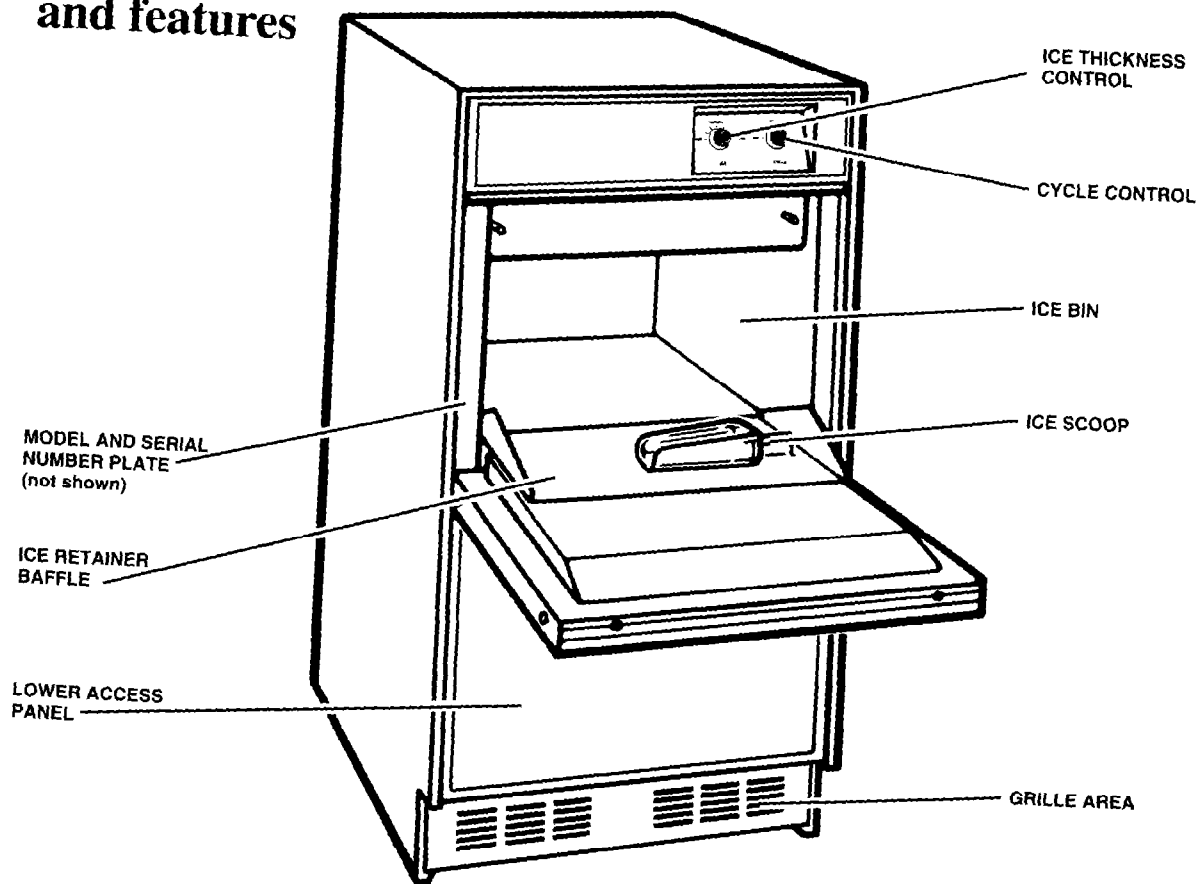




# MODEL IACS50

## Use and Care Guide

### Parts and features



### Copy your Model and Serial Numbers here ...

When you need service, or call with a question, have this information ready.

1. **Complete** Model and Serial Numbers (from the plate located as shown).
2. Purchase date from sales slip.

Copy this information in these spaces. Keep this book, your warranty, and sales slip together in a handy place.

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Purchase Date \_\_\_\_\_

Service Company and Telephone Number \_\_\_\_\_

Part No. 2180630

12/94

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## Before you plug it in

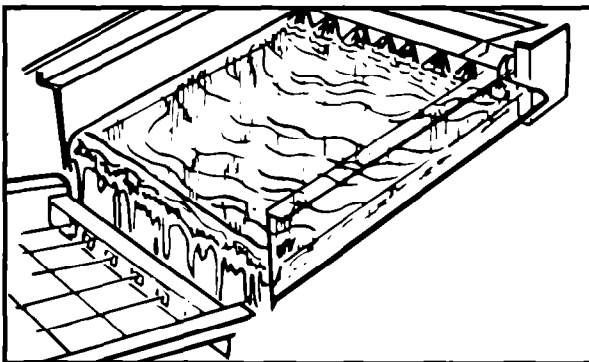
### IMPORTANT

Before using your ice maker, you are responsible for making sure that it ...

