



*Origins Series*



## Installation Guide

# BI-98 Ice Maker

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**1 Follow Safety Precautions**

**IMPORTANT**

PLEASE READ all instructions completely before attempting to install or operate the unit.

- This unit requires connection to the water supply. Improper hook-up can result in substantial property damage! If you are unsure of your ability to safely connect the water supply to the unit, consult a licensed plumber for assistance.
- This unit requires connection to a grounded (three-prong), polarized receptacle that has been placed by a qualified electrician in accordance with applicable electrical codes.

**Safety Alert Definitions**

Safety items throughout this guide are labeled with a Danger, Warning or Caution based on the risk type:

**⚠ DANGER**

***Danger means that failure to follow this safety statement will result in severe personal injury or death.***

**⚠ WARNING**

**Warning means that failure to follow this safety statement could result in serious personal injury, or death.**

**⚠ CAUTION**

Caution means that failure to follow this safety statement may result in minor or moderate personal injury, property or equipment damage.

## General Precautions

Use this appliance for its intended purpose only and follow these general precautions along with those listed throughout this guide:

### WARNING

#### **SHOCK HAZARD — Electrical Grounding Required.**

- **Keep the unit unplugged throughout installation except during testing.**
- **Never remove the round grounding prong from the plug and never use a two-prong grounding adapter.**
- **Never use an extension cord to connect power to the unit.**
- **Always keep your working area dry.**

### CAUTION

- Use care when moving and handling the unit. Use gloves to prevent personal injury from sharp edges.
- Do not lift the unit by the door or door handle.
- Do not install the unit behind closed doors or in any way that would obstruct airflow to the front grille, which may cause the unit to malfunction.

## 2 Inspect and Plan

You have received a carton containing your BI-98 Ice Maker with a package inside containing a User Manual, a Product Registration Card and water connection parts. Complete and mail the Product Registration Card or register online at [www.U-LineService.com](http://www.U-LineService.com). Once your unit is installed, keep the User Manual and this Installation Guide in a safe place for future reference.

BI-98 units are available in vinyl clad cabinets with matching doors which have a slightly contoured handle across the top and are reversible. The doors have recessed front panels that will accept a custom 1/4 inch thick door panel.

Please carefully follow the directions that apply to your unit and your intended design.

### Tools/Materials Required

- Screwdrivers — slotted and Phillips head
- 1/4-inch OD copper tubing and shut-off valve for water supply line
- 1/4-inch thick door panel material and cutting tools

### Inspection

Unwrap and inspect the unit on a flat, level surface capable of supporting its entire weight.

## Exterior Cleaning

(As Required)

### Black and White Models:

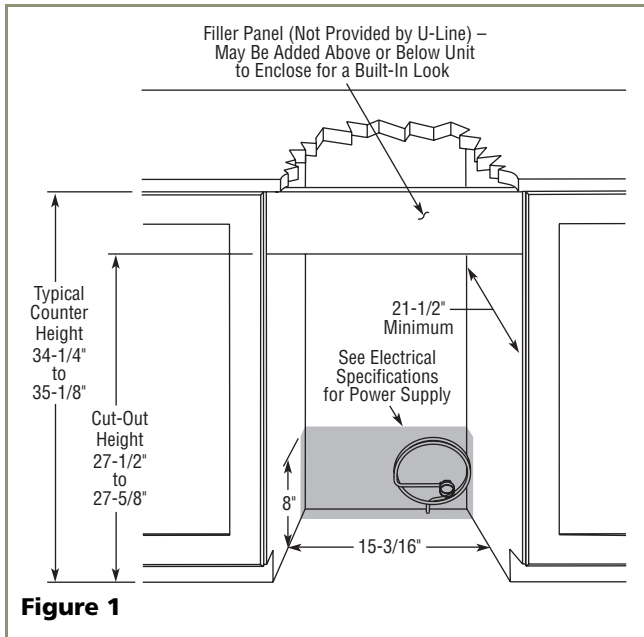
Black and white surfaces may be cleaned with a mild detergent and warm water solution. Do not use solvent-based or abrasive cleaners. Use a soft sponge and rinse with clean water. Wipe with a soft, clean towel to prevent water spotting.

