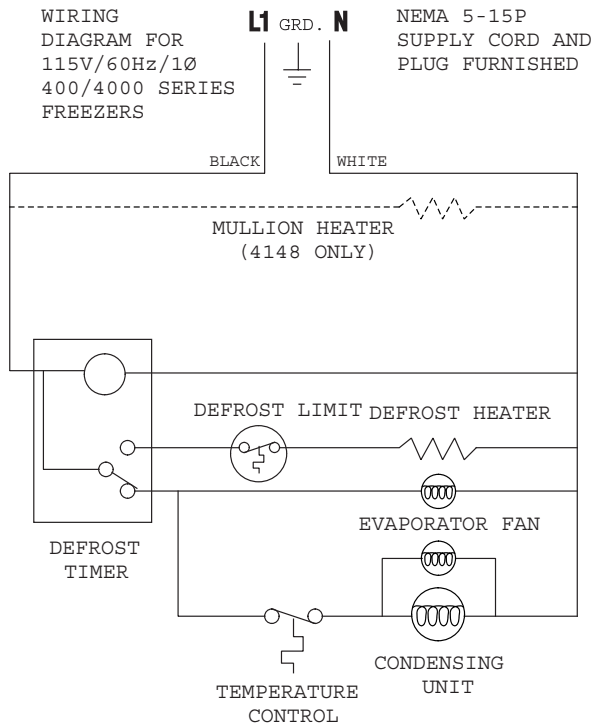


Wiring Diagram Refrigerators - 400, 4000 and 4400 Series

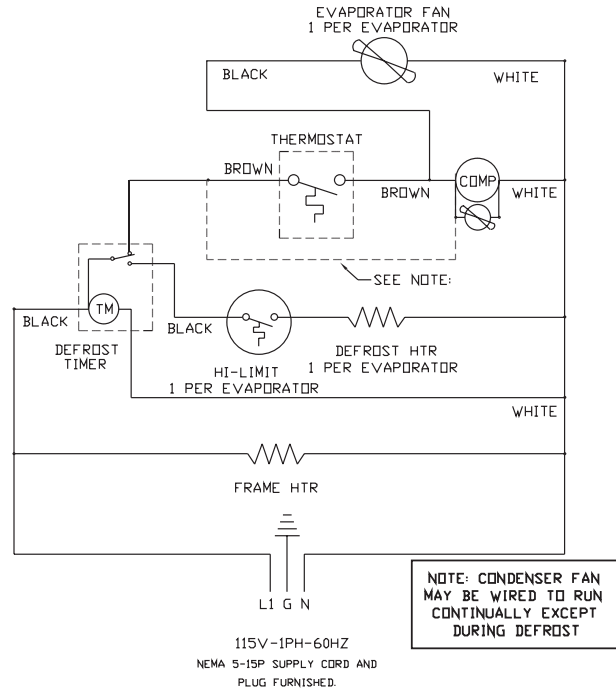


Wiring Diagram Freezers - 400, 4100 and 4500 Series

400 & 4100 SERIES

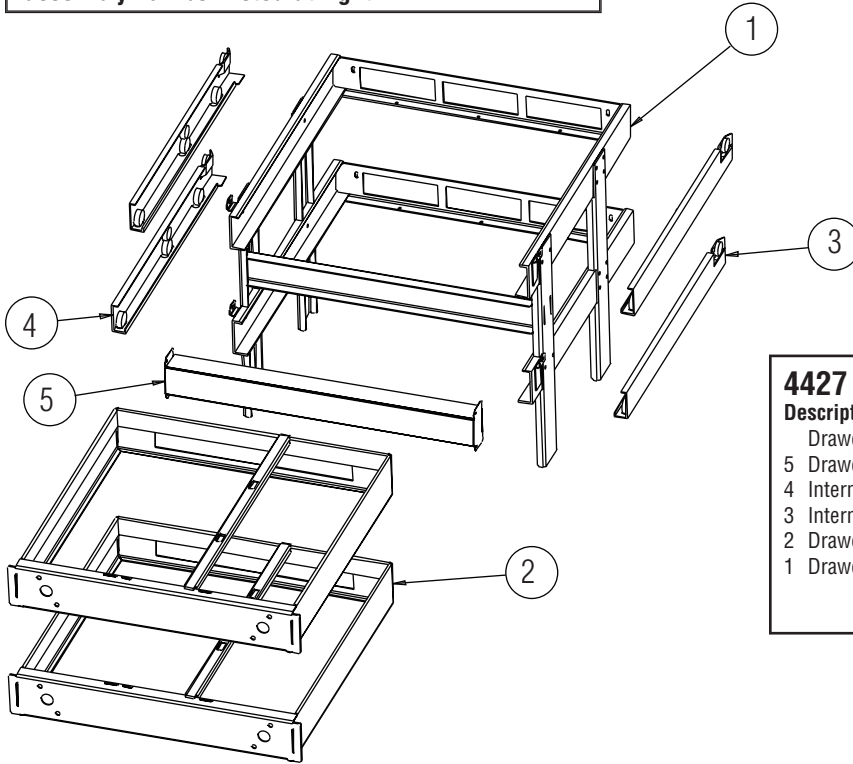


4500 SERIES



Two Drawer Assembly (without drawer fronts)

NOTE: Drawer fronts must be ordered separately (see next page) unless ordering complete kit by assembly number listed at right.



