USER GUIDE & SERVICE MANUAL

SAFETY • INSTALLATION & INTEGRATION • OPERATING INSTRUCTIONS • MAINTENANCE • SERVICE

U-LINE

RIGHT PRODUCT. RIGHT PLACE. RIGHT TEMPERATURE. SINCE 1962.

1000 Series • CLR1215 • 15" Clear Ice Maker

USER GUIDE

U-LINE
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Tip: Click on any section below to jump directly there

Contents

WELCOME TO U-LINE

Congratulations on your U-Line purchase. Your product comes from a company with over five decades of premium modular ice making, refrigeration, and wine preservation experience. U-Line continues to be the American leader, delivering versatility and flexibility for multiple applications including residential, light commercial, outdoor and marine use. U-Line's complete product collection includes Wine Captain® Models, Beverage Centers, Clear Ice Machines, Crescent Ice Makers, Glass & Solid Door Refrigerators, Drawer Models, Freezers, Combo® Models, and more.

U-Line has captivated those with an appreciation for the finer things with exceptional functionality, style, inspired innovations and attention to even the smallest details. We are known and respected for our unwavering dedication to product design, quality and selection. U-Line is headquartered in Milwaukee, Wisconsin and has shipped product to five continents for over two decades and is proud to have the opportunity to ship to you.

PRODUCT INFORMATION

Looking for additional information on your product? User Guides, Spec Sheets, CAD Drawings, Compliance Documentation, and Product Warranty information are all available for reference and download at 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 +1.800.779.2547.
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
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Milwaukee, Wisconsin 53223 USA
Monday - Friday 8:00 am to 4:30 pm CST
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Parts Email: onlineparts@u-line.com

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Designed, engineered and assembled in WI, USA

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.

Disposal and Recycling

⚠ **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.

⚠️ **CAUTION**

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

Electrical

<div style="background:#E8751A; display:inline-block; padding:6px 20px;">⚠ **WARNING**</div>

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 DIMENSIONS for recommended receptacle location.
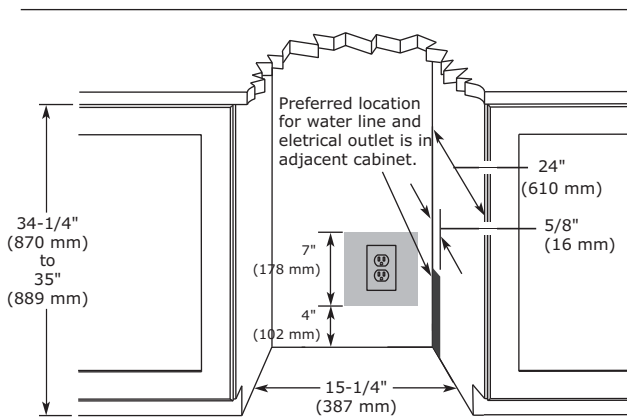
Cutout Dimensions

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.
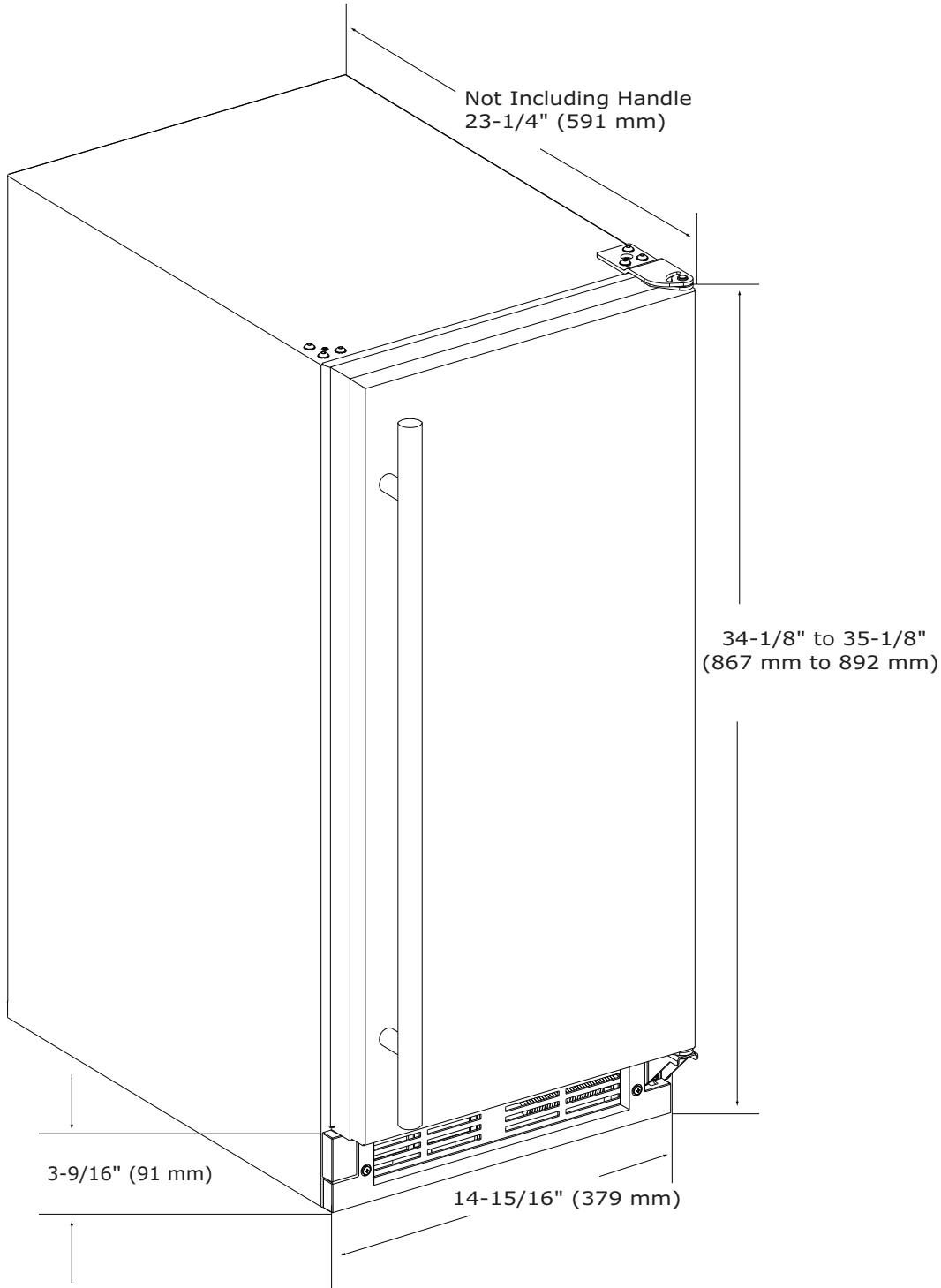
⚠ **CAUTION**

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

Preferred location for water line and eletrical outlet is in adjacent cabinet.

34-1/4"
(870 mm)
to
35"
(889 mm)

24"
(610 mm)

5/8"
(16 mm)

7"
(178 mm)

4"
(102 mm)

15-1/4"
(387 mm)

Product Dimensions

Not Including Handle
23-1/4" (591 mm)

34-1/8" to 35-1/8"
(867 mm to 892 mm)

3-9/16" (91 mm)

14-15/16" (379 mm)

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.
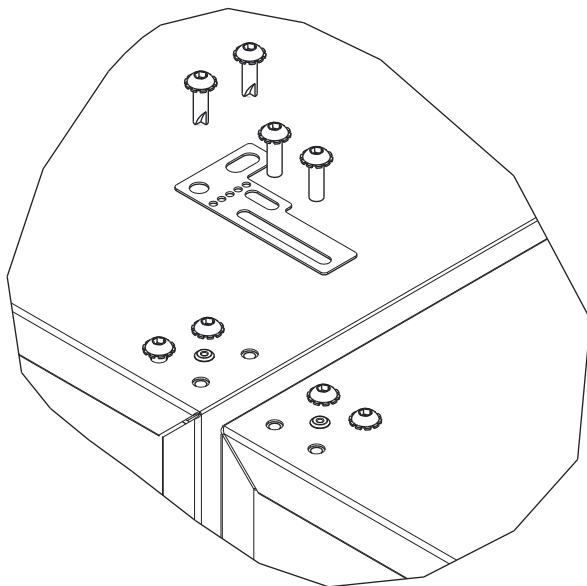
3. Place bracket over holes and attach to unit with two screws removed in step 2 using a T-25 Torx driver. Tighten screws fully.

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. A 10' (3 m) braided flexible water supply line is included with the unit.

> ⚠️ **WARNING**

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.

> ⚠️ **CAUTION**

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 shut-off valve on the supply line.

> ⚠️ **CAUTION**

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.

> ⚠️ **CAUTION**

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.

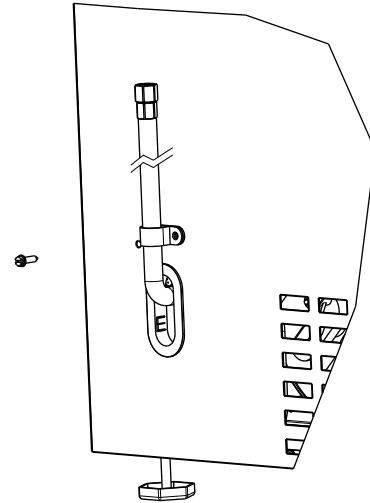3. Locate water valve in the front of the unit and thread water supply line through.
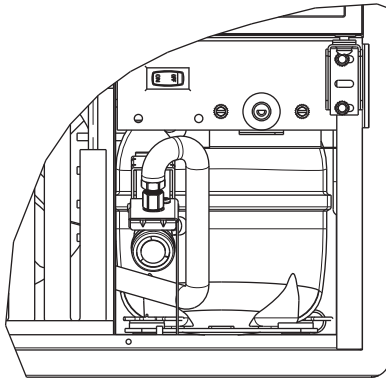
NOTICE

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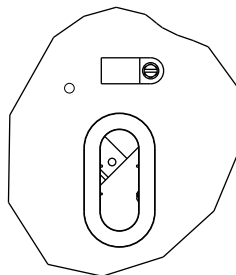
4. On the back panel, break away filler feature in bushing with flat screwdriver.

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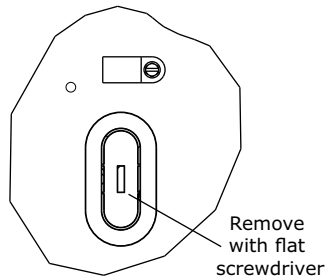
5. Thread water line through back panel hole (with bushing) and connect to cold water supply line.

6. Turn on water supply and check for leaks.

7. Reinstall back panel and grille/front access panel.

8. Install retaining clip.

Drain

Model numbers including "-00" or "-07" do not include a factory installed drain pump.

Model numbers including "-40" or "-47" include a factory installed drain pump.

DRAIN CONNECTION

> ⚠ **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.

GRAVITY DRAIN

Normal
Proper Drain

With Trap
Poor Drainage, Water Will Back Up

With Trap and Vent
Proper Drain
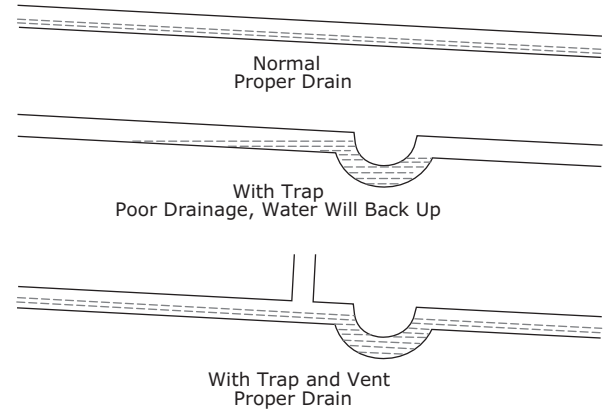
A gravity drain may be used if:

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.

> ⚠ **CAUTION**

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 pre-installed U-Line P60 drain pump.
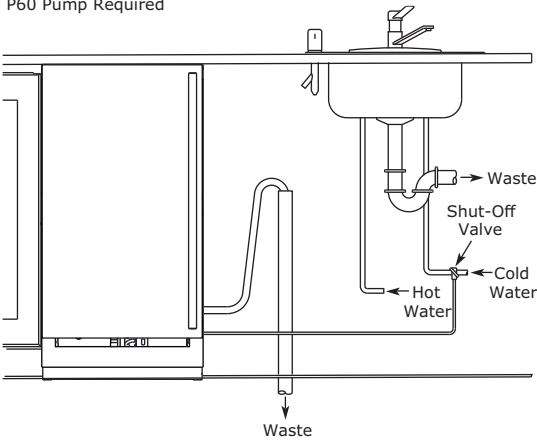
If you need to install a P60 drain pump into your unit, see DRAIN PUMP section in the User Manual.

See below for typical installations requiring a drain pump.
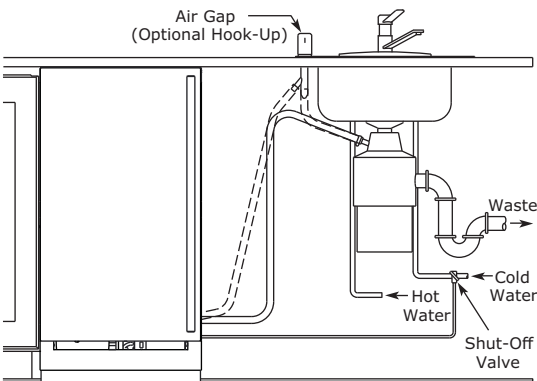
Y-Branch Tailpiece
P60 Pump Required
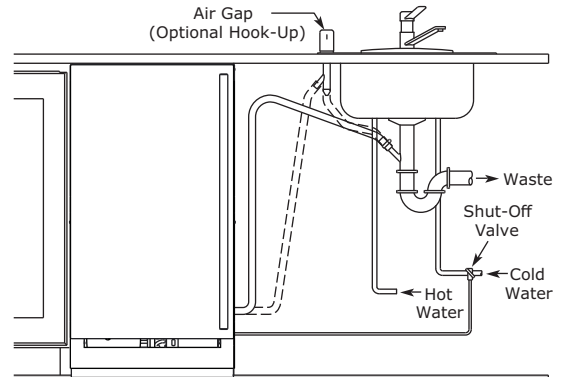
Stand Pipe
P60 Pump Required

NOTICE

The maximum lift for the P60 drain pump is 10 feet. This must be done as close to the rear of the unit as possible.

Disposal Assembly
P60 Pump Required

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 P60-00 drain pump in the U-Line Clear Ice Machine (unit). The drain pump should be installed before installing the unit.
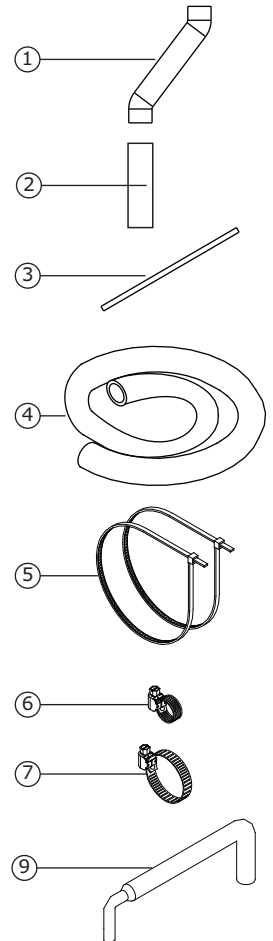
- The U-Line P60-00 drain pump is designed to be used exclusively on the U-Line Clear Ice Machine and is UL recognized only for use on the U-Line Clear Ice Machine.

- U-Line Corporation assumes no warranties or responsibility, whether express or implied, if the P60-00 drain pump is used on another ice machine or product for which it is not UL recognized or listed.

- Modification of the P60-00 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

⑧

Wiring Plug

Ground Terminal

Pump Assembly

Discharge Tube Connector
Drain Tube Connector
Vent Tube Connector
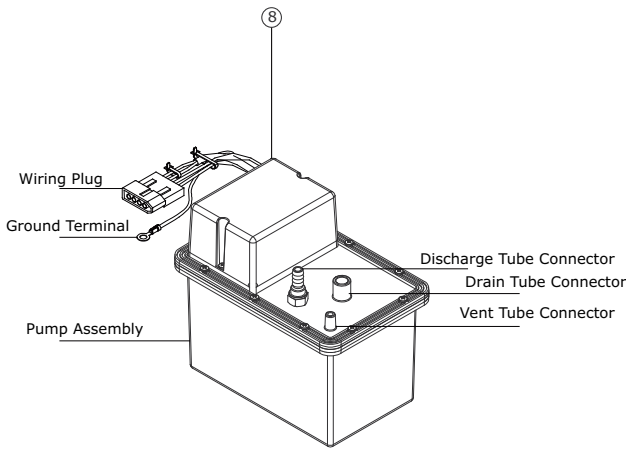
INSTALLATION PROCEDURE

⚠ **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.

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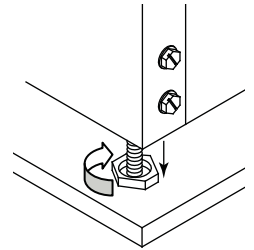
6. Install the 3 hoses and hose clamps to the pump assembly as shown below. Do not tighten clamps at this time.

Drain Tube

Vent Tube

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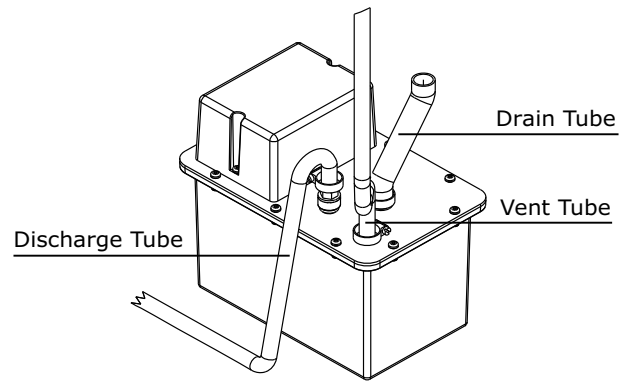
7. Remove the protective paper from the adhesive strip and carefully set pump inside of unit.

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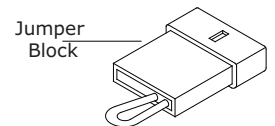
Jumper Block

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.

Pump Wiring Plug

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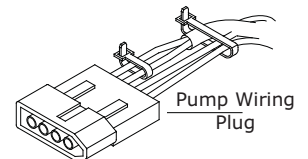
When working with tools inside of unit, be careful so as not to nick or damage any refrigerant lines/pipes or wires.

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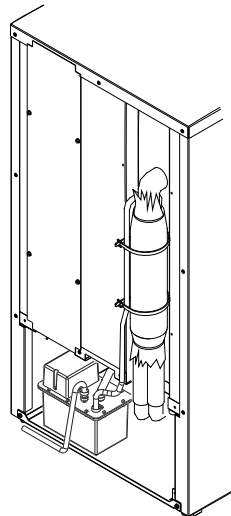
11. Connect pump drain tube to storage bin drain nipple with clamp removed from step 3. Ensure that no kinks are present in the tube.

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).

NOTE: 1224 models shown with four screw. 1215 models only have three screws, but same screws are used in both applications.
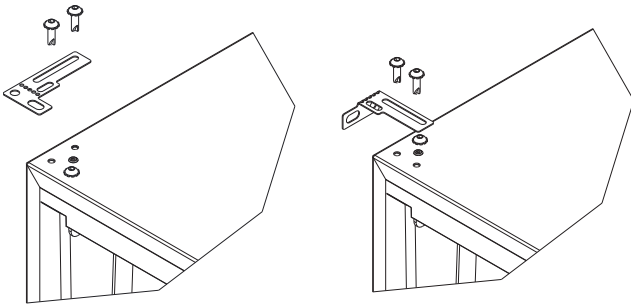
3. Place bracket (part #14154) over holes and attach to unit with two screws removed in step 2 using a T-25 Torx driver. Tighten screws fully.

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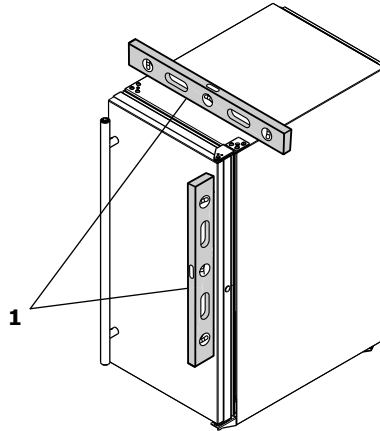
2. If the unit is not level, adjust the legs on the corners of the unit as necessary.

Turn to Adjust
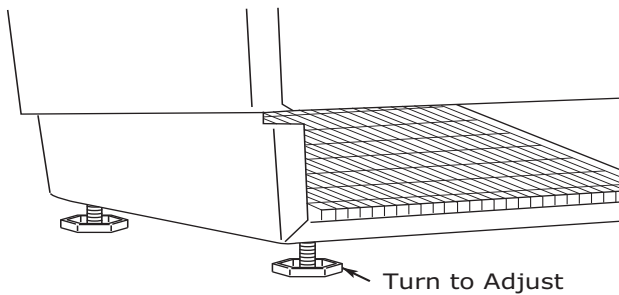
3. Confirm the unit is level after each adjustment and repeat the previous steps until the unit is level.

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 the 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.

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 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 - Plinth Installation

REMOVING AND INSTALLING GRILLE

> ⚠ **WARNING**

Disconnect electric power to the unit before removing the grille.

When using the unit, the grille (plinth strip/base fascia) must be installed.

> ⚠ **WARNING**

DO NOT touch the condenser fins (4). The condenser fins are SHARP and can be easily damaged.

Removing the grille

1. Disconnect power to the unit.

2. Loosen the two screws (1).

3. Remove grille (2) and grille cap (3) from unit.

Installing the grille

1. Make sure grille cap (3) is behind grille in slots (2) provided in grille before attaching grille to unit.

2. Align cabinet and grille holes and secure, but do not over tighten grille screws (1).

3. Reconnect power to the unit.
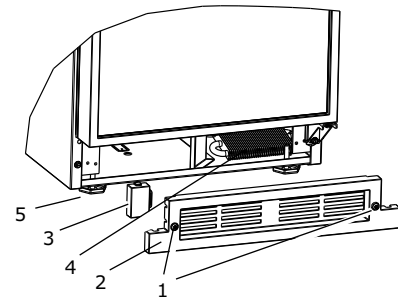
Door Swing
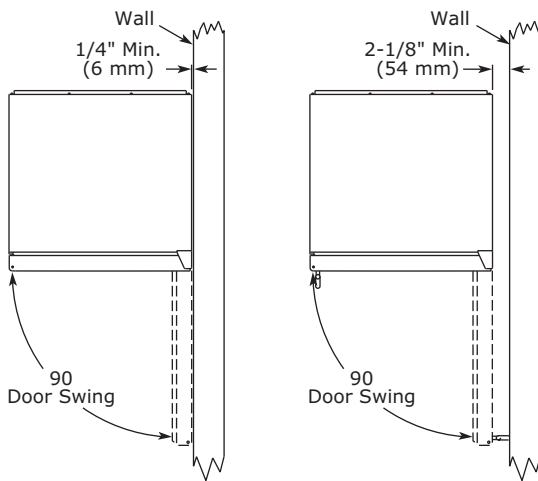
Units have a zero clearance for the door to open 90°, when installed adjacent to cabinets.

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

Integrated models require 1/4" (6 mm) clearance if installed next to a wall. Allow for additional space for any knobs or pulls installed on the integrated panel/frame.

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Door Stop

Your U-Line unit was shipped to you with the optional 90° pin(s). (Models that are 15" wide include 1 pin. Models that are 24" wide include 2 pins.) The unit's door will open freely without a fixed opening angle limitation. If you would like the door stop at 90° follow these instructions.

NOTICE

The pin is designed to stop the door at 90° under normal operating conditions. It is not designed for excessive force. Do not use the door to move the unit in/out of the cutout during installation.

If your unit is already undercounter, it might need to be moved out/forward to access the hinge.

1. Locate the threaded pin.

2. With the door between 0° (closed) and 90° and using a 3/32" hex driver, install the threaded pin through the hinge.
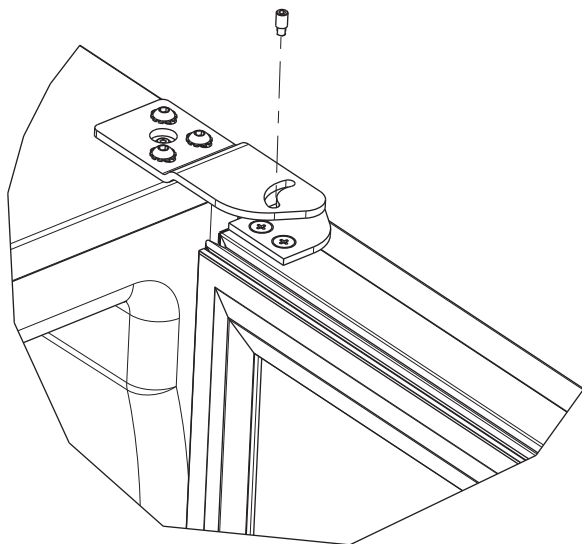
3. On 24" models, a second pin is included for the bottom hinge. Repeat steps above for second hinge.

NOTE: Threaded pin will be inserted from the bottom.
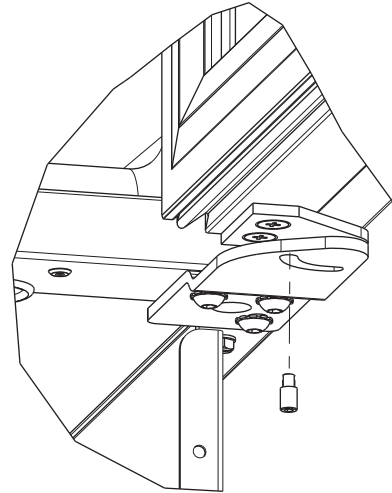
4. Carefully slide your unit back in place.

NOTICE

The pin can be removed to return the door swing back to its original state by unscrewing the threaded pin.

USER GUIDE

Door Adjustments

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. Loosen (do not remove) top and bottom hinge screws.

2. Align door squarely with cabinet.

3. Make sure gasket is firmly in contact with cabinet all the way around the door (no gaps).

4. Tighten bottom hinge screws.

5. Tighten top hinge screws.

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.
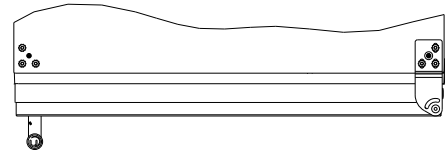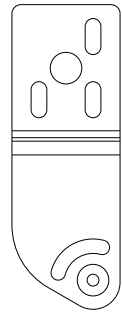
TO REVERSE THE DOOR

Remove grille:

Remove the grille (see GRILLE-PLINTH INSTALLATION section of this guide).

Remove top hinge and door:

1. Hold door to keep it from falling.

2. Remove top hinge from cabinet by removing three screws. Set aside and save for possible future use.
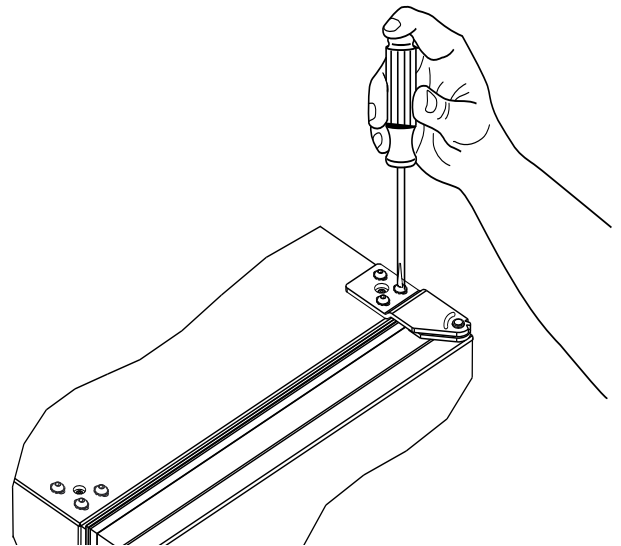
3. Remove door by tilting forward and lifting door off bottom hinge. Retain shoulder washers; they will be reused.

4. Remove three screws from hinge holes on the opposite side. Reinstall into holes where the hinge was removed. Take care not to scratch cabinet.

Remove bottom hinge:

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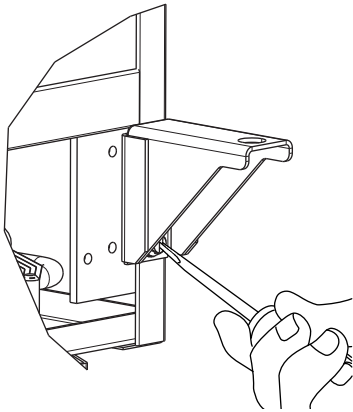
2. Remove corresponding screws on opposite side of cabinet. On some models there may be a nut behind one or both screws on either side.

Install bottom hinge:

Install two or three screws, depending on model. Replace nuts if used.
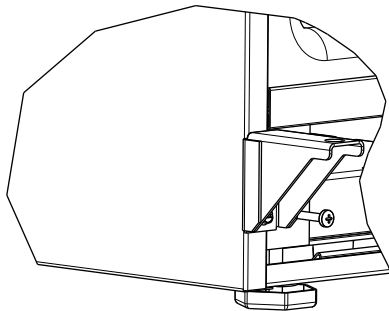
Prepare door for reinstallation:

1. Remove gasket. This will reveal mounting holes for the magnet assembly

2. Remove magnet assembly from door with T-10 TORX driver. Be sure to only remove the two screws holding the assembly to the door. Reinstall on the opposite end of the door

3. Rotate gasket 180°, aligning notch with magnet assembly and pressing firmly into the gasket channel starting at the corners.

4. Rotate door 180° to reverse.

Install top hinge and door:

1. Use alternate hinge supplied with unit and reinstall the screws. Do not tighten..
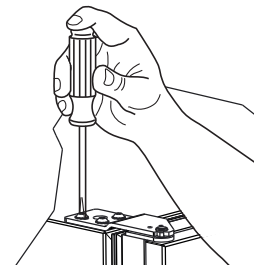
2. Lift the door on to the bottom hinge.

3. Align flat edge of the hinge with the outer edge of the unit.

4. Tighten three screws.

Align and adjust the door:

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

Install grille:

Install the grille.

First Use

All U-Line controls are preset at the factory. Initial startup requires no adjustments.

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 hold for 5 seconds and release.

Control Operation

Up   Down   Light Power Clean LED

CONTROL FUNCTION GUIDE

FUNCTION	COMMAND	DISPLAY/OPTIONS
ON/OFF	Press ⏻ and release	Unit will immediately turn ON or OFF.
Adjust ice thickness	See "Ice" section	
Sabbath Mode	See "Sabbath Mode" section	
Silent Mode (ice production suspended for 3 hours)	Hold ▽ and ⏻	Display will show "**3H**".
Clean Mode	See "Cleaning" section	

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 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).

7/8"
(22 mm)

7/8"
(22 mm)

DIMPLES

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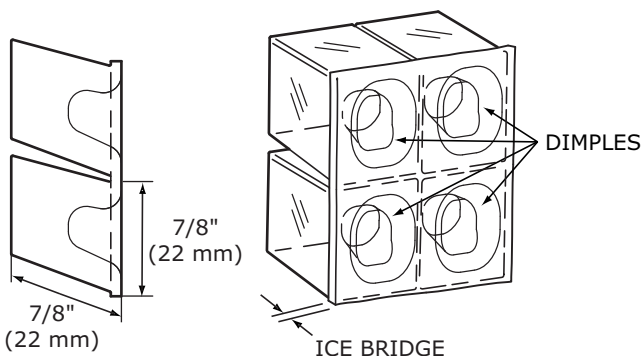
Your clear ice machine is pre-set to produce ice between the optimal dimensions illustrated below:

Cube Details

1/4" TO 1/2"
(6.4 mm to 12.7 mm)
DIMPLE

1/16" TO 1/8"
(1.6 mm to 3.2 mm)
ICE BRIDGE

Factory Default Setting - 0

THINNER BRIDGE

THICKER BRIDGE

DEEPER DIMPLE   SHALLOWER DIMPLE

< 0
SETTING

> 0
SETTING
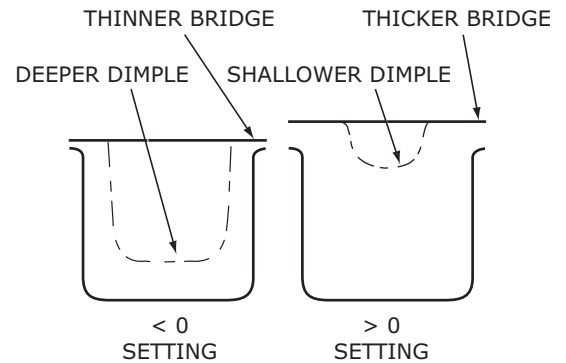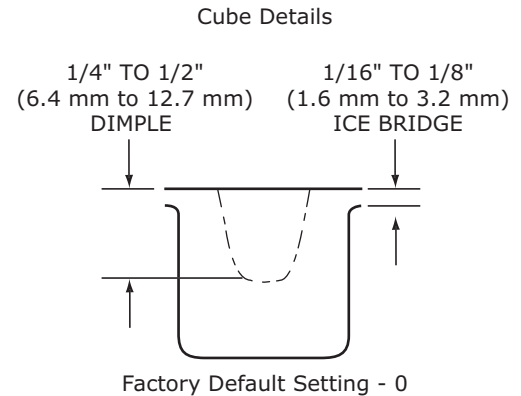
Ice thickness adjustments are made using the control panel as follows:

1. To enter the thickness adjustment mode:

    - Press and hold ⌃ for 5 seconds.

    - The display will switch to "0" to confirm the thickness adjustment mode has been selected.

The factory setting is "0". Use ⌃ to raise the setting and thicken the ice bridge, or ⌄ to lower the setting to thin the ice bridge.

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

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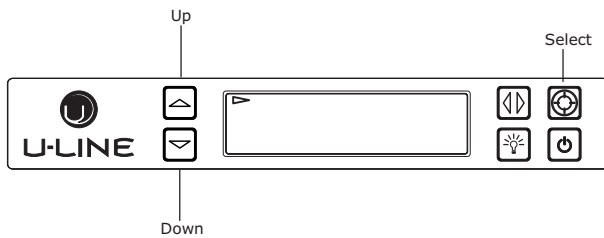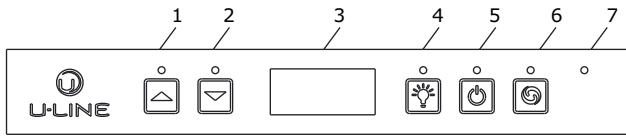
U-Line Clear Ice Machine models are Star-K certified and can be used during the Sabbath. View a full list of Star-K certified U-Line units at www.star-k.org.

To prepare the unit for the Sabbath:

1. Press ⏻ and hold the 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 ⏻ is pressed again and the unit turns on.

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.
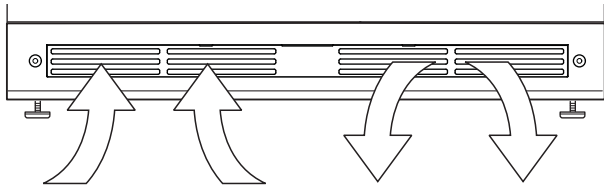
Cleaning

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 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.

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 water 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.

> ⚠️ **CAUTION**

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

NOTICE

Use only U-Line Ice Machine Cleaner (Part No. 37050, available from your dealer or direct from your local parts distributor. To locate a parts distributor near you, visit www.u-line.com. 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 Ice Machine Cleaner is used to remove lime scale and other mineral deposits. Refer to the following steps to initiate the self-cleaning cycle.

⚠ **CAUTION**

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

Evaporator cover

1. Turn the ice machine off and allow any ice to melt off of the evaporator.
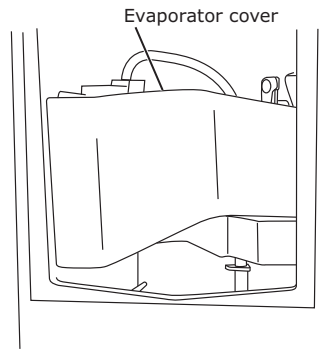
2. Remove all ice from the storage bin.

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.

Evaporator
Standpipe   Water trough
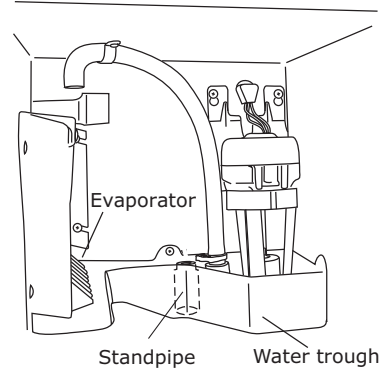
6. Clean the Interior Bin as follows:

- Dilute one packet of CLR 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.

Brush
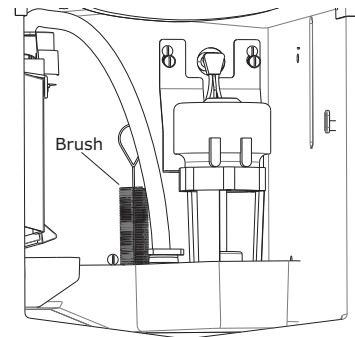
7. Turn unit on by pressing ⏻.

8. Place the unit into CLEAN mode by holding ⟳ for 5 seconds.

9. When water begins flowing over the evaporator (approximately 3 minutes), pour 1 packet of CLR 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.

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-PLINTH INSTALLATION).

2. Clean the condenser coil using a soft brush or vacuum cleaner.

3. Install the grille.

Condenser
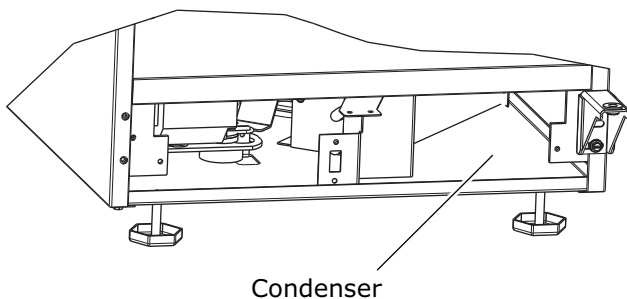
Extended Non-Use

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, P60 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 +1.800.779.2547.

⚠ **CAUTION**

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 SERVICE IS REQUIRED

If you do not understand a troubleshooting remedy, or your product needs service, contact U-Line Corporation directly at +1.800.779.2547.

When you call, you will need your product Model and Serial Numbers. This information appears on the Model and Serial number plate located on the upper right or rear wall of the interior of your product.

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 over 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 10E or ER, 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.

U-Line Corporation (U-Line) Limited Warranty

One Year Limited Warranty

For one year from the date of original purchase, this U-Line product 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 U-Line factory authorized service, unless otherwise specified by U-Line. Service provided during normal business hours.

Available Second Year Limited Warranty

Beyond the standard one year warranty outlined above, U-Line offers an extension of the one year warranty coverage for an additional second year from the date of purchase, free of charge. To take advantage of this second year warranty, you must register your product with U-Line within two months from the date of purchase at u-line.com providing proof of purchase.

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 U-Line factory authorized service, 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 the U-Line 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 year 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.
- 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. 55th Street, Milwaukee, WI 53223 • u-line.com • onlineservice@u-line.com • +1.800.779.2547

Wire Diagram
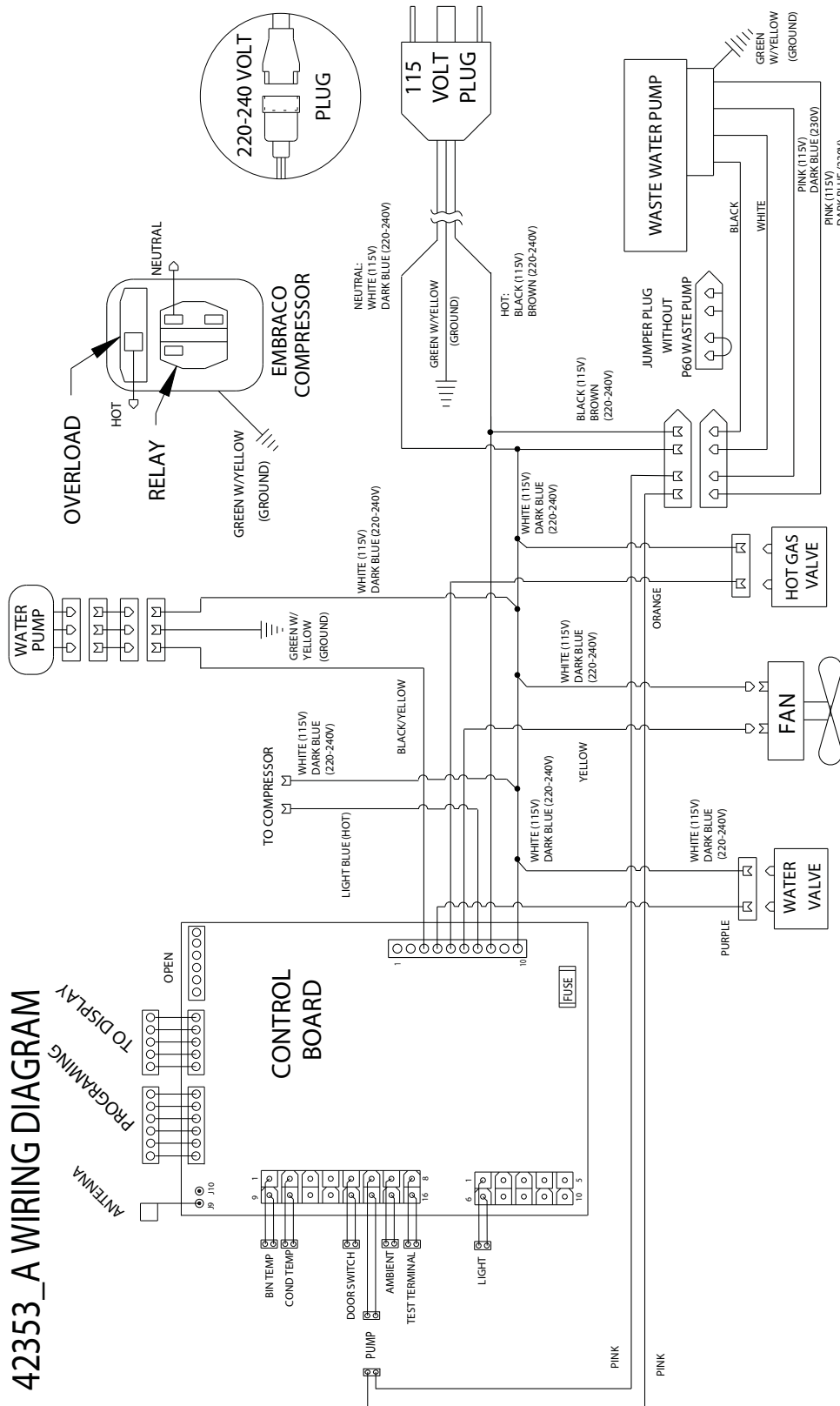
Product Liability

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 1-800-799-2547 for further direction

8900 N. 55th Street • Milwaukee, WI 53223
T: +1.414.354.0300 • F: +1.414.354.354.5696
Website: www.u-line.com

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

Warranty Claims

The following information defines the parameters for filing a warranty claim:

- Valid serial number needed

- Valid model number needed

- Narda (or equivalent) form or submitted online at www.u-line.com

- 60 day submittal deadline from date of completed service

- Only one repair or unit per warranty claim

- Refrigerant should be labeled and included on the labor submittal

- Door and water level adjustments are covered 30 days from install date.

Serial Number Requirements:

14 30911 12 XXXX

Year   Month

A typical serial number is shown above. The first two digits of the first segment, 14, represents the production year. The number between the dashes, 12, represents the production month. In most cases, warranty status can be verified by the production date information within the serial number.

- Alternatively, a Proof of Purchase (or equivalent) may submitted with the warranty claim to document

warranty status. We also accept the following information to verify warranty status:

- New Construction Occupancy Documents

- Closing Paperwork

- Final Billing – Remodel

Noting all of the following on the warranty claim will be considered proof of purchase, hard copy will not be required:

- Name of the selling Dealer

- Date of purchase/installation

- Order or Invoice number (if available)

- Description of document reviewed (i.e. store receipt, closing paperwork, etc)

Parts and labor claims are paid separately. Indicate part numbers and description for parts used in the warranty repair. Include the purchase invoice and name of the parts supplier used to procure the parts.

Parts
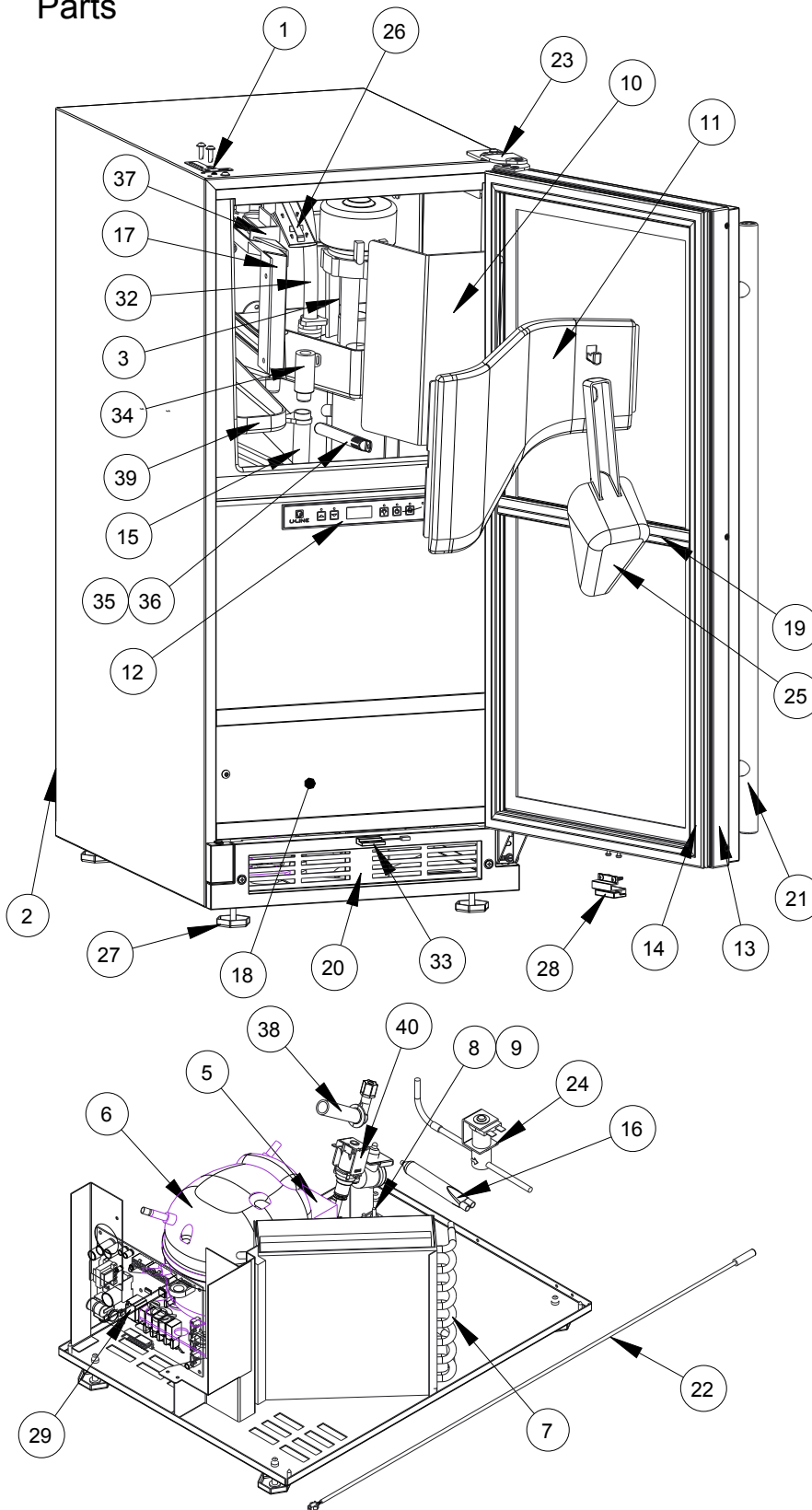
U-CLR1215S-00B		
Item	Description	U-Line P/N
1	Anti tip brackets w/screws	80-54239-00
2	Back panel	80-54335-00
3	Circulation pump	80-54137-00
4	Cleaner	80-54081-00
5	Compressor electricals only	80-54141-00
6	Compressor w/electricals	80-54140-00
7	Condenser assembly	80-54079-00
8	Condenser fan	80-54138-00
9	Condenser fan blade	80-54066-00
10	Cover pump, white	80-54333-00
11	Cover w/ hook, white	80-54332-00
12	Display module	80-54252-00
13	Door assembly w/hinges	80-54351-00
14	Gasket, door	80-54235-00
15	Drain tube, clr	80-54074-00
16	Drier	80-54055-00
17	Evaporator assembly	80-54349-00
18	Front panel w/screws	80-54344-00
19	Gasket, Horizontal	80-54339-00
20	Grille w/ screws	80-54230-00
21	Handle w/logo	80-54214-00
22	Hi temp thermistor	80-54070-00
23	Hinges (2) w/screws	80-54233-00
24	Hot gas valve and coil	80-54169-00
25	Ice scoop, clr	80-54080-00
26	LED light strip and cover assy	80-54000-00
27	Leg Levelers (4)	80-54201-00
28	Magnet w/bkt and screws (2)	80-54250-00
29	Main board (no case or wires)	80-54008-00
30	Packaging	80-54238-00
31	Power cord	80-54341-00
32	Preformed dispersion tube	80-54343-00
33	Reed switch	80-54134-00
34	Stand pipe	80-54077-00
35	Thermistor (1 pc)	80-54006-00
36	Thermistor cover and pin	80-54237-00
37	Water dispersing receptacle	80-54078-00
38	Water line assembly	80-54068-00
39	Water trough, white	80-54334-00
40	Water valve assembly	80-54139-00
41	Wire harness, board	80-54342-00

Ordering Replacement Parts

If you have a purchasing account, please utilize our service website to order parts.

Orders may also be placed by Fax or phone. See our contact information below:

www.U-LineService.com (with service login)
FAX Number: +1.414.354.5696
Phone Number: +1.800.779.2547

NOTICE
Use only genuine U-Line replacement parts. The use of non-U-Line parts can reduce speed of ice production, cause water to overflow from ice maker mold, damage the unit, and void the warranty.

Warranty parts will be shipped at no charge after U-Line confirms warranty status. Please provide the model, serial number, part number and part description. Some parts will require color or voltage information.

If U-Line requires the return of original parts, we will inform you when the parts order is taken. This requirement will be noted on your packing list. A prepaid shipping label will be included with the replacement part. Please enclose a copy of the parts packing list and any labor claims with your return. Please be sure the model and serial numbers are legible on the paperwork. Tag the part with the reported defect.

When ordering a non-warranty part, you will need an open account and tax exemption on file at U-Line. Another option would be to visit www.u-line.com to locate an authorized parts distributor in your area.

System Diagnosis Guide

REFRIGERATION 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

⚠ DANGER

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.

To measure the start winding resistance, measure across the C and S pins.

To measure the run winding resistance, measure across the C and R pins.

Also check S to R and you should get the sum of the run and start windings.

To ensure the windings are not shorted, check the S and R to ground.

OVERLOAD PROTECTOR

STARTING RELAY

RELAY COVER

ULIN_0576_AW
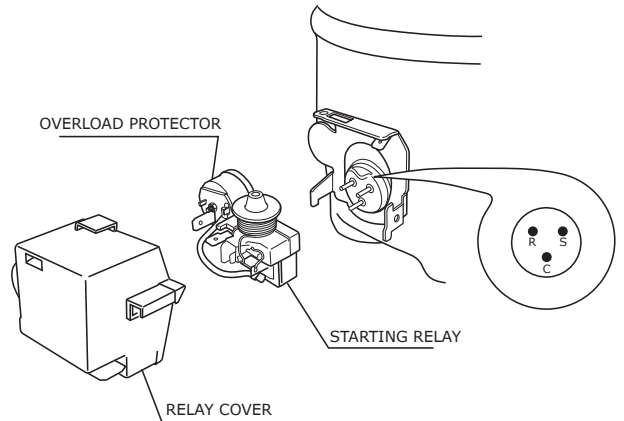
	EMU30HSC
Refrigerant	R134a
Voltage	115 VAC
Frequency	60 Hz
Run Cap	12μF/180 VAC
Start Winding	7.0 Ohm at 77°F
Run Winding	8.4 Ohm at 77°F
LRA	5.5 A
FLA	1.0 A
Starting Device	8EA14C
Overload	4TM197NFBYY-53

* All resistance readings are ±10%

Troubleshooting - Extended

SPECIFIC ERRORS AND ISSUES

The technically advanced diagnostic capabilities of the electronic controls utilized on the 1200 and 2200 series units allows 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 #19, "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 and of course, if additional help is required please contact the U-Line Corp, "Customer Care Facility" at +1.800.779.2547 for assistance.

TROUBLESHOOTING GUIDE.

Concern	Potential Causes	Suggested Remedy
No Display or Interior Lights	Unit may be in Sabbath mode	Hold ❄ for 5 seconds to turn off Sabbath mode, test the door switch circuit
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 temperature and humidity levels fall. Keep exterior of unit well polished to protect surface.
No Ice Production	Is unit level, is the unit getting water, is circulation pump working?	Monitor freeze cycle to assure proper water distribution over evaporator. Go to component testing and turn off fill valve, level unit if needed.
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.
Ice Does Not Fall Off During Harvest	Dirty evaporator, unit not level, faulty hot gas valve	Clean the evaporator if needed, level unit if needed, test function of hot gas bypass valve using relay toggle in service mode.
Error Message in Digital Display	Check error log	View errors in service mode, review error and take corrective action to resolve.
Ice is Too Thick/Thin	Dirty evaporator, water starvation, faulty hot gas valve	Clean 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	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.
Poor Ice Quality	Is unit level, is the evaporator dirty?	Monitor freeze mode to watch water distribution over evaporator, level unit if needed, clean evaporator if needed.

REFRIGERATION 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 - in 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

ERRORS

*All errors are logged in memory.

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

*For clear ice models, pump error is displayed via alert light with no audible alerts.

E1: Thermistor 1 open.

E2: Thermistor 2 open.

E3: Thermistor 3 open (Does not apply to this model).

E4: Thermistor 4 open (Does not apply to this model).

E5: Thermistor 1 shorted.

E6: Thermistor 2 shorted.

E7: Thermistor 3 shorted (Does not apply to this model).

E8: Thermistor 4 shorted (Does not apply to this model).

E9: Door open error.

Pi: Pump Circuit open.

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.

```
┌──────────────────┐              ┌──────────────────┐
│ Check Voltage    │  No Voltage  │ Alert Customer   │
│ At Wall Outlet   │─────────────→│ Of Power Failure │
└──────────────────┘              └──────────────────┘
         │
      Voltage
         │
┌──────────────────┐              ┌──────────────────┐
│ Verify Voltage At│  No Voltage  │ Replace          │
│ Main Control     │─────────────→│ Power Cord       │
│ Voltage Input    │              └──────────────────┘
└──────────────────┘
         │
      Voltage
         │
┌──────────────────┐              ┌──────────────────┐
│ Check Fuse F1    │ No Continuity│ Replace          │
│ For Continuity   │─────────────→│ Fuse             │
└──────────────────┘              └──────────────────┘
         │
     Continuity
         │
┌──────────────────┐              ┌──────────────────┐
│ Connect Test     │  Operating   │ Inspect          │
│ Display Cycle    │─────────────→│ Customer UI      │
│ Power And Check  │              │ and Data Cable   │
│ For Operation    │              └──────────────────┘
└──────────────────┘
         │
   Not Operating
         │
┌──────────────────┐              ┌──────────────────┐
│ Is the Reed      │     Yes      │ Replace Main     │
│ Switch Operating │─────────────→│ Board            │
│ Properly?        │              └──────────────────┘
└──────────────────┘
         │
        No
         │
┌──────────────────┐
│ Replace          │
│ Reed Switch      │
└──────────────────┘
```

Testing The Main Control

If the main control is suspected of being faulty, the following procedure should be performed to verify main control for functionality.

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. 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. Configuration errors can be cleared by restoring the unit to its factory default setting. Factory defaults may be restored through 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.

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. In an ice water bath (32°F) resistance should measure 16.1 kilohms.

5K OHMS @ 77°
16.1K OHMS - 32°F ambient

THERMISTOR FAILURE

Always assure that all thermistor connections are clean and dry. Whenever opening a thermistor connection be sure to apply a fresh dab of die electric grease.

REED SWITCH

A reed switch is used to monitor door state. When the door is closed magnetic force pulls the reed to its contact and closes the circuit which turns the light and display off. When the door is open the reed pulls away from the contact 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.
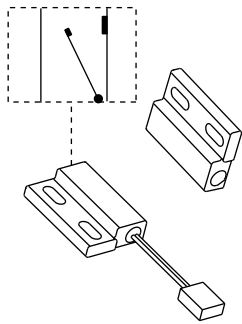
Magnet Away From Switch
(Door Open)
(Switch Open)
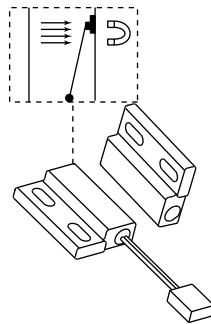
Magnet Close To Switch
(Door Closed)
(Switch Closed)

Control Operation - Service

UI BUTTON LAYOUT
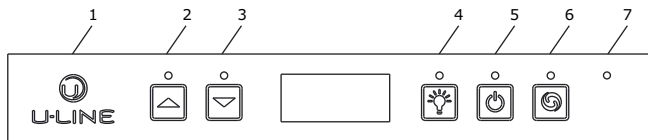
1. **Hidden Button**
   -Accesses Service Menu
   -No LED directly above. All LEDs turn on with button activation except #7.

2. **Up Button**
   -Increases temperature
   -Navigates through service menu
   -LED activated with button activation.

3. **Down Button**
   -Decreases temperature
   -Navigates through service menu
   -LED activated with button activation

4. **Light Button**
   -Activates light for 3 hours on select models
   -Used to select items in service menu
   -LED activated with button activation

5. **Power Button**
   -Turns unit off/on
   -LED activated with button activation (only turning unit off)

6. **Clean Button**
   -Activates Clean Cycle
   -LED activated with button activation

7. **LED**
   -No button

CONTROL FUNCTION GUIDE

FUNCTION	COMMAND	DISPLAY/OPTIONS
ON/OFF	Press ⏻ and release	Unit will immediately turn ON or OFF.
Adjust ice thickness	See "Ice" section	
Sabbath Mode	See "Sabbath Mode" section	
Silent Mode (ice production suspended for 3 hours)	Hold ▽ and ⏻	Display will show "**3H**".
Clean Mode	See "Cleaning" section	

VIEWING BIN THERMISTOR SET POINT

To view the set point temperature at which the bin thermistor will stop ice production, push and release the up and down arrow icons. Adjustments to this can be made in the service mode.