### 3 Prepare Site

Your U-Line product has been designed for either free-standing or built-in installation. When built-in, your unit does not require additional air space for top, sides or rear. However, the front grille must NOT be obstructed and clearance is required for water and electrical connections in the rear.

**Note:** Unit can NOT be installed behind a closed cabinet door.

### Cut-Out Dimensions



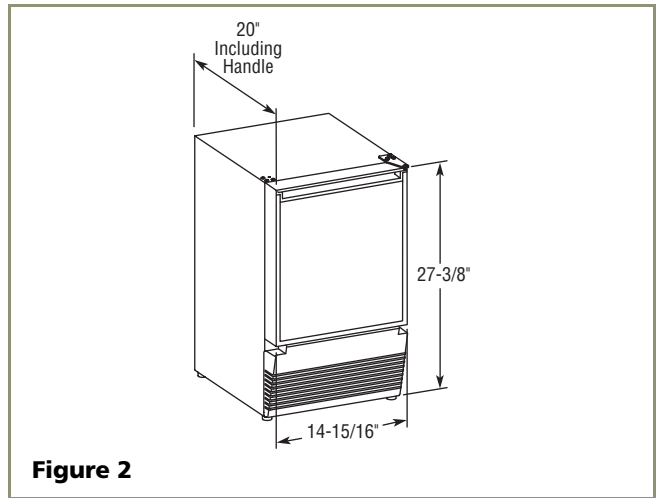
**Figure 1**

Follow the cut-out drawing in **Figure 1**. The 15-3/16" width allows 1/4" for ease in installation and removal of the unit. 24" is the counter depth in most installations. 21-1/2" depth includes the door, handle and water line connection (see **Figure 2**).

#### IMPORTANT

It is extremely important that the unit sits on a level surface, as it does not have feet levelers. If it is not level, the ice mold will not fill evenly.

### Product Dimensions

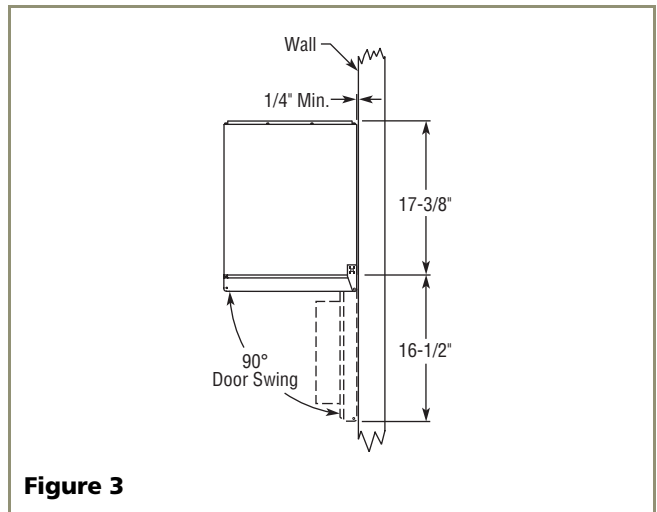


**Figure 2**

### Door Swing/Clearances Information

Units have a zero clearance for the door to open 90° (see **Figure 3**). U-Line recommends a minimum door clearance of 1/4" to accommodate the handle if the unit is right-hand hinged and installed next to a wall or similar type of structure.

**Note:** When a raised panel is used, additional clearance is needed for easy removal of ice bin if door hinge side is installed adjacent to wall.



**Figure 3**

## Reversing the Door

All units may be left- or right-hand opening.

**Note:** The grille should not yet be installed. If it has been installed, remove it for door reversing. See **Page 10**.

