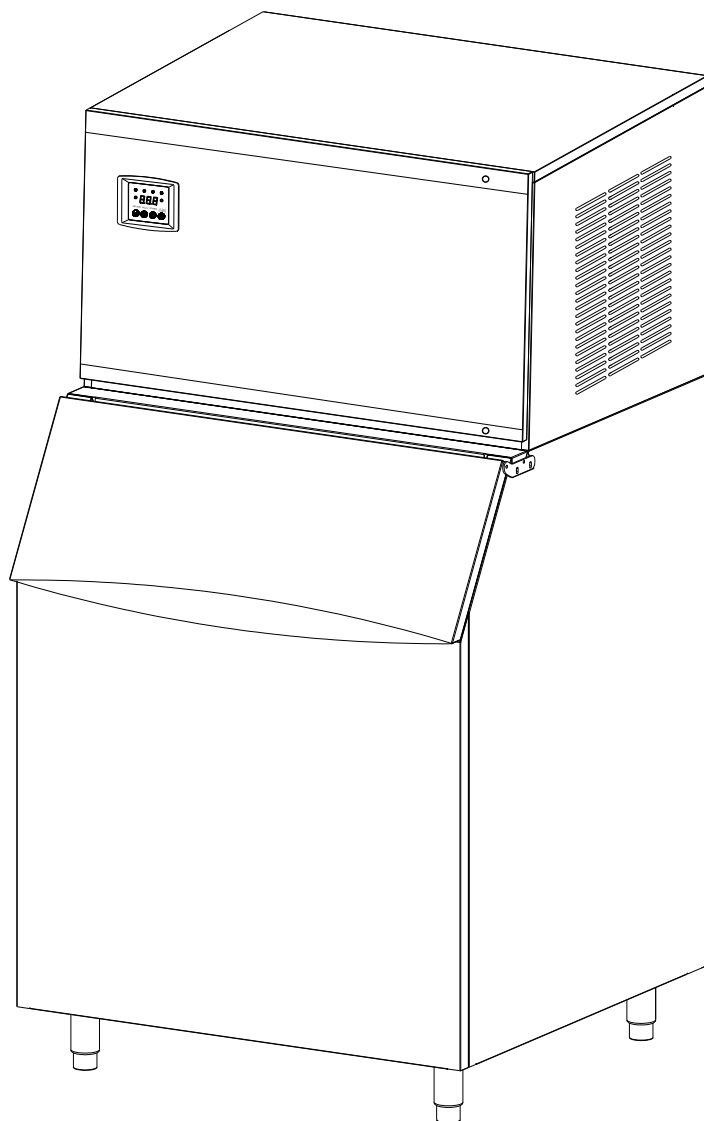


MERCATOR

N A V I G A T I N G S U C C E S S

INSTRUCTION MANUAL



ASBURY WORLD WIDE LLC

MI360F-MI360H

MI370F-MI370H

MI500F-MI500H

MI650F-MI650H

MI1000F-MI1000H

COMMERCIAL ICE MACHINE

PLEASE READ CAREFULLY

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NOTICE:
This instruction manual is for the models noted on the front over. Ice storage bins are NOT INCLUDED.

Ice Maker Safety

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.

DANGER – Risk of Fire or Explosion. FLAMMABLE REFRIGERANT



**Do not use mechanical devices to defrost.
Do not puncture refrigerant tubing.
To be repaired only by trained service personnel.**



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
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.

WARNING: Keep clear of obstruction all ventilation openings in the appliance enclosure or in the structure for building-in.

WARNING: Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.

WARNING: Do not use electrical appliances inside the food/ice storage compartments unless they are of the type recommended by the manufacturer.

WARNING: Do not install or use this unit in a public corridor or lobby.

DISPOSAL

Dispose of properly in accordance with Federal or Local regulations. Flammable refrigerant used. The appliance can not be treated as normal domestic trash but must be handed in at a collection point for recycling electric and electronic appliances. Further information about the recycling of this product can be obtained from your local municipal authority.

