

USER MANUAL



IQN/F

MODELS

- IQF FLAKER
- IQN NUGGETS

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1. INTRODUCTION

Thank you for buying an ice cube maker from our 'NQ' range. You have bought one of the most reliable ice makers on the market today.

Carefully read the instructions within this manual, these contain important information regarding safety during installation, operation and maintenance.

1.1 WARNINGS

- This appliance is intended to be used in household and similar applications such as: staff kitchen areas in shops, offices and other working environments; farm houses and by clients in hotels, motels and other residential type environments; bed and breakfast type environment; catering and similar non-retail applications.
- The installation of this equipment should be done by the Technical Assistance Service department.
- The socket should always be placed on an accessible location.
- When positioning the appliance, ensure that the power cable is not trapped or damaged.
- Do not place multiple portable socket outlets or portable power sources in the rear of the appliance
- ALWAYS disconnect the power supply from the machine BEFORE any cleaning or maintenance service.
- Any change needed on the electrical installation for the appropriate connection of the machine, should be exclusively performed by qualified and certified professional personnel only.
- Any use by the ice maker not intended to produce ice, using drinking water, is considered inappropriate.
- It is extremely dangerous to modify or intend to modify this machine and shall make any type warranty void.
- This device is not intended for use by persons (including children) whose physical, sensory or mental capacities are limited, or who lack sufficient experience or knowledge, unless they are acting under the supervision of or have received instruction regarding proper use of the device from a person responsible for their safety. Children should be supervised to ensure they do not play with the device.
- Children should be monitored to assure that they should not play near the equipment.
- This machine is not intended to be used outdoors nor exposed to the rain.
- Connect to potable water supply only. See section 3 of this manual.
- This machine must be grounded to prevent possible discharges on persons or damage to the equipment. The machine must be grounded according to local and/or national regulations and regulations in each case. The manufacturer will not be responsible for the damage caused by the lack of grounding of the installation.
- To guarantee the efficiency of this machine and its correct operation, it is essential to adhere to the manufacturer's instructions, especially as regards maintenance and cleaning operations, which must only be carried out by qualified personnel.
- This equipment must be installed with adequate return flow protection to comply with federal, state and local codes that are applicable.

ATTENTION: *The intervention of unskilled people, besides being dangerous, can cause serious damage. In case of a breakdown, contact your distributor. We recommend always using original spare parts.*

The company reserves the right to make changes in specifications and design without prior notice.

REMEMBER THAT MAINTENANCE AND CLEANING OPERATIONS ARE NOT INCLUDED IN THE WARRANTY AND THEREFORE, WILL BE INVOICED BY THE INSTALLER.



This signal indicates "Risk of fire / Flammable materials" because of the use of flammable refrigerant.

For compression-type **appliances that use flammable refrigerants** should additionally consider the substance of the warnings listed below:

- Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- Do not damage the refrigerant circuit.
- Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.

In case of refrigerant leakage:

- Do not generate flames close to the appliance.
- Do not switch on/off or plug in/off the appliance.
- To ventilate immediately the area where appliance is located by opening doors and/or windows.
- To call to an authorized technical service.

2 RECEIVING THE MACHINE

Inspect the outside packing. In case of damages, MAKE THE CORRESPONDING CLAIM TO THE CARRIER.

To confirm the existence of damages, UNPACK THE MACHINE IN THE PRESENCE OF THE CARRIER and state any damage on the equipment on the reception document, or on a separate instrument. As from May 1, 1998 complies with the European regulations on management of packing and packing waste, inserting the "Green Dot Label" on all their packages.

Always state the machine number and model. This number is printed on three locations:

21.- PACKAGING

There is an exterior label with the manufacturing number. (Figure I)

Figure I

22.- EXTERIOR OF THE EQUIPMENT

Located on the back of the unit, the same label as before.

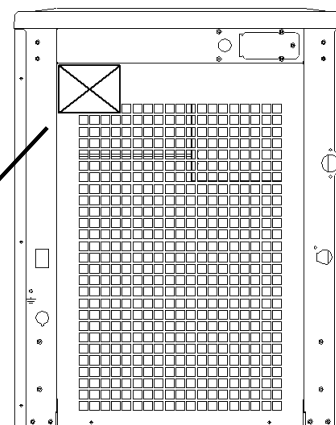
23.- DETAILS PLATE

Located on the back of the machine. (Figure II)

Check that the installation kit with the machine includes:

- Manual.
- Warranty label indicating serial number.