To reverse the door:

1. Remove top hinge from cabinet (three screws). See **Figure 4**. Hold door to keep it from falling.
2. Lift the door off the bottom hinge.

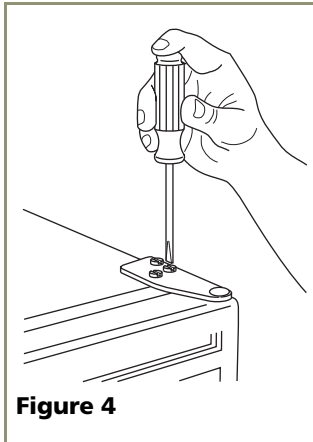


Figure 4

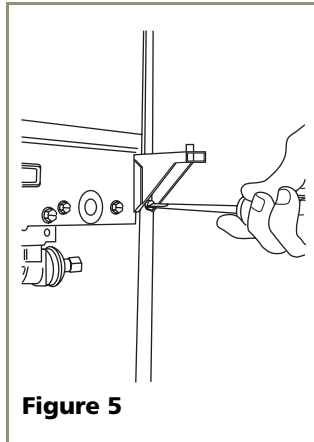


Figure 5

3. Remove bottom hinge from cabinet (two screws). See **Figure 5**. Remove screws on opposite side of cabinet (**Figure 6**). Note that there may be a nut behind one or both screws on either side.

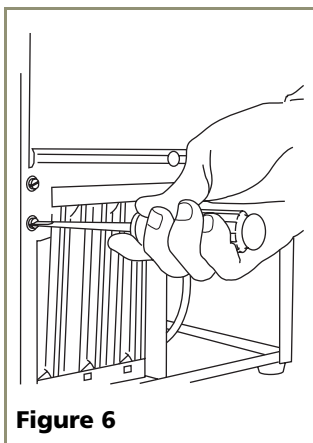


Figure 6

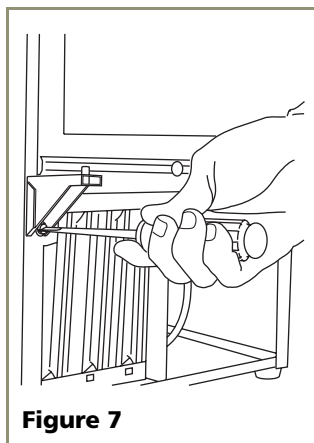


Figure 7

4. Install hinge on opposite side, bottom of cabinet. See **Figure 7**. Replace nut on back side where installed. Align hinge outer edge with cabinet before tightening screws.

5. Relocate plastic spacer/bushing on bottom of door to opposite side, and place door on bottom hinge pin. See **Figure 8**. Clean out bushing hole in door bottom with a screwdriver if necessary.
6. Remove plastic hole plug from door handle and relocate on opposite side. See **Figure 9**.

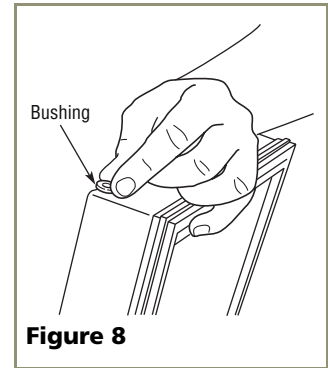


Figure 8

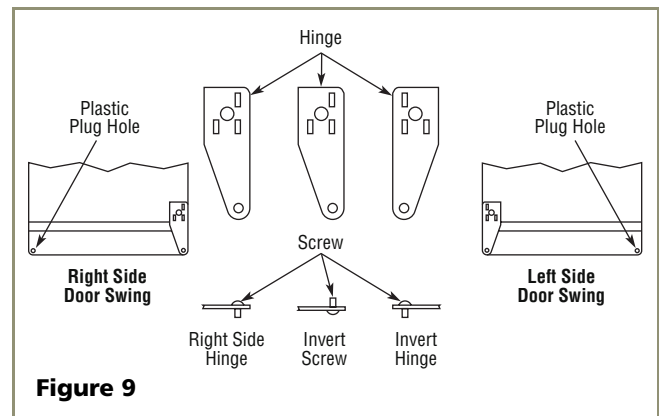


Figure 9

7. Remove pivot screw from top hinge, invert screw and reinstall pivot screw in top hinge. See **Figure 9**.
8. Remove three plastic screw plugs from hinge holes, top of cabinet, opposite side. Be careful not to scratch cabinet. See **Figure 10**.
9. Place door on lower hinge pin. Invert and install upper hinge on door.

