

# HOSPITALITY SERIES COMBINATION BASE & PLATE HEATERS OWNERS / OPERATORS MANUAL



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**PH2S & BH2S**  
Base/Plate Heater



**PBH2S**  
Combo Base/Plate Heater

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## INSTALLATION AND STARTUP

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

Refer to *SHIPPING DAMAGE CLAIM PROCEDURE* on the next page.



### **WARNING:** Risk of personal injury

Installation procedures must be performed by a qualified technician with full knowledge of all applicable electrical codes. Failure could result in personal injury and property damage.



### **IMPORTANT:** Power cord is 10' long

If necessary, contact a licensed electrician to install an appropriate 20 or 30 amp electrical circuit with correct NEMA 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.



### **WARNING:** Risk of personal injury

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

1. Remove the cabinet from shipping carton, ensuring that all packing materials and protective plastic has been removed from the unit.
2. Inspect all components for completeness and condition.
3. If any freight damage is present, a freight claim must be filed immediately with the shipping company.
4. **Freight damage is not covered under warranty.**
5. Check to insure all components are included: cabinet, instruction packet and additional accessories.
6. Read operation instructions completely.
7. Remove each self-leveling dispenser unit out of the cabinet. Remove corrugated packing materials from the cabinet.
8. Wipe all surfaces of the cabinet and self-leveling dispensers with a clean damp cloth, then dry thoroughly.
9. All models are equipped with self-leveling mechanisms that are removable through the top of the unit so that adjustments can be made to the tension springs. By adding or removing springs, proper dispensing can be attained. See page 5 for instructions on how to adjust the spring tension.
10. Verify that you have the proper electrical supply and plug into properly grounded electrical supply according to the electrical specifications on the serial tag located on the cabinet.

### **IMPORTANT: Not under warranty**

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

### **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 service agent if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded.



### **WARNING:** Risk of personal injury

Portions of the unit remain energized, even if the power switch is in the OFF position. Unplug unit for service or cleaning.

## 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.

## OPERATION



**CAUTION:** If you have a heated dispenser, exposed surfaces of the dispenser can be hot and may cause burns



### CAUTION: PINCH HAZARD

- Hold plates/bases by the sides when loading the dispenser
- Holding plates/bases by the bottom can allow fingers to become trapped between the plates and dispenser wall



Toggle power switch:  
BH & PH Models

### BH2S, BH3S, PH2S, PH3S Models:

These cabinets are adjustable to hold plates or bases. BH models leave the factory configured for Base Holding and PH models leave the factory configured for Plate Holding. Otherwise, they are the same. If you wish to change from Plate to Base holding or vice versa, refer to page 5 to adjust the spring tension in the tubes prior to loading

- 1) Plug unit into electrical outlet.
- 2) Place bases/plates into the dispensers, as needed, or until they are filled to the top. Make sure the load is leveled on the shelf or it could bind.
- 3) Place the lids on the top of the unit.
- 4) If you are heating plates, flip the switch to the right for plate heating. If you are heating bases, flip the switch to left for base heating.
- 5) Heat up time for bases and plates varies, depending on the number and style of each. Minimum heat up time for a full unit is one hour.
- 6) After heating, remove lid(s) and hang on storage hooks, located at each end of the cabinet.
- 7) Carefully dispense plates/bases.
- 8) When not in use, turn unit off and keep covers on tubes.

**CAUTION:** Plates, bases and exposed surfaces of the dispenser will be HOT! Operators should always wear gloves or use base/plate lifters when dispensing.

## OPERATION



**CAUTION:** If you have a heated dispenser, exposed surfaces of the dispenser can be hot and may cause burns



### **CAUTION: PINCH HAZARD**

- Hold plates/bases by the sides when loading the dispenser
- Holding plates/bases by the bottom can allow fingers to become trapped between the plates and dispenser wall

### **PBH2S Model:**

These cabinets are adjustable to hold plates and/or bases. Each tube is independently controlled so you can hold either plates or bases. Refer to page 5 to adjust the spring tension in each tube for plates or bases prior to loading them.

- 1) Plug unit into electrical outlet.
- 2) Place bases/plates into the dispensers, as needed, or until they are filled to the top. Make sure the load is leveled on the shelf or it could bind.
- 3) Place the lids on the top of the unit.
- 4) If you are heating plates, flip the switch to the right for plate heating. If you are heating bases, flip the switch to left for base heating.
- 5) Heat up time for bases and plates varies, depending on the number and style of each. Minimum heat up time for a full unit is one hour.
- 6) After heating, remove lid(s) and hang on storage hooks, located at each end of the cabinet.
- 7) Carefully dispense plates/bases.

