

VERTICAL CRISP N' HOLD FOOD HOLDING STATION

MODEL: VCNH3W2S & VCNH3W2S-CVR
OWNERS / OPERATORS MANUAL



MANUFACTURED BY:

CARTER-HOFFMANN
1551 McCormick Avenue
Mundelein, IL 60060 U.S.A.

Phone: 847-362-5500
Fax: 847-367-8981
Toll Free: 800-323-9793
Email: Service@Carter-Hoffmann.com



VCNH3W2S



VCNH3W2S-CVR



READ THIS MANUAL
COMPLETELY BEFORE
OPERATING THIS
APPLIANCE

Patent Pending

TABLE OF CONTENTS

SAFETY PRECAUTIONS.....	2
FEATURES & SPECIFICATIONS.....	3
UNPACKING AND INSPECTION.....	4
INSTALLATION & START-UP.....	5
NORMAL OPERATION	6
CONTROLLER PROGRAMMING.....	7-8
DAILY CLEANING PROCEDURES.....	9
WIRING DIAGRAMS.....	10
PARTS LISTS & TROUBLESHOOTING GUIDE	11
WARRANTY STATEMENT.....	12

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



Air Flow Plenum

Patent Pending



Removable Interior Caddy

Forced Convection Food Holding Cabinet

The Crisp n' Hold provides a heated stream of air to maintain crispy or fried food temperature and freshness for a specified period of time after cooking. Forced air is heated through an electric resistance heater and ducted into cabinet interior. The heated air is discharged through small circular openings in the bottom and sides of the cabinet interior caddy, which is removable. A plenum on the front of the removable caddy aids in directing a warm blanket of air over the food. Pans rest on wire rods built into the removable caddy.

Capacity/Dimensional Characteristics

Model Number	Capacity		Dimensions			Shipping Weight Lbs (kg)
	1/3 size steam table pan 6.75" x 12.5" x 2.5"	1/2 size sheet pan 13" x 18"	Height in (mm)	Depth in (mm)	Width in (mm)	
VCNH3W2S	6 (3 per shelf)	2 (one per shelf)	15-5/8 (397)	15-3/8 (390)	23 (584)	50 (23)
VCNH3W2S-CVR	6 (3 per shelf)	2 (one per shelf)	15-5/8 (397)	16-1/2 (419)	25-5/8 (651)	82 (37)

Cabinet Material: All stainless steel cabinet construction. Modular design with one controller featuring single temperature control and six timers; one pan cavity. Removable interior caddy with 2 wire shelves. VCNH3W2S-CVR also includes removable pan covers for 1/3 size pans (6 per cabinet).

Controls: Electronic temperature control with six timers. Allows user to program temperature in one degree increments up to 225° F (108°C). Timers can be set for up to 9 hours, 59 minutes, in 1 minute increments. Countdown converts to seconds when less than one minute is left.

Heater System: Dual fan heating system with electronic temperature control. On/off toggle switch with rubber boot. Blower system with precision engineered air venting in back and bottom of removable caddy, along with front mounted plenums at top and bottom of caddy provide even air circulation throughout cabinet. Electrical components isolated away from vapors and oils.

Performance: Capable of heating to 225°F (108°C). Preheat to 180°F (82°C) in less than 20 minutes.

Electrical Characteristics (4 options)

voltage	120	voltage	208	voltage	230	voltage	240
watts	1600	watts	1600	watts	1560	watts	1695
Phase	single	Phase	single	Phase	single	phase	single
Frequency	60 Hz	Frequency	60 Hz	Frequency	50/60 Hz	Frequency	50/60 Hz
Full Load Amps	14.3	Full Load Amps	8.2	Full Load Amps	6.9	Full Load Amps	7.1
Plug Type	5-20P	Plug Type	6-15P	Plug Type	CE	Plug Type	CE

Agency Approvals:



Specifications subject to change through product improvement and innovation.

