



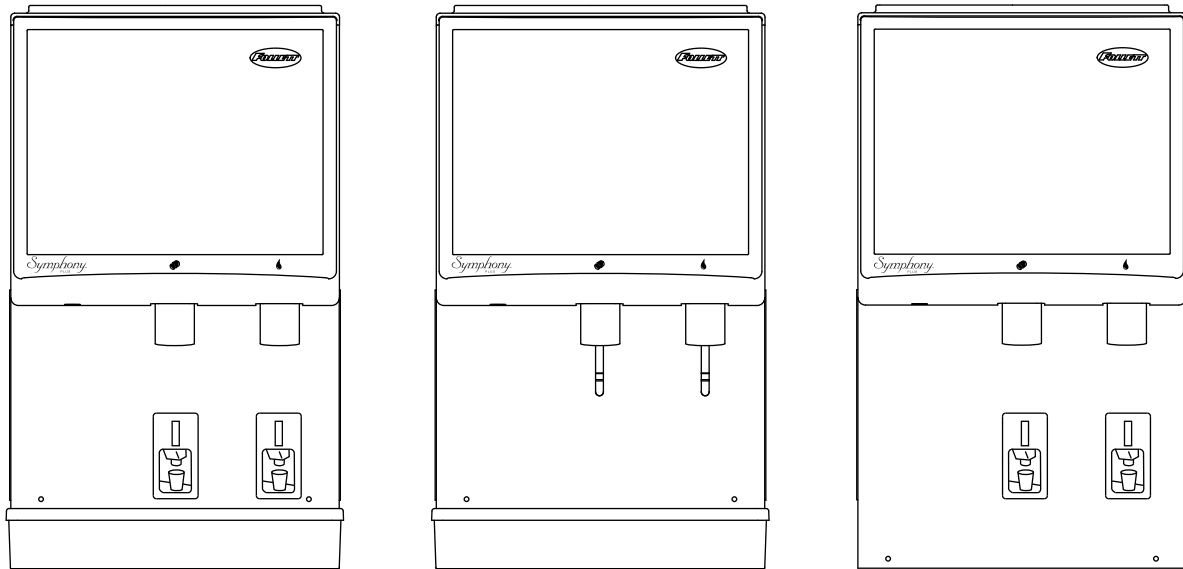
Symphony Plus™ 25 and 50 Series Ice and Water Dispensers

25CI425A/W, 25HI425A, 50CI425A/W, 50HI425A

Installation, Operation and Service Manual

Serial numbers above L78614

Please visit <https://www.follettice.com/technicaldocuments>
for the Operation and Service manual for your unit.



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, review this guide carefully before you begin your installation.

Should you have need technical help, please call our Technical Service group at (877) 612-5086 or (610) 252-7301.

Please have your model number, serial number and complete and detailed explanation of the problem when contacting Technical Service.

Getting Started

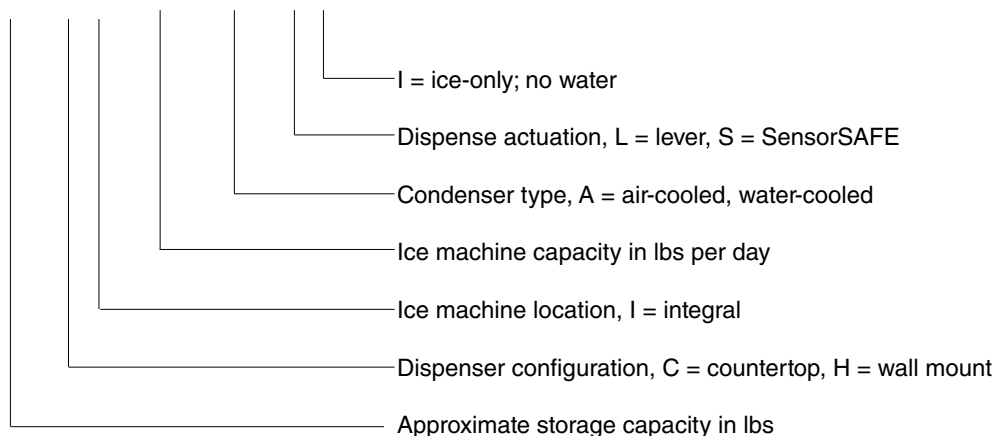
After uncrating and removing all packing material. Inspect the equipment for concealed shipping damage. All freight is to be inspected upon delivery. If visible signs of damage exist, please refuse delivery or sign your delivery receipt "damaged." Follett Customer Service must be notified within 48 hours. Wherever possible, please include detailed photos of the damage with the original packaging so that we may start the freight claim process.

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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.

25CI425A-LI

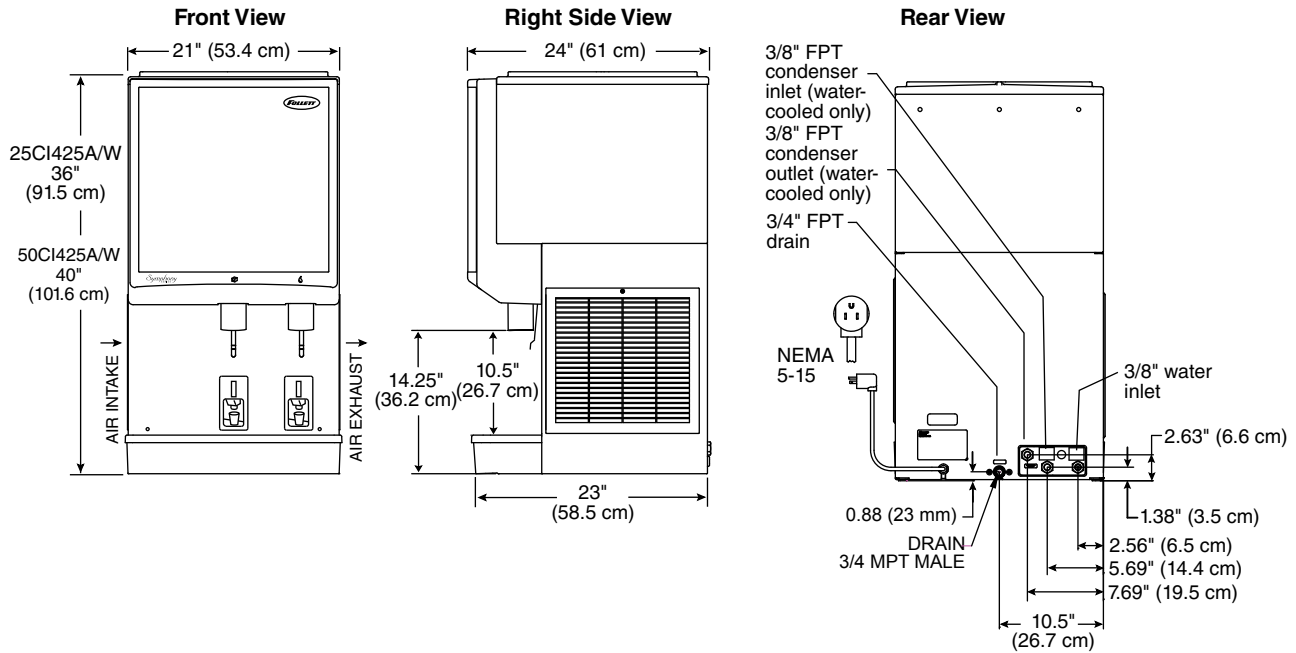


CAUTION!

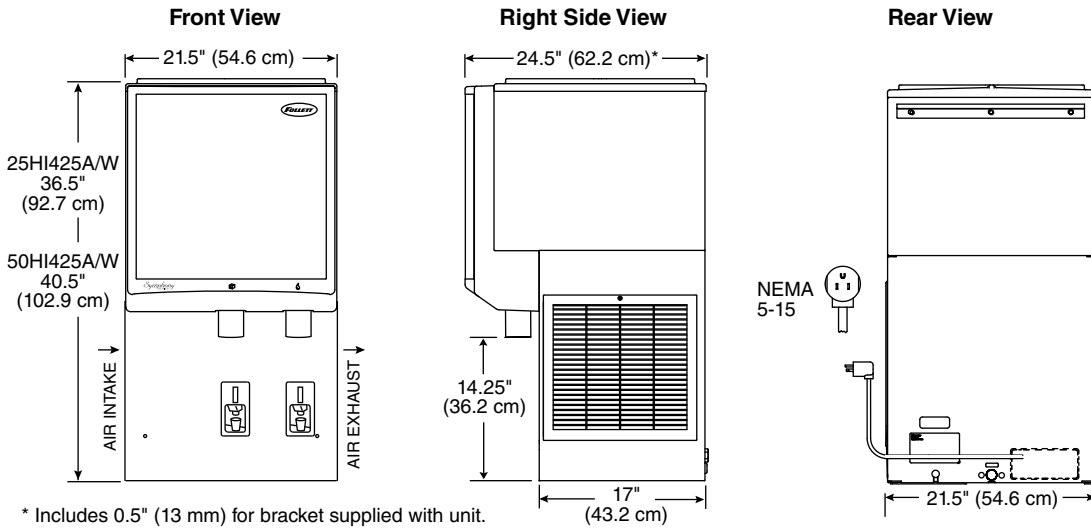
- Do not tilt unit further than 30° off vertical during uncrating or installation.
- Dispenser bin area contains mechanical, moving parts. Keep hands and arms clear of this area at all times. If access to this area is required, power to unit must be disconnected first.
- Follett recommends a Follett 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 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 left side air intake or right side air exhaust.

Specifications

Countertop



Wall mount



Electrical

- 115 V, 60 Hz, 1 phase, 11.0A
- Connect to a 15A dedicated circuit.
- Furnished with 7 ft (2 m) power cord with a 90° NEMA hospital grade 5-15 plug.

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 C Min. (Best performance below 70 F (21 C)) |
| Water pressure (psi/bar) | 70/5 Max. | 10/0.7 Min. |

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

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

Plumbing

| | Connections 25/50CI425A | Rough-ins 25/50HI425A |
|------------------|-------------------------|-----------------------|
| Dispenser drain | 3/4" MPT | Air-cooled 3/4" FPT |
| Water inlet | 3/8" FPT | 3/8" FPT |
| Condenser inlet | Water-cooled 3/8" FPT | N/A |
| Condenser outlet | Water-cooled 3/8" FPT | N/A |

Note: Water shut-off recommended within 10 ft. (3m) 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

| | Air-cooled | Water-cooled |
|--------------------------|----------------------------------------------|-------------------|
| Required for ventilation | 3" (77 mm) each side | N/A |
| Suggested for service | 12" (30.5 cm) top, 6" (15.3 cm) left side | 12" (30.5 cm) top |

Note: Do not block left side air intake or right side air exhaust.

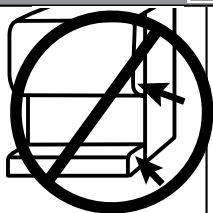
Dry weight

- 25/50CI425A/W (countertop): 215 lbs. (98 kg)
- 25/50HI425A/W (wall mount): 230 lbs. (105 kg)

Installation

Before you begin

- All dispensers must be installed level in both directions to ensure proper operation.
- Provide proper ventilation clearances.
- Countertop units provide the option of taking utilities out bottom or back of dispenser (on wall mount units and countertop units with legs, utilities exit from back).
- Wall mount model utilities exit through back of dispenser only.
- Directions for each installation follow.

| | |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ⚠ WARNING! | |
|  | <ul style="list-style-type: none"> ▪ DO NOT LIFT UNIT AT THESE POINTS. Panels will not support weight of unit ▪ Failure to follow warning may result in equipment damage or personal injury |

Installing countertop dispensers with rear exiting utilities (no legs)

1. Position dispenser in desired location.
2. Mark dispenser outline on counter and remove dispenser.
3. Drill four 7/16" holes in counter to anchor dispenser to counter (**Fig. 1**).
4. Apply a thick bead approximately 1/4" (7 mm) diameter of NSF listed silicone sealant (Dow Corning® RTV-732 or equivalent) 1/4" (7 mm) inside marked outline of dispenser.
5. Reposition dispenser on counter and secure to counter with four 3/8"-16NC bolts.
6. Smooth excess sealant around outside of dispenser.
7. Make utility connections (**Fig. 2**).

| | |
|------------------------------------------------------------------------------------------------------------------------------------|--|
| ⚠ CAUTION! | |
| <ul style="list-style-type: none"> ▪ Do not connect water-cooled condenser outlet line to the dispenser drain line. | |

8. Turn on water supply and check for leaks.
9. Clean dispenser and ice machine before putting into service.
10. Turn power on and allow ice machine to produce ice.

Fig. 1 Countertop anchoring locations

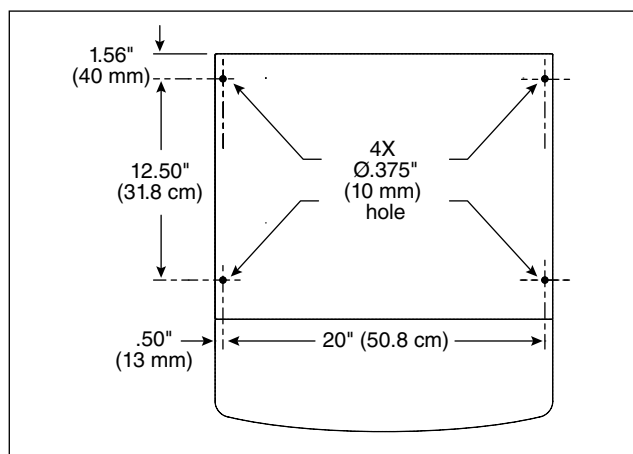
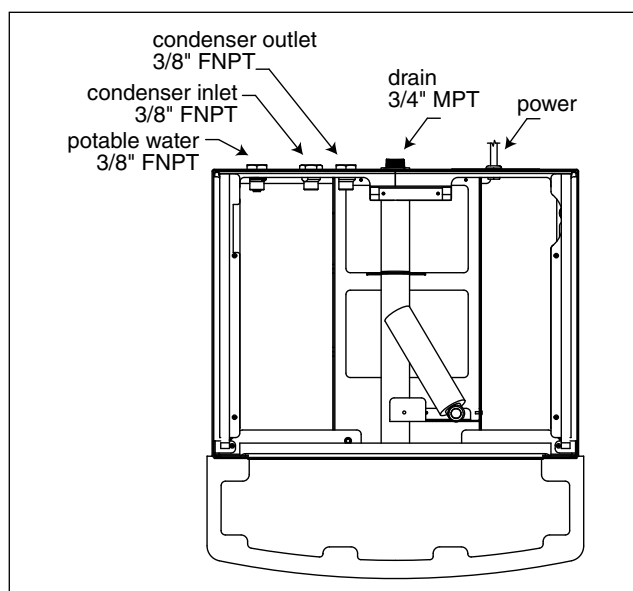


Fig. 2 Utility connections as viewed from top for countertop back access



Installing countertop dispensers with bottom exiting utilities

WARNING!

- A sturdy work surface capable of supporting the entire dispenser must be used.
- The work surface must be large enough to accommodate height of dispenser.
- Failure to provide proper support may result in personal injury.

1. Position dispenser with dispense chutes facing upward on sturdy work surface (**Fig. 3**).
2. Move drain fitting from back of dispenser and mount (**Fig. 4.1**).
3. Cut drain tube to length and attach to barbed connection (**Fig. 4.2**).
4. Move inlet water fitting from back of dispenser and mount (**Fig. 4.3**).
5. Cut water tubing to length and re-insert into water fitting.
6. **Water-cooled only.** Disconnect internal condenser water inlet and outlet fittings.
7. **Water-cooled only.** Relocate water inlet and outlet fittings and reconnect (**Fig. 4.4**). **Note:** The water inlet is connected to the condenser; the outlet line is connected to the water regulating valve.

8. Raise the dispenser upright and position in desired location.
9. Mark dispenser outline on counter and remove dispenser.
10. Cut countertop utility opening and drill four 7/16" holes to anchor dispenser to counter (**Fig. 5**).
11. Apply a thick bead approximately 1/4" (7 mm) diameter of NSF-listed silicone sealant (Dow Corning® RTV-732 or equivalent) 1/4" (7 mm) inside marked outline of dispenser.
12. Reposition dispenser on counter and secure to counter with four 3/8"-16NC bolts.
13. Smooth excess sealant around outside of dispenser and make utility connections through countertop cutout.

CAUTION

- Do not connect water-cooled condenser outlet line to the dispenser drain line.

14. Turn on water supply and check for leaks.
15. Clean dispenser and ice machine.
16. Turn power on and allow ice machine to produce ice.

Fig. 3

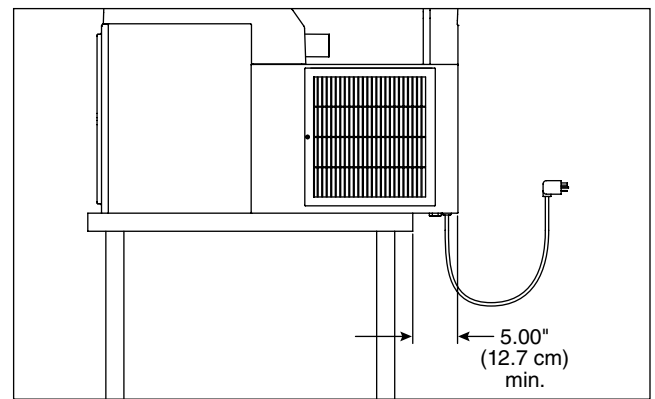


Fig. 4

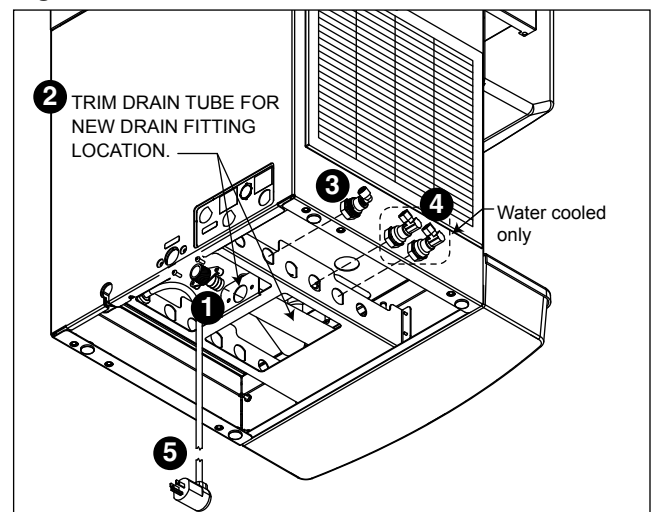
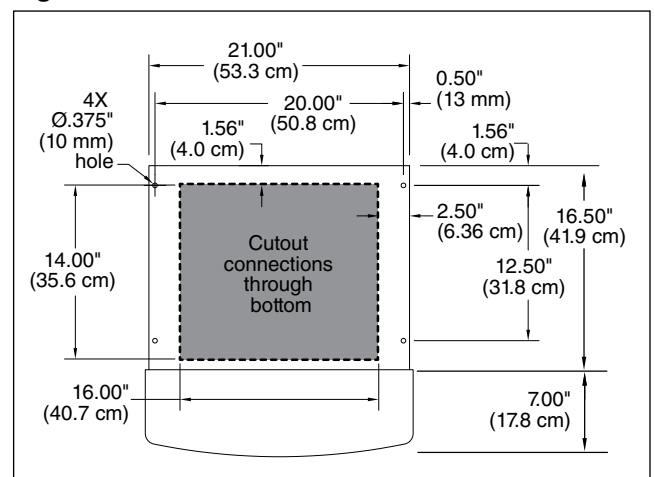


Fig. 5



Installing wall mount dispensers

WARNING!

- Wall mount dispensers are intended to be mounted above a sink, eliminating the need for a drain pan.
- Before beginning installation verify that the sink size and location meet the requirements shown in Fig. 6.
- If requirements are not met, a drain pan must be used to prevent ice and water from falling on counter or floor.
- **FAILURE TO TAKE THESE PRECAUTIONS COULD RESULT IN SLIPS AND FALLS ON WET FLOORS**

Fig. 6 – Minimum sink requirements (without drain pan), front view

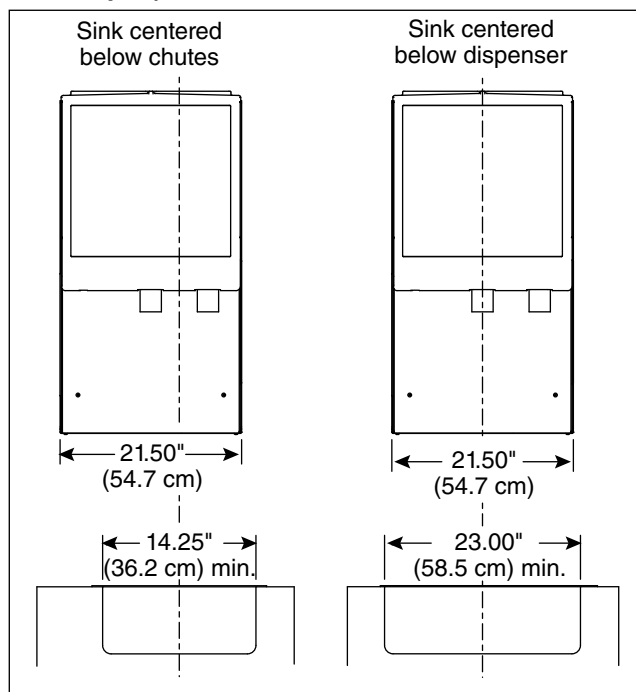
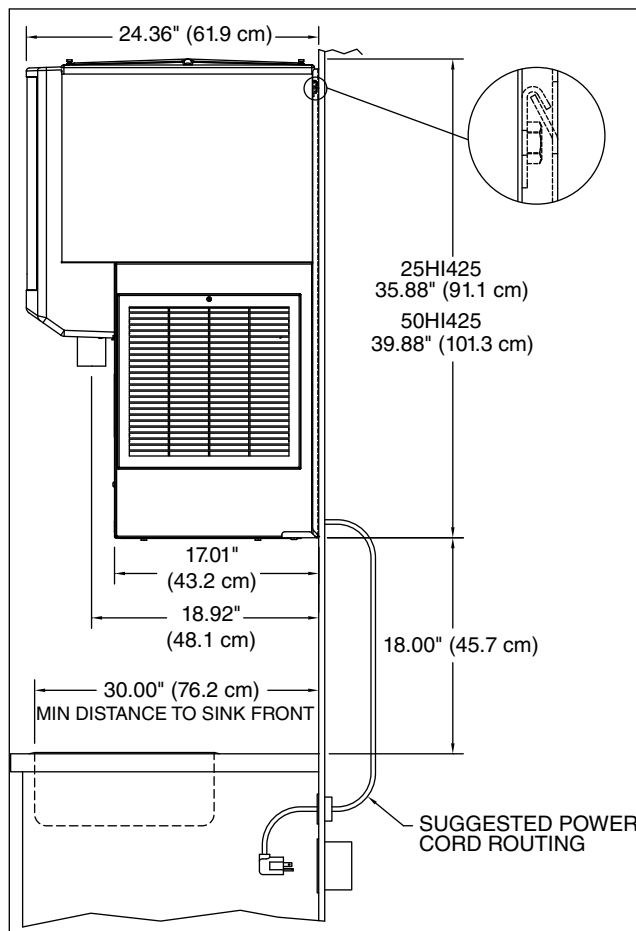


Fig. 7 – Minimum sink requirements (without drain pan), side view



1. Locate wall bracket mounting position relative to wall studs (**Fig. 8**). Install the supplied wall bracket with six 3/8" diameter fasteners (**Fig. 10.1**).
Note: Three holes are available at each fastening site to allow capture of studs or supports within the wall.
2. Locate and cut utility hole (**Fig. 10.2**) in wall using **Fig. 9** dimensions.
3. Rough in utilities. Wall mount bracket dimensions can be used as a template.
 - Water: 1/2" FNPT
 - Drain: 3/4" MPT
4. Lift dispenser onto wall bracket positioning unit so that hook on back of dispenser is captured by wall bracket support angle (**Fig. 10.3**).
5. Install two 1/4" X 20 screws through bottom of wall bracket into bottom of dispenser to secure dispenser to wall bracket (**Fig. 10.4**).
6. Install supplied 1/2" MPT X 3/8" push-in adapter onto 1/2" FNPT water supply.

Fig. 8 – Wall bracket location guide

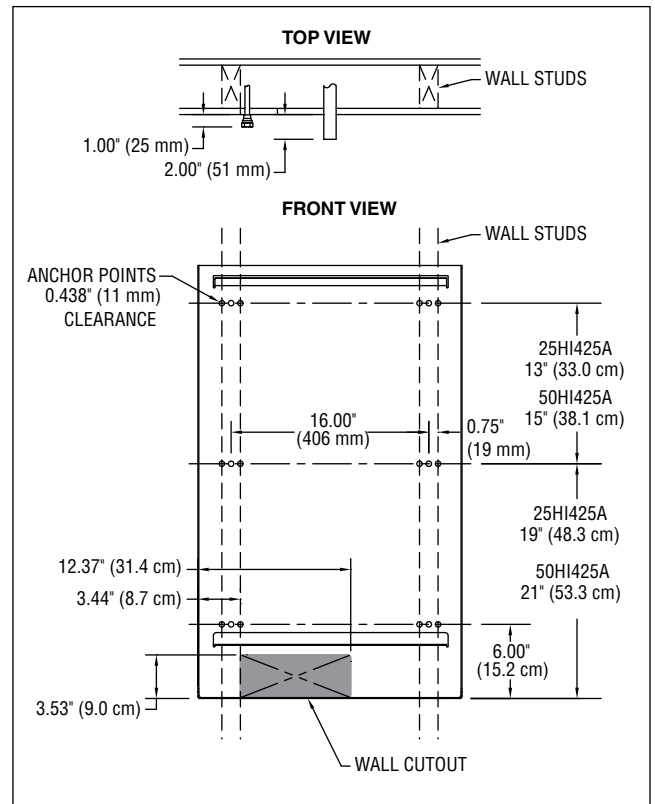


Fig. 9 – Wall mount, utility location

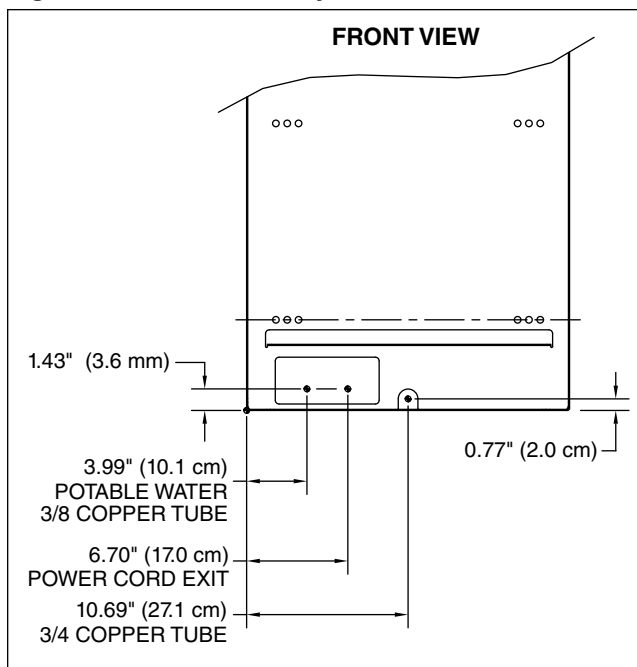
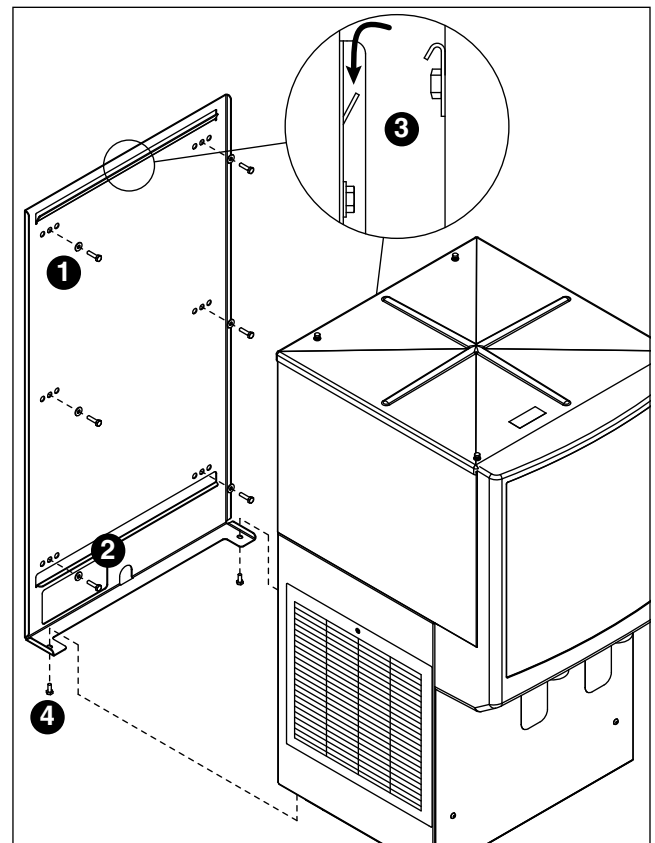
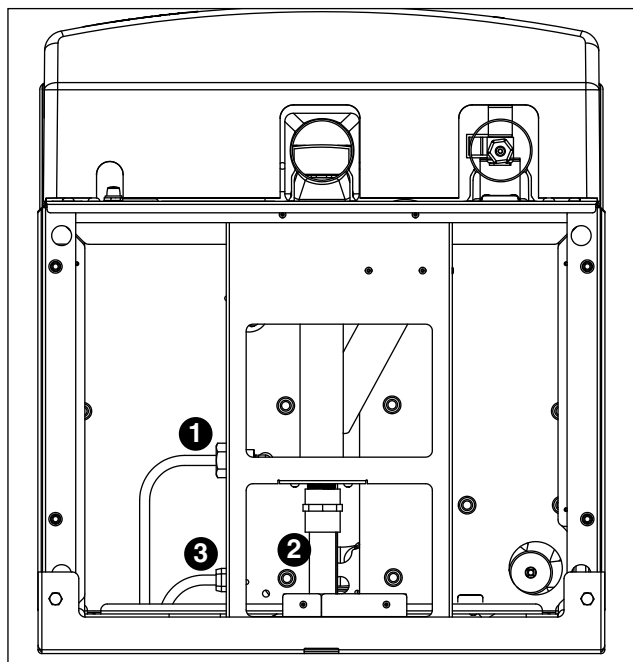


Fig. 10 – Wall mount bracket and fastener requirements



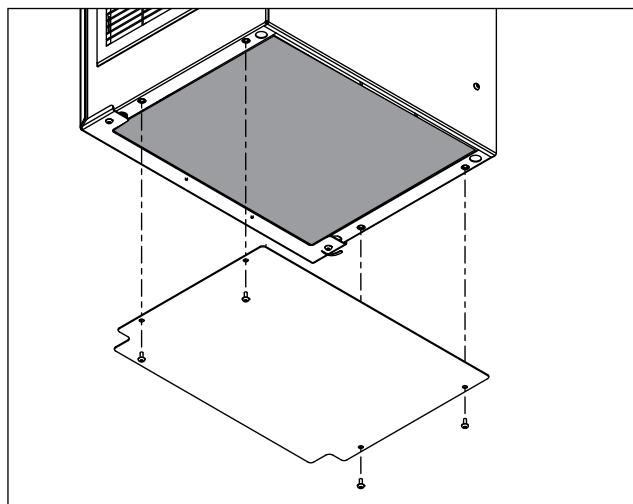
7. Connect supplied 3/8" water line between water supply and water inlet fitting (**Fig. 11.1**).
8. Using supplied 3/4" drain tubing and barbed fittings, connect 3/4" barbed drain elbow fitting on dispenser to 3/4" FNPT drain (**Fig. 11.2**).
9. Route power cord through utility access hole to power supply (**Fig. 11.3**).
10. Turn on water supply and check for leaks.

Fig. 11 – Dispenser bottom view



11. Install bottom panel (**Fig. 12**).

Fig. 12



User information

How the dispenser works

Follett's 25/50CI series automatic-load ice and water dispensers are equipped with Follett's 425 lb (181kg)/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.

Cleaning and sanitizing

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 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.

Follett recommends sanitizing the pressurized water lines prior to cleaning the ice machine/dispenser. Follett offers two kits: order P/N [01089572](#) when a Follett filter system with a pre-filter bowl is present, or P/N [01089580](#) when a Follett filter system is not present. Follow the instructions provided with the respective kits to sanitize the pressurized water lines immediately before cleaning the ice machine/dispenser.

Cleaning of the condenser can usually be performed by facility personnel. Cleaning 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 intervals*

| Symphony Plus | Frequency |
|------------------------------|---------------------------|
| Drain Line | weekly |
| Drain Pan/Drip Pan | weekly |
| Exterior, Water Station Tube | 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 |
| Pressurized Water Sanitizing | semi-annually |

* Ice machine and dispenser must be cleaned 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

1. Deactivate dispensing by pressing and releasing clean switch located on left side of unit under top front cover.
2. Clean lens and splash panel front using a soft cloth and mild, non-abrasive, non-chlorine based cleaner.
3. 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 procedure should always include both the ice machine and dispenser.
- Icemaking system can be cleaned in place.

CAUTION!

- Wear rubber gloves and safety goggles (or face shield) when handling SafeCLEAN Plus™ and IMS-III solutions.
- Use only Follett approved cleaners.
- It is a violation of Federal law to use the Nu-Calgon® IMS-III solution in a manner inconsistent with its labeling.
- Do not use solvents, abrasive cleaners, metal scrapers or sharp objects to clean any part of the dispenser.

Cleaning Tool Checklist

- (1 or 2) 1.5 gallon (or larger) plastic bucket
- (2) clean cloths
- Sanitary gloves
- Safety glasses
- (2) SaniSponge™ (P/N [00131524](#) - single sponge)
- SafeCLEAN Plus ice machine cleaner
- [OPTIONAL] Nu-Calgon IMS-III no-rinse sanitizer (P/N [00979674](#) – 16 fl oz. bottle)

SafeCLEAN Plus Solution: Follow the directions on the SafeCLEAN Plus packaging to mix 1 gal. (3.8 L) of Follett SafeCLEAN Plus solution. Use 100 F (38 C) water.

[OPTIONAL] No-rinse Sanitizing Solution: Follow the directions on the Nu-Calgon IMS-III packaging to mix 1 gal. (3.8 L) of IMS-III solution. Use 100 F (38 C) water.

Ice Machine and Dispenser

Cleaning Procedure

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

1. If ice machine was running recently, ensure that the evaporator is completely free of ice before proceeding. If there is ice in the evaporator, complete steps 2-7 using only hot water to remove the ice, then begin Cleaning Procedure again.
2. Remove front cover and turn **OFF** bin signal switch.
3. Dispense all ice from storage hopper and discard.

4. Remove splash panel.
5. Press **CLEAN** switch. The **MAINTENANCE** light will turn on and the machine will drain. Wait for the **LOW WATER** light to turn on.
6. Remove lid from cleaning cup and fill (about 1 quart) until SafeCLEAN Plus solution completely fills the reservoir. Place lid back on cup. Save remainder of SafeCLEAN Plus solution.
7. **CLEANER FULL** light will turn on and machine will start cleaning cycle, then rinse three times; this process takes approximately 15 minutes.
8. While ice machine is cleaning, clean dispenser as follows:
 - a. Turn **OFF** dispenser power.
 - b. Remove hopper lid.
 - 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. Remove water dispense tube. Soak in SafeCLEAN Plus solution and clean thoroughly with a small brush. Rinse with clean water and reinstall.
 - g. Submerge drain grille in SafeCLEAN Plus solution and allow to soak to remove any scale buildup.
 - h. Wipe inside of hopper lid, stud assembly, baffle, wheel, inside of storage area, dispense chutes, drain grille and drain pan with damp cloth wrung out in SafeCLEAN Plus 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.
9. When machine is finished cleaning, the **MAINTENANCE** light will turn off.

Finish cleaning – SafeCLEAN Plus only

10. Reinstall dispense chutes, wheel, baffle, stud assembly and knurled nuts.
11. Remove top bearing insulation. Loosen Phillips-head screw on nozzle connected to evaporator. Remove nozzle from evaporator side only, leave other side of nozzle connected to transport tube.
12. Soak one SaniSponge in remaining SafeCLEAN Plus solution.
13. Insert the sponge soaked in cleaning solution into nozzle, then insert a dry sponge into the nozzle.
14. Replace nozzle onto evaporator and tighten screw. Ensure drain is connected to reservoir and vent tubes are connected to evaporator drain pan. Replace top bearing insulation.
15. Turn **ON** bin signal switch. Wait for ice to push sponges through transport tube.
16. Collect sponges from ice storage bin.
17. Replace hopper lid, machine top, turn **ON** dispenser power and install front cover.
18. After 10 minutes, dispense all ice and discard.

[OPTIONAL] Finish cleaning – No-rinse sanitizing with Nu-Calgon IMS-III

19. Press **CLEAN** switch. The **MAINTENANCE** light will turn on and the machine will drain. Wait for the **LOW WATER** light to turn on.
20. Remove lid from cleaning cup and fill (about 1 quart) until sanitizing solution completely fills the reservoir. Place lid back on cup. Save remainder of sanitizing solution.
21. **CLEANER FULL** light will turn on and machine will start cleaning cycle then rinse three times; this process takes approximately 15 minutes.
22. While ice machine is sanitizing, clean dispenser as follows:
 - a. Wipe inside of hopper lid, stud assembly, baffle, wheel, inside of storage area, dispense chutes, drain grille and drain pan with damp cloth wrung out in sanitizing solution. Do not rinse off the 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.
23. Reinstall dispense chutes, wheel, baffle, stud assembly and knurled nuts.
24. When machine is finished rinsing, the **MAINTENANCE** light will turn off.
25. Remove top bearing insulation. Loosen Phillips-head screw on nozzle connected to evaporator. Remove nozzle from evaporator side only, leave other side of nozzle connected to transport tube.
26. Soak one SaniSponge in remaining sanitizing solution.

27. Insert the sponge soaked in sanitizing solution into nozzle then insert a dry sponge into the nozzle.
28. Replace nozzle onto evaporator and tighten screw. Ensure drain is connected to reservoir and vent tubes are connected to evaporator drain pan. Replace top bearing insulation.
29. Turn ON bin signal switch. Wait for ice to push sponges through transport tube.
30. Collect sponges from ice storage bin.
31. Replace hopper lid, machine top, and install front cover.
32. After 10 minutes, dispense all ice and discard.

User Interface and Exterior Cabinet

- Clean stainless steel panels with stainless steel cleaner.

Service

Ice machine Operation (all models)

Follett's ice machine consists of four distinct functional systems:

- Harvesting system
- Water system
- Electrical control system
- Refrigeration system

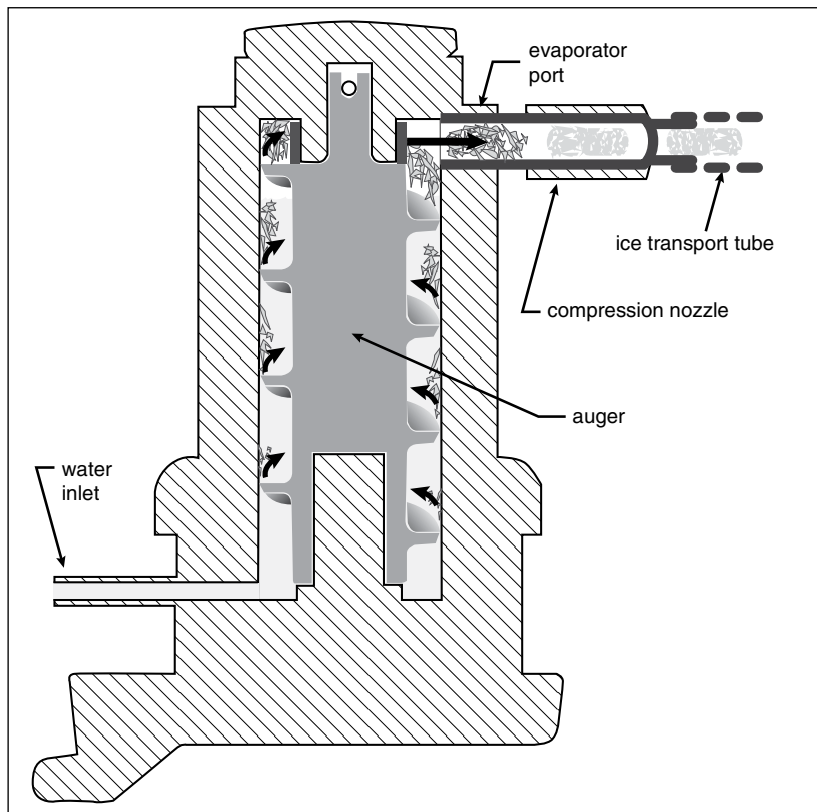
These four systems work together to accomplish the production and harvesting of ice. A problem in any one of these systems will result in improper operation of the entire ice production cycle. When troubleshooting the ice machine, it is important to analyze the entire system operation to determine which system is not functioning properly, then pinpoint the component within that system that is malfunctioning. Determine what corrective action must be taken before making any adjustments or replacing any components.

The icemaking process

The Maestro Plus ice machine uses a stainless steel jacketed evaporator and operates on a continuous freezing cycle. Water is supplied to the evaporator from the water reservoir where the water level is controlled by conductivity probes.

When the ice machine is running, a layer of ice forms on the interior surface of the evaporator. This ice is continuously removed by a slowly rotating (12 RPM) auger. The auger carries the ice upward into the cavity formed by the top bearing housing and the compression loop, where it is compressed to remove excess water. When the ice reaches the desired hardness it rotates within the cavity and is forced through a discharge port and compression nozzle and into the ice transport tube. The discharge tube and compression nozzle are slightly restricted to further compress the ice and produce the desired hardness.

A solid state control board located in the electrical box of the ice machine controls the normal operation of the ice machine and monitors gearmotor torque. This control board will shut down the ice machine should an over-torque condition occur. It is very important that you familiarize yourself with the operational sequences detailed in this manual before attempting to service the ice machine.



Water system

The water level in the evaporator is controlled by a fill solenoid (**Fig 13**) and level detecting sensors. Water sensing rods (**Fig. 14**) extend down into the reservoir at the end of the evaporator assembly. The system works via electrical conductivity as follows:

One of the longest probes is a common. When water is between any of the other probes and the common, the PC board will sense the activation. During normal operation, the water level rises and falls between the Normal High and Normal Low sensors. As water is consumed to make ice, the level will fall until the Normal Low sensor is exposed, triggering the water feed solenoid on. Water will fill until the Normal High sensor is activated.

Note: The potable water dissolved solids content must be greater than 10 ppm for the water control system to function properly. If using reverse osmosis water filtration system, ensure T.D.S level is greater than 10 ppm.

Fig. 13 – Water system diagram

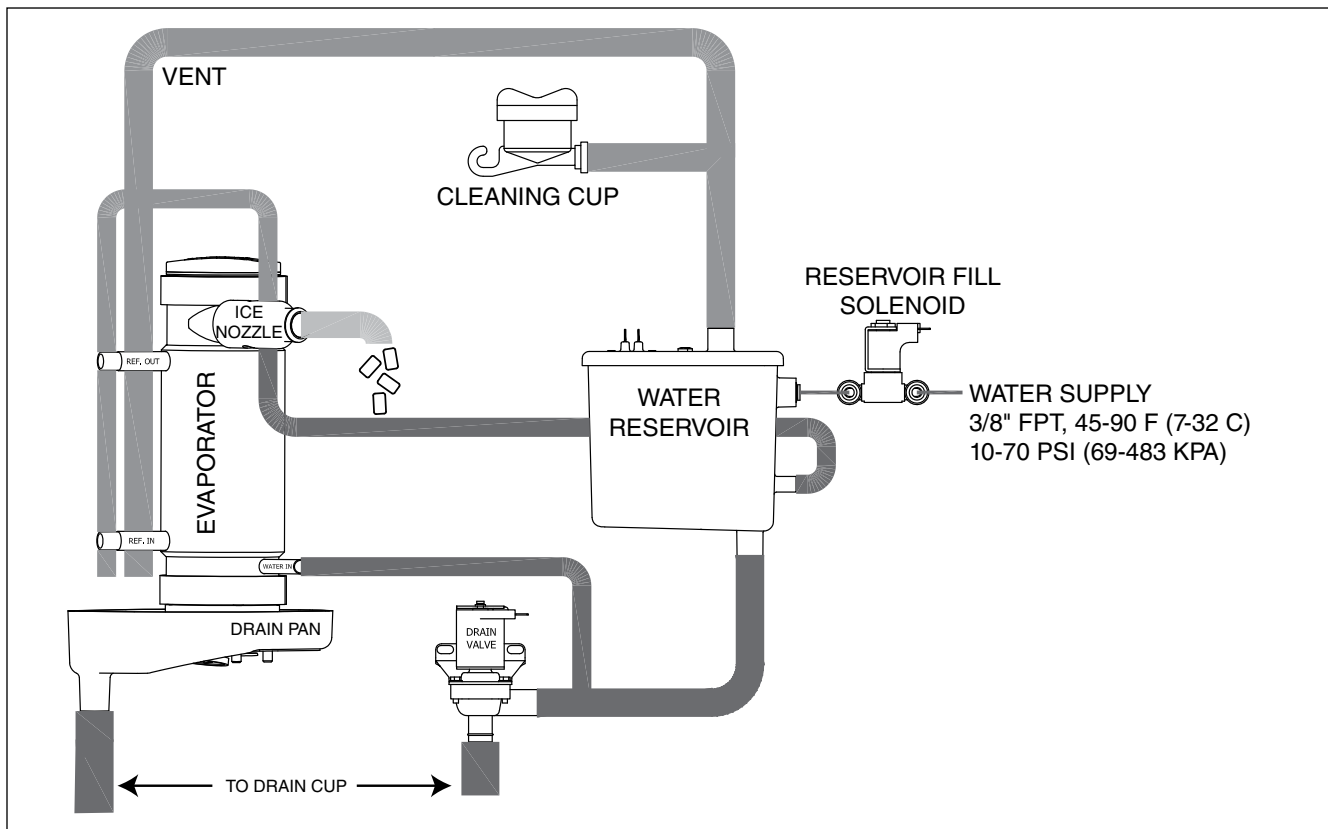
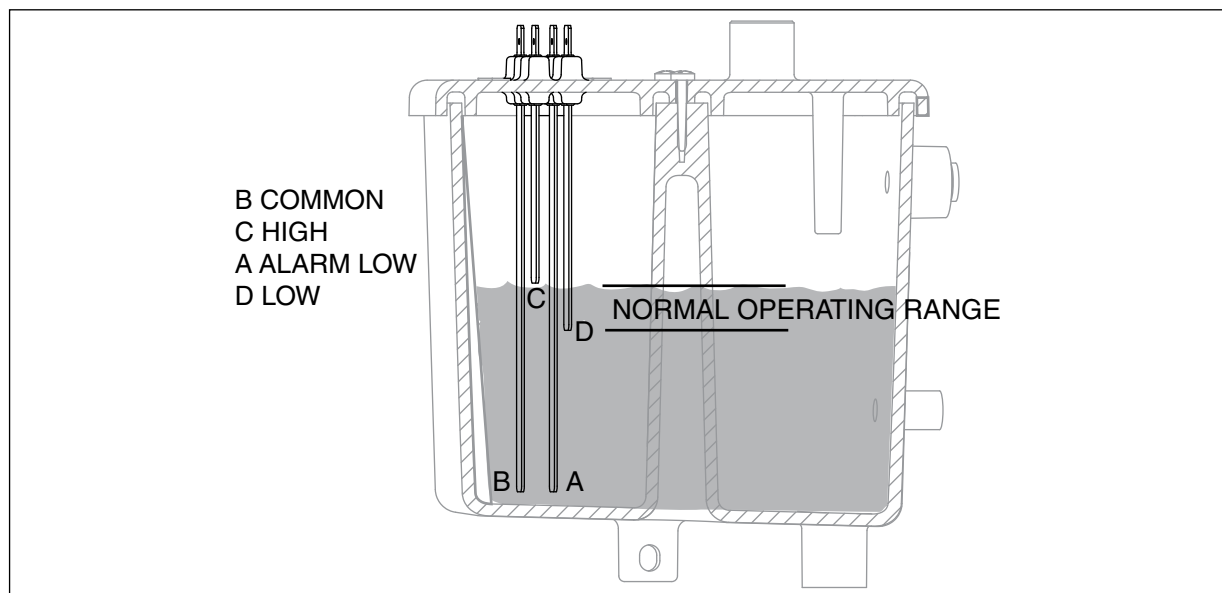


Fig. 14 – Water level diagram



Electrical box and control board



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

Fig. 15 – Electrical component locations

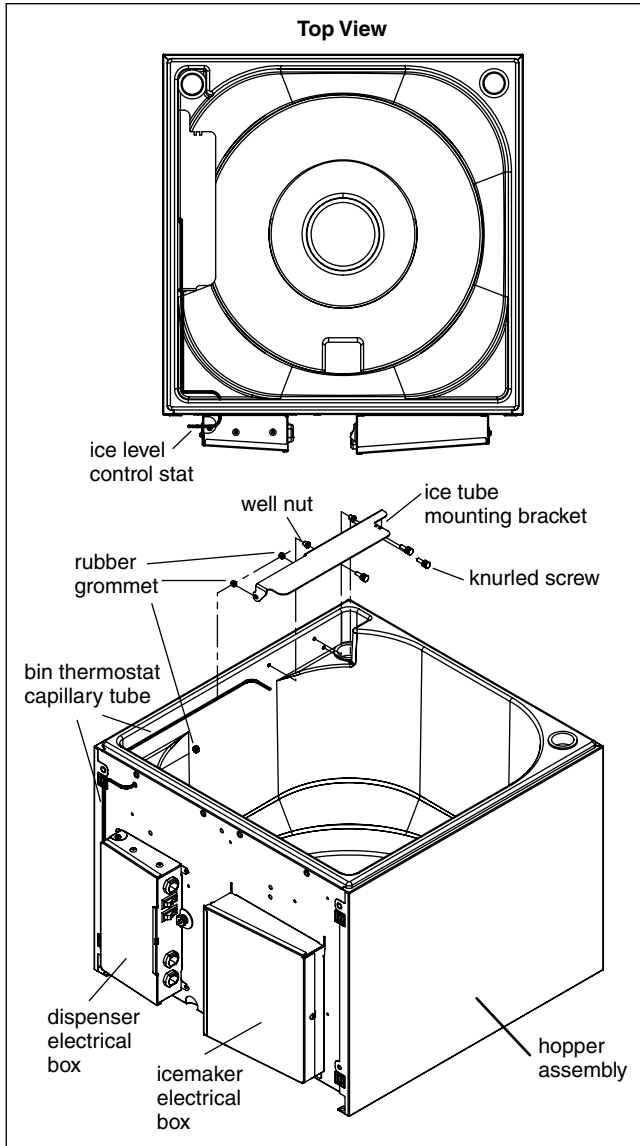
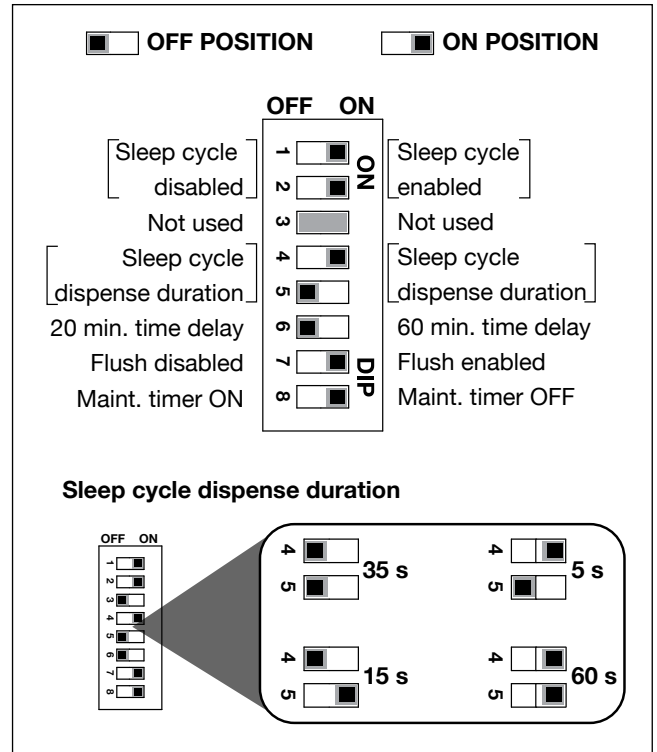
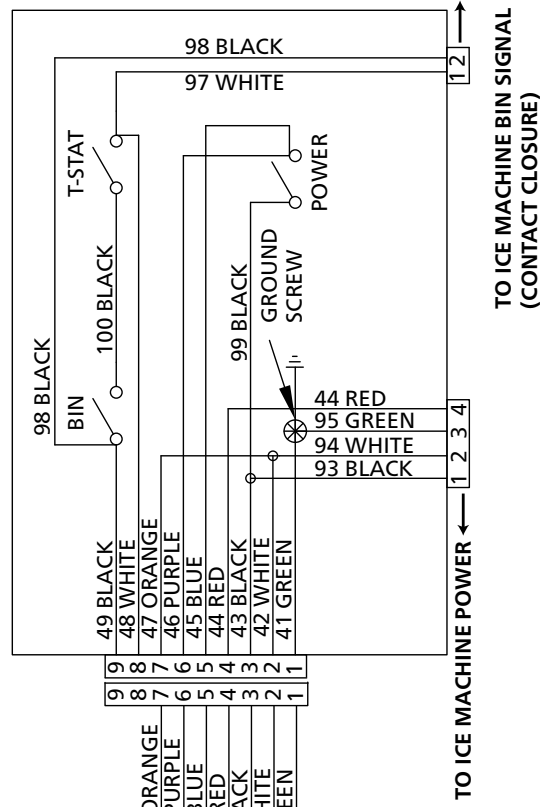


