



Reach-in Laboratory/Pharmacy Refrigerators/Freezers

Installation, Use and Care Manual

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



**Important Information
Read Before Use
Please Save These Instructions!**



August 2013



Important Warning And Safety Information



WARNING

Read This Manual Thoroughly Before Operating, Installing, Or Performing Maintenance On The Equipment.



WARNING

Failure To Follow Instructions In This Manual Can Cause Property Damage, Injury Or Death.



WARNING

Do Not Store Or Use Gasoline Or Other Flammable Vapors Or Liquids In The Vicinity Of This Or Any Other Appliance.



WARNING

Unless All Cover And Access Panels Are In Place And Properly Secured, Do Not Operate This Equipment.



WARNING

This Appliance Is Not Intended For Use By Persons Who Lack Experience Or Knowledge, Unless They Have Been Given Supervision Or Instruction Concerning Use Of The Appliance By A Person Responsible For Their Safety.



WARNING

This Appliance Is Not To Be Played With.



WARNING

Do Not Clean With Water Jet.



WARNING

Do Not Use Electrical Appliances Inside The Food Storage Compartment Of This Appliance.



CAUTION

Observe the following:

- Minimum clearances must be maintained from all walls and combustible materials.
- Keep the equipment area free and clear of combustible material.
- Allow adequate clearance for air openings.
- Operate equipment only on the type of electricity indicated on the specification plate.
- Unplug the unit before making any repairs.
- Retain this manual for future reference.

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Receiving & 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. Be certain to check the compressor compartment housing and visually inspect the refrigeration package. Be sure lines are secure and base is still intact.
6. Freight carriers can supply the necessary damage forms upon request.
7. Retain all crating material until an inspection has been made or waived.

Serial Number Location

The serial number is on the identification plate that also includes the model number. On refrigeration and freezer units the identification plate is located inside the left most door near the top front corner of the left interior wall.

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

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If you have questions regarding your optional recorder and or temperature alarm, refer to the operating instructions that accompany this manual.

Warranty Information

Visit <http://www.delfieldscientific.com/?xhtml=xhtml/mcl/us/en/general/warranty-info.html> to:

- Register your product for warranty.
- Verify warranty information.
- View and download a copy of your warranty.

Regulatory Certifications

Models are certified by:



Underwriters Laboratories (UL)

Underwriters Laboratories of Canada (ULC)

Model Numbers

Series	Finish	Temp	Configuration	Section	Doors
L=Scientific Line	S=Stainless interior & exterior A=Stainless exterior, aluminum interior M=Stainless front, aluminum sides and interior	R=Refrigerator F=Freezer D=Dual Temp	None=Reach-in PT=Pass Thru RL=Refrigerator Left TR=Top Refrigerator BB=Blood Bank C=Chromatography	1=1 Section 2=2 Section 3=3 Section	S=Solid Full SH=Solid Half G=Hinged Glass Full GH=Hinged Glass Half SLG=Sliding Glass Full

Introduction

Model numbers starting with the letters “LS” have a stainless steel exterior and interior. Model numbers starting with the letters “LA” have an aluminum interior and a stainless steel exterior. Model numbers starting with the letters “LM” have an aluminum interior and exterior with a stainless steel front and shroud. Door gaskets are magnetic and mount to the door, snapping in place and are removable without tools. Keyed door lock is mounted in the door next to the handle.

Doors can be removed from the cabinet without the use of tools. Each door has two edge mount, self-closing, cam lift style hinges.

Refrigeration System

All components are mounted to the exterior cabinet ceiling, outside the cold zone and are assembled as one-piece and can be removed as one-piece. Environmentally friendly R404A refrigerant is used. The system has the capability of maintaining between 33°F (1°C) and 40°F (4°C) in heavy use operations. Refrigerant is metered using a highly responsive thermostatic expansion valve. Systems are controlled using Delfield’s electronic temperature control. It provides improved pull down times, reducing compressor cycling and longer compressor life with lower energy consumption. Evaporator condensate is eliminated using an energy efficient hot gas system.

Freezer Refrigeration System

All components are mounted to the exterior cabinet ceiling, outside the cold zone and are assembled as one-piece and can be removed as one-piece. Environmentally friendly R404A refrigerant is used. The system has the capability of maintaining between -4°F (-20°C) and 0°F (-17°C) in heavy use operations. Refrigerant is metered using a highly responsive thermostatic expansion valve. System is controlled using Delfield’s electronic temperature control, which provides improved pull down times, reducing compressor cycling and longer compressor life with lower energy consumption. Control system automatically defrosts the evaporator coil every 4 hours to assure evaporator coil is free of ice and operating at optimum efficiency. Evaporator condensate is eliminated using an energy efficient hot gas system.

Dual Temperature Refrigeration/Freezer

Each compartment has its own separate refrigeration system. Condensing units are located on top of the cabinet, outside the cold zone, behind the removable upper shroud. Evaporator coils are located inside the cabinet mounted to the interior ceiling of each compartment. Defrost is automatic. In single section dual temperature models, condensate travels down a tube in the cabinet sidewall to a receptacle mounted to the exterior bottom of the cabinet where it evaporates with the aid of an electric heater. Each compartment’s temperature is individually monitored and controlled. Two exterior digital thermometers monitor temperature. Refrigerator compartment maintains temperature between 33°F (1°C) and 41°F (5°C). Freezer compartment maintains temperature between -2°F (-19°C) and -7°F (-14°C). Refrigerant is metered using a highly responsive thermostatic expansion valve.

Specifications

Reach-In Refrigerators - Hinged Doors - Standard Width & Depth

Model	Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug
LSR1-S, LSR1-G, LAR1-S, LAR1-G, LMR1-S, LMR1-G	115	6.0	24.96	17.08	4	1/4	2092	12.5	418lbs/190kg	5-15P
LSR2-S, LSR2-G, LAR2-S, LAR2-G, LMR2-S, LMR2-G	115	9.5	51.92	34.16	8	1/3	3226	19	650lbs/295kg	5-15P
LSR3-S, LSR3-G, LAR3-S, LAR3-G, LMR3-S, LMR3-G	115	14.5	78.89	51.24	12	1/2	5465	24	830lbs/376kg	5-20p

Reach-In Refrigerators - Sliding Doors

Model	Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug
LSR2-SLG, LAR2-SLG, LMR2-SLG,	115	9.5	51.92	34.16	8	1/3	3226	19	670lbs/304kg	5-15P

Reach-In Refrigerator/Freezer Combinations - Dual Temps - Hinged Doors - Standard Width & Depth

Model	Section	V	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug
LSDTR1-SH, LSDTR1-GH, LADTR1-SH, LADTR1-GH, LMDTR1-SH, LMDTR1-GH,	Refrigerator	115	12.0	10.81	17.08	4	1/5	1590	11	525lbs/238kg	5-20P
	Freezer			10.81	17.08	4	1/4	1040	12		
LSDRL2-S, LADRL2-S, LMDRL2-S	Refrigerator	115	15.0	24.96	17.08	4	1/4	2092	12.5	730lbs/331kg	5-20P
	Freezer			24.96	17.08	4	1/2	1516	12.5		
LSDRL2-G, LADRL2-G, LMDRL2-G	Refrigerator	115/208-230	8.0	24.96	17.08	4	1/4	2092	12.5	730lbs/331kg	14-20P
	Freezer			24.96	17.08	4	1/2	1923	12.5		