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

- Plug into a grounded 3-prong outlet. Do not remove grounding prong, do not use an adapter, and do not use an extension cord.
- 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 40°F (4.4°C) and below 110°F (43.3°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 (115 VAC, 60 Hz, 15 A), properly grounded in accordance with the National Electrical Code and local codes and ordinances, is required.
- Do not kink or pinch power supply cord or drain lines between ice maker and cabinet.
- The fuse (or circuit breaker) size should be **20** amperes.
- It is important for the ice maker to be leveled in order to work properly. 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.
- 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 the water supply tap off when the ice maker is working.

- Except to take ice from the unit, keep the door closed in order to reduce ice melting and to promote proper ice formation
- Although the unit has been tested at the factory, due to long-term transit and storage, the first batch of cubes must be discarded
- 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

SAVE THESE INSTRUCTIONS

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 prevents overloading 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.

If the SUPPLY CORD is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.

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.

Technical Information

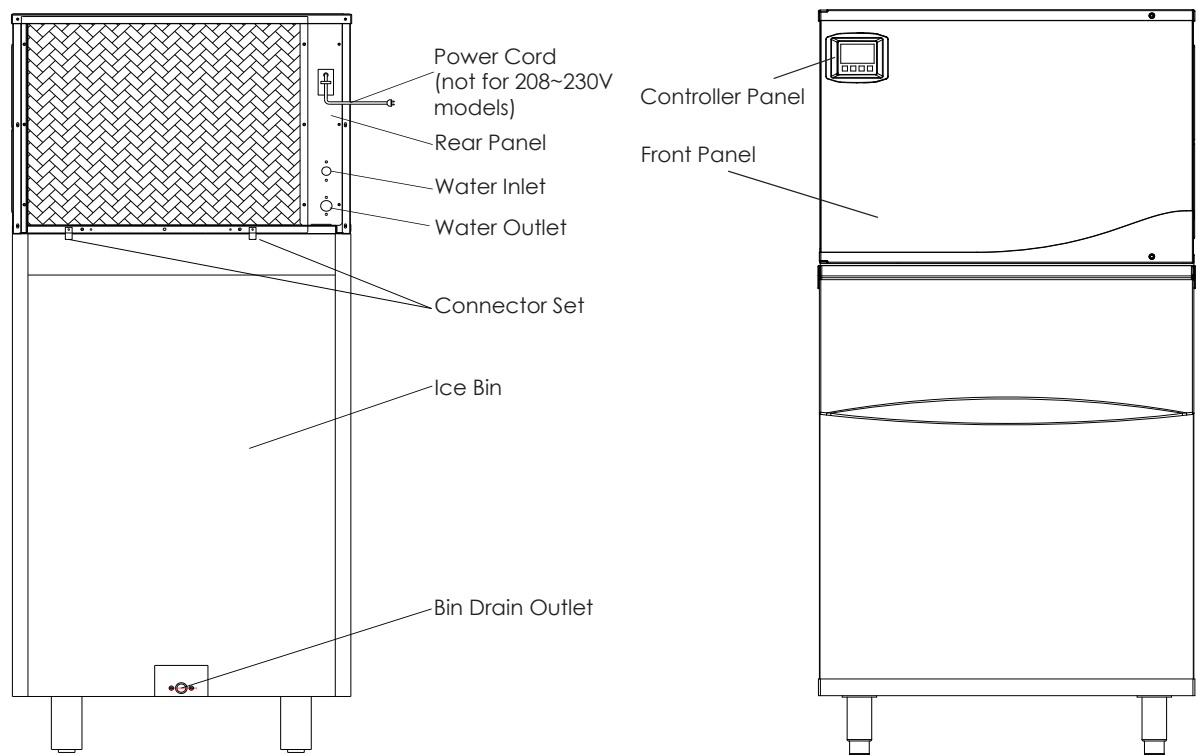
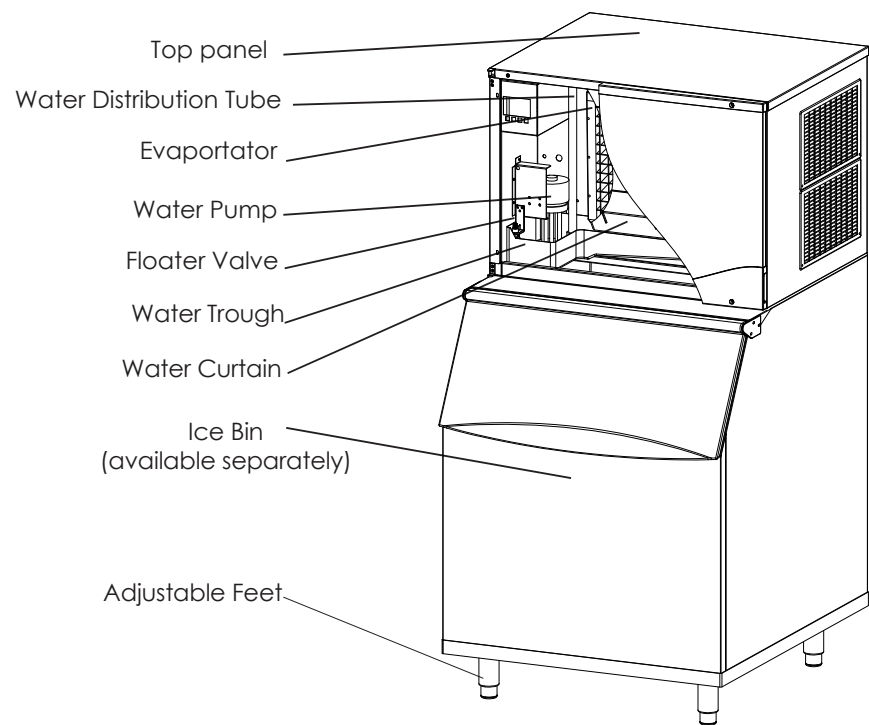
MODEL	MI360F/MI360H	MI370F/MI370H	MI500F/MI500H	MI650F/MI650H	MI1000F/MI1000H
Electrical input	115VAC / 60Hz	115VAC / 60Hz	115VAC / 60Hz	115VAC / 60Hz	208-230VAC/60Hz
Power consumption (kW h /100 lbs of ice)	5.3	5.3	4.5	4.7	4.6
Ice-making/Ice-harvest rated current	6.4A/6.8A	6.4A/6.8A	10.3A/9.7A	9.6A/10.5A	7.0A/9.7A
Refrigerant	R290, 4.59oz	R290, 4.59oz	R290, 7.76oz	R290, 8.82oz	R290, 9.88oz
High/Low side pressure	253psig/103psig	253psig/103psig	309psig/109psig	272psig/72psig	324psig/86psig
Unit width x depth x height	22"x 24.6"x 21"	30"x 24.6"x 21"	30"x 24.6"x 21"	30"x 24.6"x 21"	30"x 24.6"x 26.7"
Unit weight	96 lbs	101 lbs	112 lbs	116 lbs	152 lbs
Minimum room floor area (m²)	N/A	N/A	10.5	12	13.4
Ice-making capability (lbs/day*)	280 (90°F air & 70°F water)	280 (90°F air & 70°F water)	385 (90°F air & 70°F water)	510 (90°F air & 70°F water)	765 (90°F air & 70°F water)
	360 (70°F air & 50°F water)	360 (70°F air & 50°F water)	495 (70°F air & 50°F water)	635 (70°F air & 50°F water)	995 (70°F air & 50°F water)
Ice shape	Cube	Cube	Cube	Cube	Cube
Ice cube dimensions	Dice	7/8"x 7/8"x 7/8"	7/8"x 7/8"x 7/8"	7/8"x 7/8"x 7/8"	7/8"x 7/8"x 7/8"
	Half dice	1/2"x 7/8"x 7/8"	1/2"x 7/8"x 7/8"	1/2"x 7/8"x 7/8"	1/2"x 7/8"x 7/8"

*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.

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.

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.

CAUTION

This ice maker should be installed in accordance with the Safety Standard for Refrigeration Systems, ANSI/ASHRAE 15, by qualified personnel.

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

This equipment should only be used on ice bins without electrical components or bins designed to be used with flammable refrigerants.

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" (9.5mm) 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.

AIR FILTER

USE the air filter if the ice machine's working in complex environment. Just Insert the air filter to the slots of condenser on the back of the unit.

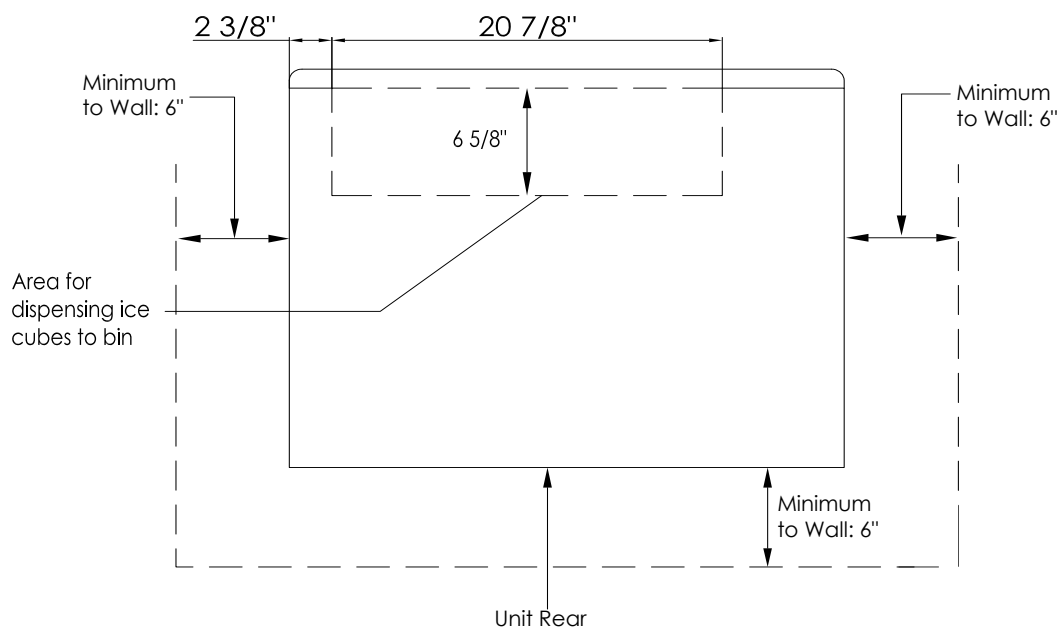
CAUTION: using the air filter will slightly lower the performance, and requires periodic cleaning.

WARNING

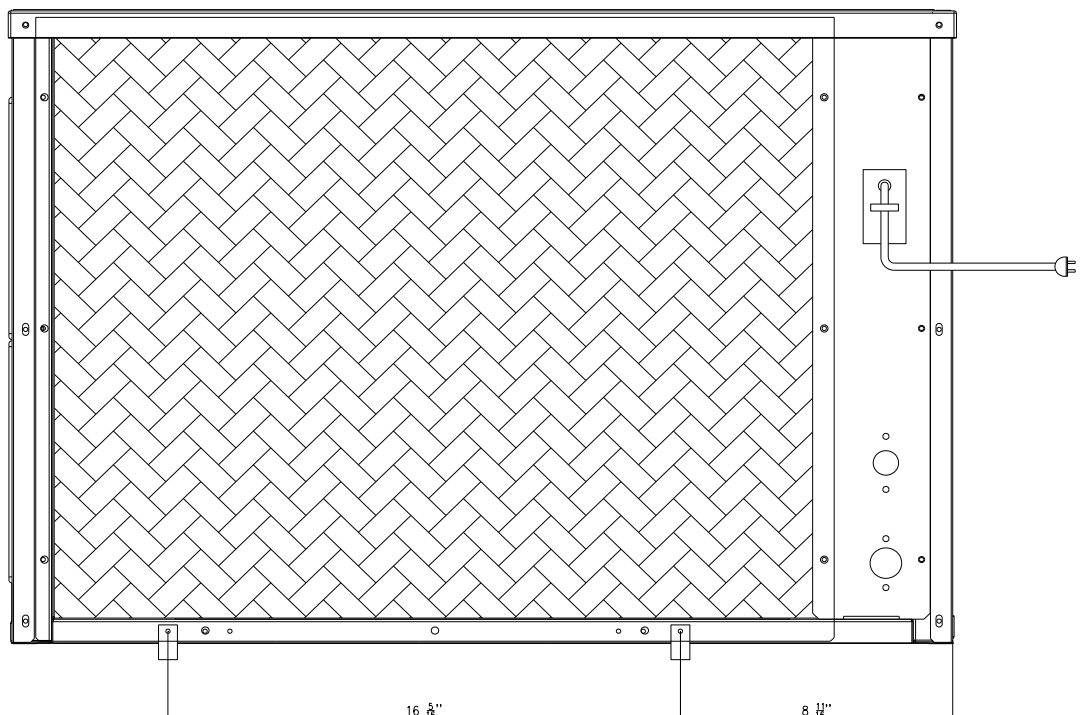
Normal operating ambient temperature should be between 50°F(10°C) and 100°F (38°C). Normal operating water temperature should be between 41°F (5°C) and 90°F (32°C). Operation of the ice maker for extended periods outside of these normal temperature ranges may affect production capacity.

INSTALLATION CLEARANCE

TOP VIEW of ICE MACHINE

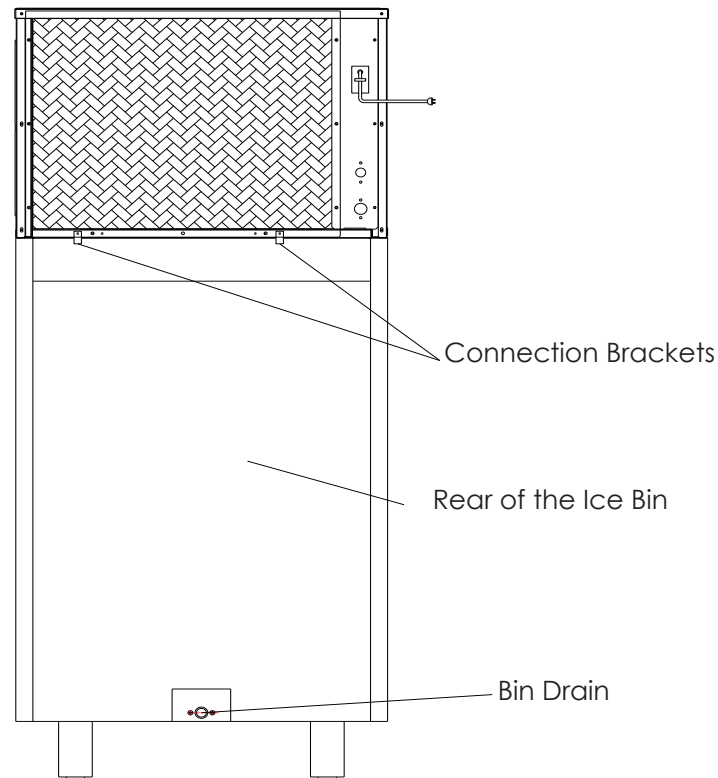


REAR VIEW of ICE MACHINE



REAR VIEW if ATTACHING to an ICE BIN

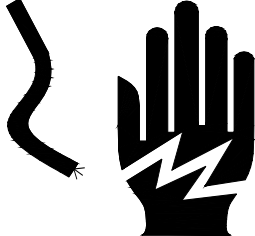
The (2) security latch holes are used when securing to an ice bin.



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 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.

