PIE MERCHANDISING CABINETS

MODELS: MDPM2 & MDPM4 OWNERS / OPERATORS MANUAL





MANUFACTURED BY:

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SAFETY PRECAUTIONS



WARNING: ELECTRIC SHOCK HAZARD

All service requiring access to non-insulated components must be performed by qualified service personnel. Failure to heed this warning may result in severe electric shock.



CAUTION: ELECTRIC SHOCK HAZARD

Disconnect this appliance from electrical power before performing any maintenance or service.



CAUTION: BURN HAZARD

Exposed metal surfaces can be hot to the touch and may cause burns.

IMPORTANT SAFETY INSTRUCTIONS

When using electrical appliances basic safety precautions should be adhered to, including the following:

- 1) Be familiar with the appliance use, limitations and associated restrictions. Operating instructions must be read and understood by all persons using or installing this appliance.
- 2) This appliance must be grounded. Connect only to properly grounded outlet.
- 3) Use this appliance only for its intended use as described in the manual.
 - a. This equipment is specifically designed to hold pre-cooked food at temperature.
 - b. This equipment is intended for use in commercial establishments only.
 - c. This equipment is not designed for industrial or laboratory use.
- 4) Cleanliness of this appliance and accessories is essential to good sanitation.
- 5) DO NOT submerge this appliance in water. This appliance is not jet stream approved. DO NOT direct water jet or steam jet at this appliance, or at any control panel or wiring. DO NOT splash or pour water on, in or over any controls, control panel or wiring. DO NOT use corrosive chemicals or vapors in this appliance.
- 6) DO NOT store this appliance outdoors. DO NOT use this product near water for example, near a kitchen sink, in a wet basement, or near a swimming pool, and the like.
- 7) DO NOT operate this appliance if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped. Do not immerse cord or plug in water, keep cord away from heated surfaces, and do not let cord hang over edge of table or counter.
- 8) Only qualified service personnel should service this appliance.
- 9) DO NOT cover or block any openings on the appliance.

NOTE:

The technical content of this manual, including any wiring diagrams, schematics, parts breakdown illustrations and/or adjustment procedures, is **intended for use by qualified technical personnel** and is subject to change without notice.

FEATURES & SPECIFICATIONS







Removable Pie Caddy

Pie Merchandising Cabinets

Carter-Hoffmann pie merchandising cabinets are designed to hold individually boxed pies and other hand-held food items at serving temperature. Each cabinet has a programmable controller with a low temperature alarm. The controller is factory pre-set at holding temperature of 165°F (74°C) and low temperature alarm of 140°F (60°C). Each cabinet has a removable product caddy.

Capacity/Dimensional Characteristics

Model	Capacity	Inside Working Height	t Overall Dimensions			Weight	
Number	3" x 6" x 1.25" boxes	In (mm)	Height In (mm)	Depth In (mm)	Width In (mm)	Lbs (kg)	
MDPM2	28	17.5 (445)	26.375 (670)	10 (254)	9.5 (241)	40 (18)	
MDPM4	42	17.5 (445)	26.375 (670)	10 (254)	12.188 (310)	45 (20)	

Agency Approvals







Cabinet Material: All stainless steel double-wall cabinet construction. Modular design with one controller featuring single temperature control. Removable interior caddy. High density fiberglass insulation in top bottom and sides. Illuminated display in door for graphic panel.

Controls: Electronic temperature control with low temperature alarm. Allows user to program temperature in one degree increments up to 225°F (108°C).

Heater System: Blower heating system with electronic temperature control. On/off toggle switch. Blower systems tem with precision engineered air venting in removable caddy.

Electrical Characteristics:

- 1) 120 volts, 60 Hz, single phase, 500 watts, 4.2 Amps. Ten foot power cord with 15 amp plug.
- 2) 200-208 volts, 413/446 watts, 50-60 Hz, single phase, 2.1-2.2 Amps*
- 3) 220-240 volts, 500/595 watts, 50-60 Hz, single phase, 2.3-2.5 Amps*

Performance: Capable of heating to 225°F (108°C). Preheat to 175°F (74°C) in 10 minutes.