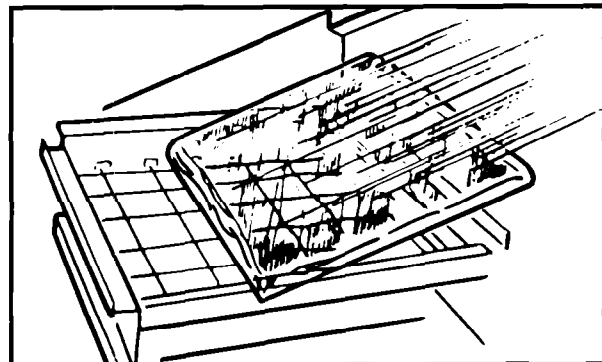
- has been installed where it is protected from the elements.
- is located so that the front is not blocked to restrict incoming or discharge airflow.
- is properly leveled.
- is located in a well ventilated area with temperatures above 55°F (13°C) and below 110°F (43°C). Best results are obtained at temperatures between 70°F (21°C) and 90°F (32°C).
- is properly connected to a water supply and drain.
- is properly connected to electricity. A 115 Volt, 60 Hz., AC only, 15 or 20 ampere electrical supply circuit, properly grounded in accordance with the National Electrical Code and local codes and ordinances, is required. **NOTE** : A time delay fuse or circuit breaker is recommended.
- is not operated by anyone unable to use it properly.
- is used only for the job it was designed to perform.
- is properly maintained.

## Using your ice maker

### How the ice maker works

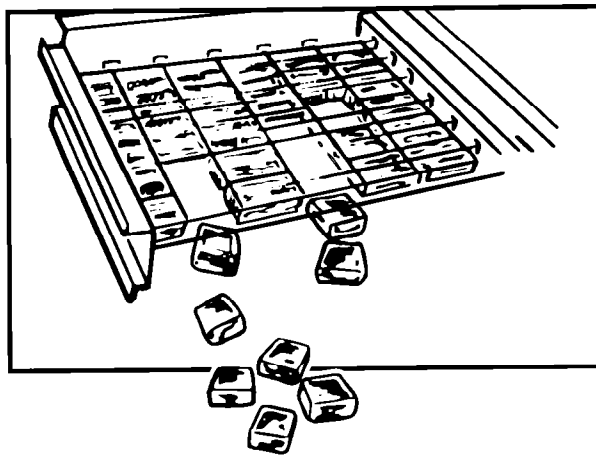


1. Water is constantly circulated over a freezing plate. As the water freezes into ice, the minerals in the water are rejected. This produces a clear sheet of ice with a low mineral content.

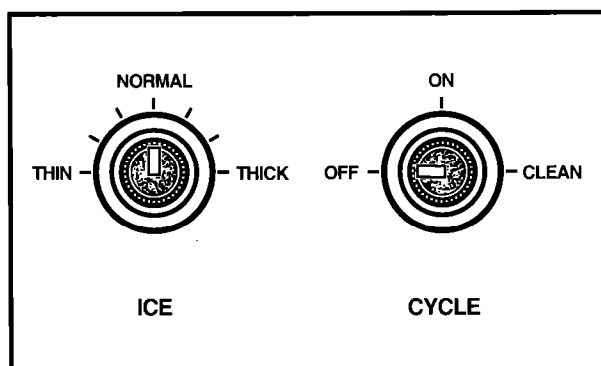


2. When the desired thickness is reached, the ice sheet is released and slides onto a cutter grid. The grid divides the sheet into individual cubes.

- The water containing the rejected minerals is drained after each freezing cycle.
- Fresh water enters the machine for the next freezing cycle.
- Cubes fall into the storage bin. When the bin is full, the ice maker shuts off automatically and restarts when more ice is needed.



## Setting the controls



- Select an ice thickness. The ice maker has been preset to produce ice approximately  $\frac{1}{2}$ " thick while operating in a room temperature of 70°F (21°C).

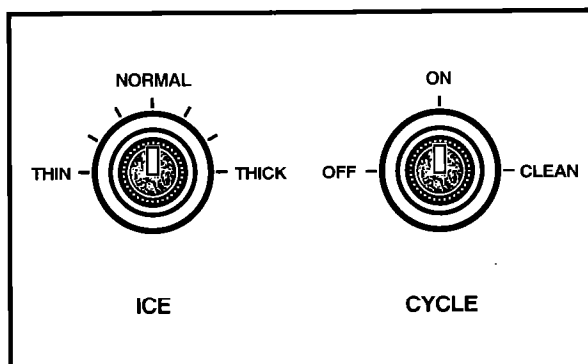
Operation in different room temperatures may require readjusting the Ice Thickness Control Knob toward "THICK" or "THIN."

Best operation will be obtained with ice  $\frac{1}{2}$ " to  $\frac{5}{8}$ " thick.

If operating in a warm room temperature (above 90°F (32°C)), **DO NOT** set Ice Thickness Control Knob to maximum thickness. Doing so could cause the unit to malfunction.

