



UCX24-1-2-00 INSTALLATION & OPERATION MANUAL



IMPORTANT

The Perlick Corporation verifies this product does not contain a prohibited refrigerant as defined by the California Air Resource Board (CARB), the state of New York, or any other state with HFC prohibition laws. This product does not contain HFC's. The following disclosure statement is provided to comply with the CARB regulation: This equipment is prohibited from use in California with any refrigerants on the "List Of Prohibited Substances" for that specific end use, in accordance with the California Code of Regulations, title 17, section 95374. This disclosure statement has been reviewed and approved by the Perlick Corporation and the Perlick Corporation attests under penalty of perjury that these statements are true and accurate.



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GENERAL INFORMATION

Introduction

Congratulations on your purchase of a Perlick undercounter product. This manual has been prepared to assist you in the installation of your cabinet and to acquaint you with its operation and maintenance.

We dedicate considerable time to ensure that our products provide the highest level of customer satisfaction. If service is required, your dealer can provide you with a list of qualified service agents. For your own protection, never return merchandise for credit without our approval.

We thank you for selecting a Perlick product and assure you of our continuing interest in your satisfaction.

Warranty

Improper installation of this product may void warranty. Please review this manual for recommended installation. All warranty service will need to be performed by a Perlick-authorized service agent utilizing OEM parts.

To register your product, visit our web site at www.perlick.com. Click on "Residential" or "Commercial", then "Resources". Click on the link "Warranty and Support". You must complete and submit this form or the installation date will revert back to the ship date.

Please record the purchase date and the dealer's name, address and telephone number below.

Serial Number is located on the inside nameplate on top center of the cabinet.

Model Number: _____

Serial Number: _____


Purchase Date: _____

Dealer Name & Address:

Phone Number: _____

SAFETY

PLEASE READ all instructions completely before attempting to install or operate the unit. Take particular note of the DANGER, WARNING, an CAUTION information in the manual. The information is important for the safe and efficient installation, operation and care of your Perlick unit.

 **DANGER** Indicates a hazard that **WILL** result in serious injury or death if precautions are not followed.

 **WARNING** Indicates a hazard **MAY** cause serious injury or death if precautions are not followed.

 **CAUTION** Indicates a hazard where **minor injury or product damage may occur** if precautions are not followed.

NOTICE

Indicates property damage **MAY** occur if warnings or instructions are not followed.



The GHS pictogram diamond symbol indicates this product contains a flammable gas. This symbol is used within this manual and labels on the appliance.



The red flame triangle symbol indicates this product contains a flammable gas. This symbol is used within this manual and labels on the appliance.




IMPORTANT!

Read and understand all information in this manual before attempting the installation. All plumbing and electrical work must be performed by a qualified technician and conform to all applicable state and local codes.


Keep hands away from pinch points on the equipment. For example, any area around the door hinges. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.


Refrigerant

 **CAUTION** This product contains a **flammable refrigerant**, R600a (Isobutane). The appliance shall be installed in accordance with the safety standard for refrigeration systems, ANSI/ASHRAE 15. All local, state, provincial, and federal laws must be followed for installation, handling, servicing, and disposal of the appliance.


R600a (isobutane) is a **flammable refrigerant** and hydrocarbon. This product has been designed to operate safely with R600a and is certified to safety standards UL/CSA 60335-1, UL/CSA 60335-2-24, and UL/CSA 60335-2-89.


- R600a is heavier than air. The concentration will always be highest at the floor level.
- The explosion limits are as follows:
 - Lower Limit: 1.8% by volume
 - Upper Limit: 8.4% by volume
 - Ignition Temperature: 460°C


 **DANGER** Take caution when handling, moving and using the product to avoid damaging the refrigerant tubing or increasing the risk of a leak.

 **WARNING** Only service personnel that have the proper qualifications and training to safely work with **flammable refrigerants** and electricity should attempt to maintain, service, or repair the refrigeration and electrical system of this appliance. This includes but is not limited to breaking into the refrigeration circuit, opening of covers and enclosures, and service or repair any components of the electrical system.

 **WARNING** All component parts shall be replaced with like components to minimize the risk of possible ignition due to incorrect parts or improper service.

 **CAUTION** If service is necessary, it is recommended that repair work is performed by a Perlick authorized servicer. Work done by unqualified individuals could potentially be dangerous and will void the warranty.

 **NOTICE** This product contains blown foam insulation using blowing agent R611 (Methyl Formate). The foam in this product does not contain HFC's, CFC's, or HCFC's.

 **CAUTION** This product uses R611 as a blowing agent for the foam insulation. R611 is mildly flammable. All local, state, provincial, and federal regulations must be followed when disposing of the appliance.

