

Hoshizaki America, Inc.

Cubelet Icemaker/Dispenser

Models

DCM-500BAH(-OS)

DCM-500BWH(-OS)



“A Superior Degree
of Reliability”

www.hoshizaki.com

INSTRUCTION MANUAL



Issued: 6-18-2014

IMPORTANT

Only qualified service technicians should install, service, and maintain the 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. Failure to install, operate, and maintain the equipment in accordance with this manual may adversely affect safety, performance, component life, and warranty coverage.

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, write, or send an e-mail message to the Hoshizaki Technical Support Department for assistance.

HOSHIZAKI AMERICA, INC.
618 Highway 74 South
Peachtree City, GA 30269

Attn: Hoshizaki Technical Support Department

Phone: 1-800-233-1940 Technical Support
(770) 487-2331

Fax: 1-800-843-1056
(770) 487-3360

E-mail: techsupport@hoshizaki.com

Web Site: www.hoshizaki.com

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 icemaker is installed and operated. Only qualified service technicians should install, service, and maintain the icemaker. Read the warnings contained in this booklet carefully as they give important information regarding safety. Please retain this booklet for any further reference that may be necessary.

CONTENTS

Important Safety Information	4
I. Specifications.....	5
A. Nameplate Rating	5
1. DCM-500BAH (air-cooled)	5
2. DCM-500BAH-OS (air-cooled).....	6
3. DCM-500BWH (water-cooled)	7
4. DCM-500BWH-OS (water-cooled).....	8
B. Dimensions/Connections	9
1. DCM-500BAH	9
2. DCM-500BAH-OS	10
3. DCM-500BWH.....	11
4. DCM-500BWH-OS	12
II. Installation and Operating Instructions	14
A. Checks Before Installation.....	14
B. How to Remove Panels	15
C. Location	16
D. Setup.....	16
E. Electrical Connection	17
F. Water Supply and Drain Connections	18
1. Icemaker	19
2. Water-Cooled Condenser.....	20
a) Connection to an Open Drain System	20
b) Connection to a Closed Loop System	21
G. Final Checklist	22
H. Startup	23
I. Controls and Adjustments	24
III. Cleaning and Maintenance	25
A. Cleaning and Sanitizing Instructions.....	25
1. Water System	26
2. Dispensing Components	27
B. Maintenance.....	29
C. Preparing the Icemaker for Long Storage	30

Important Safety Information

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

⚠ WARNING Indicates a hazardous situation which could result in death or serious injury.

CAUTION Indicates a situation which could result in damage to the unit.

IMPORTANT Indicates important information about the use and care of the unit.

⚠ WARNING

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.

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

- Electrical connection must be hard-wired and 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 severe damage to equipment.
- This unit requires an independent power supply. See the nameplate for proper voltage and breaker/fuse size. Failure to use a proper breaker or fuse can result in a tripped breaker, blown fuse, or damage to existing wiring. This could lead to heat generation or fire.
- **THIS UNIT MUST BE GROUNDED.** Failure to properly ground this unit could result in death or serious injury.
- This unit should be disassembled or repaired only by qualified service personnel to reduce the risk of electric shock, injury, or fire.
- Do not make any alterations to the unit. Alterations could result in electric shock, injury, fire, or damage to the unit.

I. Specifications

A. Nameplate Rating

1. DCM-500BAH (air-cooled)

HOSHIZAKI ICE MAKER	
MODEL NUMBER	DCM-500BAH
SERIAL NUMBER	
AC SUPPLY VOLTAGE	115-120/60/1
COMPRESSOR	120V 7.5RLA 54.5LRA
GEAR MOTOR	120V 2.4FLA 1/4HP
FAN MOTOR	120V 1.0FLA 50W
AGITATING MOTOR	120V 0.9FLA 55W
DISPENSING MOTOR	120V 0.9FLA 55W
OTHER	120V 0.2A
MAXIMUM FUSE SIZE	20 AMPS
MAX. HACR BREAKER (USA ONLY)	20 AMPS
MAX. CIRC. BREAKER (CANADA ONLY)	20 AMPS
MINIMUM CIRCUIT AMPACITY	20 AMPS
DESIGN PRESSURE	HI-460PSI LO-290PSI
REFRIGERANT	404A 1 LB. 4.1 OZ.
 MOTOR-COMPRESSOR THERMALLY PROTECTED, NOT INTENDED FOR OUTDOOR USE! Hoshizaki America, Inc. Peachtree City, GA www.hoshizaki.com For certification marks, see the nameplate on the rear panel.	

See the nameplate for electrical and refrigeration specifications. This nameplate is located on the rear panel.

Since this nameplate is located on the rear panel of the icemaker, it cannot be read when the back of the icemaker is against a wall or against another piece of kitchen equipment. Therefore, the necessary electrical and refrigeration information is also on the rating label, which can be easily seen by removing only the front panel of the icemaker.

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

2. DCM-500BAH-OS (air-cooled)

HOSHIZAKI ICE MAKER

MODEL NUMBER	DCM-500BAH-OS
SERIAL NUMBER	
AC SUPPLY VOLTAGE	115-120/60/1
COMPRESSOR	120V 7.5RLA 54.5LRA
GEAR MOTOR	120V 2.4FLA 1/4 HP
FAN MOTOR	120V 1.0FLA 50W
AGITATING MOTOR	120V 0.9FLA 55W
DISPENSING MOTOR	120V 0.9FLA 55W
OTHER	120V 0.2A
MAXIMUM FUSE SIZE	20 AMPS
MAX. HACR BREAKER (USA ONLY)	20 AMPS
MAX. CIRC. BREAKER (CANADA ONLY)	20 AMPS
MINIMUM CIRCUIT AMPACITY	20 AMPS
DESIGN PRESSURE	HI-460PSI LO-290PSI
REFRIGERANT	404A 1 LB. 4.1 OZ.

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3. DCM-500BWH (water-cooled)

HOSHIZAKI ICE MAKER

MODEL NUMBER	DCM-500BWH
SERIAL NUMBER	
AC SUPPLY VOLTAGE	115-120/60/1
COMPRESSOR	120V 7.5RLA 54.5LRA
GEAR MOTOR	120V 2.4FLA 1/4HP
FAN MOTOR	-----
AGITATING MOTOR	120V 0.9FLA 55W
DISPENSING MOTOR	120V 0.9FLA 55W
OTHER	120V 0.2A
MAXIMUM FUSE SIZE	20 AMPS
MAX. HACR BREAKER (USA ONLY)	20 AMPS
MAX. CIRC. BREAKER (CANADA ONLY)	20 AMPS
MINIMUM CIRCUIT AMPACITY	20 AMPS
DESIGN PRESSURE	HI-460PSI LO-290PSI
REFRIGERANT	404A 11.5 OZ.

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

4. DCM-500BWH-OS (water-cooled)

HOSHIZAKI ICE MAKER	
MODEL NUMBER	DCM-500BWH-OS
SERIAL NUMBER	
AC SUPPLY VOLTAGE	115-120/60/1
COMPRESSOR	120V 7.5RLA 54.5LRA
GEAR MOTOR	120V 2.4FLA 1/4HP
FAN MOTOR	-----
AGITATING MOTOR	120V 0.9FLA 55W
DISPENSING MOTOR	120V 0.9FLA 55W
OTHER	120V 0.2A
MAXIMUM FUSE SIZE	20 AMPS
MAX. HACR BREAKER (USA ONLY)	20 AMPS
MAX. CIRC. BREAKER (CANADA ONLY)	20 AMPS
MINIMUM CIRCUIT AMPACITY	20 AMPS
DESIGN PRESSURE	HI-460PSI LO-290PSI
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1. DCM-500BAH

FRONT VIEW

ICE MAKING WATER INLET 1/2" FPT

22.07 [561]

15.62 [397]

3.22 [82]

STORAGE BIN DRAIN 3/4" FPT

DRIP TRAY DRAIN 3/4" FPT

TOP VIEW

JUNCTION BOX POWER SUPPLY

1.79 [45]

17.52 [445]

