



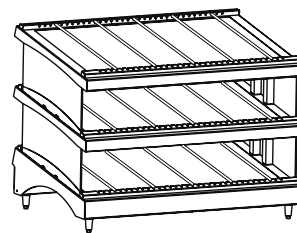
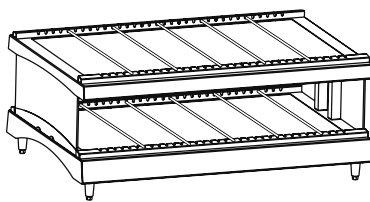
GLO-RAY™

Heated Glass Merchandisers

GR3SDH & GR3SDS Series

Installation & Operating Manual

I&W #07.05.146.00



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 decal located on the rear of the unit), voltage and purchase date of your Glo-Ray® Heated Glass Merchandiser in the spaces below. Please have this information available when calling Hatco for service assistance.

Model No. _____

Serial No. _____

Voltage _____


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.D.T.
Monday through Thursday
8:00 a.m. to 2:30 p.m. C.D.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

INTRODUCTION

The Hatco Glo-Ray Heated Glass Merchandising Warmers, GR3SDH (Horizontal Shelf) and GR3SDS (Slant Shelf) are perfect for holding hot wrapped or boxed foods on a buffet line or customer serving points. A thermostatically controlled, hardcoated heated base and unique patented heated glass shelf hold hot wrapped or boxed food products and keep them at optimum serving temperatures while maintaining product quality.

These warmers offer an additional heated shelf on the top, ideal for use of short term holding of food for which serving temperature is not critical. The Glo-Ray Heated Glass Merchandising Warmers are guaranteed against breakage and burnout for one year. These units also feature fluorescent display lights along with a cord and plug set.

This manual provides the installation, safety and operating instructions for the Glo-Ray Heated Glass Merchandising Warmers. We recommend all

installation, operating and safety instructions appearing in this manual be read prior to installation or operation of your Hatco Heated Glass Merchandising Warmers. 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 personal injury or death to yourself or others.  **CAUTION** means there is the possibility of minor or moderate injury. **CAUTION** *without the symbol* signifies the possibility of equipment or property damage only.

Hatco Glo-Ray Heated Glass Merchandising Warmers are 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 instructions to avoid personal injury or death, and to avoid damage to the equipment or property.

⚠ WARNINGS

- ⚠ To avoid any injury, turn the power switch OFF, unplug the unit from the power source and allow to cool completely before performing any cleaning or maintenance.
- ⚠ 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, do not allow liquids to spill onto the heated glass shelf.
- ⚠ To avoid any injury, do not clean heated glass shelf when unit is energized or hot.
- ⚠ Unit is not waterproof. To avoid electrical shock or personal injury DO NOT submerge in water. Do not operate if it has been submerged in water.
- ⚠ To avoid electrical shock or personal injury, do not steam clean or use excessive water on the unit.
- ⚠ For safe and proper operation, the unit must be located a reasonable distance from combustible walls and materials. If safe distances are not maintained, discoloration or combustion could occur.
- ⚠ 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.
- ⚠ For safe and proper operation do not place food product directly onto glass or hardcoat surface. Food product must be wrapped or boxed.
- ⚠ The fluorescent light fixtures used have plastic safety shields covering the fluorescent bulbs to meet N.S.F. standards. To avoid personal injury and/or food contamination always operate the unit with the plastic safety shield properly installed.
- ⚠ GR3SDS-33D rated for 120 volt has two power supply cords. To avoid electrical shock or personal injury disconnect both power supply cords before servicing or repair.
- ⚠ Model GR3SDS-33D, 120 volt has two circuits and each circuit has a separate power supply cord. Circuit One is rated 120 volt, 10.6 amps and 1270 watts. Circuit Two is rated 120 volt, 7.8 amps, and 935 watts. For safe and proper operation each circuit/power cord must be plugged into a separate branch circuit rated 120 volts and a minimum of 15 amps.
- ⚠ Be sure to reinstall the protective lens cover. Breakage of a bulb not properly covered could result in personal injury and/or food contamination.
- ⚠ 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 Replacement Parts when service is required.
- ⚠ 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.
- ⚠ 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.

