

USER GUIDE

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



 **U-LINE**
RIGHT PRODUCT. RIGHT PLACE. RIGHT TEMPERATURE. SINCE 1962.

ADA Series • BI95 • 14" Crescent Ice Maker

Tip: Click on any section below to jump directly there

Contents

Intro

Warranty

Safety

Safety and Warning

Disposal and Recycling

Installation

Environmental Requirements

Electrical

Cutout Dimensions

Product Dimensions

Water Hookup

General Installation

Integrated Panel Dimensions

Integrated Panel Installation

Grille / Plinth Installation

Door Swing

Door Adjust

Service Extended

Wire Diagram

Product Liability

Warranty Claims

Ordering Replacement Parts

System Diagnosis Guide

Compressor Specifications

Troubleshooting Extended

Defrost

Replace Ice Maker

Operating Instructions

First Use

Ice

Airflow and Product Loading

Maintenance

Cleaning

Cleaning Condenser

Extended Non-Use

Service

Troubleshooting

WELCOME TO U-LINE

Congratulations on your U-Line purchase. Your product comes from a company with over five decades and three generations 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 modular Wine Captain® Models, Beverage Centers, Clear Ice Machines, Crescent Ice Makers, Glass & Solid Door Refrigerators, Drawer Models, Freezers, and Combo® Models.

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 with a west coast office located in Laguna Beach, California and European support in Dublin, Ireland. U-Line 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, Quick Reference Guides, CAD Drawings, Compliance Documentation, and Product Warranty information are all available for reference and download at u-line.com under Documentation.

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.

SERVICE INFORMATION

Answers to Customer Frequently Asked Questions are available at u-line.com under Customer Care or you may contact our Customer Care group directly, contact information below.

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
F: +1.414.354.7905
Email: sales@u-line.com
u-line.com

SERVICE & PARTS ASSISTANCE

Monday - Friday 8:00 am to 5:30 pm CST
T: +1.800.779.2547
F: +1.414.354.5696
Service Email: onlineservice@u-line.com
Parts Email: onlineparts@u-line.com

CONNECT WITH US



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



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



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

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.



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 DIMENSIONS for recommended receptacle location.

Cutout Dimensions

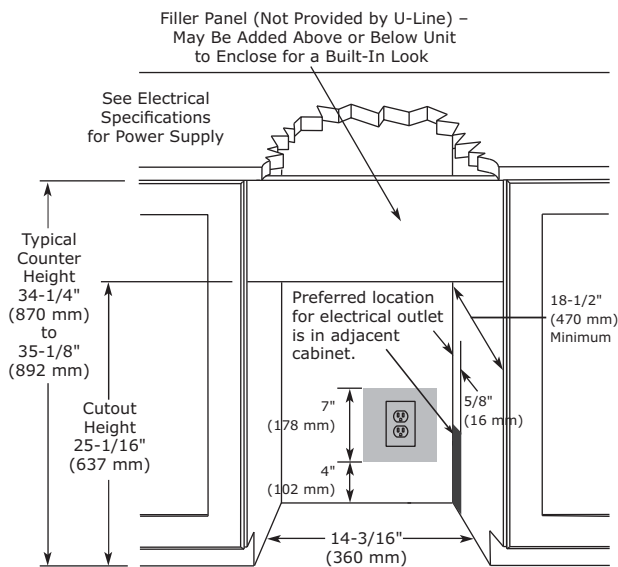
PREPARE SITE

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 and water connection in the rear.



Units can NOT be installed behind a closed cabinet door.

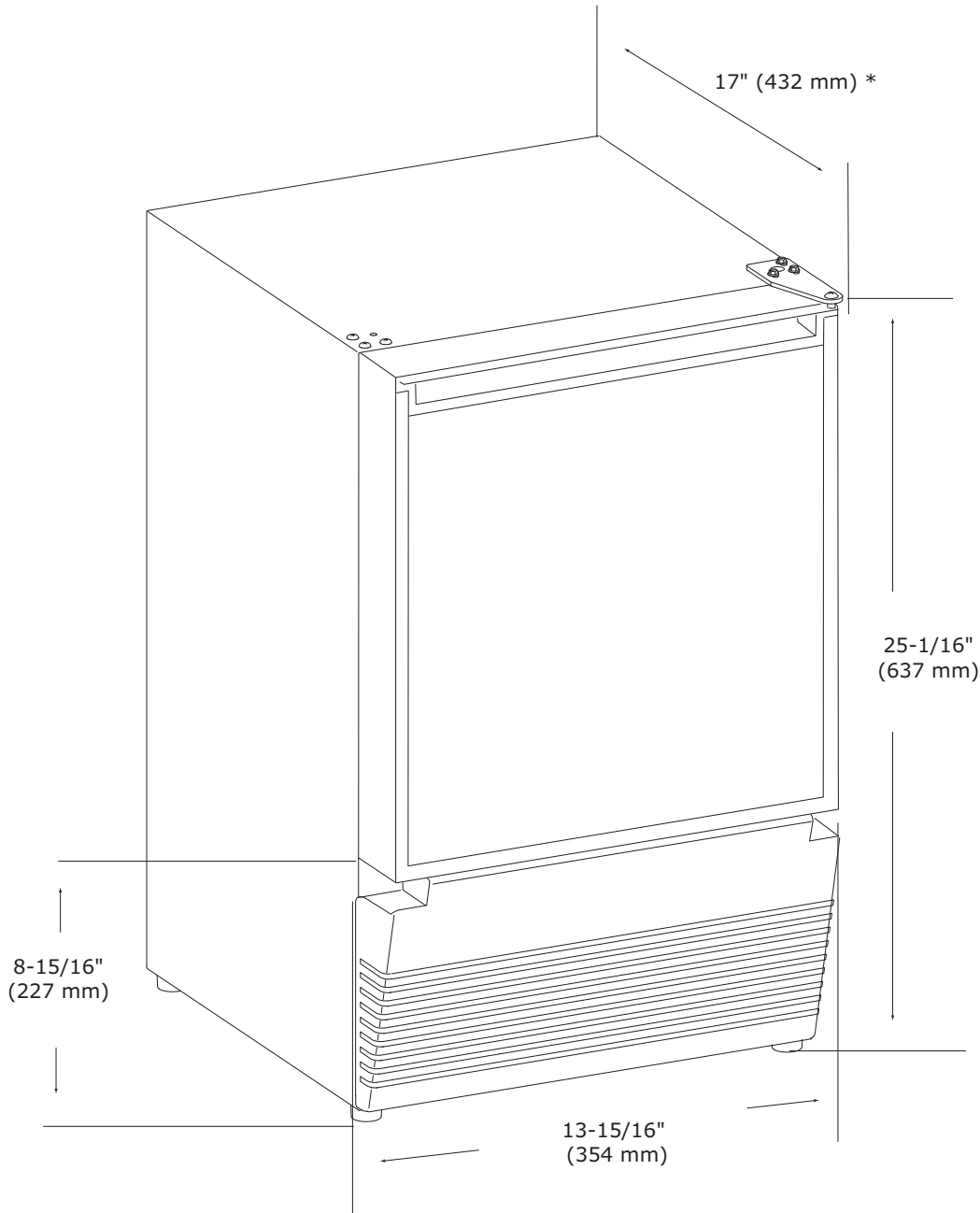
CUTOUT DIMENSIONS



NOTICE

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

Product Dimensions



*Add 1-1/2" For Water Line Clearance

Water Hookup

PREPARE PLUMBING

The water valve uses a standard 1/4" (6.35 mm) compression fitting. U-Line recommends using accessory water hook up kit – part # WATERHOOKUP. The kit includes a 10' (3 m) braided flexible water supply line and a brass hose fitting. When using a 1/4" (6.35 mm) O.D. soft copper supply line use the brass nut and sleeve included with the unit.



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

Water Supply Connection

When connecting the water supply, please note the following:

- Before installing the unit and connecting to the cold water supply, review the local plumbing codes.
- The water pressure should be between 20 and 120 psi (138 and 827 kPa).
- The water line MUST have a shut-off valve in the supply line.
- The water line should be looped into 2 coils. This will allow the unit to be removed for cleaning and servicing. Make certain that the tubing is not pinched or damaged during installation.



Connect to potable water supply only.



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.

Use new hose set. Do not reuse old hose set.

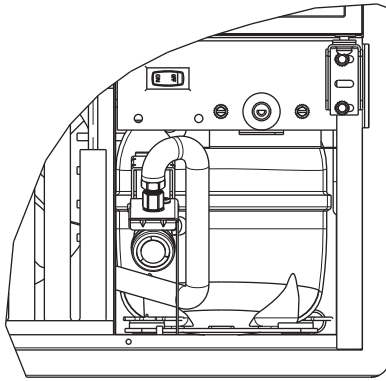


Turn off water supply and disconnect electrical supply to unit prior to installation.

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 (plinth strip/base fascia) and access panel (if equipped) along with back panel.

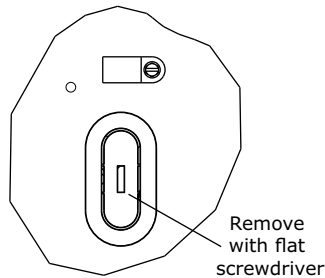
3. Locate water valve in the front of the unit and thread water supply line through.



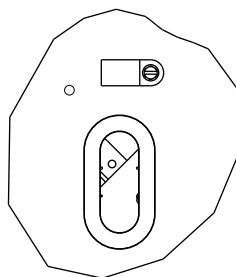
NOTICE

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.

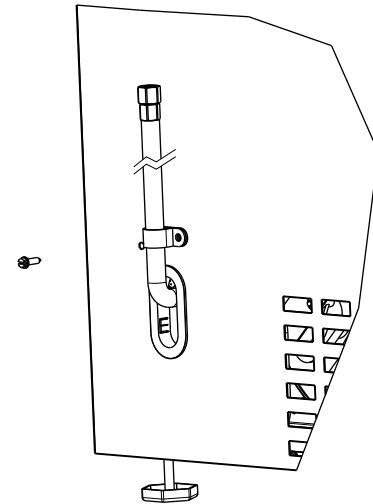
4. On the back panel, break away filler feature in bushing with flat screwdriver.



