# USER GUIDE & SERVICE MANUAL



Model: U-3018CLRINT-00C

### Click on any section below to jump directly there

### Table of Contents

Intro

#### Safety

Safety and Warning Disposal And Recycling

#### Installation

Environmental Requirements Electrical Cutout & Product Dimensions Side by Side Installation Water Hookup Drain Drain Pump General Installation Integrated Panel Dimensions Grille Installation Integrated Panel Installation Door Swing Door Stop

#### Maintenance

Cleaning Cleaning Condenser Extended Non-Use

#### **Operating Instructions**

First Use Control Operation Sabbath Mode Ice Airflow and Product Loading

#### Service

Troubleshooting Wire Diagram Product Liability Parts R600a Specifications System Diagnosis Guide Compressor Specifications Warranty



#### WELCOME TO U-LINE

Congratulations on your U-Line purchase! Our products are focused on functionality, style, and inspired innovations — paying close attention to even the smallest details. Applications include residential, outdoor, ADA height compliant, marine, and commercial. Product categories include Beverage Centers, Wine Refrigerators, Ice Machines, Refrigerators, Freezers, and Dispensers. Our advanced refrigeration systems, large and flexible capacities, and clean integrated look are what makes our products Built-In to Stand Out<sup>®</sup>. Since 2014, U-Line has been part of the Middleby family of brands.

#### U-Line — RIGHT PRODUCT. RIGHT PLACE. RIGHT TEMPERATURE.®

#### **PRODUCT INFORMATION**

Looking for additional information on your product? User Guides, Spec Sheets, CAD Drawings, and Product Warranty information are available digitally on u-line.com.

#### **PROPERTY DAMAGE / INJURY CONCERNS**

In the unlikely event property damage or personal injury is suspected related to a U-Line product, please take the following steps:

- 1. U-Line Customer Care must be contacted immediately at +1.414.354.0300.
- 2. Service or repairs performed on the unit without prior written approval from U-Line is not permitted. If the unit has been altered or repaired in the field without prior written approval from U-Line, claims will not be eligible.

#### **GENERAL INQUIRIES**

U-Line Corporation 8900 N. 55th Street Milwaukee, Wisconsin 53223 USA Monday - Friday 8:00 am to 4:30 pm CST T: +1.414.354.0300 Email: sales@u-line.com u-line.com

#### SERVICE & PARTS ASSISTANCE

Monday - Friday 8:00 am to 4:30 pm CST T: +1.414.354.0300 Service Email: onlineservice@u-line.com Parts Email: onlineparts@u-line.com

#### CONNECT WITH US AT MIDDLEBY REFRIGERATION

## Safety and Warning

#### NOTICE

Please read all instructions before installing, operating, or servicing the appliance.

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

#### SAFETY ALERT DEFINITIONS

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

## **DANGER**

This unit contains R600a (Isobutane) which is a flammable hydrocarbon. It is safe for regular use. Do not use sharp objects to expedite defrosting. Do not service without consulting the "R600a specifications" section included in the User Guide. Do not damage the refrigerant circuit.

### **WARNING**

Service must be done by factory authorized service personnel. Any parts shall be replaced with like components. Failure to comply could increase the risk of possible ignition due to incorrect parts or improper service.

#### **CALIFORNIA PROPOSITION 65**

This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

www.P65warnings.CA.gov



This equipment is to be installed with adequate backflow protection to comply with applicable federal, state and local codes.

## Disposal and Recycling

## A DANGER

RISK OF CHILD ENTRAPMENT. Before you throw away your old refrigerator or freezer, take off the doors and leave shelves in place so children may not easily climb inside.

If the unit is being removed from service for disposal, check and obey all federal, state, and local regulations regarding the disposal and recycling of refrigeration appliances, and follow these steps completely:

- 1. Remove all consumable contents from the unit.
- 2. Unplug the electrical cord from its socket.
- 3. Remove the door(s)/drawer(s).

## **Environmental Requirements**

This model is intended for indoor/interior applications only and is not to be used in installations that are open/ exposed to natural elements.

This unit is designed to operate between 50°F (10°C) and 100°F (38°C). Higher ambient temperatures may reduce the unit's ability to reach low temperatures and/or reduce ice production on applicable models.

For best performance, keep the unit out of direct sunlight and away from heat generating equipment.

In climates where high humidity and dew points are present, condensation may appear on outside surfaces. This is considered normal. The condensation will evaporate when the humidity drops.

## 

Damages caused by ambient temperatures of 40°F (4°C) or below are not covered by the warranty.

## Electrical

## **WARNING**

SHOCK HAZARD — Electrical Grounding Required. Never attempt to repair or perform maintenance on the unit until the electricity has been disconnected.

Never remove the round grounding prong from the plug and never use a two-prong grounding adapter.

Altering, cutting or removing power cord, removing power plug, or direct wiring can cause serious injury, fire, loss of property and/or life, and will void the warranty.

Never use an extension cord to connect power to the unit.

Always keep your working area dry.

#### NOTICE

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. A GFCI (ground fault circuit interrupter) is usually not required for fixed location appliances and is not recommended for your unit because it could be prone to nuisance tripping. However, be sure to consult your local codes.

See CUTOUT & PRODUCT DIMENSIONS for recommended receptacle location.

## **Cutout & Product Dimensions**

#### PREPARE SITE

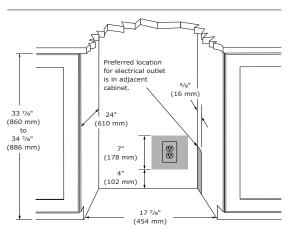
Your U-Line product has been designed for either freestanding or built-in installation. When built-in, your unit does not require additional air space for top, sides, or rear. However, the front grille must NOT be obstructed, and clearance is required for an electrical connection in the rear.

## **CAUTION**

Unit can NOT be installed behind a closed cabinet door.

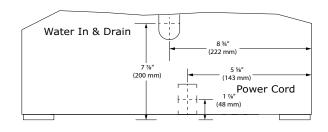
If you would like to align the face of the unit with other adjacent cabinet doors, you may need to alter the wall just behind the drain connection on the unit to accommodate the drain.

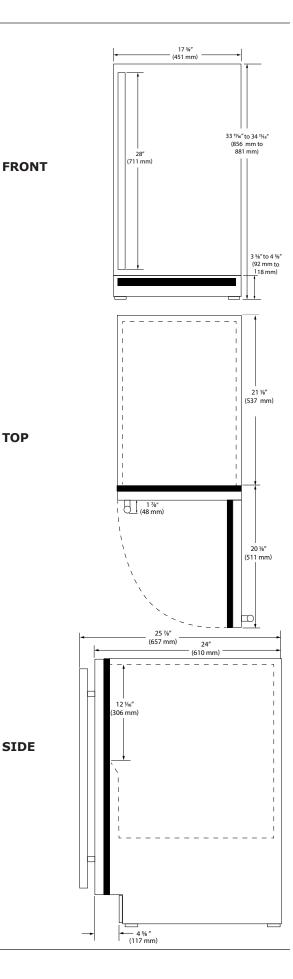
#### **CUTOUT DIMENSIONS**



#### **PRODUCT DIMENSIONS**

#### REAR





TOP

SIDE

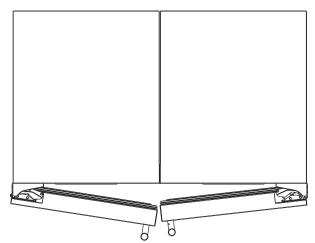
## Side-by-Side Installation

#### OTHER SITE REQUIREMENTS

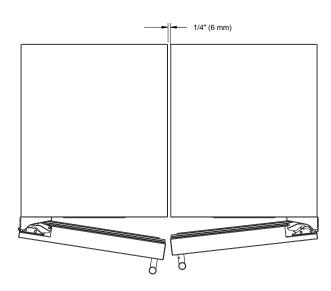
#### Side-by-Side Installation

Units must operate from separate, properly grounded electrical receptacles placed according to each unit's electrical specifications requirements.

Cutout width for a side-by-side installation is the total of the widths listed under Cutout Dimensions in each unit's Installation Guide. Each door can be opened individually (one at a time) without interference.

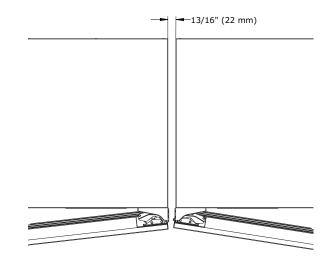


However, to ensure unobstructed door swing (opening both doors at the same time), 1/4" (6.4 mm) of space needs to be maintained between the units.

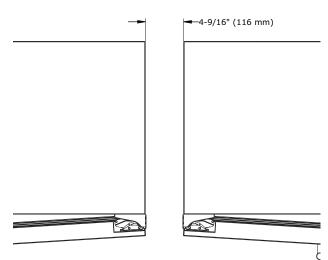


#### Hinge-by-Hinge Installation (Mullion)

When installing two units hinge-by-hinge, 13/16" (22 mm) is required for integrated models. Additional space may be needed for any knobs, pulls or handles installed.



Stainless steel models which include the standard stainless handle will require 4-9/16" (116 mm) to allow both doors to open to 90° at the same time.



## Water Hookup

#### PREPARE PLUMBING

The water valve uses a standard 1/4" (6.35 mm) compression fitting. U-Line recommends using accessory water hook up kit – part # ULAWATERHOOKUP. The kit includes a 10' (3 m) braided flexible water supply line and a brass hose fitting.

## 

Prior to installation, determine if this product contains a gravity style drain or factory installed drain pump. Products without a drain pump may only use a gravity style drain. Failure to connect water supply or drain line connections properly may result in water leakage, personal injury, and/or property damage. Disconnect power and turn off water to the unit before attempting to alter these connections. These connections are the responsibility of the owner and must be connected per local plumbing code. If you are uncertain of how to safely and properly install this product, contact a licensed plumber.

