

HUSSMANN® Beer Merchandiser



P / N Q 5 1 2 8 8 7 A

ARV-570 &
ARV-1230
Owner's Manual
P/N 0512887_A
1 October 2009

IR Ingersoll Rand
Climate Control Technologies

These merchandisers are manufactured to meet ANSI / National Sanitation Foundation (NSF®) Standard #7 Type II requirements. Proper installation is required to maintain certification. Near the serial plate, each case carries a label identifying the type of application for which the case was certified.

**ANSI/NSF-7 Type II – Display Refrigerator / Freezer (Beverage Cooler)
Intended for 80°F / 55%RH Ambient Application**

This equipment is intended for the storage and display of nonpotentially hazardous, bottled or canned products only.



Copyright Notice
Husmann and Safe-NET are trademarks of Husmann Corporation

SAFETY FIRST!

Before installing, read and understand the operating manual. Any damage caused by not following directions given in this manual is out-of-warranty.

CAUTION

To reduce the risk of fire, electrical shock or injury when using your Hussmann Beer Merchandiser:

- Always use a dedicated circuit with the Amperage stated on the unit.
 - Plug into an outlet designed for the plug.
 - Do not use an adapter.
 - Do not overload the circuit.
 - Disconnect power before servicing.
 - Replace any damaged power cord.
 - Never turn off by pulling on the power cord.
 - Unit must have electrical ground at all times.
 - Never connect the ground wire directly to the neutral wire or connect to gas, water, telephone, drain pipe, lightning rod, etc.
 - Do not damage the refrigeration system.
 - Do not use any mechanical device or other means to speed the defrost process, except as recommended by the manufacturer.
-
- Unplug the Hussmann Beer Merchandiser before cleaning.
 - Do not store or use toxic or dangerous chemical products inside the case.
 - Do not use electrical devices in the Hussmann Beer Merchandiser unless recommended by the manufacturer.
-
- Use two or more people to move a unit.
 - Keep packing materials away from children.

We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

ARV-570 & ARV-1230**Contact**

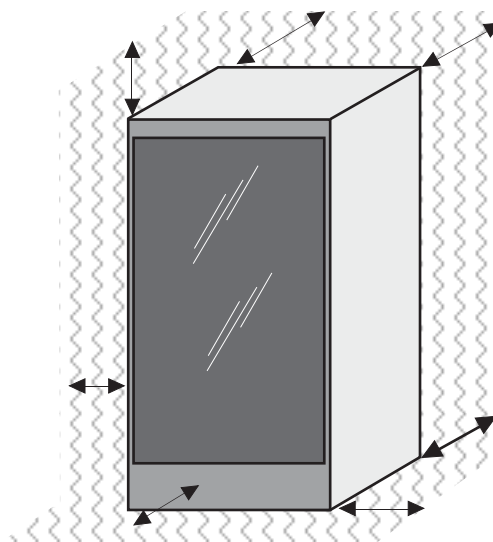
To request technical assistance with your Hussmann Beer Merchandiser, or to place a service call, please phone Hussmann's CALL CENTER • U.S. or Canada 1-800-922-1919 • Mexico 1-800-522-1900.

LOCATION

Hussmann Beer Merchandisers are designed for a protected environment, out of direct sun or rain. Placing the unit near heat sources (ovens, grills, etc.) or in direct sun will adversely affect performance. Unusual ambient conditions can be handled by changing settings in the Safe-NET™ controller. Temperatures of 80°F (27°C) and less than 55% R.H. are considered normal ambient conditions.

The merchandiser may not operate properly in environments of extreme temperature and humidity [above 90°F (32°C) and 65% relative humidity]. Performance issues resulting from poor local conditions are out-of-warranty.

The merchandiser must have a minimum 5-inch (13 cm) ventilation space at the back, at the top, on each side, and below the door in front.



5-inch (13 cm) Required Ventilation Minimum

Condensation may form on external parts when the merchandiser is used in high relative humidity. Use a soft cloth to remove moisture.

The floor must be flat to facilitate leveling and to avoid problems with door sealing or abnormal noises. The floor must support the weight of a fully loaded merchandiser.

INSPECTION

All equipment should be thoroughly examined for shipping damage before and during the unloading.

Each Hussmann Beer Merchandiser is carefully inspected at our factory. Any claim for loss or damage must be made to the carrier. The carrier will provide any necessary inspection reports and/or claim forms.

Apparent Loss Or Damage

If there is an obvious loss or damage, it must be noted on the freight bill or express receipt and signed by the carrier's agent; otherwise, carrier may refuse claim.

Concealed Loss Or Damage

When loss or damage is not apparent until after equipment is uncrated, retain all packing materials and submit a written request to the carrier for inspection, within 15 days.

UNCRATE

Use the appropriate equipment to safely lift and move the Hussmann Beer Merchandiser to the preferred location in your business.

Carefully remove the shipping box. Avoid scratching the Hussmann Beer Merchandiser.

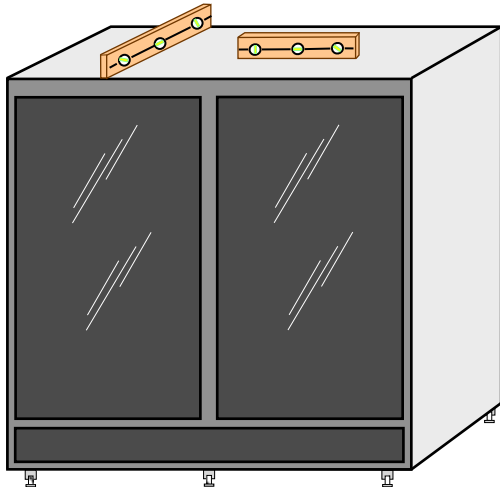
Recycle packing materials whenever possible.

Models with Wheels: ARV models have wheels that make moving easier. The pallet is held by lateral tabs which are easily removed.



