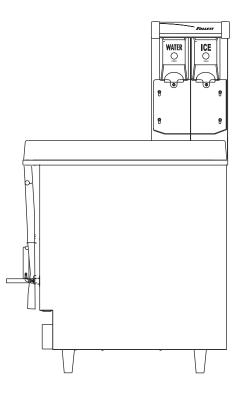
# CVU155N Series – 220V 60Hz Ice and Water Dispensers

Installation, Operation and Service Manual

Service numbers above B50000



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



801 Church Lane • Easton, PA 18040, USA Toll free (800) 523-9361 • (610) 252-7301 Fax (610) 250-0696 • www.follettice.com



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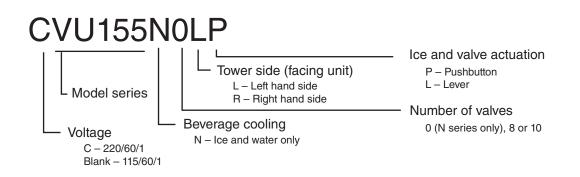
## Welcome to Follett

Follett ice dispensers enjoy a well-deserved reputation for excellent performance, long-term reliability and outstanding after-the-sale support. To ensure that this dispenser delivers that same degree of service, we ask that you take a moment to review this manual before beginning the installation of the dispenser. Should you have any questions or require technical help at any point, please call our technical service group at (610) 252-7301.

### 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 in the CVU155 series.



### Important cautions

Storage area of dispenser 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.

Ice is slippery. Maintain counters and floors around dispenser in a clean and ice-free condition.

Ice is food. Follow recommended cleaning instructions to maintain cleanliness of delivered ice.

Always disconnect power before cleaning or servicing the dispenser.

Failure to remove all sanitizer may result in health hazard.

Follett manual load dispensers can accommodate most cube/cubelet ices up to 1" square, or Follett compressed nugget ice. Crushed, flake, bagged, nugget or congealed ice cannot be used. Use of these ices can jam dispenser and void warranty. Separate any "waffle-like" sections of cubes before adding to dispenser. For ice compatibility questions, please call Follett customer service at (610) 252-7301.

# Specifications

### Electrical

Each icemaker and dispenser require a separate circuit with electrical disconnect within 6m (10 ft). Equipment ground required. Standard electrical – 220V, 60Hz, 1 phase.

Model number	lcemaker amperage	Dispenser amperage
CVU155N series	5.0 amps ea	2.0 amps
Plumbing		

Dispenser3/4" PVC pipe nipple for bin drain<br/>3/4" PVC pipe nipple for drain pan drain<br/>3/8" ID red line tubing for water in

Icemaker Refer to detailed specifications in icemaker installation manual packed with icemaker

### **Dimensions and clearances**

#### **Required clearances**

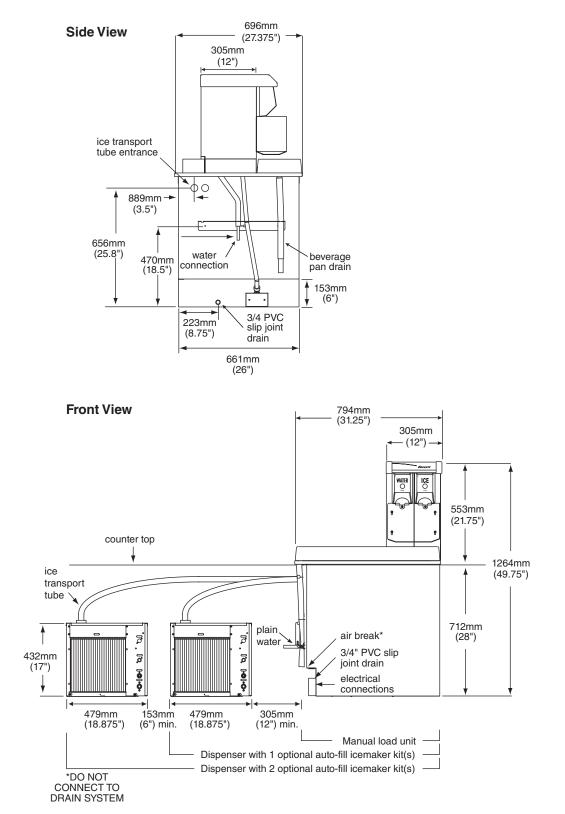
1295mm (51") minimum above counter for installation if dispenser will be dropped into counter

915mm (36") minimum above counter for all units after installation for auger cleaning and servicing

305mm (12") minimum on side opposite ice chute for service

305mm (12") minimum on ice chute side if ice transport tube enters this side

305mm (12") minimum between dispenser side(s) and optional icemaker(s)



## Installation

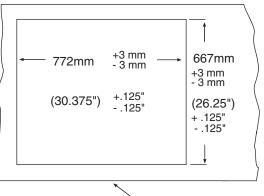
### Installing dispenser in counter

**Note:** All dispensers must be supported from below with supplied 153 – 229mm (6" – 9") adjustable leg accessory, or equivalent. Do not hang dispenser on flange.