IMPORTANT SAFETY INFORMATION

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

⚠ CAUTIONS

- ⚠ Some exterior surfaces on the unit will get hot. Use caution when touching these areas to avoid injury.**
- ⚠ 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.**
- ⚠ The National Sanitation Foundation (NSF) requires units over 36" (914 mm) in length or weighing more than 80 lbs. (36 kg) to be either sealed or raised on the installation surface. If this unit cannot be sealed at the point of use, 2-1/2" (64 mm) legs are included to allow for proper cleaning access below unit.**
- ⚠ 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, do not come in contact with the heated glass shelf while unit is in operation.**
- ⚠ For safe and proper operation, the top side of the upper most shelf is intended for short term holding of food for which serving temperature is not critical.**
- ⚠ To allow for proper cleaning and operation the lower vented side covers must be removed before installing legs.**

CAUTIONS

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

Only soft cleaning cloths, mild soap and water should be used to clean breath protector(s). Breath protector(s) are made of shatterproof polycarbonate and will scratch or crack if proper care is not taken.

Do not allow the glass shelf to overheat. Overheating may cause the food containers to melt or soften.

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

Do not use food pans, ceramic dishes, or abrasive materials on heated glass shelves. Food pans, ceramic dishes, and abrasive materials may scratch the glass shelf marring its appearance and making it susceptible to dirt accumulation. It is recommended that glass shelves be used for food products contained in disposable paper or plastic containers or wrapping.

MODEL DESCRIPTION

ALL GR3SD MODELS

All GR3SD Models feature a thermostatically controlled hardcoated heated base and glass dual heat source which conducts heat upward to keep the food on the glass shelf warm, and radiates heat downward to blanket the product below. Units also include tempered glass side panels, product divider rods, fluorescent display lights, and a cord and plug set.

GR3SDH MODELS

The GR3SDH Models are horizontal shelf warmers designed to hold hot wrapped or boxed food product.

These models are available in widths of 27-1/4, 33-1/4 and 39-1/4 inches (692, 845 and 997 mm) and are available with a single or dual heated glass shelf.

GR3SDS MODELS

The GR3SDS Models are slant shelf warmers designed to hold hot wrapped or boxed food product. The shelves are slanted for convenience of self-serve.

These models are available in widths of 27-1/4, 33-1/4 and 39-1/4 inches (692, 845 and 997 mm) and are available with a single or dual heated glass shelf.

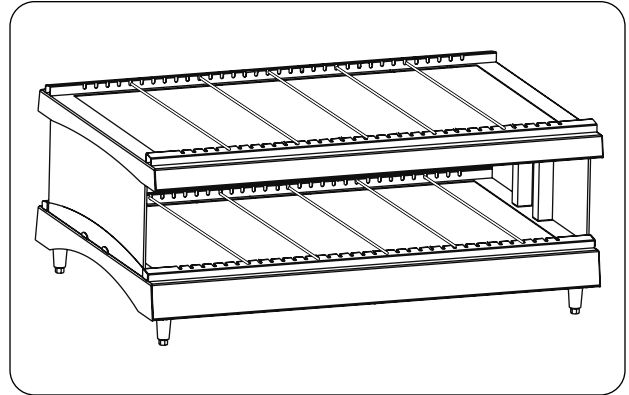


Figure 1. Glo-Ray Model GR3SDH - Single Shelf

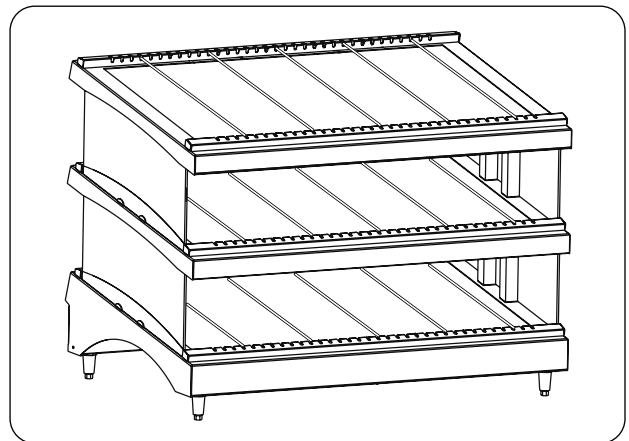


Figure 2. Glo-Ray Model GR3SDS - Dual Shelf

SPECIFICATIONS

PLUG CONFIGURATIONS

Units are supplied from the factory with an electrical cord and plug. (See Figure 3.)

⚠ WARNING

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.

