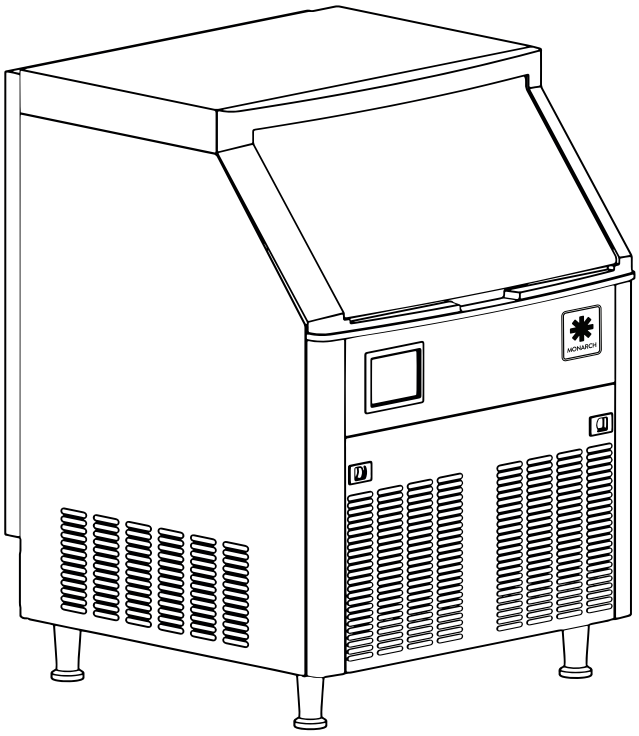
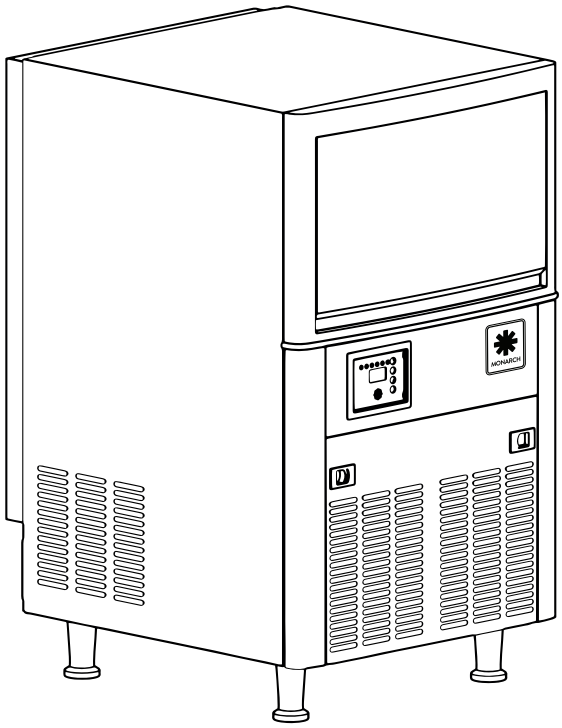
MONARCH





Undercounter Ice Makers

User Manual for Model Nos.:
ICMB80FCM, ICMB120FCM, ICMB210FCM, ICMB280FCM

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Table of Contents

Warranty

Chapter 1

Safety Information

Safety Notices

This safety alert symbol is used to alert you to important safety precautions.

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury. Notice signs are typically used for activities that result in property damage.

Warning and Safety Instruction

DANGER

A qualified professional must carry out the installation, repair, and maintenance of this machine. If not, a risk of electric shock, fire, or personal injury may occur with incorrect operation. Machine should also be serviced every three months for safe, optimal performance.

WARNING

The ice making water inlet of the ice maker can only be connected with drinking water. Groundwater or other non-drinking water sources can not be used.

DANGER

This ice maker has the risk of fire or explosion due to a flammable refrigerant being used. Repairs must be carried out by trained service personnel only.

The refrigerant tubing must NOT be punctured.

⚠CAUTION

The repair manual/owner's guide must be consulted before attempting to service this product. Follow all safety precautions.

⚠WARNING

The ice maker uses a flammable refrigerant. Puncturing the refrigerant tubing causes a risk of fire or explosion; ensure proper handling as per instructions.

Be sure to comply with local government regulations and carefully follow handling instructions.

⚠CAUTION

This ice maker cannot be operated in an outdoor environment.

Individuals with lack of experience or knowledge, children, and those with physical weaknesses, slow response, or reduced mental capabilities should not operate this ice maker.

NOTICE

- Please place the ice maker in the upright position for more than 24 hrs after delivery. This helps the refrigerant to fully precipitate before startup. If not performed, the compressor may be damaged.

⚠WARNING

- If/when the power cord of the ice maker is damaged, it must be replaced by the manufacturer or qualified professional to avoid electric shock, fire, or personal injury.

⚠CAUTION

- In order to ensure food safety, the water pipe assembly that is supplied in the accessory box of the ice maker must be used. The water pipe from the old machine should not be used.

NOTICE

- When moving or handling the ice maker, keep it upright. Do not exceed an inclination of 45 degrees and do not invert the ice maker or lay it on its side (horizontally).

⚠WARNING

- Do not place the ice maker where it can get wet or easily splashed.
- Do not ground the ice maker to gas pipes, water pipes, telephone lines, lightning rods, etc.
- Do not place small objects into the ventilation or exhaust ports; as serious machine damage and injury may occur due to rotating components in the ice maker.

⚠DANGER

- An explosion or fire may result if volatile or flammable substances are stored in this ice maker.

NOTICE

- In order to keep the ice scoop clean, do not store any sundries or freeze any food in the storage bin.

⚠WARNING

- Injury from the equipment falling over may result if the ice maker is not placed on a floor that can support its weight.

NOTICE

- **Ventilation is important. Ensure there is adequate ventilation space around the ice maker.**

See the installation chapter for more information and clearance requirements.

⚠WARNING

- **The machine nameplate specifies what power supply can be used. Only use that power supply.**

NOTICE

- **Do not connect this ice maker to hot water.**

⚠WARNING

- **Reliably grounded sockets with leakage protection must be used with this ice maker.**
- **Before performing repair, maintenance, or manual cleaning, disconnect the ice maker from the power source.**

NOTICE

- **All ice in the ice maker and storage bin needs to be removed prior to cleaning, repairing, and maintenance to avoid contamination of the ice.**

⚠WARNING

- **During the cleaning process, do not splash water directly onto the surface of the ice maker. Splashing of water on the surface may cause short circuits, leakage, or other faults.**
- **The ice maker uses a flammable foaming agent during the foaming process. Disposal and recycling of the ice maker should be handled by only qualified personnel and organizations.**
- **An extension cord should never be used to plug the ice maker into.**
- **Do not unplug by just pulling on the power cord. Grasp it by the plug and pull it straight out from the outlet.**
- **If the ice maker malfunctions, turn off the power and contact a trained professional for repair.**

⚠CAUTION

- **Children should not mess with or play around the ice maker. To ensure that children stay away from the ice maker it should be properly supervised.**

⚠WARNING

- **Do not use mechanical devices or other means to accelerate the defrosting process; other than those recommended by the manufacturer.**
- **This appliance should work under environment of temperatures from 41—95°F (5—35°C) and humidity ≤90%.**
- **Never turn the machine upside down or lean it more than 45 degrees.**
- **After turning the dispenser off, allow the dispenser to sit idle for 3 minutes before turning it on again.**

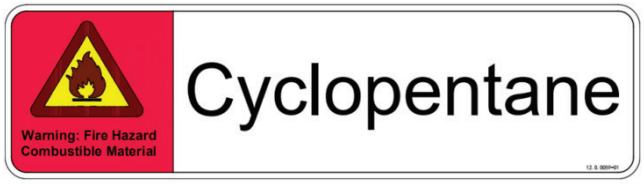
Warning Labels

Please note the following warning labels located on the ice maker.

BR00055

Figure 1-1

Figure 1-1 indicates a hazardous voltage. There is a risk of electric shock.



BR00056

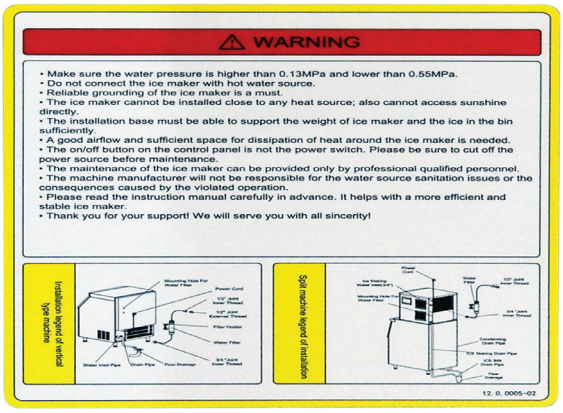
Figure 1-2

Figure 1-2 indicates a flammable foaming agent "Cyclopentane" used. There is a risk of fire.

BR50017

Figure 1-3

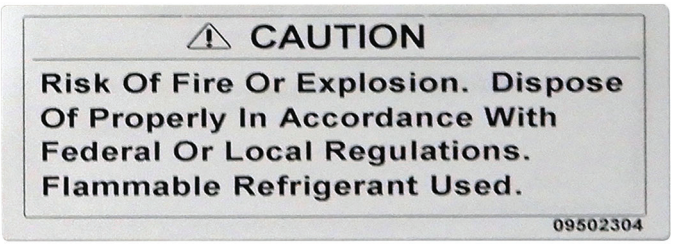
Figure 1-3 indicates a flammable refrigerant "R290" used. There is a risk of fire.



BR50001

Figure 1-4

Figure 1-4 indicates various instructions on how to install, operate, and maintain the ice maker.



BR50002

Figure 1-5

Figure 1-5 indicates a risk of explosion due to a flammable refrigerant being used.

