

# HUSSMANN®



*Anheuser-Busch, Inc.*  
ONE OF THE ANHEUSER-BUSCH COMPANIES

## CHILL CHAMBER™



ARV-570 &  
ARV-1230  
Operator's Manual  
P/N 31032397\_C  
01 June 2007

 **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.**



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Chill Chamber is a trademark of Anheuser-Busch, Inc.

## 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 Chill Chamber:

- 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 Chill Chamber before cleaning.
- Do not store or use toxic or dangerous chemical products inside the case.
- Do not use electrical devices in the Chill Chamber 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.

## Contact

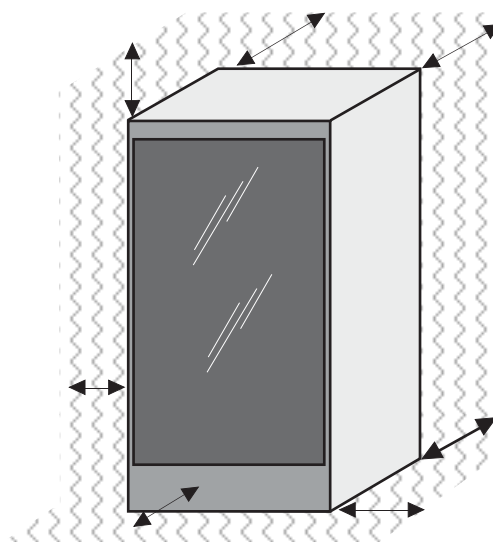
To request technical assistance with your Chill Chamber, or to place a service call, please phone Hussmann's call center at 1 (800) 504-4828.

## LOCATION

Chill Chambers 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 Chill Chamber.

## **INSPECTION**

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

Each Chill Chamber 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 Chill Chamber to the preferred location in your business.

Carefully remove the shipping box. Avoid scratching the Chill Chamber.

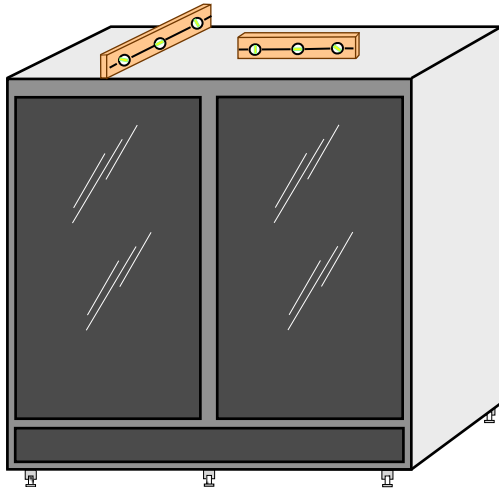
**Recycle** packing materials whenever possible.

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



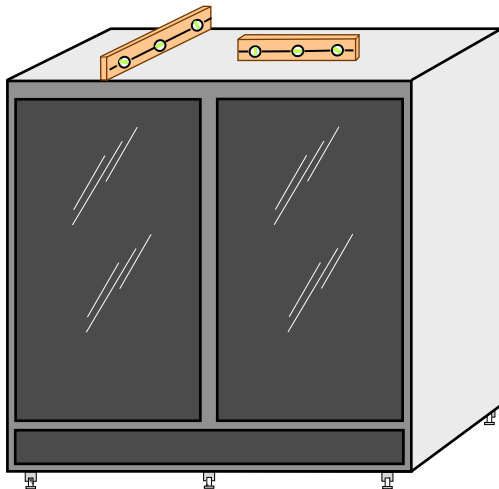
## **BUILT-IN BACK SPACERS**

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.



## LEVEL

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



For Chill Chambers 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.

### IMPORTANT:

After leveling, wait at least 30 minutes before turning on power to the Chill Chamber 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 chill chamber. Be sure to unpack the thumbscrew locks and insert them into the front corner wheels to prevent unplanned movement of the Chill Chamber.