BUILT-IN BACK SPACERS

The ARV-570 and ARV-1230 have LH and RH hinged spacers to promote ventilation at the back of the units. Be sure to unfold each before placing unit against wall or other structure.



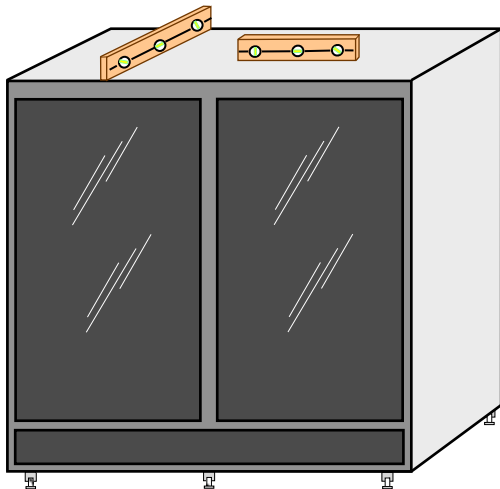
IMPORTANT:

After leveling, wait at least 30 minutes before turning on power to the Hussmann Beer Merchandiser to allow any oil residue to return to the compressor. Oil not in the compressor at start up may cause permanent damage not covered by warranty.

Thumbscrew locks are packed in an envelope inside the merchandiser. Be sure to unpack the thumbscrew locks and insert them into the front corner wheels to prevent unplanned movement of the Hussmann Beer Merchandiser.

LEVEL

Merchandisers must be level front-to-back and side-to-side to operate at peak efficiency.



Turn Thumbscrew clockwise until it stops wheel from moving.

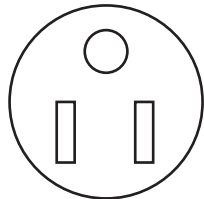
For Hussmann Beer Merchandisers with rollers, first lock the front corner wheels by turning the thumb screws clock-wise. Carefully lift the unit to insert shims as needed to prevent the chamber from rolling or tilting.

ARV-570 & ARV-1230 & ARV-570 & ARV-1230 & ARV-1230

PLUG IN

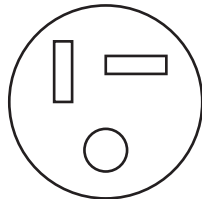
Put the Hussmann Beer Merchandiser on its own dedicated electrical circuit with ground. 12AWG is the minimum size wire acceptable.

- The **ARV-570** requires a dedicated 15 Amp circuit with grounded wall receptacle (NEMA 5-15P)
- The **ARV-1230** double door Hussmann Beer Merchandiser requires a dedicated 20 Amp circuit with a special wall receptacle (NEMA 5-20P).
- Do not use extension cords. Never use adapters.
- If in doubt, call an electrician.



NEMA 5-15P

ARV-570



NEMA 5-20P

ARV-1230

Electrical requirements for the merchandiser are stated on the serial plate attached to the unit.

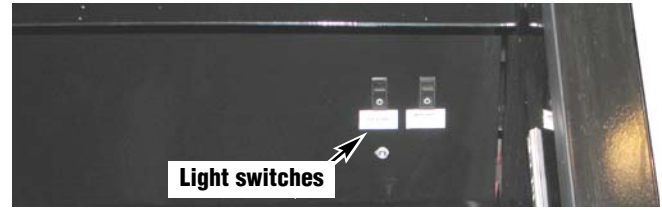
ARV-570	ARV-1230
1500 VA	3000 VA

Nominal Voltage	Minimum Voltage	Maximum Voltage
120	108	132

If the power supply oscillates beyond the range given in the preceding table, install a voltage regulator:

Light Switch

Hussmann Beer Merchandiser light switches are located on the top right side of the interior.



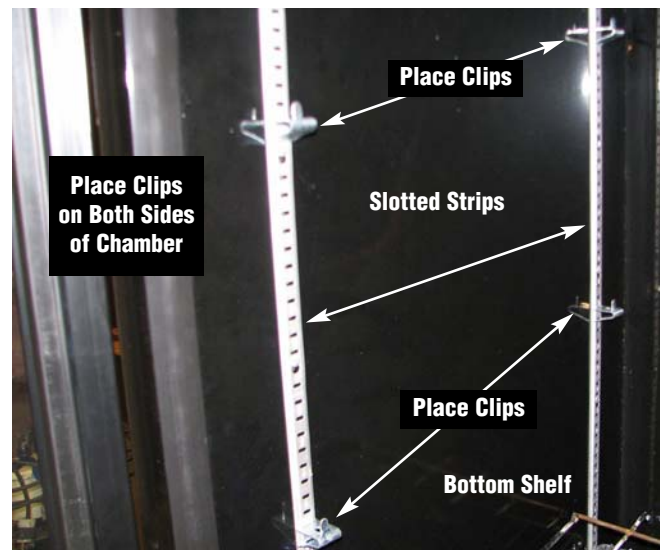
INSTALL SHELVES

- ARV-570** – Four rows of flat shelves,
OR Five rows of flat wire shelves,
OR Four rows of gravity feed shelves with product guides.

- ARV-1230** – Four rows of flat wire shelves,
OR Five rows of flat wire shelves.