- To start the normal freezing cycle, turn the Cycle Control Knob to "ON."
- To stop ice maker operation, turn the Cycle Control Knob to "OFF."

The "CLEAN" setting is used whenever solutions are circulated through the ice maker for cleaning. Only the water pump operates at this setting.

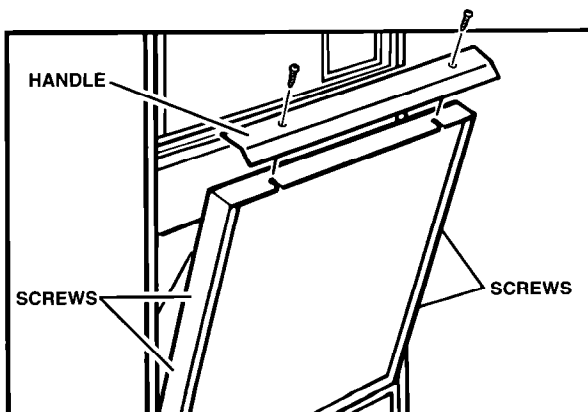


## Changing the bin door panel

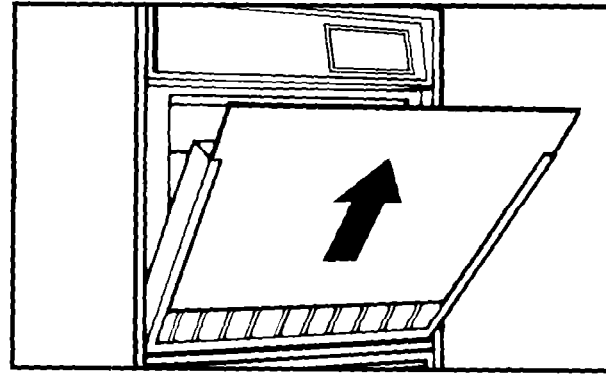
You can make a decorative wood front to match existing cabinets.

### To change the bin door panel:

- Open the storage bin door. Remove the two screws holding the handle to the door frame.
- Loosen the screws in both side trim pieces.
- Remove the handle.



4. Carefully slide the panel out and break off the ribs on the door insulation to allow room for the wood panel's thickness.
5. Make the wood panel  $\frac{1}{4}$ " (6 mm) thick and  $17" \times 13\frac{3}{16}"$  (433 mm x 335 mm).
6. Replace the handle and tighten the screws in both side trim pieces. Replace the handle screws and tighten.

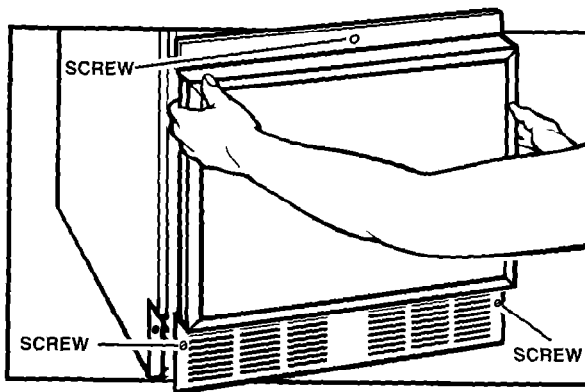


## Changing the lower access panel

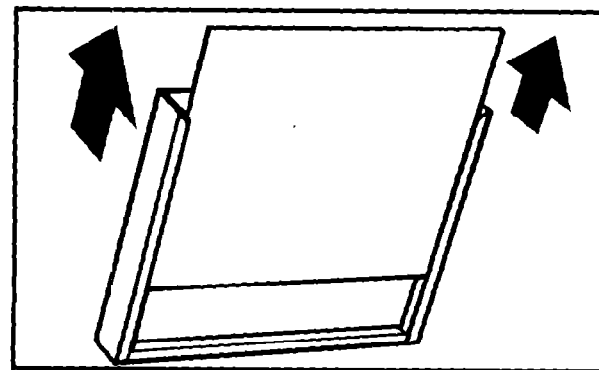
### **⚠ WARNING**

#### **Electrical Shock Hazard**

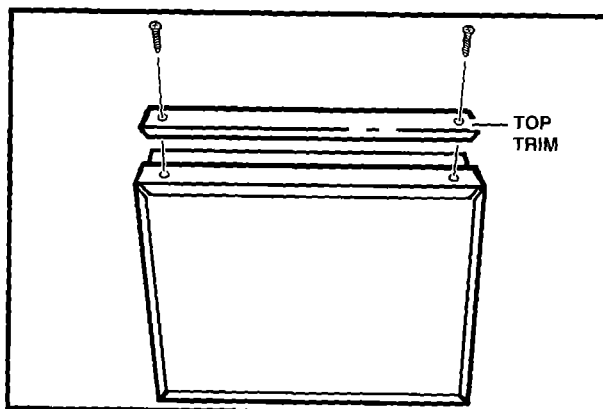
**Do not operate the ice maker with the lower access panel or control panel removed. Electrical shock or personal injury could result.**



1. Remove the two screws in the lower grille area and the one screw from the center of the front panel support. (Open bin door slightly for better access to screw.) Pull forward and down to remove the lower access panel.



