

VANTAGE 6000™ AND GLASS DOOR MERCHANDISERS

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.



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

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Serial Number Location

On refrigeration and freezer storage units, the serial tag is located on the upper left rear corner of the cabinet exterior.

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.

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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.

VANTAGE 6000™ SERIES SPECIFICATIONS
SOLID DOOR REACH-IN REFRIGERATORS AND FREEZERS

MODEL NUMBER	VOLTAGE (60HZ/1Ph)	AMPS	STORAGE CUBIC FT	SHELVES SQ. FT.	# OF SHELVES	UNIT H.P.	BTU/HR CABINET LOAD	BTU/HR SYSTEM CAPACITY	EVAP CAPACITY BTU/TD	SHIP WEIGHT	NEMA PLUG
VRR1-S	115	6.0	20	12.1	3	1/5	555	2010	130/15	332	5-15P
VRR2-S	115	10.0	43	26.6	6	1/4	919	2898	150/19	498	5-15P
VRR3-S	115	16.0	63	41.0	9	1/5-1/4	1265	4191	150/28	694	5-20
FREEZER											
VFR1-S	115	7.8	20	12.1	3	1/3	907	1510	150/10	334	5-15P
VFR2-S	115	11.0	43	26.6	6	1/2	1522	3177	200/16	558	5-15P
VFR3-S	115	7.8/11.0	63	41.0	9	1/3-1/2	2138	4037	250/16	766	2(5-15)P
REMOTE											
VRR1R-S	115	4.0	20	12.1	3	1/5*	555	2010	130/15	274	NA
VRR2R-S	115	5.0	43	26.6	6	1/4*	919	2898	150/19	454	NA
VRR3R-S	115	13.0	63	41.0	9	3/4*	1265	4191	150/28	622	NA
FREEZER											
VFR1R-S	115	5.9	20	12.1	3	1/3*	907	1510	150/10	274	NA
VFR2R-S	115	7.1	43	26.6	6	1/2*	1522	3177	200/16	454	NA
VFR3R-S	115	13.0	63	41.0	9	3/4*	2138	4037	250/16	622	NA

*Recommended.

GLASS DOOR REACH-IN REFRIGERATORS AND FREEZERS

MODEL NUMBER	VOLTAGE (60HZ/1Ph)	AMPS	STORAGE CUBIC FT	SHELVES SQ. FT.	# OF SHELVES	UNIT H.P.	CABINET LOAD	BTU/HR SYSTEM CAPACITY	BTU/HR CAPACITY BTU/TD	EVAP SHIP WEIGHT	NEMA PLUG
VRR1-G	115	6.0	20	12.1	3	1/5	820	2010	130/15	338	5-15P
VRR2-G	115	10.0	43	26.6	6	1/4	1453	2898	150/19	548	5-15P
VRR3-G	115	16.0	63	41.0	9	1/5-1/4	2058	4191	150/28	774	5-20P
FREEZER											
VFR1-G	115	7.8	20	12.1	3	1/3	1340	1466	130/11	340	5-15P
VFR2-G	115	11.0	43	26.6	6	1/2	2376	2894	150/19	614	5-20P
VFR3-G	2(115)	7.8-11.0	63	41.0	9	1/3-1/2	3365	3551	150/24	854	(2)5-15P
REMOTE											
VRR1R-G	115	4.0	20	12.1	3	1/5*	820	2010	130/15	290	NA
VRR2R-G	115	5.0	43	26.6	6	1/4*	1453	2898	150/19	444	NA
VRR3R-G	115	9.0	63	41.0	9	3/4*	2058	4191	150/28	630	NA
FREEZER											
VFR1R-G	115	5.9	20	12.1	3	1/3*	1340	1466	130/11	290	NA
VFR2R-G	115	7.1	43	26.6	6	1/2*	2376	2894	150/19	444	NA
VFR3R-G	115	13.0	63	41.0	9	3/4*	3365	3551	150/24	630	NA

*Recommended.

