

HOSHIZAKI

Instruction Manual

Self-Contained Crescent Cuber

Models KM-81BAJ KM-116BAJ KM-161BAJ, BWJ



hoshizakiamerica.com

Only qualified service technicians should install and service the appliance. To obtain the name and phone number of your local Hoshizaki Certified Service Representative, visit www.hoshizaki.com. No installation or service should be undertaken until the technician has thoroughly read this Instruction Manual. Likewise, the owner/manager should not proceed to operate the appliance until the installer has instructed them on its proper operation. Failure to install, operate, and maintain the appliance in accordance with this manual will adversely affect safety, performance, component life, and warranty coverage and may result in costly water damage. Proper installation is the responsibility of the installer. Product failure or property damage due to improper installation is not covered under warranty.

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

Should the reader have any questions or concerns which have not been satisfactorily addressed, please call, send an e-mail message, or write to the Hoshizaki Technical Support Department for assistance.

Phone: 1-810-233-1940; (770) 487-2331 Fax: 1-810-843-1056; (770) 487-3360

E-mail: techsupport@hoshizaki.com

HOSHIZAKI AMERICA, INC.

618 Highway 74 South Peachtree City, GA 30269 Attn: Hoshizaki Technical Support Department

- **NOTE:** To expedite assistance, all correspondence/communication MUST include the following information:
 - Model Number ______
 - Serial Number _____
 - Complete and detailed explanation of the problem.

IMPORTANT

This manual should be read carefully before the appliance is installed and operated. Read the warnings and guidelines contained in this manual carefully as they provide essential information for the continued safe use and maintenance of the appliance. Retain this manual for any further reference that may be necessary.

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Important Safety Information

Throughout this manual, notices appear to bring your attention to situations which could result in death, serious injury, damage to the appliance, or damage to property.

- AWARNING Indicates a hazardous situation which could result in death or serious injury.
- **NOTICE** Indicates a situation which could result in damage to the appliance or property.

IMPORTANT Indicates important information about the installation, use, and care of the appliance.

The appliance 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 injury or damage resulting from improper, incorrect, and unreasonable use. Failure to install, operate, and maintain the appliance in accordance with this manual will adversely affect safety, performance, component life, and warranty coverage and may result in costly water damage.

To reduce the risk of death, electric shock, serious injury, or fire, follow basic precautions including the following:

- Only qualified service technicians should install and service the appliance.
- The appliance must be installed in accordance with applicable national, state, and local codes and regulations.
- The appliance requires an independent power supply of proper capacity. See the nameplate for electrical specifications. Failure to use an independent power supply of proper capacity can result in a tripped breaker, blown fuse, damage to existing wiring, or component failure. This could lead to heat generation or fire.
- THE APPLIANCE MUST BE GROUNDED: The appliance is equipped with a NEMA 5-15 three-prong grounding plug to reduce the risk of potential shock hazards. It must be plugged into a properly grounded, independent 3-prong wall outlet. If the outlet is a 2-prong outlet, it is your personal responsibility to have a qualified electrician replace it with a properly grounded, independent 3-prong wall outlet. Do not remove the ground prong from the plug and do not use an adapter plug. Failure to properly ground the appliance could result in death or serious injury.
- Do not use an extension cord.
- To reduce the risk of electric shock, make sure the control switch is in the "OFF" position before plugging in or unplugging the appliance.
- To reduce the risk of electric shock, do not touch the control switch or plug with damp hands.
- Do not use an appliance with a damaged power cord. The power cord should not be altered, jerked, bundled, weighed down, pinched, or tangled. Such actions could result in electric shock or fire. To unplug the appliance, be sure to pull the plug, not the cord, and do not jerk the cord.

A WARNING, continued

- Do not make any alterations to the appliance. Alterations could result in electric shock, injury, fire, or damage to the appliance.
- The 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.
- Children should be properly supervised around the appliance.
- Do not climb, stand, or hang on the appliance or appliance door or allow children or animals to do so. Serious injury could occur or the appliance could be damaged.
- Be careful not to pinch fingers when opening and closing the door. Be careful when opening and closing the door when children are in the area.
- Do not use combustible spray or place volatile or flammable substances near the appliance. They might catch fire.
- Keep the area around the appliance clean. Dirt, dust, or insects in the appliance could cause harm to individuals or damage to the appliance.

NOTICE

- Protect the floor when moving the appliance to prevent damage to the floor.
- Follow the water supply, drain connection, and maintenance instructions carefully to reduce the risk of costly water damage.
- In areas where water damage is a concern, install in a contained area with a floor drain.
- Install the appliance in a location that stays above freezing. Normal operating ambient temperature must be within 45°F to 100°F (7°C to 38°C).
- If using the optional drain pump, test its operation every time the appliance is cleaned and sanitized. See the instructions included with the accessories for details. If the optional drain pump is not operating properly, water could back up and overflow, leading to costly water damage.
- If water collects in the bin and will not drain, turn off the appliance and close the water supply line shut-off valve. Call for service.
- Do not leave the appliance on during extended periods of non-use, extended absences, or in sub-freezing temperatures. To properly prepare the appliance for these occasions, follow the instructions in "IV. Preparing the Appliance for Periods of Non-Use."
- Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- Do not place more than 33 lb. (15 kg) on the top panel.
- The ice storage bin is for ice use only. Do not store anything else in the ice storage bin.