UNPACKING AND INSPECTION



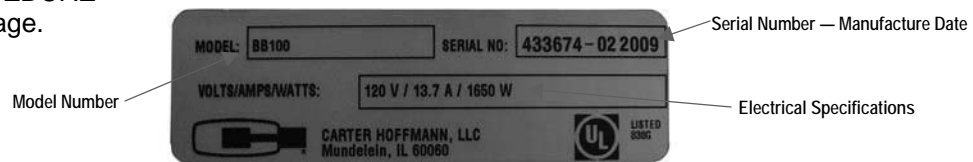
This appliance should be thoroughly cleaned prior to use.

See the **CLEANING INSTRUCTIONS**, on page 9 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 DAMAGE CLAIM PROCEDURE* on bottom of this page.

1. 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, instruction packet and any additional accessories.
5. Read operation instructions completely.
6. 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).
7. Appliance should be thoroughly cleaned before use. See **CLEANING INSTRUCTIONS**, page nine.



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 IMMEDIATELY:** 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



WARNING: Risk of personal injury

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 NEMA receptacle. See serial tag on cabinet for electrical specifications.



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 Crisp n' Hold 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.

To prevent an electrical shock hazard between the appliance and other appliances or metal parts in close vicinity, an equalization-bonding stud is provided. An equalization bonding lead must be connected to this stud and the other appliances/metal parts to provide sufficient protection against potential difference. The terminal is marked with the following symbol:



Start-up

1. Plug the Crisp n' Hold 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 pages 7-8 for programming instructions.

NORMAL OPERATION (Dayparts Enabled)



**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

Typical Temperature

Module is READY

NOTE: Timer can not be started until the cabinet is pre-heated.

NOTE: Press and release the TEMP KEY top view or verify a cavity setpoint.

Typical Time Remaining

NOTE: Timer can be cancelled at any time during the cycle by pressing and holding the TIME KEY for 2 seconds. Digital readout will display currently selected timer (e.g. "P 1").

Timed Cycle Completed

NOTE: Program timer defaults to "P1" each time the unit is turned OFF then back ON.

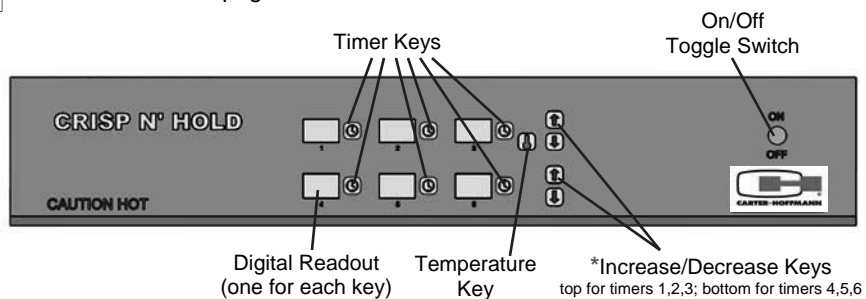
NOTE: See *PROGRAMMING INSTRUCTIONS* on next page with instructions on how to enable DAYPARTS

Daily operating procedures

1. Prior to use, unit must be installed properly and tested by a trained installation or service professional.
2. Unit must be clean and grease-free prior to use.
3. Verify that the removable interior caddy is installed properly.
4. Turn power on by flipping the toggle switch; the motors should begin to turn and create airflow.
5. Unit will automatically begin to preheat, allow 20 minutes for unit to climb to operating temperature of 180° F. Digital readout will display "LO" until the cabinet reaches 122° F. After the cabinet reaches 122° F, the digital readout will display the current temperature, until the cabinet reaches the setpoint.
6. Once the cabinet reaches the setpoint, the digital readout will display "P1". This indicates the cabinet is at temperature and ready to hold product.
7. Load product into pans and insert pans into the Crisp 'N Hold.
8. The cabinet has six programmable timers ("P1", "P2", "P3", "P4", "P5", "P6") for each pan (if holding maximum capacity of six 1/3 size pans). Different program times can be used for different parts of the day (i.e. Breakfast, Lunch, Dinner) or for alternate products.
9. Press the INCREASE KEY* or DECREASE KEY* to select the desired program timer (display will scroll through P1 through P6).
10. Once a timer menu (P1-P6) has been selected, press TIME KEY

to start the program. Refer to *Controller Programming* on pages 7 and 8 to change programmed time. The digital readout will count down, displaying the remaining time. When the timer reaches 5 minutes remaining, the timer will display "5" and will beep for 5 seconds. The digital readout will display in hours and minutes until it reaches less than one minute. When time remaining is less than a minute, the digital read out will count down in seconds. At the end of the timed cycle, the digital readout will flash "000" and an alarm will sound until the TIME KEY is pressed. The digital readout will display the currently selected timer (i.e. "P1"), indicating that the cabinet is ready to hold product.

