



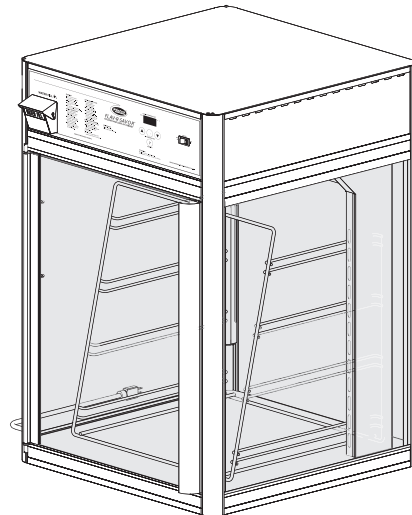
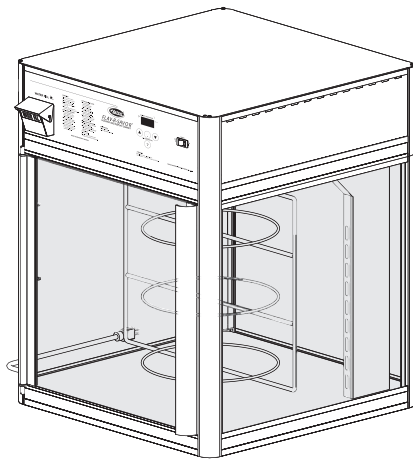
FLAV-R-SAVOR®

Humidified Holding and Display Cabinets

FSD and FSDT Series

Installation and Operating Manual

I&W #07.05.005.00



Register your unit online!

See IMPORTANT OWNER INFORMATION section for details.



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



No opere este equipo al menos que haya leído y comprendido el contenido de este manual! Cualquier falla en el seguimiento de las instrucciones contenidas en este manual puede resultar en un serio lesión o muerte. Este manual contiene importante información sobre seguridad concerniente al mantenimiento, uso y operación de este producto. Si usted no puede entender el contenido de este manual por favor pregunte a su supervisor. Almacenar este manual en una localización segura para la referencia futura.

CONTENTS

Important Owner Information	2	Operation	11
Introduction	2	General	11
Important Safety Information	3	Setting the Air Temperature	11
Model Description	4	Setting the Humidity Level	12
Model Designation	4	Food Holding Guide	12
Specifications	5	Maintenance	13
Dimensions	5	General	13
Plug Configurations	5	Cleaning	13
Electrical Rating Chart — FSD Models	6	Removing the Rotating Rack	13
Electrical Rating Chart — FSDT Models	6	Removing the Glass Panels	13
Installation	8	Draining the Water Reservoir	14
General	8	Removing Lime and Mineral Deposits	14
Reversing the Access Door	9	Replacing a Display Light	14
Relocating the Proximity Switch	10	Troubleshooting Guide	15
		Options and Accessories	16
		Limited Warranty	19
		Hatco Authorized Parts Distributors	Back Cover

IMPORTANT OWNER INFORMATION

Record the model number, serial number (specification label located on the ceiling sheet inside the unit), voltage, and purchase date of the unit in the spaces below. Please have this information available when calling Hatco for service assistance.

Model No. _____

Serial No. _____

Voltage _____

Date of Purchase _____

Register your unit!

Completing online warranty registration will prevent delay in obtaining warranty coverage. Access the Hatco website at www.hatcocorp.com, select the *Parts & Service* pull-down menu, and click on "Warranty Registration".

Business Hours: 8:00 AM to 5:00 PM
Central Standard Time (C.S.T.)

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

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

E-mail: partsandservice@hatcocorp.com

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



24 Hour 7 Day Parts and 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

Hatco Flav-R-Savor® Humidified Holding and Display Cabinets are designed to hold prepared foods for prolonged periods of time while maintaining that "just-made" quality. Hatco Humidified Holding and Display Cabinets provide the best environment for food products by regulating the air temperature while at the same time balancing the humidity level. The use of controlled moisturized heat maintains serving temperature and texture longer than conventional dry holding equipment.

Flav-R-Savor air flow pattern is designed to maintain consistent cabinet temperature without drying out foods. The precise combination of heat and humidity creates a "blanket" effect around the food. The air flow rate enables the cabinet to recover temperature rapidly after opening and closing the door.

Hatco Humidified Holding and Display Cabinets are products of extensive research and field testing. The materials used were selected for maximum durability, attractive appearance and optimum performance. Every unit is inspected and tested thoroughly prior to shipment.

This manual provides installation, safety, and operating instructions for Hatco Humidified Holding and Display Cabinets. Hatco recommends all installation, operating, and safety instructions appearing in this manual be read prior to installation or operation of a unit.

Safety information that appears in this manual is identified by the following signal word panels:

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.



IMPORTANT SAFETY INFORMATION



Read the following important safety information before using this equipment to avoid serious injury or death and to avoid damage to equipment or property.



WARNING

ELECTRIC SHOCK HAZARD:

- Plug unit into a properly grounded electrical receptacle of the correct voltage, size, and plug configuration. If plug and receptacle do not match, contact a qualified electrician to determine and install the proper voltage and size electrical receptacle.
- Turn power switch OFF, unplug power cord, and allow unit to cool before performing any maintenance or cleaning.
- DO NOT submerge or saturate with water. Unit is not waterproof. Do not operate if unit has been submerged or saturated with water.
- Unit is not weatherproof. Locate unit indoors where ambient air temperature is a minimum of 70°F (21°C).
- Do not steam clean or use excessive water on unit.
- Do not overfill water reservoir. Overfilling can cause electrical shock. Water reservoir is full when "LO H2O" stops flashing on CABINET TEMPERATURE display. Stop filling when "LO H2O" stops flashing on display.
- Turn power switch OFF and allow unit to cool before draining water reservoir.
- Do not pull unit by power cord.
- Discontinue use if power cord is frayed or worn.
- Do not attempt to repair or replace a damaged power cord. The cord must be replaced by Hatco, an Authorized Hatco Service Agent, or a person with similar qualifications.
- This unit must be serviced by qualified personnel only. Service by unqualified personnel may lead to electric shock or burn.
- Use only Genuine Hatco Replacement Parts when service is required. Failure to use Genuine Hatco Replacement Parts may subject operators of the equipment to hazardous electrical voltage, resulting in electrical shock or burn. 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.

FIRE HAZARD: Locate unit a minimum of 1" (25 mm) from combustible walls and materials. If safe distances are not maintained, discoloration or combustion could occur.

The fluorescent light fixtures in this unit have plastic safety shields covering the fluorescent tubes to meet National Sanitation Foundation (NSF) standards. To avoid personal injury and/or food contamination, always operate the unit with the plastic safety shields properly installed.



WARNING

This unit is not intended for use by children or persons with reduced physical, sensory, or mental capabilities. Ensure proper supervision of children and keep them away from the unit.

Make sure all operators have been instructed on the safe and proper use of the unit.

Make sure food product has been heated to the proper food-safe temperature before placing in unit. Failure to heat food product properly may result in serious health risks. This unit is for holding pre-heated food product only.

Hatco is not responsible for the actual food product serving temperature. It is the responsibility of the user to ensure that the food product is held and served at a safe temperature.

This unit has no "user-serviceable" parts. If service is required on this unit, contact an 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.



CAUTION

BURN HAZARD: Some exterior surfaces on the unit will get hot. Use caution when touching these areas.

Locate 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 falling accidentally and strong enough to support the weight of the unit and contents.

The National Sanitation Foundation (NSF) requires that units over 36" (914 mm) in width or weighing more than 80 lbs. (36 kg) either be sealed to or raised above the installation surface. If unit cannot be sealed at the point of use, 4" (102 mm) legs are available to allow for proper cleaning access below unit.

Transport unit in upright position only. Before moving or tipping unit, secure all glass surfaces with tape and drain water from water reservoir. Failure to do so may result in damage to unit or personal injury.

NOTICE

Use of distilled water in the water reservoir of humidified units is recommended to preserve the life of electrical and mechanical components. If non-distilled water is used, the reservoir will require periodic cleaning and deliming (refer to the MAINTENANCE section for cleaning procedure). Unit failure due to lime or mineral deposits is not covered under warranty.

Do not use deionized water. Deionized water will shorten the life of the water reservoir and heating element.

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

Clean unit daily to avoid malfunctions and maintain sanitary operation.

MODEL DESCRIPTION

All Models

Flav-R-Savor® Humidified Holding and Display Cabinets come in either brushed aluminum or painted *Designer* colors. All units feature a digital temperature controller, air heating system, fluorescent lamps, tempered glass side panels, and a tempered glass door(s). Units can be configured with or without a humidity system with low water control protection. The standard access door can be hinged left or right. The cabinet interior top and bottom is made of easy-to-clean stainless steel. All available display racks are nickel-plated except the pretzel tree display rack, which is stainless steel.

FSD-1 and FSDT-1 Models

The FSD-1 is a standard single door model with a revolving display motor. It has revolving and stationary rack options that hold three to five display trays.

The FSDT-1 is a single door model with a revolving display motor like the FSD-1, but is 5" (127 mm) taller. It has revolving and stationary rack options that hold three to seven display trays.

On each model, the rotating rack stops automatically when the door is opened. For details on different rack options, refer to the OPTIONS AND ACCESSORIES section.