I. Specifications

A. Electrical and Refrigerant Data

The nameplate provides electrical and refrigerant data. The nameplate is located on the upper part of the left side panel. For certification marks, see the nameplate.

We reserve the right to make changes in specifications and design without prior notice.

Model Number	KM-81BAJ	KM-116BAJ	KM-161BAJ	KM-161BWJ
AC Supply Voltage	115/60/1	115/60/1	115/60/1	115/60/1
Amperes	3.5 AMPS	5.5 AMPS	7.1 AMPS	6.4 AMPS
Design Pressure	HI-290PSI	HI-290PSI	HI-290PSI	HI-290PSI
	LO-130PSI	LO-130PSI	LO-130PSI	LO-130PSI
Refrigerant	134a 7.1 oz.	134a 7.8 oz.	134a 7.4 oz.	134a 10.6 oz.

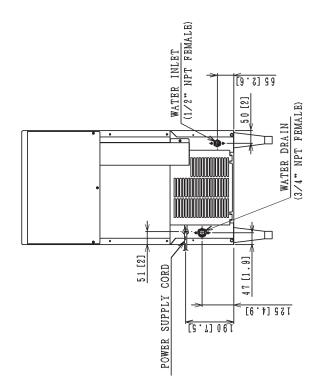
B. Dimensions/Connections

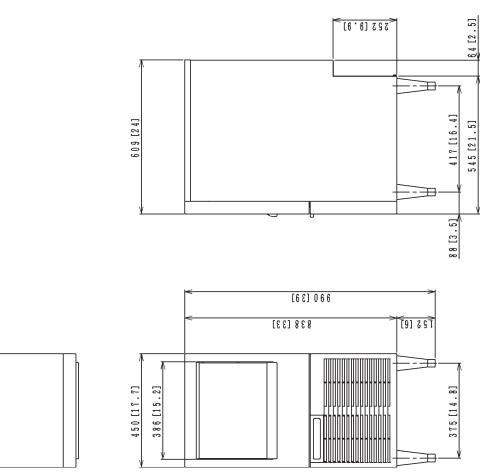
1. KM-81BAJ

Unit: mm [inches]

NOTICE

The appliance requires no clearance at either side. But allow enough space at rear for water supply and drain connections, at least 12" (30 cm) clearance at front, and at least 5/8" (15 mm) clearance at top for maintenance.



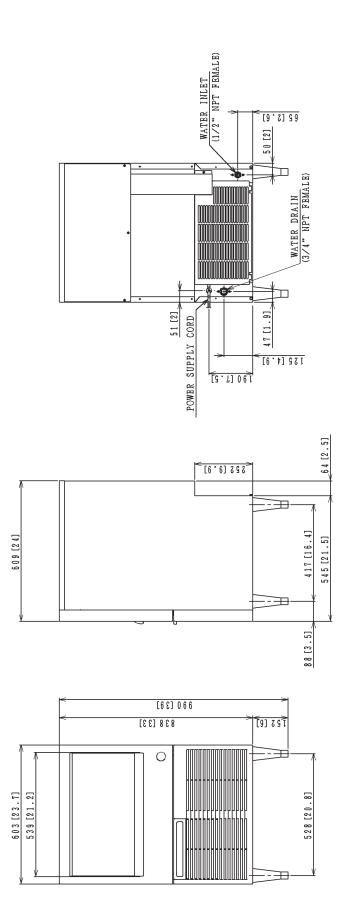


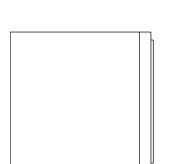
2. KM-116BAJ

Unit: mm [inches]

NOTICE

The appliance requires no clearance at either side. But allow enough space at rear for water supply and drain connections, at least 12" (30 cm) clearance at front, and at least 5/8" (15 mm) clearance at top for maintenance.



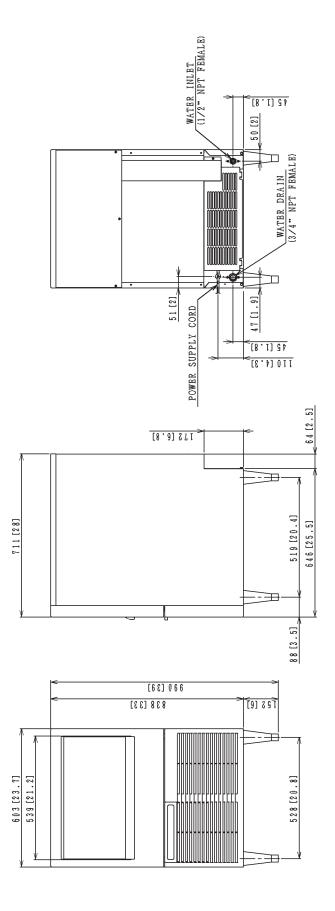


3. KM-161BAJ

Unit: mm [inches]

NOTICE

The appliance requires no clearance at either side. But allow enough space at rear for water supply and drain connections, at least 12" (30 cm) clearance at front, and at least 5/8" (15 mm) clearance at top for maintenance.

