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## INSTALLATION AND OPERATION MANUAL

Congratulations! You have just purchased the finest commercial refrigeration available.







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You have selected one of the finest commercial refrigeration units made. It is manufactured under strict quality controls with only the best quality materials available. Your Beverage Air cooler, when installed correctly and properly maintained will give you many years of trouble-free operation.

# WARNING!

#### USE THIS APPLIANCE FOR ITS INTENDED PURPOSE AS DESCRIBED IN THIS MANUAL

When using electrical appliances, basic safety precautions should be followed, including the following:

- Use this appliance for its intended purpose as described in this Owner Manual.

- This refrigerator must be properly installed and located in accordance with the Installation Instructions.

- We strongly recommend that any servicing be performed by a qualified individual.

- Do not allow children to climb, stand, or hang on the shelves in the refrigerator. They could damage the refrigerator and seriously injure themselves.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
Unplug the freezer before cleaning and making repairs.

## WARNING CHILD SAFETY!

Destroy carton, plastic bags, and any exterior wrapping material immediately after the freezer is unpacked. Children should never use these items for play. Cartons covered with rugs, bedspreads, plastic sheets or stretch wrap may become airtight chambers and can quickly cause suffocation. A child might suffocate if he crawls into a freezer to hide or play. Remove the door of a freezer when not in use, even if you plan to discard the freezer. Many communities have laws requiring you to take this safety precaution.

Remove and discard any spacers used to secure the shelves during shipping. Small objects are a choke hazard to children.

ADDITIONAL WARNING

-Please use care when moving or handling this equipment. It is equipped with flammable refrigerant and damage to refrigerant tubing will increase the risk of a leak.

-When service is required, seek factory authorized technicians trained to safely maintain and service systems that utilize flammable refrigerants, such as R290. RSES offers such training and certification.

Use factory authorized replacement parts to minimize the risk of possible ignition

CAREFULLY READ THESE INSTRUCTIONS. This manual provides instructions in how to best locate, operate, and maintain this equipment.

It is recommended to keep this manual for any future reference.

Detailed Warranty Guidelines can be found on the Beverage Air website.

## **APPLICATION**

The NCHC series of freezers have a sanitation listing permitting the merchandising of packaged food product.

## **PRODUCT REGISTRATION**

Write down the Serial number of your new unit for future reference. The Serial Number is found on the data plate located on the back of the unit.

MODEL: \_\_\_\_\_\_ SERIAL NUMBER: \_\_\_\_\_\_

## STORAGE OF THE EQUIPMENT

If the equipment will be kept in storage, it is suggested to keep it in its original packing. In case you need your equipment to be inactive for a long period of time after being used, verify that it has been unplugged. After cleaning it thoroughly with a damp cloth, lukewarm water and neutral soap and carefully drying it, cover it with a polyethylene film or similar waterproof material.

### UNCRATING

The following procedure is recommended for uncrating the unit:

Remove the outer package by carefully cutting the shrink wrap and removing the 4 corner posts and top lid. Inspect for concealed damage. Immediately file a claim with the freight carrier if there is damage. Move your unit as close to the final location as possible before removing the wooden skid.

## **MOVING THE EQUIPMENT**

The unit is shipped with casters to facilitate moving the unit into position.

Disconnect the power cord plug from the wall outlet. Remove product, then defrost, and clean the freezer. Secure all loose items such as baskets and fix the lids by taping them securely in place to prevent damage. In the moving vehicle, secure the freezer in an upright position and cover it to protect the outside of the cabinet.

## PLACING AND INSTALLING EQUIPMENT

#### ENVIRONMENTAL CONDITIONS

#### THIS UNIT CANNOT BE INSTALLED IN ENVIRONMENTS WITH EXPLOSIVE GASES. THE EQUIPMENT IS DESIGNED ONLY FOR INDOOR OPERATION.

The unit must be located in an indoor environment.

For the correct performance of the refrigerating system, it is very important to leave at least 10 cm (4") of free space both at the sides and back to allow proper air circulation. Do not block the grills on the side or back of the cabinet.

The location of the cooler must be kept away from sources of heat and humidity including direct sunlight, toasters, ovens, coffee warmers, other appliances condenser air discharge, infrared heaters, or other heat generating appliances.

Overloading the freezer forces the compressor to run longer. Do not exceed the load limit according to labels fixed on the inner cabinet (which corresponds to the baskets height).

Product to be loaded should be at  $-4^{\circ}$  F (-20° C) since the equipment is intended for maintaining a cool product at 0° F (-18° C) at load level rather than freezing a warm product

Keep the lids closed to avoid warm air and moisture getting into the freezer.

## **ELECTRICAL REQUIREMENTS**

The power cord of this appliance is equipped with a 3-prong (grounding) plug which mates with a standard 3-prong (grounding) wall outlet to minimize the possibility of electric shock hazard from this appliance. The use of extension cords is not permitted and will void the warranty.

Before connecting your equipment, check that the electrical data on the data plate match your electrical output. If voltage varies by 10 percent or more, freezer performance may be affected. Operating the freezer with insufficient power can damage the compressor. Such damage is not covered under the warranty. If you suspect voltage is high or low, consult your power company for testing.