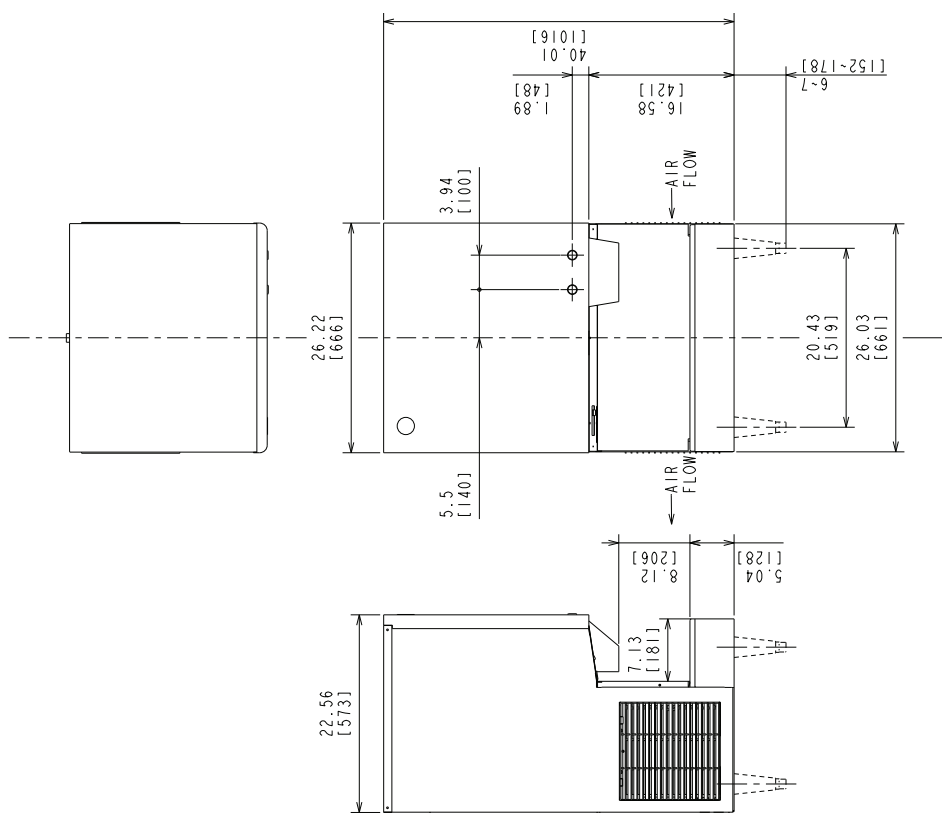
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1.77 [45]

3.35 [85]

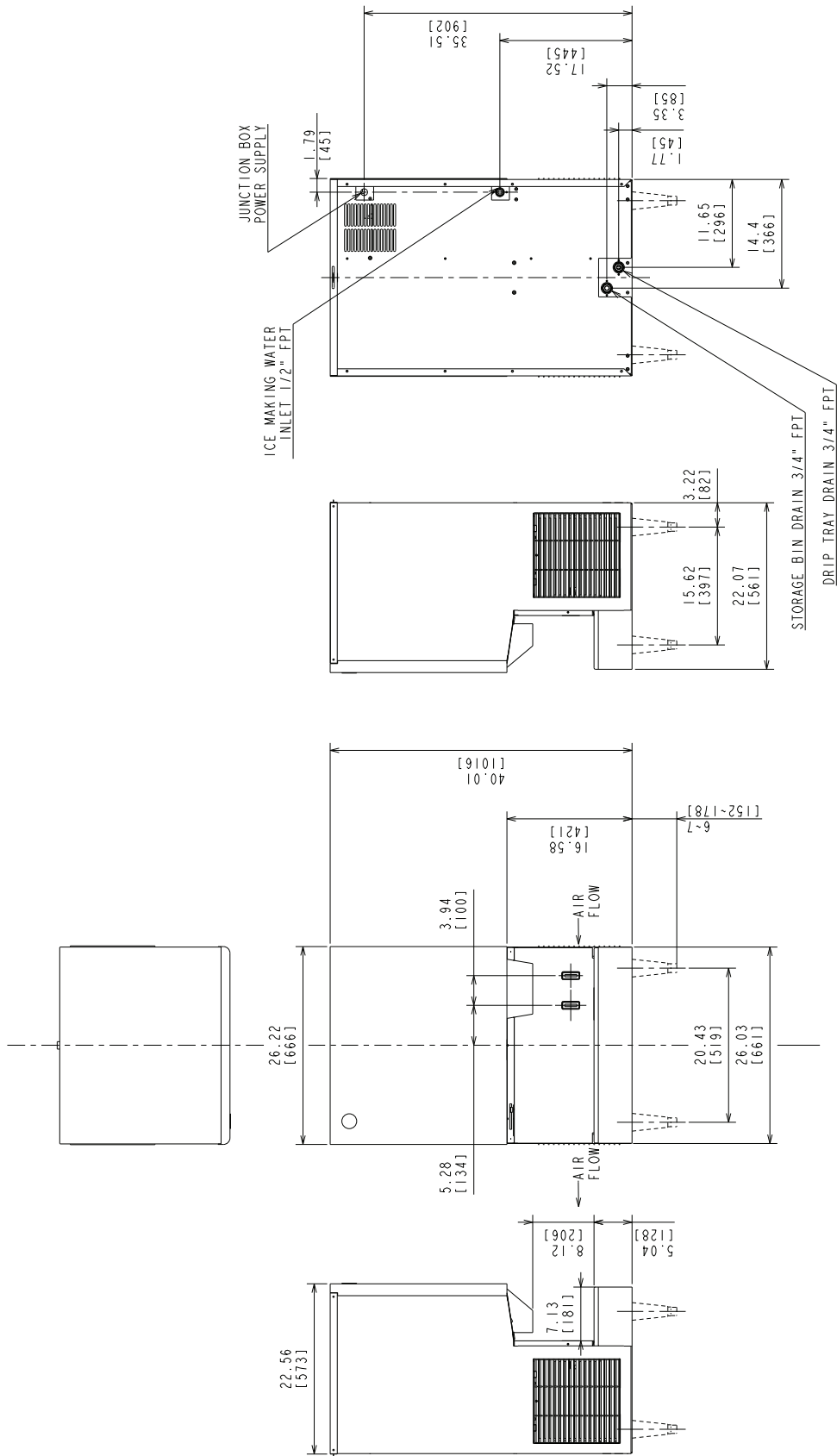
11.65 [296]

14.4 [366]



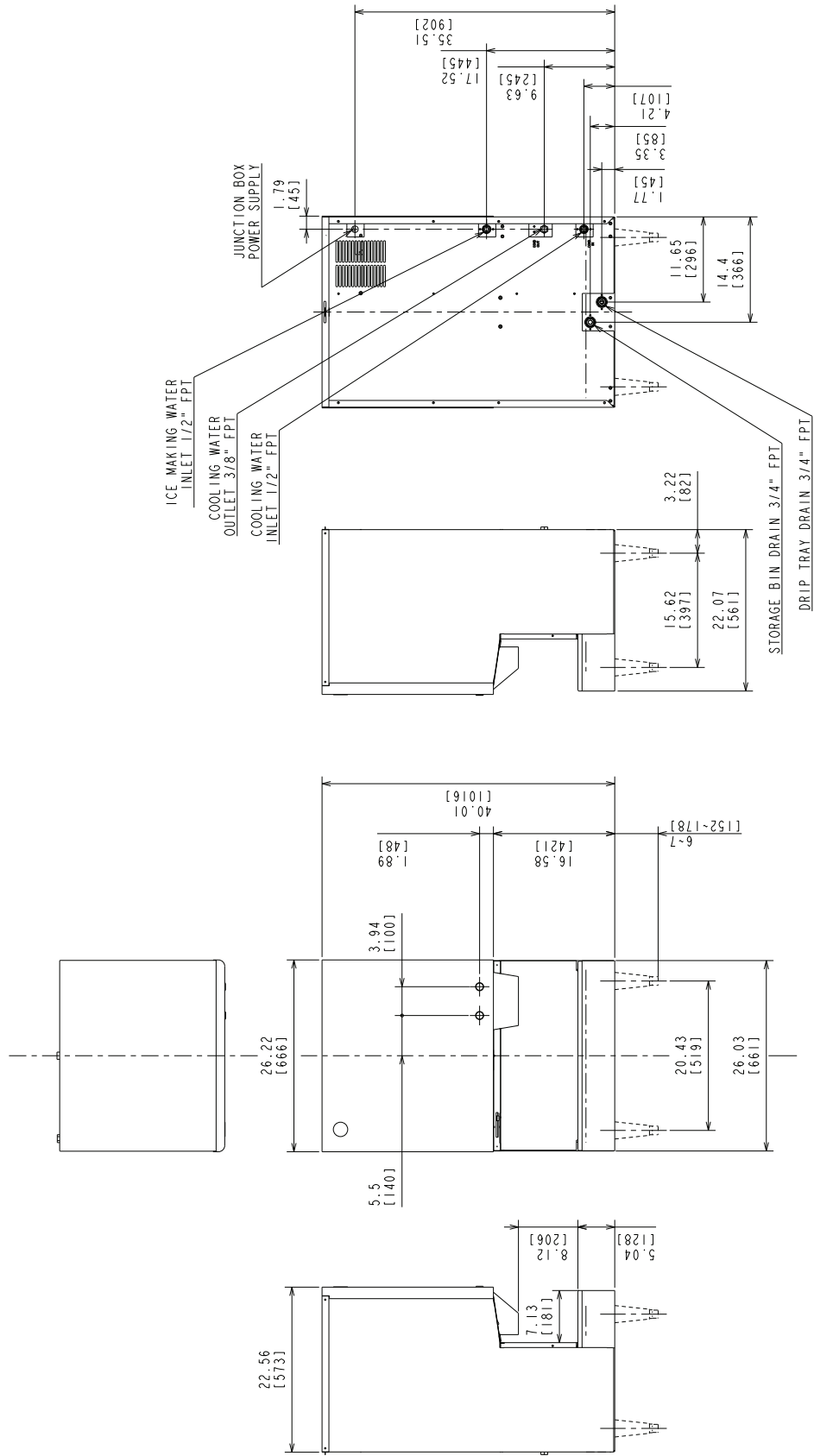
2. DCM-500BAH-OS

Unit: in. [mm]