Water Supply Connection

## **WARNING**

Connect to potable water supply only.

## 

Review, obey, and understand the local plumbing codes before you install your unit. Connect to the cold water supply. The water pressure should be between 20 and 120 psi (138 and 827 kPa). The water line <u>MUST</u> have a shutoff valve on the supply line.



Do not use any plastic water supply line. The line is under pressure at all times. Plastic may crack or rupture with age and cause damage to your home.



Do not use tape or joint compound when attaching a braided flexible water supply line that includes a rubber gasket. The gasket provides an adequate seal – other materials could cause blockage of the valve.

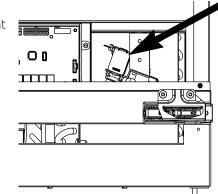
Failure to follow recommendations and instructions may result in damage and/or harm, flooding or void the product warranty.

## 

Turn off water supply and disconnect electrical supply to unit prior to installation.

Use caution when handling back panel. The edges could be sharp.

- 1. Turn off water supply and disconnect electrical supply to product prior to attempting installation.
- 2. Remove the grille/access panel in the front and the back panel.
- Locate water valve in the front of the unit and thread water supply line through.

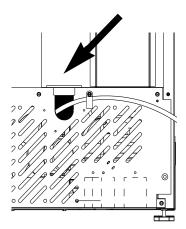


#### NOTICE

#### Route the water supply line

through the unit so it does not come into contact with any internal components other than the solenoid valve. 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.

 On the back panel, exit waterline in same location as drain line.



- 5. Turn on water supply and check for leaks
- 6. Reinstall back panel and grille/front access panel.
- 7. Install retaining clip.

### Drain

Model numbers including "CL" or "NB" do not include a factory installed drain pump.

Model numbers including "CP" or "NP" include a factory installed drain pump.

#### DRAIN CONNECTION

## **A** CAUTION

If your U-Line unit did not come with a factory installed drain pump you must use a gravity style drain connection. For assistance in determining if your unit has a pump please contact U-Line. The floor drain must be large enough to accommodate drainage from all attached drains. Follow these guidelines when installing drain lines to prevent water from flowing back into the ice maker storage bin and/ or potentially flowing onto the floor, which may result in personal injury or property damage

#### NOTICE

Drain can NOT be located directly below the unit. Unit has a solid base that will not allow the unit to drain below itself.

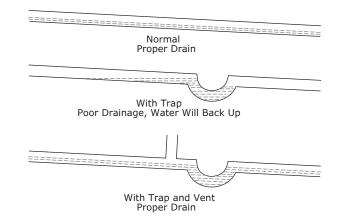
There is a possibility that hose connections may have loosened during shipment.

Verify all connections and fittings are free from leaks.

## 

This equipment is to be installed with adequate backflow protection to comply with applicable federal, state and local codes

#### **GRAVITY DRAIN**



#### A gravity drain may be used if:

Drain line has at least a 1" drop per 48" (approximately 2 cm drop per 100 cm) of run.

Drain line does not create traps and is vented per local code.

- 1. Cut the pre-installed drain tube to length.
- 2. Connect to your local plumbing per the local code.
- 3. If necessary, insulate drain line to prevent condensation.

## 

Failure to connect water supply or drain line connections properly can result in personal injury and property damage. Gravity drain connections must be routed downward from the rest of the unit at the rate of 1/4'' per foot (1 cm per 50 cm).

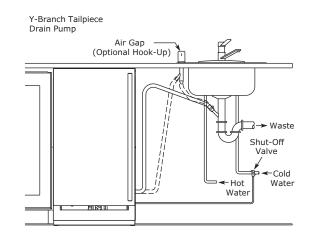
#### FACTORY INSTALLED DRAIN PUMP

If your drain line will run up to a stand pipe, disposal or spigot assembly, or does not otherwise meet the requirements for a gravity drain, you may have ordered a factory installed drain pump.

If you need to install a drain pump into your unit, see DRAIN PUMP section in the User Manual.

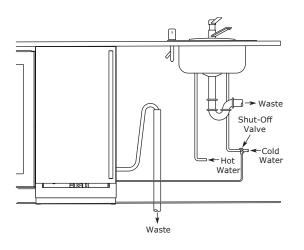
# To order a drain pump, order part number 80-54147-00 online at u-line.com.

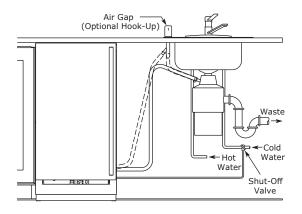
See below for typical installations requiring a drain pump.



#### NOTICE

The maximum lift for the drain pump is 10 feet. This must be done as close to the rear of the unit as possible.





## Drain Pump

#### NOTICE

PLEASE READ this instruction completely before attempting to install or operate the unit. Improper hook-up can result in substantial property damage! If you are unsure of your ability to safely connect the drain pump to the unit, consult a licensed plumber for assistance. Use these instructions to install the U-Line drain pump in the U-Line Clear Ice Machine (unit). The drain pump should be installed before installing the unit.

- The U-Line drain pump (part # 80-54147-00) is designed to be used exclusively on the U-Line Clear Ice Machine and is UL recognized only for use on the U-Line Clear Ice Machine.
- U-Line Corporation assumes no warranties or responsibility, whether express or implied, if the drain pump is used on another ice machine or product for which it is not UL recognized or listed.
- Modification of the drain pump will void all warranties.

#### NOTICE

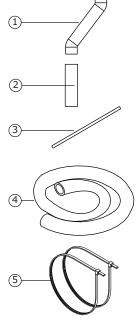
Keep your proof of purchase for warranty purposes.

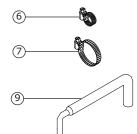
#### INCLUDED IN KIT:

- 1. 1x S-shaped Drain Tube (Not used)
- 2. 1x Straight Drain Tube
- 3. 1x Vent Tube
- 1x Braided Discharge Tube (Not included in pump kit. Ice Machine ships with discharge tube installed.)
- 5. 2x Vent tube Zip Ties
- 6. 2x Small Worm Gear Clamps
- 7. 1x Large Worm Gear Clamp
- 8. 1x P60 Pump
- 9. 1x Discharge Tub (Used on older models only)

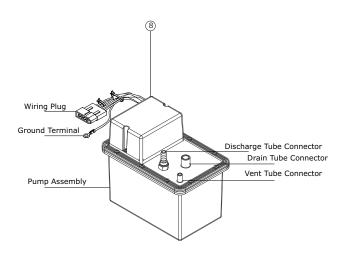
#### **TOOLS REQUIRED:**

- 1/4" x 6" Blade Screwdriver
- Adjustable Pliers
- 1/4" Nut Drive









#### INSTALLATION PROCEDURE

## **WARNING**

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

- 1. Disconnect your unit from its electrical outlet/socket.
- 2. Use a screwdriver, push the power/electric cord grommet through its seat in the back panel.
- 3. Using a screwdriver or 1/4" nut driver, remove the 12 screws from the back panel.
- 4. Remove the drain line/pipe from the storage bin drain nipple. Save the clamp for pump installation.

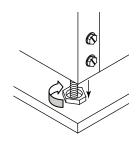
## **A** CAUTION

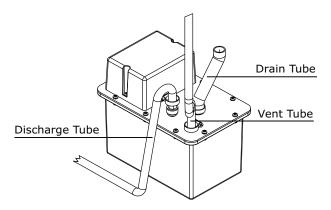
# To prevent damage to the pump, leave sufficient space between leveling leg and pump.

5. Fully extend the left rear leveling foot.

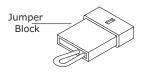
*Note:* Slide clamp on hose end before installing hose. Do not tighten clamp until pump and hoses have been installed.

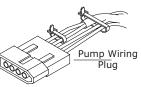
 Install the 3 hoses and hose clamps to the pump assembly as shown below. Do not tighten clamps at this time.





- 7. Remove the protective paper from the adhesive strip and carefully set pump inside of unit.
- Unplug jumper block from ice machine wiring harness (jumper block has a single pink wire). Discard jumper block.
- Connect pump wiring plug to the ice machine wiring harness connector, where the jumper block was removed. The connector is keyed and can only be inserted one way.





## 

When working with tools inside of unit, be careful so as not to nick or damage any refrigerant lines/pipes or wires.

### **WARNING**

The back panel serves as a guard. Do not put your hands inside the ice machine cabinet or attempt to touch any components except the discharge tube during testing.

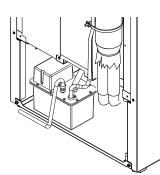
## 

Failure to properly secure the vent tube will result in water damage to the unit and surrounding areas. Do not allow vent tube to kink, bend or be obstructed in any way.

## 

Vent tube must be straight and parallel to insulated tubes. Do not over-tighten the plastic tie wraps. Over-tightening can pinch vent tube closed or cut into insulation.

- 10. Route the vent tube up the back of the unit, next to the insulated tubes. Secure vent tube vertical to the insulated tubes using plastic tie wraps.
- 11. Connect pump drain tube to storage bin drain nipple with clamp removed from step3. Ensure that no kinks are present in the tube.



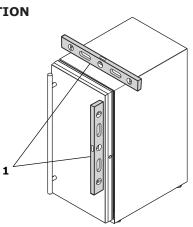
#### 12. Tighten the clamps

on the drain, discharge, and vent tubes with a screwdriver or  $1/4^{\prime\prime}$  nut driver.

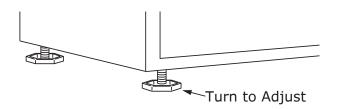
## General Installation

#### LEVELING INFORMATION

 Use a level to confirm the unit is level. Level should be placed along top edge and side edge as shown.