SHELF PART NUMBERS	
ARV-570	
Flat Shelf (2/pkg)	SH.4968432
Gravity Feed Shelf (each)	SH.7960665
ARV-1230	
Flat Shelf - Left (each)	SH.4978748
Flat Shelf - Right (each)	SH.4978751

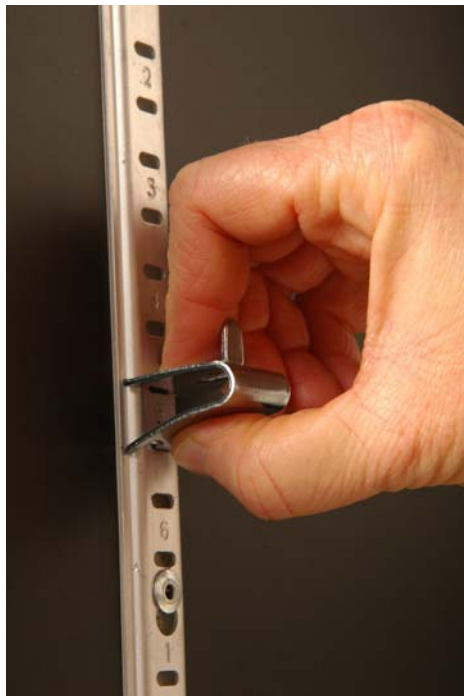
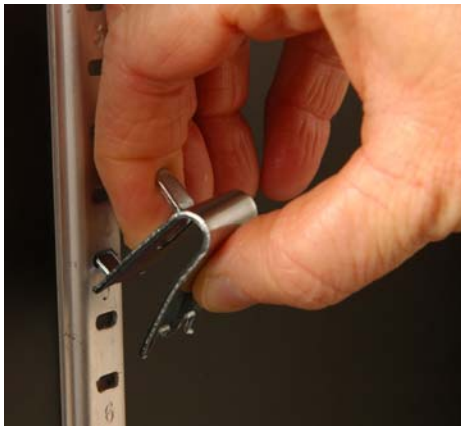
Metal shelf clips fit into slotted strips in the interior on each side at the front and back of the cooler. Each shelf requires four shelf clips.



Safe-NET software Version 9.03 or later

Safe-NET software Version 9.03 or later

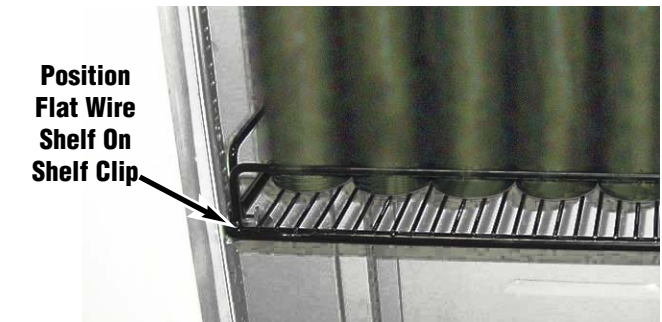
1. Begin with the first shelf at the bottom of the Hussmann Beer Merchandiser.
2. Insert one end of the shelf clip into the upper slot and gently squeeze the clip to insert into the slot below.



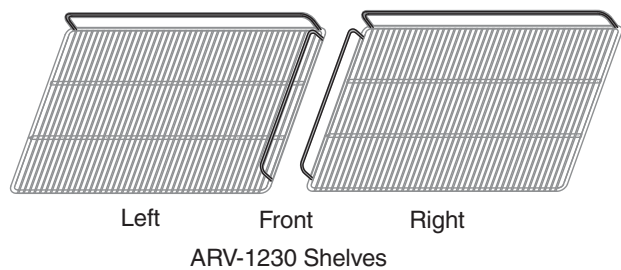
ARV-570: For gravity feed shelves with guides *ONLY*, position the rear shelf clips seven slots above the front shelf clips, according to the marks on the mounting strips.



For flat wire shelves, position shelf clips at the same slot in all four mounting strips for each shelf.



3. Position the wire display shelf on top of the four shelf clips before beginning the next shelf. The product stop goes to the rear for flat shelves. The ARV-1230 shelves have product stops toward the center of the merchandiser.



4. Use the bracket numbering on each side to guide placement of shelves. Shelves must be spaced evenly, allowing a minimum of 2-in. between the top of bottles and the shelf above to ensure airflow.

DOOR TORQUE ADJUSTMENT

Check the torque by opening the door 45° then releasing it. The door must close and seal completely. If it does not seal, adjust as follows:

1. Place one wrench each on the two lower support nuts.
2. Loosen the lower nut while holding the upper nut in place.
3. Once the lower nut is loose, the upper nut can be rotated away from the hinge to increase torque or toward the hinge to decrease torque.
4. Once torque is adjusted, hold the upper nut in place while tightening the lower nut.

**AUXILIARY RECEPTACLE**

There is an auxiliary 110V plug receptacle (female) on the back of the unit near the top to allow retailers to use an auxiliary lighted sign. This plug is limited to 1A for ARV-1230 and 3A for ARV-570, and should not be used for anything other than a lighted sign requiring the stated Amperage or less. The plug is protected by a separate fuse. The fuse can be replaced with a like fuse available at hardware stores or automotive parts retailers, as well as through Hussmann Service. For access to the fuse holder, carefully push the cover to the right to clear the flange, then pull and rotate out.


WARNING

ARV-1230
Use 1A fuse only. Use of higher rated fuse invalidates the warranty and may lead to fire.

ARV-570
Use 3A fuse only. Use of higher rated fuse invalidates the warranty and may lead to fire.

Auxiliary Outlet



View from Back of Chamber



Fuse Box and Cover

Safe-NET software Version 9.03 or later

1 October 2009 — P/N 0512887_A

SET Safe-NET TIME

Safe-NET is the electronic controller that regulates the cooling system. Before Safe-NET can operate correctly, the internal clock must be set. This will allow it to regulate the system for defrost at convenient times of the day around your location's schedule — when you are not at the busiest serving times.

The Hussmann Beer Merchandiser's Safe-NET comes preset with two defrosts per day. In most situations this will be enough defrosts unless the unit is operated in non-air conditioned environments or high humidity locations.

The Safe-NET on ARV models is located behind the front grille below the merchandiser door. Unplug the unit, then lift the grille and bring it forward off the rivet heads. (The ARV-570 front grille is held with screws at the side. The ARV-1230 front grille is held with pins.)