5. Thread water line through back panel hole (with bushing).



6. Turn on water supply and check for leaks.
7. Reinstall the grille (plinth strip/base fascia) and access panel (if equipped) along with the back panel.
8. Install retaining clip.



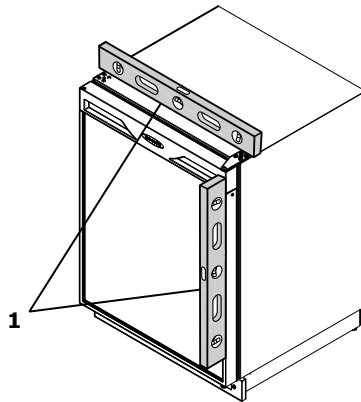
General Installation

LEVELING INFORMATION

NOTICE

Because these units do not have leveling legs, it is extremely important that they sit on a level surface. If they are not level, the ice mold will not fill evenly.

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



INSTALLATION

1. Plug in the power/electrical cord.
2. Gently push the unit into position. Be careful not to entangle the cord and water line.
3. Re-check the leveling, from front to back and side to side. Make any necessary adjustments.
4. Remove the interior packing material and wipe out the inside of the unit with a clean, water-dampened cloth.

Integrated Panel Dimensions

DOOR PANEL INSTALLATION

Door Panel Preparation

A custom door panel may be inserted into the door frame. Custom door panels can be flat or raised, as long as the maximum panel thickness, when inserted into the door reveal (channel), is no more than 1/4" (6 mm) thick. For raised panels, the depth of the reveal is 1/4" (6 mm) on all four sides.

NOTICE

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

Panel Dimensions

The door panel must not weigh more than 20 lbs.

Width	Height
12-15/16" (329 mm)	13-15/32" (342 mm)

Integrated Panel Installation

This model accepts a 1/4" insert panel.

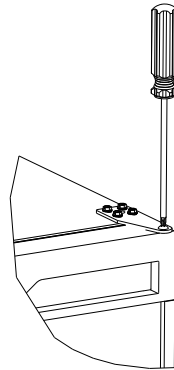
INSERT PANEL INSTALLATION

Install the insert as follows:

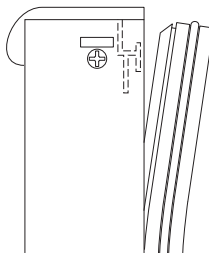


Use care when handling the insert. Insert edges may be sharp.

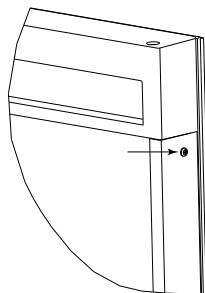
1. Remove top hinge screw pin with Phillips head screwdriver. Remove door by tilting forward and lifting off bottom hinge pin.



2. Pull door gasket out of groove (top edge of door only). Start in the middle and pull outward, moving toward the edge. This may take some force.



3. Remove two outside screws holding door handle. Slightly separate door handle from door.



4. Pull handle up and off.

5. Slide custom door panel insert into 1/4" (6 mm) channel in door front.

NOTICE

Use care not to damage magnet, located on door bottom when installing door insert. Do not set door on bottom edge when pushing insert into place.

6. Holding door gasket out of the way, replace handle on door, making sure it is seated properly on insert and that screw holes line up.
7. Install two small screws removed in Step 3.
8. Starting at the corners and working inward, push door gasket into place on door.
9. Place door on bottom hinge pin and install upper hinge screw.

Grille - Plinth Installation

REMOVING AND INSTALLING GRILLE



Disconnect electric power to the unit before removing the grille.

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



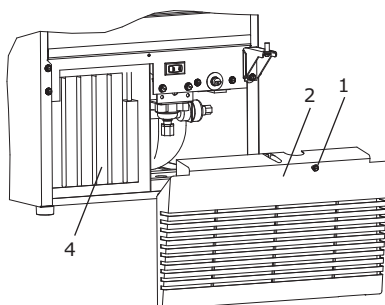
DO NOT touch the condenser fins (4). The condenser fins are SHARP and can be easily damaged.

Removing the grille

1. Disconnect power to the unit.
2. Loosen the screw (1).
3. Remove grille (2) from unit.

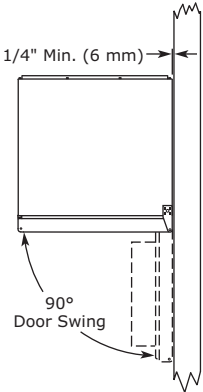
Installing the grille

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



Door Swing

All units have a zero clearance for the door to open 90°. U-Line recommends a minimum door clearance of 1/4" (6 mm) to accommodate the handle if the unit is installed next to a wall.



Door Adjustments

CHECKING DOOR ALIGNMENT

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

NOTICE

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

1. Carefully examine the door's gasket to ensure that it is firmly in contact with the cabinet.
2. When inspecting door alignment, make sure the door gasket is not pinched on the hinge side of the door.

ALIGNMENT AND ADJUSTMENT

1. Loosen (do not remove) top and bottom hinge screws.
2. Align door squarely with cabinet. Make sure gasket is firmly in contact with cabinet all the way around the door (no gaps).
3. Tighten bottom hinge screws.
4. Tighten top hinge screws.

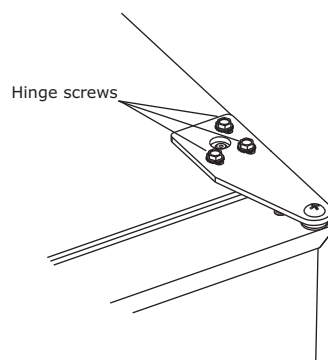
REVERSING THE DOOR

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

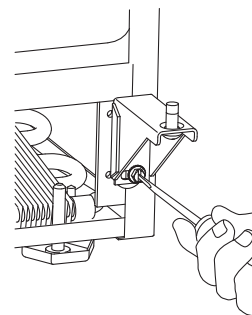
The hinge hardware will be removed and reinstalled on the opposite side of the cabinet.

To reverse the door mounting, perform the following:

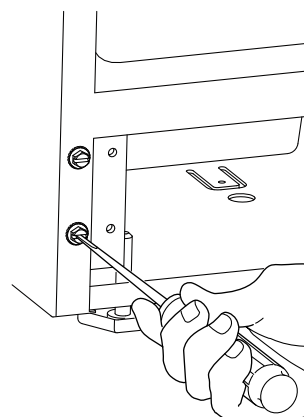
1. Remove grille (see GRILLE-PLINTH INSTALLATION).
2. Remove top hinge from cabinet (three screws). Hold door to keep it from falling.



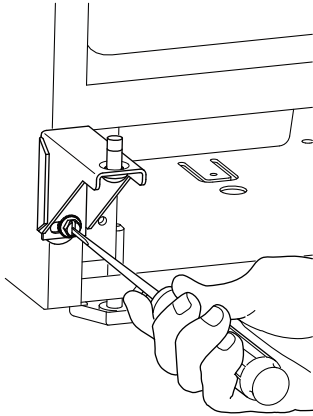
3. Lift the door off the bottom hinge.
4. Remove bottom hinge from cabinet (two screws).



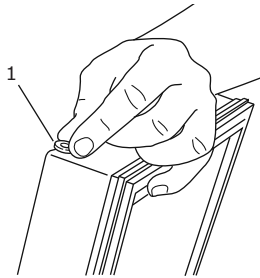
5. Remove screws on opposite side of cabinet.



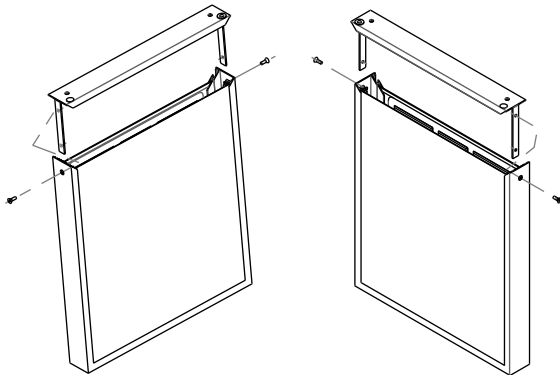
6. Install hinge on opposite side at bottom of cabinet.
Align hinge outer edge with cabinet before tightening screws.



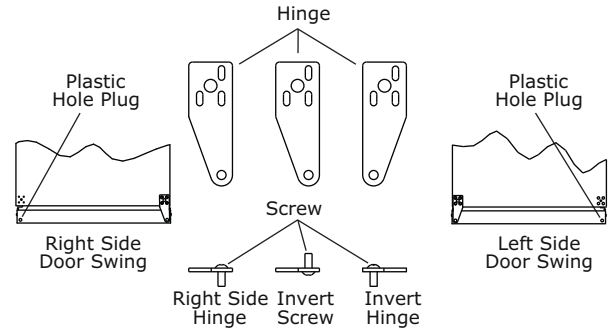
7. Relocate plastic spacer/bushing on top and bottom of door to opposite side. Clean out bushing hole in door bottom with a screwdriver if necessary.



8. Using a Phillips screwdriver, remove the two screws holding the handle.

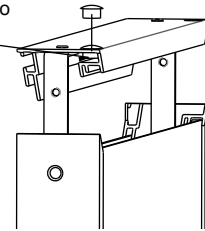


9. Remove plastic hole plug from door handle and relocate to opposite side. Lift the handle slightly and press on the locking tab, then gently pry the hole plug out of the hole, being careful not to scratch the top cap.

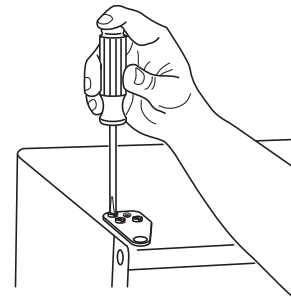


10. Remove pivot screw from top hinge, invert screw and reinstall pivot screw in top hinge.

Press in locking tab, then lightly pry up to remove hole plug and move to opposite side



11. Place door on lower hinge pin. Invert and install upper hinge on door. Fasten upper hinge to unit (three screws). Partially tighten screws.