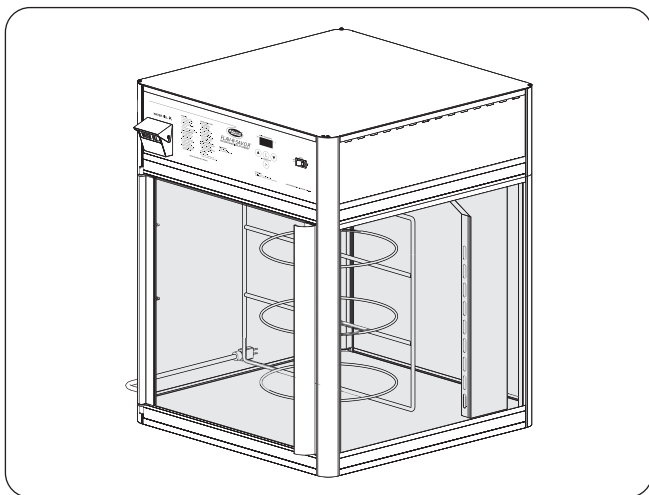


Figure 1. FSD-1 Model

NOTE: Models FSD-1 and FSDT-1 cannot be converted to models FSD-2/FSDT-2 or FSD-2X/FSDT-2X.

FSD-2 and FSDT-2 Models

The FSD-2 and FSDT-2 are the same as models FSD-1 and FSDT-1, but have an additional door on the opposite side of the controls for pass-through convenience.

FSD-1X and FSDT-1X Models

The FSD-1X is a single door model with a stationary rack that holds five display trays.

The FSDT-1X is a single door model with a stationary rack like FSD-1X, but is 5" (127 mm) taller. It has stationary rack options that hold three to seven display trays.

For details on different rack options, refer to the OPTIONS AND ACCESSORIES section.

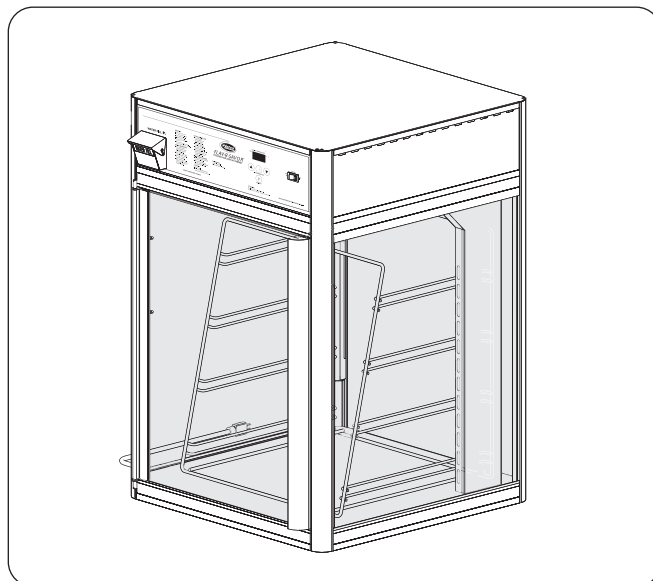


Figure 2. FSDT-1X Model

NOTE: Models FSD-1X and FSDT-1X cannot be converted to models FSD-1/FSDT-1, FSD-2/FSDT-2, or FSD-2X/FSDT-2X.

Models FSD-2X and FSDT-2X

The FSD-2X and FSDT-2X are the same as models FSD-1X and FSDT-1X, but have an additional door on the opposite side of the controls for pass-through convenience.

NOTE: Models FSD-2X and FSDT-2X cannot be converted to models FSD-2/FSDT-2.

MODEL DESIGNATION



Figure 3. Model Designation

Dimensions

Model	Width (A)	Depth (B)	Height* (C)	Footprint Width (D)	Footprint Depth (E)
FSD-1	22-1/2" (569 mm)	24-1/8" (612 mm)	27-9/16" (699 mm)	20-3/8" (518 mm)	20-3/8" (518 mm)
FSD-1X	22-1/2" (569 mm)	24-1/8" (612 mm)	27-9/16" (699 mm)	20-3/8" (518 mm)	20-3/8" (518 mm)
FSD-2	22-1/2" (569 mm)	25-3/8" (644 mm)	27-9/16" (699 mm)	20-3/8" (518 mm)	20-3/8" (518 mm)
FSD-2X	22-1/2" (569 mm)	25-3/8" (644 mm)	27-9/16" (699 mm)	20-3/8" (518 mm)	20-3/8" (518 mm)
FSDT-1	22-1/2" (569 mm)	24-1/8" (612 mm)	32-9/16" (826 mm)	20-3/8" (518 mm)	20-3/8" (518 mm)
FSDT-1X	22-1/2" (569 mm)	24-1/8" (612 mm)	32-9/16" (826 mm)	20-3/8" (518 mm)	20-3/8" (518 mm)
FSDT-2	22-1/2" (569 mm)	25-3/8" (644 mm)	32-9/16" (826 mm)	20-3/8" (518 mm)	20-3/8" (518 mm)
FSDT-2X	22-1/2" (569 mm)	25-3/8" (644 mm)	32-9/16" (826 mm)	20-3/8" (518 mm)	20-3/8" (518 mm)

* Add 4" (102 mm) to the height of the unit if the 4" leg option is installed.

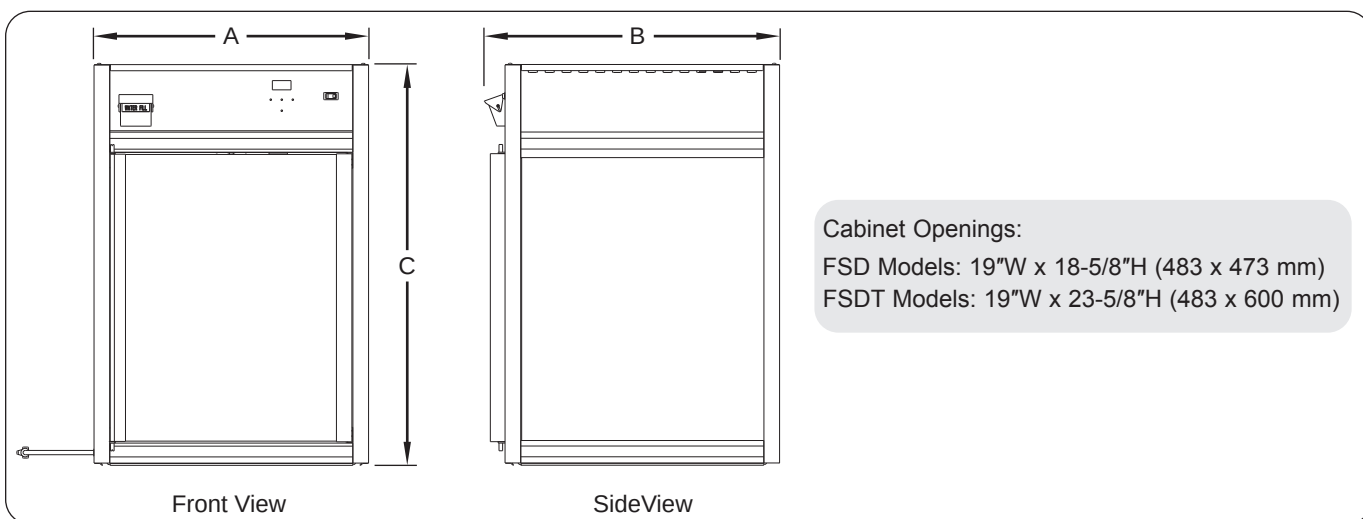


Figure 4. Dimensions

Plug Configurations

Units are supplied from the factory with an electrical cord and plug installed. Plugs are supplied according to the applications.



ELECTRIC SHOCK HAZARD: Plug unit into a properly grounded electrical receptacle of the correct voltage, size, and plug configuration. If plug and receptacle do not match, contact a qualified electrician to determine and install the proper voltage and size electrical receptacle.

NOTE: The specification label is located on the ceiling sheet inside the unit. See label for serial number and verification of unit electrical information.

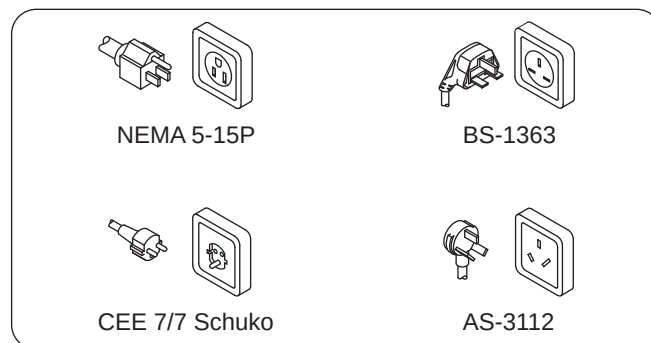


Figure 5. Plug Configurations

NOTE: Receptacle not supplied by Hatco.