**CAUTION:** Plates, bases and exposed surfaces of the dispenser will be HOT! Operators should always wear gloves or use base/plate lifters when dispensing.

- 8) When not in use, turn unit off and keep covers on tubes.

**Toggle power switch:  
PBH2S**



**Toggle left for  
base heating**

**Center  
position is  
OFF**

**Toggle right for  
plate heating**

## DAILY CLEANING PROCEDURES



**CAUTION:** Beware of sharp edges with sheet metal during cleaning process.



**CAUTION:** Do not use steel wool pads as they will result in rusting from the ferrous metal in the pads.



**CAUTION:** Be sure the power switch(es) are turned OFF and the cabinet is unplugged from the power source prior to cleaning. The heating element and electrical components must not be exposed to direct contact with water or other cleaning sprays. Permanent damage to the electrical components will result.

1. Turn cabinet OFF, unplug cabinet from outlet and allow to cool completely.
2. Pull the dispenser tubes up and out, place them on a work surface. Wipe them down with a damp cloth and allow to dry.
3. Place the dispensers back into the cabinet and clean the cabinet exterior with a mild, non-abrasive soap or detergent in a warm water solution. A commercial stainless steel cleaner may also be used.
4. To clean stainless steel surfaces, use only cleansers, detergents, degreasers, or sanitizers that are certified to be chloride-free and phosphate-free, and only in recommended concentrations or mixing ratios. After cleaning and sanitizing, rinse all exposed surfaces thoroughly with large amounts of clear water. Wipe off any standing liquid or residue from all horizontal surfaces in corners, or near edges.



**CAUTION:** 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, cracks, 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.

Use of cleaning agents that are not recommended for stainless steel may cause permanent damage to the cabinet. **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 Cleaning	Daily	Soap, ammonia detergent & water	Sponge with cloth, rinse with clear water and wipe dry
Smears/fingerprints	As Needed	Stainless steel cleaner or similar products	Rub with cloth as directed on package. Rub in direction of stainless steel grain. Do not use on vinyl trim.
Stubborn spots & stains	Daily As Needed	Any chloride-free or phosphate-free cleaner	Apply with damp sponge or cloth. Rub in direction of stainless steel grain. Rinse thoroughly. Do not use on vinyl trim.
Hard water spots	Daily As Needed	Vinegar	Swab with cloth. Rinse with water & wipe dry.

## ADJUSTMENTS FOR PLATES OR WAX BASES



### CAUTION:

Unplug cabinet and allow to cool completely before adjusting spring tension.

The tension on the self-leveling carriage is adjustable for wax bases or plates, by connecting or disconnecting the tension springs. As you are loading plates/bases, observe the plate level. The top of the stack should be maintained at a comfortable height. If the level is too high or too low, springs will have to be added or removed to attain the desired height. To ensure smooth operation, use a similar number of springs on all four sides of the tube. This is done by connecting or disconnecting the springs from the bottom retainer bracket. You will then have to set the switch(es) for plates or bases.

### TO ADJUST SPRINGS

- 1) Remove the dispenser assembly from the cabinet. Stand the assembly upright and secure it to prevent tipping.
- 2) If you intend to hold bases, then make sure all 9 springs are attached as shown in Fig. 1.
- 3) If you intend to hold plates, detach 3 springs from the bottom bracket as shown in Fig. 2. and allow them to dangle. They will remain out of the way, but available for later adjustments, if needed.
- 4) Place 10 plates or 6 bases, depending on your spring settings onto the platform. The top base or plate should be positioned at the top of the dispenser unit.

**NOTE:** Due to the varying weights and dimensions of bases and dinnerware, further spring adjustments may be needed to achieve proper height and function.

- 5) Once the proper adjustment has been achieved, remove the plates/bases and place the self-leveling tube back into the cart.

