

Compact Refrigerators

4400P Series

Original Instructions

Installation, Operation and Maintenance Manual

This manual is updated as new information and models are released. Visit our website for the latest manual.



9295093

Safety Notices

Warning

Read this manual thoroughly before operating, installing or performing maintenance on the equipment. Failure to follow instructions in this manual can cause property damage, injury or death.

DANGER

Do not install or operate equipment that has been misused, abused, neglected, damaged, or altered/modified from that of original manufactured specifications.

DANGER

Never stand on the unit! They are not designed to hold the weight of an adult, and may collapse or tip if misused in this manner.

DANGER

Keep power cord AWAY from HEATED surfaces. DO NOT immerse power cord or plug in water. DO NOT let power cord hang over edge of table or counter.

DANGER

All utility connections and fixtures must be maintained in accordance with local and national codes.

Warning

Authorized Service Representatives are obligated to follow industry standard safety procedures, including, but not limited to, local/national regulations for disconnection / lock out / tag out procedures for all utilities including electric, gas, water and steam.

Warning

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance. Never use flammable oil soaked cloths or combustible cleaning solutions, for cleaning.

Warning

This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm. Operation, installation, and servicing of this product could expose you to airborne particles of glasswool or ceramic fibers, crystalline silica, and/or carbon monoxide. Inhalation of airborne particles of glasswool or ceramic fibers is known to the State of California to cause cancer. Inhalation of carbon monoxide is known to the State of California to cause birth defects or other reproductive harm.

Warning

Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.

Warning

Use caution when handling metal surface edges of all equipment.

Warning

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision concerning use of the appliance by a person responsible for their safety. Do not allow children to play with this appliance.

Notice

Proper installation, care and maintenance are essential for maximum performance and trouble-free operation of your equipment. Visit our website www.wbtkitchenare.com for manual updates, translations, or contact information for service agents in your area.

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Section 1

General Information

Serial Number Information

The serial number is on the identification plate that also includes the model number. The identification plate is located 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.




Warranty Information

Visit www.delfield.com/warranty to:

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

Regulatory Certifications

All models are certified by:

-  NSF International
-  Underwriters Laboratories (UL)
-  Underwriters Laboratories of Canada (cUL)

Model Numbers

This manual covers the following models:

Model	Description
Refrigerated Front Breathers With Doors	
4427NP-6	One Door Salad Top
4427NP-8	
4427NP-9M	One Door Mega Top
4427NP-12M	
4432NP-12M	
4448NP-6	Two Door Salad Top
4448NP-8	
4448NP-12	
4448NP-6M	Two Door Mega Top
4448NP-12M	
4448NP-18M	
4460NP-8	Two Door Salad Top
4460NP-12	
4460NP-12M	Two Door Mega Top
4460NP-18M	
4460NP-24M	
4464NP-8	Two Door Salad Top
4464NP-12	
4464NP-12M	Two Door Mega Top
4464NP-16	Two Door Salad Top
4464NP-18M	Two Door Mega Top
4464NP-24M	
4472NP-12	Three Door Salad Top
4472NP-18	
4472NP-18M	
4472NP-24M	Three Door Mega Top
4472NP-30M	
Refrigerated Front Breathers With Drawers	
D4427NP-6	Two Drawer Salad Top
D4427NP-8	
D4427NP-9M	Two Drawer Mega Top
D4427NP-12M	
D4432NP-12M	
D4448NP-6	Four Drawer Salad Top
D4448NP-8	
D4448NP-12	
D4448NP-6M	Four Drawer Mega Top
D4448NP-12M	
D4448NP-18M	
D4460NP-8	Four Drawer Salad Top
D4460NP-12	
D4460NP-12M	Four Drawer Mega Top
D4460NP-18M	
D4460NP-24M	
D4464NP-8	Four Drawer Salad Top
D4464NP-12	
D4464NP-12M	Four Drawer Mega Top
D4464NP-16	Four Drawer Salad Top

Model	Description
D4464NP-18M	Four Drawer Mega Top
D4464NP-24M	
D4472NP-12	Six Drawer Salad Top
D4472NP-18	
D4472NP-18M	Six Drawer Mega Top
D4472NP-24M	
D4472NP-30M	
Refrigerated Front Breathers With Doors & 4" S/S Backsplash	
ST4427N-6	One Door Salad Top
ST4427NP-8	
ST4448NP-6	Two Door Salad Top
ST4448NP-8	
ST4460NP-8	
ST4460NP-12	
ST4448NP-6M	Two Door Mega Top
ST4448NP-12M	
ST4460NP-12M	
ST4460NP-18M	
ST4464NP-8	Two Door Salad Top
ST4464NP-12	
ST4464NP-12M	Two Door Mega Top
ST4464NP-18M	
ST4472NP-12	Three Door Salad Top
ST4472NP-18M	Three Door Mega Top
ST4472NP-24M	
Refrigerated Front Breathers w/ Drawers & 4" S/S Backsplash	
STD4427NP-8	Two Drawer Salad Top
STD4448NP-6	Four Drawer Salad Top
STD4448NP-8	
STD4460NP-8	
STD4460NP-12	
STD4448NP-6M	Four Drawer Mega Top
STD4448NP-12P	
STD4460NP-12M	
STD4460NP-18M	
STD4464NP-8	Four Drawer Salad Top
STD4464NP-12	
STD4464NP-12M	Four Drawer Mega Top
STD4464NP-18M	
STD4472NP-12	Six Drawer Salad Top
STD4472NP-18M	Six Drawer Mega Top
STD4472NP-24M	

Section 2 Installation

DANGER

Installation must comply with all applicable fire and health codes in your jurisdiction.