SPECIFICATIONS

Electrical Rating Chart — FSD Models

Model	Voltage	Hertz	Watts	Amps	Plug Configuration	Shipping Weight
FSD-1 (with humidity)	120	60	1440	12.0	NEMA 5-15P	113 lbs. (51 kg)
	220	50/60	1440	6.5	CEE 7/7 Schuko	113 lbs. (51 kg)
	240	50/60	1440	6.0	BS 1363	113 lbs. (51 kg)
	220–230 (CE)	50/60	1440–1574	6.5–6.8	CEE 7/7 Schuko	113 lbs. (51 kg)
	230–240 (CE)	50/60	1322–1440	5.8–6.0	BS 1363	113 lbs. (51 kg)
FSD-1 (no humidity)	120	60	1115	9.3	NEMA 5-15P	113 lbs. (51 kg)
	220	50/60	1115	5.1	CEE 7/7 Schuko	113 lbs. (51 kg)
	240	50/60	1115	4.6	BS 1363	113 lbs. (51 kg)
	220–230 (CE)	50/60	1115–1219	5.1–5.3	CEE 7/7 Schuko	113 lbs. (51 kg)
	230–240 (CE)	50/60	1025–1115	4.5–4.6	BS 1363	113 lbs. (51 kg)
FSD-1X (with humidity)	120	60	1440	12.0	NEMA 5-15P	111 lbs. (50 kg)
	220	50/60	1440	6.5	CEE 7/7 Schuko	111 lbs. (50 kg)
	240	50/60	1440	6.0	BS 1363	111 lbs. (50 kg)
	220–230 (CE)	50/60	1440–1574	6.5–6.8	CEE 7/7 Schuko	111 lbs. (50 kg)
	230–240 (CE)	50/60	1322–1440	5.8–6.0	BS 1363	111 lbs. (50 kg)
FSD-1X (no humidity)	120	60	1115	9.3	NEMA 5-15P	111 lbs. (50 kg)
	220	50/60	1115	5.1	CEE 7/7 Schuko	111 lbs. (50 kg)
	240	50/60	1115	4.6	BS 1363	111 lbs. (50 kg)
	220–230 (CE)	50/60	1115–1219	5.1–5.3	CEE 7/7 Schuko	111 lbs. (50 kg)
	230–240 (CE)	50/60	1025–1115	4.5–4.6	BS 1363	111 lbs. (50 kg)
FSD-2 (with humidity)	120	60	1440	12.0	NEMA 5-15P	114 lbs. (52 kg)
	220	50/60	1440	6.5	CEE 7/7 Schuko	114 lbs. (52 kg)
	240	50/60	1440	6.0	BS 1363	114 lbs. (52 kg)
	220–230 (CE)	50/60	1440–1574	6.5–6.8	CEE 7/7 Schuko	114 lbs. (52 kg)
	230–240 (CE)	50/60	1322–1440	5.8–6.0	BS 1363	114 lbs. (52 kg)
FSD-2 (no humidity)	120	60	1115	9.3	NEMA 5-15P	114 lbs. (52 kg)
	220	50/60	1115	5.1	CEE 7/7 Schuko	114 lbs. (52 kg)
	240	50/60	1115	4.6	BS 1363	114 lbs. (52 kg)
	220–230 (CE)	50/60	1115–1219	5.1–5.3	CEE 7/7 Schuko	114 lbs. (52 kg)
	230–240 (CE)	50/60	1025–1115	4.5–4.6	BS 1363	114 lbs. (52 kg)
FSD-2X (with humidity)	120	60	1440	12.0	NEMA 5-15P	112 lbs. (51 kg)
	220	50/60	1440	6.5	CEE 7/7 Schuko	112 lbs. (51 kg)
	240	50/60	1440	6.0	BS 1363	112 lbs. (51 kg)
	220–230 (CE)	50/60	1440–1574	6.5–6.8	CEE 7/7 Schuko	112 lbs. (51 kg)
	230–240 (CE)	50/60	1322–1440	5.8–6.0	BS 1363	112 lbs. (51 kg)
FSD-2X (no humidity)	120	60	1115	9.3	NEMA 5-15P	112 lbs. (51 kg)
	220	50/60	1115	5.1	CEE 7/7 Schuko	112 lbs. (51 kg)
	240	50/60	1115	4.6	BS 1363	112 lbs. (51 kg)
	220–230 (CE)	50/60	1115–1219	5.1–5.3	CEE 7/7 Schuko	112 lbs. (51 kg)
	230–240 (CE)	50/60	1025–1115	4.5–4.6	BS 1363	112 lbs. (51 kg)

The shaded areas contain electrical information for **International models only**.

NOTE: Shipping weight includes packaging.

Electrical Rating Chart — FSDT Models

Model	Voltage	Hertz	Watts	Amps	Plug Configuration	Shipping Weight
FSDT-1 (with humidity)	120	60	1440	12.0	NEMA 5-15P	120 lbs. (54 kg)
	220	50/60	1440	6.5	CEE 7/7 Schuko	120 lbs. (54 kg)
	240	50/60	1440	6.0	BS 1363	120 lbs. (54 kg)
	220–230 (CE)	50/60	1440–1574	6.5–6.8	CEE 7/7 Schuko	120 lbs. (54 kg)
	230–240 (CE)	50/60	1322–1440	5.8–6.0	BS 1363	120 lbs. (54 kg)
FSDT-1 (no humidity)	120	60	1115	9.3	NEMA 5-15P	120 lbs. (54 kg)
	220	50/60	1115	5.1	CEE 7/7 Schuko	120 lbs. (54 kg)
	240	50/60	1115	4.6	BS 1363	120 lbs. (54 kg)
	220–230 (CE)	50/60	1115–1219	5.1–5.3	CEE 7/7 Schuko	120 lbs. (54 kg)
	230–240 (CE)	50/60	1025–1115	4.5–4.6	BS 1363	120 lbs. (54 kg)
FSDT-1X (with humidity)	120	60	1440	12.0	NEMA 5-15P	118 lbs. (51 kg)
	220	50/60	1440	6.5	CEE 7/7 Schuko	118 lbs. (51 kg)
	240	50/60	1440	6.0	BS 1363	118 lbs. (51 kg)
	220–230 (CE)	50/60	1440–1574	6.5–6.8	CEE 7/7 Schuko	118 lbs. (51 kg)
	230–240 (CE)	50/60	1322–1440	5.8–6.0	BS 1363	118 lbs. (51 kg)
FSDT-1X (no humidity)	120	60	1115	9.3	NEMA 5-15P	118 lbs. (51 kg)
	220	50/60	1115	5.1	CEE 7/7 Schuko	118 lbs. (51 kg)
	240	50/60	1115	4.6	BS 1363	118 lbs. (51 kg)
	220–230 (CE)	50/60	1115–1219	5.1–5.3	CEE 7/7 Schuko	118 lbs. (51 kg)
	230–240 (CE)	50/60	1025–1115	4.5–4.6	BS 1363	118 lbs. (51 kg)
FSDT-2 (with humidity)	120	60	1440	12.0	NEMA 5-15P	122 lbs. (55 kg)
	220	50/60	1440	6.5	CEE 7/7 Schuko	122 lbs. (55 kg)
	240	50/60	1440	6.0	BS 1363	122 lbs. (55 kg)
	220–230 (CE)	50/60	1440–1574	6.5–6.8	CEE 7/7 Schuko	122 lbs. (55 kg)
	230–240 (CE)	50/60	1322–1440	5.8–6.0	BS 1363	122 lbs. (55 kg)
FSDT-2 (no humidity)	120	60	1115	9.3	NEMA 5-15P	122 lbs. (55 kg)
	220	50/60	1115	5.1	CEE 7/7 Schuko	122 lbs. (55 kg)
	240	50/60	1115	4.6	BS 1363	122 lbs. (55 kg)
	220–230 (CE)	50/60	1115–1219	5.1–5.3	CEE 7/7 Schuko	122 lbs. (55 kg)
	230–240 (CE)	50/60	1025–1115	4.5–4.6	BS 1363	122 lbs. (55 kg)
FSDT-2X (with humidity)	120	60	1440	12.0	NEMA 5-15P	120 lbs. (54 kg)
	220	50/60	1440	6.5	CEE 7/7 Schuko	120 lbs. (54 kg)
	240	50/60	1440	6.0	BS 1363	120 lbs. (54 kg)
	220–230 (CE)	50/60	1440–1574	6.5–6.8	CEE 7/7 Schuko	120 lbs. (54 kg)
	230–240 (CE)	50/60	1322–1440	5.8–6.0	BS 1363	120 lbs. (54 kg)
FSDT-2X (no humidity)	120	60	1115	9.3	NEMA 5-15P	120 lbs. (54 kg)
	220	50/60	1115	5.1	CEE 7/7 Schuko	120 lbs. (54 kg)
	240	50/60	1115	4.6	BS 1363	120 lbs. (54 kg)
	220–230 (CE)	50/60	1115–1219	5.1–5.3	CEE 7/7 Schuko	120 lbs. (54 kg)
	230–240 (CE)	50/60	1025–1115	4.5–4.6	BS 1363	120 lbs. (54 kg)

 The shaded areas contain electrical information for **International models only**.

NOTE: Shipping weight includes packaging.

INSTALLATION

General

Flav-R-Savor® Humidified Holding and Display Cabinets are shipped with most components installed and ready for operation. The following installation instructions must be performed before plugging in and operating the cabinet.