3. Carefully slide the panel out.
4. Make a decorative wood front to match your existing cabinets. The panel should be  $\frac{1}{4}$ " (6 mm) thick and  $17" \times 11\frac{15}{16}"$  (433 mm x 303 mm).
5. Replace the top trim and screws. Replace the lower grille area assembly and screws.



2. Remove the two screws from the top panel trim and remove the top trim.

## Cleaning and caring for your ice maker

Periodically inspect and clean the ice maker to keep it operating at peak efficiency and to prevent premature failure of system components.

Both the ice making system and the air-cooled condenser need to be cleaned regularly.

The minerals rejected from the circulating water during the freezing cycle will eventually form a hard, scaly deposit in the water system which prevents a rapid release of the ice from the freezing plate.

Clean the ice and water systems periodically to remove mineral scale buildup. Frequency of cleaning depends on water hardness. With water that contains few impurities, cleaning may not be required for several years. With hard water (15 to 20 grains/gallon), cleaning may be required as frequently as every six months.

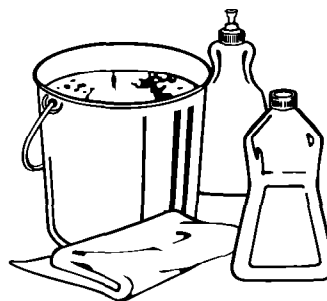
### A dirty or clogged condenser:

- prevents proper airflow.
- reduces ice making capacity.
- causes higher than recommended operating temperatures which may lead to component failure.

### Cleaning exterior surfaces

Wash the exterior painted surfaces and gaskets with warm water and mild soap or detergent. Rinse and dry. Regular use of a good household appliance cleaner and wax will help protect the finish.

**Do not use harsh or abrasive cleaners on the enamel surfaces. They may scratch the finish.**



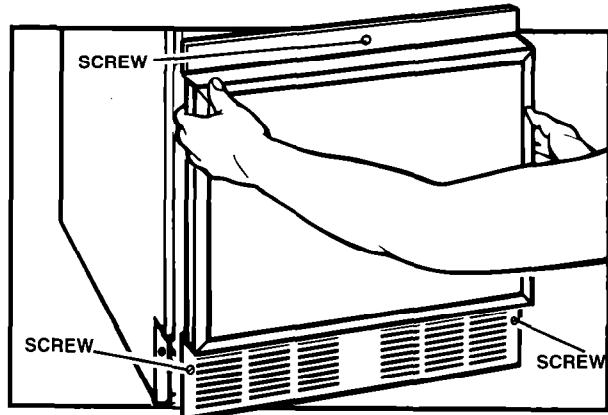
### Cleaning the condenser

#### ⚠ WARNING

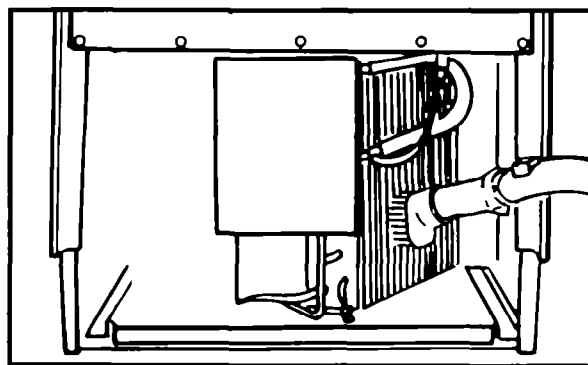
#### Personal Injury and Product Damage Hazard

- Be sure the ice maker is **OFF** and disconnected from the main power supply. Condenser fan rotation, sharp condenser fins, and hot tubing could cause personal injury.
- Condenser fins can bend easily. Use care when vacuuming the condenser to keep from bending fins. Product damage could result.

1. Turn the Cycle Control Knob to the "OFF" position. Then disconnect electrical supply to the ice maker.



2. Remove the two screws in the lower grille area and the one screw from the center of the front panel support. (Open bin door slightly for better access to screw.)
3. Pull forward and down to remove the lower access panel.



4. Remove dirt and lint from the condenser fins and the unit compartment with a brush attachment connected to a vacuum cleaner.
5. Replace the grilled front panel and screws.
6. Plug ice maker in and place the Cycle Control Knob in the "ON" position.

