



**GLO-RAY®**

**Merchandising Warmer**



**GRCMW-1DH**

# **Installation & Operating Manual & Replacement Parts List**

I&W #07.05.184.00



This manual contains important safety information concerning the maintenance, use and operation of this product. Failure to follow the instructions contained in this manual may result in serious injury. If you're unable to understand the contents of this manual, please bring it to the attention of your supervisor. Do not operate this equipment unless you have read and understood the contents of this manual.

Este manual contiene importante información sobre seguridad concerniente al mantenimiento, uso y operación de este producto. Cualquier falla en el seguimiento de las instrucciones contenidas en este manual puede resultar en un serio daño. Si usted no puede entender el contenido de este manual por favor pregunte a su supervisor. No opere este equipo al menos que haya leído y comprendido el contenido de este manual.

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## IMPORTANT OWNER INFORMATION

Record the model number, serial number (identification plate located on the rear of the unit), voltage and purchase date of your Glo-Ray® Merchandising Warmer in the spaces below. Please have this information available when calling Hatco for service assistance.

Model No. GRCMW-1DH

Serial No. \_\_\_\_\_

Voltage 120

Date of Purchase \_\_\_\_\_

Business Hours: 8:00 a.m. to 5:00 p.m.  
Central Standard Time

(Summer Hours: June to September –  
8:00 a.m. to 5:00 p.m. C.S.T.  
Monday through Thursday  
8:00 a.m. to 2:30 p.m. C.S.T. Friday)

Telephone: (800) 558-0607; (414) 671-6350

Fax: (800) 690-2966 (Parts & Service)  
(414) 671-3976 (International)



24 Hour 7 Day Parts & Service Assistance available in the United States and Canada by calling (800) 558-0607.

Additional information can be found by visiting our web site at [www.hatcocorp.com](http://www.hatcocorp.com).

## INTRODUCTION

The Glo-Ray® Merchandising Warmer keeps breakfast foods, such as cinnamon rolls, biscuits, gravy and eggs hot at kitchen work areas, waitress pick-up stations or customer serving points.

The GRCMW-1DH incorporates Hatco's precise temperature control to safely hold foods longer. The upper chamber holds food at optimum serving temperatures, while the lower heated base includes a high humidity design. Coated shatter-resistant halogen lights enhance product displays while safeguarding food products from bulb breakage. The infrared upper metal sheath heating elements are guaranteed against breakage and burnout for two years and the foil blanket base heating elements are guaranteed against burnout for one year.

Model GRCMW-1DH features front access doors and 1" adjustable legs as standard equipment.

This manual provides the installation, safety and operating instructions for the Glo-Ray Merchandising Warmer. We recommend all installation, operating and safety instructions appearing in this manual be read prior to installation or operation of your Hatco Merchandising Warmer. Safety instructions that appear in this manual after a warning symbol ⚠ and the words **WARNING** or **CAUTION** printed in bold face are very important. ⚠ **WARNING** means there is the possibility of serious injury or death to yourself or others. ⚠ **CAUTION** means there is the possibility of minor or moderate injury. **NOTICE** signifies the possibility of equipment or property damage only.

The Hatco Glo-Ray Merchandising Warmer is a product of extensive research and field testing. The materials used were selected for maximum durability, attractive appearance and optimum performance. Every unit is thoroughly inspected and tested prior to shipment.

# IMPORTANT SAFETY INFORMATION

**IMPORTANT! Read the following important safety information to avoid personal injury or death, and to avoid damage to the equipment or property.**

## **⚠ WARNINGS**

- ⚠ For safe and proper operation plug unit into a properly grounded electrical outlet of the correct voltage, size and plug configuration. If the plug and receptacle do not match, contact a qualified electrician to determine the proper voltage and size and install the proper electrical outlet.
- ⚠ To avoid any injury, turn the power switch OFF on the unit and unplug the unit from the power source and allow to cool completely before performing any maintenance or cleaning.
- ⚠ To avoid electrical shock or personal injury, do not steam clean or use excessive water on the unit.
- ⚠ To prevent any injury or damage to the unit do not pull unit by power cord.
- ⚠ To prevent any injury, discontinue use if power cord is frayed or worn and contact Authorized Service Agent to replace it.
- ⚠ Unit is not waterproof. DO NOT submerge in water. To prevent any injury or damage do not operate if unit has been submerged in water.
- ⚠ For safe and proper operation, the unit must be located at least 1" (25 mm) from combustible walls and materials. If safe distances are not maintained, discoloration or combustion could occur.
- ⚠ Only light bulbs which meet or exceed NSF standards, specifically designed for food holding areas must be used. Breakage of light bulbs not specially coated could result in personal injury and/or food contamination.
- ⚠ Some exterior surfaces on the unit will get hot. Use caution when touching these areas to avoid injury.
- ⚠ To avoid any injury or damage the unit must only be serviced by qualified personnel.
- ⚠ If service is required on this unit, contact your Authorized Hatco Service Agent, or contact the Hatco Service Department at 800-558-0607 or 414-671-6350; fax 800-690-2966 or International fax 414-671-3976.
- ⚠ This product has no "user" serviceable parts. To avoid damage to the unit or injury to personnel, use only Authorized Hatco Service Agents and Genuine Hatco Parts when service is required.
- ⚠ Genuine Hatco Replacement Parts are specified to operate safely in the environments in which they are used. Some aftermarket or generic replacement parts do not have the characteristics that will allow them to operate safely in Hatco equipment. It is essential to use Hatco Replacement Parts when repairing Hatco equipment. Failure to use Hatco Replacement Parts may subject operators of the equipment to hazardous electrical voltage, resulting in electrical shock or burn.

## **⚠ CAUTIONS**

- ⚠ Unit is not weatherproof. For safe and proper operation, locate the unit indoors where the ambient air temperature is constant and is a minimum of 70°F (21°C).
- ⚠ To avoid any injury or damage, locate the unit at the proper counter height, in an area that is convenient for use. The location should be level to prevent the unit or its contents from accidentally falling, and strong enough to support the weight of the unit and food displayed.
- ⚠ To avoid any injury or damage to the unit, do not move or relocate the unit for cleaning.
- ⚠ Standard and approved manufacturing oils will smoke up to 30 minutes during initial set up. This is a temporary condition. To assure safe operation operate unit without food product until smoke dissipates.

# IMPORTANT SAFETY INFORMATION

## NOTICES

Use only non-abrasive cleaners. Abrasive cleaners could scratch the finish of your unit, marring its appearance and making it susceptible to dirt accumulation.

Do not lay unit on the side with the control panel or damage to unit could occur.

Do not drag or slide the unit when moving or installing. Carefully lift the unit to prevent the rubber feet from tearing off.

DO NOT use paper towel or glass cleaner to clean polycarbonate breath protector. Paper towel and glass cleaner may scratch the material. Wipe off breath protector using a soft, clean and damp cloth.

## MODEL DESCRIPTION

### GRCMW-1DH

The Hatco GRCMW-1DH Merchandising Warmer is ideal for holding breakfast food at customer serving points. This model features prefocused upper infrared metal sheath heating elements, along with a three-channel electronic temperature control for the heated center shelf, heated base shelf and humidity system.