DANGER

Use appropriate safety equipment during installation and servicing.

Warning

Do not damage the refrigeration circuit when installing, maintaining or servicing the unit.

Location

Warning

This equipment must be positioned so that the plug is accessible unless other means for disconnection from the power supply (e.g., circuit breaker or disconnect switch) is provided.

Warning

Adequate means must be provided to limit the movement of this appliance without depending on or transmitting stress to the electrical conduit or gas lines.

Warning

To avoid instability the installation area must be capable of supporting the combined weight of the equipment and product. Additionally the equipment must be level side to side and front to back.

Warning

This equipment is intended for indoor use only. Do not install or operate this equipment in outdoor areas.

The location selected for the equipment must meet the following criteria. If any of these criteria are not met, select another location.

- Units are intended for indoor use only.
- The location **MUST** be level, stable and capable of supporting the weight of the equipment.
- The location **MUST** be free from and clear of combustible materials.
- Equipment **MUST** be level both front to back and side to side.
- Position the equipment so it will not tip or slide.
- Front casters **MUST** be locked once positioned.
- Recommended air temperature is 50° - 100°F (10° - 38°C).
- Proper air supply for ventilation is **REQUIRED AND CRITICAL** for safe and efficient operation.
- Do not obstruct the flow of ventilation air. Make sure the air vents of the equipment are not blocked.
- Do not install the equipment directly over a drain. Steam rising up out of the drain will adversely affect operation, air circulation, and damage electrical / electronic components.


Weight of Equipment

Model	Ship Weight
Refrigerated Front Breathers With Doors	
4427NP-6	223lbs (101kg)
4427NP-8	240lbs (109kg)
4427NP-9M	223lbs (101kg)
4427NP-12M	
4432NP-12M	245lbs (111kg)
4448NP-6	316lbs (143kg)
4448NP-8	
4448NP-12	
4448NP-18M	411lbs (186kg)
4460NP-8	
4460NP-12	
4460NP-12M	
4460NP-18M	
4460NP-24M	421lbs (191kg)
4464NP-8	
4464NP-12	
4464NP-12M	
4464NP-16	
4464NP-18M	
4464NP-24M	461lbs (209kg)
4472NP-12	
4472NP-18	
4472NP-18M	
4472NP-24M	
4472NP-30M	
Refrigerated Front Breathers With Drawers	
D4427NP-6	245lbs (111kg)
D4427NP-8	240lbs (109kg)
D4427NP-9M	245lbs (111kg)
D4427NP-12M	245lbs (111kg)
D4432NP-12M	293lbs (133kg)
D4448NP-8	398lbs (181kg)
D4448NP-12	
D4448NP-18M	
D4460NP-8	495lbs (225kg)
D4460NP-12	
D4460NP-12M	
D4460NP-18M	
D4460NP-24M	
D4464NP-8	522lbs (237kg)
D4464NP-12	
D4464NP-12M	
D4464NP-16	
D4464NP-18M	
D4464NP-24M	

Model	Ship Weight
D4472NP-12	545lbs (247kg)
D4472NP-18	
D4472NP-18M	
D4472NP-24M	
D4472NP-30M	
Refrigerated Front Breathers With Doors & 4" S/S Backsplash	
ST4427NP-6	240lbs (109kg)
ST4427NP-8	316lbs (143kg)
ST4448NP-6	
ST4448NP-8	
ST4460NP-8	411lbs (186kg)
ST4460NP-12	
ST4460NP-12M	
ST4460NP-18M	
ST4464NP-8	421lbs (191kg)
ST4464NP-12	
ST4464NP-12M	
ST4464NP-18M	
ST4472NP-12	461lbs (209kg)
ST4472NP-18M	
ST4472NP-24M	
Refrigerated Front Breathers With Drawers & 4" S/S Backsplash	
STD4427NP-6	240lbs (109kg)
STD4427NP-8	398lbs (181kg)
STD4448NP-6	
STD4448NP-8	
STD4460NP-8	495lbs (225kg)
STD4460NP-12	
STD4460NP-12M	
STD4460NP-18M	
STD4464NP-8	522lbs (237kg)
STD4464NP-12	
STD4464NP-12M	
STD4464NP-18M	
STD4472NP-12	545lbs (247kg)
STD4472NP-18M	
STD4472NP-24M	

Clearance Requirements

- Keep the vents clean and free of obstruction.
- Casters or optional legs must be used and not removed.
- Provide good air circulation inside and outside the cabinet.
- Do not pack refrigerator so full that air cannot circulate.
- Avoid hot corners and locations near stoves and ovens.
- These cabinets have Delfield’s “front-breathing” design. They may be installed flush against a wall or built into a counter as required.