⚠ WARNING

ELECTRIC SHOCK HAZARD: Unit is not weatherproof. Locate unit indoors where the ambient air temperature is a minimum of 70°F (21°C).

FIRE HAZARD: Locate unit a minimum of 1" (25 mm) from combustible walls and materials. If safe distances are not maintained, discoloration or combustion could occur.

⚠ CAUTION

Locate 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 falling accidentally and strong enough to support the weight of the unit and contents.

The National Sanitation Foundation (NSF) requires that units over 36" (914 mm) in width or weighing more than 80 lbs. (36 kg) either be sealed to or raised above the installation surface. If unit cannot be sealed at the point of use, 4" (102 mm) legs are available to allow for proper cleaning access below unit.

Transport unit in upright position only. Before moving or tipping unit, secure all glass surfaces with tape and drain water from water reservoir. Failure to do so may result in damage to unit or personal injury.

1. Remove the unit from the carton. Two people are required for this step.
2. Remove the information packet.
3. Remove tape and protective packaging from all surfaces of the unit, shelves, and any accessories.
 - Floor Sheet — The stainless steel floor in all cabinets is protected during shipping with a sheet of corrugated cardboard. This protection must be removed prior to cabinet operation.
 - Display Rack — The display rack has packing material and cardboard attached for protection during shipping. This protection must be removed prior to cabinet operation.
 - Legs — The cabinets are shipped with four rubber feet attached to the bottom of the unit. For cabinets with the optional 4" (102 mm) adjustable legs, see the OPTIONS AND ACCESSORIES section for installation instructions.

NOTE: If installing 4" (102 mm) legs, do not remove glass protection until leg installation is complete.

- Glass Side Panels — The cabinets have tempered glass side panels that are protected during shipping using foam sheets along the glass edges and tape to hold the panels securely. The sheets and tape must be removed prior to cabinet operation.

NOTE: Any impact to the tempered glass can cause breakage.

To remove a glass panel, grasp the panel firmly from inside and outside of the cabinet. Lift up and out of the bottom channel, then carefully lower the glass panel until it clears the upper channel.

To reinstall, position the glass panel top edge under the cabinet lip. Raise the panel until it clears the bottom channel, then carefully lower the panel until it rests in the bottom channel.

4. Place the unit in the desired location. Two people are required for this step.
 - Locate the unit in an area where the ambient air temperature is constant and a minimum of 70° F (21° C). Avoid areas that may be subject to active air movements or currents (i.e., near exhaust fans/hoods and air conditioning ducts).
 - Make sure the unit is at the proper counter height in an area convenient for use.
 - Make sure the countertop is level and strong enough to support the weight of the unit and food product.

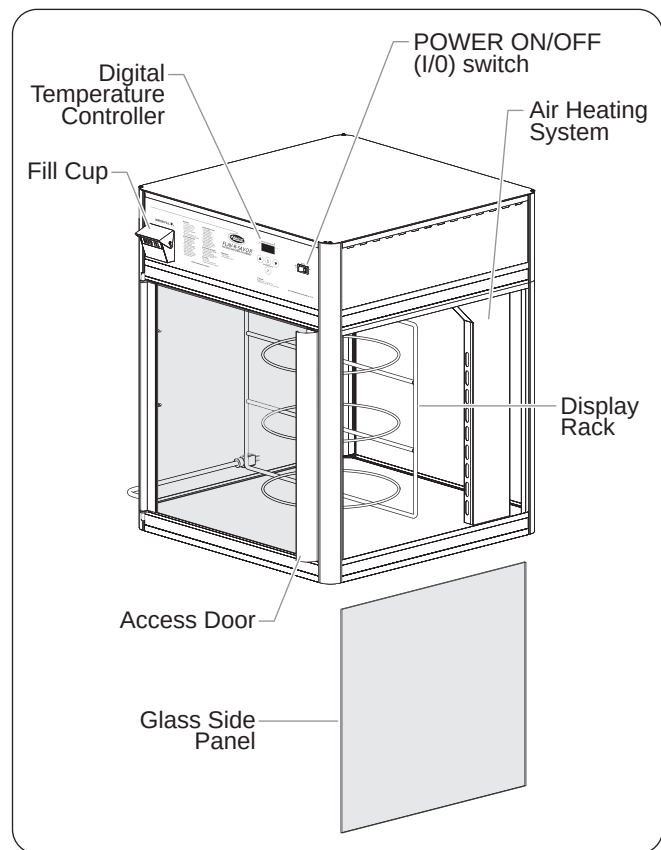


Figure 6. Components

Reversing the Access Door

Flav-R-Savor Humidified Holding and Display Cabinet access door(s) may be hinged on either the left or right side for convenience. Use the following procedure to reverse the access door.

NOTE: For models equipped with a rotating rack motor (FSD-1, FSDT-1, FSD-2, and FSDT-2), the "Relocating the Proximity Switch" procedure in this section must be performed after reversing the access door(s).

1. Remove the top hinge pin screw holding the door to the hinge.
2. Tip the door assembly forward (away from cabinet) and lift gently to clear the bottom hinge assembly. Remove the nylon washer(s).
3. Reinstall the top hinge pin screw that was removed in Step 1.
4. Remove the screws holding the hinges to the cabinet.
5. Remove the screws from the striker plates on the non-hinge side of the cabinet.
6. Install the striker plates on the opposite side of the cabinet where the hinges were previously mounted.
7. Install the hinges on the opposite side of the cabinet where the striker plates were previously mounted using the original hinge mounting screws.
8. Carefully rotate the door 180°.
9. Remove the hinge pin screw from the end that is now the top.
10. Carefully place the door assembly with the nylon washer(s) into the bottom hinge.
11. Tip/tilt the door assembly towards the cabinet and align the door top with the hinge. Reinstall the top door hinge pin screw through the hinged and into the door top.

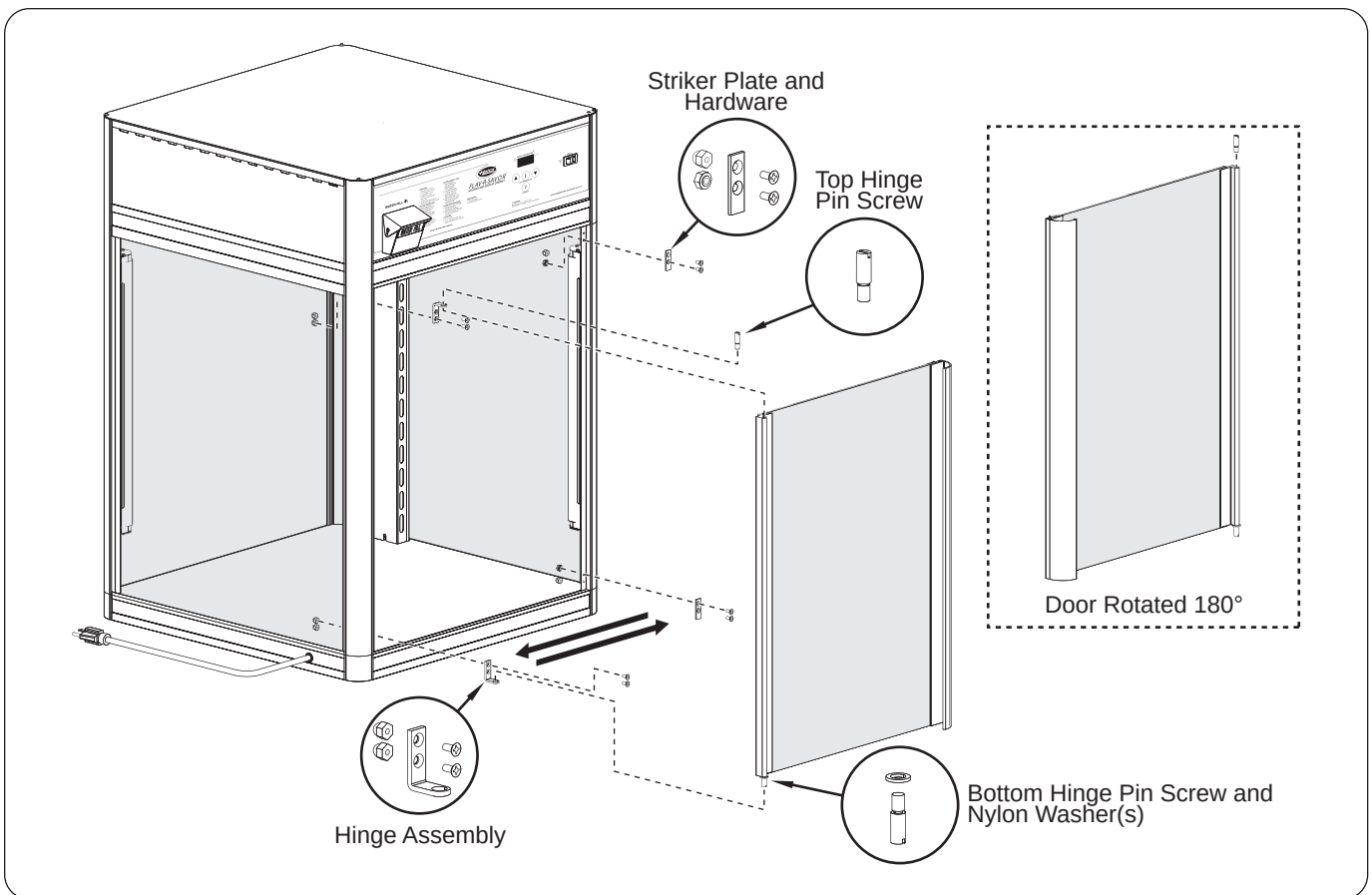


Figure 7. Reversing the Access Door

INSTALLATION

Relocating the Proximity Switch

(Rotating Rack Models Only—FSD-1, FSDT-1, FSD-2, FSDT-2)

Units equipped with a rotating rack motor will require relocating the proximity switch(es) after reversing the door(s).