Unit also features one lower front polycarbonate access door, side enclosures, an upper breath protector, 1" (25 mm) adjustable legs, a lighted On/Off switch, halogen display lights and 6' (1829 mm) cord and plug set.

The top shelf holds two 1/2 size pans or one full size pan. The bottom shelf holds two 1/2 size pans.

*NOTE: Optional upper door assembly available in lieu of breath protector.*

*NOTE: Decorative Corian® trim pieces supplied and installed by others.*

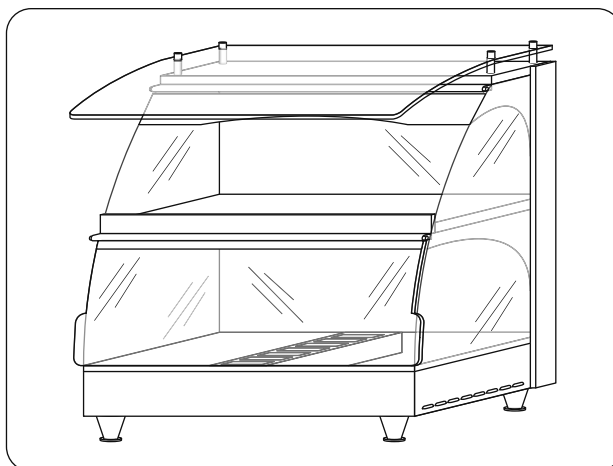


Figure 1. Glo-Ray Model GRCMW-1DH

## MODEL DESIGNATION

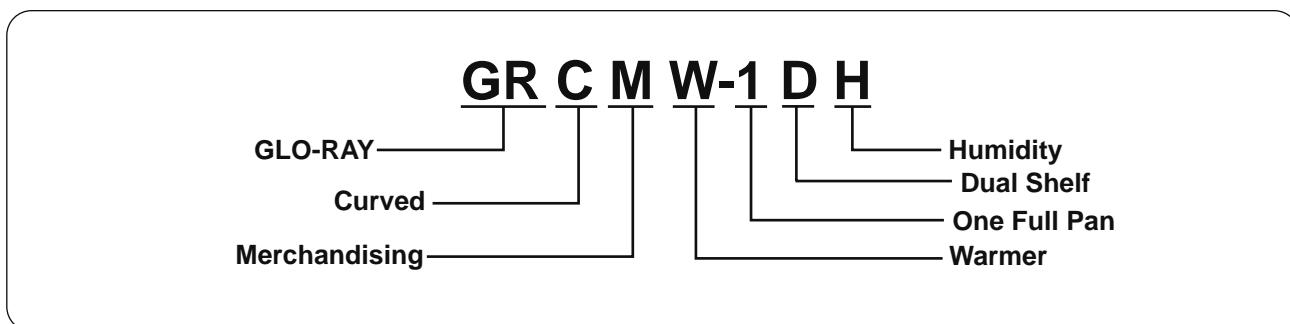


Figure 2. Model Designation

# SPECIFICATIONS

## PLUG CONFIGURATION

Units are supplied from the factory with an electrical cord and plug installed. Plugs are supplied according to the applications. (See Figure 3.)

### ⚠ WARNING

For safe and proper operation plug unit into a properly grounded electrical outlet of the correct voltage, size and plug configuration. If the plug and receptacle do not match, contact a qualified electrician to determine the proper voltage and size and install the proper electrical outlet.

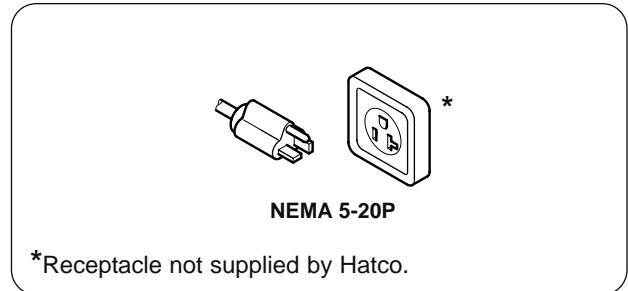


Figure 3. Plug Configuration

## ELECTRICAL RATING CHART

Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
GRCMW-1DH	120	1660	13.8	NEMA 5-20P	100 lbs. (45 kg)

## DIMENSIONS

Model	Width (A)	Depth (B)	Depth (C)	Height (D)
GRCMW-1DH with 1 door and breath protector	25-1/4" (641 mm)	17-1/2" (438 mm)	20-1/8" (511 mm)	26-7/8" (683 mm)

Model	Width (A)	Depth (B)	Depth (C)	Height (D)
GRCMW-1DH with 2 doors	25-1/4" (641 mm)	17-1/2" (438 mm)	---	26-7/8" (683 mm)

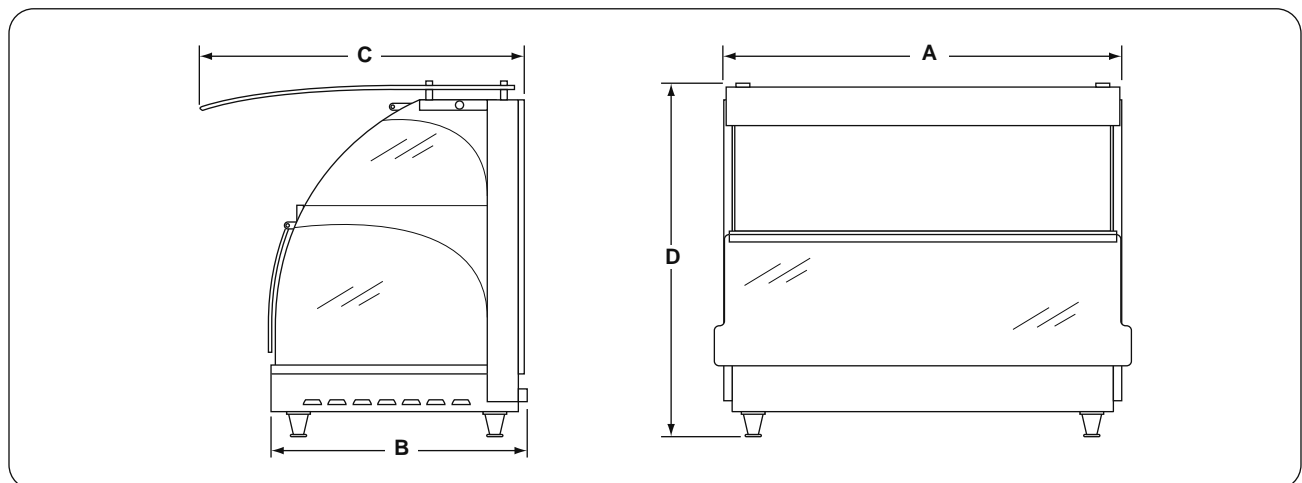


Figure 4. Dimensions Glo-Ray Model GRCMW-1DH

# INSTALLATION

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## UNPACKING

The Glo-Ray® Merchandiser is shipped with most components pre-assembled. Care should be taken when unpacking shipping carton to avoid damage to unit and components enclosed.

### WARNING

To prevent any injury or damage to the unit do not pull unit by power cord.

