# **SERVICE MANUAL**



# **MODULAR 3000 SERIES**



### **Models Covered**

- U-3018RFOL-00
- U-3018RFOL-01
- U-3018RFS-00
- U-3018RFS-01
- U-3018RGLOL-00
- U-3018RGLOL-01

- U-3018RGLS-00
- U-3018RGLS-01
  - U-3018WCOL-00
  - U-3018WCOL-01
- U-3018WCS-00
  - U-3018WCS-01

### THE MODULAR 3000 SERIES ARE INTENDED FOR BUILT IN INSTALLATIONS ONLY

The Built-In Undercounter Leader Since 1962 U-LINE.COM

### **U-LINE CORPORATION LIMITED WARRANTY FOR MODULAR 3000 SERIES PRODUCTS**

I.U-Line Corporation ("U-Line") warrants each U-Line Modular 3000 Series product to be free from defects in materials and workmanship for a period of two years from the date of purchase. U-Line further warrants the sealed system (consisting of the compressor, the condenser, the evaporator, the hot gas bypass valve, the dryer and the 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 two year warranty period for all U-Line Modular 3000 Series products U-Line shall: (1) repair any product or replace any part of a product; and (2) for all Domestic U-Line Modular 3000 Series 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 Domestic U-Line Modular 3000 Series 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 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 following conditions are excluded from this limited warranty: damage caused by outdoor use; 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.

4.U-Lines' Outdoor Limited Warranty, set forth in this Paragraph 4, 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. Exposure to temperatures below freezing may cause damage to the product. Damage resulting to the product (and/or the surroundings) caused by this exposure is not covered under this warranty. Such models shall continue to be covered by the warranty terms set forth in Paragraphs I and 2 above, to the extent such models:

A.Are subjected to temperatures between 50 and 100 degrees Fahrenheit. Although these products will function in ambient temperatures below 50 degrees and above 100 degrees Fahrenheit, performance may decline. Performance degradation due to operating above or below the designated ambient temperature range is not a manufacturing defect and any issues resulting from exposure to higher temperatures, such as spoiled food or low ice production, are not covered under this warranty policy; and/or

B.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.

5.If a product defect is discovered during the applicable warranty period, you must promptly notify either U-Line at P.O. Box 245040, Milwaukee, Wisconsin 53224 or at 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 two years after the applicable warranty period.

6.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.

7. 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.



#### PRODUCT LIABILITY POLICY

Field service technicians are authorized to make an initial assessment. If in the servicer'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 800-779-2547 to initiate the RA and product exchange process.

If in the servicer's judgment the damage is the result of installation issues (water connection/drain, etc.), the consumer would be so notified and the correction would be made by the servicer or installer without requiring removal of the product. Any claim for damages should be directed to the original installer.

Any U-Line unit involved in an alleged property damage claim must remain <u>unaltered and unrepaired</u>, for evaluation. No service or repairs should 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.

If the unit in question is a U-Line CLR or CLRCO with a drain pump, both the unit and the drain pump (regardless of the manufacturer) must be returned to U-Line Corporation.

To complete the damage claim process for the customer, please obtain the following and forward to U-Line at <u>onlineservice@U-Line.com</u>, fax to 414-354-5696 or mail to the address below.

Pictures of the unit, installation and any alleged property damage.

Inquire when the problem first appeared, any prior problems with the product and provide a brief description of the alleged damages.

To expedite the claim process, U-Line will need two damage repair estimates.

Reference the RA number and customer name when providing this information.

If a unit is returned to U-Line, this evaluation will take approximately ten business days. <u>No field service company is authorized to</u> <u>perform this evaluation</u>. When a Return Authorization Number is issued, and the unit has been boxed in a U-Line carton, U-Line should be contacted and then will make arrangements for shipping, or designate a truck line to have the unit shipped freight collect.

If U-Line's evaluation finds the unit, (or U-Line P60 pump) to be defective, causing the property damage, the damage claim will be reviewed by the U-Line Customer Assurance Department.

If U-Line's evaluation finds the unit not to be defective, does not repeat a failure or does not leak any water from the U-Line unit or U-Line P60 pump, all claims for damage will be declined.

When a product evaluation is needed, it is the customer's responsibility to assure that the unit is returned for evaluation. If the customer fails to do so, or has the unit repaired in the field prior to U-Line's evaluation, any claim for damage will be declined.

8900 N. 55th St. • P.O. Box 245040 Milwaukee, WI 53224-9540 414/354-0300 • Fax: 414/354-7905

Website: www.u-line.com

Leaders In Quality Undercounter Refrigeration

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#### General Information

#### IMPORTANT

- PLEASE READ all instructions before installing, operating, or servicing the appliance.
- Proper installation procedures must be followed when completing an installation or relocation of a unit. An INSTALLATION GUIDE for the unit, providing complete installation information is available from U-Line Corporation direct. Consult the installation guide before any installation begins. U-Line contact information appears on the rear cover of this guide.
- This unit requires connection to a dedicated 15 Amp grounded (three-prong), polarized receptacle, installed by a qualified electrician, compliant with applicable electrical codes.

### **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

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

#### 

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

### **General Precautions**

Use this appliance for its intended purpose only. The 3000 model series is intended for <u>BUILT IN</u> installation only. Anti tip brackets <u>MUST</u> be installed. Follow these general precautions with those listed throughout this guide:

#### 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.

#### WARNING

SHOCK HAZARD - Electrical Grounding Required.

- Never attempt to repair or perform maintenance on the unit until the electricity has been disconnected.
- Never remove the round grounding prong from the plug and never use a two-prong grounding adaptor.
- Altering, cutting of power cord, removal of power cord, removal of power plug, or direct wiring can cause serious injury, fire and or 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.

#### WARNING

Install provided Anti-Tip kit on all models. Units may <u>NOT</u> be installed as free standing. Serious personal injury could occur.

#### 

- Use care when moving and handling the unit. Use gloves to prevent personal injury from sharp edges.
- If your model requires defrosting, 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.

#### IMPORTANT

- Do not lift unit by door handle.
- Never install or operate the unit behind closed doors. Be sure front grille is free of obstruction. Obstructing free airflow can cause the unit to malfunction and will void the warranty.
- Failure to clean the condenser every six months can cause the unit to malfunction. This could void the warranty.
- Allow unit temperature to stabilize for 24 hours before use.
- Do not Block any internal Fans

Use only genuine U-Line replacement parts. Imitation parts can damage the unit, affect its operation or performance and may void the warranty.



### **Models Covered**

#### This guide covers the following models:

Model	Hinge Configuration	Door Configuration	Cabinet Configuration
U-3018RFOL-00	Right Hand Hinge	Solid Overlay Door	Bins
U-3018RFOL-01	Left Hand Hinge	Solid Overlay Door	Bins
U-3018RFS-00	Right Hand Hinge	Stainless Steel Solid Door	Bins
U-3018RFS-01	Left Hand Hinge	Stainless Steel Solid Door	Bins
U-3018RGLOL-00	Right Hand Hinge	Glass Overlay Door	Glass Shelves
U-3018RGLOL-01	Left Hand Hinge	Glass Overlay Door	Glass Shelves
U-3018RGLS-00	Right Hand Hinge	Stainless Steel Glass Door	Glass Shelves
U-3018RGLS-01	Left Hand Hinge	Stainless Steel Glass Door	Glass Shelves
U-3018WCOL-00	Right Hand Hinge	Glass Overlay Door	Wine Racks
U-3018WCOL-01	Left Hand Hinge	Glass Overlay Door	Wine Racks
U-3018WCS-00	Right Hand Hinge	Stainless Steel Glass Door	Wine Racks
U-3018WCS-01	Left Hand Hinge	Stainless Steel Glass Door	Wine Racks

### System Default Values

	Available	Default		Offset		Differential	Set P	Points	Fan I	Delay
Model	Modes	Modes	Zone	Evap	Ambient	Zone	Zone	Evap	On	Off
U-3018RFOL-00	Deli, Beverage, Market, Root, Pantry	Deli	0	0	0	2	36	42	I	2
U-3018RFOL-01	Deli, Beverage, Market, Root, Pantry	Deli	0	0	0	2	36	42	I	2
U-3018RFS-00	Deli, Beverage, Market, Root, Pantry	Deli	0	0	0	2	36	42	I	2
U-3018RFS-01	Deli, Beverage, Market, Root, Pantry	Deli	0	0	0	2	36	42	I	2
U-3018RGLOL-00	Deli, Beverage, Market, Root, Pantry	Deli	I	0	0	2	36	42	I	2
U-3018RGLOL-01	Deli, Beverage, Market, Root, Pantry	Deli	I	0	0	2	36	42	I	2
U-3018RGLS-00	Deli, Beverage, Market, Root, Pantry	Deli	I	0	0	2	36	42	I	2
U-3018RGLS-01	Deli, Beverage, Market, Root, Pantry	Deli	I	0	0	2	36	42	I	2
U-3018WCOL-00	Red Wine, White Wine, Sparkling	Red Wine	I	0	0	2	55	45	I	2
U-3018WCOL-01	Red Wine, White Wine, Sparkling	Red Wine	I	0	0	2	55	45	I	2
U-3018WCS-00	Red Wine, White Wine, Sparkling	Red Wine	I	0	0	2	55	45	I	2
U-3018WCS-01	Red Wine, White Wine, Sparkling	Red Wine	I	0	0	2	55	45	I	2



### Warranty Claims Procedure

J·LINE

#### IMPORTANT

Warranty claims must be filed within 60 days after the completion of the service call

# When submitting claims for warranty payment, please follow these guidelines.

You can use any form you would normally use to bill your customer (your own computer generated form, Narda, USA, etc.). Claims can also be filed on-line at www.u-lineservice.com.

The model and serial number **MUST** be on the claims. Claims will not be paid without a model and serial number.

If you used a part in your repair, you **MUST** put the part number, the invoice number and where the part was purchased from on your submittal form. Claims will be rejected without this information.

If you work on more than one unit per service call please submit a separate claim for each unit.

We track all defects through warranty claims, so please be specific on what the repair was. If it is a system leak, please specify where the leak was.

Please be sure the claim is legible. If the claim form cannot be read, it will be returned, unpaid.

**Remember:** Door and water level adjustments are 30 day warranties only.

If you are replacing a unit please supply the model and serial number of both units (the unit being replaced and the new unit) and the R.A. number.

Occasionally the customer does not return their warranty card. In this case we use the date the unit was shipped to our distributor for a beginning warranty date. This may cause the claim to be rejected for a proof of purchase. If you want to check on a purchase date, you may contact the U-Line Corporation Customer Assurance Department at 1-800-779-2547. This will allow you to get a proof of purchase, if needed, before you submit the claim.

At U-Line, parts and labor claims are paid separately. Included in labor are freon and recovery charges, all other parts are handled by the parts department. We require that some parts be returned to us, so we may return them to our vendor. It will be noted on your packing list if we require you to return the part. If a part is to be returned please include a copy of the packing list and a copy of your claim. If the part was purchased at one of our part distributors, you must handle the part warranty with that company. For labor payment please send a readable copy of your claim to U-Line Corporation, P.O. Box 245040, Milwaukee WI, 53224-9540, or fax it to 414-354-5696. Claims can also be filed on-line at www.u-lineservice.com.

### **Proof of Purchase**

Proof of Purchase and/or Proof of Install is an important part of the warranty claim process. Sometimes it is difficult to obtain a proper Proof of Purchase/Proof of Install for a number of different reasons:

- The customer does not have a copy (only the original).
- The customer has only their copy of the final Walk Through or sign-off of new construction.
- Other valid reasons that prevent your technician from leaving the job site with a suitable Proof of Purchase/ Proof of Install.

We understand the problem and have modified our Proof of Purchase policy to help you in these situations.

Effective immediately, if a copy of the Proof of Purchase/Proof of Install is not available at the site, the technician should record the following information on the Labor Invoice:

- The name of the selling Dealer
- The date of purchase/installation
- The Order or Invoice number (if available)
- The type of document they saw, i.e. Store Receipt, Closing Papers, Sign-Off of Building Permit, Final Walk Through, etc.

If we have this information on the Labor Invoice, and we have the other information that is needed (correct Serial Number, type of repair, time spent on repairs, parts used in the repair, invoice number for the part, etc.), we will be able to process the invoice for you in a timely manner.

### **Serial Number**

#### IMPORTANT

Starting October 2009, U-Line Corporation went to a 13 digit serial number. Anything before that date will have 12 digits.

The serial number is divided into four segments. A typical serial number is 0914997-11-0005. (Figure 1)



The first two digits of the first segment, 09, represents the year the unit was made.

The next four/five digits of the first segment, 14997, represent the shop order number. Order number 14997 is assigned for the Model CLRCO2175B-40 units.