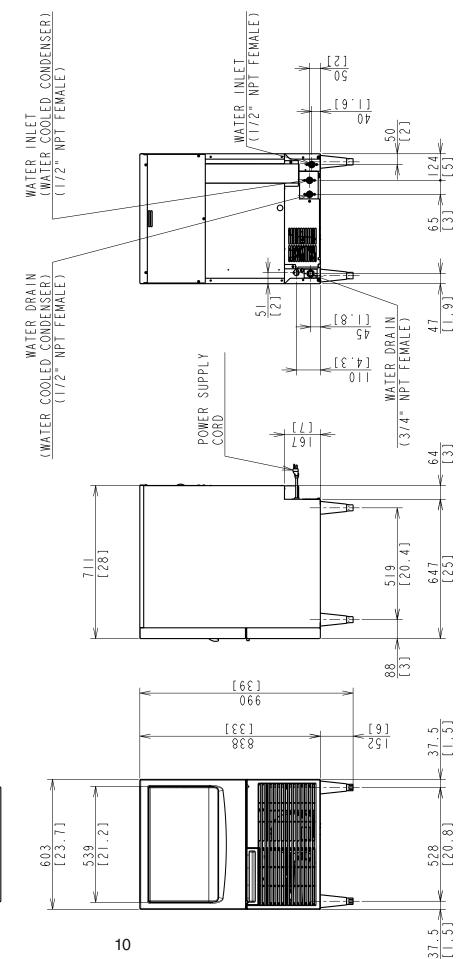


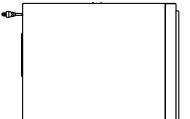
4. KM-161BWJ

Unit: mm [inches]

NOTICE

The appliance requires no clearance at either side. But allow enough space at rear for water supply and drain connections, at least 12" (30 cm) clearance at front, and at least 5/8" (15 mm) clearance at top for maintenance.





II. Installation and Operating Instructions

WARNING

- The appliance must be installed in accordance with applicable national, state, and local codes and regulations.
- Failure to install, operate, and maintain the appliance in accordance with this manual will adversely affect safety, performance, component life, and warranty coverage and may result in costly water damage.
- CHOKING HAZARD: Ensure all components, fasteners, and thumbscrews are securely in place after installation. Make sure that none have fallen into the ice storage bin.

A. Location

NOTICE

- The appliance is not intended for outdoor use. Normal operating ambient temperature must be within 45°F to 100°F (7°C to 38°C); Normal operating water temperature must be within 45°F to 90°F (7°C to 32°C). Operation of the appliance, for extended periods, outside of these normal temperature ranges may affect appliance performance.
- The appliance will not work at sub-freezing temperatures. To prevent damage to the water supply line, drain the appliance if the air temperature is going to go below 32°F (0°C). See "IV. Preparing the Appliance for Periods of Non-Use."

For best operating results:

- The appliance should not be located next to ovens, grills, or other high heat producing equipment.
- In areas where water damage is a concern, install in a contained area with a floor drain.
- The appliance requires no clearance at either side. But allow enough space at rear for water supply and drain connections, at least 12" (30 cm) clearance at front, and at least 5/8" (15 mm) clearance at top for maintenance.
- The location must provide a firm and level foundation for the appliance.