2. If the unit is not level, adjust the legs on the corners of the unit as necessary.



3. Confirm the unit is level after each adjustment and repeat the previous steps as needed.

#### **INSTALLATION TIP**

If the room floor is higher than the floor in the cutout opening, adjust the rear legs to achieve a total unit rear height of 1/8" (3 mm) less than opening's rear height. Shorten the unit height in the front by adjusting the front legs. This allows the unit to be gently tipped into the opening. Readjust the front legs to level the unit after it is correctly positioned in the opening.

#### INSTALLATION

- 1. Plug in the power/electrical cord.
- Gently push the unit into position. Be careful not to entangle the cord or water and drain lines, if applicable.
- 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" (3 mm) below the countertop.
- 4. Install the anti-tip bracket.
- 5. Remove interior packing material and wipe out the inside of the unit with a clean, water-dampened cloth.

## **Integrated Panel Dimensions**

Metric measurements rounded and optimized.

#### **INTEGRATED PANEL**

#### NOTICE

Due to differences in surrounding cabinetry the panel may not perfectly align with door. The procedure below is designed to provide a finished integrated panel that seamlessly integrates with surrounding cabinetry.

#### **Panel Preparation**

A full integrated door panel completely covers the door frame and provides a built-in appearance.

#### NOTICE

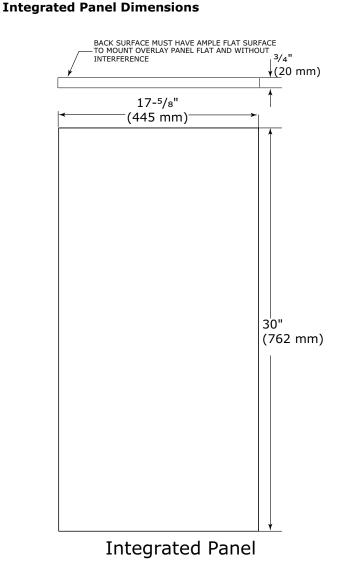
The door panel must not weigh more than 20 lbs (10 kg).

It is important to ensure that all drilled holes are drilled to the correct depth in order to avoid splits in the wood when hardware is installed.

- 1. Cut the panels to the dimensions listed in the diagram below.
- Optional: Stain or finish panel to desired stain or color. Be sure to closely follow the instructions provided by the manufacturer.
- 3. Optional: Install handles and hardware.

#### NOTICE

When applying an integrated panel to a unit, ensure that both sides are finished in order to prevent warping. In some panel installations, the panel may be visible through the glass while the door is open.



#### HANDLELESS INTEGRATED DOOR PANEL

The following procedure is designed to provide a finished, handleless solid panel for an 18" (450 mm) door that seamlessly integrates with its surrounding cabinetry.

NOTE: Many cabinet manufacturers provide a ready solution for a handleless, integrated design that can be easily applied to your model. Consult your cabinet manufacturer for applicable design and installation details. The cabinet manufacturer's solution to this design and integration detail will often result in an integrated panel solution wherein the size of the panel may result in a height dimension taller than what we specify. This can be achieved provided the additional height is positioned above the appliance door.

#### NOTICE

The integrated panel aligns with the surrounding cabinetry and, due to differences in cabinetry, may not align perfectly with the door.

The appliance will need up to 34-1/2" (876 mm) to the underside of the counter to leave room for leveling adjustments.

A single prepared panel with insert must not weigh more than 20 lbs (10 kg).

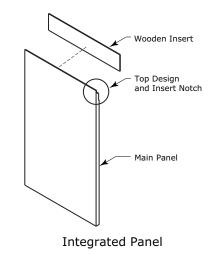
#### **Integrated Panel Preparation**

1. Cut the main panel to the dimensions below. For details, see the drawings on the next page.

Main panel width	Main panel height
17-5/8" (445 mm)	28-13/16" (732 mm)

 Create the top design for the handleless feature and the 1/8" (3 mm) notch for the insert(s) indicated on the Top Detail drawing, on the next page.  Prepare the insert(s) that will back up the handleless design. Wooden Insert - Cut 1/8" (3 mm) thick wooden insert(s) to the dimensions below.

Wooden insert width	Wooden insert height
17-5/8" (445 mm)	3-1/2" (89 mm)



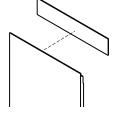
4. Optional: Stain or finish panel and wooden insert to desired stain or color. Be sure to closely follow the

instructions provided by the manufacturer.

#### NOTICE

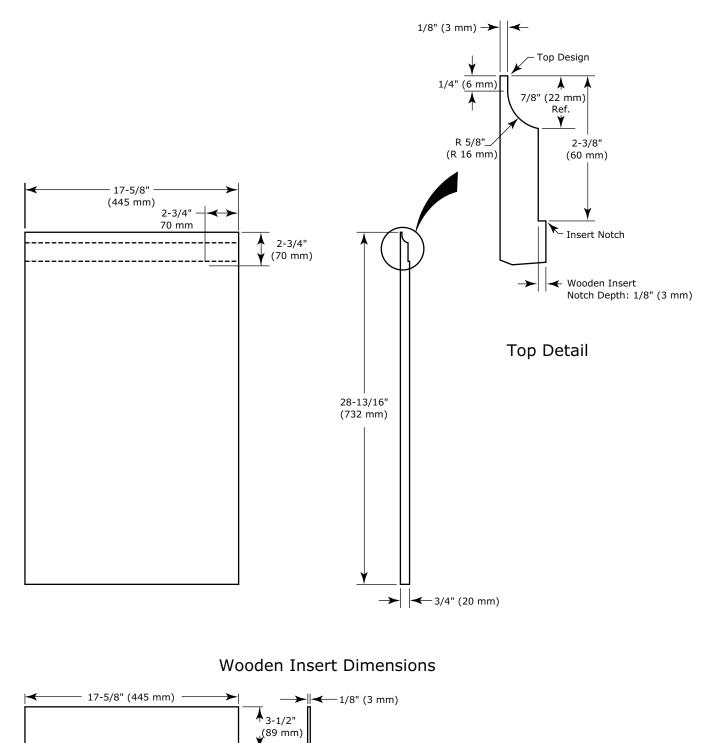
# If finishing panel or wooden insert, all sides must be finished to prevent warping.

5. Attach the insert to the panel. Wood glue or equivalent adhesive should be used to attach insert to panel.



**Attach Wooden Insert** 

#### **Handleless Integrated Panel Dimensions**



#### **EXTENDED INTEGRATED PANEL**

#### NOTICE

Due to differences in surrounding cabinetry the panel may not perfectly align with door. The procedure below is designed to provide a finished panel that seamlessly integrates with surrounding cabinetry.

#### **Panel Preparation**

An extended integrated panel can be used to maintain alignment with an adjacent extended cabinet height or a reduced toe-kick/grille application.

- 1. Cut the panels to the dimensions listed in the appropriate diagram on the next page.
- 2. Optional: Stain or finish panel to desired stain or color. Be sure to closely follow the instructions provided by the manufacturer.

3. Optional: Install handles and hardware.

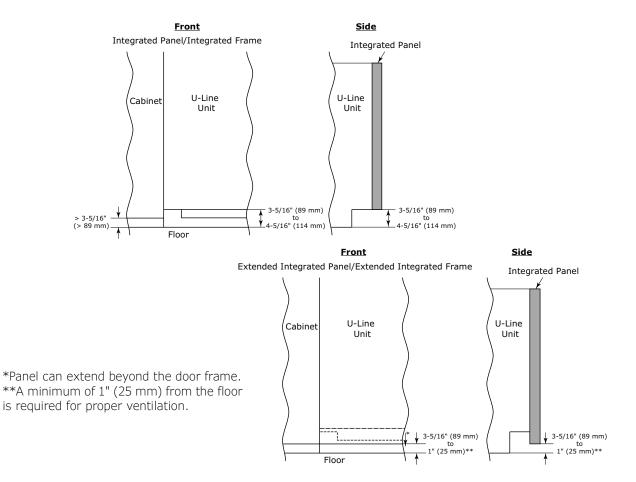
#### NOTICE

The door panel must not weigh more than 20 lbs (10 kg).

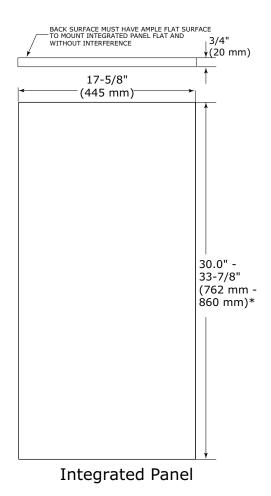
It is important to ensure that all drilled holes are drilled to the correct depth in order to avoid splits in the wood when hardware is installed.

Appliance will need up to 34-1/2" (876 mm) to the underside of the counter to leave room for leveling adjustments.

When applying an integrated panel to a unit, ensure that both sides are finished in order to prevent warping. In some installations, the panel may be visible through the glass while the door is open.



#### **Extended Integrated Panel Dimensions**



\* A minimum of 1" (25 mm) is required from the floor to the bottom of the extended integrated panel/frame for proper ventilation.

## Integrated Grille Dimensions

#### INTEGRATED GRILLE DIMENSIONS

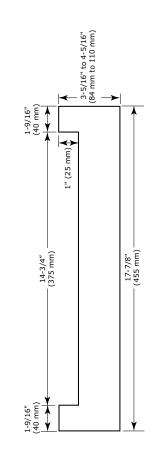
#### PREPARE AND INSTALL INTEGRATED GRILLE

- Use the dimensions provided in the diagram to cut and shape your integrated grille panel. Recommended panel thickness is between 1/4" (6 mm) and 3/8" (9 mm). Height will vary from 3-5/16" (84 mm) to 4-5/16" (110 mm) based on your grille height.
- Finish or stain your grille panel to match your surrounding furniture. Finish front, back and edges to prevent warping. Carefully follow the manufacturer's recommendations for finish application and cure times.
- Apply double sided tape to the backside of the integrated grille. Use the diagram below for reference.
   U-Line recommends 3M<sup>™</sup> VHB<sup>™</sup> tape, a high strength bonding tape.