ARV-1230



When power is first applied, the Safe-NET display will show the version of software installed. The initial scroll is as follows: **Safe — -Net — 9.03⁽¹⁾ (Version) — C570 (Case Model) [OR C123 FOR TWO DOORS] — 75⁽²⁾ (temperature of air entering the evaporator).**

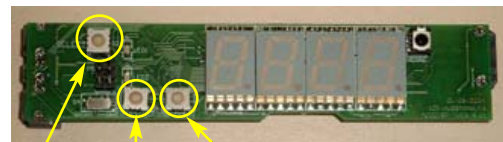
⁽¹⁾The Version will change dependent on current version installed.

⁽²⁾The temperature of air entering the evaporator depends on surrounding ambient temperature and the amount of time the case has been running.

- Open the Safe-NET controller using a small flat blade screwdriver to pop off the oval cover (this may be tight).



- Plug in the ARV models. Be careful of moving parts in the compressor compartment.
- You will see three buttons on the control board as shown in this photo.

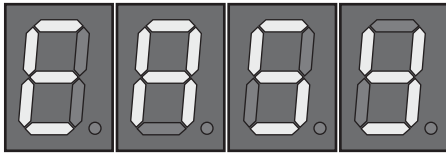


SELECT Button UP Button DOWN Button

The SELECT button is used to view EASY menu, and to edit/confirm values. Use the UP or DOWN button to move to the next item in the menu or change the value of a parameter.

Three Button Rules (Software Version 9.03 or later)

- Always start by pushing and releasing the SELECT button to display EASy.



- Press and release the SELECT button until you are in the proper menu. Once in the proper menu press the UP or DOWN button to enter the menu and to scroll through the menu.
- Once at the menu item that you want, press the SELECT button until the item flashes between the value and the title. You may have to press the SELECT button more than once to get the item to flash.
- Then press the UP or DOWN button to change the item.
- Remember to push the SELECT button to save the item.
- Pressing the UP and DOWN buttons at the same time acts as an escape to go back out of the menus.

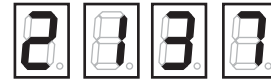
Set the Clock

The Safe-NET clock can be adjusted so that the defrosts are set to avoid the busiest serving times.

- Press the SELECT button — EASy is displayed.
- Press the DOWN button until you see CLOC.



- Press SELECT and the MINUTES begin to flash.



- With minutes flashing, use the UP or DOWN button until the correct minutes are displayed, then press SELECT. The HOURS begin to flash.



- With hours flashing, use the UP or DOWN button until the correct hour is displayed (Safe-NET uses a 24-hour, or military, clock where 12 is noon).
- Press SELECT and the clock has been set.
- The clock will automatically return to main display. Hussmann offers an optional real-time clock which will retain its time setting for at least one week if unplugged.

Replace the Display Cover.

Important: *The clock does not automatically adjust for Daylight Saving Time. If defrost times are critical, the clock must be reset manually.*

Safe-NET software Version 9.03 or later**Escape**

To leave a Menu and return to the default display, press the UP and DOWN buttons on the Safe-NET display module simultaneously. If a valid pass code has been entered it will remain active for the remainder of the 5-minute time out period. This allows exiting one menu and entering another to modify a value without having to re-enter the pass code.

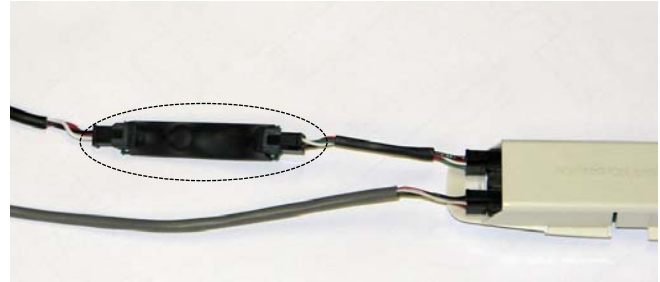
Defrosts

The unit must go into defrost mode at least twice in each 24 hours to maintain optimal performance. During defrost, the temperature display may move up 2-3°F (1-2°C). Avoid opening the door during the defrost cycle.

Defrost is necessary because the Hussmann Beer Merchandiser operates at temperatures below freezing (26°F/ -3.3°C). Defrosting is done automatically with Safe-NET.

Defrost water drains to a drip pan where it evaporates. Restricting airflow around the bottom of a Hussmann Beer Merchandiser may delay or prevent complete evaporation.

In the event of power loss, the optional real time clock will keep its settings for at least one week once the battery is fully charged. The real time clock battery is automatically recharged when the unit is plugged in.



**Real Time Clock
(Hussmann Aftermarket Part CC.4440746)**

The Hussmann Beer Merchandiser Safe-NET comes with two defrosts preset: one at 0200 and one at 1400. If the preset defrost times are acceptable for your business, no settings need to be changed. Replace the Safe-NET cover and grille.

If the preset times need to be changed for your business schedule, or if additional defrosts are needed because the unit is in an extreme environment, the Safe-NET controller can be set to meet the requirements of your business.

Set Defrost Time (Pass Code Needed)

- Press the SELECT button (top left button).



- Then press the DOWN button once to get to *StAr* and press SELECT.



- Press the UP or DOWN button to change minutes; press SELECT.
- Press the UP or DOWN button to change hours; press SELECT.

The second defrost will follow 12 hours later. If this change meets the needs of your business, replace the Safe-NET cover and grille.

