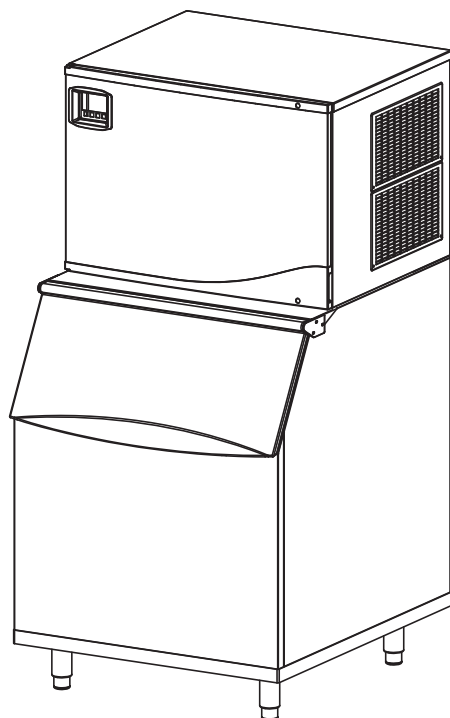




## SERVICE, INSTALLATION, AND INSTRUCTION MANUAL



**BIM-650F-BIM-650H**  
**BIM-1000F-BIM-1000H**  
**COMMERCIAL ICE MACHINE**  
PLEASE READ CAREFULLY



## Contents

ICE MAKER SAFETY	3
IMPORTANT SAFEGUARDS	4-5
MAJOR FEATURES	5
TECHNICAL INFORMATION	6
INTRODUCTION	6
COMPONENT INFORMATION	6
ICE MAKER INSTALLATION	
Unpacking	7
Remove Packaging Material	7
Location Requirements	8-9
Typical Installation of Ice Storage Bin	9
Electrical Requirements	9
Connecting the power supply line	10
Water Supply	10
Installation Types	11
OPERATION	
Final Checklist before Operation	11
Control Panel Operation	11-12
How the Machine Makes Ice	13
Normal Sounds	13
Preparing the Ice Maker for Long Storage	13
CLEANING AND MAINTENANCE	
Exterior Cleaning	14
Interior Cleaning	14
Water Distribution Tube Cleaning	15
Ice-Making System Cleaning	15
Condenser Cleaning	16
TROUBLESHOOTING GUIDE	17
TROUBLESHOOTING	18

Berg reserves the right to make specifications and design changes without prior notice.

### NOTICE:

**This instruction manual is for the models noted on the front cover.  
Ice storage bins are NOT INCLUDED.**

# ICE MAKER SAFETY

Always read and obey all safety messages.



This is the Safety Alert Symbol. This symbol alerts you to potential hazards that can injure or kill you and others. All safety messages will follow the Safety Alert Symbol and either the words "DANGER", "WARNING" OR "CAUTION".

## DANGER

DANGER means that failure to heed this safety statement may result in death or severe personal injury.

## WARNING

WARNING means that failure to heed this safety statement may result in extensive product damage, serious personal injury, or death.

## CAUTION

CAUTION means that failure to heed this safety statement may result in minor or moderate personal injury, or property or equipment damage.

All safety messages will alert you to what the potential hazard is, tell you how to reduce the chance of injury, and let you know what can happen if the instructions are not followed.



## NOTE: IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** To reduce the risk of fire, electric shock or injury, when using your ice maker, follow these basic precautions:

- Plug into grounded 3-prong outlet.
- Do not remove grounding prong.
- Do not use an adapter.
- Do not use an extension cord.
- Disconnect power before cleaning.
- Disconnect power before servicing.
- Replace all panels before operating.
- Use 2 or more people to move and install ice maker.

## SAVE THESE INSTRUCTIONS

# IMPORTANT SAFEGUARDS



Before the ice maker is used, it must be properly positioned and installed as described in this manual, so read the manual carefully. We strongly recommend that you have a professional install your new machine. The warranty may be affected or voided by an incorrect installation. To reduce the risk of fire, electrical shock or injury when using the ice maker, follow basic precautions, including the following:

## DANGER

- It is recommended that a separate circuit, serving only your ice maker, be provided. Use receptacles that cannot be turned off by a switch or pull chain.
- Do not connect or disconnect the electric plug when your hands are wet.
- Never unplug the ice maker by pulling on the power cord. Always grip the plug firmly and pull straight out from the outlet.
- Never clean ice maker parts with flammable fluids. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. The fumes can create a fire hazard or explosion.
- Before proceeding with cleaning and maintenance operations, make sure the power line of the unit is disconnected and the water line is shut off (EXCEPTION: When cleaning the machine's ice making and water systems).
- Before operating, put all the enclosure panels back into their original places.
- Do not touch the evaporator with your hand when the machine is operating.
- Unplug the ice maker or disconnect power before cleaning or servicing. Failure to do so can result in electrical shock or death.
- Do not attempt to repair or replace any part of your ice maker unless it is specifically recommended in this manual. A qualified technician should do all other servicing.

