



SELF-CONTAINED CRESCENT CUBER

INSTRUCTION MANUAL

KM-61BAH
KM-101BAH
KM-151BAH
KM-151BWH

L1M006112 (073113)

IMPORTANT

Only qualified service technicians should attempt to install, service or maintain this icemaker. No installation, service or maintenance should be undertaken until the technician has thoroughly read this Instruction Manual. Likewise, the owner/manager should not proceed to operate the icemaker until the installer has instructed them on its proper operation.

HOSHIZAKI provides this manual primarily to assist qualified service technicians in the installation, maintenance and service of the icemaker.

Should the reader have any questions or concerns which have not been satisfactorily addressed, please call or write to the following office for assistance.

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Suzhou 215126 China

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Note: To expedite assistance, all correspondence/communication MUST include the following information:

- * Model Number
- * Serial Number
- * Complete and detailed explanation of the problem

IMPORTANT

1. This booklet is an integral and essential part of the product and should be handed over to the user. Read the warnings contained in this booklet carefully as they give important indications regarding the safety of the installation, use and maintenance. Please preserve this booklet for any further consultation that may be necessary.
2. This icemaker should be destined only to the use for which it has been expressly conceived. Any other use should be considered improper and therefore dangerous. The manufacturer cannot be held responsible for eventual damage caused by improper, incorrect and unreasonable use.

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I. Installation and Operating Instructions

A. Checks Before Installation

* Visually inspect the exterior of the shipping container, and any severe damage noted should be reported to the carrier.

IMPORTANT

1. Remove shipping carton, tape(s) and packing. If packing material is left in the icemaker, it will not work properly.
2. Ensure all components, fasteners and thumbscrews are securely in place.
3. Remove the shipping tapes holding the Door and Separator. See Fig. 1.

- 1) Remove the panels to prevent damage when installing the icemaker. (See "B. How to Remove Panels".)
- 2) Remove the package containing accessories.
- 3) Remove the protective plastic film from the panels. If the icemaker is exposed to the sun or to heat, remove the film after the icemaker cools.
- 4) Check that refrigerant lines do not rub or touch lines or other surfaces, and that the fan blade turns freely.
- 5) Check that the Compressor is snug on all mounting pads.
- 6) See the Nameplate on the upper part of the Left Side Panel, and check that your voltage supplied corresponds with the voltage specified on the Nameplate.

B. How to Remove Panels - See Fig. 1

- * Louver: Remove the Air Filter. Lift it up and towards you. Push down snap tabs at the top on both sides by a flat head screwdriver, pull towards you slightly, and lift off.
- * Top Panel: Open the Door slightly, push up tabs at the front underneath the Top Panel, then slide rearward, and lift off.

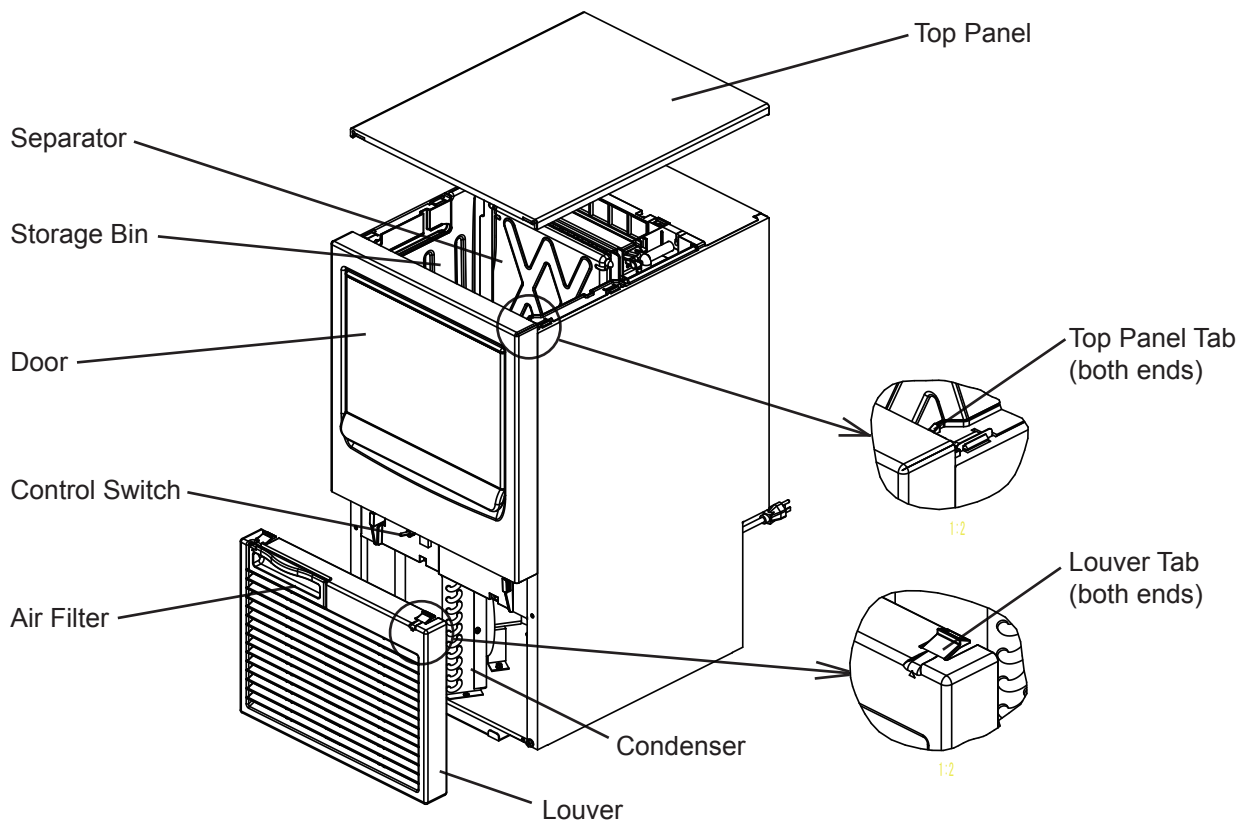


Fig. 1

C. Location

WARNING

This icemaker is not intended for outdoor use. Normal operating ambient temperature should be within +45°F to +100°F (+7°C to +38°C); Normal operating water temperature should be within +45°F to +90°F (+7°C to +32°C). Operation of the icemaker, for extended periods, outside of these normal temperature ranges may affect production capacity.

For best operating results:

- * The icemaker should not be located next to ovens, grills or other high heat producing equipment.
- * Level the icemaker from side to side and front to rear by adjusting the legs. The location should provide a firm and level foundation for the equipment.
- * Avoid a site where dripping is not allowed.
- * This icemaker will not work at subfreezing temperatures. To prevent damage to the water supply line, drain the icemaker when air temperature is below zero.

- * The icemaker requires no clearance at either side. But allow enough space at rear for water supply and drain connections, at least 12" (approx. 30 cm) clearance at front, and at least 0.6" (approx. 15 mm) clearance at top for maintenance.

D. Electrical Connection

WARNING

THIS APPLIANCE MUST BE GROUNDED.

This icemaker requires a ground that meets the national and local electrical code requirements. To prevent possible severe electrical shock injury to individuals or extensive damage to equipment, install a proper ground wire to this icemaker. Remove the plug from the electrical outlet before any maintenance, repairs or cleaning is undertaken.

CAUTION

The GREEN ground wire in the factory-installed power cord is connected to a screw on the bracket where the cord enters the machine. If it becomes necessary to remove or replace the power cord, be sure to connect the power cord's ground wire to this screw upon reattachment.

- * This icemaker must be plugged into an independent power receptacle which has enough capacity. The maximum allowable voltage variation should not exceed ± 10 percent of the nameplate rating. See the Nameplate.
- * Usually an electrical permit and services of a licensed electrician are required.

E. Set Up

IMPORTANT

Do not place heavy objects exceeding 33 lbs (15 kg) on the Top Panel.

- 1) Unpack the icemaker, and remove all shipping cartons, tapes and packing BEFORE operating the unit.
- 2) Position the icemaker in a selected site. Clean the interior with soap and water and rinse thoroughly.
- 3) Level the icemaker in both the left-to-right and the front-to-rear directions (when installed with or without legs). See Fig. 2.

- 4) When installing the unit without legs, the perimeter where the machine touches the counter should be sealed with silicone to prevent water from leaking under the icemaker.
- 5) When installing the unit with legs on the bottom, use the four accessory legs adjustable from 6" (15.2 cm) to 7" (17.8 cm). Screw the legs tightly into the tapped holes in the base (see Fig. 3). Handle the icemaker carefully not to damage the exterior.