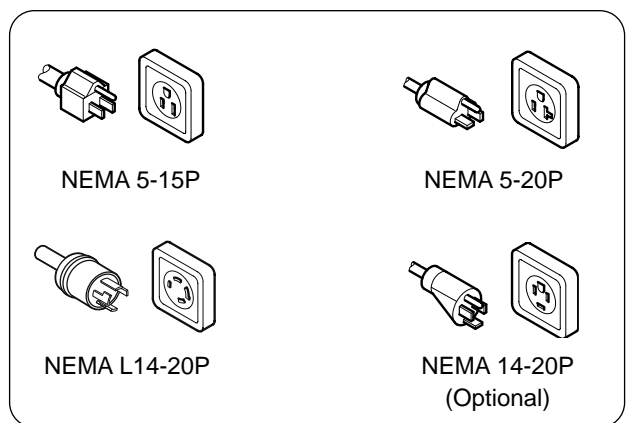


Figure 3. Plug Configurations

SPECIFICATIONS

ELECTRICAL RATING CHART – GR3SDH MODELS - HORIZONTAL MODELS - SINGLE SHELF

Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
GR3SDH-27	120	1010	8.4	NEMA 5-15P	50 lbs. (23 kg)
GR3SDH-33	120	1240	10.3	NEMA 5-15P	58 lbs. (26 kg)
GR3SDH-39	120	1490	12.4	NEMA 5-15P†	66 lbs. (30 kg)

† NEMA 5-20P for Canada

ELECTRICAL RATING CHART – GR3SDH MODELS - HORIZONTAL MODELS - DUAL SHELF

Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
GR3SDH-27D	120	1790	14.9	NEMA 5-15P†	90 lbs. (41 kg)
GR3SDH-33D	120/208	2210	10.3	NEMA L14-20P●	100 lbs. (45 kg)
	120/240	2210	10.3	NEMA L14-20P●	100 lbs. (45 kg)
GR3SDH-39D	120/208	2660	12.4	NEMA L14-20P●	112 lbs. (51 kg)
	120/240	2660	12.4	NEMA L14-20P●	112 lbs. (51 kg)

† NEMA 5-20P for Canada

● NEMA 14-20P is optional.

ELECTRICAL RATING CHART – GR3SDS MODELS - SLANT MODELS - SINGLE SHELF

Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
GR3SDS-27	120	1010	8.4	NEMA 5-15P	72 lbs. (33 kg)
GR3SDS-33	120	1240	10.3	NEMA 5-15P	80 lbs. (36 kg)
GR3SDS-39	120	1490	12.4	NEMA 5-15P†	92 lbs. (42 kg)

† NEMA 5-20P for Canada

ELECTRICAL RATING CHART – GR3SDS MODELS - SLANT MODELS - DUAL SHELF

Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
GR3SDS-27D	120	1790	14.9	NEMA 5-15P†	128 lbs. (58 kg)
GR3SDS-33D	120*	1270/935*	10.6/7.8*	NEMA 5-15P*	140 lbs. (64 kg)
	120/208	2210	10.3	NEMA L14-20P●	140 lbs. (64 kg)
	120/240	2210	10.3	NEMA L14-20P●	140 lbs. (64 kg)
GR3SDS-39D	120/208	2660	12.4	NEMA L14-20P●	158 lbs. (72 kg)
	120/240	2660	12.4	NEMA L14-20P●	158 lbs. (72 kg)

† NEMA 5-20P for Canada

● NEMA 14-20P is optional.

* Unit is equipped with two cord and plug sets, requiring two separate 120 volt, 15 amp power circuits.

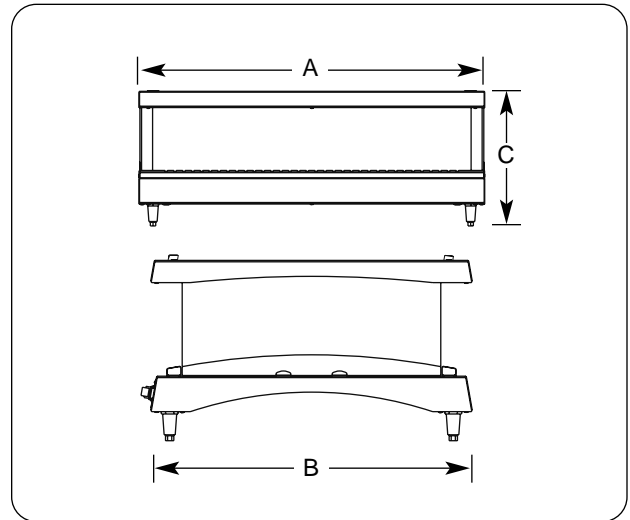
SPECIFICATIONS

DIMENSIONS - GR3SDH MODELS

GR3SDH MODELS - SINGLE HORIZONTAL SHELF

Model	Width (A)	Depth (B)	Height* (C)
GR3SDH-27	27-1/4" (692 mm)	27-1/4" (692 mm)	16-1/8" (410 mm)
GR3SDH-33	33-1/4" (845 mm)	27-1/4" (692 mm)	16-1/8" (410 mm)
GR3SDH-39	39-1/4" (997 mm)	27-1/4" (692 mm)	16-1/8" (410 mm)

* Height includes 2-1/2" (64 mm) legs attached.