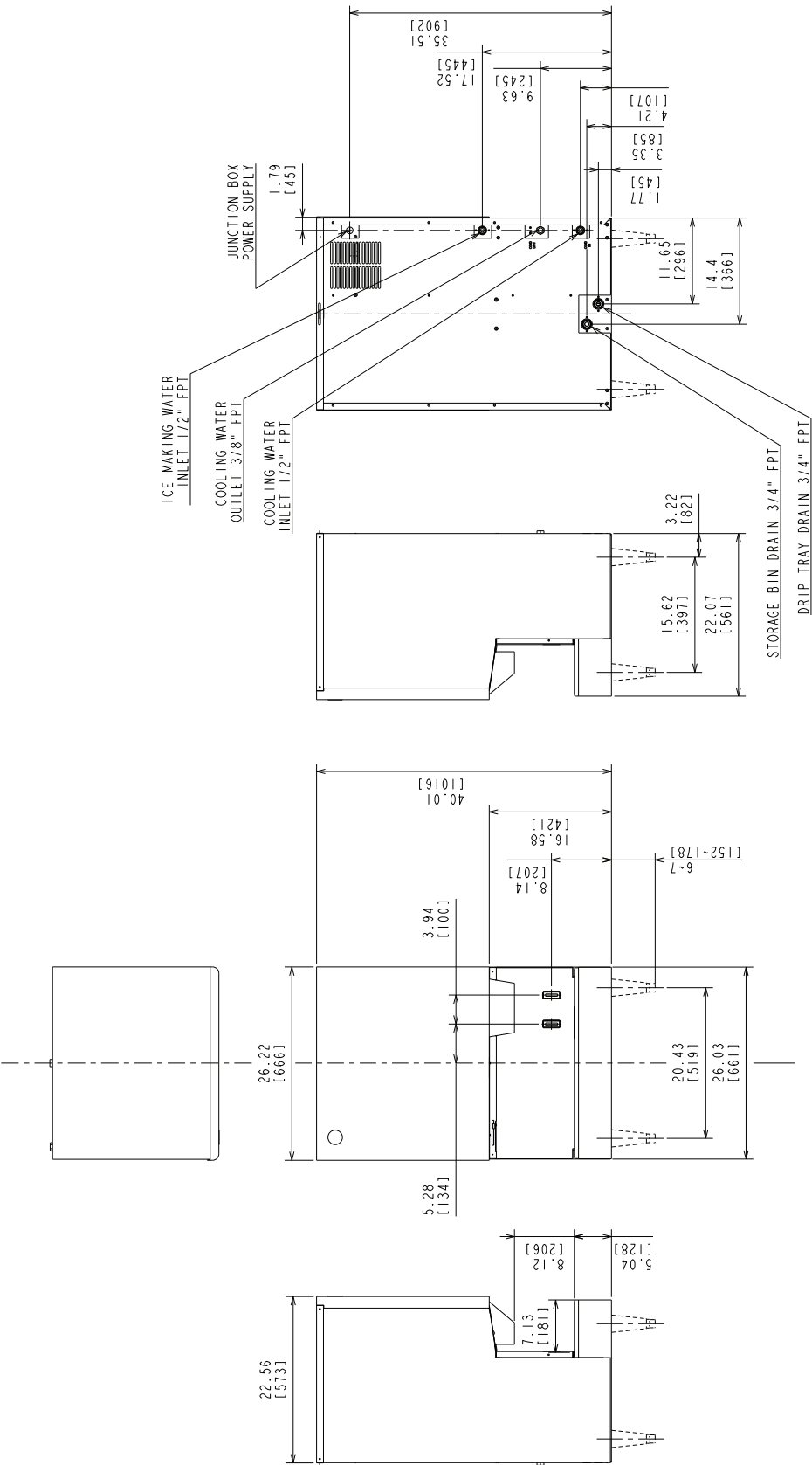
3. DCM-500BWH

Unit: in. [mm]



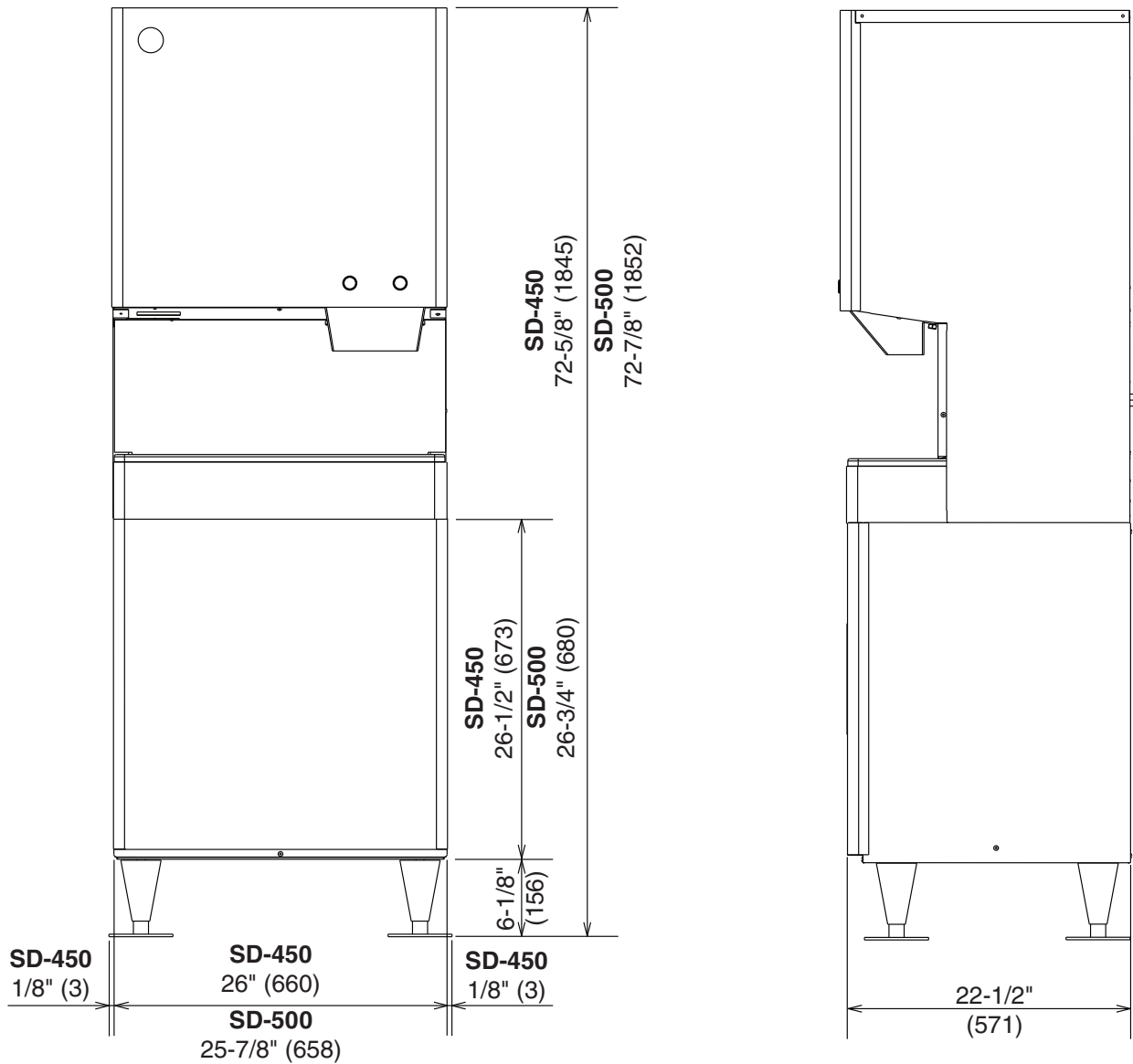
4. DCM-500BWH-OS

Unit: in. [mm]



5. DCM-500BAH(-OS) or DCM-500BWH(-OS) on optional SD-450 or SD-500 Stand

Unit: in. (mm)



II. Installation and Operating Instructions

WARNING

1. This icemaker must be installed in accordance with applicable national, state, and local regulations.
2. **CHOKING HAZARD:** Ensure all components, fasteners, and thumbscrews are securely in place after installation. Make sure that none have fallen into the storage bin.