 **Caution**

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

Dimensions

Model	Length	Depth	Work Height
Refrigerated Front Breathers With Doors			
4427NP-6	27" (69cm)	31.50" (80cm)	36.00" (91cm)
4427NP-8			
4427NP-9M			
4427NP-12M			
4432NP-12M	32" (81cm)	31.50" (80cm)	36.00" (91cm)
4448NP-6	48" (122cm)	31.50" (80cm)	36.00" (91cm)
4448NP-8			
4448NP-12			
4448NP-18M			
4460NP-8	60" (152cm)	31.50" (80cm)	36.00" (91cm)
4460NP-12			
4460NP-12M			
4460NP-18M			
4460NP-24M			
4464NP-8			
4464NP-12			
4464NP-12M			
4464NP-16			
4464NP-18M			
4464NP-24M			
4472NP-12	72" (183cm)	31.50" (80cm)	36.00" (91cm)
4472NP-18			
4472NP-18M			
4472NP-24M			
4472NP-30M			
Refrigerated Front Breathers With Drawers			
D4427NP-6	27" (69cm)	31.50" (80cm)	36.00" (91cm)
D4427NP-8			
D4427NP-9M			
D4427NP-12M			
D4432NP-12M	32" (81cm)	31.50" (80cm)	36.00" (91cm)
D4448NP-6	48" (122cm)	31.50" (80cm)	36.00" (91cm)
D4448NP-8			
D4448NP-12			
D4448NP-18M			
D4460NP-8	60" (152cm)	31.50" (80cm)	36.00" (91cm)
D4460NP-12			
D4460NP-12M			
D4460NP-18M			
D4460NP-24M	64" (163cm)	31.50" (80cm)	36.00" (91cm)
D4464NP-8			
D4464NP-12			
D4464NP-12M			
D4464NP-16			
D4464NP-18M			
D4464NP-24M			

Model	Length	Depth	Work Height
D4472NP-12	72" (183cm)	31.50" (80cm)	36.00" (91cm)
D4472NP-18			
D4472NP-18M			
D4472NP-24M			
D4472NP-30M			
Refrigerated Front Breathers With Doors & 4" S/S Backsplash			
ST4427NP-6	27" (69cm)	31.50" (80cm)	36.00" (91cm)
ST4427NP-8			
ST4448NP-6	48" (122cm)	31.50" (80cm)	36.00" (91cm)
ST4448NP-8			
ST4460NP-8			
ST4460NP-12	60" (152cm)	31.50" (80cm)	36.00" (91cm)
ST4460NP-12M			
ST4460NP-18M			
ST4464NP-8	64" (163cm)	31.50" (80cm)	36.00" (91cm)
ST4464NP-12			
ST4464NP-12M			
ST4464NP-18M	72" (183cm)	31.50" (80cm)	36.00" (91cm)
ST4472NP-12			
ST4472NP-18M			
ST4472NP-24M			
Refrigerated Front Breathers With Drawers & 4" S/S Backsplash			
STD4427NP-6	27" (69cm)	31.50" (80cm)	36.00" (91cm)
STD4427NP-8			
STD4448NP-6	48" (122cm)	31.50" (80cm)	36.00" (91cm)
STD4448NP-8			
STD4460NP-8	60" (152cm)	31.50" (80cm)	36.00" (91cm)
STD4460NP-12			
STD4460NP-12M			
STD4460NP-18M	64" (163cm)	31.50" (80cm)	36.00" (91cm)
STD4464NP-8			
STD4464NP-12			
STD4464NP-12M			
STD4464NP-18M	72" (183cm)	31.50" (80cm)	36.00" (91cm)
STD4472NP-12			
STD4472NP-18M			
STD4472NP-24M			

Capacity

Model	1/6 Pan Capacity	Shelf Area	Base Volume
Refrigerated Front Breathers With Doors			
4427NP-6	6	3.17ft ² (2945cm ²)	8.20ft ³ (232L)
4427NP-8	8		
4427NP-9M	9		
4432NP-12M	12	3.88ft ² (3605cm ²)	10.10ft ³ (286L)

Model	1/6 Pan Capacity	Shelf Area	Base Volume
4448NP-6	6	5.48ft² (5091cm²)	16.00ft³ (453L)
4448NP-8	8		
4448NP-12	12		
4448NP-18M	18		
4460NP-8	8	7.19ft² (6680cm²)	20.20ft³ (572L)
4460NP-12	12		
4460NP-12M	12		
4460NP-18M	18		
4460NP-24M	24		
4464NP-8	8	7.76ft² (7209cm)	21.60ft³ (612L)
4464NP-12	12		
4464NP-12M	12		
4464NP-16	16		
4464NP-18M	18		
4464NP-24M	24		
4472NP-12	12	8.22ft² (7637cm²)	24.80ft³ (702L)
4472NP-18	18		
4472NP-18M	18		
4472NP-24M	24		
4472NP-30M	30		
Refrigerated Front Breathers With Drawers			
D4427NP-6	6	NA	8.20ft³ (232L)
D4427NP-8	8		
D4427NP-9M	9		
D4427NP-12M	12	NA	10.10ft³ (286L)
D4432NP-12M	12	NA	10.10ft³ (286L)
D4448NP-6	6	NA	16.00ft³ (453L)
D4448NP-8	8		
D4448NP-12	12		
D4448NP-18M	18		
D4460NP-8	8	NA	20.20ft³ (572L)
D4460NP-12	12		
D4460NP-12M	12		
D4460NP-18M	18		
D4460NP-24M	24	NA	21.60ft³ (612L)
D4464NP-8	8		
D4464NP-12	12		
D4464NP-12M	12		
D4464NP-16	16		
D4464NP-18M	18		
D4464NP-24M	24	NA	24.80ft³ (702L)
D4472NP-12	12		
D4472NP-18	18		
D4472NP-18M	18		
D4472NP-24M	24		
D4472NP-30M	30		
Refrigerated Front Breathers With Doors & 4" S/S Backsplash			
ST4427NP-6	6	3.17ft² (2945cm²)	8.20ft³ (232L)
ST4427NP-8	8		
ST4448NP-6	6	5.48ft² (5091cm²)	16.00ft³ (453L)
ST4448NP-8	8		