The proximity switch signals the rack motor to stop when a door is opened and to start when the door is closed. Follow the steps below to move the proximity switch(es) to the proper position after reversing the door(s). Unit requires one switch per door.

1. Turn off the unit, unplug the power cord, and allow the unit to cool.
2. Remove the four screws and top cover.
3. Remove the screw and nut securing the proximity switch to the cabinet ceiling sheet. The screw is accessed from inside the cabinet. Reinstall screw and nut into hole after removing switch.
4. Cut the cable tie securing the proximity switch wires to the wiring harness. Mark the two wires for reassembly and unplug the wires from the proximity switch wire leads. Route the wires to the opposite corner and reattach the wires to the switch wire leads.

NOTE: Make sure to install the proximity switch in the orientation shown below for the specific installation location. Incorrect orientation will result in malfunction of the proximity switch.

5. Remove the screw and nut from the new mounting hole. Secure the proximity switch to the mounting hole with the screw and nut. Make sure to maintain proper switch orientation when tightening the hardware.

6. Make sure wires do not interfere with the other components inside the cabinet, then secure switch wires to wiring harness with a cable tie (not supplied).

NOTE: On models equipped with two doors, it may be necessary to move the air chamber to access the proximity switch on the customer-side door. Drain all water from the unit, remove the drain plug from inside the cabinet, and remove the four screws securing the air chamber assembly to the cabinet. Carefully move the air chamber out of the way to access the proximity switch. Reassemble after relocating switch.

7. Install the top cover and four screws.
8. Plug the unit into the proper power source.
9. Turn on the unit and test the operation of the proximity switch(es) by making sure the rack rotates when the doors are closed and stops rotating when a door is opened.

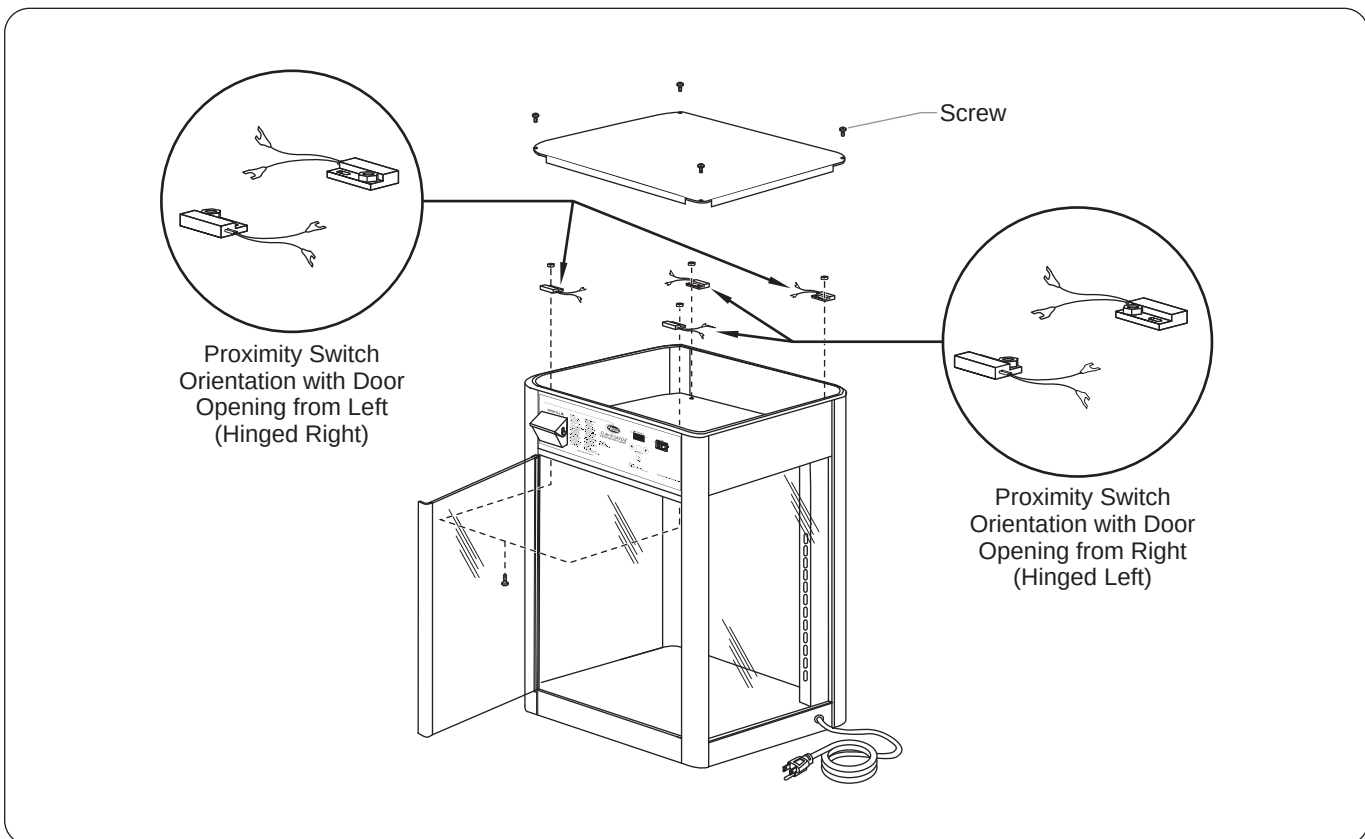


Figure 8. Relocating the Proximity Switch

General

Use the following procedures to operate the Flav-R-Savor® Humidified Holding and Display Cabinets.



Read all safety messages in the IMPORTANT SAFETY INFORMATION section before operating this equipment.

Startup

1. Plug unit into a properly grounded electrical receptacle of the correct voltage, size and plug configuration. See the SPECIFICATIONS section for details.
2. Move the POWER ON/OFF (I/O) switch to the ON (I) position.
 - The display lights will turn on and the heating system will start up.
 - The CABINET TEMPERATURE display will flash “LO H2O” four times and then flash the cabinet temperature. It will continue to alternate this way until the water reservoir is filled. Once the reservoir is full, “LO H2O” will stop flashing and the display will show the cabinet temperature.

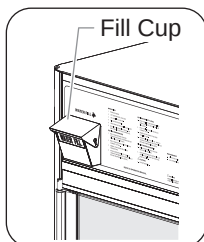
NOTICE

Use of distilled water in the water reservoir of humidified units is recommended to preserve the life of electrical and mechanical components. If non-distilled water is used, the reservoir will require periodic cleaning and deliming (refer to the MAINTENANCE section for cleaning procedure). Unit failure due to lime or mineral deposits is not covered under warranty.

Do not use deionized water. Deionized water will shorten the life of the water reservoir and heating element.

NOTE: Unit failure caused by deionized water is not covered by warranty.

3. Fill the water reservoir with clean water. To fill the reservoir:
 - a. Lift up the WATER FILL cup cover and pull forward.
 - b. Slowly pour water into the cup until “LO H2O” stops flashing on the cabinet temperature display.



IMPORTANT NOTE

When using distilled water, add one teaspoon of salt to the water reservoir during the initial water fill only. This will ensure proper operation of the water level sensors.



ELECTRIC SHOCK HAZARD: Do not overfill water reservoir. Overfilling can cause electrical shock. Water reservoir is full when “LO H2O” stops flashing on CABINET TEMPERATURE display. Stop filling when “LO H2O” stops flashing on display.

NOTE: The capacity of the water reservoir is 3/4 gallon (2.8 l). On the initial fill, the water reservoir may take up to one gallon (3.8 l) of water.

4. Set the humidity to the desired level (refer to the “Setting the Humidity Level” procedure in this section). See the “Food Holding Guide” for recommendations.
5. Set the air temperature to the desired temperature (refer to the “Setting the Air Temperature” procedure in this section). See the “Food Holding Guide” for recommendations.
6. Allow the unit 30 minutes to reach operating temperature before loading the cabinet with pre-heated food product.



Make sure food product has been heated to the proper food-safe temperature before placing in unit. Failure to heat food product properly may result in serious health risks. This unit is for holding pre-heated food product only.

BURN HAZARD: Some exterior surfaces on the unit will get hot. Use caution when touching these areas.

Setting the Air Temperature

1. Press the AIR TEMPERATURE key to enter temperature mode (“tSP” will appear on the CABINET TEMPERATURE display).
2. Press the AIR TEMPERATURE key again to show the current temperature setting.
3. Press the Up Arrow key or Down Arrow key to reach the desired temperature. The temperature range is 80°–195°F (27°–91°C) in single degree increments. See the “Food Holding Guide” in this section for recommendations.
4. After the desired temperature is set, wait 15 seconds without pushing any keys for the cabinet temperature display to return automatically to operational mode.