11. Remove the product pan from the cabinet.
12. If holding is finished and cabinet is not needed for an extended time, turn the TOGGLE SWITCH to "OFF" and perform cleaning procedure as described on page 8.



CONTROLLER PROGRAMMING

To enter into program mode, display must be in operating mode and not in a timing cycle.

NOTE: Each module can be programmed individually.








TEMP setpoint range:
122°F to 195°F.

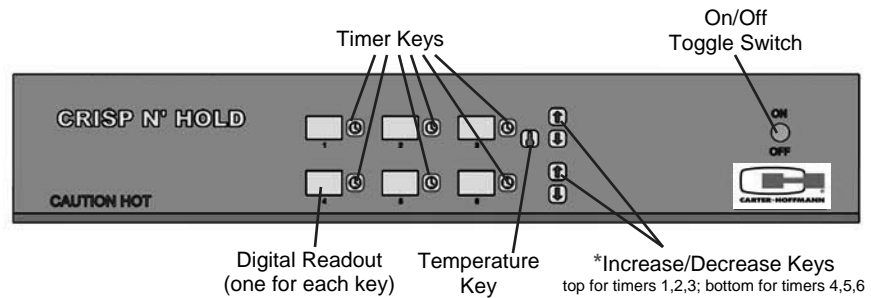


SETPOINT
TEMPERATURE
(Program Mode)

SETTING INDIVIDUAL HEATER TEMPERATURE SETPOINTS (in programming mode using P1 thru P6)

NOTE: If P1 is not displayed, press ARROW KEY

1. With appropriate P# selected, press and hold the TEMP KEY  for approximately 2 seconds, the display will flash the current setting for the lower heater; the lower heat indicator light will be ON.
2. Press either INCREASE KEY*  or DECREASE KEY*  to change the temperature.
3. To select the heater setting, press and release the TEMP KEY . The display will flash the current setting for the heater.
4. Press either INCREASE KEY  or DECREASE KEY  to change the temperature.
5. When done, press and hold the TEMP KEY  for 2 seconds. Changes will be saved. If no button is pressed, controller will automatically exit and changes will be saved.



See next page for instructions
to program timers

CONTROLLER PROGRAMMING (Continued)

To enter into program mode, display must be in operating mode and not in a timing cycle.

NOTE: Each module can be programmed individual-







TIMER range:
1 minute to 9 hours, 59 min.

8.30


TIMER
(Program Mode)

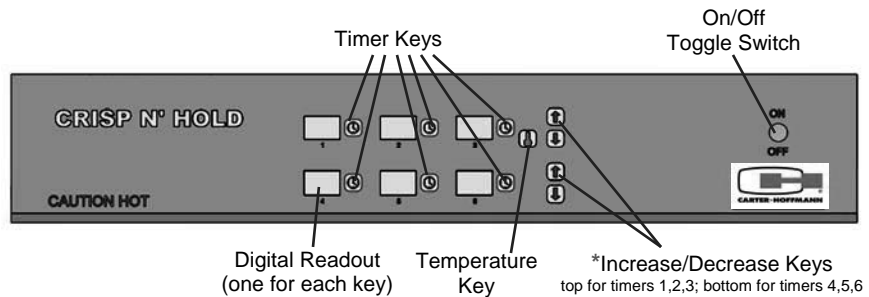
NOTE: Timers cannot be programmed for less than 1 minute.