Figure II



CAUTION: ALL PACKING ELEMENTS (plastic bags, carton boxes and wood pallets) SHOULD BE KEPT OUTSIDE THE REACH OF CHILDREN, AS THEY ARE A SOURCE OF POTENTIAL HAZARD

3. INSTALLATION

THIS ICE MAKER IS NOT DESIGNED FOR OUTDOOR OPERATION.

An incorrect installation of the equipment may cause damages to individuals, animals or other materials, being the manufacturer not responsible for such damages.

3.1.- SITE CONDITIONS

ATTENTION

The IQ machines are designed to operate at room temperature between 10°C (50°F) and 43°C (109.40°F). Below the minimum temperatures, the gear motor is forced excessively. Above the maximum, compressor life is shortened and production decreases considerably.

Do not place anything on the machine or in front of the grille.

For condensed air machines (Figure III), if the front air intake is insufficient, the exit is totally or partially obstructed, or if by its placement it is going to receive hot air from another device, we strongly advise, in case of not being able to change the site of the machine, **INSTALL A WATER CONDENSER.**

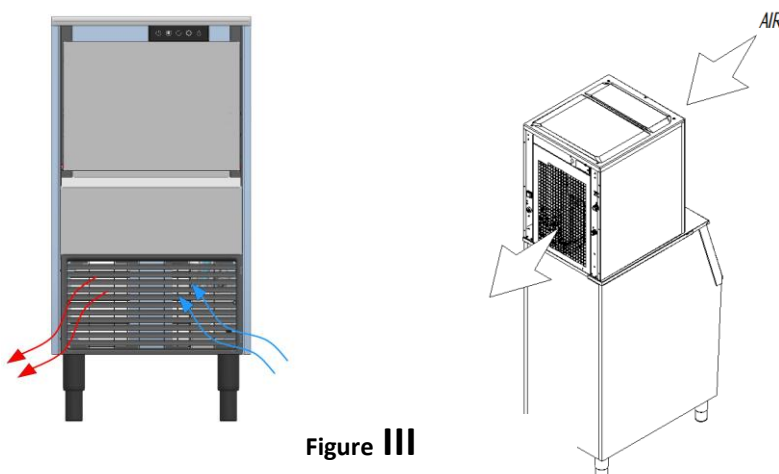


Figure III

3.2 - CONNECTIONS TO THE WATER NETWORK

The water quality has a significant effect on the appearance, density and taste of the ice, and will affect the life expectancy of a water condenser, if used.

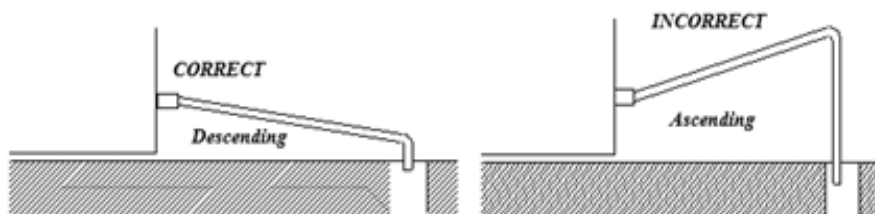
Use the 3/8 FPT connection. The water connection needs to be dedicated (only piece of equipment hooked to the water line). Water line from the water valve to the ice machine needs to be 1/4" nominal ID tubing.

In order to comply with the federal, state and local regulations the machine must be connected with a proper backflow protection.

3.3.- CONNECTION TO DRAINAGE

Use the 3/4 FPT connection.

Drainage should be located lower to the machine level, at 150 mm (5.91 inches) minimum.
 It is convenient that the drainage pipe is of 25 mm (1.") of interior diameter and with a minimum gradient of 3 cm (1.18 in) per meter (see figure).



3.4.- ELECTRICAL CONNECTION

IT IS MANDATORY TO GROUND THE EQUIPMENT

To avoid possible discharges on individuals or damages to the equipment, the machine should be grounded pursuant local and/or national regulations as the case may be.