GR3SDH MODELS - DUAL HORIZONTAL SHELF

Model	Width (A)	Depth (B)	Height* (C)
GR3SDH-27D	27-1/4" (692 mm)	27-1/4" (692 mm)	25-7/8" (657 mm)
GR3SDH-33D	33-1/4" (845 mm)	27-1/4" (692 mm)	25-7/8" (657 mm)
GR3SDH-39D	39-1/4" (997 mm)	27-1/4" (692 mm)	25-7/8" (657 mm)

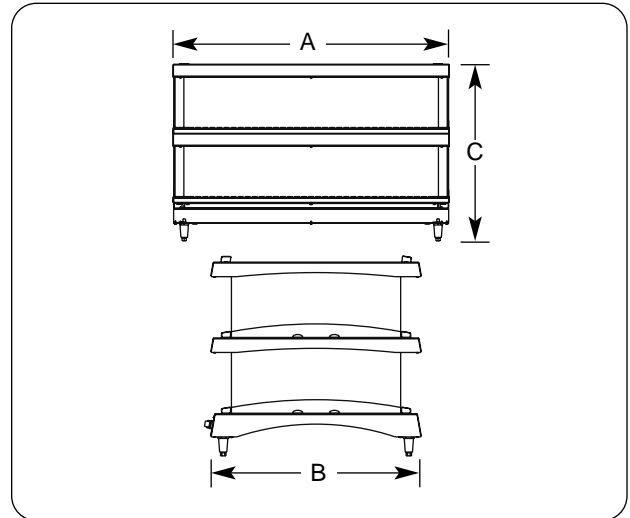
* Height includes 2-1/2" (64 mm) legs attached.

NOTE: Usable Heated Shelf Space:

-27/-27D Models: 23-1/4" (591 mm) x 21-1/4" (540 mm)

-33/-33D Models: 29-1/4" (743 mm) x 21-1/4" (540 mm)

-39/-39D Models: 35-1/4" (895 mm) x 21-1/4" (540 mm)



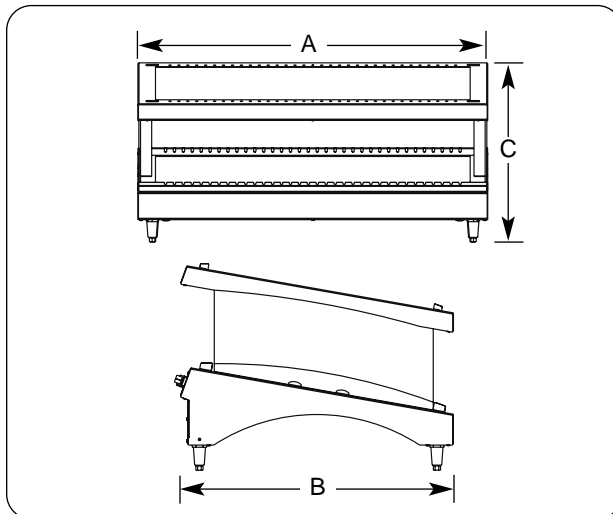
SPECIFICATIONS

DIMENSIONS - GR3SDS MODELS

GR3SDS MODELS - SINGLE SLANTED SHELF

Model	Width (A)	Depth (B)	Height* (C)
GR3SDS-27	27-1/4" (692 mm)	26-7/8" (683 mm)	20-1/2" (521 mm)
GR3SDS-33	33-1/4" (845 mm)	26-7/8" (683 mm)	20-1/2" (521 mm)
GR3SDS-39	39-1/4" (997 mm)	26-7/8" (683 mm)	20-1/2" (521 mm)

* Height includes 2-1/2" (64 mm) legs attached.



GR3SDS MODELS - DUAL SLANTED SHELF

Model	Width (A)	Depth (B)	Height* (C)
GR3SDS-27D	27-1/4" (692 mm)	26-7/8" (683 mm)	30-1/2" (775 mm)
GR3SDS-33D	33-1/4" (845 mm)	26-7/8" (683 mm)	30-1/2" (775 mm)
GR3SDS-39D	39-1/4" (997 mm)	26-7/8" (683 mm)	30-1/2" (775 mm)

