

# **Installation and User's Manual**

LUI-100A

LUI-150A

**LUI-250A** 



## Freight Claim Procedure (Important)

### Inspect Immediately

This product has been carefully inspected and packed in accordance with the carrier's packing specifications. Responsibility for safe delivery has been assumed by the carrier. If loss or damage occurs, you as the consignee must file a claim with the carrier and hold the container for carrier's inspection.

### Visible Loss or Damage

Any external evidence of loss or damage must be fully described and noted on your freight bill or express receipt and signed by the carrier's agent. The claim should be filed on a form available from the carrier.

### Concealed Loss or Damage

Concealed loss or damage should be reported to the carrier and vendor within 5 days of delivery. After 5 days the seller is not responsible for any freight damage incurred

Keep the product as well as all of the original packaging material in a receiving area for carrier's inspection.

## Warning

Connect to potable water supply only.

Adult supervision is required for safe use either by children under 8 years of age or the developmentally disabled.

The warranty does not apply to the followings.

- Repair or replacement of parts required due to misuse, improper care or storage, negligence, alteration, use of incompatible supplies or lack of specified maintenance.
- · Regular maintenance items.
- Failures caused by improper or erratic voltages, adverse environmental or water conditions, improper drainage, interruption in electrical or water supply.
- Improper or unauthorized repair.
- Any ice machine that has been installed and/or maintained inconsistent with the instructions provided by Lassele

# 1. Specifications

# 1.1 Technical Specification

## ● Electrical & Refrigerant Data

	100A		
Condenser		Air Cooling	
Rated Voltage	115V/60Hz/1Ph	220-240V/50Hz/1Ph	220V/60Hz/1Ph
Rated Ampere	5.2A	4.2A	4.2A
Compressor	95-135V 28LRA 3.73RLA	187-254V 10.8LRA 1.96RLA	198-254V 10.8LRA 1.96RLA
Pump	115V 0.50FLA 33.4W	220-230V 0.17FLA 23.2W	220-230V 0.25FLA 31.4W
Fan	115V 0.53FLA 59.6W	220-240V 0.27FLA 32.8W	220-240V 0.27FLA 32.8W
Designed Pressure	HI – 320 / LO – 150psig	HI – 320 / LO – 150psig	HI – 320 / LO – 150psig
Refrigerant	R-134a 230g (8.10Z)	R-134a 230g (8.1OZ)	R-134a 230g (8.10Z)
Safety Approval	UL	N/A	N/A
Sanitation Approval	ETL	N/A	N/A
Energy Star	N/A	N/A	N/A
CE	N/A	Certified	N/A
KC	N/A	N/A	Certified

	150A			
Condenser		Air Cooling		
Rated Voltage	115V/60Hz/1Ph	220-240V/50Hz/1Ph	220V/60Hz/1Ph	
Rated Ampere	7A	7A	7A	
Compressor	98-132 V 28.0 LRA 5.6 RLA	187-276V 18.1LRA 4.0RLA	187-253V 19.9LRA 3.19RLA	
Pump	115V 0.50FLA 33.4W	220-230V 0.25FLA 32.9W	220-230V 0.32FLA 40.8W	
Fan	115V 0.53FLA 59.6W	220-230V 0.27FLA 32.8W	220-230V 0.27FLA 32.8W	
Designed Pressure	HI –220 / LO –105 psig	HI –220 / LO –105 psig	HI –220 / LO –105 psig	
Refrigerant	R-134a 240g (8.46OZ)	R-134a 240g (8.46OZ)	R-134a 240g (8.46OZ)	
Safety Approval	ETL	N/A	N/A	
Sanitation Approval	ETL	N/A	N/A	
Energy Star	N/A	N/A	N/A	
CE	N/A	Certified	N/A	
KC	N/A	N/A	Certified	

## ● Electrical & Refrigerant Data

	250A			
Condenser		Air Cooling		
Rated Voltage	115V/60Hz/1Ph	220-240V/50Hz/1Ph	220V/60Hz/1Ph	
Rated Ampere	7A	5A	5A	
Compressor	115 V 26 LRA 4.6RLA	198-254V 18.6LRA 4.44RLA	198-254V 14.8LRA 3.69RLA	
Pump	115V 0.93FLA 57.5W	220-230V 0.4FLA 50.6W	220-230V 0.47FLA 58.0W	
Fan	115V 0.53FLA 59.6W	220-230V 0.27FLA 32.8W	220-230V 0.27FLA 32.8W	
Designed Pressure	HI -550 / LO -330 psig	HI – 460 / LO – 210psig	HI – 460 / LO – 210psig	
Refrigerant	R-410A 550g (19.4OZ)	R-404A 450g (15.8OZ)	R-404A 450g (15.8OZ)	
Safety Approval	UL	N/A	N/A	
Sanitation Approval	ETL	N/A	N/A	
Energy Star	Certified	N/A	N/A	
CE	N/A	Certified	N/A	
KC	N/A	N/A	Certified	

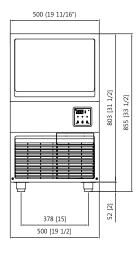
## Approximate Ice Production

No	Model	Rated Voltage	AT70 °F / WT50°F AT 21 °C / WT 10°C
1	100A	115V/60Hz/1Ph	128 lbs/day (58 kg/day)
2	100A	220-240V/50Hz/1Ph	119 lbs/day (54 kg/day)
3	100A	220V/60Hz/1Ph	110 lbs/day (50 kg/day)
4	150A	115V/60Hz/1Ph	150 lbs/day (68 kg/day)
5	150A	220-240V/50Hz/1Ph	145 lbs/day (66 kg/day)
6	150A	220V/60Hz/1Ph	150 lbs/day (68 kg/day)
7	250A	115V/60Hz/1Ph	251 lbs/day (114 kg/day)
8	250A	220-240V/50Hz/1Ph	277 lbs/day (126 kg/day)
9	250A	220V/60Hz/1Ph	255 lbs/day (116 kg/day)