Change Standard Defrost Time (Pass Code Required)

Your business may need defrost times that are not evenly spaced, or staggered, such as 0300 (3:00 a.m.) and 1400 (2:00 p.m.) because your business is open later. Or you may need more than two defrosts due to peak sales or high humidity—0300, 0900, 1500 and 2100 are evenly spaced, while 0300, 1000, 2100 are staggered defrost times. Safe-NET can handle 2 or 3 staggered defrosts or 2 to 8 evenly spaced defrosts in 24 hours.

ndEF

The *ndEF* parameter sets the number of defrost cycles in a 24-hour period. The number works in conjunction with the *StAr* parameter discussed above. The *ndEF* (number of defrosts) determines the number of defrosts that occur in a 24-hour period beginning with the *StAr* (first defrost) parameter. The maximum number of defrosts allowed in a 24-hour period is 8. The defrosts are spaced evenly across the 24-hour period beginning with the *StAr* time. The formula for calculating defrost start times is as follows:

$$\text{Defrost interval} = 24/\text{ndEF}$$

$$\text{First defrost cycle start time} = \text{StAr}$$

$$\text{Second start time} = \text{StAr} + \text{Interval}$$

$$\text{Third start time} = \text{StAr} + 2 \times \text{Interval}$$

~

$$\text{Eighth start time} = \text{StAr} + 7 \times \text{Interval}$$

For example, with a *StAr* value of 01:00 and an *ndEF* setting of 4, the defrost cycle start times are:

1:00 A.M.

7:00 A.M.

1:00 P.M.

7:00 P.M.

This scheme applies to all types of defrosts.

Press the SELECT button, then DOWN three times. After navigating to the *ndEF* submenu item, the display will cycle between *ndEF* and the current setting. While the setting is being displayed, press the SELECT button to edit this value. When the Safe-NET display module begins flashing the value, use the UP /DOWN buttons to increase or decrease the value to the desired setting.

Safe-NET software Version 9.03 or later

Once the desired setting is displayed, press the SELECT button to store the new value. The display will revert to cycling between *ndEF* and the new value.

If it is necessary to stagger the defrost times to uneven intervals, select *2-df* in the *ndEF* item. This enables *Str2* in menu which is the second defrost time, and allows the first and second defrost times to be set independently. An example would be 02:00 and 13:00. For three staggered defrost times, select *3-dF* which enables *Str2* and *Str3* defrost times.

Defrost should be scheduled for a time immediately following product loading to allow for the fast pull down.

Replace Safe-NET Cover

Position the cover over the display and gently press into place.



The complete Safe-NET technician's manual is available online at http://www.husmann.com/Installation%20Manuals/0461391_B_SafeNET.pdf

Run Before Stocking

Allow the Husmann Beer Merchandiser to run for at least 30 minutes before stocking.

LOADING

1. Add the maximum quantity of bottles allowed.
2. Load the product after closing for the night so that it can pull down to temperature overnight.
3. Stock bottles upright only.
4. Do not add warm product during selling hours.

The LED display shows the calculated actual beer temperature based on sensor input. The calculation requires beer to be loaded in the unit for 30 minutes to be accurate.

Estimated Pull Down Time to Achieve 26°F (-3.3°C) Optimum Temperature		
	Pre-Cooled Beer to 45°F (7°C)	Beer at 70°F (21°C)
Loading empty unit at 80°F (27°C) outside temperature	8.5 hours approximate	15 hours approximate
Loading half empty unit at 80°F (27°C) outside temperature	7 hours approximate	13 hours approximate

CARE AND CLEANING

Long life and satisfactory performance of any equipment is dependent upon the care it receives. To ensure long life, proper sanitation and minimum maintenance costs, this unit should be thoroughly cleaned, all debris removed and the interiors washed down. Cleaning often will control or eliminate odor buildup. Frequency of cleaning is dependent on usage and local health requirements.



WARNING

Do not use HOT water on COLD glass surfaces. This can cause the glass to shatter and could result in personal injury. Allow the glass door to warm before applying hot water.

DO NOT USE AMMONIA-BASED PRODUCTS TO CLEAN LIGHTED CANOPY. NEVER USE ABRASIVE CLEANERS OR SCOURING PADS.

Exterior Surfaces



WARNING

To reduce the risk of fire, electrical shock or injury when cleaning your Hussmann Beer Merchandiser:

- Unplug the Beer Merchandiser before cleaning.
- Keep all liquids away from electrical and electronic components.
- Do not use any mechanical device or other means to speed the defrost process, except as recommended by the manufacturer.

The exterior surfaces must be cleaned with a soft cloth, mild detergent and warm water to protect and maintain their attractive finish.

NEVER USE ABRASIVE CLEANERS OR SCOURING PADS. NEVER USE CAUSTIC SODA, ALCOHOL, KEROSENE, GASOLINE, THINNER, SOLVENTS, DETERGENTS, ACIDS, CHEMICALS OR ABRASIVES. DO NOT USE AMMONIA-BASED CLEANERS ON ACRYLIC PARTS.

Interior Surfaces

The interior surfaces may be cleaned with most domestic detergents, ammonia-based cleaners and sanitizing solutions with no harm to the surface. Always read and follow the manufacturer's instructions when using any cleaning product.

Do NOT Use:

- Abrasive cleansers and scouring pads, as these will mar the finish.
- Coarse paper towels on coated glass.
- Ammonia-based cleaners on acrylic parts.
- Solvent, oil or acidic based cleaners on any interior surfaces.
- A hose on display or interior lights or any other electrical connection.

Do:

- **First disconnect electrical power.**
- Remove the product and all loose debris.
- Thoroughly clean all surfaces with soap and hot water. **DO NOT USE STEAM OR HIGH WATER PRESSURE HOSES TO WASH THE INTERIOR. THESE WILL DESTROY THE UNIT'S SEALING CAUSING LEAKS AND POOR PERFORMANCE.**
- Take care to minimize direct contact between fan motors and cleaning or rinse water.
- Rinse with hot water, but do NOT flood.
- Allow the unit to dry before resuming operation.
- Wipe down lighted surfaces with a damp sponge or cloth so that water does not enter the light channel.
- After cleaning is completed, turn on power to the Hussmann Beer Merchandiser.

Safe-NET software Version 9.03 or later

Shelves

Shelves and shelf clips for either ARV-570 or ARV-1230 are easily removed for cleaning the interior as well as the shelves themselves.