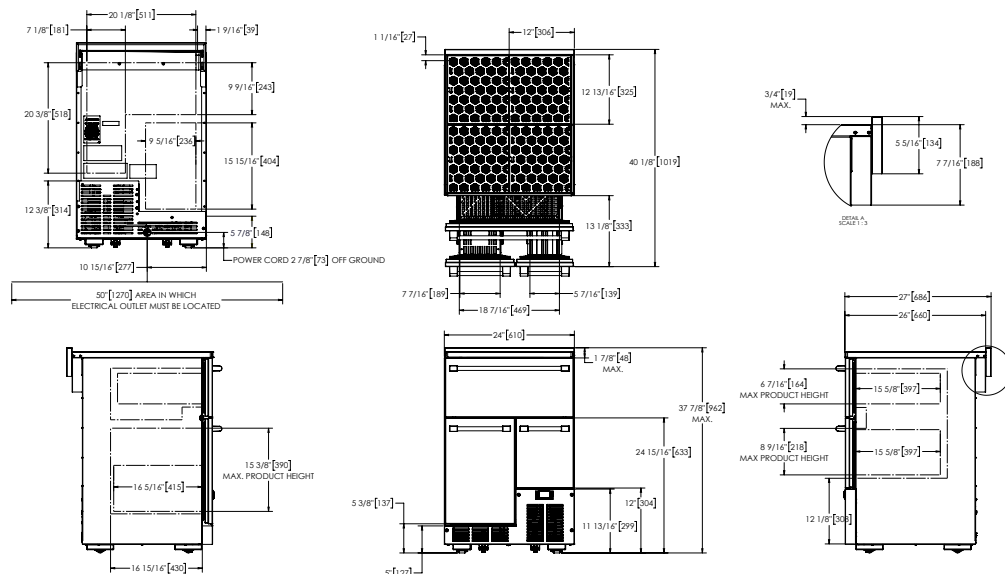
 **WARNING: California Prop 65 Notice**

These products may expose you to chemicals including Chromium, which are known to the state of California to cause cancer and birth defects or other reproductive harm. For more information on whether a product in this list contains these chemicals, please refer to the specific product page at perlick.com. Or to find out more about Prop 65, go to P65Warnings.ca.gov.



SPECIFICATIONS

MODEL NUMBERS		UCX24-1-2-00
MODEL DESCRIPTION		Dual Zone Cocktail Refrigerator/Freezer
OVERALL DIMENSIONS (with drainboard top)	Width - in. (mm)	24" (606)
	Depth - in. (mm)	27" (686)
	Height - in. (mm)	37 13/16" (960)
OVERALL DIMENSIONS (without drainboard top)	Width - in. (mm)	24" (610)
	Depth - in. (mm)	24" (610)
	Height - in. (mm)	36-1/4" (921)
INTERNAL VOLUME Net. Cu. Ft. (L).		4.0 (113)
SHIPPING WEIGHT Lbs. (kg.).		222 (101)
EQUIPMENT WEIGHT Lbs. (kg).		192 (87)
ELECTRICAL SPECIFICATIONS	Electrical Supply	115VAC/60 Hz/1 Ph
	Running Load Amps	2.7
	Electrical Connection	Cord connected
	Cord Plug Type	NEMA 3 Prong 5-15P
	Cord Length	6'
	Defrost Initiation	Automatic
	Defrost Type	Hot gas
	Thermostat	Digital
	Lighting Type	LED (Amber)
REFRIGERATION SPECIFICATIONS	Refrigerant	R600a (62g)
	Expansion Device	Capillary Tube
	Temperature Settings F (C)	Glassware & Ice Drawers: -10° (-23.3°) - 10° (-12.2°) Factory Set Point 0° (-17.8°) Bottle Storage Drawer: 34° (1.1°) - 42° (5.5°) Factory Set Point 38° (3.3°)
	Heat Rejection (at 75°F)	700 BTU/hr
	Front Vented	Yes



Perlick is committed to continuous improvement. Therefore, we reserve the right to change specifications without prior notice.



INSTALLATION PREPARATION

Space Requirements

To ensure maximum performance, fresh air must be allowed to circulate through the machinery compartment. Do not place anything in front of the cabinet that would obstruct air flow at the grill. Do not place the unit in an unventilated small room.

NOTICE If the unit is installed under a countertop, it is recommended that the countertop be supported by surrounding cabinetry and use shims to support countertop directly above the refrigerated cabinet.

NOTICE Make sure the floor under the unit is level with the surrounding finished floor. Protect a finished floor with plywood, cardboard, or some other suitable material before moving the unit into place. Failure to do this may result in damage to the floor.

NOTE: Make sure the space is correctly sized for the unit.

Check that the following are level and square before installing:

- Front and interior opening
- Installation opening and floor surface
- Countertop bottom front edge

NOTE: The floor under the unit must be at the same level as the surrounding finished floor.

Plumbing Requirements

Unit is equipped with a drain board. The drain board line needs to be connected to a drain hose before startup.

NOTICE Follow all local regulations when installing the drain hose and routing hose to a proper drain.

Drain Board Tubing Installation

NOTE: The unit is equipped with an 1/2" O.D. copper nipple connected to the drain pan located on the back of the unit.

1. Using 1/2" ID flexible drain tubing, connect the drain tubing to the drain board copper nipple.

NOTE: Drain tubing is not provided with the unit.

2. Use a hose clamp, spring clamp, or ear clamp to secure the hose to the drain board nipple.
3. Route the drain tubing to a proper drain.
4. Check all connections for leaks.

Electrical Requirements

For specifications, see the data plate located on the cabinet. You can also view the wiring diagram on this publication.

WARNING Electrical work must be performed by a qualified technician and conform to all applicable state and local codes.

WARNING Inspect the electrical cord and plug for damage prior to energizing the unit to avoid potential electric shock. If the power supply cord is damaged, it must be replaced by a qualified service agent and with an OEM replacement power supply cord.