The next two digit segment,  ${\sf II}$  , represents the month the unit was made.

The last four digit segment, XXXX, is a factory internal control number used at U-Line Corporation.

#### Serial Number (Electronic)

The 3000 series contains an electronic serial number assigned to the main control board. The electronic control serial number and the unit serial number are tied together at the factory. To obtain the electronic serial number, access "Help" in the customer service menu. See "Help" on page **10**.

### **Model Number Format**

U-LINE - 3036 PRODUCT SERIES	<b>WCW</b> FAMILY	$\underline{C}_{COLOR}$ -	00 SPECIAL ORDER
U-LINE - CO FAMILY	PRODUCT SERIES	S -	<b>OI</b> PECIAL DRDER
ULN - BI U-LINE FAMI	LY PRODUC SERIES	5 S-	- 00 SPECIAL ORDER
U-LINE - 2175 PRODUCT SERIES	RC FAMILY C	COLOR -	00 PECIAL DRDER
U-LINE - CLRC		75 S	- 41 R SPECIAL

A typical model number would be, U-2175RCGOL-00. The model number is broken into 5 segments. (Figure 2)

U- or ULN-

This signifies a U-Line Product.

Family

Family indicates the type of unit. Currently there are nine families. Refrigerators, Wine Captains, Beverage Centers, Combo Ice Makers, Clear Ice Makers, Manual Defrost Ice Makers, ADA Units, Outdoor Units and Freezers.

• Product Series:

U-Lines current product series includes 95, 98, SP18, 1095, 29, 10xx, 11xx, 21xx, 22xx, and 30xx.

• Color:

The color segment includes color along with information that is important to the unit and the way it is used. For example, the model U-2175RCGOL-00, is part of the family of refrigerators, product series 2175. The "C" following the "R" indicates this is a convection cool unit with an evaporator fan motor. The "GOL" indicates the unit is black with a glass door an may accept an overlay panel.

• Special Order:

Special order indicates door hinge arrangement, operating voltage, or pump inclusion.

![](_page_8_Picture_0.jpeg)

### **General Information**

### **Replacement Parts**

#### How to Order Replacement Parts

- 1. Refer to Service Parts and locate the illustration(s) for the model you are servicing.
- 2. Locate the desired part to be serviced and reference the part's item number in the parts list.
- 3. When ordering parts, it will be necessary to supply model number, serial number, part number, part description, and in some cases color or voltage.

All warranty parts will be shipped at no charge as long as warranty status has been confirmed. If we require that a part be returned to U-line, you will be informed at the time the order is placed. It will be noted on your packing list if we require you to return a part or if you may field scrap it. If U-Line requires a defective part to be returned, a prepaid shipping label will be included with your new replacement part. When returning parts, enclose a copy of your packing list and a copy of your labor claim showing the model and serial number. Tag or label the part with the nature of the defect. Our warranty records may not match the customer's information. In this case, a proof of purchase will be required. If you do not have the proof of purchase at the time the order is placed, the part will be sent net 15 days and charged to a Visa or Master Card if you don't have an open account with U-Line Corporation. When the proof of purchase is provided, we will credit your account.

4. Parts may be ordered on-line, by FAX or phone:

www.U-LineService.com

onlineparts@u-line.com

FAX Number (414) 354-7905

Phone Number (414) 354-0300 or (800) 779-2547;

**REPLACEMENT PARTS:** Use only genuine U-Line replacement parts. The use of non-U-Line parts can damage the unit and may void the warranty.

### Thermistors

There are 3 thermistors used with the 3018 models.

- Zone Thermistor Located on the right hand wall and is used to maintain temperature.
- Evaporator Thermistor Located on the back of the evaporator plate and is used during defrost.
- Ambient Thermistor Located in the base of the unit on the condenser and is used to monitor ambient air temperatures.

### **Viewing Temperature**

Note: The display shows set point **NOT** the actual temperature.

The 3000 series is equipped with an advanced electronic display and control. Thermistor readings can be obtained through both the customer and service menu. The customer menu will display readings while using offset calculations. It is important to note that the system will use these adjusted readings when determining cooling and defrost cycles. The service menu will display the actual thermistor reading while disregarding offsets.

#### **Customer Menu:**

To view the adjusted temperature of each available thermistor, follow the steps below.

- 1. Initiate the customer menu by holding Select O for 5 seconds.
- 2. Use Down 🖾 to scroll to "Actual Temperatures".
- 3. Press select 🖾.
- 4. Use Up  $\bigtriangleup$  or Down  $\boxdot$  to scroll through available information.

#### Service Menu

To view the actual temperature without having the offsets taken into consideration, follow the steps below.

- Initiate the service menu by holding both up ☐ and Zone Toggle
   Initiate the service menu by holding both up ☐ and Zone Toggle
- 2. Use Up 🛆 or Down 🖾 to scroll to "Actual Temperatures".
- 3. Press select 🙆.

Use Up  $\bigtriangleup$  or Down  $\boxdot$  to scroll through available information.

### **Thermistor Calibration**

While thermistors generally do not require calibration, over time contact corrosion and or element wear may make calibration necessary.

#### Calibration

To calibrate a thermistor one must first prepare an ice-bath of crushed ice and water in a suitable container. Allow the ice bath temperature to stabilize for at least 5 minutes before beginning.

#### IMPORTANT

Offsets are preset at the factory to efficiently maintain product temperature. If modifying offset, existing values must be taken into consideration.

### WARNING

Customer Care must be notified before any changes are made to factory set offsets. Failure to notify Customer Care will void the warranty.

- Enter the service menu and record existing offset values for each thermistor to be calibrated. See page 13. Some models have a factory offset setting of 0.
- 2. Change offset of each thermistor to be calibrated to 0.
- 3. Enter "Actual Temps" through the **Customer Menu**. See "Viewing Temperature".
- Submerge the thermistor in the ice bath. The temperature read out through the menu should be 32°F. If different, record difference.
- 5. Enter "Offsets" through the service menu and set the value recorded in step 4 to the thermistor to be calibrated.
- Enter "Actual Temps" through the Customer Menu, the temperature readout should now be 32°F. If the readout is still incorrect reset the offset to 0 and preform steps 4 & 5 again.
- 7. Enter the "Offsets" menu and add the value recorded in step 1 to the new offset setting. For example, if after the ice bath an offset of 1 was needed and the existing offset value recorded in step 1 was -2 the new offset value would be -1. If the calculated value is outside the maximum range capable in the offset menu the thermistor must be replaced. The offset menu has a maximum range of -10 through 10.

*Note:* If a mistake is made in the calibration process a "Factory Reset" will restore offsets to their factory pre-set values. See page **14**.

![](_page_10_Picture_0.jpeg)

### **Air Flow**

#### IMPORTANT

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

![](_page_10_Figure_5.jpeg)

Internal Air Flow And Unit Ventilation Diagram

### **Initial Startup**

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

#### IMPORTANT

U-Line recommends allowing the unit to run overnight before loading refrigerator with product.

To power the unit on simply press POWER  $^{(1)}$  and the unit will immediately switch on. To turn the unit off, press and hold POWER  $^{(1)}$  for 5 seconds and release. The display will show a countdown to switching the unit off.

### **OLED Electronic Control Display**

#### Digital Display.

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

### **Adjusting Temperature Settings**

Each zone has a series of Mode Settings with a default value for each mode. Each mode setting can be further customized by fine tuning the temperature set point. See the table below for a description of each mode and mode temperature ranges. Mode selection will vary by model.

#### **Mode Settings Chart**

Setting	Default (°F)	Range (°F)
Red Wine	55°	55° - 65°
White Wine	50°	45° - 55°
Sparkling Wine	45°	38° - 50°
Beverage	38°	34° - 65°
Market	38°	34° - 40°
Root	50°	45° - 55°
Pantry	42°	34° - 70°
Deli	36°	34° - 40°

Available mode settings will vary with model.

- 1. Press Select 🖾 to activate Mode Settings.
- Pressing Select will cycle through each available mode. Reference the mode settings chart on pg 3 for each setting's default set point and range.

#### Quick Chill

#### **ACAUTION**

Quick chill is designed to quickly pull warm beverages and foods down to optimum storage temperature. It is important to only initiate quick chill modes when the unit has been fully loaded with warm product.

The following table lists modes which include the quick chill feature and the time which quick chill will run.

Mode	Run Time
Beverage	4 Hours
Deli	5 Hours
Market	4 Hours
Pantry	4 Hours
Red Wine	Not Available
Root	l Hour
Sparkling	l Hour
White Wine	l Hour

![](_page_11_Picture_1.jpeg)

#### To Initiate quick chill.

- 1. Press Select O to select the desired mode setting.
- 2. Press Down 🖾 until the temperature set point reads "Quick"

The quick chill feature will then begin for the period of time dictated by the mode type. To cancel quick chill simply select a set point other then "quick".

### **Interior Lighting**

![](_page_11_Figure_7.jpeg)

U-Line 3000 Series unit uses a state of the art theatre style LED lighting system.

Note: Lighting system is designed to fade in and out when switching states.

- I. To begin, press U-Select Lighting <sup>™</sup> to enter the lighting menu.
- 2. Use Up 🖾 or Down 🖾 to cycle through each available brightness setting; Low, Medium, or High.
- Use U-Select Lighting <sup>™</sup> to cycle through each available timer setting. Selections include "On With Door", "On 3 Hours", "On 6 Hours", or "On 24 Hours".
- 4. To exit, press Select 0 or simply wait for the menu to time out.

### **Error Notification**

The 3000 model series continuously monitors a series of inputs and parameters to ensure proper and efficient operation of your unit. Should the system detect a fault an error notification will be displayed on the user interface. This errors are considered active and can also be viewed in the Self Test and All Errors mode of the service menu. See below for a list of errors and possible solutions.

ID	Description	Solution
No Comm	Unit lost communication to the display	Check display cable. Replace if necessary.
Zone T Open	Left or right zone thermistor circuit open.	Check connection. Replace if necessary
Amb Thrm Open	Ambient thermistor circuit open.	Check connection. Replace if necessary
Zone T Short	Left or right zone thermistor circuit shorted.	Check connection. Replace if necessary
Amb Thrm Short	Ambient thermistor circuit shorted	Check connection. Replace if necessary
Temp Hi 6H+	Left or right Zone temperature +10° over set point for over 6 hours.	Check compressor, evaporator fan and related relays and DC outputs.

ID	Description	Solution
Temp Hi 12H+	Zone temperature +10° over set point for over 12 hours.	Check compressor, evaporator fan and related relays and DC outputs.
Temp Lo 6H+	Zone temperature -10° under set point for over 6 hours.	Check compressor, evaporator fan and related relays and DC outputs.
Temp Lo 12H+	Zone temperature -10° under set point for over 12 hours.	Check compressor, evaporator fan and related relays and DC outputs.
Door Open 5M	Door switch open for more then 5 minutes.	Verify door is closed and sealing. Check reed switch and related connections.

### Customer Menu

![](_page_11_Figure_19.jpeg)

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

- To access the Customer Menu hold down Select I for 5 seconds.
- 2. Use Up  $\bigcirc$  or Down  $\boxdot$  to scroll through available selections.
- 3. Use Select O to enter selected sub-menu.
- 4. To exit Customer menu, Use Down <sup>□</sup> to scroll to the bottom of the display and use Select <sup>1</sup> to Select "Exit".

![](_page_12_Picture_0.jpeg)

#### **Actual Temps**

![](_page_12_Figure_3.jpeg)

The "Actual Temps" option displays the offset corrected temperature of each zone, evaporator, as well as ambient temperature.

- 1. To view Actual Temps first select Actual Temps from the customer menu.
- 2. Use Up 🛆 or Down 🗁 to scroll through available information.
- 3. To exit, Select 🖾 Return to Menu.

#### **Energy Saver**

![](_page_12_Figure_9.jpeg)

Energy Saver mode reduces overall energy consumption by altering user set point, differential, lighting and tone settings. When in Energy Saver mode a small leaf icon will be displayed on the main screen.

- 1. To enter Energy Saver first select Energy Saver from the Customer Menu.
- 2. Use Down  $\boxdot$  to select "Off" in the menu.
- 3. Press Select 🙆.
- 4. Use Up  $\bigtriangleup$  or Down  $\boxdot$  to change the selection from Off to On.
- 5. Press Select O to confirm your selection.
- 6. To exit Energy Saver mode simply return to the Customer Menu, Select Energy Saver mode and change "On" to "Off".

#### Sabbath Mode

![](_page_12_Figure_18.jpeg)

The U-line 3000 Series of models offer a Sabbath mode for users who require this functionality during Sabbaths. Sabbath mode disables system responses to user initiated activities and all external functions; including lighting, display and audible alarms. The unit will still maintain internal temperatures and set points.