12. Adjust door to ensure proper seal. Tighten upper and lower hinge screws securely.

13. Fill holes with remaining screws.

14. Replace 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.

To turn the unit on or off:



Press the rocker switch located inside the door on the front panel, or behind the grille.

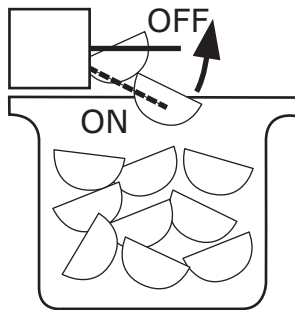
Ice

ICE MAKER OPERATION

When the ice bucket is full, the ice making mechanism will shut off. However, the refrigeration system will continue to cool and maintain the ice supply.

NOTICE

Do not place cans or bottles in the ice compartment because they will freeze.



To turn off ice production: Raise the bin arm into an upright and locked position. The unit will preserve temperature for ice storage.

NOTICE

If not intending to use the ice maker, turn the water supply valve off. It is also important to raise the bin arm of the ice maker (see above). Failure to raise the bin arm may result in damage to the water valve.

Certain sounds are normal during the unit's operation. You may hear the compressor or fan motor, the water valve, or ice dropping into the ice bucket.



NEVER use an ice pick, knife or other sharp instrument to separate cubes. Shake the ice bucket instead.

During periods of limited use or high ambient temperatures, it is common for cubes to fuse together. Gently shake the bucket to break apart cubes. If not using the ice maker regularly, empty the ice bucket periodically to ensure fresh cubes.

It is normal for cubes to appear cloudy. The cause is air trapped in the water because of fast freezing. It is not caused by the health, taste or chemical make up of the water. It is the same air that is in every glass of water you drink.

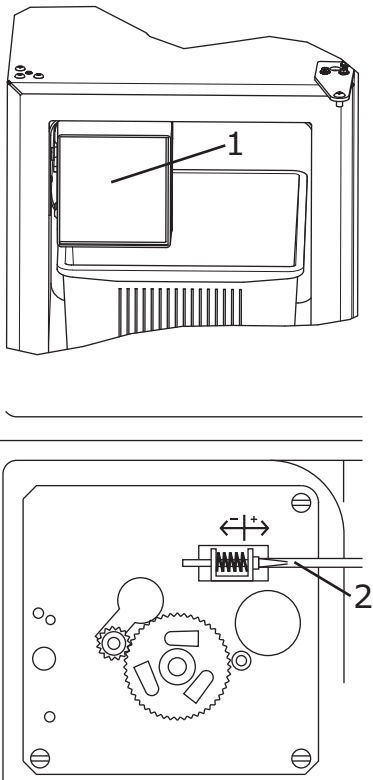
Remove the ice bucket for emptying and cleaning. To remove the ice bucket, raise the bin arm and remove the bucket from the ice compartment. Use the ice bucket for ice storage only.

ICE MAKER ADJUSTMENT

Ice Cube Thickness Adjustment

Interval - As Required

On ice maker equipped models, adjust the cube size by changing water amount injected into the ice maker assembly as follows:



1. Remove the ice maker assembly cover (1).
2. Find the adjusting screw on the ice maker assembly control box (2). The adjusting screw is just below the minus (-) and plus (+) signs on the control box.

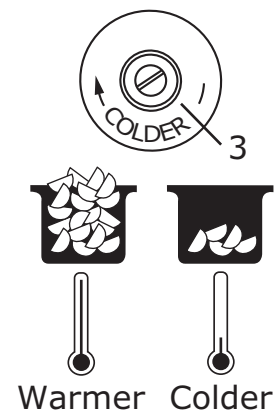


Too large of an adjustment to the screw can cause the water to overflow the ice maker and can cause property damage.

3. Turn the adjusting screw toward the minus (-) sign (clockwise) for smaller cubes or toward the plus (+) sign (counterclockwise) for larger cubes.
4. Install the ice maker assembly cover.

ADJUSTING ICE HARVEST

1. Remove the front grille (see GRILLE-PLINTH INSTALLATION).
2. Using a flat tip screwdriver, turn the adjusting screw (3) a small increment clockwise for a COLDER setting (slower ice production) or counterclockwise for a WARMER setting (faster ice production).

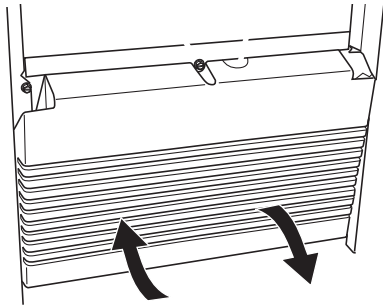


3. Reinstall the front grille (one screw).

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, which can be purchased from U-Line Corporation (Part Number 173348). 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 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 to the interior products and damage or discolor the interior.

DEFROSTING

Manual Defrost Models

This unit is a manual defrost model and will require occasional defrosting. When there is build-up of 1/4" (6 mm) or more of frost, manually defrost the unit.



DO NOT use an ice pick or other sharp instrument to help speed up defrosting. These instruments can puncture the inner lining or damage the cooling unit. DO NOT use any type of heater to defrost. Using a heater to speed up defrosting can cause personal injury and damage to the inner lining.

To defrost:

1. Disconnect power to the unit.
2. Remove ice bucket and discard ice.
3. Place towel or other absorbent material on bottom of ice bin.
4. Fill the ice bucket half full with warm, not hot water. This will help the unit defrost faster.
5. Place the ice bucket back into the unit on top of the towel or other absorbent material.
6. Prop the door in an open position (2 in. [50 mm] minimum).
7. After about 1 hour remove the ice bin and discard water.
8. Allow the frost to melt naturally.
9. After the frost melts completely clean the interior and all removed components. (See INTERIOR CLEANING).

NOTICE

DO NOT clean ice bucket using a dishwasher. The bucket is not dishwasher safe and will be damaged.

10. When the interior is dry, reconnect power and turn unit on.

NOTE: To safeguard against contaminates in ice, discard first three batches of ice after defrosting.

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.

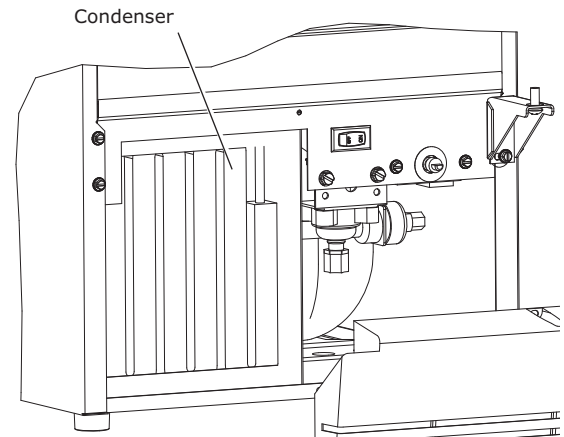


DO NOT touch the condenser fins. The condenser fins are SHARP and can be easily damaged.

NOTICE

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

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



Extended Non-Use

VACATION/HOLIDAY, PROLONGED SHUTDOWN

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

1. Remove all consumable content from the unit.
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.



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.
- Automatic Defrost Drain Pan: Water may be heard dripping or running into the drain pan when the unit is in the defrost cycle.

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:

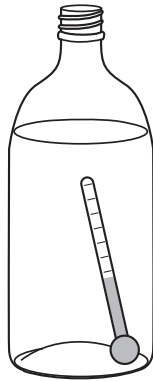
Problem	Possible Cause and Remedy
Light Remains on When Door Is Closed.	Turn off light switch if equipped. Check reed switch.
Unit Develops Frost on Internal Surfaces.	Frost on the rear wall is normal and will melt during each off cycle. If there is excessive build-up of 1/4" or more, manually defrost the unit. Ensure the door is closing and sealing properly. High ambient temperature and excessive humidity can also produce frost.
Unit Develops Condensation on External Surfaces.	The unit is exposed to excessive humidity. Moisture will dissipate as humidity levels decrease.
Product Is Freezing.	Because product in contact with the rear wall may freeze, ensure no product is touching the rear wall. Adjust the temperature to a warmer set point.

Problem	Possible Cause and Remedy
Product is Not Cold Enough.	Air temperature does not indicate product temperature. See CHECKING PRODUCT TEMPERATURE below. Adjust the temperature to a cooler set point. Ensure unit is not located in excessive ambient temperatures or in direct sunlight. Ensure the door is closing and sealing properly. Ensure the interior light has not remained on too long. Ensure nothing is blocking the front grille, found at the bottom of the unit. Ensure the condenser coil is clean and free of any dirt or lint build-up.

Causes which affect the internal temperatures of the cabinet include:

- Temperature setting.
- Ambient temperature where installed.
- Installation in direct sunlight or near a heat source.
- The number of door openings and the time the door is open.
- The time the internal light is illuminated. (This mainly affects product on the top rack or shelf.)
- Obstruction of front grille or condenser.

CHECKING PRODUCT TEMPERATURE



To check the actual product temperature in the unit:

1. Partially fill a plastic (nonbreakable) bottle with water.
2. Insert an accurate thermometer.
3. Tighten the bottle cap securely.
4. Place the bottle in the desired area for 24 hours.
5. Avoid opening the unit during the testing period.
6. After 24 hours, check the temperature of the water. If required, adjust the temperature control in a small increment (see CONTROL OPERATION).