PROGRAM TIMER (P1 through P6)

1. Press and hold TIME KEY  until digital readout flashes.
2. Press INCREASE KEY*  to add time. Each time key is pressed, timer is increased by 1 minute. Hold key to scroll faster.
3. Press DECREASE KEY*  to subtract time. Each time key is pressed, timer is decreased by 1 minute. Hold key to scroll faster.
4. Press TIME KEY  to save changes and return to P1.
5. To program timers P2 through P6:
 - A. Press INCREASE KEY  or DECREASE KEY  to select the desired program.
 - B. Repeat steps 1 through 4 above for each program

NOTE: If no key is pressed for 5 seconds, display returns to "P 1". Changes will be saved.

TO CANCEL TIMER: Press and hold TIME KEY  for 2 seconds.



CHANGING TEMPERATURE SCALE

1. Press the temperature button until the display starts flashing. Then, press both the INCREASE and DECREASE KEYS at the same time until °F is displayed.
2. Press the INCREASE KEY or DECREASE key to toggle between °F and °C.
3. Once desired scale is selected, press the TEMPERATURE KEY to save and exit.

Note: If F is not displayed after pressing both the INCREASE and DECREASE KEYS, then the controller does not have the proper software. Contact Carter-Hoffmann Technical Service for a replacement 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 warranty.



CAUTION: Beware of sharp edges on sheet metal during cleaning, especially during removal of grease filters.

1. After all food products have been removed from the cabinet, turn the power switch to "OFF" and allow the cabinet to cool. Unplug cabinet.
2. Remove the interior product caddy from the cabinet by placing your hands on the ceiling of the caddy and slide it toward you. Clean pans and product caddy with a mild detergent. Rinse and allow to air dry. (The pans and caddy may be run through a commercial dishwasher). If you have a VCNH3W2S-CVR, it will have integrated pan covers inside the caddy. Lift up lid to release from notches in the back of the caddy and pull out. Wash with mild detergent and rinse with clean water. Allow all parts to air dry before reinstalling.
3. Wipe cabinet and inside surface of warming cavity with a clean towel moistened with cleaning solution (see Recommended Tips below). Take care not to get moisture into any vents, internal controls or electrical components.
4. Rinse by wiping with a clean towel moistened with clean water. Allow to air dry.
5. Inspect and clean the areas where there are vents, making sure no water gets into the internal controls or electrical areas of the cabinet.
6. Reconnect power cord to properly grounded electrical receptacle.



Interior product caddy (installed)



Interior product caddy (removed)



VCNH3W2S-CVR pan lids



CAUTION

Cleaners, 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.

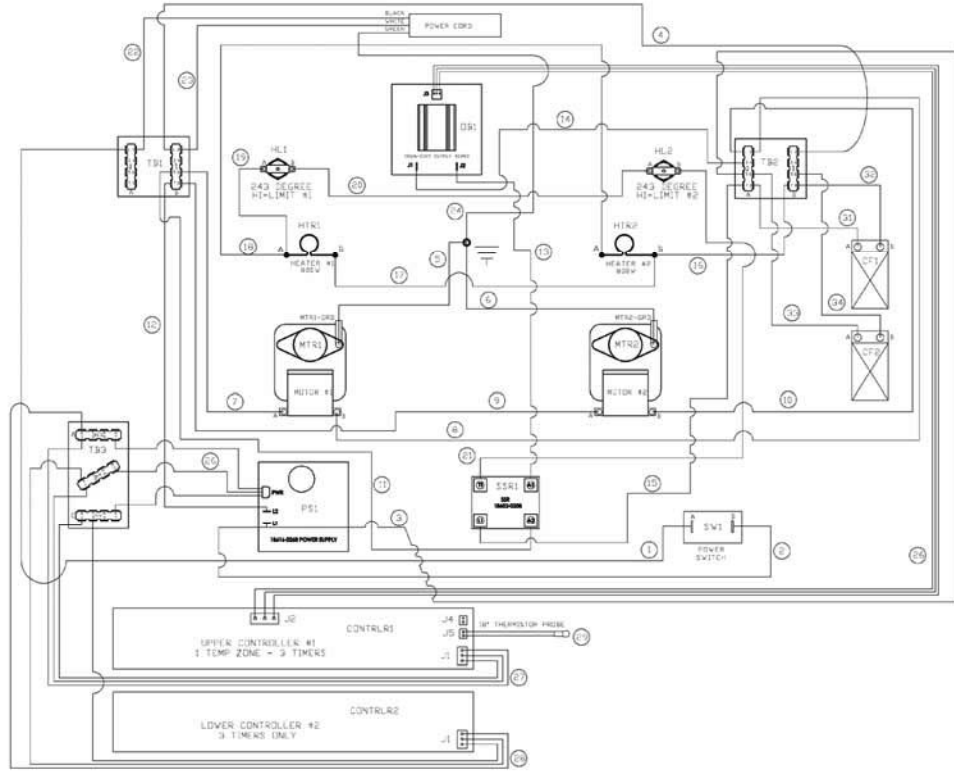
If unsure of your water quality, we recommend you have it tested. **THIS DAMAGE IS PERMANENT, COSTLY TO REPAIR, AND IS NOT COVERED BY THE WARRANTY.**