### WARNING

To prevent any injury, discontinue use if power cord is frayed or worn and contact Authorized Service Agent to replace it.

1. Remove the unit from the carton.
2. Remove information packet. To prevent delay in obtaining warranty coverage, fill out and mail the warranty card.
3. Remove tape and protective packaging from all surfaces of unit.

### NOTICE

Do not lay unit on the side with the control panel or damage to the unit could occur.

### NOTICE

Do not drag or slide the unit when moving or installing. Carefully lift the unit to prevent the legs from being damaged.

## LOCATION

*NOTE: Unit must be transported in the upright position.*

For proper operation and maximum performance, locate the unit in an area where the ambient air temperature is constant and is a minimum of 70°F (21°C). Areas which are susceptible to active air movements or currents should be avoided, i.e., near exhaust fans or hoods and air conditioning ducts.

### CAUTION

Unit is not weatherproof. For safe and proper operation, locate the unit indoors where the ambient air temperature is constant and is a minimum of 70°F (21°C).

### WARNING

For safe and proper operation, the unit must be located at least 1" (25 mm) from combustible walls and materials. If safe distances are not maintained, discoloration or combustion could occur.

### CAUTION

To avoid any injury or damage, locate the unit at the proper counter height, in an area that is convenient for use. The location should be level to prevent the unit or its contents from accidentally falling, and strong enough to support the weight of the unit and food displayed.

# INSTALLATION

## ASSEMBLY

Position unit upright on the counter near the location it will be used. Installation of the Polycarbonate Breath Protector (Qty. 1), part number 04.12.326.00, is required before operating the unit.

*NOTE: Decorative Corian® pieces are not supplied or installed by Hatco.*

### Installation for Breath Protectors (On One Door Units Only) (See Figure 5)

1. Remove protective paper from polycarbonate surfaces.
2. Remove four (4) thumbscrews and washers from top of unit.
3. Position breath protector on top of unit, matching holes in breath protector to the holes in the standoffs on top of the unit.
4. Place a washer (previously removed) in each breath protector hole.
5. Secure with thumbscrews - Do not over tighten.

### Installation for Side Glass (See Figure 6)

1. Remove thumbscrew and upper glass bracket.
2. Insert bottom edge of the side glass panel into the bottom glass bracket.
3. Ensure the back edge of the glass is against the vertical support post and tilt the top edge of glass up against the side of frame.
4. Place upper glass bracket over the top edge of the glass and secure into place with the thumbscrew.
4. Repeat steps 1-4 to install glass on opposite side.

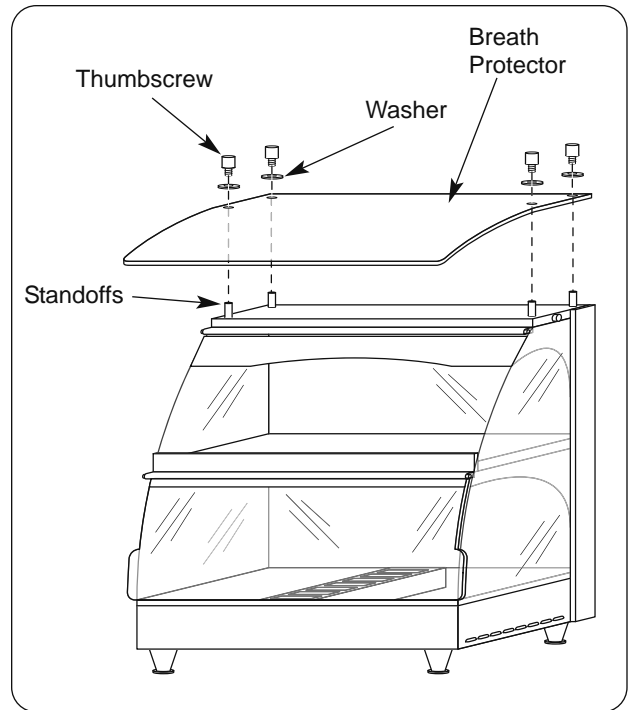


Figure 5. Installing Breath Protector

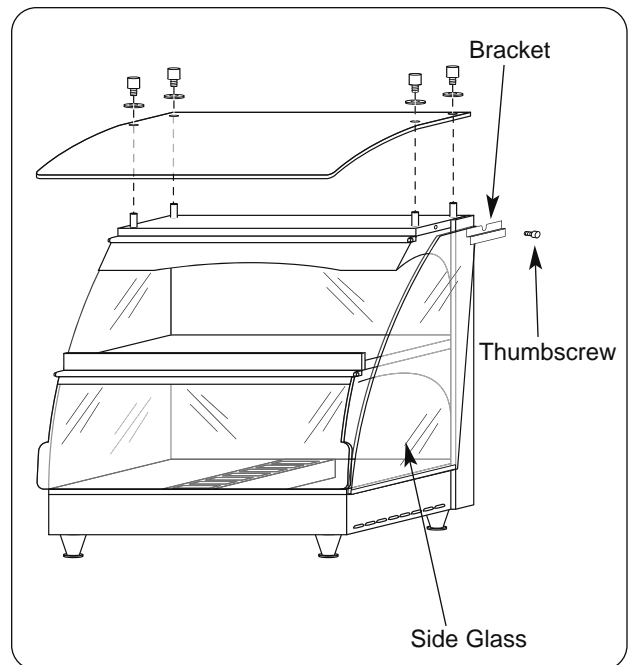


Figure 6. Installing Side Glass

# INSTALLATION

## Installation of Upper Door (Optional) (See Figure 7)

*NOTE: Before installing door on upper section, remove breath protector and install polycarbonate top panel.*

*NOTE: Only breath protector or upper door can be installed on the top section, not both accessories at the same time.*

1. Remove one of the hinge pins from the door.
2. Insert side of door, with hinge pin installed, into the hole located in the top corner of the door opening. Make sure curve on door matches curve on side glass.
3. Insert the previously removed hinge pin through the hole on the other bracket at the top corner of door opening, thread into door hinge and tighten.

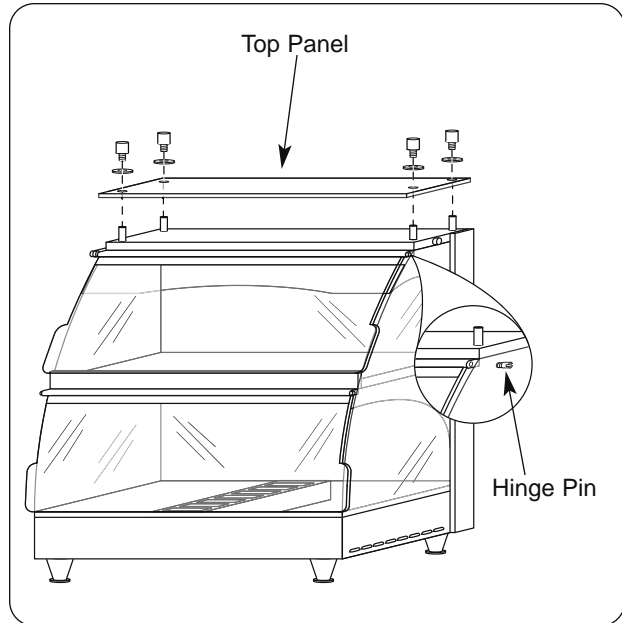


Figure 7. Installing Upper Door



## GENERAL

### WARNING

Unit is not waterproof. **DO NOT** submerge in water. To prevent any injury or damage do not operate if it has been submerged in water.