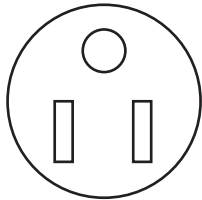
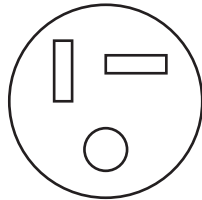
Turn Thumbscrew clockwise until it stops wheel from moving.



**PLUG IN**

Put the Chill Chamber 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 Chill Chamber requires a dedicated 20 Amp circuit with a special wall receptacle (NEMA 5-20P).
- Do not use long or thin orange 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.

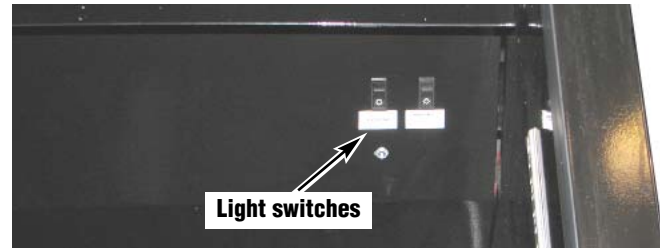
ARV-570	ARV-1230
1500 VA	3000 VA

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**

Chill Chamber light switches are located on the top right side of the interior.

**INSTALL SHELVES**

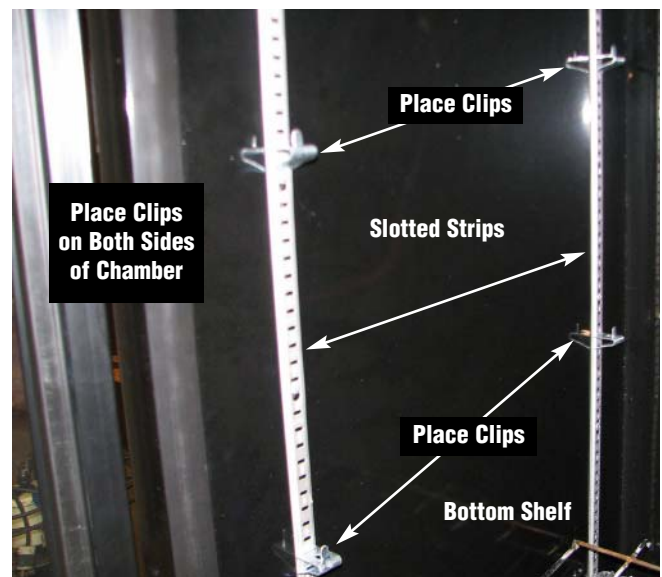
**ARV-570** – Four rows of gravity feed shelves that fit 16oz. aluminum bottles only.

**ARV-1230** – Four rows of flat wire shelves for 16oz. aluminum bottles.

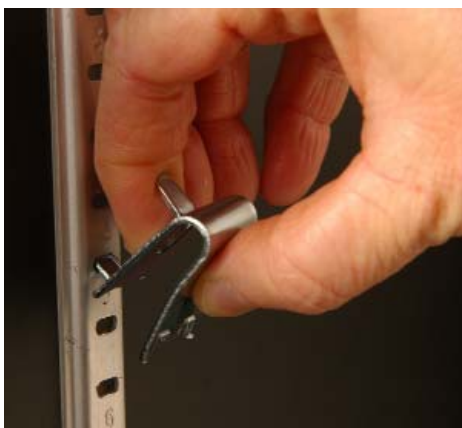
**OR** Five rows of flat wire shelves for PET plastic bottles (mostly stadium concessions).

Do not attempt 5 shelves of aluminum bottles as this will invalidate the warranty.

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.