^{*} International versions; specify plug by destination country

UNPACKING AND INSPECTION



This appliance should be thoroughly

cleaned prior to use.

See the CLEANING INSTRUCTIONS, on page 8 of this manual.

NOTE: DO NOT discard the carton or other packing materials until you have inspected the appliance for hidden damage and tested it for proper operation.

Refer to SHIPPING DAM-AGE CLAIM PROCEDURE below.

- Remove the cabinet from shipping carton, ensuring that all packing materials and protective plastic has been removed from the unit. Inspect all components for completeness and condition.
- 2. If any freight damage is present, a freight claim must be filed immediately with the shipping company.
- 3. Freight damage is not covered under warranty.
- 4. Check to insure all components are included; cabinet, product caddy, instruction packet and any additional accessories.
- Read operation instructions completely.
- Appliance should be thoroughly cleaned before use. See CLEANING INSTRUCTIONS, page eight.
- Connect power cord to grounded and properly wired electrical source as specified. Electrical specifications are indicated on the serial tag on the cabinet (see sample tag below).



FREIGHT DAMAGE PROCEDURE

NOTE: For your protection, please note that equipment in this shipment was carefully inspected and packaged by skilled personnel before leaving the factory. Upon acceptance of this shipment, the transportation company assumes full responsibility for its safe delivery.

IF SHIPMENT ARRIVES DAMAGED:

- 1. **VISIBLE LOSS OR DAMAGE:** Be certain that any visible loss or damage is noted on the freight bill or express receipt, and that the note of loss or damage is signed by the delivery person.
- 2. FILE CLAIM FOR DAMAGE <u>IMMEDIATELY</u>: Regardless of the extent of damage. Contact your dealer immediately.
- 3. **CONCEALED DAMAGE:** If damage is unnoticed until the merchandise is unpacked, notify the transportation company or carrier immediately, and then file a "CONCEALED DAMAGE" claim with them. This should be done within fifteen (15) days from the date the delivery was made to you. **Be sure to retain the container for inspection**.

Carter-Hoffmann cannot assume liability for damage or loss incurred in transit, **freight damage is not covered under warranty**. We will, however, at your request, supply you with the necessary documents to support your claim.

INSTALLATION & START-UP



Installation procedures must be performed by a qualified technician with full knowledge of all applicable electrical codes.

Failure can result in personal injury and property damage.

IMPORTANT: Power cord is 10' long.

If necessary, contact a licensed electrician to install an appropriate electrical circuit with correct receptacle.

DO NOT use an extension cord.



CAUTION: Electrical Shock Hazard

The ground prong of the power cord is part of a system designed to protect you from electric shock in the event of internal damage.

DO NOT cut off the large round ground prong or twist a blade to fit an existing receptacle.



IMPORTANT: Not under warranty:

Damage to unit due to being connected to the wrong voltage or phase is **NOT** covered by warranty.



CAUTION: Risk of personal injury

Unit is not waterproof, to avoid electrical shock keep unit and counter from being submerged in water. Do not operate if unit has been submerged in water.

Location

For proper operation and maximum performance, locate the cabinet in an ambient air temperature of 70° F (21°C).

Avoid areas near exhaust fans where there is active air movement. For safe operation, locate the unit a reasonable distance from combustible walls and materials.

To prevent injury and damage, locate the unit at a proper and safe working height. The location should be level, clean of debris, and strong enough to support the weight of a fully loaded unit.

To prevent electrical shock, be sure unit is unplugged from an electrical outlet. If unit has been operated, allow unit to cool before installing.

GROUNDING INSTRUCTIONS

This appliance is equipped with a cord having a grounding wire with a grounding plug which must be plugged into an outlet that is properly installed and grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current.