## WARNING

- Use two or more people to move and install ice maker. Failure to do so can result in back or other injury.
- To ensure proper ventilation for your ice maker, the front of the unit must be completely unobstructed. Choose a well-ventilated area with temperatures above 50°F (10°C) and below 100°F (38°C). This unit MUST be installed in an area protected from the elements, such as wind, rain, water spray or drips.
- The ice maker should not be located next to ovens, grills or other sources of high heat.
- The ice maker must be installed with all electrical and water connections in accordance with state and local codes. A standard electrical supply against the nameplate rating, properly grounded in accordance with the National Electrical Code and local codes and ordinances is required.
- The fuse (or circuit breaker) size should be 20 amperes for the ice makers.
- It is important for the ice maker to be well leveled for proper operation. You may need to make several adjustments to level it.
- All installations must be in accordance with local plumbing code requirements.
- Make certain that the hoses are not pinched or kinked or damaged during installation.
- Check for leaks after connection.
- Although the unit has been tested at the factory, due to long-term transit and storage, the first batch of cubes must be discarded.
- Remove the packing materials and clean the ice maker before using.
- Turn on the water supply tap before switching on the ice maker. Never turn off the water supply tap when the ice maker is working.
- Except to take ice from the storage bin, keep the bin door closed in order to reduce ice melting and to promote proper ice formation.
- If the ice maker will not be used for a long time, before the next use it must be thoroughly cleaned. Follow carefully any instructions provided for cleaning or use of sanitizing solution. Do not leave any solution inside the ice maker after cleaning.
- DO NOT touch the condenser fins. The condenser fins are sharp and can be easily damaged.

- DO NOT use solvent-based cleaning agents or abrasives on the interior These cleaners may transmit taste to the ice cubes, or damage or discolor the interior.
- The ice machine cleaner contains acids DO NOT use or mix with any other solvent-based cleaner products Use rubber gloves to protect hands Carefully read the material safety instructions on the container of the ice machine cleaner.
- Do not use this apparatus for other than its intended purpose.

### Electrical Connection

Do not, under any circumstances, cut or remove the third (ground) prong from the power cord For personal safety, this appliance must be properly grounded The power cord of this appliance is equipped with a 3-prong grounding plug that mates with a standard 3-prong grounding wall outlet to minimize the possibility of electric shock hazard from the appliance Have the wall outlet and circuit checked by a qualified electrician to make sure the outlet is properly grounded. When a standard 2-prong wall outlet is encountered, it is your responsibility and obligation to have it replaced with a properly grounded 3-prong wall outlet The ice maker should always be plugged into its own individual electrical outlet which has a voltage rating that matches the rating label on the appliance This provides the best performance and also prevents overloading house wiring circuits which could cause a fire hazard from overheated wires. Never unplug your ice maker by pulling on the power cord. Always grip the plug firmly and pull straight out from the outlet. Repair or replace immediately all power cords that have become frayed or otherwise damaged Do not use a cord that shows cracks or abrasion damage along its length or at either end When moving the ice maker, be careful not to damage the power cord.

### Extension Cord

Because of potential safety hazards under certain conditions, it is strongly recommended that you do not use an extension cord with this ice maker.

### Major Features

1. Completely automatic operation.
2. Easy read screen Displays operational status, reminders and alerts.
3. The fan motor responds to the ambient temperature If room temperature is low, the motor will stop working to keep the cooling system in good working condition.
4. Ice cube size is adjustable.
5. Periodically draining water allows more pure ice and keep minimum mineral buildup.
6. A sensitive probe and accurate timer enhance the performance of the ice maker.

### Technical Information

MODEL	BIM-650F/BIM-650H	BIM-1000F/BIM-1000H
Electrical input	230VAC / 60Hz	230VAC / 60Hz
Power consumption (kW·h /100 lbs of ice)	5.6	5.1
Ice-making/Ice-harvest rated current	7.1A/8.0A	10A/11.1A
Refrigerant	R404A, 43 oz	R404A, 57.1oz
High/Low side pressure	380psig/190psig	400psig/190psig
Unit width x depth x height	30"x 24.6"x 21"	30"x 24.6"x 26.7"
Unit weight	134.5 lbs	178.5 lbs
Ice-making capability ( lbs/day*)	+539/+542	+771/+774
Ice shape	Cube	Cube
Ice cube dimensions	Dice: 3/4"x 1"x 3/4"	Dice: 3/4"x 1"x 3/4"
	Half dice: 1/2"x 1"x 3/4"	Half dice: 1/2"x 1"x 3/4"

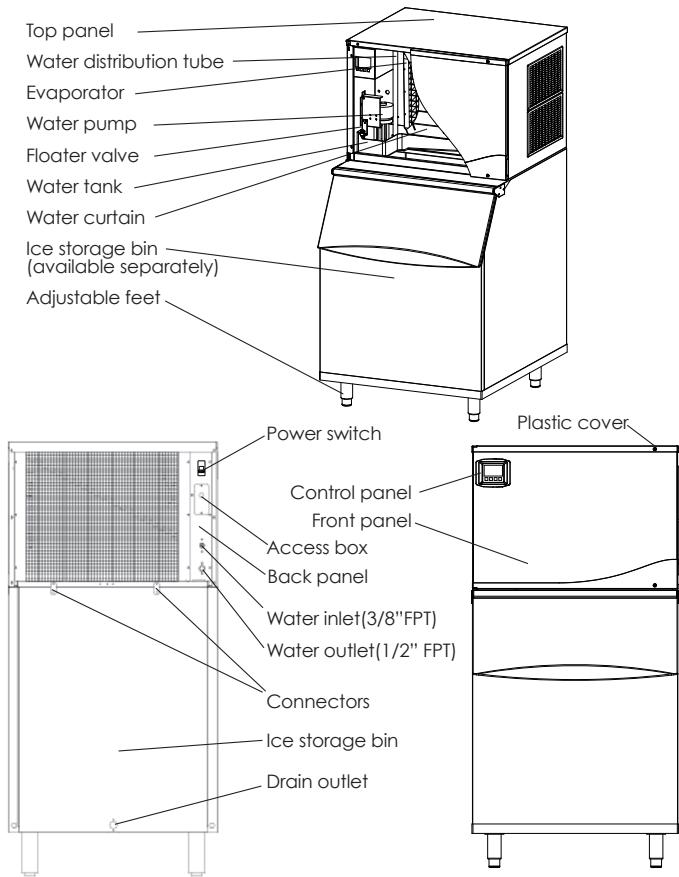
\*The actual quantity of ice produced per day can vary with room and water conditions The technical data and performance indices listed above should be used for reference only They are subject to change.