SLIDING GLASS DOOR REACH IN REFRIGERATORS

MODEL NUMBER	VOLTAGE (60HZ/1Ph)	AMPS	STORAGE CUBIC FT	SHELVES SQ. FT.	# OF SHELVES	UNIT H.P.	BTU/HR CABINET LOAD	BTU/HR SYSTEM CAPACITY	EVAP CAPACITY BTU/TD	SHIP WEIGHT	NEMA PLUG
VRR2-SL	115	10	43	26.6	6	1/4	1516	2898	150/19	548	5-15P
VRR2R-SL	115	5	43	26.6	6	1/4*	1516	2898	150/19	444	NA

*Recommended

GLASS DOOR MERCHANDISERS

MODEL NUMBER	VOLTAGE (60HZ/1Ph)	AMPS	STORAGE CUBIC FT	SHELVES SQ. FT.	# OF SHELVES	UNIT H.P.	BTU/HR CABINET LOAD	BTU/HR SYSTEM CAPACITY	EVAP CAPACITY BTU/TD	SHIP WEIGHT	NEMA PLUG
GRR1-G	115	6.0	20	12.1	3	1/5	820	2010	130/15	338	5-15P
GRR2-G	115	10.0	43	26.6	6	1/4	1453	2898	150/19	548	5-15P
GRR3-G	115	16.0	63	41.0	9	1/5-1/4	2058	4191	150/28	774	5-20P
FREEZERS											
GFR1-G	115	7.8	20	12.1	3	1/3	1340	1466	130/11	340	5-15P
GFR2-G	115	11.0	43	26.6	6	1/2	2376	2894	150/19	614	5-15P
GFR3-G	(2)115	7.8-11.0	63	41.0	9	1/3-1/4	3365	3551	150/24	854	(2)5-15P
Remote											
GRR1R-G	115	4.0	20	12.1	3	1/5*	820	2010	130/15	290	NA
GRR2R-G	115	5.0	43	26.6	6	1/4*	1453	2898	150/19	444	NA
FREEZERS											
GRR3R-G	115	9.0	63	41.0	9	3/4*	2058	4191	150/28	630	NA
GFR1R-G	115	5.9	20	12.1	3	1/3*	1340	1466	130/11	290	NA
GFR2R-G	115	7.1	43	26.6	6	1/2*	2376	2894	150/19	444	NA
GFR3R-G	115	13.0	63	41.0	9	3/4*	3365	3551	150/24	630	NA

*Recommended.



Installation

Location

Be sure the location chosen has a floor strong enough to support the total weight of the cabinet and its contents. Certain cabinets with its contents in this line can weigh up to 1500 pounds. The floor must be capable of supporting twice that weight.

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

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

Outside cabinet: Be sure that the unit has access to ample air. Avoid hot corners and locations near stoves and ovens.

It is recommended that the unit be installed no closer than 2" from any wall and should have a 12" clearance above. Avoid exposing glass door units to direct sunlight. Direct sunlight through the glass doors will make the ABS liner fade and become brittle and will greatly reduce refrigeration efficiency.

Caster/leg installation

Units are normally shipped with casters and legs installed. However, units that are shipped with the casters or legs loose will require installation of those components. During installation of the casters/legs the unit must be adequately stabilized.



Failure to do this could result in damage to the equipment or serious injury to the operator.

First, remove the two bolts from the bottom of the unit holding it to the pallet. These bolts are located under the wood deck on the pallet and can be loosened with a 3/4" open end or socket wrench. Carefully slide the unit on the pallet until one of the sets of four holes for the casters/legs are exposed. Take the caster/leg and align the holes on its mounting plates with the holes in the bottom of the unit. Using four 5/16-18 self-threading bolts supplied with the unit secure the caster/leg to the unit using a 1/2" open end or socket wrench. These bolts will require considerable force to tighten. Repeat the process on the other three casters/legs.

Leveling

A level cabinet looks better and performs more efficiently. It also helps with the proper closing of the doors and prevents undue strain on the unit. Place a level on top of the unit from front to back and left to right. To level a unit on legs, turn the foot counterclockwise to extend and clockwise to retract. The foot can be turned with a 1" open end or adjustable wrench.

To level a unit on casters, four leveling shims are provided with one and two door units, six shims are provided with three door units. These shims are 1/16" thick galvanized plates 1 3/8"W x 3 3/4" L. Place the required number of shims under the proper caster to level the unit. Once the unit is level loosen the four mounting screws holding the caster to the rail on which the caster(s) shims were placed. Remove the shims from under the caster and insert between the mounting plate and the rail. Tighten the mounting screws.

Stabilizing

Some models are supplied on casters for your convenience, ease of cleaning underneath and for mobility. It is very important, however, that the cabinet be installed in a stable condition with the front wheels locked while in use.



Should it become necessary to lay the unit on its side or back for any reason, allow at least 24 hours before start-up to allow compressor oil to flow back to the sump.

Electrical Connection

Refer to the amperage data on page 3, 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.



The temperature control must be turned off and the unit disconnected from the power source whenever performing service, maintenance functions or cleaning the refrigerated area.



Field Reversing doors is not recommended and will void product warranty.