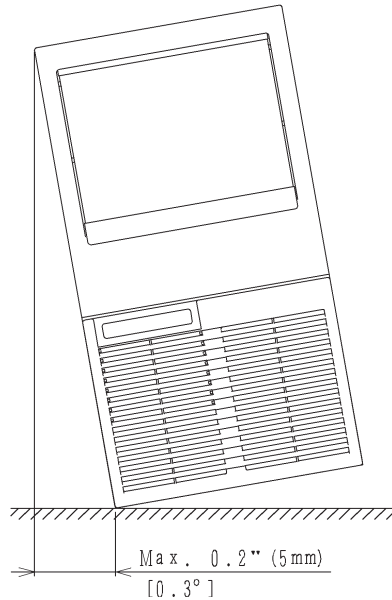


Fig. 2

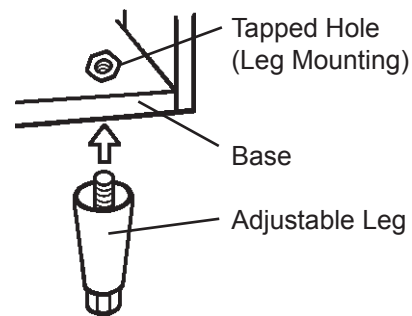


Fig. 3

F. Water Supply and Drain Connections

CAUTION

To prevent damage to equipment, do not operate this icemaker when the water supply is OFF, or if the pressure is below 10 PSIG (0.7 bar). Do not run the icemaker until proper water pressure is reached.

- * Only potable water should be used for this icemaker.
- * A plumbing permit and services of a licensed plumber may be required in some areas.
- * Water should drain into an open trap.
- * The icemaker drain is gravity flow, so ensure drain pipe has an adequate pitch or fall.
- * To prevent a backflow into the Storage Bin, the outlet hose must be laid as shown in Fig. 4.

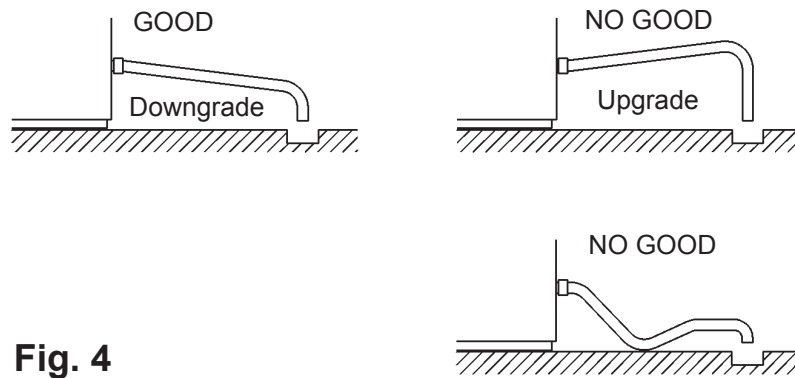


Fig. 4

- 1) Attach the free end of inlet hose to the water tap (Fig. 7), noting washer is correctly positioned before hand tightening as above. It is a wise precaution to have a stop valve within easy reach.
- 2) Hand tighten grey flexible outlet hose (accessory) onto the fitting on the rear of the icemaker as indicated (Figs. 5 and 6), ensuring rubber sealing washer is correctly positioned to obtain a leak free joint. The pipe can be cut to length as necessary to suit position of main drain. To prevent water leaks, secure the outlet hose to the drain outlet by using a hose band.

Note: Jointing compounds should be approved and suitable for potable water use.