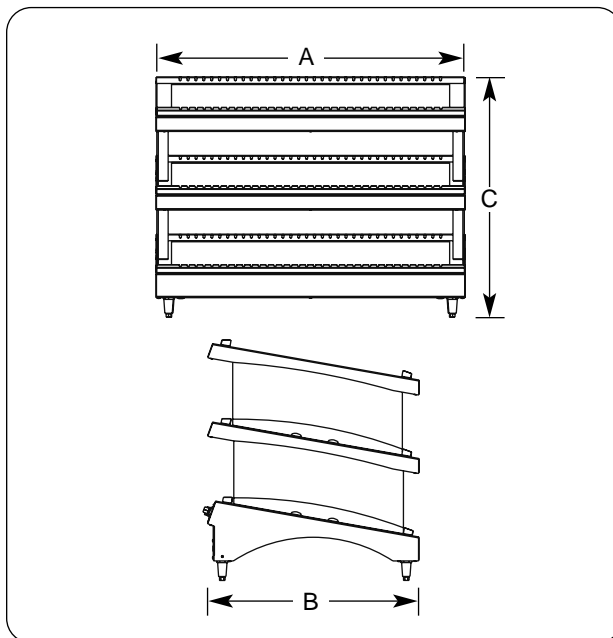
* Height includes 2-1/2" (64 mm) legs attached.

NOTE: Usable Heated Shelf Space:

-27/-27D Models: 23-1/4" (591 mm) x 21-1/4" (540 mm)

-33/-33D Models: 29-1/4" (743 mm) x 21-1/4" (540 mm)

-39/-39D Models: 35-1/4" (895 mm) x 21-1/4" (540 mm)



INSTALLATION

ALL MODELS

Glo-Ray® Heated Glass Merchandisers are 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.

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

⚠ CAUTION

The National Sanitation Foundation (NSF) requires units over 36" (914 mm) in length or weighing more than 80 lbs. (36 kg) to be either sealed or raised on the installation surface. If this unit cannot be sealed at the point of use, 2-1/2" (64 mm) legs are included to allow for proper cleaning access below unit.

CAUTION

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

⚠ CAUTION

To allow for proper cleaning and operation the lower vented side covers must be removed before installing legs.

4. Before installing legs remove lower vented side covers. (See Figure 4.)
5. Carefully lay unit on its side and install the four legs. Return unit upright. (See Figure 5.)
6. Slide each side glass panel into the top channel, then lower the panel into the bottom channel. (See Figure 6.)
7. The unit is supplied with product divider rods. To install them, place the rods in the channels provided. (See Figure 7.) The rods can be readily adjusted to separate your holding areas as needed.