Maintenance

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

Do not use an abrasive cleaner because it will scratch the metal and plastic.

Cleaning the condenser

In order to maintain proper refrigeration and energy performance the condensing unit must be cleaned regularly. Failure to perform these cleanings could result in compressor failure and/or product loss. At least every 30 days the condenser coil should be cleaned of dust, dirt and grease. To perform this



service, disconnect the electrical power from the unit. Remove the louver by taking out the top screws and lifting off the bottom catches. Using a vacuum or stiff brush remove dust and other obstructions from the front of the condenser. If the dirt is more stubborn a commercial condenser cleaner is available, please consult your factory service person for more information. When finished replace the louver and reconnect the electrical power.

Door gaskets should be cleaned as required to maintain their ability to seal properly. Do not use sharp tools or knives to scrape the bellows as this may tear the gasket and eliminate its ability to seal. A soft bristle brush and solution of soap and water will keep the gaskets clean. Do not use full strength de-greasing agents on the gasket.

Operation Information



Do not place hot pans on the white ABS liner. Do not throw items into the storage area. Failure to heed these recommendations could result in damage to the interior of the cabinet or the blower coil.

After plugging the unit in, the unit will operate immediately.

Temperature Control Instruction

Refrigerators: A thermostat, located at the top of the refrigerator evaporator housing, 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 temperature and toward “7” for lower temperatures.

Freezers: A thermostat, located at the top of the freezer on the right hand side of the evaporator housing, controls the temperature in the box. The factory setting for the control is “4” and maintains about -3°F (-19°C) in the box. Set toward “1” for higher temperature and toward “7” for lower temperatures.

Refrigeration cycle

During the refrigeration cycle, for a freezer, the timer supplies power to the temperature control, evaporator fan motors and activates the condensing unit as needed. The fan operates only during the refrigeration cycle. Any door being opened turns off the fan motors and turns on the interior light.

- 1) The temperature control allows for the coil clearing after each off cycle and before the compressor runs again.
- 2) Evaporator fan motors run continually on refrigerators only.
- 3) Interior lights are activated by the jamswitch when any door is opened.
- 4) The anti-sweat heater around each door opening cycles with the compressor.

Defrost Cycle

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 70°F (13°C). When this temperature is sensed by the defrost limit control, the defrost control switches to refrigeration mode.

If for any reason the timer remains in defrost for a period of time greater than 40 minutes, a back-up defrost termination is also provided. It can be changed by adjusting the electric control switches as shown on page 7.

Freezer Defrost Control

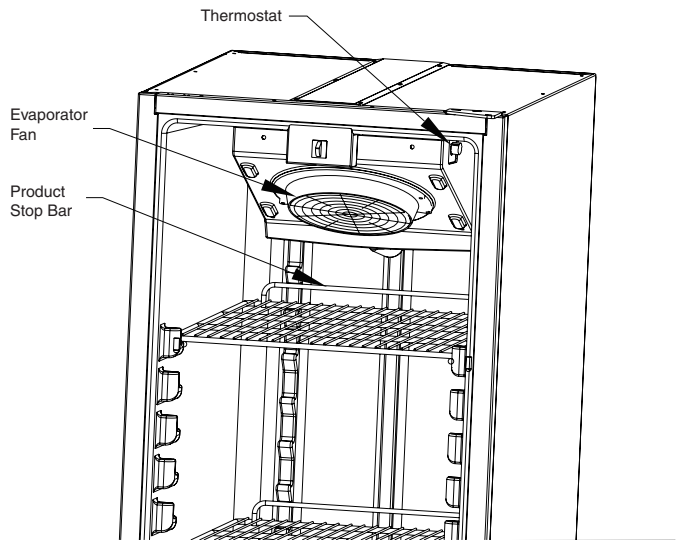
All freezers are equipped with an Air-o-tronics defrost timer for automatic defrosting of the evaporator coil. See page 7. The defrost timer cannot be adjusted to the time of day.

Operation

The electric defrost controller is preset at the factory to provide a defrost cycle every 6 hours (4 defrosts per day). If it is necessary to change the number of defrosts due to unusual operating conditions, it can be accomplished by adjusting switches as shown on page 7.



Even under the most severe operating conditions it should not be necessary to set the back-time greater than 60 minutes. Consult the factory if complete de-icing of the coil is not accomplished.



Unit loading

When loading the top shelf, maintain 4” of space between the fan guard and product. Do not allow product to pass stop bar on the back of the shelf. No product should be placed between the back shelf supports and center ribs in order to maintain good airflow. Failure to keep this space can cause inconsistent food temperature from top to bottom.