#### Apply Tape To Shaded Area

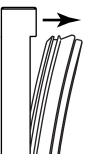


- 4. Remove backing paper from double sided tape.
- 5. Carefully align grille over integrated panel and press into position.



## Integrated Panel Installation

- 1. Fully open door.
- 2. Starting at corner, pull gasket away from door.
- 3. Continue to pull gasket free from gasket channel.

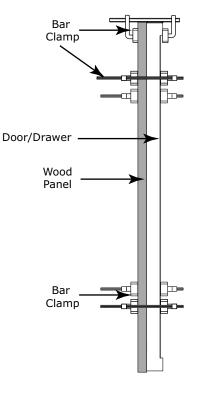


- 4. Upon removal, lay gasket down on a flat surface.
- 5. Align top of panel with top edge of door. Center panel on door.

#### NOTICE

#### Due to differences in floor construction or surrounding cabinetry, the panel may not sit flush with the top of the door.

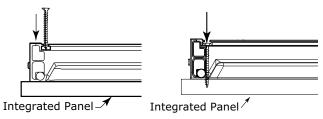
- 6. Secure integrated panel to door using clamps. A robust tape may also be used. U-Line recommends the use of bar clamps to secure the panel to the door. If using tape, be certain the tape will not damage panel finish upon removal.
- Using a 7/64"
  (3 mm) drill bit, drill 6 pilot holes into the wood panel 1/2"
   (12 mm) deep using the holes in the door frame as a guide.



#### NOTICE

It is important to ensure that all drilled holes are drilled to the correct depth in order to avoid splits in the wood when hardwood is installed.

- Locate 6 of the #6x 1-1/2" (38 mm) screws provided with your unit.
- 9. Using a Phillips screwdriver, place one screw into each of the 6 pilot holes and screw down. Do not overtighten screws.
- 10.Ensure the screws sit flush against the bottom of the channel.



11.Remove clamps from door.

#### NOTICE

If panel requires additional adjustment after removing clamps, slightly loosen each screw and adjust panel as necessary. Tighten screws upon completion.

12.Starting at the corners, re-install the gasket into the gasket channel in the frame. Make sure the gasket is fully seated.

## Grille Installation

#### **REMOVING AND INSTALLING GRILLE**



Disconnect electric power to the unit before removing the grille.

When using the unit, the grille must be installed.



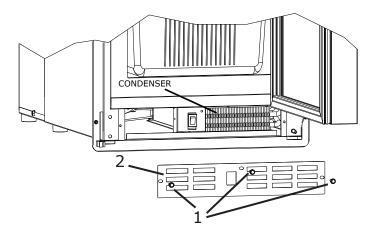
Do NOT touch the condenser fins. The condenser fins are SHARP and can be easily damaged.

#### **Removing the grille**

- 1. Disconnect power to the unit.
- 2. Remove the three screws (1).
- 3. Remove grille (2) from unit.

#### Installing the grille

- 1. Align cabinet and grille holes and secure, but do not over tighten grille screws (1).
- 2. Reconnect power to the unit.

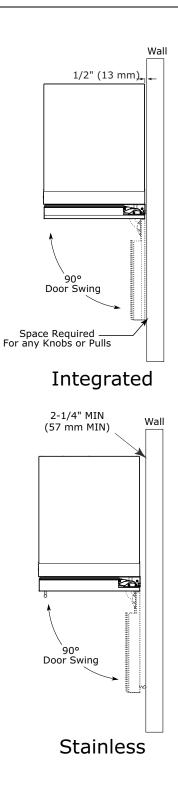


## Door Swing

For Integrated models that are installed adjacent to a wall, 1/2" (13 mm) clearance is recommended from wall on hinge side to allow the door to open 90°. Allow for additional space for any knobs or pulls installed on the integrated panel/frame.

Stainless Steel models that are installed adjacent to a wall require 2-1/4" (57 mm) door clearance on hinge side to allow for door handle.

Units have a zero clearance when installed adjacent to cabinets.



## Door Stop

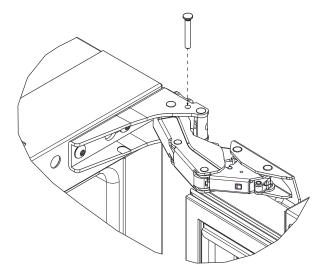
Your U-Line unit was shipped to you with the optional  $90^\circ\,$  pin.

Your unit's door(s) will open 115° straight from the factory. If you would like the door stop at 90°, follow these instructions.

#### NOTICE

# If your unit is already undercounter, it will need to be moved out to access the hinge.

- 1. Open door approximately 90°.
- Slide hinge pin into hole as shown. Pin should slide into place, stopping the door at 90°; if the pin does not go into the hole shown, hold the door less than 90° open and try again.
- 3. To fully seat the pin, tap it lightly with a hammer.
- 4. Carefully slide your unit back in place.



#### NOTICE

The pin can be removed to return the door swing back to its original 115° swing by tapping the pin out from the bottom of the hinge.

#### CLOSER

The door hinge has a self-closing feature that engages when the door is open approximately 6'' (150 mm) (about 25°).

## Door Adjustments

#### DOOR ALIGNMENT AND ADJUSTMENT

Align and adjust the door if it is not level or not sealing properly. If the door is not sealed, the unit may not cool properly, or excessive frost or condensation may form in the interior.

#### NOTICE

Properly aligned, the door's gasket should be firmly in contact with the cabinet all the way around the door (no gaps). Carefully examine the door's gasket to ensure that it is firmly in contact with the cabinet. Also make sure the door gasket is not pinched on the hinge side of the door.

### **CAUTION**

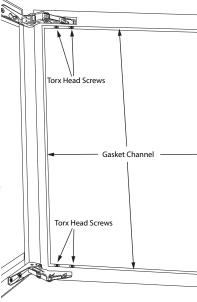
Do not attempt to use the door to raise or pivot your unit. This would put excessive stress on the hinge system.

#### Alignment and Adjustment Procedure

 Open door and remove gasket by taking hold of one corner of the gasket and gently pulling it toward the center of the door.

This will expose the gasket channel.

 Near each hinge in the gasket channel are 2 Torx head adjustment screws. Loosen each pair of screws on both the upper and lower hinges.



4. Tighten all screws on hinges.

3. Square and align

door as necessary.

5. Reinstall gasket into the channel starting at one corner.

#### **REVERSING THE DOOR**

### NOTICE

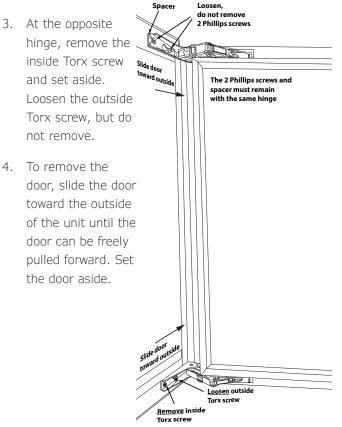
#### PLEASE READ BEFORE STARTING:

As a convenience to you, this product is equipped with a door that can be reversed. In order for the door to function properly on either side of the unit, one of the hinges is mounted with a spacer and 2 Phillips head screws. The other hinge does not have a spacer and is fastened to the unit with 2 Torx head screws. (Most machines come from the factory with the door mounted on the right side - handle on the left, hinges on the right.

## 

To prevent stripping or breaking the screws, do not use power tools during this procedure.

- 1. Open door.
- 2. Locate the hinge that has the spacer. Loosen, but do not remove the 2 Phillips screws the spacer will also remain in place.



- 5. On the non-hinge side of the unit, remove the 4 Torx head screws and set aside, but do not discard.
- 6. On the hinge side of the unit, remove the 2 Phillips screws and the spacer as well as the 1 Torx screw.
- 7. Install the spacer and the same 2 Phillips screws on the opposite corner of the machine - i.e., if the 2 Phillips screws and spacer were installed on the top right corner of the machine, you must install the two Phillips screws and spacer on bottom left corner of the machine. Leave the screws loose enough for the door to be remounted.
- Install just the outside screw in the opposite corner. Leave the screw loose enough for the door to be remounted.
- 9. Rotate door 180°, align the hinges over the 3 screws, and slide/seat into position.
- 10. Install the inside Torx screw and then tighten all 4 screws.
- 11. In the open holes on the side where the door had been removed, install the 4 Torx head screws that had been set aside.

#### Align and adjust the door:

Align and adjust the door (see DOOR ALIGNMENT AND ADJUSTMENT).

## First Use

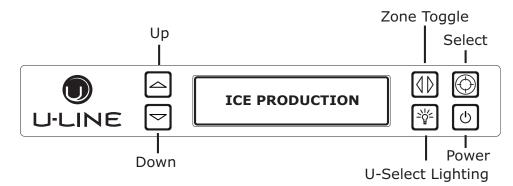
All U-Line controls are preset at the factory. Initial startup requires no adjustments. See CONTROL OPERATION section for more details.

#### NOTICE

U-Line recommends discarding the ice produced during the first two to three hours of operation to avoid possible dirt or scale that may dislodge from the water line.

When plugged in, the unit will begin operating under the factory default settings. If the unit was turned off during installation, simply press and the unit will immediately switch on. To turn the unit off, press and release.