To prevent the freezer from being turned off accidentally, do not plug unit into an outlet controlled by a wall switch or pull cord.

Do not pinch, knot, or bend the power cord in any manner.

## IMPORTANT NOTICE: PLUG THE EQUIPMENT INDEPENDENTLY TO A LOAD CENTER WITH AN APPROPRIATE CIRCUIT BREAKER ACCORDING TO THE NAMEPLATE AMPS.

## **PRODUCT LOADING**

The NCHC series of units are not intended to be a pull down freezer and as such the product must be loaded at their intended merchandising temperature.

Before loading products, allow the equipment to operate empty for at least four hours.

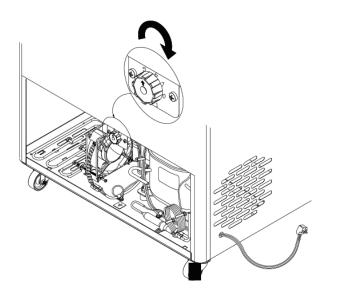
The baskets have been designed to withstand the rigors of normal use. Avoid product overloading to prevent deforming the baskets.



#### SETTING THE TEMPERATURE CONTROL

To access the temperature control, the right side grill should be removed using a Phillips screw driver.

The temperature control is factory pre-set to provide satisfactory product storage products. However, the temperature control is adjustable to provide a range of temperatures for your personal satisfaction. If a colder temperature is desired, turn the control clockwise. Allow several hours for temperature to stabilize between adjustments.



### **POWER/FREEZER FAILURE**

Note: Do not open the freezer door unnecessarily if power to the freezer is off for several hours If a power failure occurs, frozen foods will stay frozen for at least 2 hours if the freezer is kept closed. If the power failure continues, pack seven or eight pounds of dry ice into the freezer every 24 hours. Cover the product with a cardboard sheet or one inch polyurethane sheet and close the lids. Always wear gloves and use caution when handling dry ice.

If the freezer has stopped operating, see "Freezer does not run" in the Service Checklist Section of this manual. If you cannot solve the problem, call an authorized service immediately. Do not allow inexperience people to repair or modify the electrical wiring and/or refrigeration components.

## SERVICE CHECKLIST

Before calling for service, review this list. It may save you both time and expense. This list includes common occurrences that are not the result of detective workmanship or materials in this appliance.

OCCURRENCE	SOLUTION
Freezer runs too much or too long	Check to ensure that freezer is not plugged into a circuit that has ground fault interrupt. If you are unsure about the outlet, have it checked by a certified technician. Temperature control is in the OFF positio n. See Setting the Temperature Control Section. Freezer may not be plugged in, or plug may be loose. Be sure plug is tightly pushed into e lectrical outlet. House fuse has blown, or circuit breaker has tripped. Check/reset circuit breaker, or replace fuse with 15 amp. Time delay fuse Pow er outage. Check house lights. Call local electric company.
Temperatures inside the freezer are too cold	Room or outside weather is hot. It is normal for the freezer to work harder under these conditions. Freezer had recently been disconnected for a period of time. Freezer requires 4 hours to cool down completely. Large amounts of warm or hot product have been stored recently. Warm product will cause the freezer to run more until the desired temperature is reached. Door is kept open too long or to o frequently. Warm air enters the freezer every time the door is opened. Open the door less often. Freez er door may be slightly open. Temperature control is set too cold. Turn the control knob to a warmer setting. Allow several hours for the temperature to stabilize.
Temperatures inside the freezer are too warm	Temperature control is set too cold. Turn the control to a warmer setting. Allow several hours for the temperature to stabilize.
Temperature of external freezer surface is warm	Temperature control set too warm. Turn the control to a colder setting. Allow several hours for the temperature to stabilize. Door is kept open too long or is opened too frequently. Warm air enters the freezer every time the door is opened. Open the door less often Door may be o pen slightly. Freezer has recently been d isconnected for a period of time. Freezer requires 4 hours to cool down completely.
Sound and noise Louder sound level whenever freezer is on	The exterior freezer walls can be as much as 30° F warmer than room temperature. This is normal while the compressor works to transfer heat from inside the freezer cabinet.
Louder sound levels when compressor comes on	The fan motor in the compressor compartment is damaged or has a loose connection Modern freezers have increased storage capacity and more even temperatures. They require a high efficiency compressor. When the surrounding noise level is low, you might hear the compressor running while it cools the interior.
Popping or cracking sound when compressor comes on	Freezer operates at higher pressures during the start of the ON cycle. This is normal. Sound will level off or disappear as freezer continues to run.
Bubbling or gurgling sound, like water boiling	Metal parts undergo expansion and contraction, as in hot water pipes. This is normal. Sound will level or disappear as freezer continues to run.
Vibrating or ratting noise	Refrigerant (used to cool freezers) is circulating throughout the system. This is normal.
Moisture forms on inside freezer walls	Freezer is not level. It rocks on the floor when it is moved slightly. Level the unit. Floor is uneven or weak. Freezer rocks on the floor when it is moved slightly. B e sure floor can adequately support freezer. Level the freezer by putting wood or metal shims under art of the freezer. Weather is hot and humid, which increases internal rate of frost build-up. This is normal. Door is slightly open. Door is kept open too long, or is opened too frequently. Door is slightly open, causing the cold air from inside th e freezer to meet warm moist air from outside.
Odor in freezer	Interior needs to be cleaned. Clean interior with sponge, warm water, and baking soda. Product with strong odors are in the freezer. Cover the product tightly.