Shelf Installation -2 and 3 door units

Installing two and three door shelves:

1. Insert shelf through door opening, the shelf will need to be tilted as shown in figure 1.
2. Slide shelf through the notch above the mullion shelf support at your preferred height. (figure 2.)

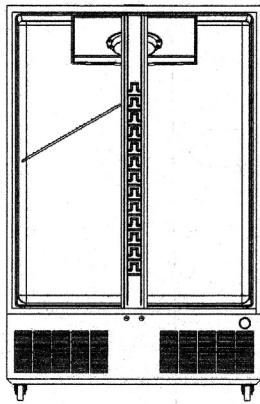


Figure 1

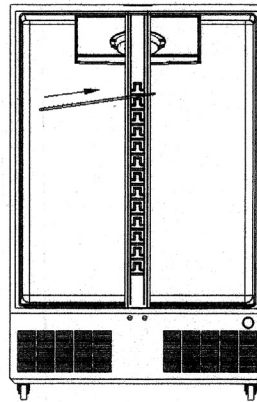


Figure 2

3. Level shelf and slide towards outside wall of unit (figure 3). Shelf can now be lowered on the shelf supports. (figure 4)

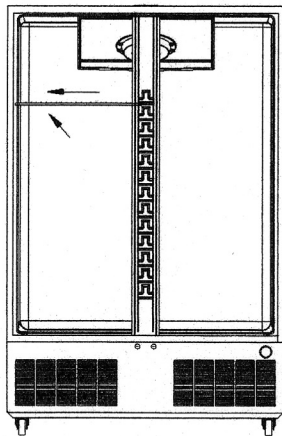


Figure 3

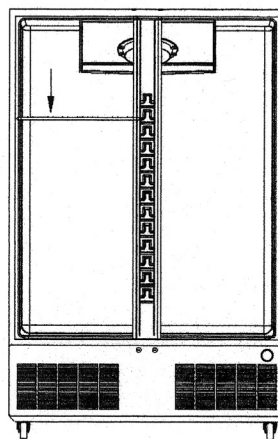


Figure 4

Defrost Timer Programming Guide (all models)

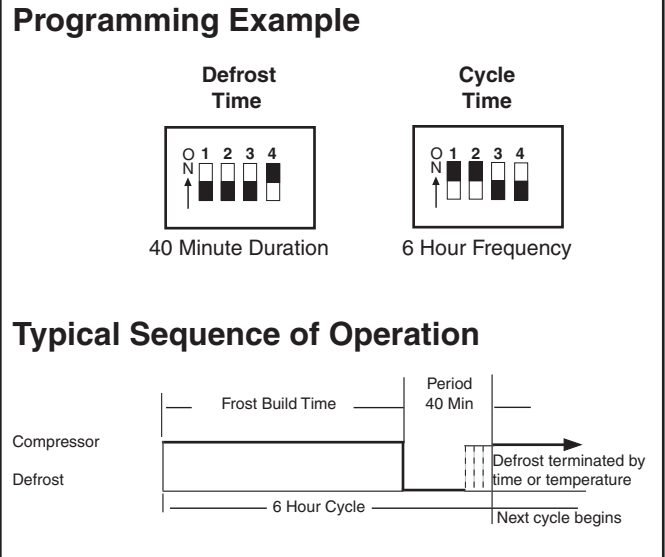
A (2) 4 position dip switch provides user control of defrost duration and cycle time. The selection is as follows.

Defrost Time

Dip Switch Setting				min
off	off	off	off	void
on	off	off	off	5
off	on	off	off	10
on	on	off	off	15
on	on	on	off	20
on	off	on	off	25
off	on	on	off	30
on	on	on	off	35
off	off	off	on	40
on	off	off	on	45
off	on	off	on	50
on	on	off	on	55
off	off	on	on	60

