

# USER GUIDE & SERVICE MANUAL



Model: UOCP115-SS01B

# USER GUIDE & SERVICE MANUAL

---

[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

Anti-Tip Bracket

General Installation

Grille Installation

Door Swing

Door Adjust

### Maintenance

Cleaning

Cleaning Condenser

Extended Non-Use

### Operating Instructions

First Use

Control Operation

Ice

Airflow and Product Loading

### Service

Troubleshooting

Wire Diagram

Product Liability

Parts

R600a Specifications

System Diagnosis Guide

Compressor Specifications

Troubleshooting Extended

Control Operation - Service

Thermistor

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®. 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**

**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](http://www.P65warnings.CA.gov)

#### **CAUTION**

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



## Disposal and Recycling



**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 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



**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

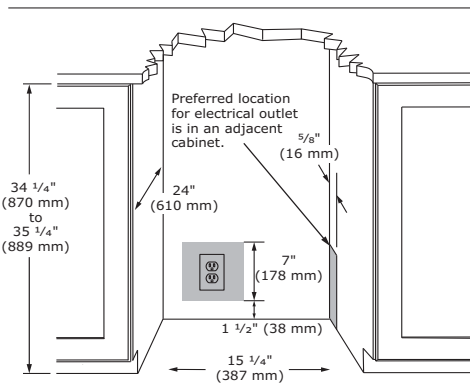
Your U-Line product has been designed for either free-standing or built-in installation. When built-in, your unit does not require additional air space for top, sides, or rear. However, the front grille must NOT be obstructed, and clearance is required for an electrical connection in the rear.



**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.**

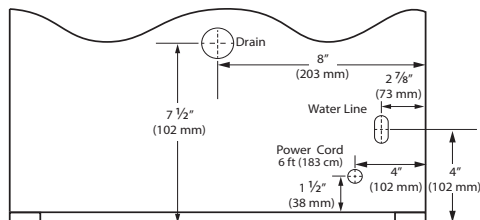
### CUTOUT DIMENSIONS



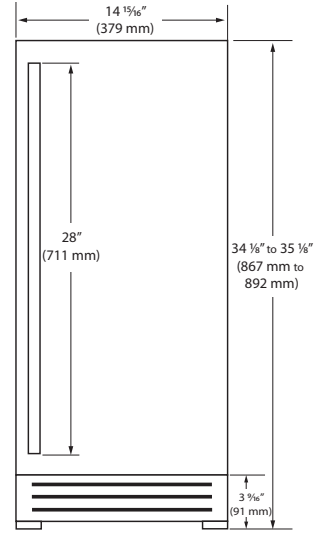
\*15\" cutout width sufficient if door protrudes beyond adjacent cabinetry

### PRODUCT DIMENSIONS

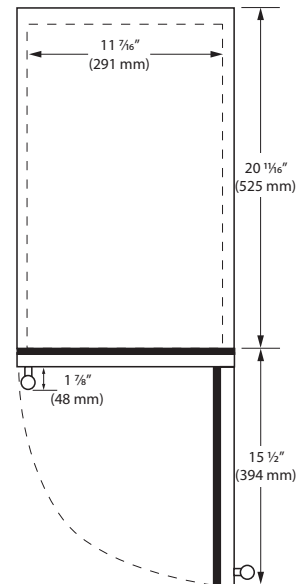
#### REAR



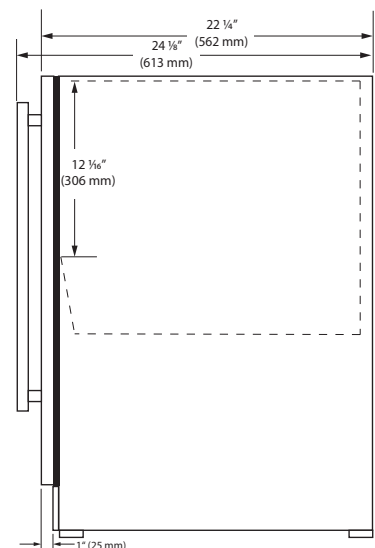
#### FRONT



#### TOP



#### SIDE





## Side-by-Side Installation

Two units may be installed side-by-side.

Cutout width for a side-by-side installation is the cutout dimension of a single unit times two.

No trim kit is required. However, 1/4" (6 mm) of space needs to be maintained between the units to ensure unobstructed door swing.

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

### Side-by-Side Installation with Bracket

1. Slide both units out so screws on top of units are easily accessible.
2. Remove screws as shown below.



3. Place bracket over holes and attach to unit with two screws removed in step 2 using a T-25 Torx driver. Tighten screws fully.
4. Gently push units into position. Be careful not to entangle the electrical cord or water line, if applicable.
5. 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.

## Water Hookup

### PREPARE PLUMBING

The water valve uses a standard 1/4" (6.35 mm) compression fitting.

U-Line recommends using accessory water hookup 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



**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 MUST have a shut-off 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.**

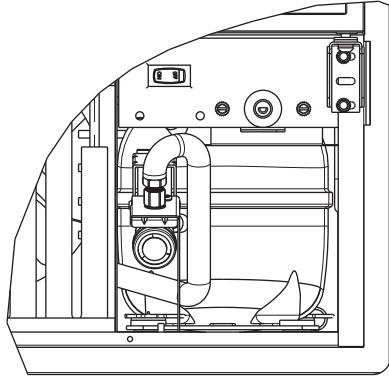
**Use caution when handling back panel. The edges could be sharp.**

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.

# USER GUIDE

---

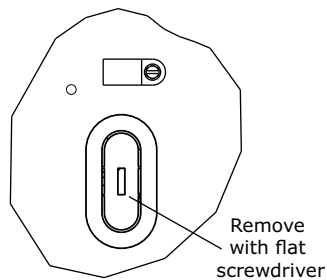
3. Locate water valve in the front of the unit and thread water supply line through.



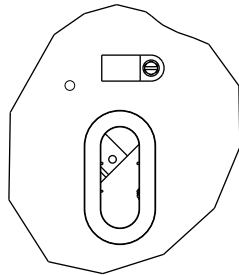
## NOTICE

**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.**

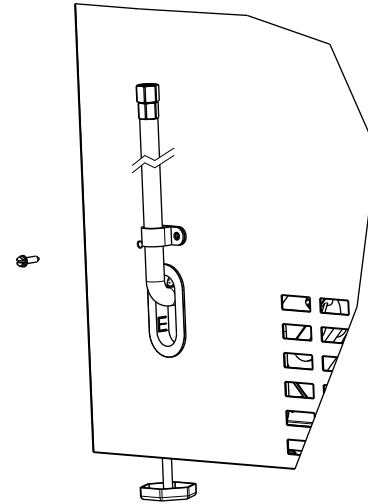
4. On the back panel, break away filler feature in bushing with flat screwdriver.



5. Thread water line through back panel hole (with bushing) and connect to cold water supply line.



8. Install retaining clip.



6. Turn on water supply and check for leaks.
7. Reinstall back panel and grille/front access panel.

## 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



**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.**

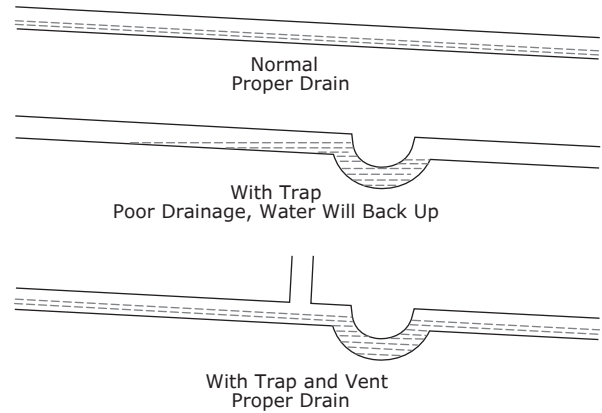
**There is a possibility that hose connections may have loosened during shipment.**

**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).**

# USER GUIDE

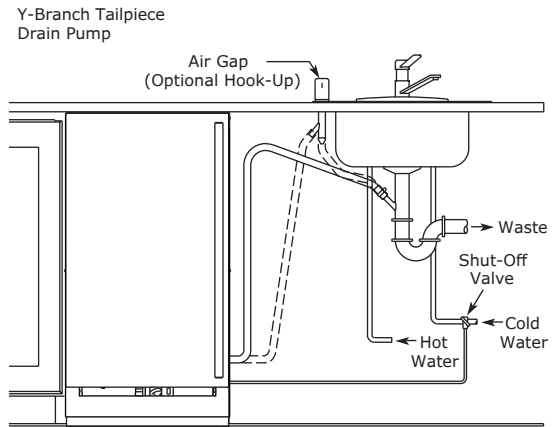
## FACTORY INSTALLED DRAIN PUMP

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.

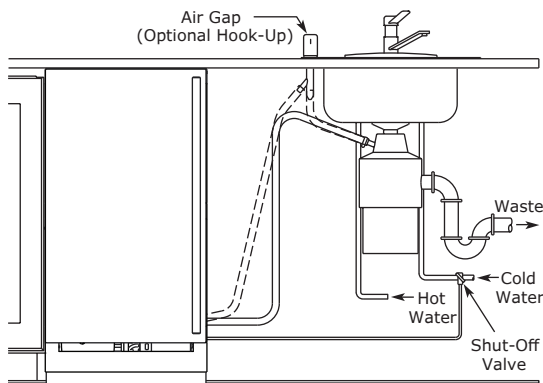
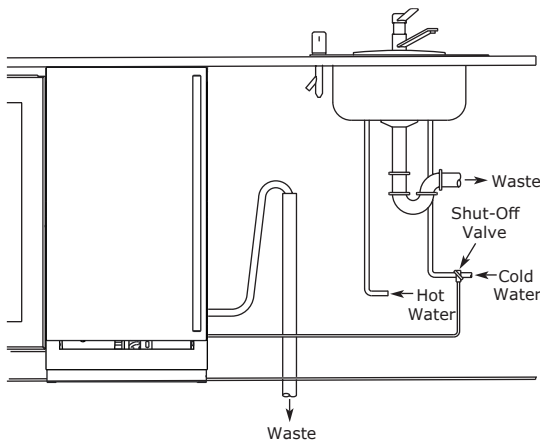
To order a drain pump, order part number 80-54147-00 online at [u-line.com](http://u-line.com).

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.**

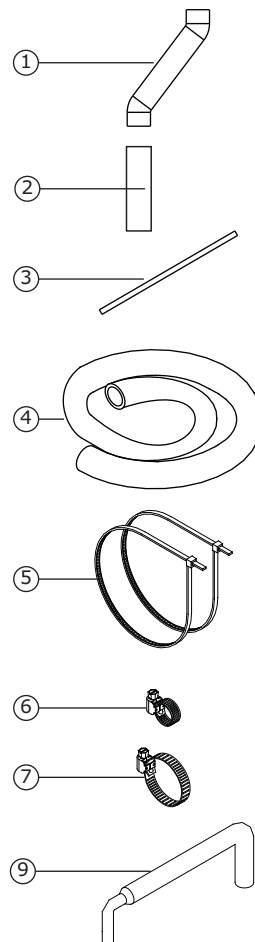
- The U-Line drain pump (part # 80-54147-00) is designed to be used exclusively on the U-Line Clear Ice Machine and is UL recognized only for use on the U-Line Clear Ice Machine.
- U-Line Corporation assumes no warranties or responsibility, whether express or implied, if the drain pump is used on another 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:

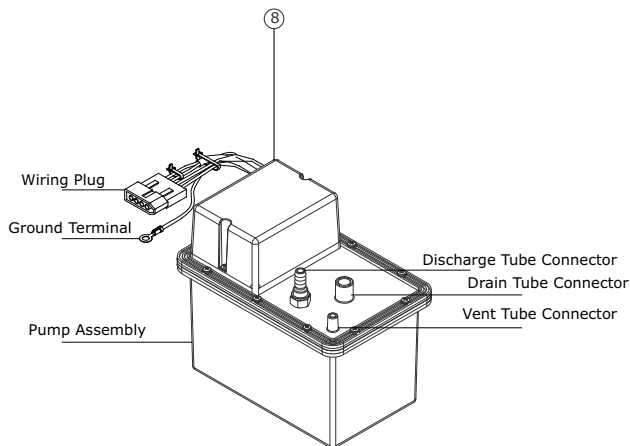
1. 1x S-shaped Drain Tube  
(Not used)
2. 1x Straight Drain Tube
3. 1x Vent Tube
4. 1x Braided Discharge Tube  
(Not included in pump kit. Ice Machine ships with discharge tube installed.)
5. 2x Vent tube Zip Ties
6. 2x Small Worm Gear Clamps
7. 1x Large Worm Gear Clamp
8. 1x P60 Pump
9. 1x Discharge Tub  
(Used on older models only)



### TOOLS REQUIRED:

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





## INSTALLATION PROCEDURE



**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.**

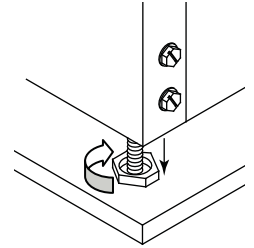
1. Disconnect your unit from its electrical outlet/socket.
2. Use a screwdriver, push the power/electric cord grommet through its seat in the back panel.
3. Using a screwdriver or 1/4" nut driver, remove the 12 screws from the back panel.
4. Remove the drain line/pipe from the storage bin drain nipple.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



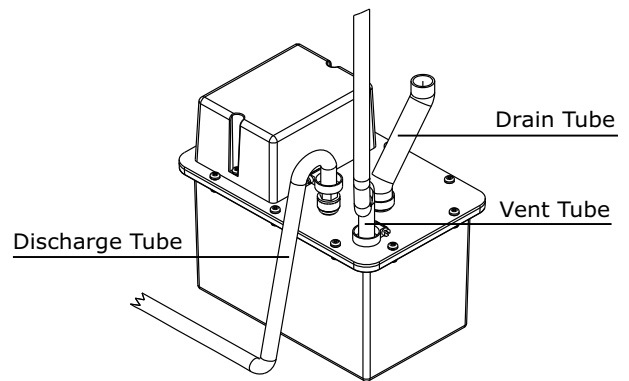
**To prevent damage to the pump, leave sufficient space between leveling leg and pump.**

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.

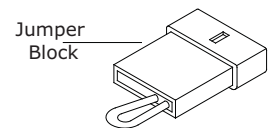


6. Install the 3 hoses and hose clamps to the pump assembly as shown below. Do not tighten clamps at this time.

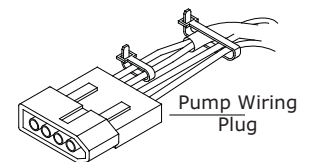


7. Remove the protective paper from the adhesive strip and carefully set pump inside of unit.

8. Unplug jumper block from ice machine wiring harness (jumper block has a single pink wire). Discard jumper block.



9. 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.**

## **⚠ CAUTION**

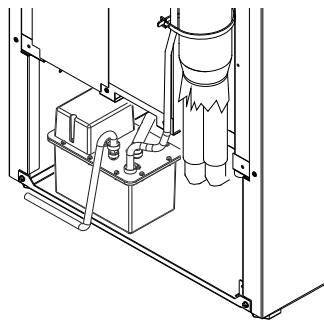
**Failure to properly secure the vent tube will result in water damage to the unit and surrounding areas. Do not allow vent tube to kink, bend or be obstructed in any way.**

## **⚠ CAUTION**

**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.

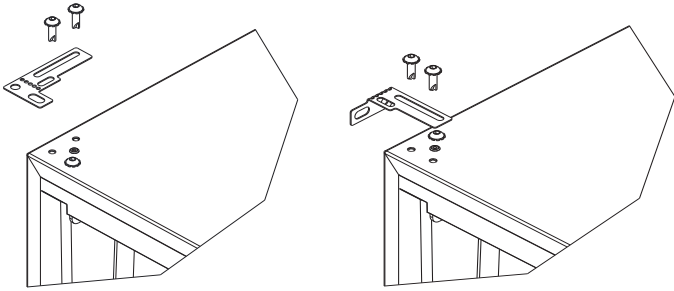
11. Connect pump drain tube to storage bin drain nipple with clamp removed from step 3. Ensure that no kinks are present in the tube.



12. Tighten the clamps on the drain, discharge, and vent tubes with a screwdriver or 1/4" nut driver.

## Anti-Tip Bracket

1. Slide unit out so screws on top of unit are easily accessible.
2. Remove the two screws from the opposite side of the hinge assembly using a T-25 Torx driver (see below).

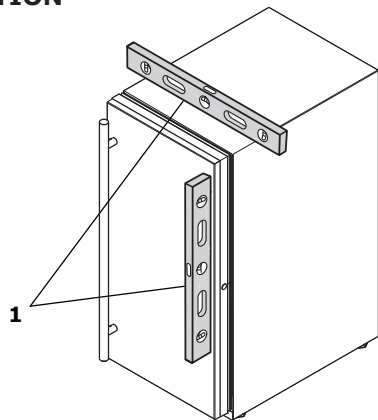


3. Place bracket over holes and attach to unit with two screws removed in step 2 using a T-25 Torx driver. Tighten screws fully.
4. Gently push unit into position. Be careful not to entangle the electrical cord or water line, if applicable.
5. Check to be sure the unit is level from front to back and side to side. Make any necessary adjustments. The unit's top surface should be approximately  $\frac{1}{8}$ " (3 mm) below the countertop.
6. Secure bracket into adjoining surface.

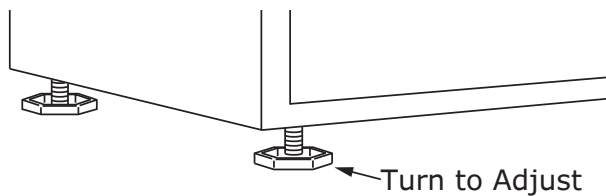
## General Installation

### LEVELING INFORMATION

1. 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  $\frac{1}{8}$ " (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.
2. Gently push the unit into position. Be careful not to entangle the cord or water and drain lines, if applicable.
3. Re-check the leveling, from front to back and side to side. Make any necessary adjustments. The unit's top surface should be approximately  $\frac{1}{8}$ " (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.

## Grille Installation

### REMOVING AND INSTALLING GRILLE

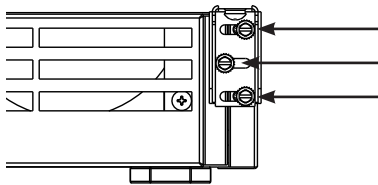


**Disconnect electric power to the unit before removing the grille.**

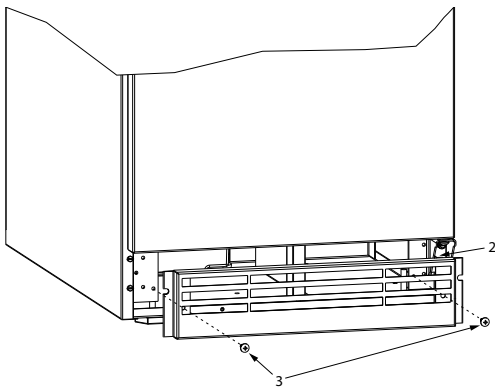
**When using the unit, the grille must be installed.**

#### Removing the grille

1. Disconnect power to the unit.
2. Slightly loosen three screws on bottom hinge.



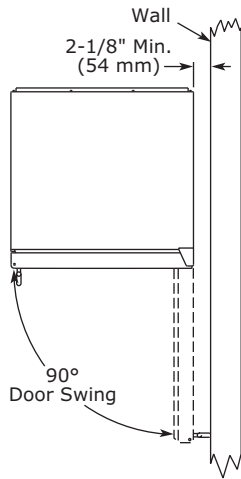
3. Remove two grille screws.
4. Slide grille to the left and remove.



#### Installing the grille

1. Align cabinet and grille holes and secure, but do not over tighten grille screws (3).
2. Tighten three hinge screws (4).
3. Connect power to unit.

## Door Swing



Units have a zero clearance for the door to open 90°, when installed adjacent to cabinets.

Stainless Steel models require 2-1/8" (54 mm) door clearance to accommodate the handle if installed next to a wall.



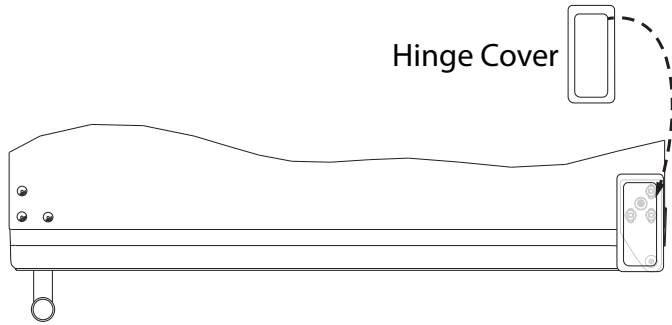
## Door Adjustments

### HINGE COVER

Hinge cover included with the literature bag is optional.

#### To install hinge cover:

1. Press hinge cover squarely over hinge.



### DOOR ALIGNMENT AND ADJUSTMENT

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

#### To align and adjust the door:

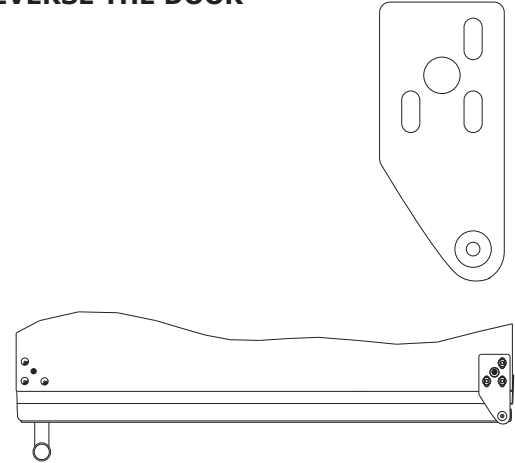
1. Gently pry off hinge cover from top of unit.
2. Loosen (do not remove) top and bottom hinge screws using a Torx T-25 screwdriver on the top and a 1/4" socket on the bottom.
3. Align door squarely with cabinet.
4. Make sure gasket is firmly in contact with cabinet all the way around the door (no gaps).
5. Tighten bottom hinge screws.
6. Tighten top hinge screws and replace hinge cover.

### REVERSING THE DOOR

Location of the unit may make it desirable to mount the door on the opposite side of the cabinet.

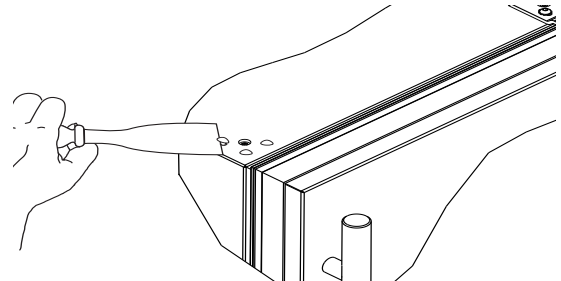
The hinge hardware will be removed and reinstalled on the opposite side of the cabinet.

### TO REVERSE THE DOOR



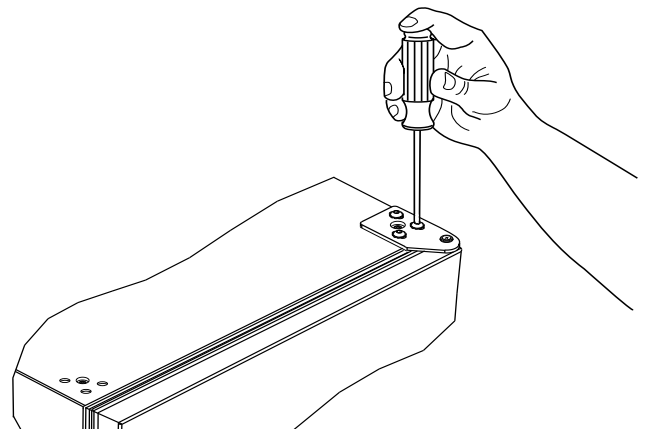
#### Remove arrow clips:

1. With a putty knife or other flat tool, gently pry each arrow clip from hinge mounting holes.
2. Set aside arrow clips to be reused on the opposite side.



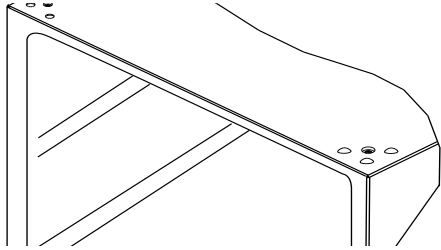
#### Remove top hinge and door:

1. Remove hinge cover from top of unit
2. Hold door to keep it from falling.
3. Remove top hinge from cabinet using a Torx T-25 screwdriver to remove three screws.



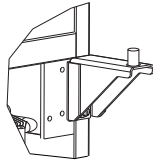
# USER GUIDE

4. Remove door by tilting forward and lifting door off bottom hinge. Retain shoulder washers; they will be reused.
5. Insert arrow clips into holes



## Remove bottom hinge:

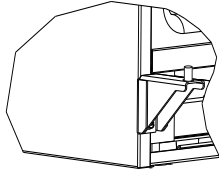
1. Remove bottom hinge from cabinet using a 1/4" socket.



2. Remove corresponding screws on opposite side of cabinet. On some models there may be a nut behind one or both screws on either side.

## Install bottom hinge:

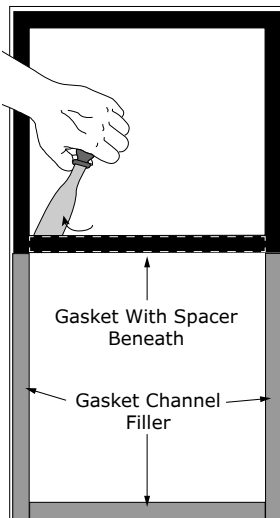
Install two or three screws, depending on model. Replace nuts if used.



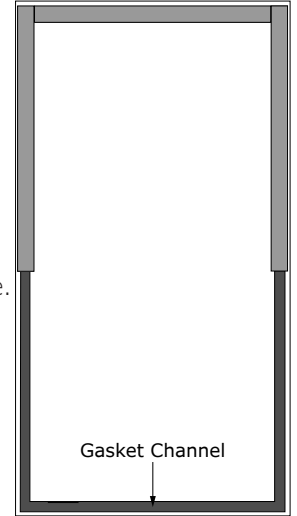
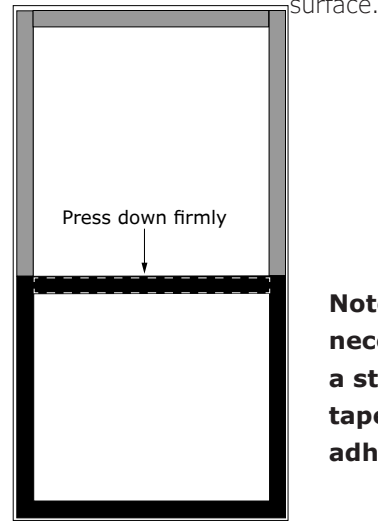
## PREPARE DOOR FOR REINSTALLATION

### Rotate gasket

1. With a flat tool, such as a putty knife, gently pry up beneath the gasket and spacer until completely free from the door surface.
2. Continue removing the gasket by grabbing hold and gently pulling outward, exposing the gasket channel.
3. Remove the 3 pieces of gasket channel filler and reinstall on the opposite end of door.

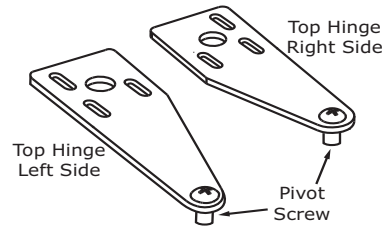


4. Install gasket into channel, beginning at one corner and pressing in firmly.
5. Press down on middle horizontal portion of gasket until it adheres to the door surface.

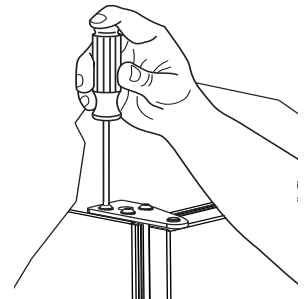


**Note: It may be necessary to apply a strip of two-sided tape for a firm adhesion.**

## Install top hinge and door:



1. Remove pivot screw from hinge, flip hinge over, and install the pivot screw in the same hole from the opposite surface.
2. Lift the door onto the bottom hinge.
3. Align edge of the hinge with the outer edge of the unit.
4. Tighten three screws and replace hinge cover.
5. Replace hinge cover.



## Align and adjust the door:



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

## First Use

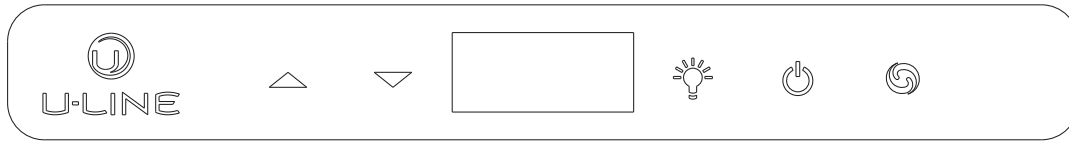
Initial startup requires no adjustments. See CONTROL OPERATION section for more details.

### **NOTICE**

**Discard the ice produced during the first two or 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	NOTES
ON/OFF	Press  and release	Unit will immediately turn On or OFF
Adjust ice thickness	See "Ice" section	
Enable Sabbath Mode	Press  and release	*No new ice will form. If unit is equipped with a drain pump, water will continue to be removed as the ice melts.
Disable Sabbath Mode	Press  and release	Unit returns to normal operation
Silent Mode (ice production suspended for 3 hours)	Hold  and	Display will countdown the hours: 3H, 2H, 1H
Clean Mode	See "Cleaning" section	
Showroom Mode	Hold  and  for 10 seconds	The °F / °C symbol will flash. Display will be lit and interior light will function. Unit will not cool. Repeat command to return to normal operation

\*This unit is Star-K certified. See [www.star-k.org](http://www.star-k.org) and the Sabbath Mode section of this manual for more details.

# USER GUIDE

## Ice

### ICE CUBE THICKNESS AND ADJUSTMENT

#### NOTICE

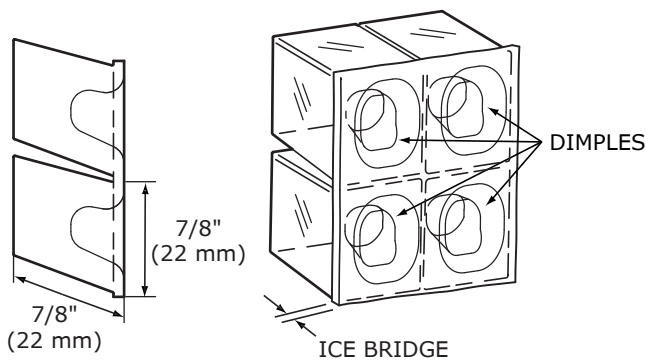
**Ice thickness adjustment should only be made one increment at a time. Allow ice maker production to stabilize for 24 hours before rechecking ice thickness.**

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.

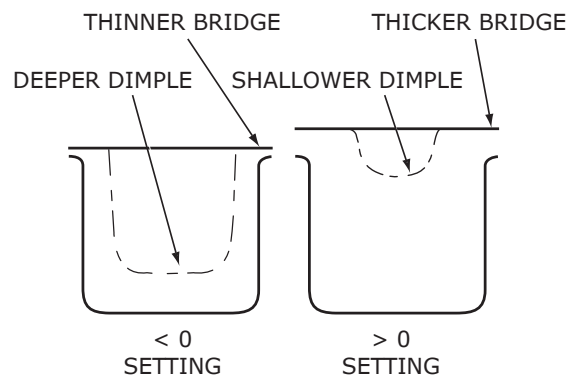
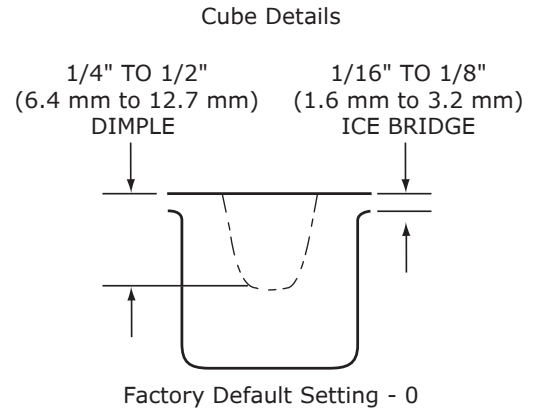
Ice cubes in any given batch will vary, so it is necessary to choose cubes from the sample area for comparison when making adjustments.

The ice cube thickness is factory set for best overall performance. The factory setting 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 becomes thicker, 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 preset to produce ice between the optimal dimensions illustrated below:



Ice thickness adjustments are made using the control panel as follows:

- To enter the thickness adjustment mode:
  - Press and hold  $\triangle$  for 5 seconds.
  - The display will switch to "0" to confirm the thickness adjustment mode has been selected.

The factory setting is "0". Use  $\triangle$  to raise the setting and thicken the ice bridge, or  $\nabla$  to lower the setting to thin the ice bridge.

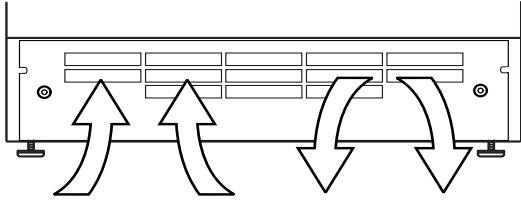
- Press  $\text{lightbulb}$  to confirm your choice.

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

## 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® 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® or Barkeepers Friend Cleanser® and a nonabrasive cloth. Always clean with the grain. Always finish with Claire® 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.**

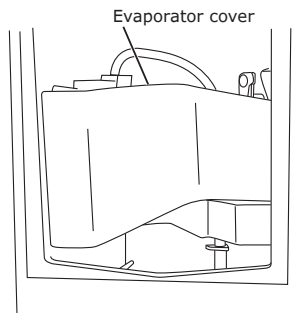
U-Line Clear Ice Machine Cleaner is used to remove lime scale and other mineral deposits. Refer to the following steps to initiate the self-cleaning cycle.



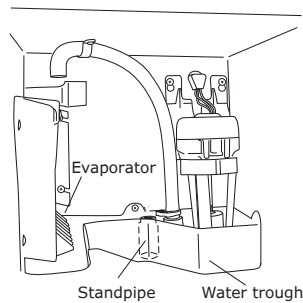
**Never use anything to force ice from the evaporator. Damage may result.**

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.

4. 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.



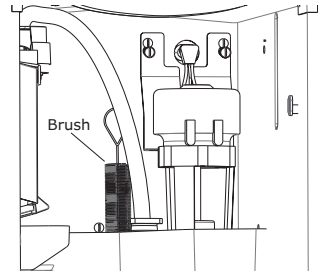
5. Re-install the standpipe into the water trough.





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 .
8. Place unit into CLEAN mode by holding  for several seconds - until you hear the cleaning mode begin.
9. 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](http://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.

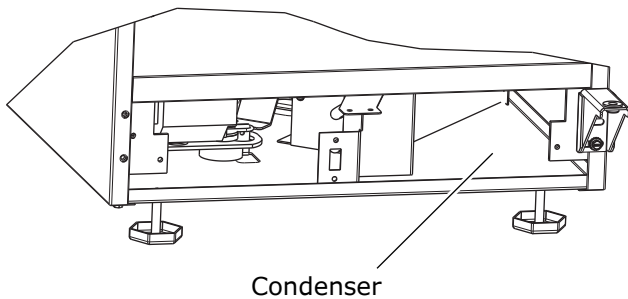


**Disconnect electric power to the unit before cleaning the condenser.**

### **NOTICE**

**DO NOT use any type of cleaner on the condenser unit. Condenser may be cleaned using a vacuum, soft brush, or compressed air.**

1. Remove the grille. See GRILLE INSTALLATION).
2. Clean the condenser coil using a soft brush or vacuum cleaner.
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.
2. 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.
7. 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 [www.U-Line.com](http://www.U-Line.com) 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 [www.U-Line.com/u-lineregistration](http://www.U-Line.com/u-lineregistration). 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



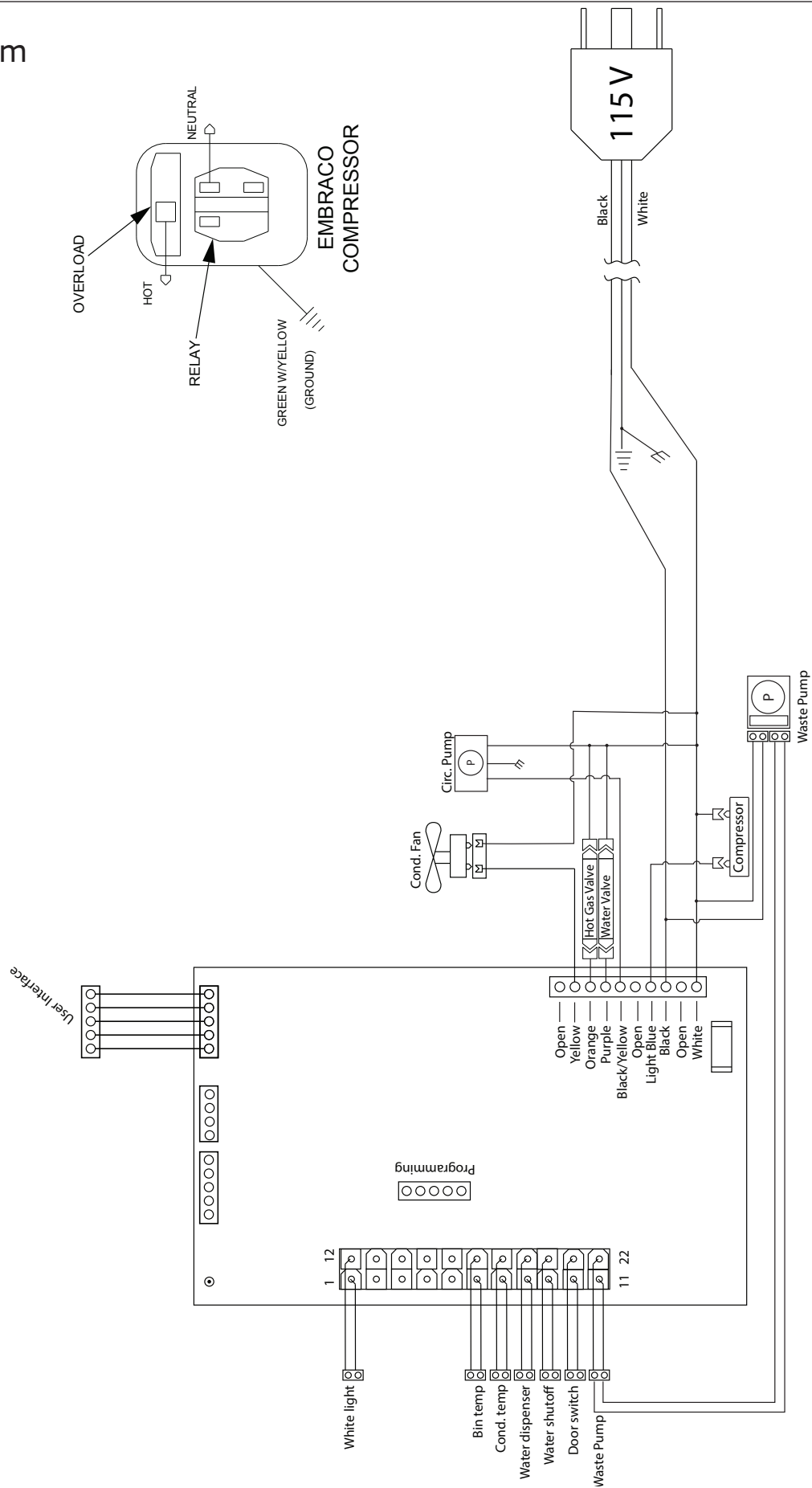
**ELECTROCUTION HAZARD. Never attempt to repair or perform maintenance on the unit before disconnecting the main electrical power.**

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.

## Wire Diagram

42375\_A



## 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

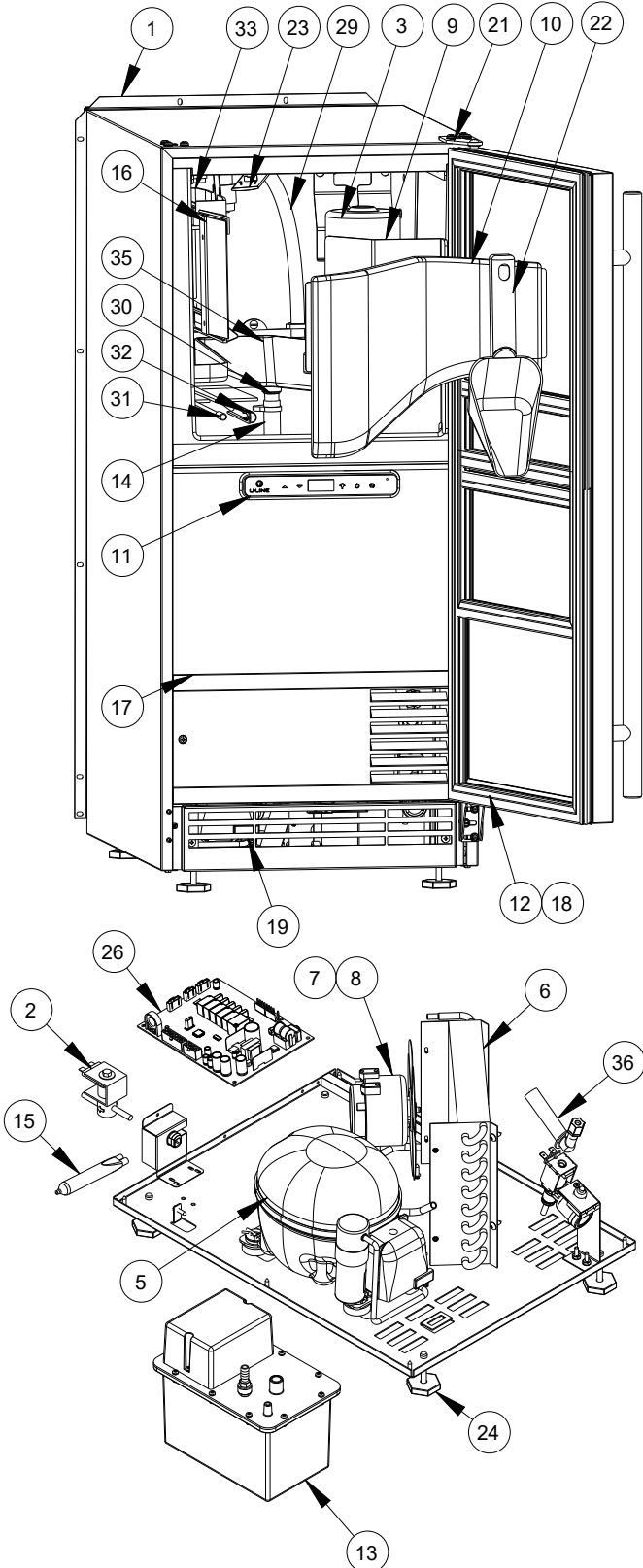
T: +1.414.354.0300 • F: +1.414.354.5696

Website: [www.u-line.com](http://www.u-line.com)

**Right product. Right place.  
Right temperature Since 1962.**

# USER GUIDE

## Parts



<b>UOCP115-SS01B</b>		
Item	Description	U-Line P/N
1	BACK PANEL	80-54863-00
2	BYPASS VALVE ASSEMBLY	80-55516-00
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, WHITE	80-54333-00
10	COVER W/HOOK WHITE	80-54332-00
11	DISPLAY MODULE	80-55214-00
12	DOOR ASSEMBLY W/HINGES	80-54351-01
13	DRAIN PUMP, ICE MACHINE	80-54147-00
14	DRAIN TUBE, CLEAR	80-54074-00
15	DRIER	80-54055-00
16	EVAPORATOR ASSEMBLY	80-54349-00
17	FRONT PANEL W/SCREWS	80-54354-00
18	GASKET, DOOR	80-54235-02
19	GRILLE ASSEMBLY, 15"	80-55609-02
20	HI TEMP THERMISTOR *	80-54070-00
21	HINGE ASSEMBLY, CHROME	80-55418-01
22	ICE SCOOP, CLR	80-54080-00
23	LED LIGHT STRIP AND COVER ASSY	80-54000-00
24	LEG LEVELERS (4)	80-54019-00
25	MAGNET W/SCREWS (2) *	80-54250-00
26	MAIN BOARD	80-55398-00
27	PACKAGING *	80-54238-00
28	POWER CORD, EXTERNAL *	80-55519-00
29	PREFORMED DISPERSION TUBE	80-54128-00
30	STAND PIPE	80-54077-00
31	THERMISTOR(1 PC)	80-54006-00
32	THERMISTOR COVER AND PIN	80-54237-00
33	WATER DISPERSION RECEPTACLE	80-54078-00
34	WATER HOOK UP KIT *	ULAWATERHOOKUP
35	WATER TROUGH, WHITE	80-54334-00
36	WATER VALVE ASSEMBLY	80-54139-00
37	WIRE HARNESS, HIGH VT *	80-55401-03
38	WIRE HARNESS, LOW VT *	80-55401-04

\* NOT PICTURED



## R-600A Specifications

For R-600a refrigerant service tips and more videos, go to: [www.u-line.com/videos](http://www.u-line.com/videos).



**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**

(R-600a has been exempted from recovery/reclaiming 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.)

# USER GUIDE

---

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.

# USER GUIDE

---

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.

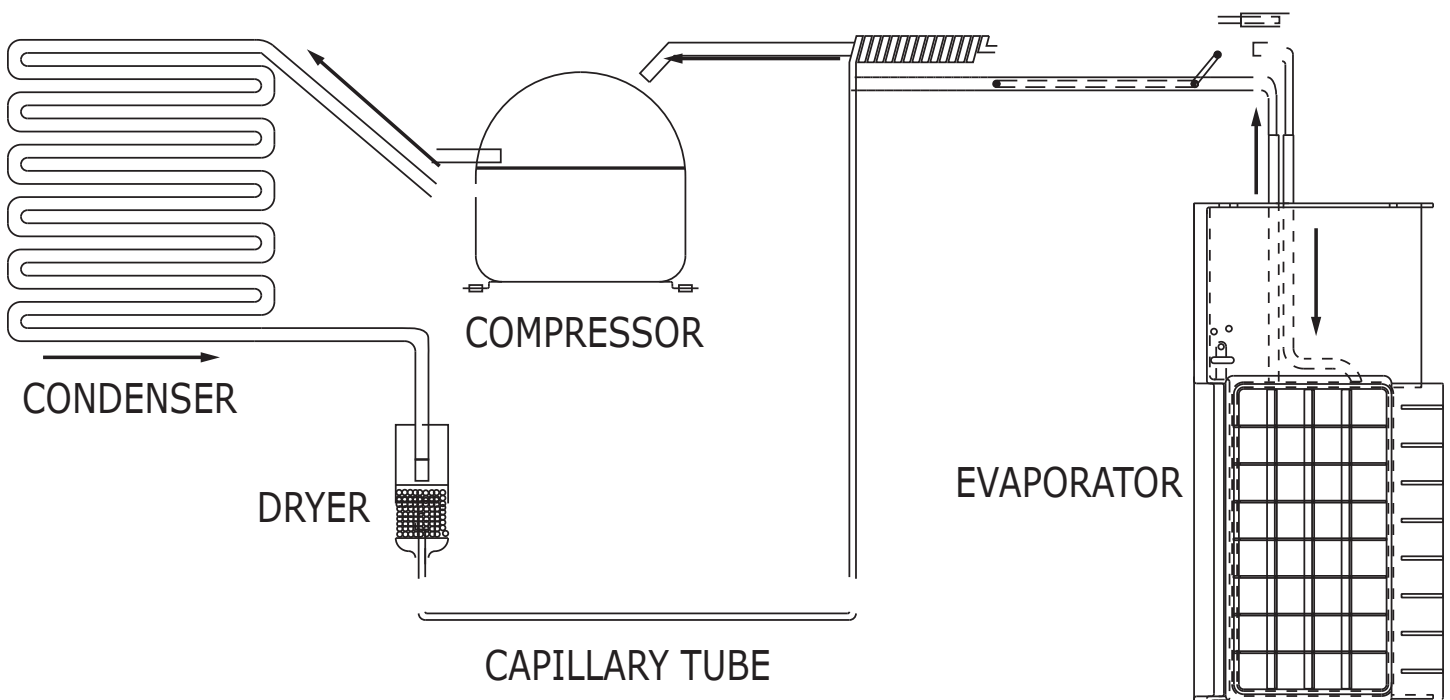
Never apply a torch to a charged R-600a refrigeration system.

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
<b>Normal</b>	Normal	Slightly below room temperature	Very hot	Very hot	Warm	Cold	Normal
<b>Overcharge</b>	Higher than normal	Very cold may frost heavily	Slightly warm to hot	Hot to warm	Cool	Cold	Higher than normal
<b>Undercharge</b>	Lower than normal	Warm-near room temperature	Hot	Warm	Warm	Extremely cold near inlet - Outlet below room temperature	Lower than normal
<b>Partial Restriction</b>	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
<b>Complete Restriction</b>	In deep vacuum	Room temperature (cool)	Room temperature (cool)	Room temperature (cool)	Room temperature (cool)	No refrigeration	Lower than normal
<b>No Gas</b>	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.**

	<b>EMX3115Y-115V</b>
REFRIGERANT	R600a
VOLTAGE	100V - 127V
FREQUENCY	50Hz
RUN CAPACITOR	17.5 $\mu$ F/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%

## Troubleshooting - Extended

### SPECIFIC ERRORS AND ISSUES


**CAUTION**

**Never attempt to repair or perform maintenance on the unit until the main electrical power has been disconnected from the unit.**

The advanced diagnostic capabilities of the electronic controls utilized on the 1, 3, and 5 Class units allow for easy and thorough troubleshooting.

Navigation of the control is the key and is explained in the CONTROL OPERATION section of the manual, along with control button layout, control function descriptions, a service mode menu and service menu selection explanations.

Verification of temperature and thermistor performance can be identified by directly viewing thermistor readings in the service mode.

Component failure issues can be identified through service mode menu #20, "Component Testing." Individual components can be switched on and off to check for both proper function of a specific component and also delivery of supply voltage to the components through the relays and DC outputs located on the relay/power board.

Included in this section are some diagnostic tips; if additional help is required, please contact the U-Line Corp., "Customer Care Facility" at +1.414.354.0300 for assistance.

### 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 sounds they make. NOTE: Your product may not contain all the components listed.

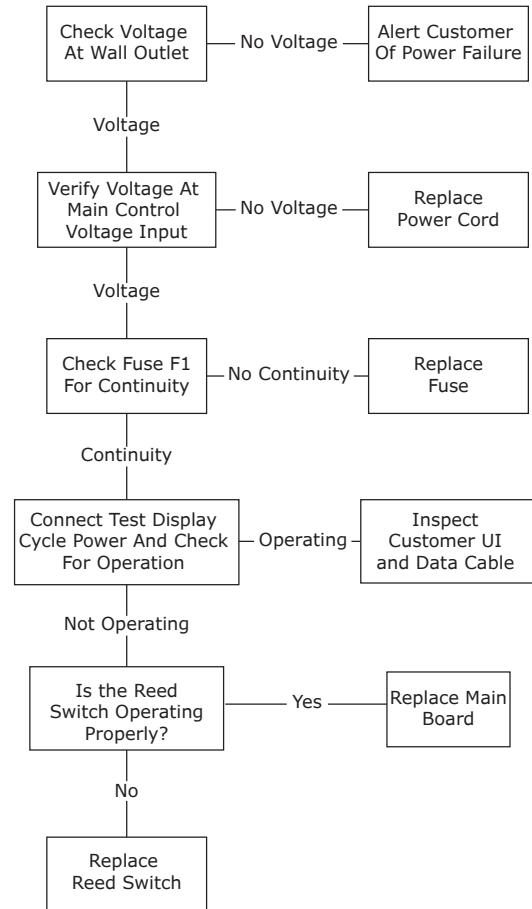
- Compressor: The compressor makes a hum or pulsing sound that may be heard when it operates.
- Evaporator: Refrigerant flowing through an evaporator may sound like boiling liquid.
- Condenser Fan: Air moving through a condenser may be heard.
- Water Valve: Running water and clicking as valve opens and closes.
- Ice Dropping: Ice falling into the bin makes a dull thud sound. The sound decreases as the bin fills with ice.
- Solenoid Valves: An occasional clicking sound may be heard as solenoid valves are operated.

## MAIN CONTROL


The main control board is very robust and is rarely the cause of system issues. It is important to fully diagnose the board for any suspected failures before attempting to remove the board for replacement or service. Follow the guidelines below to fully test and diagnose the main control.

### Power Fault

If the unit does not (or seems to not) power on, follow the flow chart below to help diagnose the issue. Before beginning it is important to first verify the unit is not simply set to sabbath mode.



## TROUBLESHOOTING GUIDE

Concern	Potential Causes	Action
No Display or Interior Lights	Unit may be in Sabbath mode	<ul style="list-style-type: none"> <li>Tap  to turn off Sabbath mode, test the door switch circuit</li> <li>Unplug unit, wait 5 seconds, plug back in. If main board does not beep, check for 120V at black and white cables on power cord.</li> </ul>
No Interior Light	Light may be set to OFF Check LED strip for power Defective door switch	Use component testing in service mode and test light circuit, manually test door switch
Condensation on exterior of unit	Is unit exposed to high humidity or high ambient temps?	Moisture will dissipate as ambient temp. and humidity levels fall. Keep exterior of unit well polished to protect surface.
No Ice Production	Is the unit getting water?	Go to component testing and turn on fill valve and verify 120V at the valve.
Low Ice Production	Dirty evaporator, dirty condenser, faulty bin thermistor	Clean the evaporator using U-Line cleaner, clean the condenser coil if needed, check bin thermistor reading in service mode.
Alert light flashing	Check error log	View errors in service mode, review error and take corrective action to resolve
Ice is too dense/ not dense enough	Dirty evaporator, water starvation	Clean the evaporator if needed, check water supply, test harvest mode, adjust ice thickness
Standing Water in Ice Bin	Drain hose is restricted, debris in bin drain hole, failed drain pump failed dump valve	Make sure drain hose run is as straight as possible. Remove any kinks or tight bends, pour 1/2 gallon of water into bin to test drain.



## Relay & DC Outputs

One of the primary functions of the main control is to operate the multiple relay and DC outputs during each cycle. Verify proper operation of these relays using the following procedure.

1. Enter "Relay Toggle" through the service menu.

### NOTICE

**Frequently toggling the compressor relay could force the compressor into overload. The compressor will automatically deactivate during an overload and will remain deactivated until the overload switch cools. This could take some time. It is important to allow the compressor at least 5 minutes off time between relay cycles.**

2. Toggle the relay (refer to Control Operation for a complete list of relays). Its related component should activate / deactivate with the switching of the relay; if it does not, test component.

## Other Suspected Main Control Faults

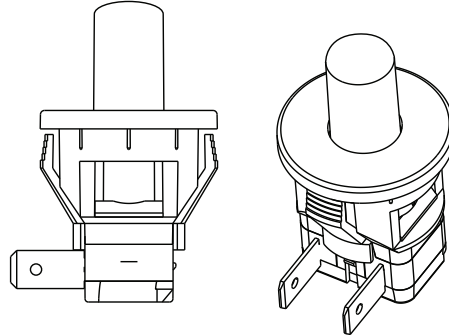
If other components have been ruled out as being faulty, but the unit continues to have operating issues, it is most likely due to a configuration error. Some configuration errors can be cleared by restoring the unit to its factory default setting. Factory defaults may be restored through the service menu. If that does not work, check that the board is programmed to the correct model in the service menu.

### CAUTION

**Precautions must be taken while working with live electrical equipment. Be sure to follow proper safety procedures while performing tests on live systems.**

## PLUNGER SWITCH

A plunger switch is used to monitor door state. When the door is closed it comes into contact with the plunger which closes a circuit which turns the light and display off. When the door is open the plunger moves outward and opens the circuit. If the door is left open for longer than 5 minutes the switch will trigger an error code and set an audible warning.



## ERROR CODES

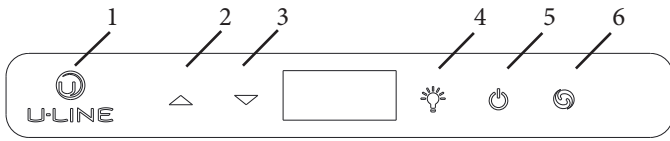
\*All errors are logged in memory.

\*Only door error is displayed on the display and has an audible signal.

- E1: Thermistor 1 open.
- E2: Thermistor 2 open.
- E3: Thermistor 3 open.
- E4: Thermistor 4 open.
- E5: Thermistor 1 shorted.
- E6: Thermistor 2 shorted.
- E7: Thermistor 3 shorted.
- E8: Thermistor 4 shorted.
- E9: Door 1 open error.
- E10: (displayed as 10): Door 2 open
- E11: (displayed as 11): Water level (tray or reservoir) high.
- E12: (displayed as 12): Water level low.
- E13: Auger error
- P1: Pump circuit open


## Control Operation-Service

### UI BUTTON LAYOUT



1. **Hidden Button**  
 -Access Service Menu  
 -No LED directly above. All LEDs turn on with button
2. **Up Button**  
 -Increases temperature  
 -Navigates through service menu
3. **Down Button**  
 -Decreases temperature  
 -Navigates through service menu
4. **Light Button**  
 -Activates light for 3 hours on select models  
 -Used to select items in service menu
5. **Power Button**  
 -Turns unit off/on
6. **Clean Button**  
 -Activates Clean Cycle on select models  
 -Toggles between zones in Dual-Zone models

### CONTROL FUNCTION GUIDE

FUNCTION	COMMAND	DISPLAY/OPTIONS
ON/OFF	Press  and release	Unit will immediately turn ON or OFF
Sabbath Mode	See "Sabbath Mode" section	

### SHOWROOM MODE

This mode is designed to show units in a display environment. When in this mode the only functions will be the control and cabinet lights. The compressor, fans, etc. will not operate. To enter/exit this mode hold the light key and the power key for 5 seconds. The display will flash once and beep and the degree symbol will begin to flash. When the degree symbol is flashing the unit will allow the use of the control for demonstrations. The unit can be left in this mode indefinitely.

### SERVICE MODE

This mode has options available for service diagnostics. To enter the mode hold the hidden key for 10 seconds. The display will show "0." When in this mode use the up and down arrows to select the desired option. The LIGHT key is the ENTER key and will initiate the function. If changing a setting, you must press the LIGHT key again to retain the changed setting. To exit the service mode scroll to option "0" and press the LIGHT key. After five minutes of not touching any keys the mode will also exit automatically.