WARNING—Improper use of the grounding can result in a risk of electric shock. Consult a qualified electrician or serviceman if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded.

Start-up

- 1. Plug the cabinet into a properly grounded electrical receptacle.
- 2. Ensure all plastic and packaging materials have been removed.
- 3. Set POWER switch to "ON" position.
- 4. Do not load product into the cabinet. Allow the heat to remove any residual oils which may adhere to inside metal surfaces. A slight emission of smoke is normal for the first few hours of operation.
- 5. Appliance is preset at the factory. However, the temperature is adjustable. See page 7 for programming instructions.

NORMAL OPERATION



CAUTION: HOT SURFACE

Inner surfaces of the unit will be very hot during and after operation. Avoid touching the cabinet when loading or removing product.





Temperature Set Button

Alarm Reset Button

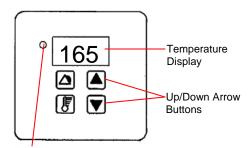
- 1. The power switch is located at the base of the cabinet, underneath the door. Turn the power switch ON. Preheat cabinet for 30 minutes. When the cabinet is turned on, the air heater will operate until the cabinet reaches the air temperature setpoint. The display will read the actual cabinet temperature. The heat "ON" light will illuminate when the cabinet temperature is below the air temperature setpoint. The temperature display will flash alternately "LO" and the actual cabinet air temperature until it reaches the low temperature alarm setpoint.
- After preheat, load cooked, boxed pies (or other hand-held items) into the cabinet.

NOTE: The interior Product Caddy has a reserve storage area, separated by wires in the upper portion of the caddy. This reserve area is intended to provide additional product while a new batch is being cooked. Holes beneath the door provide visual indication of low product level in the cabinet.

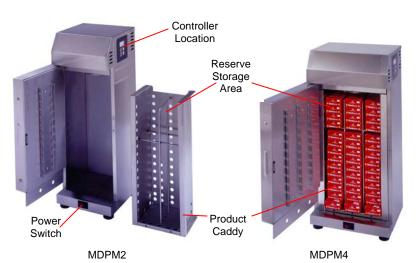
- 3. Cabinet dispenses items from the bottom, underneath the door. Simply grasp the item and pull out.
- 4. When cabinet is not in use, turn power off.

NOTE: This cabinet must be cleaned daily. Instructions can be found on page 8.

CONTROLLER



Heat "ON" Light



CONTROLLER PROGRAMMING



CAUTION: HOT SURFACE

Inner surfaces of the unit will be very hot during and after operation. Avoid touching the cabinet when loading or removing product.

CHEF'S TIP:

Recommended holding temperature for baked pies is 165°F (74°C) and 155°F (69°C) for fried pies.





Temperature Set Button

Alarm Reset Button

The controller has been factory pre-set for a holding temperature of 165°F (74°C) and a low temperature alarm of 140°F (60°C). In most cases, the temperature will not need to be changed. However, if changes are necessary, the controller is programmable.

To View or Change the Temperature Setpoint:

Turn the power on. To view the temperature setpoint, press and hold the temperature set button. To change the temperature setpoint, press and hold the temperature set button and press the up or down arrow button until the desired air temperature is displayed. The display will advance in 1° increments.

To View or Change the Low Temperature Alarm Setpoint:

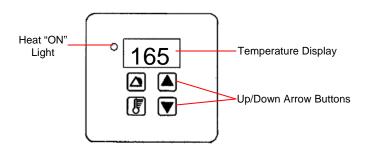
Turn the power on. To view the alarm setpoint, press and hold the alarm reset button. To change the alarm setpoint, press and hold the alarm reset button and press the up or down arrow button until the desired alarm temperature is displayed. The display will advance in 1° increments.

To View or Change Temperature Scale:

The cabinet is programmable for a temperature scale in degrees Fahrenheit and Centigrade (Celsius). Turn power off. Press and hold down both arrow buttons. While holding both arrow buttons, turn power back on. The display will show the current scale (**C** or **F**). If desired, push the up or down arrow button to change the scale. Turn power off to save the change.

NOTE: Controller temperature maximum allowable setting is 225°F (108°C).

CONTROLLER



CLEANING PROCEDURES



CAUTION: **ELECTRIC SHOCK HAZARD**

Disconnect appliance from electric power before cleaning.



CAUTION: **HOT SURFACE**

Exposed surfaces can be hot to the touch and may cause burns. Allow appliance to cool before cleaning.

IMPORTANT: DO NOT

spill or pour water into controls, control panel or wiring. Water damage is **not** covered by warrantv.



CAUTION:

Beware of sharp edges on sheet metal during cleaning.

- After all food products have been removed from the cabinet, turn the 1. power switch to "OFF" and allow the cabinet to cool. Unplug cabinet.
- 2. Remove the interior product caddy from the cabinet.
- Wipe cabinet and inside surface of warming cavity with a clean towel 3. moistened with cleaning solution (see Recommended Tips below). Take care not to get moisture into any vents, internal controls or electrical components.
- Rinse by wiping with a clean towel moistened with clean water. Allow to air dry.
- Clean product caddy with a mild detergent. Rinse and allow to air dry. (The caddy may be run through a commercial dishwasher)
- Inspect and clean the areas where there are vents, making sure no water gets into the internal controls or electrical areas of the cabinet.
- Reconnect power cord to properly grounded electrical receptacle. 7.





Cleansers, detergents, degreasers, sanitizers, or bleaching agents that contain chlorides or phosphates will cause permanent damage to stainless steel products. The damage appears as pits, eruptions, voids, small holes, severe discoloration or dulling of the metal finish. Water with high chloride content can also damage stainless steel. If unsure of your water quality, we recommend you

have it tested. THIS DAMAGE IS PERMANENT, COSTLY TO REPAIR, AND IS NOT COVERED BY THE WARRANTY.

RECOMMENDED TIPS FOR CLEANING STAINLESS STEEL						
Purpose	Frequency	Cleaning Agent	Method of Application			
Routine	Daily	Soap, ammonia	Sponge with cloth, rinse with clear water cleaning detergent and water and wipe dry.			
Smears/ Fingerprints	As needed	Stainless steel cleaner or similar products	Rub with soft cloth as directed on package. Rub in direction of grain of stainless steel. Do not use on vinyl trim.			
Stubborn spots and stains	Daily as needed	Any chloride-free or phosphate-free cleaner	Apply with damp sponge or cloth. Rub in direction of grain of stainless steel. Rinse thoroughly, especially if cleaner contains chlorine bleach, do not use on vinyl trim.			
Hard water spots	Daily as needed	Vinegar	Swab with cloth. Rinse with water and wipe dry.			

MAINTENANCE PROCEDURES



CAUTION: ELECTRIC SHOCK HAZARD

Disconnect appliance from electric power before cleaning.



CAUTION:HOT SURFACE

Exposed surfaces can be hot to the touch and may cause burns. Allow appliance to cool before cleaning.

IMPORTANT: DO NOT spill or pour water into controls, control panel or wiring. Water damage is **not** covered by warranty.



CAUTION:Beware of sharp edges on sheet

metal during cleaning.

Temperature Verification (semi-annually or as needed)

Note: The cabinet may be empty or full to conduct this procedure.

- Ensure that the cabinet has been turned on and has been in operation for at least 30 minutes.
- Clip an oven probe to the Product Caddy where the wires intersect. Close door.
- After the oven probe has been in place for at lease five minutes, compare the digital thermometer temperature to the controller temperature.

NOTE: The measured temperature must reflect the controller display within +/- 10°F (6°C).

The temperature verification is complete. If the cabinet does not pass
the verification test, turn the power switch to OFF and do not use the
cabinet. Contact Carter-Hoffmann technical service at 800-323-9793
or 847-362-5500.