THE MANUFACTURER SHALL BE HELD HARMLESS IN CASE OF DAMAGES ARISING DUE TO THE LACK OF THE GROUND INSTALLATION

At the back of the machine there is a junction box for electrical service connexion.

The machine should be placed in such a way as to allow a minimum space between the back and the wall to allow an easy access and without risks to the junction box.

It is advisable to install a power switch and the appropriate electrical safety devices in accordance with local, state and/or national regulations in each case.

Voltage and tension are indicated in the nameplate. Variation on voltage above the 10% stated on the nameplate could result on damages or prevent the machine start-up.

ATTENTION: 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.

3.5.- INSTALLATION OF THE EQUIPMENT

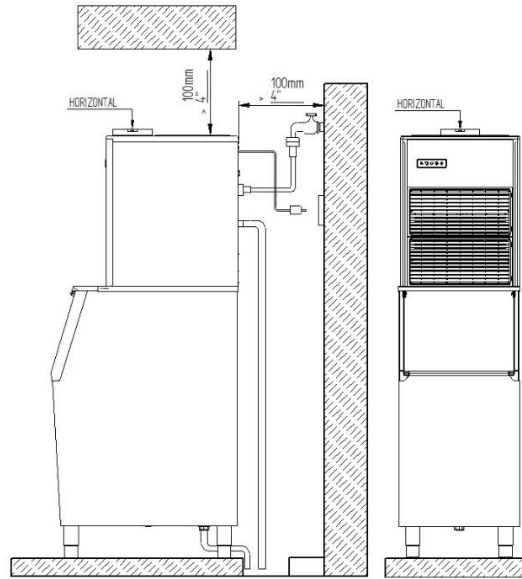
MODULAR ICE MAKERS ABOVE TANKS/BINS

The modular ice makers (IMH) must be installed on tanks or bins, following the instructions contained in this manual.

The strength and stability of the container-machine/s assembly must be verified, as well as the fixing of the elements.

The drain must be lower than the drainage area of the tank/bin and the hose must always be in a descending position, NEVER rising, (Figure IV).

IT IS IMPORTANT THAT THE WATER PIPE DOES NOT PASS BY OR GO NEAR HEAT SPOTS AS THIS WILL AFFECT ICE PRODUCTION



COMPACT ICE MACHINES

Screw the leveling feet into the bottom of the ice maker as far as they will go. Place the machine in its final position. Adjust each leg as necessary to level the ice maker from front to back and side to side.

The location should allow sufficient clearance for water drainage and electrical connections at the rear of the ice machine.

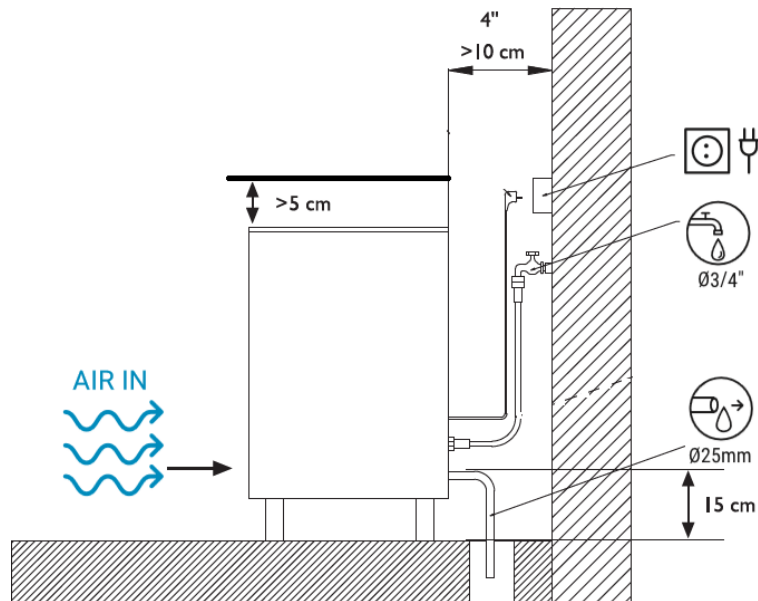


Figure IV

4. CONTROL PANEL

The outer panel is located at the front of the machine, in the upper left corner and has 5 buttons:

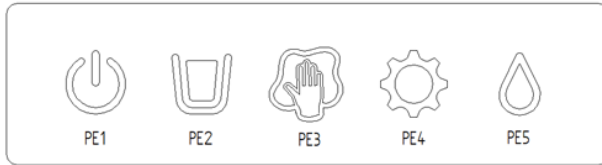


Figure V

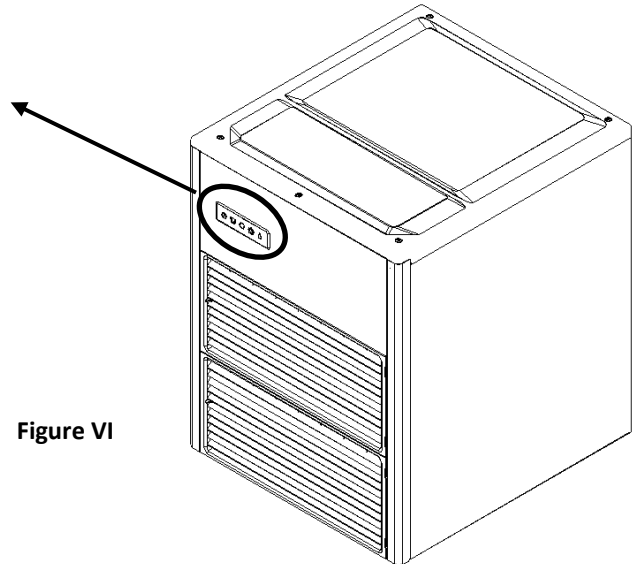


Figure VI

4.1. PE1 - ON/OFF BUTTON

When turning on the rear switch of the machine, PE1 will be red, which means that the machine will be in the stand by mode. Pressing the PE1 button will enter the timing state and the LED will light up with a flashing blue. After the time period elapses, the LED will remain steady blue and the machine will start to work. If an alarm is detected in the machine, press the button for more than 3 seconds and the machine will restart.

4.2. PE2 - RESERVOIR FULL

This LED will light up when the machine has stopped when the reservoir is full.

4.3. PE3 - MAINTENANCE ALARM

This alarm indicates that the machine needs to be serviced.

Every 6 months of operation, the machine will turn on the PE3 LED. The machine can continue to make ice, but will not turn off the PE3 LED until a complete maintenance cycle has been performed.

4.4. PE4 - INTERNAL FAULT ALARM

This LED will remain on when an internal fault has occurred in the machine, or a blockage has occurred in the outlet. With this alarm, the machine will remain stopped.

4.5. PE5 - LACK OF WATER SUPPLY ALARM

This LED indicates that there is no water supply and therefore the machine is stopped because it cannot manufacture ice.

5. STARTUP

5.1. PREVIOUS CHECKUP

- a) Is the machine leveled?
- b) Voltage and frequency are the same as those on the nameplate?
- c) Are the discharges connected and operating?
- d) ** If air condensed: Is the air circulation and its temperature appropriate?

	ROOM	WATER
MAXIMUM	43°C / 109.4°F	35°C / 95°F
MINIMUM	10°C / 50° F	5°C / 41°F

** Is water pressure appropriate?

MINIMUM	0.1 MPa (14.5 psig / 1 bar)
MAXIMUM	0.6 MPa (87 psig / 6 bar)

- f) The conductivity of the water must be at least 10 microSiemens

NOTE: In case input water pressure is higher than 0,6 MPa (87 psig / 6 bar) install a pressure reducer. THE FAUCET CONNECTION PRESSURE SHOULD NEVER BE REDUCED.

5.2 STARTING UP THE MACHINE

1. Connect to drinking water network. Open the water stopcock and check that there are no leaks.
2. Connect the machine to the electricity network. Turn the rear switch "ON".
3. The button on the control panel, PE1 (see Figure VI), must be lit red, when pressed, it will stay with a blue light flashing for 10 min.
4. After 10 minutes of the timer, the machine will start up and PE1 will remain with a steady blue light.
5. Check that there is no element that rubs or vibrates.
6. Check that it produces ice correctly. *It is normal that in the first instants a little water will drop instead of ice*.
7. Check that there is no alarm glowing on the control panel. In such case, restart the machine. If the problem persists, call the technical service.

6. MAINTENANCE AND CLEANING INSTRUCTIONS

Warning

You must wear rubber gloves and safety goggles when handling the cleaner or Sanitizer for the ice machine. All ice that will be made during this procedure is not suitable for human consumption, so it must be melted or discarded.