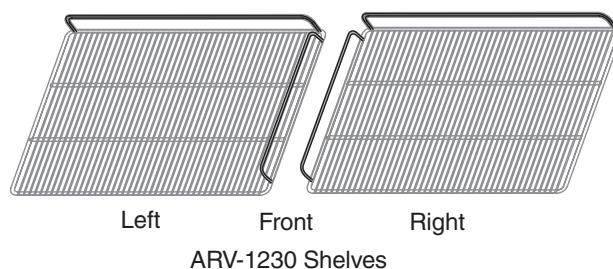
1. Begin with the first shelf at the bottom of the Chill Chamber.
2. Insert one end of the shelf clip into the upper slot and gently squeeze the clip to insert into the slot below.



**ARV-570:** Position shelf clips for the rear of the gravity feed shelves seven slots above the front shelf clips, according to the marks on the mounting strips.



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 Chill Chamber.



4. Use the bracket numbering on each side to guide placement of shelves. Shelves must be spaced evenly, allowing 2-in. from the top of bottles to the next shelf 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.**

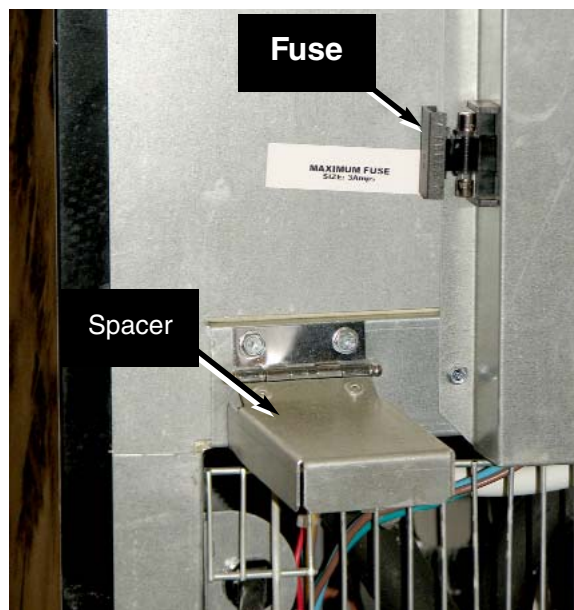
**ARV-570**

**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



## 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 Chill Chamber'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 chamber 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**

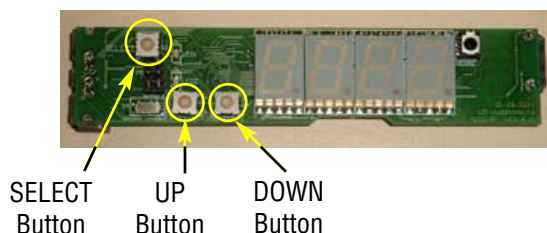


When you plug in the Chill Chamber you should see the text “Safe-NET” scroll across the display.

- 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. The SELECT button is used to scroll through menus, 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

- Always start by pushing and releasing the SELECT button, watch what is displayed. Which menu are you in?  
— StUP — CLoC — DEFr — tEM —  
vALv — diSP — and cycles back to StUP

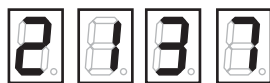
- Press and release the SELECT button until you are in the proper menu. Once in the proper menu press the UP or DOWN button to enter the menu and to scroll through the menu.
- Once at the menu item that you want, press the SELECT button until the item flashes between the value and the title. You may 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

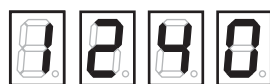
- Press the UP and DOWN buttons at the same time to get to the temperature reading / default display.
- Press the SELECT button until you see *CLOC*.



- Press UP once, then DOWN once, and then SELECT.



- With minutes flashing, use the UP or DOWN button until the correct minutes are displayed, then press SELECT. Hours should 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. The internal real-time clock will retain its time setting for at least one week if unplugged.

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

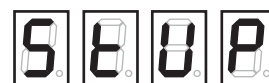
### Settings Requiring Pass Code

- Defrost Quantity
- Time of Defrosts
- Adjust Door Heat

The pass code prevents inadvertent, or unauthorized, changes to the Safe-NET controller. Any change beyond setting the time clock will require the pass code.