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Chapter 2

Intended Use

General

Ice making will start when this fully automatic ice maker is properly installed and connected to a potable water supply and power source. The ice making will stop automatically once the ice cubes fill the storage bin to capacity. This ice maker is generally used in the following, similar circumstances:

- Staff kitchen areas, shops, offices, and other working environments
- Hotels, motels, and other hospitality environments
- Hospitals or assisted living surroundings
- Bed-and-breakfast environments
- Catering and similar applications

NOTE: This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

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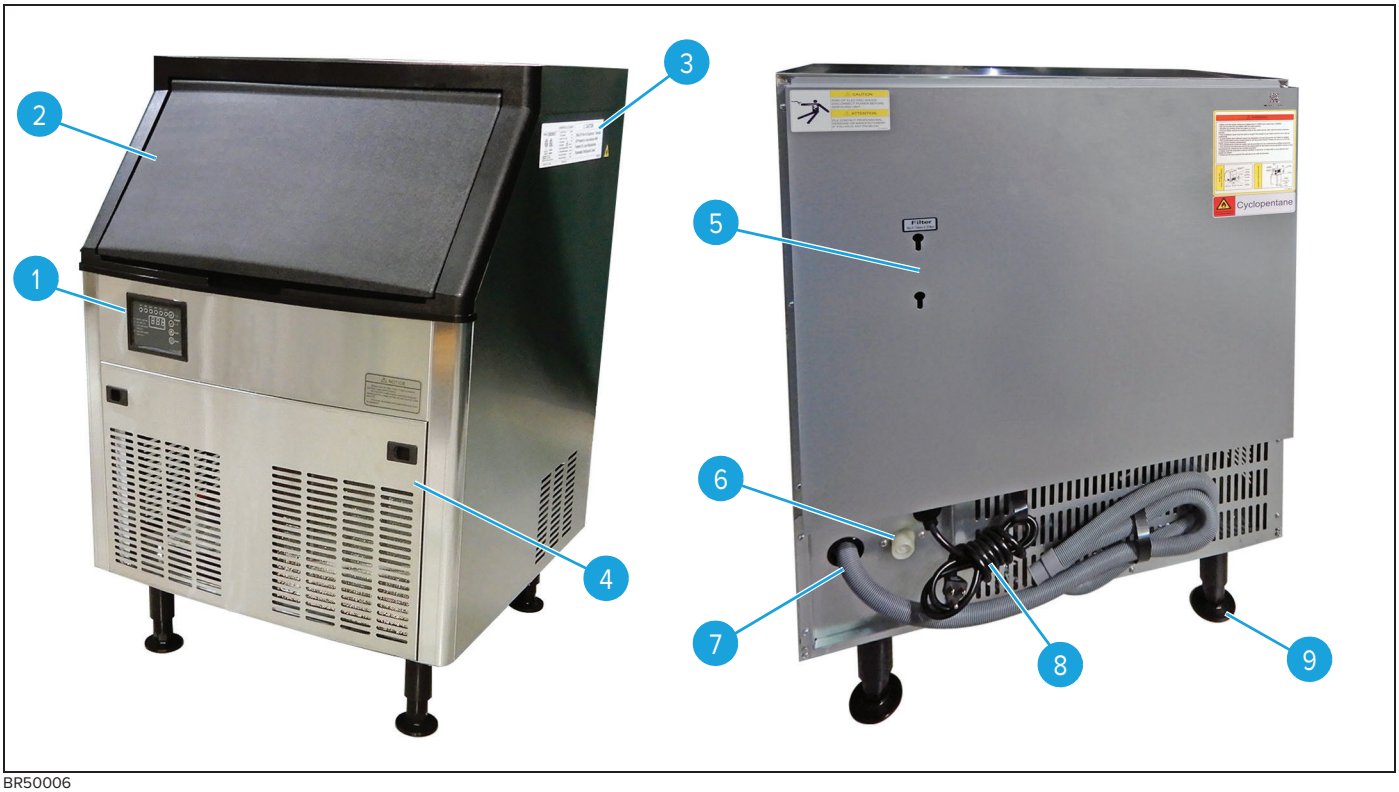
Chapter 3

Product Features

Components and Features

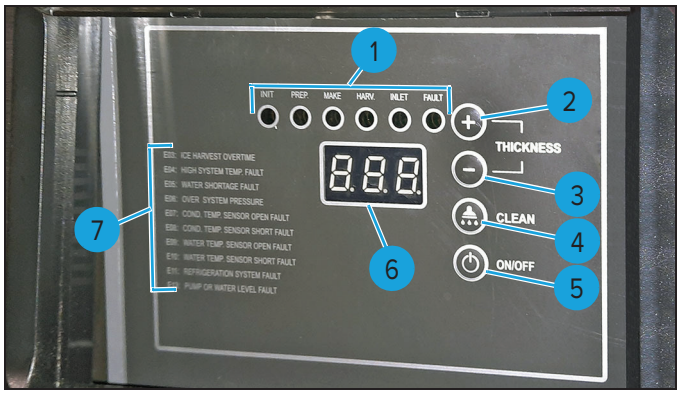


BR50006

Figure 3-1

Part	Description	Part	Description
1	Control Panel	6	Water Inlet
2	Ice Bin Door	7	Water Drain Hose
3	Product Identification	8	Power Cord
4	Service Panel	9	Adjustable Leveling Legs
5	Water Filter Mounting		

Control Panel Description



BR00015

Figure 3-2

Part	Description
1	LED Indicator Lights
2	Plus (+) Increase Thickness Button
3	Minus (–) Decrease Thickness Button
4	Automatic Clean Button
5	ON/OFF Button
6	LED Display
7	Fault Code List

The control panel allows the operator to adjust the thickness of the ice, start the automatic cleaning function, power the unit ON or OFF, visually confirm function stages, and monitor fault codes.

- When the unit is switched ON, the unit will begin an initialization function shown by the LED indicator light “INIT” and will display “ini” in the LED display.
- The preparation (PREP) LED indicator light will illuminate and count in seconds forward on the LED display.
- Once the water reaches 32°F, the ice making (MAKE) LED indicator light illuminates and a countdown clock in seconds begins on the LED display.
- The ice harvest (HARV) LED indicator light illuminates and begins to count forward in seconds on the LED display until ice is distributed into the ice bin.
- When the indicator light for the INLET is on, it means that the water inlet valve is open and water is entering the machine.
- If there is a fault, the FAULT LED indicator light illuminates and the fault code appears on the LED display.

To adjust ice thickness, press and hold the minus (–) button for 3 seconds or until the LED display indicates the current thickness setting. Then adjust by pressing the + or – button until the desired ice thickness is obtained.

NOTE: *Pressing the + or – button extends or shortens the ice making time by approximately 1 minute. Operator should wait for three ice making cycles to then confirm the size of the ice before making further adjustments.*

Machine Specifications

Ice Machine Model No.	ICMB80FCM
Rated Voltage / Frequency	115 V / 60 Hz / 350W
Operating Ambient Temperature	41–95°F (5–35°C)
Ice Production per Day	80 lbs. (37 kg)
Machine Net Weight	80 lbs. (37 kg)
Machine Dimensions (L x W x H)	20 x 18 x 32 in. (508 x 458 x 813 mm)
Refrigerant	R290

Ice Machine Model No.	ICMB120FCM
Rated Voltage / Frequency	115 V / 60 Hz / 446W
Operating Ambient Temperature	41–95°F (5–35°C)
Ice Production per Day	120 lbs. (55 kg)
Machine Net Weight	100 lbs. (46 kg)
Machine Dimensions (L x W x H)	20 x 24 x 34 in. (508 x 610 x 864 mm)
Refrigerant	R290

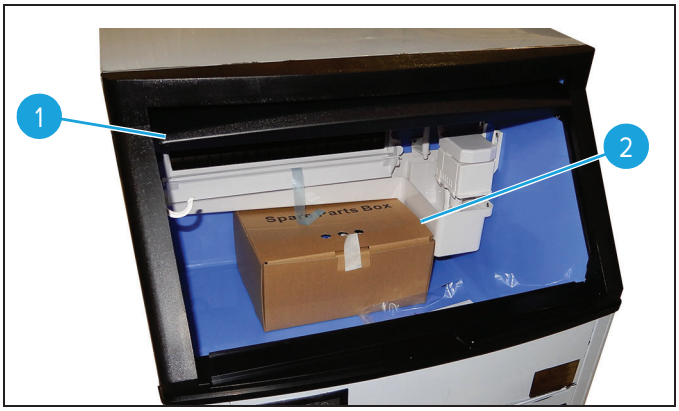
Ice Machine Model No.	ICMB210FCM
Rated Voltage / Frequency	115 V / 60 Hz / 526W
Operating Ambient Temperature	41–95°F (5–35°C)
Ice Production per Day	210 lbs. (96 kg)
Machine Net Weight	128 lb. (58 kg)
Machine Dimensions (L x W x H)	26 x 28 x 37 in. (661 x 712 x 940 mm)
Refrigerant	R290

Ice Machine Model No.	ICMB280FCM
Rated Voltage / Frequency	115 V / 60 Hz / 726W
Operating Ambient Temperature	41–95°F (5–35°C)
Ice Production per Day	280 lbs. (127 kg)
Machine Net Weight	132 lb. (60 kg)
Machine Dimensions (L x W x H)	26 x 28 x 37 in. (661 x 712 x 940 mm)
Refrigerant	R290