Reach-In Chromatography Refrigerators - Hinged Doors - Standard Width & Depth

Model		Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug
LSR1C-G, LAR1C-G, LMR1C-G	Cabinet	115	6.0	24.96	4.16	(2) 1/2 shelves	1/4	2092	12.5	418lbs/190kg	5-15P
	Receptacles	115	15.0	-	-	-	-	-	-	-	5-15P GFCI
LSR2C-G, LAR2C-G, LMR2C-G	Cabinet	115	9.5	51.92	12.7	(2) 1/2 shelves (2) full shelves	1/3	3226	19.0	650lbs/295kg	5-15P
	Receptacles	115	15.0	-	-	-	-	-	-	-	5-15P GFCI
LSR3C-G, LAR3C-G, LMR3C-G	Cabinet	115	14.5	78.89	21.24	(2) 1/2 shelves (4) full shelves	1/2	5465	24.0	830lbs/376kg	5-20p
	Receptacles	115	-	-	-	-	-	-	-	-	5-15P GFCI

Specifications, continued

Reach-In Chromatography Refrigerators - Sliding Doors

Model		Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug
LSR2C-SLG, LAR2C-SLG, LMR2C-SLG,	Cabinet	115	9.5	51.92	12.7	(2) 1/2 shelves (2) full shelves	1/3	3226	19.0	670lbs/304kg	5-15P
	Receptacles	115	-	-	-	-	-	-	-	-	5-15P GFCI

Reach-In Freezers - Hinged Doors - Standard Width & Depth

Model	Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug
LSF1-S, LAF1-S, LMF1-S	115	9.0	24.96	17.08	4	1/2	1516	12.5	440lbs/200kg	5-15p
LSF1-G, LAF1-G, LMF1-G	115	11.0	24.96	17.08	4	3/4	1923	12.5	440lbs/200kg	5-15p
LSF2-S, LAF2-S, LMF2-S	115	14.3	51.92	34.16	8	3/4	2648	17	710lbs/322kg	5-20P
LSF2-G, LAF2-G, LMF2-G	115/208-230	12.6	51.92	34.16	8	1	4793	30	710lbs/322kg	N/A

Pass-Thru Refrigerators - Hinged Doors - Standard Width

Model	Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug
LSRPT1-S, LARPT1-S, LMRPT1-S	115	6.0	26.64	17.08	4	1/4	2092	12.5	455lbs/206kg	5-15P
LSRPT1-G, LARPT1-G, LMRPT1-G	115	7.0	26.64	17.08	4	1/3	2488	12.5	455lbs/206kg	5-15P
LSRPT2-S, LARPT2-S, LMRPT2-S	115	14.5	55.42	34.16	8	1/2	5465	24	700lbs/318kg	5-20P
LSRPT2-G, LARPT2-G, LMRPT2-G	115	14.5	55.42	34.16	8	1/2	5465	24	700lbs/318kg	5-20P
LSRPT3-S, LARPT3-S, LMRPT3-S	115/208-230	12.4	84.19	51.24	12	3/4	7569	48	972lbs/441kg	N/A

Reach-In Blood Bank Refrigerators - Hinged Doors - Standard Width

Model	Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug
LSR1BB-G, LAR1BB-G, LMR1BB-G	115	6.0	24.96	N/A	N/A	1/4	2092	12.5	418lbs/190kg	5-15P
LSR2BB-G, LAR2BB-G, LMR2BB-G	115	9.5	51.92	N/A	N/A	1/3	3226	19.0	650lbs/295kg	5-15P

Installation

Location

Cabinets 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, 1000 pounds. per door section. Reinforce the floor if necessary to provide for maximum loading. For the most efficient operation, be sure to provide good air circulation inside and out. The location should be selected so that the power cord can be connected without any extensions.

Inside Unit

Take care not to block airflow to the fans or heating elements and allow space along the front, back and sides.

Outside Unit

Be sure that the unit has access to ample air; avoid hot corners and locations near stoves and ovens. Provide a minimum clearance of 12" (30.5 cm) above the unit that is open to the front.



Due to the unique design of the One Door Dual Temp units, a 6" clearance is required at the back of the unit to ensure proper operation.

Door Removal

The doors can be removed during installation if necessary. Remove the shroud. Remove the door by opening the door to 90°, lift it up and ease it out of the hinge brackets

Leg, Caster, Utility Base Installation



Some cabinets may weigh over 1000 pounds (450 kg). Use a lifting device capable of supporting the unit when removing skid or installing legs, casters or utility base.

To install the legs, or casters refer to Figure 1. To install the utility base, refer to Figure 2. Proceed as follows:

1. Remove unit from skid.
2. Raise unit to access leg/caster mounting holes on bottom of unit.
3. Attach the legs, casters or utility base to bottom of cabinet using hex head bolts.

Leveling

After the cabinet has been placed in the desired location, cabinets with legs must be leveled. Level units from front to back and from side to side. Leveling will insure proper door operation and removal of condensate. Cabinets with casters must have the caster brake set so the cabinet cannot move.

Stabilizing

It is very important that all legs are properly adjusted to keep the cabinet level, evenly distribute the weight and to make sure the unit will not rock, lean or be unstable.

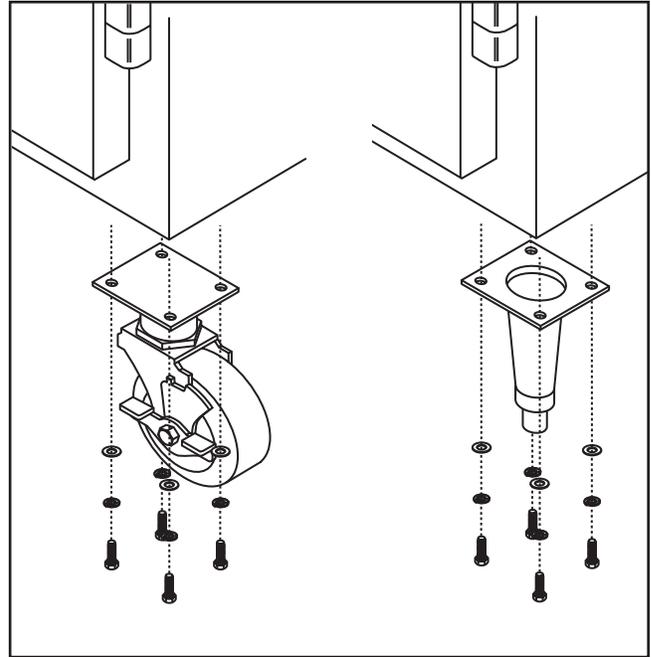


Figure 1. Leg or Caster Installation

Installation, continued

Electrical Connection



Refer to the amperage data list in the SPECIFICATIONS or the serial tag data and 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 supply cord or permanent connection to the unit. The power must be turned off and disconnected whenever performing maintenance or repair functions.



Units with two power cords must be plugged into individual branch circuits.



Chromatography models employ two power cords. During movement, cleaning or repair it is necessary to unplug both power cords.



Permanently connected units must be connected in accordance with NEC Article 422 Appliances, C-Disconnecting means. It is the responsibility of the end user to provide the disconnect means to satisfy the authority having jurisdiction.

The power cords supplied with this equipment are three-pronged plugs and must be connected to a three-pronged wall outlet for proper grounding. Do not use an adapter to connect to a two-pronged outlet. The three pronged-outlet provides a ground connection which must be used to prevent a shock hazard.



Have the wall outlet checked by a qualified electrician to be sure a proper ground is present and that the outlet provides the correct voltage and required amperage to match the rating plate.

Any power cord that is frayed or damaged should be replaced. When disconnecting the unit from the power source, do not pull on the wire. Firmly grip the plug and remove from outlet.

The plugs shown in Figure 3 are used on the various models.

Glycol Filled Bottle (for models that include it)

A bottle is provided for accurate cabinet temperature readings and needs to be filled. Ensure the bottle contains the correct mixture before installing probe and bottle in cabinet.