Model	1/6 Pan Capacity	Shelf Area	Base Volume
ST4460NP-8	8	7.19ft² (6680cm²)	20.20ft³ (572L)
ST4460NP-12	12		
ST4460NP-12M	12		
ST4460NP-18M	18		
ST4464NP-8	8	7.76ft² (7209cm)	21.60ft³ (612L)
ST4464NP-12	12		
ST4464NP-12M	12		
ST4464NP-18M	18		
ST4472NP-12	12		
ST4472NP-18M	18	8.22ft² (7637cm²)	24.80ft³ (702L)
ST4472NP-24M	24		
Refrigerated Front Breathers With Drawers & 4" S/S Backsplash			
STD4427NP-6	6	NA	8.20ft³ (232L)
STD4427NP-8	8	NA	16.00ft³ (453L)
STD4448NP-6	6	NA	16.00ft³ (453L)
STD4448NP-8	8	NA	20.20ft³ (572L)
STD4460NP-8	8		
STD4460NP-12	12		
STD4460NP-12M	12		
STD4460NP-18M	18	NA	21.60ft³ (612L)
STD4464NP-8	8		
STD4464NP-12	12		
STD4464NP-12M	12		
STD4464NP-18M	18	NA	24.80ft³ (702L)
STD4472NP-12	12		
STD4472NP-18M	18		
STD4472NP-24M	24		

Electrical Service

⚠ DANGER

Check all wiring connections, including factory terminals, before operation. Connections can become loose during shipment and installation.

⚠ Warning

This appliance must be grounded and all field wiring must conform to all applicable local and national codes. Refer to rating plate for proper voltage. It is the responsibility of the end user to provide the disconnect means to satisfy the authority having jurisdiction.

- The Danfoss control can be used to power down and shut off the unit.
- All electrical work, including wire routing and grounding, must conform to local, state and national electrical codes.
- The equipment must be grounded.
- A separate fuse/circuit breaker must be provided for each unit.
- The maximum allowable voltage variation is ±10% of the rated voltage at equipment start-up (when the electrical load is highest).
- Check all green ground screws, cables and wire connections to verify they are tight before start-up.

GROUND FAULT CIRCUIT INTERRUPTER

Ground Fault Circuit Interrupter (GFCI/GFI) protection is a system that shuts down the electric circuit (opens it) when it senses an unexpected loss of power, presumably to ground. Welbilt does not recommend the use of GFCI/GFI circuit protection to energize our equipment. If code requires the use of a GFCI/GFI then you must follow the local code. The circuit must be dedicated, sized properly and there must be a panel GFCI/GFI breaker. We do not recommend the use of GFCI/GFI outlets to energize our equipment as they are known for more intermittent nuisance trips than panel breakers.

RATED AMPERAGES, HORSEPOWER, VOLTAGE & POWER CORD CHART

Maximum 6ft (1.8m) cord with three-pronged plug. Plug into a three-pronged wall outlet for proper grounding of the cabinet to begin operation. Do not use an adapter to connect to a two-pronged outlet.

Model	Amp	H.P.	Voltage, Cycle, Phase	NEMA Plug
Refrigerated Front Breathers With Doors				
4427NP-6	4	1/4	115, 60, 1	5-15P
4427NP-8				
4427NP-9M				
4427NP-12M				
4432NP-12M	4	1/4	115, 60, 1	5-15P
4448NP-6	4	1/4	115, 60, 1	5-15P
4448NP-8				
4448NP-12				
4448NP-18M				
4460NP-8	6.9	1/3	115, 60, 1	5-15P
4460NP-12				
4460NP-12M				
4460NP-18M				
4460NP-24M				
4464NP-8	6.9	1/3	115, 60, 1	5-15P
4464NP-12				
4464NP-12M				
4464NP-16				
4464NP-18M				
4464NP-24M				
4472NP-12	6.9	1/3	115, 60, 1	5-15P
4472NP-18				
4472NP-18M				
4472NP-24M				
4472NP-30M				
Refrigerated Front Breathers With Drawers				
D4427NP-6	4	1/4	115, 60, 1	5-15P
D4427NP-8				
D4427NP-9M				
D4427NP-12M				
D4432NP-12M	4	1/4	115, 60, 1	5-15P
D4448NP-6	4	1/4	115, 60, 1	5-15P
D4448NP-8				
D4448NP-12				
D4448NP-18M				
D4460NP-8	6.9	1/3	115, 60, 1	5-15P
D4460NP-12				
D4460NP-12M				
D4460NP-18M				
D4460NP-24M				