Fig. 16 – Control board dip switch settings

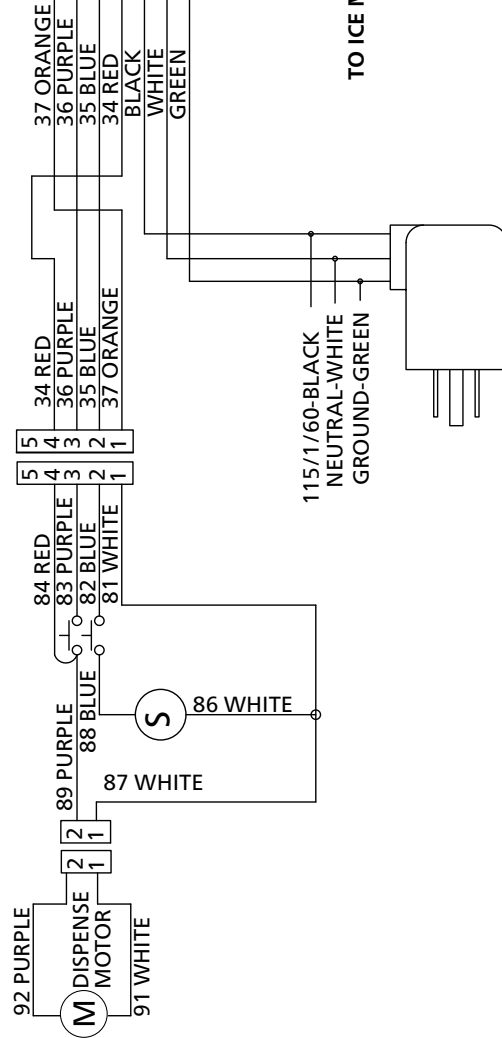


Wiring diagram - Lever

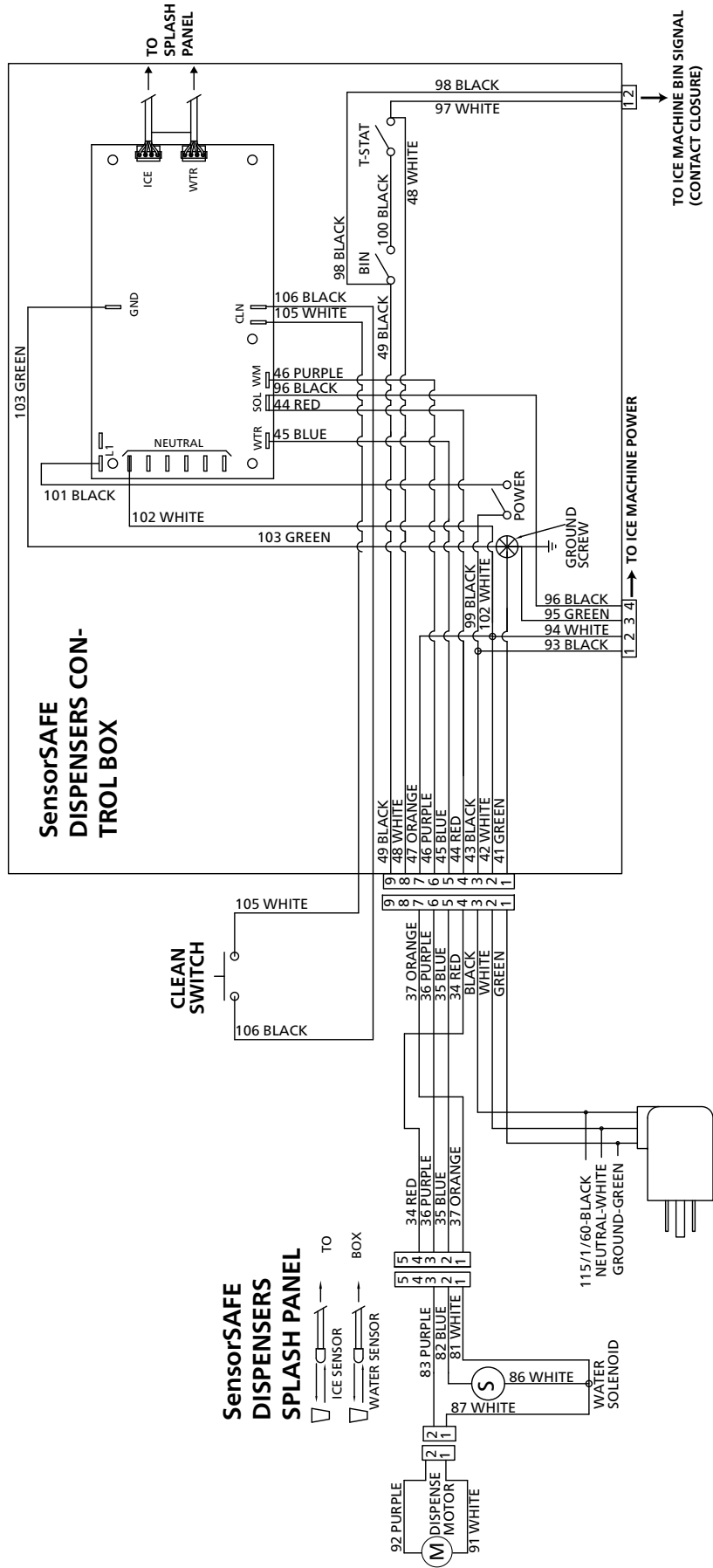
LEVER DISPENSERS CONTROL BOX



LEVER DISPENSERS SPLASH PANEL



Wiring diagram - SensorSAFE



Ice machine operational and diagnostic sequences

The wiring diagrams that follow illustrate the circuitry of Follett ice machines used with 25/50 series ice dispensers. Both normal operation (stages 1—8) and non-normal diagnostic sequences showing torque-out for use in troubleshooting are shown.

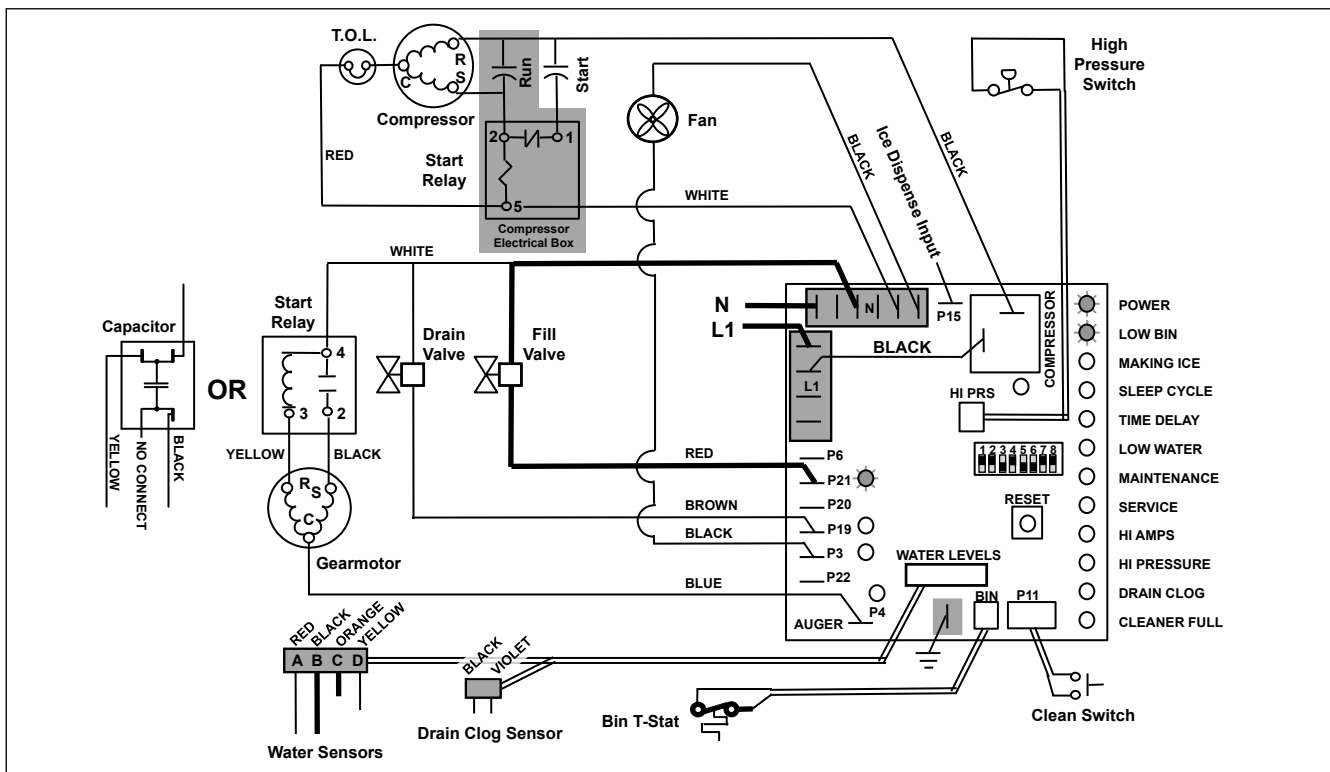
Circuitry notes

- Bin signal is contact closure only — **DO NOT SUPPLY POWER.**

Note: The operation stage descriptions that follow are based on the unit containing the split-phase gear motor.

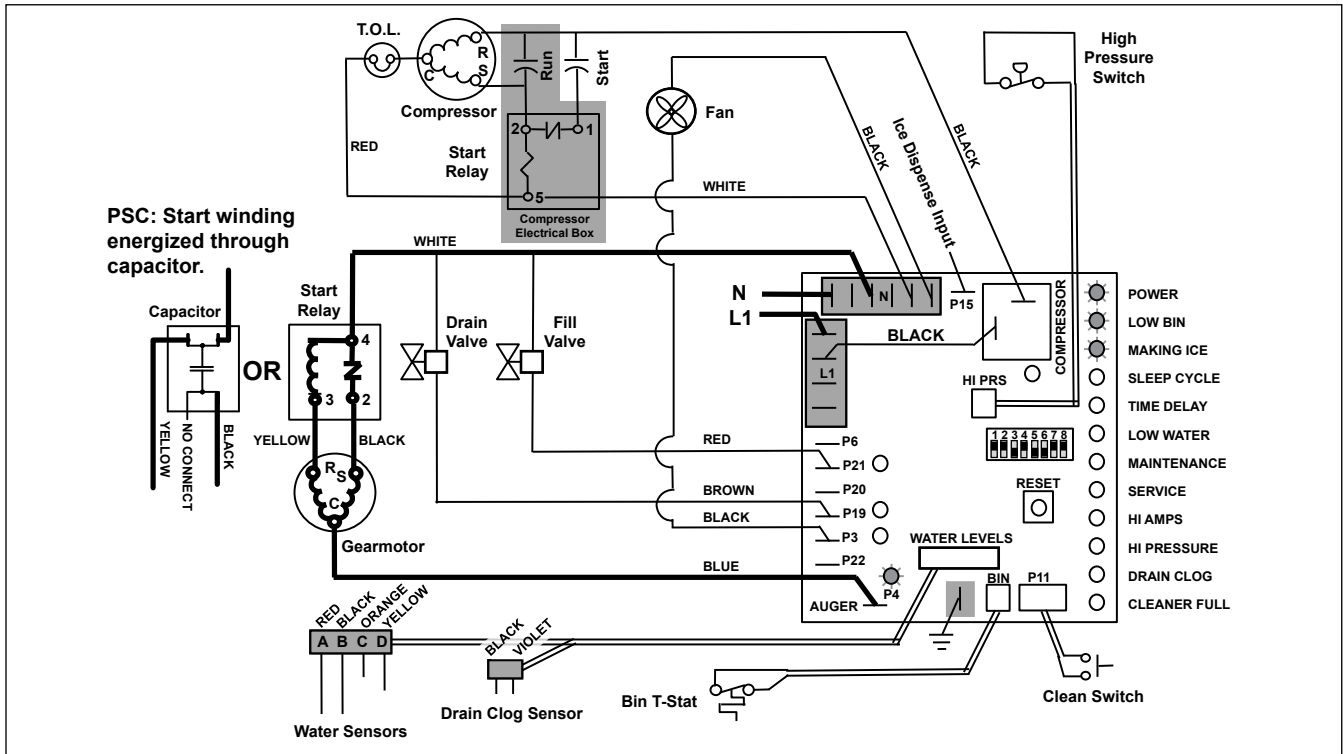
Normal operation – Stage 1

Power is supplied to L1 of the control board, the **POWER** LED light begins flashing. The ice level bin thermostat in the dispenser is closed and calling for ice, supplying contact closure to the control board. The **LOW BIN** LED will be on. The control board will now go through the start-up sequence. The board checks the water sensors (located in the reservoir) for continuity between the common probe (B) and the high probe (C). If continuity is not sensed, the water fill valve (P21) is energized.



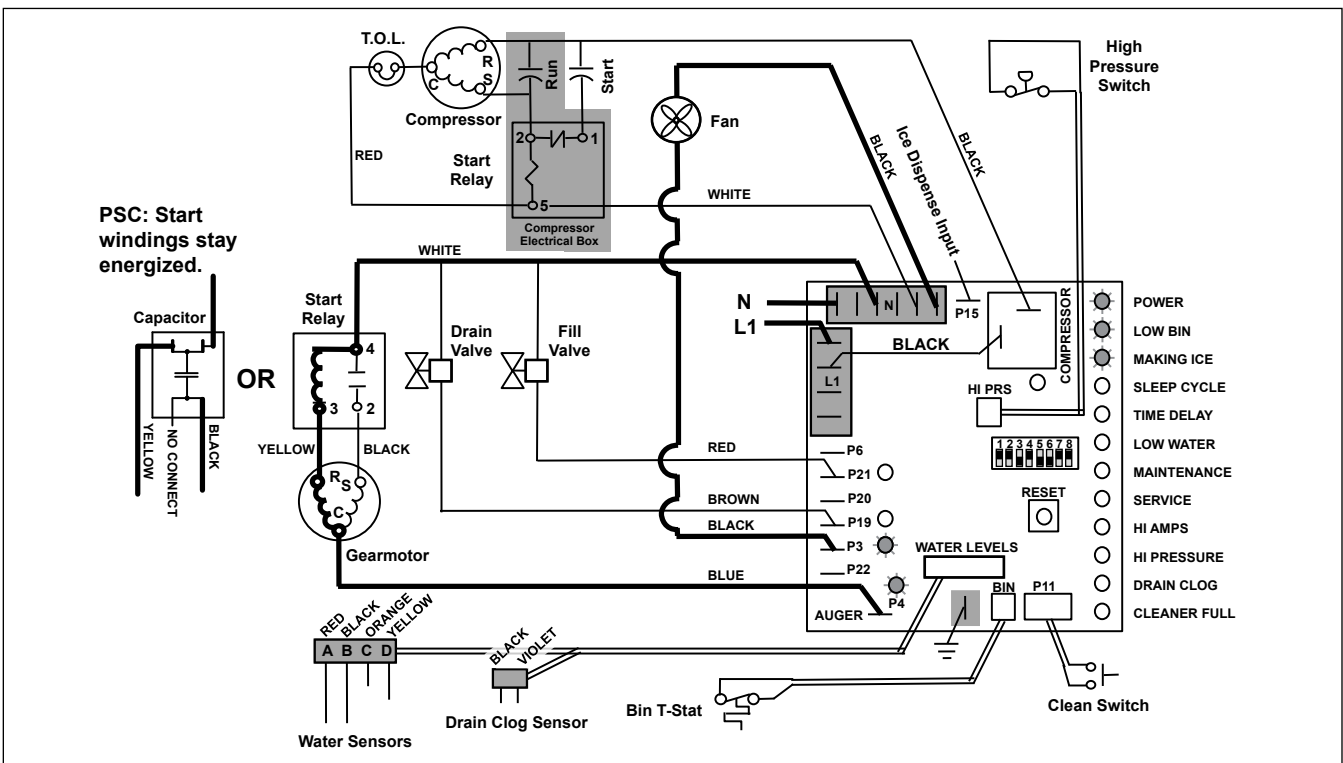
Normal operation – Stage 2

When continuity is seen between B and C, the water valve de-energizes, the AUGER output (P4) comes on along with the **MAKING ICE** LED. The auger gearmotor's start windings are energized through a current style start relay that is pulled in by the initial high current draw of the gearmotor.



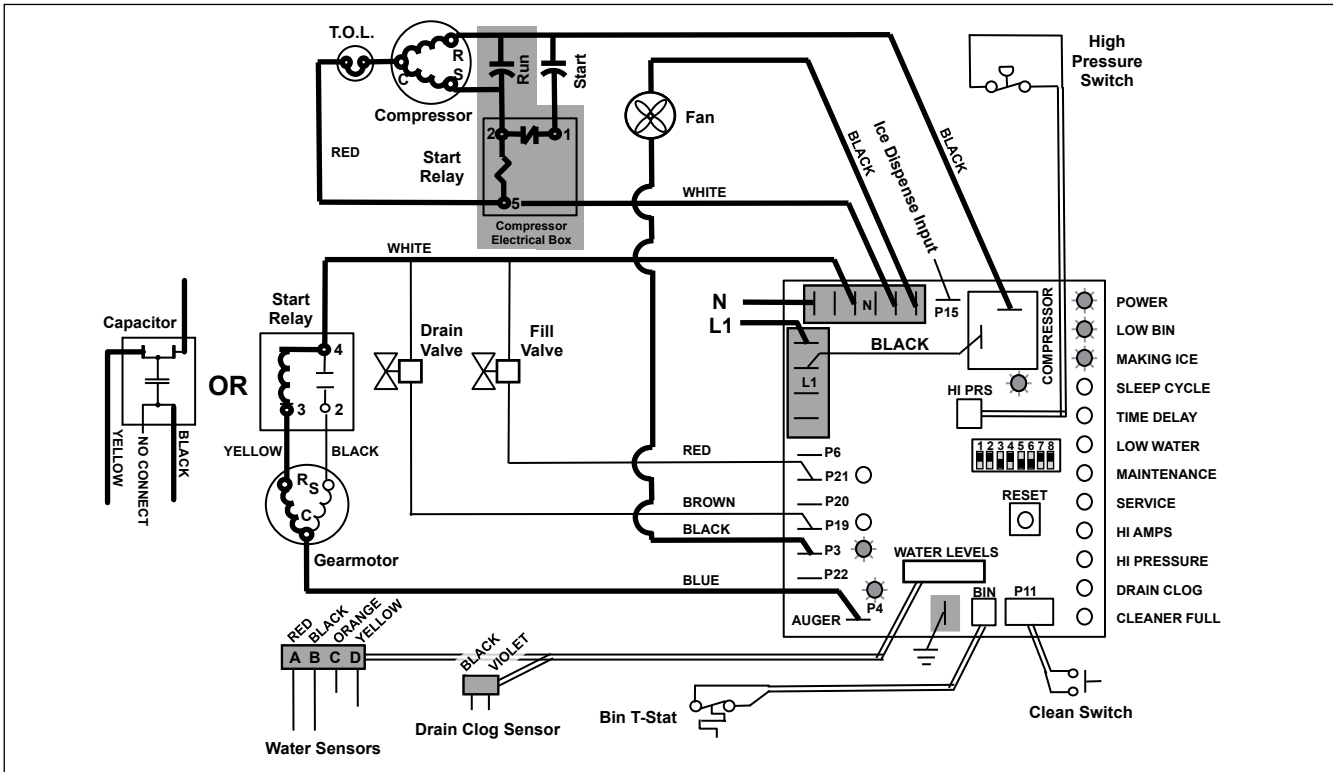
Normal operation – Stage 3

After the initial high current draw drops off, the gearmotor start relay contacts open, dropping out the start winding. The condenser fan output (P3) comes on 0.5 seconds later.



Normal operation – Stage 4

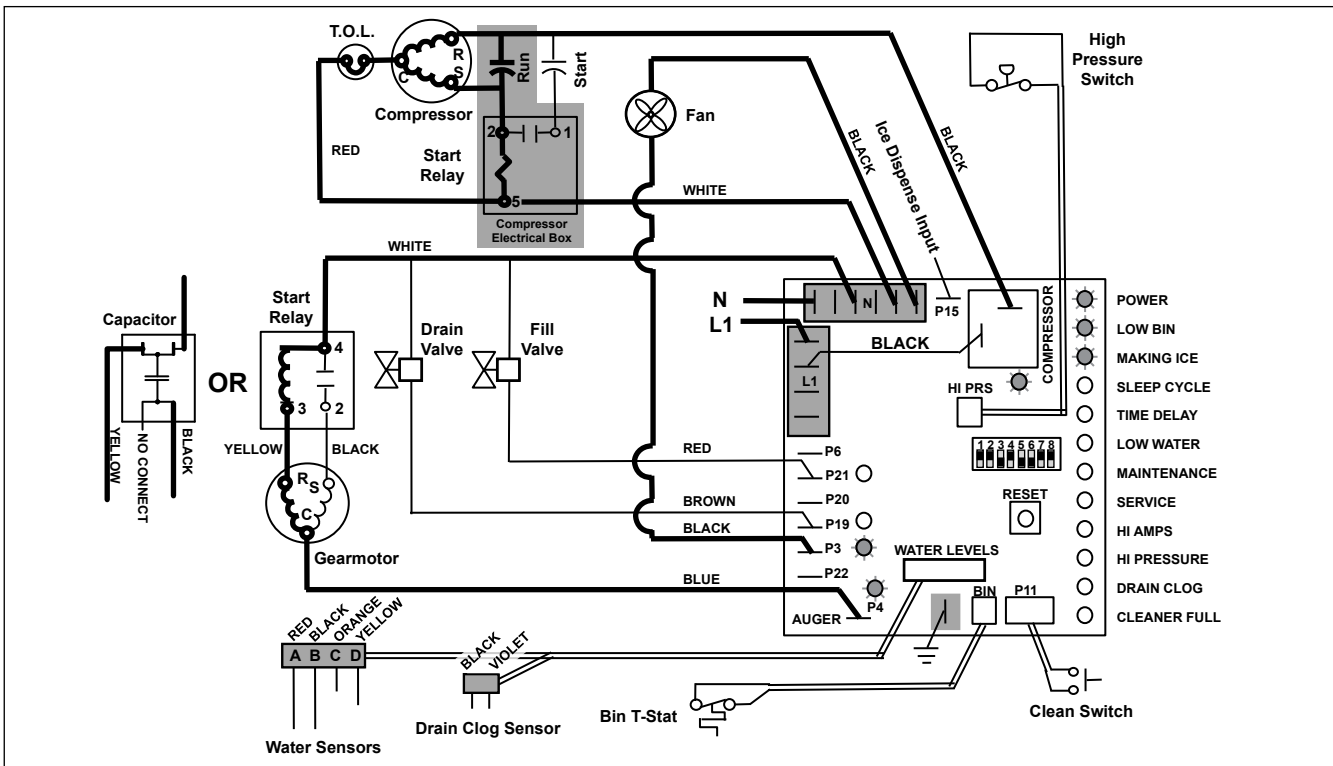
One second (1 s) after the fan comes on, the **COMPRESSOR** output comes on. The compressor circuit uses both run and start capacitors along with a potential start relay. The start capacitor is energized through the normally closed contacts of the start relay.