Whenever possible, use all product before performing maintenance. Product allowed to warm above the operating temperature may freeze when restocked.

Cleaning under the Unit

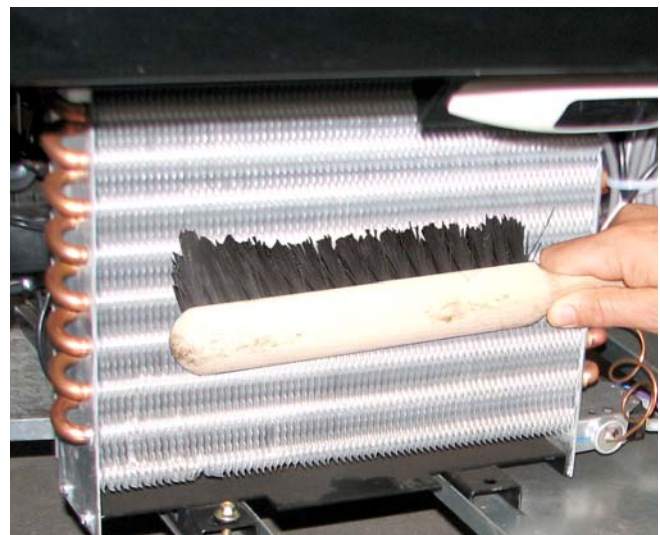
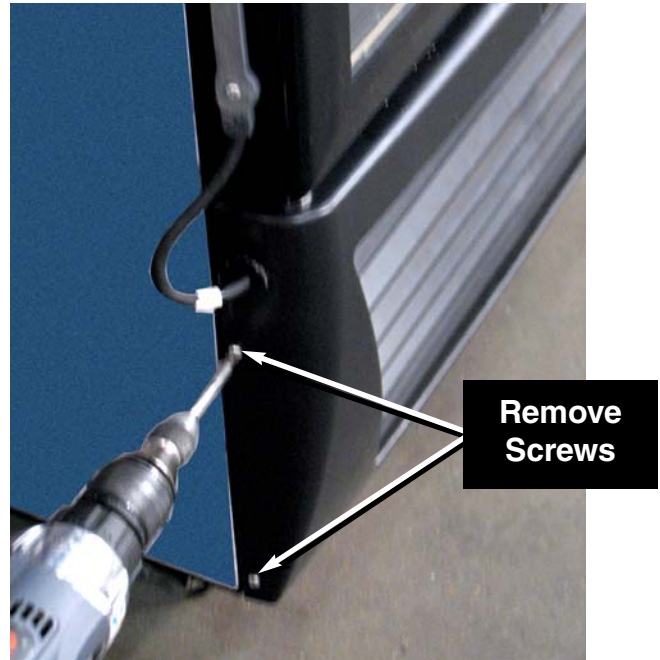
Use a vacuum with a long wand attachment to remove accumulated dust and debris from under the unit.

Condenser Coil

To maintain peak operating efficiency, the coil should be cleaned at least once each month. A dirty coil will slow product cooling significantly and can increase energy consumption by as much as 20%.

Remove screws on each side of the louvered front grille, then lift off the grille. Use a soft hand brush or soft brush attachment on a vacuum to remove accumulated dust and debris.

Consult an authorized technician if more extensive cleaning is needed.



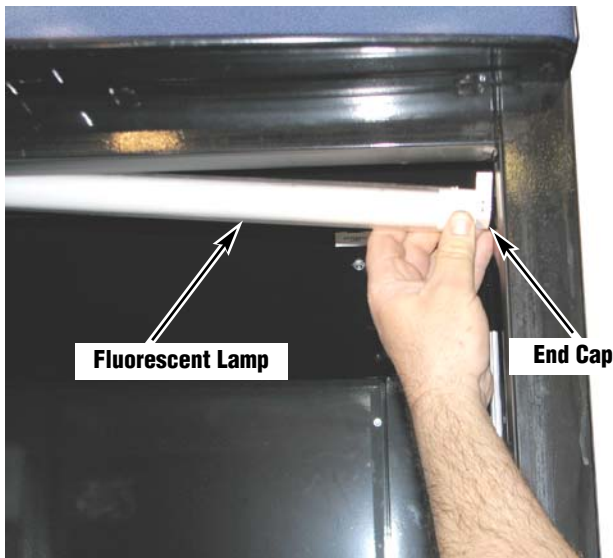
LAMP REPLACEMENT

Aftermarket Part #	Description
BU.4481507	T8 18W (ARV-570 Lamps)
BU.4481514	T8 32W (ARV-1230 Lamps)

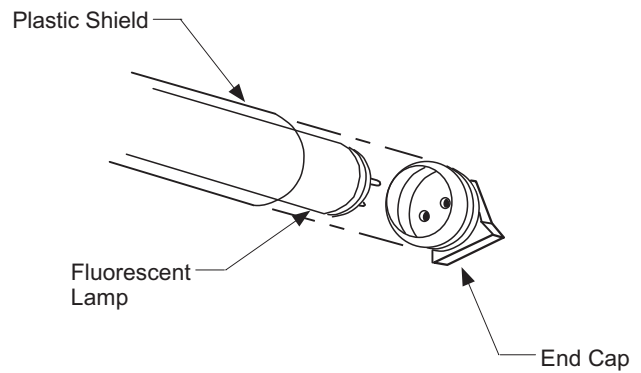
Fluorescent lamps must be replaced by lamps of the same size dimension and wattage as the original. **Restocked beer may freeze.**