WARNING Use electrical grounding to avoid electrocution or electric shock. This appliance is equipped with a 3-prong (grounding) polarized plug for your protection against possible shock hazards. Never use an extension cord to connect the unit to the electrical source. Do not use a two-prong adapter or remove the power cord ground prong. Failure to use grounding may result in death, serious injury, or property damage. Failure to use grounding will void warranty.

NOTE: For best operation, it is recommended to avoid using a Ground Fault Circuit Interrupter (GFCI) or Arc-Fault Circuit Interrupter (AFCI) unless otherwise required by local codes.

Electrical Supply	115 V-AC, 60Hz
Service	15 amp dedicated circuit
Receptacle	3-Prong, Grounded Nema 5-15 R

NOTICE Using any voltage other than specified above will result in serious damage to the unit.



Uncrating and Inspection

Upon receipt of the unit, inspect packaging for damage. If any damage is found, contact the freight company associated with shipping your product. If no visible damage is found, remove all packing material and carefully inspect for hidden damage. If damage is discovered, file your claim immediately with local dealer or distributor. Perlick is not responsible for damage in transit.

⚠ DANGER Do not use or store flammable liquids (i.e., gasoline) or vapors near the appliance to avoid fire.

⚠ WARNING Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.

⚠ WARNING To prevent personal injury, a minimum of two people are required to lift the unit. Larger units may require additional personnel.

⚠ CAUTION Do not lift unit by drawer or door handles, as damage to the unit could occur if not moved as instructed.

NOTICE When moving the unit, be sure to protect finished flooring with appropriate material to avoid damage from moving the unit.

NOTE: Before moving the unit, secure the drawers shut with tape to prevent drawers from opening while being moved. Carefully move unit to installation site and place in front of opening.

NOTICE Fully retract the legs (or rollers) prior to moving to prevent damaging the unit or floor.

NOTICE Use care whenever handling, moving, and using the product to avoid damage to the refrigerant tubing to reduce the possibility for a leak.

NOTICE If unit has been tilted past 45 degrees or laid on its back or sides, place unit upright and allow a minimum of 24 hours before connecting power. Failure to follow this procedure may damage the compressor and void the warranty.

NOTICE The unit must not be completely enclosed or damage may occur. Proper air circulation is crucial, and air circulation must not be restricted. A minimum of two inches must be provided at the front of the cabinet to have proper air circulation for the condenser. Ensure there is proper access so the front cover can be removed to clean the condenser.



INSTALLATION

Placing Unit

- Prior to sliding the unit into location, plug in the unit in.
- Using the rollers, push the unit into the opening until the bottom front edge of the unit is flush with the surrounding equipment (if applicable) or into the desired area.

NOTICE

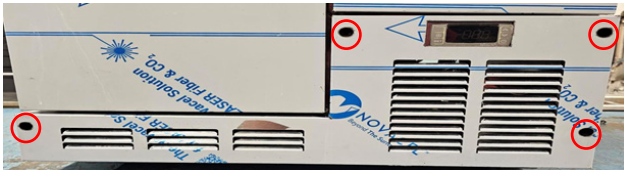
This unit requires proper ventilation to operate correctly. Do not block the louvers on the front grill or place product directly in front of the evaporator fan motor and evaporator cover louvers. Obstructed ventilation can lead to poor performance and compressor damage.

NOTICE

To prevent possible damage to the countertop and unit, do not place heavy objects on countertop directly over unit after installation.

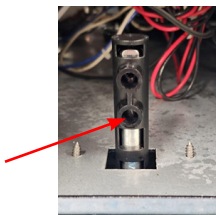
Front Grill Installation

Once the unit is secured in place, install four screws to secure the louvered front grill onto the unit.



Leveling Unit

The unit comes equipped with rollers. The included adjusting legs on the unit are used as a stop so the unit cannot roll. Remove the front grill to access the adjusting legs. Then use a 4mm Allen key to retract the legs down just so the unit is no longer resting on the front rollers. This will create a very slight pitch from the front to the rear of the cabinet. The leveling legs can also be adjusted to provide some minor side to side adjustments.



Drawers

Drawer Weight Limits

Style	Load Limit
Glass Drawer	100 lbs.
Ice Drawer	50 lbs.
Drink Drawer	50 lbs.

NOTICE

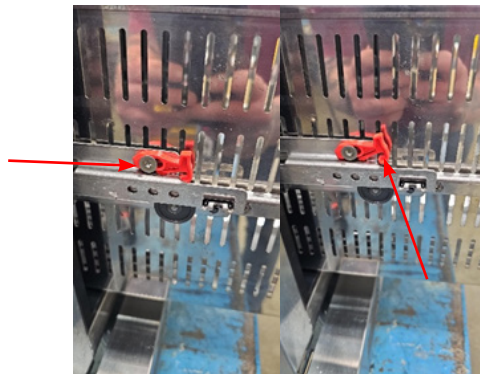
If the drawer is overloaded, it may cause damage to the unit.

Drawer Removal and Installation

NOTICE

Completely empty drawers before removing. Removal and installation is the same for all drawers on the unit.

Removal: Pull the drawer out to its furthest position. Locate the locking tabs on the both extenders. Push back on the locking tab and lift the tab up to remove the drawer. See below.





Installation: Slide the extenders completely into brackets. Then insert the drawer into the brackets. Push the locking tab down and in to lock the drawer in place.