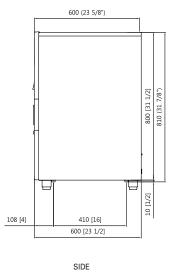
## 1.2 Product Dimensions

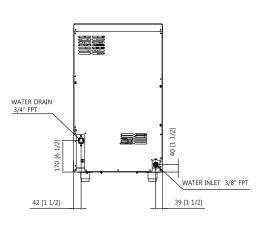
## ● 100A





FRONT

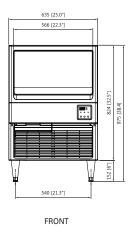


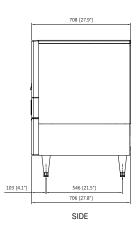


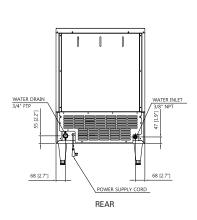
## 1.2 Product Dimensions

## ● 150A



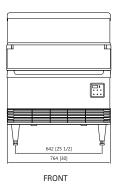


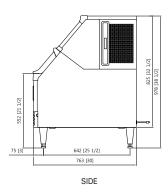


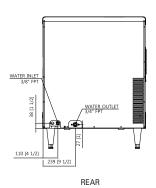


### ● 250A







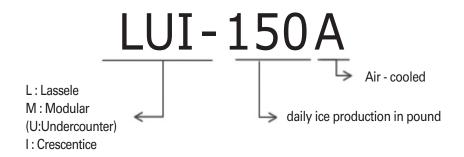


### 1.3 Accessories Included in the Machine

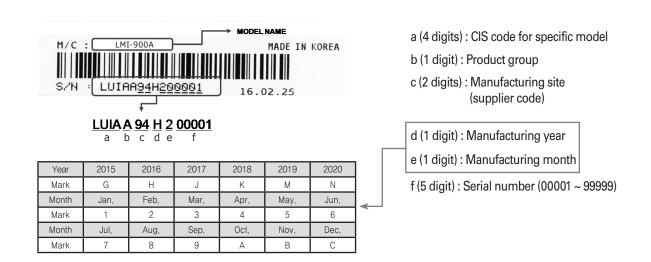
No	Name	Picture	Quantity
1	Scoop		1
2	LUI-150A Legs 6 inch(150 ~ 176 mm)		4
3	LUI-100A Legs 2 inch(50~70mm)		4
4	User Manual		1

### 1.4 How to Determine Model Names and Serial Numbers

### 1.4.1 Model names



### 1.4.2 Serial number



## 2. Installation & Operation Guide

## **WARNING**

- -The ice machine must be installed, following the local regulations of the country, state and region.
- Read the manual thoroughly before installation. Incorrect installation may cause malfunction, or bodily injury and death.
- Do not drop tools into the bin or the floor of the unit during installation. It may cause injure during routine operation of the machine.
- Do not operate unit with enclosure removed. This is marked by a sticker labelled "CAUTION or WARNING Parts. Do Not Operate Unit With Enclosure Removed."
   (When disassembly for cleaning or similar servicing exposes moving parts.)
- Power must be off when installing an ice machine.

### 2.1 Location Requirements

The installation location of the ice machine should satisfy following conditions. If the location does not satisfy these conditions, do not install the machines in that location. The installment location must be changed to meet following conditions.

- -The location should be in indoors and have good ventilation.
- -The location should not be near a heat source and should not be in direct sunlight.
- -The operating temperature at the location should be between 45°F~100°F (7°C~38°C).
- -The location should have access to a water supply, drainage and an easily connected source of electricity.
- -The location should not have any obstacles, disturbing air circulation(heat exchange).
- -The location should have enough clearance for wiring and plumbing at the rear.
- -The location should have no food waste nor food contaminant.
- -The location should support the full weight of the machine filled with ice.
- -The Setup of the machine requires leg.
- In case install the machine with no legs, a bumper at the bottom of the machine should be removed beforehand.

NOTE:

NOTE: In case that it is a built-in installation, the machine requires 127mm(5") space at the rear.

## 2.2 Installation Requirements

- -The ice machine should be level.
- -The vent of ice machine and drain of bin should be separated.
- -The tip of drain of bin should have an air gap.
- -The ice machine and bin should be completely cleaned after installed.
- -The drain line should be easily separated from the ice machine.

#### Installation condition

Condition		Minimum	Maximum
Ambient Temperature	°F	45	100
Ambient Temperature	°C	7	38
Cumplied Water Temporature	°F	45	90
Supplied Water Temperature	°C	7	32
Water Pressure	psig	30	100
vvaler Fressure	kPa	206.8	689.4
Voltage	115V	100	130
Voltage	220V	208	230

## 2.3 Electrical Requirements

## WARNING

- Electrical wiring and grounding of the unit must be done in accordance to the applicable local, state and federal laws and regulations.
- -The ice machine must be grounded in accordance to the law and regulations of the country, state, and region.

#### Read the following cautions

- -The ice machine must be grounded.
- -The ice machine must be connected to an exchangeable fuse or circuit breaker.
- Decide the appropriate size of the wire based on the length, thickness, and position of the wires.
- Electrical wiring and ground must be done by a qualified electrician.

## 2.3.1 Voltage

-When operating the ice machine (with maximized electrical load) range of variation in maximum voltage allowed is  $\pm 10\%$  of the rate voltage.

#### 2.3.2 Fuse/Circuit Breaker

- -The ice machine must be wired to an exclusive fuse/circuit breaker.
- -The circuit breaker must be installed in accordance with applicable local, state and federal regulations.

### 2.3.3 Power Connection

- For details about size of cable for power supply, please refer to the "1.1 Technical Specification".