Normal operation – Stage 5

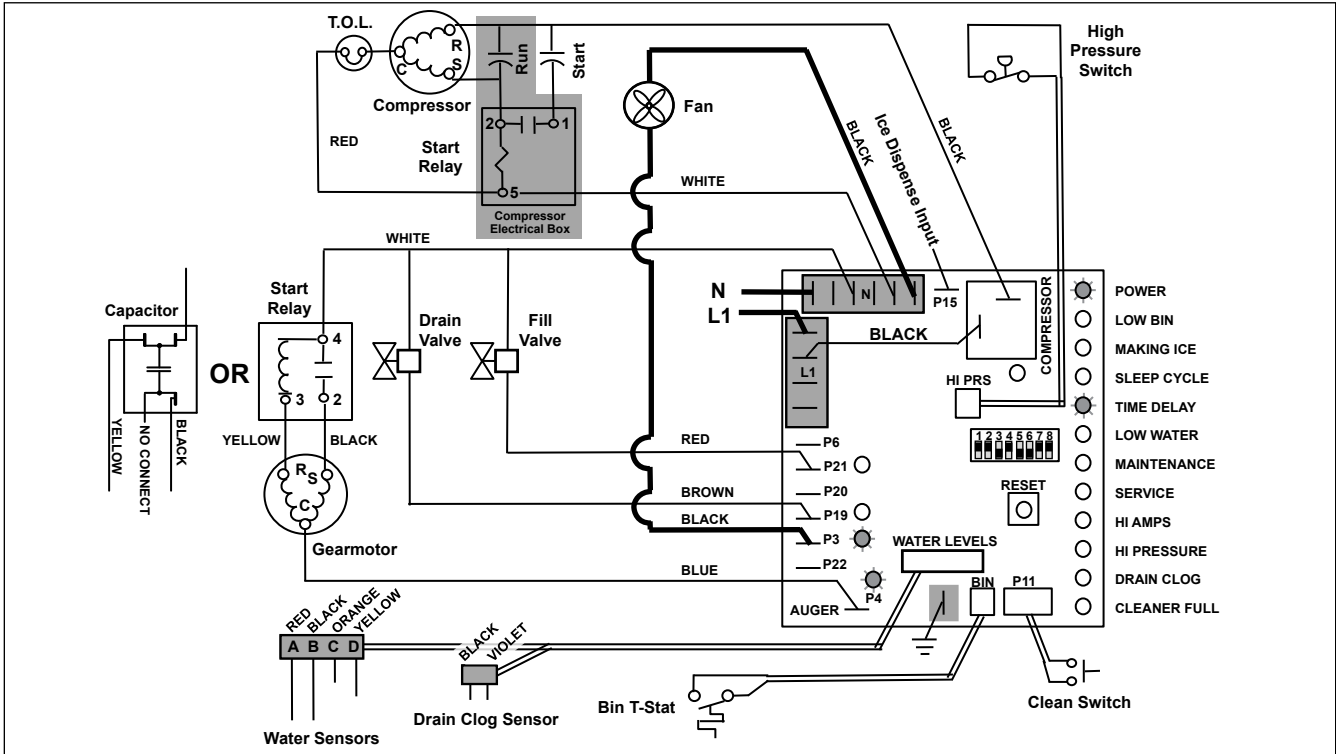
As the compressor comes up to normal running speed, its start winding generates a voltage potential across the relay's coil. This energizes the coil to open the contact and drop out the start capacitor.

The ice machine is now in a normal ice making mode. The ice machine will produce ice until the bin level control in the ice dispenser is satisfied.



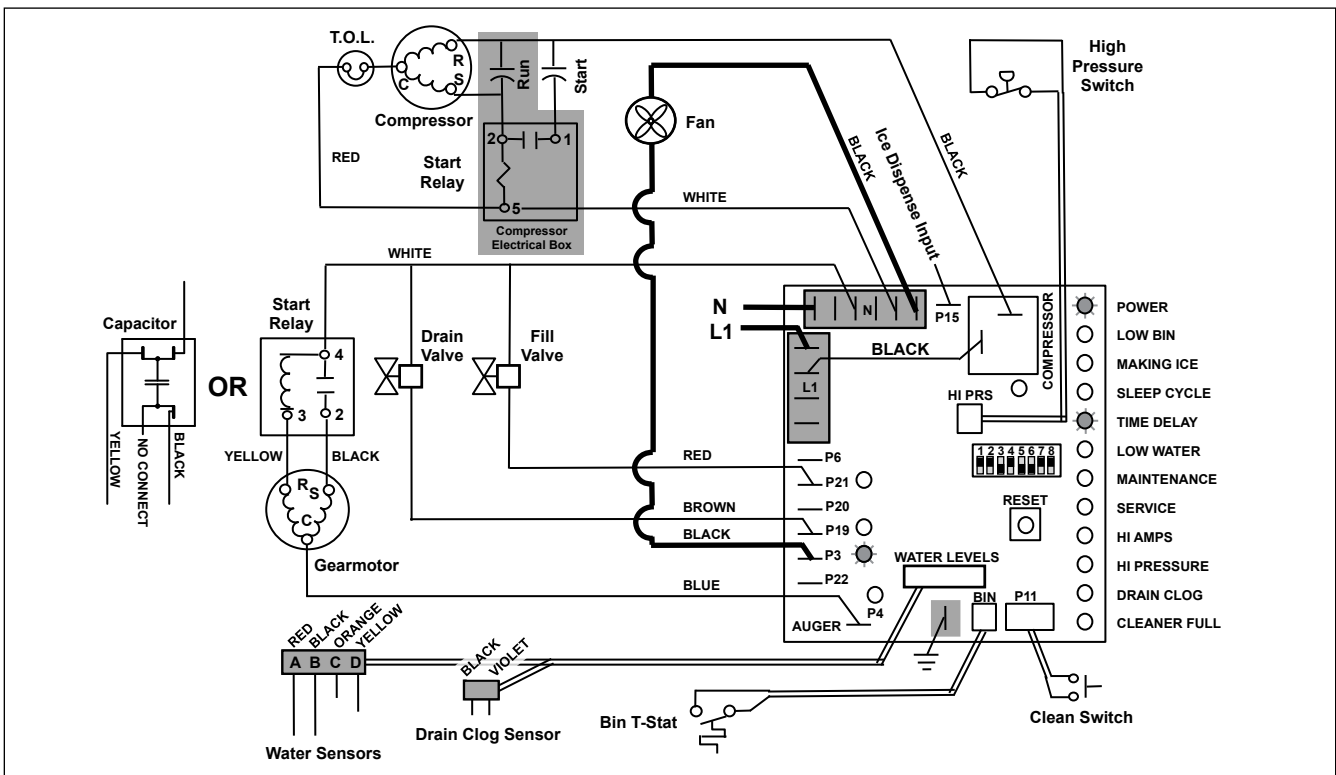
Normal operation – Stage 6

Once the bin thermostat opens, the **LOW BIN** LED goes out. The compressor and gear motor outputs turn off, the **MAKING ICE** LED goes out and the **TIME DELAY** LED comes on . .



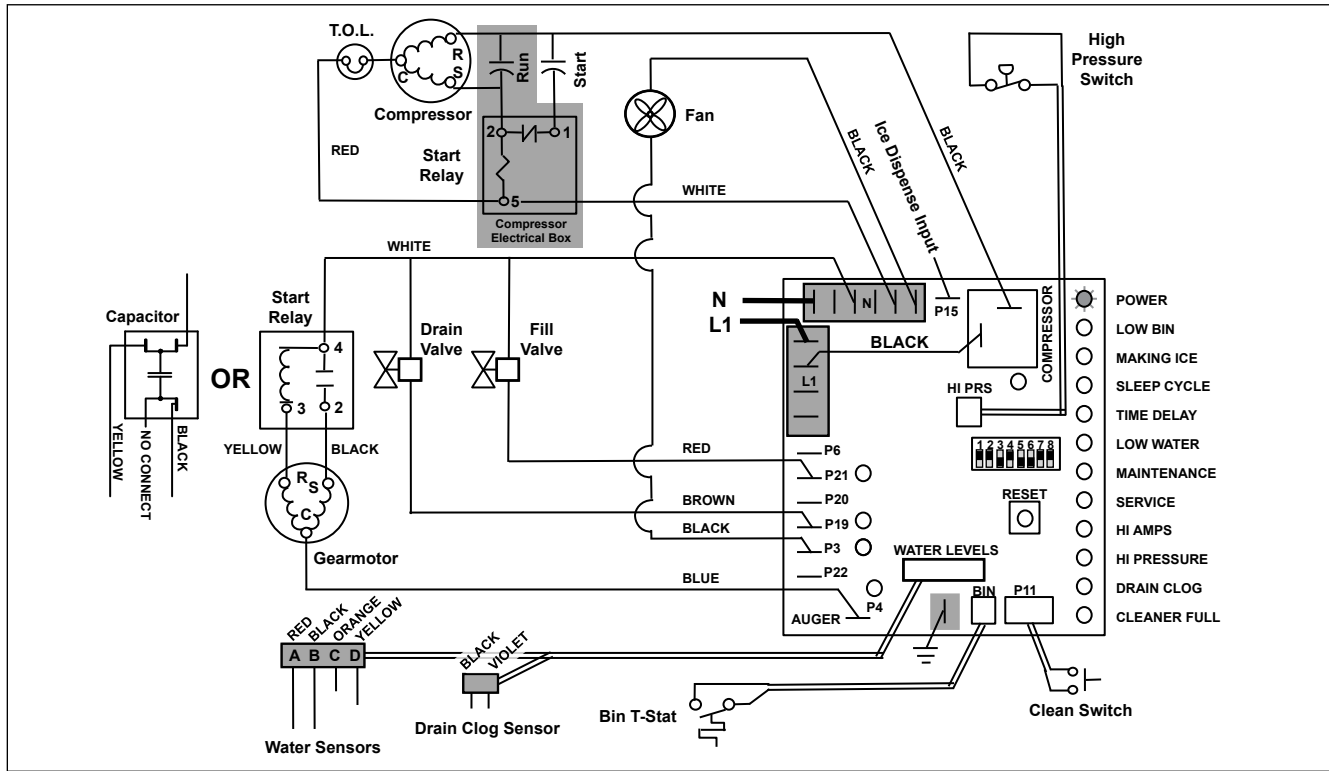
Normal operation – Stage 7

The fan motor continues for 10 minutes before shutting off. The **TIME DELAY** LED remains on for 20 minutes. The ice machine will not start while the **TIME DELAY** LED is on. To restart the ice machine for troubleshooting purposes, depress the reset button to clear the control board.



Normal operation – Stage 8

When the dwell time of 20 minutes has expired, the **TIME DELAY** LED goes off. If 5 seconds of ice has been dispensed and the **SLEEP CYCLE** LED (Symphony Plus only) is off, the ice machine will go through the normal start-up sequence when the bin level control signals the control board for ice.

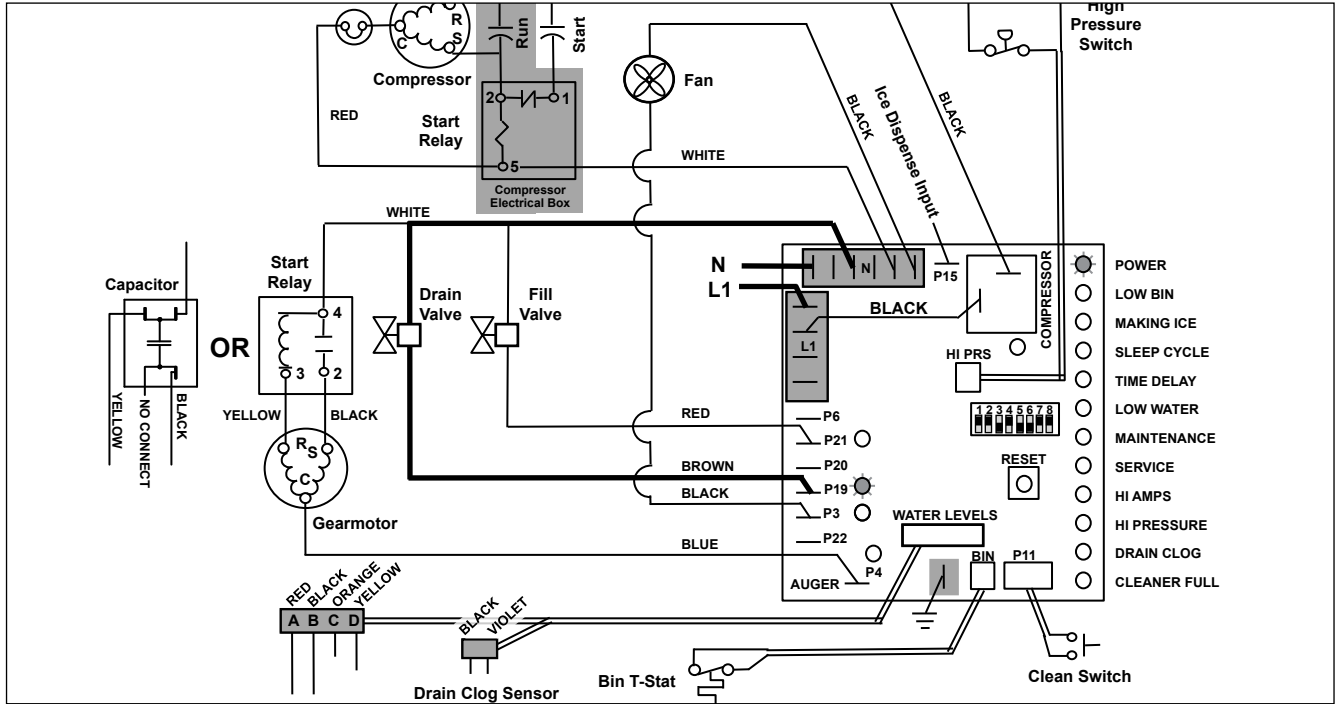


Quiet Night/Sleep cycle (Symphony Plus only)

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 dispense duration is adjustable using the DIP switches on the control board.

Self-flushing (when enabled)

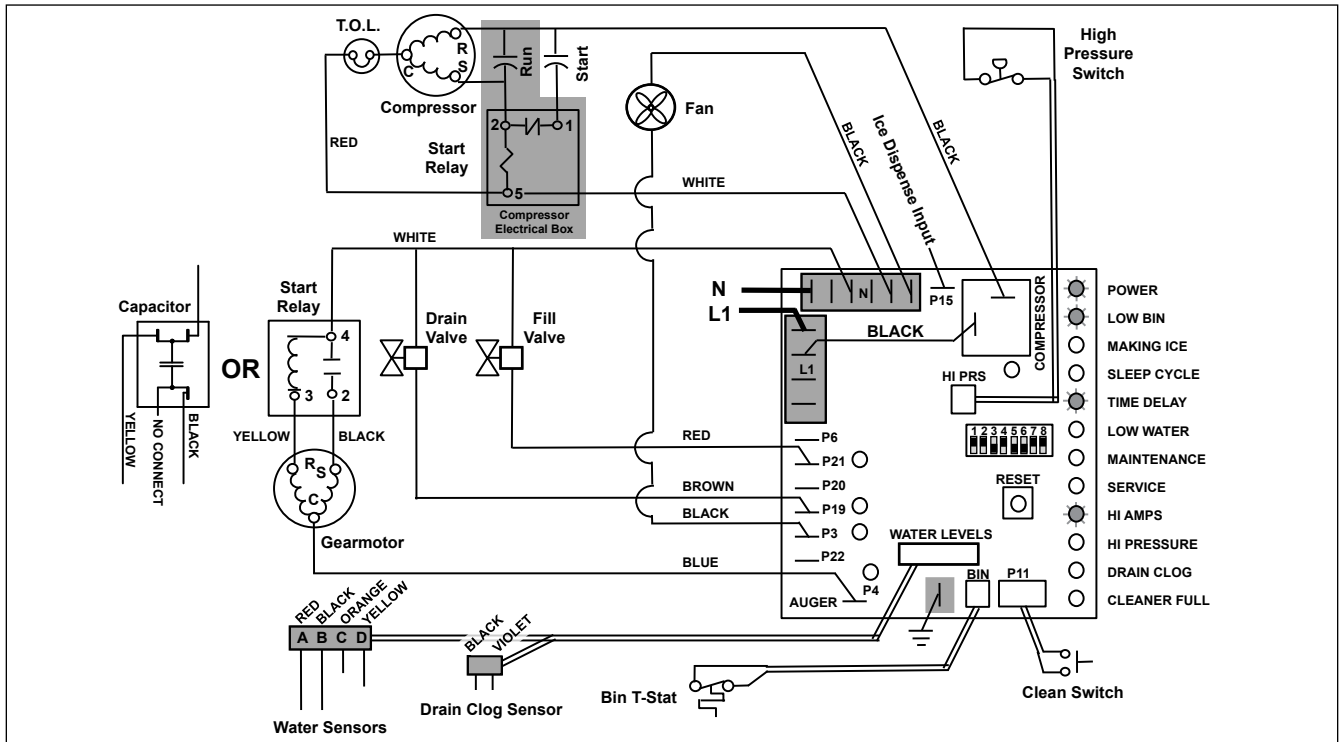
At the completion of the 20 minute time delay, the machine checks for a cumulative one hour of ice making time since the last off-cycle flush. If the cumulative ice making time exceeds one hour, the machine will energize the drain valve P19 for 60 seconds to drain the evaporator. It will then refill with water, flush again, refill and begin making ice if the **LOW BIN** LED is on. If the ice making time is less than 1 hour, the machine will start and begin making ice without draining the evaporator.



Diagnostic Stages

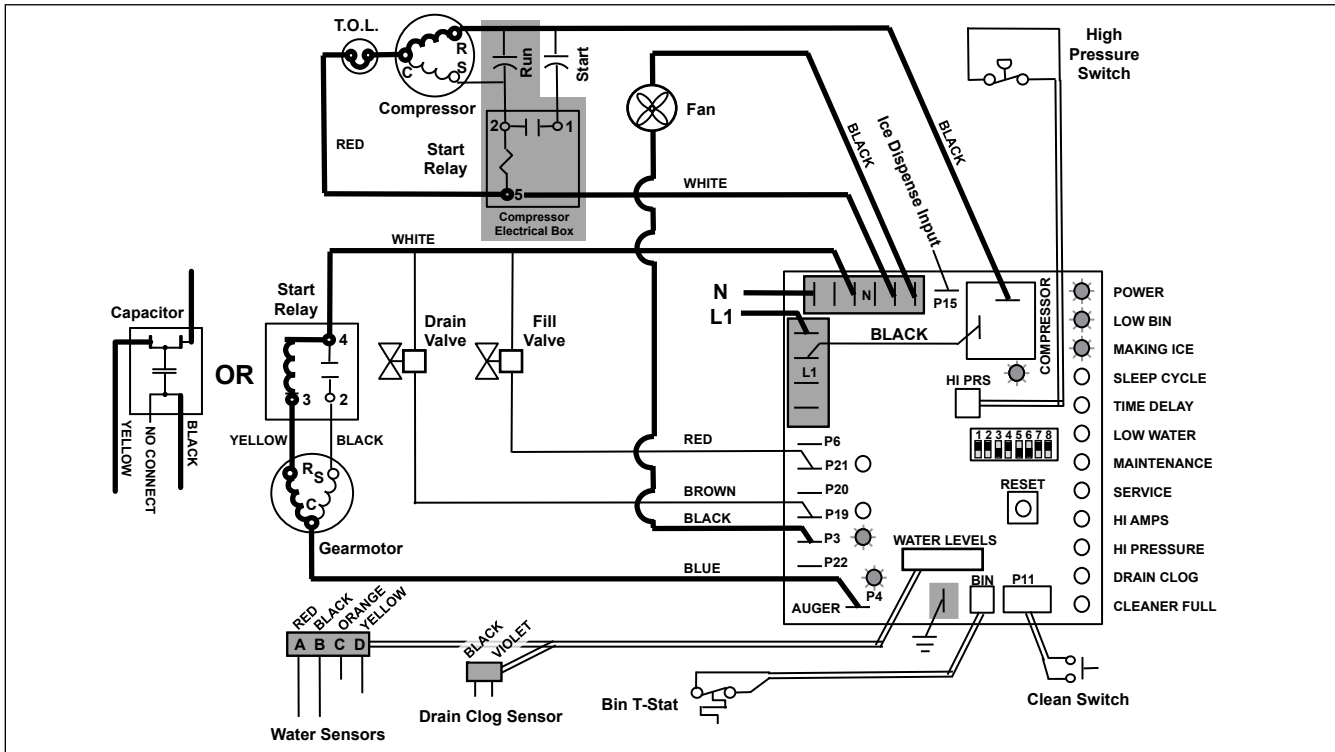
High gearmotor amps – Stage 1

The **HI AMPS** error and **TIME DELAY** LEDs are on indicating that the control board has sensed an over-torque condition at the P4 terminal (more than 3 amps from the gearmotor) or no current draw (0A) and shut the ice machine down (strike one). The **HI AMPS** and **TIME DELAY** LEDs will remain on for 60 minutes after an over-torque condition has occurred. The ice machine will remain off as long as these two LEDs are on. After the 60 minute time delay, these LED lights turn off, and the control board will try to go through a normal start-up sequence.



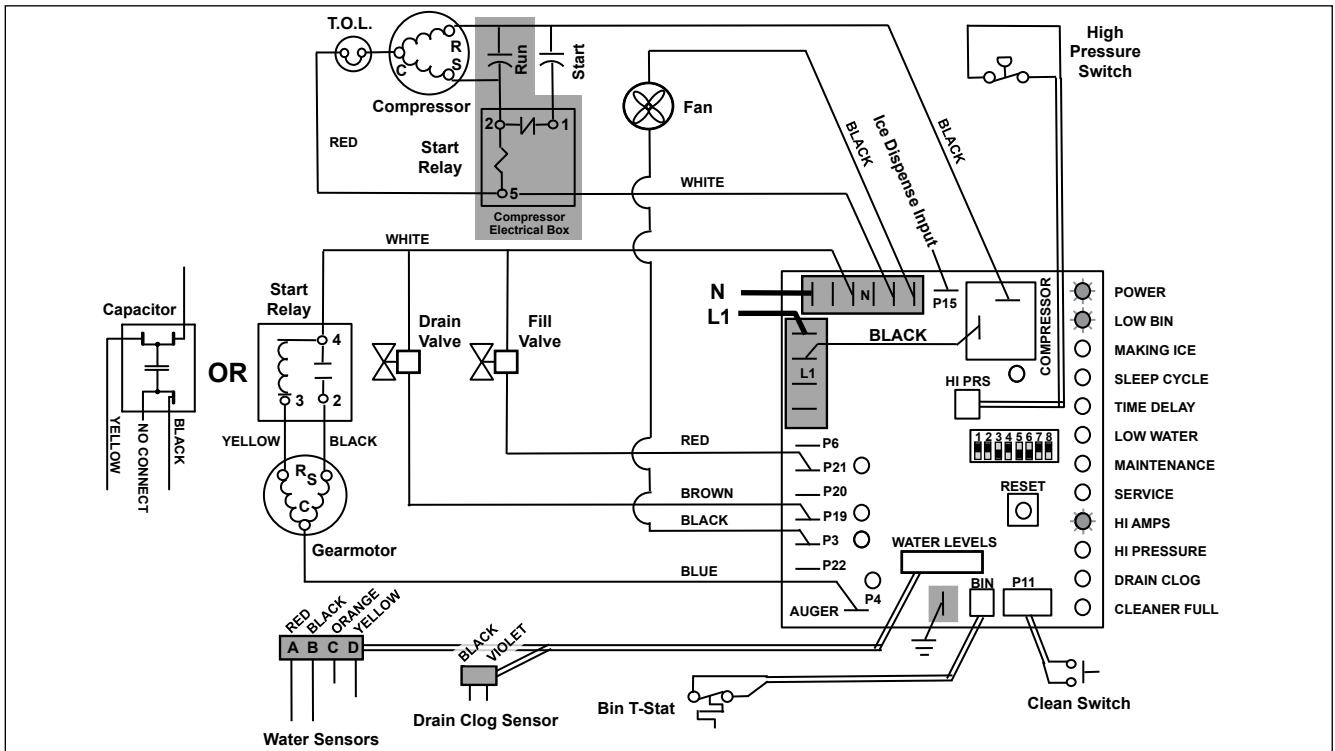
High gearmotor amps – Stage 2

If the restart is successful the board will continue to monitor the current draw on P4 for 60 minutes looking for a second high amps (above 3A) occurrence. If the ice machine runs without problems for 60 minutes and no additional torque errors occur, the ice machine will continue normal operation.



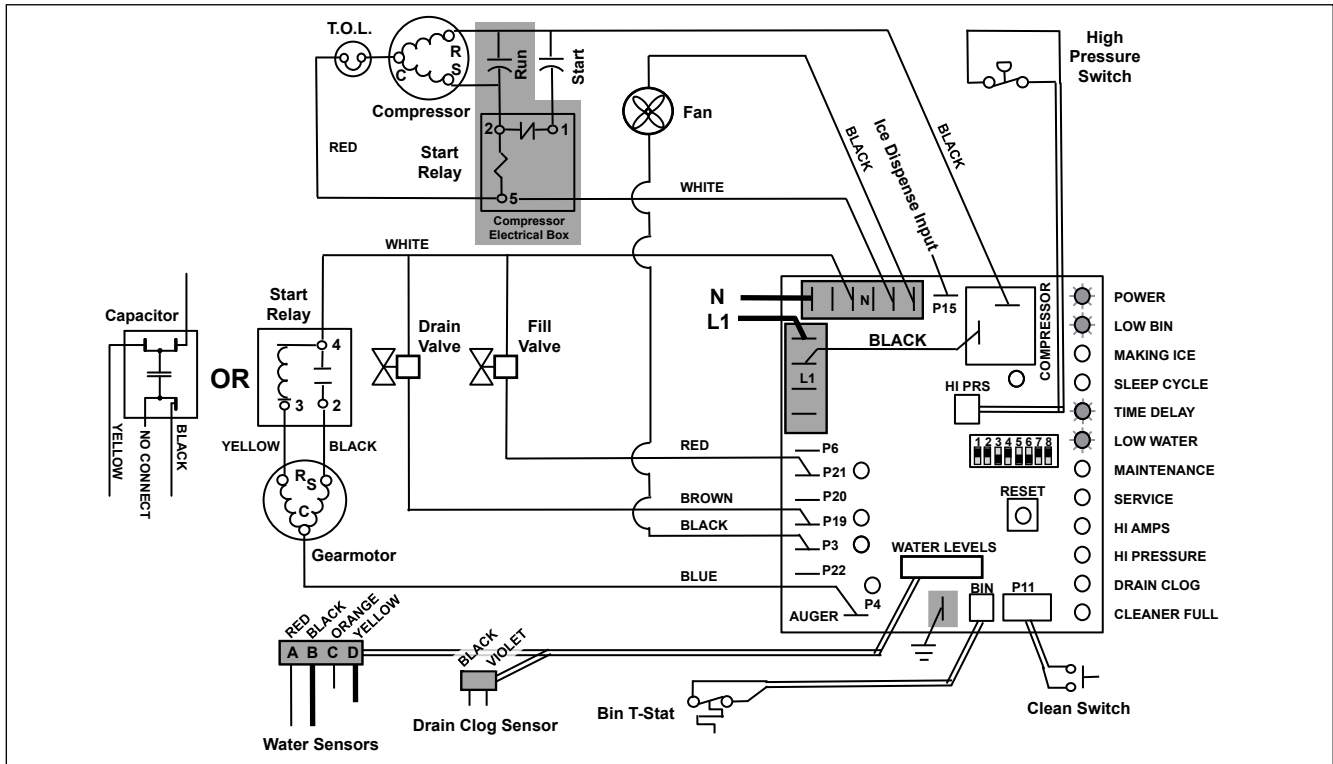
High gearmotor amps – Stage 3

If a second occurrence happens during the 60 minute monitoring period, the **HI AMPS** LED will come on again and shut the machine down (strike two). The **HI AMPS** LED (without the **TIME DELAY** LED) will indicate to the technician that two consecutive over-torque situations have occurred. The ice machine is shut down at this time and locked out. It will not restart unless the manual reset button is depressed while power is on.