NOTE: Improper drawer installation may not actuate the slide mechanism.

Power Unit On

Once the unit is installed and level, verify the master switch behind the front grill is in the ON position. The front grill must be removed to power the unit on and off. To remove the front grill, remove the four screws on the front of the unit for the grill. Follow the instructions to set the temperatures are in the Controls section.

Loading Product

Before storing any product, power unit on and allow it to operate for 24 hours to allow temperatures to stabilize.

NOTICE

Do not block internal louvers and fan guard openings or performance will be decreased. For best performance, leave a minimum of one inch between loaded product and any internal air openings.

WARNING

To avoid contamination, use food safe containers (not included) for the storage of craft ice in the cabinet's freezer compartment. This equipment does not include a drain and is intended for use with craft ice and other non-hazardous food stored in food safe containers. Perlick recommends the use of NSF food certified containers.

Checking Product Temperature

To properly check the temperature of product store inside the refrigerated compartment:

1. Insert a thermometer into an unbreakable plastic bottle, partially filled with water
2. Tighten the cap. Then place the bottle in the unit for 24 hours.

After 24 hours, check the temperature of the water and adjust the temperature of the refrigerated compartment accordingly.

CONTROLS

Digital Temperature Control

The image below shows the controller and the programming buttons on the unit.



Programming Button Definitions



The following table explains the basic functions of the icons on the controller.

LED	Button Definition
	ON/OFF
	Up Arrow
	Down Arrow
	Defrost Button
SET	Set Button





Controller Instructions



Use the following instructions to view and change settings on the controller:

- ON/OFF: Press the  button to turn the unit ON or OFF.
- Glass Drawer Temperature: Press and release the  button to view the temperature.
- Ice Drawer Temperature: The display will always show the ice drawer temperature.


Changing the Drink Drawer Temperature

1. Press and hold the **SET** button until the display shows St1 with "F" flashing.
2. Press the **SET** button again to display the ice drawers current temperature.
3. Use the  or  arrow keys to scroll to the desired temperature. The controller will memorize the desired temperature.

Changing the Glass and Ice Drawer Temperature

1. Press and hold the **SET** button and the down arrow key simultaneously for three seconds until the display shows SAA with "F" flashing.
2. Press the **SET** button to display the glass drawers current temperature ("F" will continue to flash).
3. Use the  and  arrow keys to scroll to the desired temperature. Then press the button once and the controller will memorize the desired temperature.



Manually Defrosting the Unit

Press and hold the  button for three to five seconds. After pressing, the defrost button will illuminate.

Displaying Temperature Setpoint

Press and release the **SET** button. The display will then show the current temperature setpoint.

Setting Target Temperature

1. Press and hold the **SET** button until the display shows the current setpoint temperature with the "F" flashing.
2. Use the  and  arrow buttons to select the desired temperature.








NOTE: The controller has been programmed to only allow a temperature adjustment within a specified range. See the chart below for the setpoint ranges on this unit.

Compartment Setpoint Range

Compartment	Setpoint Range
Glass Drawer	Factory setpoint 0°F. Setpoints range from -10 to +10 °F
Drink Drawer	Factory setpoint 38°F. Setpoints range from 34 to 42 °F
Ice Drawer	Factory setpoint 0°F. Setpoints range from -10 to +10 °F

LED Functions


The following table explains the different LED functions on the controller.


	ON	Compressor is ON
	Flashing	Anti-short cycle delay is ON
	ON	Defrost is ON
	Flashing	Drip time in progress
	ON	Measurement unit
	Flashing	Programming mode
	ON	Auxiliary relay ON
	ON	System pull down in process
	ON	Fans enabled
	ON	Alarm occurring




MAINTENANCE AND CARE


Maintenance and Care


 **WARNING** Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.


 **WARNING** Shut off power to the unit before any routine maintenance is performed.

Cleaning the Condenser

 **WARNING** Do not use means to accelerate the defrosting process or to clean the evaporator and/or condenser coil other than those recommended by the Perlick technical service team.

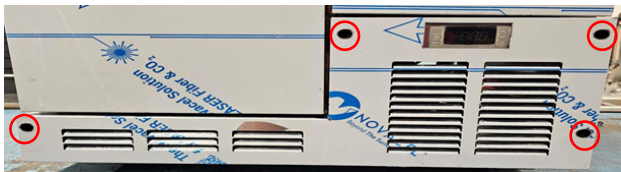
 **CAUTION** Avoid damaging or crushing the condenser fins or tubing.

 **DANGER** Flammable Refrigerant. Risk of fire or explosion. Do not damage refrigeration tubes.

 **WARNING** Do not use any electrical appliances inside the food storage compartments of the appliance.

Every 90 days is recommended to clean the condenser for optimal performance.


1. Remove four screws to remove the front grill.



2. Using a soft bristle brush or brush attachment on a vacuum, remove all dust and debris from the condenser.
3. Verify no fins are damaged or bent. If fins are damaged, use a condenser comb to correct.
4. Reinstall front grill.

Lubricating Drawer Slides

Drawer slides must be lubricated every 90 days or after every cleaning of the unit to ensure proper drawer function and longevity.

 **NOTICE** Use an NSF approved lubricant whenever lubricating the drawer slides.

To lubricate the drawer slides:

1. Open the drawer to the furthest extended position.
2. Gently spray lubricant onto the slides.
3. Open the drawer several times to ensure proper lubrication throughout the entire drawer slide.