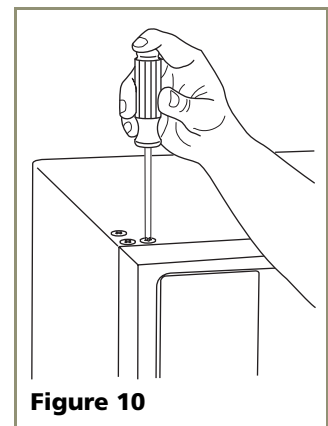
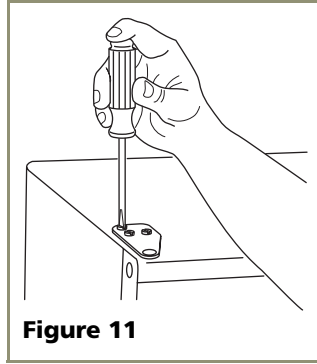


Figure 10

10. Fasten upper hinge to unit (three screws). Partially tighten screws. See **Figure 11**.
11. Adjust door to assure proper seal. Tighten upper and lower hinge screws securely.
12. Replace three plastic plugs removed in Step 8 into holes on top of unit. Replace screws in holes in bottom of unit on opposite side.



**Figure 11**

## Other Site Requirements

### Power Supply

The unit requires a grounded and polarized 115 VAC, 60 Hz, 15A circuit (normal household current). See Electrical Specifications on **Page 9**.

### Water Supply

The unit requires a 1/4-inch OD water supply line and a shut-off valve. For more information see **Page 8**.

### Environmental Requirements

The surrounding air temperature must be at least 50°F (10°C) but must not exceed 110°F (40°C). Units may be installed outdoors in a covered area. The unit must not be located near heat-generating equipment or in direct sunlight.

## 4 Prepare and Install Door Panel

Units will accept a Custom 1/4" Thick Insert to harmonize with or accent the surrounding decor.

If this treatment is not included in this installation, go on to **5 Adjust Door**.

### Custom 1/4" Thick Door Panel Insert

#### Door Panel Preparation

A custom door panel can be inserted into the doorframe. Custom door panels can be flat or raised, as long as the maximum panel thickness where inserted into the door reveal (channel) is 1/4"-thick. For raised panels, the depth of the reveal is 1/4" on all four sides.

#### IMPORTANT

Raised panels will reduce the door's 90° swing/zero clearance if the unit is installed next to a wall or similar type of structure (see **Page 4**).

Cut the panel insert to the following dimensions.

Custom 1/4" Dimensions:

Width: 13-15/16"

Height: 15-15/16"

The door panel must not weigh more than 20 lbs.

#### Door Panel Installation

Install the insert as follows:

#### ⚠ CAUTION

Use care when handling the insert. Insert edges may be sharp.

1. Remove top hinge screw pin with a Phillips head screwdriver. Remove door by tilting forward and lifting off bottom hinge pin.

