

# **INDOOR/OUTDOOR ICE MAKER**

# Models BIM68OSGDR BIM68OSPUMP



User's Manual

BEFORE USE, PLEASE READ AND FOLLOW ALL SAFETY RULES AND OPERATING INSTRUCTIONS

Write Model and Serial Numbers here:

Model No.: \_\_\_\_\_

Ser. No.: \_\_\_\_\_

FELIX STORCH, INC. Summit Appliance Division An ISO 9001:2015 registered company 770 Garrison Avenue Bronx, New York 10474

# Table of Contents

Ice Maker Safety		2
Important Safeguards	3 -	5
Electrical connection	4 -	5
Extension cord		5
Unpacking, etc	5-	6
Outside air		5
Water supply		
Water quality	5-	6
Location of Parts		7
Installation	8 - 1	4
Space requirements for installation		8
Requirements for power supply		8
Requirements for plumbing		
Gravity drain pipe model		
Drain pump model		
What to check prior to installation		
Changing door-opening direction		
Installation checklist		
Specific Features		
Operation1		
Initial operation		
Using the ice maker		
Ice shape		
Ice container		
Operation time		
Ice production		
Ice removal cycle		
How the ice maker uses water		
Cleaning		
Cleaning the nozzle / ice slide / water tank 1		
Cleaning the filters of the water tank andice tank		
Cleaning the exterior		
Cleaning the condenser		
Maintenance		
Maintenance in winter		
Adjusting the ice maker		
Specifications		
Troubleshooting		
Limited Warranty		
		••

## **ICE MAKER SAFETY**

### Your safety and the safety of others are very important.

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



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

## \Lambda DANGER 🕰

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

## A 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.

#### 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 two or more people to move & install ice maker.

## SAVE THESE INSTRUCTIONS

## **IMPORTANT SAFEGUARDS**



Before the ice maker is used, it must be properly positioned and installed as described in this manual, so read the manual carefully. SUMMIT® APPLIANCE strongly recommends 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:

## A DANGER A

- 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.
- Before operating, put all panels back into place.
- Never allow children to operate, play with or crawl inside the ice maker.
- 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. All other servicing should be referred to a qualified technician.

## 

- Use two or more people to move and install the ice maker. Failure to do so can result in back or other injury.
- Never install or operate the unit in an enclosed area, such as a closed cabinet. To ensure proper ventilation for your ice maker, the front of the unit must be completely unobstructed. Choose a well-ventilated area with temperatures above 50°F (10°C) and below 100°F (38°C). The optimum supplied water temperature would be below 50°F. 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 V AC, 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 the power supply cord between the ice maker and cabinet.
- The fuse (or circuit breaker) size should be 15 amperes.

- It is important for the ice maker to be leveled in order to work properly. Otherwise water may not flow properly through the evaporator (ice mold). The ice production will be less than normal. You may need to make several adjustments to level it.
- All installations must be in accordance with local plumbing code requirements.
- Make certain that hoses are not pinched, kinked or damaged during installation.
- Check for leaks after water line is connected.
- Although the unit has been tested and cleaned at the factory, due to long-term transit and storage, the first batch of cubes must be discarded.
- 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.
- 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. They 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 cleaning products. Use rubber gloves to protect hands. Carefully read the safety instructions on the container of the ice machine cleaner.
- Do not use the apparatus other than for its intended purpose.

## DANGER 🖊

Risk of child entrapment

Child entrapment and suffocation are not problems of the past. Junked or abandoned refrigerators and freezers are still dangerous, even if they will "just sit in the garage afew days."

- Before you throw away your old refrigerator, ice maker or freezer: Take off the doors. Leave the shelves or drawers in place so that children may not easily climb inside.
- Never allow children to operate, play with, or crawl inside the refrigerator/freezer.

## 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 also prevents overloading house wiring circuits which could cause a fire hazard from overheated wires. Never unplug your ice maker by pulling on the power cord. Always grip the plug firmly and pull straight out from the outlet. Repair or replace immediately all power cords that have become frayed or otherwise damaged. Do not use a cord that shows cracks or abrasion damage along its length or at either end. When moving the ice maker, be careful not to damage the power cord.

#### **Extension Cord**

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

## Unpacking, etc.

After removing the packing materials, check the appearance of the ice maker for possible defects or irregularity. If the product shows any irregularity in its appearance, contact the distributor.

All the packing materials (straps, box, Styrofoam, wood, etc.) should never be left within the reach of children and should be disposed of according to local regulations.

For safety, the product should be installed and used with caution in accordance with the User's manual.