- 1. To enter Sabbath Mode, select Sabbath Mode from the Customer Menu.
- 2. Use Down 🗁 to select "Off".
- 3. Press Select 🙆, "Off" will begin to flash.
- 5. Press Select 🖾 to Confirm your selection.

The display will fade out as the unit enters Sabbath mode. Sabbath remains active until Power  $^{(\!\!\!\!\!\!\!\!)}$  is pushed.

#### Languages

![](_page_12_Figure_27.jpeg)

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

To change display language select "Languages" from the Customer Menu.

- I. Use Down ☐ to select "English".
- 2. Press Select 🙆, "English" will begin to flash.
- 3. Use Up  $\bigcirc$  or Down  $\boxdot$  to cycle through the available languages.
- 4. Press Select 🖾 to confirm your choice.

![](_page_13_Picture_1.jpeg)

#### Sound Level

![](_page_13_Figure_3.jpeg)

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

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

- I. Use Up rightarrow or Down rightarrow to select the current sound level.
- 2. Press Select O, the current setting will begin to flash.
- 3. Use Up rightarrow or Down rightarrow to select a different level.
- 4. Use Select O to confirm your choice.

#### Fahrenheit / Celsius

![](_page_13_Figure_11.jpeg)

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

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

- 2. Press Select 0, the selection will begin to flash.
- 4. Press Select O to confirm your choice.

#### **Factory Default**

![](_page_13_Figure_19.jpeg)

Factory Default will restore all settings to their factory default.

#### To access Factory Default

2. Press Select 🙆

#### To restore settings to their factory default.

- 3. Use Down <sup>I</sup> to select "Restore?" and press Select <sup>I</sup>
- "Restore?" will change to "Restoring..." while settings are restored. When restoration is complete, "Restoring..." will return to "Restore".

#### Help

![](_page_13_Figure_29.jpeg)

To access the Help menu select Help from the Customer Menu. Use Up  $\bigtriangleup$  or Down  $\boxdot$  to scroll through available information. The Help screen displays the following.

- Model.
- U-Line contact information.
- Software version.
- Serial Number.

To exit the Help menu use Up  $\bigcirc$  to select "Return to Menu" and press Select 🔞 to confirm.

### Service Menu

In addition to a feature rich customer menu, the 3000 series also offers a service menu with the ability to fine tune and monitor unit operation.

To initiate the Service menu hold both Up  $\Box$  and Zone Toggle  $\overline{\mathbb{O}}$  for 5 seconds.

#### Actual Temps

![](_page_13_Figure_40.jpeg)

The Actual Temp option in the service menu will display raw thermistor readings without calculating offsets.

- 2. Press Select 🙆.

To exit the Actual Temps menu use Up  $\square$  to select "Return to Menu" and press Select O to confirm.

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#### **All Errors**

![](_page_14_Figure_4.jpeg)

The All Errors option keeps record of any system errors. When an error occurs it is recorded to all errors. The number next to the error indicates the number of recorded instances. Errors in the log may not be currently active. The error log memory is non volatile and is persistent should power be lost and restored to the unit. See below for a list of logged errors and their respective descriptions.

ID	Description	Solution
No Comm	Unit lost communication to the display.	Check display cable. Replace if necessary.
Zone T Open	Zone thermistor circuit open.	Check connection. Replace if necessary.
Evap T Open	Evaporator thermistor circuit open.	Check connection. Replace if necessary.
Amb Thrm Open	Ambient thermistor circuit open.	Check connection. Replace if necessary.
Zone T Short	Zone thermistor circuit shorted.	Check connection. Replace if necessary.
Evap T Short	Evaporator thermistor circuit shorted.	Check connection. Replace if necessary.
Amb Thrm Short	Ambient thermistor circuit shorted.	Check connection. Replace if necessary.
Temp Hi 6H+	Zone temperature +10° over set point for over 6 hours.	Check compressor, evaporator fan and related relays and DC outputs.
Temp Hi 12H+	Zone temperature +10° over set point for over 12 hours.	Check compressor, evaporator fan and related relays and DC outputs.
Temp Lo 6H+	Zone temperature -10° under set point for over 6 hours.	Check compressor, evaporator fan and related relays and DC outputs.
Temp Lo 12H+	Zone temperature -10° under set point for over 12 hours.	Check compressor, evaporator fan and related relays and DC outputs.
Door Open 5M	Door switch open for more then 5 minutes.	Check reed switch and connection.

To access All Errors follow the steps below.

- I. Use Down ☐ to select "All Errors".
- 2. Press Select 🖾.
- 3. Use Up  $\bigtriangleup$  and Down  $\boxdot$  to scroll through available information.

To clear the error log use Down  $\square$  to select "Clear Errors" and press Select 🙆 to confirm.

To exit the Actual Temps menu use Up  $\square$  to select "Return to Menu" and press Select O to confirm.

#### **Relay Status**

![](_page_14_Figure_14.jpeg)

Relay status displays the current state of each relay. While all available relays are displayed, only a portion are used.

ID	Description	Status
Mull	Mullion Heater	Not Used
Cond	Condenser Fan	Not Used
Def	Defrost Valve	Not Used
LVLV	Left Vale	Not Used
RVLV	Right Valve	Not Used
Pan	Pan heater	Not Used
Comp	Compressor	Used

*Note:* The Cond (Condenser Fan) will switch state with the compressor relay, however the condenser fan is actually powered through a DC output and is independent of the Cond relay. Condenser fan status can be viewed through the "Output" service menu option.

#### To access Relay Status

- 2. Press Select 🖾.
- 3. Use Up 🗠 and Down 🗁 to scroll through available information.

To exit the Relay Status simply press Select O to exit.

![](_page_15_Picture_1.jpeg)

#### **Relay Toggle**

![](_page_15_Figure_3.jpeg)

Relay toggle is used to manually switch the state of each relay to test for proper operation. In addition to the AC relays, DC outputs may also be toggled. Relay toggle can also be used to force the unit into a particular state. For example, to force a 3018 / 3045 into a cooling cycle activate Comp, F1, and F3.

ID	Description	Туре
Mull	Mullion Heater (Not Used)	AC
Cond	Fan (Not Used)	AC
Def	Defrost Valve (Not Used)	AC
LVLV	Left Vale (3036 / 3090 Only)	AC
RVLV	Right Valve (3036 / 3090 Only)	AC
Pan	Pan heater (Not Used)	AC
Comp	Compressor	AC
FI	Evaporator Fan	DC
F2	Evaporator Fan (3036 / 3090 Only)	DC
F3	Condenser Fan	DC
LI	Cabinet Lighting	DC
L2	Cabinet Lighting (3036 / 3090 Only)	DC

#### To access Relay Toggle

- 4. Use Down  $\boxdot$  to select "Relay Toggle".
- 5. Press Select 🙆.
- 7. Press Select 0 to toggle.

To exit the Actual Temps menu use Up  $\boxdot$  to select "Return to Menu" and press Select O to confirm.

#### Input Status

![](_page_15_Figure_13.jpeg)

Input status displays the current state of each available input as well as the current USB connection state.

ID	Description	States
Door	Door Switch	Open - Closed
IN2	Input 2 - Not Used	Open
Test Input	Factory Test Input	Open
USB	USB Connection State	Flash - Com Port

Note: USB status show current connection state. In order to make a successful connection USB connection type must be properly set in "USB Port" under the service menu.

#### To access Input Status

- 2. Press Select 🙆
- 3. Use Up 🗠 and Down 🗁 to scroll through available information.

To exit the Input Status menu use Up  $\square$  to select "Return to Menu" and press Select 🕲 to confirm.

#### Outputs

![](_page_15_Figure_23.jpeg)

Outputs is used to monitor the state of DC outputs.

ID	Description	States
Evap Fan	Evaporator Fan	0 - 100%
Condenser Fan	Condenser Fan	0 - 100%
Light	Interior Lighting	Off - Low - Med - High

#### To access Outputs

- 2. Press Select 🙆
- 3. Use Up  $\bigtriangleup$  and Down  $\boxdot$  to scroll through available information.

To exit the Input Status menu use Up  $\square$  to select "Return to Menu" and press Select 🕲 to confirm.

![](_page_16_Picture_0.jpeg)

#### Offsets.

![](_page_16_Figure_3.jpeg)

#### Customer care MUST be notified and approve of any changes to the differential before they are made. Failure to notify customer care will void the warranty.

Offsets are used to adjust or correct thermistor readings. Offset values are added to the current thermistor reading and are then used by the control board to determine cooling and defrost cycle times. Offsets have a range of +/- 10°F. Corrected values may be viewed through the customer "All Temps" menu or TTY output.

#### To access Offsets

- I. Use Down ☐ to select "Offsets".
- 2. Press Select 🙆.
- 3. Use Up  $\bigtriangleup$  and Down  $\boxdot$  to scroll through available thermistors.

#### To change offset

- 4. Press Select 0, the selected thermistor will begin to flash.
- 5. use Up  $\bigtriangleup$  or Down  $\boxdot$  to modify offset value.
- 6. Press Select O to confirm setting.

To exit the Offset menu use Up  $\boxdot$  to select "Return to Menu" and press Select O to confirm.

#### Self Test

![](_page_16_Figure_16.jpeg)

Self test is used to initiate a self diagnostic report. Any system faults will be displayed under Self test. If no errors are present "no errors" will be displayed and the main control board is functioning properly. If an error is listed attempt to correct it before changing control board. See troubleshooting for tips on correcting errors.

#### To access Self Test

- I. Use Down ☐ to select "Self Test".
- 2. Press Select 🖾.
- 3. Use Up  $\bigtriangleup$  and Down  $\boxdot$  to scroll through available information.

To exit the Self Test use Up  $\square$  to select "Return to Menu" and press Select 🕲 to confirm.

#### Differentials

![](_page_16_Figure_24.jpeg)

#### WARNING

#### Customer care MUST be notified and approve of any changes to the differential before they are made. Failure to notify customer care will void the warranty.

Differentials are used to determine the maximum variation from set point and have a range of 0 through 10. The table below shows the effect of differentials on cooling cycles with a set point of 45°.

Note: Air temperature does not reflect product temperatures. .

Differential	Cycle Start	Cycle End
0	46°	44°
I	47°	43°
2	48°	42°
3	49°	4I°
4	50°	40°
5	51°	39°
	1	1

The graph below shows a unit's cooling cycle over time with various differentials.

![](_page_16_Figure_31.jpeg)

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#### **Set Points**

![](_page_17_Figure_3.jpeg)

The Set points menu contains options to modify both the Zone and Evap set points. Changes to the zone set point will be reflected on the main screen. Changes to the evap set point alter the temperature the evaporator needs to meet during a defrost cycle.

#### To access Set Points

- 2. Press Select 🙆.
- 3. Use Up  $\bigtriangleup$  and Down  $\boxdot$  to scroll through available set points.

#### To change set point

- 4. Press Select O, the selected set point will begin to flash.
- 5. use Up  $\bigcirc$  or Down  $\boxdot$  to modify the value.
- 6. Press Select O to confirm setting.

To exit the Set Points menu use Up  $\Box$  to select "Return to Menu" and press Select 🕲 to confirm.

#### Factory Default

![](_page_17_Figure_15.jpeg)

Factory Default will restore all settings to their factory default.

#### **To access Factory Default**

- 2. Press Select 🙆

#### To restore settings to their factory default.

- 3. Use Down  $\boxdot$  to select "Restore?" and press Select O
- "Restore?" will change to "Restoring..." while settings are restored. When restoration is complete, "Restoring..." will return to "Restore".

To exit Factory Default use Up  $\square$  to select "Return to Menu" and press Select 🖾 to confirm.

![](_page_17_Figure_24.jpeg)

# Before altering model selection, U-Line customer service must be notified. Failure to notify customer service will

result in voiding of the manufacturer warranty. Re-Select Model allows the units model configuration to be modified.

Changing the units model completely reprograms available zones, relay assignments, dc output assignments etc.

#### To access Re-Select Model

- 2. Press Select 🙆.

#### To alter model setting.

- 4. Press Up 🛆 or Down 코 to scroll through each available model.
- 5. Press Select 🖾 to confirm.

To exit Re-Select Model use Up 🖻 to select "Return to Menu" and press Select 🔞 to confirm.

#### Fan Delay

![](_page_17_Figure_37.jpeg)

The Fan Delay menu option allows the modification of fan run times during and after a cooling cycle. In order to allow time for the evaporator to properly cool, the evaporator fan is delayed from starting with the cooling cycle for a given amount of time. In order to remove as much warmth as possible from the cabinet the evaporator fan will continue to run at the end of the cooling cycle for a given amount of time.

#### Fan Delay On =

"Fan Delay On" is the amount of time in minutes the fan will be delayed from starting from the beginning of a cooling cycle.