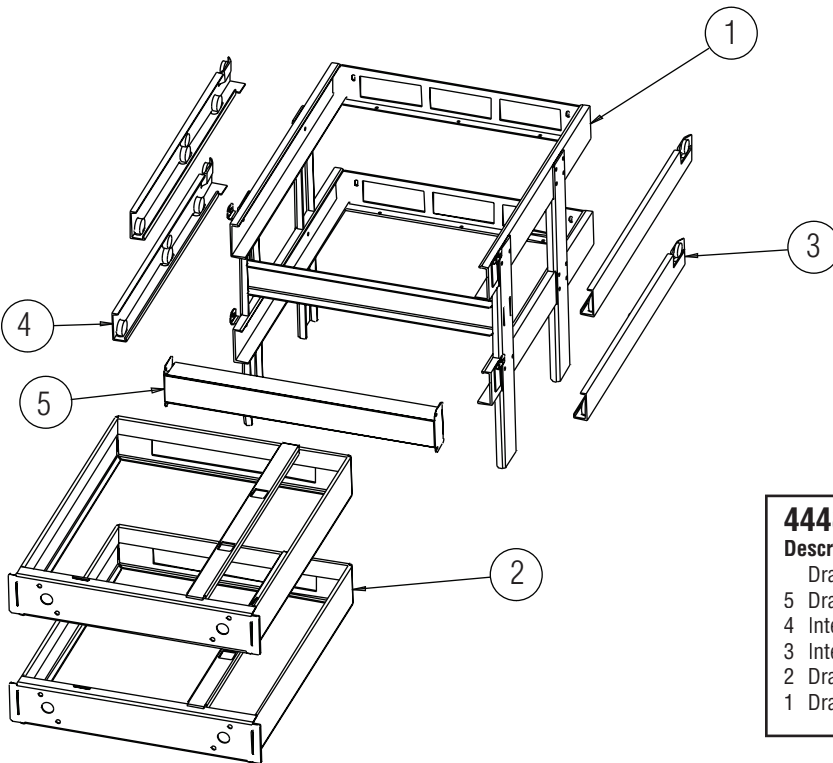
4427

Description

- Drawer assembly kit
- 5 Drawer mullion assembly
- 4 Interm prof, RH, drawer slide
- 3 Interm prof, RH, drawer slide
- 2 Drawer box cart system assy.
- 1 Drawer frame assembly

Part

- 000ANF0032
- 0302164
- 3234579
- 3234578
- 000333003L
- 000AJH0035



4448/72

Description

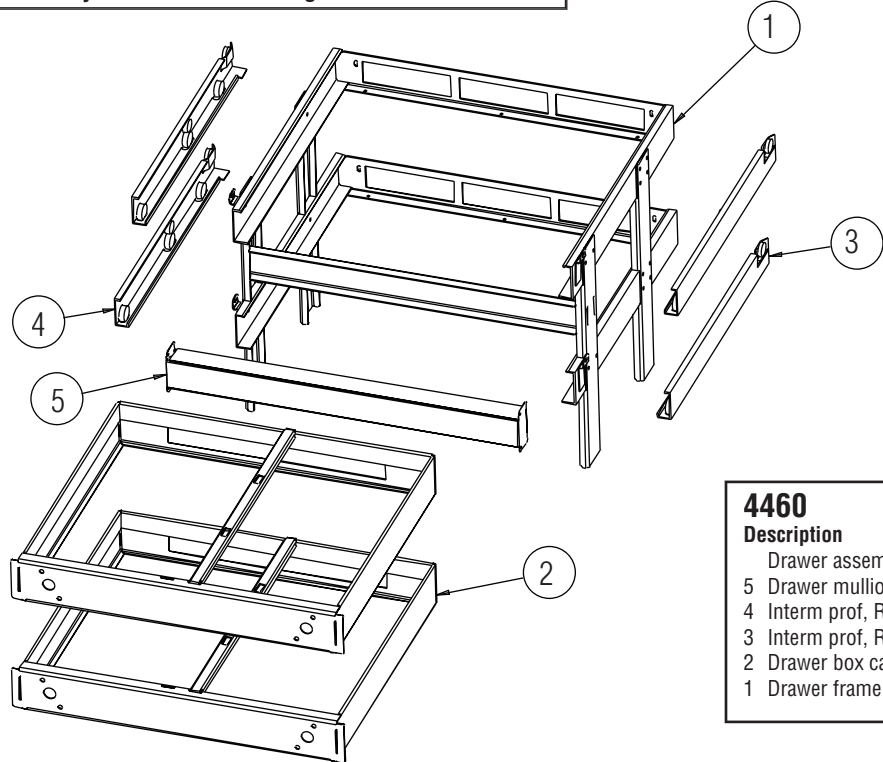
- Drawer assembly kit
- 5 Drawer mullion assembly
- 4 Interm prof, RH, drawer slide
- 3 Interm prof, RH, drawer slide
- 2 Drawer box cart system assy.
- 1 Drawer frame assembly

