⚠ WARNING!

Be sure to read and fully understand this document before installing, operating, maintaining or servicing this appliance. Failure to do so can result in appliance failure, property damage, serious injury or death. Appliance failure, injury or property damage due to improper installation is not covered by warranty.

❗ USER ACTION!

TRUE tracks the history of your appliance by its serial number. For easy reference, record your appliances full model name and serial number below. This information is on your serial label. Serial label location varies by appliance.

Model Name:

Serial Number:

True Manufacturing Co., Inc.

2001 East Terra Lane • O'Fallon, Missouri 63366-4434
(636) 240-2400 • FAX: (636)-272-2408

International FAX: (636)-272-7546 • (800)-325-6152

Parts Department: (800)-424-TRUE (424-8783)
Parts Department FAX: (636)-272-9471

INSTALLATION MANUAL

TRUE ICE (TCIM™)

Original Instructions

Contact Us

Warranty Phone: +1 855-299-3510
Warranty Email: WarrantyInquiries@TrueMfg.com
Technical Phone: +1 888-783-1429
Technical Email: CommercialIce@TrueMfg.com

THANK YOU

FOR YOUR PURCHASE

The primary purpose of this document is to assist the installation, maintenance, and servicing of your TRUE appliance. This document contains information important to safety, operation, maintenance, and servicing. **DO NOT** discard this document. TRUE is solely the appliance manufacturer. For assistance locating a refrigeration service technician in your area for installation, servicing or maintenance, please visit our Service Company Locator at **www.truemfg.com/support/service-locator.**

NOTICE!	
	Your appliance may not exactly match the figures shown in this manual.

True Commercial Ice Technical Support YouTube Channel

YouTube

For more in-depth installation and service information, see our True Commercial Ice Technical Support YouTube channel at **https://www.youtube.com/@TrueIceTechSupport.**

Installation & Setup Checklist

- ❑ Is the ice machine located where the ambient temperature is within 35˚-100˚F (1.7˚- 37.8˚C) and the water temperature within 35˚-100˚F (1.7˚-37.8˚C) all year around?
- ❑ Does the ice machine have the proper clearance for air circulation and service? See "Ice Machine Location Requirements" (pg. **27**).
- ❑ If present, are the air filter and blank cover installed on the correct side to meet clearance requirements?
- ❑ Is the ice machine level?
- ❑ Is the TRUECONNECT® modem correctly installed? See "TRUECONNECT® Modem & Antenna Verification" (pg. **47**).
- ❑ Is the TRUE TIME-OF-FLIGHT® Sensor enabled? See "Enable TRUE TIME-OF-FLIGHT® (TOF) Sensor" (pg. **49**).
- ❑ Are the mounting straps installed on the ice machine and the ice storage bin/dispenser/adapter?
- ❑ Have all shipping materials been removed from the ice machine's exterior and interior? See “Uncrating” (pg. **40**) and “Panel Removal” (pg. **41**).
- ❑ Is the ice machine on an individual dedicated electrical circuit?
- ❑ Has the power supply voltage been checked or tested against the nameplate rating?
- ❑ Has a proper ground been installed to the ice machine?
- ❑ Have all electrical and water connections been made?
- ❑ Do electrical and water connections meet applicable laws, codes, and regulations?
- ❑ Is the water supply pressure between 20-100 psig (138-689 kPa)?
- ❑ Has the water filter been installed and the ice machine been set for the correct water filter capacity? See “Water Filter Installation & Setup” (pg. **34**).
- ❑ Are the water supply and drain lines sized as specified? See “Plumbing Connection Requirements” (pg. **29**).
- ❑ Are the shut-off valve(s) installed? Is the drain line vented? See “Plumbing Connection Requirements” (pg. **29**).
- ❑ Is the compressor snug on all mounting pads?
- ❑ Have the refrigerant lines been checked to ensure they do not rub or touch other lines or surfaces?
- ❑ Has the fan blade (if applicable) been checked to ensure it turns freely?
- ❑ Has ice machine and bin/dispenser been sanitized per the manufacturer's instructions? See “Descaling & Sanitizing Procedures” (pg. **84**).
- ❑ Have the Date, Hour, Language been set? See "Display Setup" on pgs. **52**, **53**, and **54** respectively.
- ❑ Has the end user been given the instruction manual, as well as instructed on how to operate the ice machine and the importance of the recommended periodic maintenance?
- ❑ Has the end user been given the contact information for an authorized service agent?

Table of Contents

Preface

The warning, guidelines, and recommendations within this document are meant to prevent appliance damage, injury, or death. Please carefully read all warnings, guidelines, and recommendations before proceeding to ensure the continued safe use and maintenance of your TRUE ice machine.

Signal & Symbol Definitions

Below are symbols you may see in this document. Some symbols may not appear.

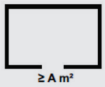
Signal Word Definitions	
⚠ DANGER!	An imminently hazardous situation which, if not avoided, will result in serious injury or death.
⚠ WARNING!	A potentially hazardous situation which, if not avoided, can result in serious injury or death.
⚠ CAUTION!	A potentially hazardous situation which, if not avoided, may result in minor or moderate injury; an unsafe practice.
❗ USER ACTION!	User action alert, follow all recommendations to avoid appliance or product damage.
❗ NOTICE!	Important information not related to hazards or risk of personal injury.

Safety Symbols	
	**Safety alert**; alerts reader to potential physical injury hazards. Obey all safety messages following this symbol to avoid possible injury or death.
 	**Flammable material**; fire or explosion hazard.
	**Electrical shock** hazard.
	**Earth terminal** must be grounded.
	**Tipping hazard**; tip-over hazard.
	**Sharp element**; cut or sever hazard.

Safety Symbols	
	**Crush or cut** hazard.
	**Slippery surface** hazard.
	**Optical radiation hazard**; risk of eye and skin injury.
	**Corrosive substance** hazard.
	**Toxic material hazard**.
	**Moving parts** hazard.

Preface

Additional Symbols	
	**Mandatory action alert symbol**; alerts reader to required or recommended actions. Obey all messages and recommendations following this symbol to avoid appliance or product damage.
NOTICE ›	**Important information** not related to hazards or risk of personal injury.
	**Review and understand** the installation manual before installing, operating, or servicing.

Additional Symbols	
	Wear **eye protection**.
	Wear **protective gloves**.
	**DO NOT** dispose of with other household waste.
	Connection to potable water supply.
	Minimum room floor area.

Important Safety Information

Basic Safety & Operation Warnings

Follow basic safety precautions, including the following, to reduce risk of personal injury, electric shock, fire, or death.

⚠ WARNING!

- Be sure to read and fully understand this document before installing, operating, maintaining, or servicing this ice machine. Failure to do so can result in appliance damage or failure, property damage, loss of warranty, serious injury, or death. Appliance failure, personal injury, or property damage due to improper installation is not covered by warranty.
- Only qualified technicians should install and service the appliance. For assistance locating a refrigeration service technician in your area for installation, servicing or maintenance, please visit our Service Company Locator at **www.truemfg.com/support/service-locator**. TRUE is solely the appliance manufacturer and is not responsible for installation.
    - Training for refrigerating appliance installation, repair, maintenance, and decommissioning procedures is carried out by national training organizations or manufacturers that are accredited to teach the relevant national competency standards that may be set in legislation. The achieved competence should be documented by a certificate.
- Failure to install, operate, and maintain the ice machine as detailed in this document will negatively affect safety, appliance performance, component life, and warranty coverage.
- All utility connections and fixtures must be maintained in accordance with all applicable laws, codes, and regulations.
- This appliance is not to be used, cleaned, or maintained by persons (including children) with reduced physical, sensory, or mental capabilities or lack of experience and knowledge, without proper supervision or instruction.
- **DO NOT** install or operate equipment that has been misused, abused, neglected, damaged, or altered/modified from original manufactured specifications.
- **DO NOT** modify or alter the ice machine. Improper alterations can result in electric shock, personal injury, fire, or death.
- **DO NOT** use electrical appliances inside the food/ice storage compartments unless they are of the type recommended by the manufacturer.
- The appliance owner is responsible for performing a Personal Protective Equipment (PPE) Hazard Assessment and to ensure adequate protection during maintenance and cleaning procedures.
- Use appropriate tools, safety equipment, and PPE during installation and servicing.
- Only use the appliance for its intended purpose as described in this document. Failure to do so may result in equipment damage, personal injury, or death.
- Keep the area surrounding the appliance clean to avoid appliance damage from debris or pests.
- All covers, and access panels must be in place and properly secured when operating the ice machine.
- Maintain all minimum clearances. See "Ice Machine Location Requirements" (pg. **27**). Keep ventilation openings clear of obstruction.
- Ice machines with greater than 4.0 oz (114 g) of R290 (propane) refrigerant shall not be installed in public corridors or lobbies.
- Ice machines with greater than 5.3 oz (152 g) of R290 (propane) refrigerant must be installed in a room with an area greater than the floor area limit. Refer to label near the nameplate (see "Label Locations" on pg. **16**) or “Ice Machine Location Requirements" (pg. **27**).

Important Safety Information (cont.)

Basic Safety & Operation Warnings (cont.)

USER ACTION!

- The ice machine must be installed in accordance with all applicable laws, codes, and regulations.
- This appliance is to be installed in accordance with the Safety Standard for Refrigeration Systems, ANSI/ASHRAE 15.

NOTICE!

The manufacturer is not responsible for injury or damage resulting from improper, incorrect, and unreasonable use.

Personal Injury Warnings

DANGER!

DO NOT allow children to play with or in the appliance. Child entrapment or personal injury can occur.

Flammable Refrigerant and High Voltage Electricity.

- Installations and repairs must be performed by qualified technicians aware of the dangers associated with refrigerant under pressure and high voltage electricity. Follow all lockout and tag out procedures when working on this equipment.
- Contact TRUE Manufacturing to locate refrigerant lines and electrical wiring before drilling, cutting or puncturing interior or exterior walls. Failure to do so could result in damage, personal injury, or death.

DO NOT store or use the following in the vicinity of this or any other appliance:

- Gasoline or other flammable vapors and liquids
- Combustible or explosive substances, such as aerosol cans with a flammable propellant
- Flammable oil-soaked cloths or combustible cleaning solutions for cleaning
- Other volatile or flammable substances
- Open flame source

WARNING!

- Only qualified technicians should install and service the ice machine. For assistance locating a refrigeration service technician in your area for installation, servicing or maintenance, please visit our Service Company Locator at www.truemfg.com/support/service-locator. TRUE is solely the appliance manufacturer and is not responsible for installation.
- Turn off and lockout all utilities (gas, electric, water) according to approved practices during maintenance or servicing.
- Use appropriate tools, safety equipment, and personal protective equipment (PPE) during installation and servicing.
- **DO NOT** touch the cold surfaces in the evaporator compartment when hands are damp or wet. Skin may stick to extremely cold surfaces.
- Choke Hazard! Ensure all components and fasteners are securely in place after installation. Be sure no objects have fallen into any dispenser unit or ice storage bin; immediately remove any objects.
- Lifting assistance may be required during installation, servicing, and maintenance. Team lift or use a lifting device. Always use proper lifting techniques or personal injury may occur.
- This appliance is not designed to support anything placed on it. **DO NOT** step or stand on it.

This product can expose you to chemicals including Chromium VI Compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov.

Important Safety Information (cont.)

Personal Injury Warnings (cont.)

⚠ WARNING! (cont.)	
	**Slippery Surfaces!** Moisture from improper drainage can create slippery surfaces near the ice machine. It is your duty to immediately warn your customers of, and dry, the slippery surface. All wet floor areas must be marked with a wet floor sign.
	**Sharp Edges!** • Take care when moving, installing, cleaning, servicing, and maintaining the ice machine to avoid cuts. Be sure to take care when reaching under the appliance or handling metal components. • Stay clear of pinch point areas, such as the space between appliance doors and surrounding cabinetry. Take care closing doors with children nearby.
	**Crush or Cut Hazard!** Keep clear of moving components. Components can move without warning unless power is disconnected.
	**Optical Radiation Hazard! UV Light!** Invisible laser radiation. Do not look directly at light. Always disconnect power before servicing the lamp.
	**Tip Over Hazard!** Appliance may pose a tipping hazard when uncrating, installing, or moving the appliance. Take appropriate safety precautions. Use of tip over restraints may only reduce (not eliminate) the tipping hazard. Never allow children to climb or hang on drawers, doors, or shelves.
	**Risk of Electric Shock or Burn!** See "Electrical Safety Warnings" for more information.
	**Moving Parts Hazard!** Moving parts can cut. Keep hands clear when panels are removed.

Ice Machine Disposal Warnings

⚠ DANGER!	
  	**Risk of Fire or Explosion!** • Flammable refrigerant and insulation used. Dispose of in accordance with all applicable laws, codes, and regulations. Follow all safety precautions associated with handling flammable refrigerant and insulation. See “Refrigerant Handling” (pg. 76) for more information. • **DO NOT** dispose of your appliance with household waste.

Important Safety Information (cont.)

Hydrocarbon Refrigerant Warnings

TRUE appliances use hydrocarbon refrigerant (R290/513A/600a). Check the nameplate or rating label to identify the ice machine's refrigerant. See "Label Locations" (pg. 16).

⚠ DANGER!

Risk of Fire or Explosion! Flammable Refrigerant Used.

- Models may contain up to 300 grams of R290 (propane) refrigerant. R290 (propane) is flammable in concentrations of air between approximately 2.1% and 9.5% by volume (LEL lower explosion limit and UEL upper explosion limit). An ignition source at the temperature higher than 878°F (470°C) is needed for a combustion to occur.
- All servicing and maintenance must be performed by qualified technicians. This is to minimize the risk of fire or personal injury due to incorrect parts or improper service.
- **DO NOT** damage the refrigeration system during transportation, installation, maintenance and servicing.
- If the ice machine is damaged, verify the refrigeration system's integrity is not compromised before proceeding.
- Never use sharp objects or tools to remove ice or frost. **DO NOT** use mechanical devices to accelerate defrost.
- Dispose of in accordance with all applicable laws, codes, and regulations. Follow all safety precautions associated with handling flammable refrigerant.
- **DO NOT** use cellphones near pipes or cables, cigarettes, cigars, or vapes near the ice machine as these can be a source of ignition or spark.

⚠ WARNING!

Risk of Fire or Explosion! Flammable Refrigerant Used.

- **DO NOT** use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater.
- **DO NOT** pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Ice machines with greater than 4.0 oz (114 g) of R290 (propane) refrigerant shall not be installed in public corridors or lobbies.
- Ice machines with greater than 5.3 oz (152 g) of R290 (propane) refrigerant must be installed in a room with an area greater than the floor area limit. Refer to label near the nameplate (see "Label Locations" on pg. 16) or “Ice Machine Location Requirements" (pg. 27)

Important Safety Information (cont.)

Electrical Safety Warnings

⚠ DANGER!

High Voltage Inside!

Open circuit voltage and voltage to ground 600v.

Risk of Electric Shock, Burn, or Fire!

- It is the appliance owner's responsibility to ensure the electrical connection meets all applicable building codes. Failure to meet these code requirements can result in appliance damage, fire, electric shock or burns, serious personal injury, or death.
- All field wiring must conform to all applicable codes of the authority having jurisdiction. It is the responsibility of the end user to provide the disconnect means to satisfy local codes
- Before connecting your Ice machine to the power supply, verify the supply voltage and circuit rating match the nameplate and rating labels. Correct improper supply voltage or circuit size immediately. See "Label Locations" (pg. 16).
- Before connecting your ice machine to the power supply, verify the power supply is correctly grounded. If the power supply is not grounded, correct immediately. TRUE recommends hiring a qualified electrician to inspect your electrical circuit to ensure they are properly grounded.
- For personal safety, your ice machine must be properly grounded.
- The ice machine should receive power from its own individual dedicated electrical circuit. This provides the best performance and prevents overloading the power supply.
- Toggling the rocker switch does not remove power from all components. Unplug the ice machine or turn off the circuit breaker/remove the fuse before installation or servicing.
- This equipment must be positioned so that the plug is accessible unless other means for disconnection from the power supply (e.g., circuit breaker or disconnect switch) are provided
- Check all wire connections, including factory terminals, before operation. Connections can become loose during shipment and installation.
- **DO NOT** clean appliance with a pressure washer or hose. **DO NOT** immerse power cord in water.
- Never use a damaged power supply. **DO NOT** operate any appliance with a damaged power supply. Repair a damaged power supply immediately. All repairs must be performed by a qualified service company.

❗ NOTICE!

TRUE will not warranty the following:

- Compressor failures due to improper incoming voltage.

For more details, see TRUE's full warranty statement. Find a copy of the wiring diagram with our Serial Number Lookup at www.truemfg.com/support/serial-number-lookup.

Notes

About Your Ice Machine & Installation Requirements

NOTICE!

True is not responsible for damage incurred during shipment. Always carefully inspect for freight damage before receiving and installing your appliance. If there is damage, note all damage on the delivery receipt, immediately file a claim with the delivery freight carrier, and contact True. **DO NOT install the unit or put it in service.**

Thank you for choosing True Manufacturing to meet your refrigeration needs. True highly recommends a qualified technician and electrician install your ice machine to ensure correct installation. The cost of professional installation is money well spent. Only qualified technicians should install and service the appliance.

For assistance locating a refrigeration service technician in your area for installation, servicing or maintenance, please visit our Service Company Locator at

www.truemfg.com/support/service-locator/.

True is solely the appliance manufacturer and is not responsible for installation.

Proper installation, care and maintenance are essential for maximum performance and trouble-free operation of your equipment. The appliance owner is responsible for proper installation and maintaining the ice machine as described in the document. Routine care and maintenance procedures are not covered by True's warranty. Visit our website for manual updates and translations

www.truemfg.com/support/manuals/.

Product Registration

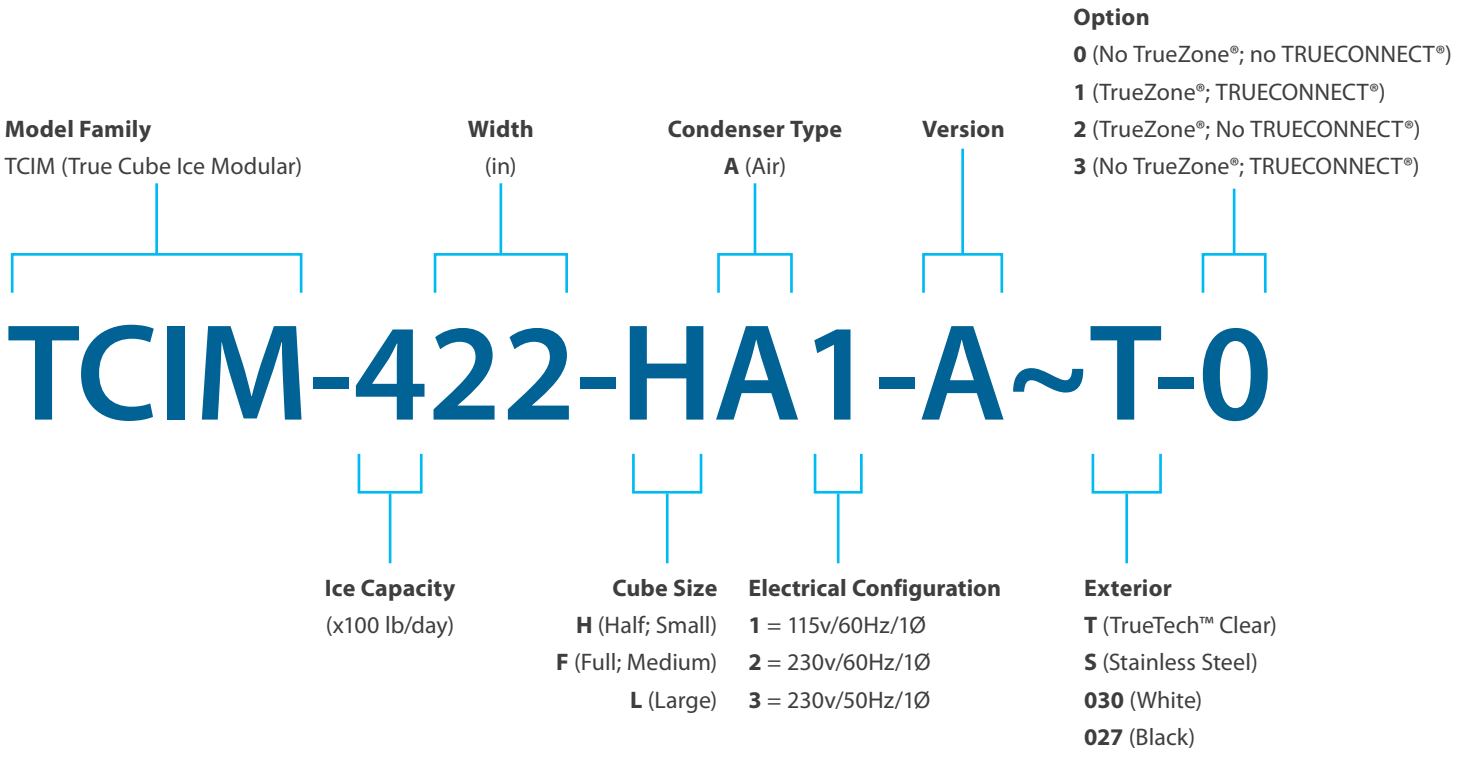
To register your TCIM, complete and submit the form at

www.truemfg.com/support/warranty/product-registration/

or scan the QR code below.

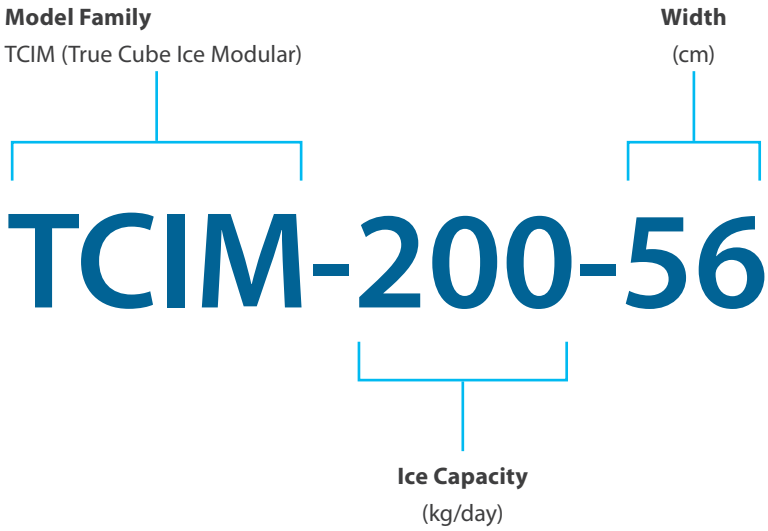
About Your Ice Machine & Installation Requirements (cont.)

Model Nomenclature



International Model Nomenclature

See below for international model nomenclature and the United States equivalents.



International	United States
TCIM-200-56	TCIM-422
TCIM-200-76	TCIM-430
TCIM-250-56	TCIM-522
TCIM-250-76	TCIM-530
TCIM-300-56	TCIM-622
TCIM-300-76	TCIM-630
TCIM-350-56	TCIM-822
TCIM-350-76	TCIM-830

About Your Ice Machine & Installation Requirements (cont.)

Ice Machine Specifications

Air-Cooled Ice Machine Specifications*						
Model	24 Hour Production		Min./Max. Batch Weights	Potable Water Consumption (90˚F Air/ 70˚F Water)	Electrical Consumption (90˚F Air/ 70˚F Water)	Peak Heat of Rejection
	70˚F Air/50˚F Water	90˚F Air/70˚F Water				
TCIM-422	450 lb (204 kg)	348 lb (158 kg)	3.7–4.4 lb (1.7–2.0 kg)	15.2 gal/100 lb	4.47 kWh/100 lb	5,700 BTU/hr (1.67 kWh)
TCIM-430	450 lb (204 kg)	346 lb (157 kg)	3.7–4.4 lb (1.7–2.0 kg)	14.9 gal/100 lb	4.27 kWh/100 lb	5,800 BTU/hr (1.70 kWh)
TCIM-522	550 lb (249 kg)	485 lb (220 kg)	4.7–5.4 lb (2.1–2.4 kg)	14.2 gal/100 lb	4.19 kWh/100 lb	7,600 BTU/hr (2.23 kWh)
TCIM-530	590 lb (268 kg)	489 lb (222 kg)	4.7–5.4 lb (2.1–2.4 kg)	14.2 gal/100 lb	3.92 kWh/100 lb	7,400 BTU/hr (2.17 kWh)
TCIM-622	630 lb (286 kg)	544 lb (247 kg)	4.7–5.4 lb (2.1–2.4 kg)	14.2 gal/100 lb	4.15 kWh/100 lb	8,500 BTU/hr (2.49 kWh)
TCIM-630	630 lb (286 kg)	556 lb (252 kg)	4.7–5.4 lb (2.1–2.4 kg)	13.8 gal/100 lb	3.95 kWh/100 lb	8,500 BTU/hr (2.49 kWh)
TCIM-822**	830 lb (376 kg)	636 lb (289 kg)	5.5-6.3 lb (2.5-2.9 kg)	15.5 gal/100 lb	4.98 kWh/100 lb	10,200 BTU/hr (2.99. kWh)
TCIM-830**	830 lb (376 kg)	680 lb (308 kg)	5.5-6.3 lb (2.5-2.9 kg)	14.2 gal/100 lb	4.75 kWh/100 lb	10,200 BTU/hr (2.99 kWh)
TCIM-1022**	960 lb (435 kg)	770 lb (349 kg)	7.5-8.0 lb (3.4-3.6 kg)	15.0 gal/100 lb	4.60 kWh/100 lb	12,000 BTU/hr (3.51 kWh)
TCIM-1030**	975 lb (442 kg)	780 lb (354 kg)	7.5-8.0 lb (3.4-3.6 kg)	15.0 gal/100 lb	4.60 kWh/100 lb	12,000 BTU/hr (3.51 kWh)
TCIM-1230**	1,100 lb (499 kg)	875 lb (397 kg)	7.5-8.0 lb (3.4-3.6 kg)	15.0 gal/100 lb	4.60 kWh/100 lb	13,500 BTU/hr (3.96 kWh)

*Specifications are based on half (small) cube models.

**Performance specifications are subject to change. For the most up-to-date information, please see Energy Star's website at

https://www.energystar.gov

or scan the QR code below.

About Your Ice Machine & Installation Requirements (cont.)

Ice Machine Specifications (cont.)

- Before connecting your ice machine to the power supply, verify the incoming voltage (±5%) and the amps match the operation ratings on the appliance's nameplate and rating labels. Correct improper incoming voltage or amps immediately. See "Label Locations" (pg. **16**) and "Cord / Wire Specifications" (pg. **38**).
- Before connecting your ice machine to the power supply, verify the power supply is correctly grounded. If the power supply is not grounded, correct immediately.
- Ensure the installation location will provide adequate clearances and sufficient airflow for the ice machine. See "Ice Machine Location Requirements" (pg. **27**).
- For ice machines with at least 5.3 oz (152 g) of propane (R290), ensure the location area is greater than the minimum room area. See "Ice Machine Location Requirements" (pg. **27**).
- Read and follow all warnings and maintenance instructions. Failure to do so may result in damage and void the warranty on your appliance.
- Do not locate the equipment near any heat source, direct sunlight, areas with high ambient conditions or without proper clearance for ventilation. Placing equipment in these locations will result in reduced capacities, high system pressures and may cause equipment failure.
- This ice machine will pull air in from the front/sides and exhaust air out the back. See fig. 1. This ice machine will also reverse fan motor periodically to remove dirt from the condenser coil.

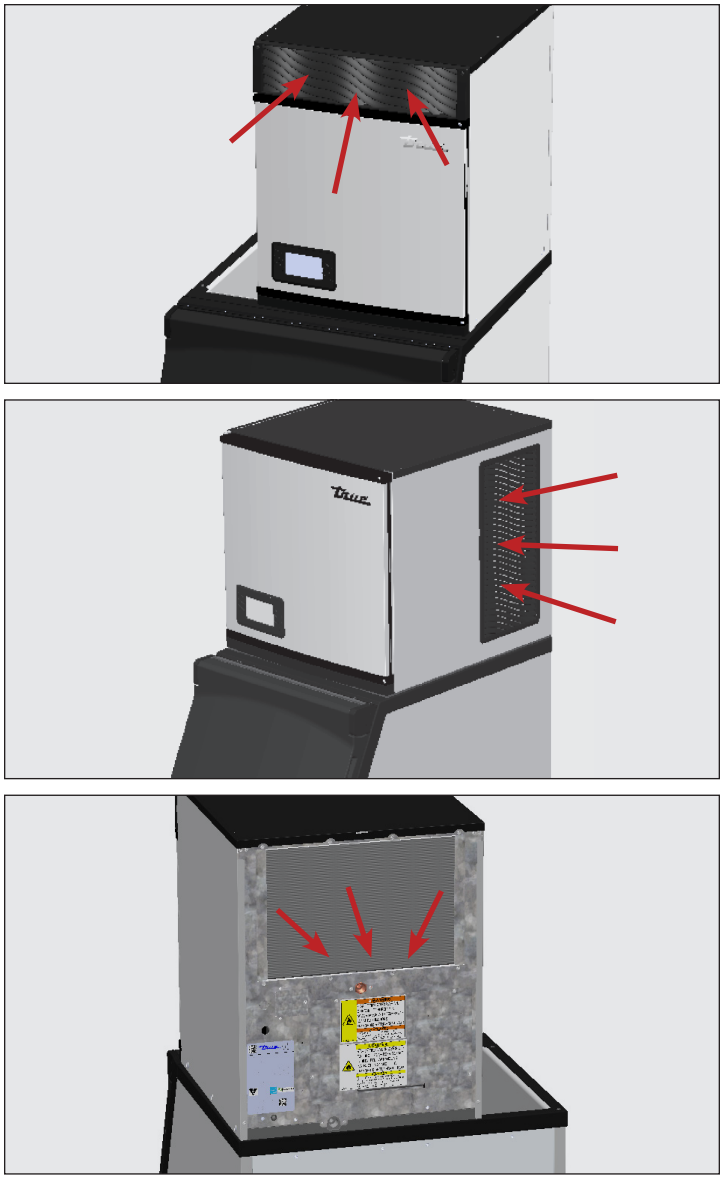


Fig. 1. Air flows into the front/sides and out the rear.

Label Locations

The nameplate and rating labels contain important information such as your model name, serial number, and refrigerant type.

- Locate the nameplate label on the lower left inside wall of the ice machine.
- Locate the rating label on the rear panel.

About Your Ice Machine & Installation Requirements (cont.)

Cube Size

TRUE Ice Machines produce ice in three different cube sizes: Half (small), full (medium), and large. The cube size is part of your full model name. See dimensions in fig. 1.

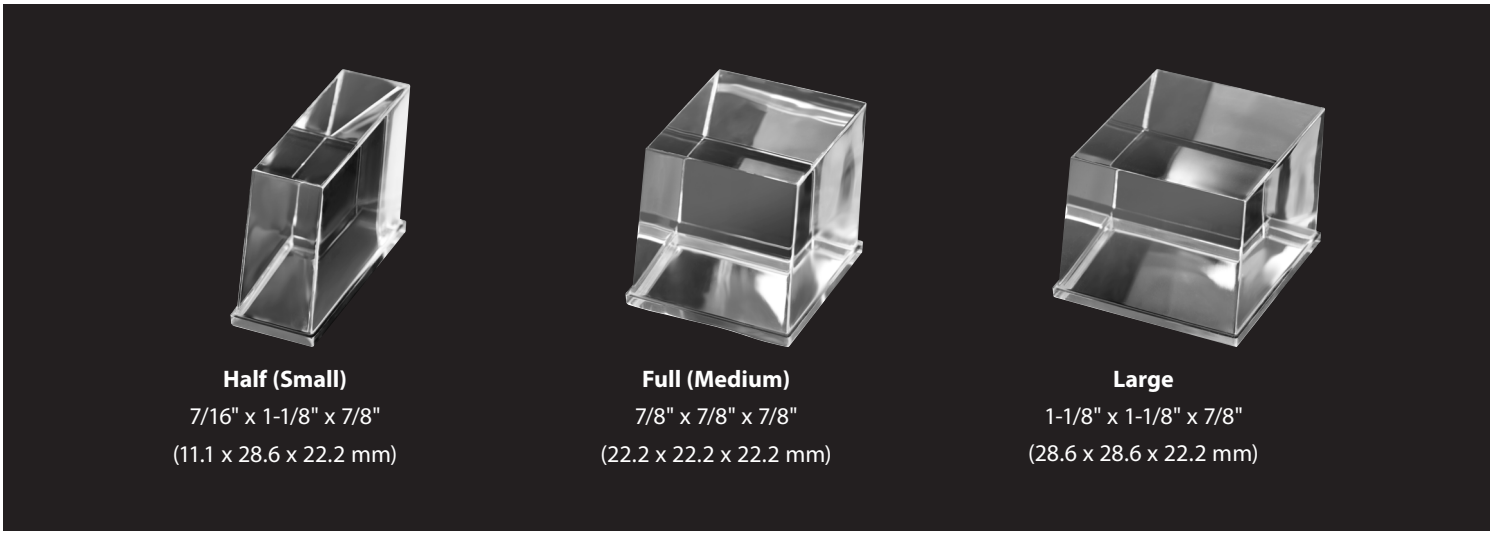


Fig. 1. Cube sizes and their dimensions.