### Re-Select Model

![](_page_18_Picture_0.jpeg)

#### Fan Delay Off =

"Fan Delay Off" is the amount of time in minutes the fan will continue to run at the end of a cooling cycle.

#### To access Fan Delay

- 2. Press Select 🖾.

#### To alter fan settings.

- Use Down <sup>□</sup> to select either "Fan Delay On" or "Fan Delay Off" and press Select <sup>□</sup>. The chosen option will begin to flash.
- 5. Press Select 🖾 to confirm.

To exit Fan Delay use Up  $\Box$  to select "Return to Menu" and press Select 🔞 to confirm.

#### **USB** Port

![](_page_18_Figure_13.jpeg)

The USB Port menu option allows the selection of a communication mode. The 3000 Series can communicate either via TTY to a PC or log diagnostic information directly to a USB flash disk.

ID	Communication
PC Link	PC TTY
Flash	USB Flash Drive

#### To access USB Port

- 2. Press Select 🖾.

#### To alter communication settings.

- 3. Use Down  $\boxdot$  to select the current setting and press Select O.
- 4. Press Up  $\bigtriangleup$  or Down  $\boxdot$  to change settings.
- 5. Press Select 🖾 to confirm.

To exit "USB Port" use Up  $\square$  to select "Return to Menu" and press Select D to confirm.

#### Showroom Mode

![](_page_18_Figure_25.jpeg)

Showroom displays a number of features and allows the unit to be powered on without running the cooling system.

#### To toggle showroom mode

- 2. Press Select 🙆.
- Use Down <sup>□</sup> to select "Off" and press Select <sup>®</sup>. "Off" will begin to flash.
- 5. Press Select 🖾 to confirm.

If set to "on" showroom mode will begin immediately. To exit showroom mode press and release Power  $^{(1)}$ .

To exit the showroom mode menu use Up  $\square$  to select "Return to Menu" and press Select D to confirm.

![](_page_19_Picture_1.jpeg)

### **USB** Communication

The 3000 series uses an advanced USB logging feature for system logging and diagnostics. The controller outputs 36 separate data points per second to either a USB flash disk or transmitted over USB via TTY to a client PC. To prepare the unit for logging, first verify the USB port is set to the proper configuration. See "USB Port" on page **15** for information on configuring the USB port.

#### Flash Mode:

Suitable for logging directly to a USB flash disk.

#### PC Link Mode:

Suitable for communicating directly with a PC via USB.

#### **USB** Communication (Flash)

The main control can host a wide range of flash disks up to a maximum capacity of 8GB. After verifying the USB port is set to "Flash", simply insert a flash disk in to the USB port located above the grille. The flash disk activity light (located on the flash disk) will begin flashing immediately as data is recorded to the drive. Data is recorded in one second increments and is only limited by the capacity of the flash disk.

The system will create a file named "uline.csv" on the flash disk. In the event the file already exists, new data will automatically be appended to the end of the existing file. The file is output in a comma delineated text format and may be viewed in a wide variety of simple text readers or spreadsheet programs.

For information on identifying each data point, see the "Communication Data" table on page **17**.

#### USB Communication (PC Link)

Data can be transmitted directly to a client PC via a serial connection. Verify the USB port is set to "PC Link". Use a Type A to Type A male to male USB cable to connect the system to a Windows® compatible PC. It is necessary to install communication drivers to the client PC. Drivers may be downloaded at www.u-lineservice.com. Establish a connection using a Telnet / TTY terminal application. U-Line recommends PuTTY. PuTTY is available for download at www.u-lineservice.com. Once the connection is established, the controller will output a series of 36 data points in I second increments. For information on identifying each data point, see the "Communication Data" table on page 17.

![](_page_20_Picture_0.jpeg)

#### Communication Data ID Table

Field	I	2	3	4	5	6	7	8	9	10
ID	Time Live	Zone Temp	Not Used	Evap Temp	Not Used	Ambient Temp	Proc Temp	Zone ID	Set Point	Differential
Sample Data	1525	36		5		85	111	Beverage	34	I
Field		12	13	14	15	16	17	18	19	20
ID	Zone Offset	Evap Offset	Door Indicator	Not Used	Relay I Indicator	Relay 2 Indicator	Relay 3 Indicator	Relay 4 Indicator	Relay 5 Indicator	Relay 6 Indicator
Sample Data	0	0				2				
Field	21	22	23	24	25	26	27	28	29	30
ID	Relay 7 Indicator	Evap Fan Indicator	Not Used	Cond Fan Indicator	Light Level	Not Used	Energy Saver	Sabbath	Power Indicator	Comp Timer
Sample Data	7	I		3	0					45
Field	31	32	33	34	35	36				
ID	Comp Cumulative	Defrost Timer	Fan I Timer	Not Used	Limp Timer	Not Used				
Sample Data	500		0	0	0	0				

#### Field Value

- I Time in seconds since unit plugged in.
- 2 Temperature of Zone in °F/°C.
- 3 Not used.
- 4 Evaporator temperature in °F/°C.
- 5 Not used.
- 6 Ambient temperature in base of unit °F/°C.
- 7 Board processor temperature.
- 8 Zone identification tag.
- 9 Zone set point in °F/°C.
- 10 Differential value in °F/°C.
- II Zone offset value in °F/°C.
- 12 Evaporator offset value in °F/C.
- 13 Door status indicator. "L" = Open "---" = closed.
- 14 Not used.
- 15 Relay I (unassigned). "I" = active, "---" = inactive.
- 16 Relay 2 (unassigned). "2" = active, "---" = inactive.
- 17 Relay 3 (unassigned). "3" = "active", "---" = inactive.
- 18 Relay 4 (unassigned). "4" = "active", "---" = inactive.

Note: Relay 2 will cycle with relay 7, this is considered normal.

#### Field Value

- 19 Relay 5 (unassigned). "5" = active, "---" = inactive.
- 20 Relay 6 (unassigned). "6" = active, "---" = inactive.
- 21 Compressor relay. "7" = active, "---" = inactive.
- 22 Evaporator fan. "I" = active, "---" = inactive.
- 23 Not used.
- 24 Condensor fan. "3" = active, "---" = inactive.
- 25 LED intensity, provided in%.
- 26 Not used.
- 27 Energy Saver mode indicator. "E" = active.
- 28 Sabbath mode indicator. "S" = active.
- 29 Soft power indicator. "P" = unit in "On" mode.
- 30 Compressor state change timer, in seconds.
- 31 Compressor cumulative run time, in seconds.
- 32 Max remaining defrost time, in seconds.
- 33 Evaporator fan state change timer, in seconds.
- 34 Not used.
- 35 Cumulative time spent in limp mode, in seconds.
- 36 Not used.

![](_page_21_Picture_1.jpeg)

### **Convection Cooling**

All 3000 series units are equipped with an advanced convection cooling system. Convection cooling stabilizes cabinet temperature, cools product faster and increases energy efficiency.

#### **Evaporator Fan**

The evaporator fan is responsible for circulating warm air from the refrigeration zone, past the evaporator and back into the refrigerated zone,

The evaporator fan is factory set to have a 1 minute delay at the beginning of a cooling cycle. This delay gives the evaporator time to cool properly before warm air is passed over it. The fan will continue to run for an additional 2 minutes at the end of a cooling cycle. Fan delay times can be modified through the service menu. See "Fan Delay" on page 14.

Evaporator fan operation is also determined by door switch state. If the door switch circuit opens the fan will stop. When the door switch circuit is closed the fan will either continue running with the cooling cycle, or if not currently cooling the fan will run for 1 minute to circulate air and clear any condensation that may have appeared on glass doors and shelves.

*Note:* If the unit is set to sabbath mode the evaporator fan will no longer respond to the state of the door switch.

In order to operate efficiently the evaporator fan blade and vents should be unobstructed and free of any dust build up.

#### **Evaporator Fan Replacement**

Should the evaporator fan need to be replaced follow the steps below.

- I. Remove any product from the unit.
- 2. Disconnect power to the unit.
- 3. Remove upper back panel.

![](_page_21_Figure_15.jpeg)

4. Disconnect fan electrical connection

![](_page_21_Figure_17.jpeg)

- 5. Remove insulating foam from refrigerant line pass-through hole.
- 6. Remove internal shelving, bins, or wine racks.
- 7. Remove shelf clips, rack, or bin mounting rails.
- 8. Remove thermistor cover.
- 9. Remove two evaporator plate screws from top of evaporator plate.

![](_page_21_Picture_23.jpeg)

- 10. Grasp evaporator fan shroud and gently pull plate away from the rear of the unit.
- 11. While pulling the evaporator plate clear of the unit, it may be necessary to use your free hand to manipulate the fan plug end through the pass-through hole.
- 12. Remove the 4 screws mounting the fan shroud to the evaporator plate.

![](_page_21_Figure_27.jpeg)

13. Remove and replace fan. Take special care to properly route fan wire.

#### IMPORTANT

Fan must be oriented to pull air in through lower evaporator plate vents and push air out at fan mounting location.

14. Installation is the reverse of removal. Before replacing back panel fill refrigerant line pass-through hole with sealant gum.

![](_page_22_Picture_0.jpeg)

Press Tab Down

### **3000 Series Doors**

### **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 or condensation may form in the interior.

#### IMPORTANT

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 assure 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.

### WARNING

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

• Pay special attention to the Cable Arm. Make sure not to over extend or damage it during door alignment

#### Stainless Models (Removing Wrap)

- 15. Open door completely.
- 16. Remove the two wrap screws from the bottom of the stainless steel door wrap.

![](_page_22_Figure_13.jpeg)

17. Gently pull bottom of wrap away from door.

18. The Wrap hinges on top of the door. Carefully pull wrap away and then up. See Below.

![](_page_22_Figure_16.jpeg)

19. If door being adjusted houses the display unit, remove cable form display by pressing in the release tab on the cable connector.

#### **Alignment and Adjustment**

- Using a T-25 Torx Bit, loosen each pair of torx head screws on both the upper and lower hinge plate.
- 2. Square and align door as necessary
- 3. Tighten Torx head screws on hinge
- 4. If necessary re-connect display and re-install Stainless steel wrap.

![](_page_22_Picture_23.jpeg)

![](_page_23_Picture_1.jpeg)

### Troubleshooting

### **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**

f the unit does not power on, follow the flow chart below to help diagnose the issue. It is important to first verify the unit is not simply set to sabbath mode.

![](_page_23_Figure_7.jpeg)

#### **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 function 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.

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

#### IMPORTANT

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.

 Toggle the relay, it's related component should activate / deactivate with the switching of the relay. If it does not see "Component Testing" on page 21.

#### Inputs

The main control monitors a number of thermistor inputs and switch states during operation. It would be unlikely that an error in reading an input would be at the board level. Always attempt to replace the faulty switch or thermistor input with a known working sample to verify proper board operation.

#### **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. See page **14**.

#### CAUTION

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

![](_page_24_Picture_0.jpeg)

### **Component Testing**

#### IMPORTANT

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, regardless of relay and voltage state.

#### IMPORTANT

If the compressor is suspected of being faulty it is important to verify all copper tubing, dryers, capillary lines, evaporators and condensers are free from kinks, excessive bends or blockages. A restriction in any of these components would force the compressor to overload, making it appear as if it is faulty.

If a component is suspected as being faulty, follow the troubleshooting steps below to help isolate the cause.

- 1. Initiate Self Test Mode, address any current errors before beginning component testing.
- 2. Activate the component's relay or DC output through "Relay Toggle" under the service menu.
- 3. Test for voltage at the component.

#### **Voltage Present**

If voltage is present and the component does not function, suspect a faulty component. If the component being tested is the compressor make certain it is not overloaded by disconnecting power to the unit for at least 15 minutes and re-testing.

#### **No Voltage Present**

![](_page_24_Figure_14.jpeg)

Relay Output ID	Test Point I	Test Point 2	Voltage On	Voltage Off
Comp	Pin J2-I	Pin J2-4	120 AC	0
FI	Pin J4-1	Pin J4-6	12 DC	< 3 DC
F3	Pin J4-3	Pin J4-8	12 DC	< 3 DC
LI	Pin J4-4	Pin J4-9	8-12 DC	< 7 DC

If no voltage is present check for voltage at the relay / DC output. Reference the diagram for component relay / DC output pins. If voltage is present, suspect a faulty component cable. If voltage is not present at the relay / DC output, cycle the power to the unit and retest. If voltage is still not present, suspect the main control of being faulty.

#### **Component Testing Example**

Below is an example of how to properly test a component for functionality. An evaporator fan is used.

#### Condition

Customer complains of the unit not cooling properly. The main screen of the display lists an error "Temp Hi 12H+". The compressor seems to be functioning properly, however the evaporator fan does not activate after a door cycle.

In the above case it would be wise to test the evaporator fan for functionality.