# Introduction

This user's manual is intended for installing, using and servicing your Berg Ice Machine. It is recommended that this manual be kept in an accessible place. Every Berg Ice machine is designed and manufactured according to the highest standards of safety and performance. It meets or exceeds the safety standard of UL563 and sanitation standard NSF12.

The Legacy Companies assumes no liability or responsibility of any kind for products manufactured by Berg, that have been altered in any way, including the use of any parts and/or other components not specifically approved by The Legacy Companies. Berg reserves the right to make design changes and/or improvements at any time. Specifications and designs are subject to change without notice.

## Component Information



# Ice Maker Installation

**POWER SUPPLY CORD - NOT INCLUDED.  
MUST HAVE A 3-PRONG GROUNDING PLUG.**

## UNPACKING

### WARNING

#### Excessive Weight Hazard

Use two or more persons to move and install ice maker.  
Failure to do so may result in back or other injury.

This unit is an ice maker only. It requires a separate ice storage bin.

## REMOVE PACKAGING MATERIALS

### IMPORTANT:

**Do not remove any permanent instruction labels or the data label on your ice maker.**

Remove tape and glue from your ice maker before using.

- To remove any remaining tape or glue, rub the area briskly with your thumb. Tape or glue residue can also be easily removed by rubbing a small amount of liquid dish soap over the adhesive with your fingers. Wipe with warm water and dry with a soft cloth.
- Do not use sharp instruments, rubbing alcohol, flammable fluids, or abrasive cleaners to remove tape or glue. These products can damage the surface of your ice maker.

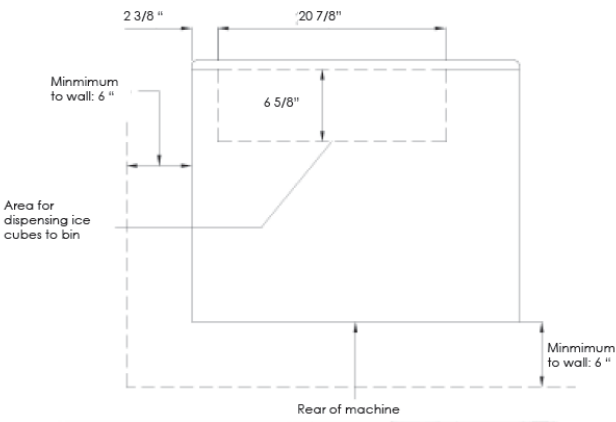
## LOCATION REQUIREMENTS

- This ice maker should be installed by qualified personnel.
- The ice maker must be installed with all electrical and water connections in accordance with state and local codes.
- Installation of the ice maker requires a cold water supply inlet of 3/8" (9.5 mm) soft copper tubing with a shut-off valve.
- The ice maker requires a continuous water supply with a minimum pressure of 15 psig and a static pressure not to exceed 80 psig.
- To ensure proper ventilation for your ice maker, you need keep the front of the unit completely unobstructed. This unit **MUST** be installed in an area protected from the elements, such as wind, rain, water spray or drips. The unit should not be located next to ovens, grills or other sources of high heat.
- It is recommended to use filtered water. A water filter can remove taste, odors and particles.

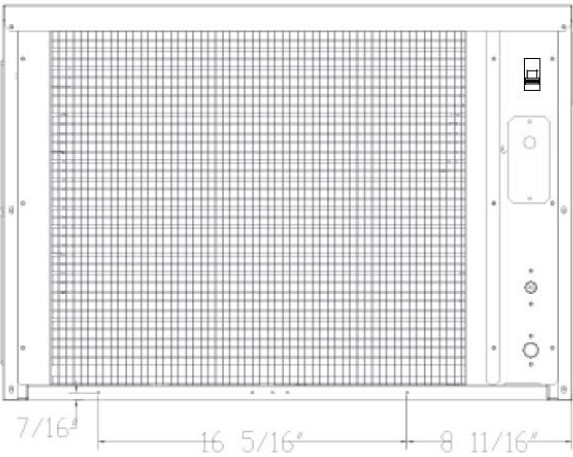
### WARNING

Normal operating ambient temperature should be between 50°F (10°C) and 100°F (38°C). Normal operating water temperature should be between 41°F (5°C) and 90°F (32°C). Operation of the ice maker for extended periods outside of these normal temperature ranges may affect production capacity.