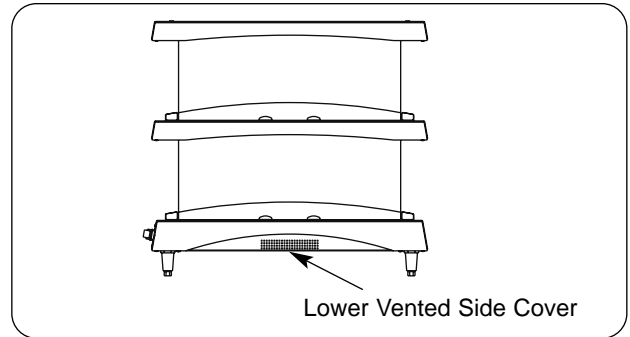


Figure 4. Leg Installation

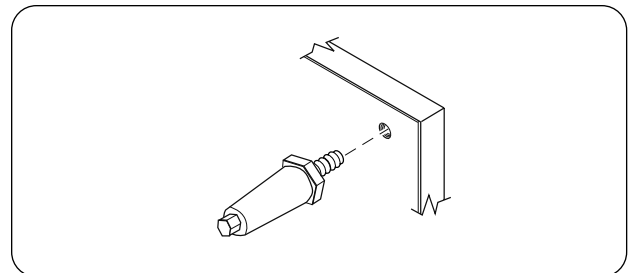


Figure 5. Leg Installation

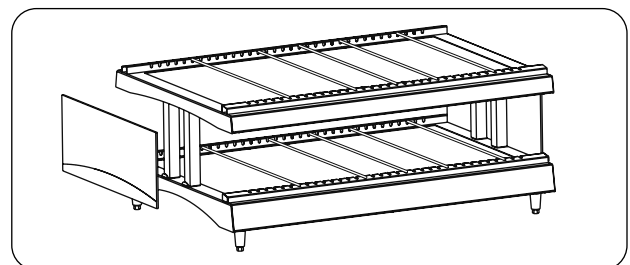


Figure 6. Side Glass Panel Installation

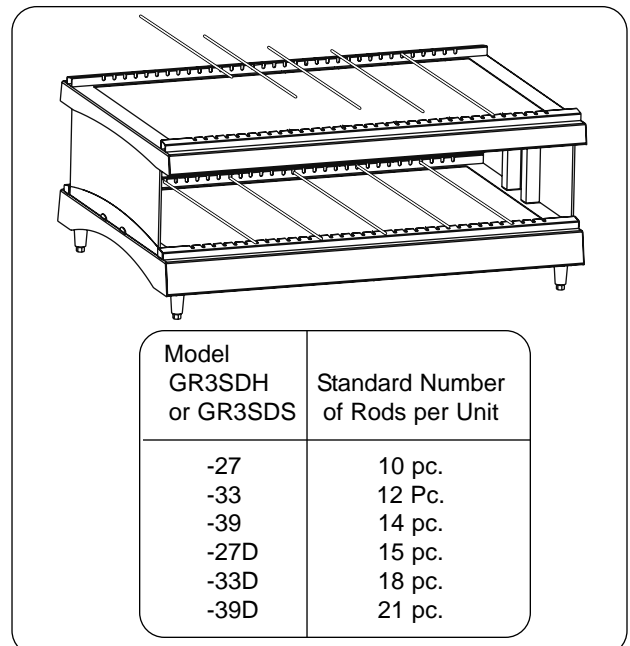


Figure 7. Installing Product Divider Rods

INSTALLATION

LOCATION

NOTE: Unit must be transported in the upright position.

For proper operation and maximum performance, locate the Heated Glass Merchandisers 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.

WARNING

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.

WARNING

Model GR3SDS-33D, 120 volt has two circuits and each circuit has a separate power supply cord. Circuit One is rated 120 volt, 10.6 amps and 1270 watts. Circuit Two is rated 120 volt, 7.8 amps, and 935 watts. For safe and proper operation each circuit/power cord must be plugged into a separate branch circuit rated 120 volts and a minimum of 15 amps.

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 a reasonable distance 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.

OPERATION

⚠ WARNING

To avoid any injury, do not allow liquids to spill onto the heated glass shelf.

⚠ WARNING

Unit is not waterproof. To avoid electrical shock or personal injury DO NOT submerge in water. Do not operate if it has been submerged in water.

⚠ WARNING

For safe and proper operation do not place food product directly onto glass or hardcoat surface. Food product must be wrapped or boxed.

⚠ CAUTION

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

⚠ CAUTION

To avoid any injury, do not come in contact with the heated glass shelf while unit is in operation.

The Heated Glass Merchandising Warmers main power is controlled by an ON/OFF rocker switch. (See Figure 8.) The switch must be in the ON position for the unit to function.

The hardcoat heated base can be set to any desired heating level as indicated on the control plate. The temperature range of the hardcoat heated base is from the ambient room temperature to 200°F (93°C). (See Figure 8.)

The heated glass shelf or shelves are controlled by switches that can be set to any desired heating level as indicated on the control plate. (See Figure 8.) The glass heated shelf is a dual heat source which conducts heat upward to keep the food on the glass

shelf warm and radiates heat downward to blanket the product below. The temperature range of the glass shelves is from the ambient room temperature to 200°F (93°C).

CAUTION

Do not allow the glass shelf to overheat. Overheating may cause the food containers to melt or soften.

The fluorescent display light(s) are controlled by an ON/OFF rocker switch. (See Figure 8.) The unit can be used for food warming with the light(s) on or off.

NOTE: To operate the unit for display only with no heat, position the heat controls to the lowest or OFF setting.

NOTE: Main power rocker switch must be in the ON position for the heat or display light(s) to function.

⚠ CAUTION

For safe and proper operation, the top side of the upper most shelf is intended for short term holding of food for which serving temperature is not critical.

CAUTION

Do not use food pans, ceramic dishes, or abrasive materials on heated glass shelves. Food pans, ceramic dishes, and abrasive materials may scratch the glass shelf marring its appearance and making it susceptible to dirt accumulation. It is recommended that glass shelves be used for food products contained in disposable paper or plastic containers or wrapping.