Part

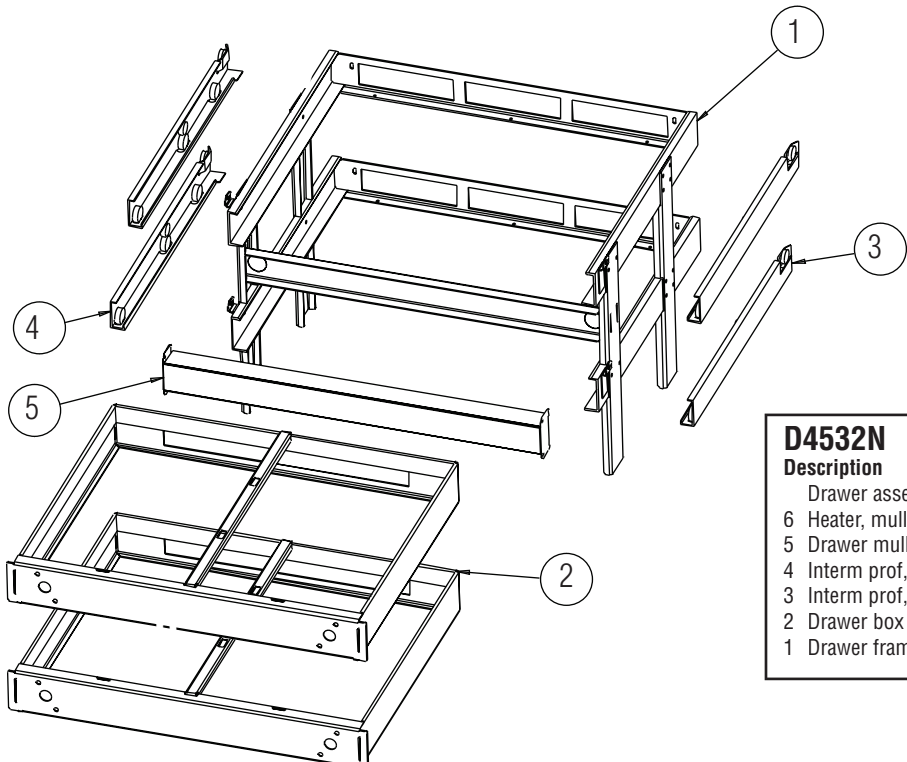
- 000ANF0033
- 0330587
- 3234579
- 3234578
- 000333003M
- 000AJH0033

Two Drawer Assembly (without drawer fronts)

NOTE: Drawer fronts must be ordered separately (see next page) unless ordering complete kit by assembly number listed at right.

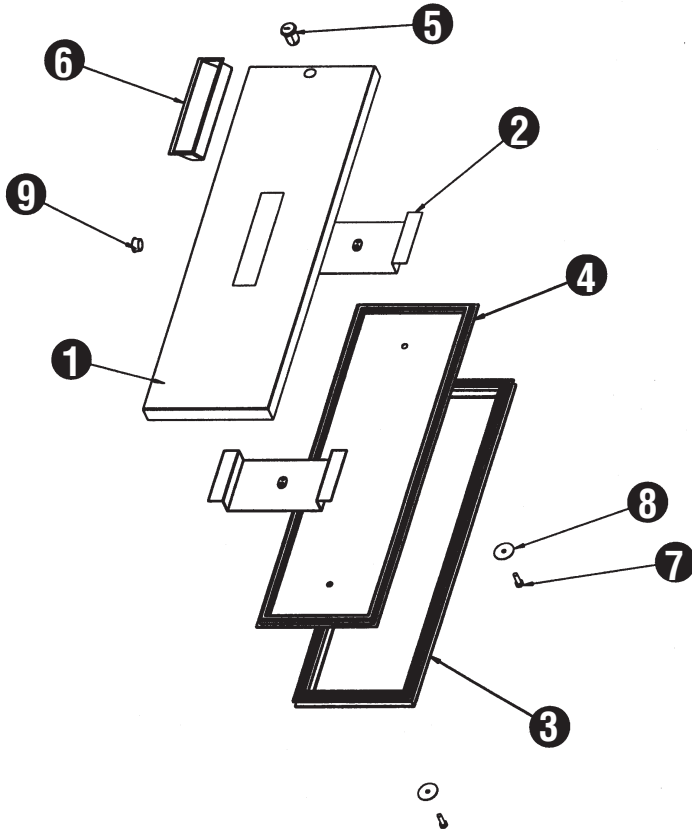


4460		Part #
Description	Drawer assembly kit	000ANF0031
	5 Drawer mullion assembly	0330590
	4 Interm prof, RH, drawer slide	3234579
	3 Interm prof, RH, drawer slide	3234578
	2 Drawer box cart system assy.	000333003K
	1 Drawer frame assembly	000AJH0031



D4532N		Part #
Description	Drawer assembly kit	000ANF0035
	6 Heater, mullion, frz. drawer	2184034
	5 Drawer mullion assembly	0302174
	4 Interm prof, RH, drawer slide	3234579
	3 Interm prof, RH, drawer slide	3234578
	2 Drawer box cart system assy.	000333003J
	1 Drawer frame assembly	000AJH0030