Incorrect installation or careless use of the product may damage or injure the environment, humans, animals, and/or materials and property. The manufacturer does not bear any responsibility for the aforesaid damage or injury.

The automatic ice maker performs best at room temperature of 50~75°F and a supply of water at 50°F.

The ice maker may be installed in either an indoor or outdoor environment, but it should NOT be installed near heat generators such as heaters, stoves, or dish washers.

#### Outside air

The ice maker sucks air through the left section of the kickplate/grill using a fan and expels hot air through the right section of the kickplate/grill. If anything is placed in front of the kickplate/grill, the flow of air flow is disrupted, resulting in reduced performance and, in the worst case, malfunction. The ice maker can be operated within a temperature range of 50°F to 100°F.

### Water supply

The ice maker requires a continuous supply of drinking water at 20psi or higher pressure. The hydrostatic pressure should not exceed 80 psi.

### Water quality

There is no such thing as "perfectly pure" water. All kinds of water including tap water contain some impurities. Rainwater absorbs impurities from the atmosphere or when it passes through soil. Some impurities consist of solid particles called suspended solids and are filtered through micro filters. Any remaining impurities cannot be filtered because they are chemically combined with water molecules. These impurities are called dissolved solids.

The mineral content of the ice produced by the ice maker is reduced compared to the content in the water before conversion into ice. Water containing a low level of impurities is rapidly frozen. The reason for this is that the impurities elevate the temperature of the water. Through such action, most of the impurities condensed in the water-tank of the ice maker form a hard precipitation called scale.

This icemaker reduces the mineral level by circulating water during the harvest cycle (the excessive quantity is removed through the outlet tube). Each cycle requires about 0.64 quart (0.6*l*) of water. For each quart, about 0.5 quart is used in rinsing the water tank and the remaining quantity is removed through the outlet pipe. In this process, some impurities unavoidably remain and may accumulate on the internal parts of the ice maker, forming abnormally-shaped ice cubes. If a large quantity of mineral scale accumulates, the lifespan of the ice maker may be reduced.

For best operation of the ice maker, impurities and minerals should be decomposed by washing periodically. The method of cleaning the ice maker is described on pages 18 - 21.

In general, it is best to use filtered water. Filters may remove not only bad odor but also particles. Neutral water is not recommended.

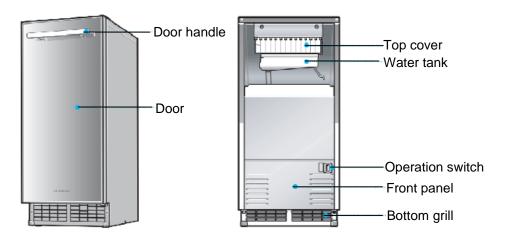
Water softener is not recommended because it exchanges minerals. If the hardness of the water is very high, softening may lead to the formation of opaque pieces of ice.

If you have any questions about the purity of your water, address your inquiry about water treatment to an expert in water quality.

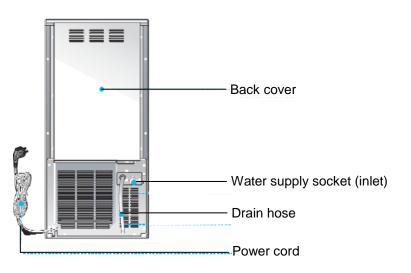
This product was thoroughly washed at the factory. However, check the cleanness of the inside before use and keep it clean during use.

## **Location of Parts**

#### <u>FRONT</u>



<u>BACK</u>



#### Notes:

Model **BIM68OSGDR** is a gravity-drain ice maker. Model **BIM68OSPUMP** includes an internal pump.

Each has a heavy-duty power cord and stainless steel door and cabinet, and is suitable for either indoor or outdoor use.

## Installation

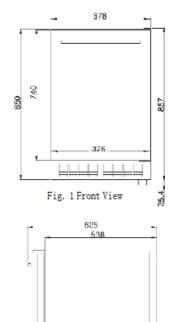


Fig. 2 Side View

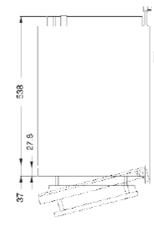


Fig. 3 Top View

### Space requirements for installation

When moving the ice maker, check whether the prepared opening dimensions, electric power, and piping position are correct.

Refer to the installation specifications and drawings shown on pages 10 and 11.

Figures 4, 5, 6 and 7 show the dimensions of the ice makers.

Model BIM68OSGDR is a gravity drain pipe model that requires a drain pipe to run from the exhaust hole at the back of the product to an appropriate drain.