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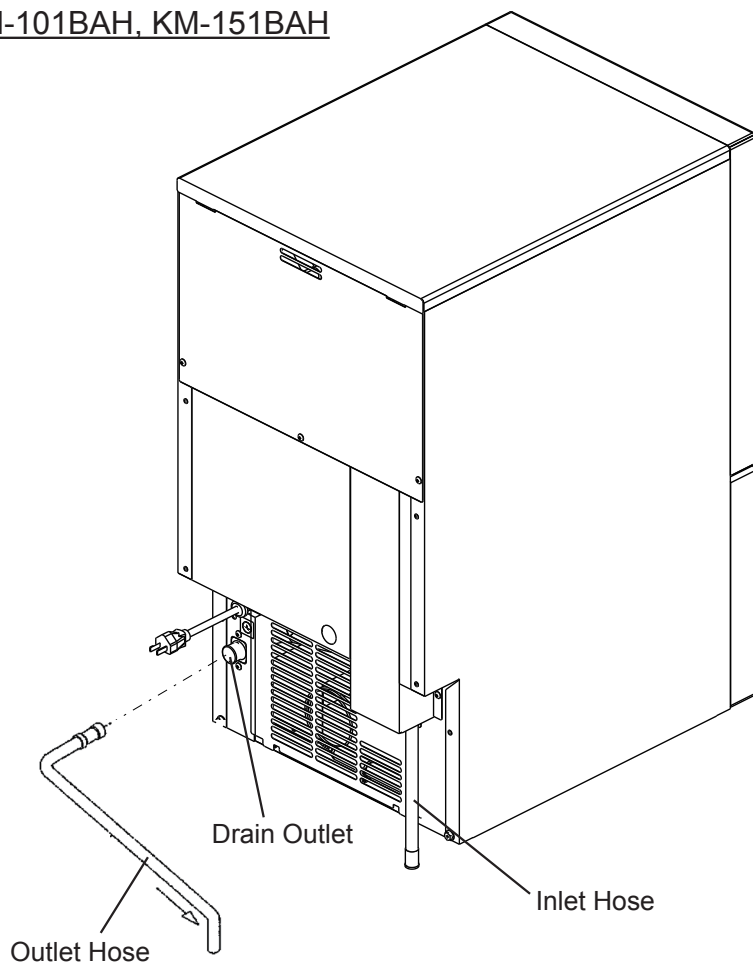