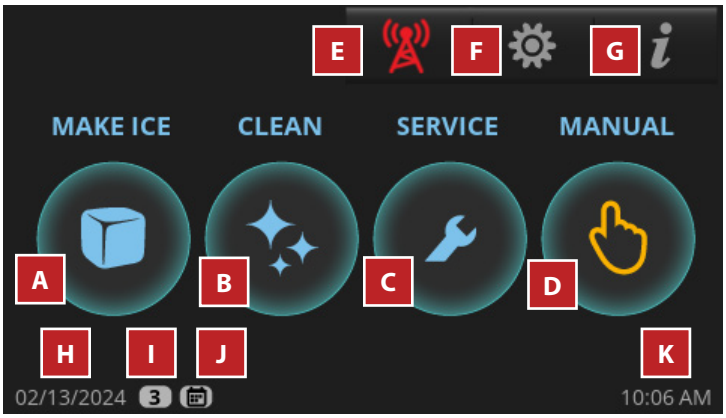
About Your Ice Machine & Installation Requirements (cont.)

Basic Screen & Icon Definitions

For more information on screen and icon definitions, see "Basic Display Information" (pg. 69).

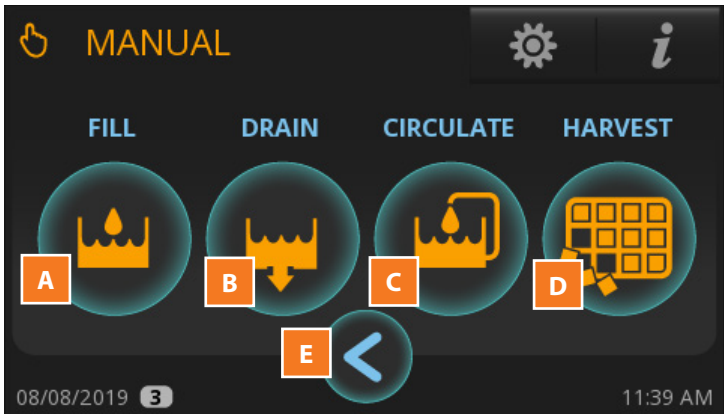
Home Screen

The default display screen.



Manual Screen

Allows for manual operation of the four modes pictured.



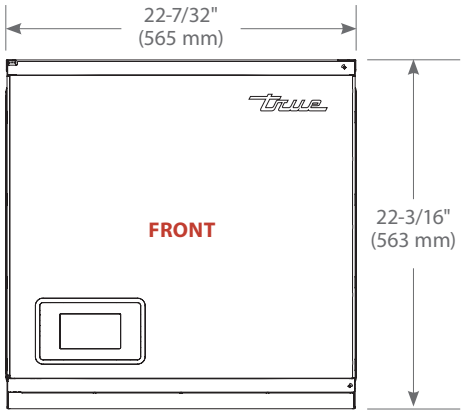
Parts of the MAIN Screen	
A	**MAKE ICE:** starts the ice making sequence.
B	**CLEAN:** starts the cleaning sequence.
C	**Preventative Maintenance Timers:** opens "counters" screen.
D	**MANUAL:** opens "manual" screen.
E	**Remote Monitoring:** displays remote monitoring QR code.
F	**MENU:** opens "menu" screen.
G	**INFO:** opens "real time" screen.
H	**Current date**
I	**Access Level Setting:** see Function Availability by Access Level (pg. 59)
J	**Scheduling is enabled:** See "Schedule Operation" (pg. 63).
K	**Current time**

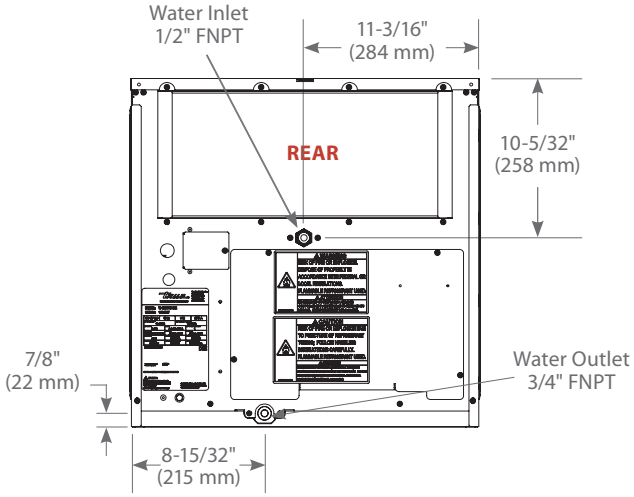
Parts of the MANUAL Screen	
A	**FILL:** allows for manual fill of sump.
B	**DRAIN:** allows for manual drain of sump.
C	**CIRCULATE:** allows for manual water circulation.
D	**HARVEST:** Allows for manual harvest.
E	**BACK:** Goes back to previous screen.

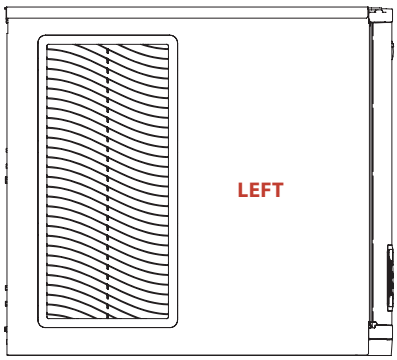
About Your Ice Machine & Installation Requirements (cont.)

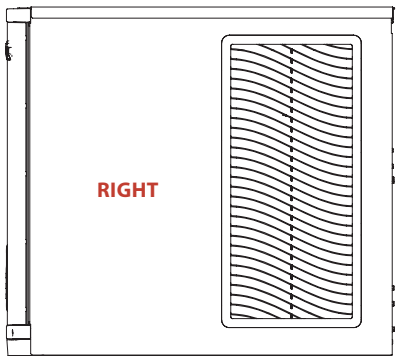
Plan Views

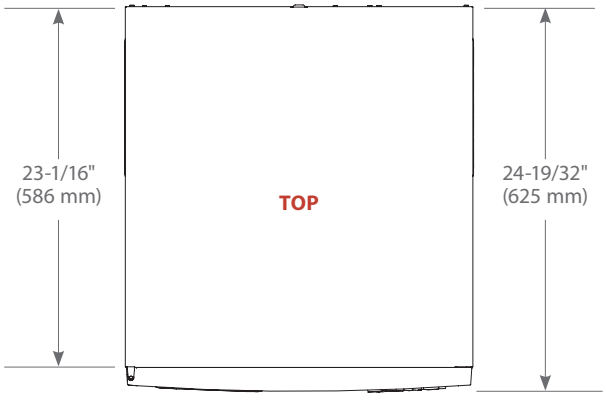
TCIM-422/522

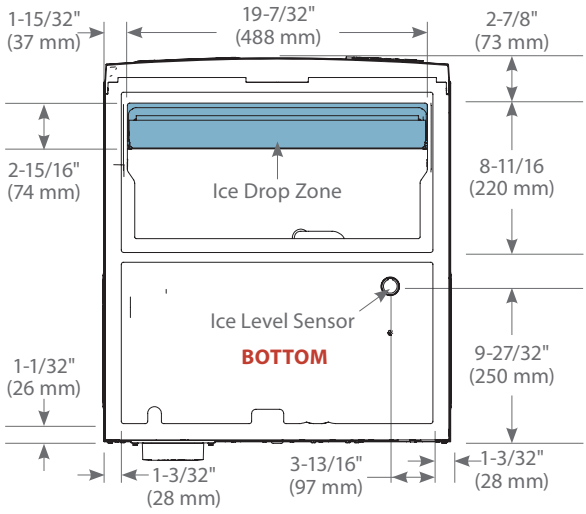










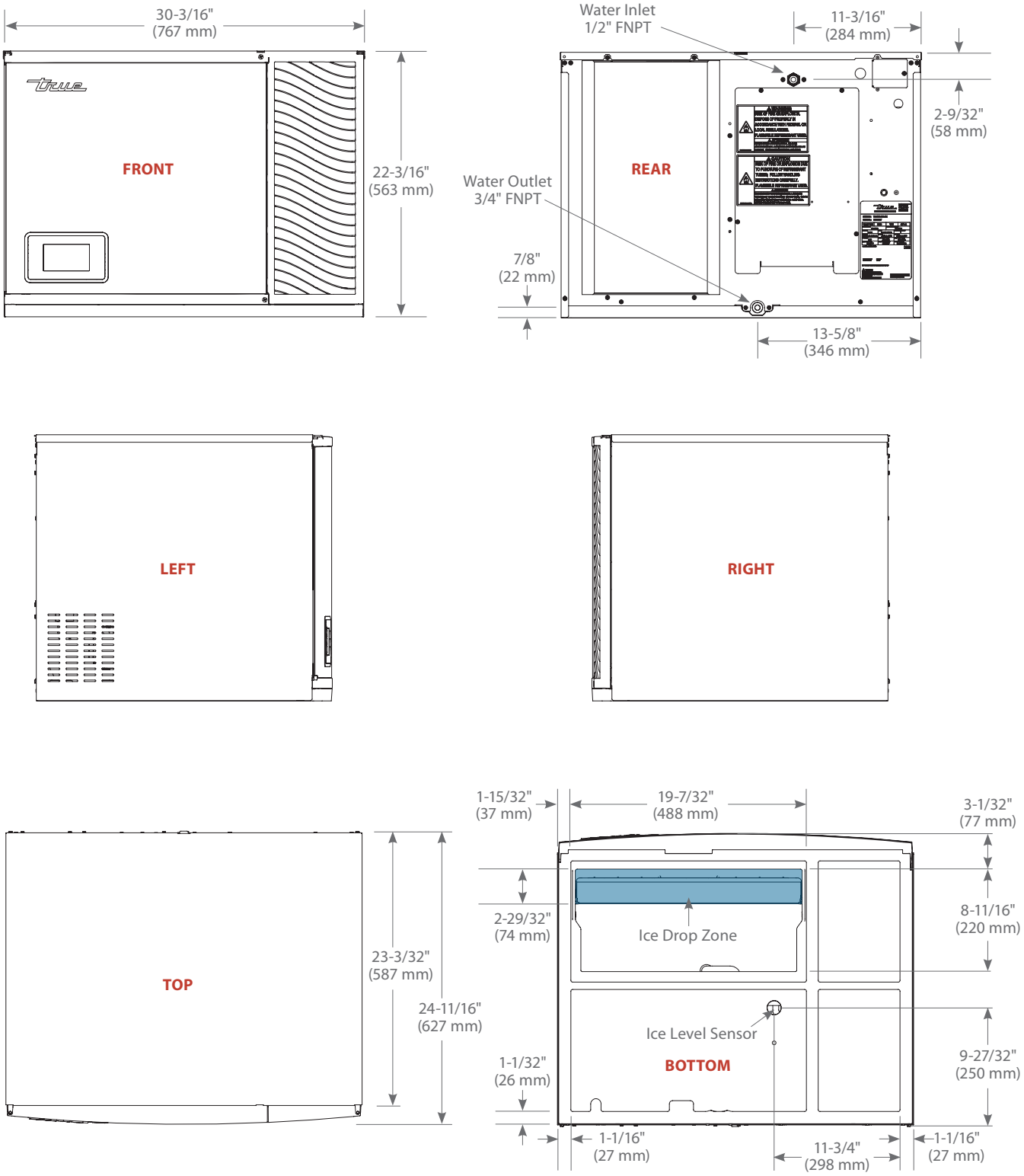


Dimensions may vary by ± 1/8" (3.2 mm)

About Your Ice Machine & Installation Requirements (cont.)

Plan Views (cont.)

TCIM-430/530/630

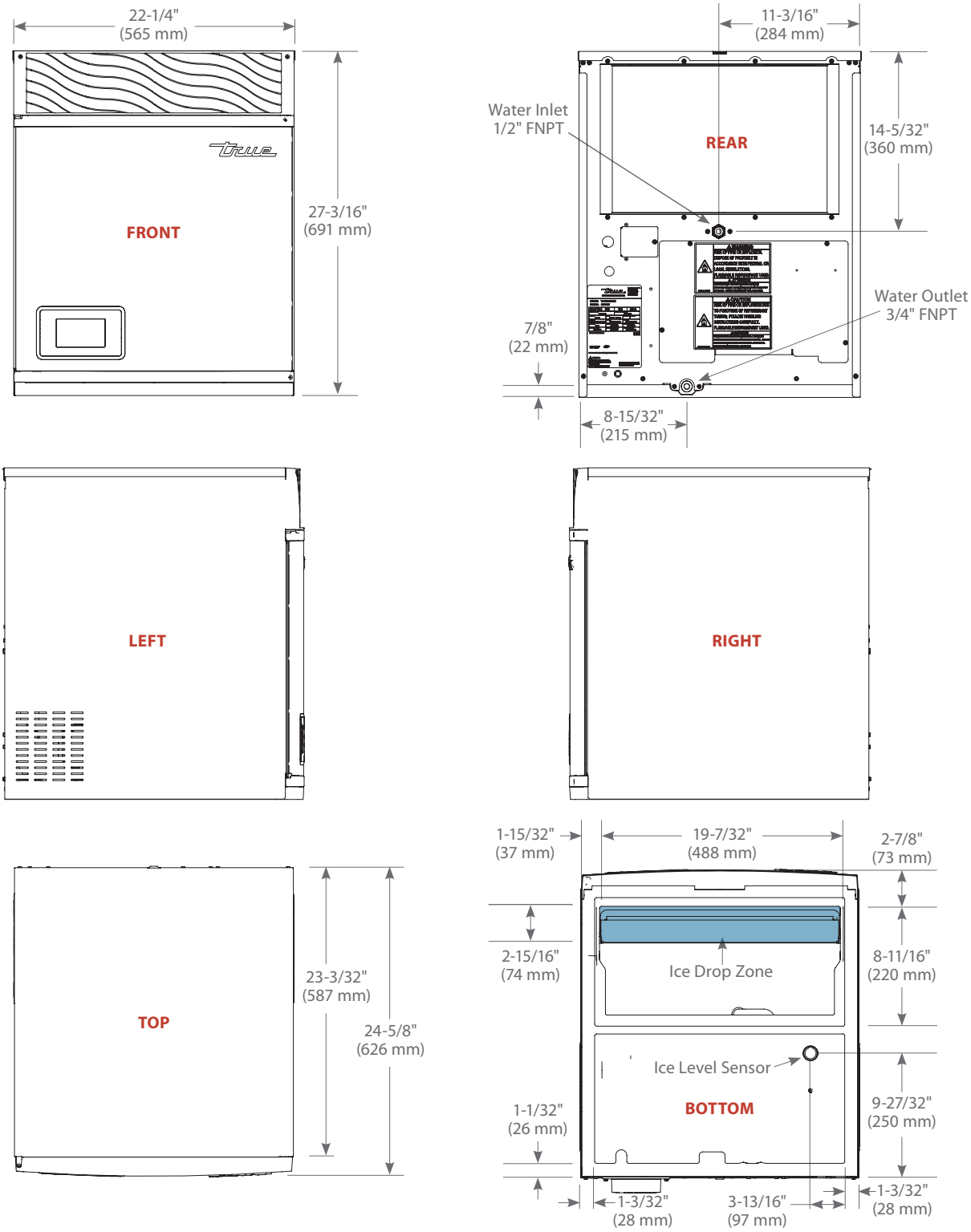


Dimensions may vary by ± 1/8" (3.2 mm)

About Your Ice Machine & Installation Requirements (cont.)

Plan Views (cont.)

TCIM-622

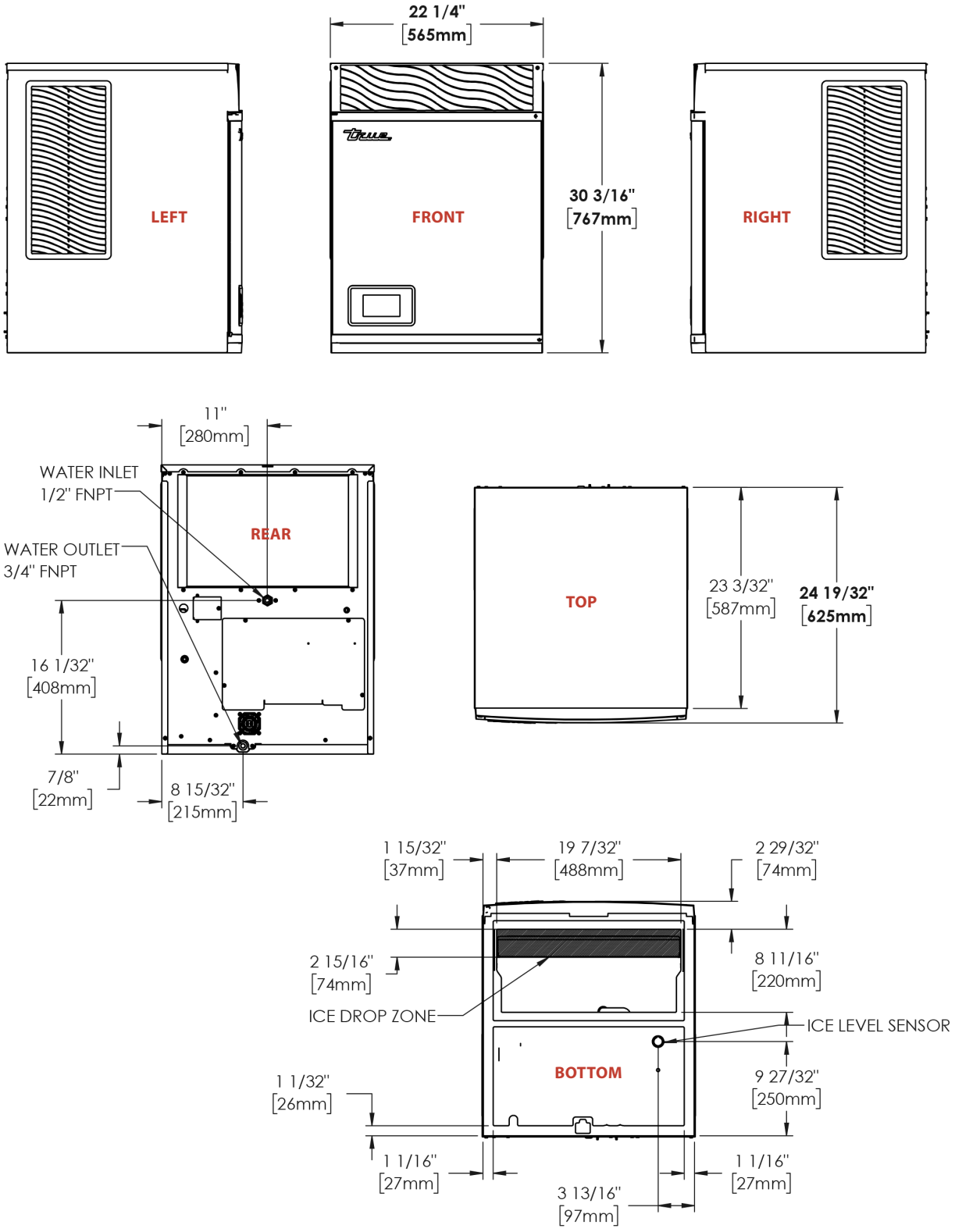


Dimensions may vary by ± 1/8" (3.2 mm)

About Your Ice Machine & Installation Requirements (cont.)

Plan Views (cont.)

TCIM-822

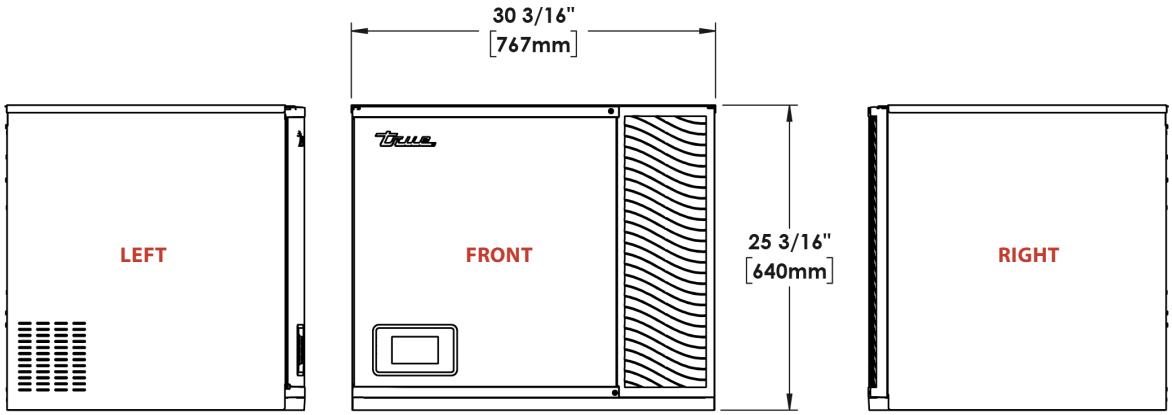


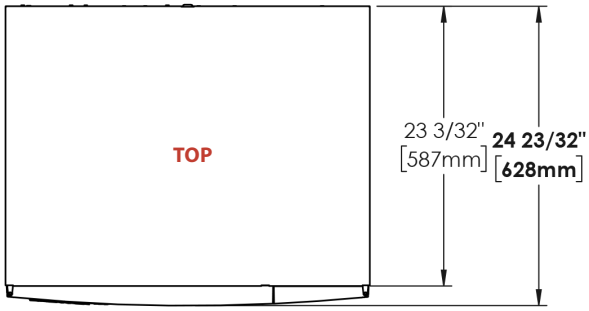
Dimensions may vary by ± 1/8" (3.2 mm)

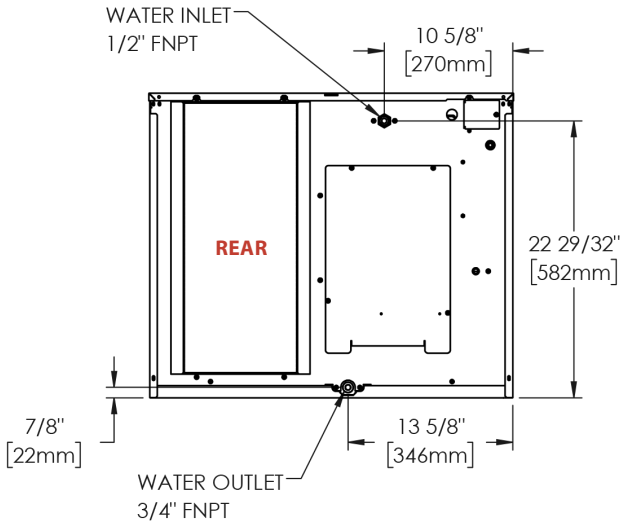
About Your Ice Machine & Installation Requirements (cont.)

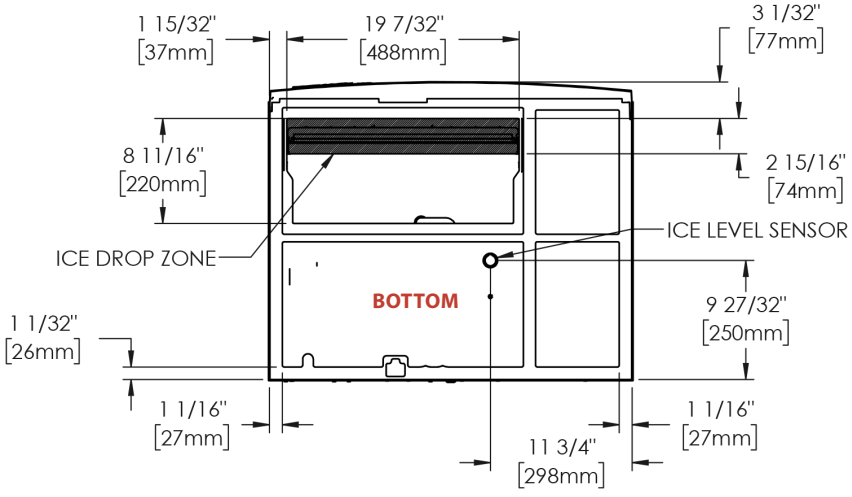
Plan Views (cont.)

TCIM-830







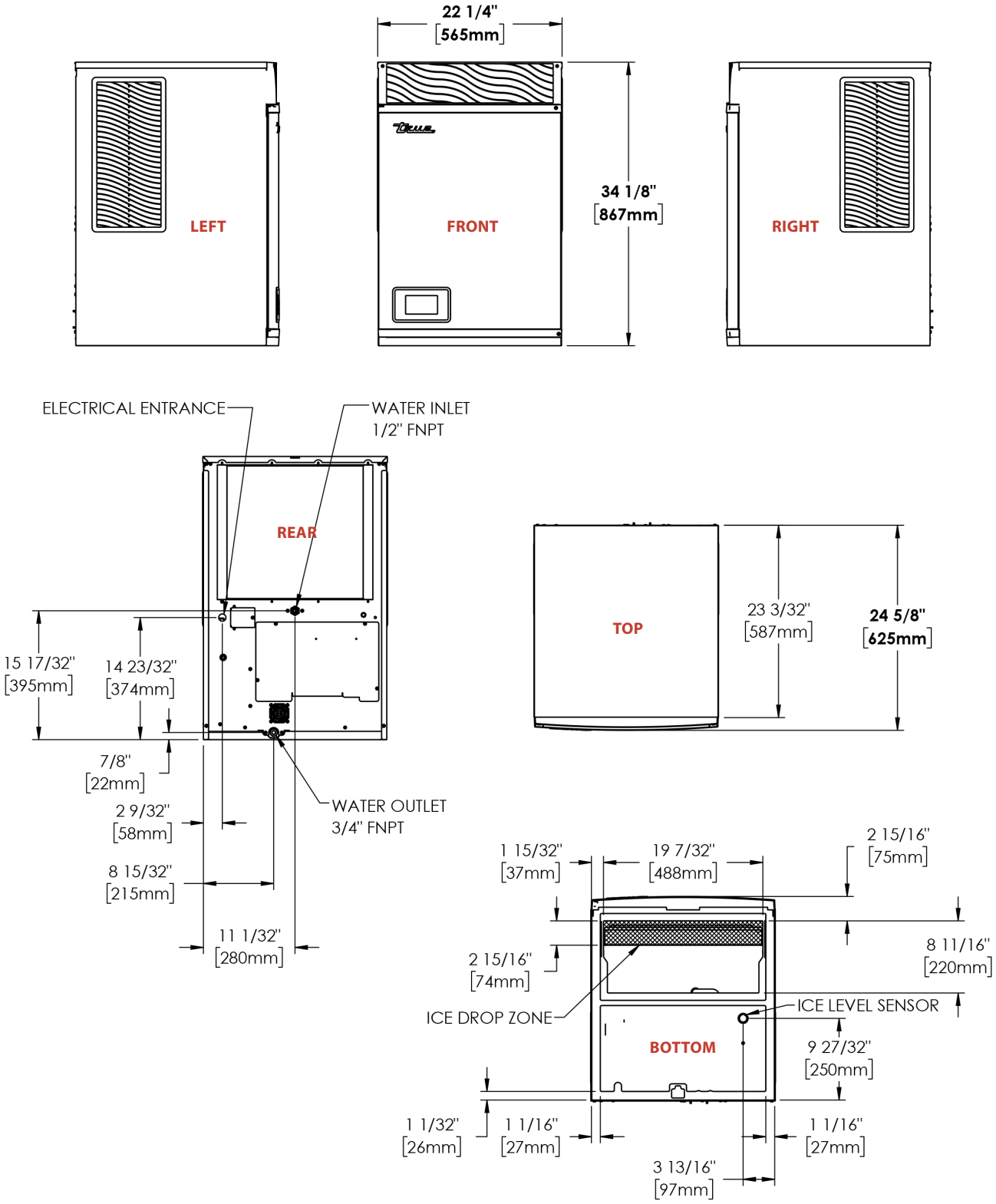


Dimensions may vary by ± 1/8" (3.2 mm)

About Your Ice Machine & Installation Requirements (cont.)

Plan Views (cont.)

TCIM-1022

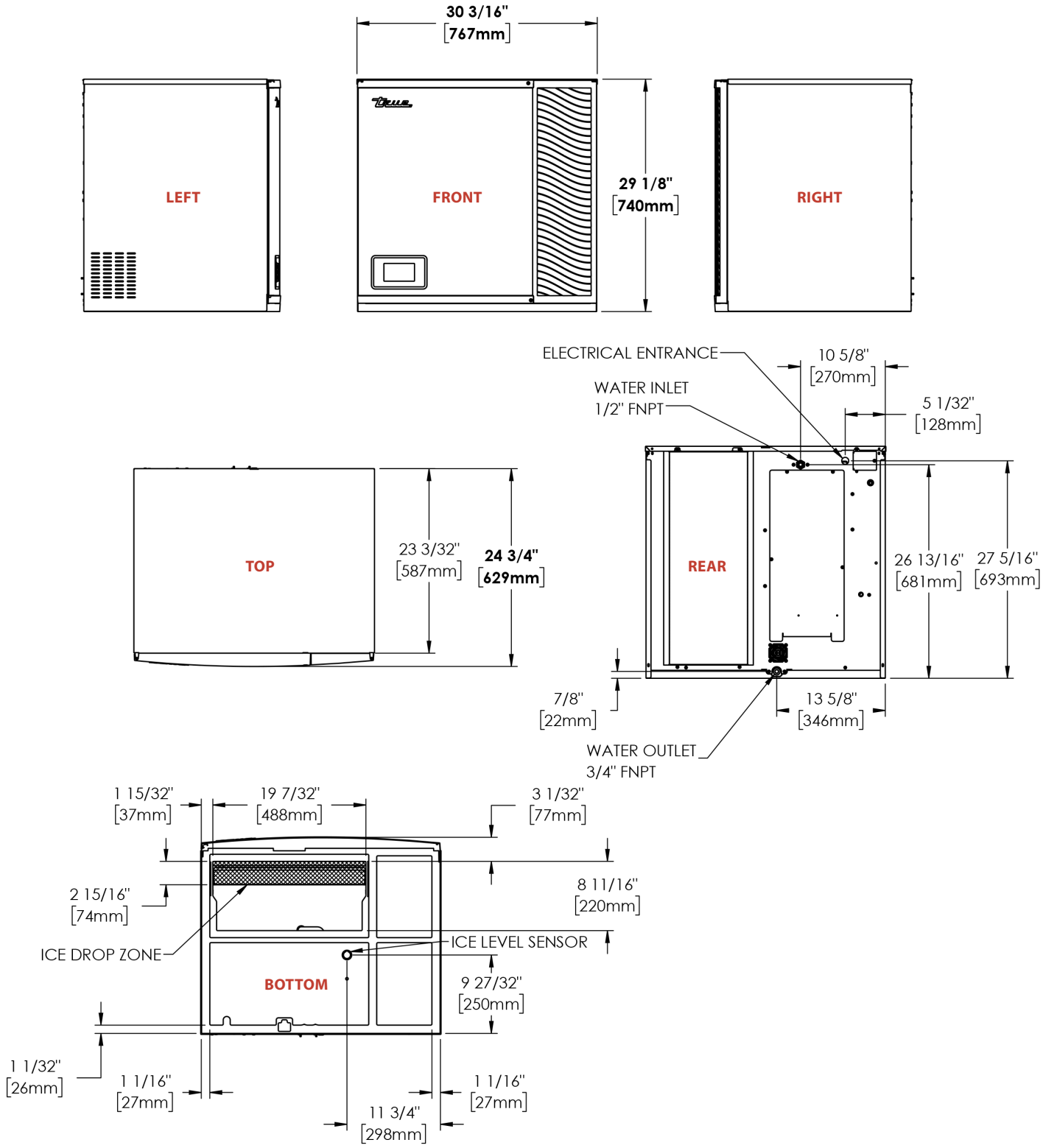


Dimensions may vary by ± 1/8" (3.2 mm)

About Your Ice Machine & Installation Requirements (cont.)

Plan Views (cont.)