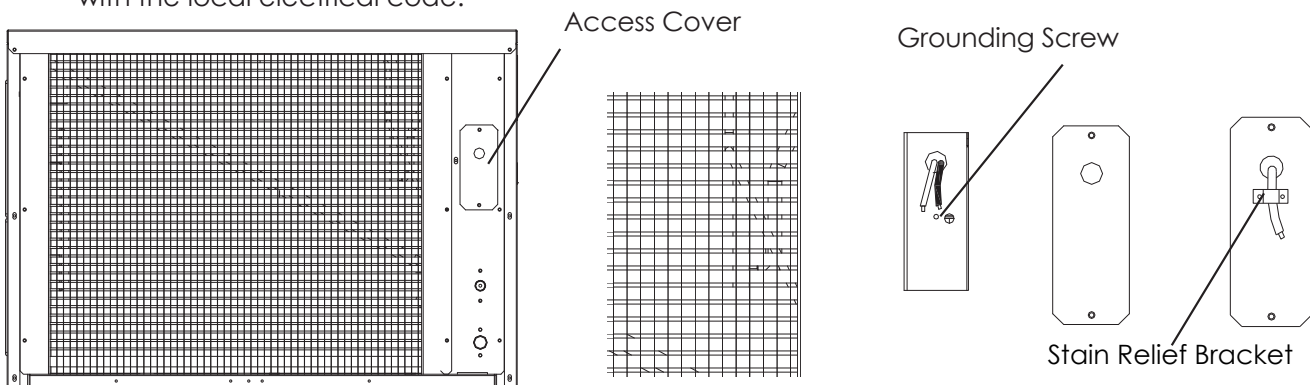
RECOMMENDED GROUNDING METHOD

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 FOR 208~230V MODELS

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.



Cabling Notes

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges, or any other adverse environmental effects. The check shall also consider the effects of aging or continual vibration from sources such as compressors or fans.

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 AND DRAIN CONNECTION

The water supply and drain should be roughed in and ready at the point of installation. A wall outlet directly behind the ice machine will make installation easier.

WARNING: Connect to potable water supply only.

IMPORTANT:

1. All installations must be in accordance with local plumbing code requirements.
2. Make certain that the pipes are not pinched or kinked or damaged during installation.
3. Check for leaks after connection.

The water supply should be ready at the point of installation. The water supply pressure should be a minimum of 15 psi (1 bar or 103 kPa) with a static pressure of not more than 80 psi (5.5 bar or 551 kPa). (A wall outlet directly behind the ice maker will make installation easier.)

The water inlet connector requires a standard 1/4" OD water tube.

NOTE: If there is a drain line near the ice maker, the best choice to drain water to the drain line is through the drain water hose provided with the ice maker.

1. Locate the floor drain near the ice maker. The distance should be less than 5 feet since the length of the long drain water hose provided with the ice maker is about 5 feet.
2. Find the drain outlet on the back of the ice maker and take off the rear drainage plug. Connect the nut of the drain outlet to the water draining hose and insert the other end of the hose into the drain line.

NOTE: Never allow the drain hose to hang or loop higher than the floor of the ice storage bin.

3. All horizontal runs of drain lines must have a fall of 1/4" per foot. An air gap will like required between the ice maker drain tube and the drain/waste receptacle. A standpipe with a trap below it would be acceptable for the drain/waste receptacle. A floor drain is also acceptable. If this is not possible, it is recommended to use a condensate pump.

4. Pour 1 gallon of water into the ice storage bin to check for leaks at all drain connections and at the nut of the drain water hole. Tighten any connections or nuts that leak.

NOTE: This ice maker is not a freezer. Hot temperatures will cause a high rate of melting in the ice storage bin. Ice will drain over time. A drain is required.

The manufacturer recommends filtering the water. A water filter helps remove taste, odors and particles. Using softened water may result in white, mushy cubes that stick together. Avoid using deionized water.

- Using a RO system may cause the water pressure to be lower than the minimum the ice machine requires.
- Ensure that the water supply hose is not pinched, kinked, or damaged during installation.

INSTALLATION TYPE

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

A free-standing 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

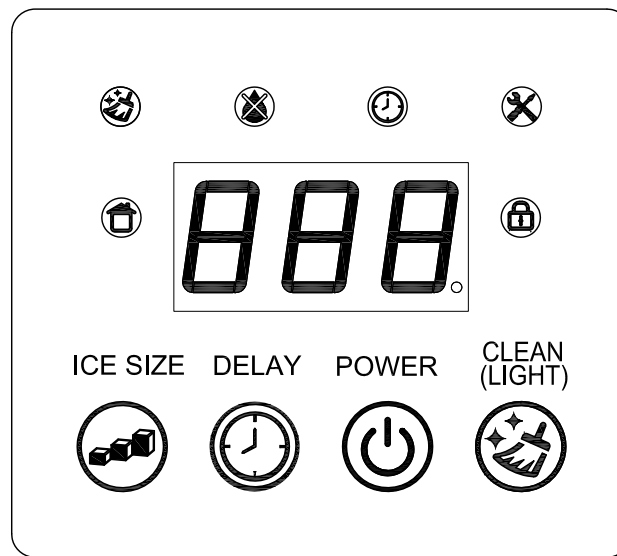
After you remove all tape from the machine, clean the inside of your ice maker and ice storage bin before using them. See "Interior Cleaning" in the Cleaning and Maintenance section.