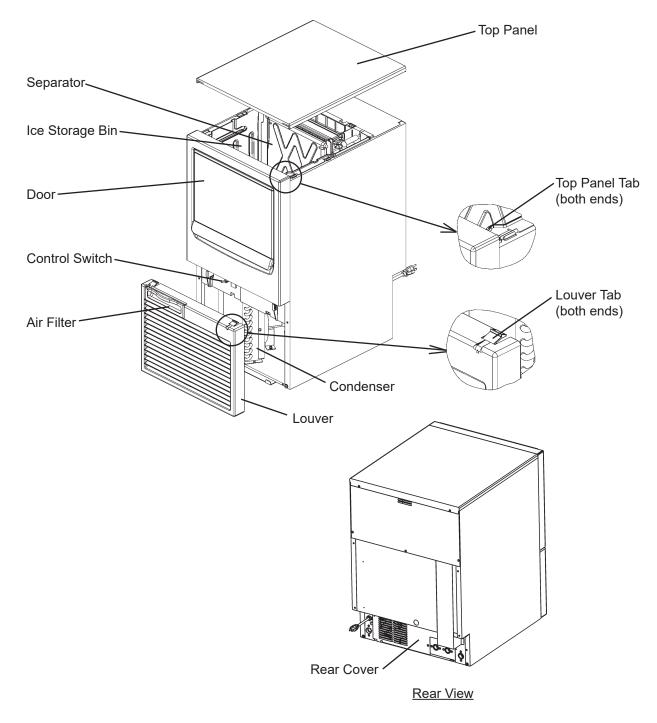
B. Checks Before Installation

NOTICE

- Remove all shipping cartons, tape, and packing material. If any are left in the appliance, it will not work properly.
- Remove the shipping tape holding the door and separator. See Fig. 1.
- Visually inspect the exterior of the shipping container and immediately report any damage to the carrier. Upon opening the container, any concealed damage should also be immediately reported to the carrier.
- Remove the panels to prevent damage when installing the appliance. See "II. C. How to Remove Panels."
- Remove the package containing the accessories.
- Remove the protective plastic film from the panels. If the appliance is exposed to the sun or to heat, remove the film after the appliance cools.
- Check that refrigerant lines do not rub or touch lines or other surfaces, and that the fan blade (if applicable) turns freely.
- Check that the compressor is snug on all mounting pads.
- 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.

C. How to Remove Panels See Fig. 1

- Louver: Remove the air filter. Lift it up and towards you. Push down the tabs at the top on both sides using a flat head screwdriver, pull towards you slightly, and lift off.
- Top Panel: Remove the screws. Slide rearward, and lift off.
- Rear Cover: Remove the screws. Pull towards you.

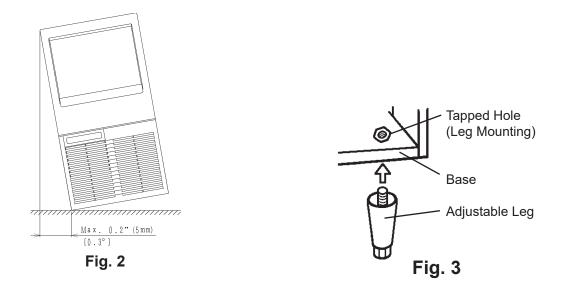




D. Setup

NOTICE

- Do not place more than 33 lb. (15 kg) on the top panel.
- Do not use the frame to life the appliance. Lift the appliance from the base.
- Handle the appliance carefully to avoid damaging the exterior.
- 1) Unpack the appliance, and remove all shipping cartons, tape, and packing material before operating the unit.
- 2) Position the appliance in its permanent location.
- 3) Level the appliance in both the left-to-right and the front-to-rear directions (when installed with or without legs). See Fig. 2.
- 4) If mounting flat to a counter, seal the perimeter where the appliance contacts the counter with approved caulk compound in a smooth and easily cleanable manner.
- 5) If 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).



E. Electrical Connection

WARNING

- Electrical connection must meet national, state, and local electrical code requirements. Failure to meet these code requirements could result in death, electric shock, serious injury, fire, or damage.
- The appliance requires an independent power supply of proper capacity. See the nameplate for electrical specifications. Failure to use an independent power supply of proper capacity can result in a tripped breaker, blown fuse, damage to existing wiring, or component failure. This could lead to heat generation or fire.
- THE APPLIANCE MUST BE GROUNDED: The appliance is equipped with a NEMA 5-15 three-prong grounding plug to reduce the risk of potential shock hazards. It must be plugged into a properly grounded, independent 3-prong wall outlet. If the outlet is a 2-prong outlet, it is your personal responsibility to have a qualified electrician replace it with a properly grounded, independent 3-prong wall outlet. Do not remove the ground prong from the plug and do not use an adapter plug. Failure to properly ground the appliance could result in death or serious injury.
- Do not use an extension cord.
- To reduce the risk of electric shock, do not touch the control switch or plug with damp hands. Make sure the control switch is in the "OFF" position before plugging in or unplugging the appliance.
- Do not use an appliance with a damaged power cord. The power cord should not be altered, jerked, bundled, weighed down, pinched, or tangled. Such actions could result in electric shock or fire. To unplug the appliance, be sure to pull the plug, not the cord, and do not jerk the cord.
- The GREEN ground wire in the factory-installed power cord is connected to the appliance. 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.
- Usually an electrical permit and services of a licensed electrician are required.
- The maximum allowable voltage variation is ±10 percent of the nameplate rating.
- For optional drain pump installation, refer to the instructions included with the accessories.

F. Water Supply and Drain Connections See Figs. 4 through 6

Water supply and drain connections must be installed in accordance with applicable national, state, and local regulations.