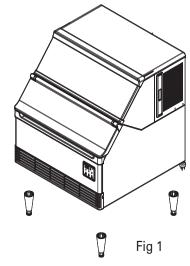
#### 2.4 Checklist before Installation

- After unpacking, check the product appearance. If there is damage to the product, contact your place of purchase.
- Remove packing box, tape and other packing components. If these things are not removed, the ice machine may not function properly.
- -Two manual valves (115V, 60hz LUI-250A only) MUST BE OPENED. If not, serious damage will occur.
- Check the name plate for minimum electrical requirement for operating the machine. Ensure there is sufficient electricity to operate the machine.
- Remove all accessories, enclosed with the ice machine.
- Remove protective plastic film of the panel.
- Check whether a compressor is fixed and the fan blade turns freely.

### 2.5 Setup

## **WARNING**

- Putting objects which exceed 15 kg (33 lbs) on the machine may damage the unit.
- 1. Remove all the wrapping box and tapings before install the machine.
- 2. Position the ice machine in the selected permanent location.
- 3. Install legs at every bottom corner of the machine and level the machine. (See Fig 1)
- 4. The legs are adjustable between 6" to 7".
- 5. In case install the machine with no legs, make the floor water resistant that you lay the machine on.
- 6. In case install the machine with no legs, a bumper at the bottom of the machine should be removed beforehand.



## 2.6 Water Supply & Drain Connections

## **▲** WARNING

- Installation of water supply and pipe system must be done in accordance to local, state and federal laws and regulations.
- -The ice machine is to be installed with adequate backflow protection to comply with applicable local, state and federal laws and regulations.
- Water pipe work must be done by a qualified service technician.

## 2.6.1 Water Supply

- Depending on the location where the ice machine is installed, the ice machine may require a water filtration system to prevent formation of scale and removing impurities and chlorine from the water supply.

## 2.6.2 Water Supply Line

Refer to following instructions for installing the water supply line.

- Do not connect a hot water system to the ice machine.
- -Water pressure must be between 30 ~ 100 psig(206.8-689.4kPa).
- Install shut-off valve to the water supply line.
- Water supply line must have a shut off valve.
- Water supply line must be insulated to prevent condensation.

## 2.6.3 Drainage Line

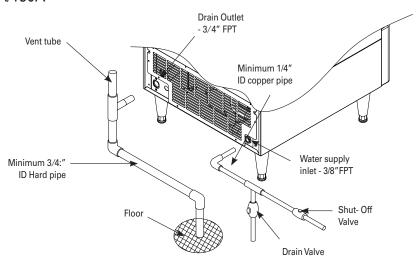
To prevent backflow of ice machine and storage container, refer to the following instructions for installing drainage line.

- For the smooth drainage, gradient of 1 inch for every 3.3 feet (2.5 cm per meter) is needed.
- Do not install any trap.
- Do not connect drainage pipe directly into the sewage pipe.
- -There must be minimum 2 inch (5 cm) of air gap vertically between end of drainage pipe and the drain hole.
- Must install vent.
- -The machine applies gravity drains and does not prevent counter-flow. If you want parts for preventing it, you should purchase it separately.

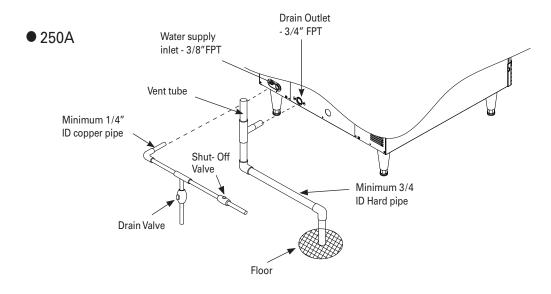
## ► Conditions for water supply and drainage

Location	Water temperature	Water pressure	connecting fitting	Size of a connecting hose
Water inlet	7°C (45°F) Min. 32°C(90°F) Max.	30 psig(206.8kPa) Min. 100 psig(689.4kPa) Max	3/8" FPT	ID 1/4" copper pipe(Min.)
Drain	-	-	3/4" FPT	ID 3/4" HARD PIPE(Min.)

### ● 100A/150A



\* Leave 2 inch(5 cm) vertical air gap between the end of each pipe and the drain.



<sup>\*</sup> Leave 2 inch(5 cm) vertical air gap between the end of each pipe and the drain.

#### 2.7 Wire

# **WARNING**

- Wiring must meet the local, state and federal standards where the machine is installed. Improper wiring might cause electric shock, injury, fire or death.
- Wiring must be done by a licensed electrician.
- -The machine requires an independent power supply. Check the nameplate for proper voltage and breaker/fuse size.
- Improper electrical supply may cause fuse cutout, damage to cords/wiring or parts, or fire.
- -The machine should be properly grounded. Otherwise, there is the possibility to cause injury or death.
- Wiring must be done by a licensed electrician.
- Allowable voltage is ±10% of the standard voltage.
- Do not apply extension cords.
- -Touching the control box with wet hand might cause an electric shock.
- Do not use broken power cords. Do not tie nor convert power cords.
- Do not pull out power cords recklessly or lay heavy objects on them. Always pull out power cords by firmly grasping the plug.
- -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.
- In case a power cord is broken, its manufacturer, distributor or a qualified person should replace it for safety reason. Do not operate a unit with a broken power cord.

#### 2.8 Final Check

## **WARNING**

After installation, make sure that all components, fixture, and thumbscrews are securely connected. Ensure that no impurities have fallen into the ice storage bin.

- (1) Are two manual valves opened? (115V, 60hz LUI-250A only)
- (2) Is ambient temperature of the installation area within the allowed range 45-100°F(7-37°C)?
- (3) Is temperature of water supplied in the installation area within the allowed range 45-90°F (7-32°C)?
- (4) Are all the packing materials such as packing box, inside tape, and other materials removed completely?
- (5) Is there an enough clearance from the ice machine for smooth air circulation?
- (6) Is ice scoop placed in the right place?
- (7) Is ice machine leveled on the floor?
- (8) Is the ice machine located indoor?
- (9) Is the power supply to the ice machine installed properly?
- (10) Is water supply pipe to the product properly connected?
- (11) Is drain system properly connected?
- (12) Is water pressure qualified (30 ~100 psig)(206.8 ~ 689.4 kPa)?
- (13) Any leakage found on the pipes?
- (14) Are all the components, fixtures, and thumbscrew fixed tightly?
- (15) Have you informed customers about the product manual, how to operate the machine, and when to replace parts?
- (16) Have you informed the customer how to get service if the unit has a problem?