Maintenance procedures described in this manual are not covered by the warranty

6.1. SCALE REMOVING PROCEDURE

Cleaning Solution: Prepare a solution of an appropriate product for the ice machines cleaning. Do not use hydrochloric acid. We recommend the use of ScaleKleen (Everpure). We recommend to prepare a previous solution of 2.8 gallons (10 liters) according to the manufacturer's instructions (ScaleKleen) with the total quantity of product / water needed. 1.4 gallons (5 liters) destined to hand wash and 1.4 gallons (5 liters) destined to the water reservoir (D). Make more solution if necessary. *In order to have the maximum effectiveness of the solution, use it after dilution.*

- I. Stop the machine pressing PE1 button of the control panel, the PE1 button must be on red color.
- II. Remove all the ice from bin.
- III. Remove the back panel of the machine.
- IV. Remove the hose plug and drain the water into a bin as seen in the **figure VII**.
- V. Return the hose to its original position and put the plug in the hose again.
- VI. Remove the top panel.
- VII. Remove the *water reservoir cover* (A), *O-ring* (B) and the *ice outlet Cover* (C) and clean them all by hand with the **cleaning solution**.
- VIII. Clean the Ice Fallen Tube (E) with a brush also with the **cleaning solution**.
- IX. Place *ice outlet Cover* (C) in its original position.
- X. For remove the ice of evaporator, active "Only gearmotor function", only will be running the gearmotor and the others components will be stopped. When the machine is stopped (PE1 button on the control panel is red), make a long press (7 seconds) on the PE1 button of the control panel until the PE5 button is flashing. After the water has been drained from the machine, all five icons will flash, so the gearmotor will start. Wait 2 or 3 minutes in order to remove the ice from evaporator and pour the **cleaning solution** as is indicated in the next step.
- XI. Pour the cleaning solution slowly into *water reservoir* (D) until it is finished. The solution will go overflowing through the drain, the electrodes inside of the *water reservoir* (D) are covered with the **cleaning solution** at the minimum level as seen in **figure IX**
- XII. The machine keeps working in "Only gearmotor function" with the five icons flashing and the machine stops automatically 30 minutes after to active this function in step X, so the PE1 button will be red color. Go to next chapter for sanitizing procedure.

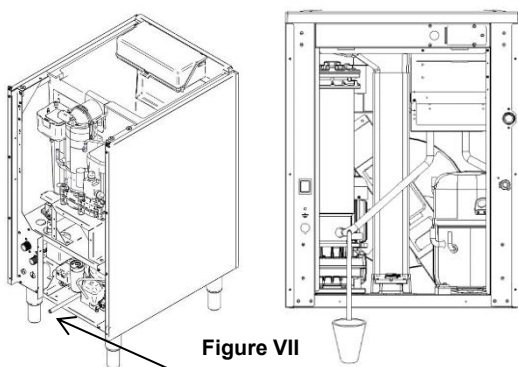


Figure VII

Drain water by removing the plug from the hose.

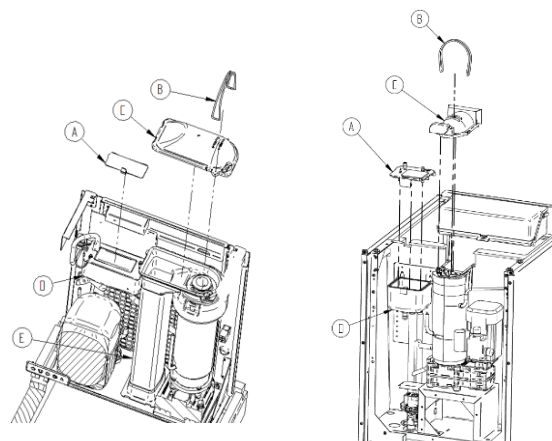


Figure VIII

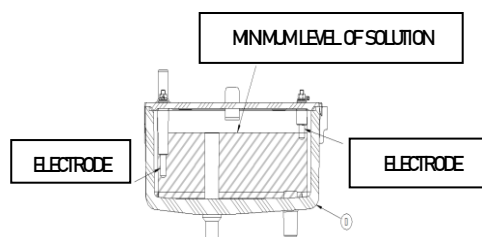


Figure IX

6.2 SANITIZING PROCEDURE

- Sanitizing solution: Mix a solution of sanitizer using approved (EPA/FDA) sodium hypochlorite food equipment sanitizer to form a solution with 200 ppm free chlorine yield. Dilute 1.2 fl.oz (35ml) of a 5.25% sodium hypochlorite solution (chlorine bleach) with 2.8 gallons (10 liters) of water.