Warranty

U-LINE CORPORATION LIMITED WARRANTY

1. U-Line Corporation ("U-Line") warrants each U-Line product to be free from defects in materials and workmanship for a period of one year (two years on Modular 3000 Series) from the date of purchase. U-Line further warrants the sealed system (consisting of the compressor, condenser, evaporator, hot gas bypass valve, dryer, and connecting tube) in each U-Line product to be free from defects in materials and workmanship for a period of five years from the date of purchase.
2. During the initial one year warranty period (two years on Modular 3000 Series) for all U-Line products U-Line shall: (1) repair any product or replace any part of a product; and (2) for all Marine, RV, and Domestic U-Line products sold and serviced in the United States (including Alaska and Hawaii) and Canada, U-Line shall be responsible for the labor costs performed by a U-Line authorized service company, incurred in connection with the replacement of any defective part. During years two through five of the warranty period for the sealed system, U-Line shall: (1) at U-Line's option repair or replace any part of the sealed system; and (2) for all Marine, RV, and Domestic U-Line products sold and serviced in the United States (including Alaska and Hawaii) and Canada, U-Line shall be responsible for the labor costs incurred in connection with the replacement of any defective part of the sealed system. All other charges, including transportation charges for replacements under this warranty and labor costs not specifically covered by this warranty, shall be the responsibility of the purchaser. This warranty extends only to the original purchaser of the U-Line product. The Product Registration Card included with the product should be promptly completed by you and mailed back to U-Line, or you can register on-line at www.u-lineservice.com.
3. The warranty listed above does not apply to floor display models. The warranty for these models shall be 30 days from the date of retail purchase and only if U-Line's Product Registration Card included with the unit is completed and mailed back or electronically submitted to U-Line. This 30 day warranty does not apply to cosmetic damages. A proof of purchase may be required.
4. The following conditions are excluded from this limited warranty: use of cleaners other than the recommended stainless steel cleaners and U-Line Clear Ice Maker cleaner; installation charges; damages caused by disasters or acts of God, such as fire, floods, wind, and lightning; damages incurred or resulting from shipping, improper installation, unauthorized modification, or misuse/abuse of the product; customer education calls; food loss and spoilage; door and water level adjustments (except during the first 30 days from the date of installation); defrosting the product; adjusting the controls; door reversal; and cleaning the condenser.
5. U-Line products are designed to operate in ambient temperatures between 50°F and 100°F unless otherwise noted in the product manual. Exposure to temperatures outside this range may cause degradation of performance and issues, such as lower ice production or spoiled contents, that are not covered under the terms of this warranty as a result of that exposure. U-Line product may not be subjected to temperatures below 40°F without following the winterization and vacation shutdown procedures in the user guide.
6. U-Line's Outdoor Limited Warranty, set forth in this Paragraph 6 shall apply to U-Line models deemed suitable for outdoor use by Underwriters Laboratory ("UL") as noted in the U-Line Product Catalog, U-Line's website, and/or on the serial tag located inside the product.
 - A. Outdoor product may come into contact with rain by virtue of outdoor use. Exposure to other sources of water shall also cause this warranty to be void, including flooding of the area in proximity of the unit greater than 1/8" deep in water, hurricanes, splashing

of pool water, or directing a spray from a hose or similar device into and around the unit.

7. If a product defect is discovered during the applicable warranty period, you must promptly notify either U-Line at 8900 N. 55th Street, Milwaukee, Wisconsin 53223 USA or at +1.800.779.2547 or the dealer from whom you purchased the product. In no event shall such notification be received later than 30 days after the expiration of the applicable warranty period. U-Line may require that defective parts be returned, at your expense, to U-Line's factory in Milwaukee, Wisconsin, for inspection. Any action by you for breach of warranty must be commenced within one year after the applicable warranty period.

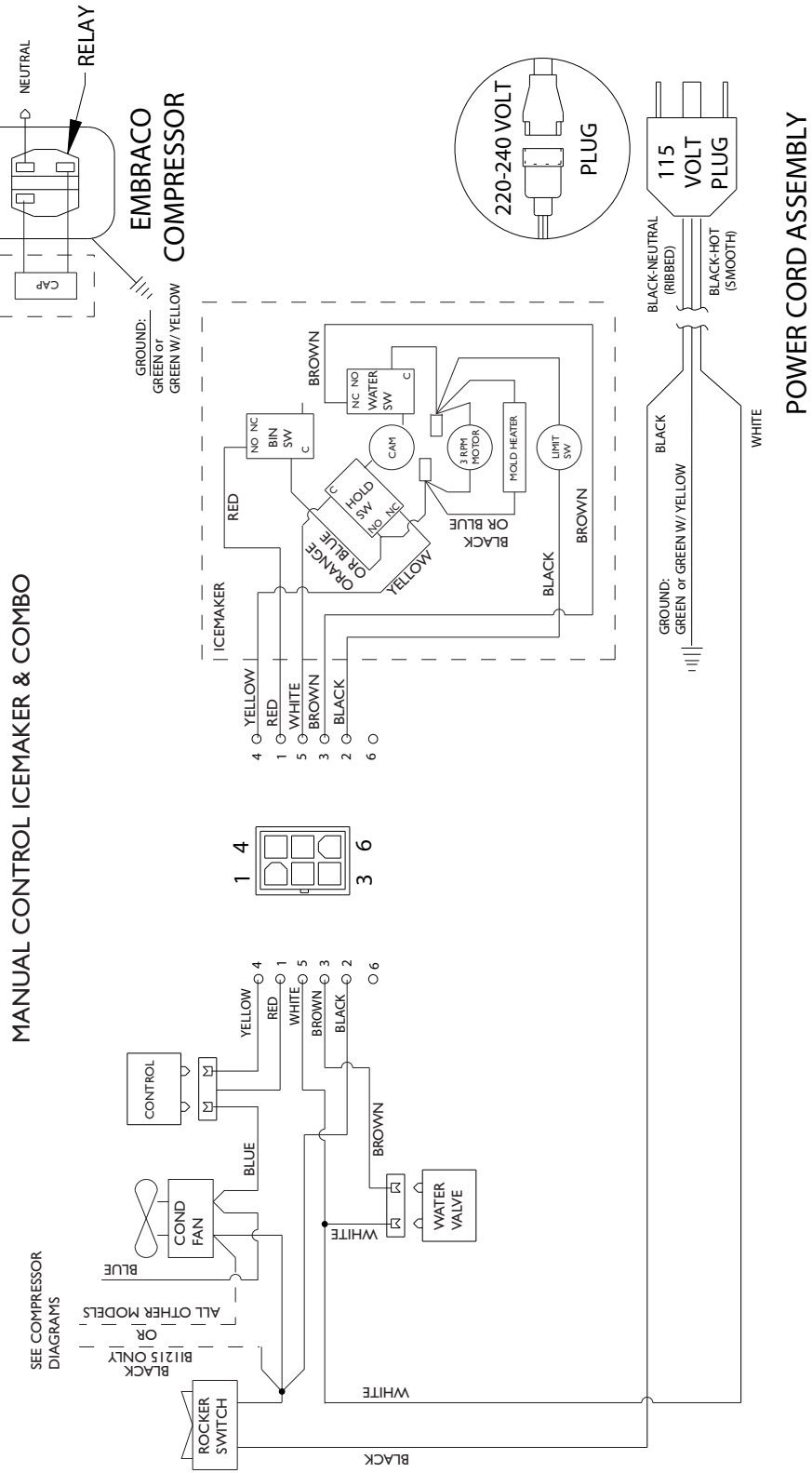
8. THIS LIMITED WARRANTY IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE DISCLAIMED. U-Line's sole liability, and your exclusive remedy, under this warranty is set forth in the paragraphs above. U-Line shall have no liability whatsoever for any incidental, consequential, or special damages arising from the sale, use, or installation of the product or from any other cause whatsoever, whether based on warranty (express or implied) or otherwise based on contract, tort, or any other theory of liability.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Warranty 6/2014 Rev.G

Wire Diagram

42312_C WIRING DIAGRAM



Product Liability

Important Note: Service or repairs must not be performed on any unit suspected to be involved in a property damage situation. If a unit has been altered or repaired in the field prior to U-Line's evaluation, any claim for damage may be declined.

Field service technicians are authorized to make an initial assessment. If in the service technician's judgment the damage is the result of a product defect, the product would be removed and returned to U-Line in an unaltered condition. The dealer would then be authorized to permanently replace the end-user's product at no cost to the end-user. Please call U-Line immediately at +1.800.779.2547 to initiate the Return Authorization and product exchange process.

If the service technician determines the damage is the result of installation issues (water connection/drain, etc.), the consumer would be notified and the correction could be made by the servicer or installer without requiring removal of the product. In this case, the claim for damages should be directed to the original installer.

On U-Line Clear Ice product equipped with a drain pump, the drain pump must be returned along with the unit, regardless of the drain pump manufacturer.

To complete the damage claim process for the customer, please forward the following to U-Line via fax (+1.414.354.5696), email (onlineservice@u-line.com), or mail:

- Pictures of the damage, U-Line product, property damage and installation (supply and drain connections, if applicable).
- A brief description of the damages and product service history (if possible).
- Damage estimates.

- A Return Authorization Number reference (provided by U-Line) and customer name when submitting information.

For shipping:

- Use an OEM shipping carton (U-Line will provide if needed or packaging can be reused from the replacement unit) and clearly mark the Return Authorization Number on the carton before returning the product.
- When the unit is ready for pickup, contact U-Line at +1.800.779.2547 and U-Line will make arrangements for a freight collect shipment.

Upon return to U-Line, the product will be evaluated within ten business days. No service company is authorized to make these evaluations in place of U-Line.

U-Line Customer Care staff will review the engineering evaluation and notify the customer of a valid claim or provide denial details.

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.

Ordering Replacement Parts

Parts may be ordered on-line, by Fax or on the 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.

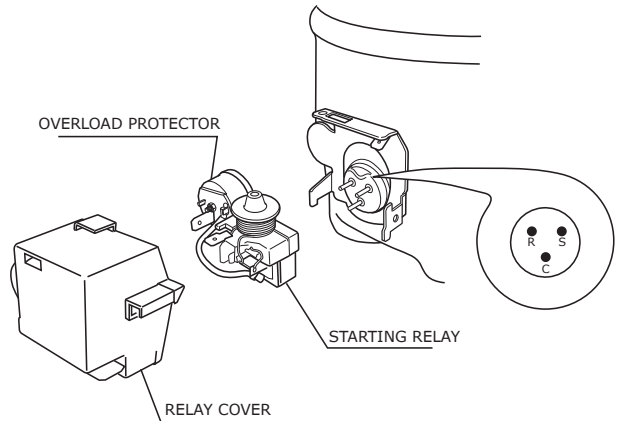
Handle circuit boards carefully and avoid touching components.