A. Checks Before Installation

- 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 shipping carton, tape, and packing material. If any are left in the icemaker, it will not work properly.
- Remove the panels to prevent damage when installing the icemaker. See "II.B. How to Remove Panels."
- Remove the package containing the accessories.
- 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.
- Check that the 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 rear panel, and check that your voltage supplied corresponds with the voltage specified on the nameplate.
- This icemaker can be installed on a countertop or on an optional stand. If using an optional stand, Hoshizaki Stand SD-450 or SD-500 is recommended.

B. How to Remove Panels

See Fig. 1 or Fig. 2

- Front Panel: Remove the screw. Lift up and towards you. Disconnect the connector on push-button models.
- Top Panel: Lift up at front slightly, push rearward and lift off.
- Apron Panel: Remove the screws and pull towards you. Disconnect the connectors on optical-sensor models.
- Side Panel: Remove the screws and pull towards you.

DCM-500B_H
(push-button models)

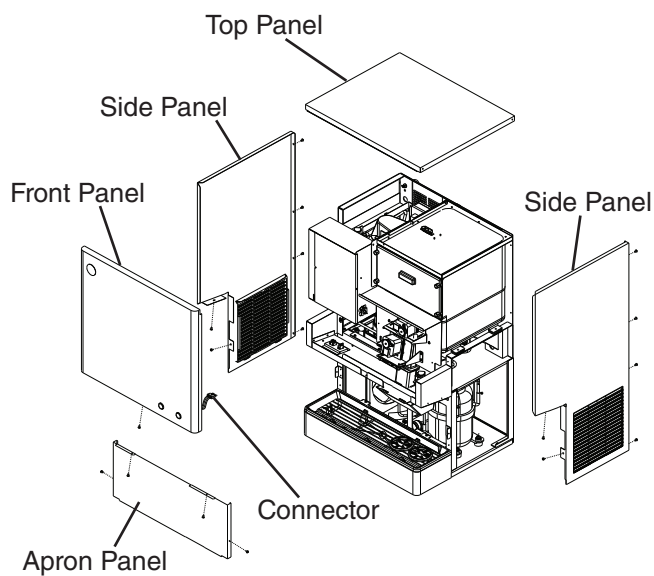


Fig. 1

DCM-500B_H-OS
(optical-sensor models)

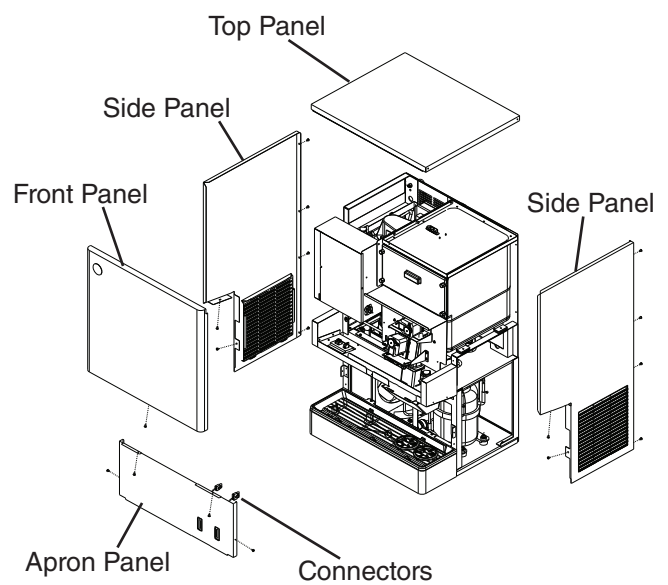


Fig. 2

C. Location

CAUTION

1. 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 icemaker performance.
2. This icemaker will not work at sub-freezing temperatures. To prevent damage to the water supply line, drain the icemaker if the air temperature is going to go below 32°F (0°C). See "III.C. Preparing the Icemaker for Long Storage."

IMPORTANT

Optical-Sensor Models (-OS): Sunlight, direct and indirect, can have an effect on the operation of the dispense sensors. If a problem is noticed, the machine should be moved out of direct sunlight and/or farther away from any outside windows.

For best operating results:

- The icemaker should not be located next to ovens, grills, or other high heat producing equipment.
- The location should provide a firm and level foundation for the equipment.
- Allow 6" (15 cm) clearance at rear and sides for proper air circulation and ease of maintenance and/or service should they be required. Allow 24" (61 cm) clearance at top to allow for removal of the auger.

D. Setup

- 1) Position the icemaker in the selected permanent location. If applicable, attach optional 6" legs or attach to an optional stand. If attaching to a stand, refer to the installation instructions included with the stand.
- 2) Level the icemaker in both the left-to-right and front-to-rear directions. If using optional 6" legs or an optional stand, adjust the legs to make the icemaker level.
- 3) If mounting flat to a counter, seal the perimeter where the icemaker contacts the counter with approved caulk compound in a smooth and easily cleanable manner.
- 4) Replace the panels in their correct positions.

E. Electrical Connection

⚠ WARNING

1. Electrical connection must be hard-wired and 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 extensive damage to equipment.
2. This unit requires an independent power supply. See the nameplate for proper voltage and breaker/fuse size. Failure to use a proper breaker or fuse can result in a tripped breaker, blown fuses, or damage to existing wiring. This could lead to heat generation or fire.
3. **THIS UNIT MUST BE GROUNDED.** Failure to properly ground this unit could result in death or serious injury.
4. Electrical connection must be made in accordance with the instructions on the "WARNING" tag, provided with the pig tail leads in the junction box. See Fig. 3.

- Usually an electrical permit and services of a licensed electrician are required.
 - The maximum allowable voltage variation is ± 10 percent of the nameplate rating.
 - The white lead must be connected to the neutral conductor of the power source.
- CAUTION! Miswiring may result in severe damage to the icemaker.** See Fig. 3.
- The opening for the power supply connection is 7/8" DIA to fit a 1/2" trade size conduit.

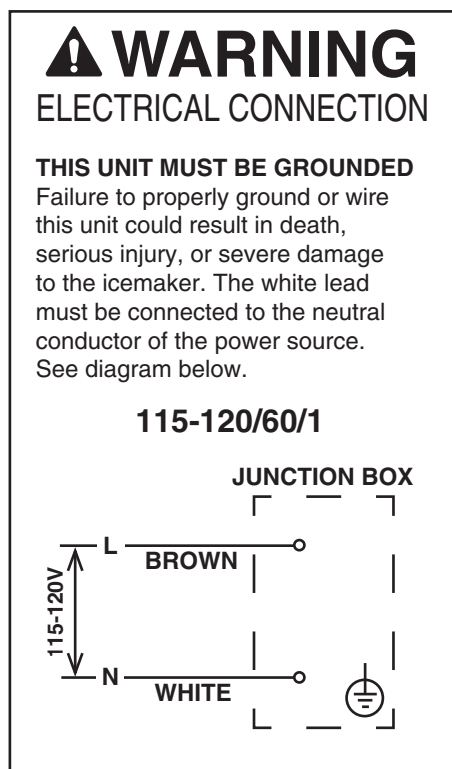


Fig. 3

F. Water Supply and Drain Connections

See Fig. 4, 5, or 6

WARNING

1. Water supply and drain connections must be installed in accordance with applicable national, state, and local regulations.
2. 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 this normal temperature range may affect icemaker performance.
3. To prevent damage to equipment, do not operate the icemaker when the water supply is off, or if the pressure is below 10 PSIG. Do not run the icemaker until the proper water pressure is reached.

- A plumbing permit and services of a licensed plumber may be required in some areas.
- External filters, strainers, or softeners may be required depending on water quality. Contact your local Hoshizaki distributor for recommendations.
- Water supply pressure should 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.
- The storage bin drain line, drip tray 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.
- 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 storage bin, drip tray, and water-cooled condenser (if applicable) and the floor drain.

1. Icemaker

- Icemaker water supply inlet is 1/2" female pipe thread (FPT). A minimum of 3/8" OD copper tubing is recommended for the icemaker water supply line.
- An icemaker water supply line shut-off valve and drain valve should be installed.
- Storage bin and drip tray drain outlets are 3/4" FPT. A minimum of 3/4" OD hard pipe is recommended for the storage bin and drip tray drain lines.