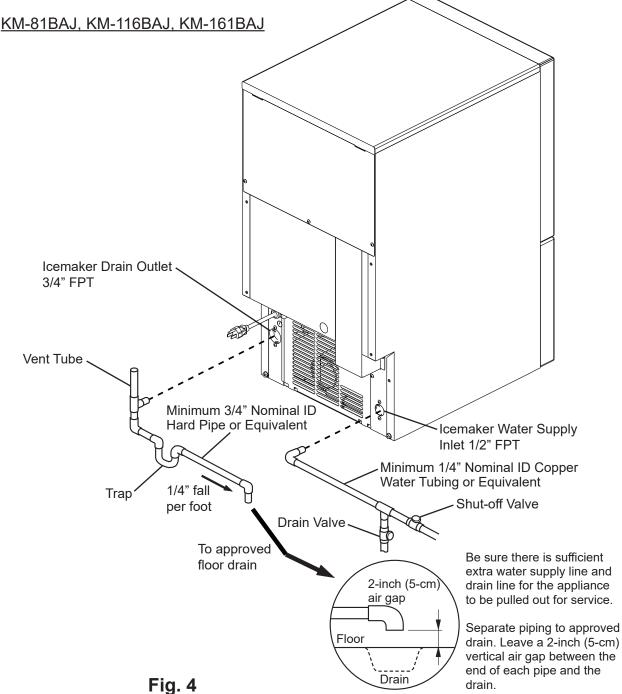
NOTICE

- Normal operating water temperature should be within 45°F to 90°F (7°C to 32°C). Operation of the appliance, for extended periods, outside of this normal temperature range may affect appliance performance.
- Water supply pressure must be a minimum of 10 PSIG and a maximum of 113 PSIG. If the pressure exceeds 113 PSIG, the use of a pressure reducing valve is required.
- To prevent damage to the appliance, do not operate the appliance when the water supply is off, or if the pressure is below 10 PSIG. Do not run the appliance until the proper water pressure is reached.
- External filters, strainers, or softeners may be required depending on water quality. Contact your local Hoshizaki Certified Service Representative or local Hoshizaki distributor for recommendations.
- A plumbing permit and services of a licensed plumber may be required in some areas.
- The icemaker drain line and water-cooled condenser drain line (if applicable) must be run separately.
- Drain lines must have 1/4" fall per foot (2 cm per 1 m) on horizontal runs to get a good flow. A vented tee connection is also required for proper flow.
- For optional drain pump installation, refer to the instructions included with the accessories.
- Drain lines should not be piped directly to the sewer system. An air gap of a minimum of 2 vertical inches (5 cm) should be between the end of the drain pipes from the icemaker and water-cooled condenser (if applicable) and the floor drain.

1. Icemaker

			Minimum Icemaker Drain Line Size	
1/2" Female Pipe	1/4" Nominal ID Copper	3/4" Female Pipe	3/4" Nominal ID Hard	
Thread (FPT)	Water Tubing or Equivalent	Thread (FPT)	Pipe or Equivalent	

- An icemaker water supply line shut-off valve and drain valve must be installed.
- Be sure there is sufficient extra water supply line and drain line for the appliance to be pulled out for service.



2. Water-Cooled Condenser

Condenser Water	Minimum Condenser	Condenser Drain	Minimum Condenser
Supply Inlet	Water Supply Line Size	Outlet	Drain Line Size
1/2" Female Pipe	1/4" Nominal ID Copper	1/2" Female Pipe	1/4" Nominal ID Hard
Thread (FPT)	Water Tubing or Equivalent	Thread (FPT)	Pipe or Equivalent

a) Connection to an Open Drain System

- A condenser water supply line shut-off valve and drain valve must be installed.
- In some areas, a back flow preventer may be required in the cooling water circuit.
- In order to maintain the proper high side pressure, the condenser water supply inlet temperature should not drop below 45°F (7°C) and the condenser drain outlet temperature must be in the 104°F to 115°F (40°C to 46°C) range. Once the icemaker installation is complete, confirm the condenser drain outlet temperature 5 minutes after a freeze cycle starts. If the condenser drain outlet temperature is not in the proper range, use a flat blade screwdriver to rotate the adjustment screw on the water-regulating valve until the temperature is in the proper range.

