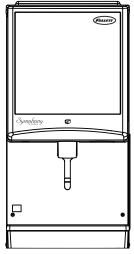
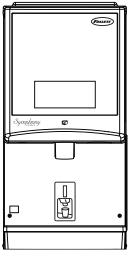
Symphony. 12 Series Ice and Water Dispensers

Order parts online www.follettice.com

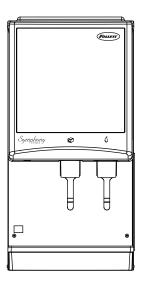
Installation, Operation and Service Manual



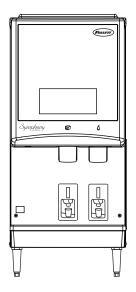
12CI400A-LI countertop, ice-only dispenser



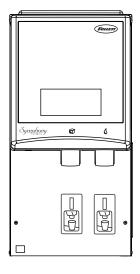
12Cl400A-SI countertop, ice-only dispenser with SensorSAFE™ infrared dispensing



12CI400A-L countertop dispenser



12Cl400A-S countertop dispenser with SensorSAFE infrared dispensing (shown with legs accessory)



12HI400A-S wall mount dispenser (available with or without drain pan)

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







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2 12Cl400A • 12Hl400A

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.

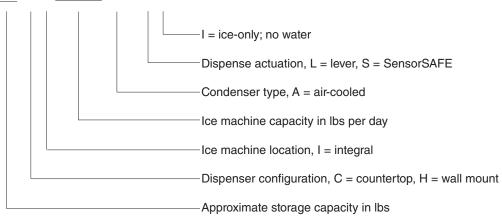
Note: To expedite assistance, all correspondence or communication MUST include the model number, serial number and complete and detailed explanation of the problem.

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.

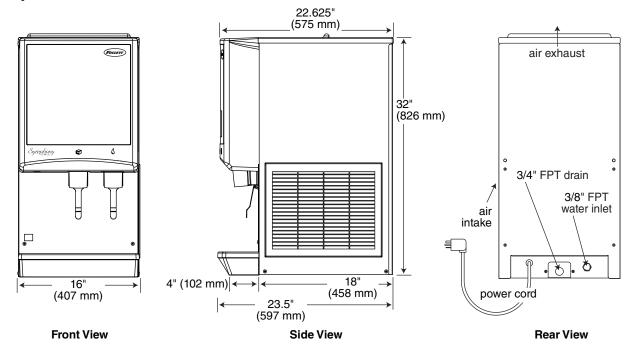
12CI400A-LI



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 (item# 00130229) be installed in the ice machine inlet water line
- 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

- 115 V, 60 Hz, 1 phase, 13.0A
- Connect to 20A circuit, fuse or breaker.

Ambient

Air temp	100 F/38 C Max.	50 F/10 C Min. (Best performance below 27 C/80 F)
Water temp	90 F/32 C Max.	40 F/4 C Min. (Best performance below 21 C/70 F)
Water pressure	70 P.S.I./5Bar Max.	10 P.S.I./0.7 Bar Min.

Plumbing

	12CI400A	12HI400A
Dispenser drain	3/4" FPT	3/4" FPT
Water inlet	3/8" FPT	3/8" FPT

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 (20mm per 1m) run of slope.

Ventilation clearances

• 6" (153mm) on right side of dispenser, 6" (153mm) at top for ventilation and 12" (305mm) at top recommended for service.

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

Dry weight

■ 175 lbs. (79.4kg)

Installation

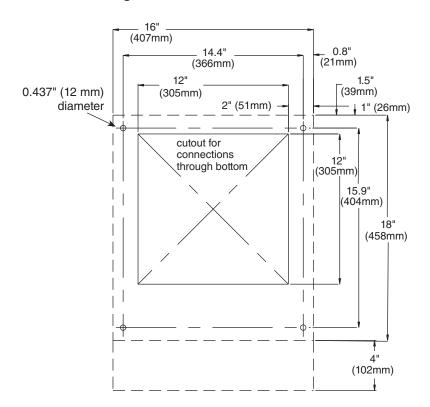
Before you begin

- All dispensers must be installed level in both directions to ensure proper operation.
- Service and ventilation clearances: 6" (153 mm) on right side of dispenser, 6" (153 mm) at top for ventilation and 12" (305 mm) at top recommended for service.
- Countertop units installed without legs 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). See counter cutout drawings for bottom exiting utilities on units with and without drain pans. For installations where utilities exit through back of dispenser, refer to back view drawings.
- Wall mount models without drain pan are designed for use above sinks.
- Counter depth must allow front of sink to be a minimum of 23.5 (597 mm) from wall.

Installing countertop dispensers without legs

- Position dispenser in desired location, mark dispenser outline on counter and remove dispenser.
- Regardless of whether utilities will exist through back or bottom of dispenser, drill four (4) 7/16" holes in counter to anchor dispenser to counter (Fig. 1).
- 3. For utilities exiting through bottom only:
 - (a) Make cut out as shown in **Fig. 1.**
 - (b) Move plug from drain T to back of unit (Fig. 2).
- 4. For all units: 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.
- Carefully lower dispenser on counter in proper position and secure to counter with four (4) 3/8"-16NC bolts.
- Smooth excess sealant around outside of dispenser.

Fig. 1 - Counter information



^{*} Dow Corning is a register trademark of Dow Corning Corporation in the United States and other countries

Fig. 2 – Bottom exiting utilities (countertop units)

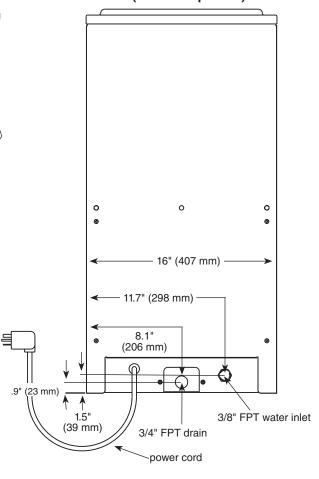
Move pipe plug to back of unit

3/4" FPT drain

Remove poly tubing and water inlet

Remove poly tubing and fitting for water inlet

Fig. 3 – Rear exiting utilities (countertop units)



Installing countertop dispensers with legs accessory

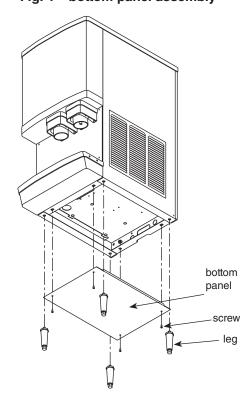


Do NOT tilt unit farther than 30° off vertical plane.

Countertop dispensers that sit on legs (not bolted to counter) can be inadvertently moved. Care should be taken when operating and cleaning to avoid accidents.

- **1.** Carefully tip dispenser back to expose underside and block up in place.
- 2. Screw legs (shipped taped to drain pan of dispenser) into dispenser bottom, taking care to seat legs securely against underside of dispenser.
- **3.** Attach bottom panel and hardware to bottom of dispenser with supplied screws (**Fig. 4**).
- **4.** Position unit in desired location and adjust bullets on legs to level in both directions.
- 5. Make final connections.

Fig. 4 – bottom panel assembly



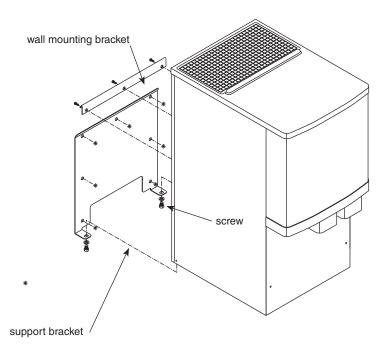
Installing wall mount dispensers Notes:

- No drain pan is provided since the dispenser is intended to be installed above a sink. (Contact Follett if a drain pan is desired.)
- SensorSAFE infrared dispensing is standard. (Contact Follett if lever actuation is desired. A deeper cabinet will be needed.)
- 1. Recommended minimum counter depth and mounting height shown on Fig. 7 ensures that ice will drop into sink.
- 2. See Fig. 6 for model dimensions. The dimensions include the 0.5" (13 mm) mounting bracket supplied with the unit.
- 3. Cut utility hole in wall as shown (Fig. 10).
- 4. Mount support bracket to wall using fasteners of sufficient strength (fasteners not included, see Fig. 6).
- 5. Rough in water and drain lines (Fig. 10).
- **6.** Lift dispenser onto support bracket, positioning unit so that hook on back of dispenser is captured by support bracket angle (**Fig. 7**).
- 7. Install two (2) supplied 3/8"-16NC screws through bottom of support bracket into bottom of dispenser (Fig. 5). Slotted holes in support bracket allow you to adjust and level the dispenser. Ensure that the top of dispenser is level or tilted slightly back toward the wall.
- 8. Make final connections.
- 9. Attach bottom panel and hardware to bottom of dispenser (Fig. 8).

Fig. 5 – Wall mount bracket and fastener requirements



WALL PREPARATION: Wall and fasteners must be of sufficient strength to carry weight of unit (185 lbs (83.9 kg)). Hardware for this is not included.