Chapter 4

Package Contents

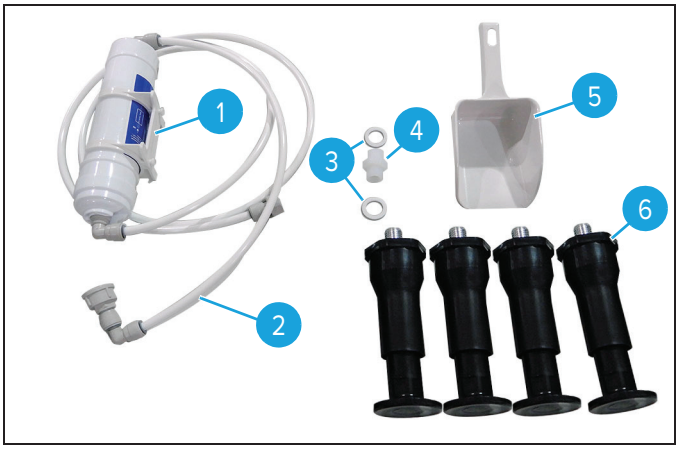
Parts Box Location and Contents



BR50008

Figure 4-1

Part	Description
1	Ice Bin Door
2	Parts Box Location

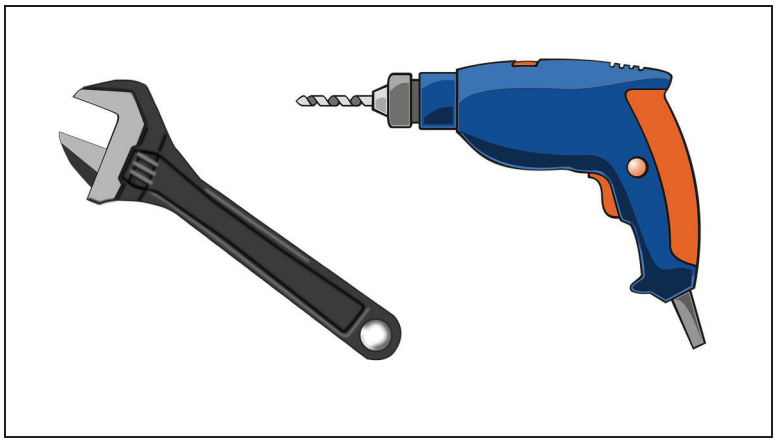


BR50009

Figure 4-2

Part	Description
1	Water Filter Assembly
2	Water Inlet Hose
3	Washer (2 used)
4	Coupler
5	Ice Scoop
6	Adjustable Leg (4 used)

Materials Needed to Install



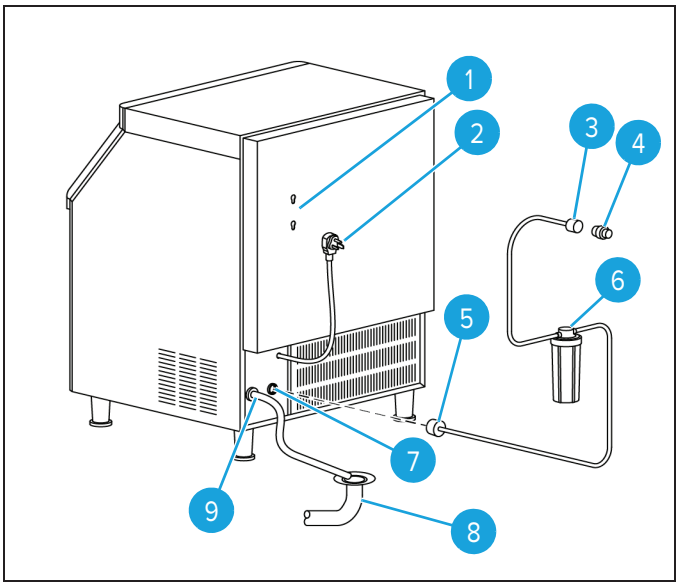
BR50007

Figure 4-3

Required Tools:

- Adjustable Wrench
- Hand-Operated Drill
- 1/4 inch Drill Bit

Parts Schematic



BR50026

Figure 4-4

Part	Description
1	Water Filter Assembly Mount
2	Power Cord
3	1/2 inch Joint (inner thread)
4	1/2 inch Coupler (external thread)
5	3/4 inch Joint (inner thread)
6	Water Filter Assembly
7	Water Inlet (external thread)
8	Floor Drain
9	Drain Hose

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Chapter 5

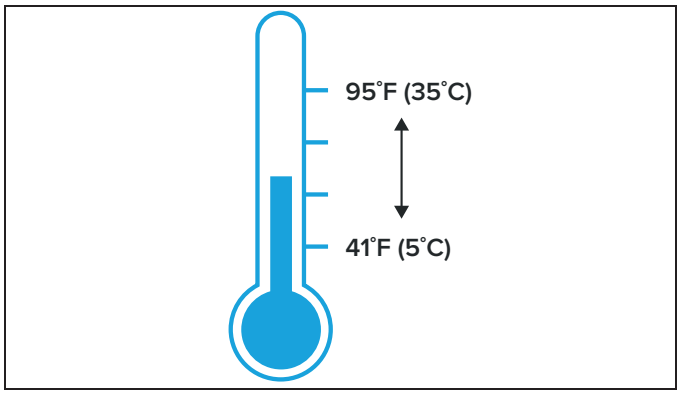
Installation

Location Preparation

NOTICE

Plumbing and electrical must comply with all local and federal codes.

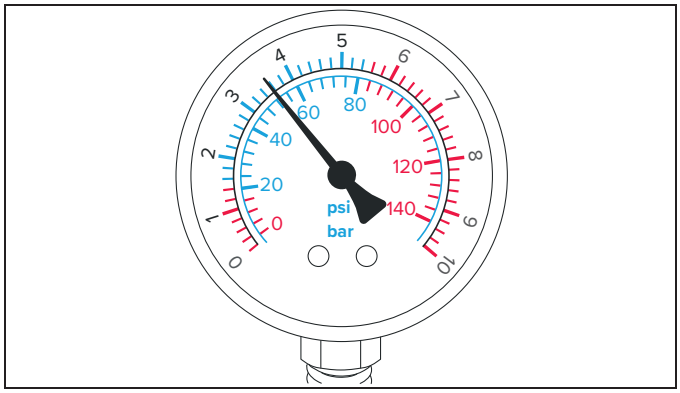
The following conditions must be met before installing the ice maker:



BR00005

Figure 5-1

- The ambient temperature around the ice maker must be within 41–95°F (5–35°C).
- The water inlet temperature must be within 41–95°F (5–35°C).

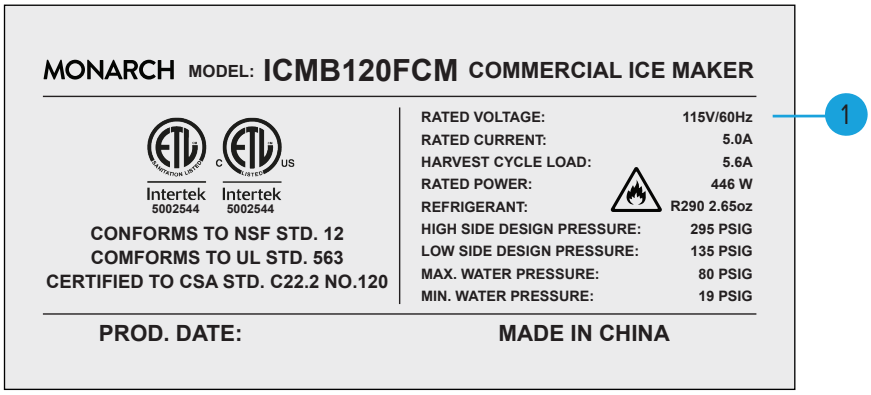


BR00006

Figure 5-2

- A potable water supply must be plumbed to the ice maker with a pressure of 20–80 psi (1.5–5.5 bar).
- The floor must be able to support and withstand the weight of the ice maker.
- A suitable, low-point floor drain must be installed near the ice maker.
- The ice maker must be kept away from other heat emitting equipment or heat sources. Do not install machine in direct sunlight.
- Open space around the machine must be maintained around the ice machine to provide sufficient ventilation. At least 8 in. (203 mm) for the rear wall, 6 in. (152 mm) for the sides, and 12 in. (304 mm) in the front.

- The electric source must be installed by a properly trained electrician. A Ground Fault Circuit Interrupter (GFCI) outlet must be paired with a GFCI circuit breaker at the breaker box.



BR00007

Figure 5-3

Part	Description
1	Rated Voltage

- The power supply must be ±6% of the rated voltage (1) indicated on the machine's nameplate.
- Keep in mind the location of the filter for easy filter replacement, if required.

Set-Up

Unpacking the Ice Maker

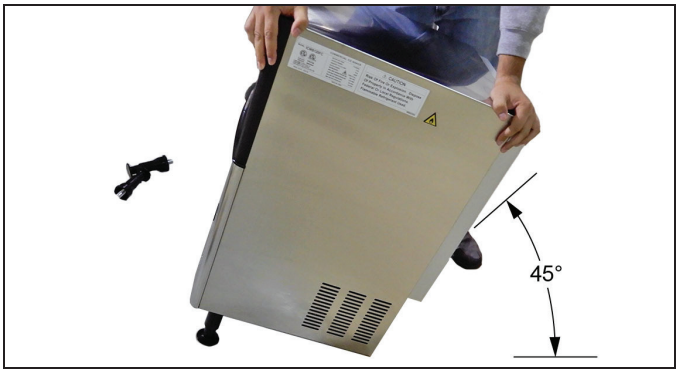
WARNING

Never tilt the ice maker more than 45-degrees. The ice maker must remain upright.