Drawer Front with Locks, 27" & 32"



27" Drawer Front W/Lock

DELFIELD			
KEY	QTY.	PART#	DESCRIPTION
Complete Drawer Front Kit			
		0330441	27", drawer front kit, w/lock
1	1	0077428	panel, drawer, 27", w/lock
2	2	0330413	drawer reinforcement*
3	1	1702476	gasket, push-in, drawer, 27"
4	1	1702477	liner, drawer, 27"*
5	1	3234201	keys and lock, 1.12 door
6	1	3234255	handle, snap-in*
7	2	9321022	1/4-20 x .75 Z-H-HX-M*
8	2	9321051	washer, 1 1/4*
9	1	9321502	plug, Heyco, 3/4, solid

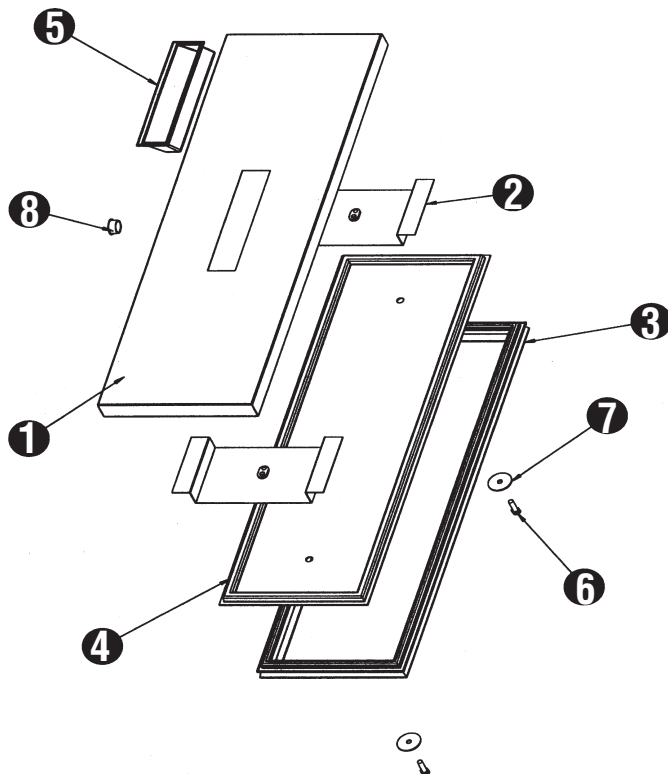
*Available only with complete kit.

32" Drawer Front W/Lock

DELFIELD			
KEY	QTY.	PART#	DESCRIPTION
Complete Drawer Front Kit			
		0330440	32", drawer front kit, w/lock
1	1	0077427	panel, drawer, 32", w/lock
2	2	0330413	drawer reinforcement*
3	1	1702478	gasket, push-in, drawer, 32"
4	1	1702479	liner, drawer, 32"*
5	1	3234201	keys and lock, 1.12 door
6	1	3234255	handle, snap-in*
7	2	9321022	1/4-20 x .75 Z-H-HX-M*
8	2	9321051	washer, 1 1/4*
9	1	9321502	plug, Heyco, 3/4, solid

*Available only with complete kit.

Drawer Front without Locks, 27" & 32"



27" Drawer Front W/O Lock

DELFIELD			
KEY	QTY.	PART#	DESCRIPTION
Complete Drawer Front Kit			
		0330412	27", drawer front kit, w/o lock
1	1	0077301	panel, drawer, 27", w/o lock
2	2	0330413	drawer reinforcement*
3	1	1702476	gasket, push-in, drawer, 27"
4	1	1702477	liner, drawer, 27"*
5	1	3234255	handle, snap-in*
6	2	9321022	1/4-20 x .75 Z-H-HX-M*
7	2	9321051	washer, 1 1/4*
8	1	9321502	plug, Heyco, 3/4, solid*

*Available only with complete kit.

32" Drawer Front W/O Lock

DELFIELD			
KEY	QTY.	PART#	DESCRIPTION
Complete Drawer Front Kit			
		0330424	32", drawer front kit, w/o lock
1	1	0077335	panel, drawer, 32", w/o lock
2	2	0330413	drawer reinforcement*
3	1	1702478	gasket, push-in, drawer, 32"
4	1	1702479	liner, drawer, 32"
5	1	3234255	handle, snap-in*
6	2	9321022	1/4-20 x .75 Z-H-HX-M*
7	2	9321051	washer, 1 1/4*
8	1	9321502	plug, Heyco, 3/4, solid*

*Available only with complete kit.



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 Jam Switch
- Solenoid Coil
- Hi-limit/Thermal Protector Switch
- Fan Delay/Defrost Termination Switch
- Compressor Start Components and Overload Protector
- Defrost Timer
- Thermometer
- Gear Box
- Contractor/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
- Condensor 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.