Figure 9. FSD/FSDT Control Panel

OPERATION

Setting the Humidity Level

1. Press the HUMIDITY key to enter humidity mode ("hSP" will appear on the CABINET TEMPERATURE display).
2. Press the HUMIDITY key again to show the current humidity level.
3. Press the Up Arrow key or Down Arrow key to reach the desired humidity level. Humidity range is 1 through 5 (1 is the lowest amount of humidity and 5 is the highest). See the "Food Holding Guide" in this section for recommendations.

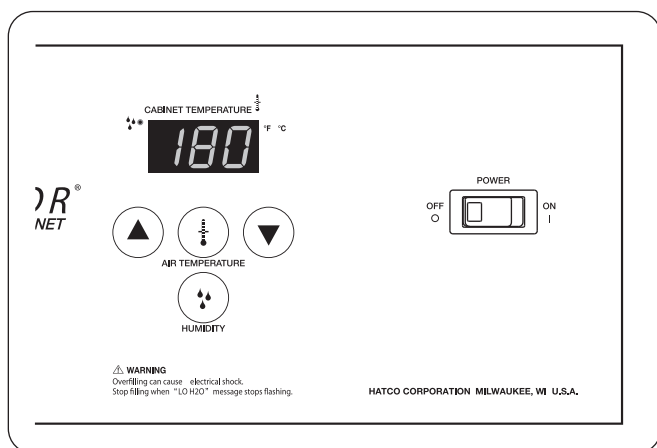


Figure 10. Setting the Humidity Level

4. After the desired humidity level is set, wait 15 seconds without pushing any keys for the CABINET TEMPERATURE display to return automatically to operational mode.

NOTE: Temperature and humidity settings may vary depending upon product make-up and consistency. The CABINET TEMPERATURE display shows the lowest temperature point inside the cabinet, not the product temperature.

The capacity of the water reservoir permits uninterrupted operation for approximately 4–8 hours, depending on the settings and how frequently the door is opened. When "LO H2O" is flashing on the CABINET TEMPERATURE display, add water to the reservoir. The water reservoir refill capacity is approximately 96 ounces, or 3 quarts (2.8 liters).

WARNING

ELECTRIC SHOCK HAZARD: Overfilling can cause electrical shock. Water reservoir is full when "LO H2O" stops flashing on CABINET TEMPERATURE display. Stop filling when "LO H2O" stops flashing on display.

Food Holding Guide

Type of Food	Maximum Holding Time	Humidity Setting	Temperature	
			°F	°C
Biscuits	2 Hours	3	130–140	55–60
Chicken Pieces (Fried)	4 Hours	5	175	80
Croissants	4 Hours	1	140	60
Fruit Pies	3-1/2 Hours	4	140	60
Onion Rings	1/2 to 1 Hour	1	175	80
Pizza — Thick Crust Thin Crust	1 Hour	4	185	85
	1 Hour	5	180	82
Pretzels	3 Hours	4	140	60
Wrapped Sandwiches	2 Hours	4	180	82

NOTE: All times and settings are recommendations only and may vary depending on product preparation, cooking time, and internal food temperature.

General

The Flav-R-Savor® Humidified Holding and Display Cabinets are designed for maximum durability and performance, with minimum maintenance.

⚠ WARNING

ELECTRIC SHOCK HAZARD:

- Turn the power switch OFF, unplug the power cord, and allow the unit to cool before performing any maintenance or cleaning.
- DO NOT submerge or saturate with water. Unit is not waterproof. Do not operate if unit has been submerged or saturated with water.
- Do not steam clean or use excessive water on unit.
- Use only Genuine Hatco Replacement Parts when service is required. Failure to use Genuine Hatco Replacement Parts may subject operators of the equipment to hazardous electrical voltage, resulting in electrical shock or burn. 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.

This unit has no “user-serviceable” parts. If service is required on this unit, contact an 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.

Cleaning

To preserve the finish of the Flav-R-Savor Humidified Holding and Display Cabinets, perform the following cleaning procedure daily.

NOTICE

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

1. Turn off the unit, unplug the power cord, and allow the unit to cool.
2. Remove and wash all food pans.
3. Wipe down all interior and exterior metal surfaces with a damp cloth. Stubborn stains may be removed with a good non-abrasive cleaner. Clean hard to reach areas using a small brush and mild soap.

NOTE: Both the rotating display rack and the stationary rack are removable for cleaning, if necessary. Refer to the “Removing the Rotating Rack” procedure in this section for removal.

4. Clean the glass side panels and door panel(s) using ordinary glass cleaner and a damp, soft cloth or paper towel. The side panels are removable for detailed cleaning, if necessary. Refer to the “Removing the Glass Panels” procedure in this section for removal.

Removing the Rotating Rack

(Models FSD-1, FSDT-1, FSD-2, FSDT-2)

1. Open the front access door.
2. Remove the two (2) connecting pins from the connecting coupling located at the top of the rack inside the cabinet.
3. Lower the connecting coupling until it is free of the motor shaft and remove the rack from the cabinet.

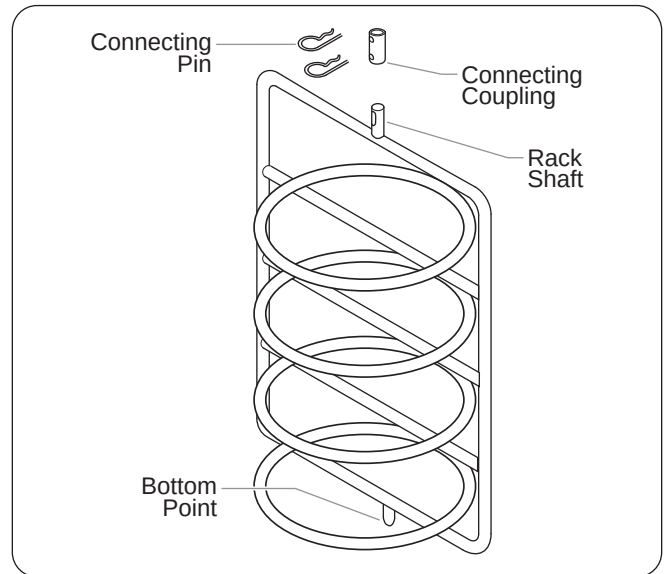


Figure 11. Removing Motorized Display Racks

Replacing the Rotating Rack

1. With the connecting coupling in position on the top rack shaft, insert the rack into the cabinet through the access door and place the rack bottom point in the dimple located at the center of the cabinet floor.
2. Slide the connecting coupling up onto the motor shaft and align the coupling holes.
3. Insert the two (2) connecting pins. The top connecting pin goes through the connecting coupling and the motor shaft. The bottom connecting pin goes through the connecting coupling and the rack shaft.

Removing the Glass Panels

1. Lift the glass panel out of the bottom channel of the cabinet.
2. Pull the lower edge away from the cabinet.
3. Carefully lower the glass until the top clears the cabinet.

Replacing the Glass Panel

1. Position the glass panel with the top edge under the top cabinet lip, and raise the glass until it clears the bottom channel of the cabinet.
2. Move the bottom of the glass towards the cabinet until the glass rests against the cabinet frame.
3. Carefully lower the glass until it rests in the bottom channel of the cabinet.

MAINTENANCE

Draining the Water Reservoir

The water reservoir in humidified units must be drained prior to moving the cabinet as well as during the “Removing Lime and Mineral Deposits” procedure.

⚠ WARNING

ELECTRIC SHOCK HAZARD: Turn the power switch OFF, unplug the power cord, and allow the unit to cool before performing any maintenance or cleaning.

1. Turn off the unit, unplug the power cord, and allow the unit to cool.
2. Locate the valve inside the cabinet on the underside of the ceiling sheet.

⚠ CAUTION

BURN HAZARD: Ceiling sheet and water in reservoir are hot during operation. Allow to cool before draining.

3. Position a one gallon (four liter) container under the valve.
4. Turn the valve handle from the horizontal position (closed) to the vertical position (open) to drain the reservoir.
5. Once the reservoir is empty, return the valve handle to the closed position.

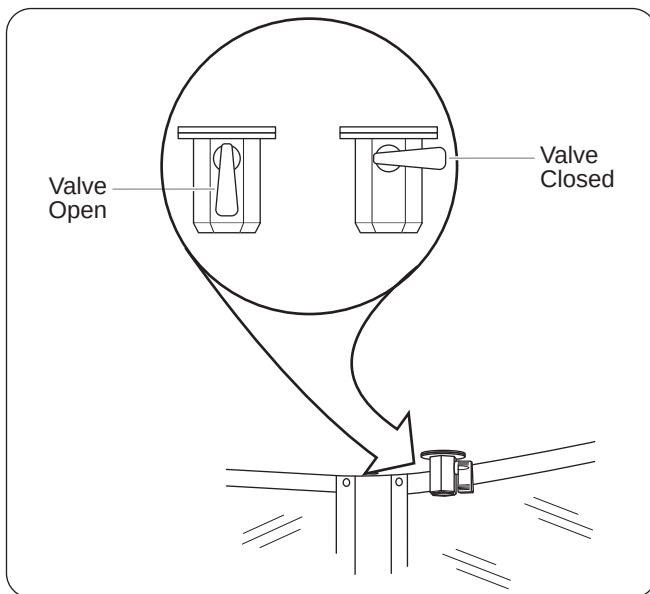


Figure 12. Draining Reservoir Valve

NOTE: If the water used has an excessive amount of lime or mineral content, follow the REMOVING LIME AND MINERAL DEPOSITS procedure for periodic cleaning and deliming of the water reservoir.