NOTICE

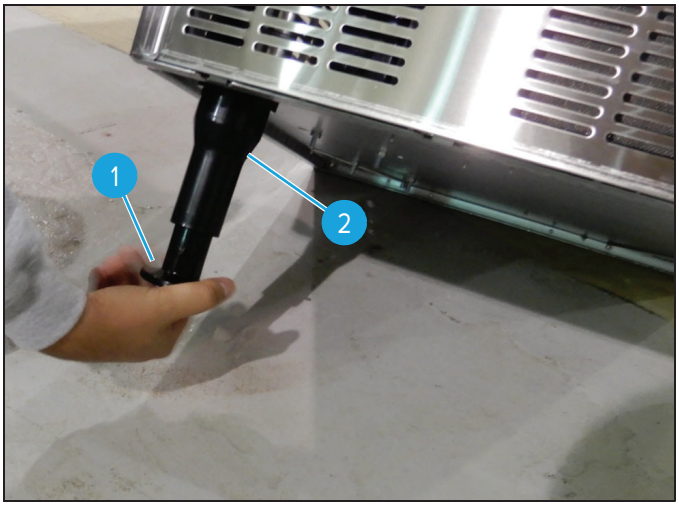
To avoid damage to the contents, do not use box cutters on the carton.

To aid in protecting the outer surface of the ice maker, leave the protective film intact until the last step in the entire setup process.



BR50012

Figure 5-4



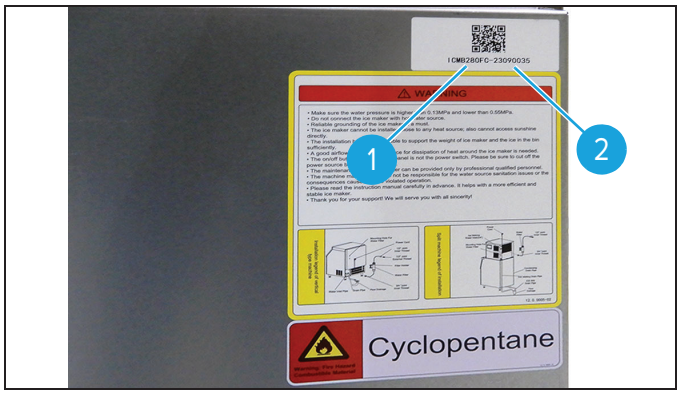
BR50014

Figure 5-5

Part	Description
1	Leveler (4 used)
2	Leg (4 used)

1. Remove the outer carton using extra care.
2. Retain included parts in the ice bin for assembly.
3. Remove the ice maker from the shipping skid.
4. Install the legs (2) onto the bottom of the ice maker.

5. Spin the leg levelers (1) all the way in until it is time to level the unit in the area where it is installed.



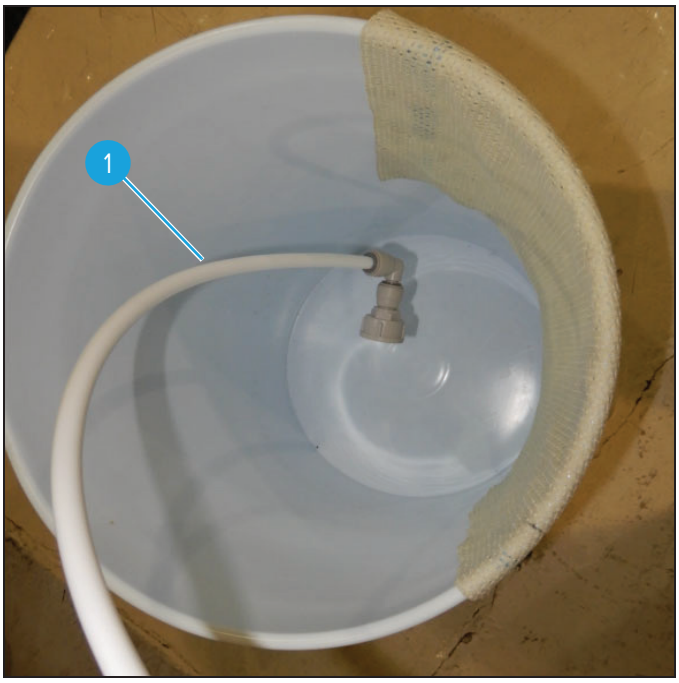
BR50011

Figure 5-6

Part	Description
1	Model Number
2	Serial Number

1. Take note of the nameplate on the rear of the machine on the upper, right-hand corner. Write down the model number (1) and serial number (2) for future reference.
2. Carefully position the unit where it will be installed. Do not connect power.
3. When the machine is in its final position, verify the level of the machine from front-to-back and side-to-side using a digital or spirit level. Adjust the leg levelers until the unit is perfectly level and standing sturdy (not wobbling).

Water Inlet Plumbing



BR50013

Figure 5-7

Part	Description
1	Filter Outlet Hose

NOTICE

When installing or connecting to threaded adapters or couplers, wrap the connections with plumber's tape at least 5 times in a clockwise direction.

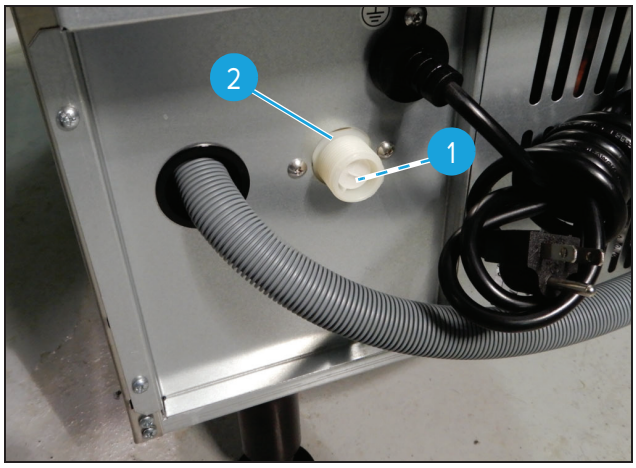
NOTICE

The filter cartridge must be replaced every 3–6 months or as directed by the filter and cartridge manufacturer.

New water filter cartridges must be flushed with clean water before supplying water to the ice machine. Run water through the filter outlet hose (1) into a drain or suitable bucket until the water runs clear. Reconnect the filter outlet to the water supply line when flushing is complete.

If the building is equipped with a complete building filtration system, an individual water filter may not be necessary.

1. Connect the inlet water filter and water line according to the flow direction indicators on the filter assembly. Refer to the filter manufacturer installation instructions.



BR50015

Figure 5-8

Part	Description
1	Strainer
2	Inlet

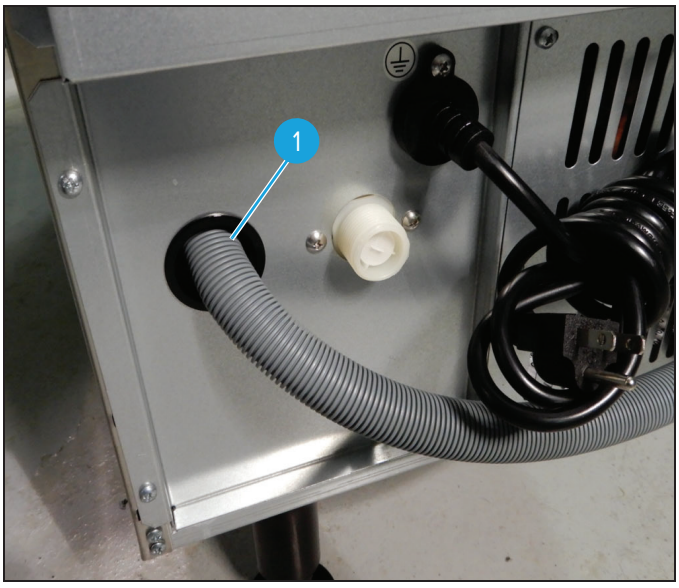
NOTE: Do not remove the strainer (1) from the inlet (2). Only remove it for cleaning.

⚠WARNING

If using a PVC solvent, keep away from the plastic parts of the ice machine.

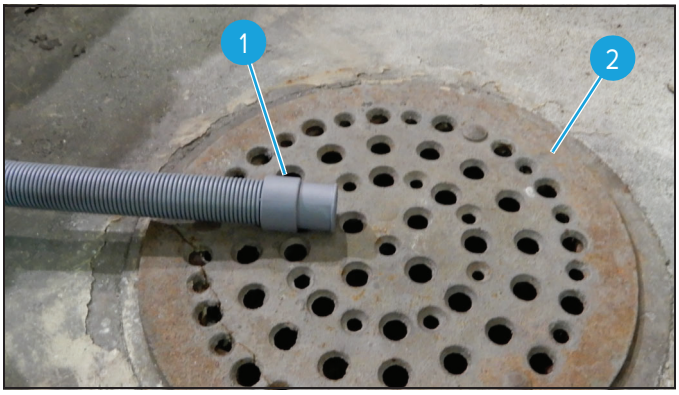
2. Connect the ice maker to the water supply using the supplied 3/4 in. inlet fitting. A shut-off valve (not supplied) is recommended to be installed in-line where it can be easily accessed.

Water Outlet and Drain Plumbing



BR50015

Figure 5-9



BR50028

Figure 5-10

Part	Description
1	Drain Hose
2	Floor Drain

NOTICE

The drain hose from the ice maker must have a continuous downward flow of more than 1 in. (25 mm) for every 3 ft. (91 cm). An open floor drain port is recommended.

1. The drain hose (1) at the bottom of the ice maker rear panel is already plumbed. Route the drain hose to the floor drain (2) as shown.