Model	Amp	H.P.	Voltage, Cycle, Phase	NEMA Plug	
D4464NP-8	6.9	1/3	115, 60, 1	5-15P	
D4464NP-12					
D4464NP-12M					
D4464NP-16					
D4464NP-18M					
D4464NP-24M	6.9	1/3	115, 60, 1	5-15P	
D4472NP-12					
D4472NP-18					
D4472NP-18M					
D4472NP-24M					
D4472NP-30M	Refrigerated Front Breathers With Doors & 4" S/S Backsplash				
ST4427NP-6	4	1/4	115, 60, 1	5-15P	
ST4427NP-8					
ST4448NP-6	4	1/4	115, 60, 1	5-15P	
ST4448NP-8					
ST4460NP-8	6.9	1/3	115, 60, 1	5-15P	
ST4460NP-12					
ST4460NP-12M					
ST4460NP-18M					
ST4464NP-8	6.9	1/3	115, 60, 1	5-15P	
ST4464NP-12					
ST4464NP-12M					
ST4464NP-18M					
ST4472NP-12	6.9	1/3	115, 60, 1	5-15P	
ST4472NP-18M					
ST4472NP-24M					
Refrigerated Front Breathers With Drawers & 4" S/S Backsplash					
STD4427NP-6	4	1/4	115, 60, 1	5-15P	
STD4427NP-8					
STD4448NP-6	4	1/4	115, 60, 1	5-15P	
STD4448NP-8					
STD4460NP-8	6.9	1/3	115, 60, 1	5-15P	
STD4460NP-12					
STD4460NP-12M					
STD4460NP-18M					
STD4464NP-8	6.9	1/3	115, 60, 1	5-15P	
STD4464NP-12					
STD4464NP-12M					
STD4464NP-18M					
STD4472NP-12	6.9	1/3	115, 60, 1	5-15P	
STD4472NP-18M					
STD4472NP-24M					

Drain Connections

⚠ Warning

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

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

Refrigeration

Model	BTU/Hour Capacity	Heat of Rejection	Charge
Refrigerated Front Breathers With Doors			
4427NP-6	2038	716	60 Grams R290.
4427NP-8			
4427NP-9M			
4427NP-12M			
4432NP-12M	2038	883	60 Grams R290.
4448NP-6	2038	1299	60 Grams R290.
4448NP-8			
4448NP-12			
4448NP-18M			
4460NP-8	2973	1645	72 Grams R290.
4460NP-12			
4460NP-12M			
4460NP-18M			
4460NP-24M	2973	1664	72 Grams R290.
4464NP-8			
4464NP-12			
4464NP-12M			
4464NP-16	2973	1664	72 Grams R290.
4464NP-18M			
4464NP-24M			
4472NP-12			
4472NP-18	2973	2042	72 Grams R290.
4472NP-18M			
4472NP-24M			
4472NP-30M			
Refrigerated Front Breathers With Drawers			
D4427NP-6	2038	716	60 Grams R290.
D4427NP-8			
D4427NP-9M			
D4427NP-12M			
D4432NP-12M	2038	883	60 Grams R290.
D4448NP-6	2038	1299	60 Grams R290.
D4448NP-8			
D4448NP-12			
D4448NP-18M			
D4460NP-8	2973	1645	72 Grams R290.
D4460NP-12			
D4460NP-12M			
D4460NP-18M			
D4460NP-24M	2973	1664	72 Grams R290.
D4464NP-8			
D4464NP-12			
D4464NP-12M			
D4464NP-16	2973	1664	72 Grams R290.
D4464NP-18M			
D4464NP-24M			

Model	BTU/Hour Capacity	Heat of Rejection	Charge			
D4472NP-12	2973	2042	72 Grams R290			
D4472NP-18						
D4472NP-18M						
D4472NP-24M						
D4472NP-30M	2038	716	60 Grams R290.			
Refrigerated Front Breathers With Doors & 4" S/S Backsplash						
ST4427NP-6						
ST4427NP-8						
ST4448NP-6	2038	1299	60 Grams R290.			
ST4448NP-8						
ST4460NP-8	2973	1645	72 Grams R290.			
ST4460NP-12						
ST4460NP-12M						
ST4460NP-18M	2973	1664	72 Grams R290.			
ST4464NP-8						
ST4464NP-12						
ST4464NP-12M	2973	2042	72 Grams R290.			
ST4464NP-18M						
ST4472NP-12	2973	2042	72 Grams R290.			
ST4472NP-18M						
ST4472NP-24M	Refrigerated Front Breathers With Drawers & 4" S/S Backsplash					
STD4427NP-6	2038	716	60 Grams R290.			
STD4427NP-8						
STD4448NP-6	2038	1299	60 Grams R290.			
STD4448NP-8						
STD4460NP-8	2973	1645	72 Grams R290.			
STD4460NP-12						
STD4460NP-12M						
STD4460NP-18M	2973	1664	72 Grams R290.			
STD4464NP-8						
STD4464NP-12						
STD4464NP-12M	2973	2042	72 Grams R290.			
STD4464NP-18M						
STD4472NP-12	2973	2042	72 Grams R290.			
STD4472NP-18M						
STD4472NP-24M						

Level & Stable

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. 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.

Cabinets with casters must have the caster brake set so the cabinet cannot move.

Leg & Caster Installation

⚠ DANGER

Legs or casters must be installed and the legs or casters must be screwed in completely to prevent bending. When casters are installed the mass of this unit will allow it to move uncontrolled on an inclined surface. These units must be tethered/secured to comply with all applicable codes.

⚠ Warning

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.

⚠ Warning

Use a jack to lift the refrigeration unit off the ground just far enough to remove the leg/caster. Place blocking underneath the unit. Do not work underneath a raised unit without proper blocking. Do not lift the unit more than necessary to remove the leg/caster. Lifting the unit too far can make the unit unstable.

⚠ Caution

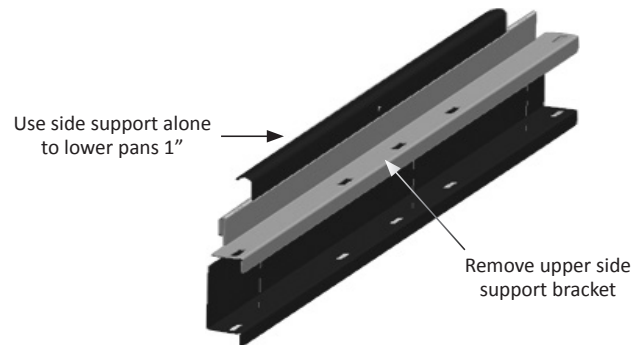
All single-section units require that the swivel casters be mounted on the front and rigid casters be mounted on the rear.