TOP VIEW of ICE MACHINE



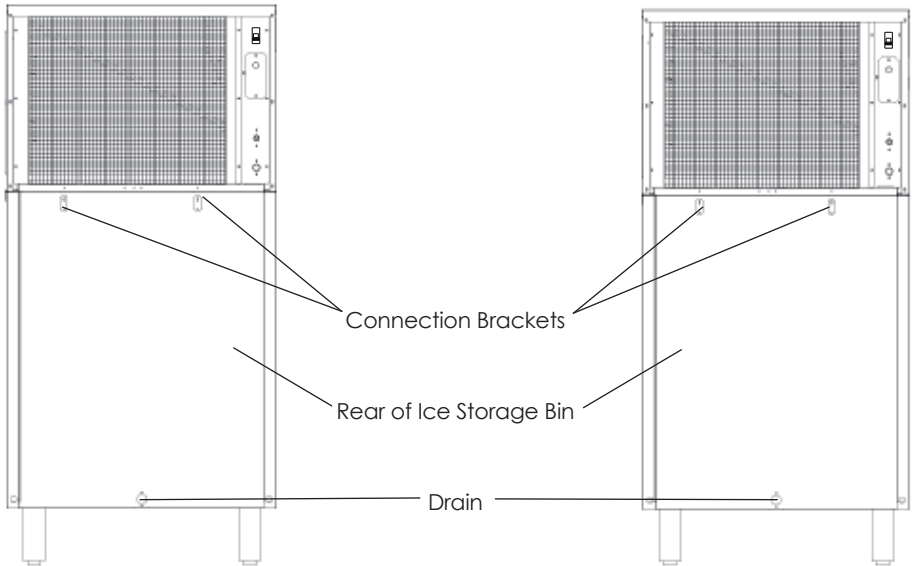
REAR VIEW of ICE MACHINE





## REAR VIEW if ATTACHING to an ICE BIN

The (2) security latch holes are used when securing to an ice bin.



### TO INSTALL ICE MACHINE to a ICE STORAGE BIN

- Two connecting brackets are attached to the upper rear edge of the ice storage bin.
- Turn the brackets up (180°) and use two screws to connect the main machine and ice storage bin.
- The feet of most bins can be rotated to adjust the height if necessary. Follow instructions accompanying the bin you purchase.
- The feet of most bins can be rotated to adjust the height if necessary.
- The ice maker and bin should be located on a firm and level surface. It is important for the ice maker to be perfectly level for proper operation; otherwise water may not flow properly through the evaporator (ice mold). Ice production will be less than expected and operation will be noisy.

### ELECTRICAL REQUIREMENTS



**DANGER**

Plug into a grounded 3-prong outlet.  
Never remove the grounding prong from the plug.  
Never use an adapter. Never use an extension cord.  
Failure to follow these instructions can result in fire, electrical shock or death.

Before you move your ice maker into its final location:

- Be sure you have the proper electrical connection.
- Refer to the nameplate rating at the left of the ice machine to make sure proper voltage, properly grounded in accordance with National Electrical Code and local codes and ordinances, is required.
- The ice maker should always be plugged into its own individual electrical outlet. It is recommended that a separate circuit, serving only your ice maker, be provided.
- Use receptacles that cannot be turned off by a switch or pull chain. The fuse (or circuit breaker) size should be 20 amperes.

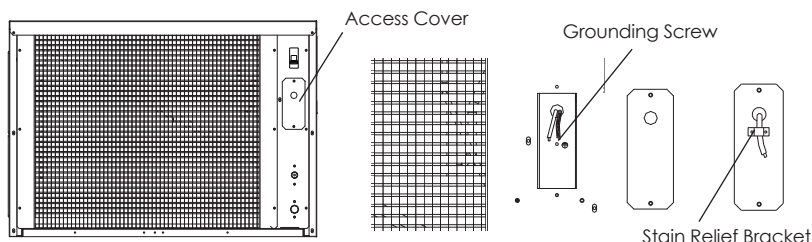
## RECOMMENDED GROUNDING METHOD

### POWER SUPPLY CORD - NOT INCLUDED. MUST HAVE A 3-PRONG GROUNDING PLUG.

For your personal safety, this appliance must be grounded. To minimize possible shock hazard, the cord must be plugged into a mating 3-pronged and grounding-type wall receptacle, grounded in accordance with the National Electrical Code and local codes and ordinances. If a mating wall receptacle is not available, it is the personal responsibility of the customer to have a properly grounded, 3-prong wall receptacle installed by a qualified electrician.

### CONNECTING THE POWER SUPPLY LINE

1. Unscrew the two screws holding the access cover and remove the cover. You will find two leads (black and white.) See drawing below.
2. Feed a power supply cord (not included) through the access cover and connect it with the two leads. The ground line should be connected to the grounding screw. The two connectors must be insulated. Put the access cover back in place.
3. You will find a strain relief bracket in the accessory package. Fix the power supply cord below the bracket, as shown in the previous illustration.
4. The other end of the power supply cord should be connected to an outlet that is in accordance with the local electrical code.



**Note:** This machine is stackable on any of the machines in this manual. If the machine is to be stacked on top of another machine, a stacking kit will need to be installed. Refer to the installation instructions included with the stacking kit.

## WATER SUPPLY

The water supply should be ready at the point of installation. The water supply pressure should be a minimum of 15 psig with a static pressure not more than 80 psig. (A wall outlet directly behind the ice maker will make installation easier.)