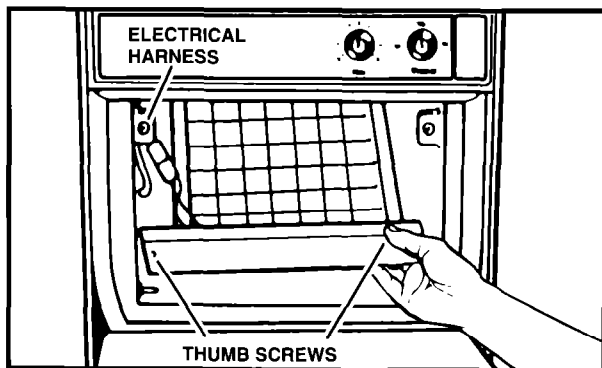
## Cleaning the ice maker system

### **⚠ WARNING**

#### Personal Injury Hazard

Most ice machine cleaners are citric or phosphoric acid which can cause irritation, even after dilution. In case of contact with eyes, flush eyes thoroughly with fresh water and contact a physician immediately. In case of contact with skin, rinse well with water. If *swallowed*, give large amounts of water and contact a physician immediately. Do not induce vomiting. **KEEP OUT OF THE REACH OF CHILDREN.**

1. Place the Cycle Control Knob in the "OFF" position.

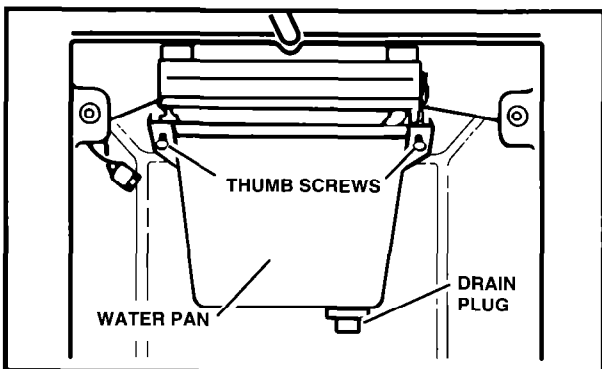


2. Remove the two thumb screws, and slide the ice cutter grid forward, out of the two slots near the water pan.
3. Unplug the electrical harness.

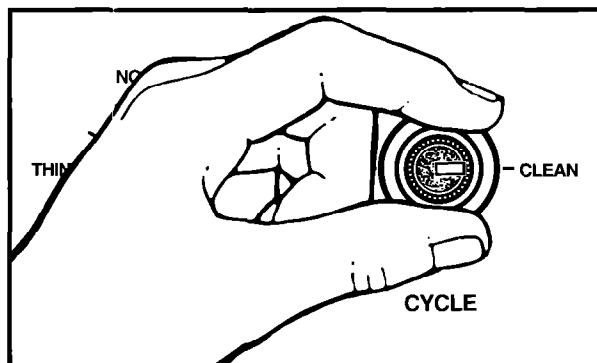
### **⚠ CAUTION**

Any ice on the grid should be melted under running warm water. Attempting to pick the ice slab from the grid may stretch and damage the grid wires.

4. Remove all ice from the storage bin and the freezing place.



5. Drain the water pan by removing the drain plug. When finished, replace the drain plug.

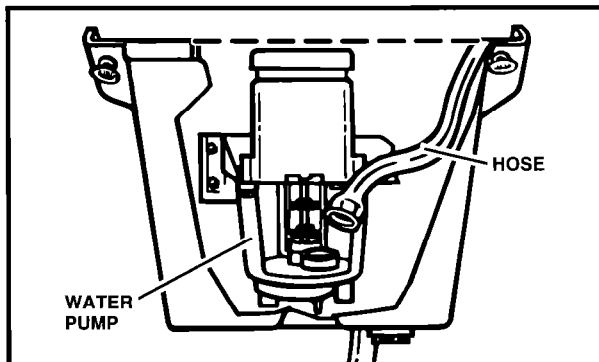
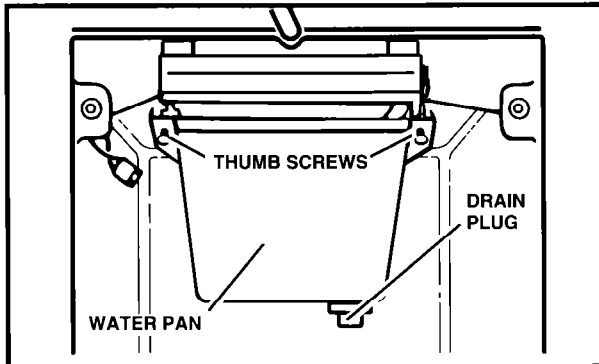
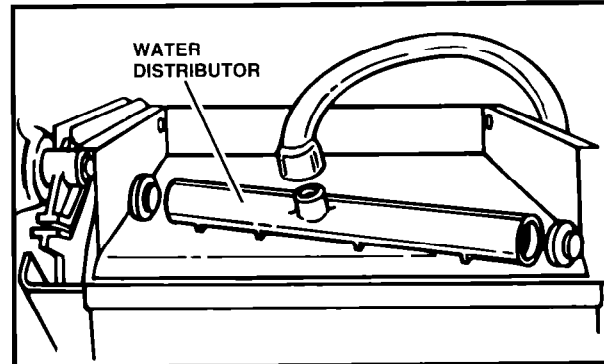
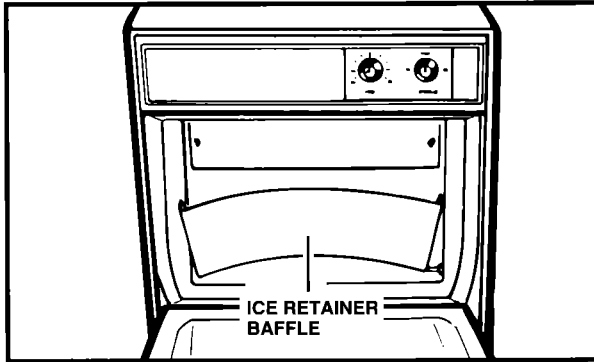