Model BIM68OSPUMP has an internal pump that can raise excess water to a drainage point such as a neighboring sink.

Refer to the specifications shown on pages 10 and 11.

<u>Important Information</u>: Be aware that if the ice maker is installed ina corner, you must leave enough space so that the opening of the door is not obstructed. Adjust the legs at the bottom of the ice maker to be sure it is level.

When moving the ice maker using a hand truck or dolly, place the dolly at the side of the unit and shut or fix the door tightly to avoid possible opening during transport. Cover the ice maker with a blanket or other suitable material to avoid possible damage when moving the product.

## Requirements for power supply

120VAC, 60Hz, 15-amp circuit breaker and electric power are required. A separate circuit is required for grounding.

The power cord of the product should be inserted into a suitable 3-prong grounding-type socket.

Important Information: A Ground Fault Circuit Interrupter (GFCI) is not recommended because it could cause the operation of the product to stop.

Important Information: The provisions of the National Electric Code as well as any local laws and instructions should be observed when installing the product.

## A Warning!

Do not use extension cords or 2-prong adapters. The product must be grounded. Never cut off the grounding terminal of the 3-prong grounding plug.

### **Requirements for plumbing**

Plan the arrangement of the water supply pipes.

Connect a 1/4" diameter copper cable with the tap water pipe.

Install a shutoff valve between the tap water pipe and the product so that the user can operate the valve. Do not install the shutoff valve at the back of the product. Do not use a self-piercing valve. If the tap water has a high level of minerals, a pipeline filter will be required.

The pressure of the tap water should be maintained at a level between 20psi (1.4bar) and 80psi (5.5bar). The tap water and drain pipeline should be planned and prepared at the place of installation. If an electric outlet is available just at the back of the icemaker, installation may be easier. The electric power, tap water pipeline and drain pipeline should satisfy all the provisions under local laws and regulations. For the position of the tap water, refer to the installation specifications and drawings on pages 10, 11 and 12.

<u>Important Information</u>: The icemaker is designed for use in a fixed position but itmay be necessary to pull the unit forward for service. Therefore, do not install any material at the front, upper or lower end of the product which may act as an obstacle when moving the ice maker.

When preparing the bottom after installing the ice maker, place shims equivalent to the thickness of the bottom under the product to keep the ice maker and bottom horizontal. The lateral side should have at least 1/6" (4 mm) of space to allow for the projection of the screw head.

<u>Installation on a slab</u>: Draw up the water to the drain position using the model with a built-in drain pump (BIM68OSPUMP). The drain pump model may raise the water up to about 8ft (2.4m) in height. The more bends in the pipeline, the lower the raising height.

Installation in a narrow or underground space: Either the gravity drain model (BIM68OSGDR) or the drain pump model (BIM68OSPUMP) may be used. If there is no space for drainage/sewage at the back of the ice maker, the drain tube should be placed under the bottom.

<u>Important Information</u>: Pipe installation should be carried out in accordance with all the provisions laid out by local laws and regulations.

## Gravity Drain Pipe Model (BIM68OSGDR)

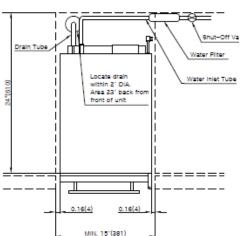


Fig. 4 Top View

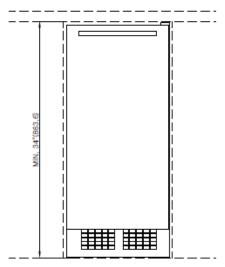


Fig. 5 Front View

Before connecting the drain tube and the water supply pipe with the ice maker, pipes should be arranged as follows.

- The horizontal distance of the drain tube should be 1/4" for every 12" (305 mm) distance.
  - An air gap is required between the drainage tube of the ice maker and the drain pipe or sewage container. A stand pipe fitted with a trap at the lower part may be used as a drain pipe or sewage container.

<u>Important Information</u>:Installation of an incorrect drainage pipe causes the ice in the ice container to melt rapidly.

- 1) Arrange the ice maker at the front of the opening of the installation area.
- 2) Adjust the leveling legs to the correct height.
- 3) Install the inlet pipe (1/4" diameter copper pipe) on the wall and connect the water supply valve.
- 4) Connect the drain pipe from the wall to the ice maker.

If the horizontal distance is 5' (1.5m) or longer, the drain pipe should be arranged by drilling the wall at the rear of the ice maker.