Changing the Illuminated Front Graphic on Door (as needed)

NOTE: You will need a Phillips screwdriver to perform this procedure.

- Remove the four screws on the sides of the door and remove the door trim.
- 2. Slide the POP graphic out; then slide the new POP graphic in, making sure to leave the white diffuser background panel in place.
- 3. Replace the door trim and secure with screws.

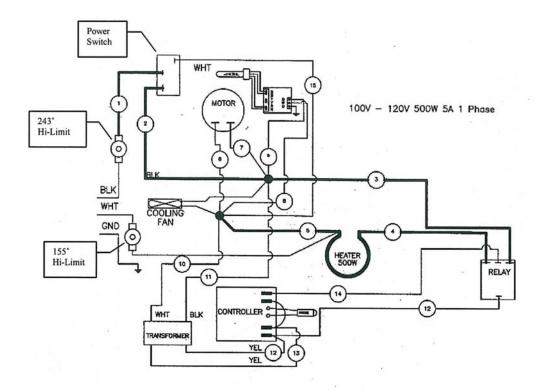
Changing the Light Bulb in the Door (as needed)

NOTE: You will need a Phillips screwdriver to perform this procedure.

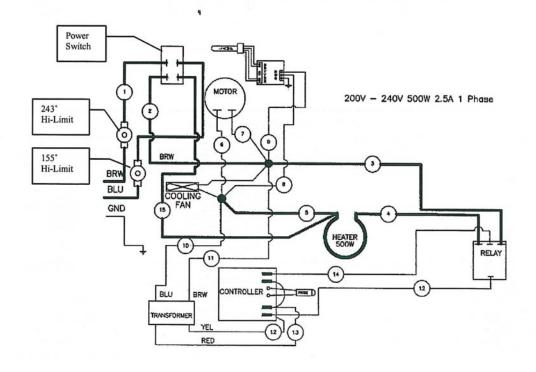
The POP graphic on the front door is illuminated by one fluorescent bulb. If the bulb burns out, turn off the cabinet. Remove the four screws on the sides of the door and remove door trim. Replace the burned out bulb, replace the door trim, and secure with screws. Turn the power switch on.

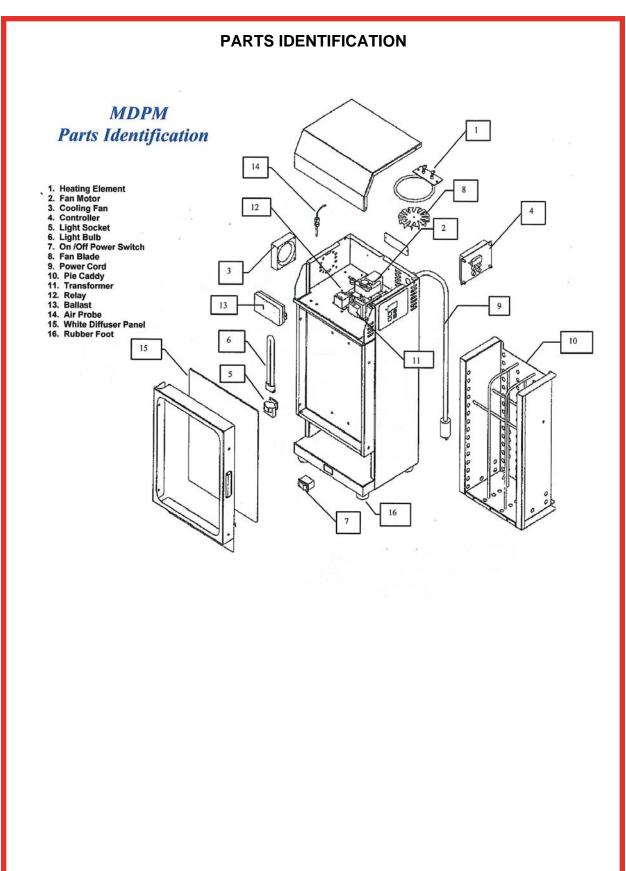
NOTE: Lamp contains mercury. Manage in accordance with disposal laws.