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.



	EM150HER
Refrigerant	R134a
Voltage	115 VAC
Frequency	60 Hz
Run Cap	n/a
Start Winding	12.1 Ohm at 77°F
Run Winding	3.9 Ohm at 77°F
LRA	18.0 A
FLA	2.0 A
Starting Device	213514105
Overload	4TM757KFBYY-53

* All resistance readings are ±10%

Troubleshooting - Extended

SPECIFIC ERRORS & ISSUES



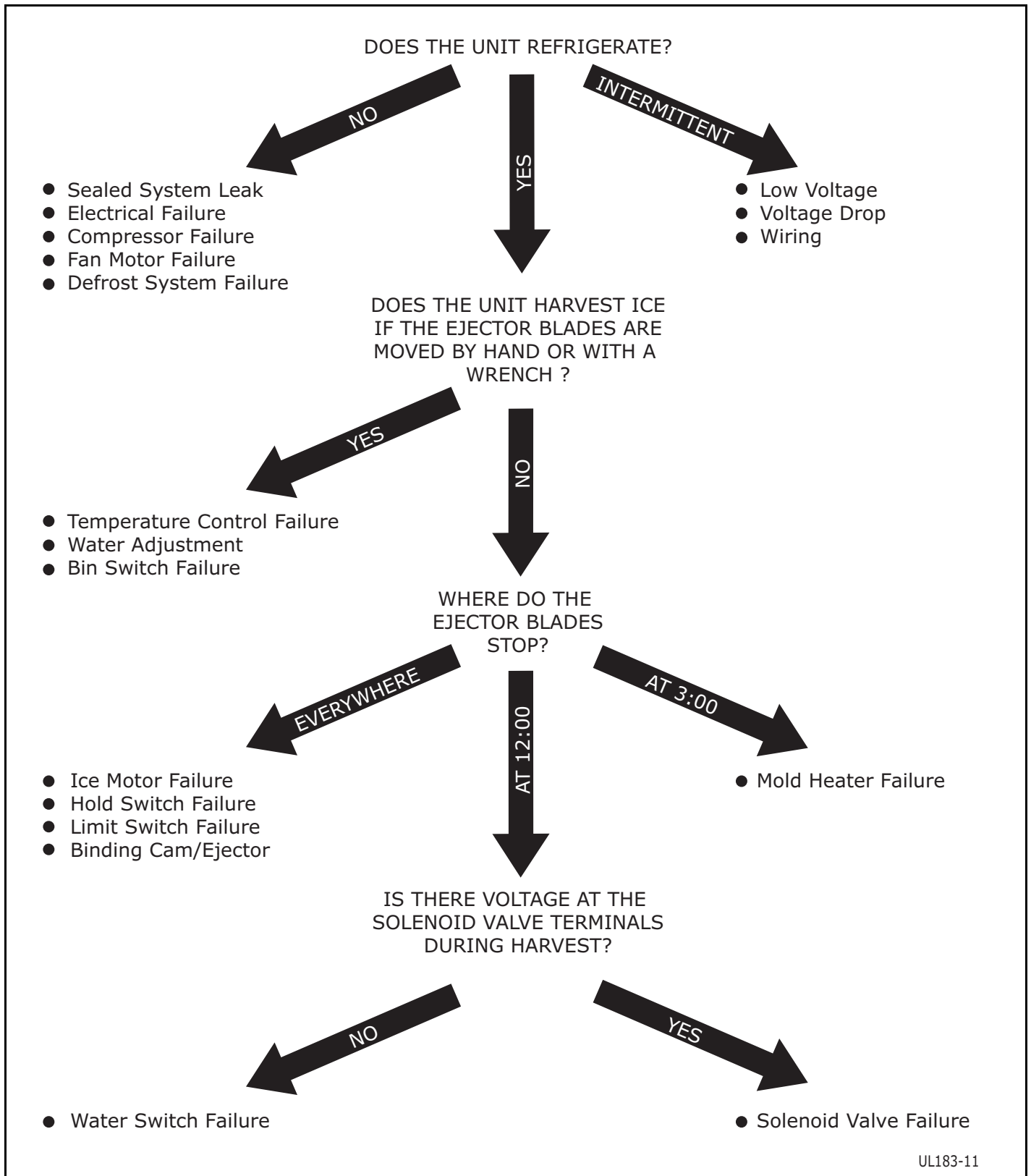
Never attempt to repair or perform maintenance on the unit until the main electrical power has been disconnected from the unit.

TROUBLESHOOTING GUIDE

Concern	Potential Causes	Suggested Remedy
Will not eject ice (water frozen).	Control setting too cold.	Adjust control warmer (counterclockwise).
	Control inoperable (1-2 contacts open)	Replace control.
	Bin switch inoperable.	Replace bin switch.
	Limit switch defective (open).	Replace limit switch.
	Ice maker assembly motor stalled.	Replace motor.
	Broken wire in ice maker circuit.	Repair or replace wiring.
	Water soaked cabinet insulation.	Replace foamed cabinet assembly.
Will not fill with water.	Dirty condenser.	Clean condenser.
	Water supply valve closed.	Open water supply valve.
	Water switch inoperable (open).	Replace water switch.
	Solenoid valve inoperable.	Replace solenoid valve.
	Fill tube outlet frozen.	Defrost fill tube.
Will not stop making ice.	Broken wire in water fill circuit.	Repair or replace wiring.
	Bin switch inoperable (closed).	Replace bin switch.
Water will not stop filling.	Bin arm binding.	Lubricate bin arm pivot points or loosen bin arm lever screw.
	Water switch inoperable (closed).	Replace water switch.
	Solenoid valve inoperable.	Replace solenoid valve.
	Stalled ice maker motor.	Replace motor.
Ejector blades will not stop turning.	Temperature control inoperable. Ice maker is in continuous harvest cycle (contacts 1-2 closed).	Replace temperature control.
	Control inoperable (1-2 contacts will not open).	Replace control.
	Hold switch inoperable.	Replace hold switch.
Low ice production.	Broken wiring.	Repair or replace wiring.
	Short in mold heater.	Replace heater.
	Control set too cold.	Adjust control warmer (counterclockwise).
	Fan motor stalled.	Replace fan motor.
	Ice cubes too large.	Lower water fill adjustment.
Not freezing (compressor and fan motors operating).	Dirty condenser.	Clean condenser.
	Bypass valve stuck open (Frost Free units only).	Replace bypass valve (Frost Free units only).
Not freezing (compressor not operating - fans operating).	Little or no frost pattern on evaporator.	Check for sealed system leak or restriction.
	Bypass valve stuck open (Frost Free units only).	Replace bypass valve (Frost Free units only).
	Relay inoperable.	Replace relay.
Compressor inoperable.	Overload inoperable (open).	Replace overload.
	Compressor inoperable.	Replace compressor.

Concern	Potential Causes	Suggested Remedy
Not freezing (compressor and fans not operating).	Power cord not plugged in.	Plug in power cord.
	On/Off switch in off position.	Turn switch to on position.
	On/Off switch inoperable (open).	Replace On/Off switch.
	Hold switch inoperable (open).	Replace hold switch.
	Control inoperable (2-3 contacts open).	Replace control.
	Broken wire in freeze circuit.	Repair or replace wiring.
	Ejector blades not in freeze position (12:00)	Manually advance ejector blades to the 12:00 position (test ice maker and limit switch).
Compressor overheating.	Condenser air flow restricted.	Remove restriction (clean condenser and grille).
	Condenser fan blade obstructed.	Remove blade restriction.
	Condenser fan motor stalled.	Replace fan motor.
	Compressor inoperable.	Replace compressor.
Compressor will not stop operating.	Control set too cold.	Adjust control warmer (counterclockwise).
	Control inoperable (2-3 contacts will not open).	Replace control.
	Control sensing bulb not sensing mold temperature.	Fully insert bulb into ice maker tube. Rout bulb away from compressor discharge tube.
	Evaporator fan stalled (Frost Free units only).	Remove obstruction or replace motor.
Water leak (under unit).	Water supply line leaking at solenoid valve inlet.	Tighten fitting or replace fitting gasket and/or fitting.
	Water line leaking at solenoid valve outlet.	Replace water line and fitting.
	Water line leaking at fill tube.	Tighten clamp or replace fill tube assembly.
	Defrost drain line not in drain pan.	Position drain line in drain pan.
	Crack in water line.	Replace water line.
Water leak (inside unit).	Ice maker assembly fill cup obstructed.	Remove obstruction.
	Fill ice cup and fill tube out of alignment.	Align fill tube and fill cup.
	Water level too high.	Adjust water level.
	Defrost drain plugged (Frost Free units only).	Ice in drain trough (Frost Free units only) (see below).
Excessive frost buildup.	Door gasket not sealing properly.	Adjust door hinges or replace door gasket.
	Door out of alignment.	Adjust door hinges.
	Water soaked cabinet insulation.	Replace foamed cabinet assembly.
	Light stays on when door is closed.	Repair or adjust light bracket.
Noisy.	Copper refrigeration tube touching cabinet.	Carefully adjust tubing.
	Fan blade touching shroud.	Adjust fan mounting or shroud.
	Fan blade obstruction (wiring, foam insulation, packaging material).	Remove obstruction.
Ice buildup in drain trough or drainage problem.	Obstructed drain cup or tube.	Clear obstruction.
	Drain trough heater failed (Frost Free units only).	Replace drain trough heater (Frost Free units only).
	Kinked drain tube.	Align drain trough and drain cup.
	Drain trough spout and drain cup not aligned.	Reroute drain tube.
Unit will not defrost (Frost Free units only).	Bypass coil inoperable.	Replace bypass valve.
	Defrost timer inoperable.	Replace defrost timer.
	Bypass valve inoperable.	Replace bypass valve.
Fresh food temperature too cold.	Temperature control set too cold.	Adjust control to warmer setting (counterclockwise).
	Bin/Freezer door not closing.	Adjust or replace door.
	Ice bucket not fully inserted.	Check for ice behind bucket and push ice bucket in place.

