GLACE BAY

Snooker®

ICE MACHINES

INSTALLATION, OPERATION AND USER MANUAL

www.snookerice.com

Preface

Before installing, operating, or maintaining this product, carefully read the entire contents of this instruction manual.

Become familiar with the equipment's function and safety precautions prior to operating or servicing the unit.

Always use tools that are in good condition when servicing the unit.

Always read and follow any safety placards that are located on the unit. These placards contain specific safety information regarding refrigerant and electrical voltage hazards.

Always follow local environmental regulations when working with refrigerant.

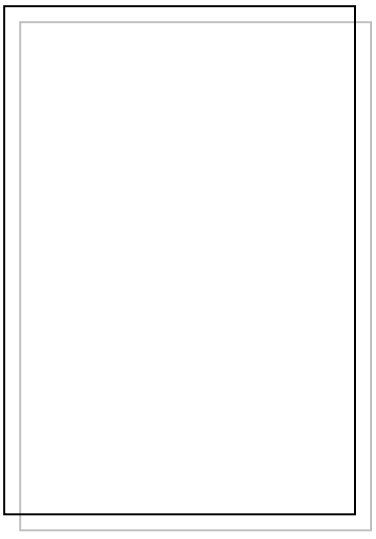
Fill in the information listed below and file away for future reference.

Model Number:
_____

Serial Number
_____

Purchased Date:
_____

Install Date:
_____



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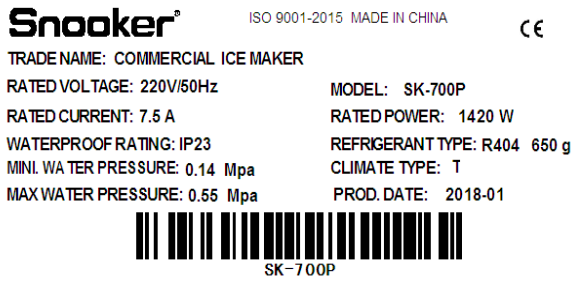
CHAPTER 1 - GENERAL INFORMATION

1.1 Introduction

This manual has been compiled as a guide to installation, operation and maintenance of your new equipment. Please take the time to read it and familiarize yourself with your equipment and its operation.

A serialized data tag is permanently attached to the unit. (See Figure 1 for example of data tag).

Figure 1: Data Tag



The model and serial number should be noted on the second page of this manual, in the spaces provided. If parts or service are ever needed for your unit, this information will be required to verify warranty status and to properly identify any parts that may be needed.

1.2 Scope of the Manual

This technical manual provides information for installation, operating, preventative maintenance, and service instructions, including applicable drawings and figures of the equipment.

CHAPTER 2 - INSTALLATION

2.1 Unpacking

Note: Before unpacking the unit, verify that the machine model is correct and that there is no damage to the outer packaging. If the outer packaging is in good condition, proceed to unpack the unit by following these steps:

Note: this machine is heavy! Use a mechanical hoist or the help of two people to lift if necessary.

1. Carefully remove all external wrappings and other protective coverings, including the white plastic coverings on the panels. Begin with unpacking the ice storage bin. Remove the carton, and using part of the carton as a cushion, tip the bin on its back to remove the skid and attach the legs or casters.
2. Return the bin to an upright position. Check the bin top gasket for gaps or tears, and fill any in with food grade sealant prior to placing the ice machine on the bin.
3. Review the installation section of the manual completely prior to installing.
4. Verify that all accessories are included.
5. Properly discard crating materials and recycle if possible.

2.2 Environmental Requirements

The following installation site requirements must be complied with or the system may not operate correctly or damage may occur.

- Environment temperature must be less than 43°C [109°F] and greater than 3°C [38°F].

WARNING: The machine is for indoor use only. Running the machine below freezing point is prohibited. Machine failure caused by exposure to freezing temperatures is not covered by the warranty.

- Proper spacing around the unit must be provided. Ice machines, like other refrigeration equipment, emit heat through a condenser and any obstruction of the airflow could affect the machine's performance and life. Please refer to the table below for spacing guidelines:

Machine	Spacing

Sides	15.0 cm [5.90 in]
Back	20.0 cm [7.87 in]
Front	30.0 cm [11.81 in]

- Installation site must be leveled. Adjustable feet at the bottom of the machine are provided to level the unit.
- The installation site must be capable of supporting the weight of the ice machine and a full bin of ice.
- The installation site may not be next to heat-generating equipment or in direct sunlight.
- The installation site must be free of airborne and other contaminants that could affect the ice machine's life or ice quality. Installing your ice machine near a source of yeast or similar material can result in the need for more frequent sanitation cleanings due to the tendency of these material to contaminate the machine.