WIRING DIAGRAMS



Circled numbers reference wire numbers only





PARTS LIST

		Cabinet Type						
Part Number	Part Description	US MDPM2 110-120v	US MDPM4 110-120v	Intl MDPM2 110-120v	Intl. MDPM4 200-208v	Intl. MDPM2 200-208v	Intl MDPM2 220-240v	Intl MDPM4 220-240v
18614-0338	FAN MOTOR 110-120 volt	Х	Х	Х				
18614-0339	FAN MOTOR 200-208 volt				Х	Х		
18614-0340*	FAN MOTOR 220-240 volt						Х	Х
16090-2235	MONITOR / MOTOR SHEILD KIT	X	Х	Х	Х	Х	Х	Х
18603-5090	FAN BLADE		Х	Х	Х	Х	Х	Х
18612-0221	HEAT ELEMENT 110-120v	Х	Х	Х				
18612-0222*	HEAT ELEMENT 200-240v				Х	Х	Х	Х
18602-0055	ON/OFF SWITCH 110-120v	Х	Х	Х				
18602-0075*	ON/OFF SWITCH 200-240v				Х	Х	Х	Х
18600-0049*	HI LIMIT SNAPDISC 155°F (68°C)	Х	Х	Х	Х	Х	Х	Х
18600-0062*	HI LIMIT SNAP DISC 243°F (115°C)	Х	Х	Х	Х	Х	Х	Х
18606-0010	POWER CORD HSJO 16/2 w/PLUG	Х	Х	Х				
18605-0200*	POWER CORD 200-240v				Х	Х	Х	Х
18614-0322	COOLING FAN 120v	Х	Х	Х				
18614-0323*	COOLING FAN 208-240v				Х	Х	Х	Х
18616-0135	TRANSFORMER 110-120v	Х	Х	Х				
18616-0131*	TRANSFORMER 200-240v				Х	Х	Х	Х
16090-2332	RELAY RETROFIT KIT (relay, bracket & screws; units produced before 2003)	Х	Х	Х	Х	Х	Х	Х
18616-0223*	HEAT RELAY	Х	Х	Х	Х	Х	Х	Х
18616-0147	LIGHT BULB SOCKET 110-120v	X	Х	Х				
18616-0185	LIGHT BULB SOCKET 200-208v				Х	Х		
18616-0252*	LIGHT BULB SOCKET 220-240v						Х	Х
18616-0146	LIGHT BULB 110-120v	X	Х	Х				
18616-0189	LIGHT BULB 200-208v				Х	Х		
18616-0208*	LIGHT BULB 220-240v						Х	Х
18616-0197	LIGHT BULB BALLAST 110-208v	Х	Х	Х	Х	Х		
18616-0144*	LIGHT BULB BALLAST 220-240v						Х	Х
18616-0198*	AIR TEMPERATURE PROBE	Х	Х	Х	Х	Х	Х	Х
18616-0207	CONTROLLER BOARD	Х	Х	Х	Х	Х	Х	Х
18616-0229*	CONTROLLER						Х	Х
18312-0189	CONTROL OVERLAY	Х	Х	Х	Х	Х	Х	Х
18302-0086	MEDIUM SNAP-IN MAGNET	Х	Х	Х	Х	Х	Х	Х
16502-8327	DOOR STRIKE	Х	Х	Х	Х	Х	Х	Х
29037-9003	MDPM4 PLASTIC WHITE DIFFUSER		Х		Х			Х
29037-9008	MDPM2 PLASTIC WHITE DIFFUSER	Х		Х		Х	Х	
Contact Factory	PIE CADDY ASSEMBLY	Х	Х	Х	Х	Х	Х	Х
16090-2462	TOP HINGE ASSEMBLY	Х	Х	Х	Х	X	Х	Х
16502-8542	BOTTOM HINGE ASSEMBLY	Х	Х	Х	Х	Х	Х	Х
16502-8539	DOOR TRIM MDPM4		Х		Х			Х
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*WEEE Parts