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?
7. Has the water supply pressure been checked to ensure a minimum of 15 psig with a static pressure not to exceed 80 psig?
8. 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?
9. Has the power supply voltage been checked or tested against the nameplate rating? And has proper grounding been installed for the ice cube machine?
10. Is the ice cube machine plugged in?
11. Have you turned on the main water supply and the tap?
12. Have you checked for leaks at all water supply connections?

USING THE CONTROL



The control panel located at the top of the cabinet includes a display window, 4 buttons and 6 indicators.

FUNCTION		OPERATION
Turn ON		Press the POWER button to turn ON the unit. The unit will automatically start making ice and display Full on initial power up, ICE on ice making, Harv on Ice Harvesting, and Full on ice bin full. The run indicator will light.
Turn OFF		Press and hold the POWER button over 3 seconds to turn OFF the unit. The unit will Standby and display OFF .
Adjust the ice cube size		Press the ICE SIZE button over 3 seconds to enter ICE SIZE ADJUSTING. Continuously press. Capitalize letters as indicate to toggle the numbers. Ice Size numbers are from 1 to 5 (min to max). 5 is the default ice size. The setting will be saved after 5 seconds.
Screen Lock 	 	Press and hold the POWER and the CLEAN button over 3 seconds to Lock/Unlock the screen. The lock indicator will light when screen is locked.
Clean(Light) 		Press and hold the CLEAN button over 3 seconds to turn ON/OFF the CLEANING Function. [only available on Standby] Once started, window will display CLE , and the clean cycle will run for 30 minutes and then exit and standby. the clean indicator will light during the cycle. On Ice making cycle, Press the CLEAN button to toggle the LED light ON/OFF.

FUNCTION		OPERATION
Delay Ice Making 		Press and hold the DELAY button over 3 seconds on Standby to toggle ON/OFF the delayed ice making. Once ON, Continuously press. Capitalize letters as indicate to select from  to  hour delay(2 hours interval) for the timer. The setting will auto-save after 10 seconds, then the window will display the countdown time in hours, and the Timer indicator will light. <i>*Press POWER again to cancel the countdown and immediately start ice making.</i>
Showroom 	 	Press and hold the DELAY and the CLEAN button for over 6 seconds on Standby to toggle on/off the Showroom Mode. The Showroom indicator will light. This mode is for retailers to display the unit. The lights, controllers, and evaporator fan will function in this mode, but the unit will not produce ice and all alarms will be disabled except the door open alarm.
Sabbath	 	Press and hold the ICE SIZE and CLEAN button over 6 seconds to Toggle Sabbath Mode ON/OFF. On Sabbath mode, display & light will be shut off, and audible sounds are also disabled.

CLEAN REMINDER

When the unit has worked for approximately 6 months without running the CLEANING program, the panel will be flashing **CLE** as the reminder. Run the CLEAN program to clear the alarm.

FAULT ALARM AND ERROR CODES

When the unit detects an error, it will sound the alarm with the ALARM indicator flashing and display the below error codes. Please provide the error codes when contacting service.

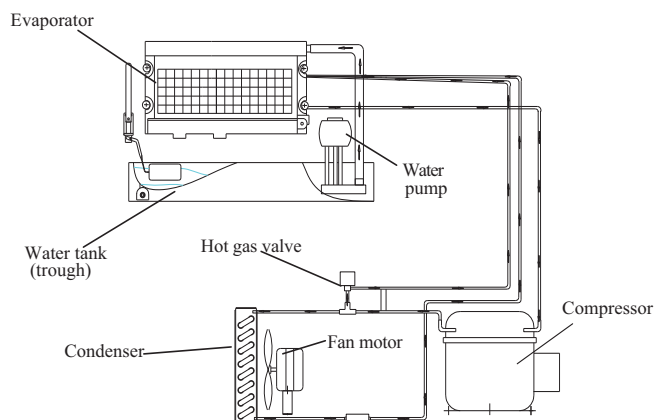
 FAULT ALARM	ERROR CODES
Evaporator temperature sensor failure	E1
Condenser temperature sensor failure	E2
ICE FULL temperature sensor failure	E3
Ice harvest failure alarm	E4
 Lack of water alarm	E5
Drain failure	PUE
High ambient temperature	HIC

The ice machine will keep running on E1, E2 error with the RUN indicator flashing and will completely stop working on the rest of the errors. Check "troubleshooting" for easy self-diagnosis to try clearing some error codes.