- 5) If the electric outlet is at the back of the product, insert the plug in the electric outlet.
- 6) Install the product so that the front of the product is facing forward.
- 7) Use the inlet pipe after cutting it to the required length.
- 8) Wash the inlet pipe. Connect the inlet pipe with the copper pipe using the flare nut.
- 9) Connect the inlet pipe with the water-supply valve of the product using the flare nut.
- 10) Cut the required length of drain tube.
- 11) Connect the drain nipple (with a diameter of 3/4" FPT (NPT))

The drain tube should be placed on the upside passing the drain fitting.

- 12) Turn on the tap and check for any leakage.
- 13) Be sure the ice maker is level.

## Drain Pump Model (BIM68OSPUMP)

- 1) Arrange the ice maker at the front of the installation opening.
- 2) Adjust the leveling legs to the appropriate height.
- 3) Install the inlet pipe (copper pipe with a diameter of 1/4") on the wall and connect the water supply valve.
- 4) Connect the drain pipe from the wall to the ice maker.
- 5) Important Information: An air gap may be required between the drain tube of the ice maker and the container of the drain pipe under the provision of local laws and regulations. Refer to the accompanying drawing.
- 6) If the electric outlet is at the back of the product, insert the plug into the electric outlet.
- 7) Install the product so that the front of the product is facing forwards.
- 8) Use the inlet pipe after cutting the required length.
- 9) Wash the inlet pipe. Connect the inlet pipe with the copper pipe using the flare nut.
- 10) Connect the inlet pipe with the water-supply valve of the product using the flare nut.
- 11) Cut the required length of drain tube.
- 12) Connect the drain tube (with a diameter of 5/8") with the drain pipe at the back of the product and fix them together using a hose clamp. If required for easy installation, immerse the drain hose in warm water just before connection with the fitting.
- 13) Turn on the tap and check if there is any leakage.
- 14) Pour 3 guarts of water into the ice container. The drain pump should work and pump the water upwards. Check whether the drain pump works or not. Check for any leakage.
- 15) Turn the switch to the "ICE" position.
- 16) The compressor should start working in 3 to 5 minutes.
- 17) Pour 3 guarts of water into the ice container and block the drain tube while the drain pump is operating. At this time, check whether the operation has stopped and that the drain pump works continuously.
- 18) Be sure the ice maker is level. Important Information: Pipe installation should be carried outin accordance with all the provisions laid out by local laws and regulations.

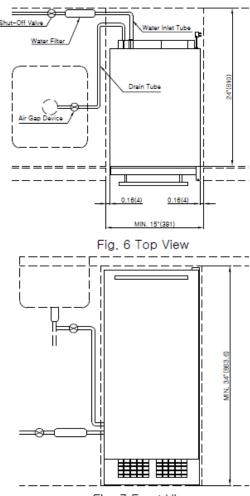


Fig. 7 Front View

### Drain pump kit

You may order the ice maker with or without a drain pump. In the case of the model with no drain pump, water is drained by gravity.

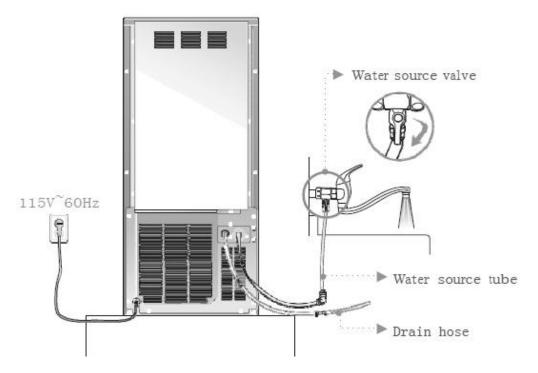
However, it is possible to install a drain pump kit on the gravity drain pipe model if you wish to convert the model to a drain pump model.

You may obtain the necessary parts for conversion from the distributor or on the company's website.

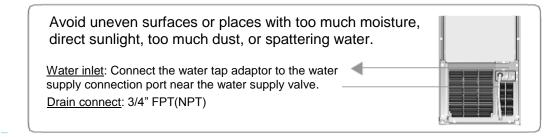
A detailed description of installation is included in the kit.

## What to check prior to installation

## Follow this process!



- The water supply valve may have different shapes depending on the installation condition.
- The filter may be located close to the water source or back of the product depending on the situation.





- In order to guarantee optimal operation of the product, consult with our technicians on how to install the product. (Contact our authorized technicianswhen moving the product after the initial installation.)
- Be sure to connect the water supply adaptor to the cold water drainage pipe.
- The ice maker provides optimal functionality at a room temperature of 50-68°F and supplied water temperature of lower than 50°F.

There may be some water inside the product, which is from the test procedure of the manufacturing process.