#### 2.9 Test Run

## **WARNING**

The ice machine is factory-adjusted. In general, no additional setting is required after installing the product. In cases of random modification, it may cause adverse influence on safety, function, component lifespan, and warranty period.

- (1) Open the shut off valve in the water supply line.
- (2) Press "Power" button for 2 seconds to operate the ice machine.
- (3) Water tank is filled with water through the water supply valve.
- (4) After water is filled, it turns into harvesting cycle and control board shows "2.00".
- (5) After this, it turns into freezing cycle and control board shows "3.00".
- (6) About 3 minutes after freezing cycle, press "Power" button for 2 seconds to stop the machine.
- (7) 150A: Disconnect 'Hose Drain Joint' connected to 'WaterTank' to drain remaining water. 250A: Push'Wash' button to drain remaining water.
- (8) 150A: Reconnect 'Hose Drain Joint' once remaining water is completely drained. 250A: Turn off the machine when 'Add' is appeared on the control panel.
- (9) Unplug the power cord.
- (10) Open the door and clean inside of the ice storage inside with neutral detergent.
- (11) Wash thoroughly after cleansing.
- (12) Turn on the ice machine again

- (13) Check if bin switch works by pushing flap of the bin switch within first 5 minutes of freezing cycle.
- (14) Continue Pressing flap of the bin switch for 10 seconds.
- (15) The ice machine will stop operation with 'Full' display. After 5 seconds you should stop pressing the flap of the bin switch, 'Full' will be disappeared and the ice machine goes into the water supply procedure.

(The ice machine will stop operation immediately if you press flap for 10 seconds within 5 minutes after initiating ice making cycle. If not, the ice machine will stop after completion of ice making and harvest cycle.)

- When turning off the unit during a test run, do not attempt to re-operate until at least 3 minutes later to protect the compressor.
- While operating, check for water leaks on both the inside and outside pipe.

### 3. Operation

#### 3.1 Button



(1) Power

Push the button for 2 seconds to turn on/off.

(2) Wash

Use the button when cleaning the machine.

(3) Check

Only for service persons to check status of the machine

## 3.2 Status Light

(1) On/Off: shows power status in green.

If storage container is full of ice, orange light will appear.

If water level is too low, red light will appear.

- (2) Clean: Green light will appear during washing mode.
- (3) Err: Red light will appear if any problems occur during the machine operation.
- (4) Freeze: Green light will appear during freezing cycle.
- (5) Harvest: Green light will appear during harvest.

# 3.3 **7**– segment

Display	Status
	Ready for cycle
	1 = Water Supply Period .00 = Elapsed time (x 10 sec)
	2 = Harvesting Period .00 = Elapsed time (min)
	3 = Freezing Period .00 = Elapsed time (min)
	Drainage cycle
	Wash mode Ice machine is either cleaning or sanitizing.
	Indicates when the bin is full of ice.
	Wash mode Indicates need to put detergent or sanitizer into the machine.
	Cleaning and sanitization completed (User has to press the button to remove this sign)

## 3.4 Operation Cycle

Ice machine operates in accordance to the following process

#### 1) Water Supplying Cycle

Once power is on, water supply valve opens to fill the water tank with water.

#### 2) Harvesting Cycle

To remove ices made on the evaporator, water flow stops and it becomes hot. Then, ices are released from the evaporator to the storage container. Once temperature sensor detects a certain temperature, freezing cycle begins. Water continues to be supplied during the harvesting cycle.

#### 3) Freezing Cycle

This is the process of making ices. Water is supplied to the surface of evaporator and it becomes cold. As water keeps circulating, more and more ices is layered. This process is repeated until water level sensor reaches low. Once it reaches low level, the harvest cycle starts.

#### 4) Drainage Cycle

Residue or impurities will occur in the water tank during the repeating process of freezing and harvesting cycles. Using the ice machine for a long time without draining may cause damage. After a certain number of cycles, completely drain leftover water in the water tank by using water pump.

## 3.5 Safety

#### (1) Maximum Freezing Time - 60min

To protect the ice machine, maximum freezing time is set to 60 minutes. When freezing cycle goes over 60 minutes, it switches to the harvesting cycle. During the second freezing cycle, if time goes over 60 minutes, machine stops and shows error code (E1) on the control panel with a beep sound.

#### (2) Maximum Harvesting Time - 25min

The maximum harvesting time is 25 minutes. If time goes over 25 minutes, it automatically switches into the freezing cycle. During the second harvesting cycle, if time goes over 25 minutes, error code (E2) is shown on the control panel with a beep sound.

#### (3) High Temperature Safety

If temperature outside the evaporator during freezing cycles goes over 140°F(60°C), machine stops to protect the cycle and error code (E3) is shown on the control panel.

#### (4) Low Water Safety

For protection of water pump, if water level is low after harvesting cycle, machine halts and error code (E5) is shown on the control panel.