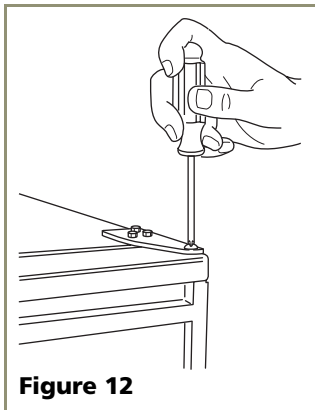


Figure 12

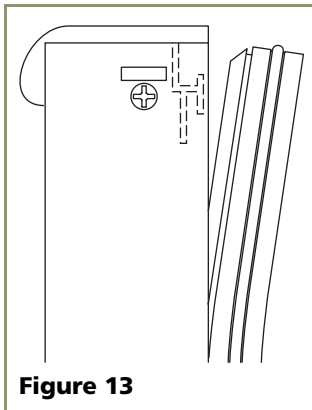


Figure 13

2. Pull door gasket out of groove (top edge of door only). Start in the middle and pull outward, moving toward the edge (see **Figure 13**). This may take some force.
3. Remove two outside screws holding door handle. Slightly separate door handle from door (see **Figure 14**).
4. Pull handle up and off.
5. Slide custom door panel insert into 1/4-inch channel in door front.
6. Holding door gasket out of the way, replace handle on door, making sure it is seated properly on insert and that screw holes line up.
7. Install two small screws removed in **Step 3**.
8. Starting at the corners and working inward, push door gasket into place on door.
9. Place door on bottom hinge pin and install upper hinge screw.
10. Go on to **5 Adjust Door**.

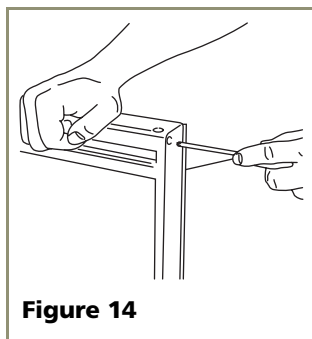


Figure 14

## 5 Adjust Door

### Checking Door Alignment

The unit's door is aligned at the factory before shipment. However, its alignment could have been disturbed during shipment or during door panel installation.

#### IMPORTANT

Properly aligned, the door's gasket should be firmly in contact with the cabinet all the way around the door (no gaps).

1. Carefully examine the door's gasket to assure that it is firmly in contact with the cabinet.

*Note:* When inspecting door alignment, make sure the door gasket is not pinched on the hinge side of the door.

2. If the door is properly aligned, go on to **6 Prepare Plumbing**. If it is not, use the following procedure.

### Adjusting Door Alignment

1. Loosen (do not remove) top and bottom hinge screws. See **Figure 15**.
2. Align door squarely with cabinet. Make sure gasket is firmly in contact with cabinet all the way around the door (no gaps).
3. Tighten bottom hinge screws.
4. Tighten top hinge screws. Go on to **6 Prepare Plumbing**.

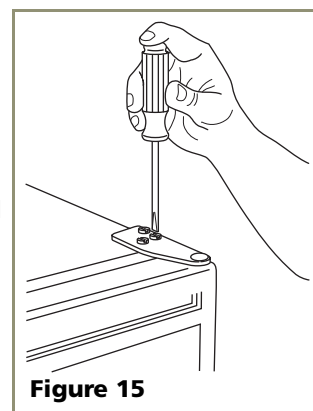


Figure 15

## 6 Prepare Plumbing

### ⚠ CAUTION

Plumbing installation must observe all state and local codes. All water connections **MUST BE** made by a licensed/qualified plumbing contractor. Failure to follow recommendations and instructions may result in damage and/or harm.

### ⚠ WARNING

**To prevent accidental electrocution, make certain that the floor surfaces surrounding the unit are dry whenever power is removed from, or applied to, the unit.**

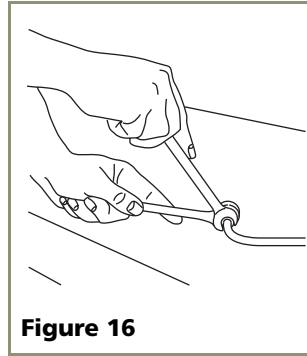
## Water Supply Connection

When connecting the water supply, follow these guidelines:

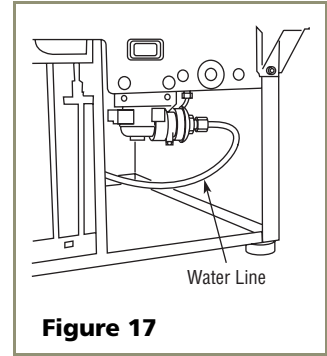
- Review the local plumbing codes before you install the unit.
- Connect to the cold water supply.
- The water pressure should be between 20 and 120 psi.
- Install a shut-off valve in the 1/4 inch OD water supply line.
- Connect sufficient tubing to the unit so that tubing may be looped, allowing the unit to be removed for cleaning and servicing (see **Figure 18**). However, make certain that the tubing is not pinched or damaged during installation.
- U-Line recommends the use of copper tubing for installation.

To connect to water supply:

1. Install the 1/4 inch OD copper water line from the main water source.

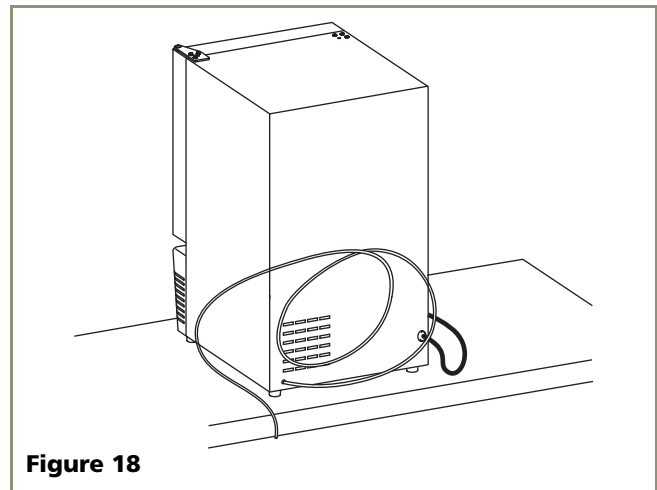


**Figure 16**



**Figure 17**

2. Locate the compression fitting and ferrule packed with the unit. Slide the compression fitting and ferrule over the 1/4-inch OD water supply line. Do not use thread sealing compound or tape. Using two wrenches, tighten the compression fitting on the supply line (see **Figure 16**).
3. Carefully bend the water supply line into position and connect the line to the solenoid valve (see **Figure 17**). Avoid kinking the water supply line.



**Figure 18**

### IMPORTANT

Route the water supply line through the unit so it does not come into contact with any internal components other than the solenoid valve. See **Figure 18**. Normal operation creates some vibration. A water supply line contacting an internal component or cabinet wall can cause excessive noise during operation or damage to the line.

4. For recessed installations, allow extra water supply line length to provide slack for easy removal from the recessed area (see **Figure 18**). This will also safeguard against kinking the line.
5. Go on to **7 Prepare Power Supply**.



## 7 Prepare Power Supply

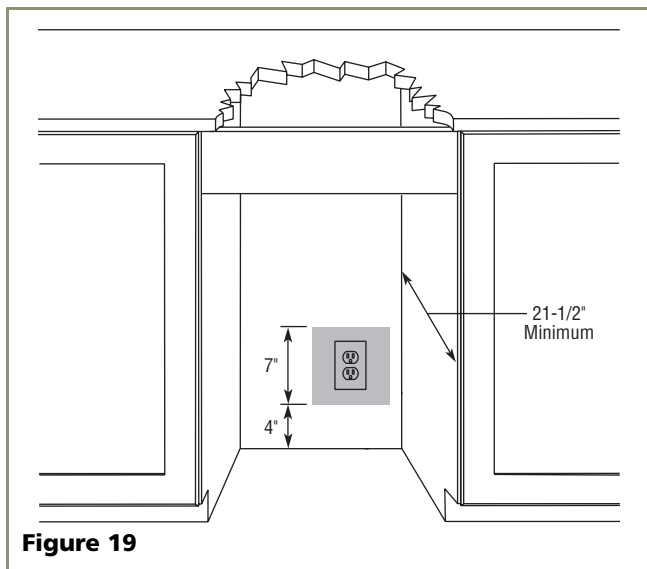
### Electrical Specifications

#### CAUTION

Electrical installation must observe all state and local codes. This unit requires connection to a grounded (three-prong), polarized receptacle that has been placed by a qualified electrician.