### WARNING

Some exterior surfaces on the unit will get hot. Use caution when touching these areas to avoid injury.

### CAUTION

Standard and approved manufacturing oils will smoke up to 30 minutes during initial set up. This is a temporary condition. To assure safe operation operate unit without food product until smoke dissipates.

## START-UP

1. Plug unit into a properly grounded electrical outlet of the correct voltage, size and plug configuration. See *SPECIFICATIONS* for details.

*NOTE: For proper operation Hatco recommends using the unit with water in the reservoir. When no water is being used, Hatco recommends adjusting the water temperature to lowest setting.*

2. Fill the water reservoir with softened or distilled water.
  - To fill the reservoir, lift the bottom access door fully open.
  - Lift the reservoir cover up and off of the water reservoir. (See Figure 8.)
  - Slowly pour the water into the water reservoir (reservoir holds a maximum of 5 cups of water).
  - Re-install water reservoir cover onto water reservoir.
  - Allow 30 minutes to preheat a full reservoir of water.

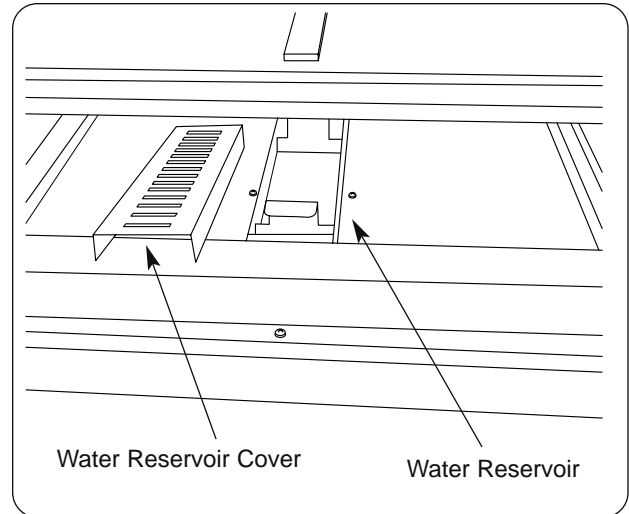


Figure 8. Water Reservoir

Use of softened or distilled water is recommended to preserve the life of the electrical and mechanical components in the reservoir. Do not use deionized water. If “hard” water is used, the reservoir will require periodic cleaning and deliming. (See *MAINTENANCE* for removing lime and mineral deposits.)

*NOTE: Product failure due to lime or mineral deposits is not covered under warranty.*

The reservoir capacity permits uninterrupted operation for approximately 8 hours, depending on the settings and how frequently the door is opened.

## OPERATION

- Place the On/Off rocker switch, located on the left side of the unit, in the ON position. (See Figure 9.) The halogen lights will glow at this time and the electronic temperature controller will display "Stby." When the programmed temperature setpoints have been reached, the control panel will display "rEdy" and the unit is ready for use.

*NOTE: See SETTING THE THERMOSTAT TEMPERATURE CONTROL for adjusting the temperature.*

- Fully raise door to load food pans into unit. Close door when complete. (See Figure 10.)

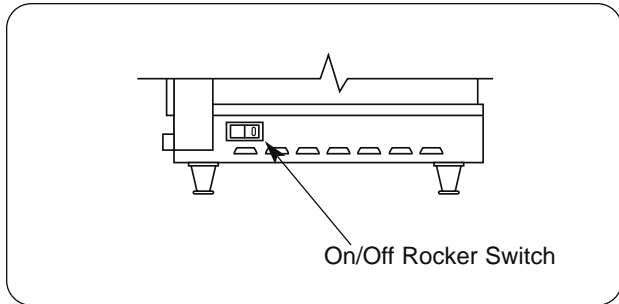


Figure 9. On/Off Rocker Switch

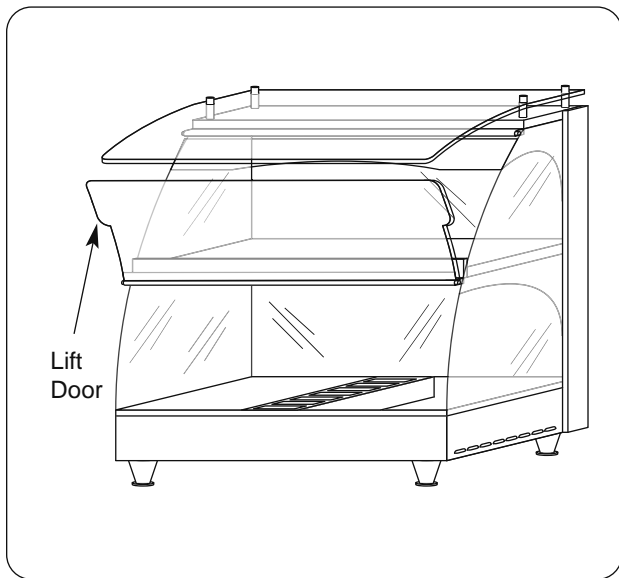


Figure 10. Door Operation

## SETTING THE THERMOSTAT TEMPERATURE CONTROL

The lower heated base, water reservoir heat and upper heated shelf are controlled by an electronic thermostat that can be set to any desired heating level as indicated on the thermostat control panel located on the rear of the unit.

The temperature panel readouts are identified as follows when facing the control panel.

- tL = Top Shelf Heat
- tr = Water Reservoir heat
- bL = Bottom Shelf heat
- Stby = Standby, unit heating up to set temperatures
- rEdy = Ready, unit is at all temperature setpoints

The Overhead Heat suggested temperature setpoint is 155°F (68°C). Maximum range is 200°F (93°C).

The Water Reservoir suggested temperature setpoint is 200°F (93°C). Maximum range is 200°F (93°C).

The Bottom Shelf suggested temperature setpoint is 170°F (77°C). Maximum range is 200°F (93°C).

The overhead heating elements are controlled by infinite switches on the control panel. The switch on the left side controls the top shelf overhead heat, suggested setting is #3. The switch on the right side is for the bottom shelf overhead heat, suggested setting is #3.

To adjust the temperature setpoint for the top shelf, bottom shelf, or water reservoir, follow steps 1 - 6. (See Figure 11.)

1. Press and hold the “Enter” and “Decrease” buttons at the same time until “SetP” is displayed then release.
2. Press the “Enter” button and “tL” will be displayed indicating Top Shelf Heat. Continue to press the “Enter” button to scroll through the other heat settings. Stop at the setting you wish to adjust.
3. Press the “Enter” button again and the current setpoint for the selected zone will be displayed.
4. To adjust the temperature push the appropriate increase or decrease buttons until the desired temperature setting is reached. Press and hold the “Enter” and “Decrease” buttons at the same time until “PrOG” is displayed and the values are stored in the memory.
5. Press the “Enter” button again to advance to the next zone.
6. Repeat steps 3, 4 & 5 until all zones are programmed to the desired setting.