## 3.6 Error Code

Code	Problem	Possible Cause	Remarks
		Refrigerant leaked or pipe blocked	
		Compressor not operating	
E1	Freezing error	Fanmot or not operating	
	(freezing time exceeds 60 min)	Ambient or water temperature too high	A/T : 45-100°F(7-38°C) - W/T : 45-90°F(7-32°C)
		Voltage too high or too low	Voltage: 115V : 100~130V 220V : 208~230V
		Refrigerant leaked or pipe blocked	
		Compressor not operating	
	Harvesting error	Hot gas valve not operating	
E2	(harvesting time exceeds	Evaporator temperature sensing error	
	25 min)	Ambient or water temperature too low	A/T : 45-100°F(7-38°C) W/T : 45-90°F(7-32°C)
		Voltage too high or too low	Voltage: 115V : 100~130V 220V : 208~230V
	Evaporator	Water temperature too high	W/T : 45-90°F(7-32°C)
E3	temp too high (temp	Sensor or connector defect	
	>60°C(140°F)	PCB defect	
	No drainage	Check water outlet hose	
E4	when the bin	Check pump motor	
	is iuii	Level Sensor not operating	
	Water supply not	Float switch not operating	
E5	enough (water supply	Water valve not operating	
	time exceeds 4 min)	Water pressure too low	W/P : 30-100psi (206.8 ~ 689.4 kPa)
E6	Evaporator sensor error	Sensor short-circuit or disconnected	
E7	PCB error	PCB program error	

## 4. Maintenance & Cleaning

## **WARNING**

Ice machine shall be maintained and cleaned based on this manual and cleaning label attached on each unit

## 4.1 Maintenance Period

#### Maintenance Period

Refer to the following table for guidance on Maintenance Period. It may be shorter depending on surrounding environment and hygiene regulations of the installation area.

Period	Area	Details
Everyday	Scoop	Clean scoop with food safe cleaner, rinse with fresh water.
Every two weeks	Air Filter	Clean with compressed air, or warm water and allow to fully dry.
	Water filter system	Check proper water pressure and replace filter if needed
Every month	Ice machine exterior	Check proper water pressure and replace filter if needed
	Bottom of ice machine &bin door	Wipe it with a soft fabric
	Ice machine & Ice storage bin	Wash and sanitize according to the manual. Please refer to '4.2 How to clean and sanitize'
Every six	Water Supply Inlet	Close the ice machine water supply line shut-off valve and drain the water system. Clean the water supply inlet screen.
months	Condenser	Inspect. Clean if necessary by using a brush or vacuum cleaner.  More frequent cleaning may be required depending on location.
	Water Hose	Inspect the water hoses and clean/replace if necessary.

### 4.2 [100A/150A] Interior Cleaning & Sanitizing Procedure

The ice machine should be cleaned and sanitized every six months. Depending on the installation condition, the machine may need more frequent cleaning and sanitizing.

## **WARNING**

- Use a detergent and sanitizer for ice machines, and follow the directions of those products.
- During cleaning and sanitizing, wear rubber gloves and protective eye glasses to protect eyes and skin.
- Keep detergent and sterilizer out of the reach of small children.
- Do not remove ices, made on evaporator, by force. It might cause damage to the surface of evaporator.
- Do not remove ices on evaporator with a sharp ice pick.

### 4.2.1 Cleaning Procedure





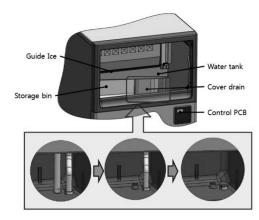


Fig 2

- 1) Press "power" to turn off ice machine. If machine is in freeze cycle, wait for harvest cycle to complete and turn off ice machine by holding the "Power" button for 2 seconds.
- 2) Remove all ice from the storage bin.
- 3) Press the "Wash" button.
- 4) Machine will display "drn" on the control board and drain any remaining water in the water thank.

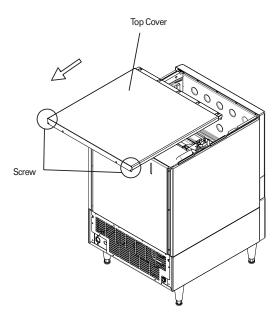
  If machine doesn't detect any water, drain cycle will be skipped and control board will move on to step 5.
- 5) Once all water has drained from machine, control board will read 'Add'
- 6) Add 8 oz. of Nu-Calgon ice machine cleaner into water tank. (see Fig 2) Machine will bring in fresh water after a 60 second time delay and then proceed to the clean cycle.
- 7) Control panel will now read 'Cln'.
- 8) Machine will circulate cleaning solution over evaporator for 30 minutes then drain.
- 9) After machine drains, water inlet valve will bring in fresh water for 3 minutes.
- 10) Pump will run for a 5-minute period to rinse remaining cleaning solution.
- 11) After 5 minutes, remaining water will drain.
- 12) For 30 minutes, ice machine repeats steps 9-11.
- 13) Once cleaning cycle is completed, [ \_ \_ ] will be displayed on control board.
- 14) Press "Power" to turn off ice machine.
- 15) Disassemble spray tube, supply tube, spray guide, eva cover, water tank, ice guide, inner cabinet brackets, and hoses referring to user manual. (see 4.2.3 Product Disassembly)

- 16) Mix 5 oz. of Nu-Calgon ice machine cleaner per gallon of water and use with a soft towel/sponge/nylon brush to gently clean disassembled parts.
- 17) Rinse all disassembled parts with fresh water.
- 18) Wash ice storage bin with remaining prepared cleaning solution from step 16. Rinse ice storage bin with fresh water.
  - \*\*WARNING- DO NOT CLEAN EXTERIOR OF MACHINE WITH CLEANING SOLUTION\*\*
  - \*\*If cleaning AND sanitizing machine- move on to 2. Sanitizing; if cleaning only, proceed to step 19.
- 19) Reassemble ice machine. Press "Power" button for 2 seconds to turn on ice machine and resume ice making cycle.