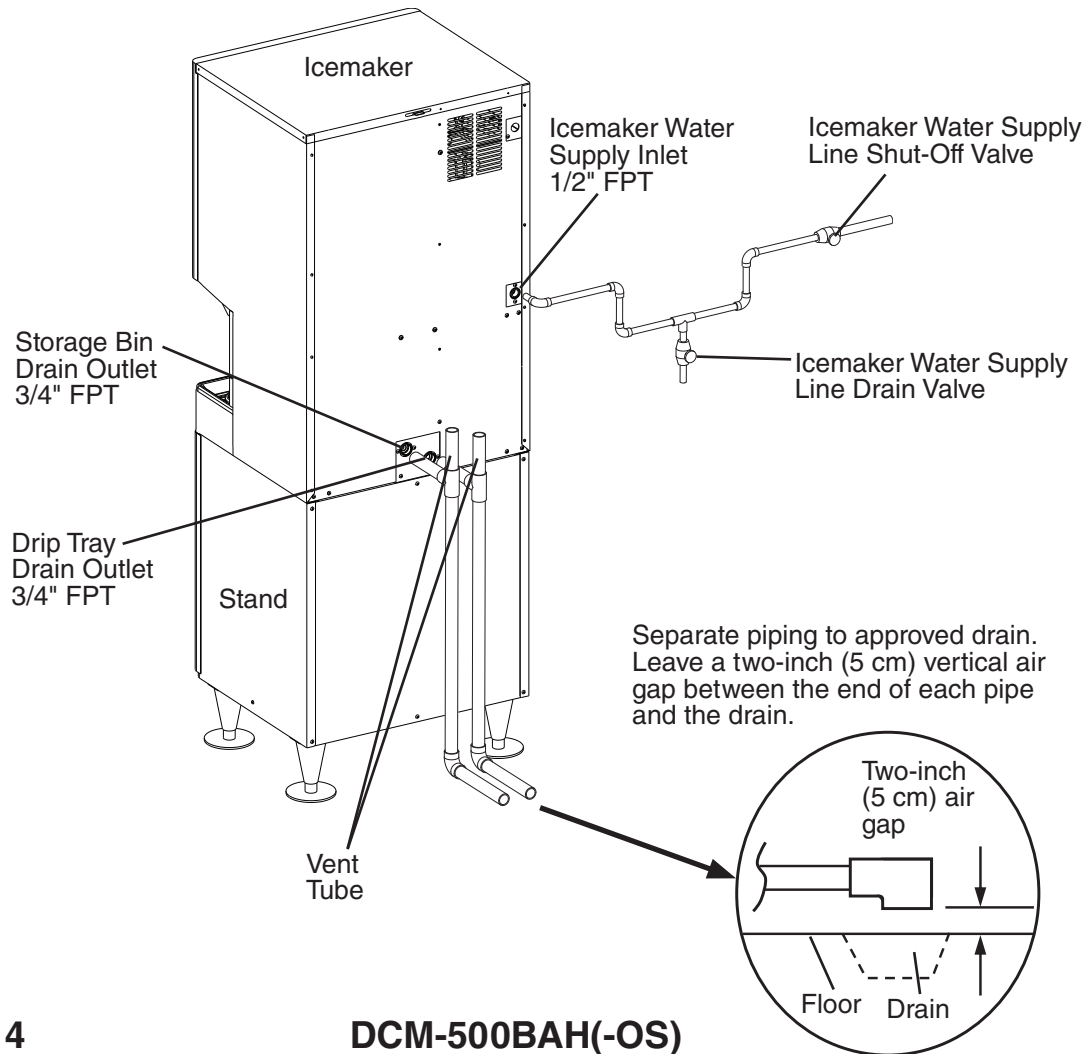


Fig. 4

DCM-500BAH(-OS)

2. Water-Cooled Condenser

a) Connection to an Open Drain System

- Condenser water supply inlet is 1/2" female pipe thread (FPT). A minimum of 3/8" OD copper tubing is recommended for the condenser water supply line.
- A condenser water supply line shut-off valve and drain valve should be installed.
- Condenser drain outlet is 3/8" FPT. A minimum of 3/8" OD hard pipe is recommended for the condenser drain line.
- In some areas, a back flow preventer may be required in the condenser water supply line.

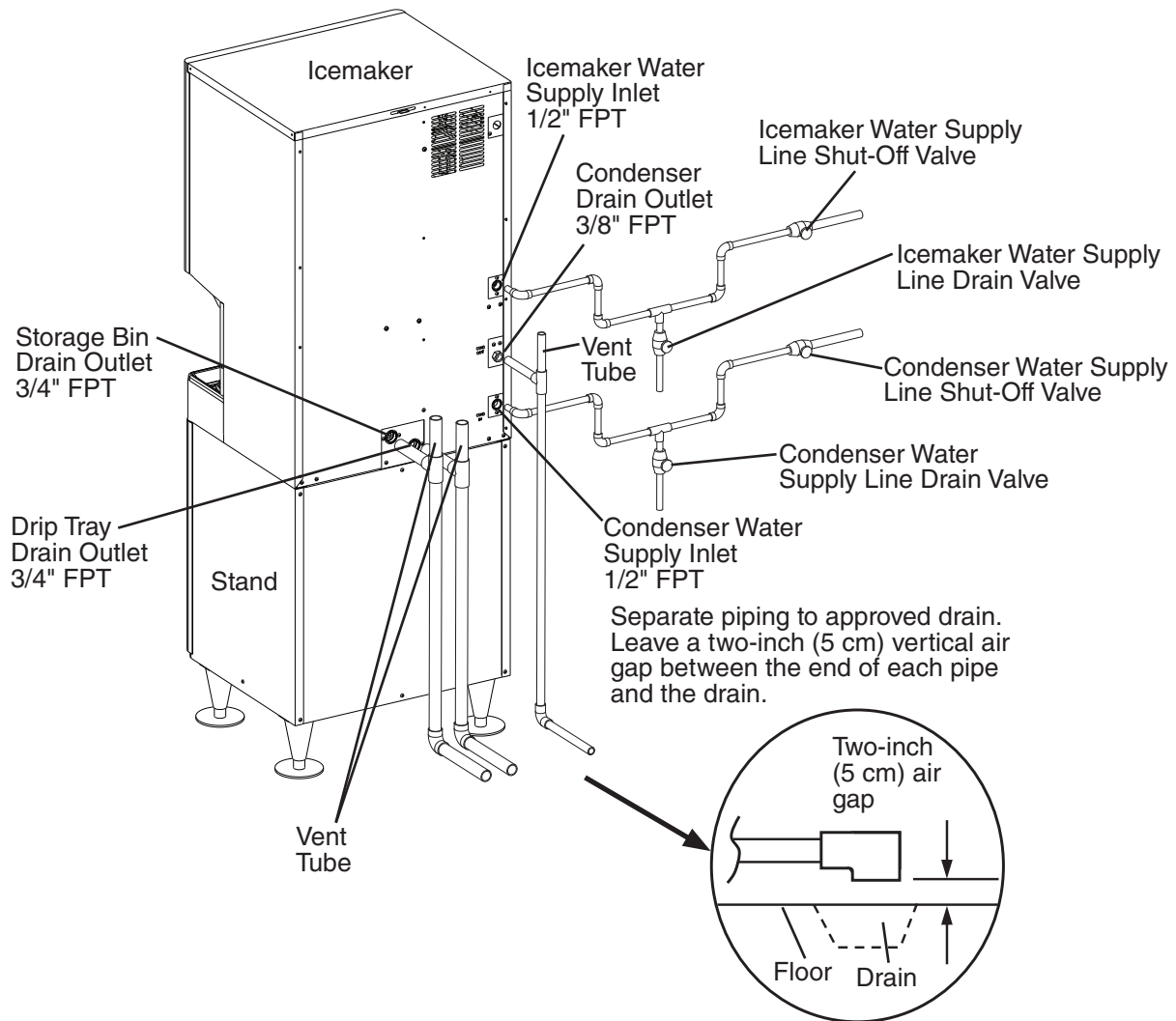


Fig. 5

**DCM-500BWH(-OS)
Connection to an Open Drain System**

b) Connection to a Closed Loop System

- Condenser water supply inlet is 1/2" female pipe thread (FPT). A minimum of 3/8" OD copper tubing is recommended for the condenser water supply line.
- Condenser return outlet is 3/8" FPT. A minimum of 3/8" OD hard pipe is recommended for the condenser return line.
- Shut-off valves and drain valves should be installed at both the condenser water supply inlet and condenser return outlet.
- The water supply to the condenser should not drop below 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 return 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 return outlet temperature 5 minutes after a freeze cycle starts. If the outlet temperature is not in the proper range, adjust the water-regulating valve to bring it into range.