Fig. 5

KM-151BWH

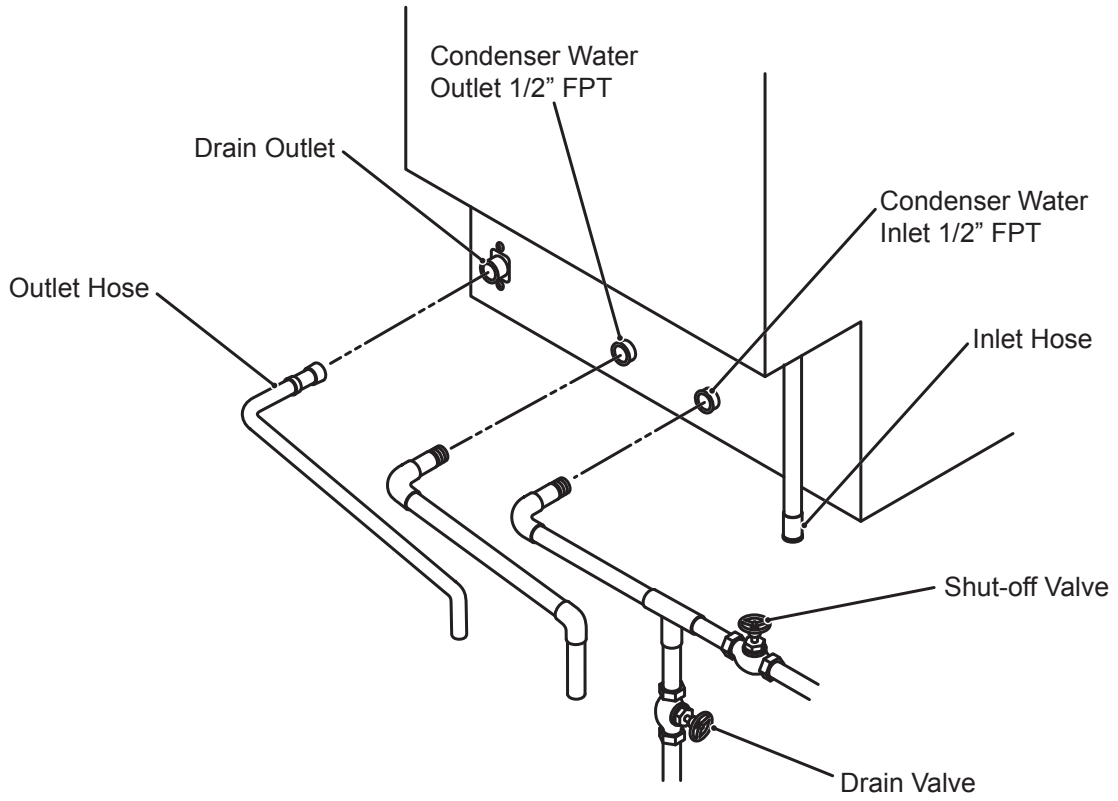


Fig. 6

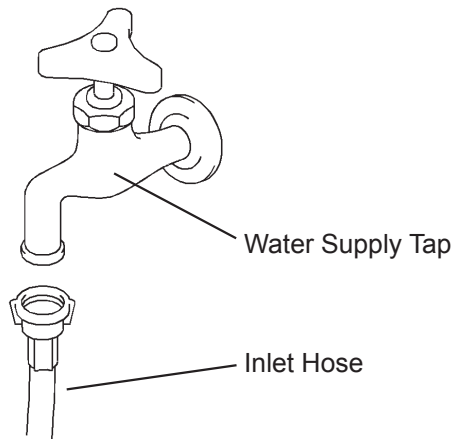


Fig. 7

G. Final Checklist

- 1) Is the icemaker level?
- 2) Is the icemaker in a site where the ambient temperature is within +45°F to +100°F (+7°C to +38°C) and the water temperature within +45°F to +90°F (+7°C to +32°C) all year around?
- 3) Is there at least 0.6" (15 mm) clearance at top of the icemaker for ease of maintenance or service?
- 4) Have all shipping carton, tape(s) and packing been removed from the icemaker? Is the cube guide in its correct position?
- 5) Are all components, fasteners and screws securely in place?
- 6) Have all electrical and piping connections been made?
- 7) Has the power supply voltage been checked or tested against the nameplate rating? And has a proper ground been installed in the icemaker?
- 8) Has the water supply pressure been checked to ensure a minimum of 10 PSIG (0.7 bar) and a maximum of 113 PSIG (7.5 bar)?

Note: The icemaker may stop running when the water supply is OFF, or if the pressure is below 10 PSIG (0.7 bar). When the proper water pressure is reached, the icemaker automatically starts running again.
- 9) Have the Compressor hold-down bolts and all refrigerant lines been checked against vibration and possible failure?
- 10) Has the bin control operation been verified?
- 11) Has the end user been given the Instruction Manual and instructed on how to operate the icemaker and the importance of the recommended periodic maintenance?
- 12) Has the end user been given the name and telephone number of an authorized service agent?

H. Startup

CAUTION

1. All parts are factory-adjusted. Improper adjustments may result in failure.
2. If the unit is turned off, wait for at least 3 minutes before restarting the icemaker to prevent damage to the Compressor.

* Check that shipping tape(s), string and packing are removed before starting the icemaker.

- 1) Open the water supply tap.
- 2) Remove the Air Filter.
- 3) Move the Control Switch on the Control Box to the "ICE" position.
- 4) Let the icemaker run for 10 minutes, then move the Control Switch to the "OFF" position.
- 5) Open the Door.
- 6) Disconnect the Silicone Hose to drain the water. See Fig. 8.
- 7) Reconnect the Silicone Hose back in its correct position after all of the water has drained.
- 8) Clean inside the Storage Bin and Door.
- 9) Move the Control Switch to the "ICE" position. This starts the automatic icemaking process.
- 10) Close the Door.
- 11) Place the Air Filter in its correct position.

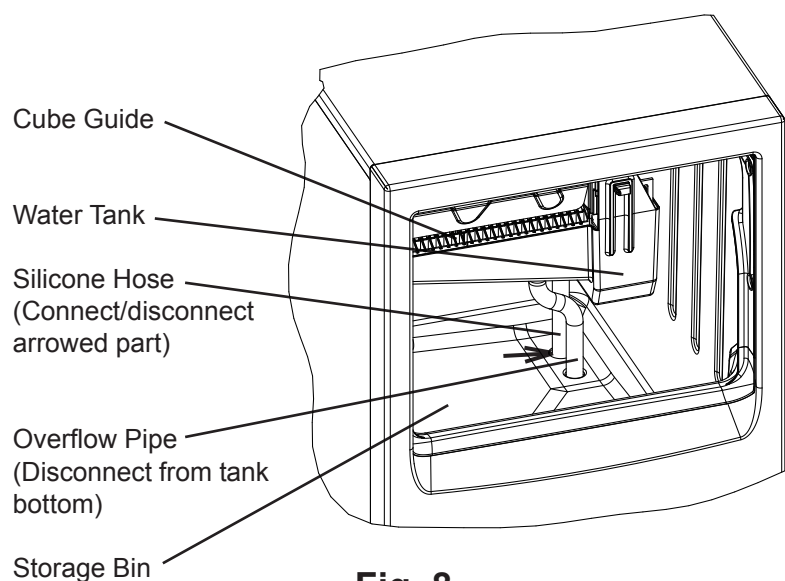


Fig. 8

II. Cleaning and Maintenance Instructions

IMPORTANT

Ensure all components, fasteners and screws are securely in place after any maintenance or cleaning is done to the equipment.