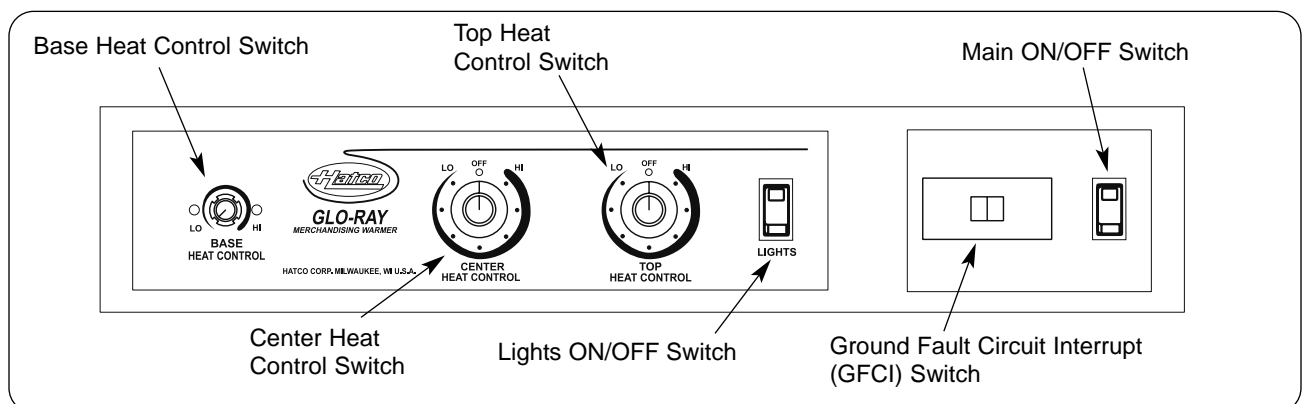


Figure 8. Control Panel

MAINTENANCE

CLEANING

Hatco Glo-Ray® Heated Glass Merchandisers are designed for maximum durability and performance, with minimum maintenance.

WARNING

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

WARNING

GR3SDS-33D rated for 120 volt has two power supply cords. To avoid electrical shock or personal injury disconnect **both** power supply cords before servicing or repair.

WARNING

To avoid any injury, do not allow liquids to spill onto the heated glass shelf.

WARNING

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

CAUTION

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

CAUTION

Only soft cleaning cloths, mild soap and water should be used to clean breath protector(s). Breath protector(s) are made of shatterproof polycarbonate and will scratch or crack if proper care is not taken.

WARNING

To avoid any injury, do not clean heated glass shelf when unit is energized or hot.

To preserve the finish of the Glo-Ray Heated Glass Merchandiser, it is recommended that the hardcoated heated base shelf be wiped daily with a clean, soft, damp cloth.

The glass side panels and heated glass shelves should be cleaned daily with ordinary glass cleaner and soft cloth or paper towel.

DISPLAY LIGHT BULB REPLACEMENT

The unit is equipped with 120 volt fluorescent light tubes which illuminate the warming area. These tubes have a special lens cover to guard against injury and food contamination in the event of breakage.

To replace a fluorescent light disconnect unit from power supply and wait until the unit has cooled. Remove the protective lens cover from the fixture and carefully twist the fluorescent tube and pull to remove it from the sockets.

WARNING

Be sure to reinstall the protective lens cover. Breakage of a bulb not properly covered could result in personal injury and/or food contamination.

WARNING

The fluorescent light fixtures used have plastic safety shields covering the fluorescent bulbs to meet N.S.F. standards. To avoid personal injury and/or food contamination always operate the unit with the plastic safety shield properly installed.

GROUND FAULT CIRCUIT INTERRUPT

The GR3SDH & GR3SDS Series warmers are supplied with a built in Ground Fault Circuit Interrupt (GFCI) which is designed to turn electrical power off to the internal components when there is a short circuit or electrical fault. (See Figure 8.)

To reset the "GFCI" push the red reset button in. If the "GFCI" continues to trip, contact your local Authorized Hatco Service Agency.

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 Replacement Parts when service is required.

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.

ACCESSORIES

DISPLAY SIGN HOLDER

A display sign holder (sign not included) is available for installation on top or intermediate shelf, customer side. To install follow these steps and see Figure 9.

1. Remove protective paper from acrylic surfaces.
2. Remove front divider.
3. Remove four acorn nuts from underside of shelf.
4. Remove channel divider brackets.
5. Place sign holder in position on shelf.
6. Reinstall channel divider brackets into same holes and secure with acorn nuts.
7. Install acrylic sign guard and sign into holder.
8. Place sign holder cap over assembly.
9. Reinstall channel divider with slots facing inward.

CAUTION

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

BREATH PROTECTORS

Breath protector(s) are available from the factory for the customer side. To install follow these steps and see Figure 10.

1. Remove protective paper from acrylic surfaces.
2. Loosen 3 screws from underside of shelf. Slide mounting bracket into position with studs facing to the front and down. Tighten 3 screws.
3. Position the acrylic breath protector into the channel on the warmer with the mounting holes aligned.
4. Secure the breath protector using the acorn nuts provided. Tighten until snug. Do not overtighten.