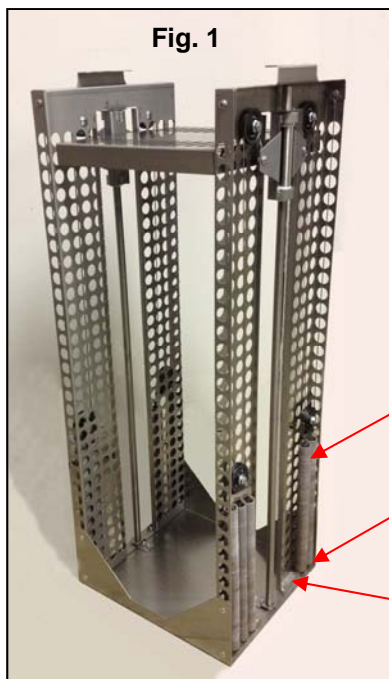


Fig. 1

Lift entire tube out of cabinet to adjust springs

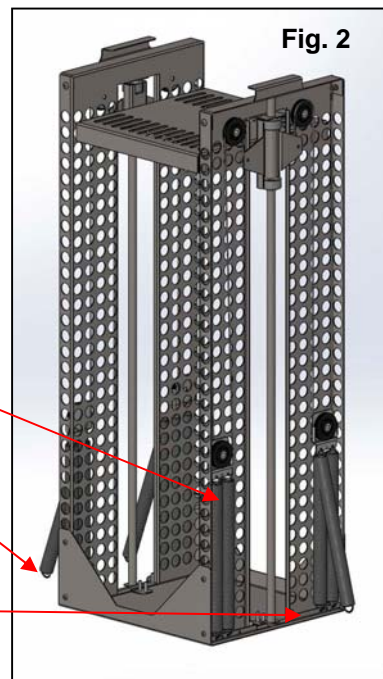


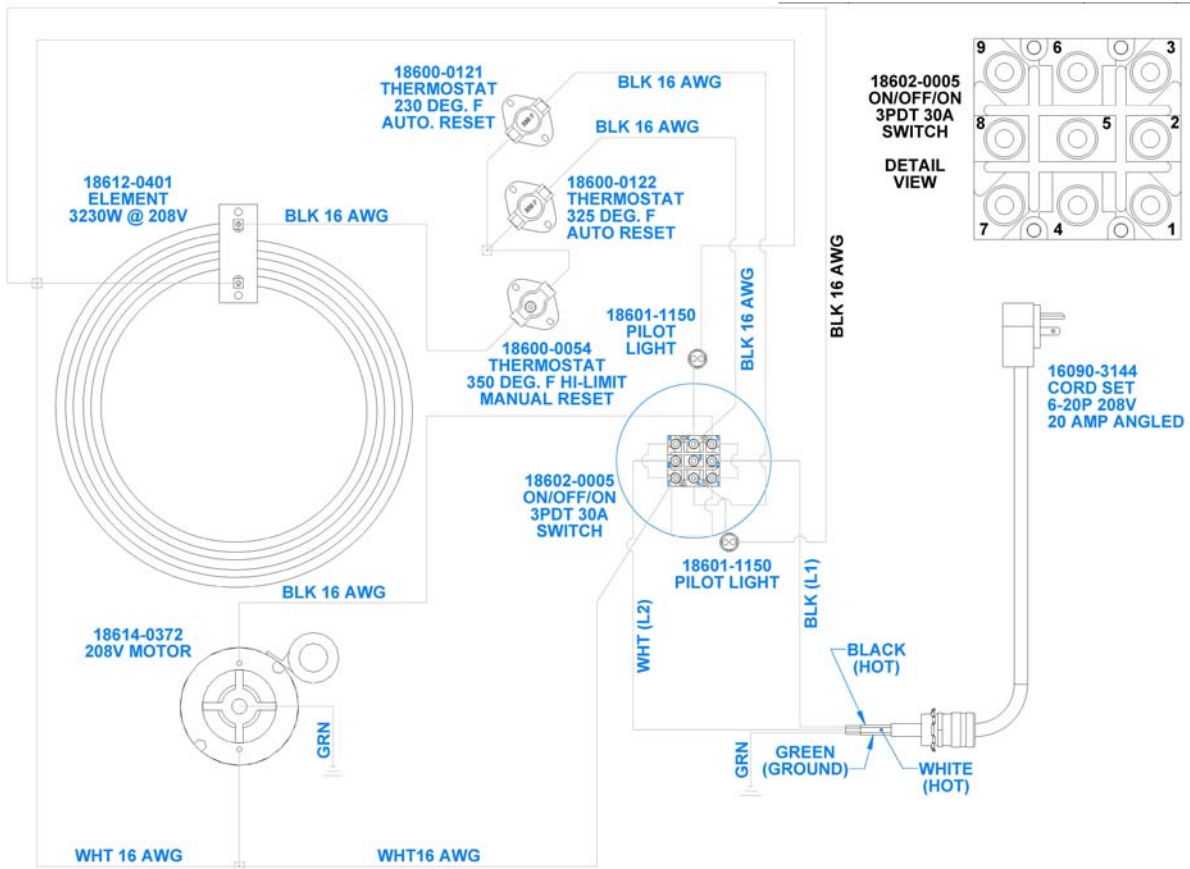
Fig. 2

Springs

Spring Hooks

Bottom Hook Bracket

## WIRING DIAGRAM-PH2S & BHS MODELS



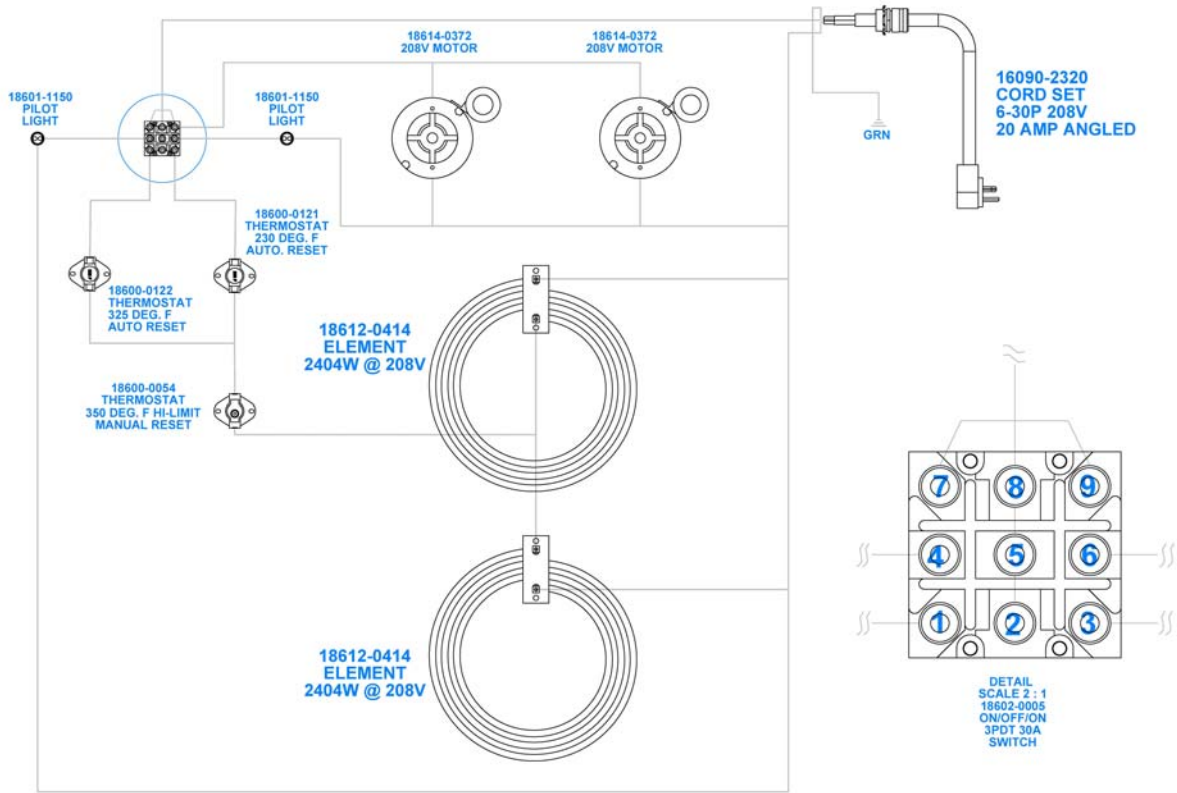
## REPLACEMENT PARTS

### BH2S & PH2S Models

DESCRIPTION	PART NUMBER
1/2" x 31.75" lowerator rod	16050-0319
Lowerator guide assembly	16095-3102
Guard washer	16503-7841
Tension spring	18400-2015
Pulley wheel	18617-0489
Braided S.S. pulley cable	18605-6030
Cord set, 6-20P angled	16090-3144
Push handle assy.	16095-3013
Lid assy.	16095-3526
Cord wrap bracket	16505-2199
Service panel	16505-5721
Extruded aluminum bumper frame	17030-0566