Changing Pan Height

If additional pan temperature cooling ability is desired, especially in higher ambient temperature conditions and/or if pan covers are open or off for extended time periods improved cooling of pans can usually be achieved by utilizing the lower position of the dual level pan guides.

When utilizing the lower position on a model with drawers, only 4" deep pans can be used in the top. When utilizing the lower position on a door model, 4" or 6" deep pans may be used.

1. Remove all pans, pan dividers, front and rear support bars.
2. Remove the upper side support brackets by pulling them up and off.
3. Reinstall all components removed in step one.



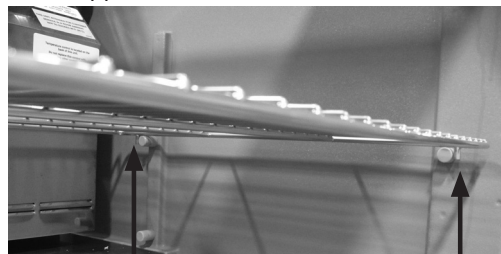
If the lower pan position is desired for models 4427N-8 or 4427N-12M, model specific brackets must be ordered. They will replace all other brackets.

Shelf Installation Instructions

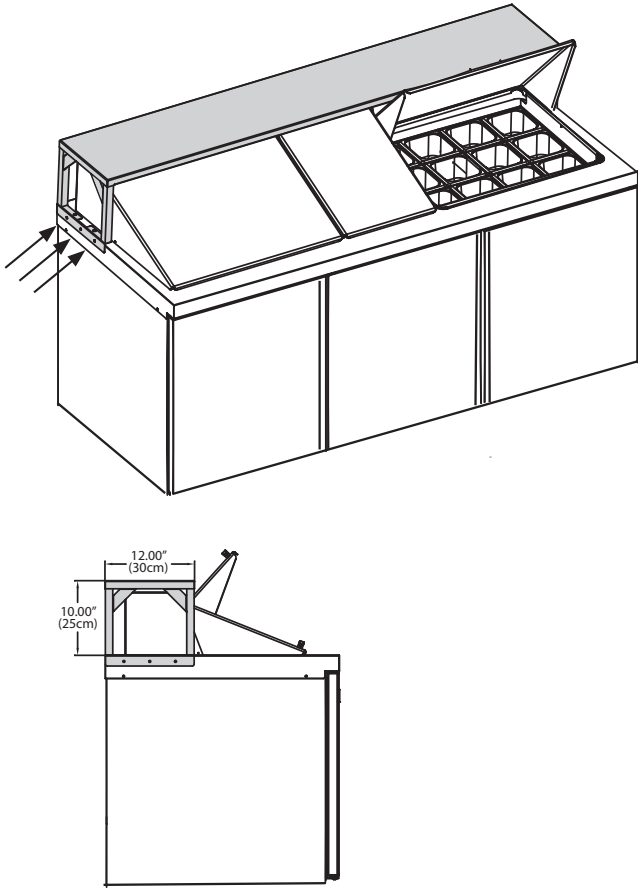
1. Notice the shelves have four alignment pins on the underside and a backstop on the top back.
2. Insert the shelves into the cabinet.
 - The backstop should be at the top back.



- The alignment pins should be in front and back of the shelf supports.



Optional Overshelf Installation Instructions



If the unit is ordered to have the overshelf:

1. Remove the three screws from each top side of the cabinet (total six screws).
2. Set the overshelf in-place on the top of the cabinet.
3. Line up the overshelf holes with the unit holes.
4. Secure with three screws per side of the cabinet (total six screws).

If the overshelf was not ordered with the unit:

1. Set the overshelf in-place on the top of the cabinet.
2. Secure with three screws per side of the cabinet (total six screws).

Heavy Duty Cutting Board Bracket Mounting

Supplies Needed

- #3 Phillips Screwdriver

Parts Included For 27" & 32" Units

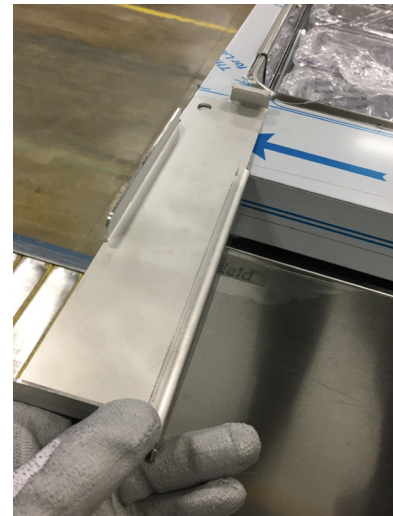
Qty	Description	Part No.
1	Left Bracket	Varies
1	Right Bracket	Varies
1	Silicone	9291311
2	Screw, pan head	9321519
2	Screw, flat head	9324092
2	Fender Washer	9324043