Clean Gaskets

Follow the steps below to properly clean the drawer gaskets of your Perlick unit. Clean gaskets as needed or every 30 days.

Gasket maintenance is recommended to prolong the life of the gaskets, preventing air intrusion into the unit.

1. Put the unit in standby mode or turn the power off by removing the front grill and using the rocker switch prior to cleaning.
2. Use a mild soap and warm water mix to wipe down the gasket and remove debris and residue.
3. For tough stains or grime, use a mixture of baking soda and water. Apply gently to the affected areas, then wipe it clean.
4. Avoid harsh chemicals, especially those containing chlorine, bleach, or quaternary ammonium.
5. Do not use steel wool or abrasive pads that could damage surrounding stainless surfaces or gaskets.
6. Clean mold or mildew (if present) using a solution of 1 part white vinegar with 2-3 parts water. Wipe the affected area with a soft cloth. Then rinse thoroughly with clean water and dry completely.

NOTE: A food-grade hydrogen peroxide spray can also be used on affected areas.



7. Dry thoroughly after cleaning. Use a dry cloth to remove all moisture from the gasket area. This will prevent mold growth and maintain a tight seal.
8. Inspect the gasket for damage, such as rips/cracks or warping, and ensure it creates a full seal along the unit's front surface.
9. Close drawers and turn unit back on by using the rocker switch. Reinstall the front grill.

LED Replacement

If an LED replacement is required, call your Perlick Factory Authorized Service Center. For the location of the Service Center in your area, contact your selling dealer, inquire via the web at www.perlick.com, E-mail us at warrantyserv@perlick.com, or call 844-411-8050.

Stainless Steel Care & Cleaning

General

Stainless steel is a "passive" metal because it contains other metals like chromium, nickel and manganese that stabilize the atoms. Chromium provides an invisible passive film that covers the steel surface, acting as a shield against corrosion. If the film is intact and not contaminated, the metal is passive and stainless. If the passive film of stainless steel has been broken, equipment can start to corrode and rust.

The following materials or processes can break down stainless steel's passive layers and allow corrosion to occur:

Mechanical abrasion refers to items that will scratch a steel surface. Steel pads, wire brushes, and scrapers are prime examples.

Water comes out of the faucet in varying degrees of hardness. Hard water may leave spots. When allowed to sit, these deposits will break down the passive chromium layer and rust stainless steel. Other deposits from food preparation must be promptly removed with an appropriate cleaning agent.

Chlorides are found nearly everywhere. They are in water, food, and table salt. Household and industrial cleaners are the worst offenders.

Preventing Stainless Steel Rust

Use non-abrasive tools to clean stainless steel products. Soft cloths and plastic scouring pads will not harm the steel's passive layer.

Clean with polish lines. Some stainless steels have visible polishing lines or "grain." When visible lines are present, always scrub in a motion parallel to the lines. When the grain cannot be seen, polish in a consistent straight pattern and not in a circular motion.

Use alkaline, alkaline chlorinated or non-chloride containing cleaners. While many traditional cleaners are loaded with chlorides, the industry is providing more options of non-chloride cleaners to consumers. If you are not sure of chloride content in the cleaner being used, contact your cleaner supplier. If your cleaner contains chlorides, ask your supplier for an alternative. Avoid cleaners containing quaternary salt; it also can attack stainless steel and cause pitting and rusting.

Keep food equipment clean. Use alkaline, alkaline chlorinated or non-chloride cleaners at recommended strength. Clean frequently to avoid build-up of hard, stubborn stains. The single most likely cause of damage is chlorides in the water. Remember, adding heat to cleaners that contain chlorides dramatically increases their effect on stainless steel.

If chlorinated cleaners are used, immediately rinse and wipe equipment and supplies dry. The sooner you wipe standing water, especially when it contains cleaning agents, the better. After wiping equipment down, allow it to air dry. Oxygen helps maintain the stainless steel passive film.

Cleaning the Cabinet Interior/Exterior

NOTICE

NEVER use hydrochloric acid (muriatic acid) on stainless steel. Do not use abrasive cleansers or cloths on any interior or exterior surfaces or removable parts.

Glass panels may be cleaned using any standard glass cleaner available on the market.

To clean interior and exterior non-metallic surfaces and removable parts, wash with mild solution of soap and lukewarm water with a little baking soda. Rinse and dry thoroughly. Avoid getting water on the lights, controllers, and fan motors.