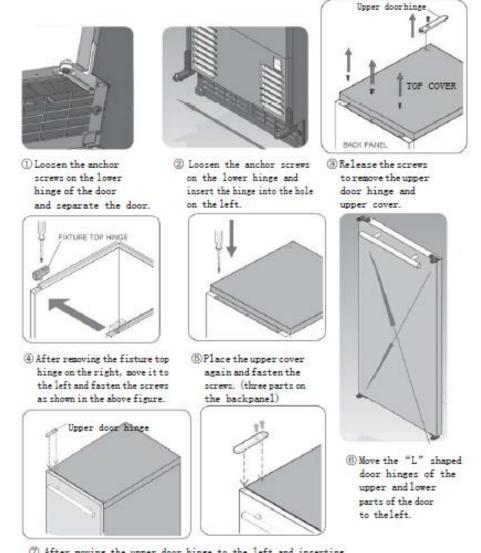
It does not mean that the product has been used prior to installation, so rest assured that you have a new product.

## **Changing Door-opening Direction**

The direction in which the door with fixed hinges opens may be changed.

The hinges are attached to the right-hand side of the door when the product is shipped from the factory.

However, the ice maker is designed so that the hinges may be installed on either side. If the hinges are moved to the holes on the left-hand side, the door will open to the left.



- ⑦ After moving the upper door hinge to the left and inserting it into the hole on the front door, fix it in the hole on the upper cover and fasten the screws(two parts).
- (8) Check the movement of the door by opening and closing it.

## **Installation Checklist**

<u>Important Information</u>: The installation engineer should check whether any installation part has been omitted and follow the check list below to ensure safe and proper installation.

If you have any questions or problems regarding installation, address your queries to the distributor or dealer. You may also seek information on the company's website.

- Does the ice maker work properly? If the ice maker does not work, check whether the plug has been inserted properly.
- Did you remove all the packing materials and tapes from inside the ice maker?
- Did you follow the installation instructions?
- Did you level the unit?
- Is the front of the kickplate/grill adequately ventilated?
- Does the user sufficiently understand the operation of the ice maker?

## 🛕 Warning

- Be sure to follow any safety instruction for storing or disposing of an old ice maker. Remove the door or fix the door firmly if the door is closed. If a child gets inside the ice maker, and the door is closed, he/she may get injured.
- Be sure to observe the following:
  - Since the ice maker makes use of water, proper water supply and draining facilities are required.
  - Be sure to use the product with properly functioning drainage, since water may leak due to various causes during installation or usage. Leaks may cause electric shock due to moisture, so make sure that the following are always observed:
    - 1. When installing the product indoors, be sure to have a natural drainage facility and make the floor waterproof, especially if the floor gets damaged due to leaks.
    - 2. A draining outlet must be available at the installation site; be sure to connect the drain hose.
    - 3. It is preferable that the floor be sloped so that the leaking water may get drained away even if the drain hose gets dislodged or damaged. Install a water overflow prevention wall to prevent damage.
- The manufacturer will not be liable for any issue arising from failure to comply with the above-mentioned warnings, dislodged/damaged water supply hose, or inappropriate drain facility.

## **SpecificFeatures**



Fig. 9: Ice maker

- Sink-Mounted Ice Maker
- The gravity drain-type naturally drains water, whereas the drain pump-type drains water to an adjacent sink using a built-in pump.
- A perfect and unified design system with a depth of 24" (610 mm).
- A decorative door panel may be installed.
- The product supplies good-quality, transparent ice.
- The maximum capacity of the ice container is 26 lbs(12kg).
- Automatic ice-removal function.
- Left/Right opening door system.
- Front ventilation is possible using the attachable kick plate/grill at the front of the ice maker.
- The product incorporates a magnetic door attachment/detachment structure and gasket, and an insulating foam system is used for insulation of the door.

## Operation

### Initial operation

- ① Open the water supply valve connected with the ice maker.
- 2 Insert the plug of the ice maker into the electric outlet.
- ③ Open the door and turn the switch at the lower end of the product to the "ICE" position."
- 4 Discard the first batch of ice.
- (5) Good-quality ice is produced 1-2 hours later.

### Using the ice maker

Use of the ice maker is very simple. Simply turn the switch at the lower end of the product to the "ICE" position.

The product automatically starts ice production, which continues until the ice container has been filled with ice. Remove the ice using the ice scoop and insert the scoop into the holder on the inside of the container (If you place the container in the ice, it may be submerged in the ice).

The ice maker produces 24 ice cubes every 30 minutes. Also, the produced ice drops down into the ice container; water is supplied to the ice maker and the water is also drained.