TCIM-1030

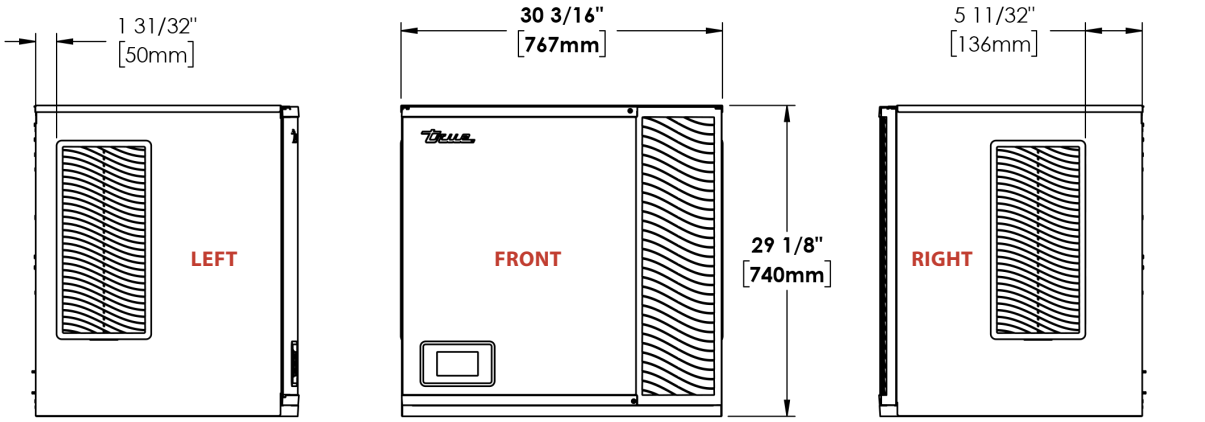


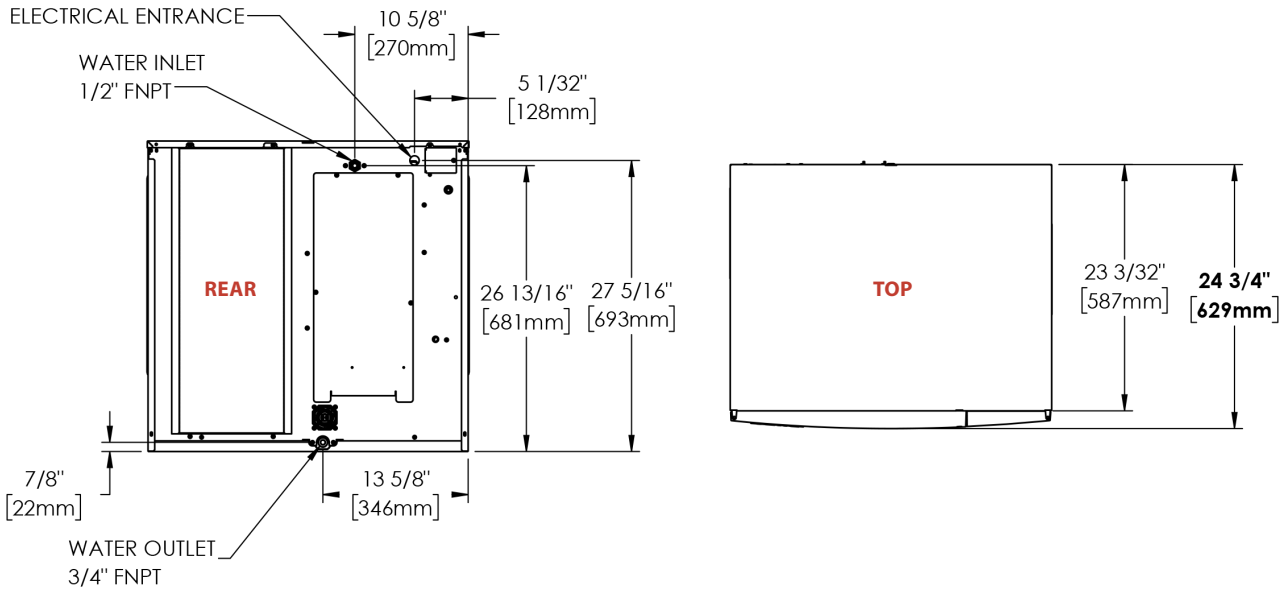
Dimensions may vary by ± 1/8" (3.2 mm)

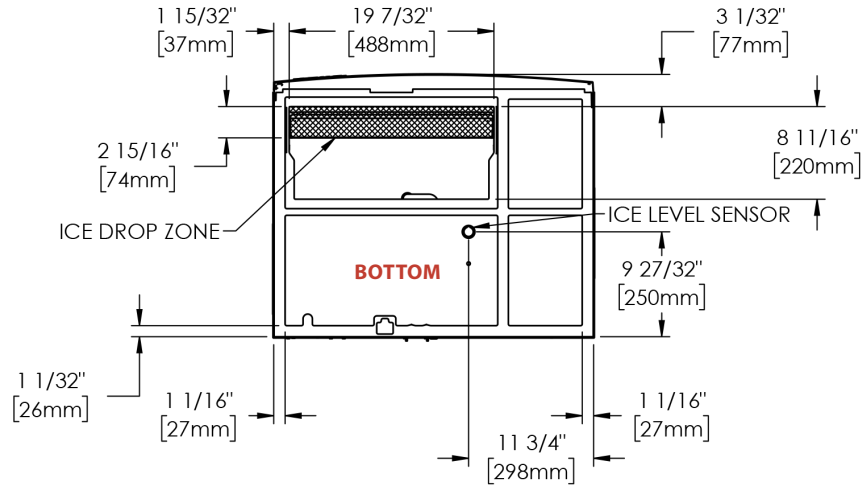
About Your Ice Machine & Installation Requirements (cont.)

Plan Views (cont.)

TCIM-1230







About Your Ice Machine & Installation Requirements (cont.)

Ice Machine Location Requirements

⚠ WARNING!

- Failure to install, operate, and maintain the ice machine in accordance with this manual will adversely affect safety, performance, component life, and warranty coverage and may result in costly water damage.
- Maintain all minimum clearances. See "Air-Cooled Ice Machine Clearances" table (pg. 28).
- Keep all ventilation openings clear of obstruction.

- Ice machines with greater than 4.0 oz (114 g) of R290 (propane) refrigerant shall not be installed in public corridors or lobbies.
- Ice machines with greater than 5.3 oz (152 g) of R290 (propane) refrigerant must be installed in a room with an area greater than the floor area limit. See "Minimum Room Area by Model" table (pg. 27).

- The location must allow enough clearance for water, drain, and electrical connections in the rear of the ice machine.
- The location must not obstruct airflow through or around the ice machine.
- Always install equipment on a stable and level surface.
- The equipment must be level side-to-side and front-to-back.
- To avoid instability the installation area must be capable of supporting the combined weight of the equipment and product.
- **ATTENTION** The flooring beneath and around the equipment must be water-resistant or waterproof (such as sealed concrete, tile, epoxy-coated surfaces, or equivalent) to prevent deterioration, mold, or structural damage resulting from continuous moisture exposure.

Ambient Temperature		
	Minimum	**Maximum**
Air Temperature	35° F (1.7 C)	110° F (43.3 C)

Minimum Room Area by Model*		
	Refrigerant Charge Amount (R290)	**Minimum Room Area**
TCIM-822	6.5 oz (184 g)	95 ft^2 (8.8 m^2)
TCIM-830	7.5 oz (213 g)	110 ft^2 (10.2 m^2)
TCIM-1022	9.75 oz (276 g)	142 ft^2 (13.2 m^2)
TCIM-1030	9.75 oz (276 g)	142 ft^2 (13.2 m^2)
TCIM-1230	10 oz (284 g)	146 ft^2 (13.6 m^2)

*Models with less than 5.3 oz (152 g) of propane (R290) refrigerant do not require a minimum room area.

About Your Ice Machine & Installation Requirements (cont.)

Ice Machine Location Requirements (cont.)

Air-Cooled Ice Machine Clearances			
Model	**Sides**	**Top**	**Back**
TCIM-422	6" (152.4 mm)	6" (152.4 mm)	6" (152.4 mm)
TCIM-430	3" (76.2 mm)	6" (152.4 mm)	6" (152.4 mm)
TCIM-522	6" (152.4 mm)	6" (152.4 mm)	6" (152.4 mm)
TCIM-530	3" (76.2 mm)	6" (152.4 mm)	6" (152.4 mm)
TCIM-622	3" (76.2 mm)	12" (304.8 mm)	6" (152.4 mm)
TCIM-630	3" (76.2 mm)	6" (152.4 mm)	6" (152.4 mm)
TCIM-822	6" (152.4 mm)	6" (152.4 mm)	6" (152.4 mm)
TCIM-830	3" (76.2 mm)	6" (152.4 mm)	6" (152.4 mm)
TCIM-1022	6" (152.4 mm)	6" (152.4 mm)	6" (152.4 mm)
TCIM-1030	3" (76.2 mm)	6" (152.4 mm)	6" (152.4 mm)
TCIM-1230	3" (76.2 mm)	6" (152.4 mm)	6" (152.4 mm)

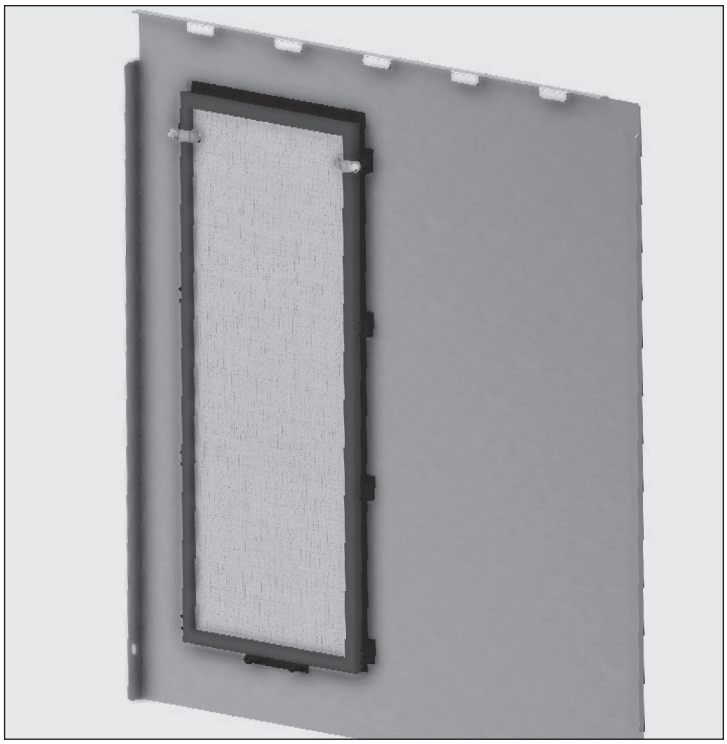


Fig. 1. Interior view of side panel with air filter. Right side shown.

About Your Ice Machine & Installation Requirements (cont.)

Plumbing Connection Requirements

USER ACTION!

DO NOT ALLOW THE ICE MACHINE TO BE EXPOSED TO TEMPERATURES BELOW 32˚F (0˚C) WITHOUT WINTERIZING THE UNIT AS THIS WILL CAUSE ANY WATER IN THE MACHINE TO FREEZE. FAILURES CAUSED BY EXPOSURE TO FREEZING TEMPERATURES ARE NOT COVERED BY THE WARRANTY. See "Removal From Service & Winterization" (pg. 79).

NOTICE!

- Warranty does not cover issues caused by improper installation, lack of basic preventative maintenance, or harm caused to the ice machine by improper use of cleaners/sanitizers, use of reverse osmosis water that does not have a neutral pH, or use of deionized water.
- Required water temperature is 35-100°F (1.7-37.8°C) and pressure is 20-100 psig (138-689 kPa).

Water Supply Requirements

WARNING!

Only connect your ice machine to a potable water supply.

USER ACTION!

Water supply piping must be installed in accordance with all applicable laws, codes, and regulations.

Water Temperature & Pressure		
	Minimum	**Maximum**
Water Temperature	35° F (1.7 C)	100° F (37.8 C)
Water Pressure	20 psig (138 kPa)	100 psig (689 kPa)
Water Supply Connection Requirements		
Water Supply Inlet	1/2" Female NPT Fitting	
Water Supply Piping	3/8" minimum • Copper, braided stainless, or equivalent	

About Your Ice Machine & Installation Requirements (cont.)

Plumbing Connection Requirements (cont.)

Water Supply Requirements (cont.)

- Only connect the ice machine to a potable water supply.
- Cold water supply required. **DO NOT** connect the ice machine to a hot water supply. Incoming water temperature must remain between 35 – 100°F (1.7 – 37.8°C). Supply water temperature higher than the recommended maximum will cause reduced capacities.
- Be sure the water supply line is equipped with an easily accessible shut-off valve. If a water filter is present, install the shut-off valve before the water filter.
- TRUE recommends water filters for all ice machines. See "Water Filter Installation & Setup" (pg. **34**) for more details.
- Be sure there is sufficient extra water supply line for the appliance to be pulled out for service.
- Use thread sealant at connections.
- Insulate the water line from sources of heat for greater operation efficiency.
- Inlet air gap included; no back-flow device required for the potable water inlet. This UL listed model has greater than a 1" (25.4 mm) anti-back flow air gap between the water inlet tube end and the highest possible sump water level. For further information, please see **https://www.ul.com/software/productsourcing-and-certifications-database.**
- Deionized water is not recommended by TRUE. Use of deionized water can result in appliance damage.
- Reverse osmosis water with a negative pH is not recommended by TRUE. Use of such water can result in appliance damage.
- Be sure to thoroughly inspect all connections after installation to ensure there are no leaks.
- Appliance is intended to be permanently connected to the water mains and not connected by a hose-set.

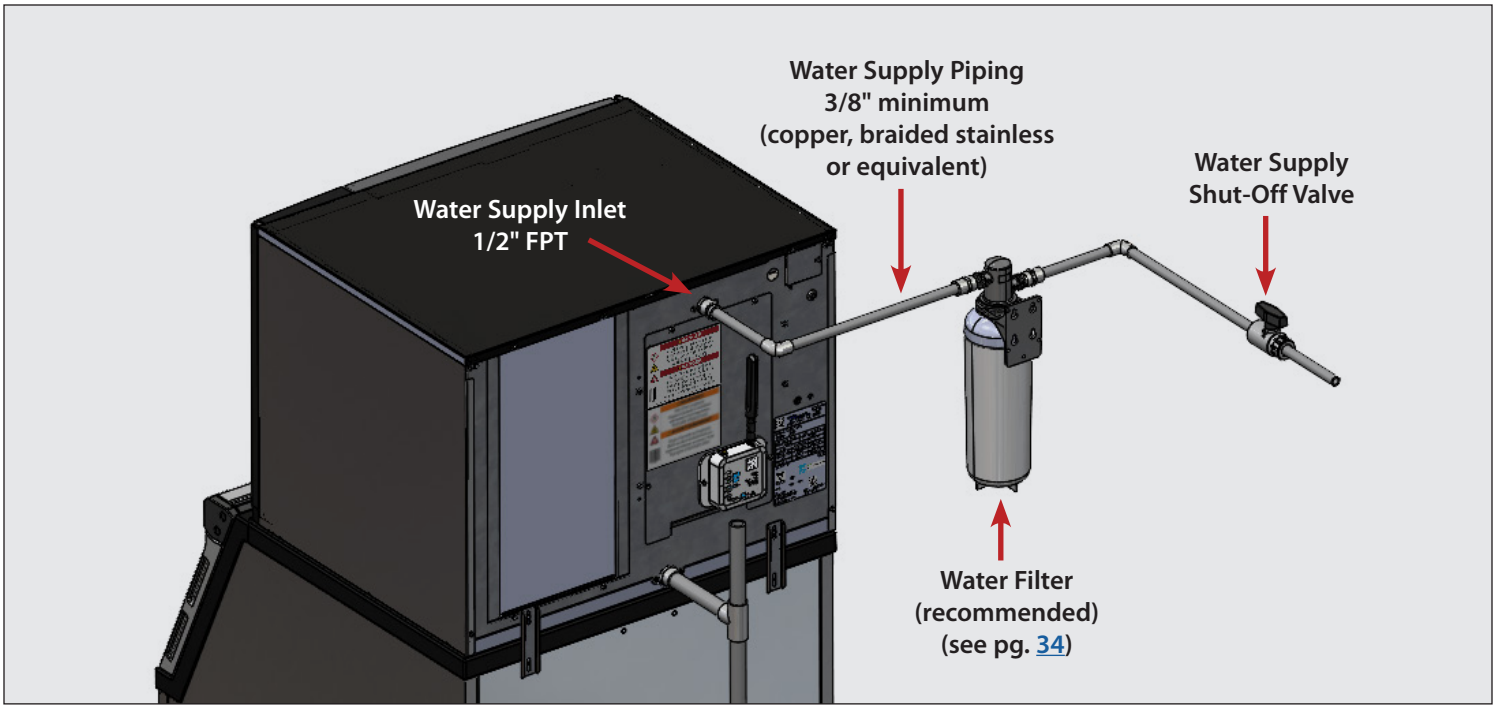


Fig. 1. Example of water supply installation. Your application may differ.

About Your Ice Machine & Installation Requirements (cont.)

Plumbing Connection Requirements (cont.)

Drain Requirements

USER ACTION!

Drain piping must be installed in accordance with all applicable laws, codes, and regulations.

Water Connection Requirements	
Drain Outlet	3/4" FPT
Drain Piping	3/4" I.D. minimum • Hard piping or equivalent

- **ALWAYS** use thread sealant at the TCIM drain connection.
- **ALWAYS** run **separate drain lines** for the TCIM, storage bin or dispenser, and the water-cooled condenser (if present). This ensures correct operation.
- **ALWAYS** vent ALL drain lines with a tee connection to ensure correct operation. The vertical vents must extend up 8-10" (203-254 mm).
- **DO NOT** directly pipe drain lines to the sewer system.
- All drain lines must have a 2" (50.8 mm) air gap between the end of the drain line and the drain.
- Drain line must have 1/4" fall per 12" (20 mm fall per 1 m) of horizontal run.
- Insulate drain lines in humid environments.
- Be sure to thoroughly inspect all connections after installation to ensure there are no leaks.

ATTENTION A functional, unobstructed floor drain is required to manage meltwater, condensate, cleaning discharge, and potential leaks from this equipment. Failure to provide proper drainage may result in water accumulation, property damage, or unsanitary conditions.

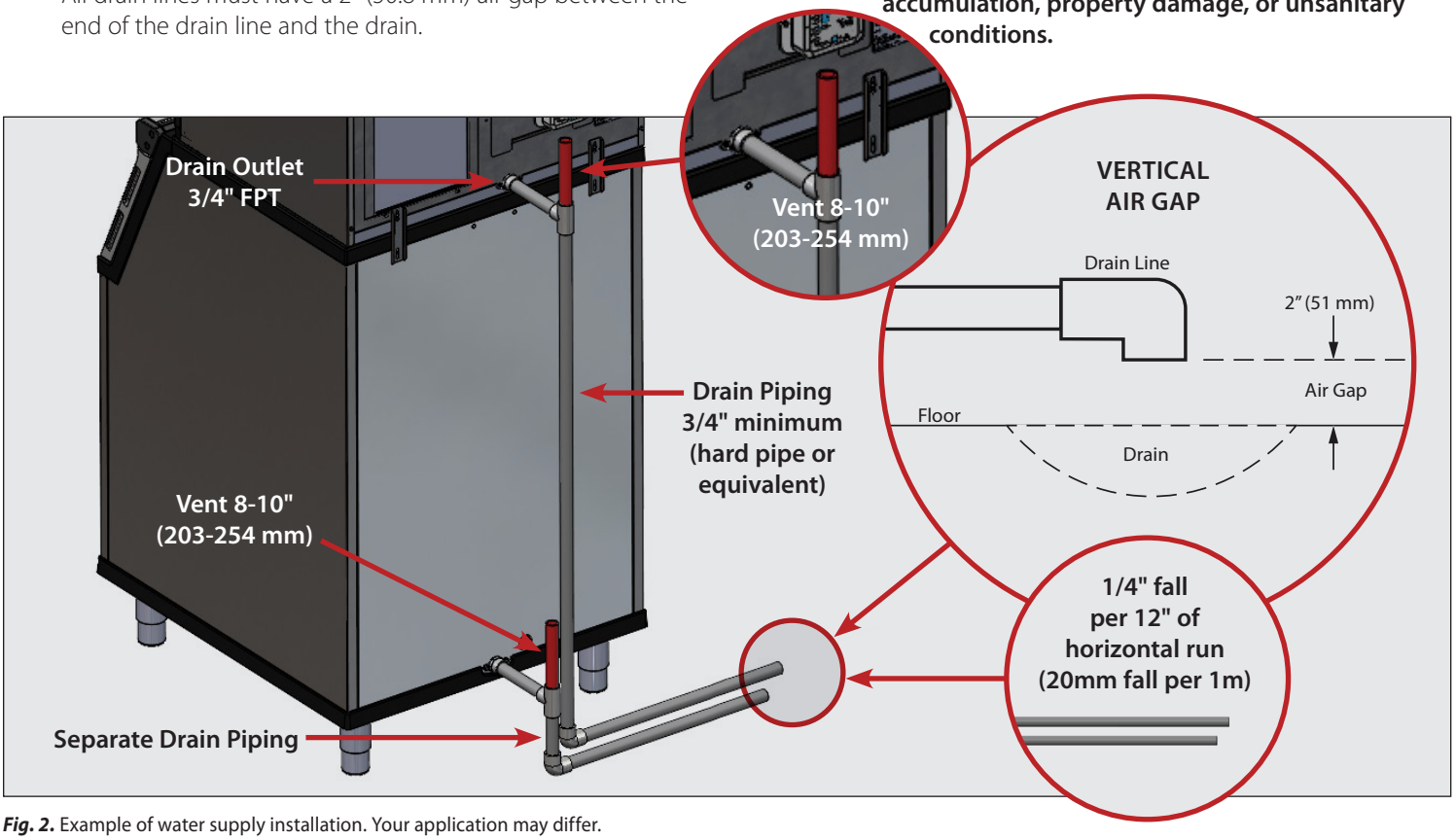


Fig. 2. Example of water supply installation. Your application may differ.

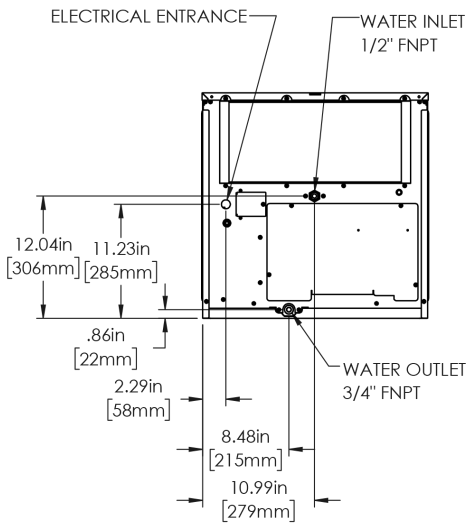
About Your Ice Machine & Installation Requirements (cont.)

Plumbing Connection Requirements (cont.)

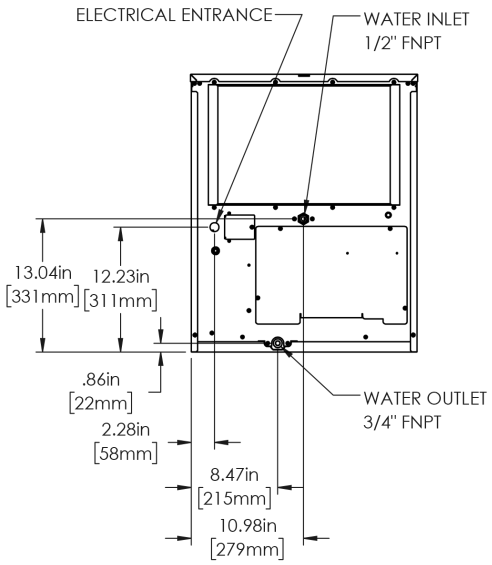
Plumbing Connection Diagrams

Ice machine rear views shown.

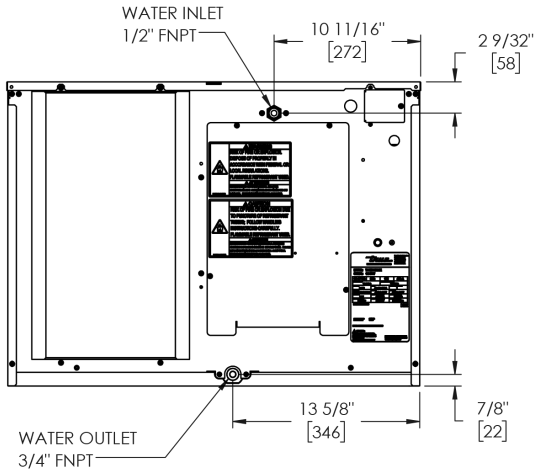
TCIM-422/522



TCIM-622



TCIM-430/530/630



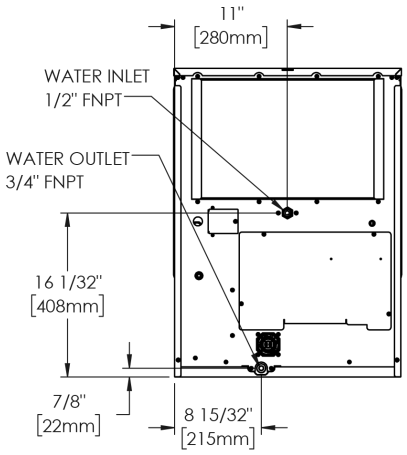
About Your Ice Machine & Installation Requirements (cont.)

Plumbing Connection Requirements (cont.)

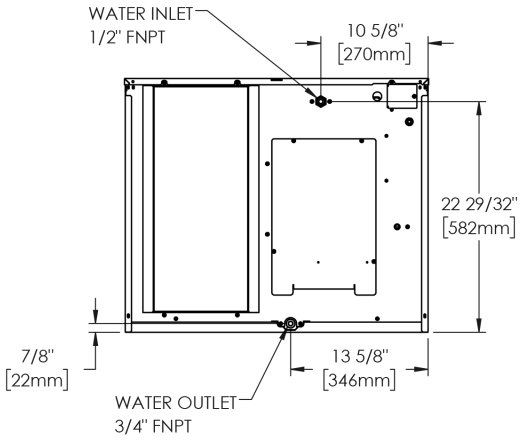
Plumbing Connection Diagrams

Ice machine rear views shown.

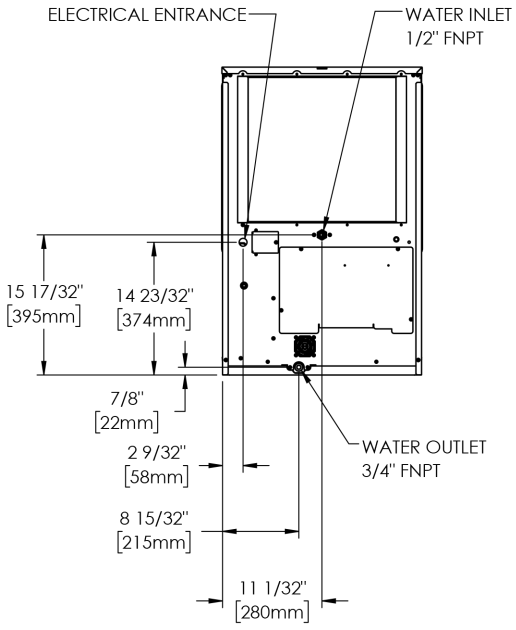
TCIM-822



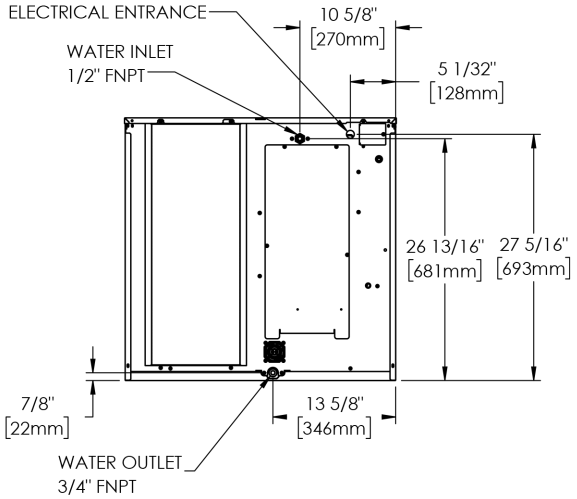
TCIM-830



TCIM-1022



TCIM-1030 / 1230



About Your Ice Machine & Installation Requirements (cont.)

Water Filter Installation & Setup

True recommends water filters for all TCIM installations. Water filters help remove particulates that reduce operating efficiency and equipment life. Regularly changing water filters is essential for optimum-quality ice, reduced maintenance, and prolonged equipment operation.

True offers two water filter options and one water filter head. To order, please contact our True Parts Department at

https://www.truemfg.com/support/parts/

or scan the QR code. See the table to determine which water filter is appropriate for your application. Part numbers are subject to change.

Installation

1. If a water filter is present, install the water supply shut-off valve before the water filter. See fig. 1.
2. With appropriate hardware, mount the water filter head on a wall near the TCIM. See fig. 2.
3. Water filter inlet and outlet are 3/8" FPT.
4. Always use thread sealant at connections.
5. Flush the water filter for 2 minutes before use.
6. Be sure to thoroughly inspect all connections after installation to ensure there are no leaks.

Part	Capacity	Recommended Application
Standard Water Filter P#855884	14,000 gal (52,996 L)	TCIM-600 series models or smaller
Platinum Water Filter P#855885	35,000 gal (132,490 L)	TCIM-800 series models or larger
Water Filter Head P#855886	n/a	All TCIM models

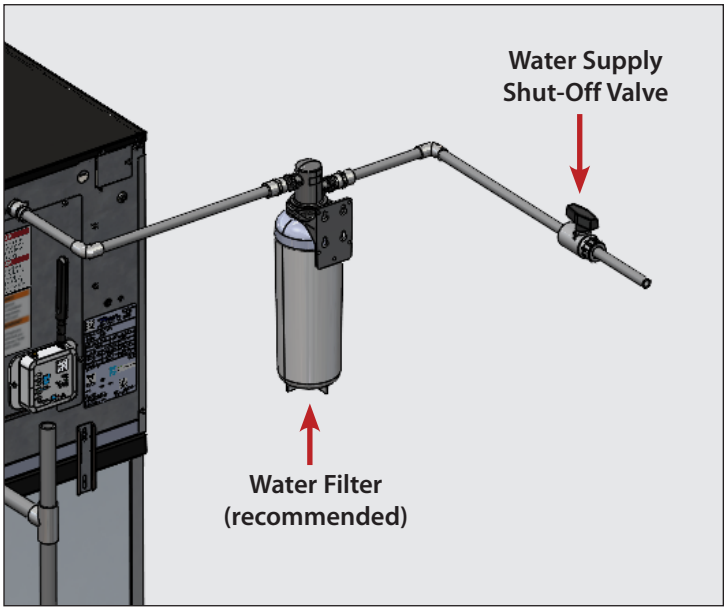


Fig. 1. Shut-off valve installed before the water filter.

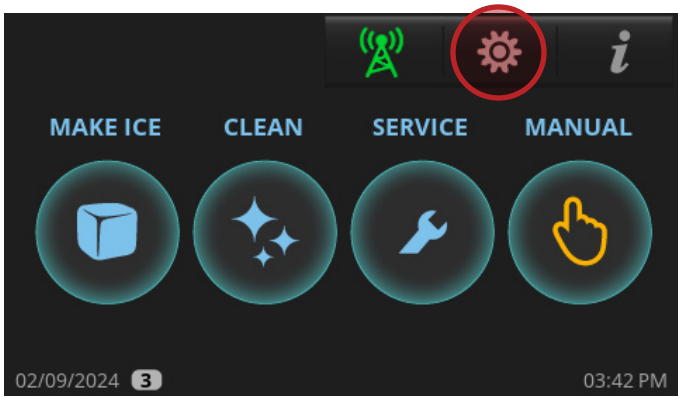
Fig. 2. TRUE Water filter head installed on a wall and connected to the water supply lines.

About Your Ice Machine & Installation Requirements (cont.)

Water Filter Installation & Setup (cont.)

After powering the TCIM, the correct water filter capacity must be selected.

1. In the home screen, select the **MENU** icon.

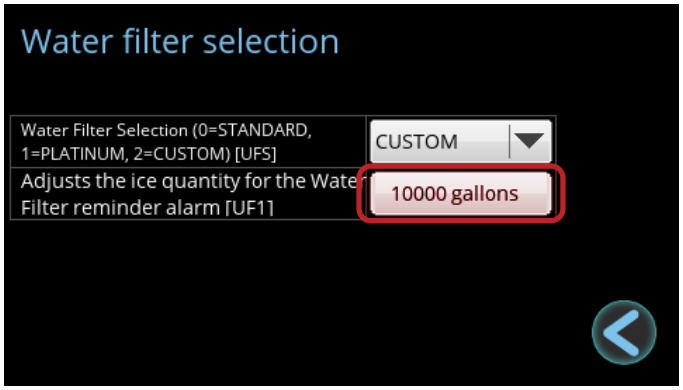


2. In the **MENU** screen, select **WATER FILTER**.

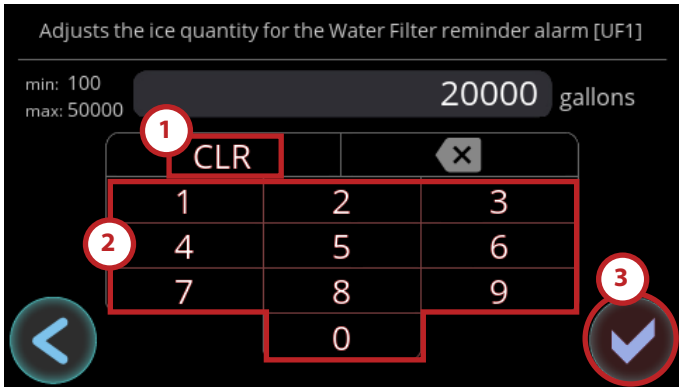
3. In the **Water filter selection** screen, select the appropriate water filter for your application. If using a non-True water filter, enter the water capacity as **CUSTOM**.