## SERVICE MODE GUIDE

(For adjustments, see Service Mode Guide)

0. Exit
1. Thermistor 1 temperature not including offsets.
2. Thermistor 2 temperature not including offsets.
3. Thermistor 3 temperature not including offsets.
4. Thermistor 4 temperature not including offsets.
5. Thermistor 1 offset. (+/- 10)
6. Thermistor 2 offset. (+/- 10)
7. Thermistor 3 offset. (+/- 10)
8. Thermistor 4 offset. (+/- 10)
9. Thermistor 2 set point
10. Thermistor 3 set point.
11. Thermistor 4 set point.
12. Defrost Interval (0 to 99 hr)
13. Defrost duration (0 to 99 min)
14. Error Log (See Appendix)
15. Clear error log (hold light key until cleared)
16. Thermistor 1 differential (+5)
17. Thermistor 3 differential (+5)
18. Evaporator fan on delay (0 to 99 sec)
19. Evaporator fan off delay (0 to 99 sec)
20. Individual component toggle
  - Option #0 - Exit
  - Option #1 - Relay 1
  - Option #2 - Relay 2
  - Option #3 - Relay 3
  - Option #4 - Relay 4
  - Option #5 - Relay 5
  - Option #6 - Relay 6
  - Option #7 - DC Output 1
  - Option #8 - DC Output 2
  - Option #9 - DC Output 3
  - Option #10 - DC Output 4
  - Option #11 - DC Output 5
  - Option #12 - Serial output (Compressor)
21. Model number
22. Light All Segments
23. Activate Defrost/Harvest- press and hold for 3 seconds to activate defrost/harvest
24. Defaults- press and hold for 3 seconds to restore all values to factory defaults.
25. Main Software (Display only)
26. Live Log Period (frequency that data is output to diagnostics port)
27. Factory test mode (0=Off, 1=On)
28. Compressor RPM
29. Freeze time adjust (Model 54 only)
30. Harvest time adjust (Model 54 only)
31. Low temp alarm limit (Model 55 only)
32. High temp alarm limit (Model 55 only)

## APPENDIX

### SERVICE MODE GUIDE

1. **THERMISTOR 1**

This shows the pure thermistor reading with no offsets taken into account.
2. **THERMISTOR 2**

This shows the pure thermistor reading with no offsets taken into account.
3. Does not apply to this model.
4. Does not apply to this model.
5. **THERMISTOR 1 OFFSET**

(DO NOT MAKE AN ADJUSTMENT TO THIS WITHOUT CONTACTING TECH LINE: +1 414.354.0300)

This calibration is only to be used if actual temperature at thermistor #1 is off from set point.

By adjusting the offset higher we can force the unit to drive the temperature down below the set point. (example: adjusting from 0 to +2 will drop the unit temperature 2 degrees)
6. **THERMISTOR 2 OFFSET**

(DO NOT MAKE AN ADJUSTMENT TO THIS WITHOUT CONTACTING TECH LINE: +1 414.354.0300)
7. Does not apply to this model.
8. Does not apply to this model.
9. Does not apply to this model.

This shows the thermistor reading with offsets taken into account.
10. Does not apply to this model.
11. Does not apply to this model.
12. Does not apply to this model.
13. Does not apply to this model.
14. **VIEW ERROR LOG**

A list of errors in the order they occurred will scroll on the display. All errors are logged in memory. Only door error is displayed on the display and has an audible signal.

**E0:** Door 1 open.  
**E1:** Thermistor 1 open.  
**E2:** Thermistor 2 open.  
**E3:** Does not apply to this model.  
**E4:** Does not apply to this model.  
**E5:** Thermistor 1 shorted.  
**E6:** Thermistor 2 shorted.  
**E7:** Does not apply to this model.  
**E8:** Does not apply to this model.  
**E9:** Door open.  
**E10:** Door 2 open.

# USER GUIDE

**E11 - E13** Do not apply to this model.

**P1:** Pump Circuit open (Only if unit has drain pump.)

15: **CLEAR ERROR LOG**

To clear errors, press and hold (5 seconds) when CLR is flashing.

16: **THERMISTOR - 1 DIFFERENTIAL**

This number should not be adjusted.

17. Does not apply to this model.

18. **THIS NUMBER SHOULD NOT BE ADJUSTED**

19. **THIS NUMBER SHOULD NOT BE ADJUSTED**

20. **INDIVIDUAL COMPONENT TOGGLE**  
SEE RELAY / OUTPUT CHART

21. **MODEL NUMBER INDICATOR**

Displays the two-digit model number of the specific unit. See Model list table.

22. **LIGHT ALL LED SEGMENTS**

This will illuminate all the LEDs on the display to ensure they work properly

23. **ACTIVATE DEFROST /HARVEST**

-Press and hold for 3 seconds to activate

24. **FACTORY DEFAULTS**

-Press and hold for 3 seconds to restore all values to factory defaults

25. **MAIN SOFTWARE**

26. Does not apply to this model

27. **FACTORY TEST MODEL - DO NOT USE**



28. **COMPRESSOR RPM**

29. - 32. Do not apply to this model.

## MODEL LIST

Model #	
11	U-CLR1215, UHCL, UHCP - ALL CLEAR ICE MODELS 2020 AND NEWER
79	UHCP115-**81A BRIGHT SHIELD CLEAR ICE MODELS

## PROGRAMMING THE UNIT TO CORRECT MODEL NUMBER

1. Disconnect the unit from power source.
2. Push and hold the U-Line button. 
3. While still holding the U-Line button, plug the unit into the appropriate power source.
4. When the flashing digits appear (3-5 seconds), use the up and down arrow buttons to select the appropriate model number from the chart below. or
5. Press the light bulb button once. 
6. The display will blink, and then will appear as the programmed display.

Display #	Relay / Output
Option #0	Exit
Option #1	Relay 1
Option #2	Relay 2
Option #3	Relay 3
Option #4	Relay 4
Option #5	Relay 5
Option #6	Relay 6
Option #7	DC Output 1
Option #8	DC Output 2
Option #9	DC Output 3
Option #10	DC Output 4
Option #11	DC Output 5
Option #12	Serial output (Compressor)

## Relay / Output Chart

<b>Relay 1</b>	Compressor
<b>Relay 2</b>	-
<b>Relay 3</b>	Circulation Pump
<b>Relay 4</b>	Water Inlet
<b>Relay 5</b>	Hot Gas Valve
<b>Relay 6</b>	Cond Fan
<b>DC1</b>	Light 1
<b>DC2</b>	Light 2
<b>DC3</b>	-
<b>DC4</b>	-
<b>DC5</b>	Cond Fan

## Thermistors

Thermistors are used for various temperature readings. Thermistors provide reliable temperature readings using a resistance which varies based on surrounding temperatures. If a faulty thermistor is suspected it may be tested using an accurate ohmmeter.

Both thermistors in the unit are identical. If a thermistor is suspected of being defective, the resistance can be verified. Place the thermistor in an ice water bath, the resistance should read 16.1k Ohms +/-5% on your meter.

Thermistor connections must be kept clean. A thermistor connection that has become corroded can cause resistance values from the thermistor to change as they pass through a dirty connection to the board.

It is for that reason that we apply dielectric grease to all of our thermistor connections. Dielectric grease will help to keep thermistor connections clean and dry.

If you change a thermistor in the unit please re-apply dielectric grease to the connection. If you encounter a dirty thermistor connection, you should replace the thermistor and the thermistor harness.

Thermistor error information can be found in the Control Operations - Service section.

This unit has **one** thermistor.

### Thermistor one (Zone):

Located along the right hand side wall. It is used to maintain the operating temperature within that zone.

## THERMISTOR FAILURE

### Zone Thermistor

If the zone thermistor in the unit fails, the unit will continue to cool in a backup mode (Self Preservation Mode) to preserve the integrity of the contents. The unit will otherwise operate normally.

Thermistor Resistance Data

Temp (F)	Temp (C)	Nominal Resistance (OHMS)*
-40	-40	169157
-31	-35	121795
-22	-30	88766
-13	-25	65333
-4	-20	48614
5	-15	36503
14	-10	27681
23	-5	21166
32	0	16330
41	5	12696
50	10	9951
59	15	7855
68	20	6246
77	25	5000
86	30	4029
95	35	3266
104	40	2665
113	45	2186
122	50	1803
131	55	1495
140	60	1247
149	65	1044
158	70	879
167	75	743
176	80	631

\* (+/- 5%)

# 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](http://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](http://u-line.com) • [onlineservice@u-line.com](mailto:onlineservice@u-line.com) • +1.414.354.0300