NOTE: Unit failure caused by liming or sediment buildup is not covered under warranty.

Removing Lime and Mineral Deposits

Use the following procedure for periodic cleaning and de-liming of the water reservoir in humidified units.

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

NOTE: Perform this procedure when the unit will not be used for a period of time, such as the end of the day.

1. Turn off the unit, unplug the power cord, and allow the unit to cool.
2. After the unit has cooled down, perform the “Draining the Water Reservoir” procedure in this section.
3. Fill the water reservoir with a mixture of 75% water and 25% white vinegar. Do not use flavored vinegar.
4. Plug in and turn on the unit.
5. Set both the air temperature and humidity to their highest settings and allow the unit to run for 30 minutes.
6. Turn off the unit, unplug the power cord, and allow the unit to cool.
7. Perform the “Draining the Water Reservoir” procedure to empty the deliming solution from the water reservoir.
8. Continue to fill and drain the water reservoir with clean water until the deliming solution is rinsed through and the water discharge is clean.
9. Plug the unit into its power source and fill the reservoir as usual for daily operation using the procedure in the OPERATION section of this manual.

Replacing A Display Light

⚠ WARNING

Make sure protective lamp cover(s) are installed in front of fluorescent lamp(s). Breakage of fluorescent lamps not properly protected could result in personal injury and/or food contamination.

The unit is equipped with two fluorescent lamps that illuminate the warming area. These lamps have a special lamp cover to guard against injury and food contamination in the event of breakage. When replacing a fluorescent lamp, use P/N 02.30.074.00. Use the following procedure to replace a fluorescent lamp.

1. Turn off the unit, unplug the power cord, and allow the unit to cool.
2. Remove the lamp cover from in front of the fluorescent lamp.
3. Carefully twist the fluorescent lamp and pull out to remove it from the sockets on each end.
4. Align the tabs on each end of the new fluorescent lamp with the channels on each socket, and push the lamp into the sockets.
5. Carefully twist the fluorescent lamp in the sockets until it “snaps” into position.
6. Replace the lamp cover in front of the fluorescent lamp.

TROUBLESHOOTING GUIDE



WARNING

This unit must be serviced by trained and qualified personnel only. Service by unqualified personnel may lead to electric shock or burn.



WARNING

ELECTRIC SHOCK HAZARD: Turn the power switch OFF, unplug the power cord, and allow the unit to cool before performing any maintenance or cleaning.

Symptom	Probable Cause	Corrective Action
Fluorescent lamp not working.	Lamp loose or defective.	Re-install or replace fluorescent lamp.
	Ballast failed.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
Unit operates, but is not circulating air inside cabinet.	Blower motor is defective.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
	The correct voltage may not be supplied to blower.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
Unit is plugged in, but nothing works	No power to unit.	Check electrical receptacle and verify that power supply matches specifications on unit. If receptacle is not working, check circuit breaker and reset, or plug unit into a different known working receptacle.
	Power cord connections are loose or disconnected.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
	Power cord is damaged.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
	Defective POWER ON/OFF (I/O) switch.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
Unit is operational, but rotating rack (if equipped) does not turn.	Proximity switch was not relocated after door reversal.	See "Relocating the Proximity Switch" in the INSTALLATION section of this manual.
	Proximity magnet or proximity switch not working properly.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
	Incorrect voltage is supplied to rack motor.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
Unit is not producing any "hot air" inside cabinet.	Safety high-limit is tripped or open.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
	Incorrect voltage supplied to heating element.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
	Blower motor is not working.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
	Air heating element is defective.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
Unit is heating, but is not producing humidity inside cabinet. "LO H2O" not flashing on display and unit is full of water.	Incorrect voltage supplied to water heating element or heating element is defective.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
Unit is heating, but is not producing humidity inside cabinet. "LO H2O" flashes on display and unit is full of water.	When using distilled water, no minerals are being sensed by low water probe.	On initial fill, add one teaspoon of salt to the water reservoir.
	Low water protection system is malfunctioning.	Contact an Authorized Hatco Service Agent or Hatco for assistance.

Error Codes

The following error codes may appear on the digital display to indicate an error in the operating condition of the unit.

LO H2O = Low water probe does not detect water. Refill water reservoir — refer to instructions in OPERATION section of this manual.

E1 = Air temperature sensor malfunctioning. Contact an Authorized Hatco Service Agent or Hatco for assistance.

E2 = Humidity temperature sensor malfunctioning. Contact an Authorized Hatco Service Agent or Hatco for assistance.

OPTIONS AND ACCESSORIES

4" (102 mm) Adjustable Legs

The 4" (102 mm) adjustable legs are used to add additional height to the unit.

1. Secure all glass sides and doors with tape. Lay the unit on its side. **NOTICE: Do not lay unit on side with control panel.**
2. Remove the four screw-type rubber feet from the corner brackets.

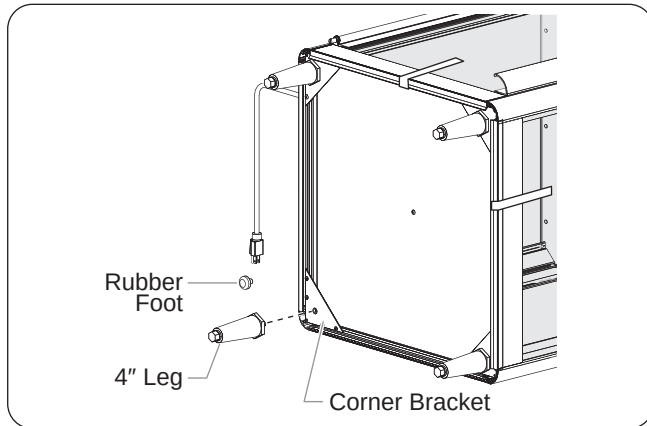
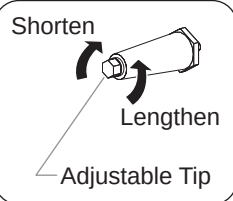


Figure 13. Installation of 4" Legs

3. Screw the 4" (102 mm) legs into the holes in the middle of each corner bracket. After all the legs are tightened, return the unit to its upright position. If the unit is not level or rocks, turn the adjustable tip of the appropriate leg to level the unit.



Merchandising Decal

Self-adhesive merchandising decals are available to promote food products. The decals are designed to be installed on three (3) sides of the cabinet above the glass panels.

Decal Installation

1. Before installing decals, clean the side panels with a non-oily cleaner, such as isopropyl alcohol (rubbing alcohol).
2. After the cleaned surfaces have dried, remove the protective backing from the decal and apply to the panel.
3. Any air pockets or bubbles behind the sticker can be removed by rubbing gently with a soft cloth from the center towards the outer edges.

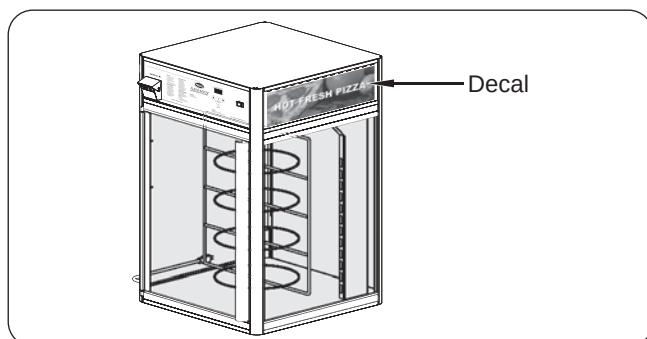


Figure 14. Decal Installation

Merchandising Display Sign Holders

Merchandising Display Sign Holders are available in heights of 3-1/4" (83 mm) and 7-1/2" (191 mm). The sign holders include a metal holder and an acrylic window. Up to three sign holders can be installed on a unit, one per side (excluding the control side).

Printed signs are available separately to promote Pizza or Chicken food products.

1. Remove the existing screws securing the top cover in place, position the sign holder over the screw holes, and reinstall the screws.
2. Place the printed sign in the holder and slide the protective acrylic window over the sign.