**IMPORTANT NOTE:** If no adjustments are made within 10 seconds, the temperature controller will not accept any changes and will default to previous values.

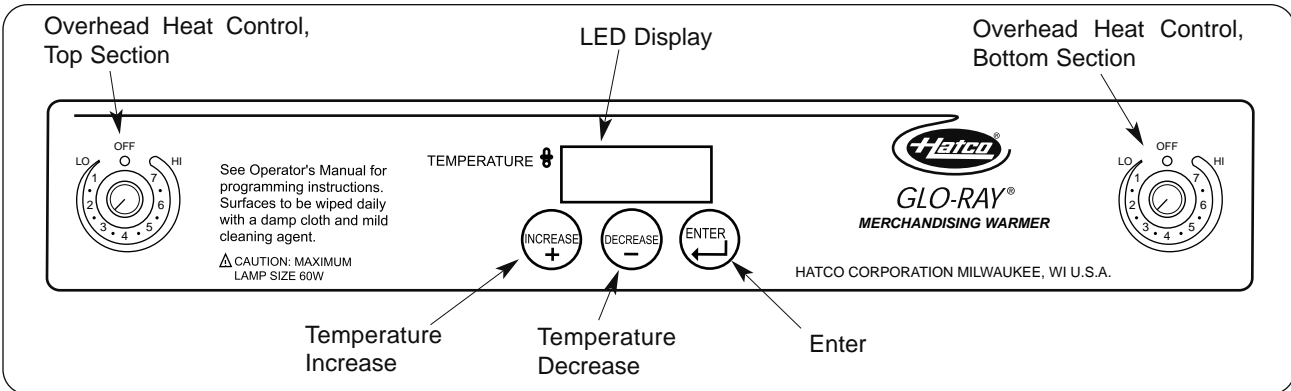


Figure 11. Thermostat Temperature Control

# MAINTENANCE

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## CLEANING

The Hatco Glo-Ray® Merchandising Warmer is designed for maximum durability and performance, with minimum maintenance.

### WARNING

**To avoid any injury, turn the power switch OFF on the unit and unplug the unit from the power source and allow to cool completely before performing any maintenance or cleaning.**

### WARNING

**Unit is not waterproof. DO NOT submerge in water. To prevent any injury or damage do not operate if unit has been submerged in water.**

### WARNING

**To avoid electrical shock or personal injury, do not steam clean or use excessive water on the unit.**

### CAUTION

**To avoid any injury or damage to the unit, do not move or relocate the unit for cleaning.**

To preserve the finish of the Glo-Ray Merchandising Warmer, the following is recommended:

- Metal surfaces to be wiped daily with a damp cloth. (Stubborn stains may be removed with a good stainless steel cleaner or a non abrasive cleaner.)
- Hard to reach areas should be cleaned with a small brush and mild soap.
- The glass side and rear panels should be cleaned with ordinary glass cleaner and a damp soft cloth or paper towel.

*NOTE: Do not remove rear glass panel for cleaning. Clean rear glass panel while installed in frame.*

- The polycarbonate door(s) and breath protector should be cleaned with a mild, soapy water solution and a damp, soft cloth.

### NOTICE

**DO NOT use paper towel or glass cleaner to clean polycarbonate breath protector. Paper towel and glass cleaner may scratch the material. Wipe off breath protector using a soft, clean and damp cloth.**

## Removing and Installing Side Glass Panels

Side glass panels are removable for cleaning.

1. Loosen thumbscrew above panel and tilt glass forward, then carefully lift panel out of bottom rail.
2. Clean glass.
3. To install repeat step one in reverse order.

## Removing and Installing Lower Pan Skirt

1. Remove water reservoir cover.
2. Lift pan skirt up and remove from bottom shelf.
3. Clean shelf area and pan skirt.
4. To install the lower pan skirt repeat 1 and 2 in reverse order.

## Removing and Installing Upper Pan Skirt

1. Lift pan skirt and remove from top shelf.
2. Clean shelf area and pan skirt.
3. To install upper pan skirt repeat 1 and 2 in reverse order.

### NOTICE

**Use only non-abrasive cleaners. Abrasive cleaners could scratch the finish of your unit, marring its appearance and making it susceptible to dirt accumulation.**

## REMOVING LIME & MINERAL DEPOSITS

If the water used on the GRCMW-1DH model has an excessive amount of lime or mineral content, use the following instructions for periodic cleaning and de-liming of the water trough.

*NOTE: The lime and mineral content of the water used for daily operation will determine how often de-liming procedure must be performed.*

*NOTE: It is recommended that this procedure be performed when the unit will not be used for a period of time, such as the end of the day.*

1. Turn the power switch off and unplug the unit from its power source.
2. After the unit has cooled down, remove the water reservoir cover and water reservoir. Empty water reservoir. (See Figure 8.)
3. Reinstall the water reservoir.
4. Fill the water reservoir with a mixture of 75% water and 25% off-the-shelf vinegar.
5. Plug unit into the correct power source and turn the unit ON.
6. Allow the unit to run for 30 minutes.
7. After the deliming period, remove the solution from the water reservoir.
8. Continue to fill and rinse the reservoir with water only, until the reservoir is clean.
9. Install the reservoir into the unit. Plug the unit into its power source and fill the reservoir as usual for daily operation.
10. Install water reservoir cover.

# MAINTENANCE

## LIGHT BULB REPLACEMENT

The display lights are shatter-resistant, halogen light bulbs which illuminate the warming area. These bulbs have a special coating to guard against injury and food contamination in the event of breakage.

1. To replace a light bulb, disconnect the power supply from the unit and wait until the unit has cooled.
2. Remove the wire guard covering the bulb by removing one screw on cover. (See Figure 12.)
3. Light bulbs have a threaded base. Unscrew the light bulb from the unit and replace it with a new specially coated halogen light bulb.
4. Re-install the cover. Make sure the wire rods are engaged inside the holes on the reflector and cover.

*NOTE: Hatco shatter-resistant light bulbs meet NSF standards for food holding and display areas. For 120 volt applications, use Hatco part number 02.30.081.00.*

### WARNING

Only light bulbs which meet or exceed NSF standards, specifically designed for food holding areas must be used. Breakage of light bulbs not specially coated could result in personal injury and/or food contamination.

### WARNING

If service is required on this unit, contact your Authorized Hatco Service Agent, or contact the Hatco Service Department at 800-558-0607 or 414-671-6350; fax 800-690-2966 or International fax 414-671-3976.

### WARNING

This product has no “user” serviceable parts. To avoid damage to the unit or injury to personnel, use only Authorized Hatco Service Agents and Genuine Hatco Parts when service is required.