ICE MAKER DIAGNOSIS FLOW CHART



UL183-11

ICE MAKER OPERATING CYCLES

Freeze Cycle

- Temperature control terminals 2 and 3 are closed.
- Power to the condenser.
- Power to the condenser fan.

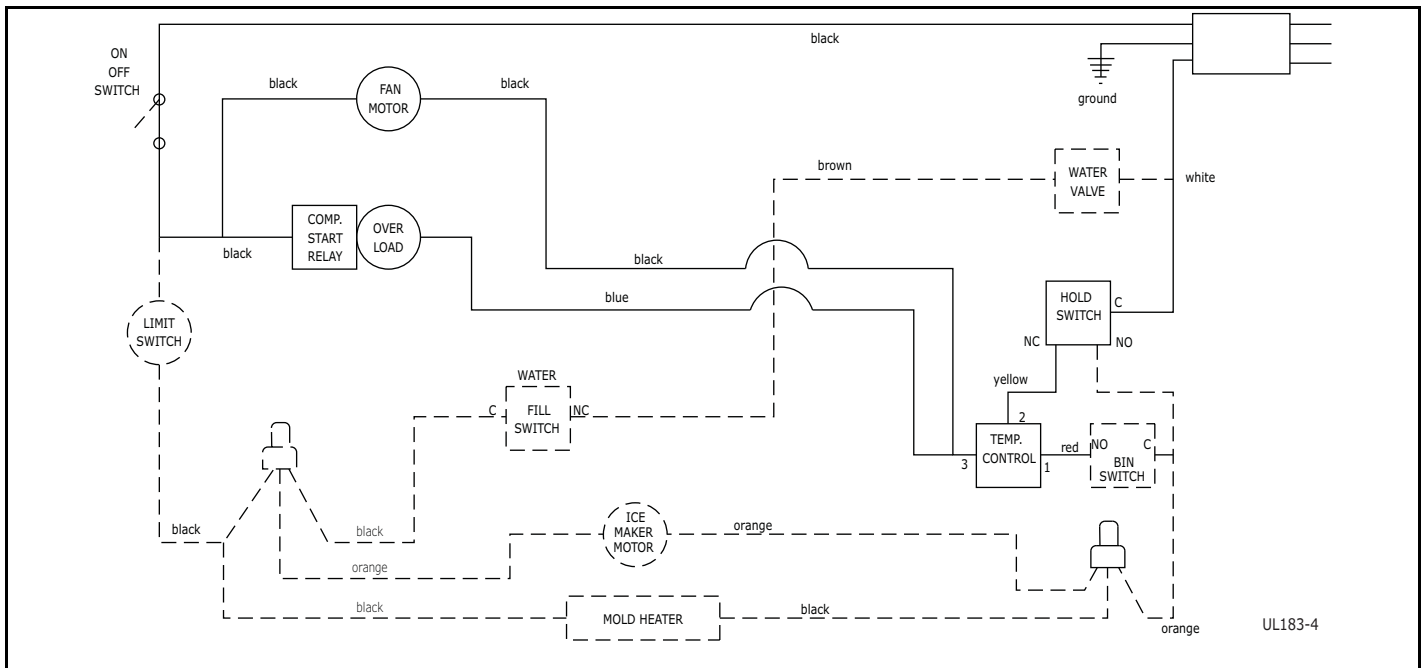


Figure 1. Freeze Cycle

Harvest-1 Cycle

- Temperature control terminals 2 and 3 are open - 2 and 1 close.
- No power to the compressor or condenser fan.
- If bin arm is down, power goes through bin arm switch to the ice maker motor. If bin arm is up, the ice maker will not harvest.

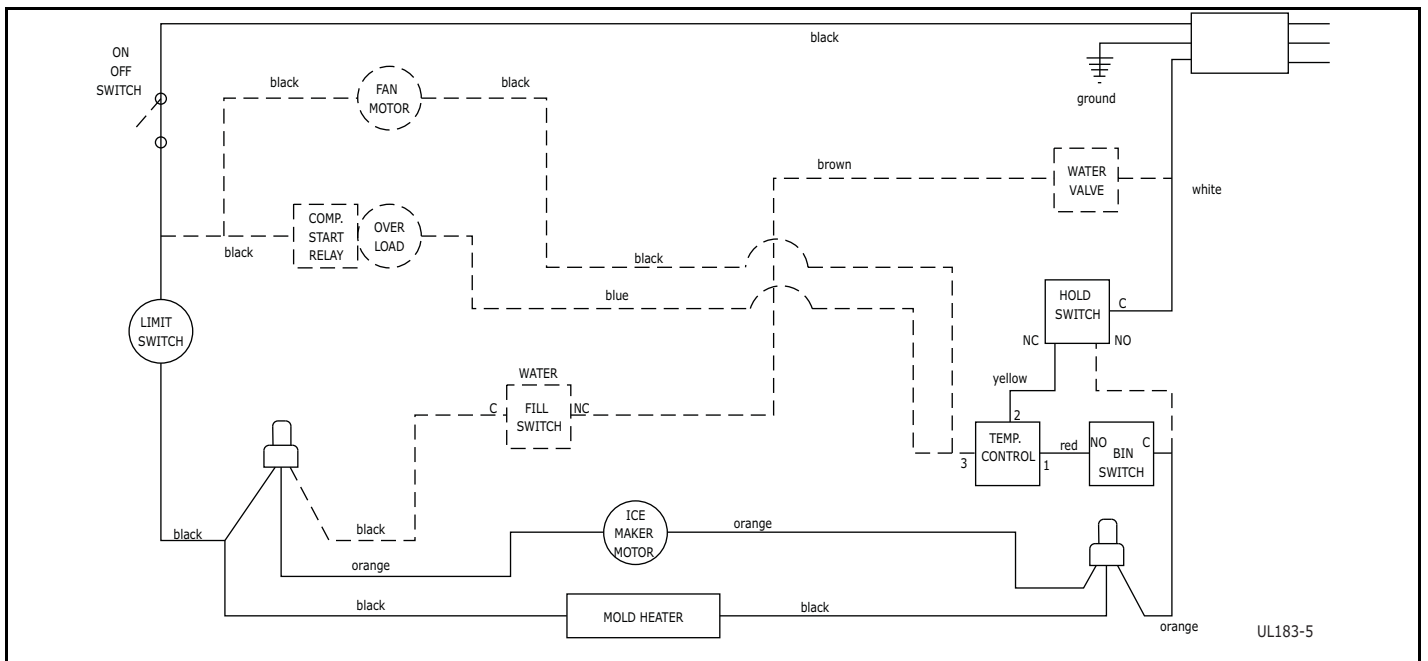


Figure 2. Harvest-1 Cycle (Hold Switch in Normal Position)

HARVEST-2 CYCLE

- Ice maker ejector blades reach approximately 2:00 position and cam depresses the hold switch. Power goes through the hold switch to the ice maker motor and mold heater.
- Ejector blades stall on ice and ice maker motor pulsates until mold heater warms and ice releases.

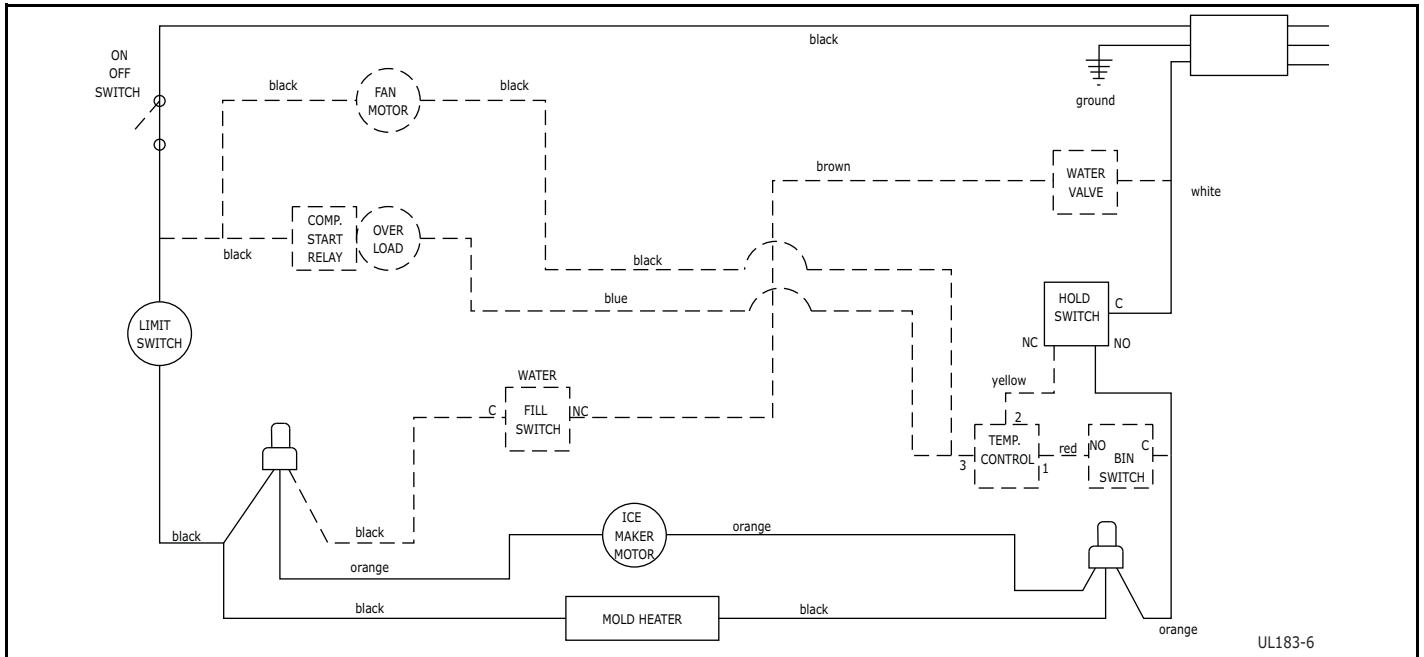


Figure 3. Harvest-2 Cycle (Hold Switch in Switched Position)

WATER FILL CYCLE

- Ice maker ejector blades reach approximately 10:00 position and cam depresses the water fill switch.
- Power to the water valve. Ice maker mold fills.