Installing wall mount dispensers

Fig. 6 – Wall mounting dimensions

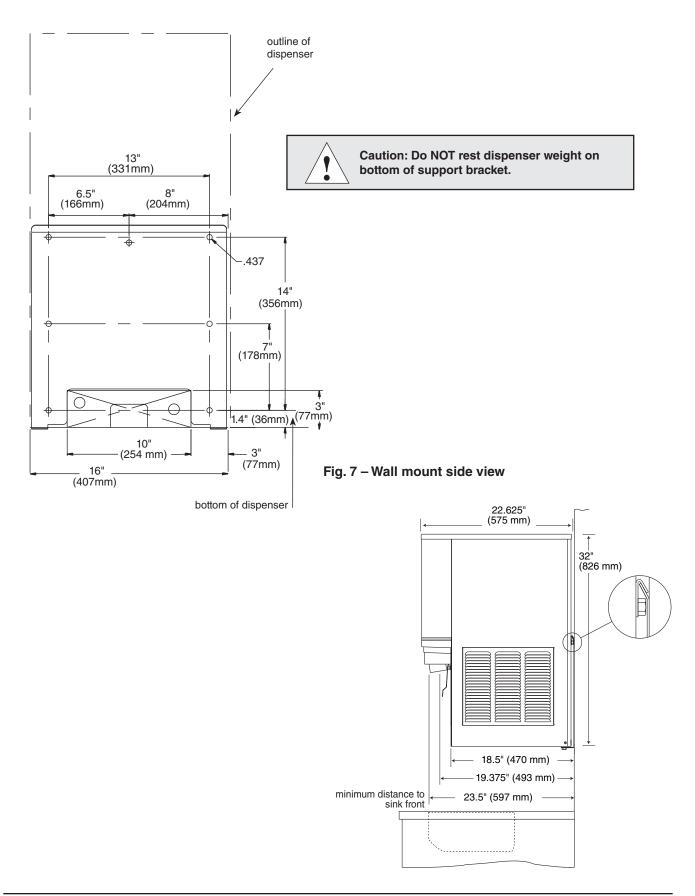


Fig. 8 – Wall mount unit bottom panel assembly

Fig. 9 - Wall mount bottom view

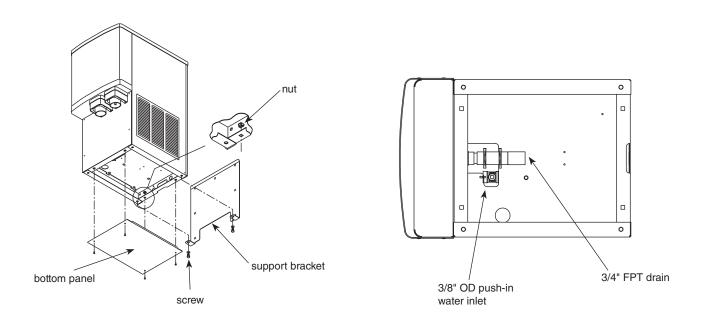
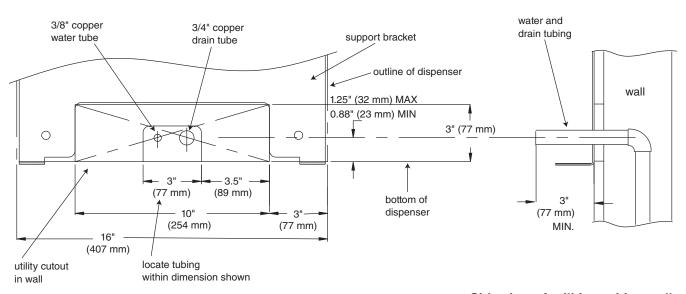


Fig. 10 – Front view of wall mount bracket, utility location



Side view of utilities exiting wall

User information

How the dispenser works

Follett's 12 series automatic-load ice and water dispensers are equipped with Follett's 400 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/descaling and sanitizing

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	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 cleaned and sanitized prior to start-up.

Weekly



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

Dispenser drain pan and drain line

1. 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.
- 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)

1. 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; ice
 machine should be cleaned and sanitized first, followed by the dispenser.
- Icemaking system can be cleaned/descaled in place.

To ensure that your ice machine and dispenser are cleaned/descaled and sanitized properly, proceed as follows:

- 1. Clean/descale the ice machine
- 2. Sanitize the ice machine
- 3. Clean/descale the dispenser
- 4. Sanitize the dispenser

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. (3.8L) 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).

Clean/descale ice machine

- 1. If ice machine was running recently, ensure that the evaporator is completely free of ice before proceeding.
- **2.** Disconnect power to ice machine.
- 3. Remove any ice machine panels required to gain access to water reservoir and electrical control box.
- **4.** Turn compressor switch on electrical box of ice machine to OFF position.
- 5. Remove water reservoir cover and close water supply valve (or block up reservoir float).
- **6.** Drain water from reservoir by releasing evaporator drain tube from float reservoir bracket, removing plug from drain tube and releasing (unclamping) pinch clamp (if equipped).
- 7. Plug drain hose, replace drain line in reservoir bracket and pour part of **Solution A** into reservoir, filling it almost to overflowing.
- 8. Remove stainless steel ice compression nozzle and drain lines and submerge in a cup of **Solution A** while cleaning/descaling rest of system. (Flake ice machines have no ice compression nozzle and drain lines.)

CAUTION: To avoid potential pitting, do not soak parts in **Solution A** for more than 45 minutes.

- 9. Restore power to ice machine (gearmotor will run; compressor and fan will not).
- 10. Inspect evaporator drain pan and drain line and remove any accumulated scale build up.
- **11.** After 15 minutes, turn power OFF; drain solution from reservoir and evaporator.
- 12. Fill reservoir almost to overflowing with clean water to rinse. Drain. Repeat two more times.
- 13. Rinse ice compression nozzle and drain lines in clean water.

Sanitize ice machine

- 14. Submerge ice compression nozzle and drain lines in a cup of Solution B while following steps 15-21.
- 15. Connect ice transport tube directly onto evaporator outlet port without ice compression nozzle.
- **16.** Fill reservoir almost to overflowing with **Solution B**.
- 17. Restore power to ice machine (gearmotor will run; compressor and fan will not).
- **18.** After 10 minutes, turn compressor switch to ON position.
- **19.** As unit starts to make ice, continue to pour **Solution B** into reservoir, maintaining level just below reservoir overflow.

- 20. Continue to make ice with Solution B for 20 minutes.
- 21. Turn power to ice machine OFF.
- **22.** Disconnect ice transport tube from evaporator outlet port. Rinse ice compression nozzle and drain lines in clean water and reinstall on evaporator outlet. Reconnect ice transport tube to ice compression nozzle.
- 23. Drain any remaining Solution B from evaporator.
- **24.** Fill reservoir almost to overflowing with 120 F (49 C) clean water to rinse. Drain. Repeat two more times. Re-clamp pinch clamp, replace drain plug, and re-secure drain tube *ensuring that end of drain tube is above water level in reservoir*.
- 25. Open water supply valve (or unblock float) and replace reservoir cover; restore power to ice machine and ensure compressor switch is in ON position. Make ice for at least 15 minutes to flush any remaining Solution B from system (RIDE® ice machines with long ice transport hoses may take longer to flush out). Discard this ice and all ice made during sanitizing.

Clean/descale dispenser

- 26. Remove and discard all ice from storage hopper.
- 27. Ensure power is disconnected. Remove ice storage hopper cover.
- **28.** Remove center thumbscrew, locking plate, two wingnuts and backing plate from front of storage hopper (see Page 29).
- 29. Remove threaded rod, agitator, baffle, and wheel in this sequence (see Page 29).
- **30.** Remove and disassemble (if applicable) dispense chutes.
- **31.** Thoroughly wipe hopper lid, dispense wheel, baffle, inside of storage area and dispense chutes with cloth soaked in **Solution A**.

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

- **32.** Remove grille and wash with **Solution A**. Rinse thoroughly with clean water.
- 33. Rinse all above items with damp cloth wrung out in clear water.

Sanitize dispenser

- 34. Wipe all above items with damp cloth wrung out in Solution B to sanitize. Do not rinse.
- 35. Reinstall all parts and replace any panels removed prior to cleaning.
- **36.** Pour 1 gal. (3.8 L) of hot tap water into drain pan to flush drains.
- **37.** Turn ice machine ON and begin to make ice (ice machine should start immediately with power and bin signal supplied).
- 38. After approximately 30 minutes, test dispenser for proper dispensing.

Service

Important preliminary information

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

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

These four systems work together to accomplish the production and harvesting of ice. A problem in any one of these system areas 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.

Note: When performing electrical service, always use a meter to determine whether or not components being serviced are energized.

The icemaking process

The Follett 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 a float valve. This valve also shuts off the water supply when the ice machine is not running.