Important Information: Do not put anything other than ice in the ice container. Wine or beer bottles are unsanitary and a detached label may block the drain pipe.

### Ice shape

The ice has a rectangular bell shape (refer to Fig. 11).

Newly produced ice is clear and transparent. The inside of the ice is sometimes cracked; however, such cracks commonly occur in the production process and disappear with time.

Ice stored in the container for a long time may gather frost on the outside and look muddy. This is normal and, once water is poured on the ice, such frosting disappears.

### Ice container

The product continues making ice until the level of ice reaches the temperature sensing tube(right side). It then ceases operation. The model with a drain pump drains away melted ice when the ice maker is turned off. The pump works for only a few seconds.

A Star

Fig. 10 Switch



Fig. 11 Ice cube

## Operation time

It takes about 20-35 minutes to produce a batch of 24 ice cubes. The length of one cycle of the ice maker (ice production and ice removal) differs depending upon the cleanness of the ice maker, the surrounding temperature, and the temperature of the water supplied to the ice maker. It takes about 10-12 hours to fill the empty ice container with ice.

### Ice production

The ice production process largely consists of two cycles: ice production and ice removal. 24 pieces of ice are produced with each cycle of ice production and ice removal.

When water is sprayed on to the surface of the frozen ice-forming mold, the ice production cycle is started. When ice is removed and water is supplied to the ice maker, the ice removal cycle is started. The time taken for both cycles together is about 20-35 minutes.

### Ice production cycle

As the ice production cycle progresses, the compressor exhausts the refrigerant, the fan motor circulates the air, and the pump motor circulates water. When the surface of the ice-forming mold absorbs the heat from the water, the heat moves to the part to which the fan supplies water. The heat is transferred to the air and the heated air is removed from the ice maker. At the same time, ice is produced on the surface of the ice-forming mold (at the upper end of the ice maker). When the surface of the ice-forming mold has sufficiently cooled, the ice production cycle stops and ice removal is started by the program installed in the ice maker.

### Ice removal cycle

The compressor works during the progression of the ice removal cycle, but the pump motor and fan motor are stopped. The hot gas valve and water supply valve work. When the two valves are opened and the frozen surfaces are heated, ice drops down into the container.

Then the ice removal cycle is stopped and the ice production cycle is started again by the program installed in the ice maker.

### How the ice maker uses water

The ice maker starts its work with the fixed quantity that has been fed into the water container. When water is sprayed on to the surface of the ice-forming mold, the water not containing mineral impurities freezes and attaches to the ice-forming mold. The water containing impurities drops down into the water container. During the progression of the ice production cycle, the mineral impurity level in the water in the water container rises.

During the progression of the ice removal cycle, water is fed to the ice maker, thereby diluting the water in the container, and washes a part of the concentrated minerals through the drain pipe.

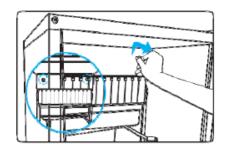
## Cleaning

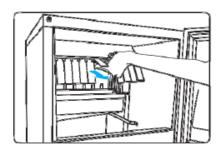
Cleaning the nozzle / ice slide / water tank

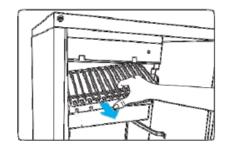
- 1. Open the door and remove two front injection bolts on the top cover.
- 2. Pull the top cover to remove it.

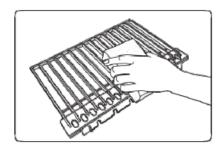
3. Slightly lift the ice slide to remove it.

4. Clean the slide with a soft plastic brush or sponge.

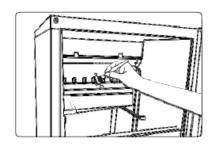


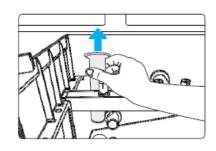






- 5. Clean the gap of the nozzle frame fixed on the vessel sheet (water tank).
- 6. Lift the drain projectile inside the vessel sheet (water tank), clean it, and drain the water.
  - Make sure the drain projectile is assembled back in the correct position after cleaning; otherwise, draining will not stop, with the product rendered unable to make ice cubes.





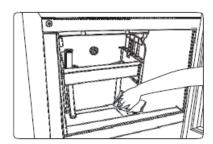


<u>Cleaning the nozzle / ice slide / water tank:</u> Clean at least once a month after turning off power.