2.3 Water Supply Requirements and installation

The water used for ice making must be in accordance with local drinking water quality standards. External water filtration device may be installed on the supply line as long as required water pressure is maintained.

The following water supply and plumbing requirements must be complied with or the system may not operate correctly or damage may occur:

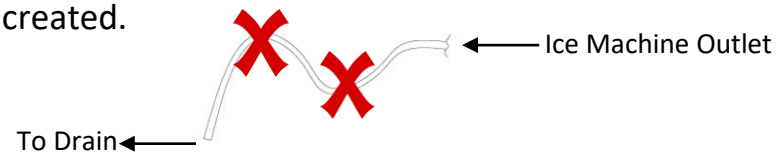
- **Water Inlet Temperature** must be between 0.6°C [33°F] and 32°C [89.6°F].

WARNING: The ice machine must not be connected to hot water supply. Please review and comply with water temperature requirements above.

- **Ice Making Water Pressure** must be between 0.13 Mpa [19 psi] and 0.55 Mpa [80 psi]. If water pressure exceeds the maximum recommended pressure, a water pressure regulator will be required.
- **Cooling Water Pressure** must be between 0.59 Mpa [85.6 psi] and 1.17 Mpa [169.7 psi].

- **Inlet Pipe Diameter** must be larger than 9.5 mm [3/8 inch].
- **Drain Pipe Diameter** must be larger than 15.8mm [5/8 inch] and drop 3 cm per meter [3/8 inches per foot].

DRAIN PIPE INSTALLATION NOTE: To prevent drain water from flowing back into the ice machine and storage bin the following rules must also be complied with:
1.) No point in the drain pipe shall be higher than the drain outlet from the ice machine.
2.) No point in the middle of the drain pipe shall be lower than any point beyond it such that a trap is created.



- It is recommended that drains have a joint or other suitable means to allow disconnection from the ice machine when servicing is required.
- All water supply and drain plumbing must comply with local, state and national codes.
- It is recommended that water supply and drain lines be insulated to prevent condensation.

2.4 Power Supply Requirements

The following electrical supply requirements must be complied with or the system may not operate correctly or damage may occur:

- All wiring must conform to local, state and national codes.
- The voltage, frequency and capacity of power supply provided must be consistent with that marked on the machine nameplate.
- The maximum allowable voltage variation is 10% of the rated voltage on the ice machine model/serial number plate at start-up (when the electrical load is highest).
- The earth terminal of the power supply, socket or plug must be connected to external grounding.