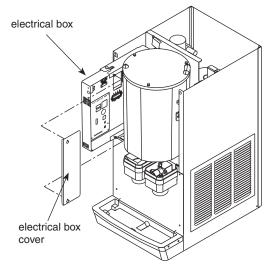
When the ice machine is running, a layer of ice forms on the interior surface of the evaporator. This ice is continuously removed by a slowly rotating (12 RPM) auger. The auger carries the ice upward into the cavity formed by the top bearing housing and the compression loop, where it is compressed to 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 high quality. As the formation of ice continues, ice in the transport tube is pushed through the tube to the storage compartment in the ice dispenser or ice storage bin.

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 on an ongoing basis. 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.

Access to electrical box and control board

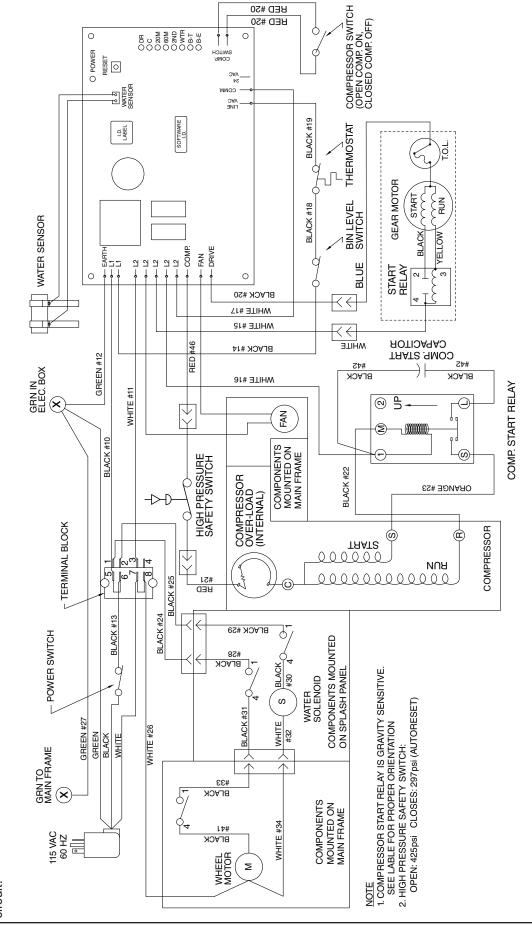
The 12 series electrical box has been designed to slide out for easy access to the control board and more convenient troubleshooting.

- 1. Remove top and front panels of dispenser (for panel removal instructions see page 31).
- 2. Remove electrical box cover.
- 3. Pull electrical box toward front of unit.



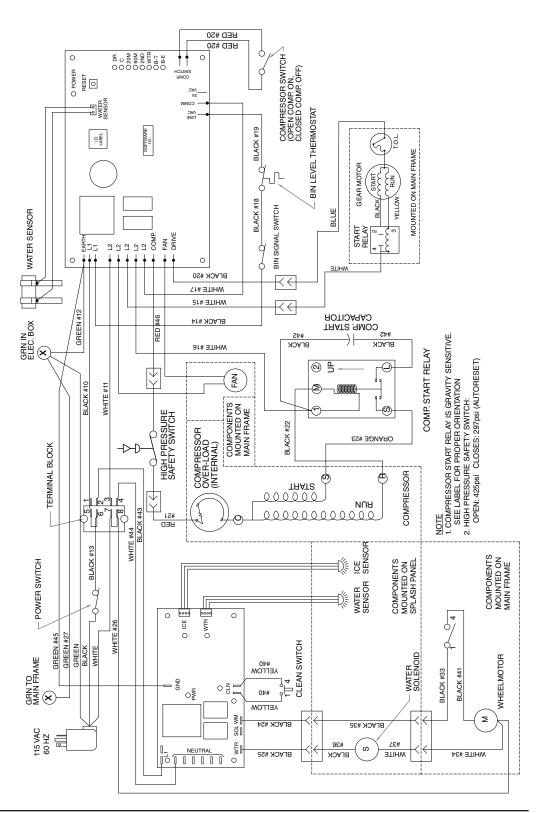
How the unit works — models with lever dispensing

The dispense wheel motor is energized through the power, dispense and cover interlock switches. The bin signal circuit is completed through the normally closed contacts of the bin thermostat and the bin signal switch. When ice builds up around the bin thermostat, the contacts opens, cutting the bin signal circuit.



How the unit works — models with SensorSAFE infrared dispensing

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 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. The bin signal circuit is completed through the normally closed contacts of the bin thermostat and the bin signal switch. When ice builds up around the bin thermostat, zone. Dispensing can be temporarily suspended by depressing and releasing the clean switch, located under the left side of the top front cover. Depressing and releasing the 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 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 chute, an invisible, randomly-generated infrared signal is emitted, reflected off the container and detected by the sensor. The sensor then sends a signal to the control board Models with SensorSAFE infrared dispensing provide "touchless" ice and water dispensing. When a container is placed within the actuation zone below the ice or water the contacts open, cutting the bin signal.



Ice machine operational and diagnostic sequences

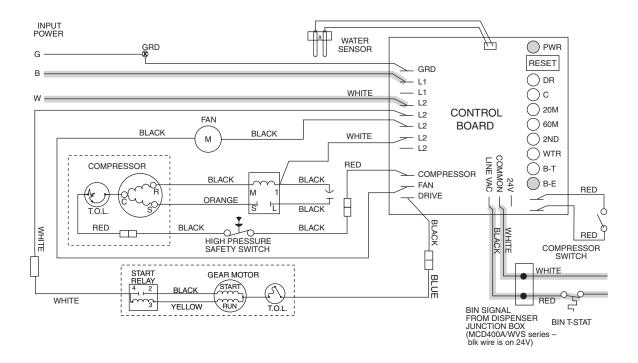
The wiring diagrams that follow illustrate the circuitry of Follett ice machines used with 12 series ice dispensers. Both normal operation (stages 1 - 6) and non-normal diagnostic sequences showing torque-out (stages 7 - 10) for use in troubleshooting are shown.

Circuitry notes

- Compressor switch should read open in ON position.
- Compressor start relay is position sensitive. See label on start relay for proper orientation.
- Bin signal is 115 V, 60 Hz.
- Flashing water LED at any time indicates that water signal to board has been lost for more than one second.
- Ten-second delay: There is a 10 second delay in reaction to loss of water (WTR) or bin (B-E) signals. If signals are not lost for more than 10 seconds, no reaction will occur.

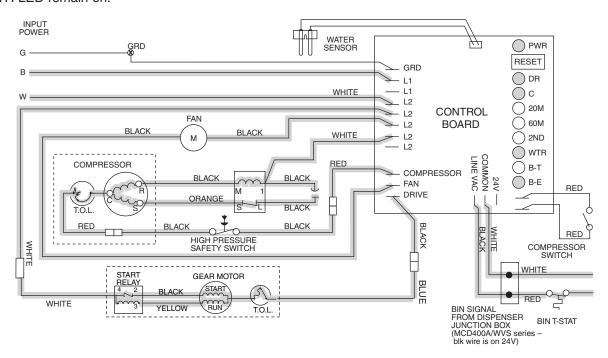
Normal operation – Stage 1

Power is supplied to L1 of the control board. The ice level control in the dispenser is closed and calling for ice, supplying signal voltage to the control board. The control board will now go through the start-up sequence. Less than 30 seconds will elapse as the water sensor located in the float reservoir checks for water in the reservoir. The bin empty LED (B-E) and power LED (PWR) will be on.



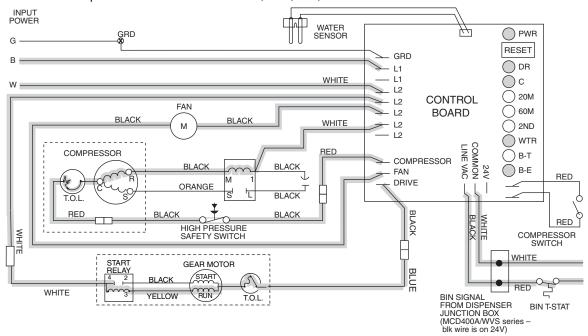
Normal operation – Stage 2

The water sensor verifies water in the float reservoir. The water OK LED (WTR) comes on. At the same time, the gearmotor, compressor and condenser fan motor come on, lighting the drive LED (DR) and compressor LED (C). The high initial current draw of the compressor run winding closes the contacts of the current relay energizing the start winding through the run capacitor. The gearmotor is also started through a current style relay (or start capacitor) that is pulled in by the initial high current draw of the run winding. The PWR, B-E and WTR LED remain on.