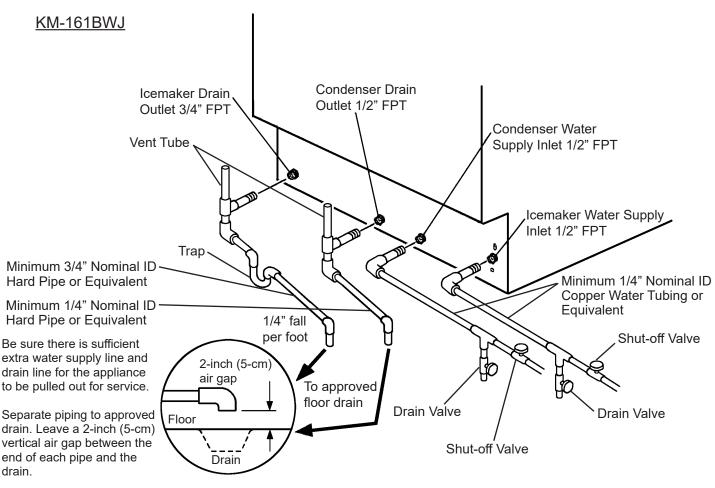
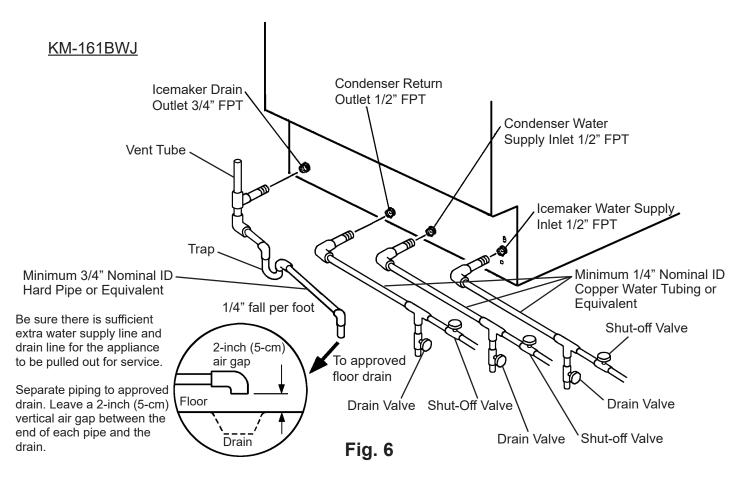


Fig. 5

b) Connection to a Closed Loop System

Condenser Water	Minimum Condenser	Condenser	Minimum Condenser
Supply Inlet	Water Supply Line Size	Return Outlet	Return Line Size
1/2" Female Pipe	1/4" Nominal ID Copper	1/2" Female Pipe	1/4" Nominal ID Copper
Thread (FPT)	Water Tubing or Equivalent	Thread (FPT)	Water Tubing or Equivalent

- Shut-off valves and drain valves must be installed at both the condenser water supply inlet and condenser return outlet.
- Minimum water flow to the condenser is 4 GPM.
- The pressure differential between the condenser water supply inlet and condenser return outlet must be no less than 10 PSIG.
- When using a glycol blend, the solution mixture should be less than 30% glycol.
- In order to maintain the proper high side pressure, the condenser water supply inlet temperature should not drop below 45°F (7°C) and the condenser drain outlet temperature must be in the 104°F to 115°F (40°C to 46°C) range. Once the icemaker installation is complete, confirm the condenser drain outlet temperature 5 minutes after a freeze cycle starts. If the condenser drain outlet temperature is not in the proper range, use a flat blade screwdriver to rotate the adjustment screw on the water-regulating valve until the temperature is in the proper range.



G. Final Checklist

A WARNING

CHOKING HAZARD: Ensure all components, fasteners, and thumbscrews are securely in place after installation. Make sure that none have fallen into the ice storage bin.

- 1) Is the appliance level?
- 2) Is the appliance 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 12" (30 cm) clearance at front, and at least 5/8" (15 mm) clearance at top of the appliance?
- 4) Have all shipping cartons, tape, and packing material been removed from the appliance? Are the cube guides in their correct positions?
- 5) Have all electrical and water connections been made? Do electrical and water connections meet applicable national, state, and local code and regulation requirements?
- 6) Has the power supply voltage been checked or tested against the nameplate rating? Is the power supply a properly grounded, independent 3-prong wall outlet?
- 7) Are the water supply and drain lines sized as specified? Are the water supply line shut-off valve(s) and drain valve(s) installed? Has the water supply pressure been checked to ensure a minimum of 10 PSIG and a maximum of 113 PSIG?
- 8) Is the compressor snug on all mounting pads? Have the refrigerant lines been checked to make sure they do not rub or touch other lines or surfaces? Has the fan blade (if applicable) been checked to make sure it turns freely?
- 9) Are all components, fasteners, and thumbscrews securely in place?
- 10) Has the end user been given the instruction manual, and instructed on how to operate the appliance and the importance of the recommended periodic maintenance?
- 11) Has the end user been given the contact information of an authorized service agent?
- 12) Has the warranty card been filled out and forwarded to the factory for warranty registration?

H. Startup

All parts are factory-adjusted. Improper adjustments may adversely affect safety, performance, component life, and warranty coverage.