Parts Included For 48" Units

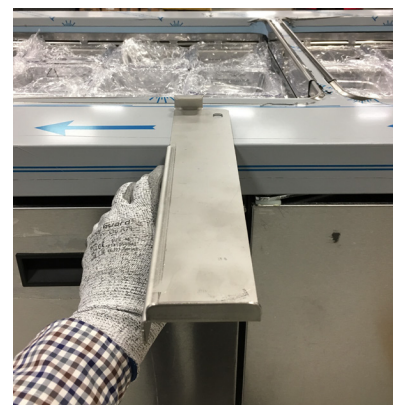
Qty	Description	Part No.
1	Left Bracket	Varies
1	Center Bracket	Varies
1	Right Bracket	Varies
1	Silicone	9291311
3	Screw, pan head	9321519
3	Screw, flat head	9324092
3	Fender Washer	9324043

Parts Included For 60", 64" & 72" Units

Qty	Description	Part No.
1	Left Bracket	Varies
2	Center Bracket	Varies
1	Right Bracket	Varies
1	Silicone	9291311
4	Screw, pan head	9321519
4	Screw, flat head	9324092
4	Fender Washer	9324043



Left Bracket



Center Bracket



Right Bracket

Heavy Duty Cutting Board Bracket Mounting Instructions

1. Attach each bracket to the top of the unit with one flat head screw (9324092).



Top

2. Attach each bracket to the face of the unit with one fender washer (9324043) and one pan head screw (9321519).

- Some adjustment to align the brackets may be necessary once the cutting board is installed.
- Do not over tighten the screws.



Face

3. Install the cutting board onto the brackets.

- Make final bracket adjustments so the cutting board sits flush in the brackets.
- Tighten screws.



4. Silicone (9291311) each bracket anyplace it touches the top or face of the unit. This prevents foreign objects from getting between the brackets and the unit.

Section 3 Operation

DANGER

The on-site supervisor is responsible for ensuring that operators are made aware of the inherent dangers of operating this equipment.

DANGER

Do not operate any appliance with a damaged cord or plug. All repairs must be performed by a qualified service company.

DANGER

Never stand on the unit! They are not designed to hold the weight of an adult, and may collapse or tip if misused in this manner.

Warning

Do not contact moving parts.

Warning

All covers and access panels must be in place and properly secured, before operating this equipment.

Warning

The operator of this equipment is solely responsible for ensuring safe holding temperature levels for all food items. Failure to do so could result in unsafe food products for customers.

Warning

Overloading shelves can damage equipment or cause bodily injury.

Warning

Damp or wet hands may stick to cold surfaces.

Warning

Do not block the supply and return air grills or the air space around the air grills. Keep plastic wrappings, paper, labels, etc. from being airborne and lodging in the grills. Failure to keep the air grills clear will result in unsatisfactory operation of the system.

Caution

Do not throw items into the storage area. Failure to heed this recommendation could result in damage to the interior of the cabinet or to the blower coil.

Power To Cool.

- After the cabinet is connected to the power source it will automatically begin in defrost.
- With the covers and doors closed, the temperature of the cabinet should reach 36°F to 40°F (2°C to 4°C) in about one hour.
- Temperature on 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.

Temperature Control

- The temperature control on all salad top units is located in the rear of the unit.
- The factory setting for the control is 37.5°F and maintains about 34°F(1°C) to 40°F (2°C) inside the box.
- There is also an optional display that can be added to the front nosing of the unit. The control (without display) would be mounted on the back of the unit with a cable connecting to the display.



Temperature Control

Sensor 1 defect	E01	X	Air sensor
Sensor 2 defect	E02	X	Coil sensor
High temperature alarm	Hi	X	Automatically switching at 2 sec rate
Low temperature alarm	Lo	X	
Line voltage too high	uHi	X	
Line voltage too low	uLi	X	
Control calls for cooling for more than 24 hours straight	LEA	X	Time includes defrost. Error will go away if the control cycles off the compressor or if the power is shut off. If error is on a cold pan it could be related to a high ambient temperature or not shutting the rail off nightly.

Control Error Codes

Efficient Operation

- Cabinets with pans should be operated with pans in place. Operating the cabinet without all pans in place may damage the cabinet.
- Continuous opening and closing of the door will hamper the cabinet’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 cabinet while empty.

Defrost

The electronic temperature controller monitors evaporator temperature and compressor run time to determine the proper time for a positive defrost cycle. A defrost cycle can occur as often as every 60 minutes under extremely heavy usage. When the controller enters the defrost mode the compressor is shut off and will remain off until the evaporator coil temperature exceeds 41°F or the controller reaches a time limit of 35 minutes. The defrost cycle can last from a minimum of 2 minutes to a maximum of 35 minutes.

Evaporator Fan Operation

Salad and mega top refrigerator units under 60” wide have one evaporator and one axial fan. 60”, 64” and 72” wide units have one large evaporator and two axial fans.

Cooling Cycle		Defrost Cycle
Compressor On	Compressor Off	Compressor Off
Evaporator Fan	Evaporator Fan	Evaporator Fan
On	On three minutes then off three minutes	On

During normal operation the evaporator fan may cycle and/or pulse independently of the compressor. Consult the service manual or contact Technical Support at 1-844-724-CARE if you are unsure of the proper function.

Section 4 Maintenance

⚠ DANGER

It is the responsibility of the equipment owner to perform a Personal Protective Equipment Hazard Assessment to ensure adequate protection during maintenance procedures.

⚠ DANGER

Failure to disconnect the power at the main power supply disconnect could result in serious injury or death. The power switch DOES NOT disconnect all incoming power.

⚠ DANGER

Disconnect electric power at the main power disconnect for all equipment being serviced. Observe correct polarity of incoming line voltage. Incorrect polarity can lead to erratic operation.

⚠ Warning

Never use sharp objects or tools to remove ice or frost. Do not use mechanical devices or other means to accelerate the defrosting process.