#### Testing

- I. Check "Self Test" for any additional errors that may be current.
- 2. Visually examine the fan through the fan cover. Note any ice buildup. In this case no ice buildup was noticed. The fan appeared as if it could spin freely
- 3. Enter "Relay Toggle" and manually activate FANI.
- 4. Check for fan operation. In this case the fan does not operate.
- 5. Remove the upper and lower back panel from the refrigeration unit.
- 6. Ensuring the DC output is still active, use a meter to check voltage at the fan power connection point. In this instance no voltage is present.

—Voltage Checked At Connection

7. Ensuring the DC output is still active and referencing the Connector & Pin ID chart, a voltage test is performed across pins 1 and 6 of the header

![](_page_24_Figure_32.jpeg)

- At These Pins
- 8. Confirming that the board is sending voltage, the cabling between the board and fan is inspected for damage. In this case some damage is noted.
- 9. The fan cable harness is replaced, and the fan dc output is tested again. It is noted the fan now spins freely.
- 10. The unit is them monitored for proper operation and any further faults.

![](_page_25_Picture_1.jpeg)

### **Customer Call Guide**

The following guide has been developed to help answer frequently asked questions. It can be used by persons scheduling service calls. These are things the customer should consider before scheduling a service call.

Concern	Response
The unit is not cold enough.	• Are you familiar with the factory temperature specifications for
	the unit? Many factors can cause these temperatures to vary;
	ambient temperature, application, amount of use (number of
	times and length of time the door are opened and closed), etc
	• Is the door sealing properly? If the door is not sealed properly, it
	allows heat into the unit. U-Line's warranty is 30 days for door
	adjustments.
	• Has the door been left open? The unit will issues an audible tone
	if the door has been left open for longer than 5 minutes.
	• Is the condenser clean? U-Line's warranty does not cover clean-
	ing the condenser.
	• Is the unit behind closed doors or the grille restricted? The front
	grille must be free of obstruction.
	• Is the unit in an application of heavy usage? Heavy usage or high
	ambient temperatures will cause a unit to frost up.
	• Did you try adjusting the temperature to a colder level? Adjust
	to a colder level. Be sure to allow 24 hours between temperature
	control adjustments.
Temperature is too cold.	Check actual temperature versus set-point.
	• Did you try adjusting the temperature to a warmer level? Adjust
	to a warmer level and allow 24 hours between temperature con-
	trol adjustments.
Product is freezing.	• What is the temperature set at?
	• Do not allow products to lean against the evaporator at the back
	wall.
The unit is frosting up.	• Are you familiar with the defrost technology of the unit?
	• Is the door sealing properly? If the door is not sealing properly, it
	allows heat/humidity into the unit. U-Line's warranty is 30 days
	for door adjustments.
	Has the door been left open?
	• Is the unit in an application of heavy usage? Heavy usage or high
	ambient temperatures will cause a unit to frost up.

![](_page_26_Picture_0.jpeg)

### 

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

Cause	Remedy
Compressor overheating	
I. Condenser air flow restricted.	I. Remove restriction (clean condenser and grille).
2. Condenser fan blade obstructed.	2. Remove blade restriction
3. Condenser fan motor stalled.	3. Replace fan motor
4. Compressor inoperable.	4. Replace compressor
Compressor will not stop operating.	
I. Temperature set too cold.	I. Adjust temperature warmer.
2. Control inoperable.	2. Replace control.
3. Control sensing bulb not sensing temperature.	3. Check bulb/thermistor for location and ohms.
4. Evaporator fan stalled.	4. Remove obstruction or replace motor.
Excessive frost buildup.	
I. Door gasket not sealing properly.	I. Adjust door or replace door gasket.
2. Door out of alignment	2. Adjust door hinges/pivot plates.
3. Light stays on when door is closed.	3. Repair or adjust light bracket/magnet.
4. Warm air leaking into cabinet from back.	4. Seal holes in the foam to prevent warm air entering the unit.
Noisy.	
I. Copper refrigeration tube touching cabinet.	I. Carefully adjust tubing.
2. Evaporator fan blade touching cover.	2. Adjust fan mounting or shroud.
<ol> <li>Condenser fan obstruction (wiring, foam insulation, packaging material).</li> </ol>	3. Remove obstruction.
Ice Buildup in drain trough or drain problem	
I. Obstructed drain cup or tube.	I. Check and clear drain tube.
2. Kinked drain tube.	2. Reroute drain tube.
3. Drain trough spout and drain cup not aligned	3. Align drain trough and drain cup.

### **Compressor Information**

#### **Cooling process**

Refrigerant is pumped from the compressor to the condenser as a high pressure, high temperature vapor.

As the refrigerant cools in the high pressure condenser, the vapor condenses to liquid. During this phase change, a great amount of heat is rejected with the help of the condenser fan.

The liquid then flows to the dryer where it is strained and filtered.

From the dryer, the refrigerant flows through the capillary tube which meters the liquid refrigerant to the evaporator.

The pressure of the refrigerant is reduced to the evaporating or low side pressure.

The reduction of pressure on the liquid refrigerant causes it to boil or vaporize until it reaches saturation temperature. As the low temperature refrigerant passes through the evaporator coil, it continues to absorb a lot of heat, causing the boiling action to continue until the refrigerant is completely vaporized. It is during this phase that the most heat is absorbed (the cooling takes place) in the refrigerator.

The refrigerant vapor leaving the evaporator travels through the suction line to the compressor inlet. The compressor takes the low pressure vapor and compresses it, increasing both pressure and temperature. The hot high pressure gas is pumped out the discharge line and into the condenser. The cycle continues

![](_page_27_Figure_11.jpeg)

![](_page_28_Picture_0.jpeg)

### Thermistors

Thermistors are used for various temperature readings. Thermistor 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 bath (32°F) resistance should measure 16.1 kilohms,

#### 16.1K Ohms - 32°F ambient

### **Thermistor Failure**

#### **Zone Thermistor**

If the zone thermistor fails the unit will continue to operate on a preset time interval of 10 minutes on and 30 minutes off. The unit will otherwise operate normally. The error will be displayed on the main display, "Self Test" and logged in "All Errors".

#### **Evaporator Thermistor**

If the evaporator thermistor fails the unit will rely on a preset defrost timer during defrost cycles. The unit will otherwise operate normally. Evaporator thermistor errors are hidden from the display and recorded in "All Errors" and displayed in "Self Test" modes.

#### **Ambient Thermistor**

The ambient thermistor is mainly used for diagnostics. If the thermistor fails the unit will operate normally.

### **Reed Switch**

A reed switch is used to monitor door state. The switch side is mounted under the cabinet and the magnet is mounted to the cable arm. 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 or drawers are left open for longer than 5 minutes, the switch will trigger an error code and set an audible warning.

![](_page_28_Figure_14.jpeg)

![](_page_28_Figure_15.jpeg)

### Compressors

### 

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.

	EMU30HSC
Voltage	115
Frequency	60
LRA	5.5
FLA	1.0
Start Winding	7.0
Run Winding	8.4

![](_page_28_Figure_29.jpeg)

## **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

## Fault System Diagnosis Guide

Error	Solution I	Solution 2	Solution 3
No Comm	Inspect the UI data cable for continuity. Replace if necessary. he main control board and UI.		
Zone T Open	Inspect zone thermistor connection. Replace if necessary.	Inspect main control wire harness for splits or breaks. Repair split or cut cabling.	
Evap T Open	Inspect evaporator thermistor connection. Replace if necessary.	Inspect main control wire harness for splits or breaks. Repair split or cut cabling.	
Amb Thrm Open	Inspect ambient thermistor connection. Replace if necessary.	Inspect main control wire harness for splits or breaks. Repair split or cut cabling.	
Zone T Short	Inspect thermistor cable for pinch points or damage. Replace if necessary.	Inspect wire harness from main control board for pinch points or damage. Repair split or pinched cabling.	
Evap T Short	Inspect thermistor cable for pinch points or damage. Replace if necessary.	Inspect wire harness from main control board for pinch points or damage. Repair split or pinched cabling.	
Amb Thrm Short	Inspect thermistor cable for pinch points or damage. Replace is necessary.	Inspect wire harness from main control board for pinch points or damage. Repair split or pinched cabling.	
Temp Hi 6H+	If excessive frost is also noted, inspect door and door gasket for proper seal and alignment.	Inspect evaporator fan for proper operation.	Inspect refrigeration system. Reference the Refrigeration System Diagnosis Guide on page <b>26</b> .
Temp Hi 12H+	If excessive frost is also noted, inspect door and door gasket for proper seal and alignment.	Inspect evaporator fan for proper operation.	Inspect refrigeration system. Reference the Refrigeration System Diagnosis Guide on page <b>26</b> .
Temp Lo 6H+	Inspect main control for proper relay operation.	Inspect refrigeration system. Reference the Refrigeration System Diagnosis Guide on page <b>26</b> .	
Temp Lo 12H+	Inspect main control for proper relay operation.	Inspect refrigeration system. Reference the Refrigeration System Diagnosis Guide on page <b>26</b> .	
Door Open 5M	Verify door closes properly.	Inspect cable arm, verify presence of magnet, verify proper operation and movement or arm.	Inspect reed switch wiring.

### **Parts Information**

![](_page_31_Figure_1.jpeg)

#### **Models Covered**

U-3018RFOL-00 U-3018RFOL-01 3018RFS-00 U-3018RFS-01

#### Part Number Cross Reference

	U-3018RFOL-00	U-3018RFOL-01	U-3018RFS-00	U-3018RFS-01
Bin Kit	80-51021-00	80-51021-00	80-51021-00	80-51021-00
Bin Lower	26113	26113	26113	26113
Bin Rack	18076-01	18076-01	18076-01	18076-01
Bin Slide Kit	80-51023-00	80-51023-00	80-51023-00	80-51023-00
Cable Arm Kit	80-25068-00	80-25068-00	80-25068-00	80-25068-00
Compressor Kit	80-51026-00	80-51026-00	80-51026-00	80-51026-00
Compressor Electronic Kit	80-51024-00	80-51024-00	80-51024-00	80-51024-00
Condenser Kit	80-21012-00	80-21012-00	80-21012-00	80-21012-00
Condenser Fan Kit	80-22008-00	80-22008-00	80-22008-00	80-22008-00
Control Kit	80-51020-00	80-51020-00	80-51020-00	80-51020-00
Display	68099	68099	68099	68099
Display Spacer	38037-01	38037-01	38037-01	38037-01
Door	80-17107-01	80-17107-12	80-17107-03	80-17107-14
Door Gasket	31493-18-BLK	31493-18-BLK	31493-18-BLK	31493-18-BLK
Drain Pan	31385	31385	31385	31385
Drain Trough	26118-01	26118-01	26118-01	26118-01
Door Handle	N/A	N/A	23050-01	23050-01
Dryer	2694	2694	2694	2694
Evaporator Kit	80-51032-00	80-51032-00	80-51032-00	80-51032-00
Evaporator Fan	67005	67005	67005	67005
Evaporator Fan Cover Kit	80-51029-00	80-51029-00	80-51029-00	80-51029-00
Evaporator Plate Kit	80-51030-00	80-51030-00	80-51030-00	80-51030-00
Grille Kit	80-29098-00	80-29098-00	80-29098-00	80-29098-00
Hinge Kit	80-16095-01	80-16095-01	80-16095-01	80-16095-01
Hinge Cover	26140	26140	26140	26140
LED	68100	68100	68100	68100
LED Lens	26116	26116	26116	26116
Front Leveler Leg	18088	18088	18088	18088
Packaging	80-32094-01	80-32094-01	80-32094-00	80-32094-00
Power Cord	2992	2992	2992	2992
Reed Switch Kit	80-51016-00	80-51016-00	80-51016-00	80-51016-00
Thermistor	68092	68092	68092	68092
Thermistor Housing Kit	80-51031-00	80-51031-00	80-51031-00	80-51031-00
Tool Kit	80-51025-00	80-51025-00	80-51025-00	80-51025-00

ULINE

### **Parts Information**

![](_page_33_Figure_1.jpeg)