### Enter the Pass Code

- Press the SELECT button (top left button) until you see *StUP*.



- Then press the UP button once to get to *PASS* and press SELECT.



- Once the display starts blinking you will be able to select the pass code, 595. Press the DOWN button to get to this number.



- Once 595 is displayed, press the SELECT button on the Safe-NET display module. The display will revert to cycling between PASS and 595. This enables editing of system parameters.

The user may now navigate the menu system and edit parameters as necessary.

*Note:*

*The pass code protected access remains active for 5 minutes. Each time a new parameter is entered by pressing the SELECT button on the Safe-NET display module, the 5 minute timer is restarted. After 5 minutes with no parameter entries, the pass code value reverts to 0 and the pass code entry process must be performed to regain access.*

*Any time you want to change defrost times, you will need to set up the pass code before being able to make the necessary changes.*

### **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 Chill Chamber operates at temperatures below freezing (22°F/ -5.5°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 Chill Chamber may delay or prevent complete evaporation.

**In the event of power loss, the 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.**

The Chill Chamber 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) until you see *dEFr*.



- Then press the UP button twice 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.

Setting this parameter is done in the *dEFr* menu. 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.



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.hussmann.com/docs/inst\\_manuals/other/0461391A\\_SafeNET.pdf](http://www.hussmann.com/docs/inst_manuals/other/0461391A_SafeNET.pdf).

#### Run Before Stocking

Allow the Chill Chamber to run for at least 30 minutes before stocking.

## ARV-570 & ARV-1230

### LOADING

1. Add the maximum quantity allowed of Anheuser-Busch aluminum bottles (you may also use Anheuser-Busch plastic bottles in the Double Chamber ARV-1230).
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 22°F (–5.5°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.**



### WARNING

To reduce the risk of fire, electrical shock or injury when cleaning your Chill Chamber:

- Unplug the Chill Chamber 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.

### Exterior Surfaces

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 Chill Chamber.

## 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 (22°F) may freeze when restocked.*

## Cleaning under the Unit

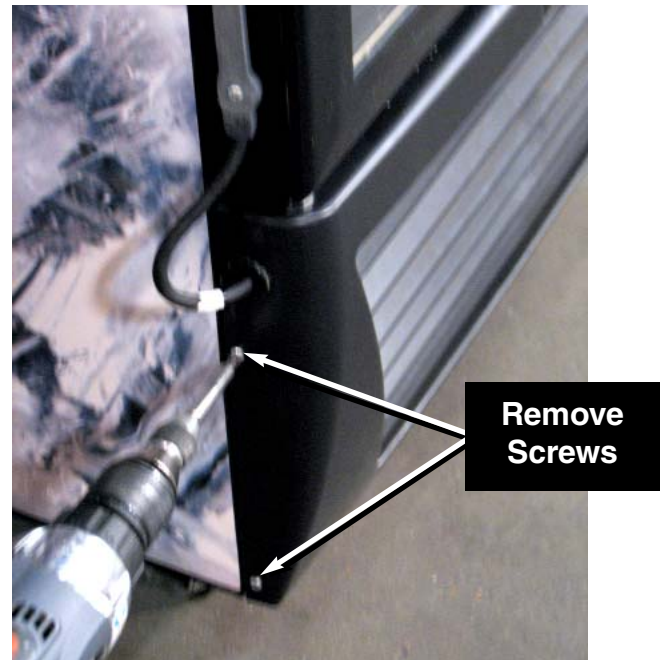
Use a vacuum with a long wand attachment to remove accumulated dust and debris from under the unit.