## **Control Operation**



#### CONTROL FUNCTION GUIDE

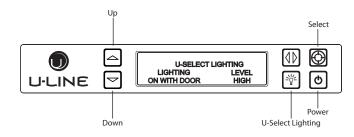
FUNCTION	COMMAND	DISPLAY/OPTIONS	
OFF	Press 🕑 and hold	Display will count down from 5 to off.	
ON	Press 🕑 and release	Unit will come on immediately.	
Adjust lighting	Press 💥 to adjust lighting	Press $\bigtriangleup$ or $\bigtriangledown$ to set low, medium or high.	
Customer menu	Press 🗑 and hold for 5 seconds	Press 🛆 or 🖵 to scroll through menu.	
Service menu	Press $\bigtriangleup$ or $$ and hold for 5 seconds	Press 🛆 or 🤝 to scroll through menu.	
Sabbath Mode	Press 🕑 and hold. Press 🕑 and release to restart unit.	No new ice will form when the unit is off. Ice will melt and pump-equipped models will continue to remove water as needed.	

#### **U-SELECT<sup>®</sup> CONTROL**

#### **Digital Display**

The 3000 Series units are controlled by a feature rich, advanced OLED display control unit. The control panel allows adjustment to temperature set point, access to Energy Saver Mode, internal temperature readings, and many other features.

#### **U-Select Lighting**



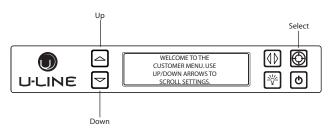
1. To begin, press  $\textcircled{\mathbb{P}}$  to enter the lighting menu.

- Press <sup>™</sup> to cycle through each available timer setting. Selections include "On With Door", "On 3 Hours", "On 6 Hours", or "On 24 Hours".
- To exit, press ☺ or simply wait for the menu to time out.

#### **CUSTOMER MENU**

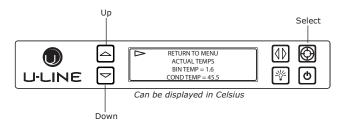
The 3000 Series of U-Line undercounter refrigeration appliances contains a feature rich customer menu. The Customer Menu allows access to a series of advanced features including Energy Saver Mode, Sabbath Mode, actual temperature readings as well as a method to restore factory defaults.

#### 3000 Series - Customer Menu



- 1. To access the Customer Menu hold 0 for 5 seconds.
- 2. Press  $\bigtriangleup$  or  $\boxdot$  to scroll through available selections.
- 3. Press 🙆 to enter selected sub-menu.

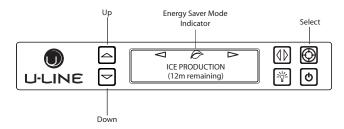
#### **Actual Temps**



The Actual Temps option displays the actual temperature of the ice bin and condenser, as well as ambient temperature.

- 1. To view actual temperature, press 🙆 and select "Actual Temps" from the Customer Menu.
- 2. Press  $\bigtriangleup$  or  $\boxdot$  to scroll through available information.
- 3. To return to the Customer Menu, press 🙆 and select "Return to Menu".

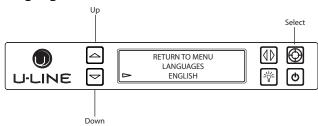
#### **Energy Saver Mode**



Energy Saver mode reduces overall energy consumption by reducing the amount of ice stored in the bin, along with decreasing the lighting.

- 1. To enter Energy Saver Mode, first select Energy Saver from the Customer Menu.
- 2. Press  $\boxdot$  to select "Off" in the menu.
- 3. Press 🙆.
- 4. Press  $\bigtriangleup$  or  $\boxdot$  to change the selection from Off to On.
- 5. Press 0 to confirm your selection.
- 6. To return to the Customer Menu, press ☑ and select "Return to Menu".
- To cancel Energy Saver Mode simply return to the Customer Menu, select Energy Saver and change "On" to "Off".

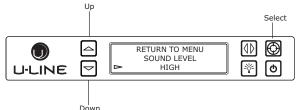
#### Languages



The U-Line 3000 Series of models supports a number of display languages including English, Spanish, French, German and Italian.

- 1. To change display language select Languages from the Customer Menu.
- 2. Press ☐ to select "English".
- 3. Press 🙆. "English" will begin to flash.
- Press ☐ or ☐ to cycle through the available languages.
- 5. Press 0 to confirm your choice.

#### Sound Level



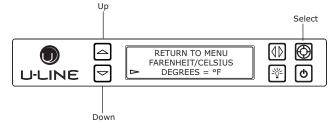
Audible alarms and alert tones support four different Sound Level settings, High, Medium, Low, and Off.

To select a new tone level, enter the Sound Level Menu from the Customer Menu.

1. Press  $\bigtriangleup$  or  $\bigtriangledown$  to select the current sound level.

- 2. Press 0. The current setting will begin to flash.
- 3. Press  $\bigtriangleup$  or  $\boxdot$  to select a different level.
- 4. Press 0 to confirm your choice.

#### Fahrenheit / Celsius

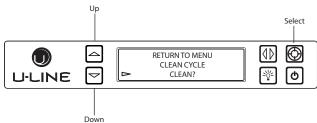


Temperature and set point information can be displayed in either Fahrenheit or Celsius.

To change from Fahrenheit to Celsius enter the Fahrenheit / Celsius Menu from within the Customer Menu.

- 1. Press ☐ to select "Degrees".
- 2. Press 🙆. The selection will begin to flash.
- Press ☐ or ☐ to select between °F (Fahrenheit) or °C (Celsius).
- 4. Press 0 to confirm your choice.

#### **Clean Cycle**

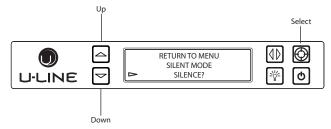


A clean cycle can be initiated through this menu. Once the cleaning cycle starts, the cycle cannot be stopped until complete.

To initiate a clean cycle, select "Clean Cycle" from the Customer Menu. Please refer to CLEANING section regarding proper cleaning procedure.

- 1. Press  $\boxdot$  to select "Clean Cycle".
- 2. Press 0. The clean cycle will now begin.
- 3. Refer to CLEANING section regarding proper cleaning procedure.

#### Silent Mode



Users can halt ice production for 3 hours with an option called "Silent Mode" in the Customer Menu. Silent Mode will begin once the current ice making cycle is complete. After 3 hours in Silent Mode, normal ice production will continue.

NOTE: Silent Mode will not silence any alerts.

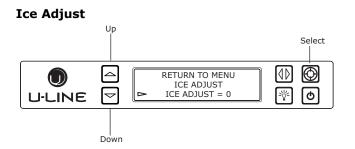
To initiate Silent Mode, enter Silent Mode Menu from within the Customer Menu.

#### To activate Silent Mode:

- 2. Press 🙆. Silent Mode will now begin.

#### To cancel Silent Mode:

- 1. Press to select "Cancel?".
- 2. Press 🙆. Silent Mode will end.

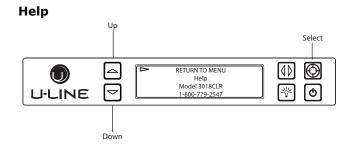


The Ice Adjust option adjusts ice thickness by adding or subtracting up to 5 minutes of ice production.

To change the ice thickness, enter the Ice Adjust Menu from within the Customer Menu.

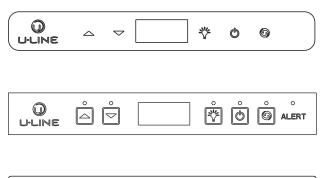
#### To adjust thickness:

- 1. Press to select "Ice Adjust".
- 2. Press 0. The selection will begin to flash.
- 4. Press 0 to confirm your choice.



To return to the Customer Menu, press  $\boxdot$  to select "Return to Menu" and press to confirm.





ULINE	$\bigtriangledown$	₩ O	

Clear Ice Machines are Star-K certified and can be used during the Sabbath. View a full list of Star-K certified U-Line units at www.star-k.org.

#### To prepare the unit for the Sabbath:

- 1. Press and hold 1 until the unit turns off.
- 2. No new ice will form when the unit is off, but previously made ice will still be accessible/present for over 24 hours. Pump equipped models will continue to remove water as needed even if the unit is off.

Sabbath Mode remains active until 0 is pressed again and the unit turns on.

# USER GUIDE

## Ice

ICE CUBE THICKNESS ADJUSTMENT

## NOTICE

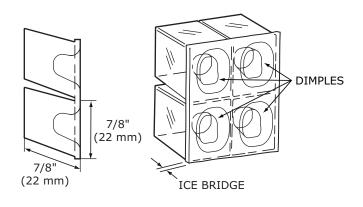
Ice thickness adjustment should only be made one increment at a time. Allow ice maker production to stabilize for 24 hours before rechecking ice thickness.

Ice is produced in layers resulting in a clear cube. Ice in bin may develop surface frost which disappears when cube is placed in liquid.

Ice cubes in any given batch will vary, so it is necessary to choose cubes from the sample area for comparison when making adjustments.

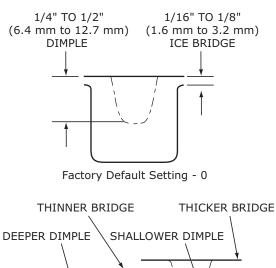
The ice cube thickness is factory set for best overall performance. The factory setting "0" is designed to maintain an ice bridge of approximately 1/16" to 1/8" (1.6 mm to 3.2 mm) under normal conditions, resulting in a dimple of approximately 1/4" to 1/2" (6.4 mm to 12.7 mm) in depth. A fuller cube with less of a dimple results in a thicker ice bridge. As the ice bridge thickens, the tendency for the cubes to stay together as a slab increases. A bridge thicker than 1/8" (3.2 mm) may cause cubes to overfill the ice bucket.