Filter Type	Capacity
Standard	14,000 gal (52,996 L)
Platinum	35,000 gal (132,490 L)
Custom (default)	10,000 gal (3,7854 L; adjustable)

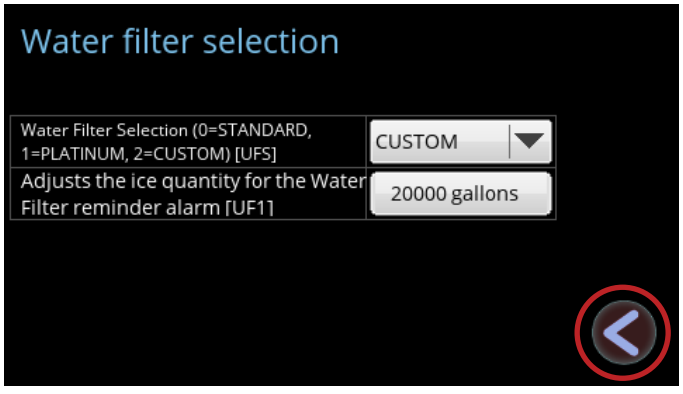
4. If choosing **CUSTOM**, adjust the capacity to match the water filter's rating. Press the capacity setting to enter the customize capacity screen.



5. Press **CLR** to clear the current setting. Then, enter the updated capacity setting and press okay.



6. To return to the home screen, press the **BACK** icon twice (x2).



About Your Ice Machine & Installation Requirements (cont.)

Electrical Requirements

⚠ DANGER!

Risk of Electric Shock, Burn, or Fire!

- Electrical connection must be hard-wired and meet all applicable laws, codes, and regulations. Failure to meet these code requirements can result in appliance damage, fire, electrical shock, serious injury, or death.
- Your ice machine requires an independent power supply of proper capacity. See nameplate and rating labels for specifications (see "Label Locations" (pg. 16). Failure to use an independent power supply of proper capacity can lead to electrical fire.
- For personal safety, your ice machine must be properly grounded.

See "Cord / Wire Specifications" (pg. **38**) for detailed electrical specifications. Electrical service must fall within the voltage tolerances listed.

- See wiring diagram beneath the top panel as shown in fig. 1. To access, see "Panel Removal" (pg. **41**).
- Ice machines come equipped with a rocker switch. See location in fig. 2.
- Make electrical connections inside the ice machine's junction box on the appliance's rear. See figs. 3 and 4.

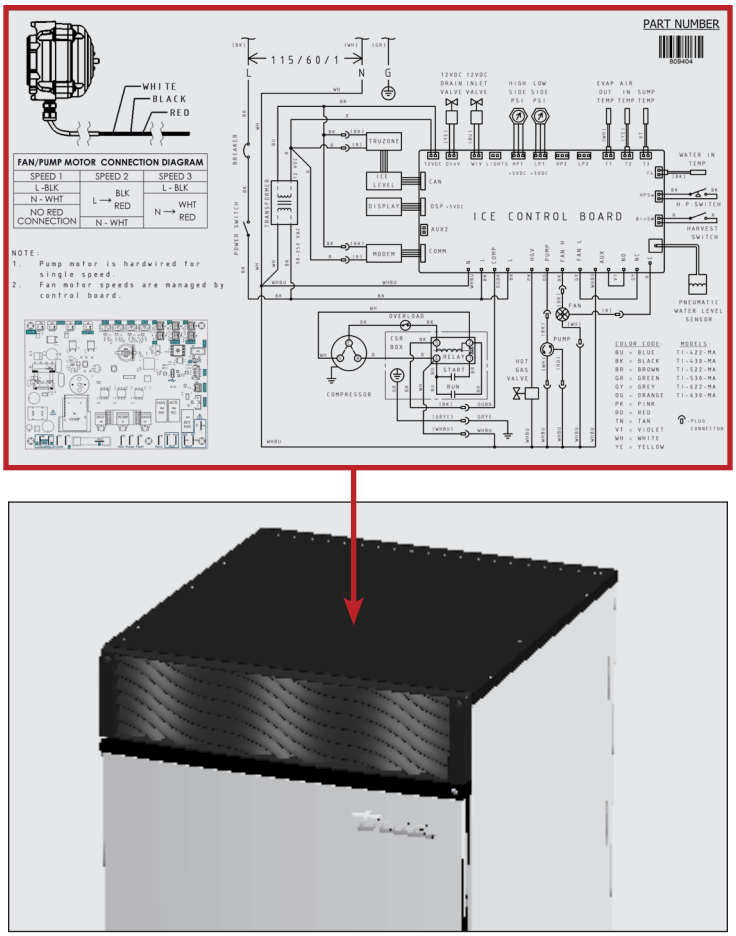


Fig. 1. Wiring diagram located under the top panel.

About Your Ice Machine & Installation Requirements (cont.)

Electrical Requirements (cont.)

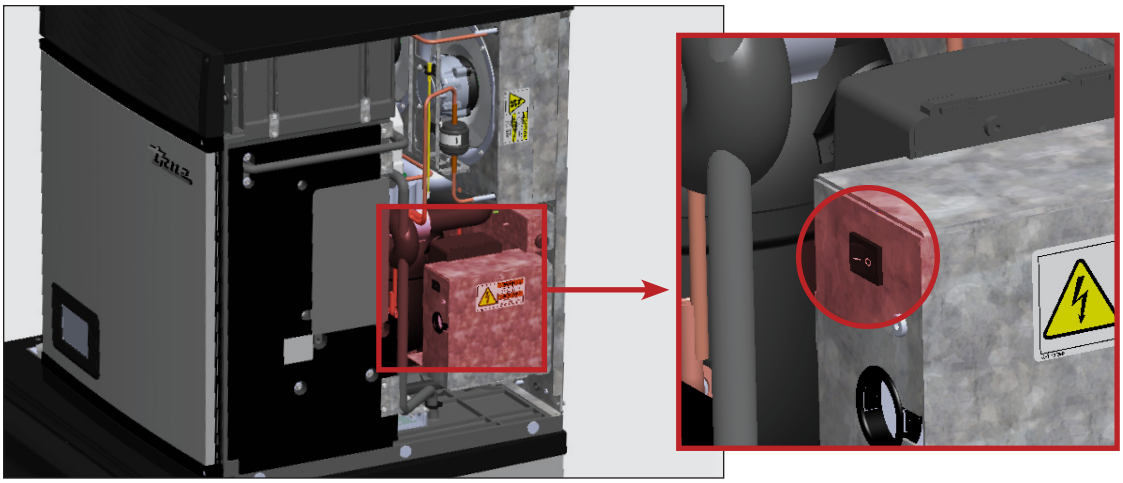


Fig. 2. Rocker switch location. Rocker switch disconnects power from the control board and front display; it **DOES NOT** disconnect power from the entire unit.

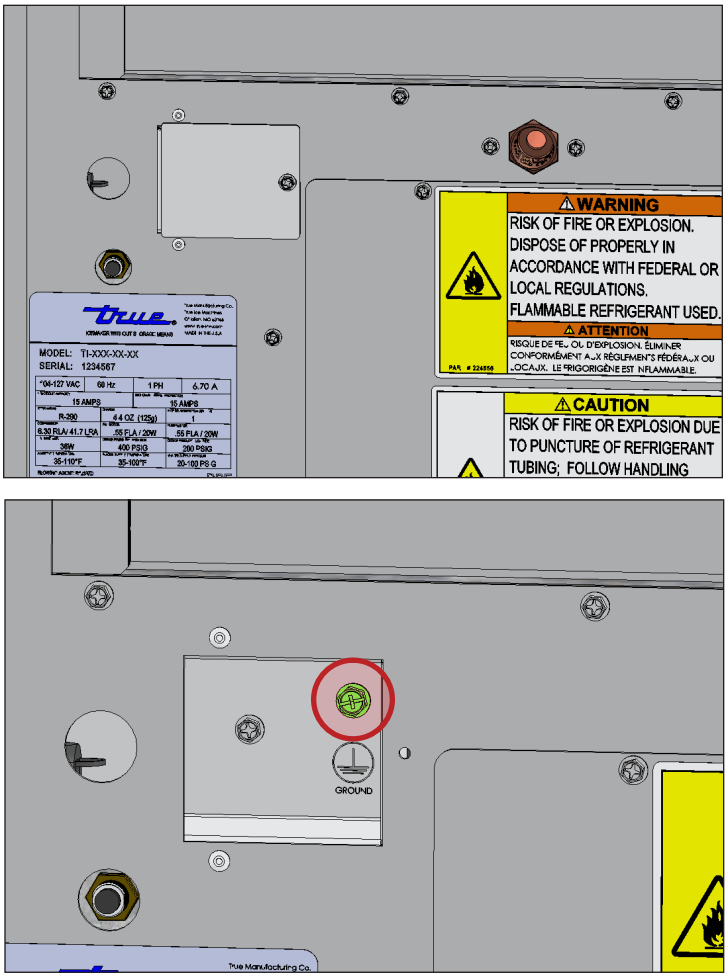


Fig. 3. Make the electrical connections inside the ice machine's junction box. Be sure to use strain reliefs. Always use the green grounding screw when making electrical connections.

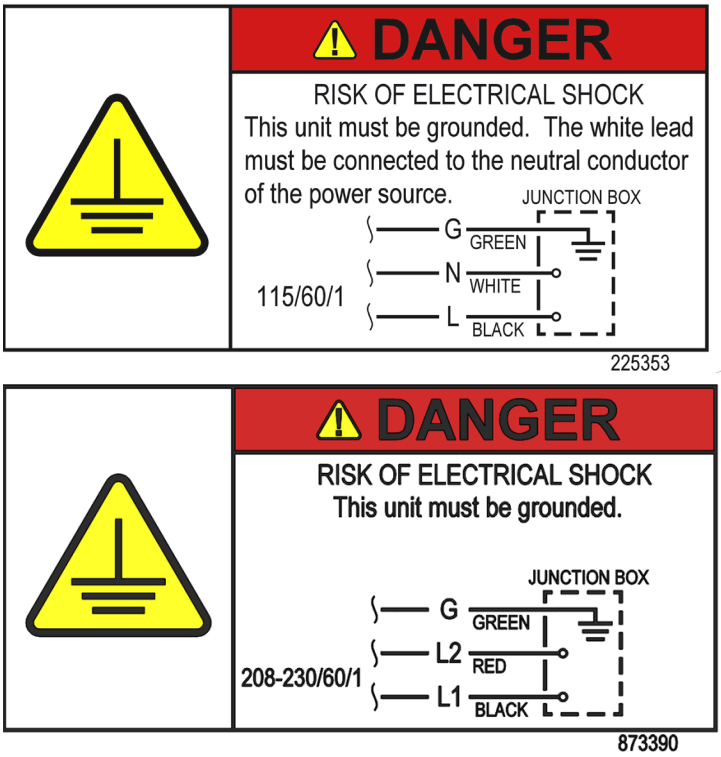


Fig. 4. Junction box electrical label.

About Your Ice Machine & Installation Requirements (cont.)

Electrical Requirements (cont.)

Wire gauge chart (115V)

115 Volts	Distance in Feet to Center of Load											
AMPS	20	30	40	50	60	70	80	90	100	120	140	160
2	14	14	14	14	14	14	14	14	14	14	14	14
3	14	14	14	14	14	14	14	14	14	14	14	12
4	14	14	14	14	14	14	14	14	14	12	12	12
5	14	14	14	14	14	14	14	12	12	12	10	10
6	14	14	14	14	14	14	12	12	12	10	10	10
7	14	14	14	14	14	12	12	12	10	10	10	8
8	14	14	14	14	12	12	12	10	10	10	8	8
9	14	14	14	12	12	12	10	10	10	8	8	8
10	14	14	14	12	12	10	10	10	10	8	8	8
12	14	14	12	12	10	10	10	8	8	8	8	6
14	12	12	12	10	10	10	8	8	8	6	6	6
16	12	12	12	10	10	8	8	8	8	6	6	6
18	12	12	10	10	8	8	8	8	8	8	8	5
20	12	12	10	10	8	8	8	6	6	6	5	5
25	10	10	10	8	8	6	6	6	6	5	4	4
30	10	10	8	8	6	6	6	6	5	4	4	3

Wire gauge chart (230V)

230 Volts	Distance in Feet to Center of Load											
AMPS	20	30	40	50	60	70	80	90	100	120	140	160
5	14	14	14	14	14	14	14	14	14	14	14	14
6	14	14	14	14	14	14	14	14	14	14	14	12
7	14	14	14	14	14	14	14	14	14	14	12	12
8	14	14	14	14	14	14	14	14	14	12	12	12
9	14	14	14	14	14	14	14	14	12	12	12	10
10	14	14	14	14	14	14	14	12	12	12	10	10
12	14	14	14	14	14	14	12	12	12	10	10	10
14	12	12	12	12	12	12	12	12	10	10	10	8
16	12	12	12	12	12	12	12	10	10	10	8	8
18	12	12	12	12	12	12	10	10	10	8	8	8
20	12	12	12	12	10	10	10	10	10	8	8	8
25	10	10	10	10	10	10	10	10	8	8	6	6
30	10	10	10	10	10	10	8	8	8	6	6	6

Cord / Wire Specifications

The opening for the power supply connection is 7/8" diameter to fit a 1/2" trade size conduit.

Min/Max Circuit Ampacity & Fuse Size

Model	Minimum Circuit Ampacity	Maximum Overload Protection	Breaker/ Fuse Size
TCIM-422	15 Amps	15 Amps	15 Amps
TCIM-430	15 Amps	15 Amps	15 Amps
TCIM-522	15 Amps	15 Amps	15 Amps
TCIM-530	15 Amps	15 Amps	15 Amps
TCIM-622	15 Amps	20 Amps	15 Amps
TCIM-630	15 Amps	20 Amps	15 Amps
TCIM-822	15 Amps	15 Amps	15 Amps
TCIM-830	15 Amps	15 Amps	15 Amps
TCIM-1022	15 Amps	15 Amps	15 Amps
TCIM-1030	15 Amps	15 Amps	15 Amps
TCIM-1230	15 Amps	15 Amps	15 Amps

Min/Max Voltage Supply

Nominal Voltage	Minimum No Load	Maximum No Load
115 Volts	104 Volts	127 Volts
208-230 Volts	187 Volts	254 Volts

Installation & Setup

⚠ WARNING!	
	The appliance owner is responsible for performing a Personal Protective Equipment (PPE) Hazard Assessment and ensuring adequate protection during maintenance and cleaning procedures. Use appropriate tools, safety equipment, and PPE during installation and servicing.
	**Tip over hazard!** • Ice machine may pose a tipping hazard when uncrating, installing, or moving the appliance. Take appropriate safety precautions. • At least two people are required to lift or move the ice machine to prevent tipping or personal injury. • Use of tip over restraints may only reduce (not eliminate) the tipping hazard. Never allow children to climb or hang on drawers, doors, or shelves.
	**Sharp Edges!** • Take care when moving, installing, cleaning, servicing, and maintaining the ice machine to avoid cuts. Be sure to take care when reaching under the ice machine or handling metal components.

IMPORTANT! The following chapter details the installation procedure for a typical TCIM application (TCIM on an ice storage bin or dispenser). For other applications, such as Freestyle dispensers or First In First Out (FIFO) bins, please contact technical support for additional installation information at 1-888-783-1429 or CommercialIce@TrueMfg.com.

Installation & Setup (cont.)

Uncrating & Inspection

Required Tools

Required tools include (but may not limited to) the following:

- Gloves
- Eye Protection
- Cutting Tool
- Crowbar
- Hammer
- Phillips Screwdriver

Procedure

1. Inspect the exterior packaging for damage. Follow True's recommended guidelines for accepting deliveries. Immediately file a claim with the freight carrier if there is damage.
2. Remove exterior packaging.
3. Remove the wood blocks from the skid. See fig. 1.
4. Open the front panel. See "Panel Removal" (pg. 41). Then, inspect the interior for concealed damage. Immediately file a claim with the freight carrier if there is damage.
5. Remove the interior packaging. See fig. 2.
6. Proceed to "Ice Storage Bin or Dispenser Information" (pg. 42).

NOTICE › Move the skid as close as possible to the final installation location.

Fig. 1. Remove the wood blocks from the skid.

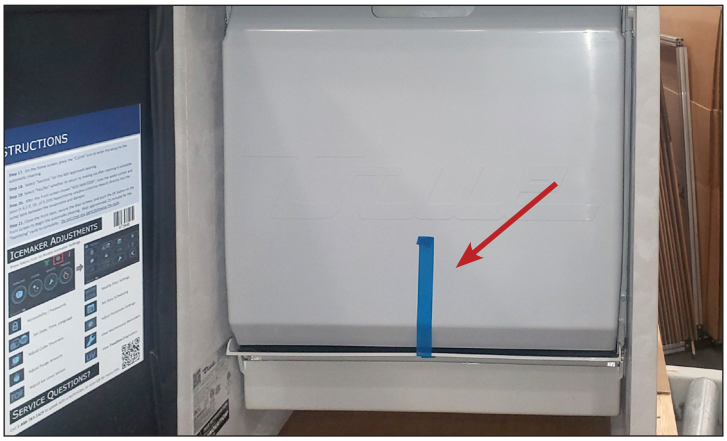


Fig. 2. Example of interior packaging to be removed.

Installation & Setup (cont.)

Panel Removal

Front Panel

1. Remove the front panel screws. See fig. 1.
2. Open the front panel(s). See fig. 2.

Top Panel

1. Open the front panel(s).

   EXCEPTION! TCIM-622 and larger remove the front filter grill. See fig. 3.

2. Carefully lift the top panels front. Then, slide the top panel towards the ice machine's rear. See fig. 4
3. Remove the freed top panel.

Side Panel

1. Open the front panel.
2. Remove the top panel.
3. Remove the side panel's rear screw. See fig. 5.
4. Pull the side panel from the bottom fasteners. Then, lift the side panel. See fig. 6.

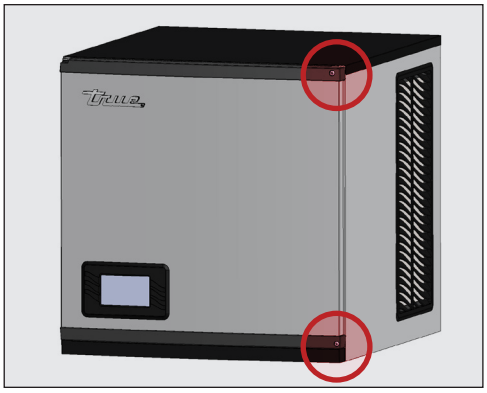


Fig. 1. Front panel screw locations.

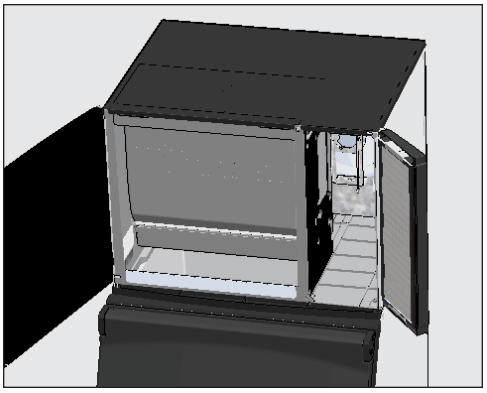


Fig. 2. Open the front panels.

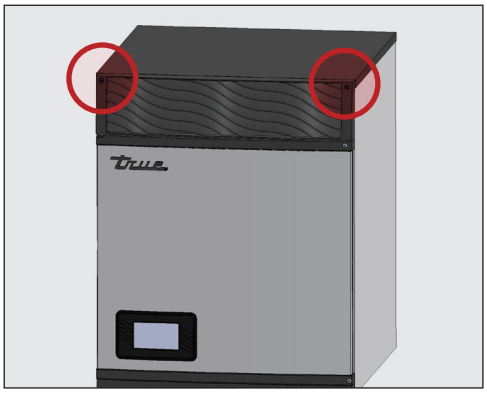


Fig. 3. Front filter grill screw locations.

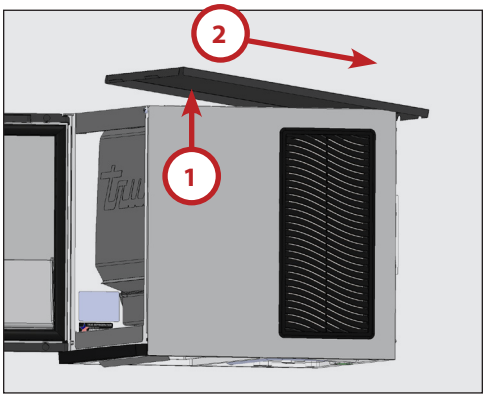


Fig. 4. Lift the front edge, slide the top panel back, and then lift the panel.

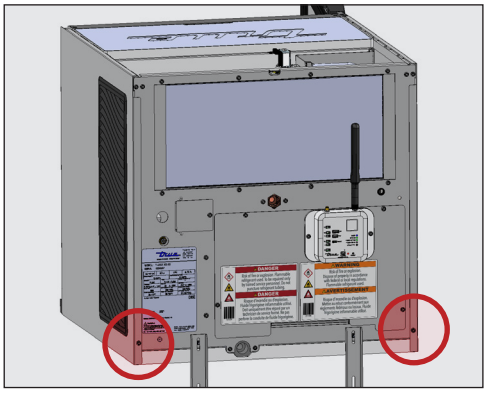


Fig. 5. Side panel screw locations.

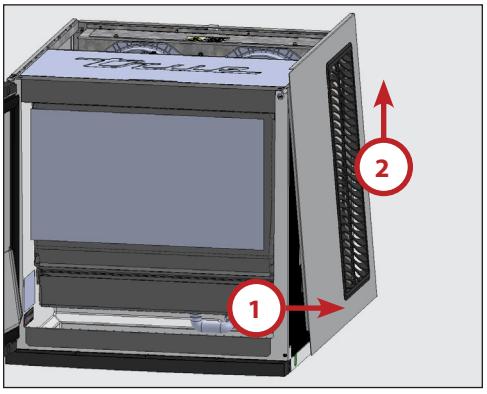


Fig. 6. Pull the panel from the adhering tabs and then lift the panel.

Installation & Setup (cont.)

Ice Storage Bin or Dispenser Information

⚠ WARNING!

Tipping hazard! ALWAYS verify center leveling screws fully contact the floor after leveling the appliance.

Lifting assistance required! Team lift or use a lifting device. Always use proper lifting techniques or personal injury may occur.

USER ACTION!

- The installer must ensure the ice storage bin/dispenser is compatible with the ice machine and that the ice storage bin/dispenser and ice machine are properly attached and secured. See fig. 1.
- Before positioning the TCIM on the ice storage bin/dispenser, always measure for the TRUE TIME-OF-FLIGHT® ice level sensor as shown in fig. 2. See "Enable TRUE TIME-OF-FLIGHT Sensor Setup" (pg. 49).
- Ice level management is recommended to prevent water leakage or movement of ice machine during agitation. See "Enable TRUE TIME-OF-FLIGHT Sensor Setup" (pg. 49).

- The installer must ensure the ice storage bin/dispenser is compatible with the ice machine, and that the ice storage bin/dispenser and ice machine are properly attached and secured. See fig. 1.
- Before positioning the TCIM on the ice storage bin/dispenser, always measure for the TRUE TIME-OF-FLIGHT Ice Level Sensor as shown in fig. 2. See "Enable TRUE TIME-OF-FLIGHT Sensor Setup" (pg. 49).
- See plan views for drop zone specifications. Be sure the location of the drop zone is compatible with the ice storage. Verify the ice will fall freely and not catch on parts of the ice storage.
- Before installing this TCIM on a non-OEM ice storage system, follow the manufacturer's installation procedures and verify the location/installation meet all applicable laws, codes, and regulations.
- Always secure the TCIM to the ice storage bin/dispenser/adapter. See "Bin/Dispenser/Adapter Brackets" (pg. 45).
- Ice machines require a drop zone deflector when installed on an ice storage bin. See "Drop Zone Deflector" (pg. 46). Before using a non-OEM ice storage system with the TCIM, contact the bin manufacturer to verify their ice deflector is compatible with the TCIM.
- If mounting the ice machine on a dispenser unit, follow the dispenser unit's setup procedure.
- If mounting the ice machine on an ice storage bin, unpack the ice storage bin and attach the provided adjustable legs to the bin's bottom.
- Level the ice storage bin/dispenser front-to-back and side-to-side before positioning the TCIM. See fig. 3. Adjust the legs as needed. Then, position the TCIM.
- Always use lifting assistance to remove the TCIM from the skid and position it on the bin/dispenser/adapter. See fig. 4.

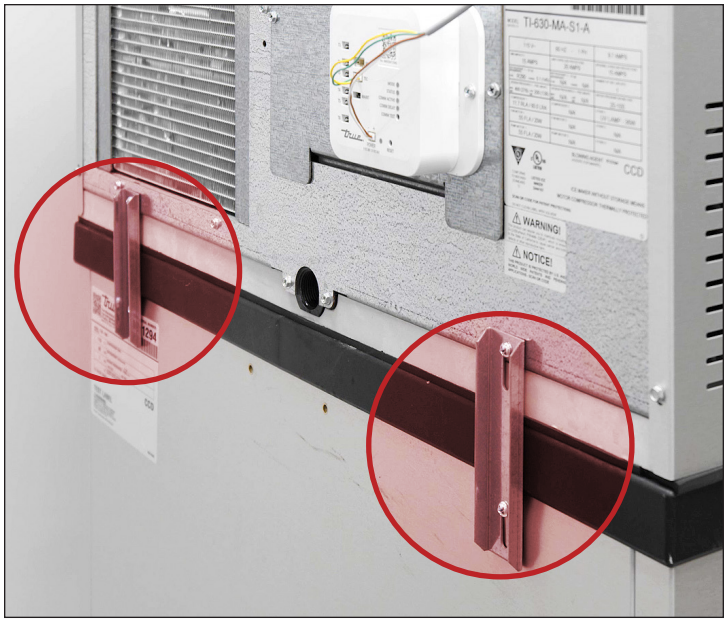


Fig. 1. Installed bin brackets.

Installation & Setup (cont.)

Ice Storage Bin or Dispenser Information (cont.)

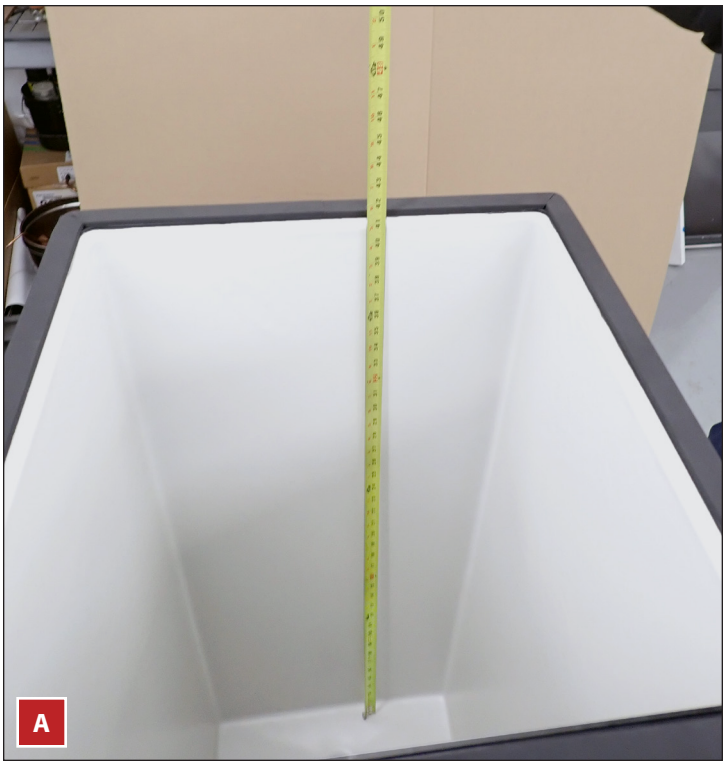


Fig. 2. Always measure the bin (A) or dispenser (B) for the TOF sensor before positioning the TCIM.

Fig. 3. Check the level of the ice storage before positioning the TCIM.

Fig. 4. With lifting assistance, carefully position the TCIM.

Installation & Setup (cont.)

Ice Storage Bin or Dispenser Information (cont.)

Bin Adapters

True offers bin adapters to cover the opening when the ice storage bin is wider than the ice machine. See options in the Bin Adapter Size table. To order, please contact our True Parts Department at

https://www.truemfg.com/support/parts/

or scan the QR code. Size options and part numbers are subject to change.

Bin Adapter Size	Kit Part #
4" (101.6 mm)	P#228243
8" (203.2 mm)	P#228242
18" (457.2 mm)	P#228244

Examples of possible configurations of TCIMs on bins/dispensers with adapters include but are not limited to the following:

- TCIM on the left side (configuration 1; see fig. 5)
- TCIM on both sides (configuration 2; see fig. 6)

IMPORTANT! Applications with TCIMs on both sides require a bin adapter (4" or greater) between the right most unit (as viewed from the front) and the right edge of the bin/dispenser/adapter to reduce interference with **True Time-of Flight® (TOF) Sensor**. See fig. 7. See "**Enable True Time-of Flight Sensor Setup**" (pg. 49) for more information about the TOF sensor.

Configuration 1

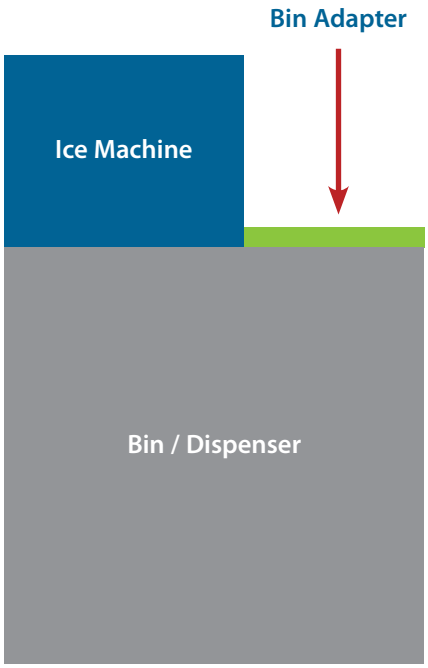


Fig. 5. TCIM installed on the left side of the bin / dispenser.

Configuration 2

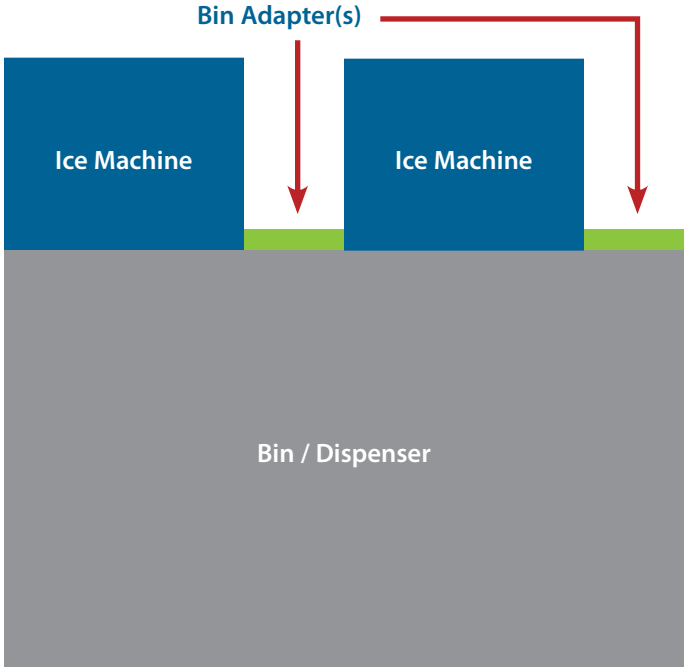


Fig. 6. TCIMs installed on both sides of the bin / dispenser.

Installation & Setup (cont.)

Ice Storage Bin or Dispenser Information (cont.)

Configuration 2 (cont.)

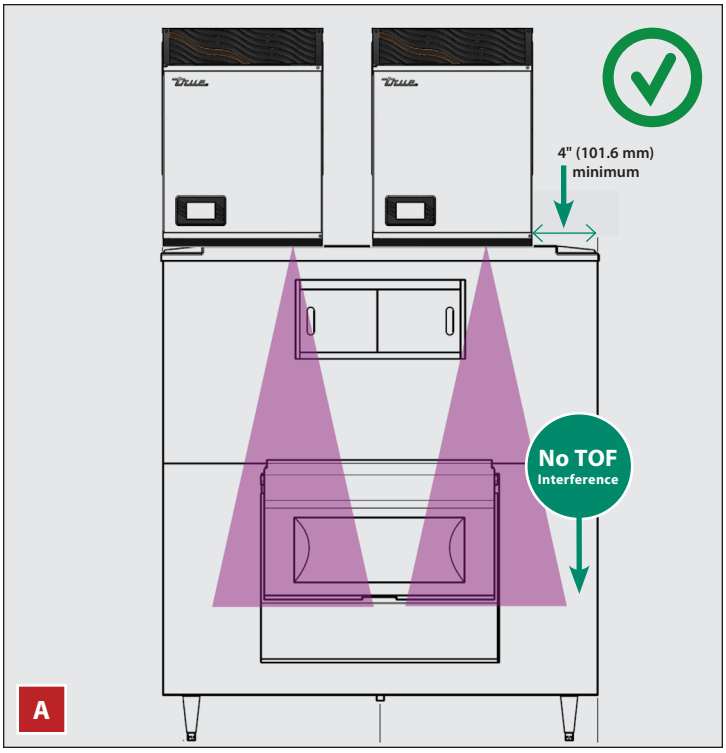


Fig. 7. Always install a bin adapter (required size varies by application) between the TCIM and the right edge of the bin/dispenser (A) to prevent TOF interference (B) and incorrect operation.