- Fill freezer bottles with a mix of 90% glycol/10% water.
- Fill refrigerator bottles with a mix of 10% glycol/90% water.

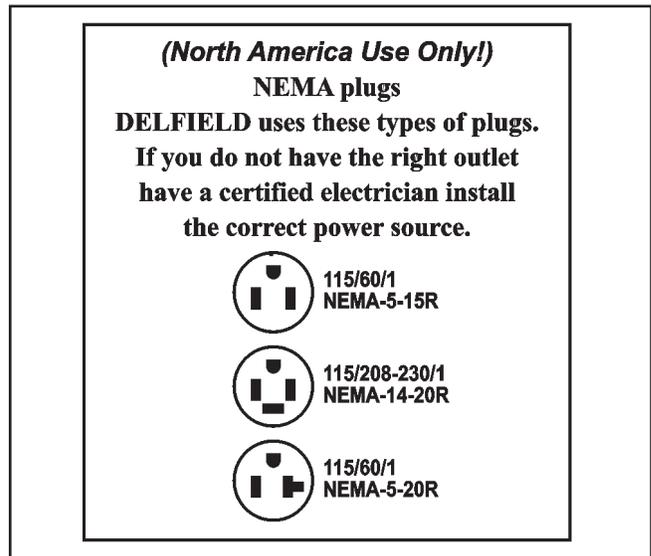


Figure 3. Plug Configurations

Danfoss AK-CC210 Control



Dual Temp Models have two controls.

If at any time the wrong selection is made stop pressing buttons and wait approximately 30 seconds and the display will time out. Restart from the first step.

To Adjust Set Point (Desired Temp)

1. Press and release the center button one time and the display will show the cabinet set point.
2. Use the top and bottom buttons to adjust the temp higher or lower to the desired temperature. (note: if the desired temperature is between 38 and 42 degrees set the temperature set point at 40 as the temp will fluctuate above and below the set point) .
3. Once the desired set point is reached on the display, press and release the center button one time to accept that temperature.

To Change From Celsius to Fahrenheit:

1. Press and hold the top button of the control until the display shows r01 then release the button.
2. Press the bottom button approximately 4 times until the display reads r05.

3. Press and release the center button one time and the display will show °F or °C
4. To change use the top or bottom button to scroll and select the temp format required.
5. Once the chosen format is visible in the display press and release the center button one time.
6. The display will return and say r05.
7. Do not press any buttons at this point, The display will time out in approximately 30 seconds and display the chosen format.



The set point regulates air temperature. The display is a measure of the bottle temperature. Initially there could be up to 3°F (1.6°C) difference between these two temperatures. It may take up to two hours for the bottle temperature (display) to reach the set point.

Maintenance

Door Gasket Maintenance

Door gaskets require regular cleaning to prevent mold and mildew build up and also to retain 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 crack. Never use sharp tools or knives to scrape or clean the gasket. Gaskets can be easily replaced and do not require the use of tools or an authorized service person. 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.

Drain Maintenance - Base

Each unit has a drain located inside the unit that removes the condensation from the evaporator coil and routes it to an external condensate evaporator pan. Each drain can become loose or disconnected during normal use. If you notice water accumulation on the inside of the unit be sure the drain tube is connected to the evaporator drain pan. If water is collecting underneath the unit make sure the end of the drain tube is in the condensate evaporator in the machine compartment. The leveling of the unit is important as the units are designed to drain properly when level. Be sure all drain lines are free of obstructions.

Caster Maintenance

Wipe casters with a damp cloth monthly to prevent corrosion.



The power switch 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 can damage the breaker strips and gaskets.

Stainless Steel Care and Cleaning

To prevent discoloration or rust on stainless steel several important steps need to be taken. First, we need to understand the properties of stainless steel. Stainless steel contains 70-80% iron, which will rust. It also contains 12-30% chromium, which forms an invisible passive film over the 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 discoloration or rust. 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. 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. Always rub with the grain of the steel. There are stainless steel cleaners available which can restore and preserve the finish of the steels protective layer. Early signs of stainless steel breakdown are 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!

Cleaning 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.

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

Doors/Hinges

Over time and with heavy use doors the hinges may become loose. If this happens tighten the screws that mount the hinge brackets to the frame of the unit. Loose or sagging doors can cause the hinges to pull out of the frame, which may damage both the doors and the hinges. In some cases this may require qualified service agents or maintenance personnel to perform repairs.

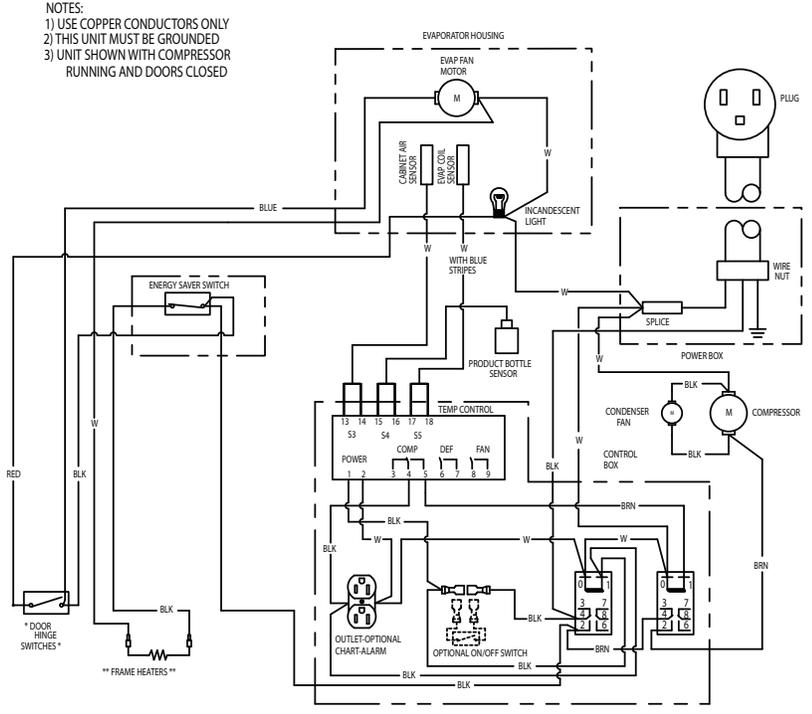
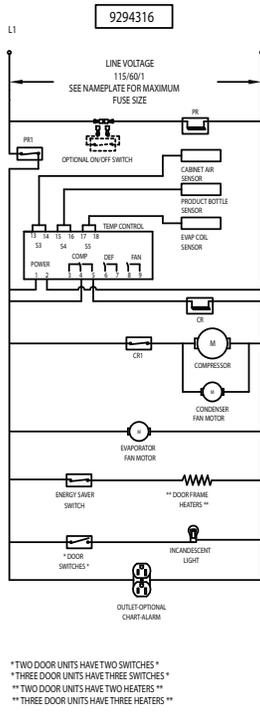


Overloading the storage area, restricting the airflow, and continuous opening and closing of the doors and drawers will hamper the units ability to maintain operational temperature.