### Cleaning the filters of the water tank and ice tank

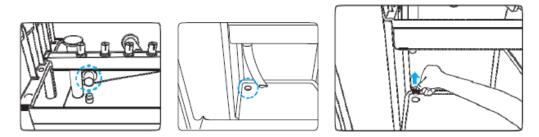
 Empty the ice tank and prepare a cleaning solution by mixing 1 oz of neutral dishwashing detergent with 2 gallons of warm water (95 to 113°F). Soak a clean cloth in the solution and clean the inside of the ice tank.
 Pour an appropriate amount of

the solution into the draining pipe, and then wait until it dries naturally.



• Press the switch to set it to "WASH" when cleaning the product. This will repeat the process of supplying water for about 2 minutes and operating the circulation pump 3 times, enabling easier cleaning.

2. Open the front door and remove the filter screens from the bottom of the ice tank and water tank.



Water tank

Ice tank

- 3. Rinse the screens with running water, and then assemble them back to the tanks.
  - Otherwise, the water nozzle will get clogged, or dregs inside the ice tank may damage the product by clogging the draining port.
  - Insert the bottom filter screen first, followed by the top screen.





Bottom filter screen

Top filter screen



<u>Cleaning the filters of the water tank and ice tank</u>: Clean at least once a month after turning off power.

## Cleaning the exterior

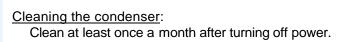
For the stainless steel exterior surfaces, use a clean sponge or soft cloth and a mild detergent in warm water. DO NOT use abrasive or harsh cleaners, or cleaners containing chlorine, as these can scratch or damage the material. Using a soft cloth, dry thoroughly.

Cleaning the condenser

1. Remove two screws on the front panel at the center of the inside.

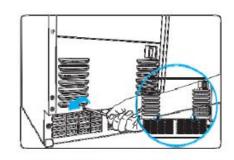
2. Remove dust from the surface of the condenser with a vacuum cleaner.

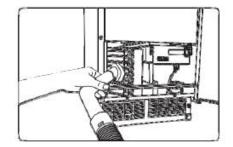
3. Reassemble the screws to the panel after cleaning.

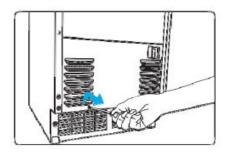


For yourinformation

For your information







## Maintenance

### Maintenance in winter

- 1) Clean the ice-production system.
- 2 Turn off the power.
- ③ Empty the water container. Remove the pump hose.
  (The pump hose may be removed after removing the back panel from the ice maker.)
- ④ Separate the inlet pipe connected with the water supply valve.
- <sup>(5)</sup> Turn on the power and set the switch at the "WASH" position to open the water supply valve and to remove the water from the inlet pipe inside the ice maker.
- ⑥ In the case of the drain pump model, pour 1/2 gallon of RV anti-freeze mixture (propylene glycol) into the ice container.

Important Information: Do not use an anti-freeze product intended for automobiles.

Turn off the ice maker and disconnect the plug from the electric outlet.
 When using the ice maker after winter, re-connect the pump hose and other hoses. Repeat the initial starting steps described on page 16.

## Adjusting the ice maker

Three items may be adjusted: the detection temperature of the evaporator, the delay time of the ice-production cycle, and the water supply time.

To adjust the three items, an inspection kit is required.

If the ice maker is adjusted by the user at his/her discretion, a serious incident may occur.

<u>Important Information</u>: The three items mentioned above should be adjusted by the engineer of a service center designated by SUMMIT.

## **Specifications**

CATEGORY		UNIT	ICE MAKER
			BIM68OSGDR / BIM68OSPUMP
Maximum Ice-Making Capacity <b>※</b>		kg/day	29
		lb/day	63.9
Dimensions		WxDxH (mm)	378 x 624 x 855 (excluding handle, legs, hinge)
		WxDxH (inch)	14.9x22.8x33.5(excluding handle, legs, hinge)
Quantity of Ice		EA	24 cubes
Rated Power		V/Hz	115V / 60Hz
Weight	Unpacked	lb	110
	Packed	lb	139
Cooling UNIT	Refrigerant	_	R-134a
	Capacity	kcal/hr	1080(at 45°F)
	Cooling Method	_	Air-cooled
Controlling the size of ice		_	Controlling the temperature with EVA SENSOR
Controlling the detection of full ice		-	Controlling the temperature with electronic sensor
			Differential application per ambient temperature (automatic PCB control)
Power Consumption		W	500
Water Supply Condition		°F	50~80°F
Water supply pressure		psig	7~113
Ambient temperature		°F	50~100°F

22

\* The maximum ice capacity is based on 50°F ambient / water temperature but may vary depending on the installation conditions; high temperature in summer may severely affect the capacity.