**Tools required: 3/8" open-end wrench and Phillips screwdriver**

### IMPORTANT:

- 1 All installations must be in accordance with local plumbing code requirements. Professional installation is recommended.
- 2 Water inlet fitting: 3/8" FPT (Female Pipe Thread); drain line connection: 1/2" FPT.
- 3 Make certain you have a suitable water supply hose and two suitable drain hoses, and that the hoses are not pinched, kinked or damaged during installation.
- 4 Check for leaks after connection.

### Connecting the water line:

- 1 Turn off main water supply.
- 2 Find a water supply line near the installation location. The distance should be less than the length of the water supply hose.
- 3 A shut-off valve must be installed to the main water supply.
- 4 Connect the water supply hose to tap and water inlet valve. Tighten firmly by hand, then one-half turn with wrench.
- 5 Connect the water drain hose to drain line connection. Tighten firmly by hand, then one-half turn with wrench.
- 6 Turn on main water supply and tap. Check for water supply connection leaks. Tighten every connection (including connections at the water inlet.)

INSTALLATION TYPES

This ice maker has only been designed for mobile (free-standing) installation

Mobile installation:

An enclosed installation will allow you to install the ice cube machine under a counter or in a kitchen cabinet provided the required clearance space around the ice maker is respected.. You must follow the stated instructions for:

- a Electrical requirements
- b Water supply

Cleaning before use

After you remove all tape from the machine, clean the inside of your ice maker and ice storage bin before using them. See "Interior Cleaning" in the Cleaning and Maintenance section.

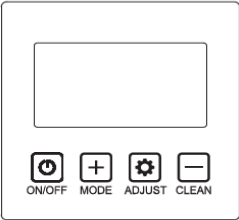
Operation

FINAL CHECK LIST BEFORE OPERATION

1. Have all packing materials and tape been removed from the interior and exterior of the ice maker?
2. Did you clean the ice storage bin?
3. Have the installation instructions been followed, including connecting the machine to water and electricity?
4. Has the machine been leveled?
5. Is the ice cube machine in a site where the ambient temperature is between 50° F (10° C) and 100° F (38° C) and the water temperature between 41° F (5° C) and 90° F (32° C) all year round?
6. Has the water supply pressure been checked to ensure a minimum of 15 psig with a static pressure not to exceed 80 psig?
7. Is there a clearance of at least 6" (150 mm) at the rear and sides, 1" (25 mm) at the top for proper air circulation?
8. Has the power supply voltage been checked or tested against the nameplate rating? And has proper grounding been installed for the ice cube machine?
9. Is the ice cube machine plugged in?
10. Have you turned on the main water supply and the tap?
11. Have you checked for leaks at all water supply connections?

Control Panel (in the front panel of the machine)

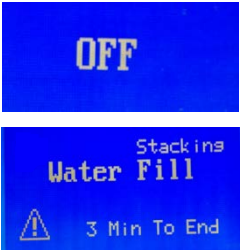
You will find the control panel in the front panel of the machine This control panel offers four pressure sensitive buttons and a LCD display screen.



- 1 **ON/ OFF Button.** Powers the ice machine.
- 2 **Bin Full Process:** When the words of "Bin Full" display, the ice storage bin is full of ice or something is holding the water curtain open The unit will stop working When ice cubes are taken out of the ice storage bin, releasing the water curtain, the words of "Bin Full" will flash for 3 minutes. The unit will then restart and returns to the Ice making mode.
- 3 **Making Ice Process:** When the words of "Making Ice" display, the unit is working in the Ice Making mode controlled by a temperature probe on the evaporator and a fixed timer.
- 4 **Harvesting Ice Process:** When the words of "Harvesting Ice" display, the unit is working in the Ice Harvest mode controlled by a temperature probe on the evaporator and a fixed timer.
- 5 **Clean Button:** When this button is pressed, the unit enters the Cleaning mode. the screen will display "Cleaning". To stop the Cleaning mode, just press the ON/OFF button.
- 6 **Mode Button:** *Recommended for service technician only.* When this button is pressed, unit can change from Ice Making mode to Ice Harvest mode or from Ice Harvest mode to Ice Making mode. You can judge the mode from the displaying contents on the screen.
- 7 **Water Fill Process:** When the words of "Water Fill" display, there are three minutes for water inlet and self-checking After three minutes the ice maker will start to make ice automatically.

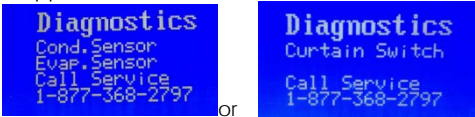
**OPERATION OF THE CONTROL PANEL:**

- 1. When the unit is plugged in and turn on the power switch. Only "OFF" displays on the LCD screen.
- 2. Press the ON/OFF button, the LCD screen lights. If normal, only the words of "Water Fill" and "3 Min To End" displays on the LCD screen. The ice maker will start to make ice automatically when the words of "3 Min To End" changes to "0 Min To End".



Note:

- Only when the double ice machine heads stacked, the words of "Stacking" may be displayed on the LCD screen.
- When the ice machine runs in "Water Fill" process, the control board will check the condenser probe, evaporator probe and water curtain function, if one of them defaults, the exclamation mark will appear and blink on the left bottom corner of the LCD screen. At this time press "ADJUST" button, the Diagnostics for Curtain switch, condenser sensor and evaporator sensor will appear on the LCD screen.