TROUBLESHOOTING GUIDE

SYMPTOM	DISPLAY READS	PROBABLE CAUSE	CORRECTIVE ACTION	
NO POWER	Blank	Faulty circuit breaker tripped	Reset circuit breaker	
		Input cable to controller unplugged	Plug in power cable	
		Faulty transformer	Replace	
		Faulty controller	Replace	
		Faulty ON/OFF switch	Replace	
		Faulty wiring	Follow wiring per diagram	
NO HEAT / LOW TEMP	Ambient air temperature	Hi Limit faulty or tripped	Reset/Replace	
		Faulty heat element	Replace	
		Faulty relay	Replace	
		Faulty air probe	Replace	
		Faulty controller	Replace	
CONTROLLER LED'S	LED segments are out / dim	Loose wiring	Follow wiring per diagram	
		Faulty controller	Replace	
CONTROLLER READS ERROR CODE	Actual error code	Faulty probe connection	Check wiring	
		Faulty probe	Replace probe	
		Faulty controller	Replace	
PRODUCT NOT HOT ENOUGH	Normal	Wrong setting or menu being used	Correct temperature setting	
		Temperature out of calibration	Perform temperature verification test (page 9)	
		Product is not at proper serving temperature prior to being placed in cabinet	Cook product to proper temperature prior to placing in cabinet	
FUNCTION KEY DOES NOT OPERATE	Normal	Faulty controller	Replace	

NOTE:

The technical content of this manual, including any wiring diagrams, schematics, parts breakdown illustrations and / or adjustment procedures, is intended for use ONLY by qualified technical personnel.

NOTE:

For warranty service, call Carter-Hoffmann direct at 800-323-9793 for authorization, we will dispatch the nearest authorized service agency.

WARRANTY STATEMENT

Carter-Hoffmann Warranty:

Carter-Hoffmann ("CARTER-HOFFMANN") warrants to the initial purchaser of its standard Carter Line Products that CARTER-HOFFMANN will, at its option, repair or replace, during the warranty period set forth below, any part of such products made necessary due to a defect in material or workmanship which is present when the product leaves its factory and which manifests itself during the warranty period under normal use and service.

This warranty applies only to original equipment owned and possessed by the initial purchaser and the warranty period begins on the date of original shipment from the CARTER-HOFFMANN factory and extends as follows: to component parts and labor for 12 months; to refrigeration compressor unit for one year (limited to replacement only - not to include labor for removal, repair or replacement).

Repair or replacements under this warranty will be performed, unless otherwise authorized in writing by CARTER-HOFFMANN, at its factory. All parts or components to be repaired or replaced under this warranty are to be shipped prepaid to CARTER-HOFFMANN, with reimbursement credit for such part or component to be given if found by CARTER-HOFFMANN to be defective.

CARTER-HOFFMANN neither makes nor assumes and does not authorize any other person to make or assume any obligation or liability in connection with its products other than that covered in this warranty. This warranty applies only within the continental United States and Canada. In Alaska and Hawaii, this warranty applies only to and is limited to the supply of replacement parts.

Warranty Exclusions and Limitations:

Any implied warranty of merchantability or fitness for a particular purpose is hereby specifically disclaimed by CARTER-HOFFMANN. There are no warranties, expressed or implied, which extend beyond the description on the face hereof. This warranty does not cover and CARTER-HOFFMANN shall not under any circumstances be liable for any incidental, consequential or other damages (such as injury to persons or property, loss of time, inconvenience, loss of business or profits, or other matters not specifically covered) arising in connection with the use of, inability to use, or failure of these products.

Specifications subject to change through product improvement and innovation.

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