Cleaning

BR00004

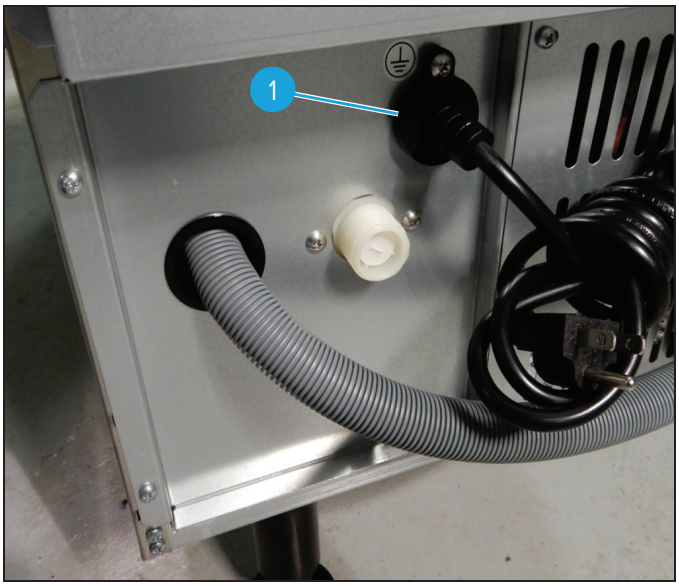
Figure 5-11

NOTE: The ice bin has been sanitized at the factory before packing and shipping. Dust and odors can accumulate in and on the machine during transit.

1. Using a sponge and warm soapy water, clean the inside of the ice storage bin. Drain excess soapy water, rinse with clean potable water, drain again, and allow to air dry or hand dry using a lint-free towel.

   NOTE: *For further cleaning information, see* ***Chapter 8: Cleaning and Maintenance***.

Electrical



BR50015

Figure 5-12

Part	Description
1	Power Cord

WARNING

Never use an extension cord or power strip to connect power.

1. The ice maker comes with its own power cord. It must be connected to a GFCI outlet.

Initial Start-Up Checklist

Verify the following steps are performed prior to ice maker start-up:

- All packaging material has been removed from the ice maker.
- All parts and accessories have been removed from the ice bin.
- Ice maker is level.
- The water line is connected and the valve is OPEN.
- The power cord is connected to the GFCI outlet. and the GFCI breaker is in the OFF position.
- Water and ambient air temperatures meet the requirements for efficient operation.
- Water supply pressure is within specification.

Start-Up:

- Turn the power supply at the breaker box to the ON position.
- Turn the power ON at the control panel and the ice maker will begin making ice automatically after a self-check process.

Confirming Normal Operation:

- Water is present in the ice maker water tank with no overflow.
- The water pump is operational, and water is flowing into the evaporator.
- If the compressor is operating normally, the evaporator and ice making water temperature is decreasing gradually.
- Verify that the fan is operating and air is flowing through the inlet and outlet unobstructed.
- Note if the machine is running smoothly and quietly, with no vibration.

NOTE: *The higher the air and water temperature, the longer it may take to produce ice.*

- Ice will begin to dispense into the ice bin in about 10–20 minutes, depending on ambient air and water temperature.

NOTICE

If there are any problems with start-up, retrace installation steps and refer to Chapter 7: Troubleshooting.

Chapter 6

Operation

Operation Instructions

- **Start-up:** The water source needs to be connected and the power supply needs to be turned on when proper installation is complete. When the machine is turned on for the first time, confirm that it is operating as it should.
- **Self-check:** The ice maker will do a self-check and purge out any remaining water on initial start-up.
- **Preparing:** Once the self-check is complete, the inlet valve will then open and inlet water will flow in until it reaches the specified level; at this point the ice maker will defrost one time.
- **Ice making:** Once pre-cooling for 30 seconds has finished, the water pump will then start and water will smoothly and evenly flow through the evaporator. This allows for the ice cubes to gradually be formed in the ice cube tray.
- **Ice harvest (drop):** After the ice making is complete and the water pump has shut-off, the defrosting valve is turned on. Hot gas will then enter into the evaporator for roughly 1—2 minutes and the ice cubes will then slide from the evaporator into the storage bin.

⚠WARNING

To prevent ice from hitting your hand, DO NOT place your hand in the ice storage bin during the ice falling process!

- **Shutdown:** Pressing the ON/OFF button on the control panel will stop the ice maker from working during the running process.
- **Bin full stop:** Ice making will stop after 40 seconds once the bin is filled to a certain height. A sensor at the top of the bin triggers the stop. Spread the ice around that piles in front of the sensor in order to maximize bin space.

NOTE: Gently open and close the storage bin.

- **Repeat ice-making:** Once ice is moved or taken away from the sensor, the ice maker will then go back to processing ice within seconds.

NOTICE

The ice maker must not sit idle for a long period of time. It needs to be turned ON and run for about 2—4 hours every 2 months.

Control Panel

BR00036

Figure 6-1

1. LED Display:
   - Self-check: Displays “ini” code.
   - Preparing: Counts forward (in seconds).
   - Ice making: Counts forward (in seconds) prior to water reaching 32° F. Then counts backward (in seconds) to 0 seconds afterwards.
   - Ice harvest: Counts forward (in seconds).
   - Clean: “CLE” displays during the cleaning and descaling process
   - Sanitizing: “STL” displays during sanitizing
   - Rinse: “RIN” displays during rinsing.
2. LED Lamps: Lights turn on/off.
3. Ice Cube Thickness Adjustment: If you are not content with the ice size that is being produced, press the ice cube minus (–) button for 3 seconds. To adjust the ice cube thickness, click the plus (+) or minus (–) button on the panel.

NOTE: Ice making time is extended or shortened by approximately 1 minute by clicking the plus (+) or minus (–) button one time.

4. Cleaning: Hold the cleaning button for 3 seconds during normal operation to enter the cleaning process. Cleaning agents and disinfectants need to be placed into the water trough during the entire cleaning process.

NOTE: ONLY use nickel safe cleaning and sanitizing chemicals.

NOTE: The ice maker will start making ice again when the cleaning process is finished.

5. ON/OFF: Use this button to turn the machine ON or OFF.

Chapter 7

Troubleshooting

Faults and Troubleshooting

Table 7-1: Troubleshooting

Fault	Possible cause	Possible Solution
Machine is not working.	Power or power switch is OFF.	Verify the power switch and breaker switch is ON.
Power indicator light is OFF.	Plug is loose.	Verify the power switch and breaker switch is ON.
Machine shutdown every 3 minutes after start-up.	The ambient temperature is too high.	Ambient temperature must be 41–95°F (5–35°C).
The display indicates fault code E4 (high temperature).	The condenser is dirty or blocked.	Clear the condenser of dirt, debris or blockage.
	High-pressure switch wire has become disconnected.	Check the connection or repair the switch electrical connectors. Replace the switch if necessary.
The display indicates fault code E6 (high pressure).	The fan does not engage.	Check the connection or repair the fan. Replace the fan or switch if necessary.
Ice defrost is irregular.	Ambient temperature is too low.	Ambient temperature must be 41–95°F (5–35°C).
	The defrost valve is not engaging.	Repair or replace the defrost valve.
	Ice cubes are too thick or too thin.	Verify the correct ice thickness setting.
Ice cubes are too thin or incomplete. Transparency of ice cubes is poor.	Ice cubes are too thin.	Verify the correct ice thickness setting.
	Water pressure is low.	Sufficient water supply pressure is 20–80 psi (1.5–5.5 bar). Verify water pressure is within specification.
	Temperature of water is too warm.	Water temperature must be 41–95°F (5–35°C).
	Water inlet valve is not working properly.	Repair or replace the water inlet valve if necessary.
	Water inlet valve is dirty or blocked.	Check for water leaks and clear obstructions. Repair or replace the water inlet valve if necessary.
	Water leak detected.	Check, repair or replace the water inlet filter and plumbing connections.
	Water filter has not been changed and is overdue.	Replace the water filter.

Fault	Possible cause	Possible Solution
Ice production is too slow.	The condenser or air filter is dirty or blocked.	Clean the condenser and air filter. Remove dirt, debris and any air obstruction.
	Ambient temperature is too high.	Ambient temperature must be 41–95°F (5–35°C).
	Ventilation is poor.	Proper ventilation is necessary for the ice maker to function efficiently.
	Temperature of water is too warm.	Water temperature must be 41–95°F (5–35°C).
Ice maker is noisy.	The machine is not on a level surface.	Level the machine using the leg levelers and a digital or spirit level for accuracy.
Water does not flow into the machine.	The water supply is shut off.	Check the water flow to the machine and the shutoff valve inside the machine cabinet.
Machine leaking water.	Plugged drain.	Check for drain blockage or restriction.
	The ice catch pan is overflowing.	Remove excess ice from the pan.
	Catch pan screen is plugged.	Clean the restriction from the screen.
	The ice maker and dispenser gasket is leaking.	Remove the head and replace the foam gasket.

Fault Protection and Diagnostics

There are a few factors that indicate a fault with the machine. The ice maker monitors faults in the machine and detects whether it should be shut down for safety and machine protection.

The following fault codes are displayed on the user panel:

Table 7-2: Diagnostic Codes

Code	Comments	Machine Action
E01	Evaporator failure	Protective shutdown
E02	Ice making time-out	Protective shutdown
E03	Ice making overtime	Protective shutdown
E04	Overheating	Protective shutdown
E05	Insufficient water	Protective shutdown
E06	High-pressure	Protective shutdown
E07	Condensation sensor (open circuit)	Does not shutdown (error LED flashes every 5 seconds)
E08	Condensation sensor (short circuit)	Does not shutdown (error LED flashes every 5 seconds)
E09	Evaporator sensor (open circuit)	Does not shutdown
E10	Evaporator sensor (short circuit)	Does not shutdown
E11	Refrigeration system failure	Protective shutdown
E12	Water level control	Protective shutdown
E13	Pump or water level	Protective shutdown

Other faults can shutdown the ice maker for safety and protection, including:

- If it detects that ice has not been harvested from the trough for three cycles.
- If the ambient temperature is too high. Proper ventilation is necessary to operate efficiently. Ideal ambient temperature is 41–95°F (5–35°C).