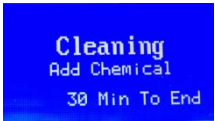


- 3. After three minutes, the ice maker will start to make ice automatically. The words of "Making Ice" displays on the LCD screen.
- 4. When the ice machine runs in harvest process, the words of "Harvesting Ice" displays on the LCD screen.
- 5. When the ice storage bin is full, the words of "Bin Full" displays on the LCD screen. The unit stops working.
- 6. When ice cubes are taken out from the ice storage bin, releasing the water curtain, the machine will judge the status for three minutes. During this period, the LCD screen will display the words of "Bin Full Release" and "3 Min To End". "Bin Full Release" flashes until the words "3 Min To End" changes to "0 Min To End". At this time, the ice maker will start to make ice automatically.



- 7. **TO CLEAN THE MACHINE**, press the ON/OFF button first, then press it on again.

- During "Water Fill" process, press the "CLEAN" button, the ice maker will start the cleaning process, the words of "Cleaning", "Add chemical" and "30 Min To End" display on the LCD screen.
- At the first one minute, the words of "Add chemical" flash to remind pouring the Ice Maker Cleaner Solution into the water tank until the words of "30 Min To End" changed into "29 Min To End", the words of "Add chemical" disappear and the water pump runs, the ice maker goes into cleaning process.
- The ice-making system cleaning cycle will continue until the words of "30 Min To End" changed into "0 Min To End", the cleaning process stops and the ice machine is in suspend mode.
- You can press the ON/OFF button to stop the cleaning cycle any time during the cleaning mode.
- If you want to make ice cubes after cleaning, press the ON/OFF twice, the next ice-making cycle will begin. See photo below.



**NOTE:**

Pressing the CLEAN BUTTON has no effect when the ice maker runs in ice-making, harvest and bin full process.

## Additional Functions:

1. **Draining Function:** press the "Clean" button and hold for 6 seconds, the machine will go into the draining water mode automatically. The words of "Purging Water" appear on the LCD screen. The words disappear after 3 minutes and the draining process stops. **NOTE:** Draining function only effect in "Water Fill" process and "Cleaning" process.
2. **Self-checking Function:** when the ice maker runs, the control board will check the condenser probe, evaporator probe, high condenser temperature, water shortage, long freeze, long harvest and water curtain function, if one of them defaults, the exclamation mark will appear and blink on the left bottom corner of the LCD screen. At this time press "ADJUST" button, the cause of default will appear on the LCD screen. See photo below.
3. **Purging cycle interval Optional Function:** during "Water Fill" process, press and hold the "CLEAN" button and "ADJUST" button together for at least 3 seconds. The unit will enter the "Purging Optional" process, the words of "Purging Optional" and "20 Cycle" (Note: The cycle number may display other number) appear on the LCD screen. During this period, you can press the "MODE" or "CLEAN" button for the desired purging cycle interval. You can choose any purging cycle interval from 0 to 20.
4. After 10 seconds without any operation, the unit will automatically memorize the current status and return to the previous process.



**NOTE:** The machine is only in "Water Fill" process, the purging cycle interval Optional Function can be accessed. **IMPORTANT:** The purging cycle interval 20 has been set at the factory for optimum performance. You can change it according to the quality of water.

### ICE BRIDGE SIZE ADJUSTMENT GUIDE:

- 1 Press and hold the "ADJUST" button for at least 3 seconds The unit will enter the Ice Size Adjustment mode and the words "Ice Adjust" display on the LCD Screen.
- 2 While in the Ice Size Adjustment mode, press the "Clean" button or the "Mode" button for the desired ice size.

### SMALLER ICE SETTING:

By pressing the "Clean" button, you can decrease the size of the ice bridge The words of "-6 Minutes" indicate the smallest ice size.

### LARGER ICE SETTING:

By pressing the "Mode" button, you can increase the size of the ice bridge The words of "+10 Minutes" indicate the largest ice size. *After 10 seconds without any operation, the unit will automatically memorize the current state and return to the previous mode.*

### NOTE:

- If during the ice size adjustment mode the words of "Ice Adjust" and "0 Minute" display on the LCD screen, this indicates that the unit is in the regular (middle) setting of the ice size.
- When the machine is in the cleaning stage or ice full stage, the ice size adjustment mode cannot be accessed.

### IMPORTANT:

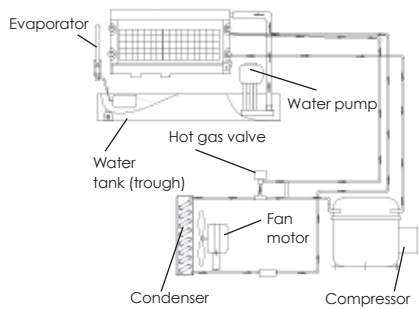
- The ice bridge adjustment has been set at the factory for optimum performance and it is not recommended for a user to make this adjustment This ice adjustment procedure should therefore be made only by an authorized service technician.

### IMPORTANT:

- Although the unit has been tested and cleaned at the factory, due to long-term transit and storage, the first batch of cubes must be discarded.
- Never turn the water supply tap off when the ice maker is working.
- Never touch the evaporator when the machine is running.
- Keep the door closed as much as possible to reduce melting and insure proper ice formation.

# HOW THE ICE MACHINES MAKES ICE

Turn the power switch to the ON position.  
Then press ON/OFF button in front panel.  
The LCD screen lights.  
After about 3 minutes the machine will automatically go into the ice-making stage.  
There are two distinct cycles: freeze and harvest.  
In the freeze cycle, water flows to the evaporator surface. In the harvest cycle, the ice is released and water enters the machine.