Replacement Parts List

Model 402 and 406

CA Suffix denotes standard on casters

Description	Part #
Door gasket	1702623
Fan motor	2162691
Temperature control	2194224
Leg	3234791
3 1/2" caster	3234025
Evaporator coil	3516116
Hanging thermometer	3516135
Fan blade	3516172
Fan guard	3516173
Condenser coil	3516275
Filter drier	3516277
Compressor R404A	3526939
Wire shelf	3978030
Shelf clip	5189779
Hinge kit	0420067

Model 403 and 407

CA Suffix denotes standard on Casters

Description	Part #
Door gasket	1702623
Fan motor	2162691
Defrost heater	2194232
Heater safety switch	2194235
Temperature control	3516043
Leg	3234791
3 1/2" caster	3234025
Hanging thermometer	3516135
Evaporator coil	3516153
Defrost timer	3516156
Fan blade	3516172
Fan guard	3516173
Condenser coil	3516275
Filter drier	3516277
Compressor R404A	3526937
Shelf	3978030
Shelf clip	5189779
Hinge kit	0420067

Model 4048 - ST/UC

Description	Part #
Door gasket	1702622
Fan motor	2162691
Temperature control	2194224
Leg	3234791
Evaporator coil	3516116
Hanging thermometer	3516135
Fan blade	3516172
Fan guard	3516173
Condenser coil	3516275
Filter drier	3516277
Compressor R404A	3526939
Wire shelf	3978033
Hinge kit	0420067

Model 4148 - ST/UC

Description	Part #
Door gasket	1702622
Fan motor	2162691
Defrost heater	2194232
Heater safety switch	2194235
Temperature control	3516043
Leg	3234791
Hanging thermometer	3516135
Evaporator coil	3516153
Defrost timer	3516156
Fan blade	3516172
Fan guard	3516173
Condenser coil	3516276
Filter drier	3516277
Compressor R404A	3526938
Shelf	3978033
Hinge kit	0420067

Model 4427N, ST4427N, UC4427N

Description	Part #
Door gasket	1702474
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Temperature control	2194224
Caster 2"	3234148
Hinge cartridge assy.	3234225
Shelf support	3234290
Accumulator	3516051
Evaporator fan blade	3516274
Dryer filter	3516277
Condenser coil	3516296
Evaporator coil	3516298
Compressor R404A	3526939
Shelf 27"	3978161
Refrigerant, gas R404a	9221010

Model D4427N, STD4427N, UCD4427N

Description	Part #
Drawer kit	000ANF0032
Drawer gasket	1702524
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Temperature control	2194224
Accumulator	3516051
Hanging thermometer	3516135
Evaporator fan blade	3516274
Condenser coil	3516296
Evaporator coil	3516298
Compressor R404A	3526939

Model 4427N-6

Description	Part #
Door gasket	1702474
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Temperature control	2194224
Caster 2"	3234148
Hinge cartridge assy.	3234225
Cartridge brkt. BR, TL	3234226
Pivot brkt. BL, TR	3234228
Shelf support	3234290
Accumulator	3516051
Evaporator fan blade	3516274
Dryer filter	3516277
Condenser coil	3516296
Evaporator coil	3516298
Compressor R404A	3526939
Shelf 27"	3978161

Model D4427N-6

Description	Part #
Drawer kit	000ANF0032
Liftcover assy.	0330406
Drawer gasket	1702524
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Temperature control	2194224
Caster 2"	3234148
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Dryer filter	3516277
Condenser coil	3516296
Evaporator coil	3516298
Compressor R404A	3526939

Model 4427N-9M

Description	Part #
Door gasket	1702474
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691

Temperature control	2194224
Caster 2"	3234148
Hinge cartridge assy.	3234225
Cartridge brkt. BR, TL	3234226
Pivot brkt. BL, TR	3234228
Shelf support	3234290
Accumulator	3516051
Hanging thermometer	3516135
Evaporator fan blade	3516274
Dryer filter	3516277
Condenser coil	3516296
Evaporator coil	3516298
Compressor R404A	3526939
Shelf 27"	3978161

Model D4427N-9M

Description	Part #
Drawer kit	000ANF0032
Drawer gasket	1702524
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Temperature control	2194224
Caster 2"	3234148
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Dryer filter	3516277
Condenser coil	3516296
Evaporator coil	3516298
Compressor R404A	3526939
Shelf 27"	3978161

Model 4432N, UC4432N

Description	Part #
Door gasket	1702475
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Control temp	2194224
Caster 2"	3234148
Hinge cartridge assy.	3234225
Cartridge brkt. BR, TL	3234226
Pivot bracket BL, TR	3234228
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Drier filter	3516277
Condenser coil	3516296
Evaporator coil	3516298
Compressor 1/2HP R404A	3526939
Shelf 24"	3978163

Model D4432N, UCD4432N, STD4432N

Description	Part #
Drawer kit	000ANF0030
Drawer gasket	1702522
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Temperature control	2194224
Caster 2"	3234148
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Dryer filter	3516277
Condenser coil	3516296
Evaporator coil	3516298
Compressor R404A	3526939

Model 4432N-12M

Description	Part #
Door gasket	1702475
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Control temp	2194224
Caster 2"	3234148