ARV-570 (Only) Interior Top

1. Unplug the unit.
2. Remove lamp assembly from the unit.



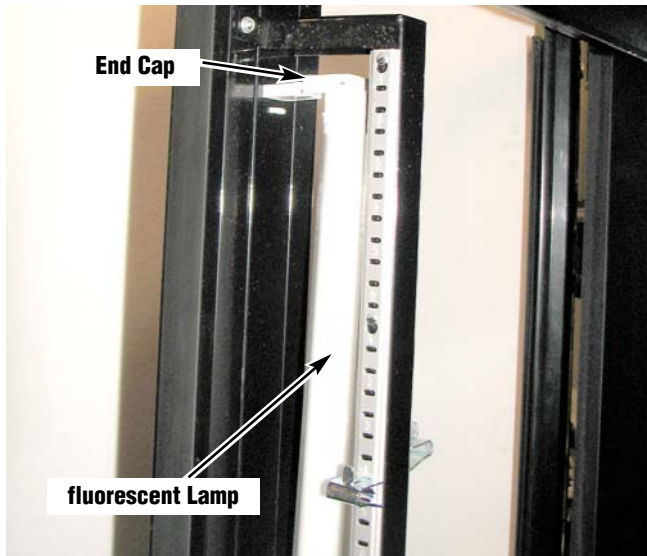
3. Remove lamp from the end cap.
4. Remove lamp from plastic shield.



5. Replace the lamp.
6. Put into clear sleeve.
7. Reassemble in reverse order.
8. Plug the unit in.
9. Allow the unit to run for at least 30 minutes before stocking with fresh product.

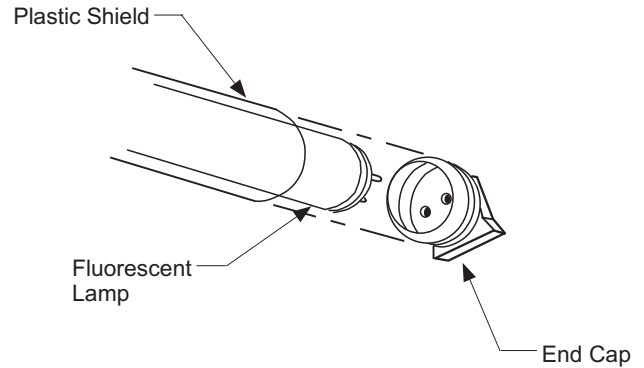
ARV-1230 (Only) Interior Center Column

1. Sell all product in the unit.
2. Unplug the unit.
3. Remove the shelves from one side.
4. Remove lamp assembly from the unit.



ARV-570 & ARV-1230

4. Remove lamp from end cap.
5. Remove lamp from plastic shield.



6. Replace the lamp.
7. Put into clear sleeve.
8. Reassemble in reverse order.
9. Plug the unit in.
10. Allow the unit to run for at least 30 minutes before stocking with fresh product.

16 **ARV-570 & ARV-1230**

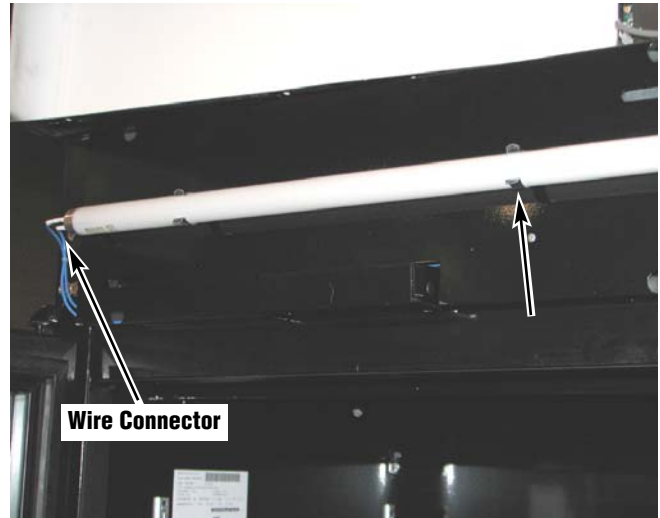
ARV-570 and ARV-1230 Canopy (Exterior)

1. Unplug the unit.
2. Remove all push fasteners from canopy top and bottom. (There is an equal number of push fasteners on top and bottom.)

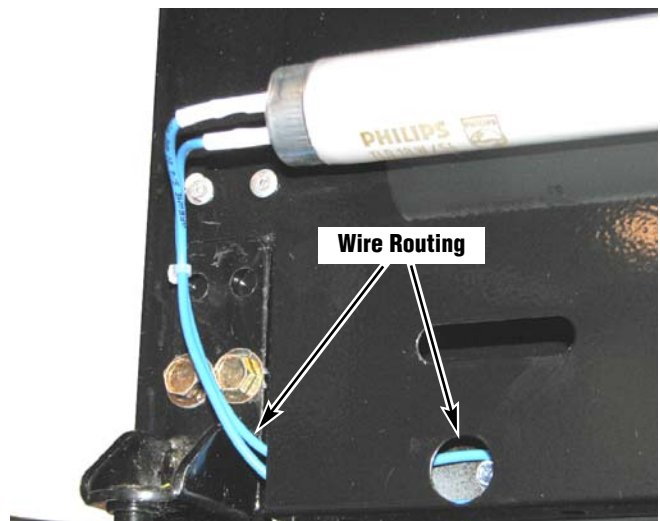


3. Carefully remove the canopy.

4. To remove the fluorescent lamp, disconnect the two individual wire connector from each end.



5. Remove from holding clips.
6. Replace the lamp and reconnect connectors.
7. Reassemble in reverse order.



8. Plug the unit in.
9. Allow the unit to run for at least 30 minutes before stocking with fresh product.

Troubleshooting

The following chart identifies most common problems, their causes, and suggested solutions.

Troubleshooting Guide

To place a service call, please phone Hussmann's call center at 1 (800) 227-8634.