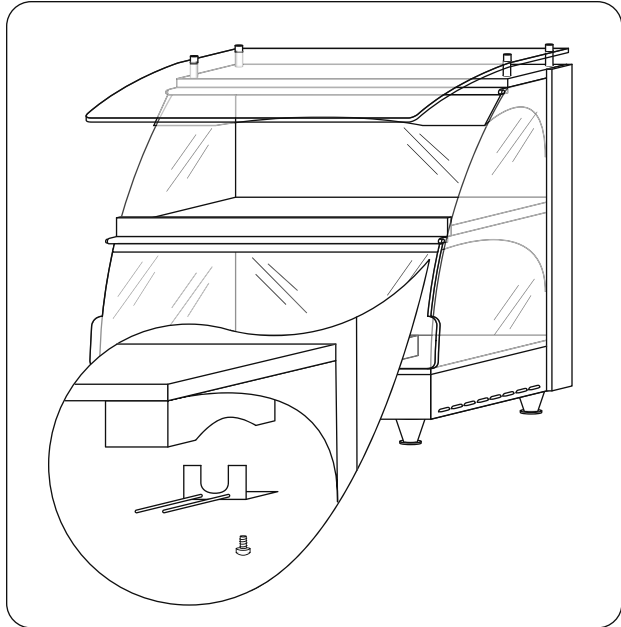


Figure 12. Wire Guard Cover

### WARNING

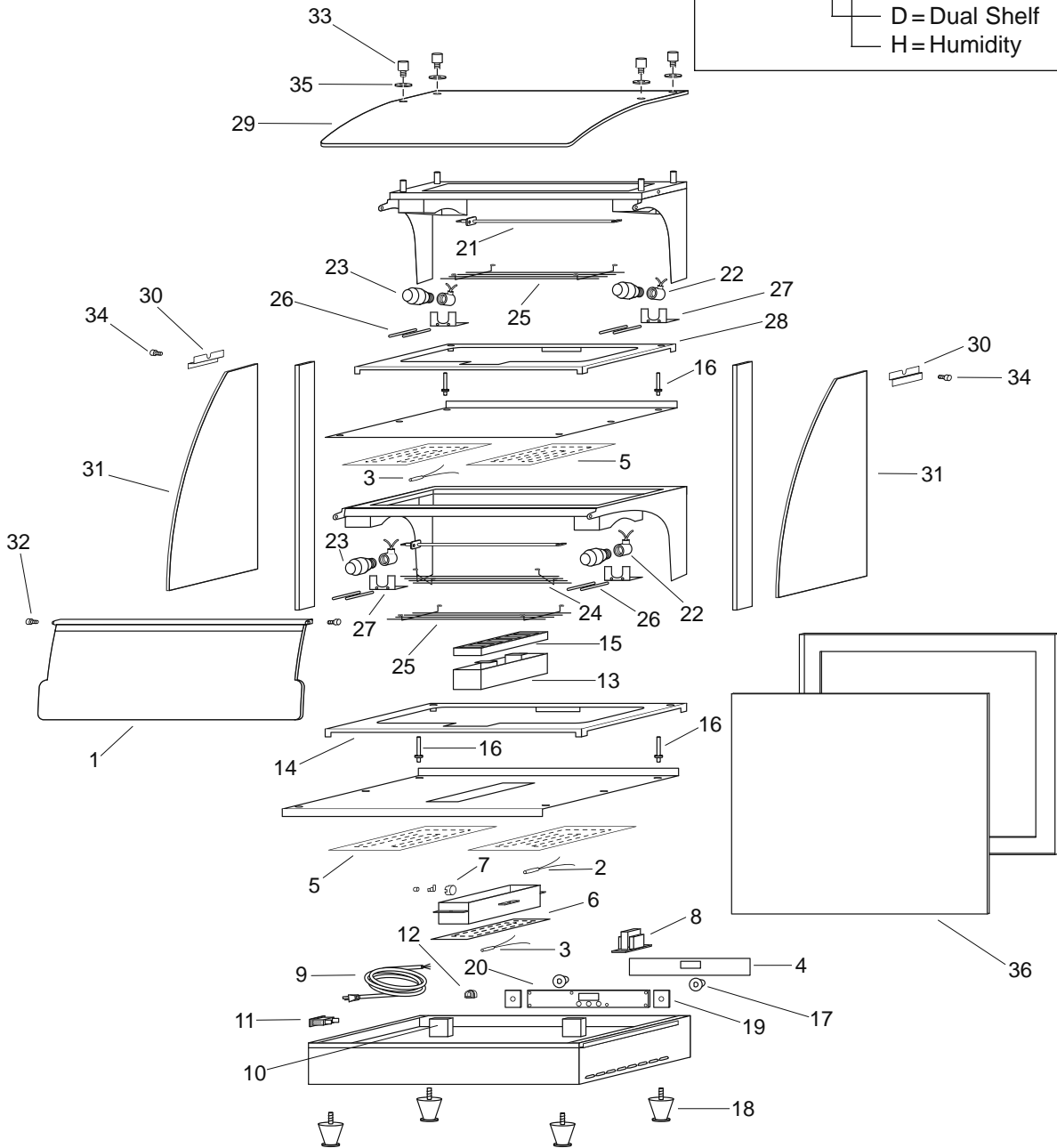
Genuine Hatco Replacement Parts are specified to operate safely in the environments in which they are used. Some aftermarket or generic replacement parts do not have the characteristics that will allow them to operate safely in Hatco equipment. It is essential to use Hatco Replacement Parts when repairing Hatco equipment. Failure to use Hatco Replacement Parts may subject operators of the equipment to hazardous electrical voltage, resulting in electrical shock or burn.

# REPLACEMENT PARTS LIST

## Hatco Glo-Ray® Merchandising Warmer GRCMW-1DH Series

### Model Designation

GRCMW-1DH	G = Glo
	R = Ray
	C = Curved
	M = Merchandising
	W = Warmer
	1 = One Full Pan
	D = Dual Shelf
	H = Humidity



24 Hour 7 Day Parts & Service Assistance available in the United States and Canada by calling (800) 558-0607.

**⚠ CAUTION - Use of replacement parts other than those supplied by Hatco Corporation may result in damage to the unit or injury to personnel.**