**A complete cycle (freeze cycle and harvest cycle) takes 15 to 40 minutes, depending on temperature and operating conditions.**

**Freeze:** During the freeze cycle the compressor is pumping refrigerant, the fan motor is blowing air, and the water pump is pumping water. When the batch of ice has been fully formed, the ice maker stops the freeze cycle and the harvest cycle start.

**Harvest:** During the harvest cycle, the compressor is still operating and power is supplied to the hot gas valve. Every 20 cycles, the water purge valve opens and allows the water pump to purge the water from the water tank, removing all impurities and sediment. This allows the machine to make clear ice cubes and keep mineral build-up at a minimum. The water pump will then stop. When the hot gas valve opens, it allows hot gas to go directly to the evaporator. The gas warms the evaporator, causing the cubes to slide off the evaporator and into the storage bin. The freeze cycle will restart when all the cubes drop into the bin.

## HOW THE MACHINE USES WATER

The ice maker begins with a fixed charge of water that is contained in the water tank. As the water flows to the freezing evaporator surface, the water freezes and sticks to the ice cube molds. During the ice-making process, fresh water enters the water tank continuously as the water from the tank freezes continuously on the evaporator.

## NORMAL SOUNDS

Your new ice cube machine may make sounds that are unfamiliar to you. Most of the new sounds are normal. Hard surfaces like the floor and walls can amplify the sounds. The following describes the kinds of sounds that might be new to you and what may be causing them.

- Rattling noises may come from the flow of the refrigerant or the water line. Items stored on top of the ice cube machine can also make noises.
- The high-efficiency compressor may make a pulsating or high-pitched sound.
- Running water may make a splashing sound.
- You may hear air being forced over the condenser by the condenser fan.
- During the Harvest cycle, you may hear the sound of ice cubes falling into the ice storage bin.

## PREPARING THE ICE CUBE MACHINE FOR LONG STORAGE or WHEN MOVING THE ICE MACHINE

- 1 Shut off the water supply at the main water source.
- 2 Disconnect the water supply pipe from the water inlet.
- 3 Depress the clean button and hold for six seconds. Draining mode starts automatically. When the words "Water Fill" display, the drain process is complete.
- 4 Shut off the power supply at the main electrical power source.
- 5 Dry the water tank.
- 6 Remove all ice cubes from the ice storage bin and dry it.
- 7 Keep the food open to allow for ventilation and to prevent mold and mildew.
- 8 Leave the water supply pipe and power cord disconnected until needed for use.

**IMPORTANT:** Do not touch the power plug when your hands are wet. Never unplug the unit by pulling on the cord.

# Cleaning and Maintenance

## CAUTION

If the ice maker is left unused for a long time, before the next use it must be thoroughly cleaned. Follow carefully any instructions provided for cleaning or use of sanitizing solution. Do not leave any solution inside the ice maker after cleaning.

Periodic cleaning and proper maintenance will ensure efficiency, top performance, and long life. The maintenance intervals listed are based on normal conditions. You may want to shorten the intervals if you have pets or there are other special considerations.

### WHAT SHOULDN'T BE DONE

Never keep anything in the ice storage bin other than ice: objects like wine and beer bottles are not only unsanitary, but the labels may slip off and plug up the drain.

### WHAT SHOULD BE KEPT CLEAN

- 1 The exterior
- 2 The interior
- 3 Water distribution tube
- 4 The ice-making system cleaning

## WARNING

Before proceeding with cleaning and maintenance operations, make sure the power line of the unit is disconnected and the water line is shut off. (EXCEPTION: Cleaning of ice-making system)

### EXTERIOR CLEANING

The exterior of the ice maker and bin may be cleaned with a soft cloth or sponge dampened with a mild detergent and warm water solution such as 1 oz of dishwashing liquid mixed with 2 gallons of warm water. Never use solvent-based or abrasive cleaning agents. Rinse with clean water. Wipe with a soft clean towel to prevent water spotting.

### INTERIOR CLEANING

Clean the water tank before the ice maker is used for the first time and reused after stopping for an extended period of time. It is usually convenient to sanitize the tank after the ice-making system has been cleaned and the ice storage bin is empty. The ice storage bin should be sanitized occasionally.

Follow these steps to clean the tank and the bin:

- 1. Disconnect power to the unit.
- 2. Using a knife point or similar tool to remove the plastic covers on the top and bottom front panel.
- 3. Using a Phillips screwdriver, remove the screws, then swing the front panel open.
- 4. Using a sanitizing solution made of 1 ounce of household bleach and 2 gallons of hot water (95° to 115°F), wipe down the water tank and the inside of the ice storage bin with a clean cloth. To clean hard-to-reach corners, apply the sanitizing solution with a spray bottle.
- 5. Rinse thoroughly with clear water.
- 6. This completes the interior cleaning of the ice maker and storage bin.
- 7. Reconnect power to the unit.

### WARNING

DO NOT use solvent-based cleaning agents or abrasives on the interior. These cleaners may transmit taste to the ice cubes, or damage or discolor the interior.