#### **Models Covered**

U-3018RGLOL-00 U-3018RGLOL-01 U-3018RGLS-00 U-3018RGLS-001

#### Part Number Cross Reference

	U-3018RGLOL-00	U-3018RGLOL-01	U-3018RGLS-00	U-3018RGLS-01	
Cable Arm Kit	80-25068-00	80-25068-00	80-25068-00	80-25068-00	
Compressor Kit	80-51026-00	80-51026-00	80-51026-00	80-51026-00	
Compressor Electronic Kit	80-51024-00	80-51024-00	80-51024-00	80-51024-00	
Condenser Kit	80-21012-00	80-21012-00	80-21012-00	80-21012-00	
Condenser Fan Kit	80-22008-00	80-22008-00	80-22008-00	80-22008-00	
Control Kit	80-51020-00	80-51020-00	80-51020-00	80-51020-00	
Crisper Kit	80-51033-00	80-51033-00	80-51033-00	80-51033-00	
Crisper Rack	18078-01	18078-01	18078-01	18078-01	
Crisper Slide Kit	80-51023-01	80-51023-01	80-51023-01	80-51023-01	
Display	68099	68099	68099	68099	
Display Spacer	38037-01	38037-01	38037-01	38037-01	
Door	80-17108-01	80-17108-12	80-17109-03	80-17109-14	
Door Gasket	31493-18-BLK	31493-18-BLK	31493-18-BLK	31493-18-BLK	
Door Handle	N/A	N/A	23050-01	23050-01	
Drain Pan	31385	31385	31385	31385	
Drain Trough	26118-01	26118-01	26118-01	26118-01	
Dryer	2694	2694	2694	2694	
Evaporator Kit	80-51032-00	80-51032-00	80-51032-00	80-51032-00	
Evaporator Fan	67005	67005	67005	67005	
Evaporator Fan Cover Kit	80-51029-00	80-51029-00	80-51029-00	80-51029-00	
Evaporator Plate Kit	80-51030-00	80-51030-00	80-51030-00	80-51030-00	
Grille Kit	80-29098-00	80-29098-00	80-29098-00	80-29098-00	
Hinge Kit	80-16095-01	80-16095-01	80-16095-01	80-16095-01	
Hinge Cover	26140	26140	26140	26140	
LED	68100	68100	68100	68100	
LED Lens	26116	26116	26116	26116	
Leveler Leg (Front)	18088	18088	18088	18088	
Packaging	80-32094-01	80-32094-01	80-32094-00	80-32094-00	
Power Cord	2992	2992	2992	2992	
Rack	18078-01	18078-01	18078-01	18078-01	
Reed Switch Kit	80-51016-00	80-51016-00	80-51016-00	80-51016-00	
Shelf Kit	80-51017-00	80-51017-00	80-51017-00	80-51017-00	
Thermistor	68092	68092	68092	68092	
Thermistor Housing	80-51031-00	80-51031-00	80-51031-00	80-51031-00	
Tool Kit	80-51025-00	80-51025-00	80-51025-00	80-51025-00	

### **Parts Information**

![](_page_35_Figure_1.jpeg)

#### **Models Covered**

- U-3018WCOL-00
- U-3018WCOL-01
- U-3018WCS-00
- U-3018WCS-01

![](_page_36_Picture_1.jpeg)

#### Part Number Cross Reference

	U-3018WCOL-00	U-3018WCOL-01	U-3018WCS-00	U-3018WCS-01
Cable Arm Kit	80-25068-00	80-25068-00	80-25068-00	80-25068-00
Compressor Kit	80-51026-00	80-51026-00	80-51026-00	80-51026-00
Compressor Electronic Kit	80-51024-00	80-51024-00	80-51024-00	80-51024-00
Condenser Kit	80-21012-00	80-21012-00	80-21012-00	80-21012-00
Condenser Fan Kit	80-22008-00	80-22008-00	80-22008-00	80-22008-00
Control Kit	80-51020-00	80-51020-00	80-51020-00	80-51020-00
Display	68099	68099	68099	68099
Display Spacer	38037-01	38037-01	38037-01	38037-01
Door	80-17108-01	80-17108-12	80-17109-03	80-17109-14
Door Gasket	31493-18-BLK	31493-18-BLK	31493-18-BLK	31493-18-BLK
Door Handle	N/A	N/A	23050-01	23050-01
Drain Pan	31385	31385	31385	31385
Drain Trough	26118-01	26118-01	26118-01	26118-01
Dryer	2694	2694	2694	2694
Evaporator Kit	80-51032-00	80-51032-00	80-51032-00	80-51032-00
Evaporator Fan	67005	67005	67005	67005
Evaporator Fan Cover Kit	80-51029-00	80-51029-00	80-51029-00	80-51029-00
Evaporator Plate Kit	80-51030-00	80-51030-00	80-51030-00	80-51030-00
Grille Kit	80-29098-08	80-29098-08	80-29098-08	80-29098-08
Hinge Kit	80-16095-01	80-16095-01	80-16095-01	80-16095-01
LED	68100	68100	68100	68100
LED Lens	26116	26116	26116	26116
Leveler Leg (Front)	18088	18088	18088	18088
Packaging	80-32094-01	80-32094-01	80-32094-00	80-32094-00
Power Cord	2992	2992	2992	2992
Rack Assembly Kit I	80-51034-00	80-51034-00	80-51034-00	80-51034-00
Rack Assembly Kit 2	80-51034-01	80-51034-01	80-51034-01	80-51034-01
Rack Assembly Kit 3	80-51034-02	80-51034-02	80-51034-02	80-51034-02
Rack Assembly Kit 4	80-51034-03	80-51034-03	80-51034-03	80-51034-03
Rack Wood Trim	39014-01	39014-01	39014-01	3904-01
Reed Switch Kit	80-51016-00	80-51016-00	80-51016-00	80-51016-00
Slide Assembly Kit I	80-51035-00	80-51035-00	80-51035-00	80-51035-00
Slide Assembly Kit 2	80-51035-01	80-51035-01	80-51035-01	80-51035-01
Thermistor	68092	68092	68092	68092
Thermistor Housing Kit	80-51031-00	80-51031-00	80-51031-00	80-51031-00
Tool Kit	80-51025-00	80-51025-00	80-51025-00	80-51025-00

![](_page_37_Picture_1.jpeg)

### **Kit Part Reference**

Many components are ordered as assemblies or kits. The table below lists each part in a given kit or assembly. Please note doors include handles when applicable and do not include hinges, they must be ordered separately.