## 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.



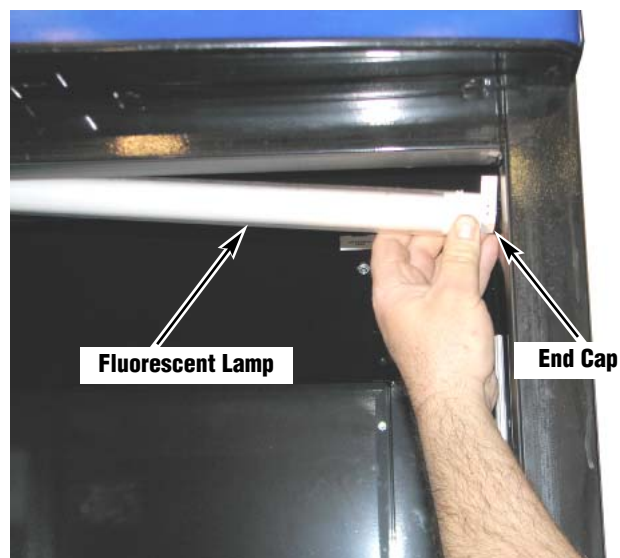
**LAMP REPLACEMENT**

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

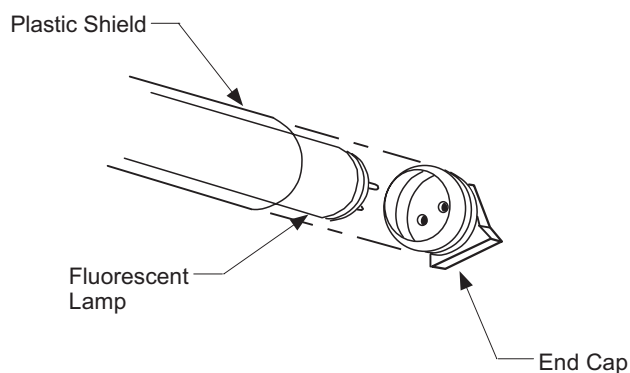
Fluorescent lamps must be replaced by lamps of the same size dimension and wattage as the original. **Restocked beer may freeze.**

**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.

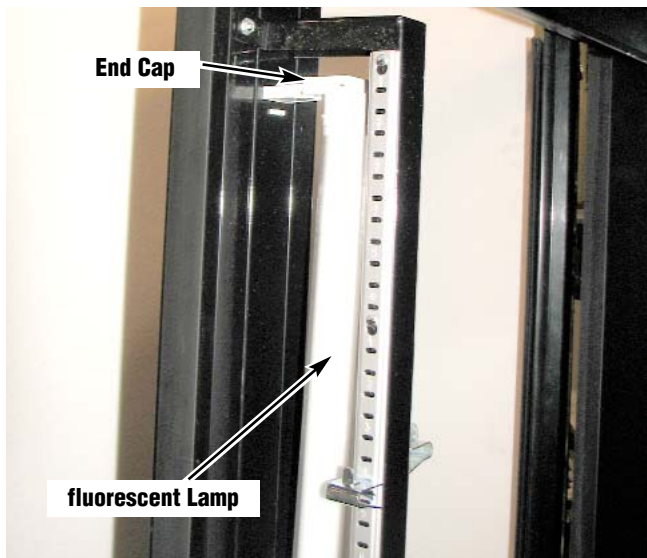


5. Replace the lamp.
6. Put into clear sleeve.
7. Reassemble in reverse order.
8. Plug the unit in.
9. Allow the unit to run for at least 30 minutes before stocking with fresh product.

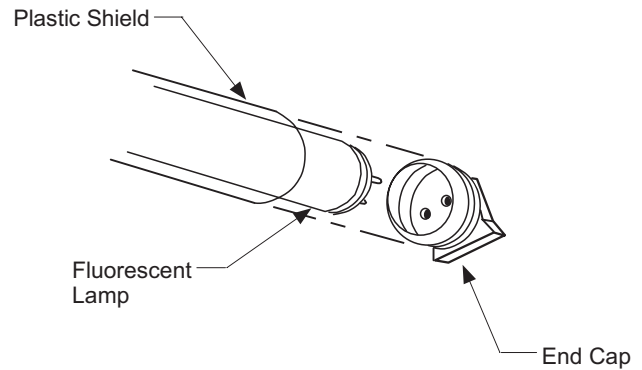


**ARV-1230 (Only) Interior Center Column**

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.