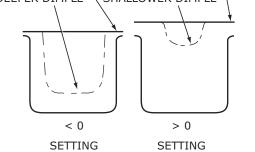
32 ice cubes are formed on a 4 x 8 slab during each cycle. Each cycle takes approximately 15-20 minutes at the default cube thickness (0).



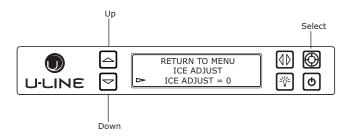
Your clear ice machine is pre-set to produce ice between the optimal dimensions illustrated below:

#### Cube Details









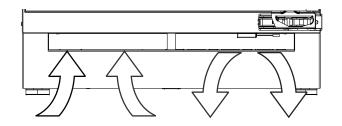
Adjust ice thickness as follows:

- Press and O and hold for 5 seconds to enter the Customer Menu.
- 2. Press ☐ to select "Ice Adjust".
- 3. Press 🙆. The selection will begin to flash.

# Airflow and Product Loading

### NOTICE

The unit requires proper airflow to perform at its highest efficiency. Do not block the front grille at any time, or the unit will not perform as expected. Do not install the unit behind a door.





## Cleaning

## EXTERIOR CLEANING

### Vinyl Clad (Black or White) Models

Clean surfaces 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.

Clean any glass surfaces with a non-chlorine glass cleaner.

#### **Stainless Models**

Stainless door panels, handles and frames can discolor when exposed to chlorine gas, pool chemicals, saltwater or cleaners with bleach.

Keep your stainless unit looking new by cleaning with a good quality all-in-one stainless steel cleaner and polish monthly. For best results use Claire<sup>®</sup> Stainless Steel Polish and Cleaner. Comparable products are acceptable. Frequent cleaning will remove surface contamination that could lead to rust. Some installations may require cleaning weekly.

### Do not clean with steel wool pads.

# Do not use stainless steel cleaners or polishes on any glass surfaces.

Clean any glass surfaces with a non-chlorine glass cleaner.

### Do not use cleaners not specifically intended for stainless steel on stainless steel surfaces (this includes glass, tile, and counter cleaners).

If any surface discoloring or rusting appears, clean it quickly with Bon-Ami<sup>®</sup> or Barkeepers Friend Cleanser<sup>®</sup> and a nonabrasive cloth. Always clean with the grain. Always finish with Claire<sup>®</sup> Stainless Steel Polish and Cleaner or comparable product to prevent further problems. Using abrasive pads such as ScotchBrite™ will cause the graining in the stainless steel to become blurred.

Rust not cleaned up promptly can penetrate the surface of the stainless steel and complete removal of the rust may not be possible.

For information on Keg and Tap Towers, please reference the Single and Double Tap Tower Kits User Guide on u-line.com.

#### **Integrated Models**

To clean integrated panels, use household cleaner per the cabinet manufacturer's recommendations.

#### **INTERIOR CLEANING**

Disconnect power to the unit.

Clean the interior and all removed components using a mild nonabrasive detergent and warm solution applied with a soft sponge or non-abrasive cloth.

Rinse the interior using a soft sponge and clean water.

#### Do not use any solvent-based or abrasive

**cleaners.** These types of cleaners may transfer taste and/or odor to the interior products and damage or discolor the interior.

### **CLEAR ICE MACHINE CLEANING CYCLE**

Your U-Line clear ice machine has an automatic clean alert function. Cleaning cycles should be run as notified. Otherwise, to maintain operational efficiency the unit should be cleaned every three months. Depending on water conditions, more frequent cleaning may be necessary. If the ice machine requires more frequent cleaning, consult a plumber to test the water quality and recommend appropriate treatment.



Wear rubber gloves and safety goggles and/or face shield when handling Ice Machine Cleaner.



#### NOTICE

Use only U-Line Clear Ice Machine Cleaner (80-55667-00), available for purchase from u-line.com or your dealer. It is a violation of federal law to use this solution in a manner inconsistent with its labeling. Use of any other cleaner can ruin the finish of the evaporator and will void the warranty. Read and understand all labels printed on the package before use.

U-Line Clear Ice Machine Cleaner is used to remove lime scale and other mineral deposits. Refer to the following steps to initiate the self-cleaning cycle.

## 

# Never use anything to force ice from the evaporator. Damage may result.

- 1. Turn the ice machine off and allow any ice to melt off of the evaporator.
- 2. Remove all ice from the storage bin.
- 3. Remove evaporator cover.
- Remove the standpipe by lifting it up while using a slight back and forth motion to loosen it from the drain hole. The water in the reservoir will flow down the drain.



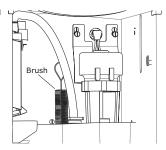
Evaporator

Standnine

Water trough

- 5. Re-install the standpipe into the water trough.
- 6. Clean the Interior Bin as follows:
- Dilute 1-2 oz. of Clear Ice Machine Cleaner into two quarts of water.
- Using a sponge or cloth, clean interior of ice bin, tubing and door. This cleaner will remove all mineral deposits and other contaminants from the surfaces.

 Using a bottle brush, clean out the trough drain tube and pump tubing where needed.



- 7. Turn unit on by pressing 0.
- 8. Place unit into CLEAN mode by holding (6) for several seconds until you hear the cleaning mode begin.
- When water begins flowing over the evaporator (approximately 3 minutes), pour 1-2 oz. of Clear Ice Machine Cleaner into the water trough. The cleaning process will last approximately 45 minutes.
- 10. Dilute 1 tablespoon bleach in 1 gallon of warm water. Apply this solution to the entire inside of the storage area. Then rinse thoroughly with water.

The unit will resume operation approximately 15 minutes after the automated cleaning process is completed. The water fill valve will energize, fill the water reservoir, and shut-off after three minutes. The compressor begins to operate and water flows over the evaporator assembly (ice mold). Initially, the water flow may not be uniform, causing uneven sized cubes or water to spill into the ice storage bin. This is a normal situation that will correct itself within the first 24 hours of operation.

#### NOTICE

Discard all ice produced in the first harvest.

Should power to the unit be interrupted during the self-clean cycle, it will be necessary to repeat the complete cleaning cycle after power is restored.

### REFRESH KIT

Due to variations in water quality or inadequate maintenance your unit may become excessively coated in lime scale or calcium. U-Line offers a cost effective refresh kit which replaces many interior components and will return your unit to like new condition. Refresh kits may be ordered from your local distributor and installed by your local service company. For information on your local distributor or service company please visit www.u-line.com.

## Cleaning Condenser

#### **INTERVAL - EVERY SIX MONTHS**

To maintain operational efficiency, keep the front grille free of dust and lint, and clean the condenser when necessary. Depending on environmental conditions, more or less frequent cleaning may be necessary.

**WARNING** 

Disconnect electric power to the unit before cleaning the condenser.

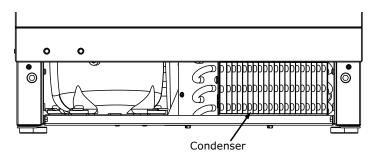


DO NOT touch the condenser fins. The condenser fins are SHARP and can be easily damaged.

#### NOTICE

DO NOT use any type of cleaner on the condenser unit.

- 1. Remove the grille. (See GRILLE INSTALLATION).
- 2. Clean the condenser coil using a soft brush with a "combing" action or vacuum cleaner. Do not touch the condenser coil.
- 3. Install the grille.



## Extended Non-Use

## VACATION/HOLIDAY, PROLONGED SHUTDOWN

The following steps are recommended for periods of extended non-use:

- 1. Remove all consumable content from the unit.
- Disconnect the power cord from its outlet/socket and leave it disconnected until the unit is returned to service.
- 3. Turn off the water supply.
- 4. If ice is on the evaporator, allow ice to thaw naturally.
- 5. Clean and dry the interior of the cabinet. Ensure all water has been removed from the unit.
- 6. Disconnect the water and drain line (if applicable) making sure all water is removed from the lines.
- The door must remain open to prevent formation of mold and mildew. Open door a minimum of 2" (50 mm) to provide the necessary ventilation.

#### WINTERIZATION

If the unit will be exposed to temperatures of 40°F (5° C) or less, the steps above must be followed. In addition, drain pumps in clear ice machines must be drained according to the following procedure:

- 1. Remove the drain pump from the ice machine.
- 2. Drain the water in the pump's reservoir by turning the pump upside down and allowing the water to drain through the pump's inlet and vent tube fittings.
- 3. After water is drained, reinstall the drain pump and reattach all connections.

For questions regarding winterization, please call U-Line at 414.354.0300.



Damage caused by freezing temperatures is not covered by the warranty.

Do not put anti-freeze in your unit.

## Troubleshooting

### **BEFORE CALLING FOR SERVICE**

If you think your U-Line product is malfunctioning, read the CONTROL OPERATION section to clearly understand the function of the control.

If the problem persists, read the NORMAL OPERATING SOUNDS and TROUBLESHOOTING GUIDE sections below to help you quickly identify common problems and possible causes and remedies. Most often, this will resolve the problem without the need to call for service.

If your product needs service, please go to <u>www.U-Line.com</u> and navigate to the Find a Servicer page to locate a U-Line Authorized servicer. If your product is in warranty please make sure to register it at <u>www.U-Line.com/u-lineregistration</u>. If you have any issues following this process you can contact the U-Line Corporation by phone at +1.414.354.0300

If you call, you will need your product Model and Serial Numbers. This information appears on the Model and Serial number plate located on the interior of your product, most often placed on the ceiling.

## NORMAL OPERATING SOUNDS

All models incorporate rigid foam insulated cabinets to provide high thermal efficiency and maximum sound reduction for its internal working components. Despite this technology, your model may make sounds that are unfamiliar.

Normal operating sounds may be more noticeable because of the unit's environment. Hard surfaces such as cabinets, wood, vinyl or tiled floors and paneled walls have a tendency to reflect normal appliance operating noises.

Listed below are common refrigeration components with a brief description of the normal operating sounds they make. NOTE: Your product may not contain all the components listed.

• Compressor: The compressor makes a hum or pulsing sound that may be heard when it operates.

- Evaporator: Refrigerant flowing through an evaporator may sound like boiling liquid.
- Condenser Fan: Air moving through a condenser may be heard.
- Running Water: As your unit continues to produce ice you will hear water flowing into the collection chambers and running through the evaporator.

### TROUBLESHOOTING GUIDE

## **DANGER**

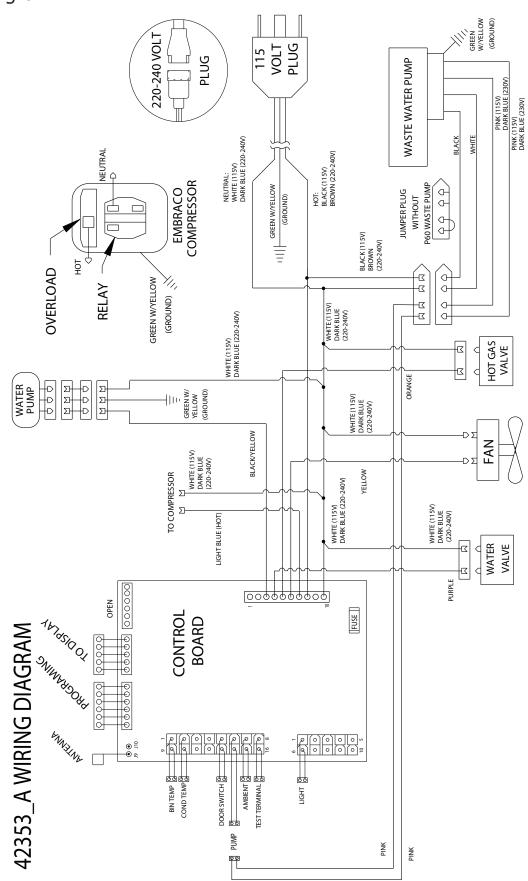
ELECTROCUTION HAZARD. Never attempt to repair or perform maintenance on the unit before disconnecting the main electrical power.

Troubleshooting - What to check when problems occur:

Problem	Possible Cause and Remedy		
Unit Does Not Operate. Electronic Display Blank.	No electrical supply. Plug unit in or check circuit breaker.		
Display Showing Error Code.	If display shows error "dr", check to make sure door is sealing correctly. Make sure to close door completely. If sealing the door does not clear the error, contact U-Line service for more information.		
Unit Develops Condensation on External Surfaces.	The unit is exposed to excessive humidity. Moisture will dissipate as humidity levels decrease.		
Poor Ice Quality.	Unit may not be level. Check if unit is level. Ice maker system may be dirty. Clean the ice maker.		
No Ice Production.	Ensure water is being supplied to the unit. Verify the ice making unit is turned on.		
Not Enough Ice.	Ensure the condenser coil is clean and free of any dirt or lint build-up.		
Water in Ice Bin.	Drain may be restricted, ensure drain is free of foreign debris.		

# USER GUIDE

## Wire Diagram



## **Product Liability**

Field service technicians are authorized to make an initial assessment in the event of reported damages. If there are any questions about the process involved, the technician should call U-Line for further explanation.

While inspecting for defects or installation issues, photos should be taken to document any damages or issues found.

During the assessment, if the service technician is able to find the source of the damage and it can be resolved by replacement of a part, the servicer is authorized to replace the part in question. The part that caused the damage must be returned to U-Line in its entirety. The part must be clearly labeled with the serial number of the unit it was removed from, the date, and the servicer who removed the part.

If the service technician determines the damage is the result of installation issues (water connection/drain, etc.), the consumer would be notified and the issues shall be resolved at the direction of the consumer.

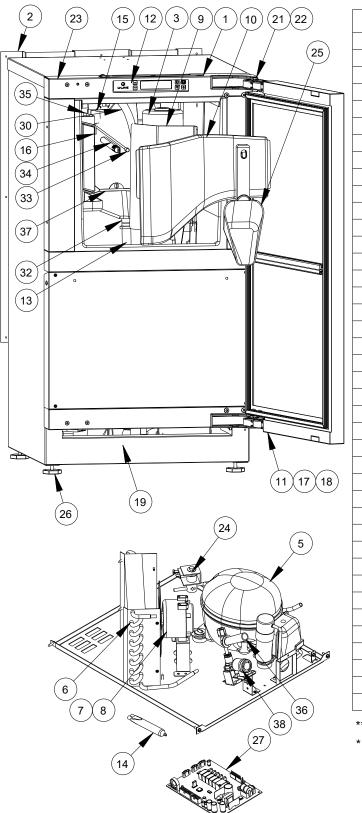
If damage is evident and the service technician is unable to find the source, U-Line must be contacted at +1.414.354.0300 for further direction.

8900 N. 55th Street • Milwaukee, WI 53223 T: +1.414.354.0300 • F: +1.414.354.5696 Website: <u>www.u-line.com</u>

> Right product. Right place. Right temperature Since 1962.

# USER GUIDE

## Parts



	U-3018CLRINT-00C	
Item	Description	U-Line P/N
1	ANTI TIP BRACKET W/SCREWS	80-54012-00
2	BACK PANEL	80-54142-00
3	CIRCULATION PUMP	80-54137-00
4	CLEAR ICE MACHINE CLEANER *	ULACLRCLEAN
5	COMPRESSOR ASSY, R600	80-54376-01
6	CONDENSER ASSEMBLY	80-54079-00
7	CONDENSER FAN BLADE	80-54066-00
8	CONDENSER FAN MOTOR	80-54138-00
9	COVER PUMP, BLACK	80-54073-00
10	COVER W/HOOK, BLACK	80-54072-00
11	DOOR ASSEMBLY W/O HINGES	80-54148-00
12	DISPLAY MODULE	80-54032-00
13	DRAIN TUBE, CLEAR	80-54074-00
14	DRIER	80-54055-00
15	LED LIGHT STRIP AND COVER ASSY	80-54000-00
16	EVAPORATOR ASSEMBLY	80-54063-00
17	GASKET, DOOR, INJECTION MOLDED	80-54003-00
18	GASKET, HORIZONTAL	80-54061-00
19	GRILLE W/SCREWS	80-54031-00
20	HI TEMP THERMISTOR *	80-54070-00
21	HINGE COVER(2 PCS)	80-54001-00
22	HINGES(2) W/SCREWS AND COVERS	80-54013-00
23	HINGE MOUNTING HOLE COVERS(4) 80-54024-0	
24	HOT GAS VALVE AND COIL	80-54169-00
25	ICE SCOOP, CLR	80-54080-00
26	LEG LEVELERS(4) 80-54019-0	
27	MAIN BOARD(NO CASE OR WIRES)	80-54008-00
28	PACKAGING *	80-54143-00
29	POWER CORD *	80-54144-01
30	PREFORMED DISPERSION TUBE	80-54128-00
31	REED SWITCH **	80-54134-00
32	STAND PIPE	80-54077-00
33	THERMISTOR(1 PC)	80-54006-00
34	THERMISTOR COVER AND PIN	80-54023-00
35	WATER DISPERSION RECEPTACLE	80-54078-00
36	WATER LINE ASSEMBLY	80-54068-00
37	WATER TROUGH, BLACK	80-54075-00
38	WATER VALVE ASSEMBLY	80-54139-00
39	WIRE HARNESS, BOARD *	80-54342-01

\*\* REED SWITCH LOCATED BEHIND DISPLAY

\* NOT PICTURED

# **R-600A Specifications**

For R-600a refrigerant service tips and more videos, go to: <a href="http://www.u-line.com/videos">www.u-line.com/videos</a>.



# Flammability warnings for a pure-iso-butane refrigerant.







#### Gloves and Eye Protection must be used.



R-600a is considered non-toxic, but is flammable when mixed with air.

Keep a dry powder type fire extinguisher in the work area.



R-600a is heavier than air, do not allow any leakage/migration to low areas such as basements and stairs.

Never use a torch on a fully charged refrigeration system.

Never substitute U-Line OEM replacement parts or methods of construction.

**R-600a must be stored and transported in approved containers.** 

## **WARNING**

Only skilled and well trained service technicians permitted to service R-600a equipped products.

All tools and equipment must be approved for use with R-600a refrigerant.

Local, state and federal laws, standards must be observed along with proper certification and licensing.

Ventilation is required during servicing.

No conversions to R-600a from any other refrigerants. OEM R-600a equipped unit only.

Service area must be free of ignition sources.

No smoking is allowed in the service area.

All replacement electrical components must be OEM and installed properly (sealed and covered).

If the evaporator is cold prior to service, it must be thawed prior to service.

When using a vacuum pump, start pump before opening refrigeration system.

Vacuum pump and recovery equipment should be at least 10 feet from the work area.

It is recommended that a simple LPG gas detector is on site during service.

Ensure that all R-600a is removed from the system prior to brazing any part of the sealed system.

Only a clean, dry leak free system should be charged with R-600a.

#### **R-600A SPECIFICATIONS/LABELING**

R-600a equipped products are labeled (both the unit and the compressor).

R-600a is colorless and odorless.

R-600a is considered non-toxic, but is flammable when mixed with air.

Do not remove or alter any R-600a labeling on the product.

Use only a refrigerant grade R-600a from a properly labeled container.

#### **RECOVERING/RECLAIMING R-600A**

<u>(R-600a has been exempted from recovery/reclaiming</u> requirements by the US EPA)

Recovery/Reclaiming equipment must be approved for use with R-600a.