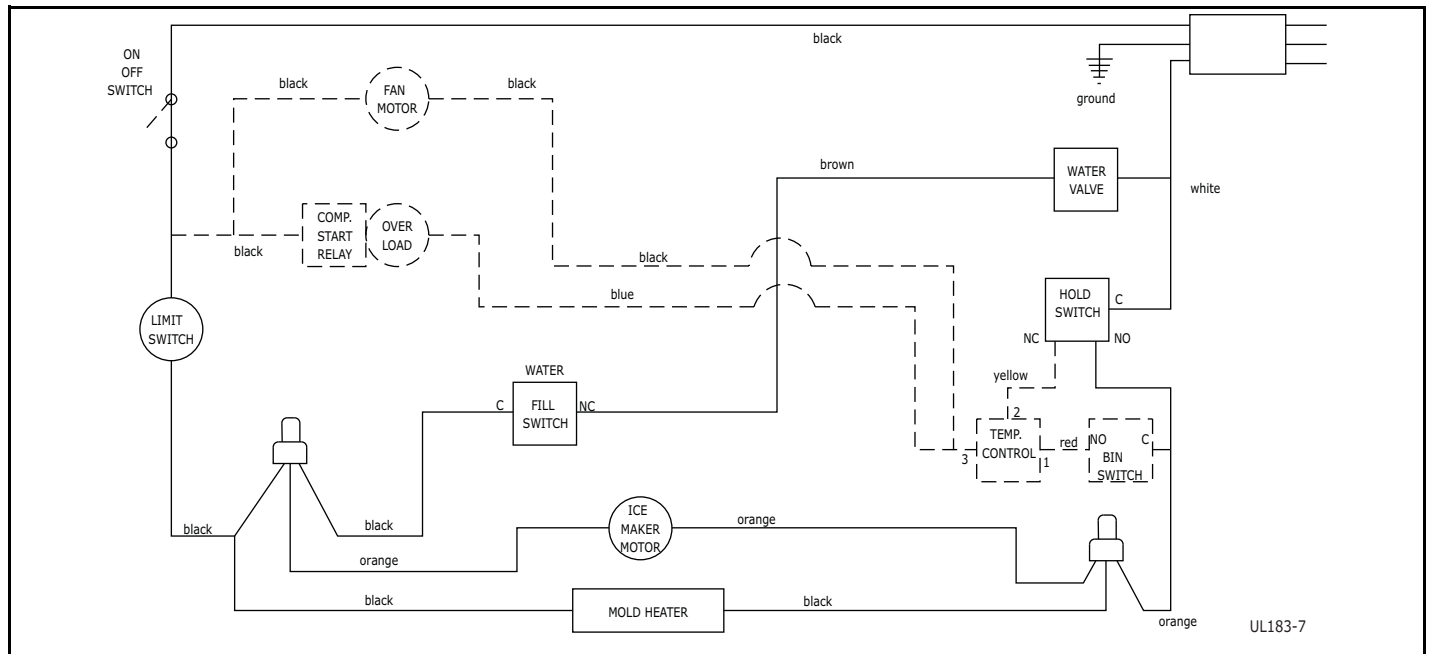


Figure 4. Water Fill Cycle

EJECT CYCLE

- Ejector blades push ice into bucket and stop at 12:00 position.
- Temperature control terminals 2 and 3 have closed during harvest cycle.
- Next freeze cycle begins with power to the compressor and condenser fan.

TEMPERATURE CONTROL SPECIFICATIONS

Double Throw Ice Maker Thermostat Numbers 4548, AR-19-12, 2636, 2690, 2691, 2717, 2783, 2782-S, 2763-S, 2780, 80-26005-02

These temperature controls are double throw, single pole controls. The sensing tube is inserted into the ice maker mold and senses mold temperature. After ice is sensed in the mold, the 2-3 contacts open (stopping the compressor) and the 2-1 contacts are closed (starting the ice maker motor). The 2-3 contacts close (2-1 contacts open) before the end of the ice harvest cycle. The hold switch prevents power going back to the compressor. This prepares the control for the next cycle.

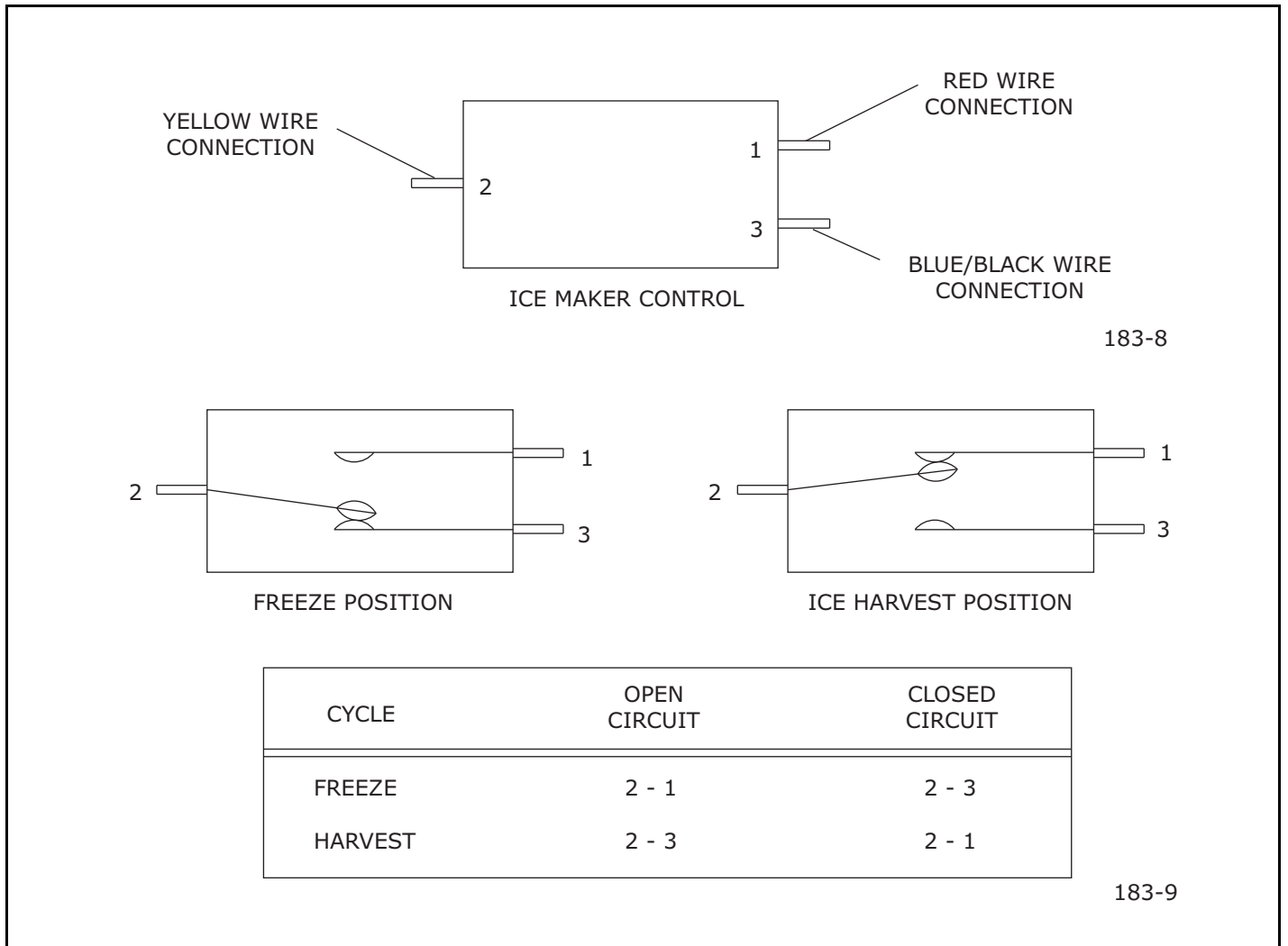


Figure 5. Temperature Controls - Manual Defrost Ice Makers

LIMIT SWITCH SPECIFICATIONS

- Normally closed Bi-metal switch
- Open temperature: 104°F
- Close temperature: 83°F

The function of this switch is to open in the event of an overheating condition. This bi-metal thermostat is normally closed and does not initiate the ice harvest cycle. The ice harvest cycle is initiated by a double throw, single pole temperature located remotely from the ice maker assembly.

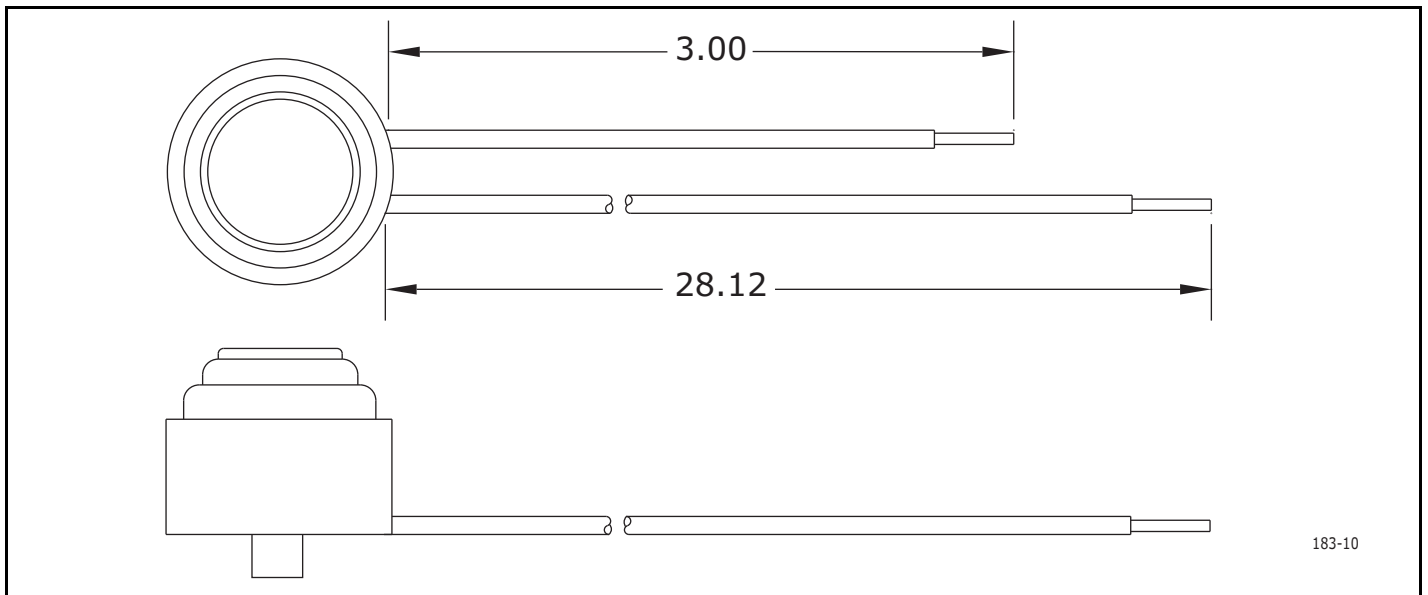


Figure 6. Limit Switch

REPLACING ICE MAKER ASSEMBLY (CO29F ONLY)