DESCRIPTION	PART NUMBER
Bumper, red vinyl	17030-05568V
Snap disc 350°F manual reset	18600-0054
Snap disc 225°F auto reset	18600-0121
Snap disc 325°F auto reset	18600-0122
Light, 250V red pilot	18601-1150
Element, 4300w at 240V; 3230 at 208V	18612-0401
Fan wheel	18614-0345
Motor, 208v/240v	18614-0372
Caster, 3.5" red performa w/brake	18301-0006
Switch, 30A, 3-way toggle	18602-0005
Caster, 3.5" red performa w/o brake	18301-0007

## WIRING DIAGRAM-PH3S & BH3S MODELS



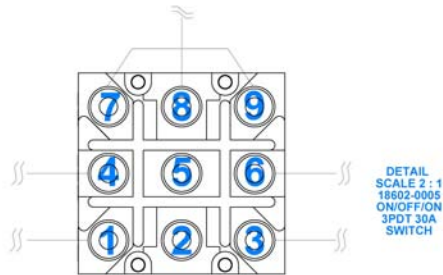
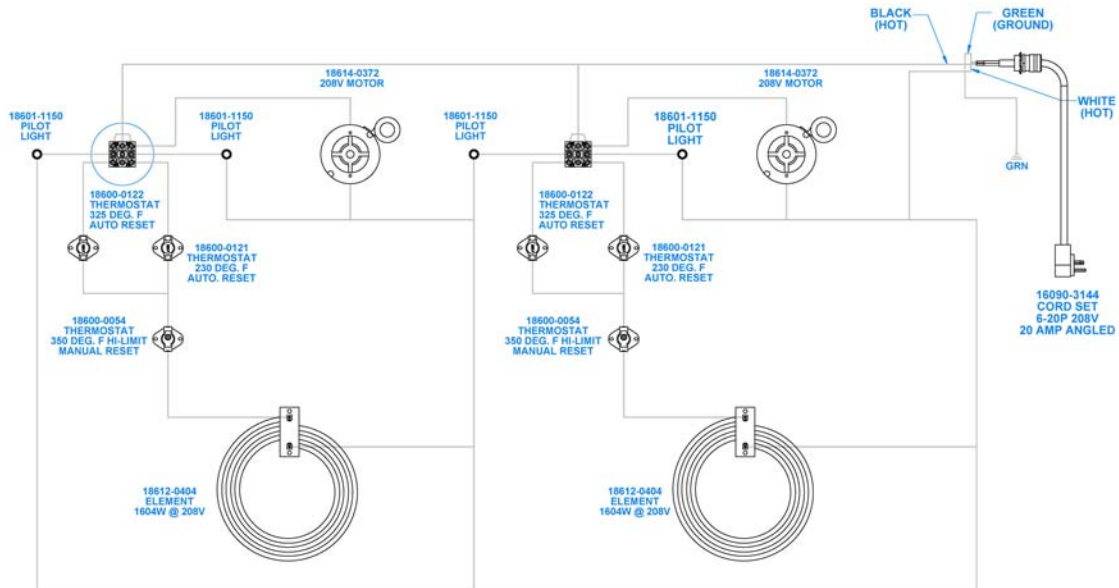
## REPLACEMENT PARTS

### BH3S & PH3S Models

DESCRIPTION	PART NUMBER
1/2" x 31.75" lowerator rod	16050-0319
Lowerator guide assembly	16095-3102
Guard washer	16503-7841
Tension spring	18400-2015
Pulley wheel	18617-0489
Braided S.S. pulley cable	18605-6030
Cord set, 6-30	16090-2320
Push handle assy.	16095-3013
Lid assy.	16095-3526
Cord wrap bracket	16505-2199
Service panel	16505-5792
Extruded aluminum bumper frame	17030-0580

DESCRIPTION	PART NUMBER
Bumper, red vinyl	17030-05568V
Snap disc 350°F manual reset	18600-0054
Snap disc 225°F auto reset	18600-0121
Snap disc 325°F auto reset	18600-0122
Light, 250V red pilot	18601-1150
Element, 3200w at 240v	18612-0414
Fan wheel	18614-0345
Motor, 208v/240v	18614-0372
Caster, 5" red performa w/brake	18301-5288
Switch, 30A, 3-way toggle	18602-0005
Caster, 5" red performa w/o brake	18301-5287

## WIRING DIAGRAM-PBH2S



## REPLACEMENT PARTS

### PBH2S

DESCRIPTION	PART NUMBER
1/2" x 31.75" lowerator rod	16050-0319
Lowerator guide assembly	16095-3102
Guard washer	16503-7841
Tension spring	18400-2015
Pulley wheel	18617-0489
Braided S.S. pulley cable	18605-6030
Cord set, 6-20P angled	16090-3144
Push handle assy.	16095-3013
Lid assy.	16095-3526
Cord wrap bracket	16505-2199
Service panel	16505-5721
Extruded aluminum bumper frame	17030-0566