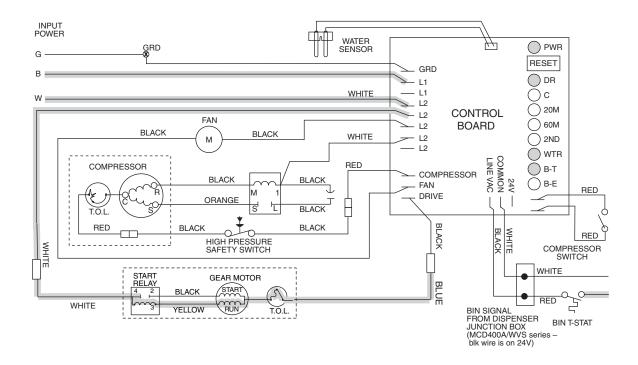
Normal operation - Stage 3

After the initial high current draw drops off, the gearmotor start relay contacts open, dropping out the start winding (or start capacitor). As the compressor comes up to normal running speed, the compressor start relay contacts also open, dropping out the start winding of the compressor. The ice machine is now in a normal icemaking mode. The ice machine will begin to produce ice and continue to produce ice until the bin level control in the ice dispenser is satisfied. The PWR, B-E, DR, C and WTR LEDs are all on.



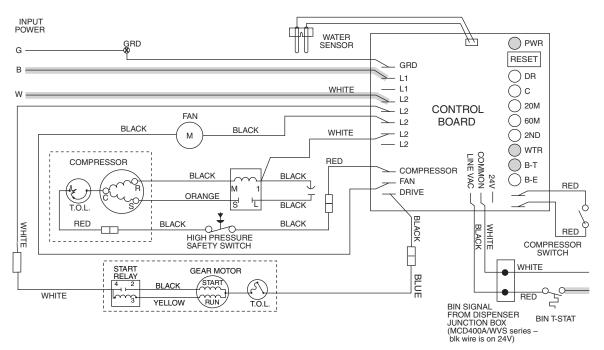
Normal operation - Stage 4

Once the ice level control opens, the B-E LED goes out. After a 10 second delay the compressor LED (C), compressor and fan motor go off. (Should the ice level control not remain open for 10 seconds, the ice machine will continue to run.) The gearmotor continues to run and the DR LED remains lighted for 60 seconds. The purpose of this function is to drive the remaining ice out of the evaporator and to boil off any refrigerant remaining in the evaporator. The bin timer LED (BT) comes on, starting the twenty minute off cycle time delay.



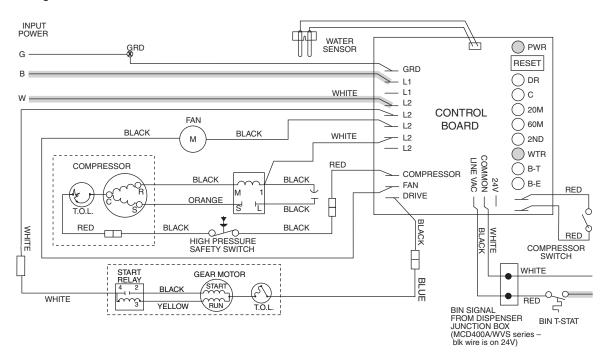
Normal operation - Stage 5

The drive motor now shuts down and the DR LED is off. The B-T LED remains on for 20 minutes. The ice machine will not start while the B-T LED is on. To restart the ice machine for troubleshooting purposes, depress the reset button to clear the control board.



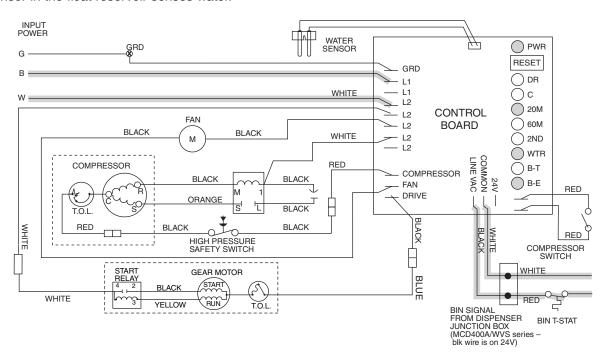
Normal operation - Stage 6

When the dwell time of 20 minutes has expired, the B-T LED goes off. The ice machine goes through the normal start-up sequence when the bin level control signals the control board for ice. The WTR LED will remain on as long as the water sensor in the float reservoir senses water.



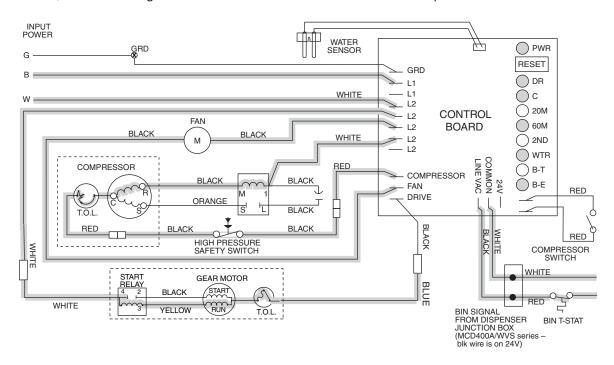
Diagnostic sequence - Stage 7

The 20 minute error LED (20M) is on, indicating that the control board has sensed an over-torque condition (above 3A on the gearmotor). The 20M LED remains on for 20 minutes after an over-torque condition has occurred. The ice machine remains off as long as the 20M LED is on. When the 20M LED goes off, the control board will try to go through a normal start-up sequence. The WTR LED remains on as long as the water sensor in the float reservoir senses water.



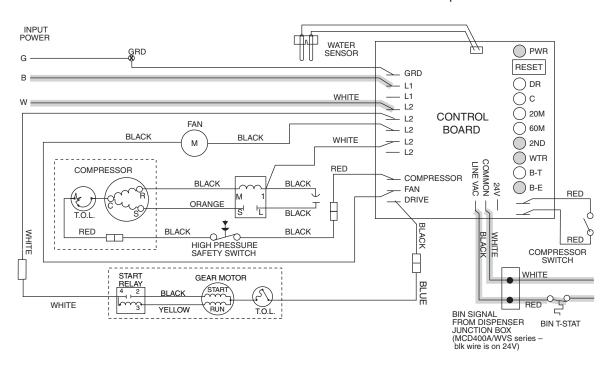
Diagnostic sequence - Stage 8

If the restart is successful the 20M LED goes off, the 60 minute timer LED (60M) comes on. The 60M LED remains on for 60 minutes from restart. A lighted 60M LED indicates that the ice machine has experienced an over-torque condition. If the ice machine runs without problems for 60 minutes and no additional torque errors occur, the 60M LED goes off and the ice machine continues normal operation.



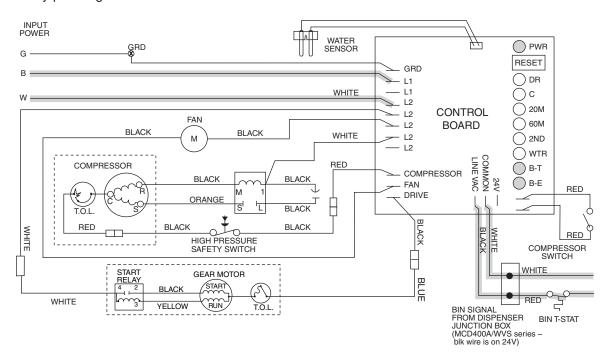
Diagnostic sequence - Stage 9

The second error (2ND) LED comes on if an over-torque condition occurs while the 60M LED is still lighted. The 2ND LED indicates that two consecutive over-torque situations have occurred. The ice machine will be shut down at this time and will not restart unless the manual reset button is depressed.

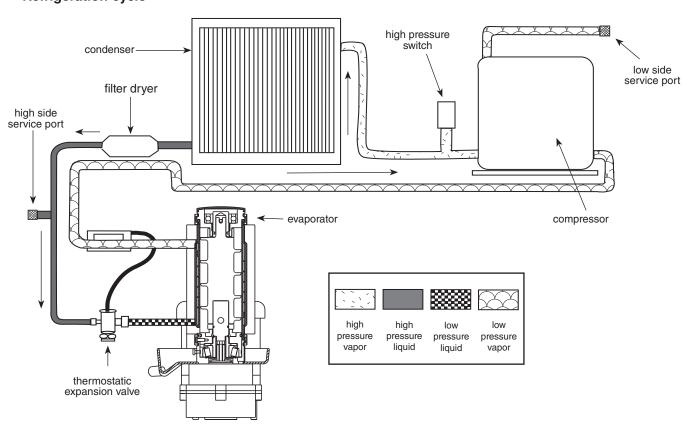


Diagnostic sequence - Stage 10

If the water level in the float reservoir drops to an unacceptable level, the WTR LED goes out, shutting the ice machine off. Also, the BT LED comes on, preventing the ice machine from restarting for twenty minutes. If water is restored, the WTR LED comes back on and flashes to alert the technician that water to ice machine has been lost. The ice machine restarts at the end of the 20 minute time delay. The flashing WTR LED can be cleared by pressing the reset button.



Refrigeration cycle



Refrigeration pressure data

Air-cooled icemaker capacity/24 hrs. Ambient Air Temperature °F/°C

	F	60	70	80	90	100	
	С	16	21	27	32	38	
()	50	468	417	366	317	268	lbs.
F/°C	10	212	189	166	144	122	kg.
	60	450	402	354	298	243	lbs.
atur	16	204	182	161	135	110	kg.
oera	70	432	387	342	280	217	lbs.
əm	21	196	176	155	127	98	kg.
ir Te	80	410	369	328	271	214	lbs.
/ate	27	186	175	149	123	97	kg.
Inlet Water Temperature	90	387	351	314	262	210	lbs.
Infe	32	176	159	142	119	95	kg.

