

MODULAR ICE MAKER

INSTRUCTION MANUAL

FOR END USER

FM-481AG
FM-481AWG

HOSHIZAKI

IMPORTANT

1. This booklet is an integral and essential part of the product and should be kept and preserved by the user. Please read carefully the guidelines and warnings contained herein as they are intended to provide the user with essential information for the continued safe use and maintenance of the product. In addition, it provides GUIDANCE ONLY to the user on the correct services and site location of the icemaker. Please preserve this booklet for any further consultation that may be necessary.
2. This is a commercial icemaker, and should be destined only to be used for the purpose for which it has been expressly designed. Any other use should be considered improper and therefore dangerous. The manufacturer will not be held liable or responsible for any damage caused by improper, incorrect and unreasonable use.

I. INSTALLATION INSTRUCTIONS

WARNING

The installation must be carried out by qualified personnel, in accordance with current regulations, according to the manufacturer's instructions.

1. LOCATION

IMPORTANT

1. This icemaker is not intended for outdoor use. Normal operating ambient temperature should be within 5°C to 40°C. Normal operating water temperature should be within 5°C to 35°C. Operation of the icemaker, for extended periods, outside of these normal temperature ranges may affect production capacity.
2. The icemaker should not be located next to ovens, grills or other high heat producing equipment.
3. The location should provide a firm and level foundation for the equipment.
4. Allow 15 cm clearance at rear and sides for proper air circulation and ease of maintenance and/or service should they be required. Allow 60 cm clearance on top to allow for removal of the Auger.

5. This appliance is not suitable for installation in an area where a water jet could be used and where dripping is not allowed.
6. Do not place anything on top of the icemaker or in front of the Louver.

2. ELECTRICAL CONNECTIONS

WARNING

THIS APPLIANCE MUST BE EARTHED

This icemaker requires an earth that meets the national and local electrical code requirements. To prevent possible severe electrical shock to individuals or extensive damage to equipment, install a proper earth wire to the icemaker. Remove the plug from the mains socket before any maintenance, repairs or cleaning is undertaken.

- * This icemaker should not be installed:
 - a) Where the power supply is not within the range of 220 - 240V.
 - b) Where the icemaker cannot be plugged directly into its own power supply without using an extension cord or sharing a receptacle.
- * Usually an electrical permit and services of a licensed electrician are required.
- * If the supply cord and the plug should need to be replaced, it should only be done by a qualified service engineer.

3. WATER SUPPLY AND DRAIN CONNECTIONS

Note: A plumbing permit and services of a licensed plumber may be required in some areas.

- * Only potable water should be used for the icemaker.
- * Water supply pressure should be minimum 0.5 bar and maximum 8 bar. If the pressure exceeds 8 bar, use a proper pressure reducing valve. Do **NOT** throttle back the supply tap.
- * The icemaker drain is gravity flow, so ensure drain pipe has an adequate pitch or fall.
- * Water should drain into an open trap.
- * On water-cooled model, a back flow preventer may be required in the cooling water circuit.

II. OPERATING INSTRUCTIONS

WARNING

1. This icemaker is designed to produce and store edible ice. To keep the icemaker hygienic:
 - * Wash your hands before removing ice. Use the Plastic Scoop provided (accessory).
 - * The Storage Bin is for ice use only. Do not store anything else in the Bin.
 - * Clean the Storage Bin before use (see "III. 1. CLEANING").
 - * Keep the Scoop clean. Clean it by using a neutral cleaner and rinse thoroughly.
 - * Close the Door after removing ice to prevent entrance of dirt, dust or insects into the Storage Bin.
2. The use of any electrical equipment involves the observance of some fundamental rules. In particular:
 - * Instances of high humidity and moisture increase the risk of electrical short circuits and potential electrical shocks. If in doubt, disconnect the icemaker.
 - * Do not pull the power cord in order to disconnect the icemaker from the feed network.
 - * This appliance is not suitable for unsupervised use by young children or aged or infirm persons.
3. All parts are factory-adjusted. Improper adjustments may result in failure.
4. If the unit is turned off, wait for at least 3 minutes before restarting the icemaker to prevent damage to the Compressor.

1. OPERATION

The installer will normally commission the icemaker to start the automatic icemaking process. To ensure continuous operation, make sure that:

- * The water supply tap is on, and
- * The icemaker is plugged into the power supply.

2. PREPARING THE ICEMAKER FOR LONG STORAGE

- 1) Push the Stop Button on the Operation Panel. The Display will blink in the "STOP" mode for 15 minutes during the drain control operation and will start to illuminate constantly at the end of drain control.

- 2) Close the water supply tap.

- 3) Remove the Inlet Hose from the water tap, and drain the Hose.

- 4) Unplug the icemaker.

- 5) Remove all ice from the Storage Bin, and clean the Bin.