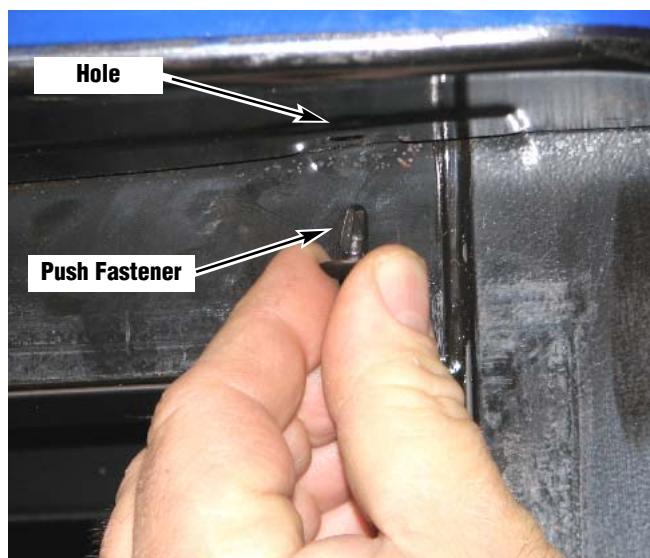
4. Remove lamp from end cap.
5. Remove lamp from plastic shield.



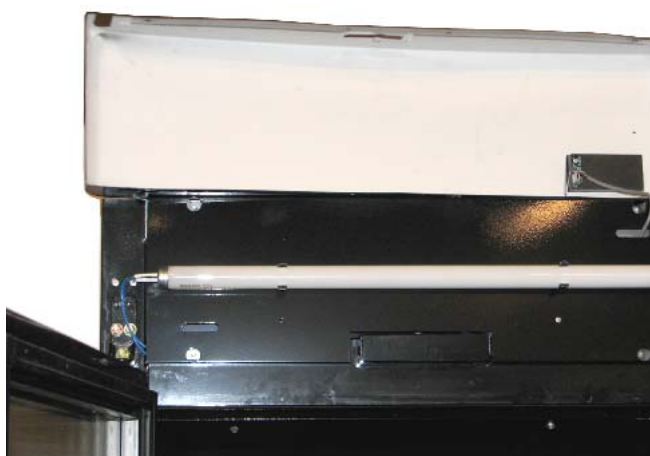
6. Replace the lamp.
7. Put into clear sleeve.
8. Reassemble in reverse order.
9. Plug the unit in.
10. Allow the unit to run for at least 30 minutes before stocking with fresh product.

### ARV-570 and ARV-1230 Canopy (Exterior)

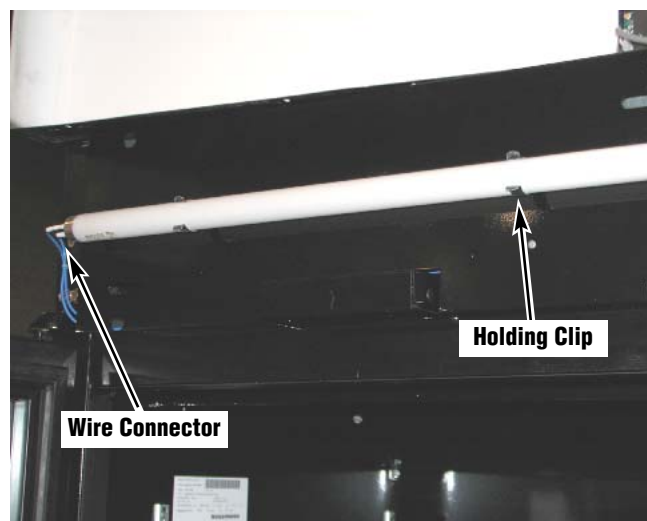
1. Unplug the unit.
2. Remove all push fasteners from canopy top and bottom. (There is an equal number of push fasteners on top and bottom.)