#### WATER DISTRIBUTION TUBE CLEANING

When you find that the ice cubes are incompletely formed or the output of ice cubes is low, the water distribution tube may be blocked. Set the power switch to OFF. Unscrew the six screws holding the top panel and remove the panel. You will see the water distribution tube. Rotate the water distribution tube so that the holes in it are facing up. Using a toothpick or similar tool, dredge the holes, then rotate the water distribution tube back to its original position. If the tube is badly blocked, clean it as follows:

1. Shut off the water and power supplies.
2. Disconnect the water hose from the distribution tube.
3. Lift one side, remove the distribution tube.
4. With a brush, clean the tube with a dilute solution of warm water and a mild detergent such as dishwashing liquid. After removing the dirt and lint from the surface, rinse the tube with clean water.
5. Replace the distribution tube.
6. Reconnect the water supply and power supply lines.
7. Re-attach the top and front panels.

#### ICE-MAKING SYSTEM CLEANING

Minerals that are removed from water during the freezing cycle will eventually form a hard, scaly deposit in the water system. Cleaning the system regularly helps remove the mineral scale buildup. How often you need to clean the system depends on how hard your water is or how effective your filtration may be. With hard water of 15 to 20 grains/ gallon (4 to 5 grains/liter), you may need to clean the system as often as every 3 months.

1. Using tools to remove the plastic cover and screws fixed in front panel, swing the front panel open.
2. Make sure all ice is off evaporator. If ice is being made, initiate harvest or wait for cycle completion, then turn machine off at the power switch.
3. Remove all ice cubes from the storage bin.
4. Keep the ice maker connected to the water supply. Pour 8 oz of Nickel-Safe Ice Maker Cleaner Solution into the water tank.
5. Press ON/OFF button to light the LCD screen. Within 3 minutes, press the CLEAN button. The machine will automatically shift into cleaning mode.
6. The ice-making system cleaning cycle will continue for 30 minutes unless you press ON/OFF button (you can press the power switch to stop the cleaning cycle any time during the 30 minutes). After cleaning, the LCD screen will display the words of "OFF". The cleaning process stops.
7. Repeat steps 4 and 5 above, three times, to rinse the ice machine thoroughly.  
(NOTE: Do not add Ice Maker Cleaner Solution to the water tank during the rinses.)
8. Perform steps 3 and 4 in the Interior Cleaning section.
9. If you want to make ice cubes after cleaning, turn off the power switch, then turn on the power switch. The next ice-making cycle will begin.
10. Discard the first batch of ice.



## WARNING

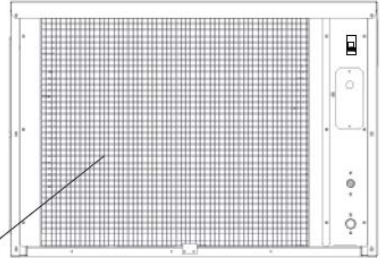
The ice machine cleaner contains acids. DO NOT use or mix with any other solvent-based cleaner products. Use rubber gloves to protect hands. Carefully read the material safety instructions on the container of the ice machine cleaner. DISCARD the first batch of ice produced after cleaning.

### CONDENSER CLEANING

- 1 See drawing
- 2 The air cooled condenser should be vacuumed once or twice per year to remove any lint that may have been drawn into it. Using a tool that seems like a probe to remove any lint from the condenser fins.

**NOTE:** Do not touch condenser fins. They are sharp and can be damaged easily.

Condenser



## Troubleshooting

### BEFORE CALLING FOR SERVICE

If the unit appears to be malfunctioning, read through the OPERATION section of this manual first. If the problem persists, check the Troubleshooting Guide on the following page. The problem may be something very simple that can be solved without a service call.

## Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	PROBABLE CORRECTION
The machine doesn't operate	The ice maker is unplugged	Plug the ice maker in
	The fuse is blown	Replace fuse If it happens again, call for service to check for a short circuit in the ice maker
	The ice maker power switch is OFF	Turn the ice maker power switch ON
	The ice storage bin is full of ice	Remove some ice Make sure water curtain and micro-switch are closed
The water doesn't feed in after the ice maker starts	The water supply tap is turn off	Turn on the water supply line
	The water supply pipe is not proper connected	Reconnect the water supply pipe
Machine makes ice, but bin does not fill up with ice	The condenser may be dirty	Clean the condenser air filter.
	The air flow to the ice maker may be obstructed	Check the installation
	The ambient and water temperatures are high, or the machine is near some heat source	Check the installation
Water is leaking from the unit	A few water drops fall to the floor when you open the door to take out ice from ice storage bin	Normal condensation on the door or some water together with ice Take care when you take out ice
	Water supply connection leaks	Tighten fitting. See "Connecting the water line"
Cubes are partially formed or white at the bottom	Not enough water in the water trough	Check if the water supply pressure is below 15 psig
		Check water supply--filter may be restricted
		Check for a water leak at the water trough
Noise during operation	The feet are not leveled and locked	Level and lock the feet See "Leveling the Ice Maker"
	Certain sounds are normal	See Normal Sounds
The ice maker stops suddenly while making ice	The electricity is off	Reconnected the power supply line
	The room temperature is out the stated range	Cut off the electricity, let the ice maker stop working until the temperature returns within the stated range
	The ice storage bin is full of ice	Remove some ice cubes; Make sure the water curtain and micro-switch are close
The body of the ice maker is electrified.	The grounding line isn't in the socket	Use a socket meeting the required electrical standard
Scales occur frequently inside the machine.	The hardness of the water is too high	Use a water-softening device in- stalled in front of the water inlet