DESCRIPTION	PART NUMBER
Bumper, red vinyl	17030-05568V
Snap disc 350°F manual reset	18600-0054
Snap disc 225°F auto reset	18600-0121
Snap disc 325°F auto reset	18600-0122
Light, 250V red pilot	18601-1150
Element, 2135w at 240v	18612-0404
Fan wheel	18614-0345
Motor, 208v/240v	18614-0372
Caster, 5" red performa w/brake	18301-5288
Switch, 30A, 3-way toggle	18602-0005
Caster, 5" red performa w/o brake	18301-5287

## MAINTENANCE



**CAUTION:** Use only OEM original equipment manufacturer replacement parts. Using unauthorized parts may cause serious injury. Replacement parts should be installed by a qualified service technician.



**WARNING: Risk of personal injury**

Portions of the unit remain energized, even if the power switch is in the OFF position. Unplug unit for service or cleaning.

### CASTERS

Check casters for freedom of movement and proper brake operation. Make sure they are free of debris (mop strings, paper, plastic, hair nets, etc). Clean or replace as required

### CORD AND PLUG

Inspect plug blades for distortion and replace if any blades are missing, bent or broken. Inspect cord wiring for integrity at termination points by qualified service personnel. Make sure the cord sheathing extends into the cabinet interior. If wires are showing on the outside of the cabinet, remove the unit from use and have repairs made before using the unit.

### PERIMETER BUMPERS

Vinyl which has been dislodged from the channel due to severe bumping or scraping can be pried back into place with a common screwdriver.

### TENSION SPRINGS

Periodically check springs for proper dispensing by filling each cavity with bases/plates and checking to for proper functioning. If bases/plates do not index properly, and the unit is not overloaded, adjust or replace the springs. The springs provided with our dispensers are designed to provide years of use. If replacement springs are needed, they may be ordered from Carter-Hoffmann. Contact our parts department at 800.323.9793.

## TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE ISSUE	REMEDY
Unit does not heat; fan is operating	<ol style="list-style-type: none"> <li>Loose wiring</li> <li>Defective heating element</li> <li>Open Hi Limit</li> </ol>	<ol style="list-style-type: none"> <li>Check and secure wiring</li> <li>Replace heating element</li> <li>Call for service</li> </ol>
Unit heats; fan not operating	<ol style="list-style-type: none"> <li>Defective motor</li> <li>Jammed or loose fan blade</li> <li>Loose wiring</li> </ol>	<ol style="list-style-type: none"> <li>Replace motor</li> <li>Replace or tighten blade</li> <li>Determine fault and correct</li> </ol>
Unit does not operate and power indicator light does not come on	<ol style="list-style-type: none"> <li>No power</li> <li>Defective power switch</li> <li>Loose wiring</li> </ol>	<ol style="list-style-type: none"> <li>Make sure unit is plugged in and power switch is ON</li> <li>Check for power to receptacle</li> <li>Replace power switch</li> <li>Check and secure wiring</li> </ol>
Base/plate temperature is too low, and fan is operating	<ol style="list-style-type: none"> <li>Fan blade is jammed or loose</li> <li>Cover is open</li> </ol>	<ol style="list-style-type: none"> <li>Replace thermostat</li> <li>Replace or tighten fan blade</li> <li>Close cover</li> </ol>
Dispenser binds	<ol style="list-style-type: none"> <li>Improper springs</li> <li>Debris on guide rods</li> </ol>	<ol style="list-style-type: none"> <li>Depending on contents, use correct number of springs</li> <li>Clean off debris</li> </ol>
Cabinet does not roll easily	<ol style="list-style-type: none"> <li>Debris on wheel or axle</li> <li>No lubrication</li> </ol>	<ol style="list-style-type: none"> <li>Clean off debris</li> <li>Lubricate axles with load bearing grease. Lubricate swivel bearings with 30-weight oil</li> </ol>

## **CARTER-HOFFMANN WARRANTY**

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 one year; to refrigeration compressor unit for one year (limited to replacement of the unit only-not to include the labor for removal, repair or replacement). Repair or replacement 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, express or implied, which extend beyond the description on the face thereof.

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 use, 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.

**Note: Due to our continuous process of product improvement and innovation, all listed specifications subject to change.**