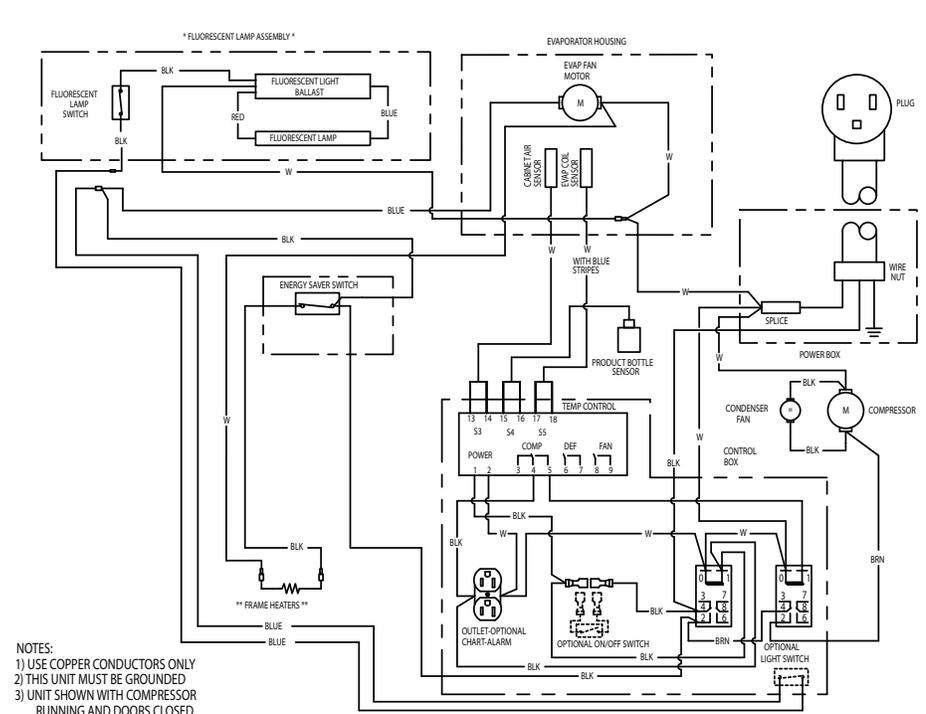
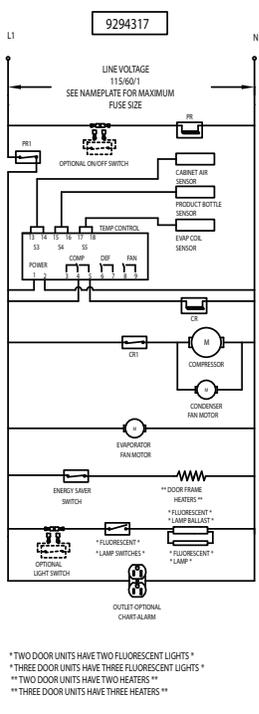
Continuous opening and closing of the doors will hamper the unit's ability to maintain optimum refrigeration temperature.

Wiring Diagram Refrigerators

Solid Doors



Glass Doors

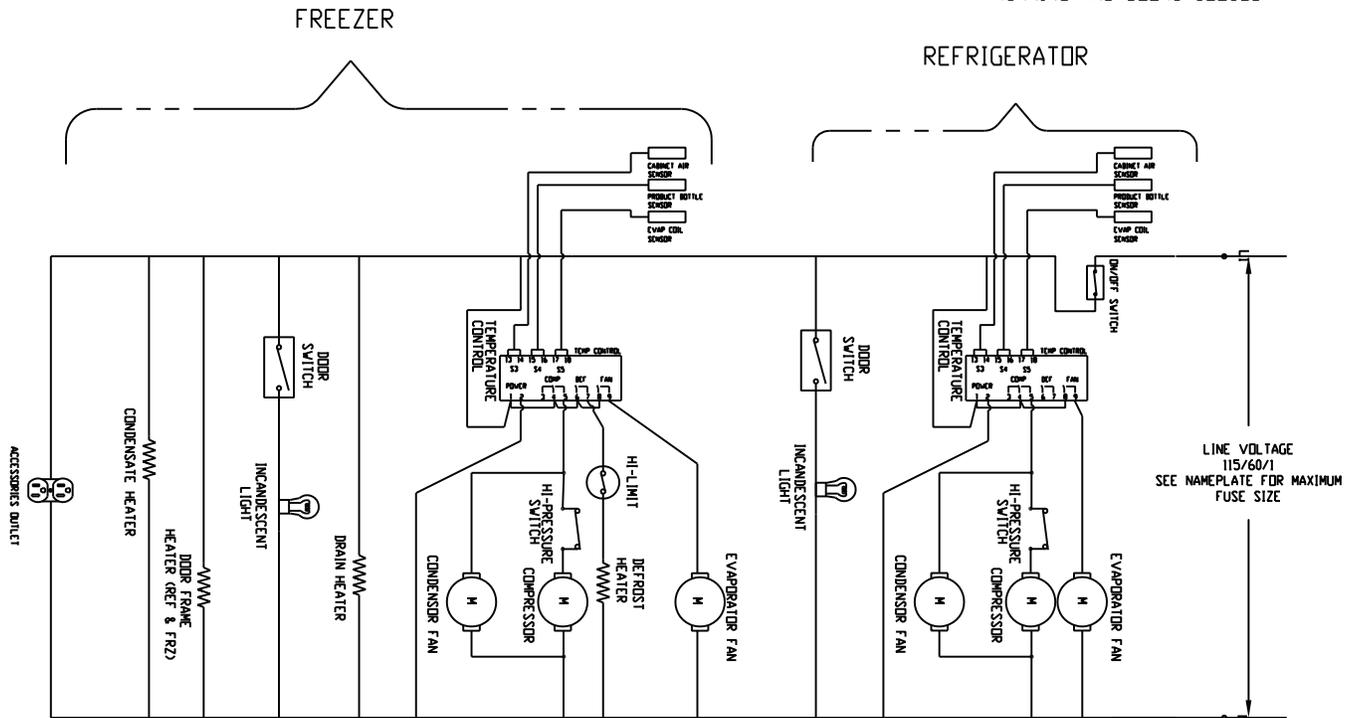


Wiring Diagram Refrigerator/Freezer Combination Models

Solid Doors

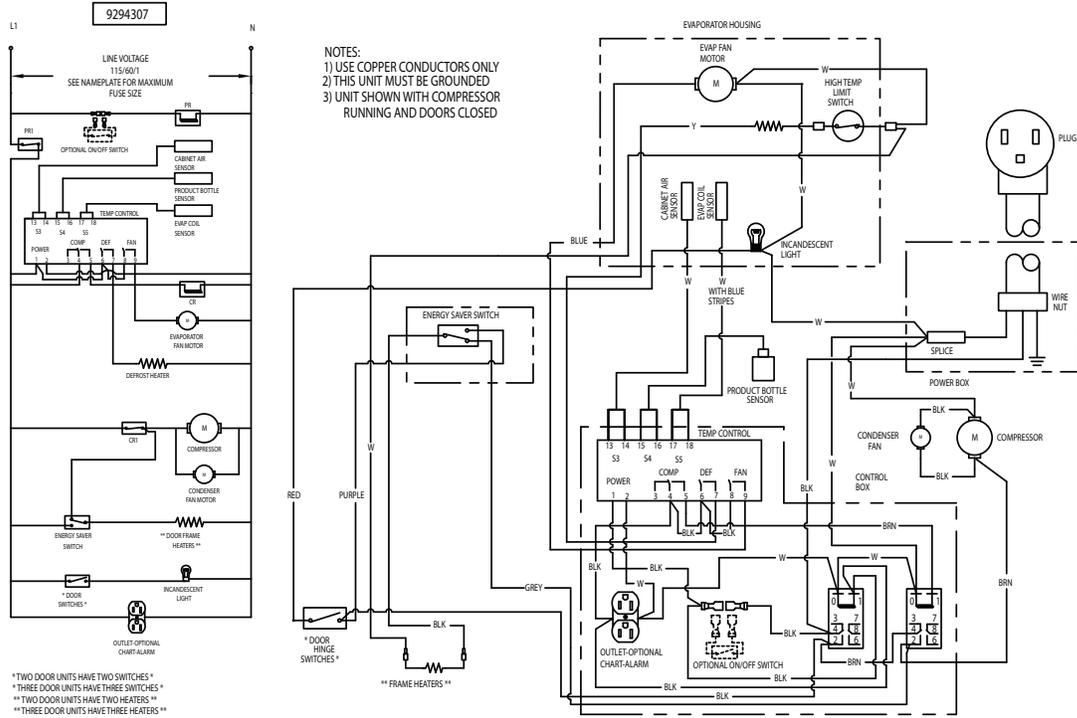
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- NOTES:
 1) USE COPPER CONDUCTORS ONLY
 2) THIS UNIT MUST BE GROUNDED
 3) UNIT SHOWN WITH COMPRESSOR RUNNING AND DOORS CLOSED