80-16095-01         Hinge Kit.         80-51035-00         Hinge Kit.         80-51034-02         Rack Kit.3         1           Hinge 45mm         I         Allen Wranch 7/64         I         Rack 3         2           Hinge 45mm         I         Allen Wranch 7/64         I         Rack 3         2           Hinge 45mm         I         Bo-2101-00         Condenser Kit         Rack 13         1           Dickrage Table         I         Rack 7         2         Screw.         Side 572 ± 200         4           B0-2101-00         Condenser Kit         I         Rack 14         1         Screw.         1         Screw.         1         Screw.         2         Screw.         Vice Tim.2         Screw.         1         Screw.         1         Screw.         Rack 14         1         Screw.         1         Screw.         Screw.         Screw.         No         Screw.         No         Screw.         No         Screw.         Screw.         No         Screw.         Screw. <td< th=""><th>Part Number</th><th>Description</th><th>QTY</th><th>Part Number</th><th>Description</th><th>QTY</th><th>Part Number</th><th>Description</th><th>QTY</th></td<>	Part Number	Description	QTY	Part Number	Description	QTY	Part Number	Description	QTY
ScrewBinge dSmmIAllen Waren, A'AIBack 32Hinge dSmmIBors102.6-00Compressor KitIScrew, Side 37.2 x 200MHinge Covr2Process Tubel.ISide 37.2 x 200MBorz002Condeness TubIProcess Tubel.ISide 37.2 x 200MDicharge Tubel.ICondeness TubISide 37.2 x 200MMIBorz002.00Condeness Tubel.ICompressor MitIScrew, MMMIBorz003.00Cardeness Tubel.ICompressor MitIScrew, Side IScrew, S	80-16095-01	Hinge Kit		80-51025-00	Tool Kit		80-51034-02	Rack Kit 3	I
Hing sformI Hing scoreHing scoreI Hing scoreHing scoreHing scoreI Hing scoreHing scor		Screw	8		Allen Wrench 6mm	I		Rack 3	2
Hinge formI lenge Cover0 log S102-00Compressor KitHere S32Here S32H S163 S2 x 200380-21012-00Condenser KitFebRelayISide S32 x 2003Dickarge TikeICondenser KitGapatrofISide S32 x 2003B0-22008-00Dickarge TikeGapatrofI80-51034-03Rack Kit 4IB0-22008-00Condenser Fan KitIGapatrofI80-51034-03Rack Kit 4IB0-22008-00Condenser Fan KitIScrew, Vood TimIScrew, Vood TimIB0-22008-00Condenser VasherIScrew, Vood TimIScrew, Vood TimIB0-22008-00Cable Arm KitIScrew, Vood TimIScrew, Vood TimIB0-22008-00Cable Arm KitIScrew, Vood TimIScrew, Vood TimIB0-2008-00Cable Arm KitIScrew, Vood TimIIB0-2009-00Cable KitIScrew, Vood TimIIB0-2009-00Cable Arm KitIScrew, Vood TimII		Hinge 45mm	I.		Allen Wrench 7/64	I		Screw, Slide	
Hinge Corer         Side 37.2 x00 % 1         Side 37.2 x00 % 1           80-2101-00         Condenser Kit         Red Support         2           Dirknge Tube         I         Overlaad         I         Side Support         2           Bin Tube Condenser Fan Kit         Gombers for Min         Compressor         Screw, Wood Trin         2           80-22008-00         Condenser Fan Kit         Gommet         2         Screw, Wood Trin         2           80-22008-00         Condenser Fan Kit         Gommet         1         Screw, Side Support         2           Roopene Wake         Gommet         Gommet         1         Screw, Side Support         2           Roopene Wake Support         1         Sortew Side Support         2         Screw, Side Support         2           Roopene Wake Support         1         Screw, Side Support         1         Screw, Side Support         2           Arm, Bottom         1         Screw, Camp Fare         1         Screw, Side Support         2           Grille Swep         1         Screw, Side Support         1         Screw, Side Support         2           Gale Arm Kit         1         Screw, Side Support         1         Screw, Side Support         3		Hinge 45mm	I.	80-51026-00	Compressor Kit			Rivet 5/32	I.
80-21012-00     Cincinser Kit     I     Relay     I     Side Support     2       Dirar     I     Overload     I     Wood Tim     2       Bo-22008-00     Condenser Kin     Compersor     I     80-51034-03     Rack Ki + 4     I       Bo-22008-00     Condenser Kin     I     Monte     I     Screw, Mod Tim     2       Bo-22008-00     Condenser Kin     I     Screw, Side     I     Screw, Side     I       Bo-23008-00     Condenser Kin     I     Screw, Side     I     Screw, Side     I       Bo-25008-00     Condenser Kin     I     Screw, Side     I     I     Screw, Side     I       Bo-25008-00     Condenser Kin     I     Screw, Side     I     I     Screw, Side     I       Bo-25008-00     Condenser Kin     I     Screw, Side     I     I     Screw, Node Tim     I       Bo-25008-00     Grille Kin     I     Screw, Side     I     I     Screw, Node Tim     I       Bo-25008-00     Grille Kin     I     Screw, Side     I     I     Screw, Side     I       Grille Swep     I     Bo-5103-00     Screw, Side     I     I     Screw, Side     I       Grille Swep     I		Hinge Cover	2		Process Tube	I.		Slide 37.2 x 200	4
Dirent         I         Coerfand         I         Wood Trim         2           Bindrage Tube         Fin Tube Cond         I         Compressor         I         Screw Wood Tim         I           80-2008-00         Conferes Fan Kit         Washer         I         Mach Kit         I         Rack Kit         I           80-2008-00         Conferes Fan Kit         Fin         Conferes Fan Kit         Rack Kit         I         Rack Kit         I           80-2008-00         Conferes Fan Kit         I         Screw Wood Tim         I         Rest 5/32         I           80-2008-00         Cable Arm Kit         I         Screw Vood Tim         I         I         Vood Tim         I           80-2009-00         Cable Arm Kit         I         Screw Vood Tim         I         I         Vood Tim         I           80-2009-00         Grifle Kit         I         Screw Vood Tim         I         Vood Tim         I           80-2009-00         Grifle Kit         I         Screw Vood Tim         I         Vood Tim         I           80-101-0         Grifle Kit         I         Screw Vood Tim         I         Screw Vood Tim         I           Grifle Swep         Screw Vo	80-21012-00	Condenser Kit			Relay	I.		Slide Support	2
Diakunge TubeIGrave, Yood TrimIGrave, Yood TrimI80-22008-00Condenser Fan Kit-YukaherI80-1034-03Rack Kit AINeoprew Yood Trim4Fin Courdenser Fan KitServe, Yood TrimIRack Xit AI80-2208-00Cafaer, Situation180-51029-00Grammet CourdenserSituationSituationSituationI80-2508-00Cafaer, Mitt-Serve, Yood TrimISituationSituationSituationSituationSituationSituationSituationSituationI80-2508-00Cafaer, Mitt-Serve, Yood TrimISituation <t< td=""><td></td><td>Drier</td><td>I.</td><td></td><td>Overload</td><td>I</td><td></td><td>Wood Trim</td><td>2</td></t<>		Drier	I.		Overload	I		Wood Trim	2
Be-Zoole     Fibe Condenser Fan Kit     ·     ·     Condenser Fan Kit     ·       Bo-Zoole     Screw, Nade     Pin     2     Rack 4     1       Screw, Nade     Pin     2     Pin     Screw, Side     1       Bo-Zoole     Cable Arr     1     Screw, Side     1     Screw, Side     1       Bo-Zoole     Cable Arr     1     Screw, Yaod     1     Screw, Yaod     1       Bo-Zoole     Cable Arr     1     Screw, Yaod     1     Screw, Yaod     1       Arm, Tor     1     Screw, Yaod     Screw, Yaod     1     Screw, Yaod     1       Bo-Zoole     Fanoror     Screw, Yaod     Screw, Yaod     1     1       Bo-Soole     Screw, Yaod     Screw, Yaod     Screw, Yaod     1       Bo-Soole     Fanorororororo     Screw, Yaod     N     Screw, Yaod     1       Bo-Soole     Screw, Soole     Screw, Yaod     N     Screw, Yaod     N       Bo-Soole     Fanororororororororororororororororororor		Discharge Tube	I.		Capacitor	I		Screw, Wood Trim	2
80-22008-00     Conceare Fan Kit     Fin     Wather     2     Rack 4     Rack 4     2       Neopreen Wather     4     Pin     2     Grommet     2     Screw, Slide     1       80-25068-00     Cable Arm Kit     1     8-51029-00     Eva Fan Cover     1     Slide 37,2 x 2000     4       80-25068-00     Cable Arm Kit     2     Grommet     1     Slide 37,2 x 200     4       80-25068-00     Cable Arm Kit     1     80-51029-00     Evaporator Plate Kit     1     Screw, Vood Trim     2       80-25098-00     Grille Kit     1     80-5103-00     Screw, Tode     1     Screw, Vood Trim     1       80-29098-00     Grille Kit     1     80-5103-00     Screw, Slode     Net     Screw, Vood Trim     1       80-29098-00     Grille Kit     1     80-5103-00     Side 17,1 x 4000     1     Screw, Slode     1       80-5101-00     Reck Strew, Slode     1     Screw, Slode     1     Side 37,2 x 4000     1       80-5101-00     Reck Strew, Slode     1     Screw, Slode     1     Side 37,2 x 4000     1       80-5101-00     Screw, Clanp     4     Sorew, Slode     1     Side 37,2 x 4000     1       80-5101-00     Screw, Slode		Pin Tube Cond	I.		Compressor	I	80-51034-03	Rack Kit 4	I.
ImageSeriesAPrim2SeriesSeriesImageSeriesImageSeriesSeriesImageSeriesImageSeries	80-22008-00	Condenser Fan Kit			Washer	2		Rack 4	2
Neprine Wather         4         Grommet         4         Revet 5/32         1           0C Line Joarny         1         80-5102-00         Farsup Farsu		Screw	4		Pin	2		Screw, Slide	
B0-25068-00     Cable Arm Kit		Neoprene Washer	4		Grommet	4		Rivet 5/32	I
80-25068-00     Cable Arm Kit     I     Screw View     I     Side Support     2       Arm, Top, Top, Barber     I     80-5035-00     Screw, Vood Trim     1       80-20098-00     Grille Kt     I     Vood Trim     1       80-20098-00     Grille Kt     80-51035-00     Screw, Vood Trim     1       80-20098-00     Grille Kt     80-51035-00     Screw, Vood Trim     1       80-20098-00     Grille Kt     80-51035-00     Screw, Vood Trim     1       Grille Sweep     I     80-51035-00     Screw, Silde Trim     1       Grille Sweep     I     80-51035-00     Screw, Silde Trim     1       Screw     Screw, Silde Support     I     Screw, Silde Trim     1       Screw     Screw, Silde Support     I     Screw, Silde Support     I       80-51016-00     Screw, Silde Trim     Screw, Silde Trim     Silde Support     I       80-51017-00     Sheff Ktit     I     Screw, Silde Trim     Silde Support     I       80-51017-00     Sheff Support     I     80-51034-00     Silde Support     I       80-51021-00     Sheff Support     I     Sortew     Screw, Silde Trim     Silde Support     I       80-51021-00     Sheff Support     I     Sortew		DC Fan.20amp	I.	80-51029-00	Evap Fan Cover			Slide 37.2 x 200	4
Fasner2Fan Cover1Mode Trim2Arm, Top180-5103-00Evaporator Plate Kit1Screw, Wood Trim180-29098-00Grille Kit1Note Arm2Note ArmScrew, Wood Trim180-29098-00Grille Kit1Note Arm2Screw, Wood Trim1Note ArmGrille Sweep1Note Arm1Screw, Side Arm1Note Arm1Note Arm1Deflector180-5103-00Evaporator Kit1Note Arm1Note ArmNote ArmNote ArmNote ArmNote ArmNo	80-25068-00	Cable Arm Kit			Screw	I		Slide Support	2
Arm, Top     I     80-5103-00     Evaporator Plate Kit     I     Screw, Wood Trim     I       80-20098-00     Grille Corm     I     Normal Screw, Wood Trim     I       80-20098-00     Grille Corm     I     80-51031-00     Screw, Wood Trim     I       Grille Sweep     I     80-51031-00     Screw, Wood Trim     I     Screw, Wood Trim     I       Grille Sweep     I     Net     Net     I     Screw, Solde     I       Boelstor     I     Screw     Screw Screw, Solde     I     Screw, Solde     I       Screw     I     Screw     Screw Screw, Solde     I     Screw, Solde     I       Reed Switch Kit     I     Screw Compa     I     Screw, Solde     Screw, Solde     I       Magnet     I     Screw Compa     Screw Compa     I     Screw, Solde     I       Magnet     I     Screw Compa     I     Screw, Solde     I     I       Screw     Reed Switch Kit     I     Screw Chanp     I     Screw, Solde     I       Bo-5101-00     Shelf Kit     I     Screw Chanp     I     Screw, Solde     I       Screw     Shelf Support     I     Screw Screw     Screw Screw     Screw Screw     I		Fastner	2		Fan Cover	I		Wood Trim	2
Arm, Bottom     I     Screw     I     Wood Tim     I       80-29098.00     Grille Kit     I     Exaporator Plate     2     Screw, Wood Tim     2       Grille Kit     I     Bo-S1031-00     Thermitor Housing     2     Bo-S1035-00     Bidie I kit     I       Grille Sweep     I     Rivet     Screw, Thousing     I     Screw, Sidie     I       Bo-Storip     I     Bo-S1032-00     Evaporator Ritor     I     Screw, Sidie 37.2 x400.     I       Rever     Test     Screw, Clamp     I     Bo-S1035-00     Sidie 37.2 x400.     I       Rever     Test     Screw, Clamp     I     Bo-S1035-00     Sidie 37.2 x400.     I       Rever     Test     Screw, Clamp     I     Screw, Sidie Suport     I       Rever     I     Screw     Screw, Clamp     I     Screw, Sidie 37.2 x400.     I       Rever     I     Screw     Screw     Screw, Sidie Suport     I     Sidie 37.2 x400.     I       Bo-S1010-00     Edif Tim     I     Screw     Screw     Screw Sidie Suport     I       Bo-S1020-00     Edif Tim     I     Screw     Screw Sidie Suport     I     Sidie Suport       Bo-S1020-00     Edif Tim     I     Screw Sid		Arm, Top	I.	80-51030-00	Evaporator Plate Kit	I		Screw, Wood Trim	2
80-29098-00     Grille Kit     I     80-51031-00     Thermistor Housing     2     80-51035-00     Silde I Kit     I       Grille Swepo     1     River     Name     1     Serew. Side     1       Deflector     1     River     Serew. Side     1     Serew. Side     1       Serew     2     80-51032-00     Evaporator Kit     1     Side 37.2 x 400     1       River 5/32     2     Camp     1     Side 37.2 x 400     1       River 5/32     2     Camp     1     Side 37.2 x 400     1       River 5/32     3     Serew. Camp     1     Side 37.2 x 400     1       River 5/32     1     Serew. Camp     1     Side 37.2 x 400     1       River 5/32     1     Serew. Camp     1     Side 37.2 x 400     1       River 5/32     1     Serew. Side     Side Support     1     Side 37.2 x 400     1       River 5/32     1     Serew. Camp     1     Side 37.2 x 400     1     Side 37.2 x 400     1       River 5/32     1     Serew. Camp     1     Side 37.2 x 400     1     Side 37.2 x 400     1       River 5/32     Serew. Camp     Retainer     1     Serew. Side 37.2 x 400     1     Side 37.2 x		Arm, Bottom	I.		Screw	I		Wood Trim	1
Image: series of the series	80-29098-00	Grille Kit			Evaporator Plate	2		Screw, Wood Trim	2
Grille SweepIRivetIRivetIScrew, SlideIDeflectorISensor HousingIRivet 5/32IScrew2Sensor HousingISide 37.2 x400IReto Strip2CampISide 37.2 x400IReto Svitch KitScrew, Clamp4Screw, Slide 2 KitIReed Switch KitScrew, Clamp4Screw, Slide 2 KitIReed Switch KitScrew, Clamp4Screw, Slide 37.2 x400IReed Switch KitScrewScrewSide SupportIReed Switch KitScrewScrewSide SupportIReed SwitchIScrewScrewSide SupportIReed SwitchIScrewScrewSide SupportIBo-5101-00Shelf KitScrewSide SupportISide SupportIBoff KitControl KitScrew, SideCriper At 18ScrewSide 37.2 x400ISolos 1020-00Control KitScrew, SideScrew, SideScrewSide SupportISolos 1021-00Bin KitScrew, SideScrew, SideScrewSide SupportISolos 1022-00Bin KitScrewSide SupportIScrewSide SupportISolos 1021-00Bin Side KitIScrew, SideScrew, SideScrewSide SupportISolos 1021-00Bin KitScrewScrew, SideScrew, SideScrewScrewScre		Grille	1	80-51031-00	Thermistor Housing	2	80-51035-00	Slide   Kit	
DeflectorISensor HousingIRivet 5/32IScrew280-51032-00Evaporator KitISide 37.2 x 400IReto2ClampCamo Spacer80-5103-01Side SuportI80-5101-00Reed Switch KitScrew, Clamp4Screw, Side2ScrewMagnet4Nut1Rivet 5/32I80-5101-00Reed Switch KitScrew, Slampare5Screw, Slade1Reed Switch4Screw, SlampareScrew, SladeScrew, Slade1Raget Kit80-5103-00ScrewScrewSlade 37.2 x 200180-5101-00Sheff Support4ScrewSlade Support1Sheff Support4ScrewCrisper KitRivet 5/32180-5102-00Sheff Support4ScrewSlade Support1Sheff Support4ScrewSlade Support1Slade Support1Bo-5102-00Sheff Support8Rack Kit 11ScrewSlade Support1Main Board1Screw, Slade2ScrewScrewScrewScrewScrewScrewScrewScrewScrewMain Board1Screw, Slade Support1ScrewSc		Grille Sweep	1		Rivet	4		Screw, Slide	2
Screw280-5103-00Evaporator Kit18Side 37.2 x4001Felt Strip2ClampClamp1Side SupportSide Support180-5101-00Reed Switch KitFoan SpacerT80-5103-00Side 2 XitT80-5101-00Reed Switch KitScrew, Clamp4Screw, Clamp4Reed Switch KitScrew, Side180-5101-00Magnet4Screw, Clamp4Screw, Side1Side 37.2 x 200180-5101-00Sheff KitTScrew, SideCrisper KitSide Support1Side Support180-5102-00Screw, SideCrisper Control1Side Support1Side Support180-5102-00Control KitSScrew, Side1Side Support180-5102-00Control Control1Screw, Side1Screw, Side180-5102-00Ein KitIScrew, Side1Screw, Side180-5102-00Bin KitIScrew, Side1Screw, SideScrew, Side180-5102-00Bin Side KitISide Support1Screw, SideScrew, SideI80-5102-00Bin Side KitIScrew, Side Support2Screw, SideScrew, SideI80-5102-00Bin KitIScrew, Side Support1Screw, SideScrew, SideI80-5102-00Bin Side KitIScrew, Side Support1Screw, Side		Deflector	I.		Sensor Housing			Rivet 5/32	I
Felt Strip2Clamp1Bide Support1Rivet2Foam Spacer60-51035-01Side 2 Kit780-51016-00Reed Switch KitScrew, Clamp460-51035-01Side 2 Kit780-51016-00Reed Switch KitScrew, Clamp41Screw, Side 2 Kit1Reed Switch Kit1Screw, Clamp1Rivet S/32180-51017-00Shelf Kit80-51033-00Crisper KitSide Support180-51017-01Shelf Kit80-51033-00Crisper KitSide Support180-51017-02Shelf KitScrewScrewSide Support180-51017-03Shelf KitScrewScrewSide Support180-51021-00Control KitScrewScrew, Side2ScrewSide Support280-51021-00Sin Sx 18"IScrew, SideScrew, Side2ScrewScrew280-51021-00Bin SitIScrew, Side Support1Screw, Wood Trim1Screw, Wood Trim180-51021-00Bin Sit RitIScrew, SideIScrew, Wood Trim1Screw, Wood Trim180-51021-00Bin Sit RitIScrew, SideIScrew, SideIIScrew, SideII80-51021-00Bin Site KitIScrew, Wood TrimIIIIIIIIIIIIIIIII		Screw	2	80-51032-00	Evaporator Kit	I		Slide 37.2 x 400	I
Rive:         2         Foam Spacer         80-5103-00         Side 2 Kit           80-51016-00         Red Switch Kit          Screw, Clamp         4         Screw, Slide 2         Screw, Slide 2         Screw, Slide 3/2 × 200         1           80-51016-00         Red Switch Kit         1         Screw, Clamp         1         Screw, Slide 3/2 × 200         1           80-51017-00         Sheff Kit         Exaporator         2         Side Support         1           80-51017-00         Sheff Kit         I         Screw, Clamp         1         Side Support         1           80-51020-00         Sheff Kit         I         Screp Control         1         Side Support         1           80-51020-00         Screntof Kit         I         Screp Control         I         Screp Control         I         Screp Control         I         Screw I         Screw Side         Screw I         Screw I         Screw Side         Screw I         Screw I         Screw Void Trim         I         Screw I         Screw I         Screw Void Trim         I         Screw I         Screw Void Trim         I         Screw I         Screw Void Trim         I         Screw II         Screw Void Trim         I         Screw Void Trim         Screw Void Trim<		Felt Strip	2		Clamp	I		Slide Support	I
80-51016-00       Reed Switch Kit       I       Screw, Clamp       4       Screw, Slide       2         Reed Switch       I       Nut       I       Rivet 5/32       I         Reed Switch       I       Screw       Screw       Slide 37.2 x 200       I         Magnet       80-5103.00       Crisper Kit       Slide 37.2 x 200       I         80-51017-00       Shelf Kit       80-5103.00       Crisper Control       I       Slide 37.2 x 400       I         Biel Support       4       Retainer       I       Slide 37.2 x 400       I       I         Shelf Curon Tray       1       Retainer       I       Slide 37.2 x 400       I       I         Shelf Curon Tray       1       Retainer       I       Slide 37.2 x 400       I       I         Soford Tray       1       Rack I       I       Grille Kit       I       Grille Kit       I         Sorew       Side 37.2 x 400       1       Screw, Slide Support       I       Fet Surp       I         Sorew       Side Support       Side Support       I       Screw, Slide Support       I       Fet Surp       I         Sorew       Sing S 18"       I       Screw, Wood Trim       I <td></td> <td>Rivet</td> <td>2</td> <td></td> <td>Foam Spacer</td> <td></td> <td>80-51035-01</td> <td>Slide 2 Kit</td> <td></td>		Rivet	2		Foam Spacer		80-51035-01	Slide 2 Kit	
Screw4Nut1Rivet 5/321Reed Switch1ScrewScrewSide 37.2 x 2001Magnet1Evaporator2Side 37.2 x 200180-51017-00Shelf Kit2Side 37.2 x 4001Bielf Support4Retainer1Side 37.2 x 4001Edge Tim1Crisper Control1Side 37.2 x 4001Boef Support4Crisper 4 x 18Side Support180-51020-00Control KitCrisper 4 x 18Grille Kit1Control Tray1Rack I2Screw3Screw1Screw, Side2Screw280-51021-00Bin KitScrew, Side 37.2 x 4004Screw3Bin S x 18"1Side 37.2 x 4004Screw580-51021-00Bin KitScrew, Side 37.2 x 4004ScrewScrewScrew80-51021-00Bin Site KitScrewSide 37.2 x 4004ScrewScrewScrew80-51021-00Bin Site KitScrewScrew, Wood Trin2ScrewScrewScrewScrew80-51022-00Bin Site KitScrewScrew, Side 304ScrewScrewScrewScrewScrew80-51024-00GacitorIScrew, Side 30IScrewScrewScrewScrewScrewScrewScrewScrewScrewScrewScrewScrewScrewScrewScrew <td>80-51016-00</td> <td>Reed Switch Kit</td> <td></td> <td></td> <td>Screw, Clamp</td> <td>4</td> <td></td> <td>Screw, Slide</td> <td>2</td>	80-51016-00	Reed Switch Kit			Screw, Clamp	4		Screw, Slide	2
Reed SwitchIScrewISide 37.2 x 200IMagnetIEvaporator2Slide 30.2 x 200I80-5103-00Shelf KitCrisper KitIRivet 5/32IShelf Support4Crisper ControlISlide 30.2 x 400IEdge Trim1Crisper ControlISlide 30.2 x 400I80-5102-00Control Kit6Crisper 4 x 18ScrewScrewScrew20Control TrayIRack KitIGrille KitScrew80-5102-00IScrewScrew, SlideIScrewScrewScrew80-5102-00Bin KitIScrew, SlideIScrewScrewScrewScrew80-5102-00Bin KitIScrew, Slide 37.2 x 400IScrewScrewScrewScrew, Vood TrimI80-5102-00Bin Side KitIScrew, Wood TrimIScrew		Screw	4		Nut	I		Rivet 5/32	I
MagnetIEvaporator2Slide SupportI80-5103-00Crisper KitRetainerIRetainerISlide 37.2 x 400IEdge TrimICrisper ControlISlide SupportISlide SupportI80-5102-00Control KitISlide SupportISlide SupportI80-5102-00Control TrayISlide SupportIScrewGrille KitI80-5102-00Control TrayISlide SupportIScrewIScrewI80-5102-00Main BoardIScrew, SlideIScrewIScrewI80-5102-00Bin KitISlide SupportIScrewIScrewI80-5102-00Bin KitISlide SupportIIScrewII80-5102-00Bin KitIScrew, Slide SupportIIIII80-5102-00Bin Side KitIScrew, Wood TrimII		Reed Switch	I.		Screw			Slide 37.2 x 200	I
80-51017-00       Shelf Kit       80-5103-00       Crisper Kit       I       Rivet 5/32       I         Shelf Support       4       Retainer       1       Slide 37.2 x 400       1         Edge Trim       1       Crisper Control       1       Slide Support       1         Shelf       1       Crisper A x 18       80-51036-00       Grille Kit       1         80-51020-00       Control Kit       80-51034-00       Rack Kit 1       1       Screw       Grille Kit       1         80-51021-00       Main Board       1       Screw, Slide       2       Screw       Felt Strip       2         80-51021-00       Main Board       1       Screw, Slide Support       4       Felt Strip       2         80-51021-00       Bin Kit       Screw, Wood Trim       1       Screw, Wood Trim       1       Screw, Wood Trim       1         80-51021-00       Bin Slide Kit       Screw, Slide       1       Screw, Wood Trim       1       Screw, Wood Trim       1         80-51023-00       Bin Slide Kit       Screw, Slide       1       Screw, Slide       1       Screw, Slide       1         80-51024-00       Screw, Wood Trim       1       Screw, Wood Trim       2       Screw		Magnet	1		Evaporator	2		Slide Support	I.
Shelf Support4Retainer1Side 37.2 x 4001Edge Trim1Crisper Control1Side Support1Shelf1Crisper 4 x 1880-51036-00Grille Kit80-51020-00Control Kit1Rack Kit 11Grille KitControl Tray1Rack Xi 12Grille Kit2Screw1Rack Xi 22Screw3Main Board1Rivet 5/322Felt Strip280-51021-00Bin KitISide Support1Felt Strip1Crisper Retainer1Side Support1Felt StripIRot-51023-00Bin Side KitSorewSide Support1Felt StripISide SupportSide Support1Screw, Wood Trim1Felt StripISorewSideSorew, Side1Felt StripIISorewSide Support1Screw, Side1Felt StripISorewSide Support1Screw, Side1Felt StripISorewSide Support2Screw, Sorew, Side1Felt Strip </td <td>80-51017-00</td> <td>Shelf Kit</td> <td></td> <td>80-51033-00</td> <td>Crisper Kit</td> <td></td> <td></td> <td>Rivet 5/32</td> <td>I</td>	80-51017-00	Shelf Kit		80-51033-00	Crisper Kit			Rivet 5/32	I
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80-51021-00       Bin Kit       Slide 37.2 x 400       4         Bin 5 x 18"       I       Slide Support       I         Crisper Retainer       I       Wood Trim       I         Crisper Control       I       Screw, Wood Trim       2         80-51023-00       Bin Slide Kit       Screw, Wood Trim       2         80-51024-00       Compressor Elect       Rack Kit 2       I         Screw, Corew, Slide       4       Screw, Slide 37.2 x 400       2         0verload       I       Slide Support       2         Relay       I       Slide Support       2         Kethy       I       Screw, Slide 37.2 x 400       2         Screw, Wood Trim       J       Screw, Wood Trim       2		Main Board	1		Rivet 5/32	2			
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Relay I Wood Trim I Screw, Wood Trim 2		Overload	I		Slide Support	2			
Screw, Wood Trim 2		Relay	I		Wood Trim	I			
					Screw, Wood Trim	2			