Air-cooled Icemaker Refrigeration Pressure Discharge Pressure/Suction Pressure

Ambient air temperature °F/°C

	7 indicit all temperature 17 0						
ature "F/"	°F/°C	60/16	80/27	100/38			
er temper	50/10	174/23	245/31	237/37	psi		
lcemaker inlet water temperature	70/21	174/23	244/30	326/38	psi		
Icemaker	90/32	190/25	265/32	347/40	psi		

Table 2 - Compressor data Compressor current draw

Air-cooled

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 Ambient air temp. 6.3A 6.5A 6.7A 6.9A 7.1A

Locked rotor amps 58.8

Table 3 – Gearmotor data

Gearmotor current 2.25A (nominal)

Locked rotor amps 14A

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.

R400 ice machine charge specificat	ions	
Model	Charge	Refrigerant type
12CI400A, 12HI400A (air-cooled)	19 oz	R404A



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

Refrigerant replacement requirements

- 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.

Ambients	Minimum	Maximum
Air temperature ¹	50 F/10 C	100 F/37.8 C
Water temperature ²	40 F/4.4 C	90 F/32.2 C

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

² Ambient water temperature is measured in the ice machine float reservoir.

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:

```
1440 min. x wt. of ice produced

= Production capacity/24 hr. period

Total test time in minutes
```

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).

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.

Lever model troubleshooting guide

Problem	Indicators	Corrective Action
Does not dispense ice.	Power switch off or faulty. Faulty dispense switch.	Check switch – turn on or replace if faulty.
	3. Wheel motor malfunction.	2. Replace switch.
		Check motor and capacitor 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, replace stat.
Does not dispense water.	1. Faulty water solenoid valve.	Replace water solenoid valve.
	2. Faulty dispense switch.	2. Replace dispense switch.
	3. Power switch off or faulty.	3. Check switch - turn on or replace if faulty.

SensorSAFE model troubleshooting guide

		SensorSAFE Board LED Status		ard LED	
Problem	Action	PWR	CLN	ICE/ WTR	Corrective Action
Does not dispense ice	Check LEDs on the	OFF	OFF	OFF	Check circuit breakers and power switch. Restore power or replace defective switch.
and/or water.	SensorSAFE control board.	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	ON	OFF	OFF	Troubleshoot appropriate lens/sensor and replace if required (see lens/sensor troubleshooting).
	of lens)	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 9WTR 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 slash 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.

Ice machine troubleshooting

Flashing water LED at any time indicates that water signal to board had been lost for more than one second.

Ten-second delay: There is a 10 second delay in reaction to loss of water (WTR) or bin (B-E) signals. If signals are not lost for more than 10 seconds, no reaction will occur.

Problem	Indicators	Corrective Action
Ice machine will not	1. No power to unit.	1. Check that unit is plugged in, circuit breakers are on.
run.	2. Open bin level control.	2. Adjust or replace ice level control.
System status:	3. Water OK LED (WTR) not on.	3. Check reservoir for water, restore water to unit.
compressor, gearmotor, and fan	4. 20M or 2ND LED is on indicating that first or	4. See #6 below.
motor inoperative.	second torque error has occurred.	5. Repair or replace gearmotor.
	Gear motor locked up (immediate torque error indicated by LEDs when board is reset).	6. Replace gearmotor start relay.
	Open coil on gearmotor start relay causing an immediate torque error.	
Compressor will not run.	Condenser coil plugged causing open overload or high pressure cut-out.	Clean condenser coil and replace overload if necessary.
System status:	2. Defective starting capacitor.	2. Replace start capacitor.
gearmotor and fan motor run.	3. Defective starting relay.	3. Replace relay.
motor run.	4. Open motor winding.	4. Ohm out windings and replace compressor if
	No power output from compressor output terminal on control board.	necessary. 5. Check terminal connection and replace control board if pagescary.
l loit avals s	1. Floot vocameir viscoina des constitutions	if necessary.
Unit cycles intermittently.	Float reservoir running dry, sensing probe signalling for system to shut down.	Check water supply to float and float operation. PC board will have flashing WTR LED.
System status: compressor, gearmotor, and fan motor cycle.		
Low ice production.	Dirty air filter or condenser coil.	Clean or replace filter, clean condenser.
Poor quality ice.	2. Restricted air flow to condenser coil.	2. Remove obstruction.
, ,	3. Mineral coated evaporator.	3. Clean evaporator.
	4. Improper exhaust air provisions.	4. Provide proper exhaust air provisions per Follett
	5. Faulty expansion valve.	installation manual.
	6. Low refrigerant charge.	5. Replace expansion valve.
	7. Superheat incorrect.	6. Check for leaks; repair, evacuate, and weigh in correct
	8. Inefficient compressor.	charge.
	·	7. Check that TXV sensing bulb is securely clamped in place and not damaged; check that insulated bulb cover is in place.
		8. Replace compressor.
Water leaks from bottom of evaporator.	1. O ring seal broken.	1. Replace O ring.
Ice machine runs for short period of time	Kink in ice transport tube. Bin level control remains in closed position.	Eliminate kink and check that tube routing complies with Follett ice machine installation manual.
and shuts down on	, '	2. Adjust or replace control.
torque error.	Ice transport tube ruptured internally. Worn evaporator bearings.	3. Replace complete length of ice transport tube.
System status: 20M or 2nd LED is lit.	4. Worn evaporator bearings.	Inspect bearings for roughness or binding and replace
ZIIU LLD 18 III.	Faulty gearmotor start relay. Ice machine torques out within 5 seconds of start-up.	if necessary. 5. Replace gearmotor start relay.
	6. Torque out occurs when storage bin fills to capacity.	6. Ensure that ice contacts bin thermostat before
		backing ice up in transport tube. Refer to dispenser
Evaporator is iced up	Gearmotor running but no output rotation.	manual for proper thermostat and ice tube mounting. 1. Check for broken gearmotor output shaft or damaged
on the outside. No ice	Gearmotor running but no output rotation. Float reservoir empty.	manual for proper thermostat and ice tube mounting. 1. Check for broken gearmotor output shaft or damaged gearbox.
		manual for proper thermostat and ice tube mounting. 1. Check for broken gearmotor output shaft or damaged

Problem	Indicators	Corrective Action
Compressor cycles	Compressor start relay in wrong position.	Position relay with arrow or word "top".
intermittently. System status:	High pressure cutout open due to high head pressure.	Check discharge pressure and adjust water regulator valve.
gearmotor and fan motor run.	3. Clogged or dirty air filter or condenser coil.	3. Clean or replace filter, clean condenser coil.
motor run.	4. Improper ventilation.5. Defective compressor.	Provide inlet and exhaust air provisions per Follett ice machine installation manual.
		5. Replace compressor.
Unit runs but not	Clogged or dirty air filter or condenser coil.	Clean or replace filter, clean condenser coil.
making ice.	2. Compressor not pumping.	2. Replace compressor.
System status: compressor, gearmotor & fan motor running.	3. Low refrigerant charge.	Check for leaks; repair, evacuate, and weigh in correct charge.
Compressor and fan	Compressor switch in OFF position.	Turn compressor switch on.
motor will not run.	2. No output on compressor and fan motor terminals	2. Replace control board.
Gearmotor runs.	on control board.	3. Replace fan motor.
	Failed fan motor causes high pressure cut-out to open.	
Intermittent noises from evaporator.	Mineral build-up on evaporator surface.	Clean evaporator with liquid ice machine cleaner.

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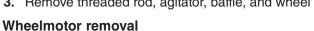
Disassembly and replacement instructions

Dispense chute removal

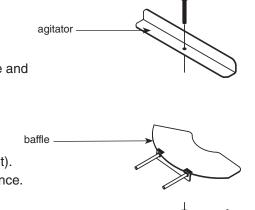
- 1. Remove top cover (see page 31).
- 2. Remove stainless front cover (see page 31).
- 3. Slide plastic dispense chute cover up and out to remove.
- **4.** Remove four (4) push fasteners holding dispense tube in place and remove tube.

Dispense wheel and drive bar removal

- 1. Remove all ice from storage area of dispenser.
- **2.** Remove center thumbscrew, locking plate, two wingnuts and backing plate from front of storage hopper (see drawing at right).
- 3. Remove threaded rod, agitator, baffle, and wheel in this sequence.