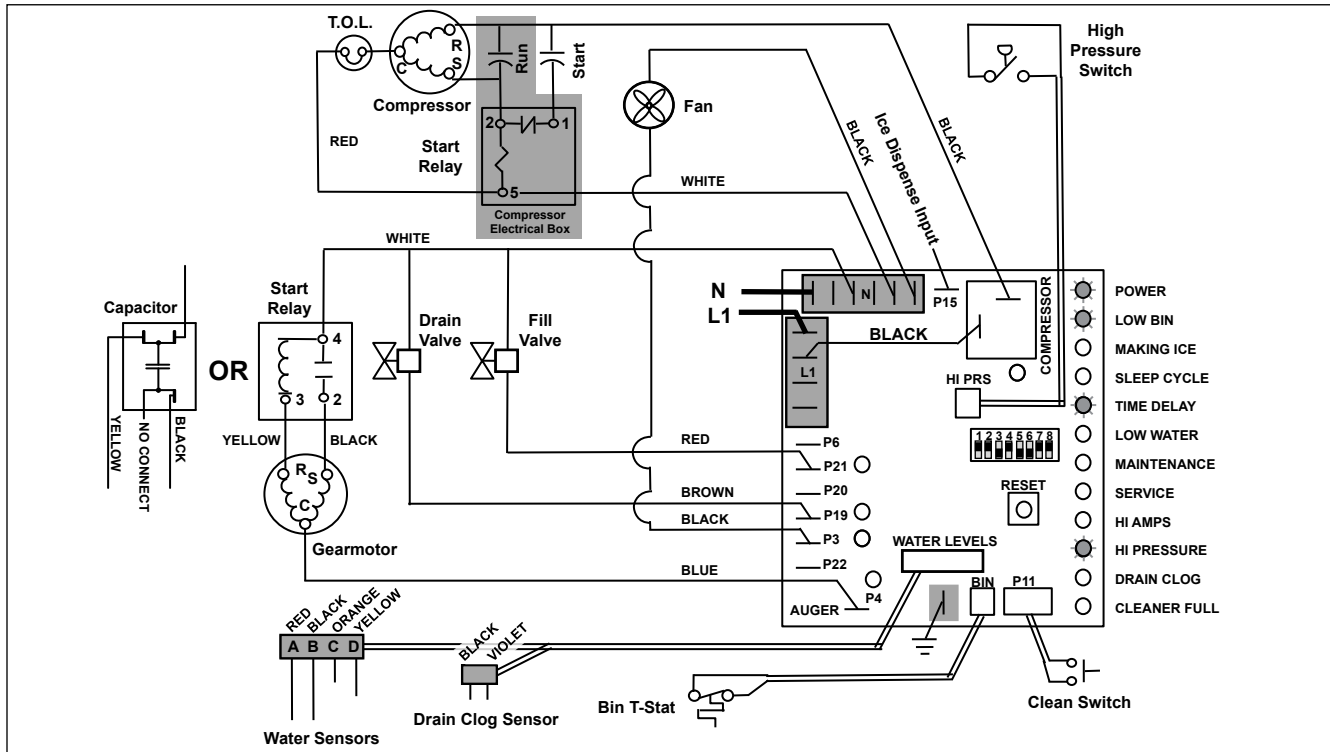
Loss of water

During operation, the water level cycles between the normal low (D) and normal high (C) water probes - the fill valve (P21) cycling on and off. If continuity is not detected between the common probe (B) and normal low (D) within 10 seconds, the **LOW WATER** and **TIME DELAY** LEDs will come on and the machine will shut down for the one hour time delay period. After the time delay, the fill valve will re-energize and wait for continuity between the common probe and normal high before restarting. **LOW WATER** LED will remain ON until the water level is satisfied.



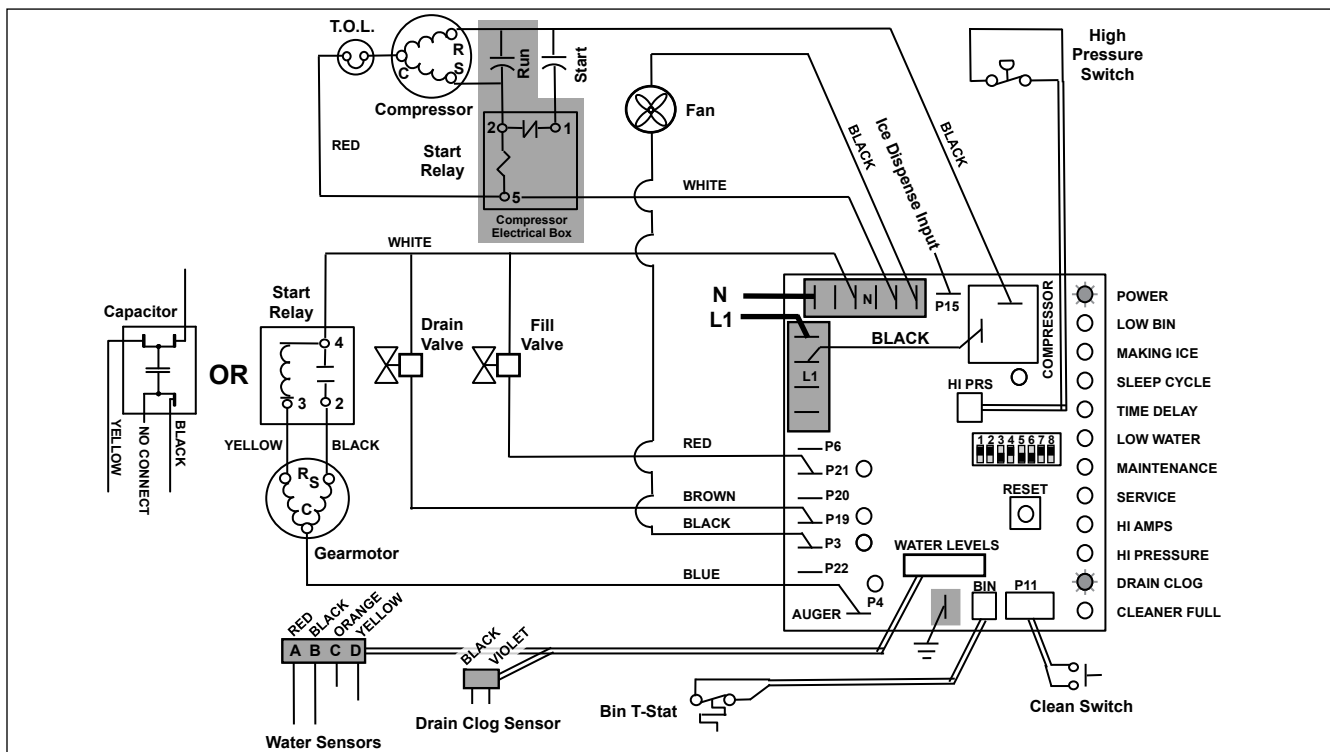
High refrigerant pressure

Should the refrigeration pressure rise above 425 psi, the high pressure switch contacts will open. The board sees the open circuit and the **HIGH PRESSURE** and **TIME DELAY** LEDs will come on, the machine shuts down. After the one hour time delay, the machine will attempt to restart. If the pressure has fallen below the reset point of 295 psi and the board see the contacts closed, the machine will resume normal operation. If the contacts are still open after the restart, the board will again go into **HIGH PRESSURE** and **TIME DELAY**, cycling until contact closure is seen.

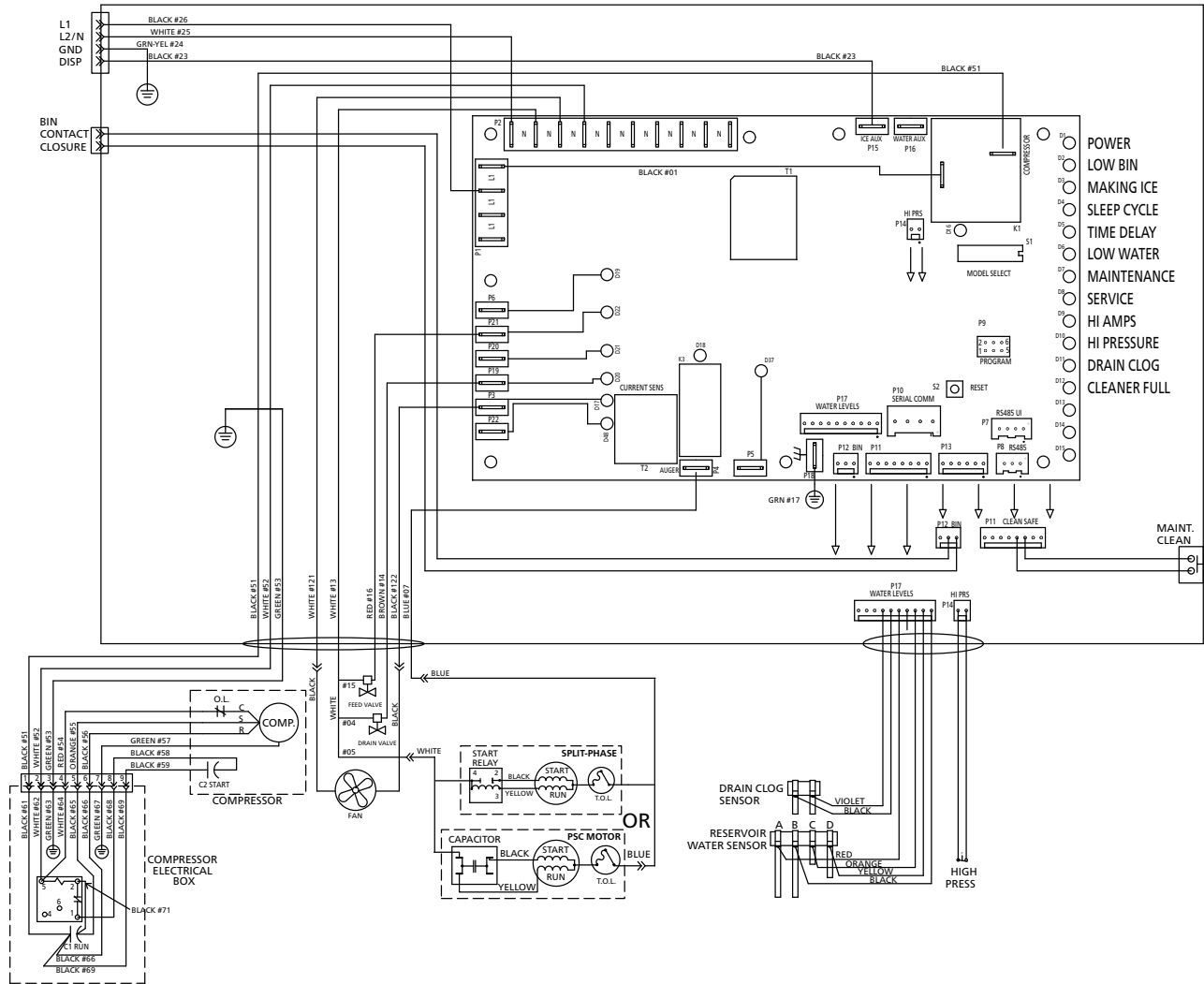


Drain clog

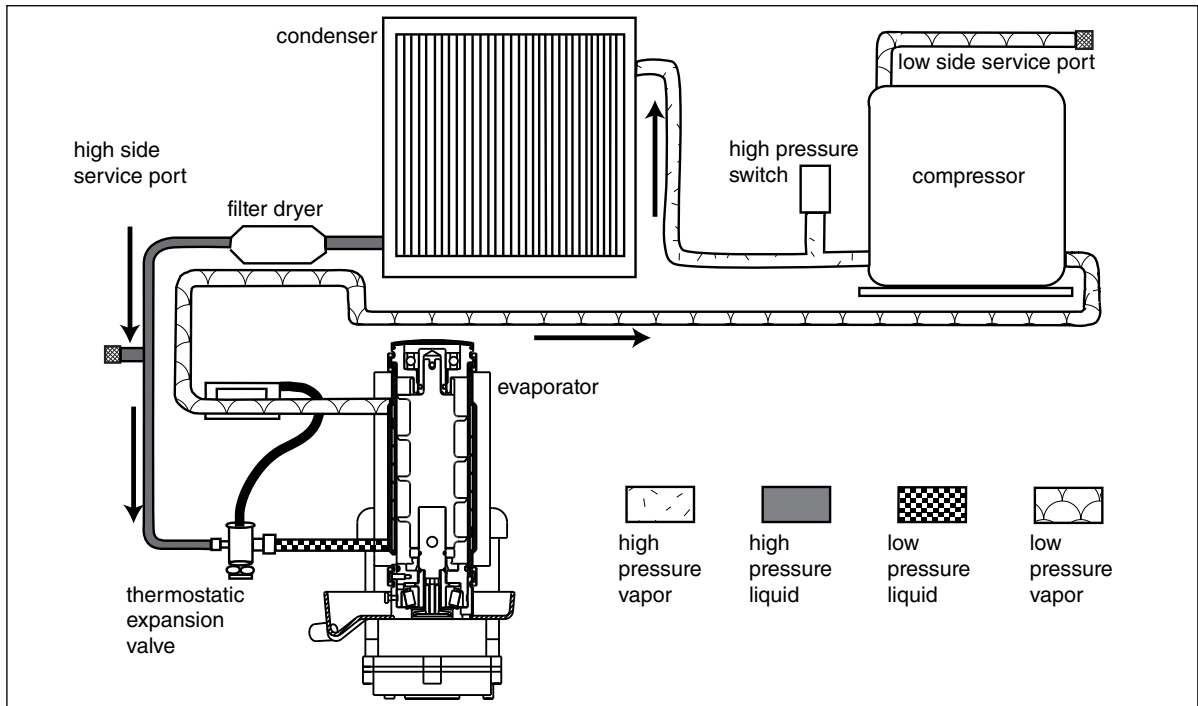
If continuity is seen between the two drain clog sensor probes, the **DRAIN CLOG** LED will come on and the machine will shut down. The machine will not restart unless the manual reset button is depressed while power is on.



Electrical control system schematic



Refrigeration cycle



Air-Cooled ice machine capacity/24hrs.

| | | Ambient Air Temperature F/C | | | | | | |
|-----------------------------|----|-----------------------------|-------|-----|-------|-----|-------|------|
| | | F | 60 | 70 | 80 | 90 | 100 | |
| | | C | 16 | 21 | 27 | 32 | 38 | |
| Inlet Water Temperature F/C | 50 | | 460 | 425 | 390 | 355 | 320 | lbs. |
| | 10 | | 208 | 193 | 177 | 161 | 145 | kg. |
| | 60 | | 437.5 | 405 | 372.5 | 340 | 307.5 | lbs. |
| | 16 | | 198 | 184 | 169 | 154 | 139 | kg. |
| | 70 | | 415 | 385 | 355 | 325 | 295 | lbs. |
| | 21 | | 188 | 175 | 161 | 147 | 134 | kg. |
| | 80 | | 405 | 375 | 345 | 315 | 285 | lbs. |
| | 27 | | 184 | 170 | 156 | 142 | 129 | kg. |
| | 90 | | 395 | 365 | 335 | 305 | 275 | lbs. |
| | 32 | | 179 | 166 | 152 | 138 | 125 | kg. |

Water-Cooled ice machine capacity/24hrs.

| | | Condenser Water Temperature F/C | | | | | | | |
|-----------------------------|----|---------------------------------|-----|-----|-----|-----|-----|-----|------|
| | | F | 50 | 60 | 70 | 80 | 90 | 100 | |
| | | C | 10 | 16 | 21 | 27 | 32 | 38 | |
| Inlet Water Temperature F/C | 50 | | 486 | 465 | 443 | 422 | 400 | 389 | lbs. |
| | 10 | | 220 | 211 | 201 | 191 | 181 | 176 | kg. |
| | 60 | | 464 | 445 | 425 | 406 | 386 | 367 | lbs. |
| | 16 | | 210 | 202 | 193 | 184 | 175 | 166 | kg. |
| | 70 | | 443 | 425 | 408 | 390 | 372 | 358 | lbs. |
| | 21 | | 201 | 193 | 185 | 177 | 169 | 162 | kg. |
| | 80 | | 422 | 406 | 389 | 373 | 356 | 340 | lbs. |
| | 27 | | 191 | 184 | 176 | 169 | 161 | 154 | kg. |
| | 90 | | 400 | 385 | 371 | 356 | 341 | 326 | lbs. |
| | 32 | | 181 | 175 | 168 | 161 | 155 | 148 | kg. |

Water-Cooled ice machine refrigeration pressure

Discharge pressure/suction pressure

| | | Condenser Water Temperature F/C | | | | |
|-----------------------------|-------|---------------------------------|--------|--------|--------|-----|
| | | F/C | 50/10 | 70/21 | 90/32 | |
| Inlet Water Temperature F/C | 50/10 | | 280/27 | 285/29 | 290/31 | psi |
| | 70/21 | | 280/27 | 285/29 | 290/31 | psi |
| | 90/32 | | 280/27 | 285/29 | 290/31 | psi |

Ice capacity test

Ice machine production capacity can only be determined by weighing ice produced in a specific time period.

1. Remove top panel and hopper lid of unit.
2. Weigh and record weight of container used to catch ice.
3. Run ice machine for at least 15 minutes.
4. Catch ice for 15 or 20 minutes.
5. Weigh harvested ice and record total weight.
6. Subtract weight of container from total weight.
7. Convert fractions of pounds to decimal equivalents (Ex. 6 lbs 8 oz = 6.5 lbs).
8. Calculate production using following formula:

| |
|--------------------------------------------------------------------------------------------------------------------------------------------|
| $\frac{1440 \text{ min.} \times \text{wt. of ice produced}}{\text{Total test time in minutes}} = \text{Production capacity/24 hr. period}$ |
|--------------------------------------------------------------------------------------------------------------------------------------------|

9. Calculated amount per 24 hours should be checked against rated capacity for same ambient and water temperatures in Ice Production Table (see page 23).

Compressor data

Compressor current draw

Air-cooled

| Ambient air temp. | 60 F/15.6 C | 70 F/21.1 C | 80 F/26.7 C | 90 F/32.2 C | 100 F/37.8 C |
|--------------------------|-------------|-------------|-------------|-------------|--------------|
| | 5.8A | 6.1A | 6.2A | 6.2A | 6.3A |
| High side pressure (psi) | 190 | 220 | 250 | 290 | 330 |
| Low side pressure (psi) | 27 | 29 | 31 | 33 | 36 |

Locked rotor amps 58.8

| Gearmotor data | Split-Phase | PSC (permanent split capacitor) |
|-------------------|---------------------|---------------------------------|
| Gearmotor current | 1.8A-1.9A (nominal) | 0.8A-0.9A (nominal) |
| Locked rotor amps | 14A | 7A-14A (temperature dependent) |

Refrigeration system

Important: All service on refrigeration system must be performed in accordance with all federal, state and local laws that pertain to the use of refrigerants. It is the responsibility of the technician to ensure that these requirements are met.

| Model | Charge | Refrigerant type |
|---------------------------------------|--------|------------------|
| 25/50CI425A, 25/50HI425A (air-cooled) | 15 oz | R404A |
| 25/50CI425W (water-cooled) | 9 oz | R404A |



CAUTION!

- Recharging of unit at other than factory specifications will void ice machine warranty.

Refrigerant replacement requirements

1. Non-contaminated refrigerant removed from any Follett refrigeration system can be recycled and returned to the same system after completing repairs. Recycled refrigerant must be stored in a clean, approved storage container. If additional refrigerant is required, virgin or reclaimed refrigerant that meets ARI standard 700-88 must be used.
2. In the event of system contamination (for example, a compressor burn out, refrigerant leak, presence of non-condensibles or moisture), the system must be repaired, evacuated and recharged using virgin or reclaimed refrigerant that meets ARI standard 700-88.
3. Follett Corporation does not approve of recovered refrigerants. Improper refrigeration servicing procedures will void the factory warranty.

Evacuation

Evacuate the system to a level of 500 microns. When the 500 micron level is reached, close valves and both manifold and shut down the vacuum pump. Allow the system to sit for approximately 20 minutes. During this period the system pressure should not rise. If the system pressure rises and stabilizes there is moisture in the system and further evacuation is needed. If the pressure continues to rise check the system for leaks.

Dispenser troubleshooting



- 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.
5. Check that water is supplied.

Lever model troubleshooting guide

| Problem | Indicators | Corrective Action |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Does not dispense ice. | <ol style="list-style-type: none"> 1. Power switch off or faulty. 2. Faulty dispense switch. 3. Wheel motor malfunction. | <ol style="list-style-type: none"> 1. Check switch – turn on or replace if faulty. 2. Replace switch. 3. Check motor and replace |
| 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, try adjusting stat (see page 57). |
| Does not dispense water. | <ol style="list-style-type: none"> 1. Faulty water solenoid valve. 2. Faulty dispense switch. 3. Power switch off or faulty. | <ol style="list-style-type: none"> 1. Replace water solenoid valve. 2. Replace dispense switch. 3. Check switch - turn on or replace if faulty. |

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. |
| | | 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. |
| | | ON | OFF | OFF | If there is power on any output terminal (WTR or WM) on control board, replace board. |

SensorSafe Board guide

LEDs, when illuminated, indicate the following: PWR (board power), CLN (clean button pressed WTR and WM outputs disabled), ICE (ice dispensing activated), WTR (water dispensing activated).

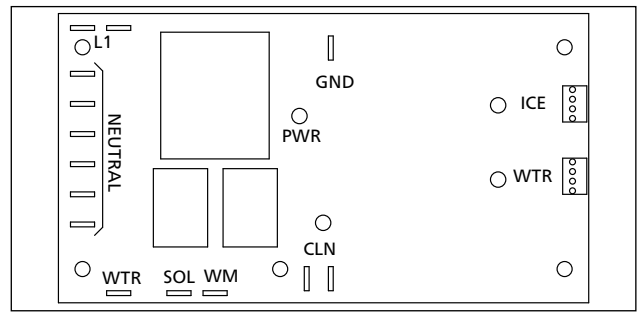
Terminals: L1 (incoming power, hot), L2 (neutral terminals), WTR (power terminal for water solenoid), WM (power terminal for wheelmotor), CLN (terminals for clean cycle switch).

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.

Fig. 17

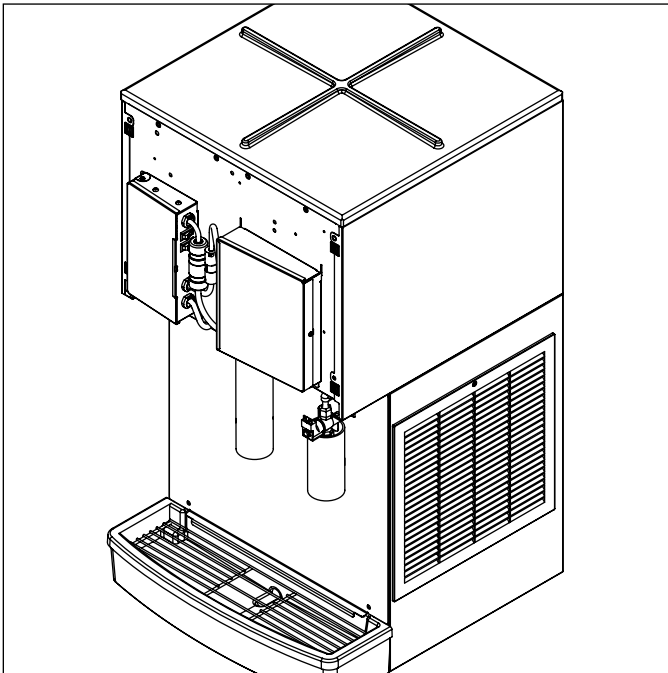


Ice machine removal instructions

CAUTION!

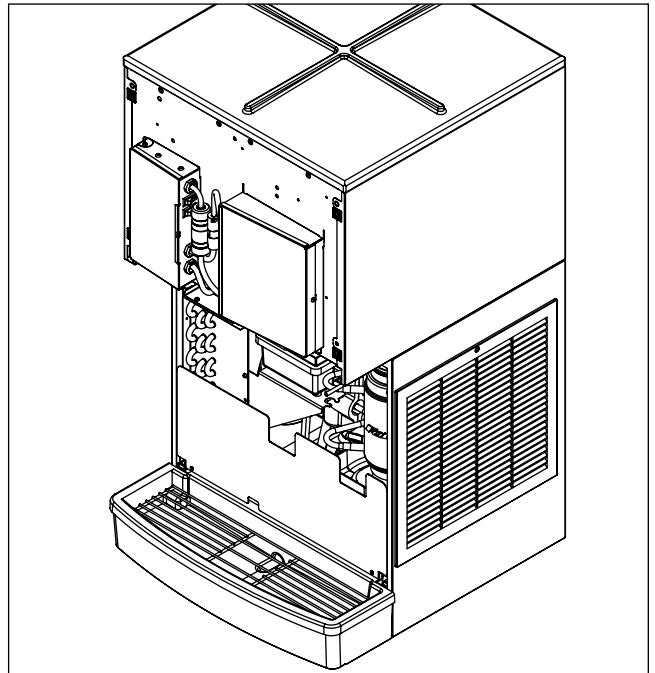
- Disconnect power to unit before putting hands or arms in storage area or attempting any repair or service to equipment.

Fig. 18 – All models



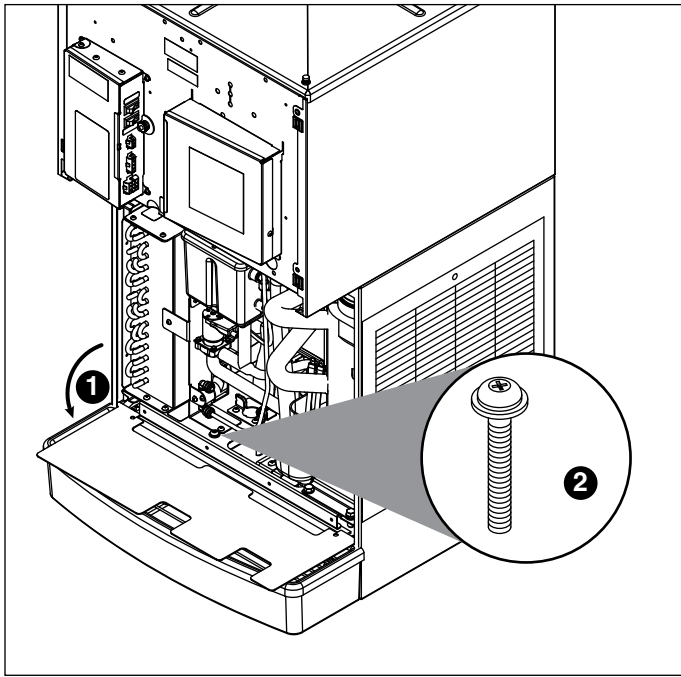
1. Dispense all ice and remove front cover (Fig. 18).

Fig. 19 – All models



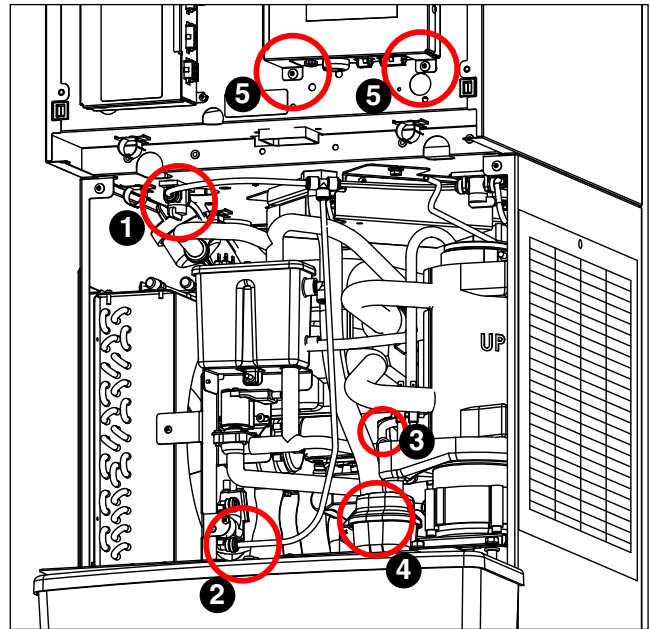
2. Remove splash panel (Fig. 19).

Fig. 20 – All models



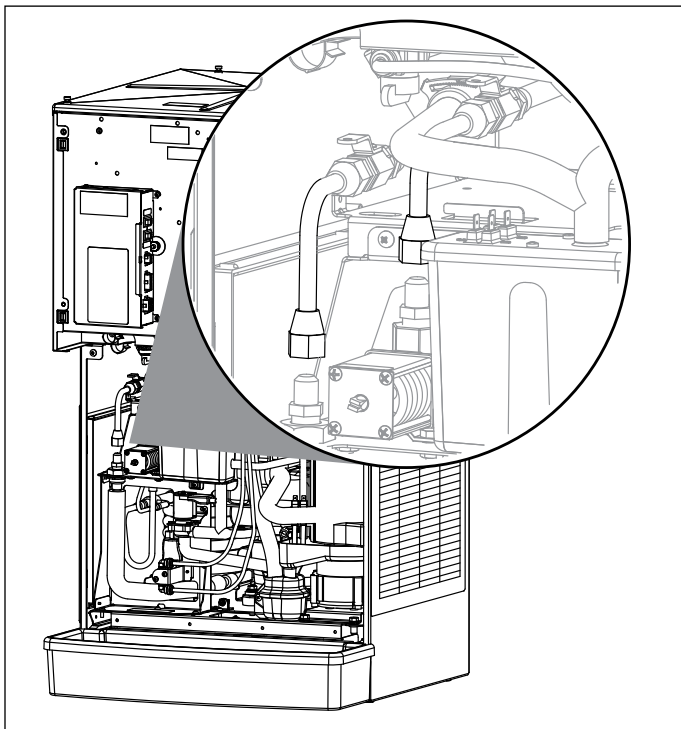
3. Lower drain pan protector (Fig. 20.1). Remove and discard shipping screw (Fig. 20.2).

Fig. 21



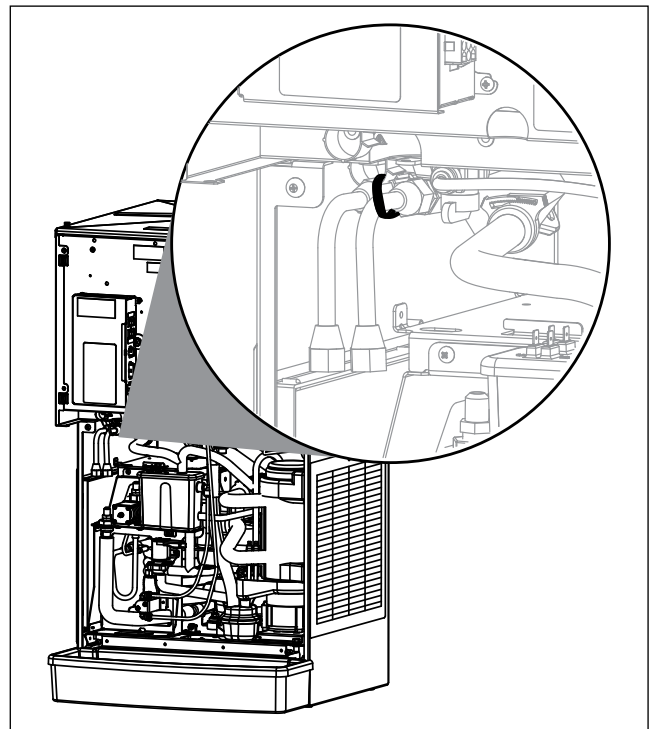
4. Close main water shut off valve (Fig. 21.1).
5. Disconnect water line to fill solenoid (Fig. 21.2).
6. Remove bin drain tube (Fig. 21.3).
7. Remove drain cup (Fig. 21.4).
8. Remove screws securing bottom of ice machine electrical box (Fig. 21.5).

Fig. 22 – Water-cooled only



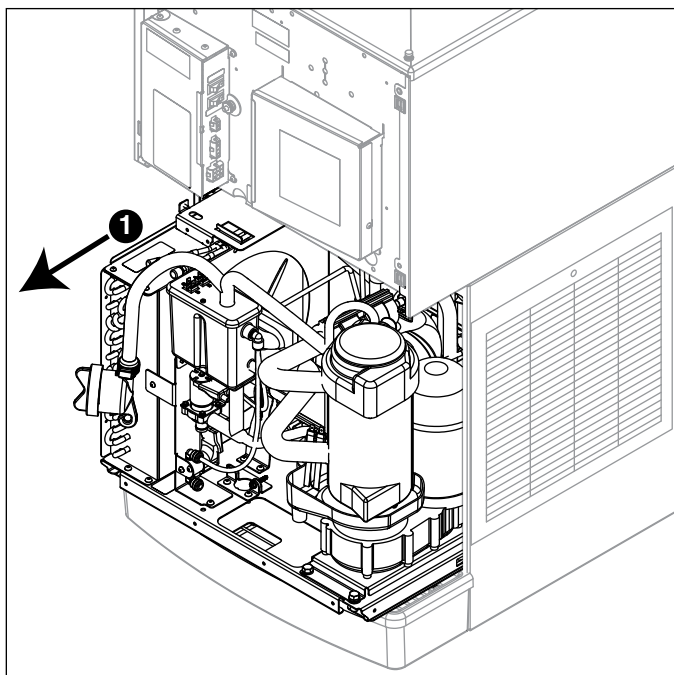
9. Shut off inlet and outlet valves to water-cooled condenser and disconnect fittings (Fig. 22).

Fig. 23 – Water-cooled only



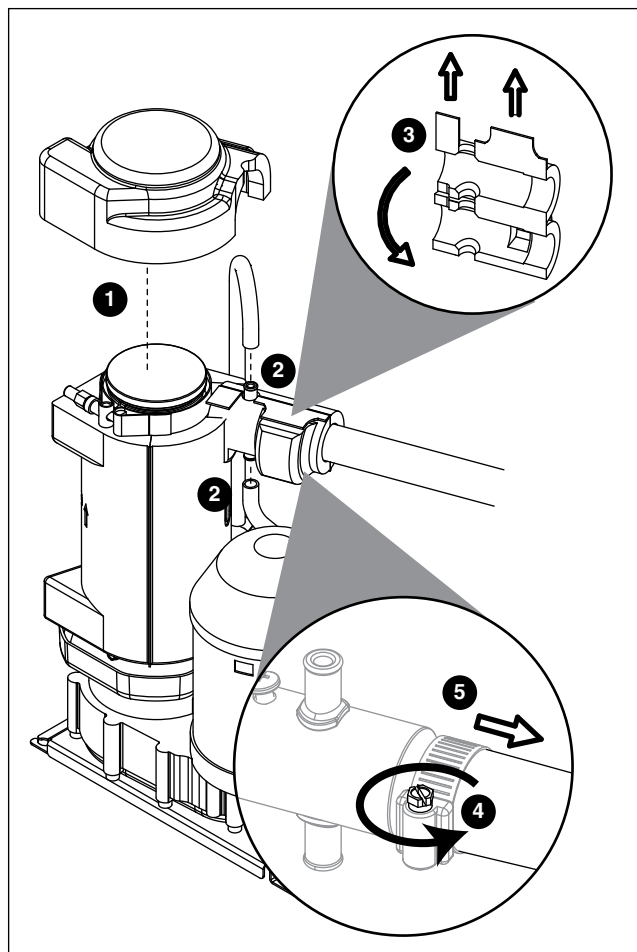
10. Lift and position water-cooled lines into hook (Fig. 23).

Fig. 24 – All models



11. Partially slide ice machine from dispenser (Fig. 24.1).
12. Disconnect power and bin signal twist lock connectors from ice machine electrical box.

Fig. 25 – All models



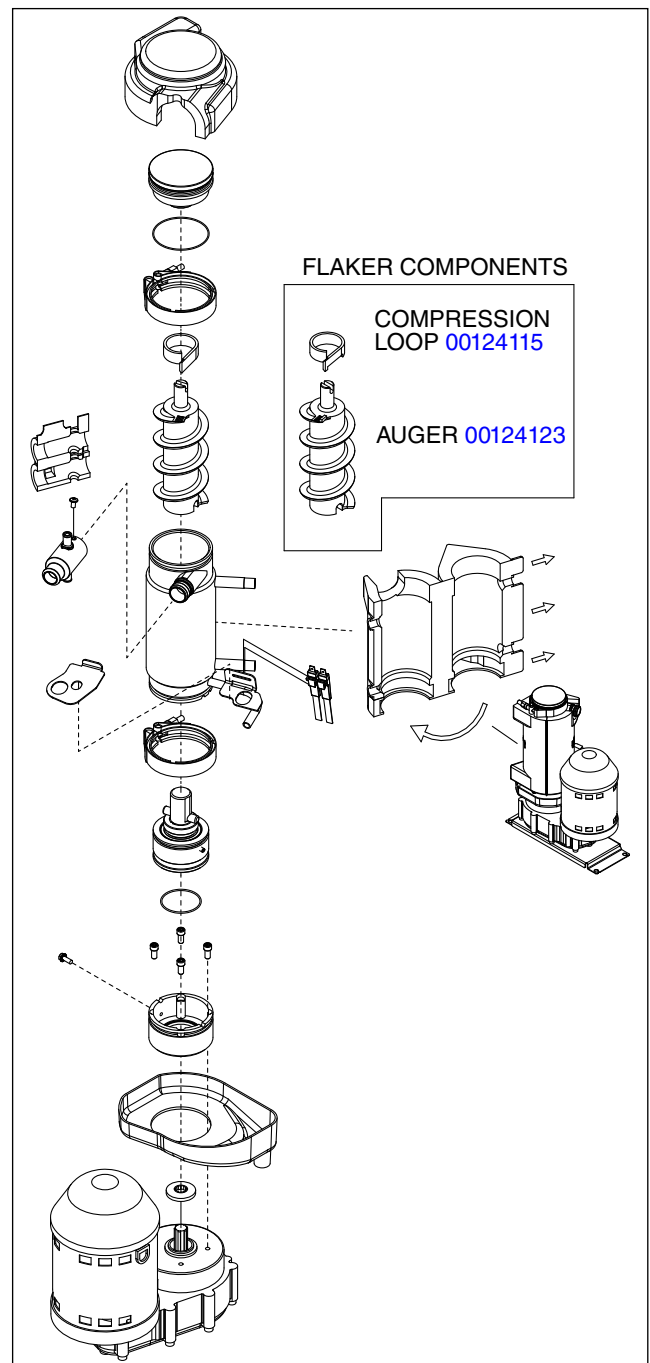
13. Remove insulation cap (Fig. 25.1).
14. Remove vent and drain tube (Fig. 25.2).
15. Remove nozzle insulation (Fig. 25.3).
16. Loosen ice tube hose clamp (Fig. 25.4).
17. Remove ice tube (Fig. 25.5).
18. Place ice machine electrical box on top of ice machine and slide out ice machine.

Evaporator disassembly

Note: The upper bearing, lower bearing and auger assemblies must be replaced as assemblies. The bottom and top bearing assemblies cannot be field assembled to factory specifications.

1. Disconnect power to ice machine.
2. Shut off water to ice machine.
3. Drain evaporator and float tank.
4. Disconnect plastic tubing from evaporator water inlet.
5. Remove top bearing insulation.
6. Disconnect vent and drain tube from nozzle.
7. Remove compression nozzle insulation.
8. Disconnect compression nozzle tubing and reservoir overflow tubing from secured clip.
9. Remove nut and upper vee-band coupling from top of evaporator.
10. Lift top bearing assembly straight up with a slight rotating motion and remove.
11. Remove ice compression loop located at top of auger.
12. Lift auger straight up and out of evaporator.
13. Remove nut and lower vee-band coupling from bottom of evaporator.
14. Lift evaporator to clear bottom bearing assembly.
15. Loosen hex head bolt in side of mounting base with 5/16" wrench and lift lower bearing assembly.
16. Remove condensate shield.
17. Remove four Allen head machine screws holding mounting base to gearbox.
18. If replacing evaporator, remove compression nozzle from evaporator port.

Fig. 26



Evaporator reassembly

1. Clean gearmotor boss, output shaft and shaft well.
2. Install drain pan and evaporator mounting base.
3. Fill gear motor shaft well with food grade grease (**Fig. 27**).
4. Install condensate shield and seat against gear motor boss.
5. Install bearing O ring in groove in evaporator mounting base.
6. Lower bottom bearing assembly into evaporator mounting base.
7. *While maintaining firm downward pressure on bottom bearing assembly*, tighten hex head bolt with a 5/16 wrench.
8. Position evaporator over lower bearing assembly and align grooves with pins in bearing assembly.
9. Install vee band clamp and nut to 70 in/lb. (**Fig. 28**).
Note: Clamp must be oriented as shown in order for the insulation to be placed properly.
10. Place auger in center of evaporator and rotate to mate with drive pin.
11. Install ice compression loop, orienting loop.
12. Install upper bearing and seal assembly, rotating bearing to slip pin into auger slot.
13. Install upper vee band clamp and nut to 70 in/lb.
14. Install evaporator insulation.
15. Install compression nozzle and tubing.
16. Secure ice transport tube with clamp (**Fig. 29.1**).
Note: Clamp must be oriented as shown in order for the insulation to be placed properly.
17. Install compression nozzle insulation (**Fig. 29.2**).
18. Install vent and drain tube (**Fig. 29.3**).
19. Install top bearing insulation (**Fig. 29.4**).

Gearmotor replacement

1. Disassemble evaporator as described previously.
2. Disconnect the wire connectors.
3. Remove four screws holding gear motor mounting plate to base of ice machine and lift gearbox and motor clear of ice machine.
4. Remove machine screws holding mounting plate to motor.
5. Install new motor in reverse order.

Fig. 27

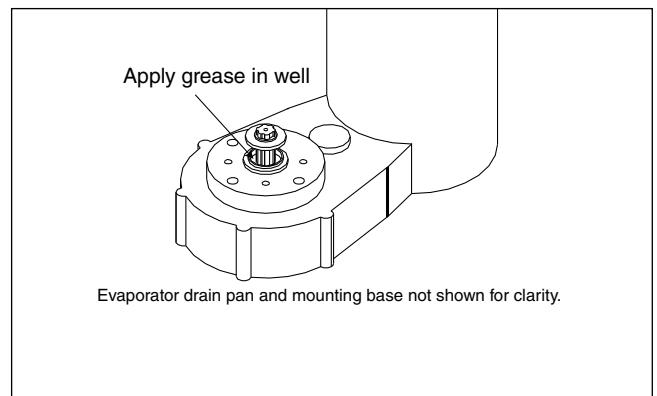


Fig. 28

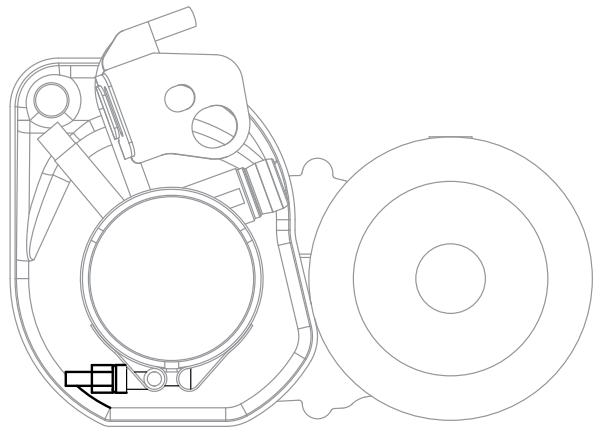
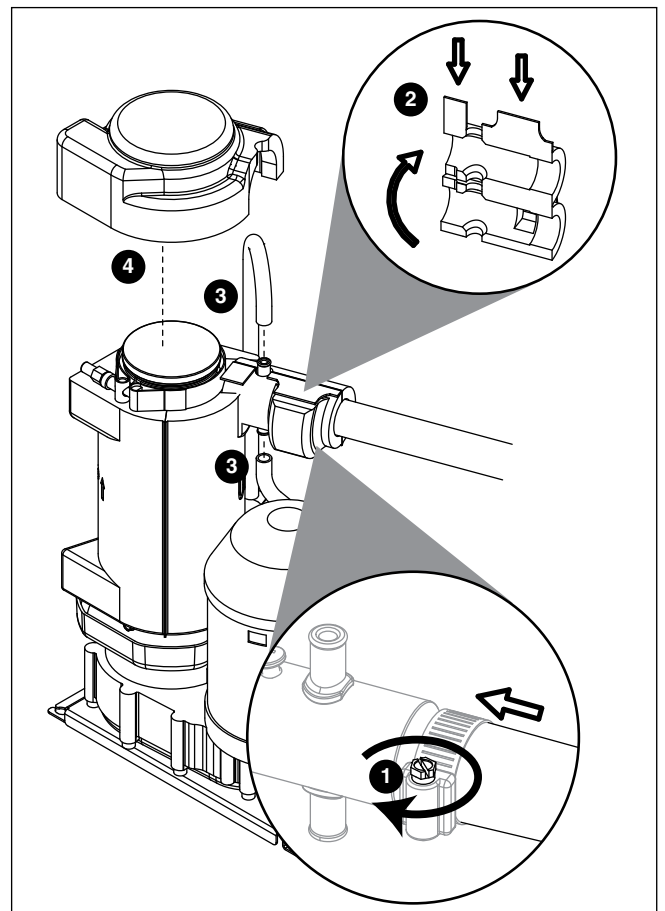
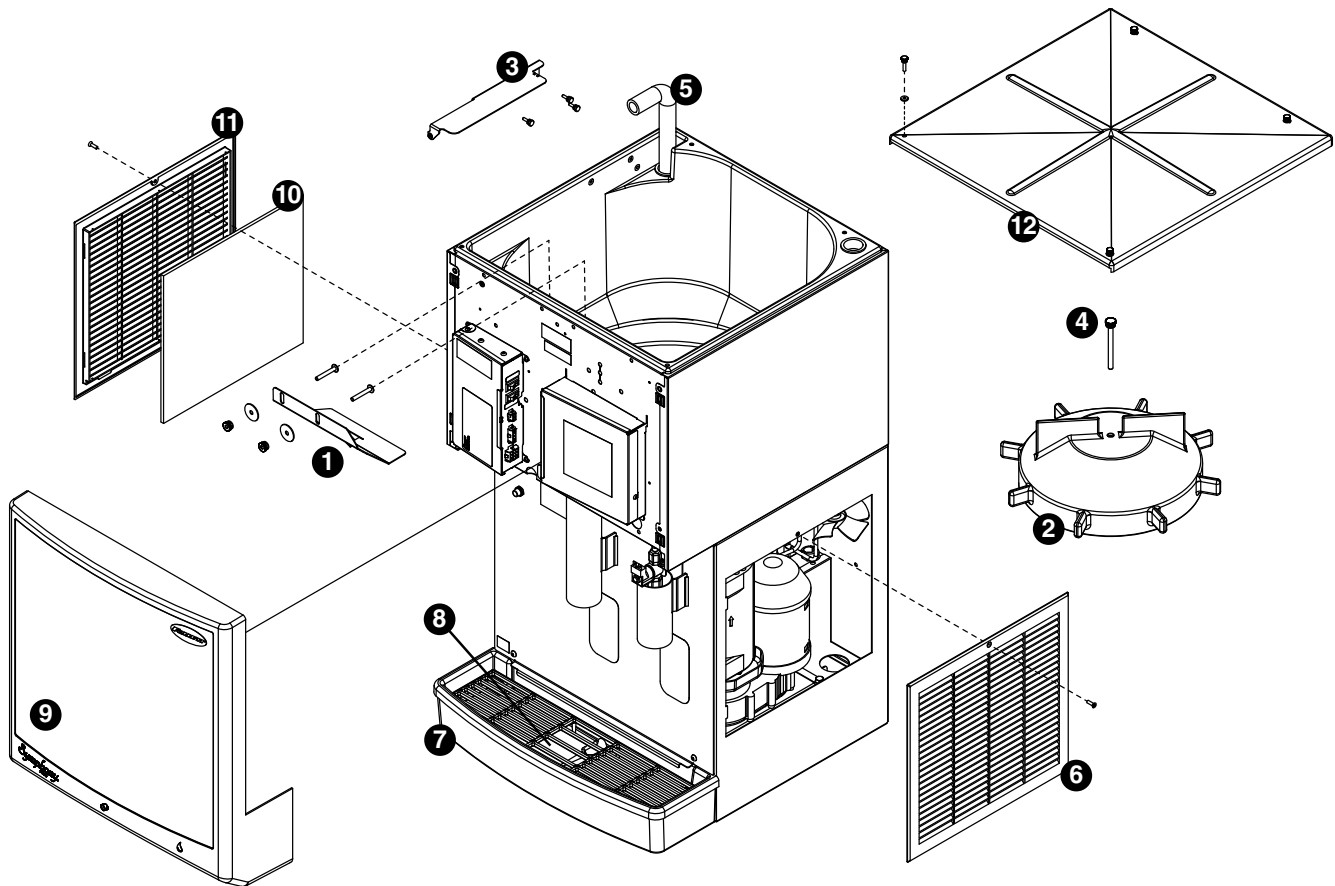


Fig. 29



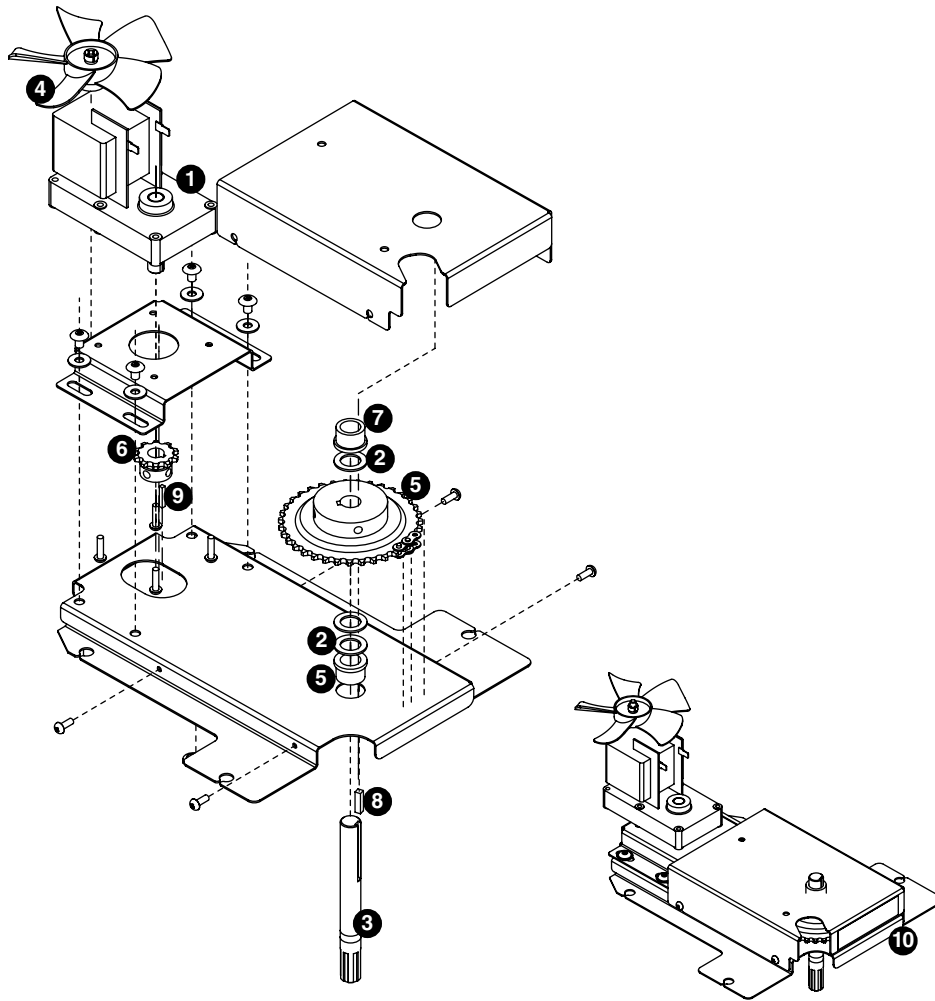
Replacement parts

Dispenser exterior



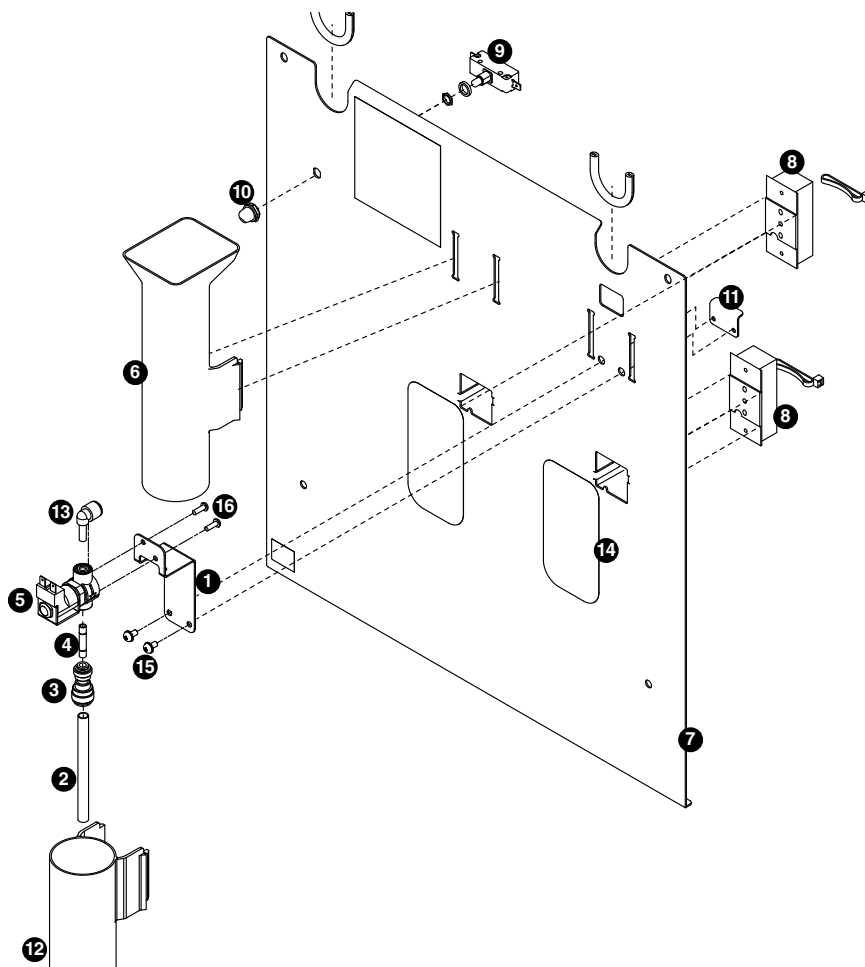
| Reference | Description | Part # |
|-----------|---------------------------------------------|----------|
| 1 | Baffle, ice | 501608 |
| 2 | Wheel, dispense (includes 501612) | 502821 |
| 3 | Bracket, ice tube | 502712 |
| 4 | Rod, threaded (includes knurled nut) | 501612 |
| 5 | Ice transport tube, 25 series | 00196030 |
| 5 | Ice transport tube, 50 series | 00196048 |
| 6 | Louver, exhaust | 00192963 |
| 7 | Drain pan | 502682 |
| 8 | Grille, drain pan, gray plastic | 01050277 |
| 9 | Cover, front 25 series, ice and water | 01072735 |
| 9 | Cover, front 50 series, ice and water | 01072750 |
| 9 | Cover, front 25 series, ice only | 01072743 |
| 9 | Cover, front 50 series, ice only | 01072768 |
| 10 | Air filter | 00184275 |
| 11 | Louver, intake (includes 00184275) | 00192955 |
| 12 | Lid, hopper, secured | 01072776 |
| Not shown | Hopper, assembly, 25 series | 00953281 |
| Not shown | Hopper, assembly, 50 series | 00953299 |
| Not shown | Drain tube, ice storage hopper | 01054576 |
| Not shown | Drain pan protector | 00195974 |
| Not shown | Wall mount bracket and cover plate | 00902080 |
| Not shown | Grille, drain pan, gray plastic, case of 12 | 01071232 |

Wheel motor and drive system



| Reference # | Description | Part # |
|-------------|-------------------------------------------------------|--------------------------|
| 1 | Wheel motor, 120V, 60Hz | 501861 |
| 2 | Washer, thrust | 501026 |
| 3 | Shaft, drive (includes key and stud) | 501619 |
| 4 | Fan blade, wheel motor | 501607 |
| Not shown | Chain, pitch 67, link | 01168781 |
| 5 | Sprocket, drive shaft, 35T (includes drive shaft key) | 502692 |
| 6 | Sprocket, wheel motor, 10T | 501019 |
| 7 | Bearing, drive shaft | 501024 |
| Not shown | Connecting link, chain | 500799 |
| 8 | Key, drive shaft | 500367 |
| 9 | Key, wheel motor | 205991 |
| 10 | Dispenser drive assembly (parts 1-9 above) | 00192971 |

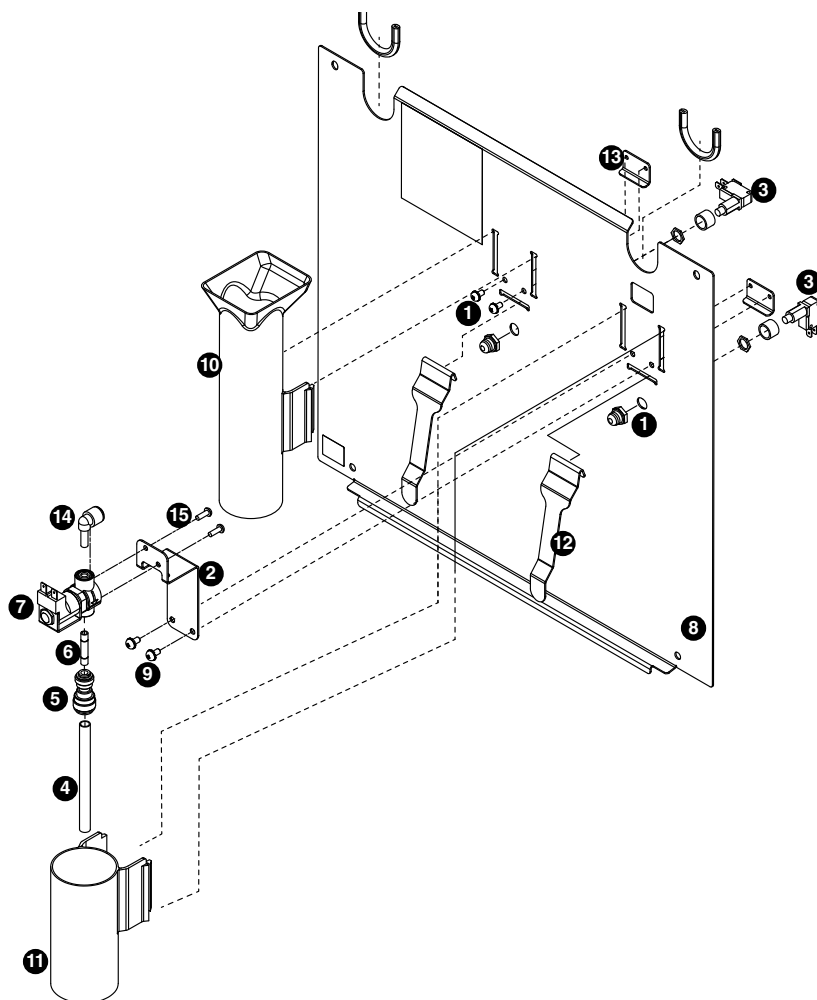
Dispense chute and splash panel (models with SensorSAFE infrared dispensing)



| Reference # | Description | Part # |
|-------------|-------------------------------------------------------------------------------------------------|----------|
| 1 | Bracket, water solenoid | 01230655 |
| 2 | Tube, water station | 00187682 |
| 3 | Fitting, 1/4" tube to 3/8" tube (After serial number L78614) | 01230671 |
| 4 | Tube, connector, 1/4" stainless steel (After serial number L78614) | 01352517 |
| 5 | Solenoid valve, water, 120 V, 60Hz | 01352483 |
| 6 | Chute, ice (with Agion®) | 00984831 |
| 7 | Splash panel, SensorSAFE dispense with drain pan (includes 2 lenses) (After S/N L78614) | 01352616 |
| 7 | Splash panel, SensorSAFE dispense with drain pan, ice only (includes 1 lens) (After S/N L78614) | 01352624 |
| 7 | Splash panel, SensorSAFE dispense, no drain pan (includes 2 lenses) | 01352632 |
| 7 | Splash panel, SensorSAFE dispense, no drain pan, ice only (includes 1 lens) | 01352640 |
| 8 | Sensor, ice or water dispense | 00195982 |
| 9 | Clean switch, SensorSAFE (includes boot) | 502359 |
| 10 | Boot, clean switch button (mounts on 502359 switch) | 501841 |
| 11 | Bracket, water valve | 00958793 |
| 12 | Chute, water (with Agion) | 00984898 |
| 13 | Elbow, 1/4" | 00121699 |
| 14 | Lens, sensors | 00977983 |
| 15 | Screw, bracket | 00982421 |
| 16 | Screw, valve (After S/N L78614) | 01352582 |
| Not shown | Tubing, water station, thermoplastic, 1/4" OD (sold by the foot) | 502079 |
| Not shown | Kit, dispense solenoid (After S/N L78614) | 01352590 |

¹ Disclaimer: Antimicrobial protection is limited to the treated components and does not treat water or ice.
Agion is a registered trademark of Agion Technologies, Inc, Wakefield, MA, USA.

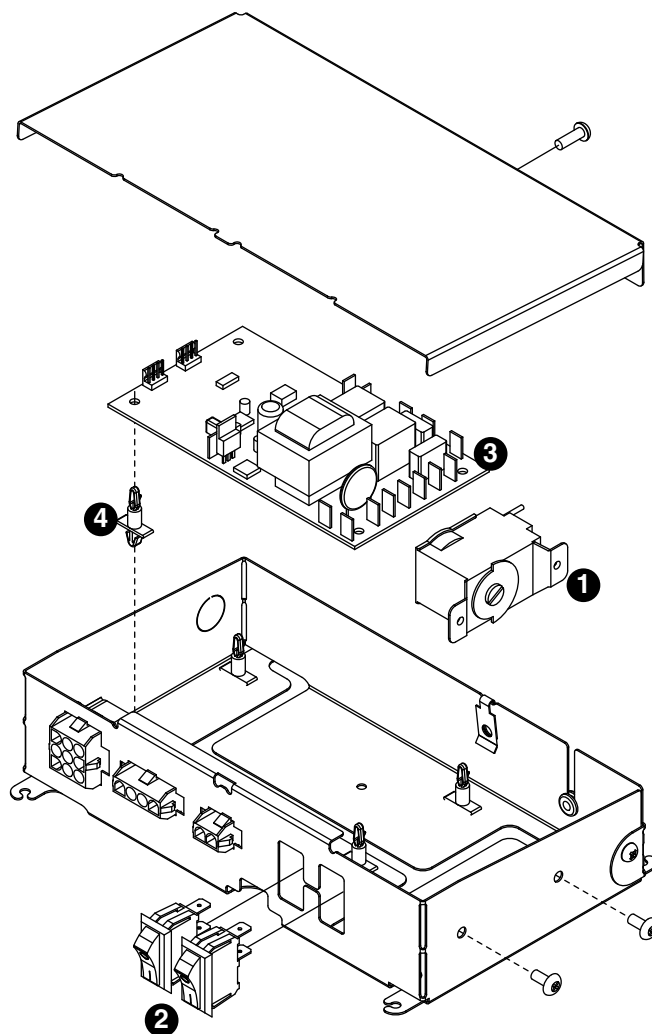
Dispense chute and splash panel (models with lever dispensing)



| Reference # | Description | Part # |
|-------------|--------------------------------------------------------------------------|--------------------------|
| 1 | Boot, dispense switch button (mounts on 00981217 switch) | 502418 |
| 2 | Bracket, water solenoid | 01230655 |
| 3 | Switch, dispense, ice or water, lever actuated (includes boot) | 00981217 |
| 4 | Tube, water station | 00187682 |
| 5 | Fitting, 1/4" tube to 3/8" tube (After S/N L78614) | 01230671 |
| 6 | Tube, connector, 1/4" stainless steel (After S/N L78614) | 01352517 |
| 7 | Solenoid valve, water, 120 V, 60Hz (After S/N L78614) | 01352483 |
| 8 | Splash panel, lever dispense (After S/N L78614) | 01352657 |
| 8 | Splash panel, lever dispense, ice only (After S/N L78614) | 01352665 |
| 9 | Screw, bracket | 00982421 |
| 10 | Chute, ice (with Agion antimicrobial product protection ¹) | 00984831 |
| 11 | Chute, water (with Agion) | 00984898 |
| 12 | Lever, dispense | 00976845 |
| 13 | Bracket, lever | 00958793 |
| 14 | Elbow, 1/4" | 00121699 |
| 15 | Screw, valve (After S/N L78614) | 01352582 |
| Not shown | Tubing, water station, thermoplastic, 1/4" OD (sold by the foot) | 502079 |
| Not shown | Kit, dispense solenoid (After S/N L78614) | 01352590 |

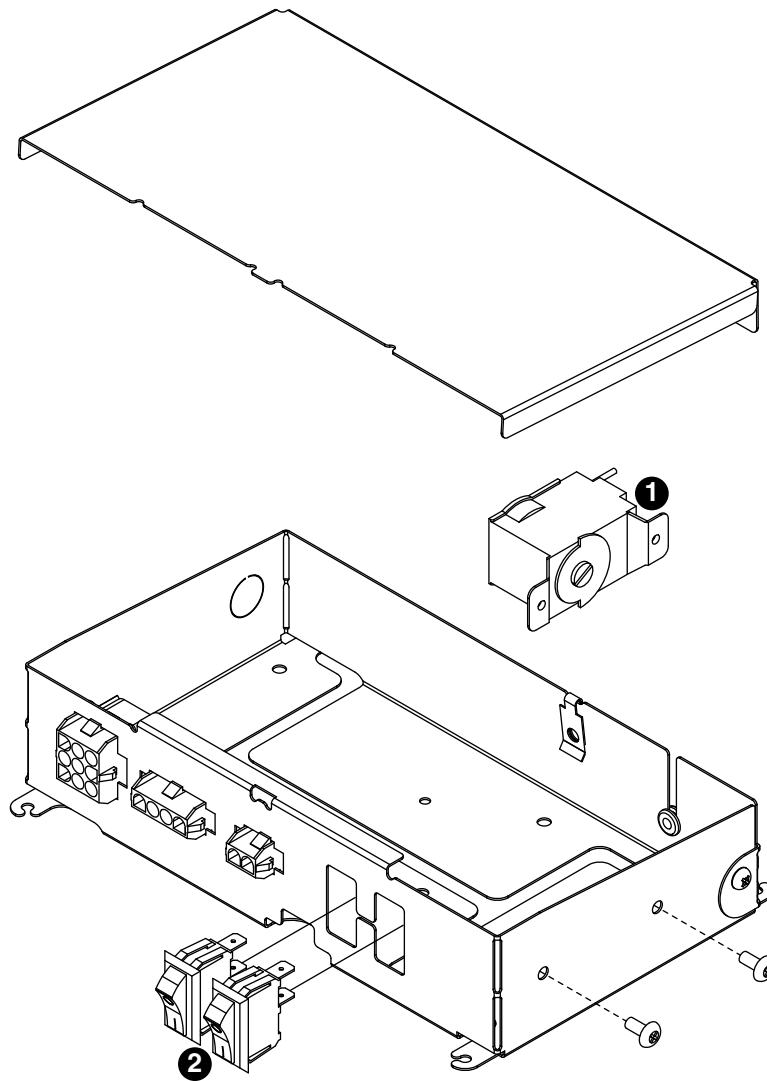
* Ty-rap is a registered trademark of Thomas & Betts International, Inc.

Dispenser electrical box – SensorSAFE models



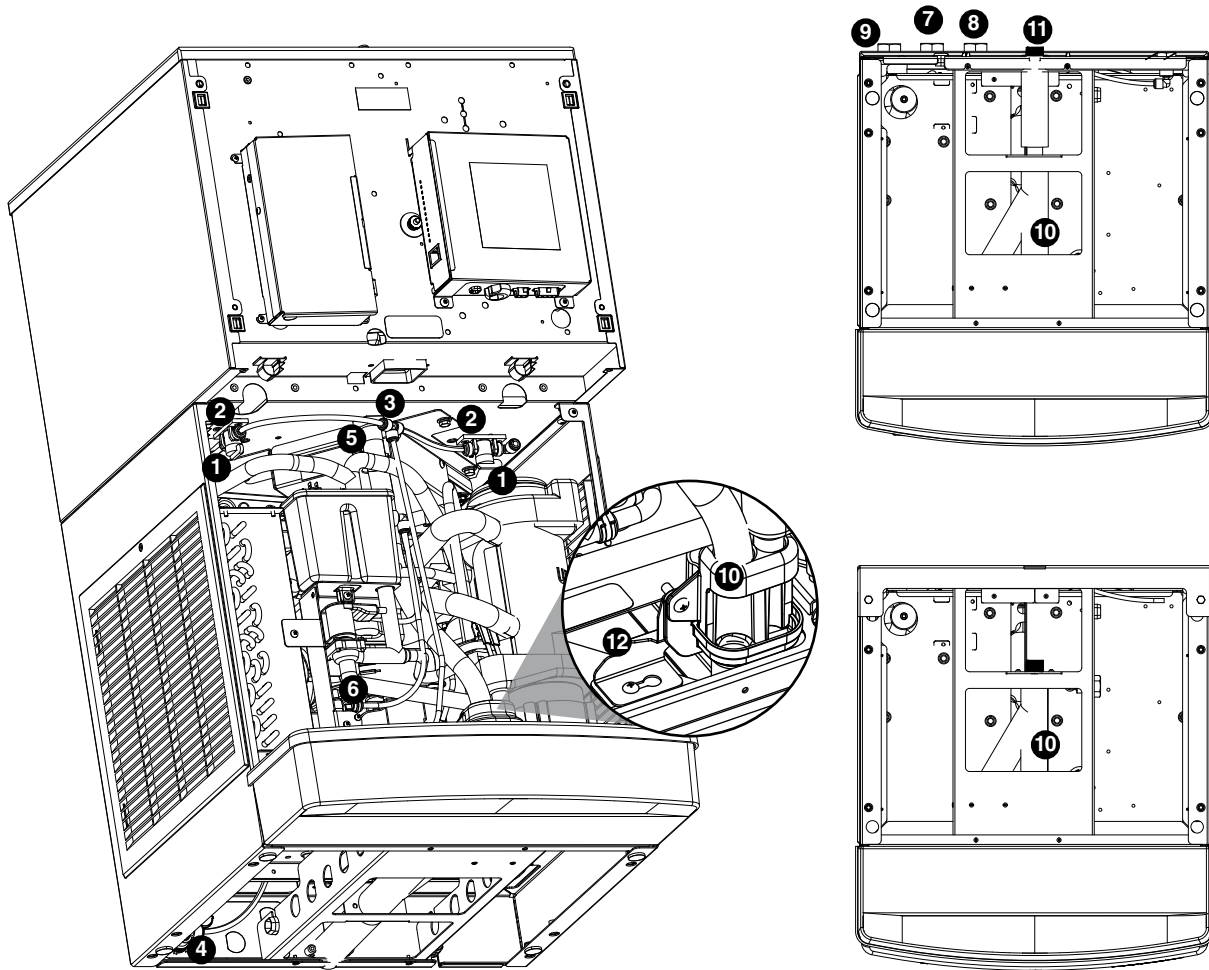
| Reference # | Description | Part # |
|-------------|---------------------------------------------------------------------|--------------------------|
| 1 | Thermostat | 500514 |
| 2 | Switch, dispenser power | 502209 |
| 2 | Switch, ice machine bin signal | 502209 |
| 3 | Board, SensorSAFE | 502242 |
| 4 | Standoff, board (4 required) | 501959 |
| Not shown | Cord and plug, ice machine power (dispenser box to ice machine box) | 01215128 |
| Not shown | Cord and plug, bin signal (dispenser box to ice machine box) | 01215144 |
| Not shown | Power cord | 01027655 |

Dispenser electrical box – lever models



| Reference # | Description | Part # |
|-------------|---------------------------------------------------------------------|--------------------------|
| 1 | Thermostat | 500514 |
| 2 | Switch, dispenser power | 502209 |
| 2 | Switch, ice machine bin signal | 502209 |
| Not shown | Cord and plug, ice machine power (dispenser box to ice machine box) | 01037878 |
| Not shown | Cord and plug, bin signal (dispenser box to ice machine box) | 01037944 |
| Not shown | Power cord | 01027655 |

Water and drain

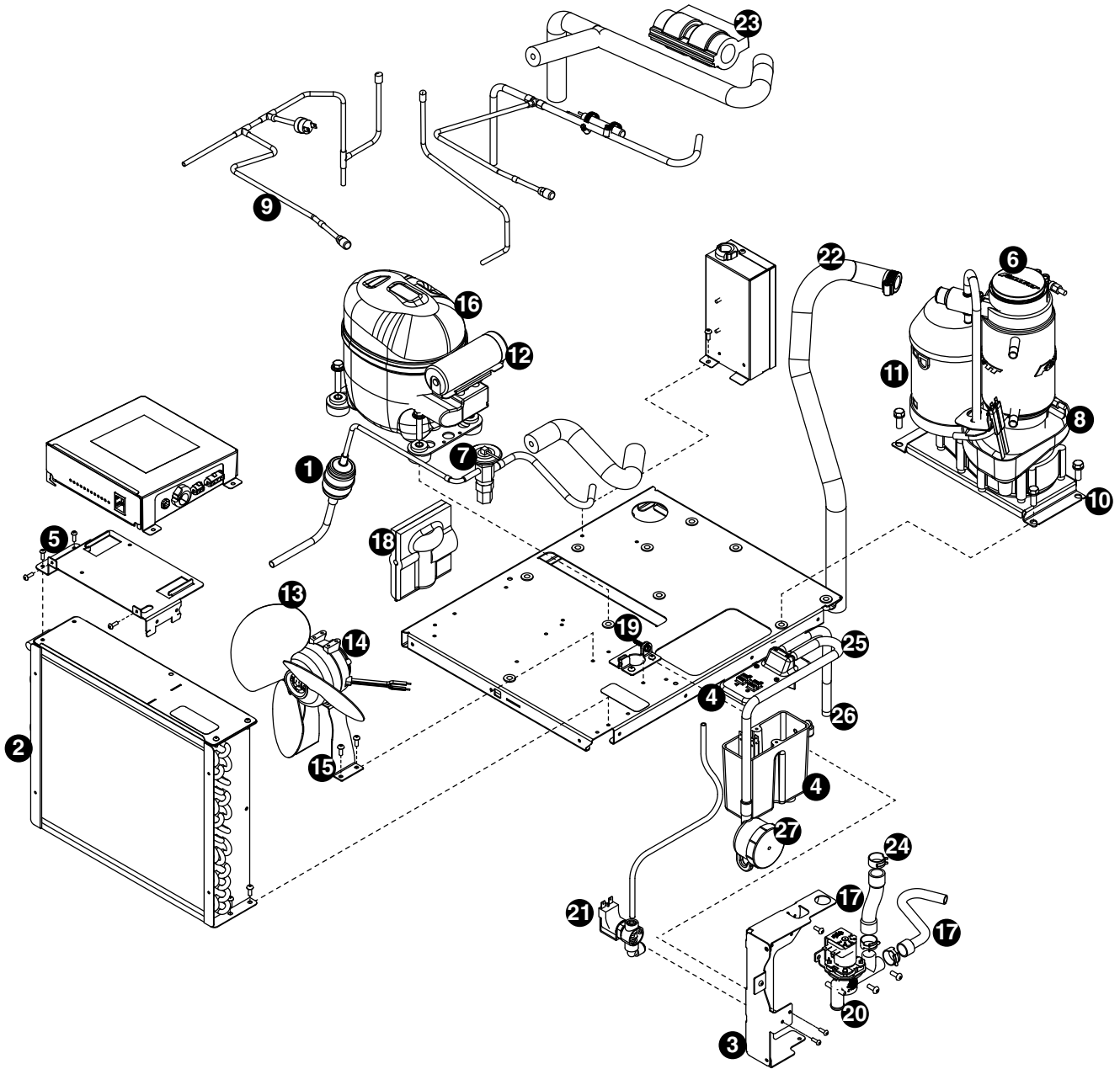


| Reference # | Description | Part # |
|-------------|---------------------------------------------------------|--------------------------|
| 1 | Valve, water shut off | 01035526 |
| 2 | Clip, shut off valve | 01035534 |
| 3 | Tee, 1/4" | 502923 |
| 4 | Elbow, 1/4" stem x 1/4" push-in | 00121699 |
| 5 | Tube, drain, hopper | 01054576 |
| 6 | Tube, purge | 01054584 |
| 7 | Fitting, water-cooled condenser inlet | 00195966 |
| 8 | Fitting, water-cooled condenser outlet | 00195966 |
| 9 | Fitting, water inlet | 01065275 |
| 10 | Tube, drain pan and cup, includes drain cup and bracket | 01072842 |
| | Drain cup | 01540327 |
| Not shown | Bottom cover, 25/50HI with drain pan | 00196113 |
| Not shown | Bottom cover, 25/50HI without drain pain | 00198341 |
| Not shown | Tubing 1/4" | 502079 |
| 11 | Fitting, drain | 00109728 |
| 12 | Bracket, drain cup | 01111111 |