Bin/Dispenser/Adapter Brackets

Always secure the TCIM to the ice storage bin/dispenser/adapter. See fig. 8. Follow the ice storage bin, adapter kit, or top kit instructions. If no instructions are available, secure the ice machine using the provided mounting brackets and hardware.

1. Position the mounting brackets so they fit flush to the TCIM and ice storage. See fig. 8.
2. With the provided hardware, fasten the mounting brackets to the TCIM.
3. With the provided hardware, fasten the mounting brackets to the bin/dispenser/adapter. If needed, use installer-provided hardware; if using self-tapping screws, **DO NOT** damage the bin/dispenser/adapter components.

Fig. 8. Installed bin brackets.

Installation & Setup (cont.)

Ice Storage Bin or Dispenser Information (cont.)

Drop Zone Deflector

Drop zone deflectors allow ice to fall farther back into the ice storage to clear any obstruction. See figs. 9 and 10. To order, please contact our True Parts Department at

https://www.truemfg.com/support/parts/

or scan the QR code.

Length options and part numbers are subject to change.

Deflector Length	Part #
4" (101.6 mm)	P#829149
10" (254 mm) **NOTICE ›** This size is meant for First In First Out (FIFO) storage bins.	P#873841

Fig. 9. Installed drop-zone deflector side view.

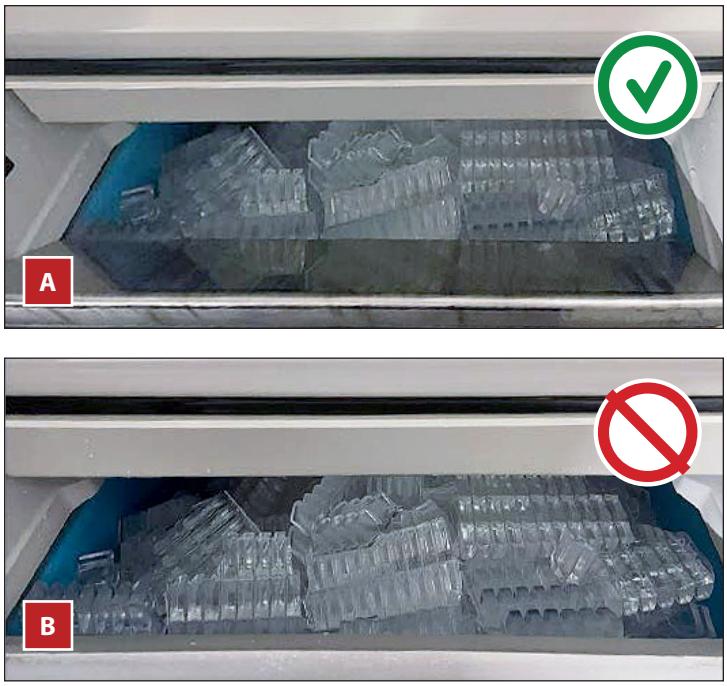
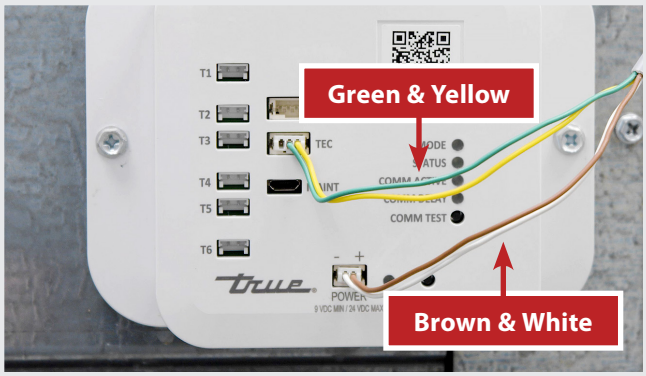
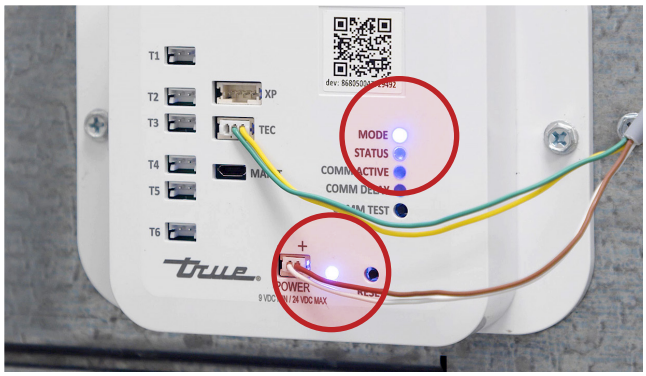
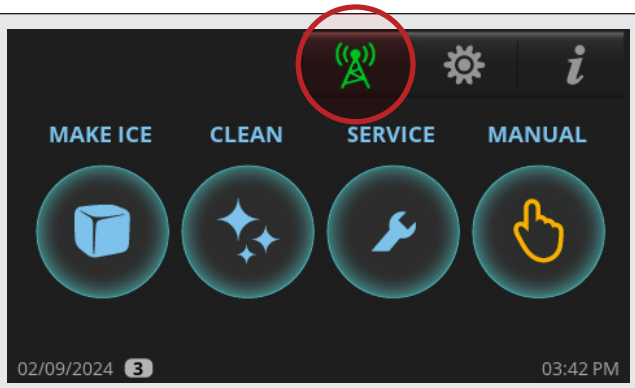


Fig. 10. Ice bins ***with (A)*** and ***without (B)*** a drop-zone deflector.

Installation & Setup (cont.)

TRUECONNECT® Modem & Antenna Verification (Optional Accessory)

Verification Checks	
Verify the antenna is installed on the **MAIN** connector.	
Verify the modem is wired correctly. • Green & Yellow wires to **TEC** • Brown & White wires to **POWER**	
After the unit is powered, verify the modem's indicator lights flash.	
After the unit is powered, on the display's home screen, verify the remote monitoring icon is green.	

Installation & Setup (cont.)

TRUECONNECT® (Optional Accessory) (cont.)

Remote Monitoring

Press **Remote Monitoring** to access the Remote Monitoring QR Code. Follow instructions on the remote monitoring website. See fig. 1.

The color of the remote monitoring icon indicates the current status of the remote monitoring. See fig. 2.

For more information, visit **connect.truemfg.com**

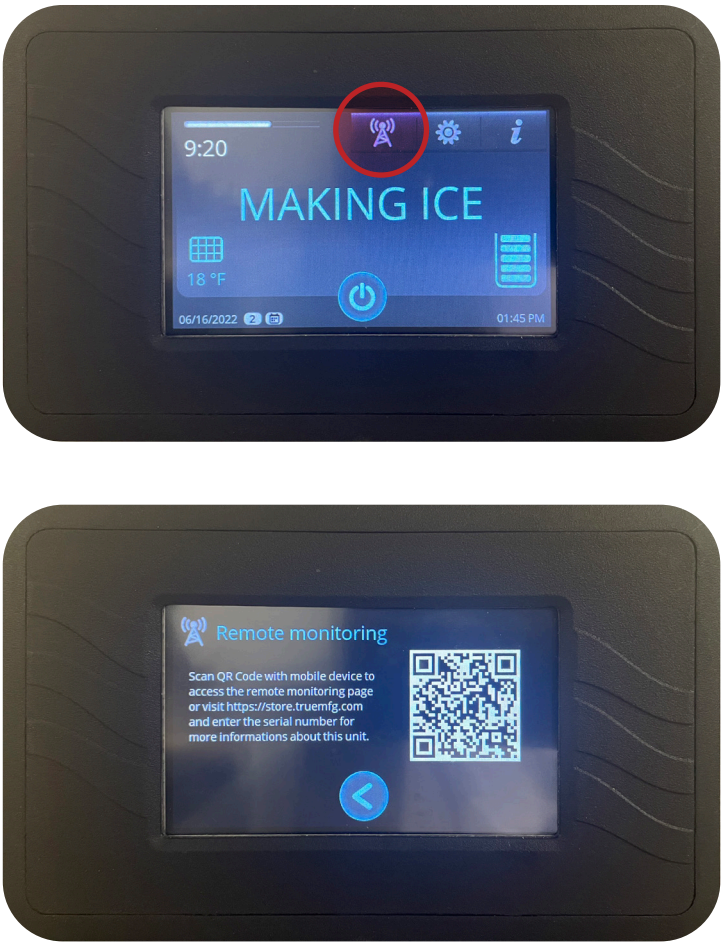
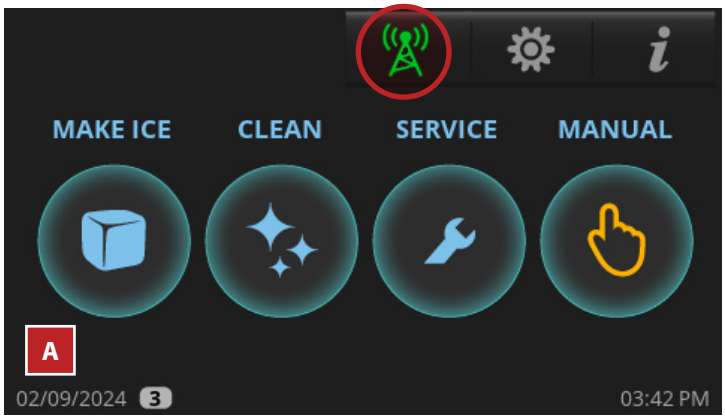


Fig. 1. Remote monitoring screen displays.

Green: Connected



Red: No cell signal, no RS485, or no power

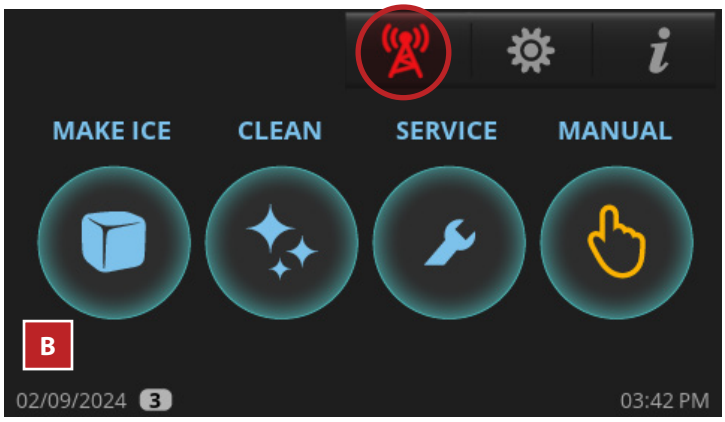


Fig. 2. The green icon (A) and the red icon (B).

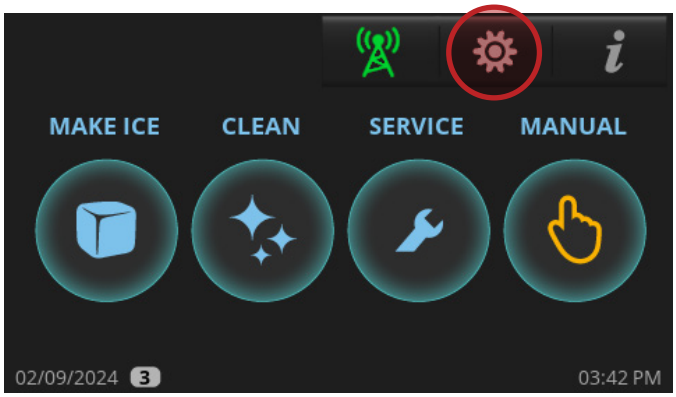
Installation & Setup (cont.)

Enable TRUE TIME-OF-FLIGHT® (TOF) Sensor

The TRUE TIME-OF-FLIGHT® (TOF) Ice Level Sensor detects the current ice level in the ice storage. The TCIM ships with the TOF disabled; the TOF must be enabled during the installation/setup process.

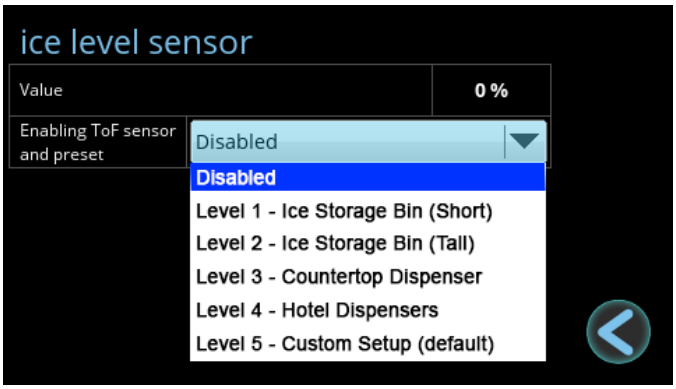
IMPORTANT! TCIM displays are factory-set for English; to change the language, see "Display Setup" (pg. 52).

1. Power the unit.
2. In the home screen, press the **MENU** icon.



3. In the **MENU** screen, press **TOF**.

4. In the ice level sensor screen, select the appropriate preset value for your ice storage unit. See preset values in the ice level sensor preset table. Select **Level 5 – Custom Setup** if none of the preset values fit your application needs.
   - **If Levels 1– 4** are selected, proceed to "Display Setup" (see pg. 52).
   - **If Level 5** is selected, proceed to "TOF Custom Setup" (pg. 50).



Installation & Setup (cont.)

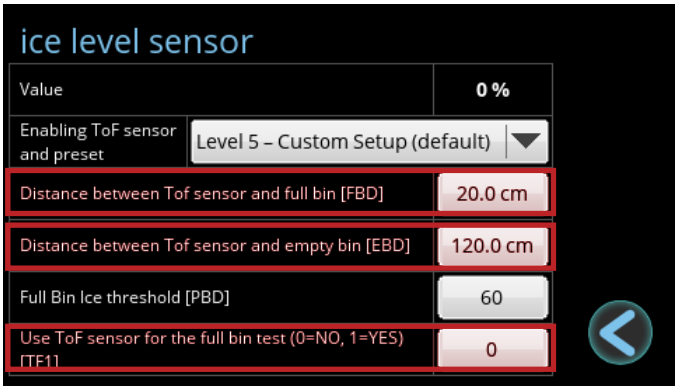
Enable TRUE TIME-OF-FLIGHT® (TOF) Sensor (cont.)

Ice Level Sensor Presets			
	Full Bin Distance (FBD)	**Empty Bin Distance (EBD)**	**Full Bin Ice Threshold (PBD)**
Level 1 – Ice Storage Bin (Short)	30 cm	85 cm	100
Level 2 – Ice Storage Bin (Tall)	20 cm	106 cm	100
Level 3 – Countertop Dispenser	25 cm	65 cm	90
Level 4 – Hotel Dispensers	25 cm	85 cm	90
Level 5 – Custom Setup	20 cm	120 cm	60

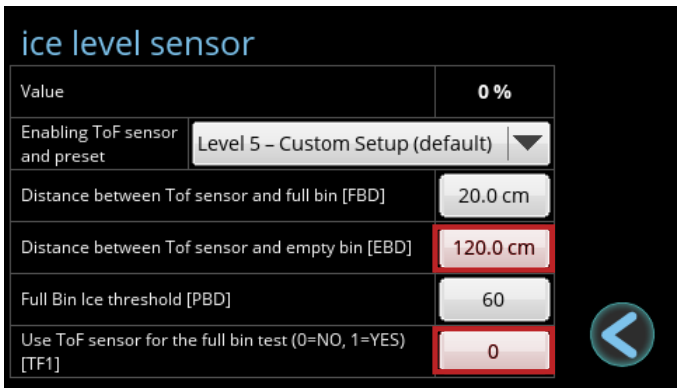
TOF Custom Setup

Select **Level 5 – Custom Setup** when the preset options do not fit the application requirements. Adjust the indicated. There are three settings to consider:

- **Full Bin Distance (FBD)** is the distance (in cm) between the TOF and the ice when the TCIM enters the full bin state with the harvest flap held down. See fig. 1.True **DOES NOT** recommend changing this setting.
- **Empty Bin Distance (EBD)** is the distance (in cm) between the TOF and the bottom of the ice storage unit. See fig. 1. This measurement should be taken before positioning the TCIM on the ice storage unit (see "Ice Storage Bin or Dispenser Information" (pg. 42). See fig. 2.
- **The Full Bin Test (TF1)** determines when the TCIM is in the full bin state.
  - **0:** The full bin state is determined by the harvest flap.
  - **1:** The full bin state is determined by the TOF. This is typically used when an ice machine is installed on a dispenser and a lower full bin level is required. See "TOF & Full Bin State" for greater detail.



1. To change these settings, press the current setting.



2. In the custom setting screen, press **CLR** to clear the current. Then, enter the desired setting and press okay.

Installation & Setup (cont.)

Enable TRUE TIME-OF-FLIGHT® (TOF) Sensor (cont.)

TOF & Full Bin State

If the Full Bin Test (TF1) is set to 1, then the TOF sensor determines when the TCIM is in the Full Bin state. The TCIM enters the full bin state when the TOF sensor reads a value greater than the Full Bin Ice Threshold (PBD), which is a percentage.

If PBD is set to 50, the TCIM enters the full bin state when the TOF sensor detects the bin is >/= 50% full.

NOTICE › The TCIM still enters a full bin state if the harvest flap is held down.

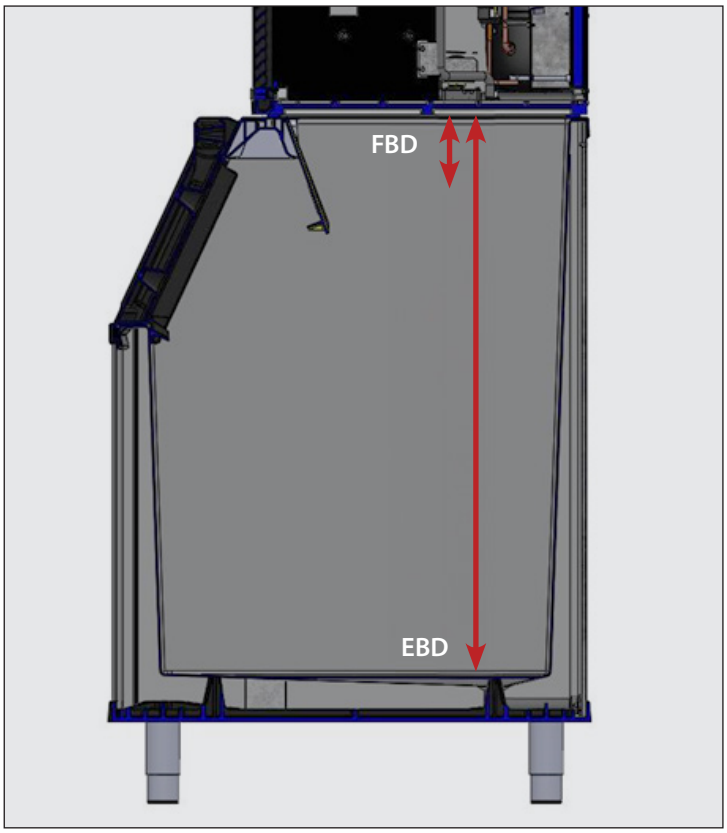


Fig. 1. FBD vs. EBD.

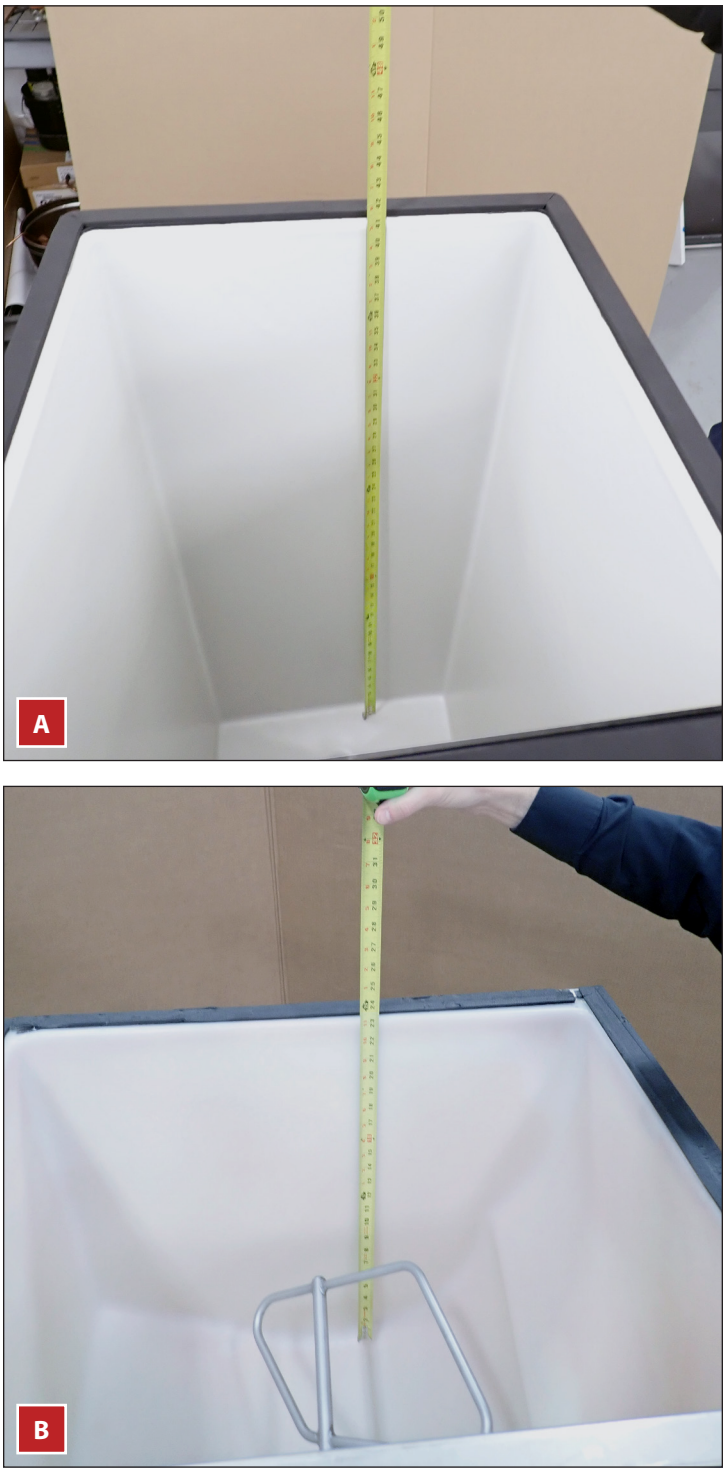


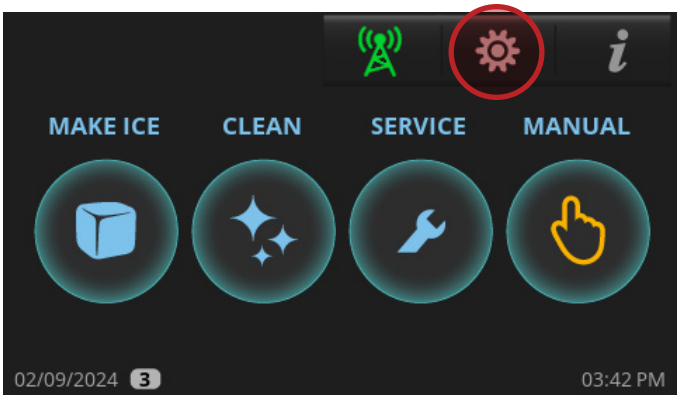
Fig. 2. Always measure the bin (A) or dispenser (B) for the TOF sensor before positioning the TCIM.

Installation & Setup (cont.)

Display Setup

The TCIM display's language, date, time, and units of measure can be changed.

1. In the home screen, press **MENU**.

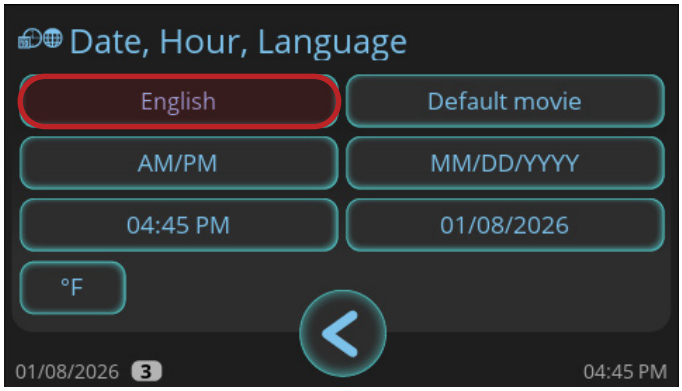


2. In the **MENU** screen, press the **Date, Hour, Language** icon.

3. Proceed to the appropriate procedure.

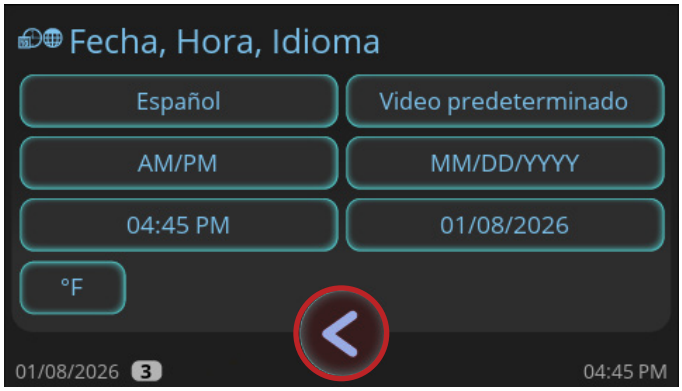
Change the Language

1. In the **Date, Hour, Language** screen, press the current language.



2. In the language selection screen, press the desired language, and then press okay.

3. In the **Date, Hour, Language** screen, press the **BACK** icon twice (x2) to return to the home screen.



continued on next page ›

Installation & Setup (cont.)

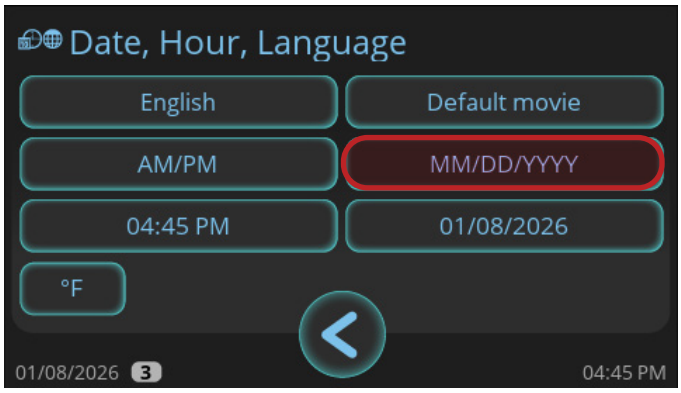
Display Setup (cont.)

Change the Date Format & Date

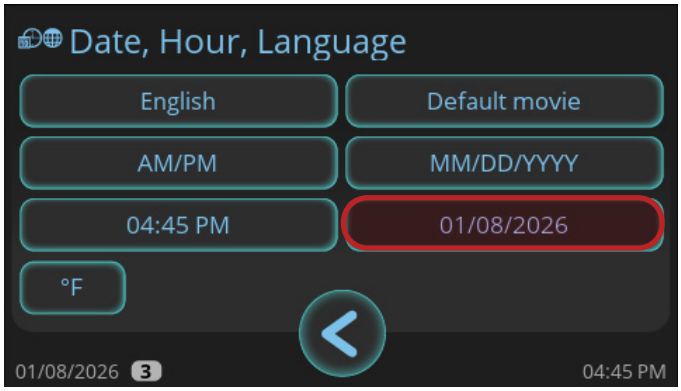
1. In the **Date, Hour, Language** screen, press the current date format to cycle through the options.

   • MM/DD/YYYY

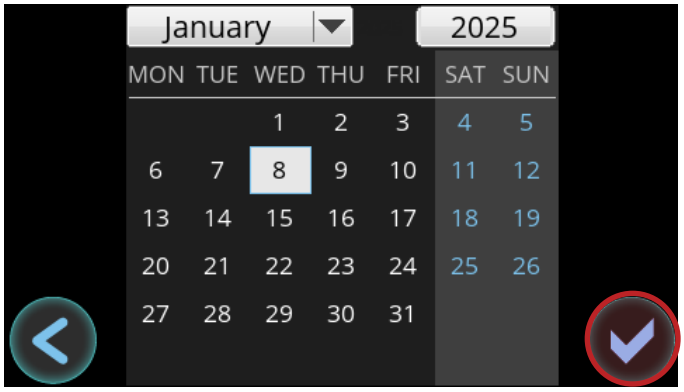
   • DD/MM/YYYY



2. After selecting your desired format, press the date.



3. In the date selection calendar, enter the correct year, month, and day. Then press okay.

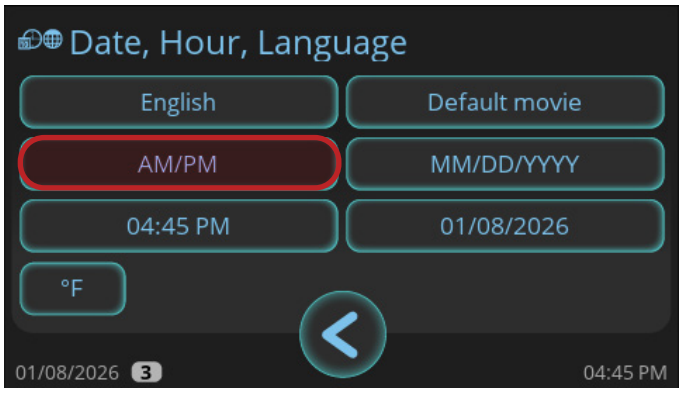


Change the Time Format & Time

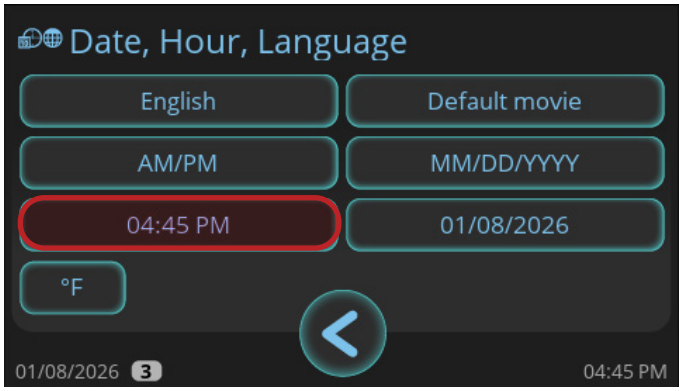
1. In the **Date, Hour, Language** screen, press the current time format to cycle through the options.

   • 12 Hour Format (AM/PM)

   • 24 Hour Format



2. After selecting your desired format, press the time.



continued on next page ›

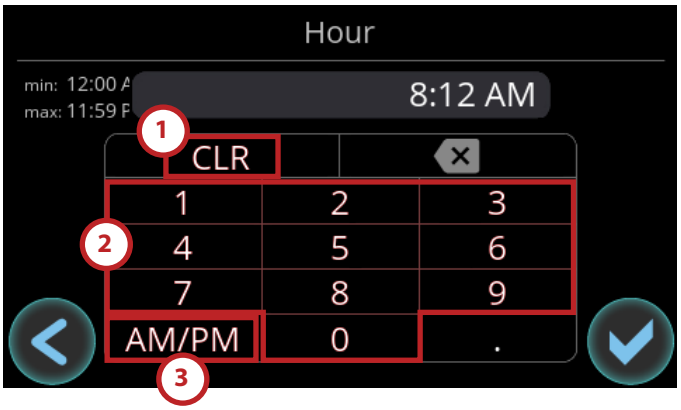
Installation & Setup (cont.)

Display Setup (cont.)

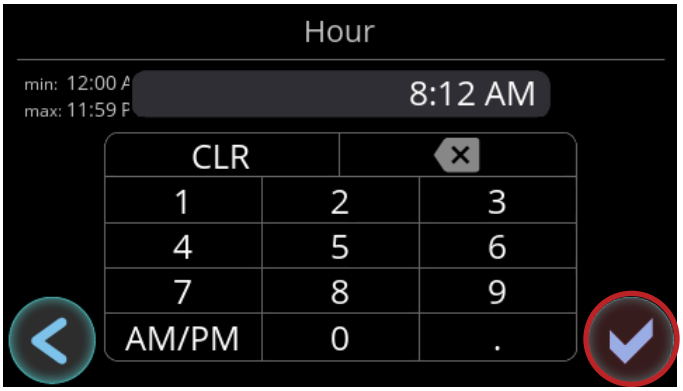
Change the Time Format & Time (cont.)

3. Press **CLR** to clear the current setting. Then enter the correct time.

NOTICE › **If using the 12 hour format, be sure to select AM or PM.**



4. 4. Press okay.

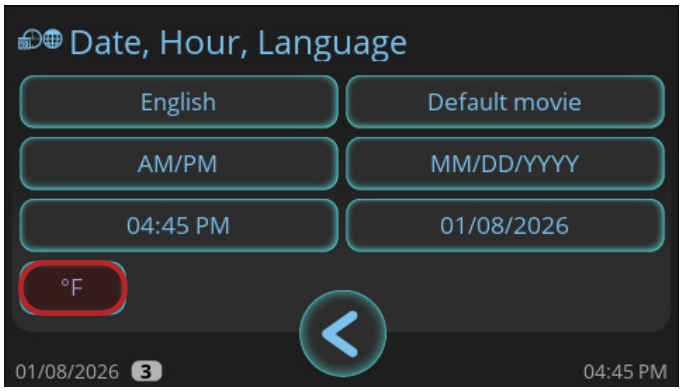


Change Units of Measure

1. In the **Date, Hour, Language** screen, press the temperature format to cycle through the units of measure.

   • Imperial (°F)

   • SI (°C)



Installation & Setup (cont.)