All dispensers must be installed level in both directions to ensure proper operation.

1. Check that dispenser location meets all requirements in this manual and cut counter as shown.

Plan View counter cut-out



Front of counter

- 2. Place support blocks in cabinet to raise dispenser to a height of 305mm (12").
- 3. Place dispenser in counter onto support blocks.
- 4. Attach adjustable legs to dispenser.
- 5. Remove support blocks and lower dispenser feet to floor.
- 6. Adjust legs for 4mm (1/8") clearance between dispenser lip and countertop to verify there is no load on flange.
- 7. Apply a bead approximately 6mm (1/4") in diameter of NSF-listed silicone sealant (Dow Corning RTV-732 or equivalent) around perimeter of dispenser where it meets counter. Smooth sealant to a 4mm (1/8") radius.
- 8. Install a PVC drain line with at least a 20mm per 1m (1/4" per foot) slope. Insulate drain line to prevent condensation.
- **Note:** Do not apply excessive heat if any sweating of fittings is necessary. Heat conduction through metal may melt threads in plastic drain.

Do not reduce drain line size or tie drains together.

9. Make electrical connections in accordance with applicable wiring diagrams provided. Provide disconnects within 3m (10 ft) of dispenser and icemaker for servicing.

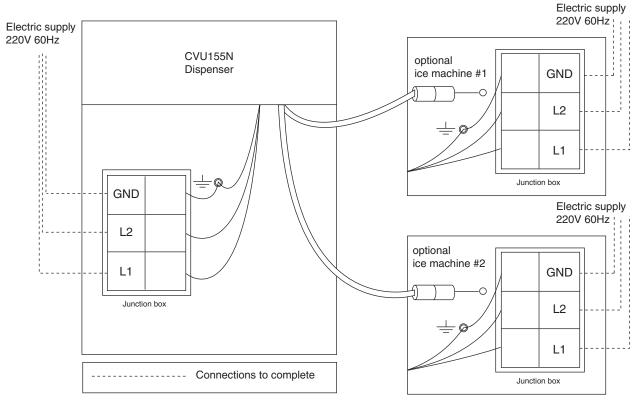
### Field wiring diagrams

**Note:** Field wiring diagrams are intended to aid electricians or technicians in understanding how equipment works. All field wiring must be installed in accordance with all local and NEC codes.

#### If attaching optional Chewblet® MCC400AVS auto-fill icemaker kit(s)

#### IMPORTANT

Field wiring diagram is intended to aid electrician or technician in understanding how equipment works.



### Installing optional auto-fill icemaker kit(s)

Correct installation of Satellite-fill<sup>™</sup> icemaker(s) is critical to proper performance of icemaker. Refer to installation manual packed with icemaker for important details on ice transport tube run, ventilation requirements and other installation requirements. Failure to comply with instructions may void warranty.

#### To start and operate dispenser

- 1. Follow detailed cleaning instructions in service manual before operating dispenser.
- 2. For manual load units, remove front drain pan or rear lid and fill storage area with approved ice.
- **Note:** Follett manual load dispensers can accommodate most cube/cubelet ices up to 1" square, or Follett compressed nugget ice. Crushed, flake, bagged, nugget or congealed ice cannot be used. Use of these ices can jam dispenser and void warranty. Separate any "waffle-like" sections of cubes before adding to dispenser. For ice compatibility questions, please call Follett customer service at (610) 252-7301.
- 3. Turn power switch located on dispenser control box to ON position.
- 4. For automatic fill units, follow detailed instructions in icemaker installation section of installation manual, then turn icemaker (bin signal) switch(es) located on dispenser control box to ON position and begin to make ice.
- 5. When dispenser has at least 153mm (6") of ice in storage area, test operation.

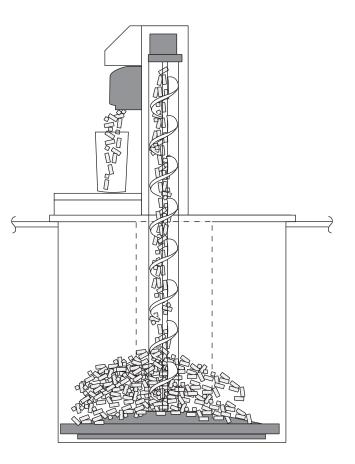
## Operation

### How the dispenser works

Follett's dispensers are available in automatic load configurations, fed from one or two Follett Satellite-fill icemakers or manual load configurations (using ice from another source).

In all models, ice is stored below the counter in the dispenser storage area. When the dispense lever or button is pushed, the dispense motors are activated. This causes the wheel assembly in the storage area to turn, moving ice to the vertical auger assembly, which carries ice up to the dispense chute where it drops by gravity into the container.

In automatic load units, ice is manufactured in either one or two Follett Satellite-fill icemakers. These icemakers may be located up to 6m (20 ft) away from the dispenser. Extruded ice is transported through a tube and pushed to the storage compartment of the dispenser. When the bin is filled, a bin thermostat shuts the icemaker off to avoid overfilling of the bin. The icemaker will restart after 20 minutes if the bin is calling for ice.