Job	Cleaning Agent	Comments
Routine Cleaning	Soap, ammonia, detergent	Apply with sponge or soft cloth.
Fingerprints and smears	Areal 20, Lac-O-Nu, Lumin Wash, O-Cedar Cream Polish	Provides barrier film to minimize fingerprints. Can be used on all finishes. Rub the surface with a cloth as directed on the package.
Stubborn stains and discolorations	AllChem Concentrated Cleaner, Samae, Twinkle, Cameo Copper Cleaners, Grade FFF Italian Pumice Whiting, Steel Bright, Lumin Cleaner, Zud Restoro, Sta-Clean, Highlite Cooper's Stainless Steel Cleaner or Revere Stainless Steel Cleaner	Apply with a damp sponge or cloth, then rinse with clear water and wipe dry.
	Old Dutch, Lighthouse Sunbrite, Wyandotte Bab-O, Gold Dust, Sapollo, Bon Ami or Comet	For these household cleaners, rub with a damp cloth. They may contain chlorine bleaches so rinse thoroughly after use and wipe dry.
	Liquid NuSteel or Dubois Temp	For these products, rub the surface with a dry cloth using only a small amount of cleanser. Rinse with water and dry.
Heat tint or heavy discoloration	Penny-Brite, Copper Brite, Paste Nu-Steel, Dubois Temp or Tarnite	Rub onto surface with a dry cloth.
Tenacious deposits, rust, discoloration, industrial atmospheric stains	Bar Keepers Friend, Revere Stainless Steel	When using these cleaners, apply with a damp sponge or cloth, rinse thoroughly and wipe dry.
	Oakite No. 33 Dilac, Texo NY, Flash-KlenzCaddy Cleaner, Turco Scale 4368 or Permag 57	Swab and soak with a clean cloth. Let stand for 15 minutes or more according to directions on package, then rinse and wipe dry.
Rust discoloration or corrosion caused by cleaning agents containing hydrochloric (muriatic) acid or chlorine bleach	3M Scotch Pad, type A, grade "fine"	Clean off the surface soil using cleaning methods above. Then rub discolored or corroded areas lightly with a dry pad.



Use of property names is intended only to indicate a type of cleaner and does not constitute an endorsement. Omission of any proprietary cleaner does not imply its inadequacy. All products should be used in strict accordance with instructions on the package.

NOTE: Do NOT use steel wool or scouring pads to clean stainless steel.

For Product Information:

- Contact your selling dealer
- Inquire via the web at perlick.com
- Call 844-411-8050 for factory assistance on planning installation or product information
- Write to Perlick Corporation, Customer Service Department, 8300 West Good Hope Road, Milwaukee, WI 53223

For Product Service:

- Check the model and serial number of your unit located on the label attached to the inside top of the cabinet
- Inquire via the web at www.perlick.com
- Call 844-411-8050 for factory assistance
- Email us at warrantyserv@perlick.com

For Replacement Parts and Accessories:

- Use only genuine Perlick replacement parts and accessories. Genuine Perlick parts and accessories are designed to work correctly with Perlick products and offer superior service life. The use of non-Perlick parts can damage the unit and may void the warranty.
- Check the model and serial number of your unit located on the label attached to the inside top of the cabinet. Call your Perlick Factory Authorized Service Center.
- Inquire via the web at www.perlick.com
- Call 844-411-8050 for factory assistance
- Email us at warrantyserv@perlick.com

TROUBLESHOOTING

If the unit appears to be malfunctioning, read the OPERATION section of this manual first. If the problem persists, check this troubleshooting section to see if you can refer to the cause and remedy of the problem and resolve without a service call.

⚠ DANGER Never attempt to repair or perform maintenance on the unit until the main electrical power to the unit has been disconnected!

Troubleshooting Chart

Problem	Resolution
Noisy during operation	Certain sounds are normal. Soft sounds from the compressor, fan motor, and valves will be heard.
The refrigerated cabinet is not running	Is there electrical power to the unit?
	Is the building circuit breaker or fuse on?
	Is the control set properly?
	Is the condenser area clean?



The refrigeration compartment is warmer than usual	Is the control set properly?
	Is the light staying on?
	Is the condenser area clean and free of obstruction?
	Has the drawer been open for a long time or more frequently drawer opening occurred?
	Are internal louvers and fan guard openings obstructed?
The refrigerated compartment is cooler than usual	Is the control set properly?
	Is the drawer closing and sealing properly?
The unit runs for extended periods of time	Is the condenser area clean and free of obstruction?
	Has the drawer been open for a long time or more frequently drawer opening occurred?
	Has warm product just been placed in the unit?
	On hot days and in warm room temperatures, the system will run longer.
Condensation forms inside the refrigerated compartments	This is normal during high humidity and frequent drawer openings.
	Are the drawers closing and sealing properly?
Condensation forms on the outside of the unit	During periods of high humidity, some condensation might appear on the outside surface. The condensation will disappear when the humidity drops. Meanwhile, be sure drawers are closing and sealing properly. If condensation persists, contact your Perlick Factory Authorized service center.
LED Controller display is flashing "P1" – Freezer compartment temperature probe error	Is the freezer compartment temperature probe firmly plugged into the digital controller?
	Contact a Perlick Factory Authorized service center for a replacement probe.
LED Controller display is flashing "P2" Drink Drawer temperature probe error	Is the drink compartment temperature probe firmly plugged into the digital controller?
	Contact a Perlick Factory Authorized service center for a replacement probe.
LED Controller display is flashing "P3" – Evaporator temperature probe error	Is the evaporator temperature probe firmly plugged into the digital controller?
	Contact a Perlick Factory Authorized service center for replacement probe.
LED Controller display is flashing "HA" – High compartment temperature alarm	Refer to problem "The refrigeration compartment is warmer than usual".



LED Controller display is flashing "LA" – Low compartment temperature alarm	Refer to problem "The refrigeration compartment is cooler than usual".
Power Outage	Verify that all temperature sensitive product did not spoil during power loss.

SERVICE AND REPAIRS

Service

WARNING It is recommended that all service work and repairs be performed by Perlick-authorized service personnel. All component parts shall be replaced with like components. Incorrect parts or improper service may result in injury, damage to property, or fire. It is recommended that all warranty service work be performed by Perlick authorized service agent using only OEM parts.