CHAPTER 3 – OPERATION

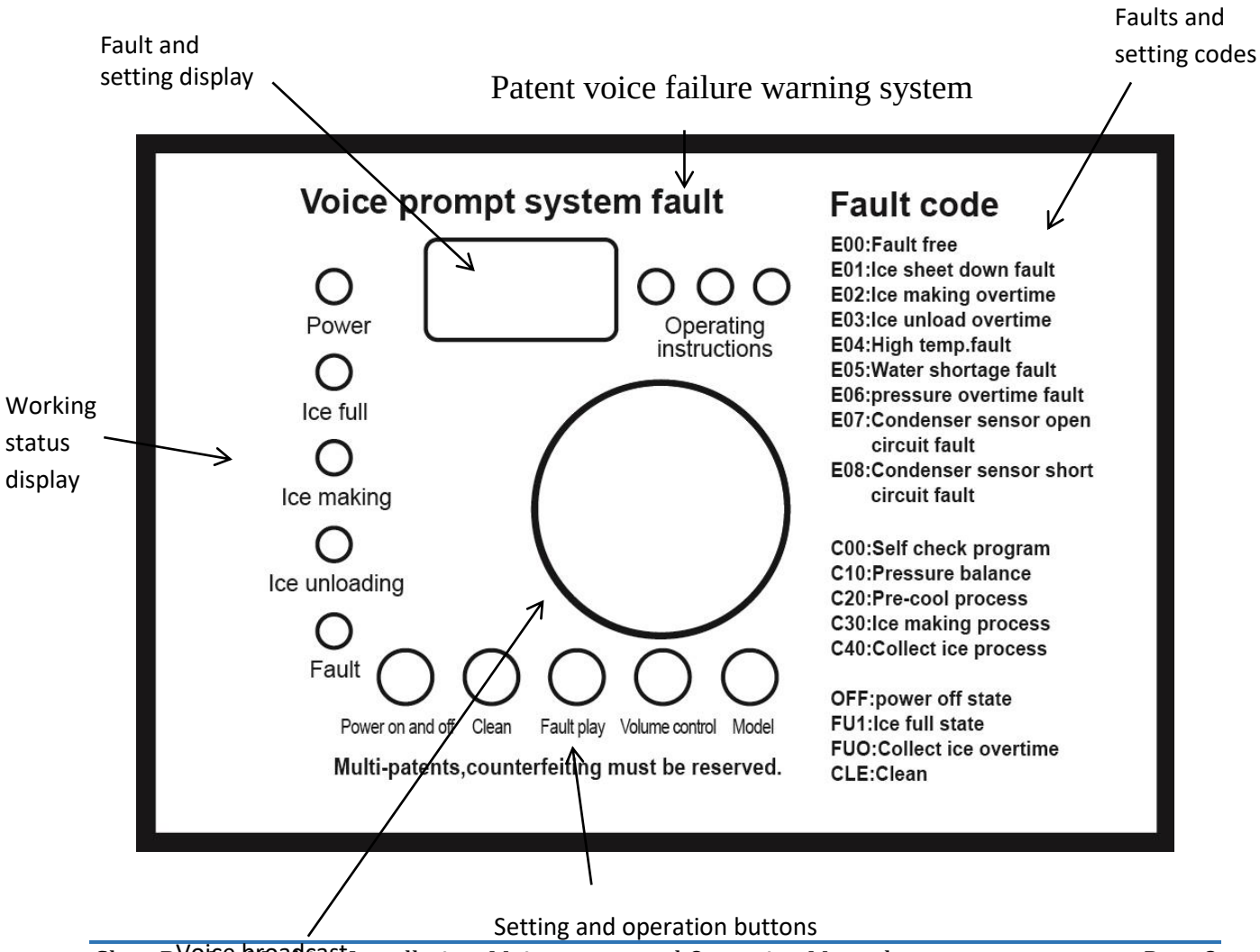
3.1 Pre-startup Check

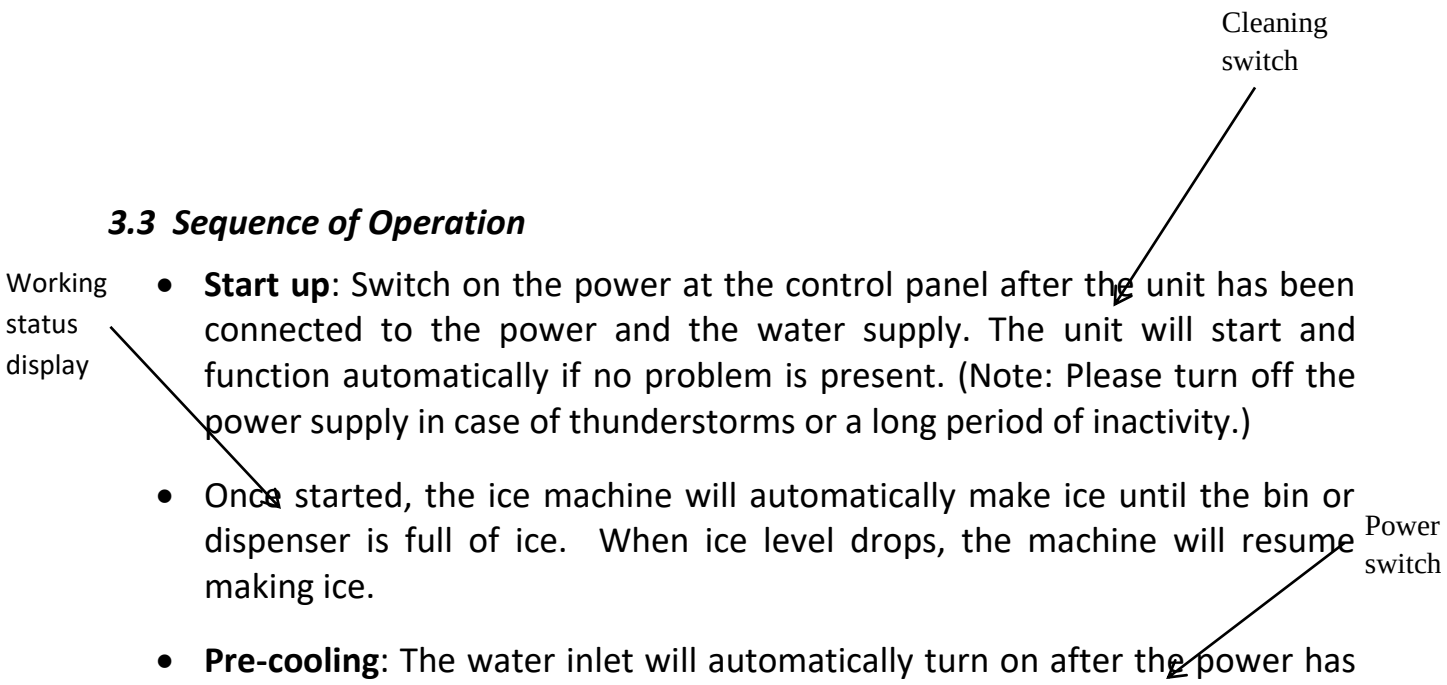
Prior to starting up the unit for the first time or restarting the unit after extended shutdown, it is important to confirm that all of the installation requirements are met. Please refer back to "CHAPTER 2 - Installation" section and verify that all requirements are met before proceeding. Make sure that all piping and drain connections are free of leaks.