Hinge cartridge assy.	3234225
Cartridge brkt. BR, TL	3234226
Pivot bracket BL, TR	3234228
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Drier filter	3516277
Condenser coil	3516296
Evaporator coil	3516298
Compressor 1/2HP R404A	3526939
Shelf 32"	3978163

Model D4432N-12M

Description	Part #
Drawer kit	000ANF0030
Drawer gasket	1702522
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Temperature control	2194224
Caster 2"	3234148
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Dryer filter	3516277
Condenser coil	3516296
Evaporator coil	3516298
Compressor R404A	3526939

Model 4448N, ST4448N, UC4448N

Description	Part #
Door gasket	1702473
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Temperature control	2194224
Caster 2"	3234148
Cartridge brkt. BR, TL	3234226
Cartridge brkt. BL, TR	3234227
Pivot bracket BL, TR	3234228
Pivot bracket BR, TL	3234229
Shelf support	3234290
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Drier filter	3516277
Condenser coil	3516296
Evaporator coil	3516298
Compressor R404A	3526939
Shelf 24"	3978160

Model D4448N, STD4448N, UCD4448N

Description	Part #
Drawer kit	000ANF0033
Drawer gasket	1702541
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Temperature control	2194224
Caster 2"	3234148
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Drier filter	3516277
Condenser coil	3516296
Evaporator coil	3516298
Compressor R404A	3526939

Model 4448N-8

Description	Part #
Door gasket	1702473
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Temperature control	2194224
Caster 2"	3234148



Model 4464N, ST4464N, UC4464N

Description	Part #
Door gasket	1702475
Condenser fan motor	2162667
Condenser fan blade	2162681
Evap fan motor	2162691
Control temp	2194224
Caster 2"	3234148
Hinge cartridge assy.	3234225
Cartridge brkt. BR, TL	3234226
Cartridge brkt. BL, TR	3234227
Pivot bracket BL, TR	3234228
Pivot bracket BR, TL	3234229
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Drier filter	3516286
Condenser coil	3516297
Evaporator coil	3516298
Shelf 32"	3978163

Model 4464N-12M, 4462N-18M, 4464N-24M

Description	Part #
Door gasket	1702475
Condenser fan motor	2162667
Condenser fan blade	2162681
Evap fan motor	2162691
Control temp	2194224
Caster 2"	3234148
Hinge cartridge assy.	3234225
Cartridge brkt. BR, TL	3234226
Cartridge brkt. BL, TR	3234227
Pivot bracket BL, TR	3234228
Pivot bracket BR, TL	3234229
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Drier filter	3516286
Condenser coil	3516297
Evaporator coil	3516298
Shelf 32"	3978163

Model D4464N-12M, D4462N-18M, D4464N-24M

Description	Part #
Drawer kit	000ANF0030
Drawer gasket	1702522
Condenser fan motor	2162667
Condenser fan blade	2162681
Evap fan motor	2162691
Control temp	2194224
Caster 2"	3234148
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Drier filter	3516286
Condenser coil	3516297
Evaporator coil	3516298
Compressor 1/2 HP R404A	3526891

Model D4532N, STD4532N, UCD4532N

Description	Part #
Drawer kit	000ANF0030
Drawer gasket	1702522
Condenser fan motor	2162667
Condenser fan blade	2162681
Evaporator fan motor	2162691
Defrost heater	2194531
Thermostat	2194532
Caster 2"	3234148
Thermometer hanging	3516135
Defrost timer	3516156
Evaporator fan blade	3516172
Plastic fan guard	3516178
Expansion valve	3516271
Drier filter	3516277
Condenser coil	3516296

Evaporator coil	3516299
Compressor R404A	3526872
Compressor 1/3 HP	3526896

Model 4560N, ST4560N, UC4560N

Description	Part #
Door gasket	1702562
Condenser fan motor	2162691
Heater safety switch	2194235
Defrost heater	2194531
Thermostat	2194532
Hinge door BR, TL	3234072
Hinge door BL, TR	3234073
Caster 2"	3234148
Hinge cartridge assy.	3234225
Cartridge brkt. BR, TL	3234226
Cartridge brkt. BL, TR	3234227
L-shaped door hinge	3234391
Thermometer hanging	3516135
Defrost timer	3516156
Evaporator fan blade	3516172
Plastic fan guard	3516178
Expansion valve	3516271
Drier filter	3516286
Evaporator coil	3516299
Compressor 1/3 HP	3526896
Shelf 30"	3978162

Model 4472N, ST4472, UC4472

Description	Part #
Door gasket	1702473
Condenser fan motor	2162667
Condenser fan blade	2162681
Evap fan motor	2162691
Caster 2"	3234148
Hinge cartridge assy.	3234225
Cartridge brkt. BR, TL	3234226
Cartridge brkt. BL, TR	3234227
Pivot bracket BL, TR	3234228
Pivot bracket BR, TL	3234229
Thermometer hanging	3516135
Evaporator fan blade	3516274
Drier filter	3516286
Condenser coil	3516297
Evaporator coil	3516298
Compressor 1/2HP R404A	3526891
Shelf 24"	3978160