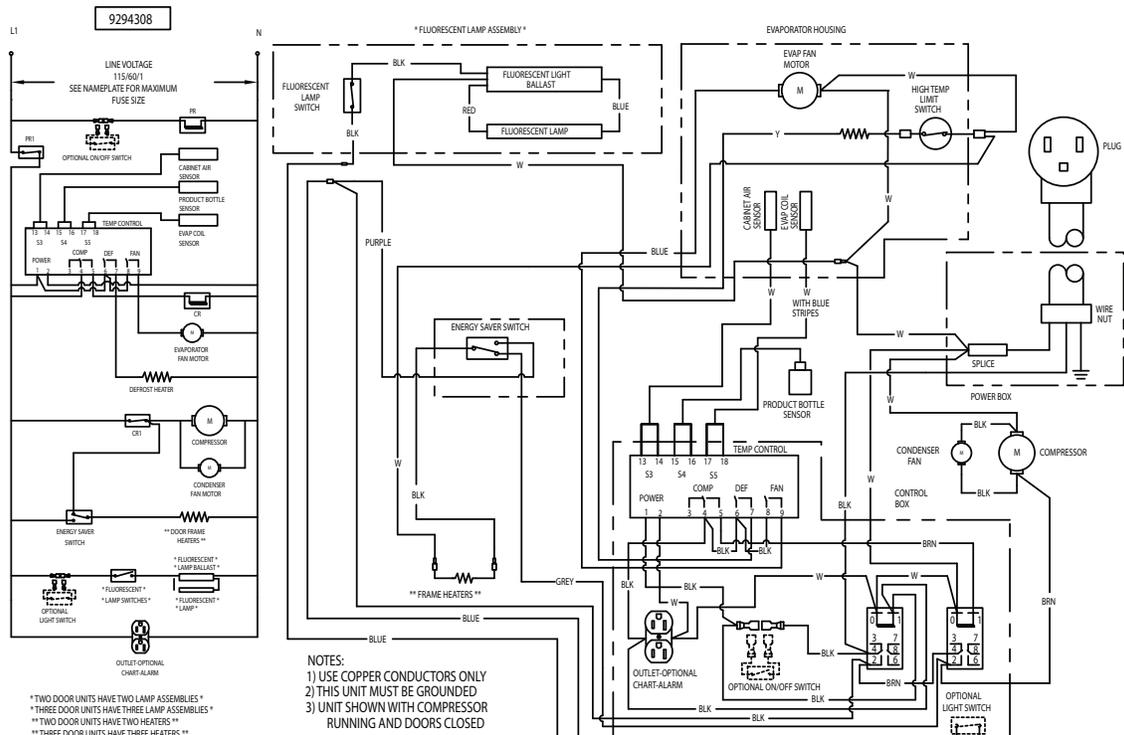


Wiring Diagram Freezers

One & Two Section Solid Doors

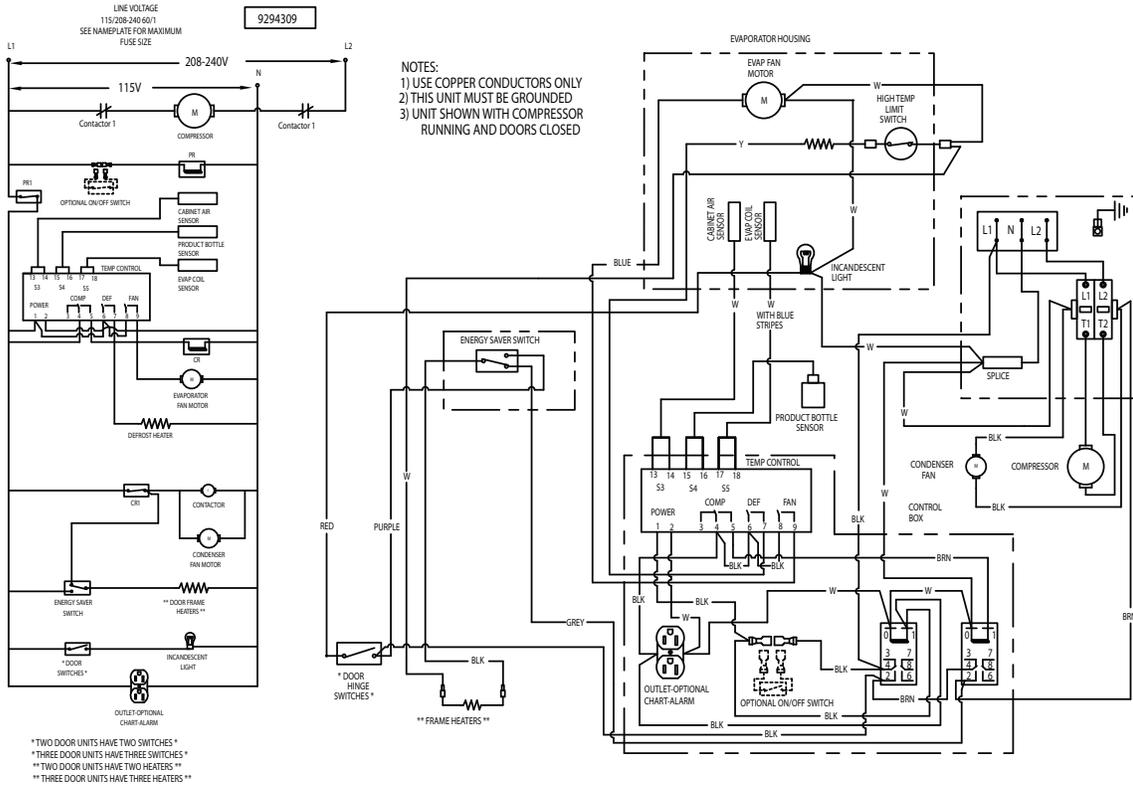


One & Two Section Glass Doors

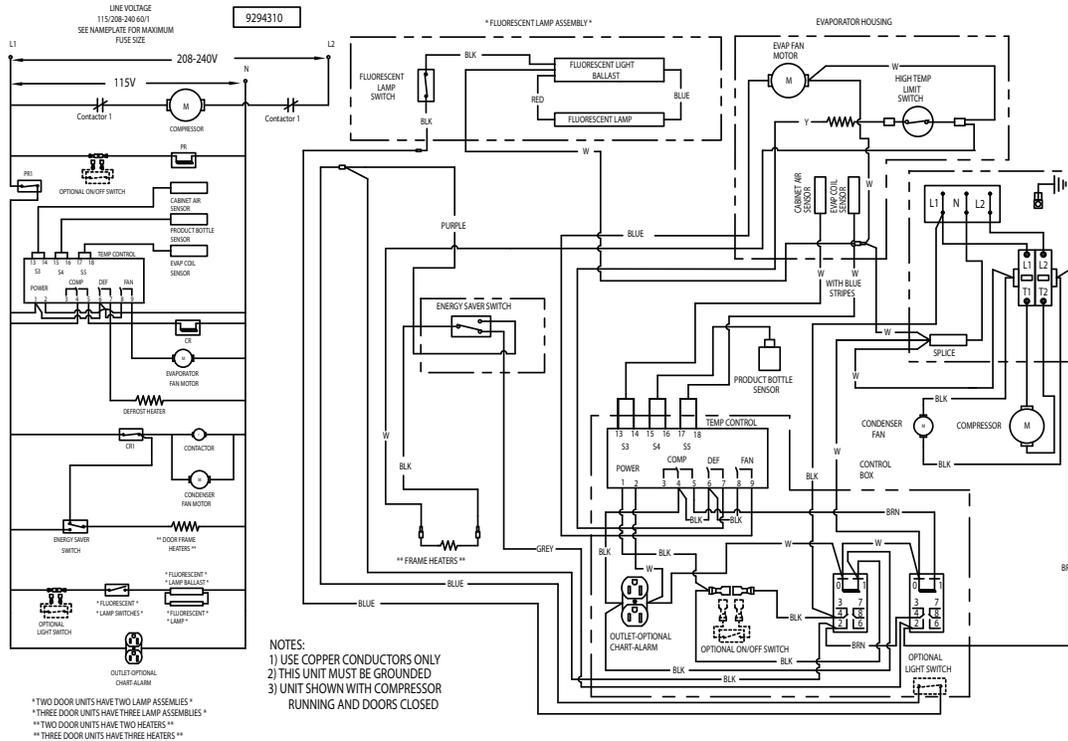


Wiring Diagram Freezers

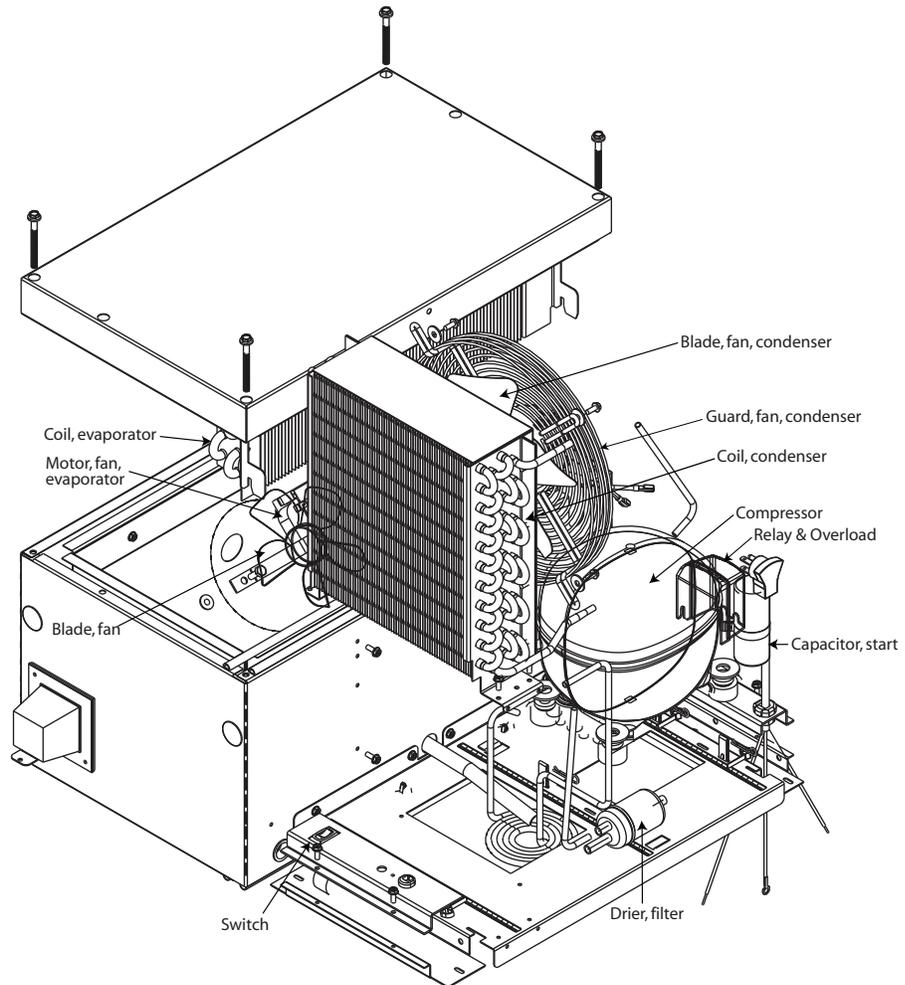
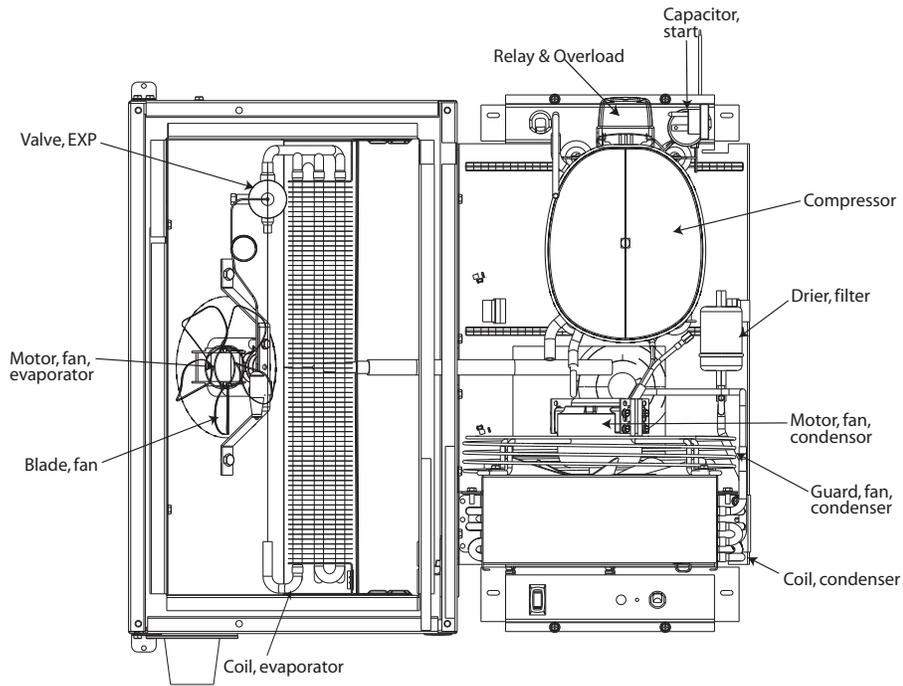
Three Section Solid Doors



Three Section Glass Doors



Compressor Diagrams



Replacement Parts

L_R1-S, L_RPT1-S

L_R1-G, L_R1C-G, L_R1BB-G

Part Number	Description
2195317	Alarm, 1 Probe, Delfield
2195139	Alarm, 2 Probe, Delfield
2195318	Alarm, 3 Probe, Delfield
3516432	Blade, Fan, Condenser, 25Deg, 8.75"
3517390	Blade, Fan, Evaporator, 5.56, CW, 5 Blade
3516204A	Breaker, Vacuum
2194787	Capacitor, Start, 280MFD
3516427	Coil, Condenser
3516437	Coil, Evap, Ref, 1DR
3526999	Comp, NF5.5CLX, 115V,60HZ
3516444	Comp, Relay, Ovld, NF5.5CLX
2195144-3	Control/Display,Ref, Scientific
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2162717	Motor, Fan, Condenser, 9W, 115V, CW
2162715	Motor, Fan, Evaporator, Bay, 3/4ST
2194784	Probe, Temp, 86.6
2195128	Probe, Product Sensing, Scientific
2195315	Recorder, Chart, 1 Probe
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
2190154	Switch, Rocker, 20A/125V
3516429	Valve, Therm EXP, W/O MOP