- Do not keep the unit running unloaded. UNPLUG IT when you are not planning to use it.

Using any electrical or electronic equipment entails the compliance with some fundamental rules.

- Do not touch the unit with wet hands or feet.
- Do not install the equipment outdoors.
- Do not remove or ignore safety devices.
- Do not leave objects on top of the unit.
- Do not climb on top of the unit.
- Never use direct or indirect water jets on the unit.
- Do not allow the electronic control to be adjusted by customers or unqualified personnel.
- Under no circumstance should you block the side or back grille of the unit.

## THE MANUFACTURER DOES NOT ASSUME ANY RESPONSIBILITY ARISING FROM DAMAGES CAUSED BY IMPROPER, INCORRECT OR ERRONEOUS USE.

It is important to instruct the user on the operation of the equipment according to this instruction manual, and to make sure that said manual is within reach of any operator that might use the unit.

### **MAINTENANCE GUIDELINES**

Regularly and carefully cleaning and defrosting the equipment prevents deterioration and product alteration.

#### REMOVAL OF FROST

It is recommended to remove the frost accumulated before reloading the freezer or anytime when one quarter inch of frost has accumulated.

The unit will have to be manually defrosted. The manual defrost frequency will depend on the units usage, environment, and the amount of frost accumulated.

- 1. Make sure the drain plug is removed and the unit is moved close to a floor drain.
- 2. Unplug the unit until all the frost is gone.
- 3. When the ice has melted wipe up any water left on the freezer floor.
- 4. Be sure to replace the drain plug before moving the freezer back into position.
- 5. Allow the freezer to refrigerate and cycle before placing the wire baskets and product back into the freezer

To defrost while keeping the freezer plugged in place a clean dry soft cloth over the product to catch the frost that will be removed. Remove the frost using a plastic scrapper trying to eliminate as much frost as possible.

#### CLEANING THE UNIT

Wash any removable parts, the freezer interior, and exterior with mild detergent and warm water. Wipe dry. **DO NOT USE HARSH CLEANERS ON THESE SURFACES.** Do not use razor blades or other sharp instruments, which can scratch the appliance surface.

#### WARNING

## DAMP OBJECTS STICK TO COLD METAL SURFACES. DO NOT TOUCH THE INTERIOR METAL SURFACES WITH WET OR DAMP HANDS.

After defrosting, wash the inside surfaces of the freezer with a solution of two tablespoons of baking soda in one quarter of a gallon (1.1 liters) warm water. Rinse and dry. Wring excess water out of the sponge or cloth when cleaning in the area of the controls, or any electrical parts.

Wash the removable parts and door basket with the baking soda solution, or mild detergent and warm water. Rinse and dry. Never use metallic scouring pads, brushes, abrasive cleaners, or alkaline solutions on any surface. Do not wash removable parts in a dishwasher. Do not shower water with a hose nor use ammonia based cleaners.

#### WARNING

# THE LOWER SIDE OF THE GLASS LIDS IS PROVIDED WITH A SPECIAL FILM. DO NOT USE RAZOR BLADES OR OTHER SHARP INSTRUMENTS WHICH CAN SCRATCH THIS SURFACE AND DAMAGE THE FILM.

#### CLEANING THE OUTSIDE

Wash the cabinet with warm water and mild liquid detergent. Rinse well and wipe dry with a clean soft cloth. Do not shower water with a hose nor use ammonia based cleaners.

Clean every week with only a damp piece of cloth and neutral soap each external and internal surface, and dry them with a clean soft cloth.

Never use flammable or abrasive products. The unit must never be cleaned with water jets.

IMPORTANT: During maintenance and cleaning operations, make sure that good visibility conditions exist in the working area, using other light sources in case it is needed. Be very careful when working with moving and/or high-temperature parts.

#### LID REMOVAL

If lids must be removed:

- 1 Stand in front of the freezer
- 2 Assure that the lower lid is totally closed to the left side of the freezer
- 3 To remove the top lid, run it open to its maximum, handling it by both sides push it to the back. This allows the lid to get out from the front rail where it runs, then remove it pulling the lid out from the rear rail. Handle the lid carefully and place it in a straight safety place.
- 4 Repeat step number 3 for removing the lower lid.

5 - To install the lids again, reverse the previous step s starting with the lower lid.

If technical personnel assistance is required, you must immediately contact your distributor, specifying the kind of problem and clearly indicating the equipment model and serial number. If replacing parts is required, do it through your distributor.

WARNING: Always ask for original spare parts

AUTHORIZED DISTRIBUTOR:

**COMMERCIAL NAME:** 

ADDRESS:

TELEPHONE:

E-MAIL: