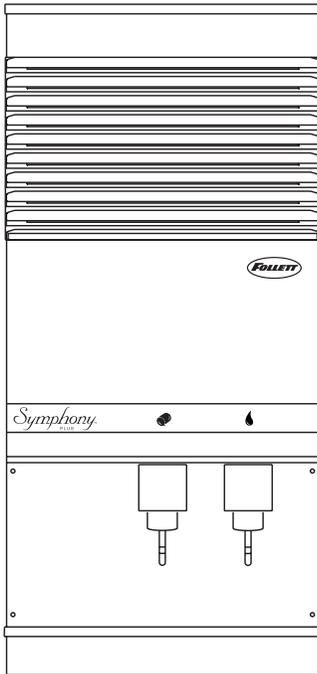
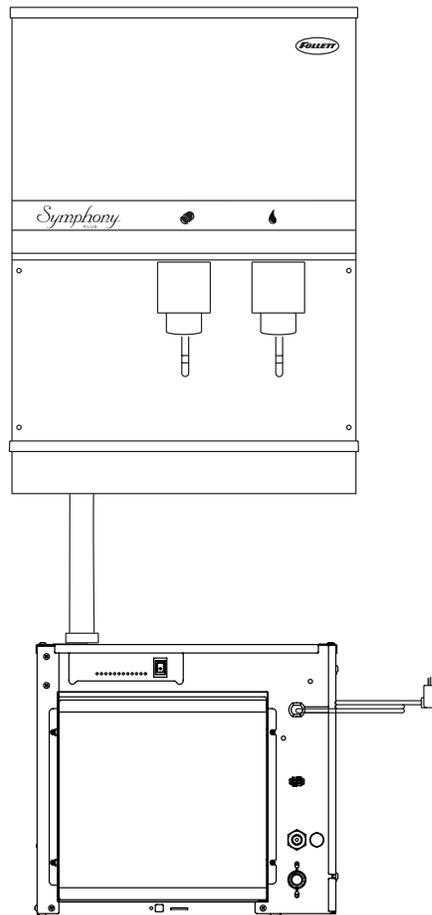


# Symphony Plus™ 110 Series Ice and Water Dispensers

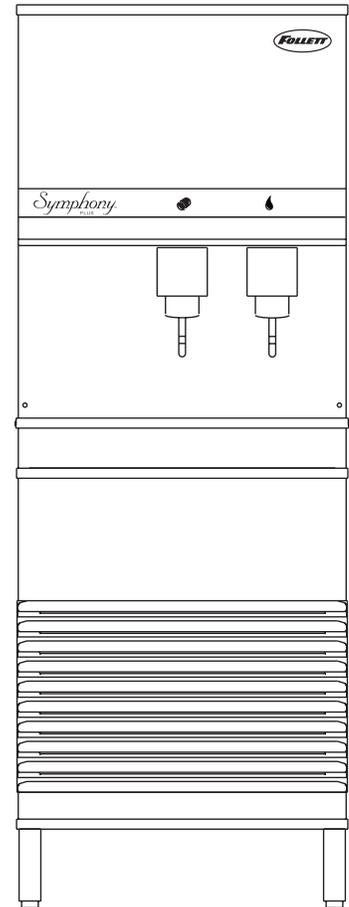
## Operation and Service Manual



110CT425A/W



110CR425A/W



110FB425A/W

**Following installation, please forward this manual  
to the appropriate operations person.**

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## Welcome to Follett

Follett equipment enjoys a well-deserved reputation for excellent performance, long-term reliability and outstanding after-the-sale support. To ensure that this equipment delivers that same degree of service, we ask that you take a moment to review the installation portion of this manual before beginning to install the unit. Our installation instructions are designed to help you achieve a trouble-free installation. Should you have any questions or require technical help at any point, please call our technical service group at (877) 612-5086 or (610) 252-7301.

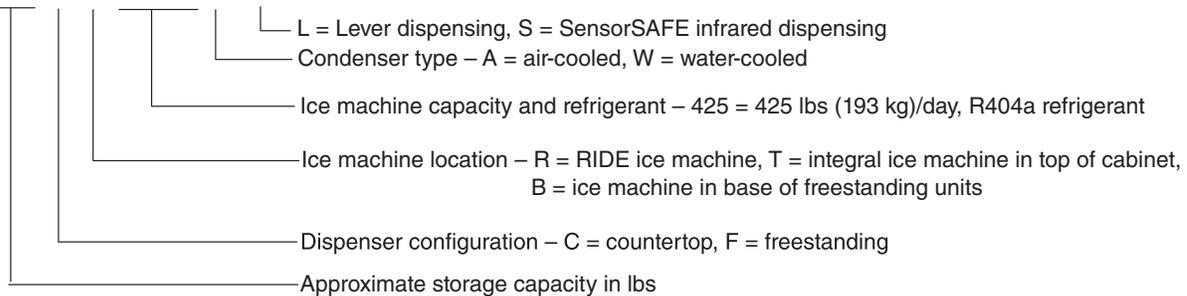
**Note:** To expedite assistance, all correspondence or communication **MUST** include the model number, serial number and complete and detailed explanation of the problem.

### Before you begin

After uncrating and removing all packing material, inspect the equipment for concealed shipping damage. If damage is found, notify the shipper immediately and contact Follett Corporation so that we can help in the filing of a claim, if necessary.

Check your paperwork to determine which model you have. Follett model numbers are designed to provide information about the type and capacity of Follett ice dispensing equipment. Following is an explanation of the different model numbers.

110CT425A-L



### CAUTION!

- Do not tilt any unit further than 30° off vertical during uncrating or installation.
- Dispenser bin area contains mechanical, moving parts. Keep hands and arms clear of this area at all times. If access to this area is required, power to unit must be disconnected first.
- Follett recommends a Follett water filter system be installed in the ice machine inlet water line (standard capacity #00130229, high capacity #00978957, carbonless high capacity #01050442).
- Prior to operation clean and sanitize the dispenser in accordance with instructions found in this manual.
- Ice is slippery. Be sure counters and floors around dispenser are clean, dry and free of ice.
- Do not block right side air intake or top air exhaust.

## Specifications

### Electrical

- Models with RIDE ice machines (110CR425A/W). Ice machine and dispenser require their own separate, dedicated circuit.

	Dispenser with ice machine	Max. circuit	Dispenser without ice machine	Max. circuit
Basic electrical: 115 V/60 Hz/1 phase	11.0A	20A	4.0A	20A

- Freestanding models (110FB425A/W, 110CT425A/W) require a dedicated circuit.

	Total system	Max. circuit
Basic electrical: 115 V/60 Hz/1 phase	11.0A	20A

- Dispensers and RIDE ice machines are supplied with 7-foot power cord with NEMA 5-15 hospital-grade plug. Connect to a dedicated 15A circuit.

### CAUTION!

All field wiring must be installed in accordance with NEC and local electrical codes. Field wiring diagram is intended only to aid electrician or technician in understanding how equipment works.

Model	Electrical connection	Circuits required
110FB425A/W	cord & plug provided	115/60/1, 15A max. fuse size
110CT425A/W	cord & plug provided	115/60/1, 15A max. fuse size
110CR425A/W	cord & plug provided	115/60/1 Dispenser: 15A max. fuse size, Ice machine: 15A max. fuse size

### Ambient

Air temp*	100 F/38 C Max.	50 F/10 C Min. (Best performance below 80 F/27 C)
Water temp†	90 F/32 C Max.	45 F/7.2 C Min. (Best performance below 70 F/21 C)
Water pressure	70 P.S.I./5Bar Max.	10 P.S.I./0.7 Bar Min.

\* Ambient air temperature is measured at the air-cooled condenser coil inlet.

† Ambient water temperature is measured in the ice machine reservoir.

### Plumbing

	110CR with RIDE ice machine	110CT with integral ice machine	110FB with ice machine in base
Dispenser drain	3/4" MPT	3/4" MPT	3/4" MPT
Ice machine drain	3/4" MPT	3/4" MPT	3/4" MPT
Dispenser water inlet	3/8" FPT	3/8" FPT	3/8" FPT
Ice machine water inlet	—	3/8" FPT	—
RIDE IM water inlet	3/8" FPT	—	—
Cond. inlet – w/c only	3/8" FPT	3/8" FPT	3/8" FPT
Cond. drain – w/c only	3/8" FPT	3/8" FPT	3/8" FPT

**Note:** Water shut-off recommended within 10 ft (3 m) of dispenser. Drain to be hard-piped and insulated. Maintain at least 1/4" per foot (20 mm per 1 m) run of slope.

## Ventilation clearances

- No clearance required for countertop models with RIDE ice machine (110CR425A/W).  
**Note: 12" (30.5 cm) at top advised for service.**
- 6" (15.2 cm) required at top (110CT425A/W).  
**Note: 6" (15.2 cm) at each side advised for service.**
- 4" (10.2 cm) required at rear (110FB425A/W).  
**Note: 12" (30.5 cm) at top advised for service.**

## Approximate shipping weight

- 290 lb (132 kg), base stand: 140 lb (64 kg)

## Installation

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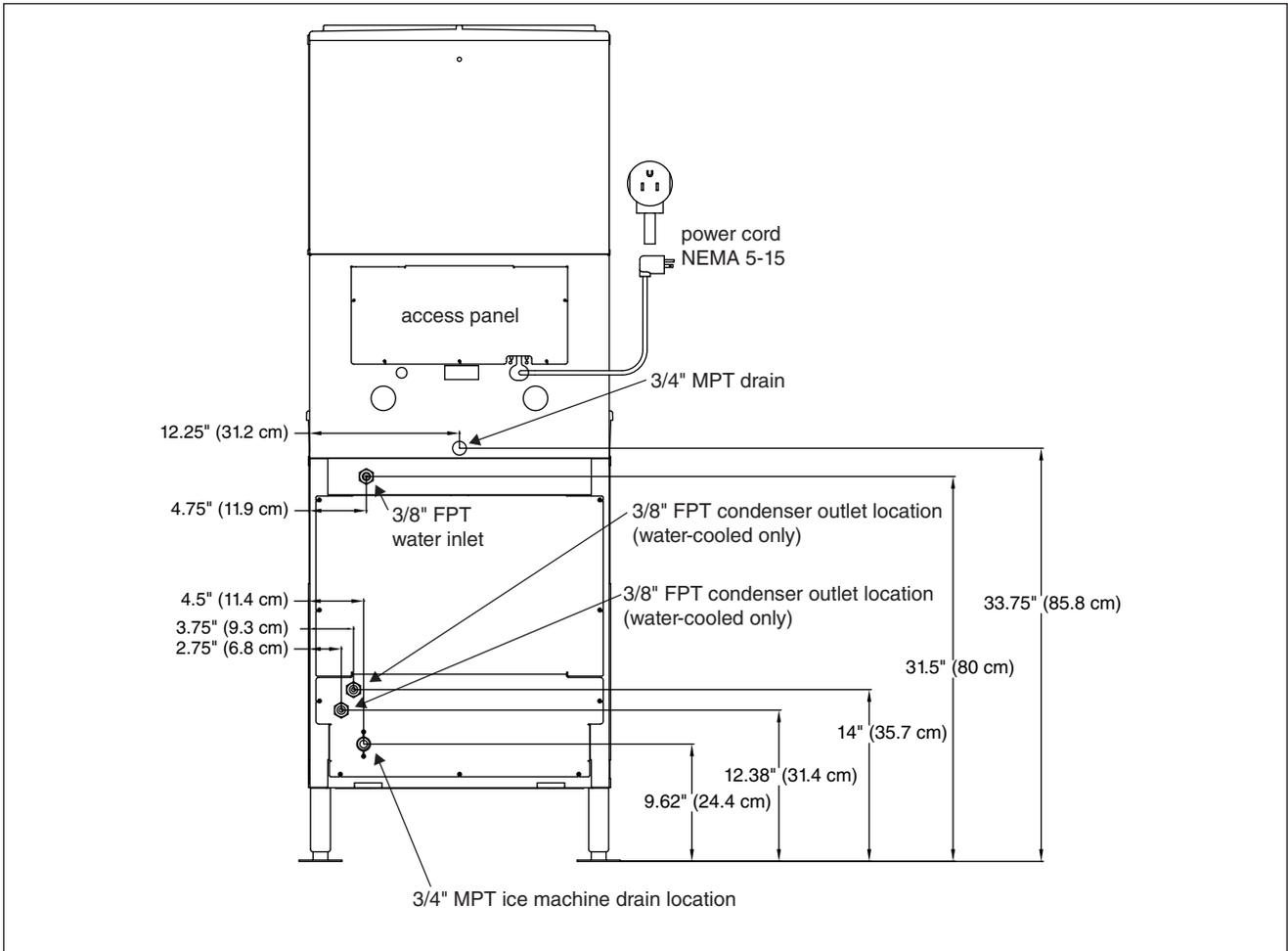
### Before you begin

- All dispensers must be installed level in both directions to ensure proper operation.
- All countertop dispensers provide the option of taking utilities out the bottom or back of the dispenser. See counter cut-out (**Fig. 2**) for bottom exiting utilities on units with and without drain pans. For installations where utilities will exit through back of dispenser, refer to back view drawings.
- SensorSAFE dispensers are shipped with a plastic, protective film on sensor lenses. For proper operation, plastic film must be removed after installation.

### Installing freestanding dispensers

1. Position dispenser in desired location and adjust legs to level in both directions.
2. Connect water supply to 3/8" FPT fitting on back of dispenser (**Fig. 1**).
3. Connect separate drain lines to 3/4" MPT dispenser drain fitting, and 3/4" MPT ice machine drain fitting on back of dispenser.
4. Run drain lines to wall or floor drain. If ice machine drain fitting is below an intended wall drain, a condensate pump must be used.
5. If ice machine is a water-cooled unit, connect water-cooled condenser supply line to 3/8" FPT condenser inlet fitting on back of dispenser.  
**Note: Do not run condenser supply water through ice machine water filter system.**
6. Connect condenser drain line to 3/8" FPT condenser outlet fitting on back of dispenser.  
**Important: Do not connect condenser drain line to any other drain lines.**
7. Plug dispenser into 15A rated NEMA 5-15 circuit.
8. Remove front cover of base section by removing two screws at bottom corners of cover. Allow cover to drop approximately 3/8" (5 mm) and pull forward.
9. Turn on water supply and check for leaks.

**Fig. 1 – Rear connections, freestanding models**



10. Remove top front cover by removing two screws at bottom corners of cover. Lift cover slightly and pull forward.
11. If dispenser is equipped with SensorSAFE remove protective plastic coating from dispense sensor labels.
12. Turn on dispenser power and bin signal rocker switches. Check dispenser and ice machine operation.
13. Sanitize ice machine according to instructions in ice machine manual. Discard ice made during sanitizing process.
14. Turn off ice machine bin signal switch.
15. Remove dispenser hopper lid; sanitize dispenser according to instructions beginning on page 12.
16. Turn ice machine bin signal switch on and replace front covers, securing with screws.

## Installing countertop dispensers



### CAUTION!

Dispensers with top mount ice machines cannot be mounted on legs. They must be bolted to counter. Use gloves when lifting ice machine to protect hands from sheet metal edges.

1. Position dispenser in desired location, mark dispenser outline on counter and remove dispenser.
2. Regardless of whether utilities will exit through back or bottom of dispenser, drill four (4) 3/8" holes in counter to anchor dispenser to counter (**Fig. 2**).

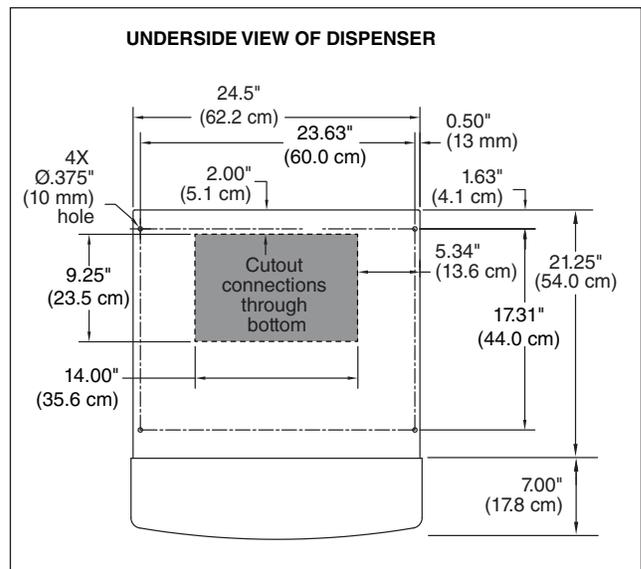
*Follett countertop dispensers can have any or all utilities run directly through counter or out rear of dispenser. For dispensers with any utilities exiting through counter, make counter cut-out (**Fig. 2**).*

### 3. For utilities exiting through bottom only:

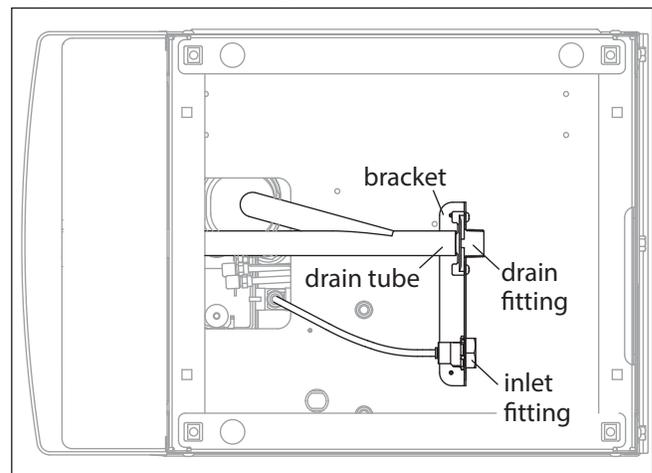
- (a) Make cut out as shown in **Fig. 2**.
  - (b) Move drain fitting from back of dispenser and mount where shown in **Fig. 3**.
  - (c) Cut drain tube to length and attach to barbed connection.
  - (d) Move inlet water fitting from back of dispenser and mount where shown in **Fig. 3**.
  - (e) Cut water tubing to length and re-insert into water fitting.
4. If ice transport tube will exit out rear of dispenser, remove ice transport tube knock-out from rear of dispenser. Install supplied grommet for CR models.

**Note:** Utility connections can be accessed through front of dispenser by removing stainless steel splash panel, or by removing access panel (**Fig. 4**) on back of dispenser.

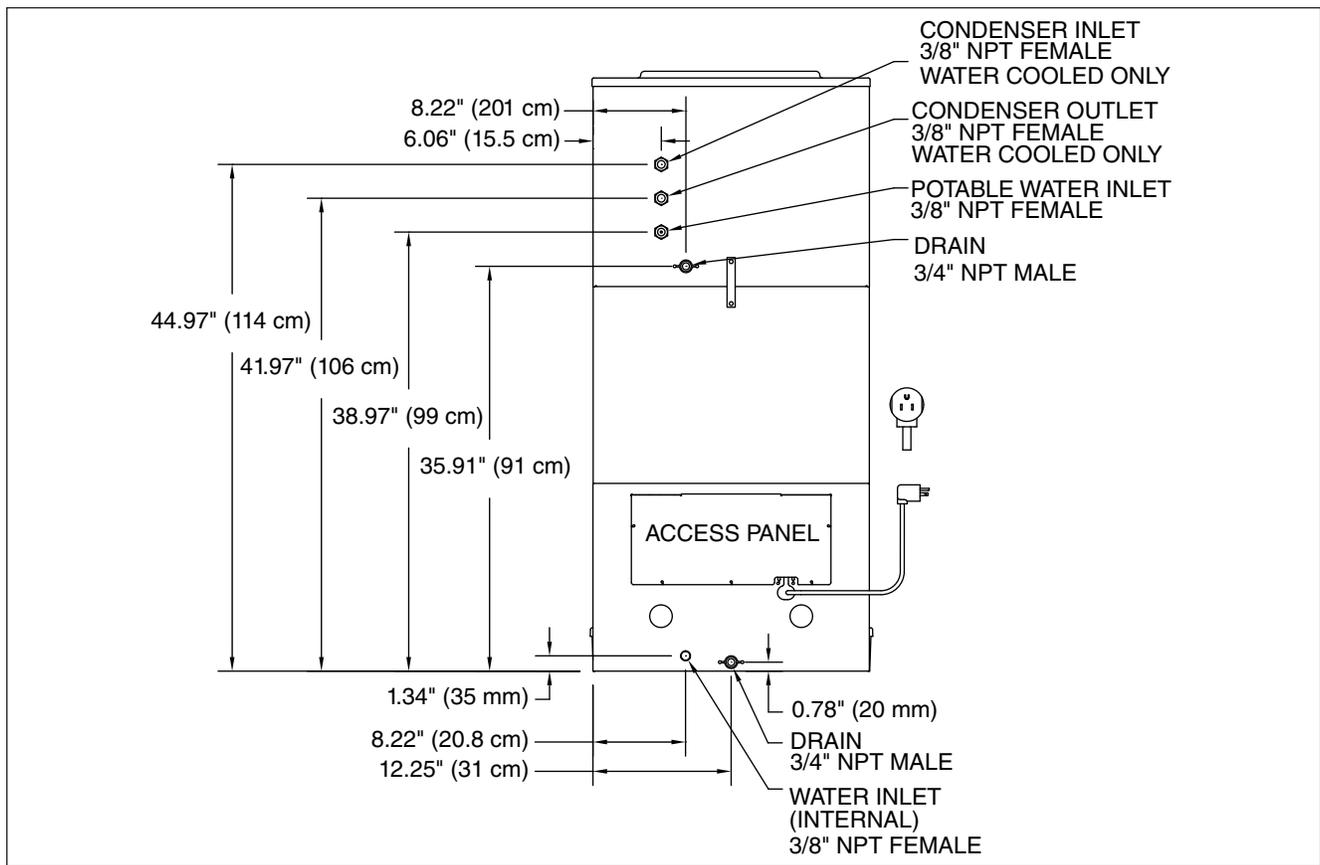
**Fig. 2**



**Fig. 3 – Bottom exiting utilities (countertop units)**



**Fig. 4 – Rear connections, countertop models**



5. If power is to be supplied through counter cut-out, complete steps 6-9. If power is to be supplied through rear of dispenser, proceed to **step 10**.
6. Temporarily remove rear access panel (**Fig. 4**) from rear of dispenser.
7. Loosen junction box mounting screws. Lift junction box and power cord up until cord and mounting screws clear notches on rear panel of dispenser. Remove Phillips head screws from right side of junction box.
8. Rotate junction box 90 degrees so that screw holes on right side of junction box align with holes on rear dispenser panel. Resecure junction box to dispenser using Phillips head screws.
9. Place power cord inside dispenser and replace access panel (**Fig. 4**) to rear of dispenser.  
**Note:** For dispensers to be installed with utilities connected through rear of dispenser, it may be easier to make preliminary connections before dispenser is set in place.
10. Apply a thick bead, approximately 1/4" (6 mm) diameter, of NSF listed silicone sealant (Dow-Corning\* RTV-732 or equivalent) 1/4" (6 mm) inside marked outline of dispenser.
11. Carefully position dispenser on counter.
12. Remove four screws securing splash panel to front of dispenser and gently lay splash panel on counter. (Water line to solenoid valve can be disconnected from water inlet valve by pushing on ring at end of inlet fitting while pulling on tubing.)
13. Secure dispenser to counter with four 3/8" bolts (supplied by others).
14. Smooth excess sealant around outside of dispenser.
15. Proceed with either RIDE or top-mounted ice machine connection instructions, as appropriate.

\* Dow Corning is a registered trademark of Dow Corning Corporation in the United States and other countries

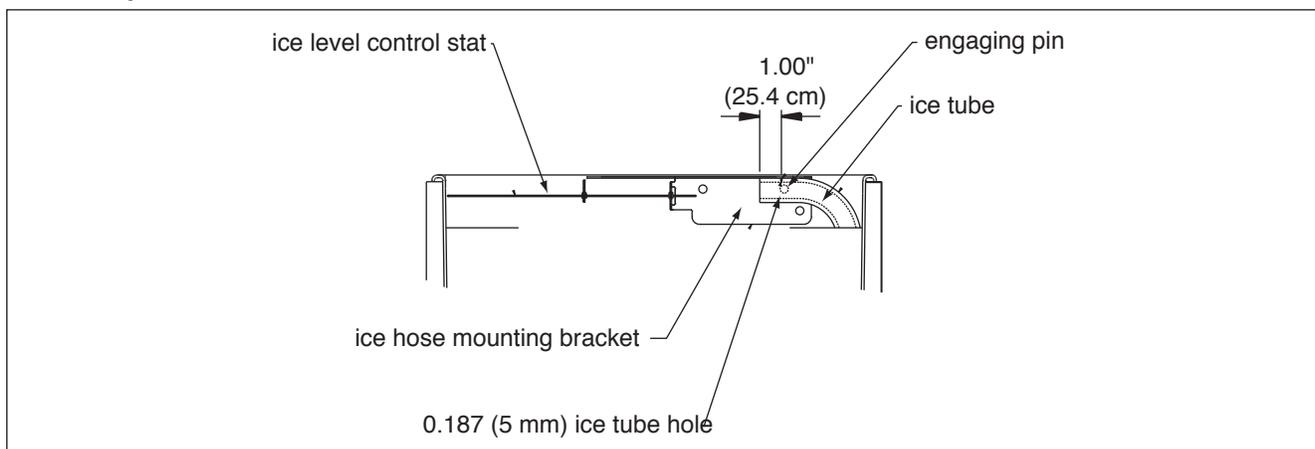
## Installing RIDE ice machines

### CAUTION!

See Ice Machine Installation Manual (form #01062587) for critical installation instructions for RIDE ice machines. Failure to comply with these instructions will result in poor performance and void warranty.

1. Install RIDE ice machine following instructions in ice machine manual.
2. If dispenser is equipped with SensorSAFE remove protective plastic coating from dispenser lenses.
3. Remove top front cover by removing two screws at bottom corners of cover. Lift cover slightly and pull forward. Turn on power and bin signal rocker switches. Replace front cover and secure with screws. Test operation.
4. Sanitize ice machine following instructions in ice machine manual. Discard ice made during sanitizing process.
5. Sanitize dispenser hopper following instructions on page 12. Installation is complete.

**Fig. 5 – Ice transport tube and ice level control stat mounting for freestanding dispensers and countertop units with RIDE ice machine**



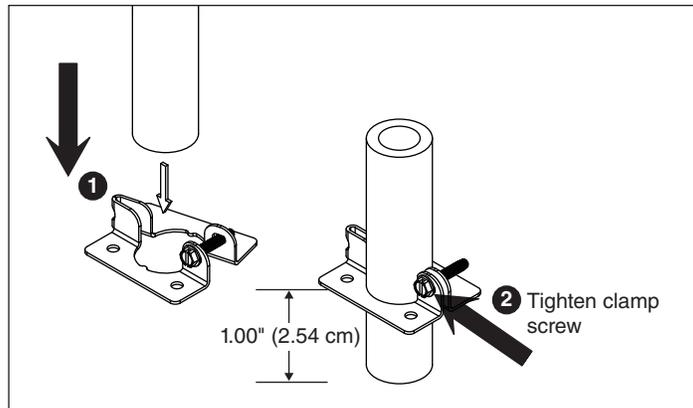
## Installing top mount ice machines

Models 110CT425A/W

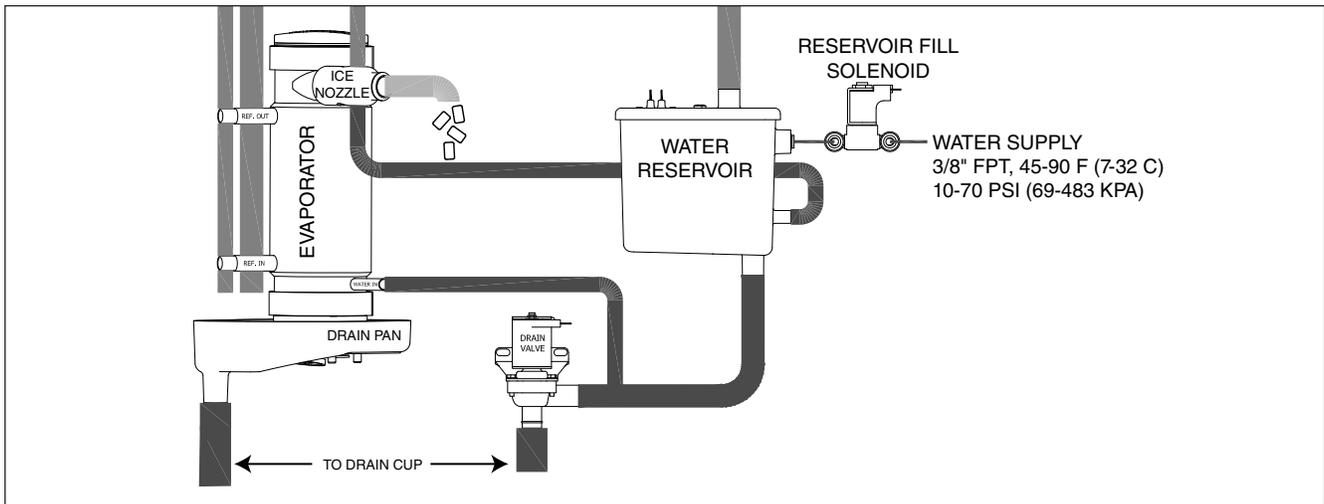
### CAUTION!

Dispensers with top mount ice machines cannot be mounted on legs. They must be bolted to counter. Use gloves when lifting ice machine to protect hands from sheet metal edges. See Ice Machine manual.

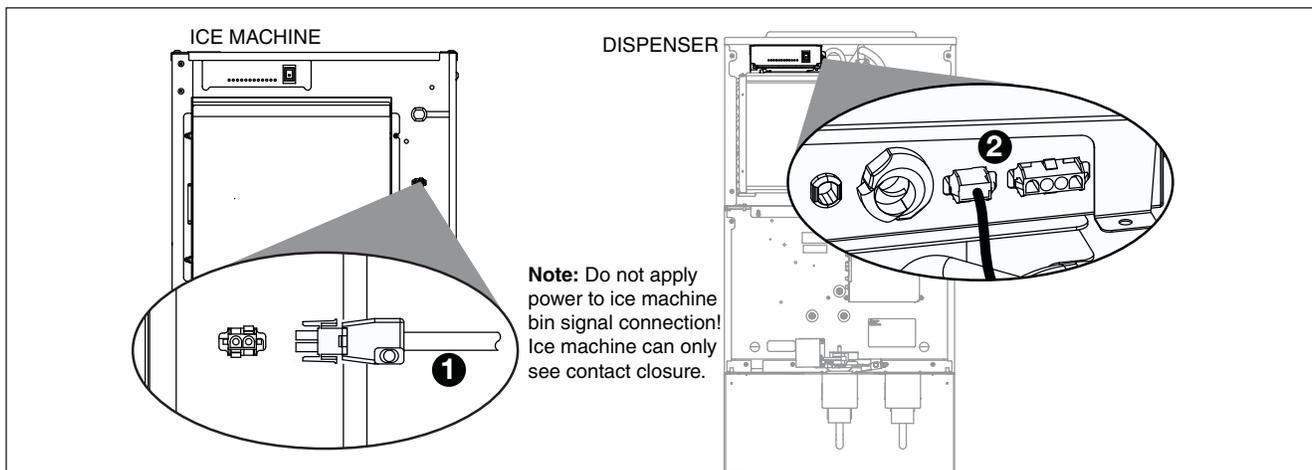
1. Remove dispenser top front cover by removing two screws at bottom corners of cover, lifting cover slightly and pulling forward.
2. Remove ice machine compartment top and side panels.
3. Remove ice machine hold-down bracket from front of ice machine compartment.
4. Lift ice machine onto dispenser top and slide ice machine completely into position, compressor end first.
5. Reinstall hold-down bracket on front of ice machine with power cord and bin signal cords in notch. Do not cut or pinch cords.
6. Insert loose end of ice transport tube through bracket (on ice machine base) into hopper access hole. Tighten transport tube clamp screw to secure ice transport tube.
7. Connect plastic water supply line to water fill solenoid.



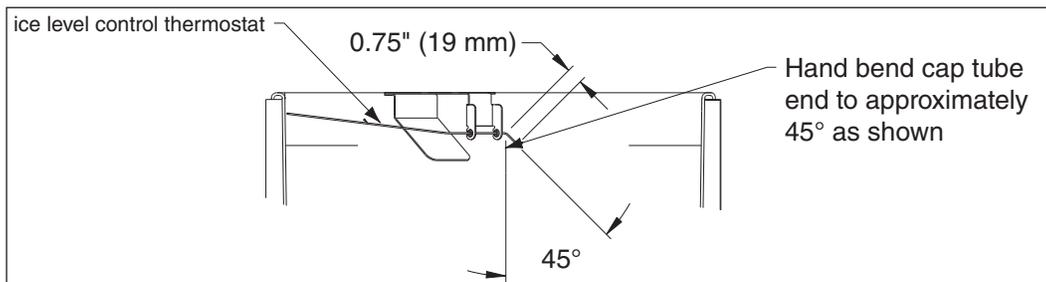
8. Connect molded drain tube to evaporator drain pan, purge solenoid and rear drain fitting.



9. Connect ice machine bin signal cable to two-pin receptacle on the dispenser electrical box.



10. On dispensers equipped with water-cooled ice machines, connect condenser water supply and drain lines to condenser fittings on ice machine.
11. Turn on water supply and check for leaks.
12. Plug dispenser power cord into 15A rated NEMA 5-15 circuit.
13. If dispenser is equipped with SensorSAFE, remove protective plastic coating from dispense sensor labels.
14. Turn on power and bin signal rocker switches and test operation.
15. Sanitize ice machine following instructions in ice machine manual.
16. Remove dispenser hopper access lid and sanitize dispenser according to instructions on page 12.
17. Replace front cover and secure with screws. Installation is complete.



## **User information**

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### **How the dispenser works**

Follett's 110 series automatic-load ice and water dispensers are equipped with Follett's 425 lb (193 kg)/day ice machine. In the continuous icemaking process, water freezes to the inside wall of the evaporator. A rotating stainless steel auger carries the ice to the top of the evaporator where it is compressed and extruded through an outlet port. The ice is then pushed through a tube to the storage hopper. When the hopper is full, a bin thermostat opens and shuts the ice machine off. When the dispense mechanism is activated, a dispense motor is turned on, causing the wheel to turn. This moves ice to the dispense chute where it drops by gravity into the container held below the chute.

### **How SensorSAFE infrared dispensing works**

Follett's SensorSAFE infrared dispensing maximizes sanitation and minimizes the possibility of cross-contamination by eliminating physical contact between the cup or container and dispenser. Sensors in the panel use reflected infrared light to detect the presence of the container and send a signal to a control board which then activates the appropriate components for ice or water dispensing.

The SensorSAFE infrared dispensing package includes a cleaning switch under the left side of the front cover which temporarily shuts off dispensing to allow cleaning of the panel and lenses. If the switch is not turned back on after cleaning, the dispenser automatically resets after two minutes for normal operation.

SensorSAFE infrared dispensing also includes a time limit safety feature which automatically stops ice dispensing after one minute of continuous dispensing. Dispensing can be resumed by moving the container away from the dispenser and returning it to the activation zone.

### **Quiet Night™/Sleep cycle (does not apply to CR units)**

The board monitors ice dispensing through a line voltage input to P15. If the ice dispense has not been initiated for more than 5 seconds during the 20 minute time delay, the **SLEEP CYCLE** LED comes on. The machine will stay off for 12 hours unless 5 seconds of dispensing is seen. After 12 hours, the **SLEEP CYCLE** LED goes out and the ice making will resume if the bin thermostat is closed. The sleep cycle can be deated using the DIP switches on the ice machine control board.

## **Cleaning/descaling and sanitizing**

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Follett ice machines and dispensers, and their associated cleaning and sanitizing procedures, are designed for use with potable water sources. The presence, or suspected presence, of infectious agents may call for additional measures, including the replacement of components and more comprehensive disinfection measures. Follett recommends that these cleaning and sanitizing procedures be reviewed with the appropriate infectious agent subject matter experts to assure complete remediation.

Periodic cleaning/descaling and sanitizing of Follett's ice and water dispenser and ice machine system is required to ensure peak performance and delivery of clean, sanitary ice. The recommended cleaning procedures that follow should be performed at least as frequently as recommended and more often if environmental conditions dictate.

Cleaning of the condenser can usually be performed by facility personnel. Cleaning/descaling and sanitizing of the ice machine system should be performed by your facility's trained maintenance staff or a Follett authorized service agent. Regardless of who performs the cleaning, it is the operator's responsibility to see that this cleaning is performed according to the schedule below. Service problems resulting from lack of preventive maintenance will not be covered under the Follett warranty.

### Recommended cleaning/descaling and sanitizing intervals\*

Symphony Plus	Frequency
Drain Line	weekly
Drain Pan/Drip Pan	weekly
Exterior	as needed
Condenser	monthly (air-cooled only)
Dispenser and Components	semi-annually
Ice Machine	semi-annually
Transport Tube	semi-annually
Ice Storage Area/Bin	semi-annually

\* Ice machine and dispenser must be sanitized prior to start-up.

### Weekly

#### CAUTION!

- Do not use solvents, abrasive cleaners, metal scrapers or sharp objects to clean any part of the dispenser.

#### Dispenser drain pan and drain line

- Pour 1 gal. (3.8 L) of hot tap water into drain pan to flush drains.

#### Splash panel front, SensorSAFE infrared dispensing

- Deactivate dispensing by pressing and releasing clean switch located on left side of unit under top front cover.
- Clean lens and splash panel front using a soft cloth and mild, non-abrasive, non-chlorine based cleaner.
- Reactivate dispensing by pressing and releasing clean switch again.

### Monthly

#### CAUTION!

- Do not use solvents, abrasive cleaners, metal scrapers or sharp objects to clean any part of the dispenser.

#### Condenser (air-cooled ice machine only)

- Use a vacuum cleaner or stiff brush to carefully clean condenser coils of lint and debris to ensure optimal performance.

## Semi-Annually (more often if conditions dictate)

- A cleaning/descaling and sanitizing procedure should always include both the ice machine and dispenser.
- Icemaking system can be cleaned/descaled in place.



### CAUTION!

- Wear rubber gloves and safety goggles (or face shield) when handling cleaner or sanitizer mixtures.
- Use only Follett approved cleaners.
- It is a violation of Federal law to use Solution A or Solution B in a manner inconsistent with their labeling.
- Do not use solvents, abrasive cleaners, metal scrapers or sharp objects to clean any part of the dispenser.

**Solution A:** Following manufacturer's instructions, mix cleaning solution of 1 gal. (3.8 L) 120 F (49 C) water and 7 oz (198 g) (one 7 oz packet) of Follett SafeCLEAN™ ice machine cleaner/descaler (P/N 00132001).

**Solution B:** Following manufacturer's instructions, mix a sanitizing solution of 1 gal. (3.8 L) 120 F (49 C) water and 1.6 oz (48 ml) Nu-Calgon IMS-II Sanitizer (P/N 00979674).

### Cleaning & Sanitizing Tool Checklist

- (2) 1.5 Gallon (or larger) Plastic Buckets
- (2) clean cloths
- Sanitary gloves
- Safety Glasses
- (2) Sani-Sponge™ (P/N 00131524 - single sponge)
- (1 ) Packet of SafeCLEAN™ (P/N 00132001 - 24 packets)
- 1.6 fl oz of Nu-Calgon IMS-II Sanitizer (P/N 00979674 - 16 fl. oz bottle)

## Ice Machine and Dispenser

### Cleaning/Descaling Procedure

**Note:** Check drains and drain cup to ensure they are open and flowing freely.

1. Remove front cover and turn **OFF** bin signal switch.
2. Dispense all ice from storage hopper and discard.  
**Note:** CI Models only: remove splash panel.
3. Press **CLEAN** switch. The **MAINTENANCE** light will turn on and the machine will drain. Wait for the **LOW WATER** light to turn on.
4. Remove lid from cleaning cup and fill (about 1 quart) until cleaning solution completely fills the reservoir. Place lid back on cup. Save remainder of cleaning solution.
5. **CLEANER FULL** light will turn on and machine will start cleaning cycle then rinse three times; this process takes approximately 15 minutes.
6. While ice machine is cleaning/descaling, clean dispenser as follows:
  - a. Turn **OFF** dispenser power.
  - b. Remove hopper lid. (Note: for CT models, remove hopper access cover)
  - c. Remove knurled nuts from front of storage hopper.
  - d. Remove stud assembly, baffle, wheel, and any remaining ice.
  - e. Remove dispense chutes from splash panel.
  - f. Submerge drain grill in cleaning solution and allow to soak to remove any scale buildup.
  - g. Wipe stud assembly, baffle, wheel, inside of storage area, dispense chutes, drain grill and drain pan with damp cloth wrung out in cleaning solution. Thoroughly rinse all parts with damp cloth wrung out with clean water.  
**Note:** To avoid possible damage to motor assembly, only use a damp cloth to clean storage hopper. Do not allow water to run through motor shaft hole in bottom of hopper.
7. When machine is finished cleaning, the **MAINTENANCE** light will turn off.

## Sanitizing Procedure

8. Press **CLEAN** switch. The **MAINTENANCE** light and **LOW WATER** light will turn on.
9. Fill cleaning cup until sanitizing solution completely fills the reservoir. Place lid back on cup. Save remainder of sanitizing solution.
10. **CLEANER FULL** light will turn on and machine will start sanitizing cycle then rinse three times; this process takes approximately 15 minutes.
11. While ice machine is sanitizing, sanitize dispenser as follows:
  - a. Wipe inside of hopper lid, stud assembly, baffle, wheel, inside of storage area, dispense chutes, drain grill and drain pan with damp cloth wrung out in sanitizing solution.  
**Note:** To avoid possible damage to motor assembly, only use a damp cloth to clean storage hopper. Do not allow water to run through motor shaft hole in bottom of hopper.
  - b. Reinstall dispense chutes, wheel, baffle, stud assembly and knurled nuts. (See manual for correct baffle position.)
12. When machine is finished rinsing, the **MAINTENANCE** light will turn off. Loosen phillips-head screw on nozzle connected to evaporator. Remove nozzle from evaporator side only, leave other side of nozzle connected to transport tube.
13. Place one Sani-Sponge in remaining sanitizing solution.
14. Insert the sponge soaked in sanitizing solution into nozzle then insert a dry sponge into the nozzle.
15. Replace nozzle onto evaporator and tighten screw. Ensure drain is connected to reservoir and vent tubes are connected to evaporator drain pan.
16. Turn **ON** bin signal switch. Wait for ice to push sponges through transport tube.
17. Collect sponges from ice storage bin.
18. Replace hopper lid (access cover for CT models), machine top, **turn ON** dispenser power and install front cover.
19. After 10 minutes, dispense all ice and discard.

## Dispenser only

### Cleaning/descaling procedure

**Note:** Check drains and drain cup to ensure they are open and flowing freely.

1. Remove and discard all ice from storage hopper.
2. Ensure power is disconnected. Working inside storage area, remove center thumbscrew from dispense wheel, tilt wheel up toward back to clear baffle and disengage wheel from motor shaft.
3. Remove dispense chutes.
4. Thoroughly wipe lid, dispense wheel, baffle and dispense chutes with cloth soaked in Solution A.
5. Wipe all bin surfaces (including the area under dispense wheel) with a damp cloth wrung out in Solution A.

**Note:** To avoid possible damage to dispense motor assembly, use only a damp cloth to clean the storage bin. Do not allow water to run through bottom of bin area.

6. Remove grille and wash with Solution A. Rinse thoroughly with clean water.
7. Rinse all above items with damp cloth wrung out in clear water.

## Sanitize dispenser

8. Wipe all above items with damp cloth wrung out in Solution B to sanitize. Do not rinse.
9. Reinstall all parts and replace any panels removed prior to cleaning.
10. Pour 1 gal. (3.8 L) of hot tap water into drain pan to flush drains.
11. If the dispenser is equipped with a Chilled Water Accessory continue to **Step 11.1**; if not, skip to **Step 12**.
  - 11.1 Remove four screws securing splash panel.
  - 11.2 Disconnect 3/4" (19 mm) drain line from bottom of chilled water canister.
  - 11.3 Loosen (do not remove) screw securing front bracket of chilled water canister to bottom of dispenser hopper.
  - 11.4 Rotate canister clockwise to release front bracket, then pull canister forward to disengage rear bracket.
  - 11.5 Remove chilled water coil from canister and clean with cloth wrung out in Solution A.
  - 11.6 Wipe inside of chilled water canister with cloth wrung out in Solution A.
  - 11.7 Rinse all above items with damp cloth wrung out in clear water.
  - 11.8 Sanitize all above items with damp cloth wrung out in Solution B. Do not rinse.
  - 11.9 Reinstall chilled water coil into canister (rubber alignment grommet on coil tubing must be located outside chilled water canister to hold coil securely against canister wall).
  - 11.10 Reinstall chilled water assembly on dispenser and tighten screw securing front bracket.
  - 11.11 Reconnect 3/4" (19 mm) drain line to chilled water canister.
  - 11.12 Reinstall splash panel and top front cover.
12. If so equipped, turn ice machine ON and begin to make ice (ice machine should start immediately with power and bin signal supplied).
13. After approximately 30 minutes, test dispenser for proper dispensing.

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# Service

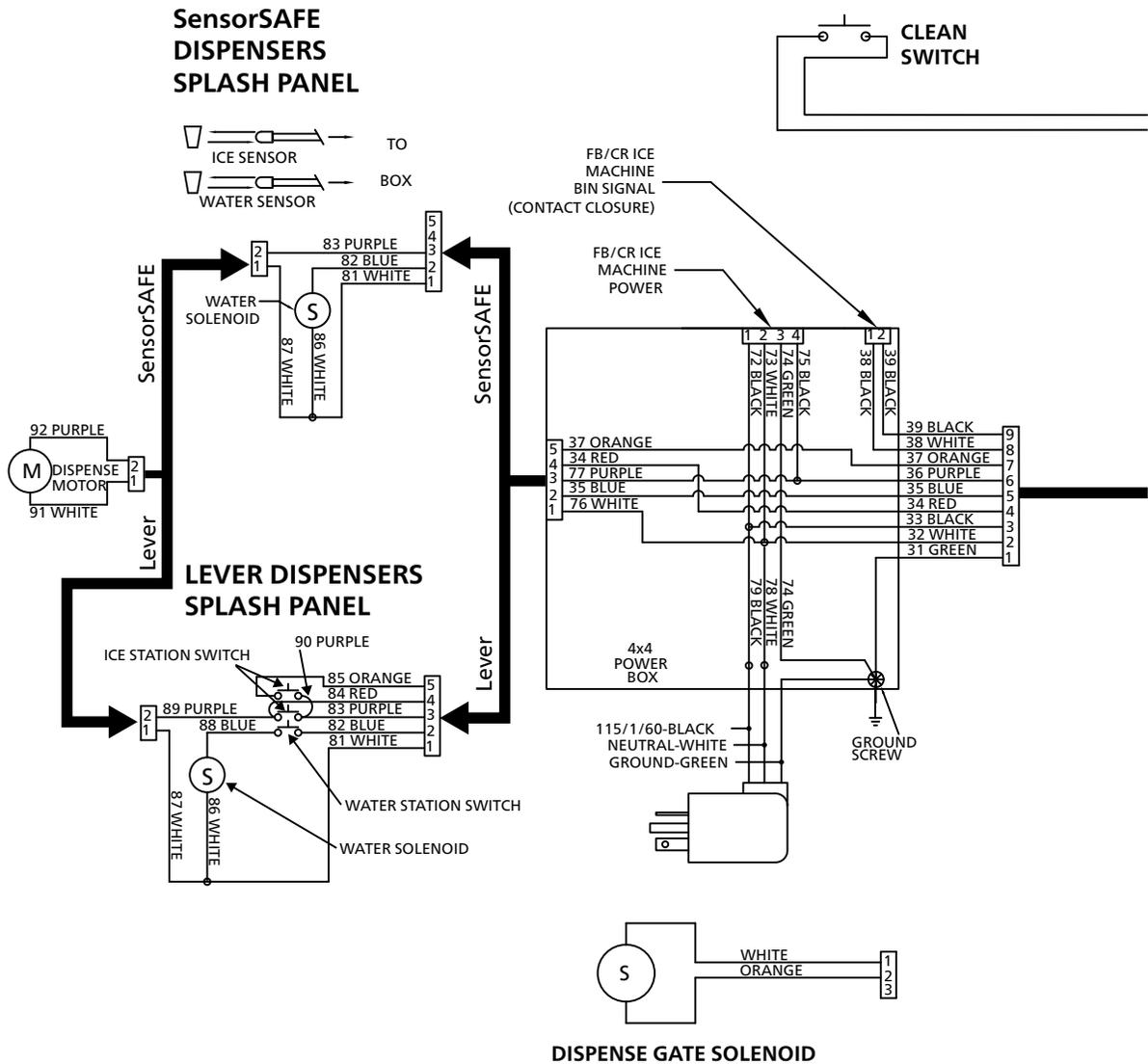
## Wiring diagram

### Lever models

The dispense wheelmotor is energized through the power and ice dispense switches. The water solenoid valve is energized through the power and water dispense switches. The ice machine is controlled through an unpowered contact closure bin thermostat circuit. When ice builds up around the bin thermostat, the contacts open, cutting the bin signal to the ice machine.

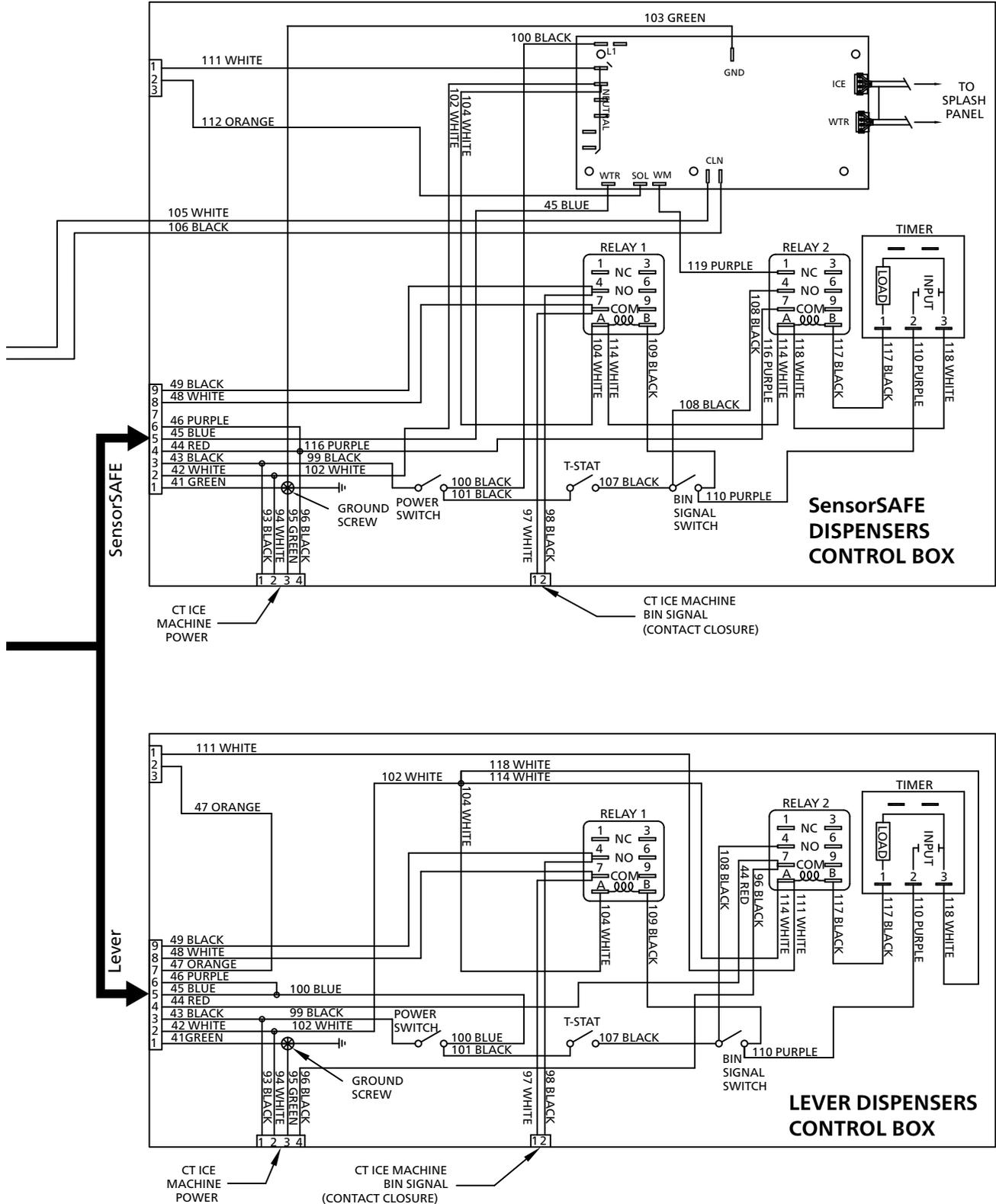
### SensorSAFE models

SensorSAFE models provide “touchless” ice and water dispensing. When a container is placed within the actuation zone below the ice or water chute on SensorSAFE dispenser models, an infrared signal reflects off the container and is detected by the sensor. The sensor then sends a signal to the control board to activate the appropriate components to dispense ice or water. LEDs on the board indicate when the board is receiving a signal from the sensors.



A safety, shut-off feature automatically shuts off dispensing after one minute of continuous activation. Dispensing can be restarted by moving the container away and then returning it to the actuation zone.

Dispensing can be temporarily suspended for cleaning by depressing and releasing the clean switch, located under the left side of the top front cover. Depressing and releasing the button a second time will return the dispenser to normal operating state. If the clean switch is not depressed a second time, the dispenser will automatically resume normal dispense operation (CLN LED goes out) after two minutes. An LED on the control board will light to indicate that the dispensing has been suspended by activation of the clean switch.



## Dispenser troubleshooting



### CAUTION!

- Disconnect power to unit before putting hands or arms in storage area or attempting any repair or service to equipment.

#### Before calling for service

1. Check that no ice is in the dispenser bin area.
2. Check that congealed ice is not causing a jam.
3. Check that all switches and circuit breakers are on.
4. Check that all drains are clear.

#### Lever model troubleshooting guide

Problem	Indicators	Corrective Action
Does not dispense ice.	<ol style="list-style-type: none"> <li>1. Power switch off or faulty.</li> <li>2. Faulty dispense switch.</li> <li>3. Wheelmotor malfunction.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check switch – turn on or replace if faulty.</li> <li>2. Replace switch.</li> <li>3. Check motor and capacitor and replace.</li> </ol>
Does not dispense water.	<ol style="list-style-type: none"> <li>1. Dispense switch contacts burned shut.</li> <li>2. Debris preventing valve from closing.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace water solenoid valve.</li> <li>2. Replace dispense switch.</li> <li>3. Check switch - turn on or replace if faulty.</li> </ol>
Water runs continuously.	<ol style="list-style-type: none"> <li>1. Faulty water solenoid valve.</li> <li>2. Faulty dispense switch.</li> <li>3. Power switch off or faulty.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check switch and replace if faulty.</li> <li>2. Remove and clean valve.</li> </ol>
Dispense wheel rotates continuously.	Dispense switch contacts are burned out.	Replace dispense switch.
Ice machine runs continuously.	Faulty or incorrectly positioned bin stat.	Check for proper positioning. If stat does not open when ice is placed on capillary tube, replace stat.
Ice dispenses by itself.	<ol style="list-style-type: none"> <li>1. Baffle not adjusted properly.</li> <li>2. Faulty dispense switch.</li> </ol>	<ol style="list-style-type: none"> <li>1. See Adjustment Instructions.</li> <li>2. Replace dispense switch.</li> </ol>
Not making ice.	1. Dispenser is in sleep mode.	<ol style="list-style-type: none"> <li>1. Verify sleep mode LED is illuminated on control board.</li> <li>2. Dispense 5 seconds worth of ice to reset.</li> </ol>

## SensorSAFE model troubleshooting guide

Problem	Action	SensorSAFE Board LED Status			Corrective Action
		PWR	CLN	ICE/WTR	
Does not dispense ice and/or water.	Check LEDs on the SensorSAFE control board.	OFF	OFF	OFF	Check circuit breakers and power switch. Restore power or replace defective switch.
		ON	ON	OFF	Press clean switch on lower left side of electrical enclosure to return board to normal operation.
	Place cup under drop zone (in front of lens).	ON	OFF	OFF	Troubleshoot appropriate lens/sensor and replace if required (see lens/sensor troubleshooting).
		ON	OFF	ON	Verify power on appropriate output terminal (WTR or WM) on control board and replace board if required. If board tests okay, troubleshoot appropriate dispenser component.
Dispenses ice and/or water continuously.	Check LEDs on control board.	ON	OFF	ON	Troubleshoot appropriate lens/sensor and replace if required (see lens/sensor troubleshooting).
		ON	OFF	OFF	If there is power on any output terminal 9 (WTR or WM) on control board, replace board.

### Board guide

LEDs, when illuminated, indicate the following: PWR (board power), CLN (cleaning, no dispensing cycle), ICE (ice dispensing activated), WTR (water dispensing activated).

Terminals: LI (incoming power, hot), L2 (neutral terminals), WTR (power terminal for water solenoid), WM (power terminal for wheelmotor), CLN (terminals for clean cycle switch).

**Note:** SOL terminal not used in 12 series dispensers.

### Lens/sensor troubleshooting

1. Turn dispenser power switch off and remove splash panel.
2. Disconnect wires from WTR and WM terminals on board.
3. Gently remove sensor/mounting block from splash panel.
4. Inspect lens and sensor, clean if necessary.
5. Restore dispenser power and test sensor by passing hand in front of sensor.
6. If LED on board turns on, sensor is operational. Re-assemble dispenser.
7. If LED does not come on switch sensor leads on board and retest.
8. If opposite LED comes on – replace defective board.
9. If opposite LED does not come on – replace defective sensor.

## Disassembly and replacement instructions

### Dispense chute removal

1. Remove dispenser front cover.
2. Slide plastic dispense chute up and out to remove.

### Dispense wheel and drive bar removal

1. Remove all ice from storage area of dispenser.
2. Remove center thumbnut from dispense wheel.
3. Remove thumbnuts holding baffle inside bin and remove baffle.
4. Tilt rear of wheel up and lift off motor drive shaft.
5. After reinstalling wheel, secure baffle loosely with thumbnuts, but do not tighten.
6. Place a 1/8" (3.2 mm) spacer against wheel and allow baffle to drop until it touches spacer.
7. Tighten thumbnuts and remove spacer.

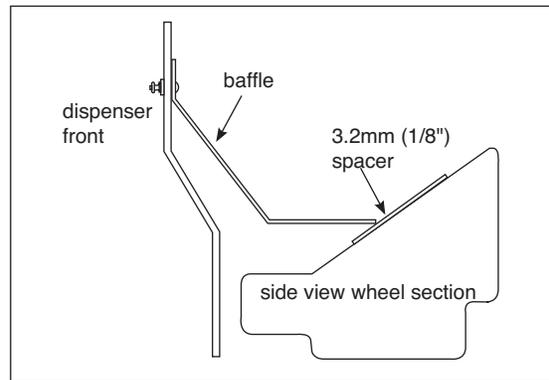
### Drive bar removal

1. Remove dispense wheel from dispenser (see above).
2. Pull drive bar out of its channel in bottom of wheel.

### Wheelmotor removal

1. Shut water off. Remove front cover.
2. Remove dispense wheel and dispense chute covers (see above).
3. Remove splash panel. Water line to solenoid valve can be disconnected from water inlet valve by pulling on ring at end of inlet fitting.
4. Disconnect wiring to panel and set panel aside.
5. Disconnect wires on motor.
6. Remove four bolts (7/16" socket) holding motor assembly to bottom of dispenser.
7. Remove motor assembly.

Fig. 6

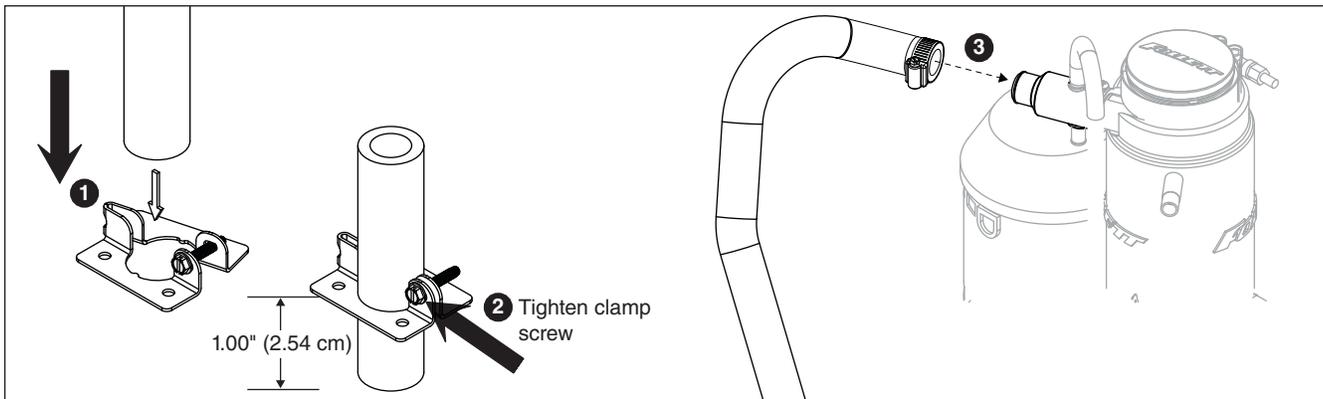


## Ice transport tube replacement – Top mount units

Models 110CT425A/W



- Use only tubing supplied by Follett Corporation.



## Ice transport tube replacement – Freestanding and RIDE models

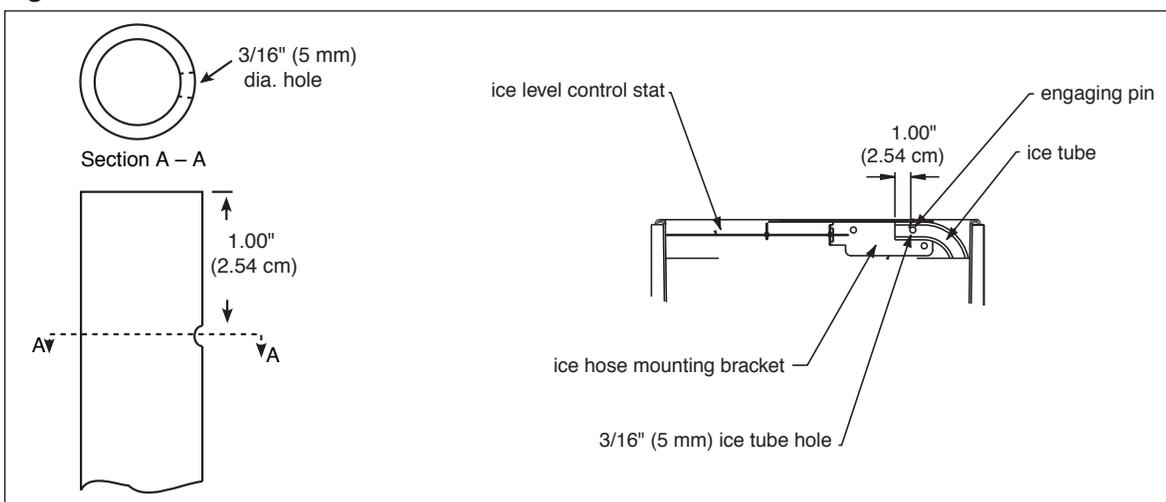
Models 110FB425A/W, 110CR425A/W



- Correct installation of ice transport tube is critical to RIDE ice machine performance. Replacement ice transport tubes for RIDE ice machines must be insulated and run continuously from ice machine to dispenser with no dips or bends with a radius of less than 6" (15.3 cm).

1. Remove top and rear access panel from dispenser (lower front panel in freestanding unit).
2. Disconnect existing ice tube from engaging pin on transport tube bracket in ice storage bin and pull down through dispenser chase.
3. Disconnect opposite end of tube from ice machine.
4. Run end of new ice transport tube with 3/16" (5 mm) hole through ice transport tube knockout in back of dispenser or through counter into bottom of dispenser, being careful to avoid any bends with less than 6" (15.3 cm) radius.
5. Insert tube in internal chase in rear inside corner of dispenser (left side as you face dispenser) and push up into storage area.
6. Push the 3/16" (5 mm) hole near end of tube into pin on ice tube bracket (**Fig. 8**).

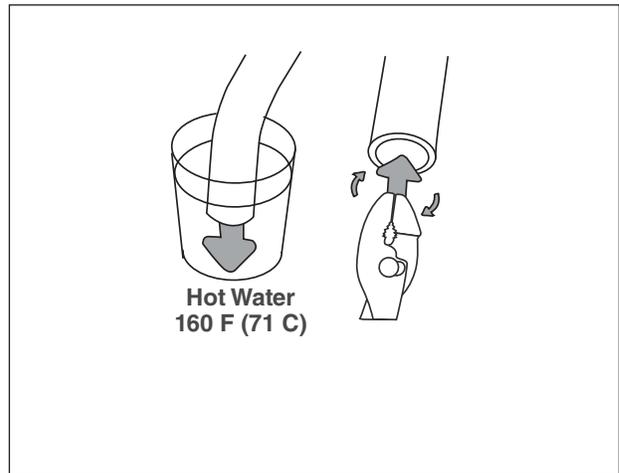
Fig. 7



**Steps 7-8 for units with RIDE ice machines only**

7. Install supplied insulation to run of transport tube required for your site, leaving approximately 2" (5.1 cm) of tube exposed at free end.
8. Check that insulated tube runs continuously from ice machine to dispenser with no dips.
9. Heat end of transport tube in cup of 160 F (71 C) hot water to soften and spread with pliers before making connection to ease assembly and prevent coupler edge from cutting inner wall of tube (Fig. 8).

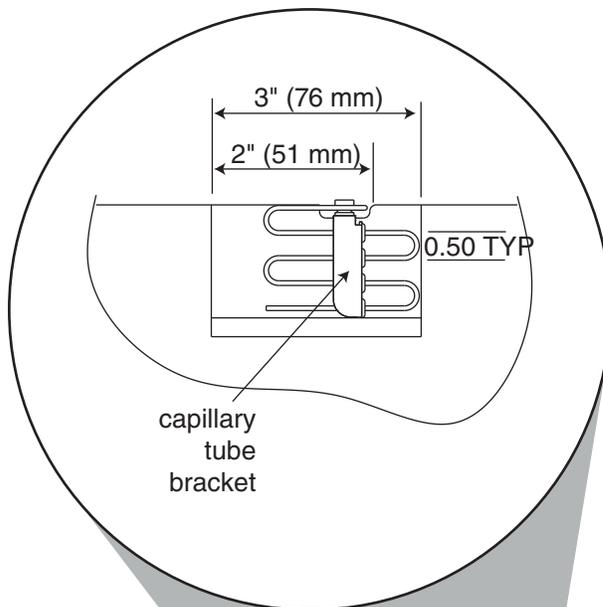
**Fig. 8**



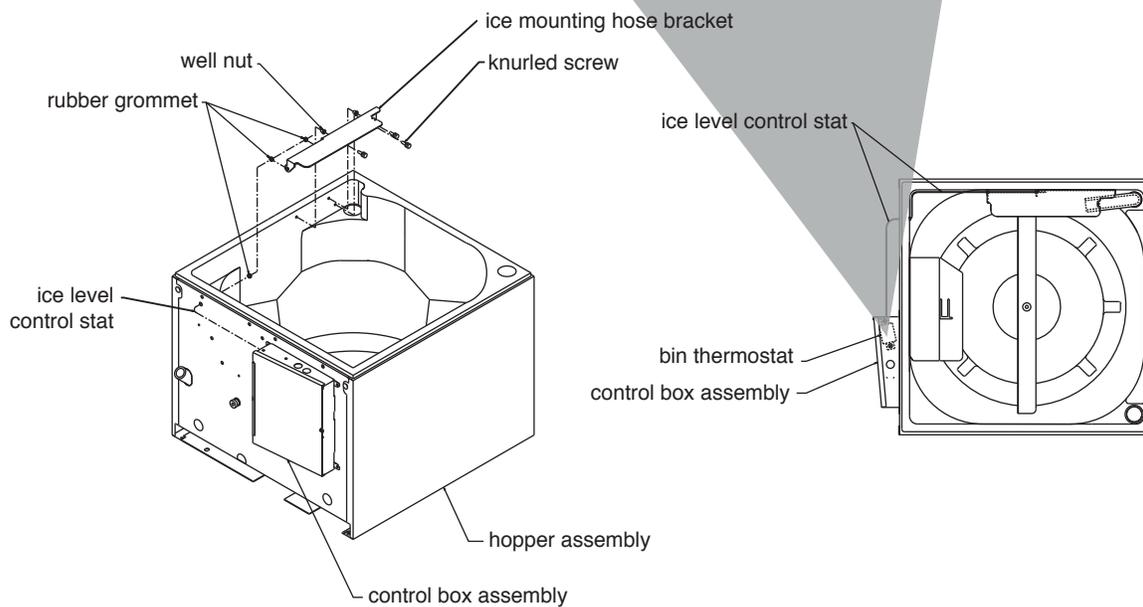
**All units**

10. Slip supplied hose clamp onto tube and push tube onto exit port of evaporator. *Do not twist hose when securing to evaporator.*  
**Note:** Only use tubing supplied by Follett Corporation.
11. Fasten tube on port with hose clamp, ensure that clamp is positioned on evaporator side of nozzle flange.
12. Tighten clamp.

# Thermostat replacement

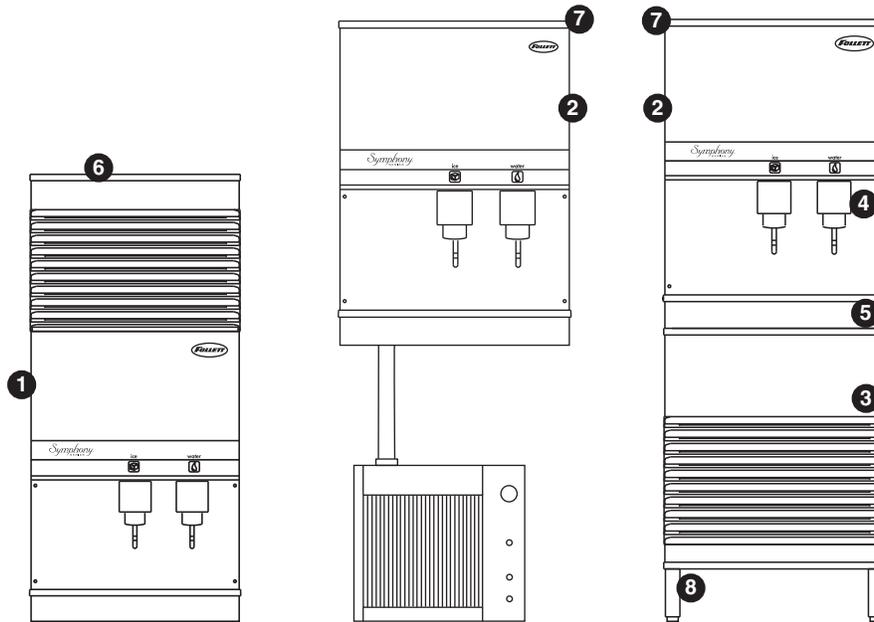


Thermostat: hand bend cap tube end as shown



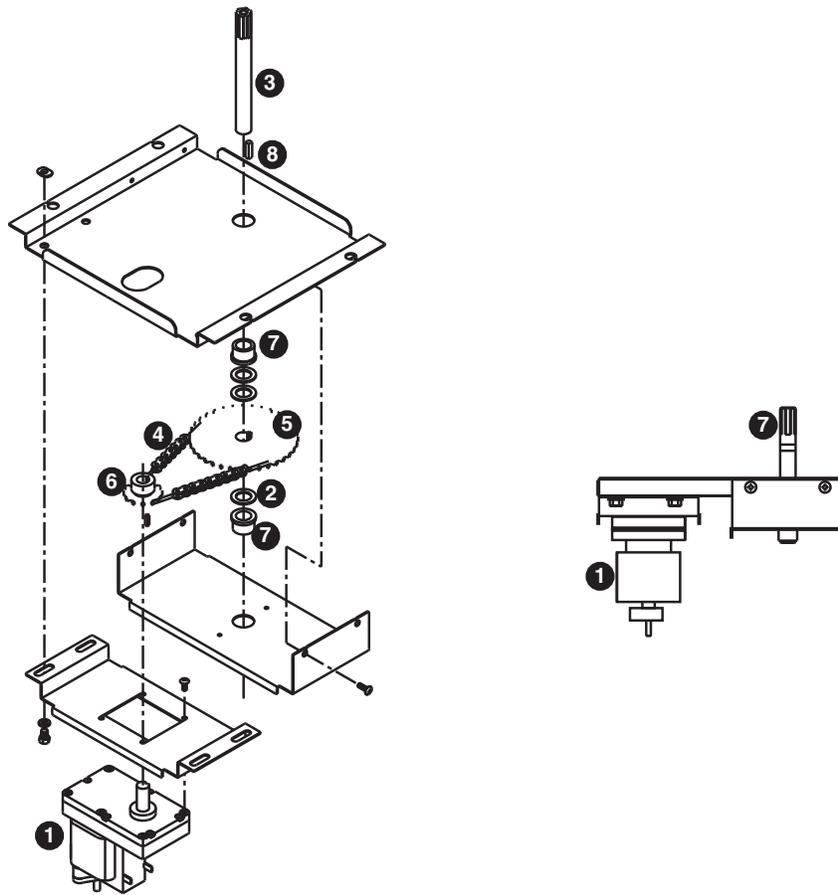
# Replacement parts

## Dispenser exterior



Reference	Description	Part #
1	Cover, top front, CT, ice and water	01072818
2	Cover, top front, CR/FB, ice and water	01072792
3	Cover, lower section, FB	502704
4	Cover, dispense chute	502681
Not shown	Knurled screws, front cover	501100
5	Drain pan	502705
Not shown	Grille, drain pan	502706
6	Lid, ice machine, 110, countertop (CT)	502709
7	Lid, 110, countertop (CR) units with RIDE ice machines & freestanding (FB) units	01072784
Not shown	Leg kit, for freestanding units – set of 4	502088
8	Single leg, for freestanding units	502298
Not shown	Drain tube assembly	502711
Not shown	Cover, top front, CT, ice only	01072826
Not shown	Cover, top front, CR/FB, ice only	01072800
Not shown	Tee, water inlet, 1/4"	502923
Not shown	Valve, water shut-off, 1/4"	01035526
Not shown	Drain fitting, plastic, ice machine (includes screws)	00109728
Not shown	Cord, power, dispenser, CR/CT/FB	01027648
Not shown	Cord & plug, bin signal, RIDE ice machine, 20'	01074202
Not shown	Cord & plug, bin signal, top mount and freestanding	01074210
Not shown	Clean switch, SensorSAFE	502359
Not shown	Cord & plug, female, ice machine power, freestanding (junction box to ice machine box)	01074848
Not shown	Caster	502805

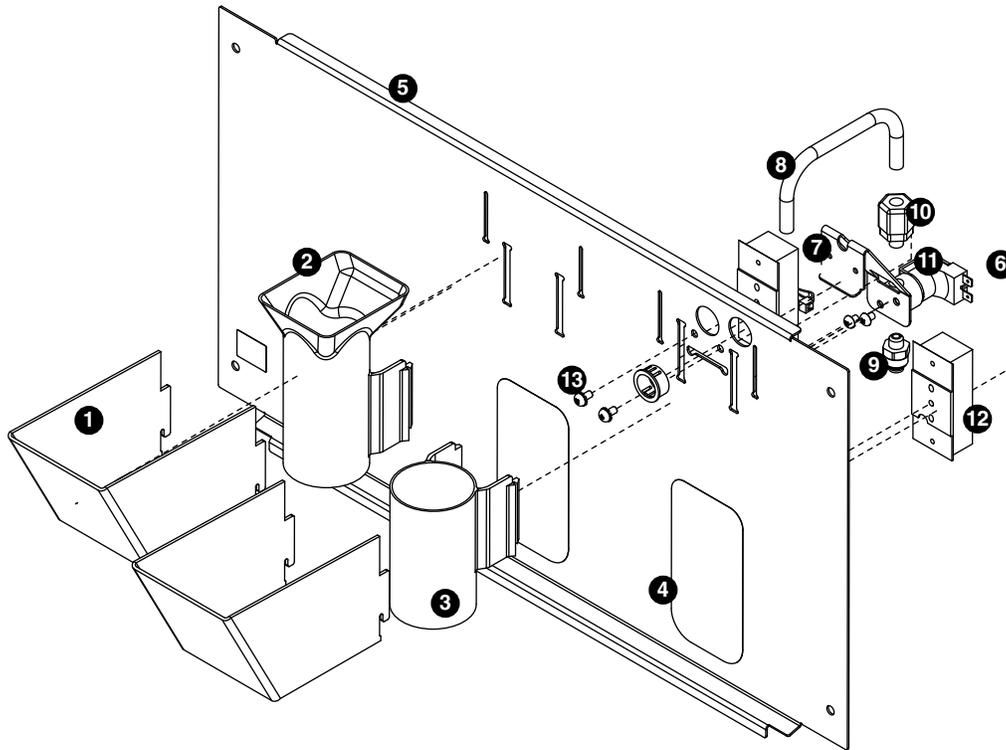
## Wheelmotor and drive system



Reference	Description	Part #
1	Wheelmotor, 120 V, 60 Hz	501861
2	Washer, thrust	501026
Not shown	Fan blade, wheelmotor	501607
3	Drive shaft (includes key and stud)	501619
4	Chain, pitch 54, link	502691
5	Sprocket, drive shaft, 35T	502692
6	Sprocket, wheelmotor, 10T	501019
7	Bearing, drive shaft	501024
Not shown	Connecting link, chain	500799
8	Key, drive shaft	500637
Parts 1-8 above	Dispenser drive assembly	502020



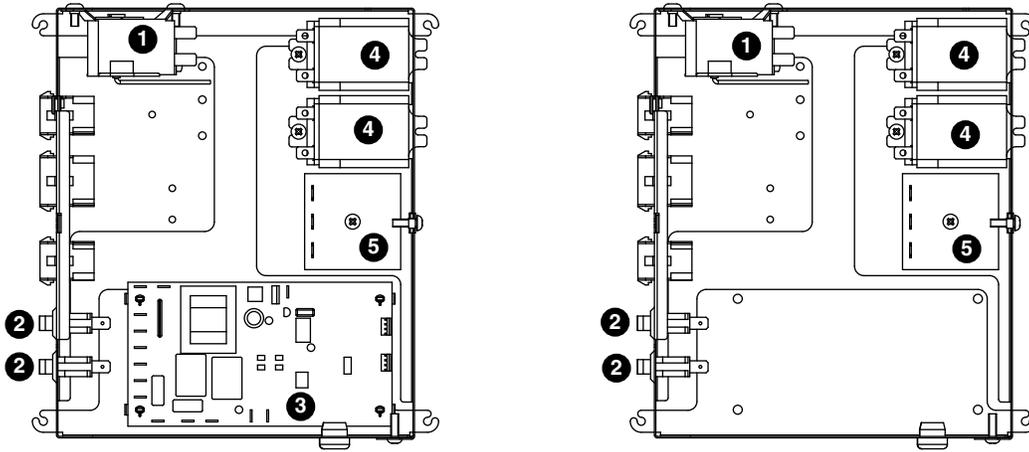
## Dispense chute and splash panel (models with SensorSAFE infrared dispensing)



Reference	Description	Part #
1	Cover, dispense chute	502681
2	Chute, ice (with Agion® antimicrobial product protection <sup>1</sup> )	01042787
3	Chute, water (with Agion)	01042795
4	Lens, sensor	502690
5	Splash panel (includes 2 of 502690)	01049162
Not shown	Splash panel, SensorSAFE, ice only (includes 2 of 502690)	01049170
6	Solenoid assembly, water, 120V, 60Hz (includes solenoid valve, tube, bracket, inlet and outlet fittings) 120V 60Hz	01049121
7	Bracket, lever and water solenoid	01039635
8	Tube, water station	502356
9	Fitting, inlet, 1/4" tube x 1/8 MNPT straight	00991232
10	Fitting, outlet, 1/8" MPT x 3/8" comp	502246
11	Solenoid valve, water, 120V, 60Hz	502243
12	Sensor (includes lens and ty-rap)	00122978
13	Fastener, 10-32 x 3/8" stainless steel	00982421
Not shown	Splash panel, SensorSAFE, complete assembly	01049030
Not shown	Splash panel, SensorSAFE, ice only, complete assembly	01049048

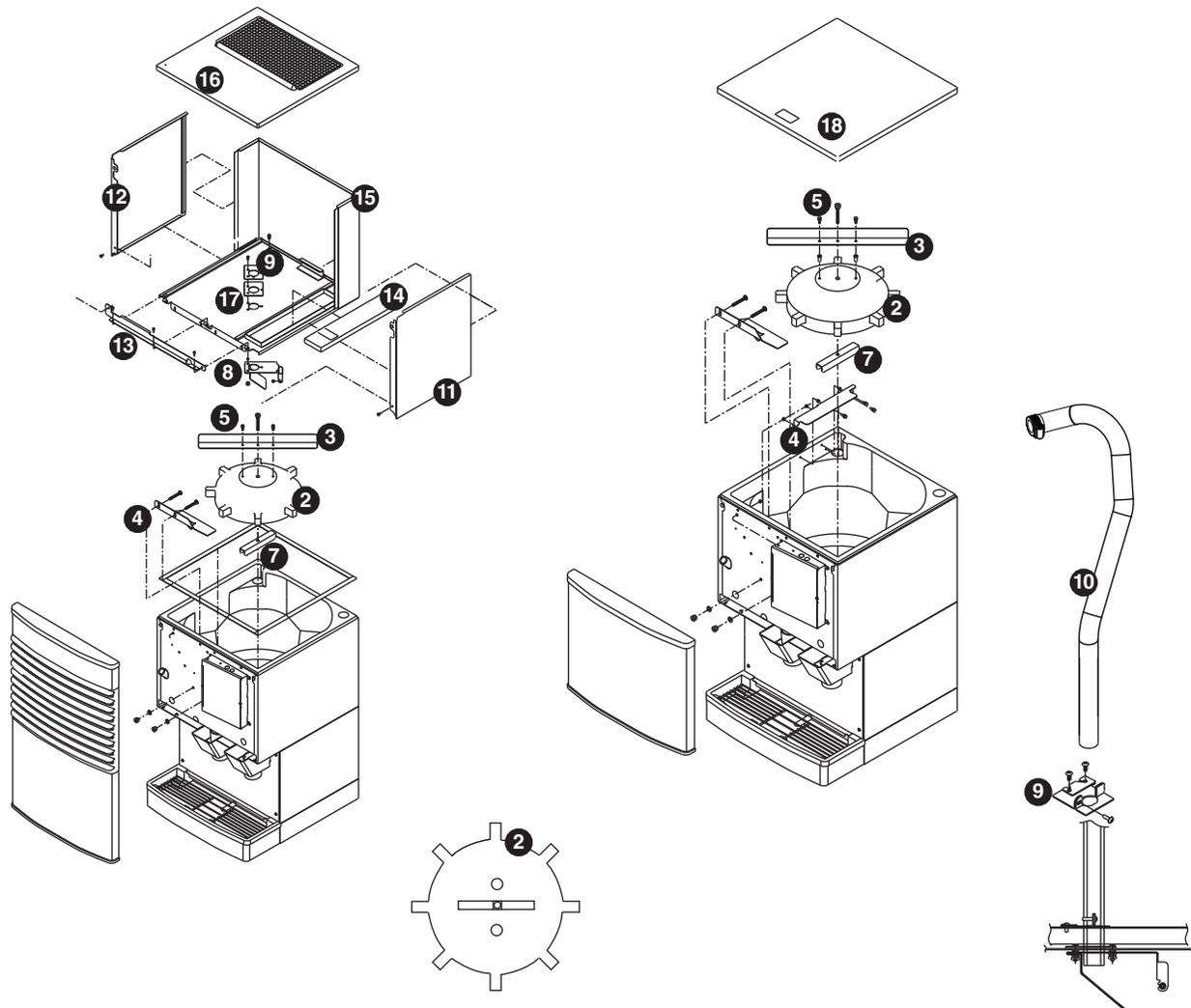
<sup>1</sup> Disclaimer: Antimicrobial protection is limited to the treated components and does not treat water or ice. Agion is a registered trademark of Sciescent LLC.

## Electrical components



Reference	Description	Part #
1	Thermostat, bin level	500514
2	Switch, dispenser power	502209
2	Switch, ice machine bin signal	502209
3	Control board, SensorSAFE	502242
Not shown	Clean switch, SensorSAFE	502359
Not shown	Boot, clean switch	501841
4	Relay, bin signal contact closure and level fill	501369
5	Timer, level fill	501601

## Hopper components

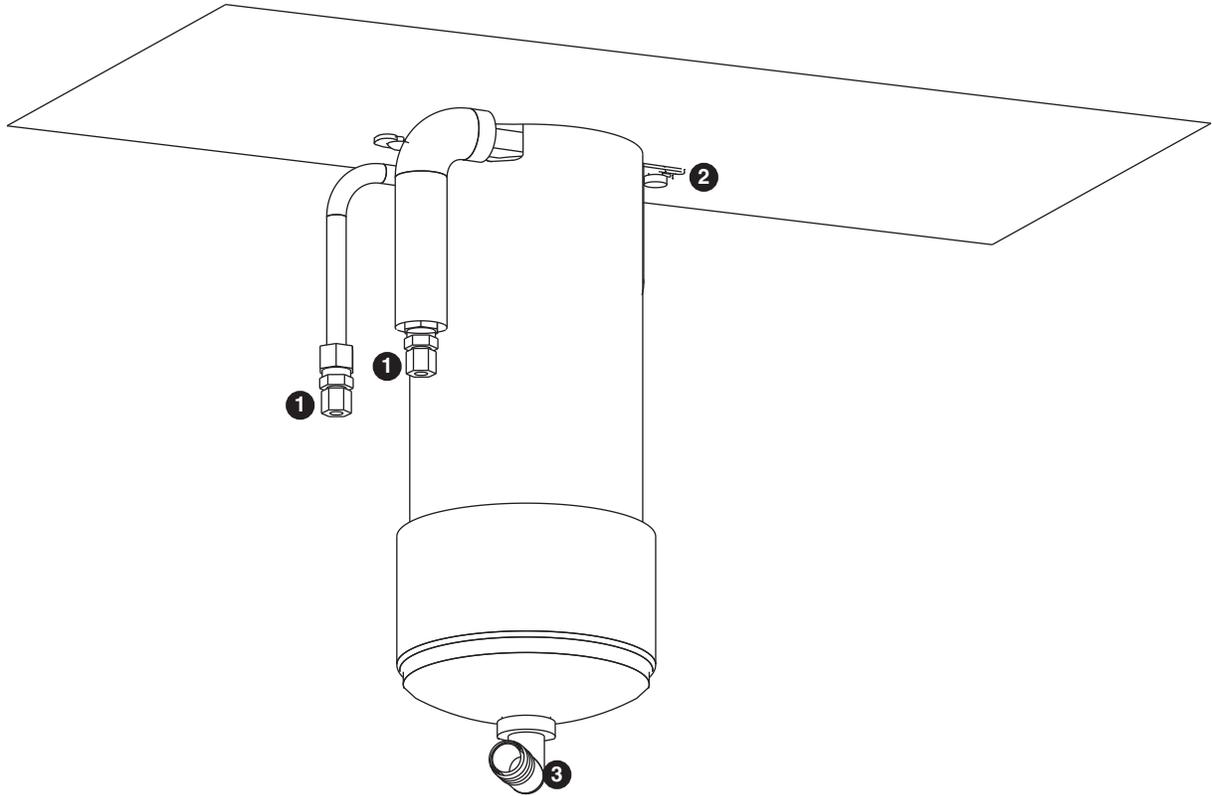


Reference	Description	Part #
1	Baffle, ice	501802
2	Wheel, dispense (includes drive bar, rotating agitator, threaded bar & rod)	501493
3	Agitator, rotating	501494
4	Bracket, ice tube	502712
5	Screw	501100
6	Rod, threaded (includes knurled nut)	501612
7	Drive bar assembly (includes threaded rod and nut)	501617
8	Ice deflector/cap tube bracket (units with top mounted ice machine)	501616
9	Bracket, ice tube entry (units with top mounted ice machine)	01067644
10	Ice transport tube assembly (units with top mounted ice machines)	01003532
11	Side panel, RH	502723
12	Side panel, LH	502722
13	Bracket, ice machine hold-down	01074871
14	Cover, hopper access	502717
15	Cover, hopper, CT	01074889
16	Lid, Ice machine, CT	502709
17	Gasket, ice entry	502824
18	Lid, secured, CR/FB	01072784
Not shown	Drain pan, hopper	00115196

## Ice transport tubing

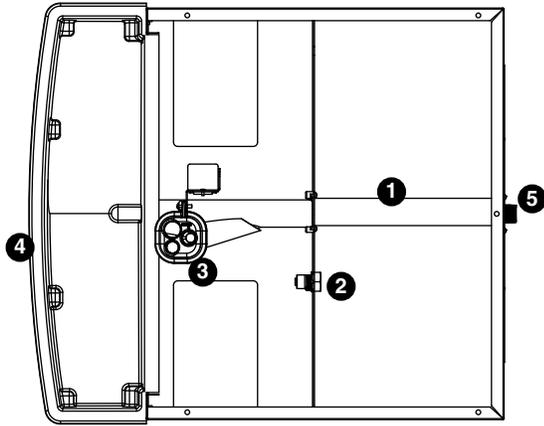
Reference	Description	Part #
Not shown	Ice transport tube (RIDE units) - 10 ft	502522
Not shown	Ice transport tube (RIDE units) - 20 ft	502523
Not shown	Ice transport tube insulation (RIDE units only) - sold by the foot	501176
Not shown	Ice transport tube assembly (50 FB units)	502328
Not shown	Ice transport tube assembly (25 FB units)	502329
Not shown	Ice transport tube assembly (top mount units)	01003532

## Chilled water components

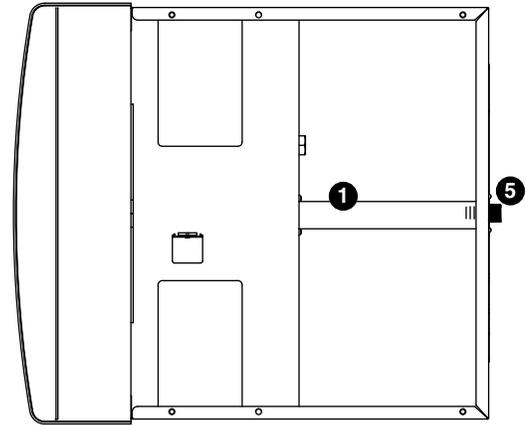


Reference	Description	Part #
Not shown	Coil, chilled water (includes two 502599)	01074111
1	Fitting, water coil	502599
2	Brackets, chilled water canister, pair (includes screws)	502600
3	Elbow, drain	502605
Not shown	Assembly, chilled water	01074137
Not shown	Tubing	01055011

## Dispenser plumbing connections



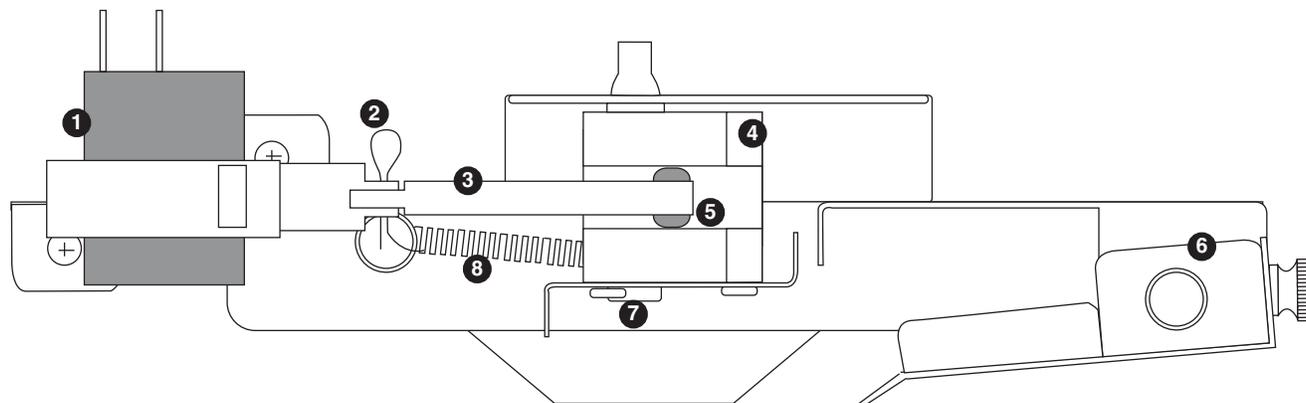
TOP VIEW



BOTTOM VIEW

Reference	Description	Part #
Not shown	Valve, water shut-off	01035526
1	Drain tube assembly	01074285
2	Fitting, water inlet	01065275
3	Cup, cleaning	01065226
4	Drain pan	502705
5	Fitting, drain	00109728
Not shown	Tee, water inlet, 1/4"	502923
Not shown	Grille, drain pan	502706

## Solenoid dispense assembly



Reference #	Description	Part #
1	Solenoid, dispense	501830
2	Cotter pin	502040
3	Linkage, solenoid (includes 502054 grommet)	502039
4	Block, dispense gate	502042
5	Grommet	502054
6	Splash pan, gate assembly	502045
7	Shoulder screw and washer	502038
8	Spring, gate assembly	501824
—	Gate assembly, 115V (includes reference numbers 1 through 8 above)	502043

## Water treatment accessories for Symphony Plus ice and water dispensers

Reference #	Description	Part #
<b>Standard capacity filter system</b>		
Not shown	Follett QC4-FL4S water filter system (includes FL4S primary cartridge and head, coarse pre-filter and head, pressure gauge, flushing valve; assembled and installed on mounting bracket), one per ice machine	00130229
Not shown	Follett FL4S primary replacement cartridge	00130245
Not shown	Water filter cartridge – primary, carton of 6	00954297
Not shown	Everpure coarse pre-filter cartridge	00130211
Not shown	Water pre-filter cartridge – pre-filter, carton of 12	00954305
<b>High capacity filter system</b>		
Not shown	High capacity water filter system (one per ice machine)	00978957
Not shown	High capacity water filter cartridge – primary, single	00978965
Not shown	High capacity water filter cartridge – primary, carton of 6	00978973
Not shown	Water pre-filter cartridge – pre-filter, single	00130211
Not shown	Water pre-filter cartridge – pre-filter, carton of 12	00954305
<b>Carbonless high capacity filter system</b>		
Not shown	Carbonless high capacity water filter system (one per ice machine) – Horizon™ and MaestroPlus series ice machines	01050442
Not shown	Carbonless high capacity water filter cartridge – primary, single	01050426
Not shown	Carbonless high capacity water filter cartridge – primary, carton of 6	01050434
Not shown	Water pre-filter cartridge – pre-filter, single	00130211
Not shown	Water pre-filter cartridge – pre-filter, carton of 12	00954305
<b>Other filtration</b>		
Not shown	Claris hardness removal filtration system	00986059
Not shown	Replacement filter for Claris system	00985127
Not shown	Reverse osmosis system, 200 gallons per day	00986034
Not shown	Replacement reverse osmosis cartridge	00985085
Not shown	Replacement reverse osmosis pre-filter	00985077
Not shown	Cleaning plug for reverse osmosis system	00985119
Not shown	Cleaning cartridge for reverse osmosis system	00985101
<b>Water pressure</b>		
Not shown	Water pressure regulator (25 psi)	501781
<b>Cleaning/Sanitizing</b>		
Not shown	SafeCLEAN ice machine cleaner, carton of 24 x 7 oz packets	00132001
Not shown	Sponge, sanitary	00131524
Not shown	<b>IMS-II sanitizing concentrate</b>	
	16 oz bottle	00979674
	Case of 12 x 16 oz bottles	01038652

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