A. Cleaning

WARNING

1. Hoshizaki recommends cleaning this unit at least once a year. More frequent cleaning, however, may be required in some existing water conditions.
2. To prevent injury to individuals and damage to the icemaker, do not use ammonia type cleaners.
3. Always wear liquid-proof gloves to prevent the cleaning and sanitizing solutions from coming into contact with skin.
4. For safety and maximum effectiveness, use cleaning and sanitizing solutions immediately after dilution.

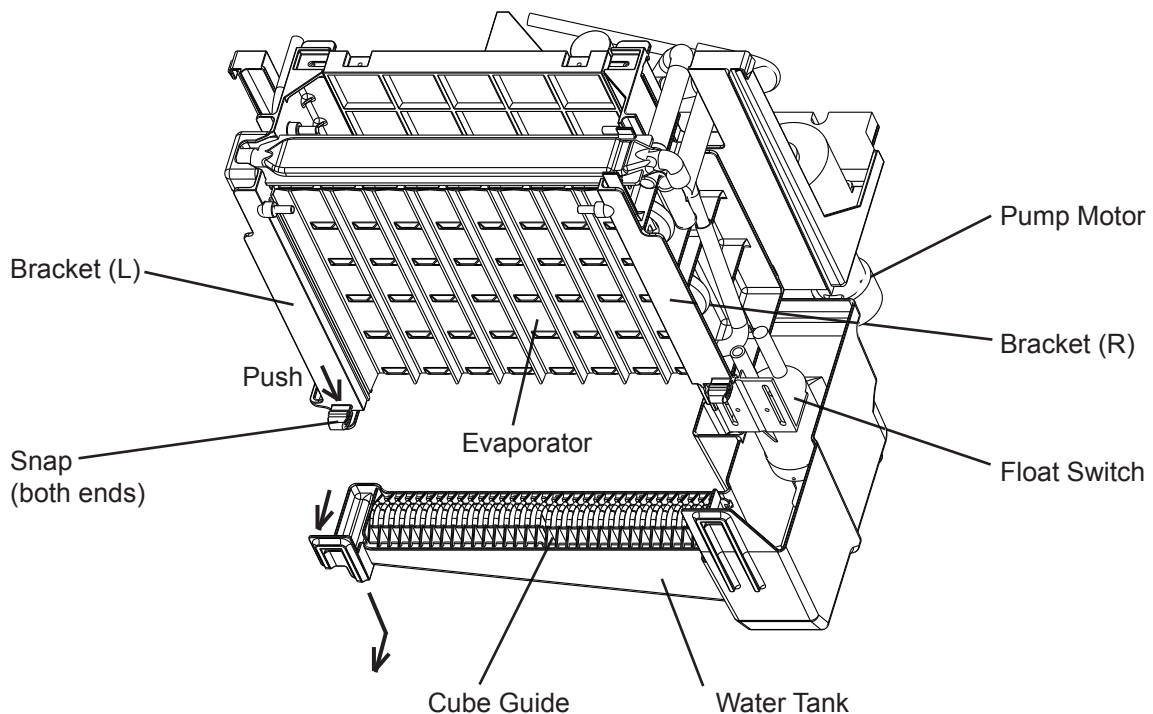
1. Cleaning Procedure

- 1) Dilute 5 fl. oz. (148 ml) of recommended cleaner Hoshizaki "Scale Away" or "LIME-A-WAY" (Economics Laboratory, Inc.) with 1 gallon (3.8 lit.) of water.
- 2) Remove the Air Filter. Remove all ice from the Evaporator and the Storage Bin.

Note: To remove cubes on the Evaporator, move the Control Switch on the Control Box to the "OFF" position and move it back to the "ICE" position after 3 minutes. The defrost cycle starts and the cubes will be removed from the Evaporator.

- 3) Move the Control Switch to the "OFF" position. Open the Door.
- 4) Disconnect the Silicone Hose to drain the water. See Fig. 8. Reconnect the Silicone Hose back in its correct position after all of the water has drained.
- 5) Pour the cleaning solution into the Water Tank. Move the Control Switch to the "WASH" position. Close the Door.
- 6) After 30 minutes, move the Control Switch to the "OFF" position.