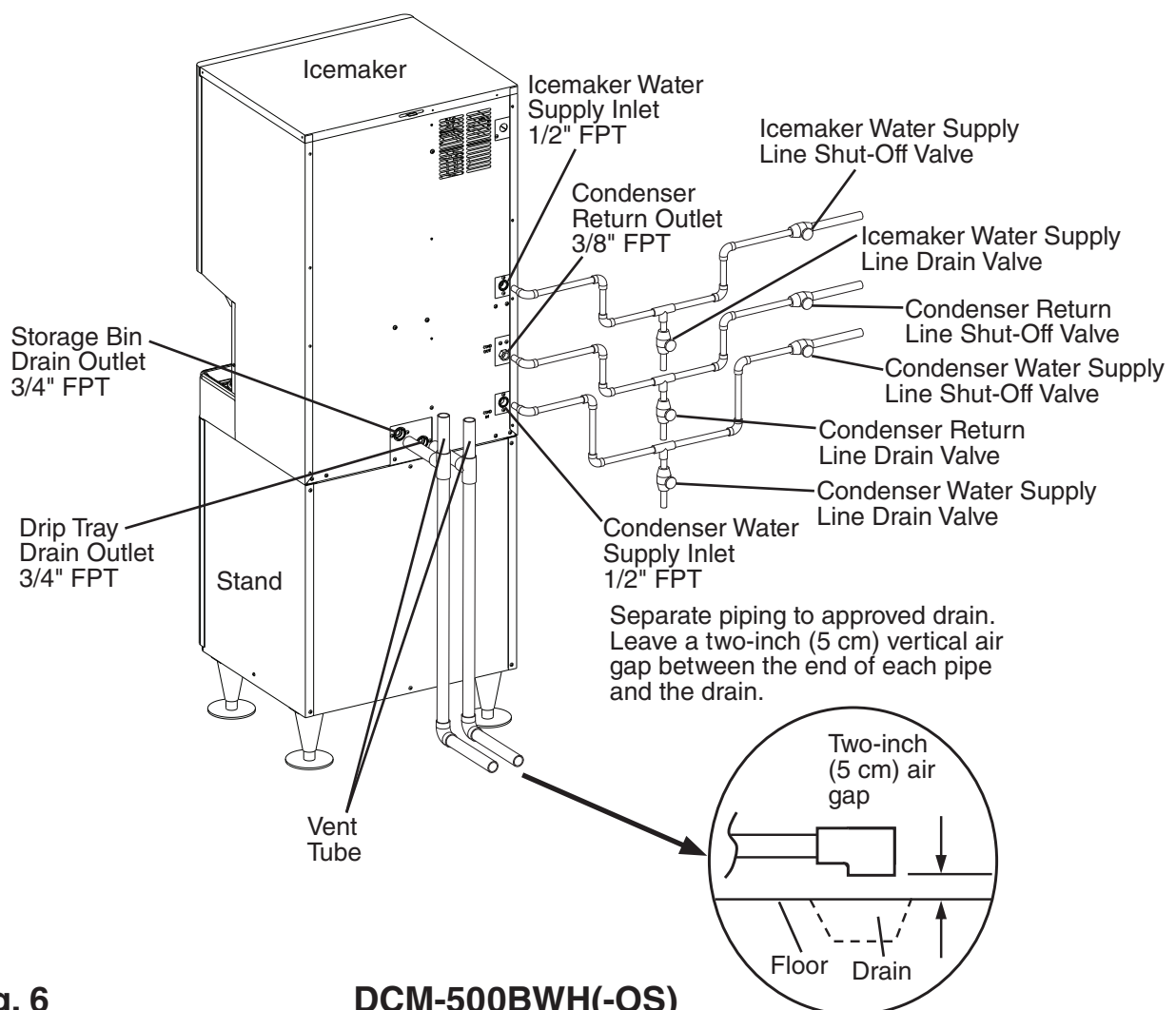


Fig. 6

**DCM-500BWH(-OS)
Connection to a Closed Loop System**

G. Final Checklist

WARNING

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

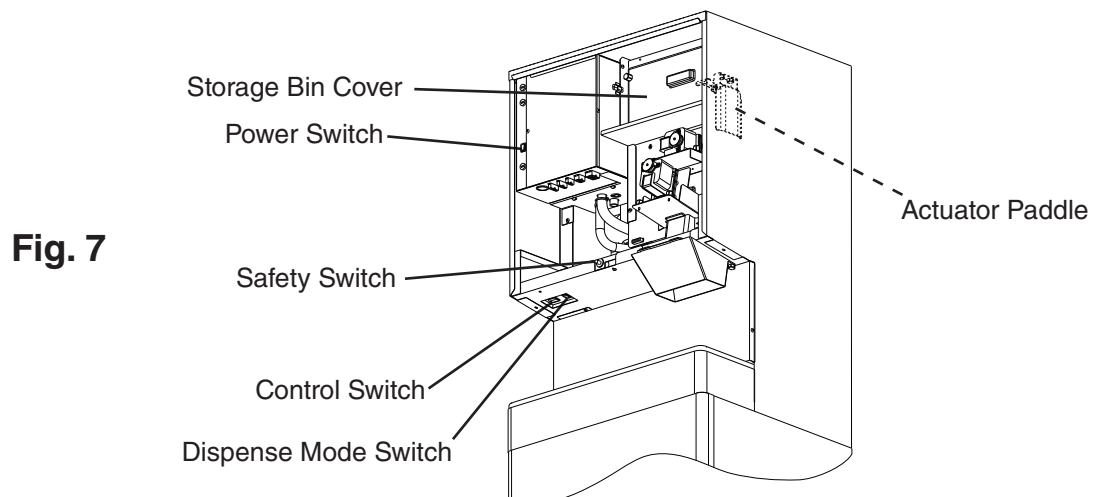
- 1) Is the icemaker level?
- 2) Is the icemaker in a site where the ambient temperature is within 45°F to 100°F (7°C to 38°C) and the water temperature within 45°F to 90°F (7°C to 32°C) all year around?
- 3) Is there at least 6" (15 cm) clearance at rear and sides and 24" (61 cm) at top for proper air circulation and ease of maintenance and service?
- 4) Have the shipping carton, tape, and packing material been removed from the icemaker?
- 5) Are all components, fasteners, and thumbscrews securely in place?
- 6) If the icemaker is on a stand, has it been secured to the stand as outlined in the stand's installation instructions? If the icemaker is mounted flat to a counter, has the perimeter where the icemaker contacts the counter been sealed with approved caulk compound?
- 7) Have all electrical and water connections been made? Do electrical and water connections meet all national, state, and local code and regulation requirements?
- 8) Has the power supply voltage been checked or tested against the nameplate rating? Has a proper ground been installed to the icemaker?
- 9) 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?
Note: The icemaker may stop running when the water supply is off, or if the pressure is below 10 PSIG. When the proper water pressure is reached, the icemaker automatically starts running again.
- 10) Are the compressor hold-down bolts snug? 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?
- 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?
- 13) Has the warranty card been filled out and forwarded to the factory for warranty registration?

H. Startup

⚠ WARNING

1. All parts are factory-adjusted. Improper adjustments may adversely affect safety, performance, component life, and warranty coverage.
2. If the icemaker is turned off, wait for at least 3 minutes before restarting the icemaker to prevent damage to the compressor.
3. 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 front panel. Move the power switch to the "ON" position, then move the control switch to the "OFF" position. See Fig. 7. Replace the front panel in its correct position, then turn on the power supply.
Note: This unit will not run if the safety switch is not engaged.
- 3) Move the control switch to the "ICE" position to start the automatic icemaking process.
- 4) Once the unit starts to produce ice, allow it to run for another 30 minutes.
- 5) Move the control switch to the "DRAIN" position and allow the water system to drain for 5 minutes.
Note: If the unit is running, the drain valve will not open until 2.5 minutes after the control switch is moved to the "DRAIN" position. This allows the components to cycle down.
- 6) Move the dispense mode switch to the "CONTINUOUS" position and dispense all of the ice from the storage bin.
- 7) Remove the front panel, then remove the storage bin cover.
- 8) To confirm bin control operation, move the control switch to the "ICE" position and then engage the safety switch. Allow the unit to run until the compressor starts (approximately 60 seconds). Press and hold the actuator paddle located inside the storage bin. **WARNING! Keep hands, hair, and loose clothing clear of the agitator inside the storage bin.** The compressor should de-energize 90 seconds later, and the gear motor should de-energize 60 seconds after that.



- 9) Disengage the safety switch. Move the control switch to the "OFF" position, then move the power switch to the "OFF" position. Turn off the power supply.
- 10) Clean the storage bin liner and the storage bin cover using a neutral cleaner. Rinse thoroughly after cleaning. Replace the storage bin cover in its correct position.
WARNING! CHOKING HAZARD: Ensure all components, fasteners, and thumbscrews are securely in place. Make sure that none have fallen into the storage bin.
- 11) Move the power switch to the "ON" position, then replace the front panel in its correct position. Turn on the power supply, then move the control switch to the "ICE" position to start the automatic icemaking process.

I. Controls and Adjustments

1. Portion Control

A variable resistor which controls the amount of ice dispensed is located on the control board.

The figures on the label indicate dispensing time (sec.). See Fig. 8. When shipped, the portion control is set at the minimum dispensing time (0.6 sec.).

DCM-500BAH(-OS); DCM-500BWH(-OS) Approximately 0.72 oz./0.6 sec.