⚠ Warning

When using cleaning fluids or chemicals, rubber gloves and eye protection (and/or face shield) must be worn.

⚠ Warning

When cleaning interior and exterior of unit, care should be taken to avoid the front power switch and the rear power cord. Keep water and/or cleaning solutions away from these parts.

⚠ Warning

Never use a high-pressure water jet for cleaning or hose down or flood interior or exterior of units with water. Do not use power cleaning equipment, steel wool, scrapers or wire brushes on stainless steel or painted surfaces.

⚠ Caution

Maintenance and servicing work other than cleaning as described in this manual must be done by an authorized service personnel.

⚠ Caution

Over shelves and other items mounted to the top of the counters should never be installed in the field due to the potential damage to the refrigeration system.

Responsibility

You are responsible for maintaining the equipment in accordance with the instructions in this manual. Maintenance procedures are not covered by the warranty.

Maintenance	Daily	Weekly	Monthly	After Prolonged Shutdown	At Start-Up
Interior	X			X	X
Gasket	X			X	X
Exterior	X			X	X
Drain		X		X	X
Condenser Coil			X	X	X
Casters			X	X	X

Interior Cleaning

The interior can be cleaned using soap and warm water. If this isn't sufficient, try ammonia and water or a nonabrasive liquid cleaner.

GASKETS

Gaskets require regular cleaning to prevent mold and mildew build up and also to retain the elasticity of the gasket. Clean

them with water and mild soap (not citrus based). 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. Place gasket in warm water to make the material more pliable for installation. Dry and press into place.

PREVENTING BLOWER COIL CORROSION

To help prevent corrosion of the blower coil, store all acidic items, such as pickles and tomatoes, in seal-able containers. Immediately wipe up all spills.

Exterior Cleaning

Caution

Never use an acid based cleaning solution on exterior panels! Many food products have an acidic content, which can deteriorate the finish. Be sure to clean ALL food products from stainless steel surfaces.

Clean the area around the unit as often as necessary to maintain cleanliness and efficient operation.

Wipe exterior surfaces with a damp cloth rinsed in water to remove dust and dirt from the outside of the unit. Always rub with the "grain" of the stainless steel to avoid marring the finish. If a greasy residue persists, use a damp cloth rinsed in a mild dish soap and water solution. Wipe dry with a clean, soft cloth.

Never use steel wool or abrasive pads for cleaning. Never use chlorinated, citrus based or abrasive cleaners.

Stainless steel exterior panels have a clear coating that is stain resistant and easy to clean. Products containing abrasives will damage the coating and scratch the panels. Daily cleaning may be followed by an application of stainless steel cleaner which will eliminate water spotting and fingerprints. 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 steel.

Wipe casters with a damp cloth monthly to prevent corrosion.

DRAIN

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. 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.

Drawer Assembly Cleaning

The drawer assembly is designed to be cleaned easily. Both drawer and tracks are removable without tools. The drawer

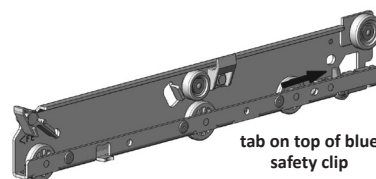
tracks are dishwasher safe or can be cleaned in a sink with detergents and a soft bristle brush. Drawers and tracks should be cleaned on a weekly basis.

Remove Drawers

Pull the drawer box out until it stops. Lift up on the drawer front and pull the drawer box completely out. Using a soft bristle brush, clean the track on the bottom of the drawer box. When finished, it should be wiped clean of all food and debris.

Tracks

The drawer box assembly must be removed. Pull the drawer tracks out until they hit a stop. Locate blue safety clips towards the back of each drawer track. Blue safety clips have a tab on the top. Push the tab back until it clicks. Lift up and pull the drawer tracks all the way out of the drawer cage. The drawer tracks are dishwasher safe or can be cleaned in a sink with detergents and a soft bristle brush. Drawers and tracks should be cleaned on a weekly basis. Using a soft bristle brush, wash the track making sure each roller is thoroughly



cleaned. The drawer cage should be cleaned with a soft bristle brush, removing any food and debris gathered on the bottom ledge. Once it's cleaned thoroughly with

a soft bristle brush, wipe remaining debris clean with a soft towel.

Reassembly

Push the drawer tracks into the drawer cage. The blue safety clip must remain pushed towards the back. Lift up and slide the drawer track all the way into the drawer cage. The blue safety clip will lock in place automatically. Once all tracks are replaced, insert the drawer box. Rest the drawer box bottom track on the front track roller. Then push the drawer back in place SLOWLY. When the drawer box is about half way in you will hit a STOP. You must lift the front of the drawer up approximately ½" (1.3cm) to continue inward. Clean tracks as often as possible. The cleaner the tracks are the better they will operate.

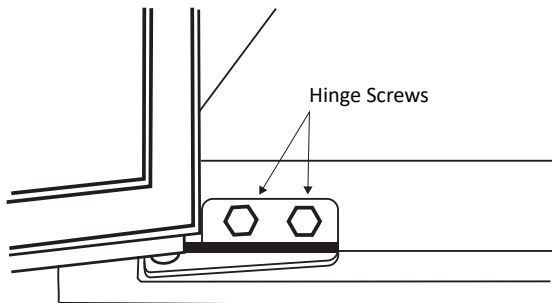
Cleaning the Condenser Coil

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 monthly. If conditions are such that the condenser is totally blocked in a month, 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.

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.





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