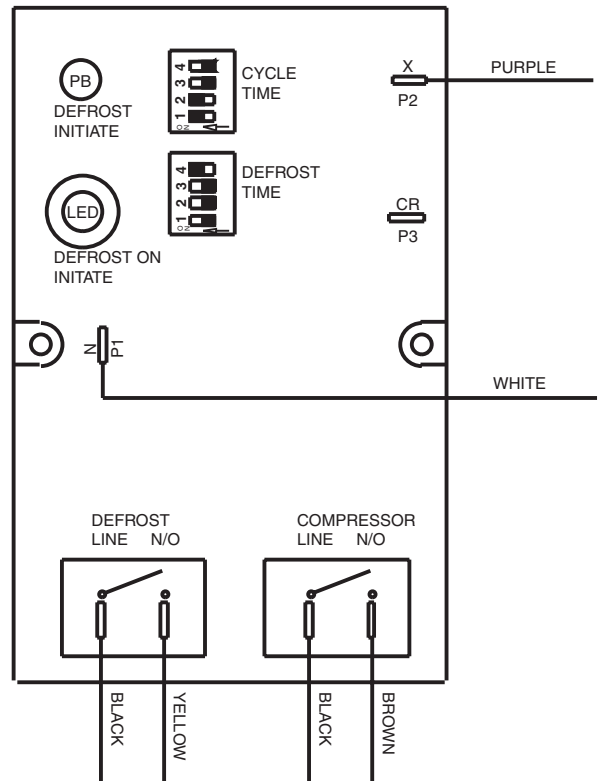
Cycle Time

Dip Switch Setting				hrs
off	off	off	off	void
on	off	off	off	2
off	on	off	off	4
on	on	off	off	6
on	on	on	off	8
on	off	on	off	10
off	on	on	off	12
on	on	on	off	14
off	off	off	on	16
on	off	off	on	18
off	on	off	on	20
on	on	off	on	22
off	off	on	on	24

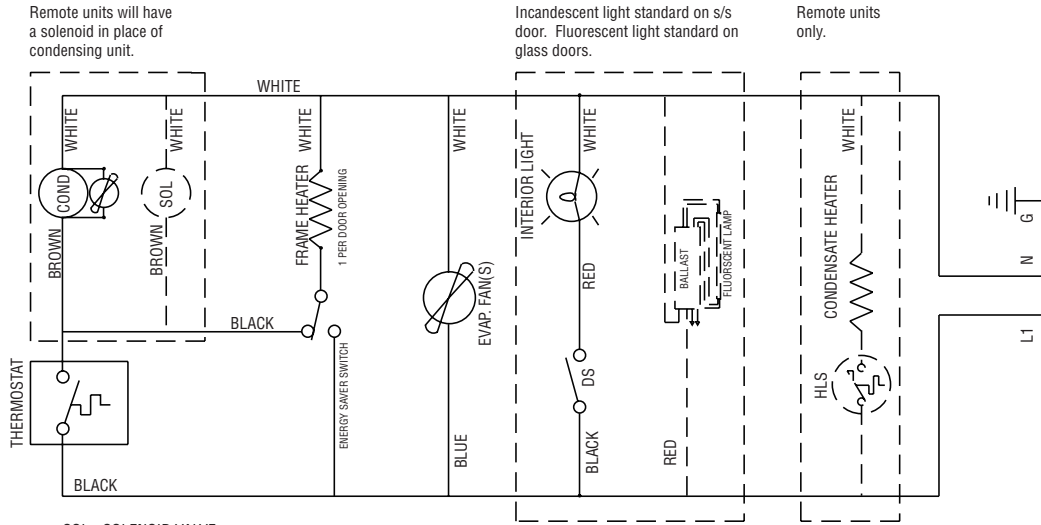


Defrost timer

NOTE: Dip switches shown in default positions.