HOW THE ICE MACHINES MAKES ICE

Turn the power switch to the ON position.
Then press POWER button in front panel.

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.

Cleaning and Maintenance

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. For LCD display model, Press the ON/OFF button to turn on the machine, then press the CLEAN button within 3 minutes. The machine will run the automatic Clean mode. For the three digital LED display model, just press and hold the CLEAN button for over 3 seconds.
6. The cleaning cycle will run for 30 minutes, or can be manually stopped by pressing the Power button. After cleaning, the screen will display "OFF".
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.



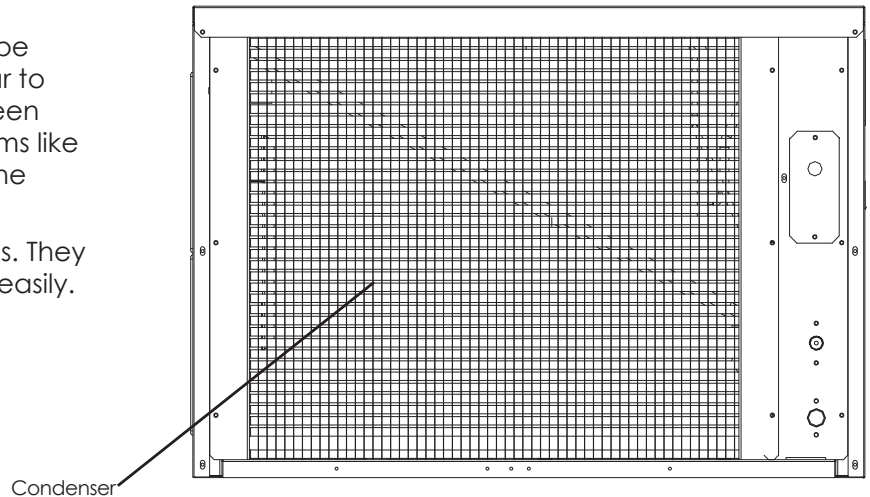
WARNING

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

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.



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

ADDITIONAL INFORMATION FOR INSTALLATION AND SERVICE

Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used. The following leak detection methods are deemed acceptable for all refrigerant systems: Electronic leak detectors may be used to detect refrigerant leaks but, in the case of FLAMMABLE REFRIGERANTS, the sensitivity might not be adequate or might need recalibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of R290 and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25 % maximum) is confirmed.

Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine can react with the refrigerant and corrode the copper pipework.

Removal and evacuation

When breaking into the refrigerant circuit to make repairs – or for any other purpose – conventional procedures shall be used. However, for flammable refrigerants it is important that best practice be followed, since flammability is a consideration. The following procedure shall be adhered to:

- a) safely remove refrigerant following local and national regulations.
- b) purge the circuit with inert gas.
- c) open the circuit by cutting or brazing.

The refrigerant charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes. For appliances containing flammable refrigerants, the system shall be purged with oxygen-free nitrogen to render the appliance safe for flammable refrigerants. This process might need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems.

For appliances containing flammable refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, when the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. Ensure that the outlet for the vacuum pump is not close to any potential ignition sources and that ventilation is available.

Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed.

- a) Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
- b) Cylinders should be kept in an appropriate position according to the instructions.
- c) Ensure that the REFRIGERATING SYSTEM is earthed prior to charging the system with refrigerant.
- d) Label the system when charging is complete (if not already).
- e) Extreme care shall be taken not to overfill the REFRIGERATING SYSTEM.

Prior to recharging the system, it should be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.

When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e., special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of all appropriate refrigerants including, when applicable, FLAMMABLE REFRIGERANTS. In addition, a set of calibrated weighing scales should be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition.

Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.

The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that FLAMMABLE REFRIGERANT does not remain within the lubricant. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.

NOTES:

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