Verify Operation

- Turn the water supply to the machine on.
- In the home screen, press **MAKE ICE**.
- Let the TCIM run through its startup sequence. Check for alerts or alarms.
- Check for water leaks, alarms, alerts, etc. and address any issues.
- During the first five minutes of the freeze cycle, confirm bin control operation by pushing the harvest flap down and holding it down until the TCIM shuts off and the display shows **FULL BIN**. The TCIM should shut down after about 11 sec. Release the harvest flap and, after one minute, TCIM operation should continue.
- Watch at least three cycles and confirm the ice bridge thickness is correct [about 1/8" (3.18 mm); see fig. 1]. To adjust bridge thickness, see "Adjust Ice Thickness" (pg. **61**).
- Always sanitize the TCIM and the ice storage bin/dispenser after verifying operation. See "Sanitize Before Use" (pg. **56**)

Fig. 1. The ice bridge holds the ice cubes together.

Installation & Setup (cont.)

Sanitize Before Use

After verifying operation, always sanitize the TCIM before use.
See "Descaling & Sanitizing Procedure" (pg. **84**).

⚠ DANGER!

HIGHLY CORROSIVE CLEANING CHEMICALS.
Avoid contact with eyes and skin. Wear eye protection and chemical-resistant rubber gloves when handling.

⚠ WARNING!

Toxic Material Hazard!
DO NOT MIX DESCALER WITH SANITIZER.
Harmful fumes may be generated.

Optical Radiation Hazard! UV Light!
Invisible laser radiation. Do not look directly at light. Always disconnect power before servicing the lamp.

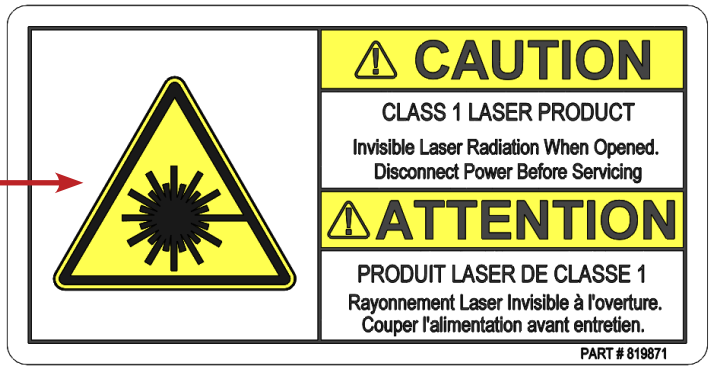
! USER ACTION!

True recommends using TRUE Ice Machine Descaler. To purchase, contact True Parts Department at 800-424-8783 or partsinquiries@truemfg.com.
If using a non-TRUE descaler (Nickel-safe) recommended dilution for soaking parts is 3 fl oz (88.7 ml) per 1 gal (3.78 L) and recommended amount for evaporator cleaning is 6-8 fl oz (177.4-236.6 ml).
Use of non-recommended descaler may void warranty.

Technical Support YouTube Channel

YouTube

For more in-depth installation and service information, see our True Commercial Ice Technical Support YouTube channel at https://www.youtube.com/@TrueIceTechSupport.



Ice Machine Operation

Sequence of Operation

USER ACTION!

Before the ice machine will start **MAKE ICE** must be pressed and the ice damper must be in place.

NOTICE!

Anytime the ice machine is in the **OFF** or **FULL BIN** state, the ice machine will drain water until the sump is empty.

1. Startup Cycle

The startup cycle consists of the self-diagnostic and refrigeration startup sequences.

Self-Diagnostics

Upon startup, the ice machine performs a series of self-diagnostic tests to ensure proper operation of critical components. During this brief period the ice machine will fill and drain with water. This tests component operations as well as helps rid the ice machine of undesirable sediment from the sump.

Refrigeration Startup

The ice machine will then energize the harvest valve and start the refrigeration system in the **HARVEST** cycle. This is to ensure no ice remains on the evaporator before the ice machine enters the **FREEZE** cycle.

2. Freeze Cycle

The water pump energizes, and water is circulated over the evaporator that is being chilled by the refrigeration system. As more heat is removed from the water, it begins to freeze and build ice on the evaporator. As the cycle continues the ice grows thicker and the water level in the sump begins to drop. Once enough water is frozen to form a full sheet of ice the water level is low enough that the water level sensor will initiate the **HARVEST** cycle. The water pump and fan motor(s) will de-energize.

3. Harvest Cycle

The harvest valve, drain valve and water inlet valve energize, which allows sediment to drain and starts to refill the sump water for the next cycle. As hot refrigerant flows into the evaporator, it begins to warm the evaporator enough to release ice from the evaporator. The ice will fall and contact the damper door at the bottom of the evaporator. The damper will pivot down to an open position and, if the ice storage unit is not full, the damper will pivot back up to closed position. This signals the ice machine to start another **FREEZE** cycle. The ice machine will continue to repeat the **FREEZE** and **HARVEST** cycles until the ice storage unit is full.

4. Full Bin

When the ice storage unit is full, the sheet of ice will prevent the damper door from pivoting back up to a closed position. After several seconds of the damper remaining open, the ice machine will shut off and display **FULL BIN**. The drain valve will energize and drain the remaining water from the sump to prevent sediment build-up. Once the ice melts or ice is removed from the ice storage unit, the damper will pivot back to a closed position and the ice machine will restart in the **STARTUP** cycle.

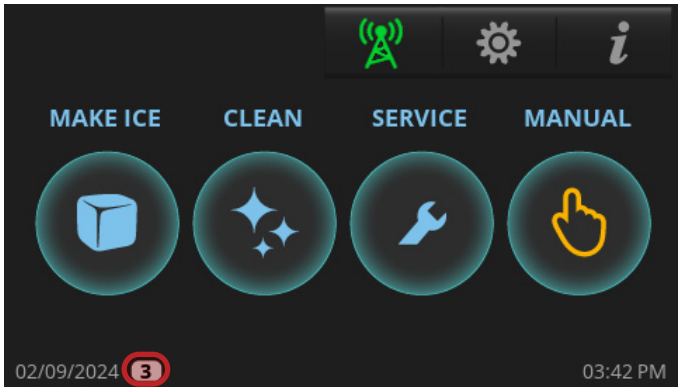
Ice Machine Operation (cont.)

Access Levels & Password Entry

The TCIM has four access levels that regulate access to machine functions:

- **Access Level 0:** Meant for the end user.
- **Access Level 1:** Meant for the ice machine owner.
- **Access Level 2:** Meant for a qualified service technician.
- **Access Level 3:** Meant for the manufacturer.

The display shows the current access level in the lower left of the display (next to the date).



See the "Function Availability by Access Level" table for a breakdown of what functions are available in which access level. To change the current access level, you must logout (for Access Level 0) or enter a password (see "Password Entry" (pg. **60**)).

Ice Machine Operation (cont.)

Access Levels & Password Entry (cont.)

Function Availability by Access Level

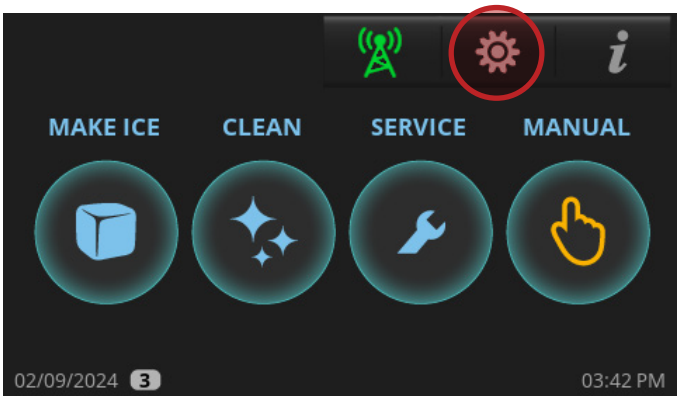
Function Availability by Access Level				
		ACCESS LEVEL		
FUNCTIONS	SUB-FUNCTIONS	0	1	2
MAKE ICE	Turning the ice machine ON or OFF		X	X
CLEAN			X	X
RCU	Reverse Condenser Fan		X	X
MANUAL	Fill		X	X
	Drain		X	X
	Circulate		X	X
	Harvest		X	X
MENU	Date, Hour, Language		X	X
	Scheduling		X	X
	Parameters			Limited
	Ice Thickness [BIG]		X	X
	Levels of water hardness or scale [SCA]		X	X
	Ice Level Sensor [TOF]			X
	Light (N/A)			
	UV info			X
	Water Filter			X
	Counters/Reminders			X
Information Screen	Temperature and Pressure Graph			X
	Active Alarms			X
	Alarm Log			X
	Statistics			X
Touching Screen to Hide Screen Saver		X	X	X
Touching Screen to Silence Alerts		X	X	X

Ice Machine Operation (cont.)

Access Levels & Password Entry (cont.)

Password Entry

1. In the home screen, press the **MENU** icon.

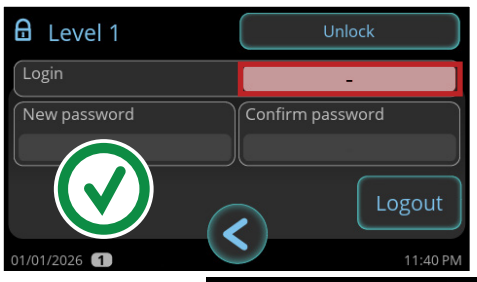


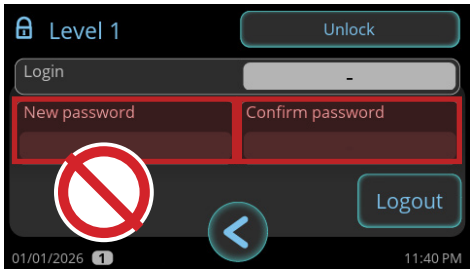
2. Press the **Access Level** icon.

3. Press the white login text box.

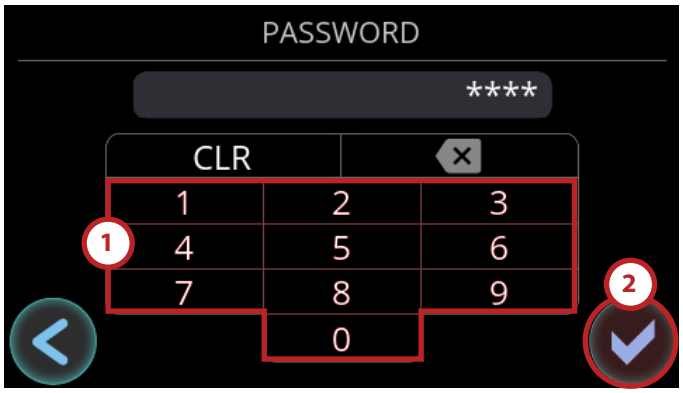
IMPORTANT! **Be advised, pressing Logout changes the display to Access Level 0. Password entry will then be required to turn the TCIM off/on.**

IMPORTANT! **DO NOT create a password.**

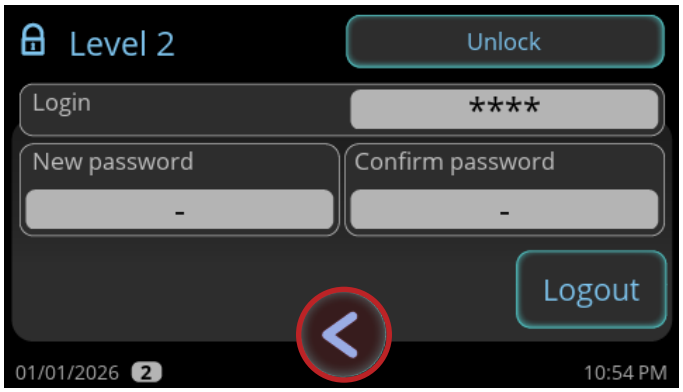




4. In the password entry screen, enter the appropriate password for the desired access level. Then, press okay.
   - **Access Level 1:** 0012
   - **Access Level 2:** 0813
   - **Access Level 3:** Contact True Ice Technical Support



5. Press the **BACK** arrow twice (x2) to return to the home screen.



Ice Machine Operation (cont.)

Adjust Ice Thickness

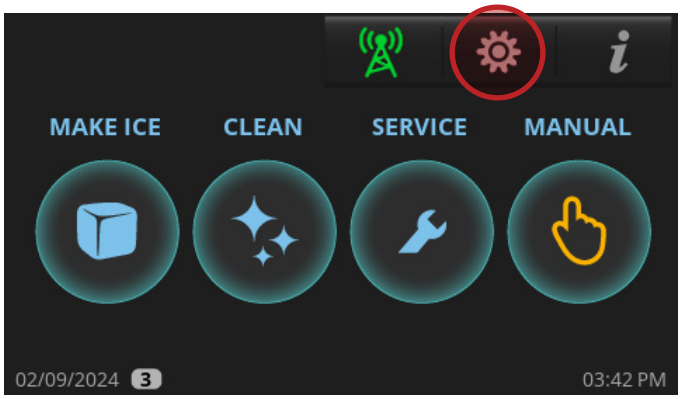
The ice bridge holds the ice cubes together. The ice thickness ranges from -6 to 6. The TCIM is factory set for a bridge thickness of about 1/8" (3.18 mm) at 0; this provides the optimal production of pounds of ice per day. Adjusting the bridge thickness also adjusts the ice dimple.

True recommends adjusting the ice thickness one numerical increase or decrease at a time. Wait at least 24 hours after each adjustment before making another change.

Fig. 1. The ice bridge holds the ice cubes together.

Procedure

1. In the upper right corner of the screen, press the **MENU** icon.



2. In the **MENU** screen, press **Ice Thickness**.

3. In the Ice Thickness screen, enter the desired ice thickness. Then press okay.

   - For thinner ice, enter a number 1 to 6 and then press +/- button. -6 is the thinnest setting.
   - For thicker ice, enter a number 1 to 6. 6 is the thickest setting.

4. Press the **BACK** icon to return to the home screen.

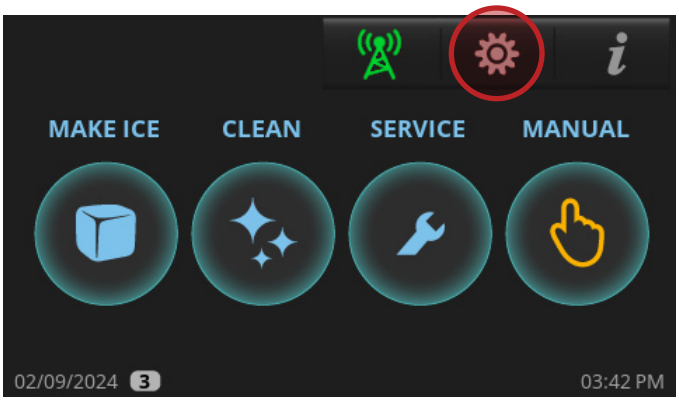
Ice Machine Operation (cont.)

Adjust Reminder Settings

There are three reminders that can be adjusted:

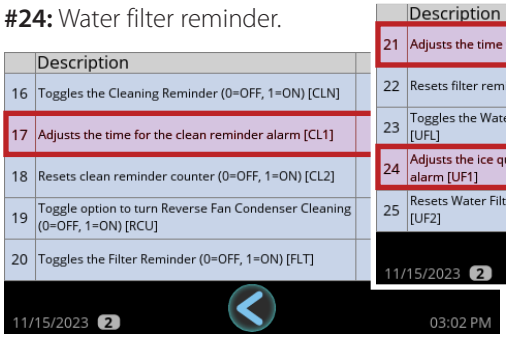
- Evaporator cleaning (Descale/Sanitize).
- Air filter cleaning.
- Water filter (also see "Water Filter Installation & Setup", pg. 34).

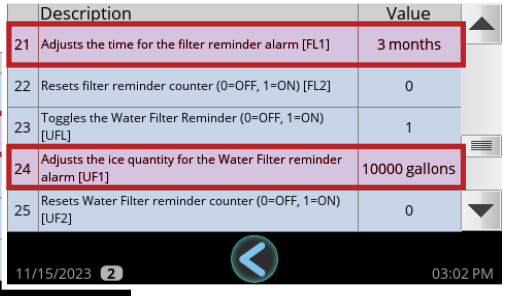
1. In the upper right corner of the screen, press the **MENU** icon.



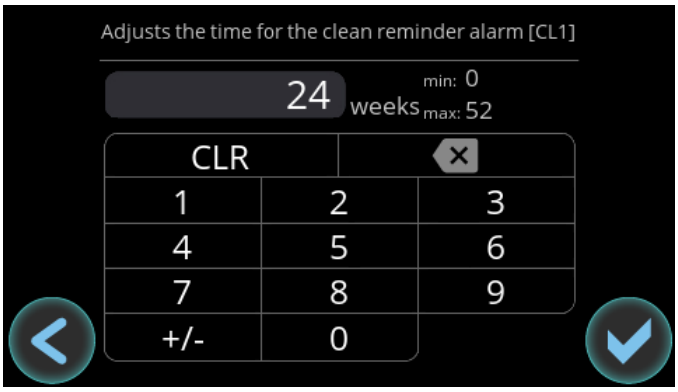
2. In the **MENU** screen, press **Parameter Settings** .

3. With the scroll bar, scroll to the desired parameter:
   - **#17:** Evaporator cleaning reminder.
   - **#21:** Air filter/condenser cleaning reminder.
   - **#24:** Water filter reminder.

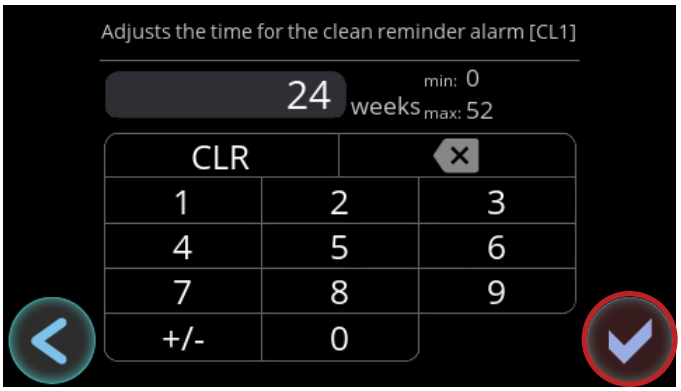




4. Press anywhere on the desired parameter's row. Then, in the number pad, enter the desired setting.



5. Press okay .



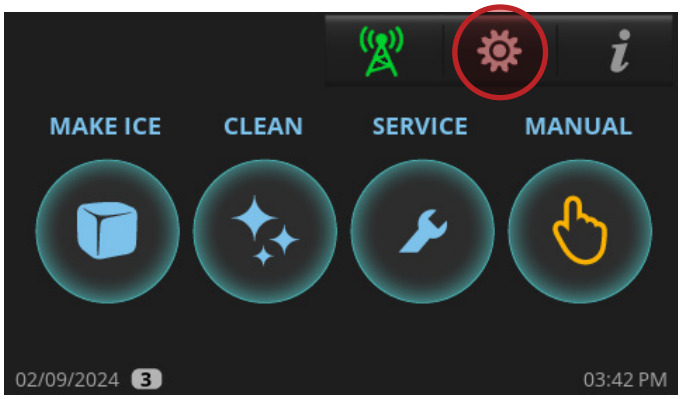
Ice Machine Operation (cont.)

Schedule Operation

Set a schedule to turn the ice machine **ON** and **OFF** automatically.

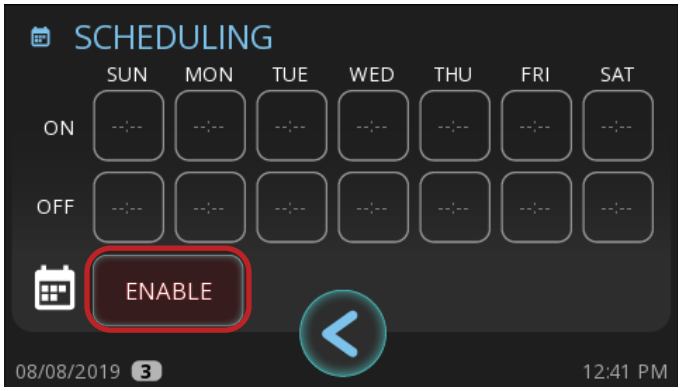
Turn Schedule ON

1. In the upper right corner of the screen, press the **MENU** icon.



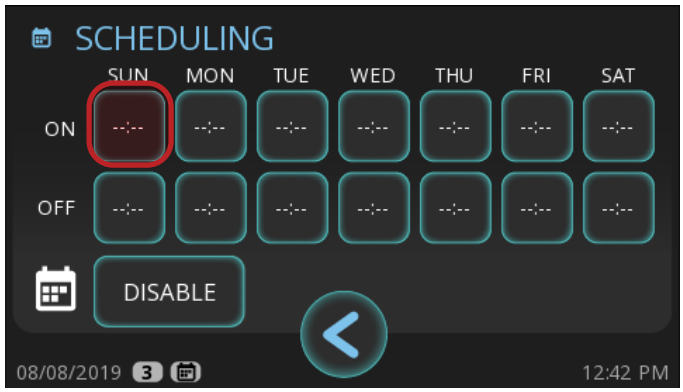
2. In the **MENU** screen, press **SCHEDULING**.

3. In the **SCHEDULING** screen, press **ENABLE**.



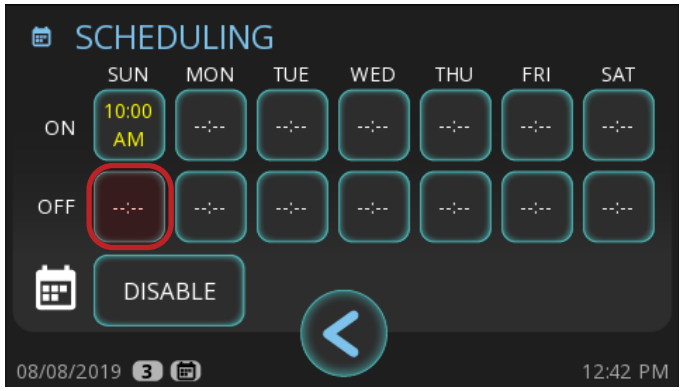
Turn Schedule ON (cont.)

4. In the **ON** row, press a day of the week.



5. In the **ON** screen, enter the desired time for the ice machine to turn on, and then press okay.

6. In the **SCHEDULING** screen, in the **OFF** row, press the same day of the week.

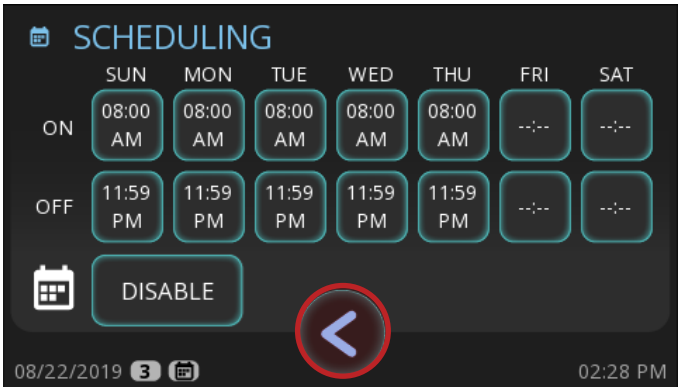


Ice Machine Operation (cont.)

Schedule Operation (cont.)

Turn Schedule ON (cont.)

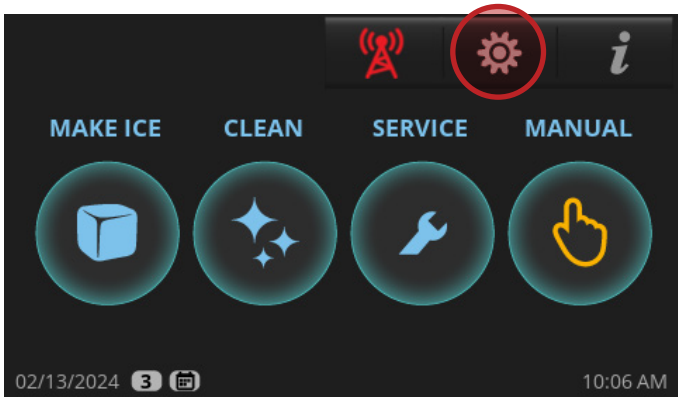
7. In the **OFF** screen, enter the desired time for the ice machine to turn off, then press okay.
8. Repeat steps 4-7 as needed for each day of the week. Then, press return to go back to the **MENU** screen.



Scheduling is enabled when the small **CALENDAR** icon appears in the lower left corner of the screen.

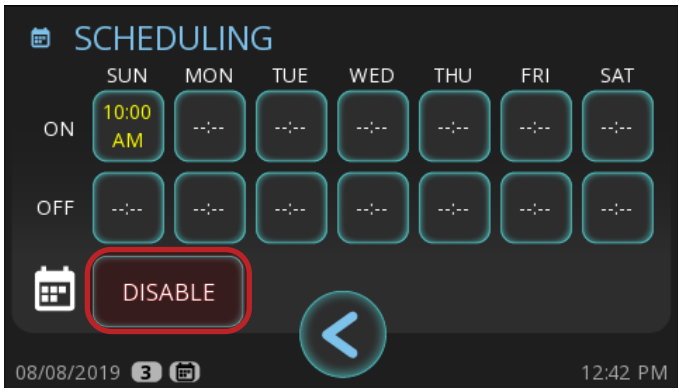
Turn Schedule OFF

1. In the upper right corner of the screen, press **MENU**.



2. In the **MENU** screen, press **SCHEDULING**.

3. In the **SCHEDULING** screen, press **DISABLE**.

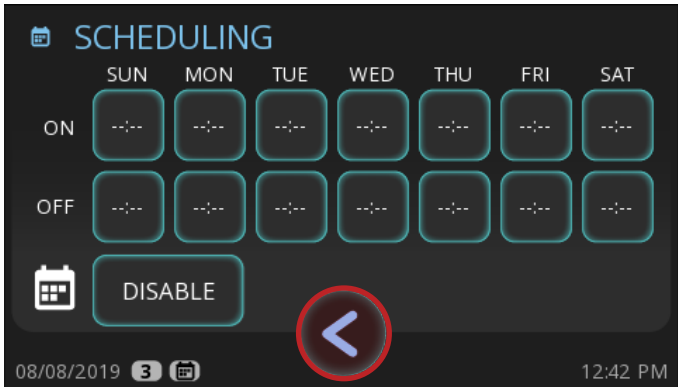


Ice Machine Operation (cont.)

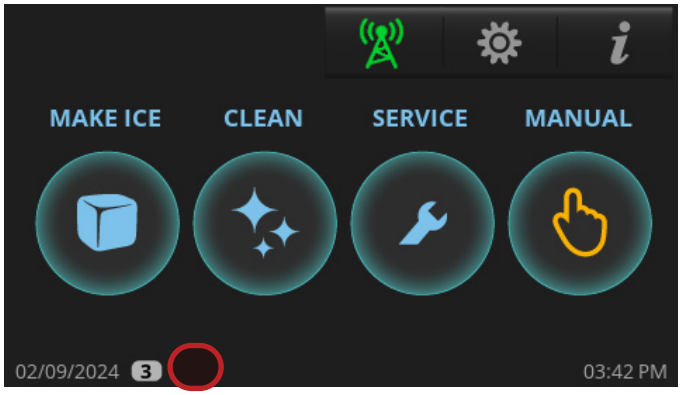
Schedule Operation (cont.)

Turn Schedule OFF (cont.)

4. After the **ON** and **OFF** rows clear, press return to go back to the **MENU** Screen.



Scheduling is disabled when the small **CALENDAR** icon **DOES NOT** appear in the lower left corner of the screen.



Adjust for Water Quality

The water quality setting allows your ice machine to easily accommodate different levels of water quality/hardness/scale.

The available settings range from 0 (soft water/low scale) to 5 (hard water/high scale). See fig.1.

The unit default setting is 0 to maintain energy star operation. If you are unsure of your water quality, check your water with a water quality test kit (not provided by True).

Each increase in setting decreases daily ice production. Setting above 3 is not recommended for most applications.

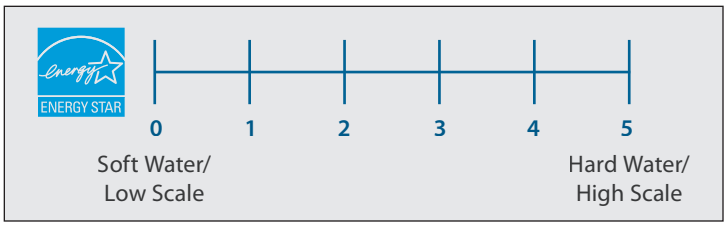
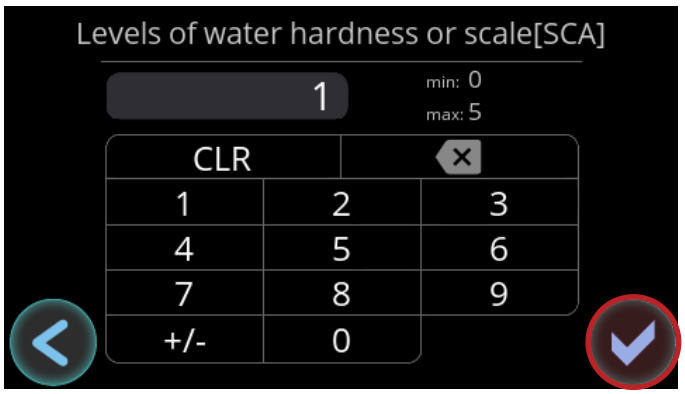


Fig. 1. Water quality setting range.

1. In the upper right corner of the screen press the **MENU** icon.
2. In the **MENU** screen, press Set Water Hardness or Scale .

3. In the **Levels of water hardness or scale [SCA]** screen, enter the desired setting, and then press okay .



Ice Machine Operation (cont.)

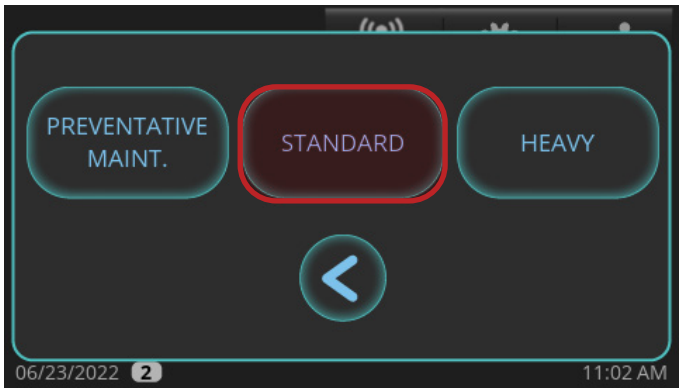
Cleaning Navigation

The procedure that follows is not the cleaning and sanitizing instructions. This section details the navigation to start a descaling and or sanitizing cycle. Please see "Descaling & Sanitizing Procedures" (pg. 84) for full instruction on descaling and sanitizing the machine.

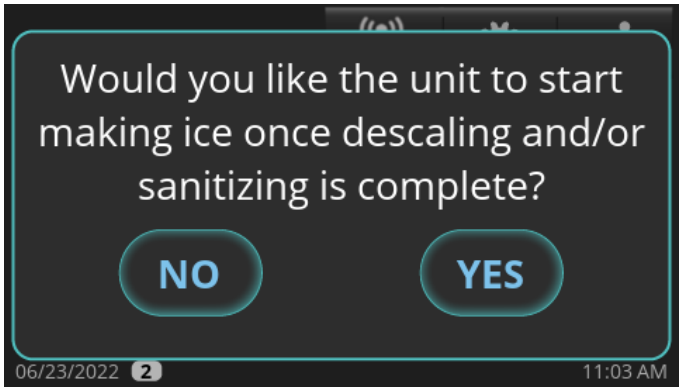
1. In the home screen, press **CLEAN**.

2. Press the desired cleaning option.
   DESCALE: Descaling with approved True Mfg. descaler only.
   SANITIZE: Sanitizing with bleach only.
   BOTH: Descale and Sanitize.

3. If **DESCALE** or **BOTH** was pressed, choose between the following options.
   PREVENTATIVE MAINTENANCE: Shorter cycles; use between bi-annual maintenance.
   STANDARD: Normal cycle times; use when performing regular bi-annual maintenance.
   HEAVY: Longer cycle times; use when heavy scaling on parts is obvious.



4. When **"Would you like the unit to start making ice once descaling and/or sanitizing is complete?"** appears, press either **NO** or **YES**. The ice machine will go into **PRE-CLEANING**.



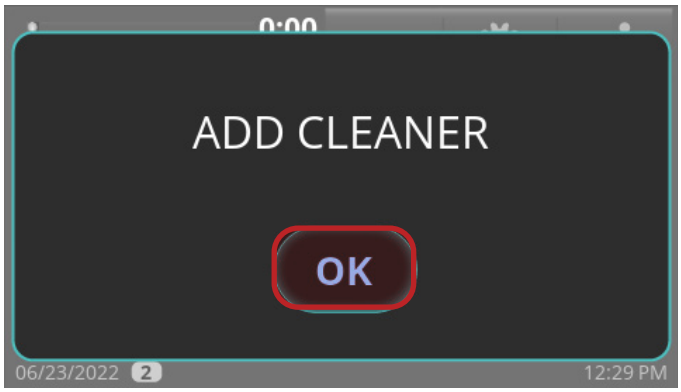
Ice Machine Operation (cont.)