3.2 Control Panel

There are two types of control panels shown below; with and without voice warning system.

With voice panel





3.3 Sequence of Operation

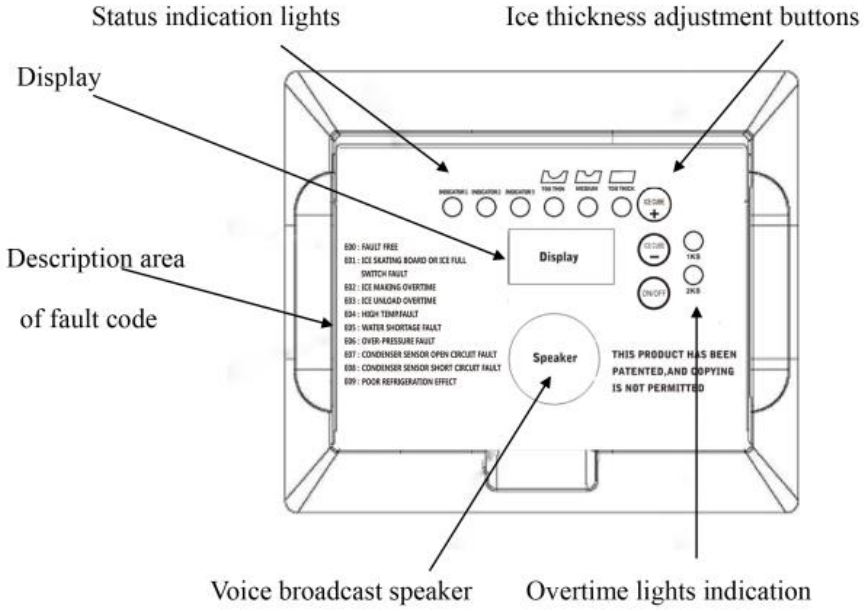
- **Start up**: Switch on the power at the control panel after the unit has been connected to the power and the water supply. The unit will start and function automatically if no problem is present. (Note: Please turn off the power supply in case of thunderstorms or a long period of inactivity.)
- Once started, the ice machine will automatically make ice until the bin or dispenser is full of ice. When ice level drops, the machine will resume making ice.
- **Pre-cooling**: The water inlet will automatically turn on after the power has been switched on before the water pump starts. The water inlet valve continues to take in water until the water reaches the specified level and the float valve switches off the water inlet.
- **Caution**: Do not place anything on top of the ice machine, including the ice scoop. Debris and moisture from objects on top of the machine can work their way into the cabinet and cause serious damage. Damage caused by foreign material is not covered by warranty.
- **Ice making**: The water pump starts up after pre-cooling for 30 seconds. Water continuously flows and ice gradually begins to form as a result. The water float valve will open and close automatically to maintain the proper water level.
- **Ice falling**: After reaching the required ice making time, the water pump shuts down and the drain valve closes within 30 seconds. The water valve opens. An entire sheet of ice will slide from the evaporator into the storage refrigerator. This process takes between 1 and 2 minutes. Hands should be away from the storage refrigerator to avoid the falling ice.
- **Noise**: The ice machine will make noise when it is in ice making mode. The compressor, fan motor, and water pump all produce some sound. It is also normal to hear some crackling just before the harvest cycle begins. In addition, during the cycle the harvest mechanism may click twice as it