- 1. Remove dispense wheel and drive bar (see above).
- **2.** Remove four (4) hopper/support plate mounting screws and washers (Fig. 11.1).
- 3. Move hopper assembly 1/2" (13 mm) to left.
- **4.** Remove four (4) dispenser motor bracket mounting screws and washers (Fig. 11.2).
- **5.** Short shaft motors only: loosen only two (2) lower screws on drive coupling and remove from motor shaft (Fig. 11.3).
- 6. Remove four (4) screws holding motor to mounting bracket.



threaded rod

dispense wheel

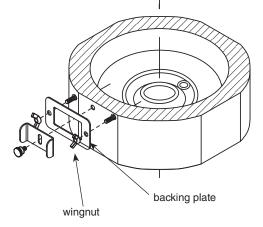
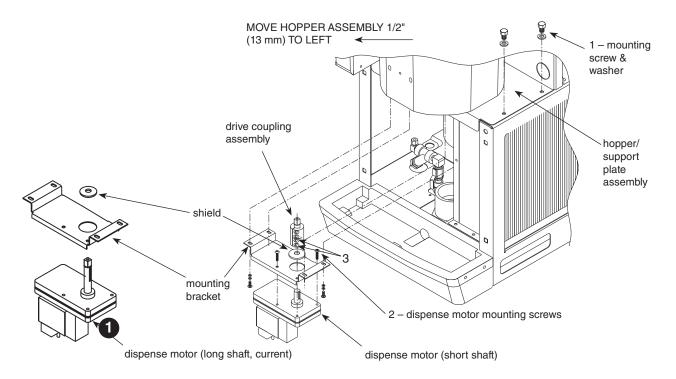


Fig. 11



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.

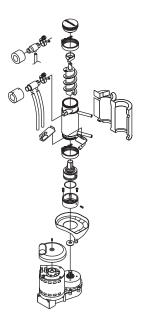
- 1. Disconnect power to ice machine.
- 2. Shut off water to ice machine.
- Drain evaporator and float tank.
- **4.** Disconnect plastic tubing from evaporator water inlet, drain pan stub, compression nozzle tubing and reservoir overflow tubing from secured clip.
- 5. Disconnect ice transport tube from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

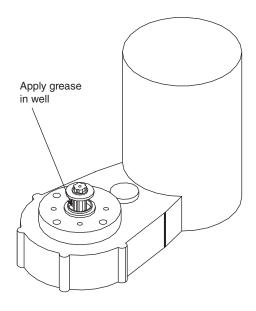
Evaporator reassembly

- 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.
- 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 a slight 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.
- **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. If evaporator was replaced, reinstall compression nozzle on new.

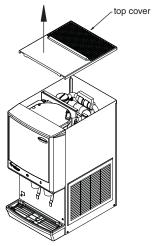
Gearmotor replacement

- 1. Disassemble evaporator as described above.
- 2. Disconnect the wire connectors.
- Remove 4 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.

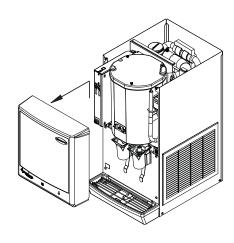




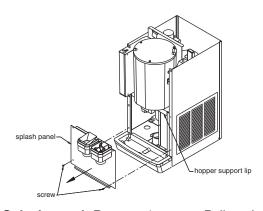
Panel removal



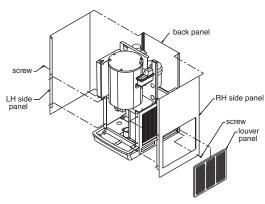
Top cover: Lift cover up and off Velcro strips.



Front cover: Pull bottom of cover, then lift cover up and forward to unhook from keyhole slots.

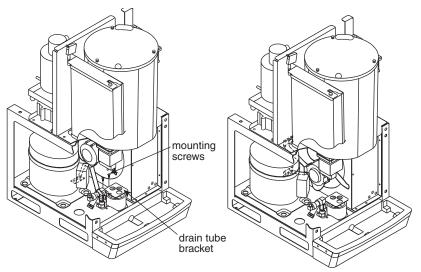


Splash panel: Remove 4 screws. Pull out bottom of panel to allow top to slide out from under hopper support lip.



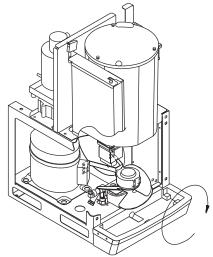
Side panels: Remove screw located on lower rear side. Pull side panel toward front of unit and out of back panel. Note: Before removing right hand side, remove side louver panel by lifting up and pulling forward on panel.

Fan removal

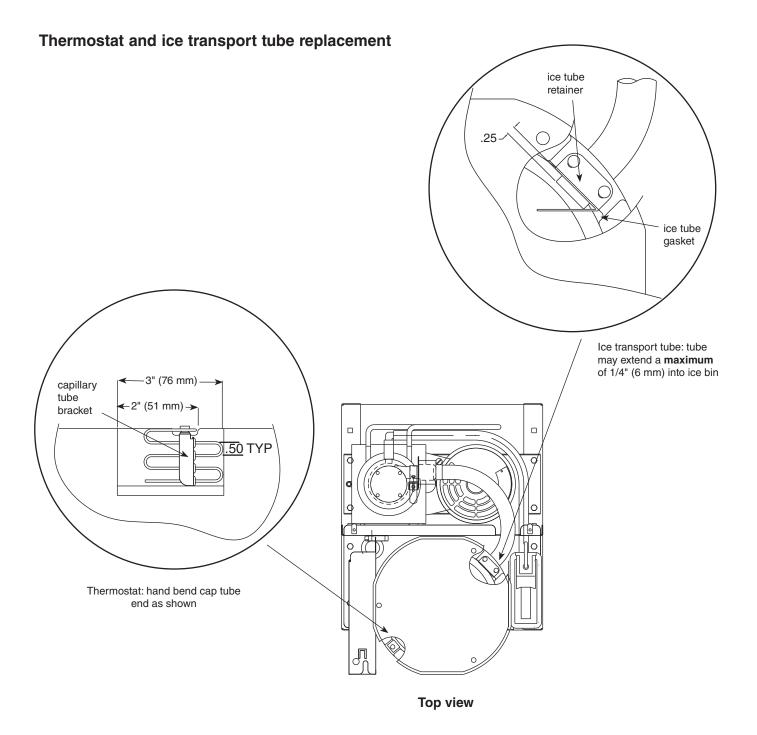


(a) Remove 4 fan mounting screws and 3 drain tubes from bracket.

(b) Rotate fan mounting bracket toward back of unit and pull fan assembly toward front of unit.



(c) As fan assembly is being pulled toward front, rotate assembly clockwise as shown above.

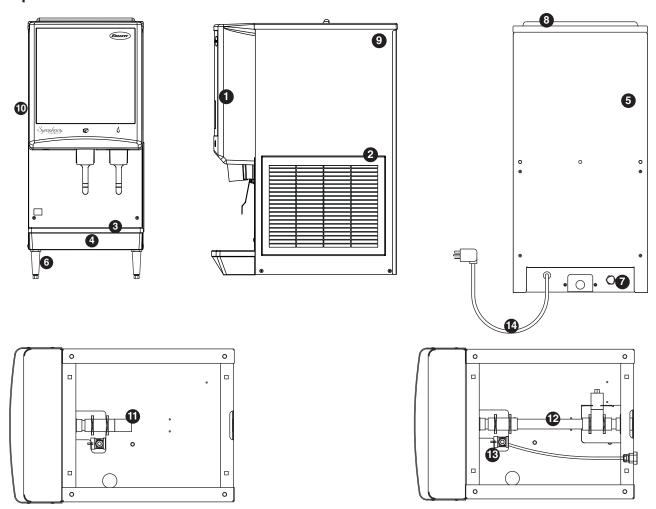


Ice transport tube replacement

- **1.** Push tube onto evaporator port.
- 2. Position clamp behind lip on evaporator port and tighten clamp.

Replacement parts

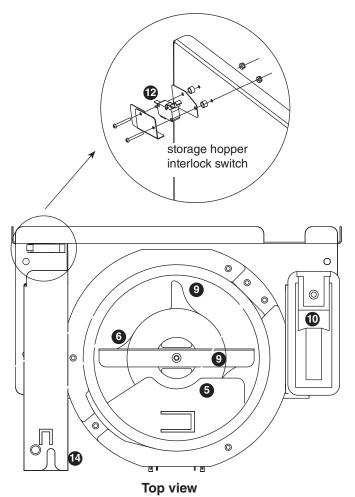
Dispenser exterior

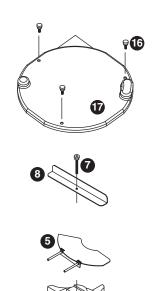


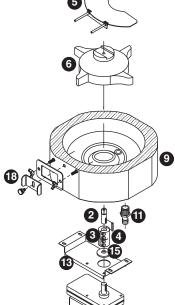
Reference #	Description	Part #
1	Cover, front (serial numbers below D61292)	502818
1	Cover, front (serial numbers D61292 and above)	00981068
2	Louver, intake, plastic	00967117
Not shown	Grille, drain pan	502412
3	Drain pan, plastic	00967059
4	Drain pan assembly (includes base, pan and grille)	502410
5	Panel, rear	502394
6	Leg kit, 4" (102 mm), adjustable – set of 4	502399
Not shown	Fitting, water inlet, brass	502415
Not shown	Fitting, water inlet, plastic	502924
7	Fitting, water inlet, brass 3/8" FPT	00137315
8	Lid, top panel, plastic (serial numbers below D61292)	502884
8	Lid, top panel, plastic (serial numbers D61292 and above)	00967091
9	Panel, right side	502396
10	Panel, left side	502395
11	Drain tube assembly, wall mount w/drain pan	502422
12	Drain tube assembly, countertop	502391
13	Elbow, water, 3/8" (10 mm)	502925
Not shown	Drain tube assembly, wall mount w/o drain pan	502514
Not shown	Bracket, wall 16" (406 mm)	502873
14	Cord and plug, power	502776