Cleaning Navigation (cont.)

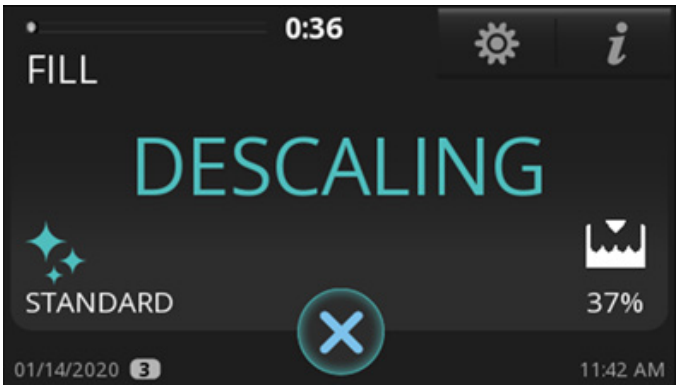
5. Wait for the ice machine to run through the **PRE-CLEANING** sequence (**FILL, PUMP, DRAIN,** and **HARVEST**). If there is enough water in the sump at the start of **CLEAN**, it will go through a **DRAIN** sequence before FILL. The compressor will start during the **HARVEST** sequence to ensure there is no ice on the evaporator and will shut off before the cleaning sequence continues.

6. When **ADD CLEANER** appears, add the proper amount of descaler or sanitizer as directed in "Descaling and Sanitizing Procedures". Then press **OK** button.

NOTICE › The cleaning cycle will not proceed from this point unless OK is pressed after adding the TRUE ice machine descaler or chlorine bleach (5.25% sodium hypochlorite).



7. Wait for the ice machine to complete the Descaling and Sanitizing sequences. There will be a series of rinse, drain and fill sequences during this time.

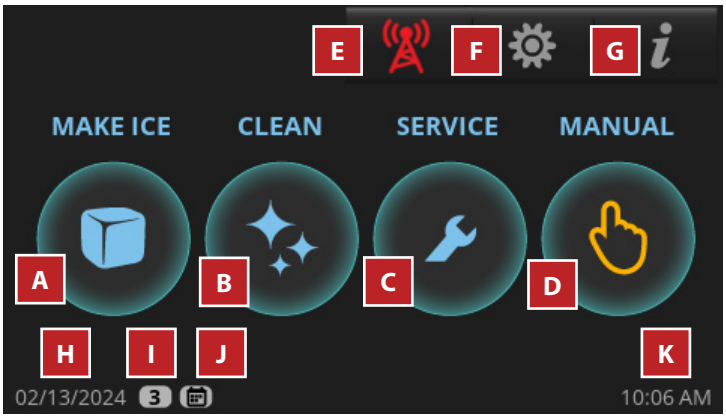


Notes

Basic Display Information

Home Screen

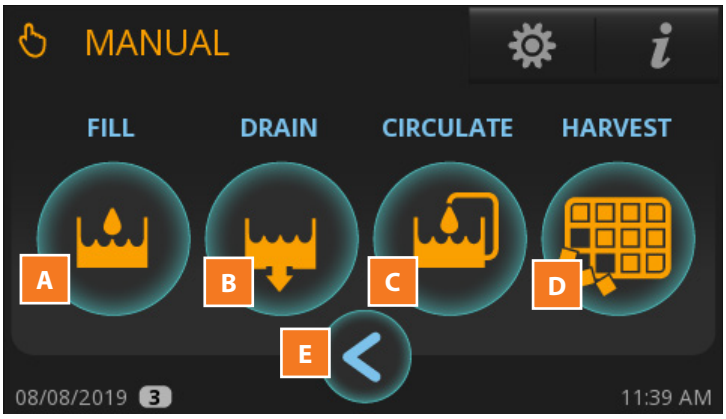
The default display screen.



Parts of the MAIN Screen	
A	**MAKE ICE:** starts the ice making sequence.
B	**CLEAN:** starts the cleaning sequence.
C	**Preventative Maintenance Timers:** opens "counters" screen.
D	**MANUAL:** opens "manual" screen.
E	**Remote Monitoring:** displays remote monitoring QR code.
F	**MENU:** opens "menu" screen.
G	**INFO:** opens "real time" screen.
H	**Current date**
I	**Access Level Setting:** See Function Availability by Access Level (pg. 59).
J	**Scheduling is Enabled:** see "schedule operation" (pg. 63).
K	**Current time**

Manual Screen

Allows for manual operation of the four modes pictured.

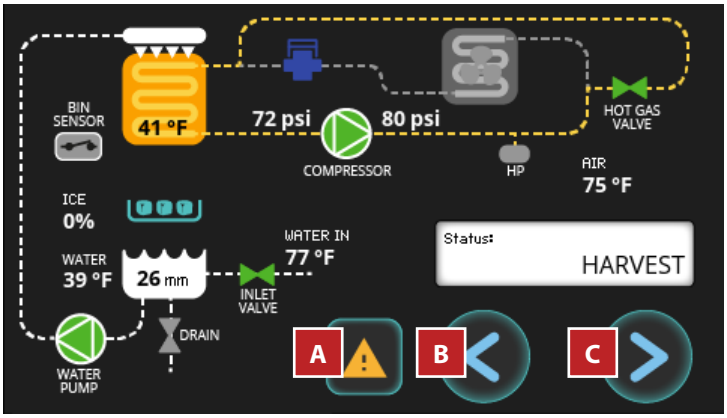


Parts of the MANUAL Screen	
A	**FILL:** allows for manual fill of sump.
B	**DRAIN:** allows for manual drain of sump.
C	**CIRCULATE:** allows for manual water circulation.
D	**HARVEST:** allows for manual harvest.
E	**BACK:** goes back to previous screen.

Basic Display Information (cont.)

Real Time Screen

Displays current status of ice machine sensors and components. Green indicates component is energized.



Parts of the REAL TIME screen	
A	Access to Alarms
B	**BACK:** Goes Back to Previous Screen
C	**FORWARD:** Access to Info Screen

Alarm Log Screen

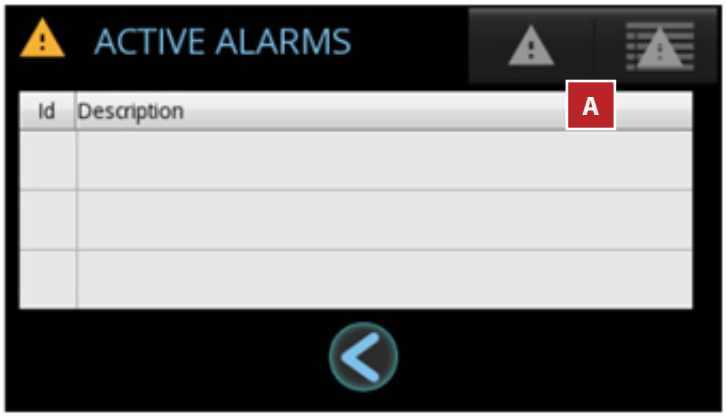
Shows previous recorded alarms.

Parts of the ALARM LOG Screen	
A	Clears the Alarm Log

Basic Display Information (cont.)

Active Alarm Screen

Shows any alarms that are currently active.



Parts of the ACTIVE ALARM Screen	
A	Access to Alarm Log

Status Screen

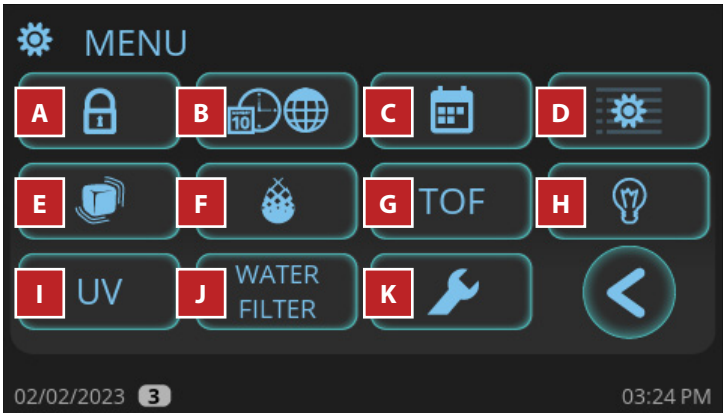
Shows current mode of operation once the **MAKE ICE** icon is pressed.

Parts of the STATUS Screen	
A	Only Used with Bin Level Management Sensor
B	Turns Ice Machine Off

Basic Display Information (cont.)

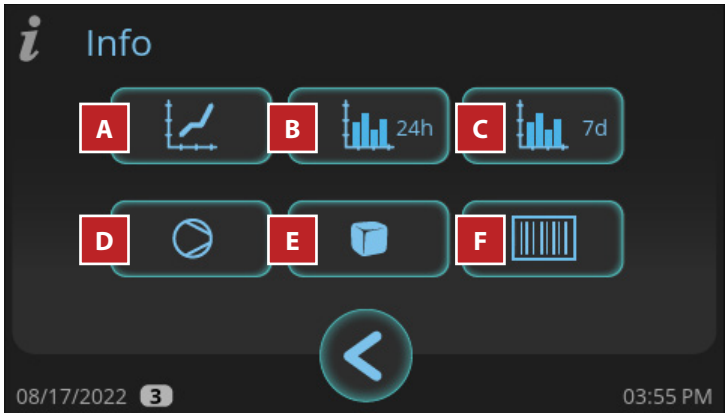
Menu Screen

The default display screen.



Parts of the MENU Screen	
A	Password Protected Access Level Login
B	Set Language, Temperature, Time and Date Format
C	Set Schedule to Turn Ice Machine On and Off
D	Service Settings Screen; Parameter settings
E	Ice Thickness Adjustment
F	Set "Level of Water Hardness or Scale [SCA]"
G	Enable Use of Bin Level Sensor
H	N/A
I	TrueZone® Status (if so equipped)
J	Water Filter Selection
K	Preventative Maintenance Timers

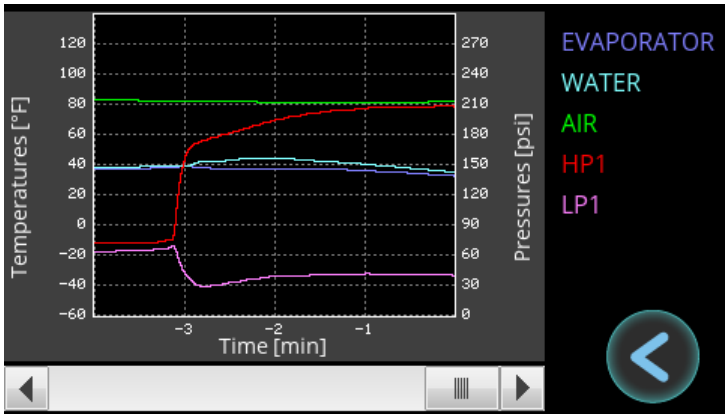
Info Screens



Parts of the INFO Screen	
A	Real Time Graph
B	Daily Ice Level
C	Weekly Ice Level
D	Runtime Statistics
E	Cycle History
F	Ice Machine Information

Real Time Graph Screen

Graphs various temperatures and pressures over the last 24 minutes.

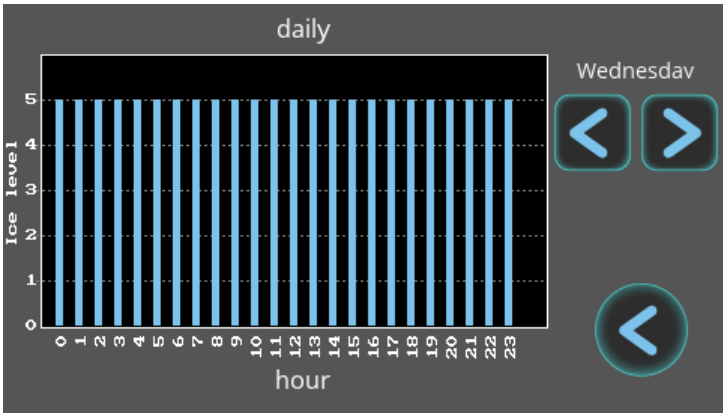


Basic Display Information (cont.)

Info Screens (cont.)

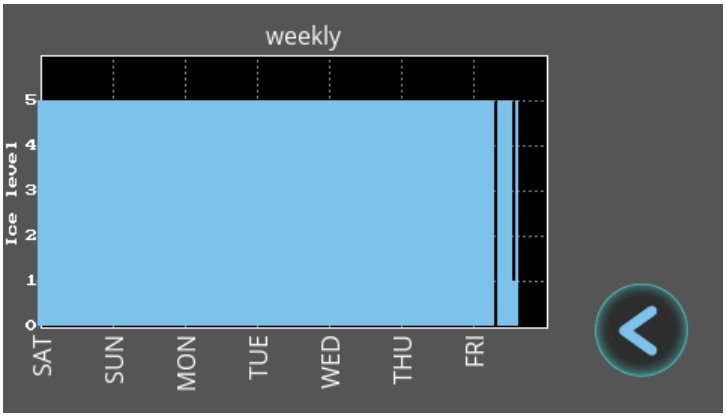
Daily Ice Level Screen

Graphs the ice level over a 24-hour period.



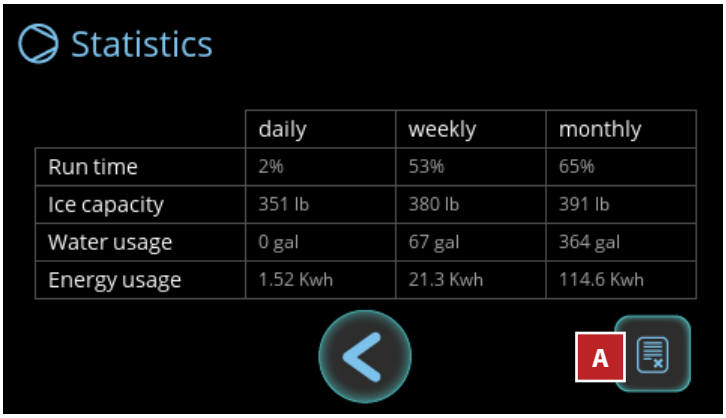
Weekly Ice Level Screen

Graphs the ice level over the past seven days.



Runtime Statistics Screen

Displays runtime percentage, ice capacity, and utility consumption over different periods of time.



Parts of the RUNTIME STATISTICS Screen	
A	Reset Statistics

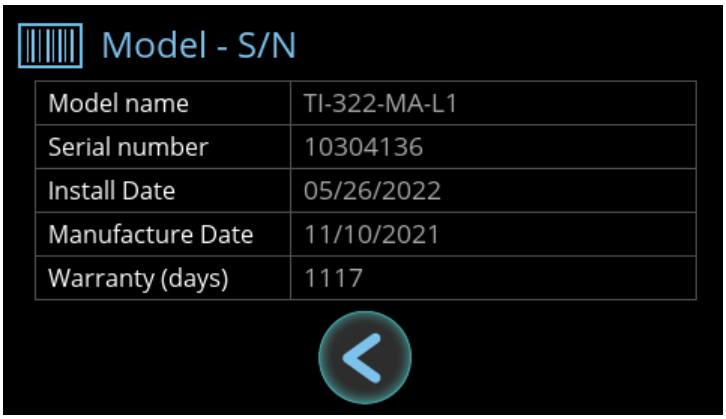
Cycle History Screen

Displays the last 5 freeze and harvest times.

Parts of the CYCLE HISTORY Screen	
A	Reset Cycle History

Ice Machine Information Screen

Displays model name, serial number, install date, manufactured date, and warranty days remaining.



Notes

Maintenance & Servicing

⚠ DANGER!

Risk of Electric Shock or Burn!

Toggling the rocker switch does not remove power from all components. Unplug the ice machine or turn off the circuit breaker/remove the fuse before installation or servicing.

- **DO NOT** clean your ice machine with a pressure washer or hose.

Flammable refrigerant used! Have a licensed service provider service your appliance to minimize the risk of possible ignition due to incorrect parts or improper service and to ensure the operator's health and safety.

⚠ WARNING!

- Only qualified technicians should install and service the appliance. For assistance locating a refrigeration service technician in your area for installation, servicing or maintenance, please visit our Service Company Locator at truemfg.com/support/service-locator. TRUE is solely the appliance manufacturer and is not responsible for installation, service, and routine maintenance.
    - Training for refrigerating appliance installation, repair, maintenance, and decommissioning procedures is carried out by national training organizations or manufacturers that are accredited to teach the relevant national competency standards that may be set in legislation. The achieved competence should be documented by a certificate.
- Turn off and lockout all utilities (gas, electric, water) according to approved practices during maintenance or servicing.

Moving Parts Hazard!

Moving parts can cut. Keep hands clear when panels are removed.

⚠ WARNING! (cont.)

The appliance owner is responsible for performing a Personal Protective Equipment (PPE) Hazard Assessment and ensuring adequate protection during maintenance and cleaning procedures.

Use appropriate tools, safety equipment, and PPE during installation and servicing.

Sharp Edges!

Take care when moving, installing, cleaning, servicing, and maintaining the ice machine to avoid cuts. Be sure to take care when reaching under the ice machine or handling metal components.

- Stay clear of pinch point areas, such as the space between appliance doors and surrounding cabinetry. Take care closing doors with children nearby.

Tip Over Hazard!

Ice machine may pose a tipping hazard when uncrating, installing, or moving the appliance. Take appropriate safety precautions. Use of tip over restraints may only reduce (not eliminate) the tipping hazard. Never allow children to climb or hang on drawers, doors, or shelves.
Two or more people are required to move this equipment to prevent tipping.

Crush or Cut Hazard!

Keep clear of moving components. Components can move without warning unless power is disconnected.

Optical Radiation Hazard! UV Light!

Invisible laser radiation. Do not look directly at light. Always disconnect power before servicing the lamp.

Maintenance & Servicing (cont.)

⚠ WARNING! (cont.)

Replace component parts with original equipment manufacturer (OEM) components to minimize the risk of possible ignition due to incorrect parts or improper service. True is not responsible for defects or damage caused by parts not approved by TRUE. Warranty will be voided for any damage caused by a non-OEM part.

❗ USER ACTION!

- When servicing the ice machine, check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges, or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.
- **DO NOT** use power cleaning equipment, steel wool, scrapers or wire brushes on stainless steel or painted surfaces

❗ NOTICE!

- The appliance owner is responsible for maintaining the ice machine as described in this document. Routine care and maintenance procedures are not covered by True's warranty.
- Servicing shall be performed only as recommended by the manufacturer.

Refrigerant Handling

General Precautions

- Before you begin, perform safety checks to ensure there are no flammable hazards or ignition risks.
- Always display the "No Smoking" safety placard near the work area.
- Notify people in the local area on the nature of the work being carried out.
- Always have a CO_2 or dry-powder fire extinguisher available.
- Do not work in a confined space. Ensure the area is open or adequately ventilated before breaking into the refrigeration system or performing any hot work. Continue ventilating while work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.
- Work shall be undertaken under a controlled procedure to minimize the risk of flammable gas or vapor being present while the work is being performed.
- Check for the presence of refrigerant with an appropriate refrigerant detector prior to and during work to ensure you are aware of potentially toxic or flammable atmospheres. Ensure the leak detector is suitable for use with HC.
- Do not use ignition sources near exposed pipe work. Keep all ignition sources, including cigarette smoking, far away from the work site when refrigerant can possibly be released to the surrounding space.
- When changing electrical components, be sure they are correct specification.
- Repair and maintenance to electrical components shall include safety checks and component inspection. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment, so all parties are advised. Initial safety checks include:
  - Capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking.
  - No live electrical components and wiring are exposed while charging, recovering or purging the system.
  - There is continuity of earth bonding.
  - Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using an open flame) shall not be used.

Maintenance & Servicing

Refrigerant Handling (cont.)

General Precautions (cont.)

The following checks shall be applied to installations using FLAMMABLE REFRIGERANTS:

- The actual REFRIGERANT CHARGE is in accordance with the room size within which the refrigerant containing parts are installed.
- Marking to the equipment continues to be visible and legible.
- Markings and signs that are illegible shall be corrected.

Leak Detection

- Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using an open flame) shall not be used.
- Electronic leak detectors may be used to detect refrigerant leaks but, in the case of Flammable Refrigerants, the sensitivity might not be adequate, or might need recalibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25 % maximum) is confirmed.
- Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine can react with the refrigerant and corrode the copper pipe work.

  NOTICE › An example of leak detection fluid is the bubble method. If a leak is suspected, all open flames shall be removed/extinguished. If a leakage of refrigerant is found which requires brazing, all of the 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.

Removal

When breaking into the refrigerant circuit to make repairs – or for any other purpose – conventional procedures shall be used. However, for flammable refrigerants it is important that best practice be followed, since flammability is a consideration. The following procedure shall be adhered to:

1. Safely remove refrigerant following local and national regulations.
2. Purge the circuit with inert gas.
3. Evacuate.
4. Purge with inert gas.
5. Open the circuit by cutting or brazing.
   - With oxygen-free dry nitrogen, set pressure to 3-5 psi (0.21-0.34 bar) and purge for two (2) minutes prior to brazing. Continue purging nitrogen through the system until all brazing is complete. This procedure is required for servicing HC equipment.
   - For appliances containing flammable refrigerants, 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.
   - For appliances containing flammable refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to 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 vs. Venting

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed from the appliance safely. TRUE recommends removing refrigerant by venting the refrigerant in an open or well-ventilated area without any sources of ignition present. Always have an electronic leak detector present to prevent flammable atmospheres.

Maintenance & Servicing (cont.)

Refrigerant Handling (cont.)

Recovery vs. Venting (cont.)

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. 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 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.

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.

If compressors or 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. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.

Charging

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

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

Charging Procedure

1. Ensure the system has been leak checked.
2. Evacuate system to a minimum 500 micron.
3. Weigh in the correct charge.
4. Leak check the system again.
5. Bleed the refrigerant from the high side hose to the low side hose.
6. Carefully disconnect the hoses, to limit the refrigerant loss.
7. Remove the line taps.

Sealing the System

Remove line taps from the system.

- Use a pinch-off tool prior to sealing the process tube ends.
- Thoroughly leak check the process tube ends before brazing.

Maintenance & Servicing (cont.)

Decommissioning

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 is commenced.

a. Become familiar with the equipment and its operation.

b. Isolate the system electrically.

c. Before attempting the procedure, ensure that:

i. mechanical handling equipment is available, if required, for handling refrigerant cylinders;

ii. all personal protective equipment is available and being used correctly;

iii. the recovery process is supervised at all times by a competent person;

iv. recovery equipment and cylinders conform to the appropriate standards.

d. Pump down refrigerant system, if possible.

e. If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.

f. Make sure that cylinder is situated on the scales before recovery takes place.

g. Start the recovery machine and operate in accordance with instructions.

h. Do not overfill cylinders (no more than 80% volume liquid charge).

i. Do not exceed the maximum working pressure of the cylinder, even temporarily.

j. When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.

k. Recovered refrigerant shall not be charged into another REFRIGERATION SYSTEM unless it has been cleaned and checked.

Equipment shall be labeled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing FLAMMABLE REFRIGERANTS, ensure that there are labels on the equipment stating the equipment contains FLAMMABLE REFRIGERANT.

Removal from Service & Winterization

If storing your ice machine for an extended time or in sub-freezing temperatures, winterize the appliance.

USER ACTION!

DO NOT ALLOW THE ICE MACHINE TO BE EXPOSED TO TEMPERATURES BELOW 32˚F (0˚C) WITHOUT WINTERIZING THE UNIT AS THIS WILL CAUSE ANY WATER IN THE MACHINE TO FREEZE. FAILURES CAUSED BY EXPOSURE TO FREEZING TEMPERATURES ARE NOT COVERED BY THE WARRANTY.

NOTICE!

If the ice machine will not be used for 2-3 days under normal conditions turn the unit off .

1. Clean and sanitize the ice machine. See "Descaling and Sanitizing Procedures" (pg. 84).
2. Turn off the water supply.
3. Disconnect and drain the water supply line at the rear of the ice machine and drain the sump.
4. In the Home Screen, press **MANUAL** . Then, press **FILL** . Wait for 3 seconds then blow compressed air in the water supply fitting in the rear of the ice machine to remove all water.
5. When complete, press cancel to exit the manual drain operation.
6. In the Home Screen, press **MANUAL**. Then, press **DRAIN** . Wait for 3 seconds then blow compressed air in the drain fitting in the rear of the ice machine to remove all water. When complete, press cancel to exit the manual drain operation.
7. Disconnect electrical power at the main disconnect/circuit breaker.

WARNING!

DO NOT rinse the parts with clean water after sanitizing. Let them air dry.

8. Fill spray bottle with sanitizer and spray all interior food zone surfaces.
9. Reinstall all panels.

Maintenance & Servicing (cont.)

Cleaning the TRUE TIME-OF-FLIGHT® Sensor

Routine cleaning of the ice level sensor is not required. Cleaning is only necessary if the lens has any obstructions (smudges, water droplets, dust, scale, condensation, etc.).

1. Remove the grill.
   a. **Top Grill Models** – Loosen the top right and left screws that secure the front grill on the ice machine and remove
   b. **Side Grill Models** – Loosen door screws then open the door and grill.
2. Remove the top panel and the right-side panel.
3. Remove the 2 screws holding the bracket to the plastic case. See fig. 1.
4. Pull the assembly out and flip it upside down to reveal the lens. See fig. 2.
5. With a clean microfiber cloth, wipe the lens from the outside of the housing. The side in the housing does not require cleaning.

   NOTICE › Any smudges or residue can result in the TOF sensor showing a false 100% value.
6. Insert the assembly back into the ice machine ensuring the assembly sits down in the plastic case cutout.
7. Secure bracket to the side of the plastic case with the bracket screws while holding the assembly down to ensure it is sitting properly.

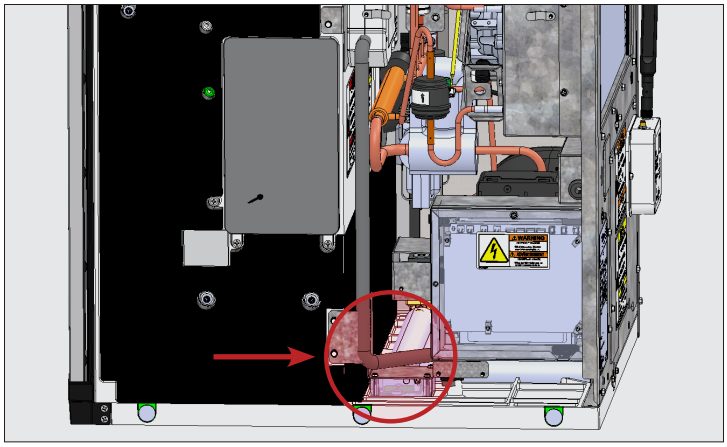


Fig. 1. Ice level sensor assembly location.

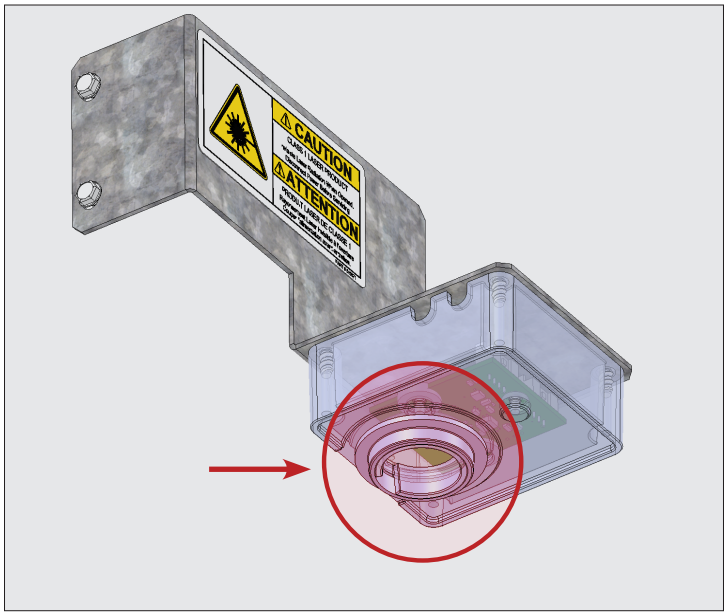


Fig. 2. Ice level sensor lens location.

TrueZone® Air & Surface Clean-In-Place (CIP) System (Optional Accessory)

TrueZone® is an air and surface clean-in-place (CIP) system for ice machines. This process inhibits the growth of common micro-organisms on all exposed food zone surfaces and kills flu and other viruses. The CIP system also helps prevent the formation of slime, mold, and yeast, in addition to controlling bacteria in hard-to-reach areas that are difficult to clean. The UV bulb lasts for 9,000 hours.

Maintenance & Servicing (cont.)

TrueZone® Air & Surface Clean-In-Place (CIP) System (Optional Accessory) (cont.)

Bulb Replacement Instructions

⚠ WARNING!

Optical Radiation Hazard! UV Light!
Invisible laser radiation. Do not look directly at light. Always disconnect power before servicing the lamp.

Electrical Shock or Burn Hazard! High Voltage Inside!

- Toggling the rocker switch does not remove power from all components. Unplug the ice machine or turn off the circuit breaker/remove the fuse before servicing.
- Open circuit voltage and voltage to ground 600v.

Sharp Edges!
Take care when installing, cleaning, servicing, and maintaining the ice machine to avoid cuts. Be sure to take care when reaching under the appliance or handling metal components.

Do not dispose of lamps with household waste. Lamps contain mercury. Recycle the lamps so the mercury, metal and glass can be reclaimed, and they do not enter our water system.
Visit search.earth911.com and search for a local recycling solution.

! NOTICE!

- The bulb counter automatically resets/recalculates when replaced. Any errors/alarms automatically clear.
- The UV bulb lasts for 9,000 hours.

Procedure

1. Disconnect power to the ice machine.

   NOTICE › Let the bulb cool at least two minutes before proceeding.

2. Open the front panel. See "Panel Removal" (pg. 41).
3. Remove the top panel or right panel (see "Panel Removal" (pg. 41) to access the UV bulb.
4. Locate the TrueZone UV system. See figs. 1 and 2.
5. **Right Access Only:** Remove the TrueZone bracket screws and slide the TrueZone UV system towards you. See fig. 2
6. Remove the bulb assembly from the TrueZone UV system.
7. Disconnect the electrical harness from the bulb assembly. Connect the replacement bulb to the electrical harness.
8. Install the replacement bulb assembly.

   NOTICE › Be sure the notch in the rubber seal faces the TrueZone's outlet air tube. See fig. 3.

9. Restore power and verify operation.
10. If applicable, reinstall the TrueZone UV system. See fig. 2.
11. Reinstall all covers and panels removed to access the bulb.

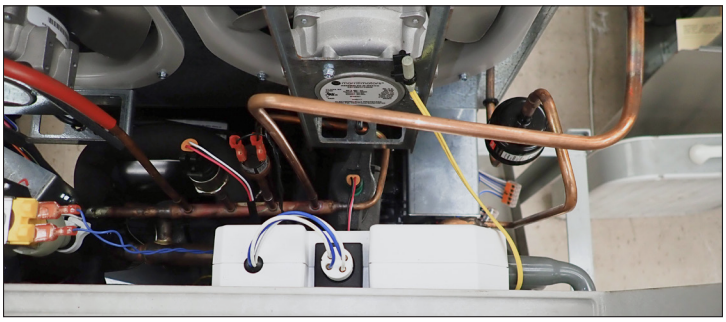


Fig. 1. TrueZone UV system top view.

Fig. 2. TrueZone UV system side view. TrueZone bracket screw locations.

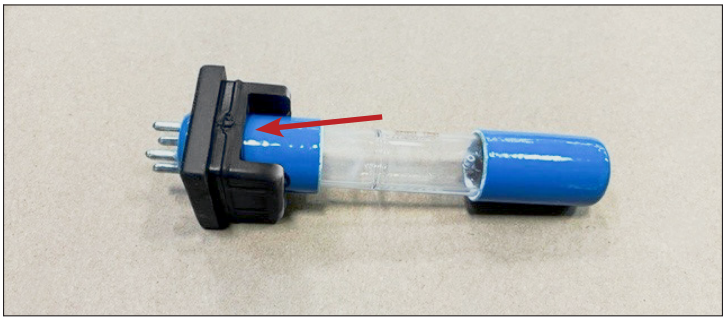


Fig. 3. Notch in the rubber seal.

Maintenance & Servicing (cont.)

TrueZone® Air & Surface Clean-In-Place (CIP) System (Optional Accessory) (cont.)

Cleanup Procedure for Accidental Lamp Breakage

⚠ WARNING!

The appliance owner is responsible for performing a Personal Protective Equipment (PPE) Hazard Assessment and ensuring adequate protection during maintenance and cleaning procedures. Use appropriate tools, safety equipment, and PPE during installation and servicing.