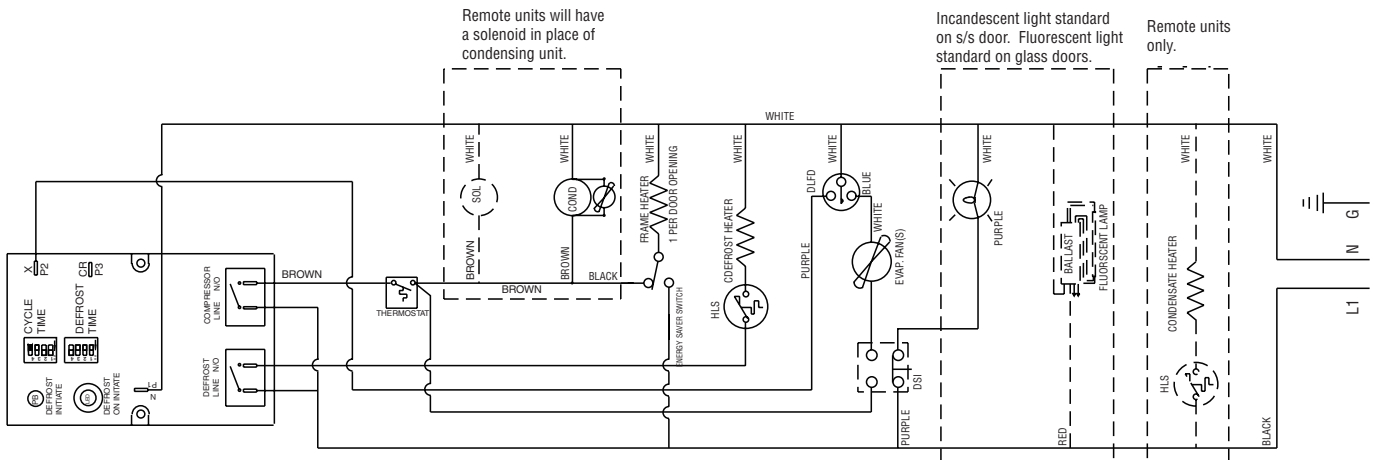


Wiring Diagram: Refrigerators



Display lights are on "G" models only. Solenoid valve and condensate heaters are on remote models only. Power cord may or may not be provided.

Wiring Diagram: Freezers



Display lights are on "G" models only. Defrost limit used with mechanical controls only. Solenoid and condensate heaters are on remote models only. Power cord may or may not be provided.

Replacement Parts

VFR2-G

000-AB9-010G	Glass door LH
000-AB9-010H	Glass door RH
000-AHA-020G	Assy. louver 1-dr.
1701313	Gasket
2162515	Fan motor
2193907	Lamp, bulb 36"
2193939	Lampholder LH
2193940	Lampholder RH
2194046	Fan delay/defrost limit
2194239	Heater defrost
2194606	Rocker switch
3233952	Bracket hinge, Top/Rt., Bottom/Lt.
3233953	Bracket Hinge Top/Lt., Bottom/Rt.
3234641	Hinge bracket
3234644	Caster
3234753	Door lock
3234754	Caster, w/ brake
3516043	Temp control
3516057	Accumulator
3516185	Guard, fan
3516191	Filter dryer
3516213	Evap. coil, 2-dr.
3516300	Defrost timer
3516313	Dial thermometer
3526909	Cond. unit, 2-dr.
3977966	Wire shelf 2-dr.
2194620	Rocker switch
9321190	Screw, evap. hsnng.
2194235	Heater safety

VFR3-G

PART #	DESCRIPTION
000-AB9-010G	Glass door LH
000-AB9-010H	Glass door RH
000-AHA-020K	Assy. louver 3-dr.
1701313	Gasket
2162515	Fan motor
2193907	Lamp, bulb 36"
2193928	Lamp, bulb 18"
2193939	Lampholder LH
2193940	Lampholder RH
2194046	Fan delay/defrost limit
2194235	Safety switch
2194578	Ballast
2194579	Defrost heater 2-dr.
2194590	Defrost heater 1-dr.
2194606	Rocker switch
3233952	Bracket hinge, Top/Rt., Bottom/Lt.
3233953	Bracket Hinge Top/Lt., Bottom/Rt.
3234641	Hinge bracket
3234644	Caster
3234753	Door lock
3234754	Caster, w/ brake
3516043	Temp. control
3516051	Accumulator
3516157	Accumulator
3516185	Guard, fan
3516191	Filter dryer
3516213	Evap. coil, 2-dr.
3516310	Evap. coil, 1-dr.
3516300	Defrost timer
3516313	Dial thermometer
3526809	Cond. unit, 1-dr.
3526909	Cond. unit, 2-dr.
3977962	Wire shelf 1-dr.
3977966	Wire shelf 2-dr.
2194620	Rocker switch
9321190	Screw, evap. hsnng.

VRR1-SH

PART #	DESCRIPTION
000-AB9-010B	Solid door, Top/RT, Bot/LT
000-AB9-010D	Solid door, Bot/RT, Top/LT
000-AHA-020F	Assy. louver 1-dr.
000-AHE-0030	Hor. mullion assy.
2162515	Fan motor
2194005	Light bulb
2194224	Temp control
2194606	Rocker switch
2194619	Light socket
3233955	Pivot hinge BTM/RT
3234225	Hinge cartridge assy.
3234480	Bracket 1/2 dr., RH
3234641	Hinge bracket top
3234644	Caster
3234753	Door lock
3234754	Caster, w/ brake
3516051	Accumulator
3516185	Guard, fan
3516191	Filter dryer
3516309	Evap. coil, 1-dr.
3516313	Thermometer
3526807	Cond. unit, 1-dr.
3977962	Wire shelf 1-dr.
2194620	Rocker switch
9321190	Screw, evap. hsnng.