L_R2-S

L_R2-G, L_R2C-G, L_R2-SLG, L_R2C-SLG, L_R2BB-G

Part Number	Description
2195317	Alarm, 1 Probe, Delfield
2195139	Alarm, 2 Probe, Delfield
2195318	Alarm, 3 Probe, Delfield
3516433	Blade, Fan, 25
3516204A	Breaker, Vacuum
2194788	Capacitor, Start, 320MFD
3517343	Coil, Condenser, Small
3517341	Coil, Evap, Sml Ref, 2dr, Up
3527000	Comp, NF7.0,115V/60HZ
2195144-3	Control/Display,Ref, Scientific
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2162716	Motor, Fan, 16W, 115V,CW
2194784	Probe, Temp, 86.6
2195128	Probe, Product Sensing, Scientific
2195315	Recorder, Chart, 1 Probe
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
3516438	Relay, Comp, Ovld, NF7CLX
2190154	Switch, Rocker, 20A/125V
3516429	Valve, Therm EXP, W/O MOP

L_RPT1-G

Part Number	Description
2195317	Alarm, 1 Probe, Delfield
2195139	Alarm, 2 Probe, Delfield
2195318	Alarm, 3 Probe, Delfield
3516433	Blade, Fan, Condenser, 25
3517390	Blade, Fan, Evaporator, 5.56, CW, 5 Blade
3516204A	Breaker, Vacuum
2194788	Capacitor, Start, 320MFD
3516427	Coil, Condenser
3516437	Coil, Evap, Ref, 1DR
3527000	Comp, NF7.0,115V/60HZ
2195144-3	Control/Display,Ref, Scientific
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2162716	Motor, Fan, Condenser, 16W, 115V,CW
2162715	Motor, Fan, Evaporator, Bay, 3/4ST
2194784	Probe, Temp, 86.6
2195128	Probe, Product Sensing, Scientific
2195315	Recorder, Chart, 1 Probe
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
3516438	Relay, Comp, Ovld, NF7CLX
2190154	Switch, Rocker, 20A/125V
3516429	Valve, Therm EXP, W/O MOP

L_RPT2-S

L_RPT2-G

Part Number	Description
2195317	Alarm, 1 Probe, Delfield
2195139	Alarm, 2 Probe, Delfield
2195318	Alarm, 3 Probe, Delfield
3516433	Blade, Fan, 25
3516204A	Breaker, Vacuum
3516468	Capacitor, Start, Run, Assy
3517344	Coil, Condenser, Large, 2Dr, Upright
3517341	Coil, Evap, Sml Ref, 2dr, Up
3527016	Comp, SC15MLX.2, 115V/60HZ
2195144-3	Control/Display,Ref, Scientific
3517345	Drier, Filter, 3/8
2160019	Guard, Fan, Wire
2162716	Motor, Fan, 16W, 115V,CW
2194784	Probe, Temp, 86.6
2195128	Probe, Product Sensing, Scientific
2195315	Recorder, Chart, 1 Probe
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
2190154	Switch, Rocker, 20A/125V
3516557	Valve, Therm EXP, #3 W/O MOP

Replacement Parts, continued

L_R3-S, L_RPT3-S

L_R3-G, L_R3C-G

Part Number	Description
2195317	Alarm, 1 Probe, Delfield
2195139	Alarm, 2 Probe, Delfield
2195318	Alarm, 3 Probe, Delfield
3516433	Blade, Fan, 25
3516204A	Breaker, Vacuum
3516468	Capacitor, Start, Run, Assy
3517344	Coil, Condenser, Lrg 2dr
3517341	Coil, Evap, Sml Ref, 2dr, Up
3527016	Comp, SC15MLX.2,115V/60HZ
2195144-3	Control/Display,Ref, Scientific
3517345	Drier, Filter, 3/8", Danfos
2160019	Guard, Fan, Wire
2162716	Motor, Fan, 16W, 115V,CW
2194784	Probe, Temp, 86.6
2195128	Probe, Product Sensing, Scientific
2195315	Recorder, Chart, 1 Probe
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
2190154	Switch, Rocker, 20A/125V
3516557	Valve, Thermal, Expansion

L_F1-S

Part Number	Description
2195317	Alarm, 1 Probe, Delfield
2195139	Alarm, 2 Probe, Delfield
2195318	Alarm, 3 Probe, Delfield
3516432	Blade, Fan, Condenser, 25DEG, 8.75"
3517390	Blade, Fan, Evaporator, 5.56, CW, 5 Blade
3516204A	Breaker, Vacuum
2194789	Capacitor, Start, 240MFD
3516427	Coil, Condenser
3516436	Coil, Evap, Frz, 1DR
3527001	Comp, SC12CLX.2, 115/60HZ
2195144-2	Control/Display,Frz, Scientific
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2194785	Htr, Def, 400W, 115V, 1DR
2194953	Limit, High Defrost
2162717	Motor, Fan, Condenser, 9W, 115V, CW
2162715	Motor, Fan, Evaporator, Bay, 3/4ST
2194784	Probe, Temp, 86.6
2195128	Probe, Product Sensing, Scientific
2195137	Recorder, Chart, 1 Probe
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
3516441	Relay, Comp, SC12CLX.2
2194959	Switch, Rocker, Snap-in
3516588	Valve, Therm Exp, W/O MOP, Small, R404A

L_F1-G

Part Number	Description
2195317	Alarm, 1 Probe, Delfield
2195139	Alarm, 2 Probe, Delfield
2195318	Alarm, 3 Probe, Delfield
3516433	Blade, Fan, Condenser, 25
3517390	Blade, Fan, Evaporator, 5.56, CW, 5 Blade
3516204A	Breaker, Vacuum
3516468	Capacitor, Start, Run, Assy
3516427	Coil, Condenser, Large, Upright
3516436	Coil, Evap, FRZ, 1dr, Upright
3527002	Comp, SC18CLX.2
2195144-2	Control/Display,Frz, Scientific
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2194785	Heater, Defrost, 400W, 115V, 1Dr
2194953	Limit, High Defrost
2162716	Motor, Fan, Condenser, 16W, 115V, CW
2162715	Motor, Fan, Evaporator, Bay, 3/4ST, 115V, TH OV
2194784	Probe, Temp, 86.6
2195128	Probe, Product Sensing, Scientific
2195137	Recorder, Chart, 1 Probe
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
2194959	Switch, Rocker, Snap-in
3516588	Valve, Therm Exp, W/O MOP, Small, R404A

L_F2-S

Part Number	Description
2195317	Alarm, 1 Probe, Delfield
2195139	Alarm, 2 Probe, Delfield
2195318	Alarm, 3 Probe, Delfield
3516433	Blade, Fan, Condenser, 25
3517390	Blade, Fan, Evaporator, 5.56, CW, 5 Blade
3516204A	Breaker, Vacuum
3516468	Capacitor, Start, Run, Assy
3517343	Coil, Condenser, Small, 2Dr, Upright
3517340	Coil, Evap, Small, Frz, 2Dr, Upright
3527002	Comp, SC18CLX.2, 115V/60Hz
2195144-2	Control/Display,Frz, Scientific
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2194970	Heater, Defrost, 600W, 115V
2194953	Limit, High Defrost
2162716	Motor, Fan, Condenser, 16W, 115V, CW
2162715	Motor, Fan, Evaporator, Bay, 3/4ST, 115V, TH OV
2194784	Probe, Temp, 86.6
2195128	Probe, Product Sensing, Scientific
2195137	Recorder, Chart, 1 Probe
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
2194959	Switch, Rocker, Snap-in
3516588	Valve, Therm Exp, W/O MOP, Small, R404A