These lamps contain a small amount of mercury sealed within the glass tubing. When a lamp breaks, some of this mercury is released as mercury vapor. The broken lamp can continue to release mercury vapor until it is cleaned and removed from the area. These lamps fall under the same category as compact fluorescent light (CFL). To minimize exposure to mercury vapor, the EPA recommends that residents follow the cleanup and disposal steps described below.

This cleanup guidance represents the minimum actions recommended to clean up a broken CFL. For more detailed instructions and information, please see U.S. Environmental Protection Agency (EPA) website at **www.epa.gov**.

The most important steps to reduce exposure to mercury vapor from a broken lamp include the following:

Before Cleanup...

1. Have people and pets leave the room
2. Air out the room 5-10 minutes by opening a window or door to the outdoor environment.
3. Shut off any central forced air heating/air-conditioning systems. Collect materials needed to clean up broken lamp
   - Stiff paper or cardboard
   - Sticky tape
   - Damp paper towels or disposable wet wipes (for hard surfaces)
   - A glass jar with a metal lid or a sealable plastic bag

During Cleanup...

1. Thoroughly collect broken glass and visible powder.

⚠ WARNING!

Do not vacuum broken glass fragments!
Vacuuming is not recommended unless broken glass remains after all other cleanup steps have been taken. Vacuuming could spread mercury-containing powder or mercury vapor.

2. Place cleanup materials in a sealed container.

After Cleanup...

1. Promptly place all lamp debris and cleanup materials outdoors in a trash container or protected area until materials can be disposed of. Avoid leaving any lamp fragments or cleanup materials indoors.

   NOTICE › Some localities require fluorescent lamps (broken or unbroken) be taken to a local recycling center. Check with your local government about disposal requirements in your area. If there is no such requirement, you can dispose of the materials with your household trash.

2. If practical, continue to air out the room where the lamp was broken and leave the heating/air-conditioning system shut off for several hours.

Maintenance & Servicing (cont.)

Recommended Cleaning Frequency

NOTICE!

Maintenance procedures are not covered by warranty.

It is the User's responsibility to keep the ice machine and ice storage bin (or dispenser if applicable) in a sanitary condition in accordance with the instructions in this manual.

When using a non-True Manufacturing bin or dispenser, follow the maintenance guidelines of the manufacturer of the product.

The maintenance schedule below is a guideline. More frequent maintenance may be required depending on water quality, environment, and local sanitation regulations.

Recommended Cleaning Schedule

Frequency	Component	Task
Daily	Ice Scoop	Clean with sanitizer or neutral cleaner and rinse thoroughly.
Monthly	Water Filter	• Check for proper outlet pressure and change if less than 20 psig (138 kPa) • Check the "Water Passed Through Filter" counter in the "Counters" section in the "MENU" screen.
	Ice Machine and Bin Exterior (or dispenser, if applicable)	• Wipe surfaces with a damp cloth rinsed in water to remove dust and dirt from the outside of the ice machine and bin. For greasy residue use a damp cloth rinsed in a mild dish soap and water solution. Wipe dry with clean, soft cloth. • The exterior panels have a clear coating that is stain resistant and easy to clean. Products containing abrasives will damage the coating and scratch the panels.
	Air Filter	Inspect and wash with warm water and neutral cleaner if dirty.
Quarterly	Ice Machine	Preventative Maintenance Cleaning and Sanitizing Procedure.
Bi-Annually	Ice Machine and Bin (or dispenser, if applicable)	Descaling and Sanitizing Procedure.
As Directed by Service Professional	Air Cooled Condenser	In areas with airborne contaminates (i.e. grease), chemical cleaning of the condenser will be required. This should only be done by a service professional.

Maintenance & Servicing (cont.)

Exterior Cleaning

USER ACTION!

If a greasy residue remains on the surface, use a mild dish soap and water solution with a damp cloth. Wipe dry with a clean, soft cloth.

NOTICE!

The exterior panels have a clear coating that is stain resistant and easy to clean. Products containing abrasives will damage the coating and scratch the panels.

- Never use steel wool or abrasive pads.
- Never use chlorinated, citrus based or abrasive cleaners on exterior panels and plastic trim pieces.

- Clean the area around the ice machine as needed to maintain cleanliness and efficient operation.
- Wipe surfaces with a damp cloth rinsed in water to remove dust and dirt from the ice machine's exterior.

Descaling & Sanitizing Procedures

DANGER!

HIGHLY CORROSIVE CLEANING CHEMICALS.
Avoid contact with eyes and skin. Wear eye protection and chemical-resistant rubber gloves when handling. Keep out of reach of children.

WARNING!

Toxic Material Hazard!
DO NOT MIX DESCALER WITH SANITIZER.
Harmful fumes may be generated.

Optical Radiation Hazard! UV Light!
Invisible laser radiation. Do not look directly at light. Always disconnect power before servicing the lamp.

USER ACTION!

True recommends using TRUE Ice Machine Descaler. To purchase, contact True Parts Department at 800-424-8783 or partsinquiries@truemfg.com.

If using a non-TRUE descaler (Nickel-safe) recommended dilution for soaking parts is 3 fl oz (88.7 mL) per 1 gal (3.78 L) and recommended amount for evaporator cleaning is 6-8 fl oz (177.4-236.6 mL).

Use of non-recommended descaler may void warranty.

Maintenance & Servicing (cont.)

Descaling & Sanitizing Procedures (cont.)

If necessary, cancel the descaling or sanitizing sequences by pressing cancel. However, the sequences cannot be cancelled after cleaner or sanitizer has been added to the sump and **OK** has been pressed.

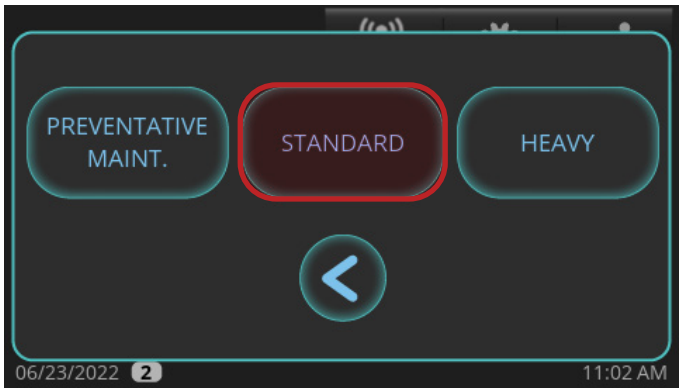
Descaling

1. Remove all ice from the bin (or dispenser if applicable).
2. Loosen the front panel screws and open the front panel.
3. In the home screen press **CLEAN** .

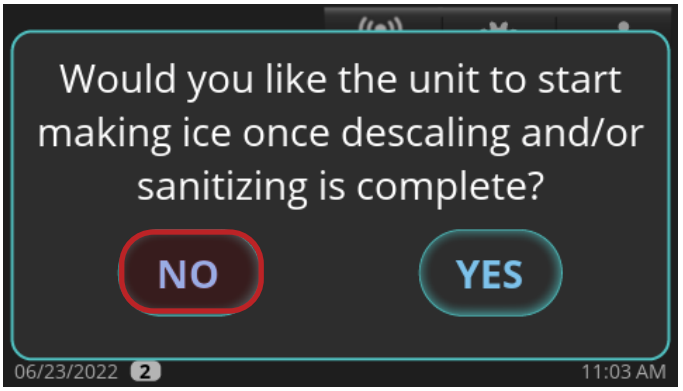
4. Press **DESCALE**.

Descaling (cont.)

5. Choose between the options.
   PREVENTATIVE MAINT.: Shorter cycles; use between bi-annual maintenance.
   STANDARD: Normal cycle times; use when performing regular bi-annual maintenance.
   HEAVY: Longer cycle times; use when heavy scaling on parts is obvious.



6. When **"Would you like the unit to start making ice once descaling and/or sanitizing is complete?"** appears, press **NO**.



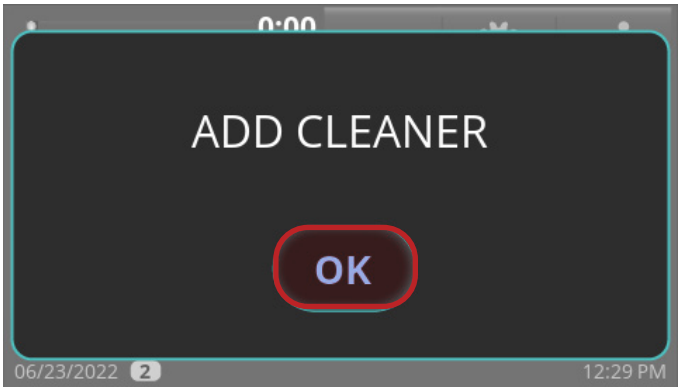
7. Wait for the ice machine to run through the **PRE-CLEANING** sequence (**FILL, PUMP, DRAIN,** and **HARVEST**). If there is enough water in the sump at the start of **CLEAN**, it will go through a **DRAIN** sequence before **FILL**. The compressor will start during the **HARVEST** sequence to ensure there is no ice on the evaporator and will shut off before the cleaning sequence continues.

Maintenance & Servicing (cont.)

Descaling & Sanitizing Procedures (cont.)

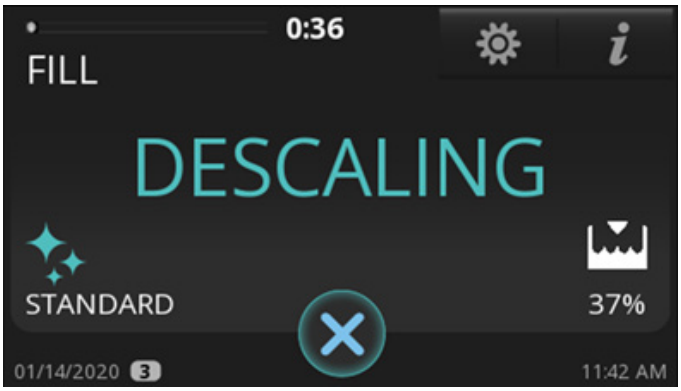
Descaling (cont.)

8. When **ADD CLEANER** appears, open the water curtain and pour 10 oz (296 ml) of TRUE ice machine descaler between the evaporator and the damper.

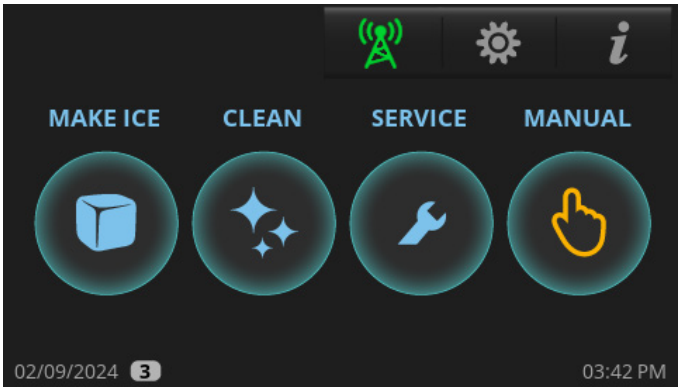


9. After adding descaler, press **OK**. The display will then show the sequence status.

NOTICE › The sequence will not proceed from this point unless OK is pressed after adding the descaler.



10. Wait for the ice machine to complete the cleaning cycle and return to the home screen.

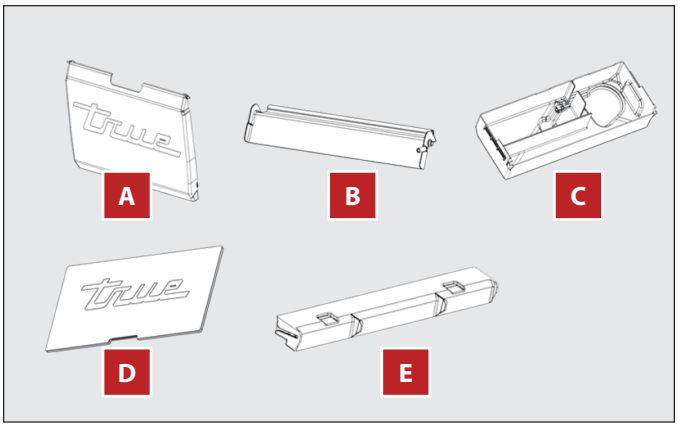


Descaling (cont.)

11. Prepare a solution of 10 fl oz (296 mL) TRUE ice machine descaler to 1 gal (3.8 L) of warm water.

NOTICE › In cases where scale build up is particularly heavy, substitute equal amounts ice machine descaler and warm water.

12. Remove parts for cleaning. See below.



A. Water Curtain: Remove by placing one hand over the top lip of the curtain and the other hand on the side of the curtain. Gently flex the curtain on the side toward the center while gently pulling the top outward.

B. Damper: Remove by pushing the damper down until horizontal, pull forward gently until it stops and then push down until it stops and pull forward.

C. Sump: Reach under the sump and pull off the drain hose. Then place fingers between the left or right bulkhead wall and the side of the sump. Place the other hand over the lip of the sump. Push the sump with your fingers toward the opposite bulkhead wall while pulling the sump in the same direction with your hand until it comes out of the snap bracket. Repeat the process on the other side and remove the sump.

D. Evaporator Area Cover: Remove by pushing up from the inside of evaporator section.

E. Water Distributor: Remove by grabbing the two distributor tabs and pull up slightly then forward.

13. With half of the solution, soak the parts for 5-10 minutes (if heavily scaled, 15-20 minutes). Then with a ***soft nylon bristle brush***, cloth, or sponge, thoroughly clean the parts.

Maintenance & Servicing (cont.)

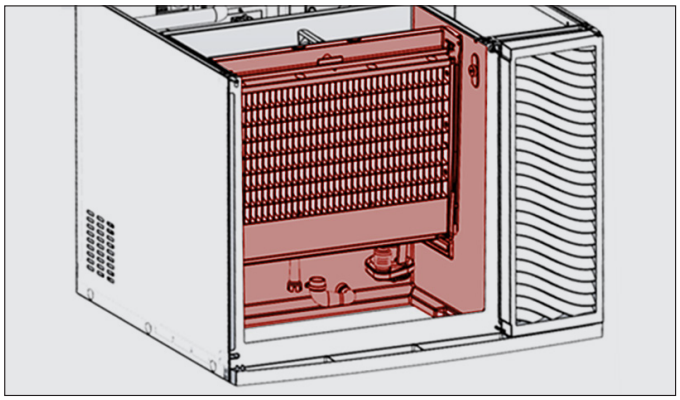
Descaling & Sanitizing Procedures (cont.)

Descaling (cont.)

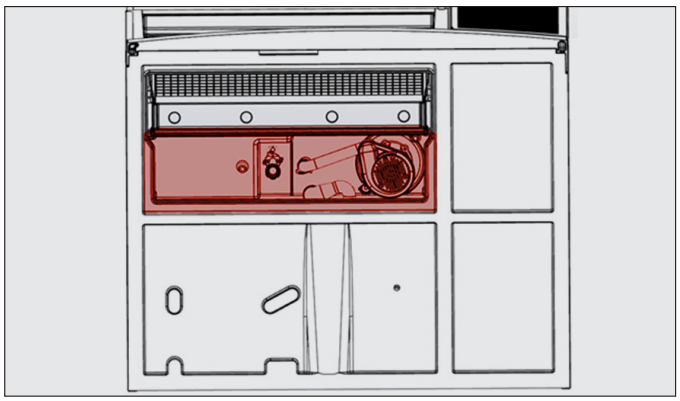
14. Thoroughly rinse the parts with clean water. With the remaining solution and a ***soft nylon bristle brush***, cloth, or sponge, thoroughly clean all food zone areas (shaded components) of the ice machine. These areas include the following:

- Side walls
- Plastic evaporator top frame (where distributor is installed)
- Plastic evaporator sides and bottom
- Water pump base
- Water pump tubing
- Sump drain tubing
- Water level air column
- Base (area above the sump, under the evaporator)

15. Thoroughly clean all food zone areas of the ice bin (or dispenser, if applicable).



Front View

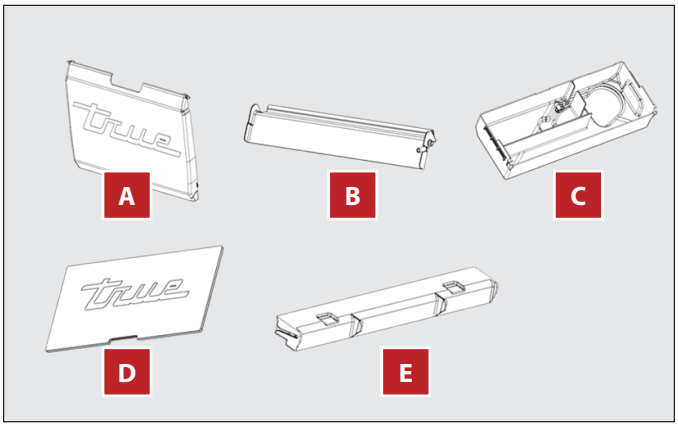


Bottom View

Sanitizing

1. Prepare a solution of 1.5 fl oz (44ml) chlorine bleach (5.25% sodium hypochlorite) to 3 gal. (11.4 L) of warm water. Use half of the solution to sanitize all the removed parts from the cleaning procedure.

2. Remove parts for cleaning. See below.



A. Water Curtain: Remove by placing one hand over the top lip of the curtain and the other hand on the side of the curtain. Gently flex the curtain on the side toward the center while gently pulling the top outward.

B. Damper: Remove by pushing the damper down until horizontal, pull forward gently until it stops and then push down until it stops and pull forward.

C. Sump: Reach under the sump and pull off the drain hose. Then place fingers between the left or right bulkhead wall and the side of the sump. Place the other hand over the lip of the sump. Push the sump with your fingers toward the opposite bulkhead wall while pulling the sump in the same direction with your hand until it comes out of the snap bracket. Repeat the process on the other side and remove the sump.

D. Evaporator Area Cover: Remove by pushing up from the inside of evaporator section.

E. Water Distributor: Remove by grabbing the two distributor tabs and pull up slightly then forward.

Maintenance & Servicing (cont.)

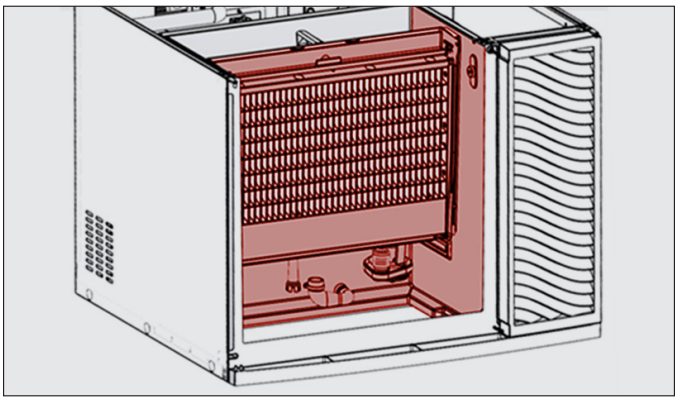
Descaling & Sanitizing Procedures (cont.)

Sanitizing (cont.)

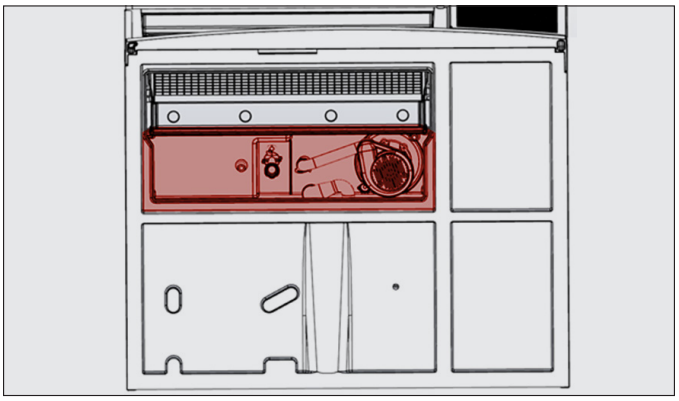
3. Use half of the solution to sanitize all the removed parts from the cleaning procedure. Soak all the parts in the solution for one minute and then **allow them to air dry**.

⚠ WARNING!	
	**DO NOT** rinse the parts with clean water after sanitizing. Let them air dry.

4. With a spray bottle, heavily spray all food zone areas with the sanitizing solution. These areas include the following:
   - Side walls
   - Plastic evaporator top frame (where distributor is installed)
   - Plastic evaporator sides and bottom
   - Water pump base
   - Water pump tubing
   - Sump drain tubing
   - Water level air column
   - Base (area above the sump, under the evaporator)
5. Reinstall the sanitized components and wait 10 minutes.



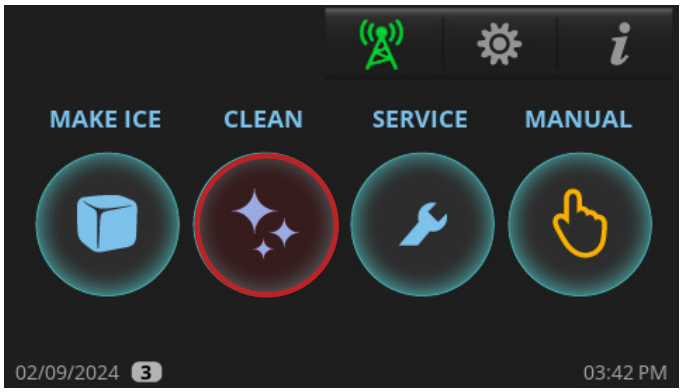
Front View



Bottom View

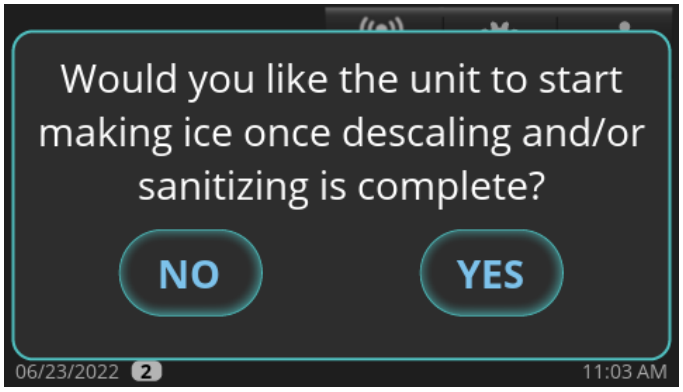
Sanitizing (cont.)

6. In the home screen, press **CLEAN** .



7. Press **SANITIZE**.

8. When **"Would you like the unit to start making ice once descaling and/or sanitizing is complete?"** appears, press either **NO** or **YES**. The ice machine will go into **PRE-CLEANING**.

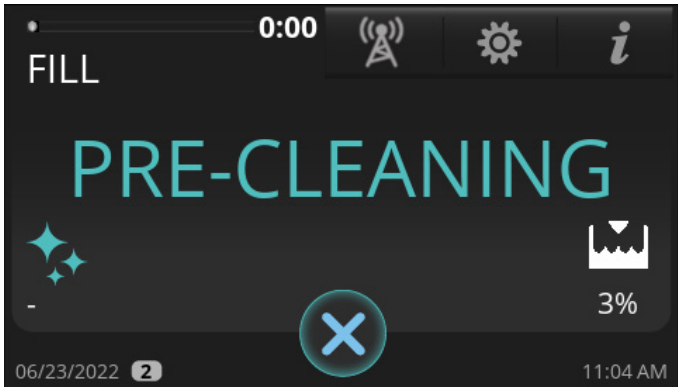


Maintenance & Servicing (cont.)

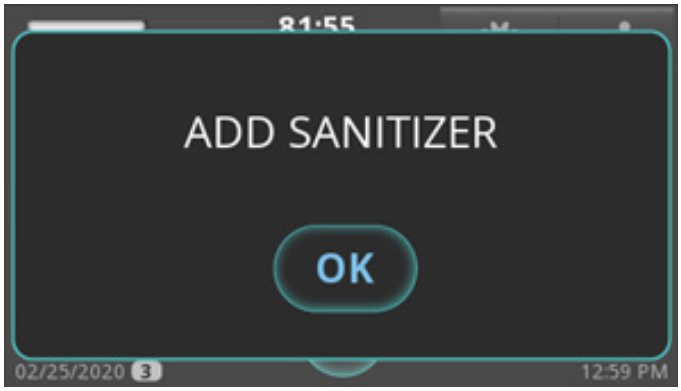
Descaling & Sanitizing Procedures (cont.)

Sanitizing (cont.)

9. Wait for the ice machine to run through the **PRE-CLEANING** sequence (**FILL**, **PUMP**, **DRAIN**, and **HARVEST**). If there is enough water in the sump at the start of **CLEAN**, it will go through a **DRAIN** sequence before **FILL**. The compressor will start during the **HARVEST** sequence to ensure there is no ice on the evaporator and will shut off before the cleaning sequence continues.



10. When **ADD SANITIZER** appears, open the water curtain and pour in 4.5 oz (133 ml) chlorine bleach (5.25% sodium hypochlorite) between the evaporator and the damper.



Sanitizing (cont.)

11. After adding chlorine bleach (5.25% sodium hypochlorite), press **OK**. The display will then show the sequence status.

NOTICE › The sequence will not proceed from this point unless OK is pressed after adding chlorine bleach (5.25% sodium hypochlorite).

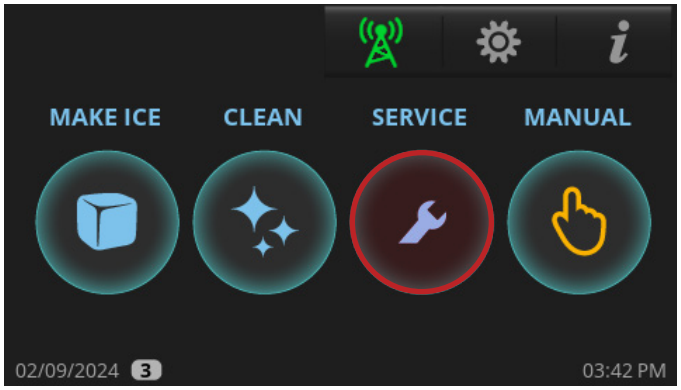
12. When the sanitizing sequence finishes, the ice machine will either go into **STANDBY** mode or return to **MAKE ICE** mode based on the choice made in step 8.

Maintenance & Servicing (cont.)

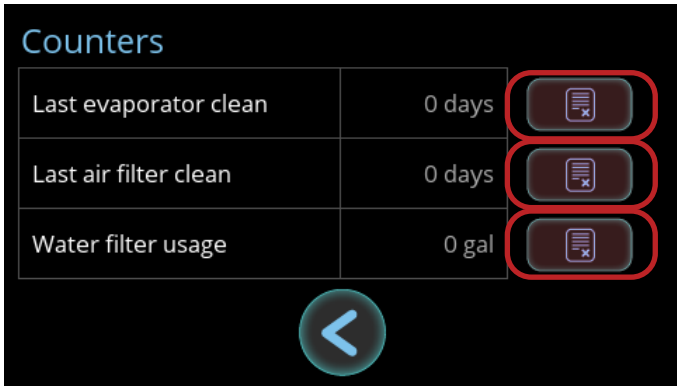
Reset Reminders

Reset preventative maintenance reminders after performing preventative maintenance.

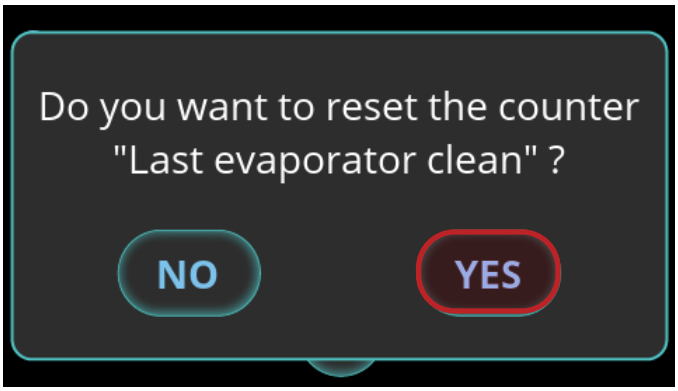
1. Press **SERVICE**.



2. In the **Counters** screen, press the appropriate reset reminder icon .



3. In the confirmation screen, press **YES**.



Troubleshooting

General Troubleshooting

Before contacting a service provider, please check the items below.

General Troubleshooting Checklist		
Problem	**Possible Cause**	**Possible Remedy**
Ice machine does not come on, display is dark.	No power supplied to the ice machine.	• Turn breaker on. • Replace blown fuse • Turn disconnect on. • Check rocker switch.
Ice machine does not come on, display is on.	• Ice machine scheduled to be off. • Ice machine turned off. • Ice machine off on alert.	• Cancel schedule. • Press "Make Ice" icon. • Reset the ice machine by pressing the "Make Ice" icon until the ice machine beeps then press "Make Ice" icon again.
Low production, ice is malformed or melted when it falls off the evaporator.	• Dirty evaporator. • Ice machine is not level.	• Clean and sanitize the ice machine. • Level the ice machine.
Low production, but ice looks normal.	• Dirty condenser. • High ambient air temperature.	• Clean the condenser. • Reduce air temperature around the ice machine.
Poor ice quality, cloudy and soft.	• Ice machine is dirty. • Poor quality water supply. • No water filtration. • Water softener problems (if applicable).	• Clean and sanitize the ice machine. • Contact company that can test the water supply and make water treatment recommendations. • Install water filtration. • Contact water softener manufacturer for service.
Ice machine produces shallow or incomplete cubes, or the ice fill pattern on the evaporator is incomplete.	• Ice thickness is set too thin. • Not enough water in sump. • Hot water feeding ice machine. • Ice machine not level.	• Adjust ice bridge thickness to 1/8" (3.18 mm) See "Adjust Ice Thickness" (pg. 61). • Confirm water pressure is 20 psig (138 kPa) minimum, change water filter, clean water inlet valve screen. • Connect cold water supply line, call plumber if connected to hot water supply. • Level the ice machine.

Troubleshooting (cont.)

Time-of-Flight® Sensor Troubleshooting

Time-of-Flight® Sensor Troubleshooting Checklist		
Problem	**Possible Cause**	**Possible Remedy**
Value is always 100%	• Empty Bin Distance (EBD) and Full Bin Distance (FBD) set incorrectly.	• Read "Enable TRUE TIME-OF-FLIGHT® (TOF) Sensor" setup Section (pg. 49) to setup EBD and FBD. • Change EBD by 1 cm increments up to +/- 5 cm until Value changes. • Change FBD by 1 cm increments up to +/- 3 cm until Value changes.
	• Contaminant on lens.	• Perform cleaning.
	• TOF Sensor installed incorrectly.	• Confirm TOF sensor is sitting down in plastic case cutout.
	• Time-of-Flight® (TOF) not enabled.	• Ensure TOF = 1.
Value is always 0%	• EBD and FBD set incorrectly.	• Read "Enable TRUE TIME-OF-FLIGHT® (TOF) Sensor" setup Section (pg. 49) to setup EBD and FBD. • Change EBD by 1 cm increments up to +/- 5 cm until Value changes. • Change FBD by 1 cm increments up to +/- 3 cm until Value changes.
	• TOF Sensor installed incorrectly.	• Confirm TOF sensor is sitting down in plastic case cutout.

Troubleshooting (cont.)

Error Code Definitions

Error Code Definitions		
Error Code	**Display Message**	**Definition**
E1	ALARM T1 Input	Evaporator outlet temperature probe error
E2	ALARM T2 Input	Ambient air temperature probe error
E3	ALARM T3 Input	Sump water temperature probe error
E4	ALARM T4 Input	Supply water temperature probe error
E6	ALARM High Pressure Safety Switch Open	
E7	ALARM HP1 Input	High pressure transducer error
E8	ALARM LP1 Input	Low pressure transducer error
E9	ALARM Water Level Sensor Input	
E10	Ice level sensor communication error	Time-of-Flight communication error
E11	ALARM Low temperature T1 in freeze	Low temperature at evaporator outlet temperature probe during freeze cycle
E12	ALARM High temperature T1	High temperature at evaporator outlet temperature probe
E13	ALARM Low temperature T1	Low temperature at evaporator outlet temperature probe
E14	ALARM High temperature T2	High ambient air temperature detected at T2 probe
E15	ALARM Low temperature T2	Low ambient air temperature detected at T2 probe
E16	ALARM High temperature T3	High sump water temperature detected
E17	ALARM Low temperature T3	Low sump water temperature detected
E18	ALARM High temperature T4	High supply water temperature detected
E19	ALARM Low temperature T4	Low supply water temperature detected
E20	ALARM High Pressure on HP1	High pressure detected at high pressure transducer
E21	ALARM Drain switch	
E22	ALARM Long Freeze Time	
E23	ALARM Calculation Error - Negative Value	
E24	ALARM Long Fill Time	
E25	ALARM Long Purge Time	
E26	ALARM Long Harvest Time	
E27	ALARM Water Leakage	
E28	ALARM Pump Motor	
E30	ALARM Biozone - Check Comm or Replace Bulb	
E31	ALARM Hot Gas Valve	
E32	ALARM Low Suction Pressure	
H2O	Slow Fill - Check Water Connection	
—	Time for Evaporator Cleaning	
—	Time for Air Filter Cleaning	
—	Time to Replace Water Filter	
—	Harvest Flap Stuck	
—	Time to Replace the TrueZone Bulb	
—	COMM	Display communication error

Warranty Information (USA & Canada Only)

Warranty Information

To view and download the Warranty Information for USA & Canada, please scan the QR code below.

Notes

www.truemfg.com