NOTICE

- If the appliance is turned off, wait for at least 3 minutes before restarting the appliance to prevent damage to the compressor.
- To prevent damage to the water pump, do not leave the control switch in the "WASH" position for extended periods of time when the water tank is empty.
- At startup, confirm that all internal and external connections are free of leaks.
- 1) Open the water supply line shut-off valve(s).
- 2) Remove the air filter.
- 3) Make sure the control switch is in the "OFF" position. Plug the appliance into the electrical outlet. WARNING! To reduce the risk of electric shock, do not touch the control switch or plug with damp hands. If you have to slide the appliance back for a built-in installation, make sure you do not damage or pinch the water supply line, drain line, or power cord.
- 4) Move the control switch to the "ICE" position.
- 5) Allow the appliance to operate for 10 minutes.
- 6) Move the control switch to the "WASH" position.
- 7) Allow the appliance to operate for 5 minutes.
- 8) Move the control switch to the "OFF" position, then unplug the appliance from the electrical outlet. Cube Guide 9) Open the door. Water Tank -10) Disconnect the silicone hose to TIMME drain the water. See Fig. 7. Silicone Hose -11) Reconnect the silicone hose back (Connect/disconnect in its correct position after all of where indicated by arrow) the water has drained. 12) Clean the ice storage bin using a Overflow Pipe -(Disconnect from tank neutral cleaner. Rinse thoroughly bottom) after cleaning. 13) Make sure the control switch is Ice Storage Bin Fig. 7 in the "OFF" position. Plug the appliance into the electrical outlet.

- 14) Move the control switch to the "ICE" position.
- 15) Replace the air filter in its correct position.
- 16) To confirm bin control operation, press the bin control's actuator paddle during the first 5 minutes of the freeze cycle. The compressor, fan motor (if applicable), and pump motor should de-energize within 15 seconds, then the drain valve should energize until the water tank empties. After the water tank empties, the drain valve should de-energize.
- 17) Close the door.

III. Maintenance

The appliance must be maintained in accordance with the instruction manual and labels provided. Consult with your local Hoshizaki Certified Service Representative about maintenance service.

A WARNING

- Only qualified service technicians should service the appliance.
- To reduce the risk of electric shock, do not touch the control switch or plug with damp hands. Make sure the control switch is in the "OFF" position before plugging in or unplugging the appliance.
- Move the control switch to the "OFF" position and unplug the appliance from the electrical outlet before servicing.
- **CHOKING HAZARD:** Ensure all components, fasteners, and thumbscrews are securely in place after any maintenance is done to the appliance. Make sure that none have fallen into the ice storage bin.

A. Maintenance Schedule

The maintenance schedule below is a guideline. More frequent maintenance may be required depending on water quality, the appliance's environment, and local sanitation regulations.

Maintenance Schedule			
Frequency	Area	Task	
Daily	Scoop	Clean the ice scoop using a neutral cleaner. Rinse thoroughly after cleaning.	
Bi-Weekly	Air Filters	Inspect. Wash with warm water and neutral cleaner if dirty.	
Monthly	External Water Filters	Check for proper pressure and change if necessary.	
	Icemaker Exterior	Wipe down with a clean, soft cloth. Use a damp cloth containing a neutral cleaner to wipe off oil or dirt build up. Clean any chlorine staining (rust colored spots) using a non-abrasive cleanser.	
	Icemaker and Ice	Clean and sanitize per the cleaning and sanitizing instructions provided	
	Storage Bin Liner	in this manual or on the maintenance label on the icemaker.	
Yearly	Water Supply Inlet	Close the icemaker water supply line shut-off valve and drain the water system. Clean the water supply inlet screen.	
	Condenser	Inspect. Clean if necessary by using a brush or vacuum cleaner. More frequent cleaning may be required depending on location.	
	Water Hoses	Inspect the water hoses and clean/replace if necessary.	

B. Cleaning and Sanitizing Instructions

The appliance must be cleaned and sanitized at least once a year. More frequent cleaning and sanitizing may be required in some water conditions.

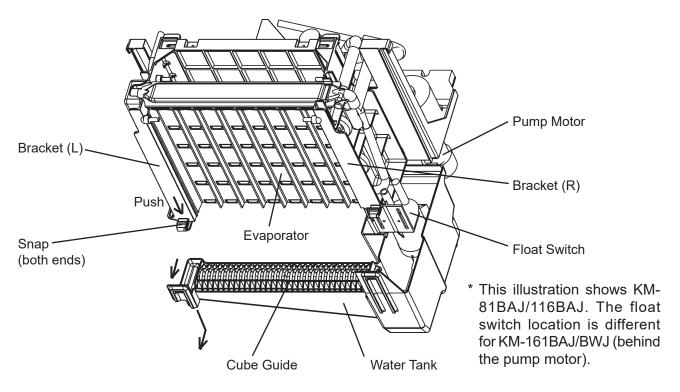
- To prevent injury to individuals and damage to the appliance, do not use ammonia type cleaners.
- Carefully follow any instructions provided with the bottles of cleaning and sanitizing solution.
- Always wear liquid-proof gloves and goggles to prevent the cleaning and sanitizing solutions from coming into contact with skin or eyes.

NOTICE

To prevent damage to the water pump, do not leave the control switch in the "WASH" position for extended periods of time when the water tank is empty.