For Product Service:

- Check the model and serial number of your unit located on the label attached to the inside top of the cabinet.
- Inquire via the web at www.perlick.com
- Call 844-411-8050 for factory assistance
- Email us at warrantyserv@perlick.com

Repairs

WARNING Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. Proper ventilation must be present during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

WARNING When performing any service or repair work, all wiring and cabling should be inspected to ensure that it will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges, or any other adverse environmental effects. This inspection shall also consider the effects of aging or continual vibration from sources such as compressors or fans.

Leak Detection of Flammable Refrigerants

DANGER Under no circumstances shall a potential source of ignition be used in searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

The following leak detection methods are permissible with **flammable refrigerants**:

- Electronic leak detectors that have adequate sensitivity and are calibrated. Ensure the electronic leak detector is suitable for being used with **flammable refrigerants** and are set at the appropriate LFL for R600a.
- Soap and bubble method.

If a leak is suspected, all naked flames shall be removed and/or extinguished.

If a leakage of refrigerant is found which requires brazing, all refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak.

Refrigerant Removal & System Evacuation

DANGER When breaking into the refrigerant circuit to make repairs it is important that best repair practices are always followed due to the flammability of the refrigerant. The following procedure shall be adhered to:

- a) Safely remove refrigerant following local and national regulations
- b) Purge the circuit with inert gas
- c) Evacuate
- d) Purge with inert gas
- e) Open the circuit by cutting or brazing



The refrigerant charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes. The system shall be purged with oxygen-free nitrogen to render the appliance safe for **flammable refrigerants**. This process might need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems.

Refrigerant purging is achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved. The gas is then vented into the atmosphere and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.

Ensure that the outlet for the vacuum pump is not close to any potential ignition sources and that ventilation is available.

Recovery Of Flammable Refrigerants

DANGER When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.

When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e., special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of all appropriate refrigerants including, when applicable, **Flammable Refrigerants**.

Flammable Refrigerant Charging Procedure

DANGER In addition to conventional charging procedures, the following requirements shall be followed:

- a) Ensure that contamination of different refrigerants does not occur when using charging equipment.
- b) Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
- c) Cylinders shall be kept in an appropriate position according to the instructions.
- d) Ensure that the refrigerating system is earthed prior to charging the system with refrigerant.
- e) Label the system when charging is complete (if not already).
- f) Extreme care shall be taken not to overfill the refrigerating system.

Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.



DECOMMISSIONING AND DISPOSAL

R-600 Class A3 Flammable Refrigerant Used




DANGER



Risk of Fire or Explosion. Flammable Refrigerant Used.

It is important to decommission and dispose of this product in accordance with all federal, state, and local regulations.

DANGER Risk of child entrapment. Before you throw away your old refrigerator or freezer:

- Take off the drawers.
- Leave the shelves in place so that children may not easily climb inside.

   **WARNING** Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.

  **WARNING** Do not use means to accelerate the defrosting process or to clean the evaporator and/or condenser coil other than those recommended by the Perlick technical service team. If the appliance is going to be decommissioned and stored, it shall be stored in a room without continuously operating ignitions sources such as open flames, gas appliances, or electric heaters. Do not pierce or burn. Be aware that refrigerants may not contain an odor.

- Be sure to follow all the **Important Safety Information** located at the beginning of this manual as well as the **Important Safety Information** located in the Service & Repairs section of this manual prior to any decommissioning & disposal work.

Decommissioning & Disposal- (End of Life)

- Servicing shall be done by trained service

personnel with certified competence in handling **flammable refrigerants** to minimize the risk of possible ignition due to improper service.

- Follow handling instructions carefully in compliance with national regulations.
- Do not puncture refrigerant tubing. Risk of fire or explosion due to puncture of refrigerant tubing; follow handling instructions carefully.
- The appliance contains a flammable refrigerant and must be disposed of in accordance with applicable national, state, and local codes and regulations. Refrigerant must be recovered and safely disposed of by properly trained service personnel.
- Prior to disposal of this product the refrigerant must be completely removed.
- When removing refrigerant from a system, it is recommended and good practice that all refrigerants are removed safely.
- Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant. It is essential that electrical power is available before the task commences.
- The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of **flammable refrigerants**. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good operating condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.