Ensure the evaporator is at room temperature prior to recovery/reclaiming R-600a.

Use a common piercing pliers or piercing valve to remove R-600a from the compressor process tube. (Note: Piercing devices must not be left on the system and must be replaced with a Schrader type valve.) Evacuate/reclaim via the piecing pliers to ensure the system is empty of R-600a before any system work is performed.



The recovery cylinder must be evacuated (no air inside) prior to accepting R-600a.

The recovery cylinder must not be filled more than 45% safe fill level and refrigerants must not be mixed.

The recovery cylinder must be clearly marked with R-600a and Flammable Warning labels.

Ensure proper ventilation during recovery/reclaiming of R-600a.

Start vacuum pump/recovery pump prior to piercing the compressor process tube.

Follow recovery/reclaim OEM instructions for the specific equipment used.

### SYSTEM REPAIR

Ensure no residual R-600a refrigerant is left within the system prior to repair (simple venting is not sufficient).

Evacuate and charge with dry nitrogen for leak checks.

Repair leaks or replace system parts as required.

When re-brazing, the system must be purged with dry nitrogen and at least one access point open to the atmosphere.

When re-brazing, proper ventilation is required along with constant monitoring for the presence of R600a refrigerant.

The filter dryer must be replaced any time the sealed system is serviced.

No system should be open to the atmosphere for longer than 15 minutes to avoid moisture migration into the system components.

#### LEAK DETECTION

After removal of the R-600a, the unit can be charged with dry nitrogen or helium.

Electronic leak detection or soap solution can be used to check for nitrogen/helium leaks.



Never use a halide torch or lighted match to check the system for leaks at any time.

The high side of the refrigeration system (compressor discharge to outlet of drier) must be leak tested with the compressor running.

The low side of the refrigeration system (evaporator, compressor and suction line) must be leak tested with the compressor off (equalized pressure).

#### RECHARGING

No air is ever to be allowed inside the refrigeration system (R-600a refrigerant or dry nitrogen only).

Never use a torch on a fully charged refrigeration system.

Install a Schrader Type access port on the compressor process stub.



Evacuate the system to 100 microns prior to charging.

Weigh in the R-600a charge using a refrigerant scale. (run compressor an extra two minutes to clear the charging hoses).

Seal the Schrader Type access port, a proper cap and seal must be used to close the system.



### SUMMARY

Safely handling R-600a requires proper procedures and training.

R-600a approved service tools must be used.

R-600a labeling must not be removed or altered.

Proper ventilation during service is required.

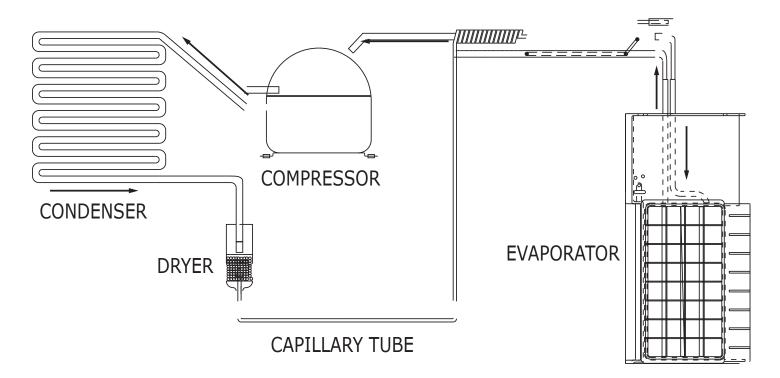
Never apply a torch to a charged R-600a refrigeration system.

Use OEM replacement service parts and do not alter the construction of the unit.

# System Diagnosis Guide

## **REGRIGERATION SYSTEM DIAGNOSIS GUIDE**

System Condition	Suction Pressure	Suction Line	Compressor Discharge	Condenser	Capillary Tube	Evaporator	Wattage
Normal	Normal	Slightly below room temperature	Very hot	Very hot	Warm	Cold	Normal
Overcharge	Higher than normal	Very cold may frost heavily	Slightly warm to hot	Hot to warm	Cool	Cold	Higher than normal
Undercharge	Lower than normal	Warm- near room temperature	Hot	Warm	Warm	Extremely cold near inlet - Outlet below room temperature	Lower than normal
Partial Restriction	Somewhat lower than normal vacuum	Warm- near room temperature	Very hot	Top passes warm - Lower passes cool (near room temperature) due to liquid	Room temperature (cool) or colder	Extremely cold near inlet - Outlet below room temperature backing up	Lower than normal
Complete Restriction	In deep vacuum	Room temperature (cool)	Room temperature (cool)	Room temperature (cool)	Room temperature (cool)	No refrigeration	Lower than normal
No Gas	0 PSIG to 25"	Room temperature (cool)	Cool to hot	Room temperature (cool)	Room temperature (cool)	No refrigeration	Lower than normal



## **Compressor Specifications**

#### 

Electrocution can cause death or serious injury. Burns from hot or cold surfaces can cause serious injury. Take precautions when servicing this unit.

**Disconnect the power source.** 

Do not stand in standing water when working around electrical appliances.

Make sure the surfaces you touch are not hot or frozen.

Do not touch a bare circuit board unless you are wearing an anti-static wrist strap that is grounded to an electrical ground or grounded water pipe.

Handle circuit boards carefully and avoid touching components.

	EMX3115Y-115V
REFRIGERANT	R600a
VOLTAGE	100V - 127V
FREQUENCY	50Hz
RUN CAPACITOR	17.5µF/180 VAC
START WINDING	4.20 +/- 8% Q at 25 °C (77°F)
RUN WINDING	2.76 +/- 8% Q at 25 °C (77°F)
LRA	16.70A
FLA	-
STARTING DEVICE	PTC V115
OVERLOAD	T0819/07

\*All resistance readings are  $\pm$  10%

## **U-Line Corporation (U-Line) Limited Warranty**

#### **One Year Limited Warranty**

For one year from the date of original purchase, this warranty covers all parts and labor to repair or replace any part of the product that proves to be defective in materials or workmanship. For products installed and used for normal residential use, material cosmetic defects are included in this warranty, with coverage limited to 60 days from the date of original purchase. All service provided by U-Line under the above warranty must be performed by a U-Line factory authorized servicer, unless otherwise specified by U-Line. Service provided during normal business hours.

#### Two Year Limited Warranty (5 Class Product)

For two years from the date of original purchase, this warranty covers all parts and labor to repair or replace any part of the product that proves to be defective in materials or workmanship. For products installed and used for normal residential use, material cosmetic defects are included in this warranty, with coverage limited to 60 days from the date of original purchase. All service provided by U-Line under the above warranty must be performed by a U-Line factory authorized servicer, unless otherwise specified by U-Line. Service provided during normal business hours.

#### **Available Second & Third Year Limited Warranty**

In addition to the standard one and two year warranties outlined above, U-Line offers a one year extension of the warranties from the date of purchase, free of charge. To take advantage of this extension, you must register your product with U-Line within 60 days from the date of purchase at u-line.com and provide proof of purchase. Nugget Ice Machine proof of purchase must include the purchase of an in-line water filter and filter head to qualify for this additional limited warranty.

#### **Five Year Sealed System Limited Warranty**

For five years from the date of original purchase, U-Line will repair or replace the following parts, labor not included, that prove to be defective in materials or workmanship: compressor, condenser, evaporator, drier, and all connecting tubing. All service provided by U-Line under the above warranty must be performed by a U-Line factory authorized servicer, unless otherwise specified by U-Line. Service provided during normal business hours.

#### Terms

These warranties apply only to products installed in any one of the fifty states of the United States, the District of Columbia, or the ten provinces of Canada. The warranties do not cover any parts or labor to correct any defect caused by negligence, accident or improper use, maintenance, installation, service, repair, acts of God, fire, flood or other natural disasters. The product must be installed, operated, and maintained in accordance with your product's User Guide.

The remedies described above for each warranty are the only ones that U-Line will provide, either under these warranties or under any warranty arising by operation of law. U-Line will not be responsible for any consequential or incidental damages arising from the breach of these warranties or any other warranty, whether express, implied, or statutory. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. These warranties give you specific legal rights, and you may also have other rights which vary from state to state.

Any warranty that may be implied in connection with your purchase or use of the product, including any warranty of *merchantability* or any warranty *fit for a particular purpose* is limited to the duration of these warranties, and only extends to five years in duration for the parts described in the section related to the five year limited warranty above. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

- The warranties only apply to the original purchaser and are non-transferable.
- The second, third, and five year warranties cover products installed and used for normal residential or designated marine use only.
- The warranties apply to units operated outside only if designed for outdoor use by model and serial number.
- U-Line Commercial products are covered by the one year and 5 year limited warranties and are not eligible for the second and third year limited warranties.
- Replacement water filters, light bulbs, and other consumable parts are not covered by these warranties.
- The start of U-Line's obligation is limited to four years after the shipment date from U-Line.
- In-home instruction on how to use your product is not covered by these warranties.
- Food, beverage, and medicine loss are not covered by these warranties.
- If the product is located in an area where U-Line factory authorized service is not available, you may be responsible for a trip charge or you may be required to bring the product to a U-Line factory authorized service location at your own cost and expense.
- Units purchased after use as floor displays, and/or certified reconditioned units, are covered by the limited one year warranty only and no coverage is provided for cosmetic defects.
- Signal issues related to Wi-Fi connectivity are not covered by these warranties.

For parts and service assistance, or to find U-Line factory authorized service near you, contact U-Line: 8900 N. 55<sup>th</sup> Street, Milwaukee, WI 53223 • u-line.com • onlineservice@u-line.com • +1.414.354.0300

Copyright U-Line Corporation. All Rights Reserved. | Publication Number 30379 | 11/2022 Rev. P