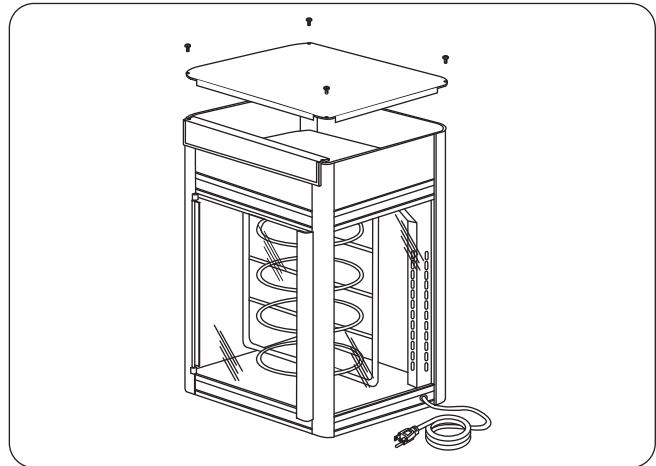
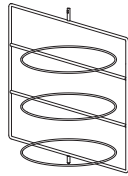


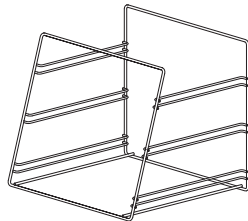
Figure 16. Merchandising Display Sign Holder
(3-1/2" [83 mm] height shown)

Display Racks for FSD

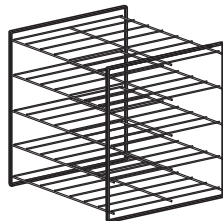
Several display racks are available to “customize” FSD models to specific foodservice operations.



3-Tier Circle Rack*
Rack Openings: 4-5/8" (117 mm)



3-Tier Pan Rack
Rack Openings: 4" (102 mm)



5-Shelf Multi-Purpose Rack
Shelf 1 Rack Opening: 2-1/2" (64 mm)
NOTE: Shelf 1 is the bottom shelf.
Shelves 2, 3, & 4 Rack Opening: 2-3/4" (70 mm)
Shelves 2, 3, & 4 are removable.

*Racks designed for use with motorized display.

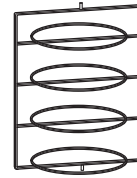
Figure 17. FSD Display Racks

Motorless Rack Coupling

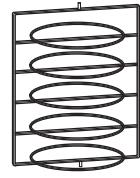
The motorless rack coupling allows the stationary installation of a circle rack or pretzel tree in cabinets that do not have a rack motor (FSD-1X, FSDT-1X, FSD-2X, FSDT-2X).

Display Racks for FSDT

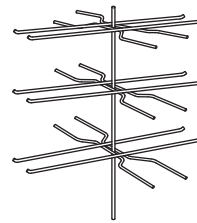
Several display racks are available to “customize” FSDT models to specific foodservice operations.



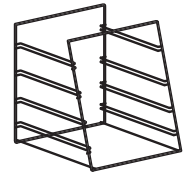
4-Tier Circle Rack*
Rack Openings: 4-5/8" (133 mm)



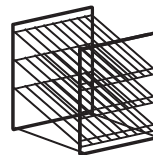
5-Tier Circle Rack*
Rack Openings: 3-1/2" (89 mm)



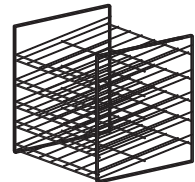
3-Tier Pretzel Tree*
Rack Openings: 5-3/4" (146 mm)



4-Tier Pan Rack
Rack Openings: 4" (102 mm)

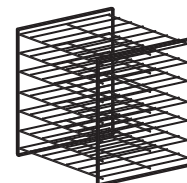


3-Shelf Angle Rack
Rack Openings: 4" (102 mm)
Middle shelf is removable.
Rack shelves slant at 15° angle.



5-Shelf Angle Rack
Rack Openings: 2-3/4" (70 mm)
All shelves are removable.

*Racks designed for use with motorized display.



7-Shelf Multi-Purpose Rack
Shelves 1 & 5 Rack Opening: 2-1/2" (70 mm).
NOTE: Shelf 1 is the bottom shelf.
Shelves 2, 3, 4 & 6 Rack Openings: 2-3/4" (76 mm)
Shelves 2, 3, 4, 6, & 7 are removable.

Figure 18. FSDT Display Racks

OPTIONS AND ACCESSORIES

Mechanical Thermostat Control Panel

The Mechanical Thermostat Control Panel is an alternative to the digital control panel and features separate dials for controlling temperature and humidity. This is a factory-installed option and is not available for retrofit.

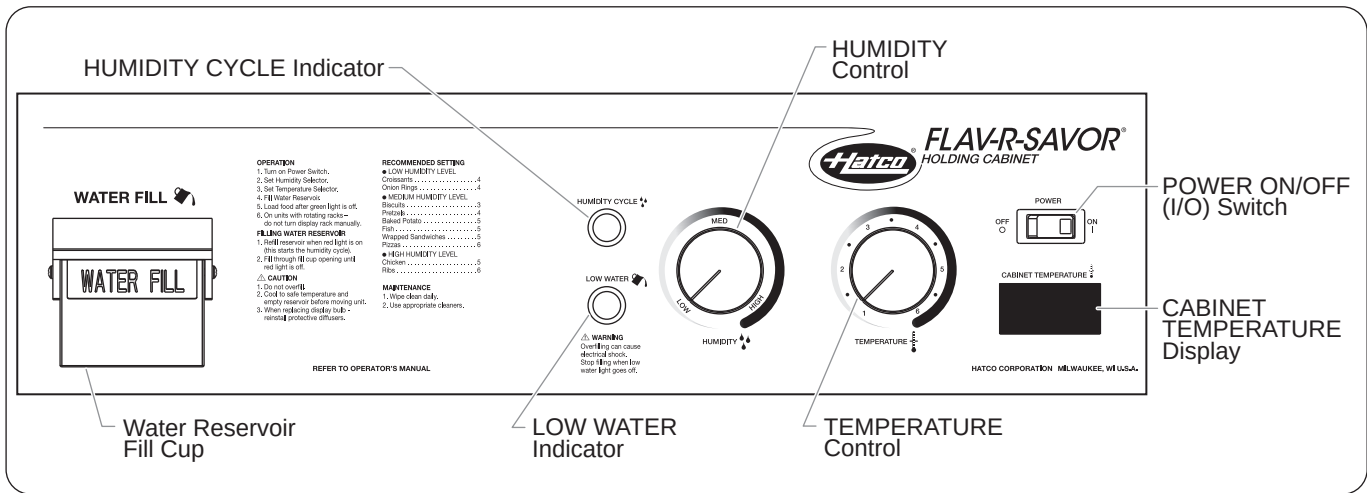


Figure 19. Mechanical Thermostat Control Panel

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:**
Conveyor 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 — HWB and HWBI Series (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
- d) **Ninety (90) Day Parts-Only Warranty:**
Replacement Parts

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, heat lamp bulbs, coated halogen light bulbs, halogen heat lamp bulbs, glass components, and fuses; Product failure in booster tank, fin tube heat exchanger, or other water heating equipment caused by liming, sediment buildup, chemical attack, or freezing; or 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 using new or refurbished parts or Product by Hatco or 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. In the context of this Limited Warranty, "refurbished" means a part or Product that has been returned to its original specifications by Hatco or a Hatco-authorized service agency. 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

Service Solutions Group
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

3Wire 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

TWC Services
Mableton 770-438-9797

Heritage Service Group
Norcross 866-388-9837

Southeastern Rest. Svc.
Norcross 770-446-6177

HAWAII

Burney's Comm. Service, Inc.
Honolulu 808-848-1466

Food Equip Parts & Service
Honolulu 808-847-4871

ILLINOIS

Parts Town
Lombard 708-865-7278

Eichenauer Elec. Service
Decatur 217-429-4229

Midwest Elec. Appl. Service
Elmhurst 630-279-8000

Cone's Repair Service
Moline 309-797-5323

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

Service Solutions Group
Lexington 859-254-8854

Service Solutions Group
Louisville 502-451-5411

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

Bildons Appliance Service
Detroit 248-478-3320

Commercial Kitchen Service
Bay City 517-893-4561

Midwest Food Equip. Service
Grandville 616-261-2000

MINNESOTA

GCS Service
Plymouth 800-345-4221

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

Duffy's Equipment Services, Inc.
Buffalo 800-836-1014

3Wire Northern
Plattsburgh 800-634-5005

Duffy's Equipment Services, Inc.
Sauquoit 800-836-1014

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

Service Solutions Group
Cincinnati 513-772-6600

Commercial Parts and Service
Columbus 614-221-0057

Electrical Appl. Repair Service
Brooklyn Heights 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 800-433-1804

Armstrong Repair Service
Houston 713-666-7100

Cooking Equipment Specialist
Mesquite 888-866-9276

Refrigerated Specialist, Inc.
Mesquite 888-866-9276

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

3Wire Restaurant Appliance
Seattle 800-207-3146

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

Key Food Equipment Service
Victoria 250-920-4888

MANITOBA

Air Rite, Inc.
Winnipeg 204-895-2300

NEW BRUNSWICK

EMR Services, Ltd.
Moncton 506-855-4228

ONTARIO

R.G. Henderson Ltd.
Toronto 416-422-5580

Choquette - CKS, Inc.
Ottawa 613-739-8458

QUÉBEC

Choquette - CKS, Inc.
Montreal 514-722-2000

Choquette - CKS, Inc.
Québec City 418-681-3944

UNITED KINGDOM

Marren Group
Northants +44(0)1933 666233

HATCO CORPORATION
P.O. Box 340500
Milwaukee, WI 53234-0500 U.S.A.
(800) 558-0607 (414) 671-6350
Parts and Service Fax (800) 690-2966
International Fax (414) 671-3976
partsandservice@hatcocorp.com
www.hatcocorp.com

Register your unit online!

See IMPORTANT OWNER INFORMATION section
for details.