**Before refrigerant recovery, ensure that:**

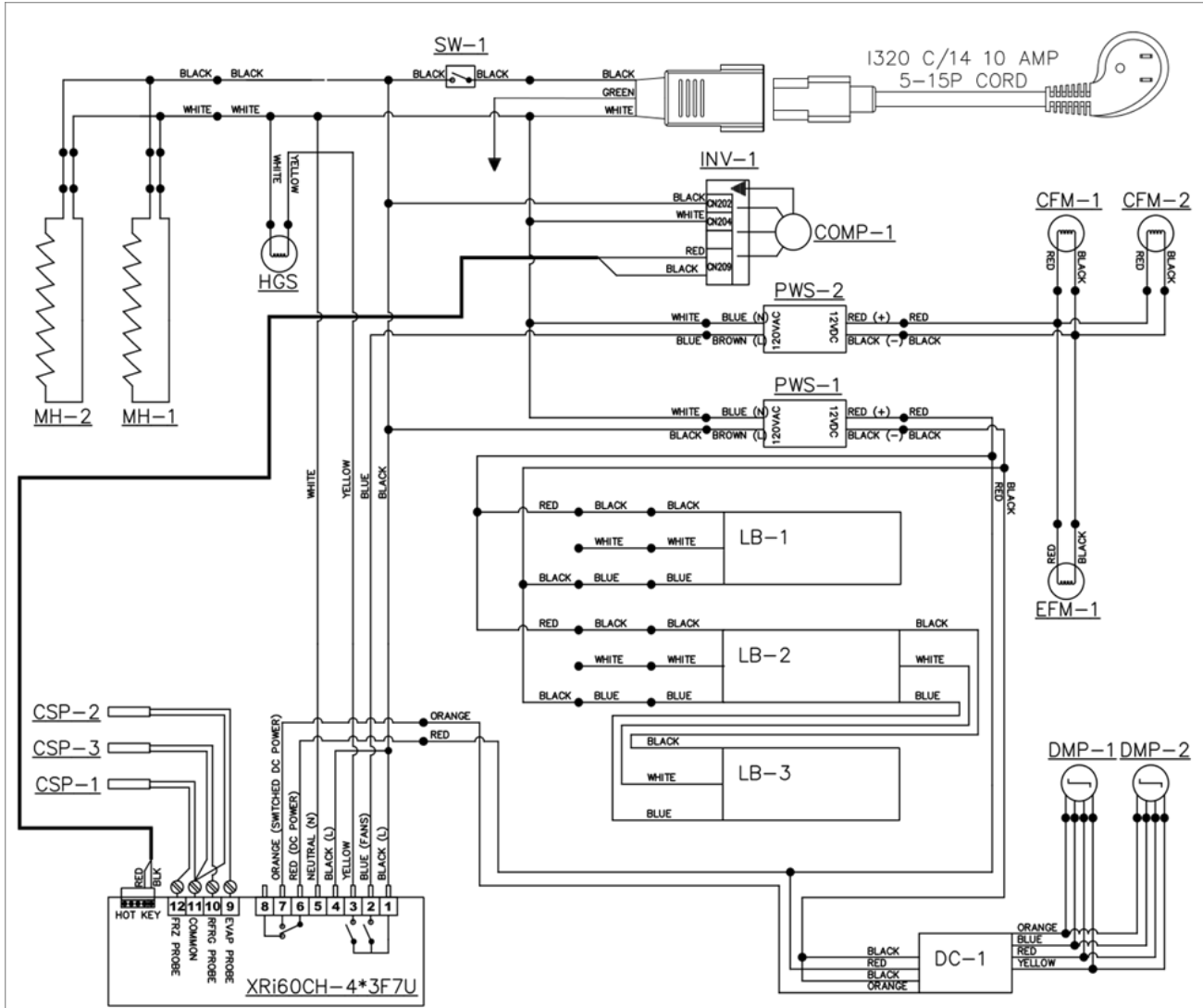
- Mechanical handling equipment is available, if required, for handling refrigerant cylinders.
- All personal protective equipment is available and being used correctly
- Isolate the system electrically.
- The recovery process is always supervised by a competent person.
- Recovery equipment and cylinders conform to the appropriate standards.
- When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the cylinder is sized correctly to hold the entire refrigerant charge. All cylinders to be used are designated for the recovered refrigerant and labeled for that refrigerant (i.e., special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.
- Even after refrigerant recovery, some residual refrigerant can be left entrained with the refrigerant oil. Cut out the compressor and drain and dispose of the compressor oil. Compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. Dispose of compressor and compressor oil in compliance with national, state, and local codes and regulations.
- The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.
- All drawers of the unit being disposed must be completely removed from the unit to avoid the risk of child entrapment. Leave shelving in place so children cannot easily climb inside.
- Disposal of this product shall be in compliance with all federal, state, and local regulations.

Labeling

Equipment shall be labeled stating that it has been decommissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing flammable refrigerant, ensure that there are labels on the equipment stating the equipment contains **flammable refrigerant**.



UCX24-1-2-00 WIRING DIAGRAM



COMPONENT LEGEND			
ID	DESCRIPTION		
XR160CH-4*3F7U	REFRIGERATION SYSTEM CONTROLLER	MH-2	MULLION HEATER (VERTICAL)
COMP-1	COMPRESSOR	SW-1	MAIN POWER SWITCH
INV-1	COMPRESSOR INVERTER	EFM-1	EVAPORATOR FAN MOTOR
LB-1	LED LIGHT BOARD (UPPER)	CFM-1	CONDENSER FAN MOTOR 1
LB-2	LED LIGHT BOARD (LOWER 1)	CFM-2	CONDENSER FAN MOTOR 2
LB-3	LED LIGHT BOARD (LOWER 2)	CSP-1	FREEZER COMPARTMENT TEMP SENSOR
PWS-1	LIGHT DC DRIVER	CSP-2	EVAP TEMP SENSOR
PWS-2	FAN DC DRIVER	CSP-3	REFRIG COMPARTMENT TEMP SENSOR
HGS	HOT GAS SOLENOID	DC-1	DAMPER CONTROLLER
MH-1	MULLION HEATER (HORIZONTAL)	DMP-1	SUPPLY AIR DAMPER
		DMP-2	RETURN AIR DAMPER

T H E
PERLICK[®]
C O R P O R A T I O N

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