1. Unplug the unit from the main power source.
2. Disconnect ice maker wire harness at plug (1).
3. Remove control capillary tube from sensing tube on ice maker assembly (2).
4. Remove water inlet tube.
5. Remove front cover (3).
6. Advance the ejector blade to the 3 o'clock position by turning the 5/16" hex head on the small brass gear counterclockwise (4).
7. Remove three screws from wall of freezer housing (5).
8. Remove ice maker assembly.
9. Place new ice maker assembly into position and secure with three screws (5).
10. Reconnect wire harness at plug.
11. Insert control capillary tube into ice maker sensing tube.
12. Insert water inlet tube.
13. Apply Permagum® to all exit holes.
14. Install back panel.
15. Plug in unit and test.

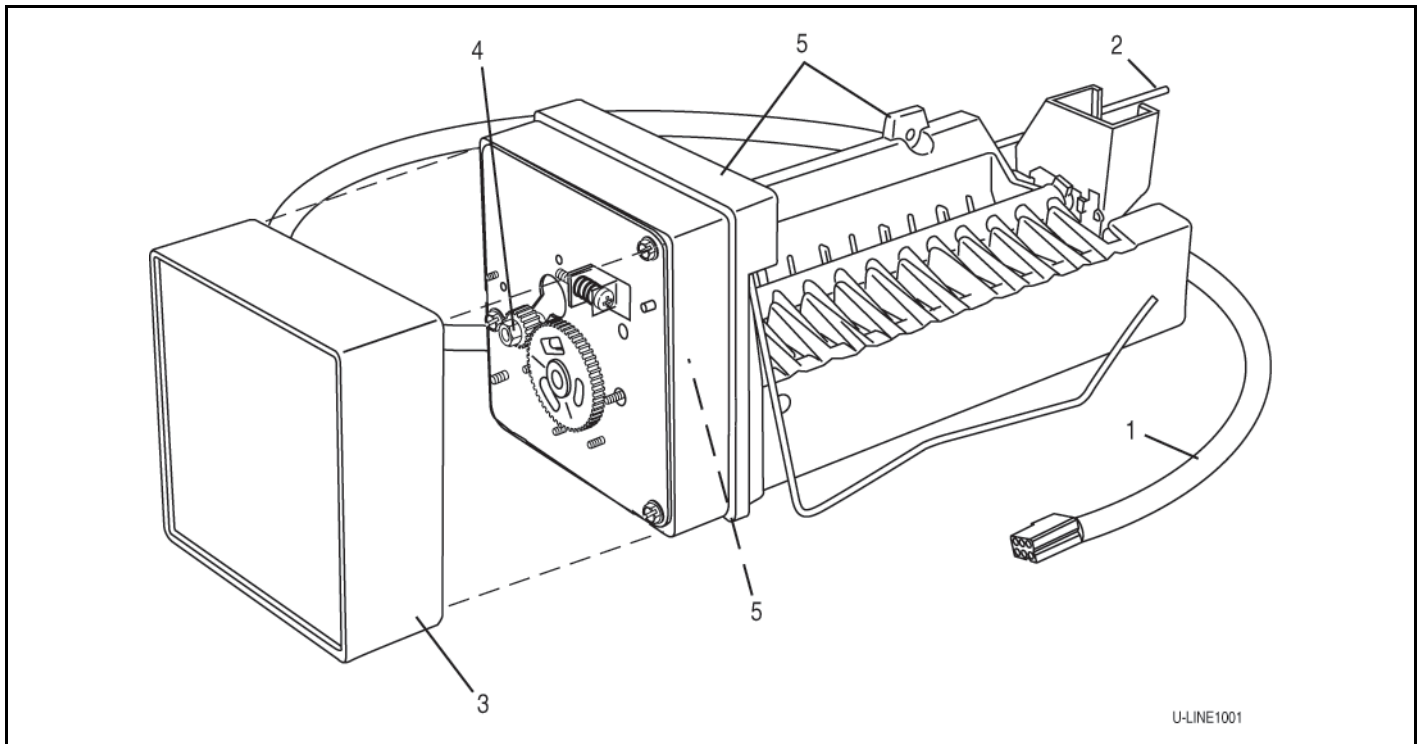


Figure 7. Ice Maker Assembly

REPLACING ICE MAKER ASSEMBLY (ALL MODELS EXCEPT CO29F)

1. Remove back panel.
2. Disconnect all wires at bell connectors (5 wires-Models BI95, BI98 or SP18; or Plug-Models).
3. Remove capillary tube from sensing tube on ice maker assembly (2).
4. Remove water inlet tube.
5. Remove front cover (3)
6. Advance ejector blades to the 3:00 position by turning the 5/16" hex head on the small brass gear counterclockwise (4).
7. Remove two screws from the side wall of evaporator (5).
8. Remove screws from the bottom of the evaporator plate.
9. Remove ice maker assembly from evaporator shelf.
10. Clean alumilastic from evaporator shelf.
11. Apply 1/4" layer of fresh alumilastic to heater side of new ice maker.
12. Replace parts in reverse order of removal.
13. Reconnect all wires.
14. Insert capillary tube into ice maker sensing tube.
15. Insert water inlet tube.
16. Apply permagum to all exit holes. Mount back panel.

17. Mount the back panel.

18. Plug in unit and test.

220 Volt Conversion List

All models listed in this manual are equipped to run on 110/115 volt. This document is a conversion list for the applicable 220 volt parts for the following models:

- SP18
- BI95
- BI98
- SS1095

110V P/N	220V P/N	Description
5263-S	5195	Fan Motor
80-39015-00	628109	I.M. motor (ice makers)
402	619	Ice maker assembly - Models SP18, BI95, BI98 and model SS1095
402-29/1175	620	Ice maker assembly - Models SP18, BI95, BI98 and model SS1095
2552A	2555A	Water valve
5402-S	5404-S	Compressor (ice makers)
150	650	Faceplate assembly
5414	5418	Relay
5413	5417	Overload

Defrost

These units are manual defrost.

To defrost unit remove ice bucket. Turn unit off. Use toweling inside to absorb water as it melts down. This will help prevent water from getting onto customer's floor.

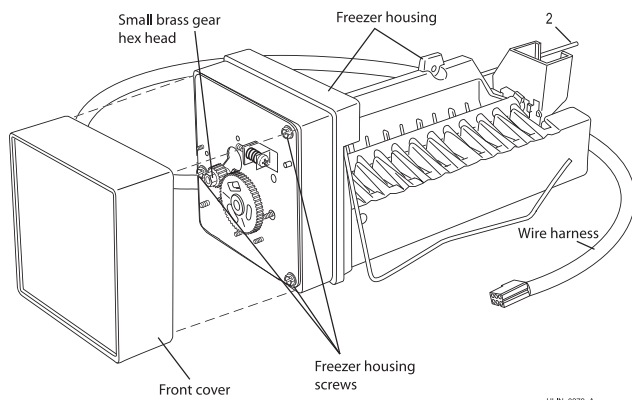
The defrost duration is dependent upon usage or climate. Typically, defrosting is needed approximately every 6 weeks.

Replace Ice Maker

The new ice maker assembly you have received will have a plug-in connection. In some instances you may need to cut plug off from cable and hard-wire the connections.

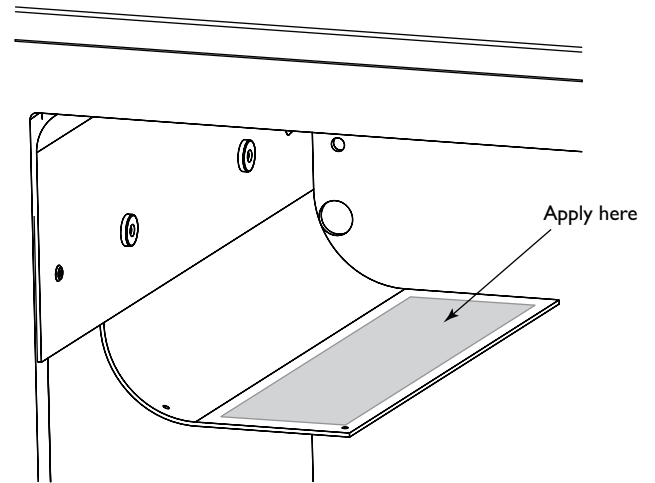
REMOVE ICE MAKER

1. Unplug the unit.
2. Disconnect ice maker wire harness at plug.
3. Disconnect thermistor plug.
4. Remove water inlet tube.
5. Remove front cover.
6. Advance ejector blade to the 3 o'clock position by turning the 5/16" hex head on the small brass gear counterclockwise.
7. Remove three screws from wall of freezer housing.
8. Remove ice maker assembly.



INSTALL ICE MAKER

1. If ice maker sits on evaporator (as shown) be sure to apply the included Alumilastic paste.



2. Reconnect plug.
3. Reconnect thermistor plug.
4. Insert water inlet tube.
5. Apply Permagum[®] to all exit holes on back of unit.
6. Install back panel.
7. Plug in unit and test.