# Troubleshooting

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Ice maker does not operate	Ice maker is unplugged	Plug ice maker in.
	Breaker tripped	Reset breaker - if it happens again, call an authorized service center.
	Switch turned to "OFF"	Turn switch to "ICE".
	The ice tank is full.	The ice maker has stopped since the ice detection sensor inside the tank is activated. The ice maker will not resume operation immediately after removing ice wait for 15~30 minutes.
Ice cubes are too large	The ambient temperature is too low.	The lower the ambient temperature, the bigger the ice will be and vice versa.
	Ice thickness control does not work.	Contact the customer service center for details on how to control the thickness of ice.
Ice cubes are too small	The ambient temperature is too high.	The lower ambient temperature is, the bigger the ice will be, and vice versa.
	Too little water in the water tank.	Check the water supply.
	The water nozzle does not eject water.	Check the water supply and see if the nozzle is clogged with foreign object.
	Ice thickness control does not work.	Please contact customer service center for controlling thickness of ice.
Ice is fragmented.	Water is not accurately sprayed from the nozzle to the center of the vaporizer cube.	Clean the ice maker - the nozzle may be clogged with a foreign object.
The tank is not fully filled with ice	Check the operation time.	The ice tank will be filled with ice after about 12 hours of operation.
	There is water in the ice tank.	Make sure the drain pipe of the water tank is properly connected and clean the drain.
cubes.	Hot air is blown to the tank.	Check the site where the product is installed.
The ice cubes are white.	Too little water in water tank.	Check the water supply as well as whether water leaks from the tank.
	Too little water in water tank.	Check the water supply. Check the water supply valve.
	Ice cubes are stuck on the vaporizer.	Check the water supply. Check the water supply valve. Check the hot gas valve.
The ice maker is operating, but no ice is made.	The water does not get cold.	Check the water supply valve. Contact the customer service center if the valve is fine.
	Water is not sprayed.	Check the water in the water tank. Check if the circulation pump is working.
	Condenser is not working.	The condenser has too much dust. Clean the condenser. Check the fan motor of the condenser.
	5	The ambient temperature is too high. Check the conditions where the product is installed or contact the customer service center.
	Hot gas leaks.	Contact the customer service center.
	Refrigerant needs to be refilled.	Contact the customer service center.

Notes

Notes

## **Limited Warranty**

### **ONE-YEAR LIMITED WARRANTY**

Within the 48 contiguous United States, for one year from the date of purchase, when this appliance is operated and maintained according to instructions attached to or furnished with the product, warrantor will pay for factory-specified parts and repair labor to correct defects in materials or workmanship. Service must be provided by a designated service company. Outside the 48 states, all parts are warranted for one year from manufacturing defects. Plastic parts, shelves and cabinets are warranted to be manufactured to commercially acceptable standards, and are not covered from damage during handling or breakage.

### 5-YEAR COMPRESSOR WARRANTY

- 1. The compressor is covered for 5 years.
- 2. Replacement does not include labor.

#### ITEMS WARRANTOR WILL NOT PAY FOR:

- 1. Service calls to correct the installation of your appliance, to instruct you how to use your appliance, to replace or repair fuses or to correct wiring or plumbing.
- 2. Service calls to repair or replace appliance light bulbs or broken shelves. Consumable parts (such as filters) are excluded from warranty coverage.
- 3. Damage resulting from accident, alteration, misuse, abuse, fire, flood, acts of God, improper installation, installation not in accordance with electrical or plumbing codes, or use of products not approved by warrantor.
- 4. Replacement parts or repair labor costs for units operated outside the United States.
- 5. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.
- 6. The removal and reinstallation of your appliance if it is installed in an inaccessible location or is not installed in accordance with published installation instructions.

#### **DISCLAIMER OF IMPLIED WARRANTIES – LIMITATION OF REMEDIES**

CUSTOMER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY SHALL BE PRODUCT REPAIR AS PROVIDED HEREIN. IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR. WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR LIMITATIONS ON THE DURATION OF IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS, SO THESE EXCLUSIONS OR LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

WARNING: This product can expose you to chemicals including Nickel (Metallic) which is known to the State of California to cause cancer.

For more information go to www.P65Warnings.ca.gov

Note: Nickel is a component in all stainless steel and some other metal components.

FELIX STORCH, INC. 770 Garrison Avenue Bronx, NY 10474 Phone: (718) 893-3900 Fax: (844) 478-8799 www.medicalrefrigerators.com



For parts and accessory ordering, troubleshooting and helpful hints, visit: www.summitappliance.com/support

Printed in South Korea