# REPLACEMENT PARTS LIST

## PARTS COMMON TO ALL GRCMW-1DH MODELS - 120 Volt

ITEM	DESCRIPTION	PART NO.	QTY.
1	Door Assembly with Hinge Pins	R04.12.327.00	2*
2	Thermostat Probe - Bottom Shelf	02.01.056.00	1
3	Thermostat Probe, Water and Upper Shelf	02.01.085.00	2
4	Electronic Controller	02.01.208.00	1
5	Blanket Heating Element, 120 Volt, 150 Watts, (2 per shelf)	02.05.632.00	4
6	Blanket Heating Element, 120 Volt, 120 Watts, (Water)	02.05.633.00	1
7	High Limit with Bracket	R02.16.036.00	1
8	Transformer, 120 Volt - 24 Volt	02.17.022.00	1
9	Power Cord and Plug	02.18.089.00	1
10	Infinite Switch, 120 Volt, with Knob	R02.19.018.00	2
11	On/Off Rocker Switch	02.19.080.00	1
12	Cord Grip	02.20.330.00	1
13	Water Pan	04.19.1160.00	1
14	Pan Skirt, Bottom Shelf	04.19.1284.00	1
15	Cover, Reservoir	04.19.1296.00	1
16	Pin, Divider	05.04.150.00	4
17	Knob, Infinite Switch	05.30.043.00	2
18	Adjustable Legs, Plastic	R05.30.081.00	4
19	Switch Plate, Infinite Switch	07.01.034.00	2
20	Label, Control Panel	07.03.530.00	1
21	Heating Element, Upper, 350 Watt, 120 Volt	R02.08.001D.00	2
22	Lamp Socket with Leads	02.30.051.00	4
23	Lamp, Halogen, 60 Watt, Coated	02.30.081.00	4
24	Wire Guard, Personnel Protector	04.08.170.00	1
25	Wire Guard for Heat Element	04.08.531.00	2
26	Wire Rod Guard for Light Bulb	05.08.014.00	8
27	Cover, Lamp Socket	04.19.1321.00	4
28	Pan Skirt, Top Shelf	04.19.1285.00	1
29	Breath Protector with Hardware	R04.12.326.00	1
30	Bracket, Upper, Glass	04.19.1283.00	2
31	End Panel, Glass	04.40.294.00	2
32	Screw, Door Hinge	05.04.146.00	2
33	Thumbscrew, Breath Protector	05.04.219.00	4
34	Thumbscrew, 1/2", Glass Bracket	05.04.305.00	2
35	Washer, Breath Protector	05.11.051.00	4
36	Rear Panel, Mirror Glass	04.40.295.00	1
37	Top Protector in Lieu of Breath Protector		
	When Second Door is Installed (Not Shown)	04.12.328.00	1
	Wiring Diagram (Not Shown)	10.01.589	

\*Second door in lieu of breath protector.



# TROUBLESHOOTING GUIDE

**⚠ WARNING**

To avoid any injury or damage the unit must only be serviced by qualified personnel.

**⚠ WARNING**

To avoid any injury, turn the power switch OFF, unplug the unit from the power source and allow to cool completely before performing any maintenance or cleaning.

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
Light bulb(s) not working.	Light bulb(s) loose.	Tighten light bulb(s).
	Light bulb(s) defective.	Replace light bulb(s).
	Power turned Off.	Turn unit On.
Overhead heat is too hot.	Overhead infinite heat control set too high.	Adjust overhead infinite heat control to a lower setting.
	Overhead infinite heat control switch is defective.	Contact Authorized Service Agent or Hatco for assistance.
Overhead heat is NOT hot enough.	Overhead infinite heat control set too low.	Adjust overhead infinite heat control to a higher setting.
	Overhead infinite heat control switch is defective.	Contact Authorized Service Agent or Hatco for assistance.
	Heating element(s) not working.	Contact Authorized Service Agent or Hatco for assistance.
	Excessive air movement around warming unit.	Restrict or redirect air movement (i.e. air conditioning duct or exhaust fan) away from unit.
Base heat is too hot.	Electronic temperature control set too high.	Adjust electronic temperature control to a lower setting (suggested setting is 170°F [77°C]).
	Electronic temperature control system not working properly.	Contact Authorized Service Agent or Hatco for assistance.
Base heat not hot enough.	Electronic temperature control set too low.	Adjust electronic temperature control to higher setting (suggested setting is 170°F [77°C], maximum setting is 200°F [93°C]).
	Electronic temperature control system not working properly.	Contact Authorized Service Agent or Hatco for assistance.
	Base heating element(s) not working.	Contact Authorized Service Agent or Hatco for assistance.

## TROUBLESHOOTING GUIDE

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
Base heat not hot enough. (Continued)	Excessive air movement around warming unit.	Restrict or redirect air movement (i.e. air conditioning duct or exhaust fan) away from the unit.
		Replace upper breath protector with door assembly to keep heat contained.
No heat and no lights	Unit turned OFF.	Turn unit ON.
	Circuit breaker tripped.	Reset circuit breaker. If circuit breaker continues to trip contact Authorized Service Agent or Hatco for assistance.
Biscuits are drying out.	Overhead heat control is set too high.	Recommended setting for overhead heat control is 3" (76 mm). Check setting and adjust if necessary.
	Biscuits have been holding in the warmer more than the recommended hold time of 45 minutes.	Check "hold time" of biscuits and discard and replace with fresh if product has been holding more than 45 minutes.
	Water pan does not have any water in it, causing the biscuits to dry out.	Add water to pan so air is humidified and place the biscuits on a trivet.
Scrambled eggs are darkening on the top.	Eggs have been held for an extended period of time without being stirred.	Gently stir the eggs. Eggs need to be stirred periodically to stay fresh and warm.
Scrambled eggs are drying out quickly.	Water reservoir inside Hatco unit is empty.	Add water to reservoir.
	Eggs are placed on the wrong shelf.	Check location of eggs. Eggs should be located on bottom shelf. Relocate is necessary.
No steam coming out of the water reservoir.	No water in humidity reservoir.	Add water to reservoir.
	Temperature setting of water reservoir is set too low.	Adjust water reservoir temperature to 200°F (93°C).
	Humidity heating element not working.	Contact Authorized Service Agent or Hatco for assistance.
	Ambient conditions and variances in your local climate will effect steam visibility.	Verify that there is water in the reservoir and that the water temperature setting is 200°F (93°C).

# HATCO LIMITED WARRANTY

## 1. PRODUCT WARRANTY

Hatco warrants the products that it manufactures (the "Products") to be free from defects in materials and workmanship, under normal use and service, for a period of one (1) year from the date of purchase when installed and maintained in accordance with Hatco's written instructions or 18 months from the date of shipment from Hatco. Buyer must establish the product's purchase date by returning Hatco's Warranty Registration Card or by other means satisfactory to Hatco in its sole discretion.

Hatco warrants the following Product components to be free from defects in materials and workmanship from the date of purchase (subject to the foregoing conditions) for the period(s) of time and on the conditions listed below:

**a) One (1) Year Parts and Labor PLUS One (1) Additional Year Parts-Only Warranty:**

Toaster Elements (metal sheathed)  
Drawer Warmer Elements (metal sheathed)  
Drawer Warmer Drawer Rollers and Slides  
Food Warmer Elements (metal sheathed)  
Display Warmer Elements (metal sheathed air heating)  
Holding Cabinet Elements (metal sheathed air heating)  
Built-In Heated Well Elements (metal sheathed)

**b) One (1) Year Parts and Labor PLUS Four (4) Years Parts-Only Warranty on pro-rated terms that Hatco will explain at Buyer's request:**

3CS and FR Tanks

**c) One (1) Year Parts and Labor PLUS Nine (9) Years Parts-Only Warranty on:**

Electric Booster Heater Tanks  
Gas Booster Heater Tanks

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT INFRINGEMENT. Without limiting the generality of the foregoing, SUCH WARRANTIES DO NOT COVER: Coated incandescent light bulbs, fluorescent lights, lamp warmer heat bulbs, glass components, Product failure in booster tank, fin tube heat exchanger, or other water heating equipment, caused by liming, sediment buildup, chemical attack or freezing, Product misuse, tampering or misapplication, improper installation, or application of improper voltage.