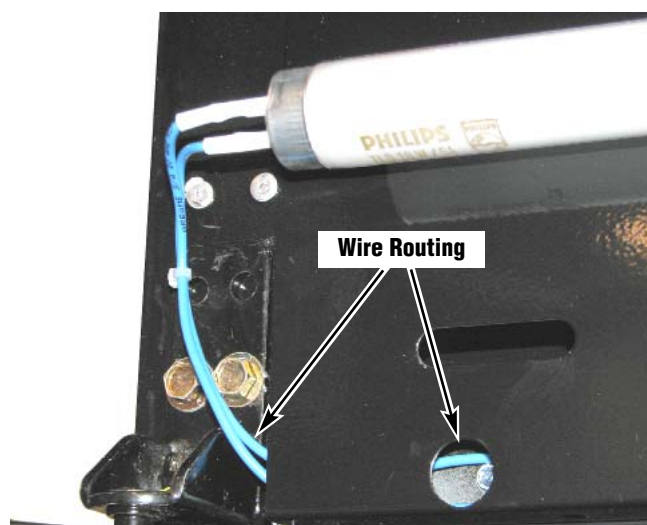
3. Carefully remove the canopy.



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.

## OPERATING TIPS

- The unit must be allowed to stand in place for 30 minutes before it is plugged in.
- Once the unit is running, the real time clock must be set. Once fully charged, the real time clock's battery will keep the clock memory for at least one week.
- In the event of power loss, the real time clock will keep its settings for at least one week once the battery is fully charged. The real time clock battery is rechargeable.
- The unit should run for 30 minutes empty and must be within 2 degrees of 22 °F before any product is loaded inside.
- The unit must go into defrost mode twice a day to maintain optimal performance. During defrost, the temperature display may move up 2 or 3°F (1 to 1.5°C). Avoid opening the door during the defrost cycle.
- If the unit is placed in a location that is not air conditioned or has high ambient humidity, additional defrost cycles may be required to prevent the rear refrigeration coil from blocking with ice.
- Very frequent door openings will eventually have an impact on product temperature and cause it to rise. Avoid holding the door open while deciding on product selection, counting inventory, etc.
- The large blue LED display above the door simulates the actual temperature of the beer in the cooler, not the air temperature in the unit. Therefore, the display temperature will change slowly as the unit cools down or warms up.
- Unplug the unit before cleaning. Clean the unit frequently to minimize odors and to maintain operating efficiency.
- Do not add warm product.
- Restocked product may freeze.
- Do not place product on the bottom of the unit.
- The light switches are located on the top right side of the interior back wall.
- Maintain air flow around the unit at all times.

To obtain warranty information  
or other support, contact your  
Husmann representative  
1-800-504-4828.

Please include the model and  
serial number of the product.

Or go to  
[http://chillchamber.husmann.com/  
serv/warranty.htm](http://chillchamber.husmann.com/serv/warranty.htm)

[http://chillchamber.husmann.com/  
serv/ChillChamberWarranty.pdf](http://chillchamber.husmann.com/serv/ChillChamberWarranty.pdf)

**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) 504 4828.*

<b>Problem</b>	<b>Possible Causes</b>	<b>Solution/Action</b>
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  <i>Safe-NET controller settings are retained for at least five days, but a power surge can cause damage.</i>
	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 frequency of defrosts
	Loading with warm product	The warmer the product when placed in the Chill Chamber, 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 — 1-800-504-4828 to have door heat increased





**HUSSMANN CORPORATION**  
**Limited Warranty for Chill Chambers 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 Chill Chambers 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 jobsite, 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 Chill Chamber 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 Chill Chamber 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 Chill Chambers. 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 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 and infringement, or to remove such product and refund the amount paid by purchaser therefor. 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 arise 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.