1. Cleaning Procedure

- 1) Dilute 5 fl. oz. (148 ml) of recommended cleaner Hoshizaki "Scale Away" with 1 gallon (3.8 lit.) of water.
- 2) Remove the air filter. Remove all ice from the evaporator and the ice storage bin. Note: To remove cubes on the evaporator, move the control switch to the "OFF" position and move it back to the "ICE" position after 3 minutes. The harvest 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. 7. 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) Disconnect the silicone hose to drain the water. Reconnect the silicone hose back in its correct position after all of the water has drained.
- 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) Disconnect the silicone hose to drain the water. Reconnect the silicone hose back in its correct position after all of the water has drained.
- 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 brackets (L) and (R) and pulling the tank towards you slightly and pushing it down. Be careful to avoid breakage when handling the parts. See Fig. 8.
- 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. 9.





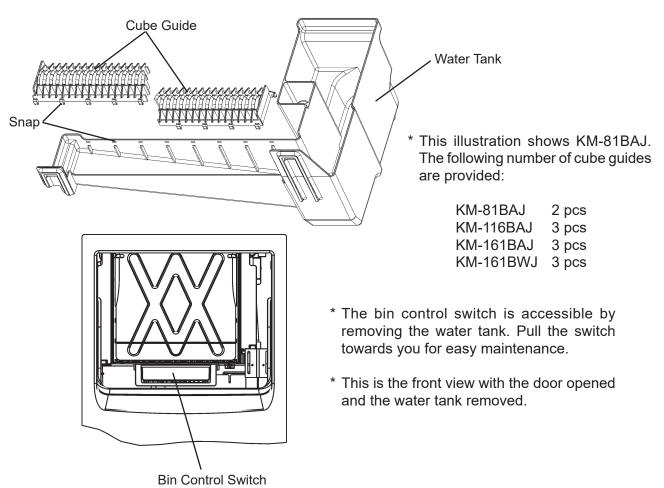


Fig. 9

- 15) Dilute 5 fl. oz. (148 ml) of recommended cleaner Hoshizaki "Scale Away" with 1 gallon (3.8 lit.) of water.
- 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 brackets (L) and (R) with the solution.
- 17) Discard the cleaning solution and rinse the parts thoroughly with water.

2. Sanitizing Procedure - Following Cleaning Procedure

- Dilute approximately 0.31 fl. oz. (9.2 ml) of an 8.25% 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.
- 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 and brackets (L) and (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) Dilute approximately 0.31 fl. oz. (9.2 ml) of an 8.25% 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.
- 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 ice storage bin with water.
- 12) Move the control switch to the "ICE" position to start the automatic icemaking process.
- 13) Close the door. Replace the air filter in its correct position.

IV. Preparing the Appliance for Periods of Non-Use

NOTICE

- During extended periods of non-use, extended absences, or in sub-freezing temperatures, follow the instructions below to reduce the risk of costly water damage.
- To prevent damage to the water pump, do not leave the control switch in the "WASH" position for extended periods of time when the water tank is empty.

During extended periods of non-use, extended absences, or in sub-freezing temperatures, follow the instructions below. When the appliance is not used for two or three days under normal conditions, it is sufficient to move the control switch to the "OFF" position.

1. Remove the water from the icemaker water supply line:

- 1) Remove the air filter if it has not already been removed.
- 2) Move the control switch to the "OFF" position.
- 3) Wait 3 minutes.
- 4) Close the icemaker water supply line shut-off valve and open the icemaker water supply line drain valve.
- 5) Allow the line to drain by gravity.
- 6) Attach compressed air or carbon dioxide supply to the icemaker water supply line drain valve.
- 7) Move the control switch to the "ICE" position.
- 8) Quickly blow the icemaker water supply line out using compressed air or carbon dioxide.

2. Drain the water tank:

- 1) Move the control switch to the "OFF" position.
- 2) Unplug the appliance from the electrical outlet.
- 3) Open the door. Disconnect the silicone hose to drain the water. See Fig. 7.
- 4) Reconnect the silicone hose back in its correct position after all of the water has drained.
- 5) Remove all ice from the ice storage bin and clean the ice storage bin.
- 6) Close the door.
- 7) Replace the air filter in its correct position.
- 8) Close the icemaker water supply line drain valve.

3. On water-cooled model only, remove the water from the water-cooled condenser:

- 1) Make sure the control switch is in the "OFF" position and the appliance is unplugged from the electrical outlet.
- 2) Remove the rear cover.
- 3) Close the condenser water supply line shut-off valve. If connected to a closed loop system, also close the condenser return line shut-off valve.
- 4) Open the condenser water supply line drain valve. If connected to a closed loop system, also open the condenser return line drain valve.
- 5) Attach a compressed air or carbon dioxide supply to the condenser water supply line drain valve.
- 6) Open the water regulating valve by using a screwdriver to pry up on the spring retainer underneath the spring. While holding the valve open, blow out the condenser using the compressed air or carbon dioxide supply until water stops coming out.
- 7) Close the condenser water supply line drain valve. If connected to a closed loop system, also close the condenser return line drain valve.
- 8) Replace the rear cover in its correct position.

V. 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.

HOSHIZAKI AMERICA, INC.