Approximate amount of ice dispensed per second.

DCM-500BAH(-OS); DCM-500BWH(-OS) Approximately 1.2 oz./sec.

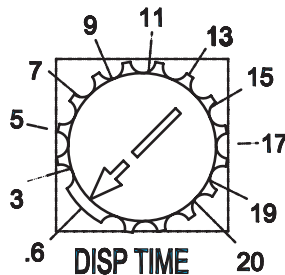


Fig. 8

III. Cleaning and Maintenance

⚠ WARNING

CHOKING HAZARD: Ensure all components, fasteners, and thumbscrews are securely in place after any cleaning or maintenance is done to the unit. Make sure that none have fallen into the storage bin.

A. Cleaning and Sanitizing Instructions

Hoshizaki recommends cleaning and sanitizing this unit at least twice a year. More frequent cleaning and sanitizing, however, may be required in some existing water conditions.

⚠ WARNING

1. To prevent injury to individuals and damage to the icemaker, do not use ammonia type cleaners.
2. Carefully follow any instructions provided with the bottles of cleaning and sanitizing solution.
3. Always wear liquid-proof gloves and goggles to prevent the cleaning and sanitizing solutions from coming into contact with skin or eyes.
4. After cleaning and sanitizing, do not use ice made from the cleaning and sanitizing solutions. Be careful not to leave any solution on the parts or in the storage bin.

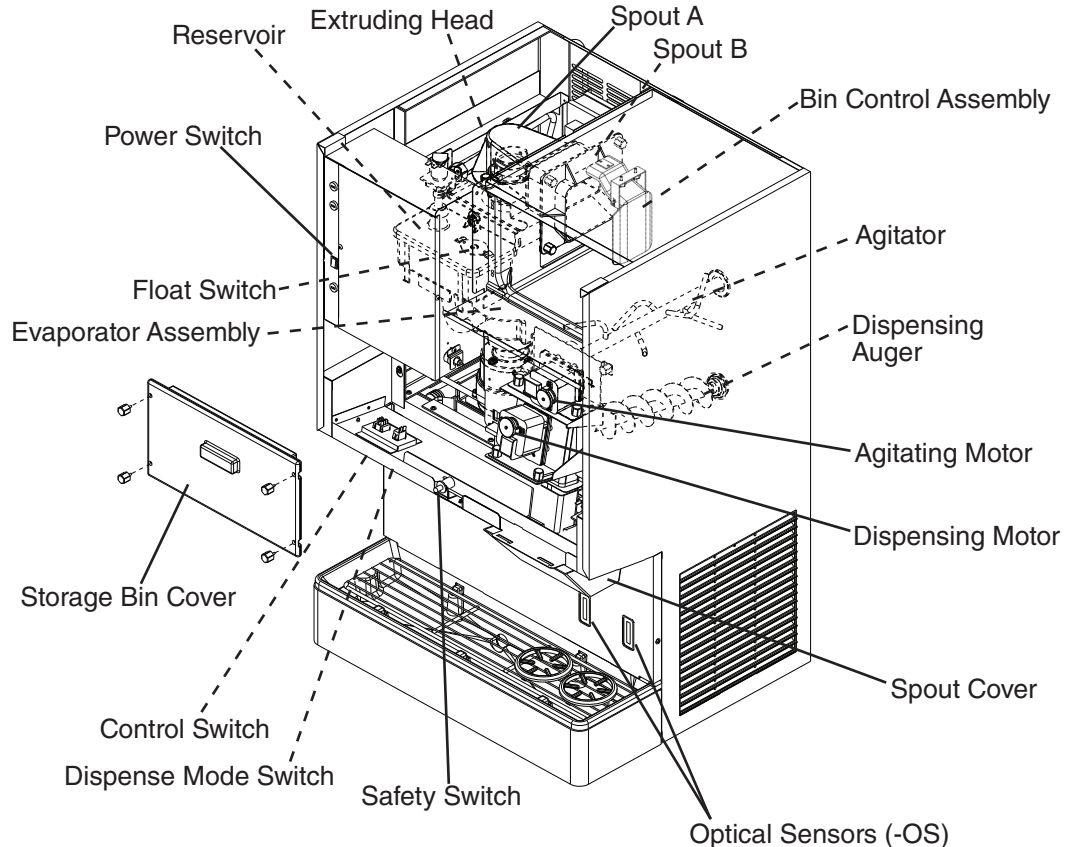


Fig. 9

1. Water System

a) Cleaning Solution

Dilute 9.6 fl. oz. (0.29 l) of Hoshizaki "Scale Away" with 1.6 gal. (6.0 l) of warm water.

b) Cleaning Procedure

- 1) Close the icemaker water supply line shut-off valve.
- 2) Move the control switch to the "DRAIN" position and allow the water system to drain for 5 minutes.
Note: If the unit is running, the drain valve will not open until 2.5 minutes after the control switch is moved to the "DRAIN" position. This allows the components to cycle down.
- 3) Move the dispense mode switch to the "CONTINUOUS" position, then dispense all of the ice from the storage bin.
- 4) Move the control switch to the "OFF" position, then turn off the power supply. Remove the front and top panels, then move the power switch to the "OFF" position.
- 5) Remove the storage bin cover. Remove spout B, then remove spout A. See Fig. 9.
- 6) Pour the cleaning solution over the extruding head until the evaporator assembly and the reservoir are full and the solution starts to overflow into the drain pan.
Note: If there is excess scale on the extruding head, fill the evaporator assembly and reservoir as described above, then use a clamp on the reservoir hose between the reservoir and evaporator assembly to block flow. Pour additional cleaning solution over the extruding head until the evaporator assembly is completely full.
- 7) Replace spout A, spout B, and the storage bin cover in their correct positions.
- 8) Allow the icemaker to sit for 10 minutes before operation. If you placed a clamp on the reservoir hose in step 6, remove it before operation.
- 9) In bad or severe water conditions, clean the float switch assembly as described below. See Fig. 9. Otherwise, continue to step 10.
 - a. Remove the float switch assembly from the reservoir cover.
 - b. Wipe down the float switch assembly with the cleaning solution.
 - c. Rinse the float switch assembly thoroughly with clean water.
 - d. Replace the float switch assembly in its correct position.
- 10) Move the power switch to the "ON" position and replace the panels in their correct positions. Turn on the power supply, then move the control switch to the "ICE" position. Make ice using the solution until the icemaker stops making ice.
Note: This unit will not run if the safety switch is not engaged.
- 11) Move the control switch to the "DRAIN" position and allow the solution to drain for 5 minutes.
- 12) Move the control switch to the "ICE" position. Open the icemaker water supply line shut-off valve to supply water to the reservoir.

- 13) After the gear motor starts, move the control switch to the "DRAIN" position and allow the water system to drain for 5 minutes.

Note: If you do not sanitize the unit, move the control switch to the "ICE" position after the water system drains. Allow the icemaker to run for 30 minutes, then move the control switch to the "OFF" position. Turn off the power supply, then remove the front panel and storage bin cover. Go to step 12 in "III.A.2.c) Cleaning and Sanitizing Procedure" under "Dispensing Components."

- 14) Move the control switch to the "OFF" position, then turn off the power supply.

- 15) Close the icemaker water supply line shut-off valve.

c) Sanitizing Solution

Dilute 0.82 fl. oz. (25 ml) of a 5.25% sodium hypochlorite solution (chlorine bleach) with 1.6 gal. (6.0 l) of warm water.

d) Sanitizing Procedure - Following Cleaning Procedure

- 1) Make sure the control switch is in the "OFF" position, the power supply is off, and the icemaker water supply line shut-off valve is closed.
- 2) Remove the front and top panels, then move the power switch to the "OFF" position.
- 3) Remove the storage bin cover. Remove spout B, then remove spout A.
- 4) Pour the sanitizing solution over the extruding head until the evaporator assembly and the reservoir are full and the solution starts to overflow into the drain pan.
- 5) Replace spout A, spout B, and the storage bin cover in their correct positions.
- 6) Allow the icemaker to sit for 10 minutes before operation.
- 7) Move the power switch to the "ON" position and replace the panels in their correct positions. Turn on the power supply, then move the control switch to the "ICE" position. Make ice using the solution until the icemaker stops making ice.
- 8) Move the control switch to the "DRAIN" position and allow the solution to drain for 5 minutes.
- 9) Move the control switch to the "ICE" position. Open the icemaker water supply line shut-off valve to supply water to the reservoir.
- 10) After the gear motor starts, move the control switch to the "DRAIN" position and allow the water system to drain for 5 minutes.
- 11) Move the control switch to the "ICE" position to start the automatic icemaking process. Allow the icemaker to run for 30 minutes, then clean and sanitize the dispensing components as outlined below.