![](_page_38_Picture_0.jpeg)

![](_page_38_Figure_2.jpeg)

#### Models Covered

U-3018RFOL-00	U-3018RGLS-00
U-3018RFOL-01	U-3018RGLS-01
U-3018RFS-00	U-3018WCOL-00
U-3018RFS-01	U-3018WCOL-01
U-3018RGLOL-00	U-3018WCS-00
U-3018RGLOL-01	U-3018WCS-01

#### Wiring Harness Part Number Reference

ID Number	<b>Board Location</b>	Description	Part Number
I	J6	Universal Serial Bus Harness	2974
2	J8	Signal Ground Harness	66025
3	JI	Input Harness	2986
4	J4	DC Output Harness	2987
5	J5	UI Control Harness	2973
6	J2	AC Harness	2992
7	FI	Fuse	I5 Amp

![](_page_39_Picture_1.jpeg)

### **PRODUCT INFORMATION**

Installation Guides with complete installation information, Custom Wood Panel Size Specifications & Installation Instructions, CAD Drawings, Use and Care Guides, Specifications & Feature Benefits are available for viewing and download on-line at www.u-line.com/specs/.

### SERVICE INFORMATION

If you have a problem with this appliance, your use and care guide has troubleshooting information to help you quickly identify common problems and provide information on possible cause and remedy. Answers to Customers Frequently Asked Questions are available at www.u-line.com/customer/faq.cfm. You may contact U-Line directly:

### **GENERAL INQUIRIES:**

U-Line Corporation P.O. Box 245040 Milwaukee, Wisconsin 53224-9540 U.S.A. Phone (414) 354-0300 FAX (414) 354-7905 Email: sales@u-line.com www.u-line.com

### SERVICE ASSISTANCE:

Phone (800) 779-2547 FAX (414) 354-5696 Email: onlineservice@u-line.com www.u-lineservice.com

### PARTS ASSISTANCE:

E-mail: onlineparts@u-line.com

### **BUILDING ON THREE GENERATIONS OF INNOVATION**

For nearly five decades and three generations, U-Line continues to be the leader in innovation, quality and value in the premium built-in undercounter ice making, refrigeration and wine preservation market. U-Line has captivated those with an appreciation for the finer things with exceptional functionality, style, inspired innovation and attention to even the smallest details. We are known and respected for our unwavering dedication to product design, quality and selection.

In 1962, Henry Uihlein founded U-Line Corporation as an outgrowth of Ben-Hur Freezer Company and was the first to develop and patent an automatic stand-alone undercounter residential ice maker. His foresight and determination to develop new ideas and to succeed when there were no clear guidelines or solutions are evident today. The newest Uihlein generation continues to build upon the family's innovative legacy at the Milwaukee, Wisconsin based business by providing continuity and vision from which new designs and technology continue to be born.

Today the complete U-Line product collection includes Ice Makers, Wine Captain® Models, Combo® Models, a Refrigerator / Freezer, Refrigerators, Drawers and Beverage Centers. The U-Line brand offers products in the 1000 Series, 2000 Series and the Modular 3000 Series. The 1000 Series offers a more targeted priced product with appropriate features, while the 2000 Series offers upscale features, advanced technology and specialized product families. U-Line's approach to its breadth of products, multiple price points and features allows a choice and product that will fit any lifestyle.

### DESIGNED, ENGINEERED AND ASSEMBLED IN WISCONSIN, USA

# The Built-In Undercounter Leader Since 1962

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