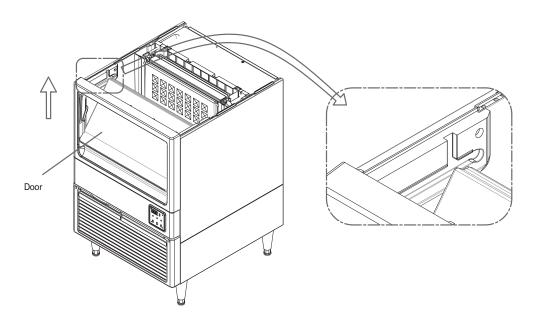
### 4.2.2 Sanitizing Procedure

- 1) Press "power" to turn off ice machine. If machine is in freeze cycle, wait for harvest cycle to complete and turn off ice machine by holding the "Power" button for 2 seconds.
- 2) Mix 2.5 oz. of Nu-Calgon ice machine sanitizer per gallon of water and use with a soft towel/sponge/ nylon brush to gently sanitize disassembled parts.
- 3) Soak the disassembled parts from step 15 of cleaning instructions in prepared sanitizing solution for 5 minutes.
- 4) Sanitize ice machine food zones where evaporator is installed and storage bin with sanitizing solution. 5) Let sanitized parts dry completely.
- 6) Reassemble disassembled parts referring to user manual. (see 4.2.3 Product Disassembly ) 7) Press the "Wash" button.
- 9) Once all water has drained from machine, control board will read 'Add'.
- 11) Control panel will now read 'Cln'.
- 12) Machine will circulate sanitizing solution over evaporator for 30 minutes, then drain. 13) After machine drains, water inlet valve will bring in fresh water for 3 minutes.
- 14) Pump will run for a 5-minute period to rinse remaining sanitizing solution.
- 15) After 5 minutes, remaining water will drain.
- 16) For 30 minutes, ice machine repeats steps 13-15.
- 17) Once sanitizing cycle is completed, [ \_ \_ ] will be displayed on control board.
- 18) Reassemble ice machine. Press "Power" button for 2 seconds to turn off ice machine. Press the "Power" button for 2 seconds again to turn the ice machine on and resume the ice making cycle.
- \* Ice machine cleaner & sanitizer has to comply with 40 CFR §180.9403 or registered with the USEPA Office of Pesticides Program, Antimicrobials Division as a food contact ice machine cleaner& sanitizer.

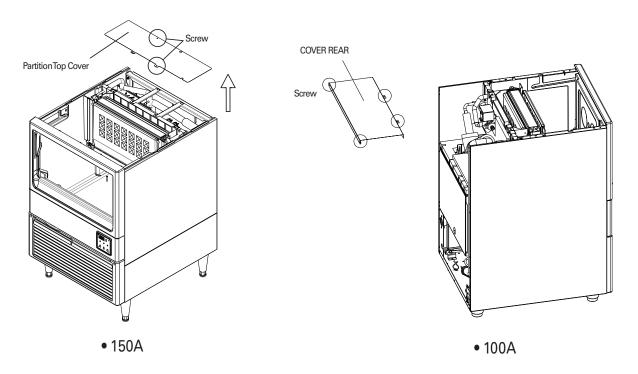
# 4.2.3 100A/150A Product Disassembly



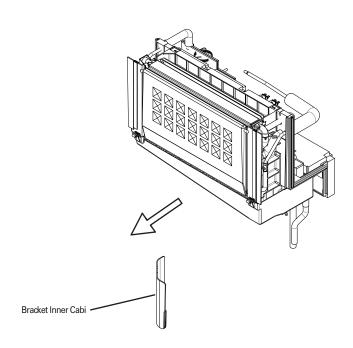
1. Unscrew two screws on the back side of top cover then pull the top cover out to disassemble it referring to above image.



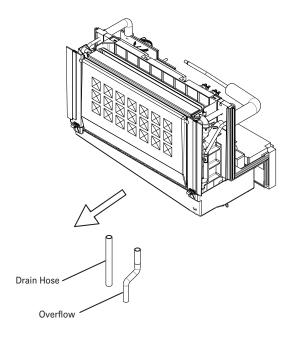
2. Lift the door up through the groove to disassemble it referring to above image.



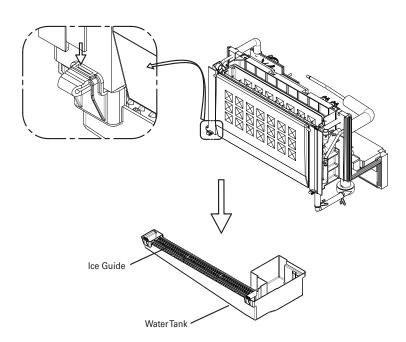
3. Unscrew two screws on the Partition Top Cover and lift it up to disassemble it referring to above image.



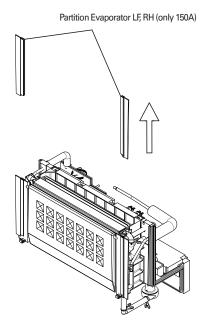
4. Detach Bracket Inner Cabi from the evaporator referring to above image.



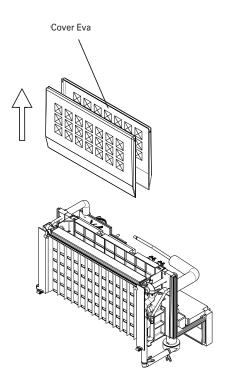
5. Pull Hose Drain and Over Flow Pipe out to disassemble them referring to above image.



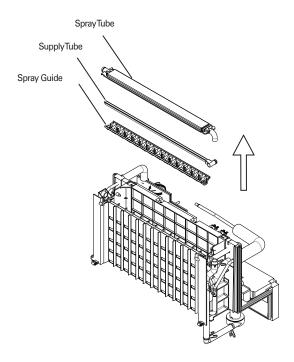
6. Press hooks on evaporator bracket and pull it to the bottom to detach water tank and Ice Guide referring to above image.



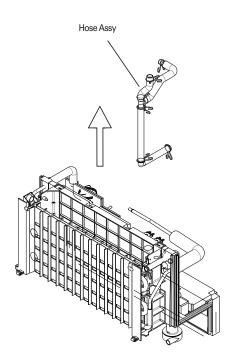
7. Lift Partition Eva LF up and RH to disassemble it referring to above image.



8. Lift Cover Eva up to disassemble it referring to above image.



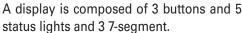
9. Disconnect Spray Tube, Supply Tube, and Spray Guide from the connected hose then lift them up to disassemble them referring to above image.