Model D4472N, STD4472, UCD4472

Description	Part #
Drawer kit	000AFN0033
Drawer gasket	1702541
Condenser fan motor	2162667
Condenser fan blade	2162681
Evap fan motor	2162691
Control temp	2194224
Caster 2"	3234148
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Drier filter	3516286
Condenser coil	3516297
Evaporator coil	3516298
Compressor 1/2HP R404A	3526891

Model D4472N-18M, D4472-24M, D4472-30M

Description	Part #
Drawer kit	000AFN0033
Drawer gasket	1702541
Condenser fan motor	2162667
Condenser fan blade	2162681
Evap fan motor	2162691
Control temp	2194224
Caster 2"	3234148
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Drier filter	3516286

Condenser coil	3516297
Evaporator coil	3516298
Compressor 1/2HP R404A	3526891

Model 4472N-18M, 4472N-24M 4464N-30M

Description	Part #
Door gasket	1702473
Condenser fan motor	2162667
Condenser fan blade	2162681
Evap fan motor	2162691
Control temp	2194224
Caster 2"	3234148
Hinge cartridge assy.	3234225
Cartridge brkt. BR, TL	3234226
Cartridge brkt. BL, TR	3234227
Pivot bracket BL, TR	3234228
Pivot bracket BR, TL	3234229
Accumulator	3516051
Thermometer hanging	3516135
Evaporator fan blade	3516274
Drier filter	3516286
Condenser coil	3516297
Evaporator coil	3516298
Compressor 1/2HP R404A	3526891
Shelf 24"	3978160



Manufacturers Limited Lifetime Warranty

Delfield warrants to the original purchaser-user, subject to the limitations and exclusions set forth below, that the ABS interior of the Delfield models identified above will be free of manufactured defects for as long as the equipment is owned by the original purchaser-user and is in operation.

What is covered.

The interior liner of the Vantage 6000 Series™ Reach In or 400/4000/4400/4500 Series prep tables, is covered against manufactured defects under normal use. For purposes of this Warranty, interior liner is defined as the portion of the interior liner which is made of ABS material. This warranty applies only to products sold and installed after March 1, 2000 in the United States, Canada, Puerto Rico, and Mexico. For purposes of this warranty, lifetime is defined as the expected usable life for the equipment of 12 years.

Delfield's Obligation

Limited strictly to shipping OEM replacement parts or repair kits for any covered ABS interior. A Delfield authorized service dealer and Delfield's Service Department must confirm the liner defect has occurred under normal conditions and is not due to misuse as defined below. All decisions regarding the ABS interior shall be made by Delfield's Service Department and shall be binding upon the parties. No labor or service charges or allowances are covered by this warranty. Warranty service must be performed by a Delfield approved authorized service agent.

User Responsibility

The product must be installed, cleaned and maintained as described in the Service and Installation manual which is furnished with the product. Only approved replacement parts may be used. Failure to adhere to the requirements of this paragraph may void warranty coverage.

Procedures

All claims for replacement parts or repair kits must be made through a Delfield Parts Depot or an authorized Delfield dealer. The defective part invoice must be returned to Delfield within 15 days after the date of service to be eligible for warranty coverage. All claims must include the model number, serial number, an original date of installation and customer identification. Use of parts other than original Delfield replacement parts will not be covered.

Exclusions

This warranty does not cover labor, service, charges for travel time, mileage, or premium charges. This warranty also does not include defects resulting from:

- Operation of the product beyond the specification set forth in the Service and Installation Manual.
 - Failure to clean and maintain the product as described in the Service and Installation Manual.
- Installation of the product in a manner other than as set forth in the Service and Installation.
- Use of installation of replacement parts not approved by Delfield; or
 - The introduction hot items directly onto the ABS liner.

This warranty is in lieu of all other warranties or guarantees of any kind, express or implied, except Delfield's One Year Parts and 90-Day Labor Warranty 400/4000/4400/4500 Series. ANY IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED AND EXCLUDED. IN NO EVENT SHALL DELFIELD BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND OR NATURE, OR FOR ANY DEFECT RESULTING IN WHOLE OR IN PART FROM MISUSE, ALTERATION, IMPROPER INSTALLATION OR INADEQUATE MAINTENANCE OF THE PRODUCT OR ANY PART THEREOF.

No part or assembly which has been subject to accident, alteration or misuse, or which has not been installed or serviced in accordance with the Operation Manual furnished with the product, or which is from equipment on which the serial number has been altered or removed, shall be covered by this warranty.

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.