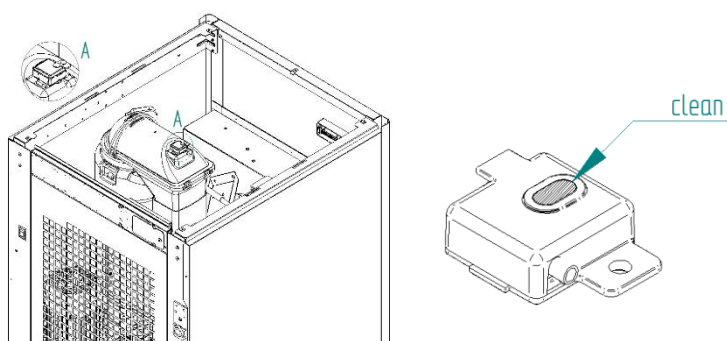
1,4 gallons (5 liters) destined to hand wash and 1,4 gallons (5 liters) destined to the water reservoir (D). *In order to have the maximum effectiveness of the solution, use it after dilution. Make more solution if necessary.*

1. Just after previous chapter XII from cleaning process, remove the hose plug and drain the water into a bin as seen in the **figure VII**, return the hose to its original position and put the plug in the hose again.
2. Then, to sanitize the machine, active "only gearmotor function" and pour the 5 liter solution into the *water reservoir* (D) following the same procedure indicated in the cleaning process (steps X and XI).
3. When sanitizing solution is finished, then wait to the machine stops automatically 30 minutes after active only gearmotor function.
4. Remove the hose plug and drain the water into a bin as seen in the **figure VII**, return the hose to its original position and put the plug in the hose again.
5. Now, with the sanitizing solution destined to hand wash, clean the inside of the ice storage bin using a cloth or sponge. Go to next chapter for removing residues procedure.

6.3 REMOVING RESIDUES PROCEDURE

1. In order to make sure that there is no residues that could have remained in the machine, rinse *the water reservoir cover* (A) and the *ice outlet Cover* (C) with water and place these items in its respective position.
2. Also, rinse the Ice Fallen Tube (E) with the brush and the inside of the ice storage bin.
3. Place the back panel and the top panel to its original position.
4. Then, allow the machine operate for 30 minutes in the freeze cycle and melt or discard all the ice that will be made.

6.4 CLEANING STORAGE SENSOR

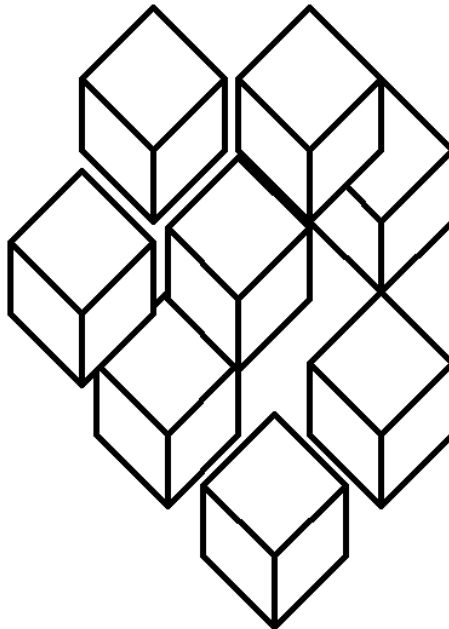


This must be done every time the machine is cleaned. Also in case the machine stops without the storage being full. It is accessed through the top of the machine. Remove the sensor from its support by removing the fixing screw. With a soft paper and alcohol clean the area of dark glass. **NEVER USE ORGANIC SOLVENTS WHICH COULD DAMAGE THE PLASTIC SURFACE.**

Reassemble and check operation: LED off indicates free sensor. Blue LED on indicates sensor activated (presence of ice).



FLAKES



NUGGET