RECOMMENDED TIPS FOR CLEANING STAINLESS STEEL

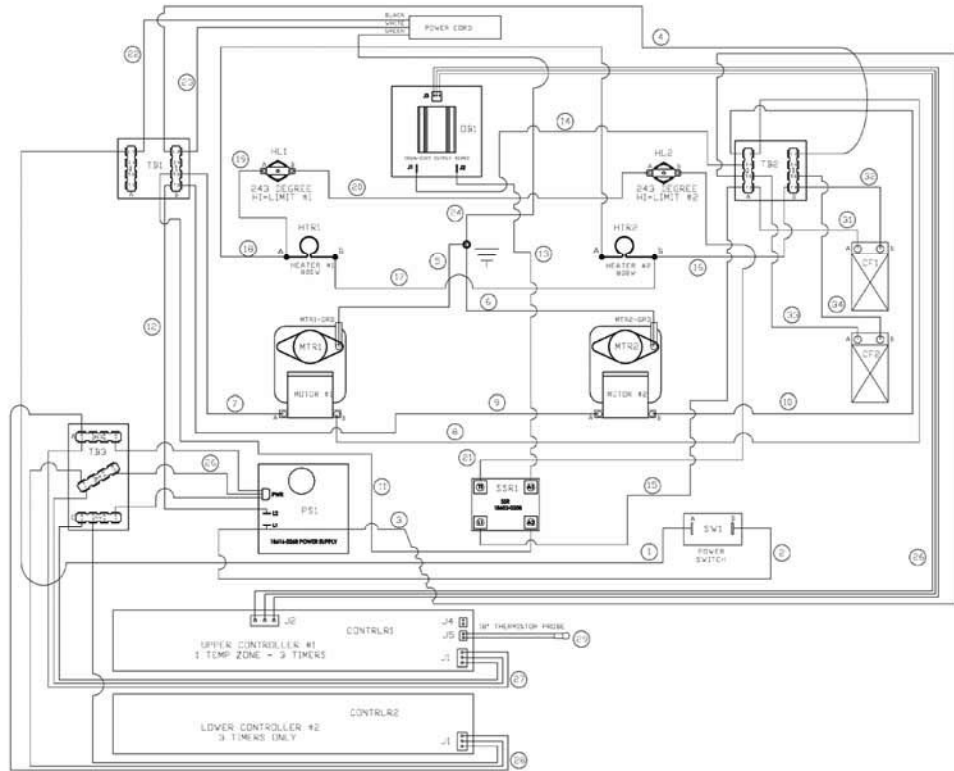
<u>Purpose</u>	<u>Frequency</u>	<u>Cleaning Agent</u>	<u>Method of Application</u>
Routine	Daily	Soap, ammonia detergent and water	Sponge with cloth, rinse with clear water cleaning and wipe dry.
Smears/ Fingerprints	As needed	Stainless steel cleaner or similar products	Rub with soft cloth as directed 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.