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Wheelmotor and drive system



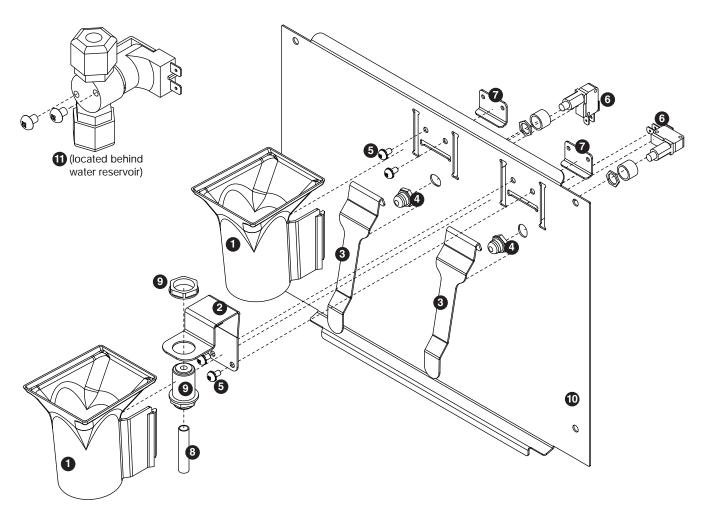






Reference #	Description	Part #
1	Motor, wheel, long shaft (includes 502537)	502580
2	Drive shaft extension	502384
3	Coupling (includes key) (short shaft motor only)	502385
4	Key, 1/8" sq x 1-1/4 lg	501273
5	Baffle, ice (securing hardware, part# 00167973, included)	502414
6	Wheel with Agion, agitator	502387
7	Rod, threaded (includes knurled nut)	502390
8	Agitator, rotating	502386
See page 32	Bracket, capillary tube	502406
See page 32	Retainer, ice tube (2" high)	502404
See page 32	Retainer, ice tube (2.25" high)	00152017
See page 32	Retainer, ice tube	00977314
See page 32	Gasket, ice tube	502405
See page 32	Gasket, ice tube	00977322
9	Assembly, hopper with Agion (includes drain fitting)	502413
10	Float valve and reservoir	500504
Not shown	Bar, spacer	502389
Not shown	Fitting, hopper drain (includes nut), 5/8" barb fitting	502381
11	Fitting, hopper drain, 3/4 MPT, 3/4" barb fitting	207095
12	Switch, interlock	502416
13	Support plate, motor	502423
14	Cover, electrical box	502408
15	Shield, gearmotor	502537
16	Screws, 10-32 x 1/2 (6 needed)	201022
17	Hopper lid with hopper lid safety switch actuation	00135962
Not shown	Hopper lid, dispenser top cover, safety switch actuation (Before SN# B72959)	207809
18	Hardware, baffle securing	00167973

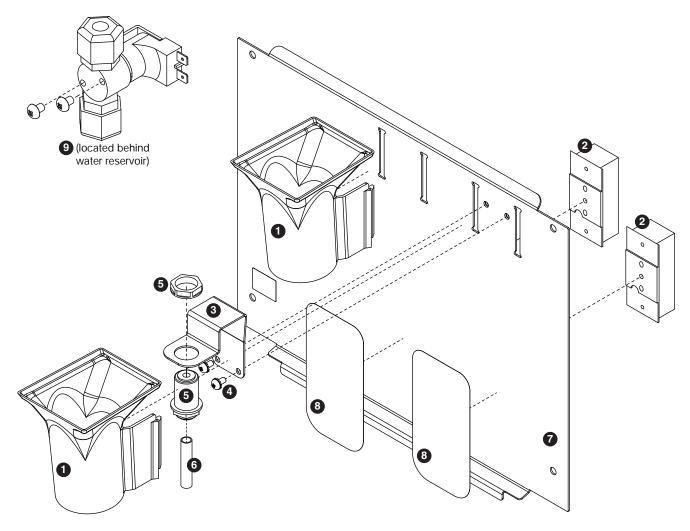
Dispense chute and splash panel (models with lever dispensing) — Serial Number D61292 and above



Reference #	Description	Part #
1	Chute, ice or water (with Agion® antimicrobial product protection¹)	00967760
2	Support, water tube	00960682
3	Lever	00976845
4	Boot, dispense switch button	502418
5	Screw, panel	00982421
6	Switch, dispense	00981217
7	Bracket, lever support	00958793
8	Tube, water solenoid	502420
9	Fitting, bulkhead (with nut)	00976787
Not shown	Splash panel (ice only)	00977850
10	Splash panel	00969980
11	Solenoid, assembly (includes fittings, screws)	00981209

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.

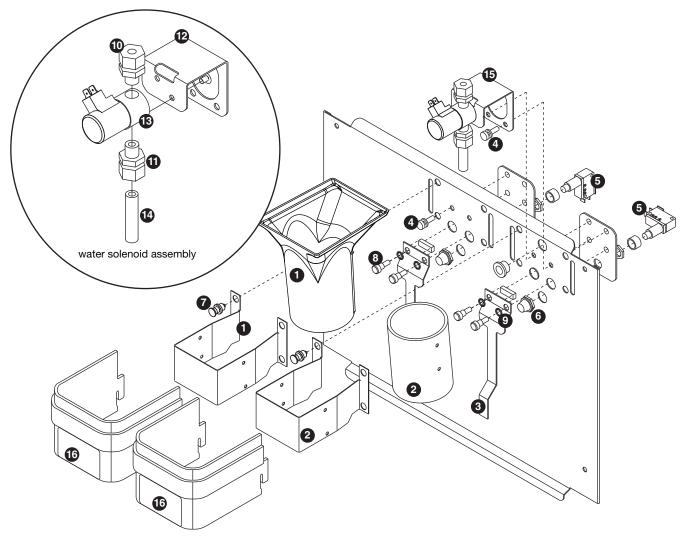
Dispense chute and splash panel (models with SensorSAFE infrared dispensing) — Serial Number D61292 and above



Reference #	Description	Part #
1	Chute, ice or water (with Agion)	00967760
2	Sensor (includes lens and Ty-rap*)	00122978
3	Support, water tube	00960682
4	Screw, panel	00982421
5	Fitting, bulkhead (with nut)	00976787
6	Tube, water solenoid	502420
Not shown	Splash panel, without drain pan (includes 2 Ty-raps and 2 lenses)	00981357
7	Splash panel, (includes 2 Ty-raps and 2 lenses)	00981332
8	Lens, sensor (each)	502690
Not shown	Splash panel, ice only (includes 1 Ty-raps and 1 lens)	00981340
9	Solenoid, assembly (includes fittings, screws)	00981209

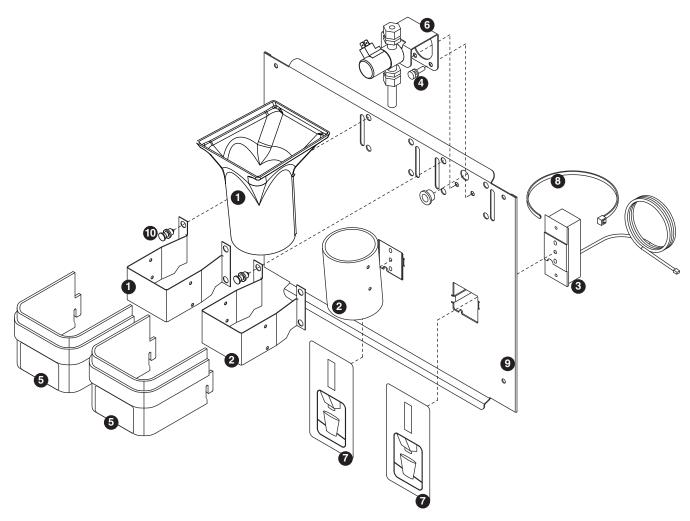
^{*} Ty-rap is a registered trademark of Thomas & Betts International, Inc.