Water treatment accessories for Symphony Plus ice and water dispensers

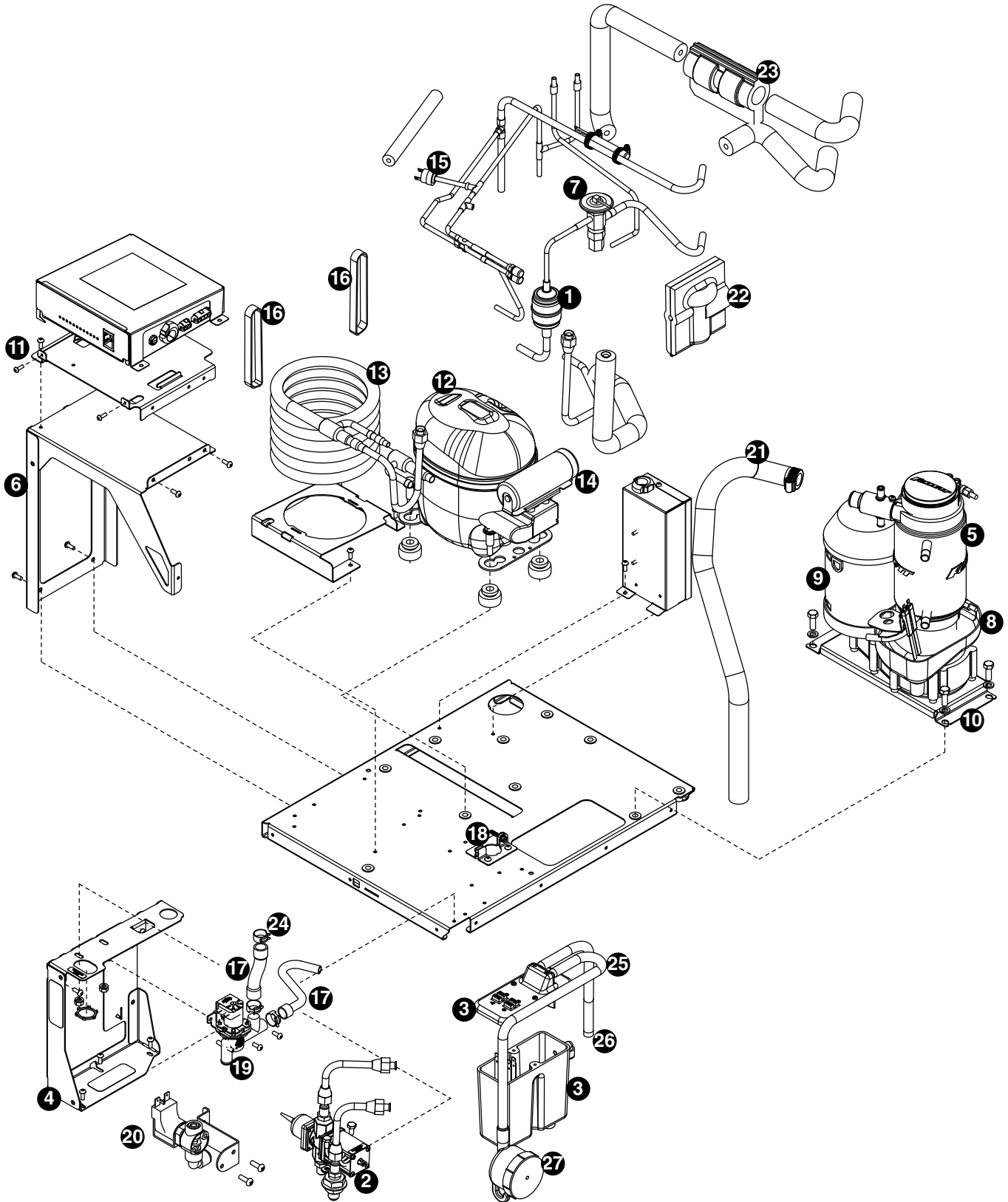
| Reference # | Description | Part # |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Standard capacity filter system | | |
| 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 |
| High capacity filter system | | |
| 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 |
| Carbonless high capacity filter system | | |
| Not shown | Carbonless high capacity water filter system (one per ice machine) – Horizon and Maestro 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 |
| Other filtration | | |
| 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 |
| Water pressure | | |
| Not shown | Water pressure regulator (25 psi) | 501781 |
| Cleaning/Sanitizing | | |
| Not shown | SafeClean Plus, case of 6 | 01149954 |
| Not shown | SafeClean Plus, case of 24 | 01149962 |
| Not shown | Sponge, sanitary | 00131524 |
| IMS-II or IMS-III sanitizing concentrate | | |
| Not shown | 16 oz. bottle | 00979674 |
| | Case of 12 x 16 oz. bottles | 01038652 |
| | Sponge, sanitary, pack of 24 | 01075431 |

Air-cooled ice machines



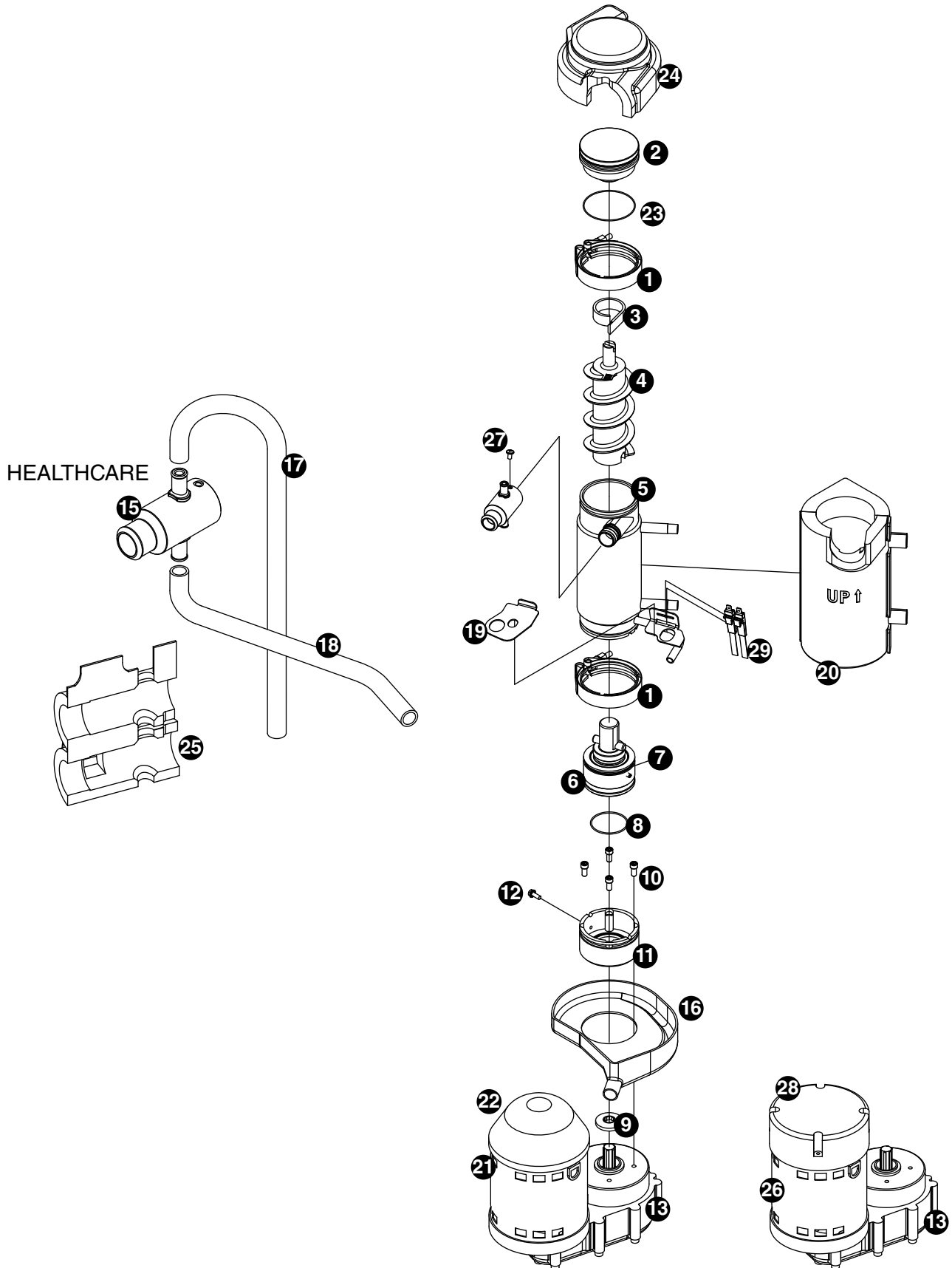
| Reference # | Description | Part # |
|-------------|--------------------------------------------------------------------------------|----------|
| 1 | Drier | 502724 |
| 2 | Condenser coil, A/C | 01067461 |
| 3 | Reservoir mounting bracket, a/c (After S/N L78614) | 01375609 |
| 4 | Reservoir assembly (includes lid, gasket, fasteners) | 01448596 |
| 5 | Bracket, electrical box | 01068170 |
| 6 | Evaporator (see page 32 and 33 for complete breakdown) | — |
| Not shown | Tubing, polypropylene, reservoir supply (sold by foot) | 502079 |
| 7 | Valve, expansion, thermal | 502726 |
| 8 | Drain pan, evaporator | 00181990 |
| 9 | High pressure cutout | 00117077 |
| 10 | Mounting bracket, gearbox | 01067693 |
| 11 | Gearbox & motor assembly, 115 V, 60 Hz | 502730 |
| 12 | Capacitor, start | 01026145 |
| 13 | Fan blade | 500474 |
| 14 | Motor, fan, 115 V, 60 Hz | 500672 |
| 15 | Bracket, fan motor | 01067107 |
| Not shown | Overload, compressor, 115 V, 60 Hz | 01027572 |
| 16 | Compressor, 115 V, 60 Hz | 01065259 |
| 17 | Tube, fill/purge - reservoir-solenoid-evaporator feed (includes 3 hose clamps) | 01261544 |
| Not shown | Water inlet fitting, brass | 01065275 |
| Not shown | Fitting, reservoir, plastic 1/4" stem x 1/4" push-in | 00121699 |
| 18 | Jacket, insulation, TXV | 502830 |
| 19 | Bracket, ice tube entry | 01067644 |
| 20 | Solenoid, purge | 01261510 |
| 21 | Solenoid, fill (After S/N L78614) | 01352483 |
| 22 | Tube, ice transport, MCD425A/WxT | 01003532 |
| 23 | Jacket, insulation, TXV bulb | 00106534 |
| Not shown | Gasket, reservoir | 01448612 |
| 24 | Clamp, hose (each) | 01281450 |
| 25 | Cleaning cup tube | 01448562 |
| 26 | Reservoir vent tube | 01448604 |
| 27 | Cleaning cup | 01448588 |

Water-cooled ice machines



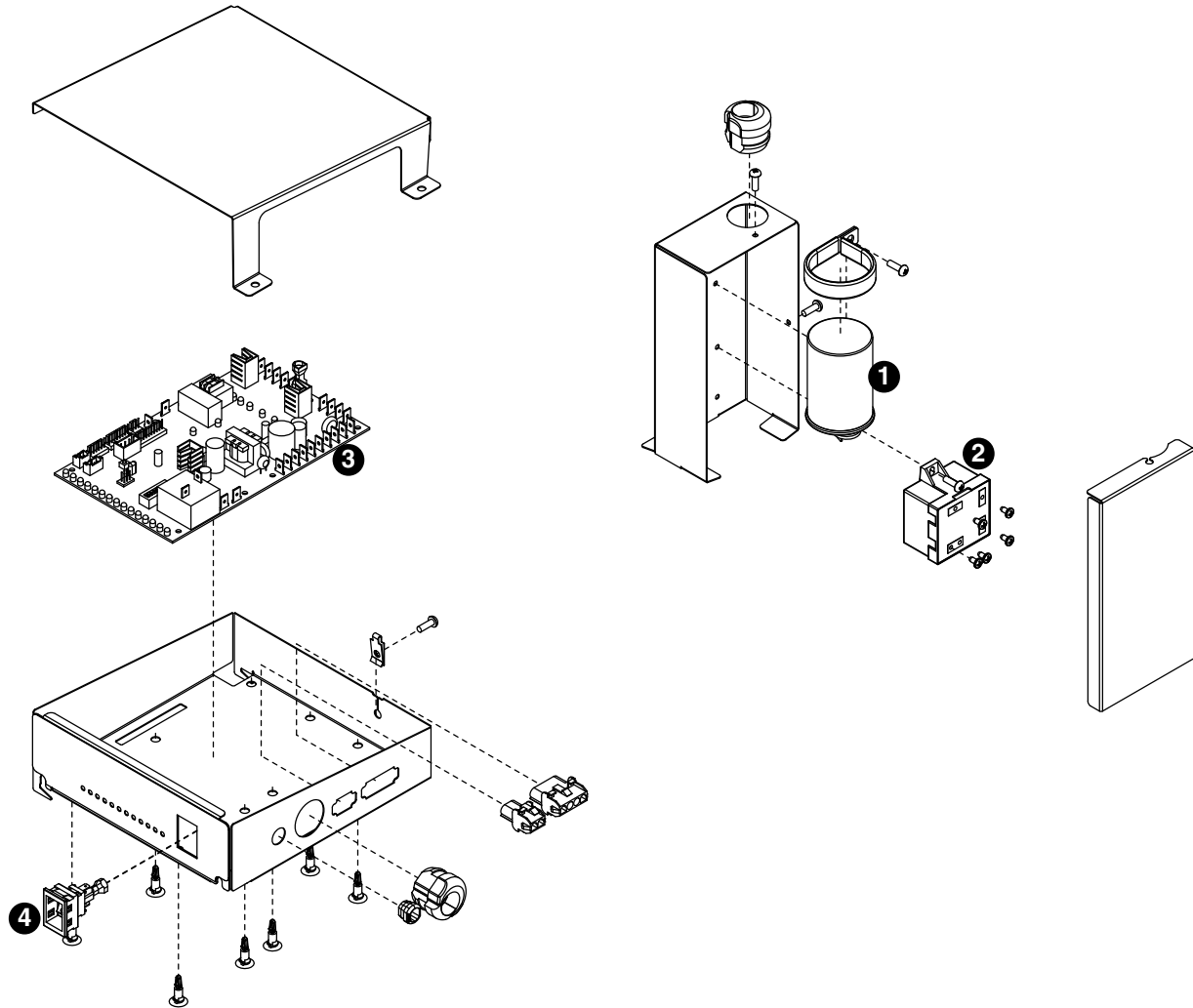
| Reference # | Description | Part # |
|-------------|--------------------------------------------------------------------------------|----------|
| 1 | Drier | 502724 |
| 2 | Valve, water regulating (includes Iso-washer) | 500537 |
| Not shown | Iso-washer (for water regulating valve) | 501810 |
| 3 | Reservoir assembly (includes lid, gasket, fasteners) | 01448596 |
| 4 | Reservoir mounting bracket | 01068162 |
| Not shown | Tubing, polypropylene, reservoir supply (sold by foot) | 502079 |
| Not shown | Fitting, reservoir, plastic 1/4" stem x 1/4" push-in | 00121699 |
| 5 | Evaporator (see page 36 and 37 for complete breakdown) | — |
| 6 | Bracket, electrical box tower | 01068121 |
| 7 | Valve, expansion, thermal | 502726 |
| 8 | Drain pan, evaporator | 00181990 |
| 9 | Gearbox & motor assembly, 115 V, 60 Hz | 502730 |
| 10 | Mounting bracket, gearbox | 01067693 |
| 11 | Bracket, electrical box mounting | 01068139 |
| Not shown | Overload compressor, 115 V, 60 Hz | 01027572 |
| 12 | Compressor, 115 V, 60 Hz | 01065259 |
| 13 | Coil, condenser | 00195933 |
| 14 | Capacitor, start | 01026145 |
| Not shown | Water inlet fitting, brass | 01065275 |
| 15 | High pressure cutout | 00117077 |
| 16 | Ty-rap (2 required) | 204584 |
| 17 | Tube, fill/purge - reservoir-solenoid-evaporator feed (includes 3 hose clamps) | 01261544 |
| 18 | Bracket, ice tube entry | 01067644 |
| 19 | Solenoid, purge | 01261510 |
| 20 | Solenoid, fill (After S/N L78614) | 01352483 |
| Not shown | Tube, drain, 25/50CI | 01054576 |
| Not shown | Tube, drain, MCD425AxT, 25/50FB | 01055185 |
| Not shown | Tube, drain, MCD425AxT, 110FB, 110CT | 01055540 |
| Not shown | Tube, drain, MCD425AxS | 01016948 |
| 21 | Tube, ice transport, MCD425A/WxT | 01003532 |
| 22 | Jacket, insulation, TXV | 502830 |
| 23 | Jacket, insulation, TXV bulb | 00106534 |
| Not shown | Gasket, reservoir | 01448612 |
| 24 | Clamp, hose (each) | 01281450 |
| 25 | Cleaning cup tube | 01448562 |
| 26 | Reservoir vent tube | 01448570 |
| 27 | Cleaning cup | 01448588 |

Evaporator replacement parts



| Reference # | Description | Part # |
|-------------|---------------------------------------------------------------------------|--------------------------|
| 1 | Clamp, v-band, includes nut | 502735 |
| 2 | Bearing assembly, top | 502736 |
| 3 | Loop, ice compression, beveled (see below for Flaker-specific components) | 502110 |
| 4 | Auger (see below for Flaker-specific components) | 502737 |
| 5 | Evaporator (includes insulation jacket, 502740) | 01064658 |
| 6 | Bearing assembly, bottom (includes O rings and condensate shield) | 502738 |
| 7 | O ring, bearing housing | 500496 |
| 8 | O ring, mounting base | 501063 |
| 9 | Shield, condensate | 500744 |
| 10 | Screw, Allen 1/4 20 x 1/2 (set of 4) | 501080 |
| 11 | Mounting base, evap. (includes 501063) | 502733 |
| 12 | Bolt, mounting base | 502227 |
| 13 | Gearbox & motor | 502730 |
| Not shown | Mounting base, gearbox | 01067693 |
| 15 | Compression nozzle, with single drain | 01064674 |
| 16 | Drain pan, evaporator | 00181990 |
| 17 | Tube, compression nozzle vent | 01148691 |
| 18 | Tube, compression nozzle, single drain | 01148675 |
| Not shown | Grease, Mobile FM222, 14 oz | 501111 |
| 19 | Bracket, vent hoses | 01007087 |
| 20 | Insulation jacket, evaporator | 01049592 |
| 21 | Relay, gearmotor | 00142042 |
| 22 | Cover, black plastic | 01012228 |
| 23 | O ring, top bearing | 01064963 |
| 24 | Insulation, top bearing | 01049600 |
| 25 | Insulation, compression nozzle, single drain | 01049584 |
| 26 | 16 μ F Capacitor (for PSC motor only) | 01103142 |
| 27 | Screw, compression nozzle | 00956250 |
| 28 | Cover, aluminum | 01106376 |
| 29 | Sensor, overflow | 01039783 |
| Not shown | O-ring, compression nozzle | 00988097 |

Ice machine electrical components



| Reference # | Description | Part # |
|-------------|-----------------------------------------------------------------------------|--------------------------|
| 1 | Capacitor, run | 00997759 |
| 2 | Relay start, compressor, 115 V, 60 Hz | 00997726 |
| 3 | Board, control circuit, 115 V, 60 Hz | 01064708 |
| 4 | Switch, clean | 01229418 |
| Not shown | Bin thermostat (MCD425A/WBT, MCD425A/WHT, MFD425A/WBT and MFD425A/WHT only) | 500514 |
| Not shown | Board, stand off control (8 required) | 00903005 |
| Not shown | Relay, power to contact closure | 01020734 |
| Not shown | Jumper, bin signal | 01069095 |

Warranty Registration and Equipment Evaluation

Thank you for purchasing Follett® equipment. Our goal is to deliver high value products and services that earn your complete satisfaction by delivering high-value products and services backed by outstanding customer and technical support.

Please review the installation instructions thoroughly. It is important that the installation be performed to factory specifications so your equipment operates at its maximum efficiency.

Follett LLC will not be liable for any consequential damages, expenses, connecting or disconnecting charges, or any losses resulting from a defect of the machine. For full warranty details, visit our website www.follettice.com/productwarranties.

Registering your equipments helps Follett track your equipment's service history should you need to contact us for technical support, and your feedback helps us improve our products and services. Please visit www.follettice.com/support to complete the Warranty Registration form.

Should you have any questions, please contact Follett's technical support group at (877) 612-5086 or (610) 252-7301 and we will be happy to assist you.

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Parts Provided

- Bin Thermostat (P/N 500514)



CAUTION!

- Live voltage. Technician must take proper precautions while working in and around the electrical box.

Procedure

1. Access the electrical box. The bin thermostat is used in several different Follett ice and water dispensers, and the location and access to the bin thermostat is also different. Please refer to the instructions shipped with your unit.
2. Remove top and front panels of dispenser.
3. Loosen screw to remove the *dispenser* electrical box cover.
4. Remove the two mounting screws to access the altitude adjustment screw on the bin thermostat (**Fig. 1**).
5. Before making any adjustments, ensure that the markings on the coarse adjustment dial are aligned (**Fig. 2**).

Fig. 1

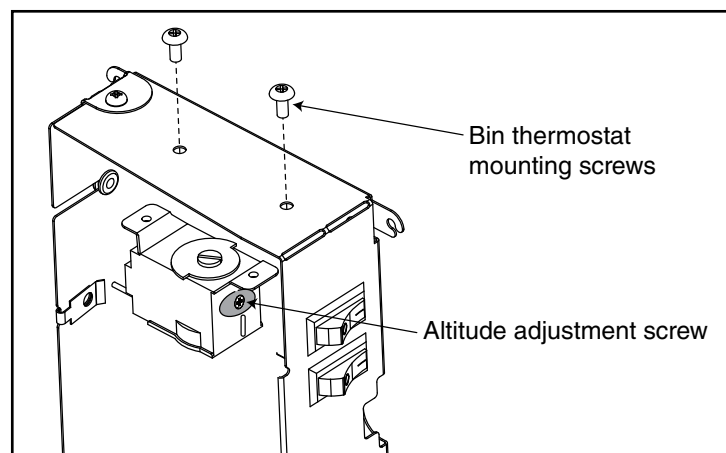
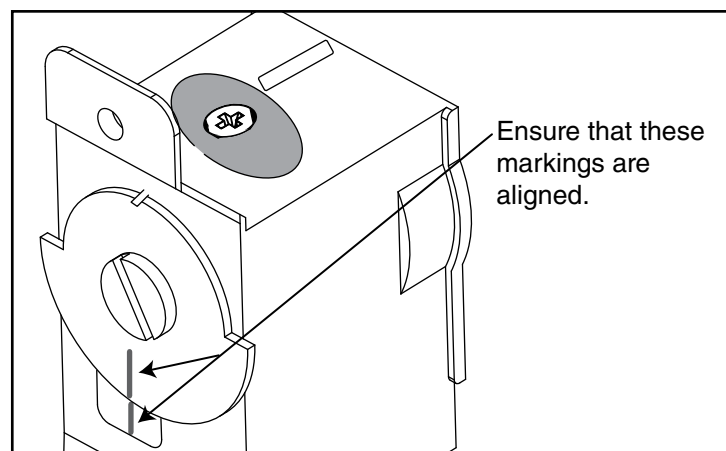


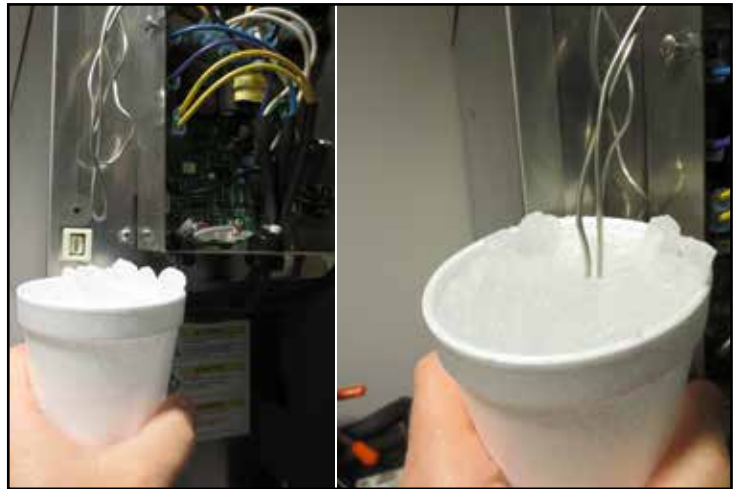
Fig. 2



6. Make an ice bath by filling a cup with ice, then add cold water to fill.
7. Locate the capillary tube alongside the electrical box.
8. Listening for the thermostat to de-energize (open circuit, audible click), fully submerge the capillary tube loop into the ice bath (**Fig. 3**).

Note: The thermostat should de-energize within 30 seconds.

Fig. 3



9. If the thermostat does not de-energize, then *slowly turn the altitude adjustment screw clockwise until the thermostat de-energizes (Fig. 4)*.
10. After it de-energizes, turn the screw an additional 1/8 turn (**Fig. 4**).
11. Remove the capillary tube from the ice bath and confirm that the thermostat energizes (closed circuit, audible click).

Note: Holding the capillary tube to warm it may help the thermostat energize.

Fig. 4



12. Turn the Coarse Adjustment Screw counter-clockwise until it stops (**Fig. 5**).
13. To validate that the bin thermostat is working correctly, again submerge the capillary tube loop into the ice bath until the bin thermostat de-energizes.
14. Replace the capillary tube to its original position.
15. Reinstall the bin thermostat.
16. Reinstall the electrical cover.
17. Reinstall the front and top cover.

Fig. 5