6. Pour 2 quarts (2 L) of hot water into the water pan and turn the cycle control to "CLEAN." This step warms up the system and allows the cleaning solution to be more effective. Allow to circulate 5 minutes. Turn switch to "OFF" and drain. Prepare the cleaning solution by thoroughly mixing 6 oz. (170 g) of powdered citric acid or phosphoric acid into 2 quarts (2 L) of hot water. Commercial ice machine cleaners are also available in liquid form and should be mixed according to instructions on the label.
7. Pour cleaning solution into water pan and turn switch to "CLEAN." If solution foams while pouring, stop until foaming subsides, then add balance of solution. Allow solution to circulate until scale has dissolved. The circulating solution may not contact scale on the side flanges of the freezing plate. To remove this scale, wear rubber gloves and use a stainless steel sponge or pad dipped in cleaning solution to scrub the side flanges until scale is removed. Generally scale will be dissolved in 15 to 30 minutes. Severe scale formation may require repeating the cleaning process with a fresh quantity of solution if the scale has not dissolved after 30 minutes.
8. Turn switch to "OFF" and drain.
9. Follow cleaning with two fresh water rinses, circulating each rinse for 5 minutes, and drain.
10. This completes the "in place" cleaning and sanitizing of the water system and freezing plate. Other interior components must also be cleaned and sanitized.

**⚠ WARNING**

**Personal Injury Hazard**

Do not operate the ice maker with the lower access panel, lower grille area, or control panel removed. Personal injury could result.



6. Remove the water distributor from the freezing plate. It is held in place by rubber end caps. Remove the inlet hose and clean all water distributor holes and the small orifice in the inlet side of the distributor. When replacing the distributor, make sure the end caps are located in the evaporator flange detents and that the water distributor holes face down.
7. Wash the **interior components** (ice retainer baffle, cutter grid, water pan, inlet hose, and water distributor) and the storage bin, door gasket, and ice scoop with mild soap or detergent and warm water. Rinse in clean water. The components should also be cleaned in a solution of ¼ oz. (8 mL) of chlorine bleach mixed with 1 gallon (3.8 L) warm water.  
**DO NOT WASH PLASTIC PARTS IN THE DISHWASHER. They cannot withstand temperatures above 145°F (63°C).**
8. Replace the interior components (water distributor, inlet hose, water pan, cutter grid, and ice retainer baffle).
9. Check the following:
  - Hose from water valve is in the water pan.
  - Rubber drain plug is in the water pan.
  - Water distributor is seated and holes are facing down.
  - Hose is reconnected to the pump and the water distributor.
  - Hose from water pan is inserted into the storage bin drain opening.
10. Reconnect the electrical harness, and slide cutter grid into place. Tighten the thumb screws.

## Filtering and treating water

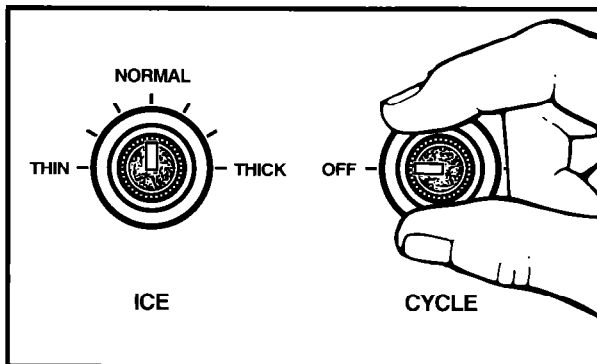
In some areas, it may be beneficial to filter or treat the water being supplied to the ice machine. It can improve the reliability of the machine, reduce water system maintenance, and produce a better quality of ice.

The installation of a polyphosphate feeder will generally reduce scale buildup, and the ice machine will require less frequent cleaning.