Dispense chute and splash panel (models with lever dispensing) — Serial Numbers below D61292



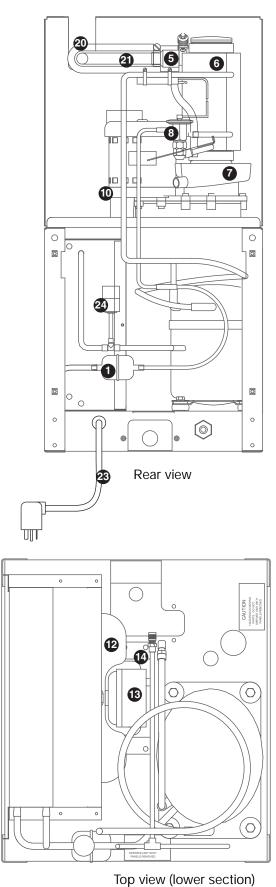
Reference #	Description	Part #
1	Chute, ice, with bracket and fasteners (with Agion)	00981225
1	Chute assembly (clear), ice	502513
2	Chute, water, with bracket and fasteners (with Agion)	00981233
2	Chute (clear), water	502249
3	Lever	502417
4	Thumbscrew	501100
5	Switch, dispense	207670
6	Boot, dispense switch button (mounts over the dispense button)	502418
7	Fastener, dispense chute assembly	502057
8	Screws, dispense lever	501250
9	O ring	502427
10	Fitting, 1/4" tube	502561
11	Fitting, 3/8" tube	502562
12	Support bracket, solenoid	502419
13	Valve, solenoid water	502243
14	Tube, water solenoid	502420
15	Solenoid, assembly (includes solenoid, fittings, tube & mounting bracket)	502421
16	Cover, dispense assembly	502819
17	Splash panel	00172767

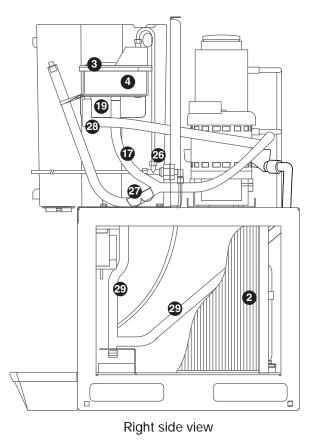
Dispense chute and splash panel (models with SensorSAFE infrared dispensing — Serial Numbers below D61292

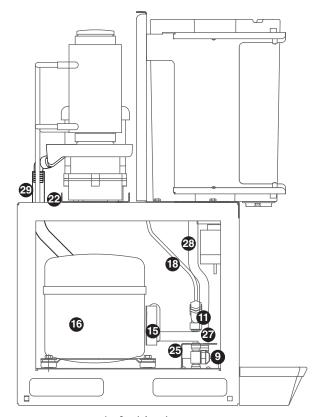


Reference #	Description	Part #
1	Chute, ice, with bracket and fasteners (with Agion)	00981225
1	Chute assembly (clear), ice	502513
2	Chute, water, with bracket and fasteners (with Agion)	00981233
2	Chute (clear), water	502249
3	Sensor (includes 502690 and 203611)	00122978
4	Thumbscrew	501100
5	Cover, dispense chute	502819
6	Solenoid assembly (includes solenoid, fittings, tube & mounting bracket, see page 37 for exploded view)	502421
7	Lens, sensor (each)	502690
8	Ty-rap, sensor mounting	203611
9	Splash panel (with drain pan – includes (2) 203611 and (2) 502690)	502675
10	Fastener, dispense chute assembly	502057
Not shown	Splash panel (without drain pan – includes (2) 503611 and (2) 502690)	502676
Not shown	Splash panel (ice-only – includes (1) 503611 and (1) 502690)	00923581

Ice machine components







Left side view

Ice machine components

Reference #	Description	Part #
1	Drier	502724
2	Coil, condenser	501187
3	Water sensor	502116
4	Float valve & reservoir	500504
Not shown	Elbow, 1/4", push-in	00121699
Not shown	Adapter, female thread to 1/4" push-in	00998716
Not shown	Fitting, plastic, float valve (includes sleeve & stem)	502078
5	Compression nozzle, single drain	502221
6	Evaporator (see page 40 for detailed drawing)	_
Not shown	Shroud, condenser coil	501820
7	Drain pan, evaporator	502727
8	Valve, expansion, thermal	502726
Not shown	Valve, shut-off, water, brass	502222
9	Valve, shut-off, water, plastic	502921
10	Gearbox & motor, 115 V, 60 Hz (includes 307192)	00142034
Not shown	Strainer, water, threaded connections	500376
11	Strainer, water, push-in connections	502920
12	Fan blade	500474
13	Motor, fan, 115 V, 60 Hz	500672
14	Bracket, fan motor	501188
15	Overload, compressor, 115 V, 60 Hz	502782
16	Compressor, 115 V, 60 Hz	502731
17	Water line with Agion, evaporator	00141432
18	Tubing, polypropylene, reservoir supply (sold by the foot)	502079
19	Bracket, float valve	502383
20	Tube, ice transport	00168112
21	Insulation, ice tube, 12" (305 mm) required	501176
22	Bracket, gearmotor mounting	307192
23	Cord and plug, power	502776
24	Hi-pressure cut-out	502732
25	Clip, water shut-off valve	502922
Not shown	Elbow, water, 3/8"	502925
26	Tee, water, 1/4"	502923
Not shown	Gasket, ice hose	00977322
27	Pinch clamp	00988238
28	Drain tube with Agion, reservoir overflow	00980151
29	Drain tube with Agion, hopper/evaporator drain pan	00980144
Not shown	Tubing, plastic, 5/8 ID, bin drain tube before SN# B72959 (sold by the foot)	500623
Not shown	Adapter, 3/4" x 5/8" (Before SN# B72959)	00114199

Water filter kits and cartridges

00130229 Follett QC4-FL4S water filter system (includes FL4S primar cartridge and head, coarse pre-filter

and head, pressure gauge, flushing valve; assembled and installed on mounting bracket)

00130245 Follett FL4S primary replacement cartridge

00130211 Everpure coarse pre-filter cartridge 501781 Water pressure regulator (25 psi)

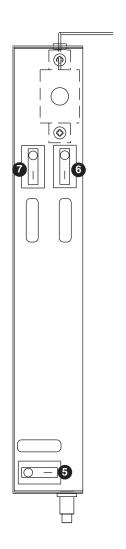
Ice machine cleaner/descaler and sanitizer

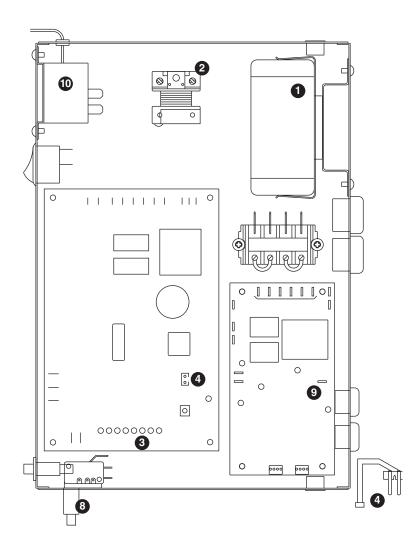
Part# Description

00132001 SafeCLEAN environmentally friendly ice machine cleaner, carton of 24 x 7 oz packets

00979674 Nu-Calgon IMS-II Sanitizer, 16 oz. bottle

Electrical components





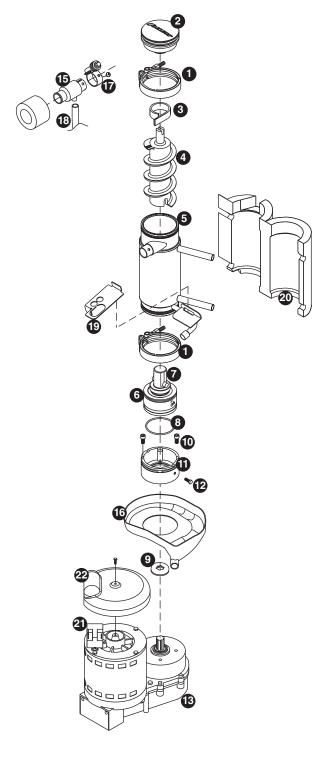
Side view Top view

Reference #	Description	Part #
1	Capacitor, start, compressor, 115 V, 60 Hz	502780
2	Relay, start, compressor, 115 V, 60 Hz	501588
3	Board, control circuit, 115 V, 60 Hz	502331
4	Water sensor	502116
5	Switch, on/off, compressor	502392
6	Switch, rocker, power	502209
7	Switch, rocker, bin signal	502209
8	Switch, cleaning, SensorSAFE models	502409
9	Control board, SensorSAFE models	502242
10	Bin thermostat	500514

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Evaporator replacement parts

Reference #	Description	Part #
1	Coupling, vee band, includes nut	502735
2	Bearing assembly, top	502736
3	Loop, ice compression, beveled	502110
4	Auger	502737
5	Evaporator (includes insulation jacket, 502740)	502725
6	O ring, bearing housing	500496
7	Bearing assembly, bottom (includes O rings and condensate shield)	502738
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 (includes 307192)	00142034
Not shown	Mounting base, gearbox	502729
15	Compression nozzle, with single drain	502221
16	Drain pan, evaporator	502727
17	Clamp, compression nozzle and screw	502226
18	Tubing, compression nozzle drain(s) (sold by foot)	500680
Not shown	Grease, Chevron SRI-2, 14 oz	501111
19	Bracket, drain hose	502739
20	Insulation jacket, evaporator	502740
21	Relay, gearmotor	00142042
22	Cover, metal	502744
22	Cover, black plastic	01012228



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