The unit requires a grounded and polarized 115 VAC, 60 Hz, 15A power supply (normal household current). An individual, properly grounded branch circuit or circuit breaker is recommended. GFCI (ground fault circuit interrupter) is usually not required for fixed location appliances and is not recommended for your unit because a GFCI could be prone to nuisance tripping. However, be sure to consult your local codes.

See **Figure 19** for recommended receptacle location.



#### WARNING

#### SHOCK HAZARD — Electrical Grounding Required.

- Never remove the round grounding prong from the plug and never use a two-prong grounding adapter.
- Never use an extension cord to connect power to the unit.

Go on to **8 Level the Unit**.

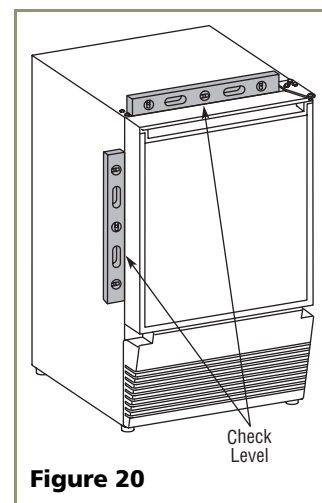
## 8 Level the Unit

### Leveling Information

#### IMPORTANT

It is extremely important that the unit sits on a level surface, as it does not have feet levelers. If it is not level, the ice mold will not fill evenly.

Use a level to check the levelness of the unit from front to back and from side to side. Level should be placed along top edge and side edge as shown (see **Figure 20**). Go on to **9 Install the Unit**.



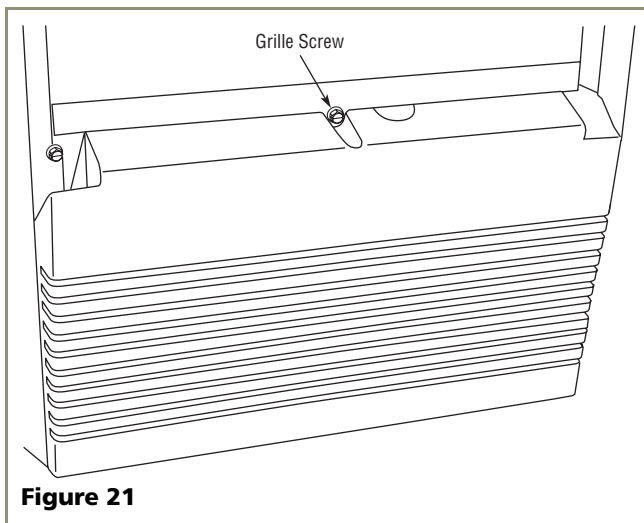
## 9 Install the Unit

### Installation of the BI-98

1. Open the water supply valve in the main water source.
2. Plug in the power cord.
3. Gently push the unit into position. Be careful not to kink the water supply line or entangle the electrical cord.
4. Re-check the leveling, from front to back and side to side. Make any necessary adjustments. The unit's top surface should be approximately 1/8" below the countertop.