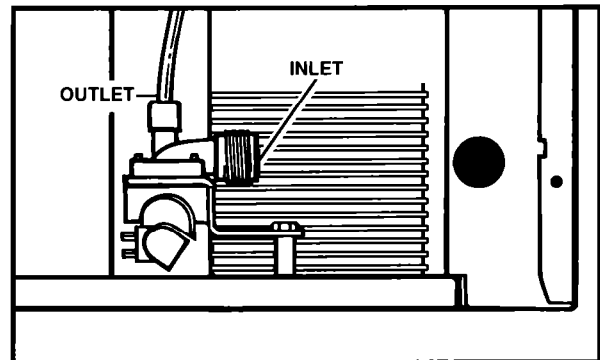
For information about filtering and treating the water, see the dealer from whom you purchased your ice machine.

## Vacation and moving care

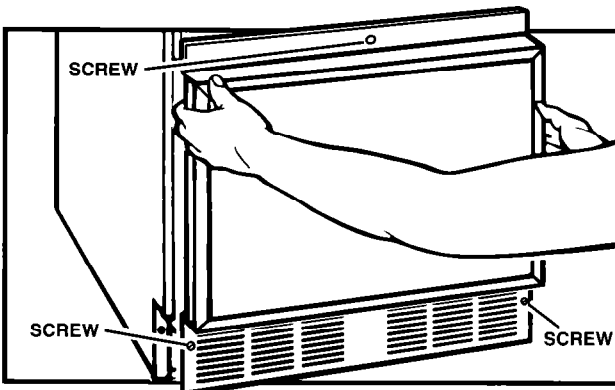
To shut down the ice maker:



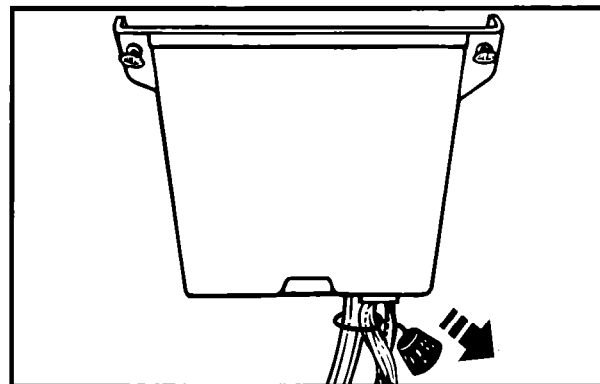
1. Turn the Cycle Control Knob to "OFF."
2. Remove all ice from the storage bin.
3. Shut off the water supply.



5. Disconnect the inlet and outlet hoses to the water valve. Allow these hoses to drain, then reconnect them to the valve.
6. Replace the lower access panel and screws.



4. Remove the two screws in the lower grille area and the one screw from the center of the front panel support. (Open bin door slightly for better access to screw.) Pull forward and down to remove the lower access panel.



7. Remove water from the drain lines and drain the water pan.
8. Before using the machine again, clean the ice maker system, interior components, and the storage bin.

**NOTE:** All components of the ice machine are permanently lubricated at the factory. They should not require any additional oiling throughout the normal life of the machine.



**CORNELIUS LIMITED WARRANTY PLAN**  
**TO THE ORIGINAL OWNER OF A CORNELIUS MODEL IACS50 CUBE ICE MAKER**

Limited to equipment located in the fifty United States and the Canadian Provinces.

**PARTS WARRANTY PERIOD**

IMI CORNELIUS INC., hereinafter referred to as CORNELIUS, warrants to the original owner of a new CORNELIUS Model IACS50 cube ice machine ("Machine"), that the Machine shall be free from defects in material and/or factory workmanship if properly installed, operated, and maintained, under normal and proper use and service conditions with competent supervision. The parts warranty period is three years (36 months) from the date of installation or 42 months from the date of shipment by CORNELIUS whichever time period elapses first as reported on the warranty registration card or other similar writing returned to the CORNELIUS factory. In addition, the motor compressor will be warranted for 5 (five) years (60 months) from date of installation or 66 months from date of shipment by CORNELIUS. The obligation of CORNELIUS under this warranty is limited to repair or replacement (at the option of CORNELIUS) FOB factory in Mason City, Iowa, of the part (or parts) of any Machine that is proven defective.

**LIMITED LABOR WARRANTY PERIOD**

In addition to the parts warranty, CORNELIUS will pay scheduled straight time labor to repair or replace a defective component when failure occurs within 3 years (36 months) from the date of installation, as reported on the warranty registration card or 42 months from date of shipment by CORNELIUS. Such service is to be performed by a service agency authorized by CORNELIUS. Time and rate schedules for labor compensation will be published periodically by CORNELIUS. Additional expenses including but not limited to travel time, truck charges, overtime charges, material costs, accessing of removal of the ice machine, normal prescribed maintenance cleaning, adjustments, and ice purchases are the responsibility of the original owner.