III. MAINTENANCE

1. CLEANING

WARNING

1. Before carrying out any cleaning or maintenance operations, unplug the icemaker from the electrical supply network.
2. Ask a trained service person to check and clean the Condenser at least once a year.
3. This appliance must not be cleaned by use of a water jet.

[1] Machine and Bin Exterior

Wipe the exterior at least once per week with a clean, soft cloth. Use a damp cloth containing a neutral cleaner to wipe off grease or dirt.

[2] Scoop Cleaning/Sanitisation (Daily)

- 1) Either mix 1 litre of water with 4 ml of 5.25% sodium hypochlorite solution in a suitable container, or the recommended Hoshizaki sanitiser as directed.

- 2) Soak the Scoop in the solution for more than 3 minutes. Rinse thoroughly, and shake to remove surplus liquid.

Note: Using a cloth to dry may re-contaminate.

[3] Storage Bin Interior Cleaning/Sanitisation (Weekly)

- 1) Open the Storage Bin Door, and remove all ice.
- 2) Remove the Thumbscrews securing the Baffle.
- 3) Remove the Baffle from the Bin.
- 4) Wash the Bin liner and Baffle with a neutral non-abrasive cleaner. Rinse thoroughly.

- 5) Either mix 5 litres of water with 18 ml of 5.25% sodium hypochlorite solution in a suitable container, or the recommended Hoshizaki sanitiser as directed.
- 6) Soak a clean sponge or cloth with the solution and wipe the Bin liner surfaces and Baffle.
- 7) Refit the Baffle and Thumbscrews. Wipe the surface of the Bin Door and Thumbscrews with the solution. Close the Bin Door.
- 8) The remaining solution can be used to sanitise utensils.

Note: Do not wipe dry or rinse after sanitising, but allow to air dry.

[4] Storage Bin Door

Clean the Storage Bin Door at least once a week, using a neutral non-abrasive cleaner. Rinse thoroughly after cleaning and sanitise as required.

[5] Air Filter (Air-Cooled Model Only)

A plastic mesh Air Filter removes dirt or dust from the air, and keeps the Condenser from getting clogged. As the Filter gets clogged, the icemaker's performance will be reduced. Remove and clean the Air Filter at least twice per month:

- 1) Remove the screw, push down the Lock and take off the Louver.

Note: Do not put your hand inside the machine compartment.

- 2) Remove the Air Filter by pushing it down.
- 3) Clean the Air Filter by using a vacuum cleaner. When severely clogged, use warm water and a neutral cleaner to wash the Air Filter.
- 4) Rinse and dry the Air Filter thoroughly, and place it in position.

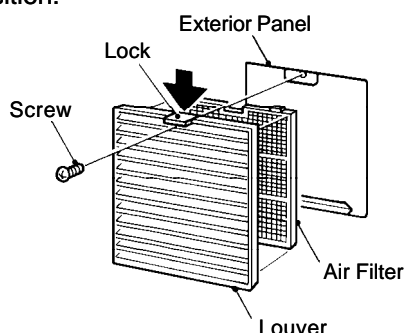


Fig. 1

2. SERVICE CALL

[1] Error Code Indication

If the error code "E" is indicated on the display, before calling for service, check the following.

Code	Remedy
E0	Possibility of water leaks. Turn OFF Operation Switch, and turn it ON again. If error code appears again, call for service.
E1	Low ice production. Turn OFF Operation Switch, and turn it ON again. If error code appears again, call for service.
E2	Turn OFF Operation Switch, and turn it ON again. If error code appears again, call for service.
E4	Clean Air Filter (air-cooled model) or check for cooling water flow (water-cooled model). Check that icemaker is properly installed according to Instruction Manual. Turn OFF Operation Switch, and turn it ON again. If error code appears again, call for service.
E7	Could lead to failure of icemaking mechanism. Ice production continues, but call for service immediately.
E8	Gear Motor could be overloaded. Turn OFF Operation Switch, and turn it ON again. If error code appears again, call for service.
Eb	Turn OFF Operation Switch, and turn it ON again. If error code appears again, call for service.
EF	Supply voltage is too low. Check that voltage is in required range and icemaker is not sharing a single receptacle with other appliances. Turn OFF Operation Switch, and turn it ON again.
EH	Gear Motor is in abnormal rotation. Turn OFF Operation Switch, and turn it ON again. If error code appears again, call for service.
EL	Bin Control Switch has failed. Call for service.

[2] No Error Code Indication

If the icemaker does not work properly or does not work at all and no error code is indicated on the display, before calling for service, check that:

- * The power is supplied to the unit.
- * The water is turned on.
- * The Air Filter is clean (Air-Cooled Model).

For further assistance or advice, contact your local Hoshizaki service agent.

HOSHIZAKI

HOSHIZAKI ELECTRIC CO., LTD.

**3-16 MINAMIYAKATA, SAKAE, TOYOAKE,
AICHI 470-1194 JAPAN**

PHONE: 0562-97-2111