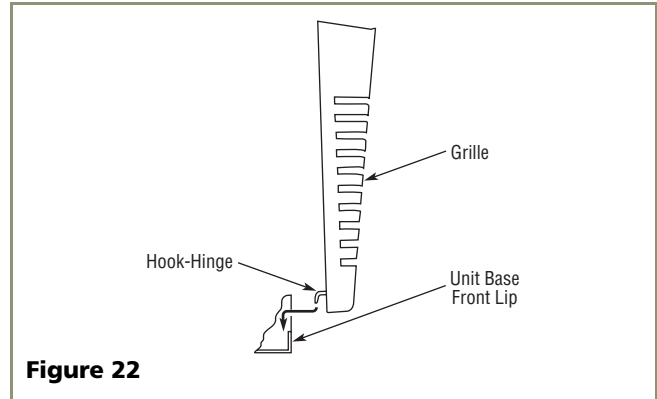
### Grille Installation

1. Locate and remove the grille screw from the cabinet, using a standard blade screwdriver (or a 1/4" nutdriver). See **Figure 21**.



**Figure 21**

2. Identify the grille screw hole on the grille itself. It is located toward the top of the middle recessed section of the grille.
3. Place the two hook-hinges (located on the rear bottom side of the grille) onto the front lip of the unit base. Swing the grille up into position, aligning the grille screw hole on the grille to the grille screw hole on the cabinet. See **Figure 22**.



**Figure 22**

4. Insert the screw. Do not overtighten.

### Installation Troubleshooting

#### **Q:** Problem

Water is leaking under the unit.

#### **A:** Solution

A water leak under the unit is most likely caused by a bad connection in the water supply line. Make sure the water line's brass fitting is screwed tight to its valve and threaded correctly. Make sure that plumber's tape was NOT used; if it was remove all traces before reinstalling.

## 10 Start-Up for the First Time

### Initial Start-Up

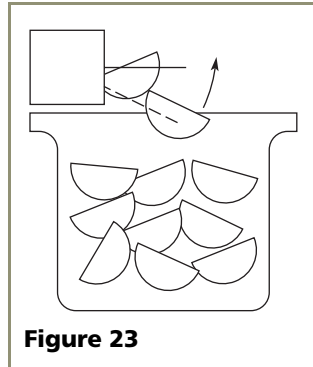
The on/off switch is located behind the front grille. A small opening in the top of the grille is provided to access the switch. Ensure that the switch is turned on.

No setting adjustments should be necessary at this time. For information about Adjusting the Temperature Control, see the User Manual.

As soon as the ice maker mold reaches the proper temperature, the ice maker mechanism will fill the mold with water.

*Note:* The first cubes may be small because of air in the water line. After two hours, cubes will be standard size.

The ice maker will continue to produce until the bin is full. You may interrupt production by raising the bin arm into an upright and locked position (see **Figure 23**). While the bin arm is locked, the unit will maintain temperature for ice storage.



**Figure 23**

#### IMPORTANT

It is possible that dirt or scale will dislodge in the water line. Always throw away all ice cubes made during the first twenty-four (24) hours of operation.

### Start-Up Troubleshooting

#### **Q:** Problem

Unit does not appear to turn on when plugged in.

#### **A:** Solution

Make sure outlet has power (circuit breaker has not tripped). Make sure the on/off switch is turned on.

#### **Q:** Problem

Water does not appear to be flowing into unit.

#### **A:** Solution

Check that the water is connected and turned on and the line is not obstructed. Water coming into the unit may take an hour or more.

#### **Q:** Problem

The cubes produced during the first two to three hours of operation have been discarded. New cubes still appear cloudy.

#### **A:** Solution

This is normal and is caused by air being trapped in the cube during fast freezing.

#### IMPORTANT

See the User Manual's *Troubleshooting Guide* for more solutions.

## *Origins Series*

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### **Who to Call**

#### **Service Information**

If the need for service arises, contact the dealer from whom the unit was purchased. State the Model Number and Serial Number and explain the problem. The Model and Serial Number plate is located inside unit at upper right hand corner.

If you need to locate a service company, you can go online at **[www.U-LineService.com](http://www.U-LineService.com)** and search for a service company by zip code.

**For more than four decades, U-Line has distinguished itself as the leader in built-in undercounter ice making, refrigeration and wine storage appliances.**

*Echelon*<sup>™</sup> SERIES / *Origins* SERIES

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