- 7) Same as step 4.
- 8) Move the Control Switch to the "ICE" position to fill the Water Tank with water.
- 9) After 3 minutes, move the Control Switch to the "WASH" position.
- 10) After 5 minutes, move the Control Switch to the "OFF" position.
- 11) Same as step 4.
- 12) Repeat steps 8 through 11 three more times to rinse thoroughly.
- 13) Disconnect the Silicone Hose and Overflow Pipe. Next, remove the Water Tank by pressing down on the snaps on the Bracket (L) (R) and pulling the tank towards you slightly and pushing it down. Be careful to avoid breakage when handling the parts. See Fig. 9.



* This illustration shows KM-61BAH. The Float Switch location is different for KM-151BAH/BWH (behind the Pump Motor).

Fig. 9

- 14) Pull the Cube Guides (quantity varies depending on model) upward to remove them from the Water Tank. They are snapped in place. See Fig. 10.
- 15) Same as step 1.

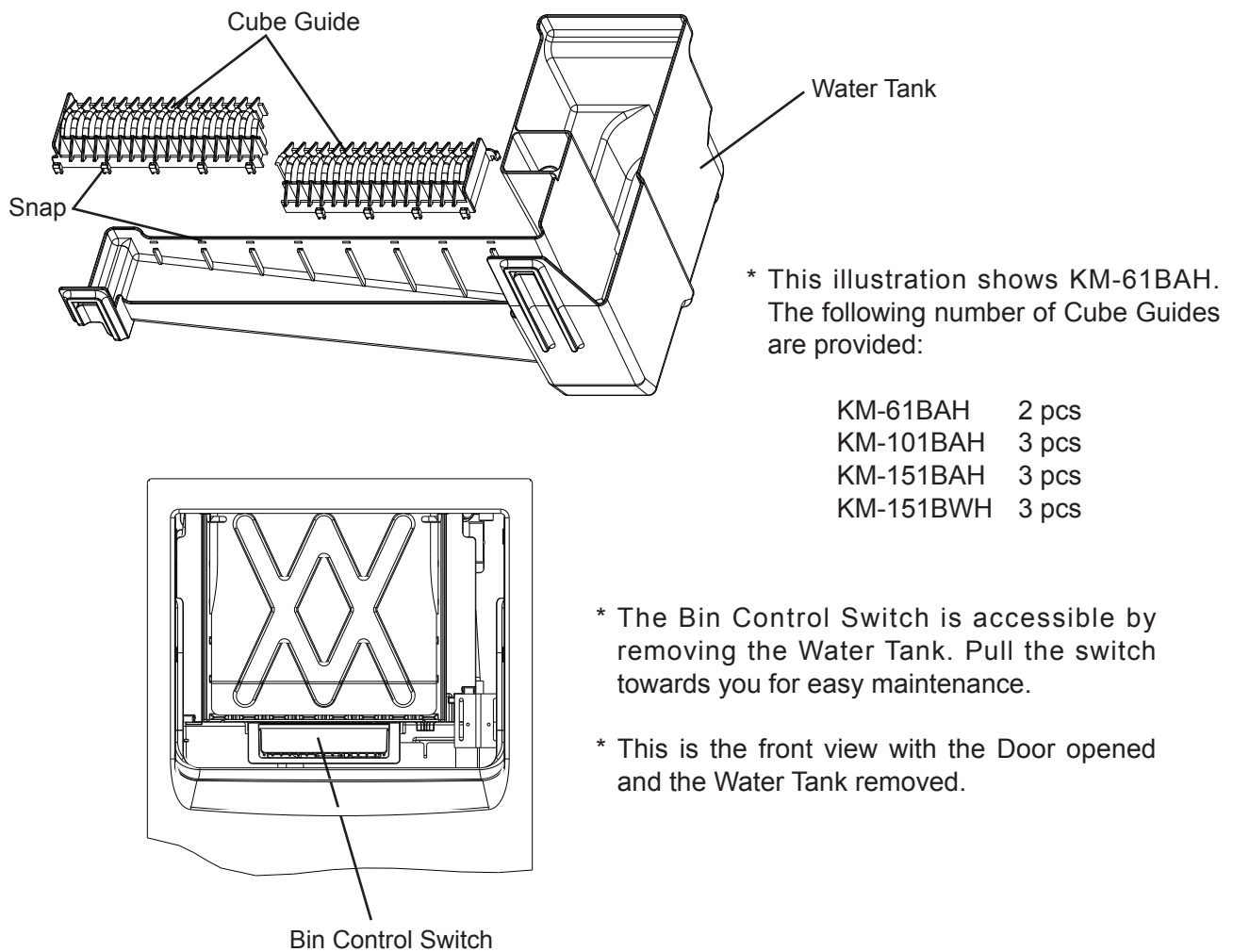


Fig. 10

16) Wash the Bin Control Switch, Water Tank, Float Switch, Cube Guide, Silicone Hose and Overflow Pipe by using a nylon scouring pad, brushes and the cleaning solution. In addition to the removed parts, also wash the bin liner and Bracket (L) (R) with the solution.

17) Discard the cleaning solution and rinse the parts thoroughly with water.

2. Sanitizing Procedure - Following Cleaning Procedure

1) Dilute approximately 0.5 fl. oz. (15 ml or 1 tbs) of a 5.25% sodium hypochlorite solution (chlorine bleach) with 1 gallon (3.8 lit.) of warm water. Using a chlorine test strip or other method, confirm that you have a concentration of about 200 ppm.

2) Soak the removed parts from step 16 above in a clean container containing the sanitizing solution. After allowing the parts to soak for 10 minutes, wash them with the solution. Also wash the bin liner, Bracket (L) (R) with the solution.

- 3) Discard the sanitizing solution and rinse the parts thoroughly with water.
- 4) Replace the removed parts in their correct positions in the reverse order of which they were removed.
- 5) Same as step 1.
- 6) Pour the sanitizing solution into the Water Tank, and allow the sanitizer to sit for 10 minutes.
- 7) Move the Control Switch to the "WASH" position. Close the Door.
- 8) After 15 minutes, move the Control Switch to the "OFF" position. Open the Door.
- 9) Disconnect the Silicone Hose to drain the water. Reconnect the Silicone Hose back in its correct position after all of the water has drained.
- 10) Repeat steps 5 through 9 one time. Repeat steps 8 through 11 in the Cleaning Procedure three times to rinse thoroughly.