Service Call

Before making a service call, verify the following if the machine is not operating properly:

1. Verify the water supply:
   - Is there water in the trough?
   - Is the water supply valve OPEN?
   - Is there a water leak detected visually
   - Is the water pressure in the specified range 20–80 psi (1.5–5.5 bar)?
   - Check the inlet water temperature. Is it 41–95°F (5–35°C)?
2. Verify the power supply:
   - Is the power indicator on the display panel ON?
   - Does the display panel indicate an OFF standby status?
   - If the display panel is dark, with no readouts or LED light indicators ON, verify that the machine is plugged-in to the power supply and check the breaker switches.

When making a service call, have the model and serial number information from the nameplate available for the service team.

NOTE: *A service call may be charged to the user if the fault lies on failure to properly maintain the machine. Refer to* ***Chapter 8: Cleaning and Maintenance*** *for proper machine care.*

Service Contact Information:

Email: cs@briowater.com

Phone: 1 (844) 257-4103

Support Hours: Monday-Friday / 9am—5pm PST

Adjust Ice Thickness

BR00015

Figure 7-1

Part	Description
1	Plus (+) Button
2	Minus (–) Button

Pressing the plus (+) (1) or minus (–) (2) button increases or decreases the ice making cycle by 1 minute. The time that it takes to make the ice determines the ice thickness and cycle time.

1. Verify that the water flows smoothly across the evaporator.
2. Press and hold the (–) button for 3 seconds or until the ice size is indicated in the LED display (example “-01”).
3. Changing the ice thickness:
   - (+) to increase the size
   - (–) to decrease the size

Before adjusting the ice thickness again, wait for three complete ice cycles to verify that the preferred ice thickness has been obtained.

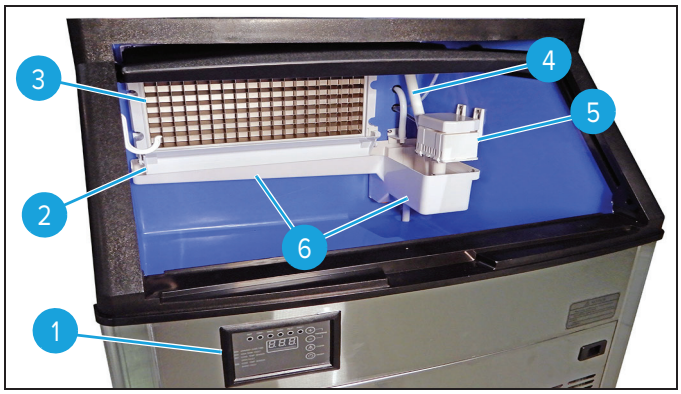
Chapter 8

Cleaning and Maintenance

Cleaning and Maintenance Schedule

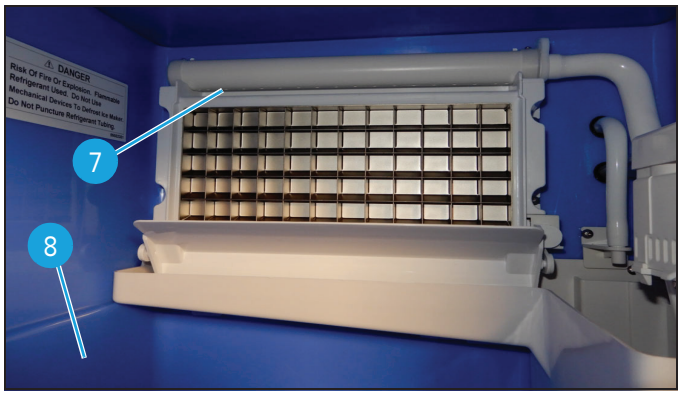
Cleaning and Maintenance Tasks	Daily	2 Weeks	3 Months
Clean and sanitize the ice scoop and bucket	X		
Clean vent filter		X	
Clean condenser			X
Clean and sanitize the water system			X
Disassemble and clean all removable parts			X
Clean and sanitize the ice storage bin			X

Ice Maker Component Identification



BR50018

Figure 8-1



BR50019

Figure 8-2

Part	Description
1	Control Panel
2	Water Curtain
3	Evaporator
4	Connecting Hose
5	Water Pump
6	Water Tank
7	Distribution Tube
8	Ice Storage Bin

Cleaning Solution and Sanitizer Mixtures

NOTICE

Verify that any container used for mixtures has been sanitized and is food-grade clean.

Cleaning Solution

Add the following to 1 gallon of warm water (95—115°F):

- 5 oz. of cleaning solution

OR

- Mild detergent

Sanitizing Solution

Add the following to 2 gallons of warm water (95—115°F):

- An approved sanitizer (follow label directions)

OR

- 1 oz. of bleach

Sanitizing Instructions

According to the sanitizer instructions, mix a solution of sanitizer and water. Verify all the sanitizer has mixed completely. The water curtain, distribution tubes, tube assembly clamp, hose clamps, and screws all must be soaked in the solution for at least 5 minutes. There is no need to rinse if using a no-rinse sanitizer.

NOTE: For service call information, see Chapter 7: Troubleshooting.

Ice Maker — Maintenance

DANGER

A qualified professional must carry out the installation, repair, and maintenance of this machine. If not, a risk of electric shock, fire, or personal injury may occur with incorrect operation. Machine should also be serviced every three months for safe, optimal performance.

WARNING

The water source and power supply must be OFF before conducting maintenance or manual cleaning.

Exterior Cleaning

- The area around the ice maker must be kept clear of dirt, debris, and clutter. Clean regularly around the ice maker and its environment to maintain machine efficiency.
- The ice maker vents must never be blocked.
- A mild detergent can be used to clean around the outer enclosure and then wiped clean.

NOTICE

Use a commercial stainless steel cleaner and polish if necessary. Without proper cleaning and maintenance, stainless steel can begin to rust.

Inlet Water Filter

- Regularly check the water filter and change the filter cartridge every 3—6 months, or as specified by the filter manufacturer.

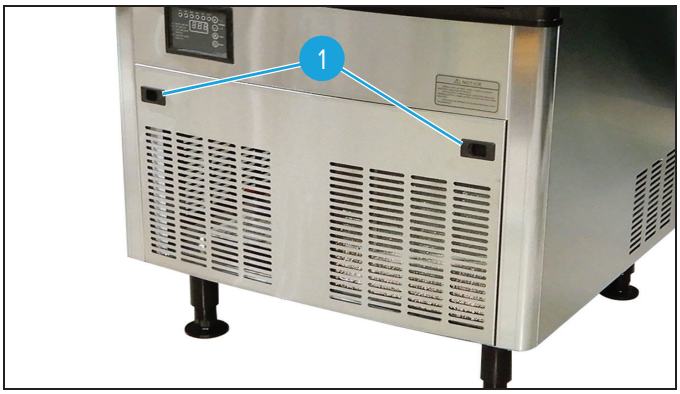
Interior Cleaning

BR00004

Figure 8-3

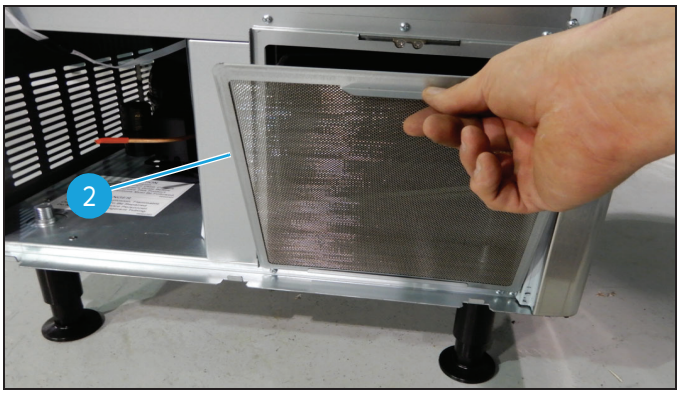
- Clean the inside of the ice storage bin and door with water and a cleaning solution every 3 months. Rinse thoroughly with clean water.
- Repeat the above process with water and a sanitizing solution.
- Do not flush the evaporator directly.

Vent Filter



BR50020

Figure 8-4



BR50021

Figure 8-5

Part	Description
1	Locks (2 used)
2	Vent Filter

NOTICE

The vent filter must be cleaned every 2 weeks.

1. Disengage locks (1) and remove the panel.
2. Pull the vent filter (2) from the holder as shown and clean using warm water and a brush.

Condenser

CAUTION

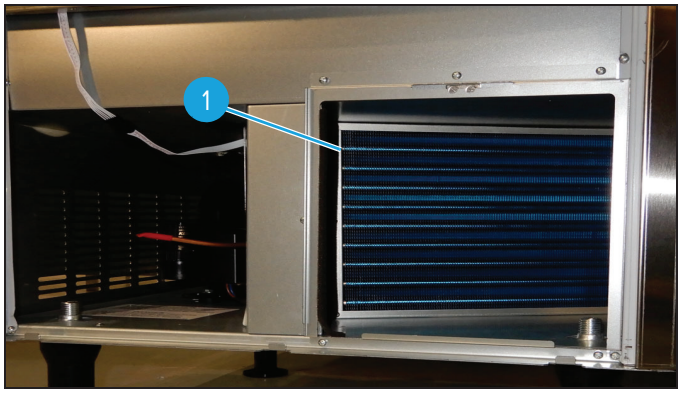
Avoid damage to the condenser fins. Use extra care moving up and down along the condenser fins using a vacuum with a brush attachment as shown.

DANGER

Avoid personal injury. The condenser fins are sharp. Use care when cleaning.