VRR2-SH

PART #	DESCRIPTION
000-AB9-010B	Solid door, Top/RT, Bot/LT
000-AB9-010D	Solid door, Bot/RT, Top/LT
000-AHA-020G	Assy. louver 2-dr.
1701289	Gasket, door
2162515	Fan motor
2194005	Light bulb
2194224	Temp control
2194606	Rocker switch
2194619	Light socket
3233954	Pivot hinge, BTM/LT
3233955	Pivot hinge BTM/RT
3234225	Hinge cartridge assy.
3234479	Bracket 1/2 dr., LH
3234480	Bracket 1/2 dr., RH
3234641	Hinge bracket top
3234644	Caster
3234753	Door lock
3234754	Caster, w/ brake
3516051	Accumulator
3516185	Guard, fan
3516191	Filter dryer
3516312	Evap. coil, 2-dr.
3516313	Thermometer
3977966	Cond. unit, 2-dr.
2194620	Rocker switch
9321190	Screw, evap. hsnng.

VRR3-SH

PART #	DESCRIPTION
000-AB9-010B	Solid door, Top/RT, Bot/LT
000-AB9-010D	Solid door, Bot/RT, Top/LT
000-AHA-020K	Assy. louver 3-dr.
1701289	Gasket, door
2162515	Fan motor
2194005	Light bulb
2194224	Temp control
2194606	Rocker switch
2194619	Light socket
3233954	Pivot hinge, BTM/LT
3233955	Pivot hinge BTM/RT
3234225	Hinge cartridge assy.
3234479	Bracket 1/2 dr., LH
3234480	Bracket 1/2 dr., RH
3234641	Hinge bracket top
3234644	Caster
3234753	Door lock
3234754	Caster, w/ brake
3516051	Accumulator
3516185	Guard, fan
3516191	Filter dryer
3516309	Evap. coil, 1-dr.
3516312	Evap. coil, 2-dr.
3516313	Thermometer
3526807	Cond. unit, 1-dr.
3526808	Cond. unit, 2-dr.
3977962	Wire shelf 1-dr.
3977966	Wire shelf 2-dr.
2194620	Rocker switch
9321190	Screw, evap. hsnng.

VRR1-GH

PART #	DESCRIPTION
000-AB9-010J	Glass door, Top/RT
000-AB9-010N	Glass door, Bot/RT
000-AHA-020F	Assy. louver 1-dr.
1701314	Gasket, door
2162515	Fan motor
2193928	Lamp bulb, 18"
2193939	Lampholder LH
2193940	Lampholder RH
2194161	Ballast
3233953	Hinge Top/Lt. Bottom/Rt.
2194224	Temp control
2194606	Rocker switch
3233953	Hinge Top/LT BTM/RT
3234480	Bracket 1/2 dr., RH
3234641	Hinge bracket top
3234644	Caster
3234753	Door lock
3234754	Caster, w/ brake
3516051	Accumulator
3516185	Guard, fan
3516191	Filter dryer
3516309	Evap. coil, 1-dr.
3516313	Thermometer
3526807	Cond. unit, 1-dr.
3977962	Wire shelf 1-dr.
9321190	Screw, evap. hsnng.

VRR2-GH

PART #	DESCRIPTION
000-AB9-010I	Glass door, Top/LT
000-AB9-010J	Glass door, Top/RT
000-AB9-010M	Glass door, Bot/LT
000-AB9-010N	Glass door, Bot/RT
000-AHA-020G	Assy. louver 2-dr.
1701314	Gasket, door
2162515	Fan motor
2193903	Ballast
2193907	Lamp bulb, 36"
2193939	Lampholder LH
2193940	Lampholder RH
2194224	Temp control
2194606	Rocker switch
3233952	Hinge TOP/RT BTM/LT
3233953	Hinge TOP/LT BTM/RT
3234479	Bracket 1/2 dr., LH
3234480	Bracket 1/2 dr., RH
3234641	Hinge bracket top
3234644	Caster
3234753	Door lock
3234754	Caster, w/ brake
3516051	Accumulator
3516185	Guard, fan
3516191	Filter dryer
3516312	Evap. coil, 2-dr.
3516313	Thermometer
3526808	Cond. unit, 2-dr.
3977966	Wire shelf 2-dr.
9321190	Screw, evap. hsnng.