Problem	Possible Causes	Solution/Action
Does not turn on	Plug is out of outlet	Insert plug into outlet
	Poor contact at outlet	Remove and reinsert plug into outlet. If good contact cannot be established, <i>contact a licensed electrician to replace the outlet.</i>
	No power	Power outage OR Circuit breaker tripped UNPLUG UNIT until power is restored UNPLUG UNIT until breaker is reset
	Low Voltage	Install a voltage regulator
Unusual Noise	Unit not level	Reposition and level the unit
	Unit contacting structure	Reposition unit to provide space on all sides
	Front grille missing	Replace grille to attenuate sound
Slow to cool product	Dirty condenser coil	Clean condenser coil
	Poor airflow around unit	Reposition unit to provide space on all sides
	Evaporator blocked by ice	Verify that door is sealing completely
		Heavy use in high humidity — reset Safe-NET controller to increase the frequency of defrosts
Loading with warm product	The warmer the product when placed in the Hussmann Beer Merchandiser, the longer the time needed to cool the product.	
Temperature display not accurate	Recently stocked	Allow time for temperature display to catch up with stocking -- about 30 minutes.
Condensation on door	High relative humidity	Contact Hussmann Service — 1-800-227-8634 to have door heat increased

Safe-NET software Version 9.03 or later

HUSSMANN CORPORATION
Limited Warranty for Beer Merchandiser in the United States & Canada

This warranty is made to the original user at the original installation site and is not transferable.

BASIC WARRANTY

Hussmann Beer Merchandisers are warranted to be free from defect in material and workmanship under normal use and service for twelve months. Unless otherwise indicated, this warranty is valid from the date of original installation, not to exceed fifteen months from the date of shipment from the factory.

Except as otherwise specifically set forth, Hussmann's obligation under this warranty shall be limited to repairing or exchanging any part or parts, without charge, FCA factory or nearest authorized parts depot (Incoterms 2000) during the warranty period, which is proven to the satisfaction of the warranty administration organization to be defective. Hussmann, or its designee reserves the right to inspect the job site, installation and reason for failure. Hussmann will also pay the cost of labor to install and/or replace parts at prevailing straight time rates and repair times which are in accordance with industry standard repair times as administered by the warranty administration organization.

Hussmann's warranty covers the Beer Merchandiser and all its components except lamps, driers, fuses and other maintenance type replacement parts for the applicable warranty period. Additionally, for thirty-six months from date of installation, Hussmann warrants all sealed, multi-glass assemblies. If within the warranty period, it can be proven to the satisfaction of Hussmann's warranty administration organization that there is impaired visibility through a multi-glass assembly caused by moisture between the glasses, the multi-glass assembly will be replaced free of charge, excluding freight charges from the factory or nearest authorized parts depot. This warranty excludes accident, misuse, or glass breakage.

For Beer Merchandiser motor compressors, excluding capacitors and relays, Hussmann agrees to repair or exchange, at its option, the original compressor unit only, with a compressor of like or of similar design and capacity, if it is shown to the satisfaction of Hussmann that the compressor is inoperative due to defects in factory workmanship or material under normal use and service as outlined in Hussmann's "Owner's Manual" which is shipped inside new Beer Merchandisers. Hussmann's sole obligation under this paragraph shall be limited to five years from date of factory shipment and applies only to the compressor shipped from the factory with the new product. After year one (1), no labor is included to replace the compressor.

EXTENDED WARRANTY

Any warranty may be extended for an additional period (not to exceed a total of 60 months in combination with the basic warranty), but must be purchased from Hussmann and documented with a paid invoice to be valid. The extended warranty must be purchased and paid for prior to the expiration of the basic warranty coverage. The basic and extended warranties listed above do not include replacement or repair of controls, relays, capacitors, or over-load protectors.

PATENT WARRANTY

Hussmann warrants that its products do not infringe the claims of any existing United States patent, but Hussmann makes no warranty against infringement by reason of the use thereof either in combination with other products or in the operation of any process or use of products other than for their intended purpose. This warranty is subject to purchaser promptly notifying Hussmann in the event of any action for such infringement brought against purchaser and permitting Hussmann to participate in the defense of such action. Hussmann reserves the right to modify or replace any product alleged to constitute an infringement, or to remove such product and refund the amount paid by purchaser there for. This warranty is not transferable. The foregoing patent warranty shall not apply to any product or part thereof made to purchaser's design and as to such product or part. Hussmann assumes no liability for patent infringement. The foregoing states the entire liability of Hussmann with regard to patent infringement.

Any warranty repair made by Hussmann shall not extend the term of the warranty. Any warranty claim must be made to Hussmann in writing within 45 days of the warranty repair date.

THE WARRANTIES RECITED ABOVE ARE THE ONLY WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, MADE BY HUSSMANN WITH RESPECT TO ITS PRODUCTS, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, AND HUSSMANN NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT, ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS OR ANY PART THEREOF.

THIS WARRANTY SHALL NOT APPLY TO LOSS OF FOOD OR CONTENTS OF THE PRODUCTS DUE TO FAILURE FOR ANY REASON. HUSSMANN SHALL NOT BE LIABLE:

- For any repair or replacements made without the written consent of Hussmann, or when the product is installed or operated in a manner contrary to the printed instructions covering installation and service which accompanied such product;
- For any damages, delays, or losses, direct, consequential, incidental or otherwise, which may in connection with such product or part thereof;
- For damages during shipment or caused by fire, flood, strikes, or other circumstances beyond its control;
- When the product is subject to negligence, abuse, misuse or when the serial number of the product has been removed, defaced, or altered;
- When the product is operated on low or improper voltages;
- When the product is put to a use other than as recommended by Hussmann;
- When operation of the product is impaired due to improper drain installation;
- For payment of refrigerant loss for any reason other than on a self-contained case.
- For costs related to shipping or handling of replacement parts;
- For periodic maintenance items such as filters, gaskets, lamps, fuses, and driers;
- Diagnostic charges;
- To defend, indemnify or hold harmless any purchaser or end user for any claims, demands, lawsuits or actions of any nature.