NOTICE

The air cooled ice maker condenser must be cleaned every 3 months.



BR00010

Figure 8-6

Part	Description
1	Condenser

1. Remove the service panel and the vent filter.
2. Use a vacuum with a soft bristle brush and clean the fins of the condenser (1) in an up and down motion.
3. Install the vent filter and service panel in reverse order of removal.

Water Line

- The water line must be cleaned regularly to ensure food safety.

Winterizing

1. Turn the water and power supply OFF.
2. Drain all remaining water from the water tank inlet and drain pipe.
3. Dry using a lint free cloth.

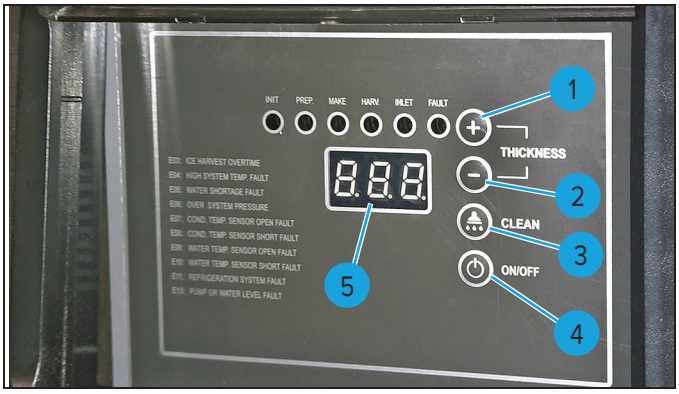
NOTE: Poor ice maker maintenance is not covered by the manufacturer's warranty.

Ice Maker — Automatic Clean Function

The ice maker can automatically clean and sanitize the ice sliding board, water distribution tubes, water supply line, and water pump.

Clean, sanitize, and do a complete rinsing of the ice storage bin.

A rinse function begins after the cleaning and sanitizing functions are complete.



BR00015

Figure 8-7

Part	Description
1	Plus (+) Button
2	Minus (–) Button
3	Clean Button
4	ON/OFF Button
5	LED Display

1. Before cleaning, empty the ice storage bin.
2. Turn the ice maker ON using the ON/OFF button (4).
3. Press the CLEAN button (3) for 3 seconds and the ice maker will begin the automatic cleaning function.

NOTE: Make sure to add the proper cleaning solution with the proper amount into the water tank until it reaches the normal operating water level.

4. Press the CLEAN button (3) again and the ice maker will go into an auto clean mode for approximately 15 minutes.

NOTE: Refer to the cleaner and sanitizer being used for proper mixing and coding instructions.

5. With the proper cleaning solution, spray the evaporator during the cleaning cycle to ensure a thorough cleaning. When the cleaning function is complete, the LED display (5) will flash “CLE”.
6. Before pressing the CLEAN button (3) again, add the proper amount of sanitizing solution manually into the water tank followed by the clean and sanitize process instruction.
7. When the cleaning and sanitizing functions are complete, the ice maker will automatically enter the rinse function that will run for approximately 5 minutes. The LED display will show “RIN” throughout five rinse cycles.
8. The ice maker will return to the regular ice making functions when the entire cleaning process is complete.

WARNING

To avoid cleaning solution contamination, discard the first five cycles of ice that is created.

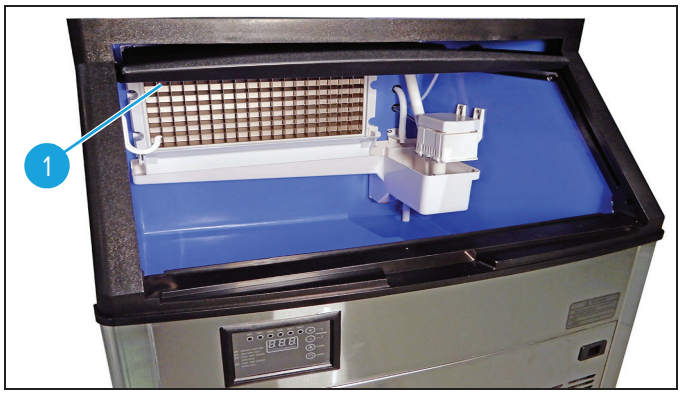
Ice Maker — Manual Cleaning and Sanitizing

Cleaning Instructions

NOTICE

Manual cleaning is recommended every 3 months.

Avoid contamination by removing all ice from the storage bin or dispenser.



BR50018

Figure 8-8

Part	Description
1	Door

1. Open the ice maker door (1).

BR00015

Figure 8-9

Part	Description
1	Clean Button
2	Minus (–) Button

2. Holding the CLEAN button (1) for 3 seconds while the ice maker is running will enter it into cleaning mode (CLE will display). While in the cleaning mode, press the minus (–) button (2) for 3 seconds to drain the water from the tank.
3. Press the OFF button and power down the ice maker.

⚠WARNING

Turn OFF the power supply at the breaker box once the draining is complete.

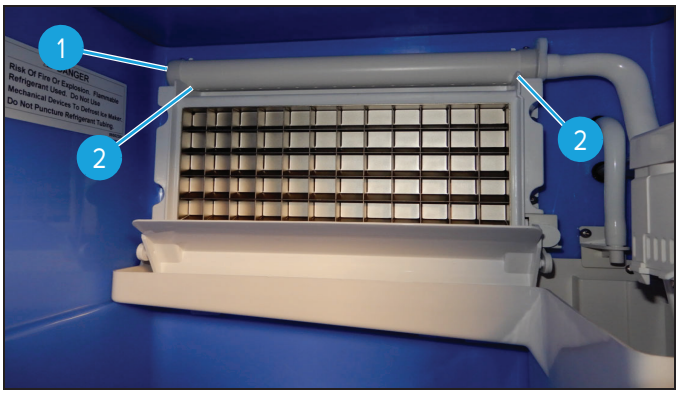


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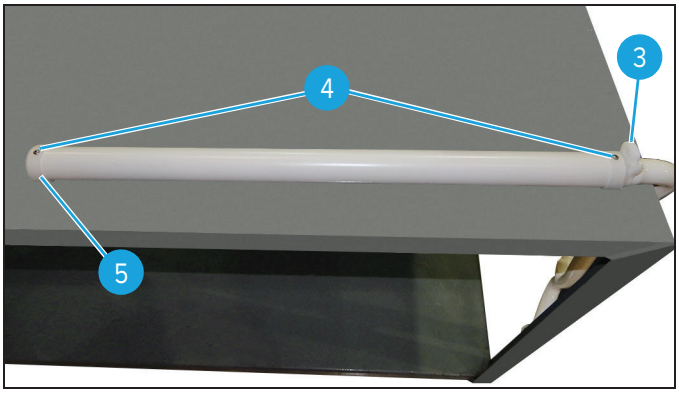
Figure 8-10



BR00021

Figure 8-11

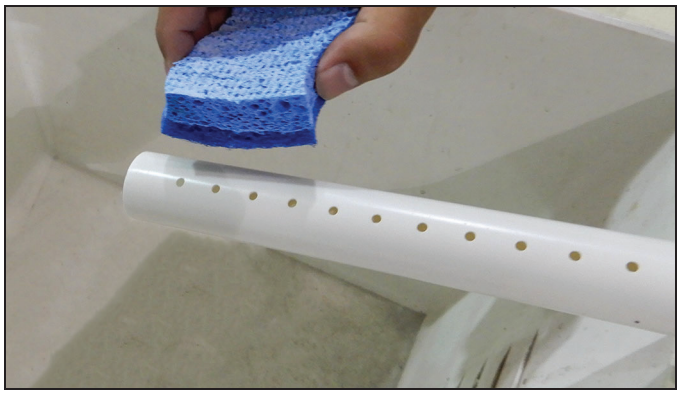
Part	Description
1	Distribution Pipe
2	Clamp (2 used)
3	Hose Clamp
4	Screw (2 used)
5	Plug

4. Pull the distribution pipe (1) from clamps (2).
5. Disconnect the connecting hose from the water pump and remove the hose and pipe assembly from the ice maker.
6. Remove hose clamp (3) from the water distribution pipe.

NOTE: For assembly, record how the pipes are removed. The holes in the pipes face opposing directions:

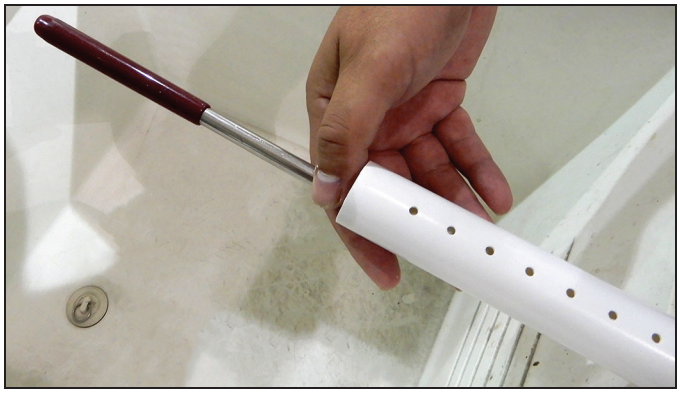
- Inner pipe, holes UP
- Outer pipe, holes DOWN

7. Remove screws (4) and separate the inner and outer distribution pipes from the plug (5).



BR00024

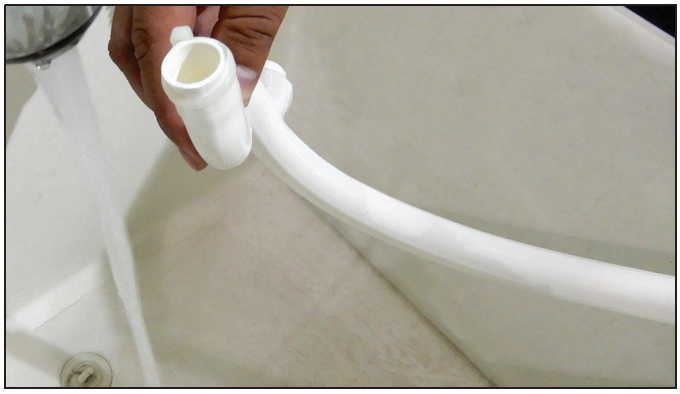
Figure 8-12



BR00025

Figure 8-13

8. Clean the exterior and interior of both water distribution pipes with cleaning solution using a sponge, pipe cleaner, or brush.