pushes the ice out and returns to its normal position. The ice harvests as a unit or slab, which makes some noise when it hits the bin or dispenser. These noises are all normal for this machine.

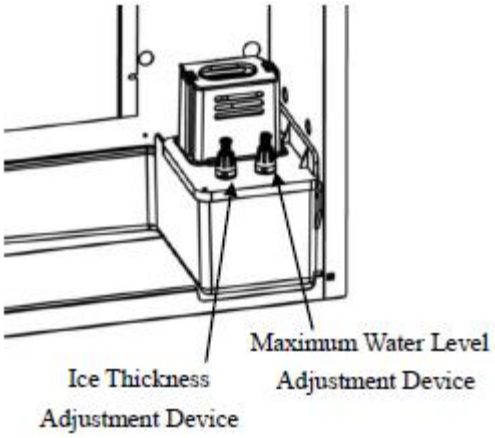
- **Shutdown**: The machine stops when the switch on the control panel is switched off.
- **Automatic Shut-off**: Ice will build up in the bin until the sliding board cannot be reset. After the machine has detected that the ice bin is full, the machine will automatically stop. After the ice bin has been emptied enough so that the level switch is reset, the machine will automatically start again.
- **Other Special Stop Conditions**:
    - There isn't any ice falling in 3x consecutive cycles. When this occurs, the machine will stop automatically.
    - Environmental temperatures exceed the prescribed temperature. This will cause machine to stop automatically.
    - There is no condensed water inside the water-cooled machine. This will also cause the machine to stop automatically.
- **Ice thickness adjustment**: There are two methods to adjust the ice thickness. Please choose one according to the machine prompts.

    - **Method I**, In the ice-making process, you can click the buttons on the panel to adjust the ice thickness. [see diagram below]
    - 1. If ice is too thin, press "Ice +". Once this button is pressed, the Arabic number on the display will increase by 1, and the ice making time will be extended by 1 minute.
    - 2. If ice is too thick, press "Ice -". Once this button is pressed, the Arabic number on the display will decrease by 1, and the ice making time will be shortened by 1 minute;
    - 3. Ice thickness criteria: the thickness of the hollow part is 1/3 of the entire ice thickness, seen from the side face of ice. The inappropriate thickness of ice will result in difficulties or failure in ice removal.

- panel



- **Method II,** Should the ice thickness not be satisfactory, the adjusting nut can be pulled up and rotated to the left or right until the desired thickness is achieved. Once this adjustment is complete, press down the adjustment device until it locks. Note: The adjustment should be limited to one rotation each time until desired thickness is achieved.



CHAPTER 4 –MAINTENANCE

4.1 Introduction

To insure the most productive and trouble-free operation, a thorough periodic maintenance schedule is required. Prior to performing any maintenance, these instructions should be followed:

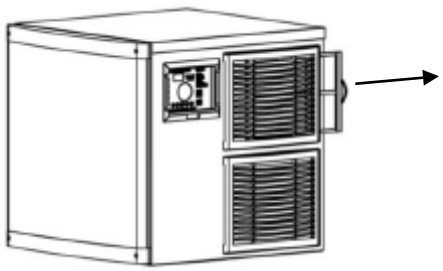
- Before maintenance and repair, the power must be disconnected.
- Maintenance and repair shall only be handled by qualified professionals.
- This manual must be read in detail before performing maintenance or repair.

4.2 Maintenance

The following time-based maintenance plan guidelines are based on general recommendations. Site conditions may dictate a change in the maintenance interval based on air and water conditions. Review your particular maintenance plan with a qualified maintenance professional to determine if changes may be necessary for your ice machine.