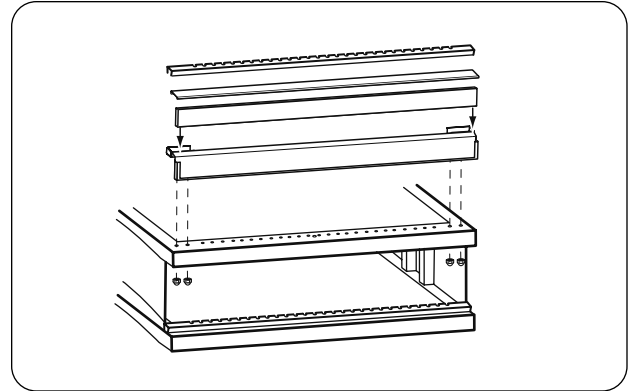


Figure 9. Display Sign Holder

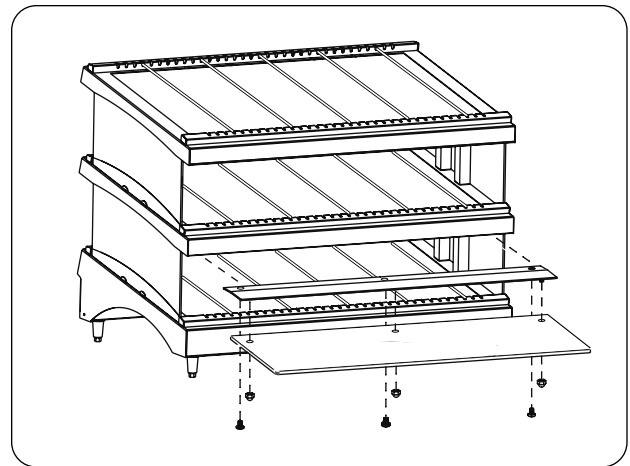


Figure 10. Breath Protectors

CAUTION

Only soft cleaning cloths, mild soap and water should be used to clean breath protector(s). Breath protector(s) are made of shatterproof polycarbonate and will scratch or crack if proper care is not taken.

ACCESSORIES

FLIP-UP DOORS

Flip-up doors are available for installation on the front or back side for units susceptible to active air movements or air currents caused by exhaust fans, hoods or air conditioning ducts.

1. Remove protective paper from acrylic surfaces.
2. Remove four screws (two on each side) from underside of shelf.
3. Install one end bracket as shown in Figure 11 using the two screws removed in step 2.
4. Place one end of door mounting bracket into installed end bracket. Place other end bracket onto door mounting bracket and secure to underside of shelf using other two screws removed in step 2.
5. Door should swing fully up for product placement.
6. When loading/unloading product, use bracket to hold flip-up door in the open position. (See Figure 12.)

CAUTION

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

4" (102 MM) ADJUSTABLE LEGS

Four inch (102 mm) legs are available in lieu of the 2-1/2" (64 mm) legs for installations that require additional clearance between the unit and countertop.

TEMPERATURE INDICATOR

NOTE: This option is factory installed only, not available for retrofit.

Units may be equipped with a temperature indicator which displays the coolest temperature on the shelf. This indicator does not measure food temperature, but is a reference to indicate shelf temperature only.

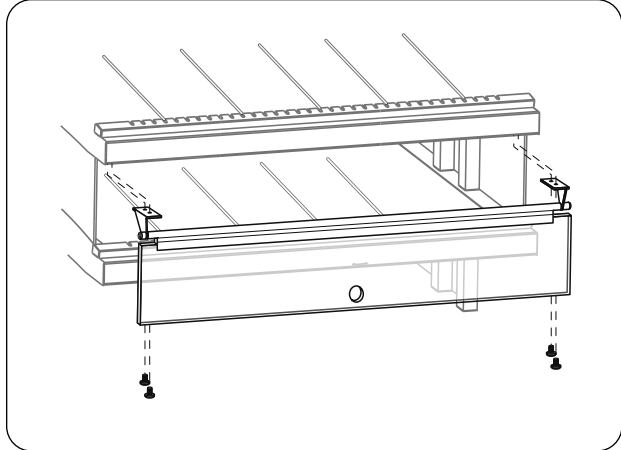


Figure 11. Flip-Up Doors

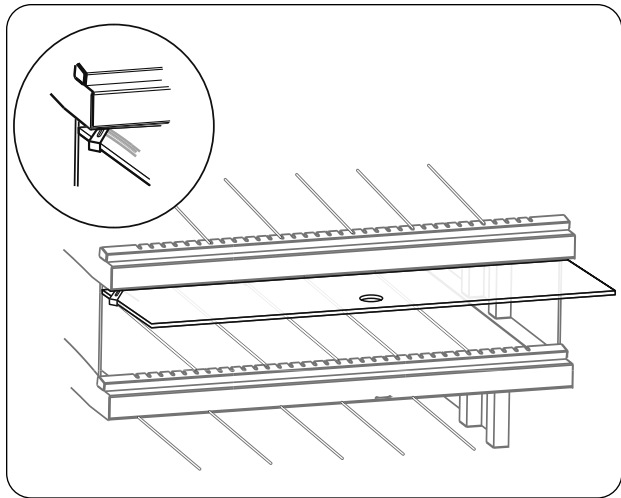


Figure 12. Flip-Up Doors with Bracket

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:

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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.

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