WIRING DIAGRAMS

120 volt Version



208 volt, 230 volt and 240 volt Versions



PARTS LISTS

VCNH3W2S or VCNH3W2S-CVR Crisp 'N Hold Station 1600 watts, 120v, 14.3 amps, 60Hz, 1 Ph, NEMA 5-20P	VCNH3W2S or VCNH3W2S-CVR Crisp 'N Hold Station 1600 watts, 208v, 8.2 amps, 50/60Hz, 1 Ph, NEMA 5-15P	VCNH3W2S or VCNH3W2S-CVR Crisp 'N Hold Station 1560/1695 watts, 230/240v, 6.9/7.1 amps, 50/60Hz, 1 Ph, CE Plug
Part Number 18305-0071 Rubber foot 18312-0418 Controller label 18600-0049 Hi-limit thermostat 18602-0030 On/Off switch 18602-0031 Switch boot 18602-0268 Solid state relay—25A 18603-5090 Fan wheel 18603-9099 18" Thermister probe 18605-0017 Cord 14/3 HSJO X 11' long 18612-0234 Heater elements, 110v 800w 18614-0272 Fan guard 18614-0322 Muffin fan 18614-0338 Motor w/ bracket 110v 18616-0264 Temperature controller w/timers 18616-0327 Timer controller 16090-2963 Caddy assembly (VCNH3W2S) 16090-3531 Caddy assy. (VCNH3W2S-CVR) 16504-3503 Pan cover (VCNH3W2S-CVR only)	Part Number 18305-0071 Rubber foot 18312-0418 Controller label 18600-0049 Hi-limit thermostat 18602-0030 On/Off switch 18602-0031 Switch boot 18602-0268 Solid state relay—25A 18603-5090 Fan wheel 18603-9099 18" Thermister probe 18605-0015 Cord 16/3 HSJO w/ 6-16 plug X 11' long 18612-0409 Heater elements, 208v 800w 18614-0272 Fan guard 18614-0323 Muffin fan 18614-0339 Motor w/ bracket 208v 18616-0264 Temperature controller w/timers 18616-0327 Timer controller 16090-2963 Caddy assembly (VCNH3W2S) 16090-3531 Caddy assy. (VCNH3W2S-CVR) 16504-3503 Pan cover (VCNH3W2S-CVR only)	Part Number 18305-0071 Rubber foot 18312-0422 Controller label; 6 timer CE 18600-0049 Hi-limit thermostat 18602-0030 On/Off switch 18602-0031 Switch boot 18602-0268 Solid state relay—25A 18603-5090 Fan wheel 18603-9099 18" Thermister probe 18605-0200 Cord 16/3 harmonized X 11' long 18612-0236 Heater elements, 240v 800w 18614-0272 Fan guard 18614-0323 Muffin fan 18614-0340 Motor w/ bracket 220-240v 18616-0264 Temperature controller w/timers 18616-0327 Timer controller 16090-2963 Caddy assembly (VCNH3W2S) 16090-3531 Caddy assy. (VCNH3W2S-CVR) 18606-0726 Plug 16A (France, Belgium) 16504-3503 Pan cover (VCNH3W2S-CVR only)

TROUBLESHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	SUGGESTED REMEDY
No power to unit	Not plugged in or circuit breaker tripped	Check or reset circuit breaker Connect to proper receptacle
	Power cord damaged	Check - replace if required
	Power switch damaged or defective	Check - replace if required
Food dries out too quickly	Operation where product temp is too high	Check product temps going into holding cabinet
	Temperature probe or controller defective	Check proper operation or call service technician
Unit is on, motors are running but no heat	Internal wiring error	Call service technician
	Element hi-limit trip /defective	Call service technician
Takes too long to get to temperature	Improper voltage	Call service technician to verify incoming voltage matches cabinet specifications.
Unit is hot but low or no airflow	Internal wiring error	Call service technician
	Circulation motor has quit	Call service technician
	Improper voltage	Call service technician to verify incoming voltage matches cabinet specifications.

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.

Carter-Hoffmann, LLC

**1551 McCormick Ave.
Mundelein, IL 60060**

Phone: 847-362-5500 • Toll free (USA and Canada): 800-323-9793

Fax: 847-367-8981

Sales & Marketing E-mail: sales@carter-hoffmann.com • Service E-mail: service@carter-hoffmann.com

Company Website: www.carter-hoffmann.com



Proud Member