Replacement Parts, continued

L_F2-G

<i>Part Number</i>	<i>Description</i>
2195317	Alarm, 1 Probe, Delfield
2195139	Alarm, 2 Probe, Delfield
2195318	Alarm, 3 Probe, Delfield
3516433	Blade, Fan, 25
3516204A	Breaker, Vacuum
2194979	Capacitor, Run, 45 MFD
2194978	Capacitor, Start, 145-175
3517344	Coil, Condenser, Lrg 2dr
3517342	Coil, Evap, Lrg Frz, 2dr
3527017	Comp, AWA2460ZXD, 208V/60H
2194974	Contact, 2 Pole, 120V
2195144-2	Control/Display,Frz, Scientific
2160019	Guard, Fan, Wire
2194970	Heater, Defrost, 600W, 115V
2194953	Limit, High Defrost
2162716	Motor, Fan, 16W, 115V, CW
2194784	Probe, Temp, 86.6
2195128	Probe, Product Sensing, Scientific
2195137	Recorder, Chart, 1 Probe
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
2194980	Relay, Potential, Start
2194959	Switch, Rocker, Snap-in
3516557	Valve, Thermal, Expansion

L_DTR1-SH

L_DTR1-GH

<i>Part Number</i>	<i>Description</i>
2195139	Alarm, 2 Probe, Delfield
3516172	Blade, Fan, Condenser, 5.56, CCW
3516432	Blade, Fan, Evaporator, 25deg, 8.75", CW
3516426	Coil, Condenser, Small, Upright
3516239	Coil, Evap, Refrig., RT, Spec
3516220	Coil, Evap, Frz, RT, Spec
3526999	Compressor, Frz., NF5.5CLX, 115V,60Hz
3526997	Compressor, Ref., TF4CLX
3516443	Compressor Cover, Frz/Ref, Small, Danfoss
2195144-5	Control/Display,Frz, Scientific
2195144-4	Control/Display,Ref, Scientific
3516322	Drier, Filter, (2)inlet 1/4"
2160019	Guard, Fan, Wire
3516173	Guard, Plastic, Fan, 6
3978197	Guard, Wire, Evaporator
2194659	Heater, 115V-100W, 1A
2194670	Heater, 115V-305W, 3A
2194679	Heater, Drain, 120V-3.75W
2162717	Motor, Fan, Condenser, 9W, 115V, CW
2162691	Motor, Fan, Evaporator, 115V, 50/60
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
3516446	Relay, Comp, Ref., Danfoss P/N 117U4148
3516444	Relay, OVLD, Comp, Frz, NF5.5CLX
2194809	Sensor, air temp, bottom section
2194756	Sensor, air temp, top section
2194808	Sensor, defrost temp, bottom section
2194755	Sensor, defrost temp, top section
2194787	Start, Capacitor, Frz/Ref, 280MFD
3516331	Switch, High Press, 1/4"Tube, 404A, 450
3517394	Valve, Exp, R404A, Frz, 1/4
3517393	Valve, Exp, R404A, Ref, 1/4

Replacement Parts, continued

L_DRL2-S

<i>Part Number</i>	<i>Description</i>
2195317	Alarm, 1 Probe, Delfield
2195139	Alarm, 2 Probe, Delfield
2195318	Alarm, 3 Probe, Delfield
3516432	Blade, Fan, Condenser, 25DEG, 8.75"
3517390	Blade, Fan, Evaporator, 5.56, CW, 5 Blade
3516204A	Breaker, Vacuum
2194789	Capacitor, Start, 240MFD
2194787	Capacitor, Start, 280MFD
3516427	Coil, Condenser
3516436	Coil, Evap, Frz, 1DR
3516437	Coil, Evap, Ref, 1DR
3526999	Compressor, NF5.5CLX, 115V,60HZ
3527001	Compressor, SC12CLX.2, 115/60HZ
2195144-2	Control/Display,Frz, Scientific
2195144-3	Control/Display,Ref, Scientific
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2194785	Htr, Def, 400W, 115V, 1DR
2194953	Limit, High Defrost
2162717	Motor, Fan, Condenser, 9W, 115V, CW
2162715	Motor, Fan, Evaporator, Bay, 3/4ST
2194784	Probe, Temp, 86.6
2195128	Probe, Product Sensing, Scientific
2195137	Recorder, Chart, 1 Probe
2195315	Recorder, Chart, 1 Probe
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
3516444	Relay, Comp, Ovid, NF5.5CLX
3516441	Relay, Comp, SC12CLX.2
2194959	Switch, Rocker, Snap-in
3516429	Valve, Therm Exp, Ref, W/O MOP
3516588	Valve, Therm Exp, Frz, W/O MOP, Small, R404A

L_DRL2-G

<i>Part Number</i>	<i>Description</i>
2195317	Alarm, 1 Probe, Delfield
2195139	Alarm, 2 Probe, Delfield
2195318	Alarm, 3 Probe, Delfield
3516432	Blade, Fan, Condenser, 25DEG, 8.75"
3517390	Blade, Fan, Evaporator, 5.56, CW, 5 Blade
3516204A	Breaker, Vacuum
2194787	Capacitor, Start, 280MFD
3516468	Capacitor, Start, Run, Assembly
3516427	Coil, Condenser
3516436	Coil, Evap, Frz, 1DR
3516437	Coil, Evap, Ref, 1DR
3526999	Compressor, NF5.5CLX, 115V,60HZ
3527002	Compressor, SC18CLX.2, 115V/60HZ
2195144-2	Control/Display,Frz, Scientific
2195144-3	Control/Display,Ref, Scientific
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2194785	Htr, Def, 400W, 115V, 1DR
2194953	Limit, High Defrost
2162717	Motor, Fan, Condenser, 9W, 115V, CW
2162715	Motor, Fan, Evaporator, Bay, 3/4ST
2194784	Probe, Temp, 86.6
2195128	Probe, Product Sensing, Scientific
2195137	Recorder, Chart, 1 Probe
2195315	Recorder, Chart, 1 Probe
2195134	Recorder, Chart, 2 Probe
2194575	Relay, 30A, DPDT
3516444	Relay, Comp, Ovid, NF5.5CLX
2194959	Switch, Rocker, Snap-in
3516429	Valve, Therm Exp, Ref, W/O MOP
3516588	Valve, Therm Exp, Frz, W/O MOP, Small, R404A

Shelf Replacement Parts

<i>Part Number</i>	<i>Description</i>
3234617	Hinge, Chrome Plated
3978279	Shelf
3234782	Shelf Clip, SS

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
- Door Jamb Switch
- Solenoid Coil
- Hi-limit/Thermal Protector Switch
- Fan Delay/Defrost Termination Switch
- Compressor Start Components and Overload Protector
- Defrost Timer
- Thermometer
- Contactor/Relay
- Evaporator/Condenser Fan Motor and Blade
- Circulating Fan Motor and Blade
- Microprocessor Control
- Transformer
- Door Hinges, Locks, and Gaskets
- Condensate Element

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.

\$55.00 maximum reimbursement for refrigerant recovery (includes recovery machine, pump, torch, oil, flux, minor fittings, solder, brazing rod, nitrogen, or similar fees.)

Refrigerants:

- R404A A maximum of \$15.00/lb. or \$1.00/oz. will be reimbursed.

Notes

Notes



Mt. Pleasant, MI



Covington, TN

Thank you for choosing Delfield!

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

Model: _____ S/N: _____

Installation Date: _____



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

Register your Delfield warranty online. Go to www.delfieldscientific.com under the customer service tab to complete.