2. Dispensing Components

Perform after cleaning and sanitizing the water system as outlined above.

a) Cleaning Solution

Dilute 9.6 fl. oz. (0.29 l) of Hoshizaki "Scale Away" with 1.6 gal. (6.0 l) of warm water.

b) Sanitizing Solution

Dilute 0.82 fl. oz. (25 ml) of a 5.25% sodium hypochlorite solution (chlorine bleach) with 1.6 gal. (6.0 l) of warm water.

c) Cleaning and Sanitizing Procedure

- 1) Move the control switch to the "OFF" position, then turn off the power supply.
- 2) Remove the front and top panels, then move the power switch to the "OFF" position.
- 3) Remove the storage bin cover.
- 4) Remove the motor bracket thumbscrews, first from the vertical plane and then from the horizontal plane. While holding on to the corresponding agitator or auger, move the agitating motor or the dispensing motor towards you. Remove the agitator and the dispensing auger from the storage bin. See Fig. 9.
- 5) Remove the bin control assembly. See Fig. 10.
- 6) Remove the snap pin, shaft, and actuator.
- 7) Remove spout B, spout A, and their gaskets.
- 8) Remove the spout cover, ice dispensing spout, and water dispensing nozzle. See Fig. 11.
- 9) Immerse the agitator, dispensing auger, and parts removed in steps 5 through 8 in the cleaning solution and then in the sanitizing solution for 15 minutes each. Rinse the parts thoroughly with clean water. On optical-sensor models (-OS), wipe the optical sensors with cleaning solution and then with a clean, damp cloth.
- 10) Wipe the shutter located above the ice dispensing spout thoroughly with a clean cloth.
- 11) Reassemble the bin control assembly and replace all parts in the reverse order of which they were removed.
- 12) Pour warm water into the storage bin and melt any remaining ice. Clean the storage bin liner and the storage bin cover using a neutral cleaner. Rinse thoroughly after cleaning. Replace the storage bin cover in its correct position.
- 13) Move the power switch to the "ON" position, then replace the panels in their correct positions. Turn on the power supply, then move the control switch to the "ICE" position to start the automatic icemaking process.

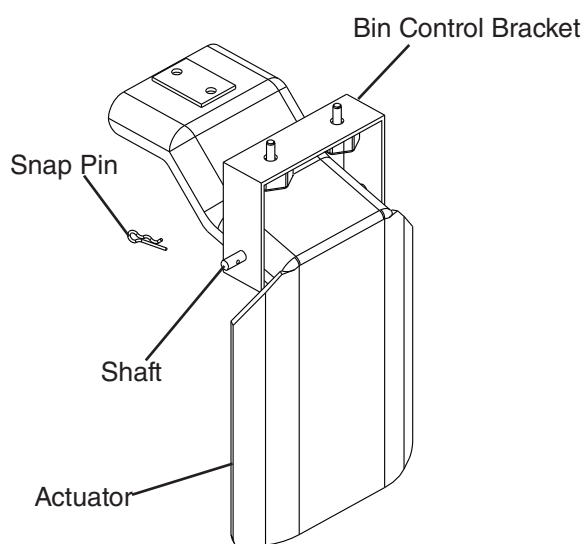


Fig. 10

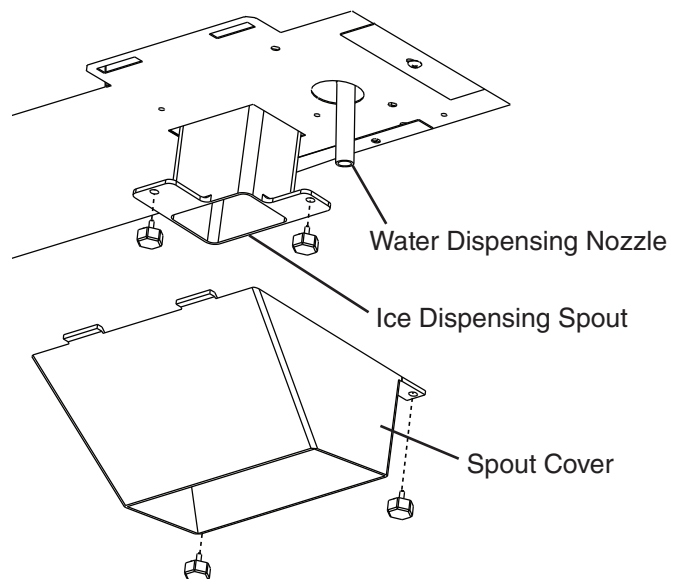


Fig. 11

B. Maintenance

This icemaker must be maintained individually, referring to the instruction manual and labels provided with the icemaker. The schedule below is a guideline. More frequent maintenance, however, may be required depending on water quality, the icemaker's environment, and local sanitation regulations.

Consult with your local distributor about inspection and maintenance service. To obtain the name and phone number of your local distributor, visit www.hoshizaki.com or call Hoshizaki Technical Support at 1-800-233-1940 in the USA.

WARNING

1. Only qualified service technicians should attempt to service or maintain this icemaker.
2. Disconnect power before performing maintenance.

Maintenance Schedule		
Frequency	Area	Task
Every 2 Weeks	Air Filter	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 cleaner like Zud or Bon Ami.
Every 6 Months	Icemaker and Storage Bin	Clean and sanitize per the cleaning and sanitizing instructions provided in this manual.
	Evaporator Condensate Drain Pan and Gear Motor Drain Pan	Wipe down with a clean cloth and warm water. Slowly pour one cup of sanitizing solution (prepare as outlined in the sanitizing instructions in this manual) into the evaporator condensate drain pan. Be careful not to overflow the pan. This solution will flow down to the gear motor drain pan and out the drain line to sanitize these areas. Repeat with a cup of clean water to rinse.
	Icemaker and Storage Bin Drains	Check to make sure they are clear.
Yearly	Inlet Water Valve and Drain Valve	Close the icemaker water supply line shut-off valve and drain the water system. Clean the inlet water valve screen and clean and inspect the drain valve.
	Water Hoses	Inspect the water hoses and clean/replace if necessary.
	Condenser	Inspect. Clean if necessary by using a brush or vacuum cleaner.
	Icemaker	Inspect for oil spots, loose components, fasteners, and wires.
	Upper Bearing (extruding head)	Check for wear using .02" round stock or pin gauge. Replace both upper bearing and lower bearing if wear exceeds factory recommendations. See the Service Manual for details.
After 3 Years, then Yearly	Upper Bearing (extruding head); Lower Bearing and O-Ring (lower housing); Mechanical Seal; Evaporator Cylinder; Auger	Inspect. Replace both upper bearing and lower bearing if wear exceeds factory recommendations. Replace the mechanical seal if the seal's contact surfaces are worn, cracked, or scratched.

C. Preparing the Icemaker for Long Storage

CAUTION

When storing the icemaker for an extended time or in sub-freezing temperatures, follow the instructions below to prevent damage.

When the icemaker is not used for two or three days under normal conditions, it is sufficient to only move the control switch to the "OFF" position. When storing the icemaker for extended time or in sub-freezing temperatures, follow the instructions below.

1. Remove the ice from the storage bin, drain the water system, and remove the water from the icemaker water supply line:

- 1) Close the icemaker water supply line shut-off valve and open the icemaker water supply line drain valve.
- 2) Move the control switch to the "DRAIN" position and allow the water system to drain for 5 minutes.
Note: If the unit is running, the drain valve will not open until 2.5 minutes after the control switch is moved to the "DRAIN" position. This allows the components to cycle down.
- 3) Move the dispense mode switch to the "CONTINUOUS" position, then dispense all of the ice from the storage bin.
- 4) Attach a compressed air or carbon dioxide supply to the icemaker water supply line drain valve.
- 5) While engaging the water dispense switch, blow out the water dispense valve using the compressed air or carbon dioxide supply. After blowing out the water dispense valve, leave the compressed air or carbon dioxide supply flowing. Move the control switch to the "ICE" position to open the inlet water valve and briefly blow out the valve. After blowing out the inlet water valve, move the control switch to the "OFF" position.
- 6) Close the icemaker water supply line drain valve.
- 7) Turn off the power supply, then remove the front panel and move the power switch to the "OFF" position.
- 8) Remove the storage bin cover. Clean the storage bin liner and the storage bin cover using a neutral cleaner. Rinse thoroughly after cleaning. Replace the storage bin cover and the front panel in their correct positions.
Note: If your unit has a water-cooled condenser, leave the front panel off and go to the next section.

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

- 1) Make sure the control switch and the power switch are in the "OFF" position and that the power supply is off. Remove the top, apron, and left side panels.
- 2) 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.
- 3) Open the condenser water supply line drain valve. If connected to a closed loop system, also open the condenser return line drain valve.

- 4) Attach a compressed air or carbon dioxide supply to the condenser water supply line drain valve.
- 5) 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.
- 6) Close the drain valve(s).
- 7) Replace the panels in their correct positions.

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