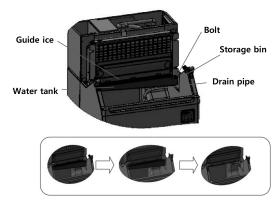


10. Lift the Hose Assy up to disassemble it referring to above image.

## 4.3 [250A] Interior Cleaning & Sanitizing Procedure







#### Fig 5

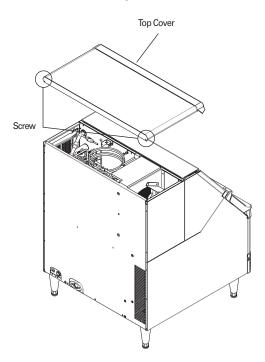
### 4.3.1 Cleaning Procedure

- 1) Press "power" to turn off ice machine. If machine is in freeze cycle, wait for harvest cycle to complete and turn off ice machine by holding the "Power" button for 2 seconds.
- 2) Remove all ice from the storage bin. 3) Press the "Wash" button.
- 4) Machine will display "drn" on the control board and drain any remaining water in the water tank. If machine doesn't detect any water, drain cycle will be skipped and control board will move on to step 5.
- 5) Once all water has drained from machine, control board will read 'Add'.
- 6) Add 8 oz. of Nu-Calgon ice machine cleaner into water tank. (see Fig 5) Machine will bring in fresh water after a 60 second time delay and then proceed to the clean cycle. 7) Control panel will now read 'Cln'.
- 8) Machine will circulate cleaning solution over evaporator for 30 minutes then drain.
- 9) After machine drains, water inlet valve will bring in fresh water for 3 minutes.
- 10) Pump will run for a 5-minute period to rinse remaining cleaning solution.
- 11) After 5 minutes, remaining water will drain.
- 12) For 30 minutes, ice machine repeats steps 9-11.
- 13) Once cleaning cycle is completed, [ \_ \_ ] will be displayed on control board.
- 14) Press "Power" to turn off ice machine.
- 15) Disassemble spray tube, supply tube, spray guide, eva cover, water tank, ice guide, and hoses referring to user manual. (4.3.3 Product Disassembly)
- 16) Mix 5 oz. of Nu-Calgon ice machine cleaner per gallon of water and use with a soft towel/sponge/nylon brush to gently clean disassembled parts.
- 17) Rinse all disassembled parts with fresh water.
- 18) Wash ice storage bin with remaining prepared cleaning solution from step 16. Rinse ice storage bin with fresh water.
- \*\*WARNING- DO NOT CLEAN EXTERIOR OF MACHINE WITH CLEANING SOLUTION\*\*
- \*\*If cleaning AND sanitizing machine- move on to 2. Sanitizing; if cleaning only, proceed to step 19.
- 19) Reassemble ice machine. Press "Power" button for 2 seconds to turn on ice machine and resume ice making cycle.

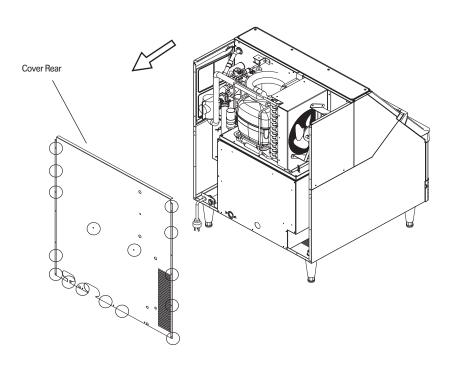
### 4.3.2 Sanitizing Procedure

- 1) Press "power" to turn office machine. If machine is in freeze cycle, wait for harvest cycle to complete and turn office machine by holding the "Power" button for 2 seconds.
- 2) Mix 2.5 oz. of Nu-Calgon ice machine sanitizer per gallon of water and use with a soft towel/sponge/nylon brush to gently sanitize disassembled parts.
- 3) Soak the disassembled parts from step 15 of cleaning instructions in prepared sanitizing solution for 5 minutes.
- 4) Sanitize ice machine food zones where evaporator is installed and storage bin with sanitizing solution. 5) Let sanitized parts dry completely.
- 6) Reassemble disassembled parts referring to user manual. (4.3.3 Product Disassembly)
- 7) Press the "Wash" button.
- 8) Machine will display "drn" on the control board and drain any remaining water in the water tank. If machine doesn't detect any water, drain cycle will be skipped and control board will move on to step 9.
- 9) Once all water has drained from machine, control board will read 'Add' and bring in fresh water for 3 minutes.
- 10) Add 8 oz. of Nu-Calgon ice machine sanitizer. Machine will bring in fresh water after a 60 second time delay and then proceed to the clean cycle.
- 11) Control panel will now read 'Cln'.
- 12) Machine will circulate sanitizing solution over evaporator for 30 minutes, then drain.
- 13) After machine drains, water inlet valve will bring in fresh water for 3 minutes.
- 14) Pump will run for a 5-minute period to rinse remaining sanitizing solution.
- 15) After 5 minutes, remaining water will drain.
- 16) For 30 minutes, ice machine repeats steps 13-15.
- 17) Once sanitizing cycle is completed,  $[ \ ]$  will be displayed on control board.
- 18) Reassemble ice machine. Press "Power" button for 2 seconds to turn off ice machine. "Power" button for 2 seconds again to turn the ice machine on and resume the ice making cycle.
- \* Ice machine cleaner & sanitizer has to comply with 40 CFR §180.9403 or registered with the USEPA Office of Pesticides Program, Antimicrobials Division as a food contact ice machine cleaner & sanitizer.

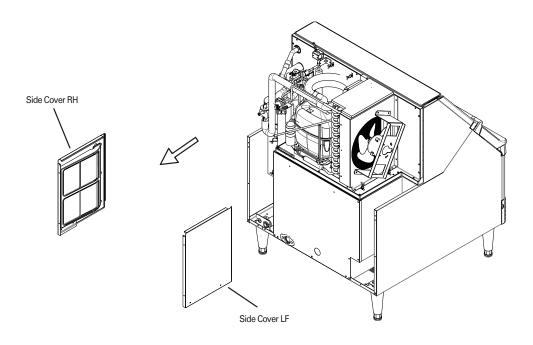
# 4.3.3 250 product Disassembly



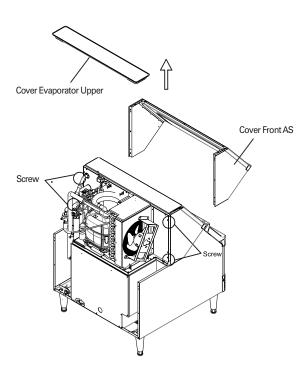
1. Unscrew two screws on the back side of top cover then pull the top cover out to disassemble it referring to above image.