No parts warranty on the motor compressor assembly will apply when the ice machine's refrigeration system is modified with a condenser heat reclaim device, or parts and assemblies not provided by CORNELIUS, unless CORNELIUS provides approval in writing, for these modifications for specific locations.

The parts warranty shall not apply when destruction or damage is caused by alterations, unauthorized service, using other than factory authorized replacement parts, risks of transportation, accidents, misuse, damage by fire, flood, or acts of God. No components or assembly from which the serial number of identification number has been altered or removed will be covered. Any defective parts to be repaired or replaced must be returned to us through a CORNELIUS distributor/dealer, transportation charges prepaid and they must be properly sealed and tagged. The serial and model number of the Machine and the date of original installation of such Machine must be given. The warranty of repaired or replaced parts will not extend beyond the period of the original warranty. The decision of the CORNELIUS Service Department regarding the warrantability of parts and eligibility for the labor allowance will be final.

No representative, distributor/dealer or any other person is authorized or permitted to make any other warranty or obligate CORNELIUS to any liability not strictly in accordance with this policy. This warranty is in lieu of all other warranties expressed or implied and of all other obligations or of liabilities on our parts.

OUR LIABILITIES ARE LIMITED SOLELY AND EXCLUSIVELY TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT. WE ARE NOT LIABLE FOR ANY SPECIAL INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHATSOEVER. In those jurisdictions where liability for damages cannot be disclaimed, original purchaser's recovery shall not exceed the cost of the warranted product.

Except for descriptions of size, quantity, and type, which may appear on CORNELIUS products with specifications of certain industry, government, or professional organization's standards which may appear as product information disclosures in CORNELIUS literature and other documents from time to time, THIS WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

**IMPORTANT**

**Be sure to return your warranty registration card to CORNELIUS immediately upon installation of the ice maker. Failure to do so may void this warranty.**

IMI CORNELIUS INC  
ONE CORNELIUS PLACE  
ANOKA, MINNESOTA 55303-1592  
612-421-6120



P/N 163238001  
Effective March 1, 1994

# If you need service or assistance, we suggest you follow these steps:

## Before calling for service ...

Performance problems often result from little things you can find and fix yourself, without tools of any kind.

### Unit does not run:

- Cycle Control Knob must be in the "ON" position.
- Check to see that the power cord is plugged in.
- Check for a blown fuse or tripped circuit breaker in the electrical supply to the machine.
- Room temperatures must be above 55°F (13°C). Otherwise, the Bin Thermostat may sense a cold room temperature and shut off even though the storage bin is not full of ice. Also, the unit may not restart once it does shut off.

### Unit runs but does not produce ice:

- Cycle Control Knob must be in the "ON" position.
- Check water supply to make sure it is open.
- If ice machine is operated at an elevation above 2000 feet above sea level, both the Bin Thermostat and the Ice Thickness Thermostat need to be recalibrated. See Installation Instructions.

### Unit runs but produces very little ice:

- Room temperature may be extremely high (over 90°F (32°C)). In this case, it is normal for ice production to be low.
- Dirt or lint may be blocking the airflow through the finned condenser. Condenser needs to be cleaned.
- Check to see if the unit has a scale buildup in the water and/or freezing systems. Clean them, if necessary.

### Grid is not cutting ice sheets:

- Check the grid harness plug to make sure the connection is secure.

### Off taste in ice cubes:

- There may be an unusually high mineral content in the water supply. Water may need to be filtered or treated.
- Do not store any foods in the ice bin.
- Packaging materials are not all removed.

# NOTICE

## YOU MUST REGISTER YOUR WARRANTY REGISTRATION CARD

Please fill out this Warranty Registration Card when your Ice Machine is installed.

### ORIGINAL OWNER

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_  
Gear Motor \_\_\_\_\_ Condensing Unit \_\_\_\_\_  
Serial No. \_\_\_\_\_ Serial No. \_\_\_\_\_

### WARRANTY REGISTRATION CARD TO BE MAILED AT TIME OF INSTALLATION

Installation Date \_\_\_\_\_

Owner's Name \_\_\_\_\_ Type of Business \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Unit Installed                      Under Bar (    )                      In Kitchen (    )                      In Basement (    )

Other (    ) Explain \_\_\_\_\_

Upon receipt of this card, your Ice Machine will be registered to contain the protection of the warranty of defective workmanship and or material. This warranty is effective from the date of original installation by the dealer and is not transferable.



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES



**BUSINESS REPLY MAIL**  
FIRST CLASS MAIL      PERMIT NO. 82      MASON CITY, IA

POSTAGE WILL BE PAID BY ADDRESSEE

**IMI CORNELIUS INC.**  
**2421 15th Street S.W.**  
**P.O. Box 1527**  
**Mason City, Iowa 50401-9952**