## 2. LIMITATION OF REMEDIES AND DAMAGES

Hatco's liability and Buyer's exclusive remedy hereunder will be limited solely, at Hatco's option, to repair or replacement by a Hatco-authorized service agency (other than where Buyer is located outside of the United States, Canada, United Kingdom or Australia in which case Hatco's liability and Buyer's exclusive remedy hereunder will be limited solely to replacement of part under warranty) with respect to any claim made within the applicable warranty period referred to above. Hatco reserves the right to accept or reject any such claim in whole or in part. Hatco will not accept the return of any Product without prior written approval from Hatco, and all such approved returns shall be made at Buyer's sole expense. HATCO WILL NOT BE LIABLE, UNDER ANY CIRCUMSTANCES, FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, INCLUDING BUT NOT LIMITED TO LABOR COSTS OR LOST PROFITS RESULTING FROM THE USE OF OR INABILITY TO USE THE PRODUCTS OR FROM THE PRODUCTS BEING INCORPORATED IN OR BECOMING A COMPONENT OF ANY OTHER PRODUCT OR GOODS.

## HATCO AUTHORIZED PARTS DISTRIBUTORS

### ALABAMA

Jones McLeod Appl. Svc.  
Birmingham 205-251-0159

### ARIZONA

Auth. Comm. Food Equip.  
Phoenix 602-234-2443  
Byassee Equipment Co.  
Phoenix 602-252-0402

### CALIFORNIA

Industrial Electric  
Commercial Parts & Service, Inc.  
Huntington Beach 714-379-7100  
Chapman Appl. Service  
San Diego 619-298-7106  
P & D Appliance  
Commercial Parts & Service, Inc.  
S. San Francisco 650-635-1900

### COLORADO

Hawkins Commercial Appliance  
Englewood 303-781-5548

### FLORIDA

Whaley Foodservice Repair  
Jacksonville 904-725-7800  
Nass Service Co., Inc.  
Orlando 407-425-2681  
B.G.S.I.  
Pompano Beach 954-971-0456  
Comm. Appliance Service  
Tampa 813-663-0313

### GEORGIA

Heritage Service Group  
Norcross 866-388-9837  
Southeastern Rest. Svc.  
Norcross 770-446-6177  
TWC Services  
Smyrna 770-438-9797

### HAWAII

Burney's Comm. Service, Inc.  
Honolulu 808-848-1466  
Food Equip Parts & Service  
Honolulu 808-847-4871

### ILLINOIS

Cone's Repair Service  
Moline 309-797-5323  
Eichenauer Elec. Service  
Decatur 217-429-4229  
Midwest Elec. Appl. Service  
Elmhurst 630-279-8000  
Parts Town  
Lombard 708-865-7278

### INDIANA

GCS Service  
Indianapolis 317-545-9655

### IOWA

Electric Motor Service Co.  
Davenport 319-323-1823  
Goodwin Tucker Group  
Des Moines 515-262-9308

### KENTUCKY

Certified Service Center  
Lexington 859-254-8854  
Certified Service Center  
Louisville 502-964-7007

### LOUISIANA

Chandlers Parts & Service  
Baton Rouge 225-272-6620

### MARYLAND

Electric Motor Service  
Baltimore 410-467-8080  
GCS Service  
Silver Spring 301-585-7550

### MASSACHUSETTS

Ace Service Co., Inc.  
Needham 781-449-4220

### MICHIGAN

Commercial Kitchen Service  
Bay City 517-893-4561  
Bildons Appliance Service  
Detroit 248-478-3320  
Midwest Food Equip. Service  
Grandville 616-261-2000

### MINNESOTA

GCS Service  
Minneapolis 612-546-4221

### MISSOURI

General Parts  
Kansas City 816-421-5400  
Commercial Kitchen Services  
St. Louis 314-890-0700  
Kaemmerlen Parts & Service  
St. Louis 314-535-2222

### NEBRASKA

Anderson Electric  
Omaha 402-341-1414

### NEVADA

Burney's Commercial  
Las Vegas 702-736-0006  
Hi. Tech Commercial Service  
N. Las Vegas 702-649-4616

### NEW JERSEY

Jay Hill Repair  
Fairfield 973-575-9145  
Service Plus  
Flanders 973-691-6300

### NEW YORK

Acme American Repairs, Inc.  
Brooklyn 718-456-6544  
Alpro Service Co.  
Brooklyn 718-386-2515  
Appliance Installation  
Buffalo 716-884-7425  
Northern Parts Dist.  
Plattsburgh 518-563-3200  
J.B. Brady, Inc.  
Syracuse 315-422-9271

### NORTH CAROLINA

Authorized Appliance  
Charlotte 704-377-4501

### OHIO

Akron/Canton Comm. Svc. Inc.  
Akron 330-753-6635  
Certified Service Center  
Cincinnati 513-772-6600  
Commercial Parts and Service  
Columbus 614-221-0057  
Electrical Appl. Repair Service  
Independence 216-459-8700  
E. A. Wichman Co.  
Toledo 419-385-9121

### OKLAHOMA

Hagar Rest. Service, Inc.  
Oklahoma City 405-235-2184  
Krueger, Inc.  
Oklahoma City 405-528-8883

### OREGON

Ron's Service, Inc.  
Portland 503-624-0890

### PENNSYLVANIA

Elmer Schultz Services  
Philadelphia 215-627-5401  
FAST Comm. Appl. Service  
Philadelphia 215-288-4800  
Appliance Installation & Service  
Pittsburgh 412-809-0244

K & D Service Co.  
Harrisburg 717-236-9039

Electric Repair Co.  
Reading 610-376-5444

### RHODE ISLAND

Marshall Electric Co.  
Providence 401-331-1163

### SOUTH CAROLINA

Whaley Foodservice Repair  
W. Columbia 803-791-4420

### TENNESSEE

Camp Electric  
Memphis 901-527-7543

### TEXAS

GCS Service  
Fort Worth 817-831-0381  
Armstrong Repair Service  
Houston 713-666-7100  
Commercial Kitchen Repair Co.  
San Antonio 210-735-2811

### UTAH

La Monica's Rest. Equip. Service  
Murray 801-263-3221

### VIRGINIA

Daubers  
Norfolk 757-855-4097  
Daubers  
Springfield 703-866-3600

### WASHINGTON

Restaurant Appl. Service  
Seattle 206-524-8200

### WISCONSIN

A.S.C., Inc.  
Madison 608-246-3160  
A.S.C., Inc.  
Milwaukee 414-543-6460

## CANADA

### ALBERTA

Key Food Equipment Service  
Edmonton 780-438-1690

### BRITISH COLUMBIA

Key Food Equipment Service  
Vancouver 604-433-4484

### MANITOBA

Air Rite, Inc.  
Winnipeg 204-895-2300

### NEW BRUNSWICK

EMR Services, Ltd.  
Moncton 506-855-4228

### ONTARIO

Choquette CKS  
Ottawa 613-739-8458  
R.G. Henderson Ltd.  
Toronto 416-422-5580

### QUÉBEC

Choquette CKS  
Montreal 514-722-2000  
Choquette CKS  
Québec City 418-681-3944

## HATCO CORPORATION

P.O. Box 340500, Milwaukee, WI 53234-0500 U.S.A.

(800) 558-0607 (414) 671-6350

Parts & Service Fax (800) 690-2966 Int'l. Fax (414) 671-3976

www.hatcocorp.com