SILENT MODE

In some cases it may be requested for the unit to be shut down temporarily - during meetings for example. To do this, hold the ▽ and ⏻ for three seconds. The unit will "beep" once and show 3H on the display. This mode can be canceled by pressing and releasing ⏻. The mode will automatically be changed back to ON after three hours.

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

#	Service Mode Menu Item
1	View thermistor #1 (no offsets)
2	View thermistor #2 (no offsets)
3	View thermistor #3 (no offsets)
4	View thermistor #4 (no offsets)
5	Adjust thermistor #1 offset
6	Adjust thermistor #2 offset
7	Adjust thermistor #3 offset
8	Adjust thermistor #4 offset
9	View thermistor #2 set point no offsets
10	View thermistor #3 set point no offsets
11	View thermistor #4 set point no offsets
12	Adjust defrost interval 3 to 24 hours
13	Adjust defrost duration 0 to 99 minutes
14	View error log
15	Clear error log
16	Adjust thermistor #1 differential
17	Adjust evaporator fan delay in minutes (start of cooling cycle) 0 - 99 minutes
18	Adjust evaporator fan delay in minutes (after cooling cycle stops) 0 - 99 minutes
19	Individual component toggle
20	Model number indicator
21	Light all LED segments of display
22	View defrost cycles
23	View compressor run time
24	Activate defrost/harvest
25	Restore factory defaults
26	View software version - main board
27	View software version - user interface
28	Login period
29	Factory test mode
0	Exit service mode

NAVIGATE SERVICE MODE

Use up or down arrows to scroll through the menu.

Use the light bulb key to enter or exit menu. If values have been changed, they will be saved when exiting.

SERVICE MODE GUIDE

1. **THERMISTOR 1 — BIN**
   This shows the pure thermistor reading with no offsets taken into account.

2. **THERMISTOR 2 — CONDENSOR/LIQUID LINE**
   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**
   Offset controls the amount of ice in bin.

   Range: -10 to +10 Higher value = more ice.

6. **THERMISTOR 2 — OFFSET**
   Adjustable by customer for ice thickness, no effect in service mode. See "Ice" section for instructions.

7. Does not apply to this model.

8. Does not apply to this model.

9. **THERMISTOR 2 — SET POINT MINUS OFFSET**
   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 the errors in the order they occurred will scroll once 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 (upper) open.
    E1: Thermistor 1 open.
    E2: Thermistor 2 open.
    E3: Thermistor 3 open.
    E4: Thermistor 4 open (Does not apply to this model).
    E5: Thermistor 1 shorted.
    E6: Thermistor 2 shorted.
    E7: Thermistor 3 shorted.
    E8: Thermistor 4 shorted (Does not apply to this model).
    E9: Door 2 (lower) open.
    P1: Pump Circuit open (Does not apply to this model).

15. **CLEAR ERROR LOG**
To clear errors, press and <u>hold</u> ☀ (5 seconds) when CLR is flashing.

16. **THERMISTOR — 1 DIFFERENTIAL**
This number should not be adjusted.

17. Does not apply to this model.

18. Does not apply to this model.

19. **INDIVIDUAL COMPONENT TOGGLE**

Display #	Relay/Output
0	Exit
2	Relay 2
3	Relay 3
4	Relay 4
5	Relay 5
6	Relay 6
7	Relay 7
8	DC Output 1
9	DC Output 2
10	DC Output 3
11	DC Output 4
12	DC Output 5

   SEE RELAY/OUTPUT CHART

20. **MODEL NUMBER INDICATOR**
Displays the two-digit model number of the specific unit. See model list table.

21. **LIGHT ALL LED SEGMENTS**
This will illuminate all the LEDs on the display to ensure they work properly.

22. Does not apply to this model.

23. **VIEW COMPRESSOR RUNTIME**
This will show the number of minutes the compressor has run in the prior cycle (or current cycle if the compressor was running when service mode was entered).

24. **ACTIVATE DEFROST/HARVEST**
Turns on the hot gas bypass valve allowing hot gas to circulate through the evaporator causing frost to melt.

25. **RESTORE FACTORY DEFAULTS**
Will restore all adjustable functions to their factory settings.

26. **SOFTWARE VERSION — MAIN BOARD**
Displays software version of the main control board.

27. **SOFTWARE VERSION — USER INTERFACE**
Displays software version of the user interface.

28. **LOG IN PERIOD**
Factory use only - do not adjust.

29. **FACTORY TEST MODE**
Should be 0.

0. **EXIT SERVICE MODE**

MODEL LIST

1000	MODEL INDICATOR	2000 (120V)	MODEL INDICATOR	2000 (230V)	MODEL INDICATOR
1215R	07	2218R	05	2245R	55
1215WC	12	2218RGL	04	2245DC	54
1224BEV	13	2218WC	06	2245WC	56
1224DWR	08	2224BEV	00	2260DC	50
1224R	14	2224FZR	11	2260FZR	57
1224RF	09	2224R	02	2260R	52
1224RSOD	10	2224RGL	01	2260RDC	51
1224WC	15	2224WC	03	2260WC	53
CLR1215	18	2224ZWC	59	2260ZWC	58
CO1224F	19	ADA24R	17		

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*. △ or ▽

*(See Above "Model List")

5. Press the light bulb button once. 💡
6. The display will blink, and then will appear as the programmed display.

Relay / Output Chart

Name	Relay 2	Relay 3	Relay 4	Relay 5	Relay 6	Relay 7	DC Output 1	DC Output 2	DC Output 3	DC Output 4	DC Output 5
1215R	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
1215WC	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
124BEV	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
1224DWR	Mullion Heater	N/A	N/A	N/A	N/A	Compressor	Top Light	Evaporator Fan	Condenser Fan	N/A	Bottom Light
1224R	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
1224RF	N/A	N/A	Pan Heater	Hot Gas Valve	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
1224RSOD	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
1224WC	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
ADA24R	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
CLR1215	N/A	Pump	Water Valve	Hot Gas Valve	Condenser Fan	Compressor	Light	N/A	N/A	N/A	N/A
CO1224F	Ice Maker 2	Ice Maker 1	Pan Heater	Hot Gas Valve	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2218R	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2218RGL	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2218WC	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2224BEV	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2224R	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2224RGL	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2224WC	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2224ZWC	N/A	N/A	vl2	vl1	N/A	Compressor	Top Light	N/A	Condenser Fan	N/A	Bottom Light
2245R	N/A	Hot Gas Valve	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2245RDC	N/A	Hot Gas Valve	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2245WC	N/A	Hot Gas Valve	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2260DC	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2260R	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2260RDC	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2260WC	N/A	N/A	N/A	N/A	N/A	Compressor	Light	Evaporator Fan	Condenser Fan	N/A	N/A
2260ZWC	N/A	N/A	vl2	vl1	N/A	Compressor	Top Light	N/A	Condenser Fan	N/A	Bottom Light

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.

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.

This unit has **two** thermistors.

Thermistor one (Ice Bin):

Located along the right hand side wall of the ice bin. It is used to maintain the ice level in the bin.

Thermistor two (Condenser Line Out):

Located on the liquid line. It is used during freeze/ harvest.

This unit uses two different thermistors: *Ice Bin Thermistor; Condenser Line Out Thermistor.*

The Ice Bin Thermistor is a type 1 thermistor. 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 16.5k OHMs +/-5% on your meter.

Thermistor Resistance Data - Type 1

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%)

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The Condenser Line Out Thermistor is a type 2 thermistor. At 77° the resistance should read 10k OHMs +/-5% on your meter.

Thermistor Resistance Data - Type 2

Temp (F)	Temp (C)	Nominal Resistance (OHMS)*
-22	-30	177000
-13	-25	130370
-4	-20	97070
5	-15	72929
14	-10	55330
23	-5	42315
32	0	32650
41	5	25388
50	10	19900
59	15	15708
68	20	12490
77	25	10000
86	30	8057
95	35	6531
104	40	5327
113	45	4369
122	50	3603
131	55	2986
140	60	2488
149	65	2083
158	70	1752
167	75	1481
176	80	1258
185	85	1072
194	90	9177
203	95	7885
212	100	6800

* (+/-5%)

Defrost

These models have no defrost options.