A. Monthly Maintenance

- Remove dust and dirt off exterior surfaces with mild household dish-washing detergent and warm water. Wipe dry with a clean, soft cloth.
- Inspect the unit to verify that supply and drain hoses are free of obstruction and properly routed.
- Clean the air filter (only applicable to air cooling machine). Remove the filter as shown in the picture below. Brush clean with soft brush and replace.



B. Six-Monthly Maintenance

- Clean condenser fins. A dirty condenser restricts airflow, resulting in excessively high operating temperatures. This reduces ice production and shortens component life. Follow the steps below

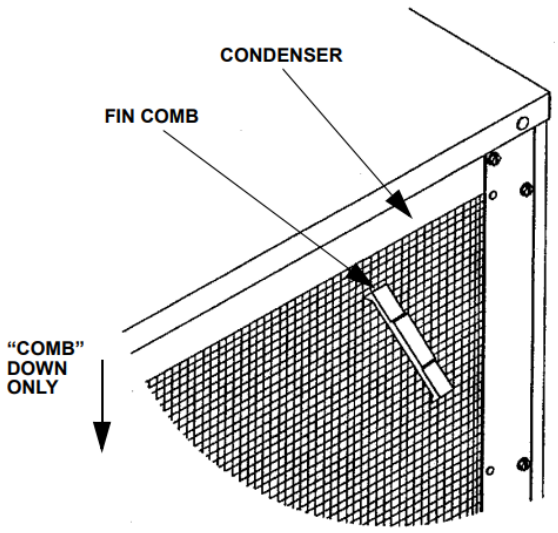
    1. Clean the outside of the condenser with a soft brush or a vacuum with a brush attachment. Clean from top to bottom, not side to side or condenser fins could be damaged.

    2. Shine a flashlight through the condenser to check for dirt between the fins. If dirt remains:

        A. Blow compressed air through the condenser fins from the inside. Be careful not to bend the fan blades.

        B. Use a commercial condenser coil cleaner. Follow the directions and cautions supplied with the cleaner.

    3. Straighten any bent condenser fins with a fin comb.



- Carefully wipe off the fan blades and motor with a soft cloth. Do not bend the fan blades.

C. Annual Maintenance

- Clean and sanitize the ice machine. Remove and discard all ice in the holding bin. Wipe down the entire unit with approved ice machine cleaner and sanitizer.

CHAPTER 5 - TROUBLESHOOTING

This chapter will assist in a systematic check of components in determining potential cause of equipment failure. The following table lists the most common symptoms that may be experienced and the recommended corrective action.

Troubleshooting Guide

PROBLEM	PROBABLE CAUSE	CORRECTION
Ice Machine will not start-up	No power supply	Check power switch and power supply
Automatic stop after starting the ice machine for 3 minutes	High pressure protection	A. Check ambient temperature meets requirements B. Clean condenser C. Check high voltage switch
Ice machine only makes ice once	Ice full	Ice sliding board
Ice cannot fall	A. Ice machine is dirty B. Ambient temperature is low	A. Clean B. Check ambient temperature meets requirement
Ice is too thin or incomplete	A. Tank water level is too low B. Inlet valve not functioning C. Water pressure is not enough D. Water supply obstructed	A. Check water level B. Check water inlet valve C. Verify water pressure meets requirements D. Check water supply line
Ice making is too slow	A. Condenser is dirty B. High ambient temperature C. Poor ventilation	A. Clean the filter and condenser B. Verify ambient temperature meets requirements C. Verify spacing around the machine meets requirements

APPENDIX 1 – ERROR CODES

Code	Annotation	Machine Action
E00	No fault	Operating
E01	Ice sliding board fault	Protection Shutdown
E02	Overtime ice making fault	Protection Shutdown
E03	Overtime ice-shedding fault	Protection shutdown
E04	High temperature fault (voice announcement pressure beyond limit)	Protection shutdown
E05	Water shortage fault	Protection shutdown
E06	Excess of pressure limit fault	Protection shutdown
E07	Condensation sensor open circuit fault, display once every 5 seconds	Non stop
E08	Condensation sensor short circuit fault, display once every 5 seconds	Non stop

APPENDIX 2 – REVISION HISTORY

Rev	Description of Change	Date
1	Initial Release	September-2017
2	1st Revision	December-2018

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