BR00026

Figure 8-14

9. Clean and flush the connecting hose with cleaning solution and flush thoroughly with clean water.

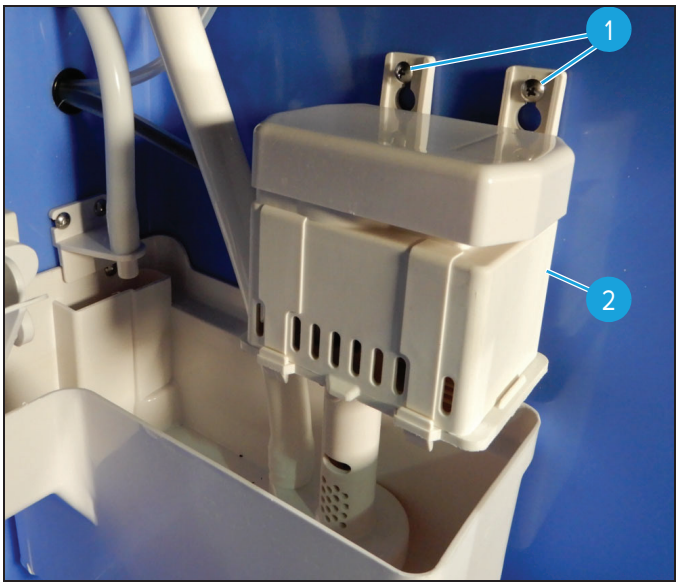


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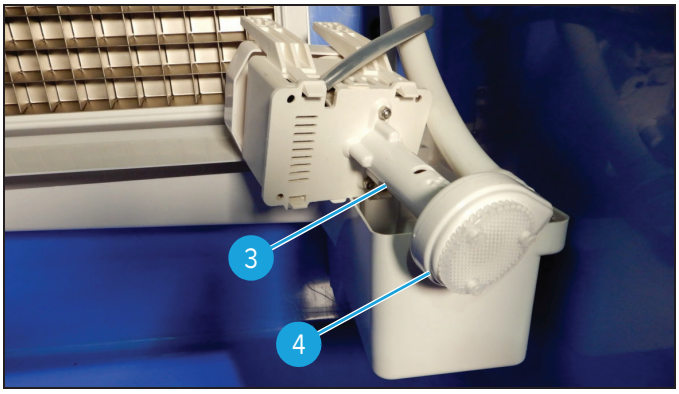
Figure 8-15



BR50024

Figure 8-16

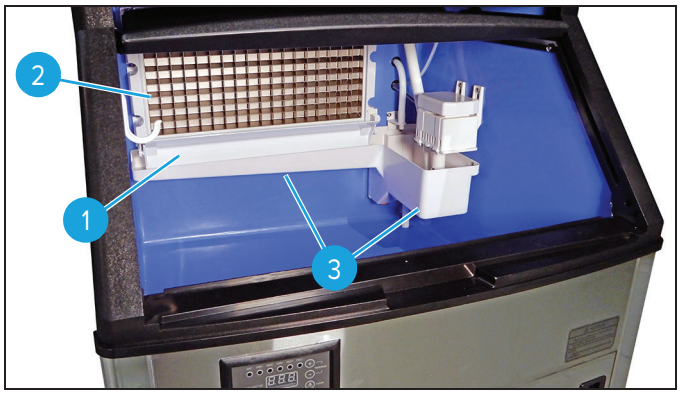
Part	Description
1	Screws (2 used)
2	Water Pump Assembly
3	Suction Tube
4	Strainer

10. Loosen screws (1) and lift the water pump assembly (2) until it can be removed from the key holes.

⚠WARNING

Avoid damage to the upper part of the water pump. It is not submersible and should only be cleaned with a damp, lint free cloth with cleaning solution applied.

11. Carefully pry the pump strainer (4) away from the suction tube (3) using your fingers or a flat blade screwdriver. Scrub the strainer using a cleaning solution and rinse.



BR50018

Figure 8-17

Part	Description
1	Water Curtain
2	Evaporator
3	Water Tank

12. Clean the water curtain (1), evaporator (2), and water tank (3) using cleaning solution and scrubbing pad or brush.

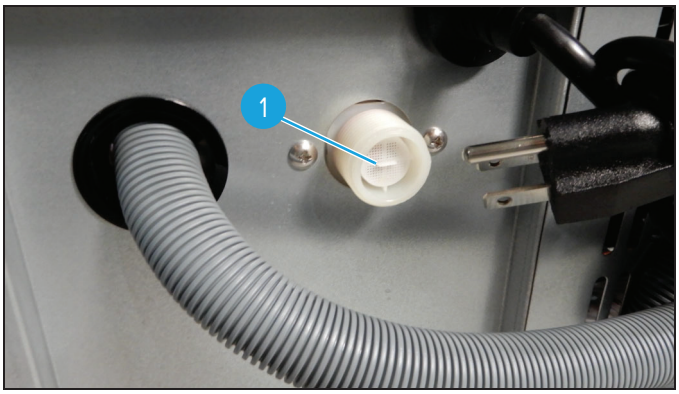


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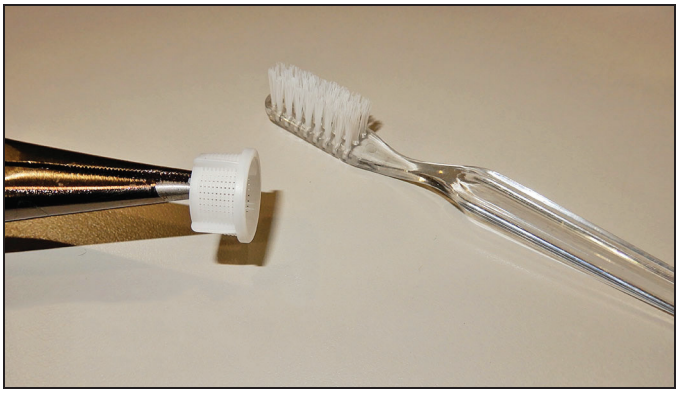
Figure 8-18



BR00029

Figure 8-19

Part	Description
1	Water Inlet Strainer

13. Disconnect the water inlet and remove the water inlet strainer (1) using a pair of long nose pliers. Scrub the strainer using a brush under clean water.
14. Rinse all parts thoroughly before assembly.

NOTE: Reapply plumber's tape to threaded connections if necessary.

15. Assemble all parts in reverse order of removal.

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Chapter 9

Warranty

Warranty Information

Brio ("Vendor") warrants to the original purchaser of the Monarch Ice Maker (the "Product"), and to no other person, that if the Product is assembled and operated in accordance with the printed instructions accompanying it, then for a period of one (1) year from the date of purchase, all parts in the Product shall be free from defects in material and workmanship. This Limited Warranty shall be limited to repair or replacement of parts that prove defective under normal use and service and which Vendor shall determine in its reasonable discretion upon examination to be defective. To take advantage of this Limited Warranty, please follow these steps:

1. Please retain your sales slip or invoice, as Vendor may require reasonable proof of your date of purchase.
2. Contact Vendor's Customer Service Department using the contact information listed below.
3. Return parts to Vendor, per Vendor's instructions, at your cost and expense.
4. Upon receipt by Vendor, the Vendor shall advise you in writing whether a defect covered by this Limited Warranty exists in any returned part and whether your claim has been approved or denied.
5. Upon Vendor's approval of your claim, the Vendor will replace such defective part without charge to you.

WHAT THIS LIMITED WARRANTY DOES NOT COVER: This Limited Warranty does not cover any failures or operating difficulties of the Product due to accident, abuse, misuse, alteration, misapplication, improper installation, maintenance or service by you or any third party, or failure to perform normal and routine maintenance on the Product, as set out in the User's Manual. In addition, this Limited Warranty does not cover damages to the finish, such as scratches, dents, discoloration, or rust after purchase.

This Limited Warranty is the only express warranty given on the Product and is in lieu of all other express warranties. Vendor disclaims all warranties for products that are purchased from seller other than authorized retailers or distributors. THIS LIMITED WARRANTY RESTRICTS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, THE IMPIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO THE ONE (1) YEAR TERM OF THIS LIMITED WARRANTY. UPON THE EXPIRATION OF THE ONE (1) YEAR TERM OF THIS LIMITED WARRANTY, VENDOR DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH THE PRODUCT BEING THUS SOLD AS-IS WITH ALL FAULTS. FURTHER, VENDOR SHALL HAVE NO LIABILITY WHATSOEVER TO PURCHASER OR ANY THIRD PARTY FOR ANY SPECIAL, INDIRECT, PUNITIVE, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. OTHER THAN THIS LIMITED WARRANTY, THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. Vendor assumes no responsibility for any defects caused by third parties. This Limited Warranty gives you specific legal rights, and you may have other rights which vary from state to state. State law may also override statements in this Limited Warranty regarding the restriction on the duration of implied warranties. Some jurisdictions do not allow exclusion or limitation of special, incidental, or consequential damages, or limitations on how long a warranty lasts; so the above exclusion and limitations may not apply to you.

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