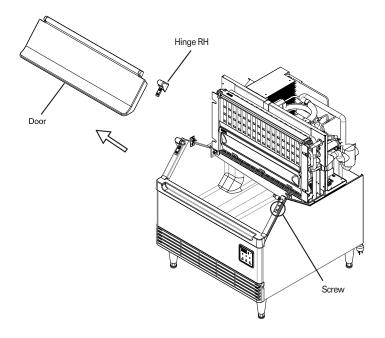
2. Unscrew nine screws in order of the numbers marked in above image and pull the Cover real out to detach it.



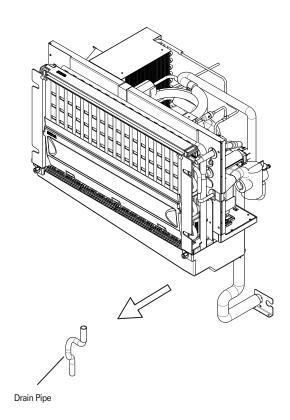
3. Pull the Cover Side LF and RH to disassemble it.



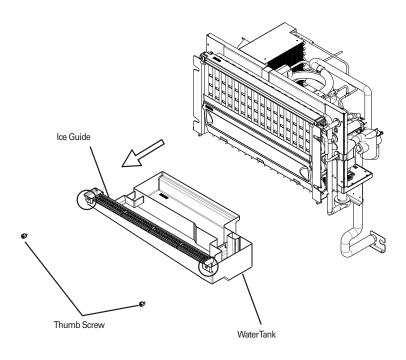
- 4. 1) Unscrew four screws marked on above image.
  - 2) Open the door and release two bolt cabinets on left and right side of cabinet referring to above image.
  - 3) Lift Cover Front AS and Cover Eva Upper up to disassemble it.



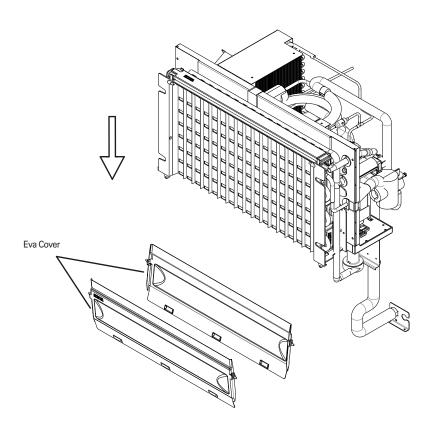
- 5. 1) Open the door and unscrew two screws fixing Hinge RH.
  - 2) Pull the Door and Hinge RH to the left to disassemble them referring to above image.



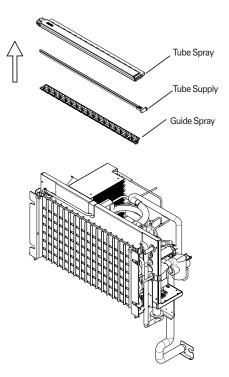
6. Pull the Pipe Drain out to disassemble it referring to above image.



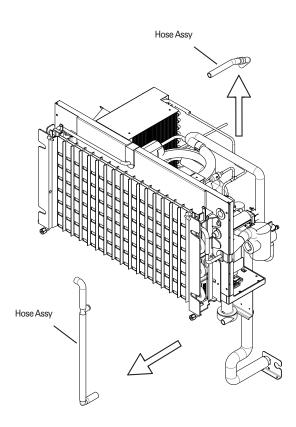
7. Unscrew two Bolt Thumbs marked on above image and pull Water Tank out to disassemble it.



8. Pull Eva Cover out to disassemble it referring to above image.



9. Disconnect Tube Spray, Tube Supply, and Guide Spray from the connected hose then lift them up to disassemble them referring to above image.



10. Lift the Hose Assy up to disassemble it referring to above image.

### 4.4 Exterior Cleaning

To prevent corrosion, clean oil or dust in outer surface with cleaning towel or neutral detergent.

### 4.5 Storage Bin and Scoop

Clean storage bin and scoop with neutral detergent. Wash with clean water afterwards. Storage bin is for ice only. Do not store any other material in the storage bin.

#### 4.6 Air Filter

Dust in the filter may decrease function of ice machine. Check the filter once every two weeks and if any dust is found, clean by using warm water and neutral detergent. Dry the filter completely and reuse.

#### 4.7 Condenser

Check the condenser at least once a year and if cleaning is necessary, clean with vacuum and brush. Cleaning interval may be shorter depending on the installation area.

### 4.8 How to Prepare for Long Term Storage

When not using the ice machine for a long period, remove all ices from the storage bin and drain all remaining water in the water tank. Clean and dry the storage bin. Also, remove all the water from the ice machine to prevent the water supply hose from getting frozen under low temperature during winter. Turn off the product until the temperature is warm.

- 1) Wash and sanitize the ice machine.
- 2) Press "Power" button to turn off the ice machine.
- 3) Press "Power" and "Check" buttons for 2 seconds at the same time to drain remaining water inside of the machine.
- 4) "drn" will display and once the remaining water level minimum level, the machine stop drain.
- 5) Disconnect the host connects water tank and pump motor to drain all remaining water inside of the unit. Instruction can be found on 4.2.3 Modular Product Disassembly
- 6) Disconnect power code and lock water supply valve.
- 7) Disassemble water supply inlet and drain outlet at the back side of the machine.
- 8) Remove all remaining water inside of hoses installed in the machine, water supply inlet and drain outlet by using air gun.
- 9) Nebulize sanitizer on the inside of the machine except for machine room and wait until they are completely dried.

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