VRR3-GH

PART #	DESCRIPTION
000-AB9-010I	Glass door, TOP/LT
000-AB9-010J	Glass door, TOP/RT
000-AB9-010M	Glass door, BOT/LT
000-AB9-010N	Glass door, BOT/RT
000-AHA-020K	Assy. louver 3-dr.
1701314	Gasket, door
2162515	Fan motor
2193907	Lamp bulb 36"
2193928	Lamp bulb 18"
2193939	Lampholder LH
2193940	Lampholder RH
2194161	Ballast
2194224	Hinge Top/Lt. Bottom/Rt.
2194606	Temp control
3233952	Rocker switch
3233953	Hinge TOP/LT BOT/LT
3233953	Hinge TOP/LT BOT/RT
3234479	Bracket 1/2 dr., LH
3234480	Bracket 1/2 dr., RH
3234641	Hinge bracket top
3234644	Caster
3234753	Door lock
3234754	Caster, w/ brake
3516051	Accumulator
3516185	Guard, fan
3516191	Filter dryer
3516309	Evap. coil, 1-dr.
3516313	Thermometer
3516312	Evap. coil, 2-dr.
3516313	Thermometer
3526807	Cond. unit, 1-dr.
3526808	Cond. unit, 2-dr.
3977962	Wire shelf, 1-dr.
3977966	Wire shelf 2-dr.
9321190	Screw, evap. hsnng.

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, ONE YEAR 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.

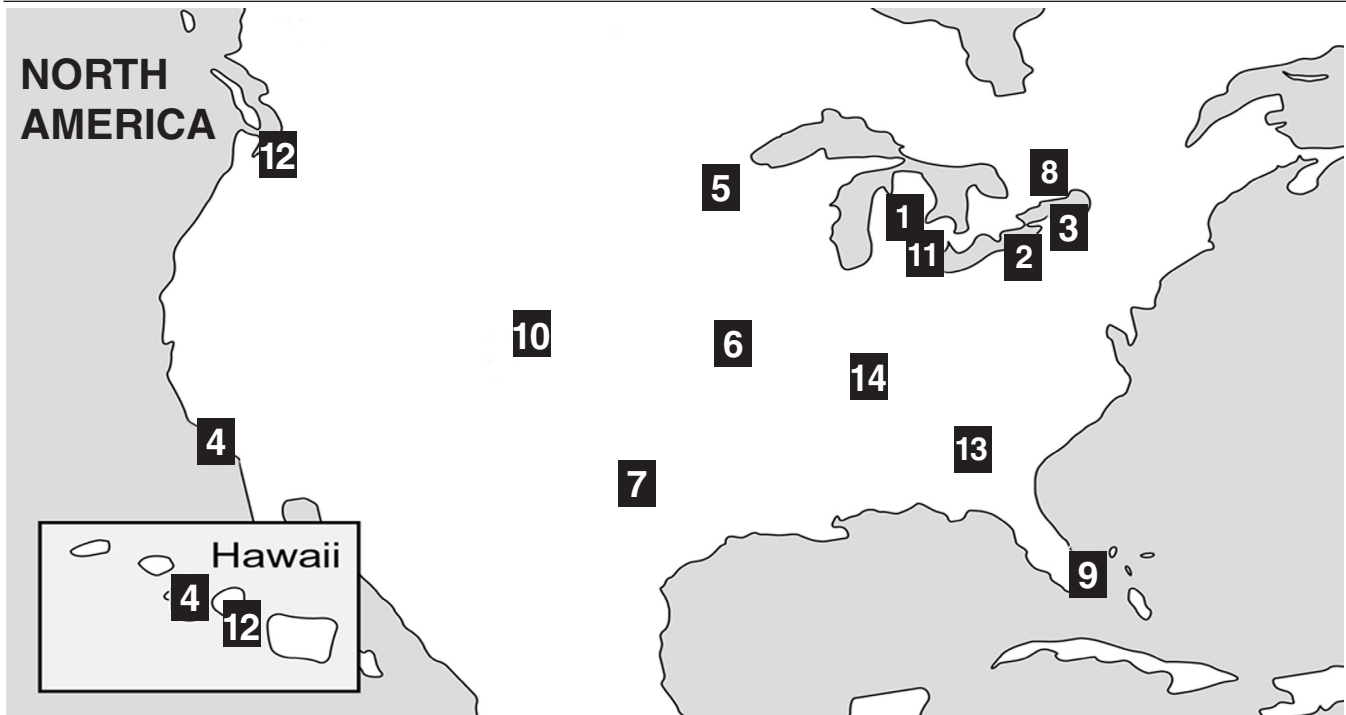
Other than any applicable Delfield Standard One year Limited Warranty, this Delfield Additional Four Year Protection Plan and any applicable Delfield Service Labor Contract, the Original Purchaser agrees and acknowledges that no other warranties are offered or provided in connection with or for the Motor-Compressor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



NOTES

Delfield Authorized Parts Depots



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

Delfield has 14 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) 733-8821 • Fax (800) 669-0619 • www.delfield.com
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