- 11) Flush the Storage Bin with water.
- 12) Move the Control Switch to the "ICE" position, and start the automatic icemaking process.
- 13) Close the Door. Replace the Air Filter in its correct position.

B. Maintenance

1. Exterior Panels

To prevent corrosion, wipe the exterior occasionally with a clean and soft cloth. Use a damp cloth containing a neutral cleaner to wipe off all oil or dirt build up.

2. Storage Bin and Scoop

- * Wash your hands before removing ice. Use the plastic scoop provided (Accessory).
- * The Storage Bin is for ice use only. Do not store anything else in the bin.
- * Keep the scoop clean. Clean it by using a neutral cleaner and rinse thoroughly.
- * Clean the bin liner by using a neutral cleaner. Rinse thoroughly after cleaning.

3. Air Filter (air-cooled model)

The plastic mesh Air Filter removes dirt or dust from the air, and keeps the Condenser from getting clogged. As the filter gets clogged, the icemaker's performance will be reduced. Check the filter at least twice a month. When it is clogged, use warm water and a neutral cleaner to wash the filter.

4. Condenser (air-cooled model)

Check the Condenser once a year, and clean if required by using a brush or vacuum cleaner. More frequent cleaning may be required depending on the location of the icemaker.

C. Preparing the Icemaker for Long Storage

IMPORTANT

When shutting off the icemaker for an extended time, drain out all water from the water lines and remove the ice from the Storage Bin. The Storage Bin should be cleaned and dried. Drain the icemaker to prevent damage to the water supply lines at sub-freezing temperatures. Shut off the icemaker until the proper ambient temperature is resumed.

- 1) Move the Control Switch to the "OFF" position.
- 2) Unplug the icemaker or disconnect the power supply.
- 3) Close the water supply tap, and remove the Inlet Hose.
- 4) Remove all ice from the Storage Bin, and clean the Bin.
- 5) Disconnect the Silicone Hose to drain the water from the Water Tank. Reconnect the Silicone Hose back in its correct position after all of the water has drained. See Fig. 8.

III. Disposal

The appliance contains refrigerant and must be disposed of in accordance with applicable national, state, and local codes and regulations. Refrigerant must be recovered by properly certified service personnel.

IMPORTANT



The insulation foaming agent used for the unit body contains flammable gas cyclopentane. With this in mind, dispose of the product properly.