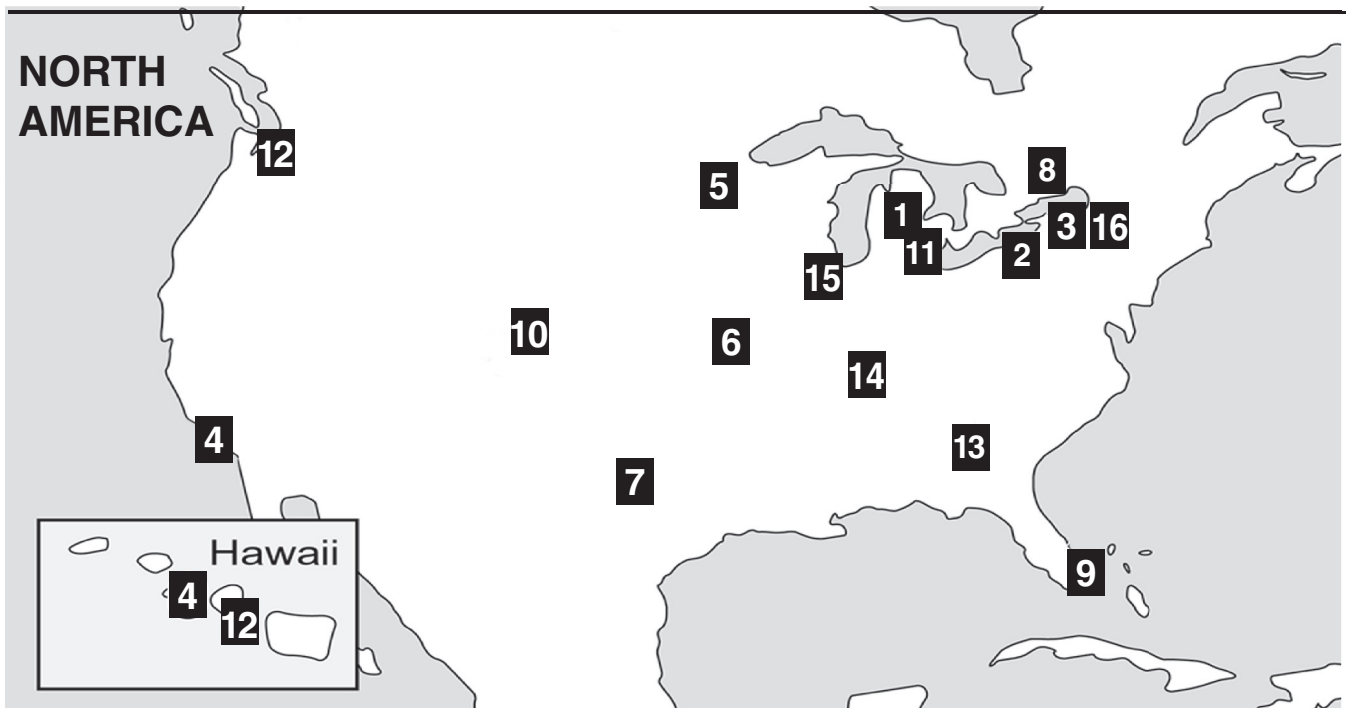
In no event will Delfield be liable for special, incidental or consequential damages, or for damages in the nature of penalties.

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.



NOTES:



Delfield has 16 conveniently located Parts Depots to ensure parts are handled promptly and accurately.

<p>1) The Delfield Company</p> <p>980 South Isabella Road Mt. Pleasant, MI 48858 800.733.8829 989.773.7981 989.773.3210 FAX custom parts direct from Delfield</p>	<p>2) A.I.S. Commercial Parts & Service</p> <p>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</p>	<p>3) Appliance Installation Service</p> <p>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</p>	<p>4) Pacific Coast Parts</p> <p>15024 Staff Court Gardena, CA 90248 800.531.1111 800.782.5747 Email: orders@pacparts.com www.pacparts.com serves: AZ, CA, HI, NV, OR</p>
<p>5) Contract Ice</p> <p>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</p>	<p>6) E.M.C.O. Sales & Distributors</p> <p>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</p>	<p>7) Stove Parts Supply/GCS Service</p> <p>2120 Solona St. PO Box 14009 Fort Worth, TX 76117-0009 800.433.1804 800.272.7358 fax serves: AR, LA, NM, OK, TX</p>	<p>8) Garland Group</p> <p>1177 Kamato Road Mississauga, Ontario L4W1X4 800.361.7745 FAX serves: Canada</p>
<p>9) Global Parts and Supplies</p> <p>2920 N.W. 109th Avenue Miami, FL 33172 305.994.9994 305.994.9992 FAX International parts depot</p>	<p>10) Hawkins Commercial Appl. Serv.</p> <p>3000 S. Wyandot Englewood, CO 80110 800.624.2117 303.761.8861 FAX serves: AZ, CO, KS, NE, NM, OK, UT, WY</p>	<p>11) MicroDine, Inc.</p> <p>44792 Helm Plymouth, MI 48170 888.828.4454 734.451.2043 734.451.3215 FAX serves: MI, IN, WI, OH</p>	<p>12) Performance Refrigeration Parts</p> <p>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</p>
<p>13) Southeastern Restaurant Services</p> <p>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</p>	<p>14) T.M.A.</p> <p>2916 Sidco Drive Nashville, TN 37204 615.726.0351 800.737.0351 615.259.4100 FAX serves: TN, AL</p>	<p>15) Heritage Food Serv. Equip. Inc.</p> <p>5130 Executive Blvd. Fort Wayne, IN 46808 800.458.5593 800.800.4981 FAX serves: IL, IN, MI, OH, WI</p>	<p>16) Northern Parts & Service</p> <p>21 Northern Avenue Plattsburgh, NY 12903 800.634.5005 800.782.5424 FAX serves: CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VA, VT, WV</p>



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