## Cleaning

Using solutions below, clean and sanitize storage area and beverage lines before starting unit and on a routine basis as noted below.

- **Note:** Always disconnect power before cleaning dispenser. Do not run plastic parts through a dishwasher.
- **Solution A:** Combine 250ml (1 oz) bleach with 8L (2 gal) hot water or use Ecolab Mikro-chlor Cleaner per manufacturers instructions.
- **Solution B:** Combine 50ml (1/4 oz) bleach with 8L (2 gal) hot water or use Ecolab Mikro-chlor Cleaner per manufacturers instructions.
- Note: Cleaning solutions temperature must be at 24 to 52 C (75 125 F)

#### Recommended cleaning prior to start up

#### Cleaning ice storage area before use

- 1. Refer to disassembly instructions (see Service section) and remove dispense wheel from ice storage area.
- 2. Remove auger, auger tube and dispense mechanism.
- 3. Wipe all components and ice storage area with cleaning Solution A.
- 4. Rinse all components and ice storage area thoroughly with clear, potable water.
- 5. Wipe all components and ice storage area with sanitizing Solution B.

#### Recommended daily dispenser cleaning

- 1. Remove all debris from drain pan.
- 2. Pour 4L (1 gallon) hot water into drain pan to keep drain lines clear.

#### Recommended weekly dispenser cleaning

- 1. Remove drain pan and grille and wash with Solution A. Rinse thoroughly.
- 2. Pour a solution of 237ml/8oz (1 cup) household bleach mixed with 3.8L (1 gallon) hot water into drain pan to help prevent algae growth in drain lines.

#### Recommended quarterly dispenser cleaning

- 1. Remove top from dispenser and turn power switch to OFF position.
- 2. Remove ice from storage area.
- 3. Remove dispense chute cover, chute, auger motor assembly, auger and auger tube (see Service section).
- 4. Remove drain pan, grille and dispense wheel (see Service section).
- 5. Clean all components and bin storage area with Solution A, rinse thoroughly with clear water and sanitize with Solution B.

#### Putting unit back in service after quarterly cleaning

- 1. Reassemble components.
- 2. For manual load units, fill unit with an approved ice (see important cautions on page 4).
- 3. For automatic load units with MCC400A/W (R404A refrigerant) icemakers, turn bin signal switch(es) and dispenser power switch to ON position and allow storage area to fill.
- 4. Dispense and discard all ice, verifying dispenser is functioning properly.

#### Recommended quarterly cleaning of optional icemaker.

Units equipped with optional icemakers require cleaning of icemaker system at least every six months, and more often if local water conditions dictate. Failure to clean icemaker system will result in decreased performance and potential damage to icemaker. Refer to Icemaker Installation, Operation and Service Manual.

## Service

#### Dispense chute cover removal

- 1. Remove top cover.
- 2. Push chute cover up vertically to slip off holding tab.
- 3. After clearing tab, pull chute cover forward to remove.

#### Dispense mechanism assembly removal

- 1. Remove top cover.
- 2. Remove chute cover (see above).
- 3. Remove auger motor assembly (see above).
- 4. Remove quick release pins from the ice chutes and gates, then unplug wires from solenoids.
- 5. Lift dispense mechanism up and off auger tube.

#### Auger and auger tube removal (Fig. 3)

- 1. Remove auger motor and dispense mechanism assembly (see above).
- 2. Pull auger upward to clear auger tube.
- 3. Lift auger tube upward to clear dispenser top.
- 4. Slide tube and bearing plate through auger tube gasket.

#### Dispense wheel removal

- 1. Remove drain pan assembly and bin access cover.
- 2. Remove center thumbnut and threaded rod on dispense wheel assembly and lift wheel out front access opening.

#### Auger motor assembly removal

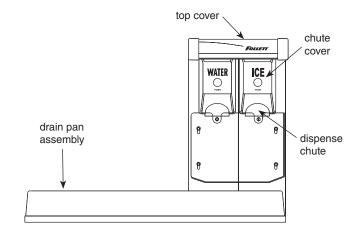
- 1. Remove top cover.
- 2. Remove one thumbnut on rear of motor bracket.
- 3. Lift motor bracket up and unplug electric quick disconnects.
- 4. Remove motor assembly.

#### Dispense wheel motor removal (Fig. 3)

- 1. Remove drain pan, bin access cover and dispense wheel.
- 2. Remove stainless steel baffle plate under dispense wheel.
- 3. Remove two screws holding wheel motor bracket on bin.
- 4. Lift plate and motor up.
- 5. Unplug electric quick disconnects from motor.
- 6. Lift motor and mounting plate out front access opening.

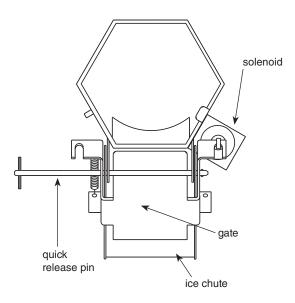
#### Fig. 1

## Front View right-hand unit

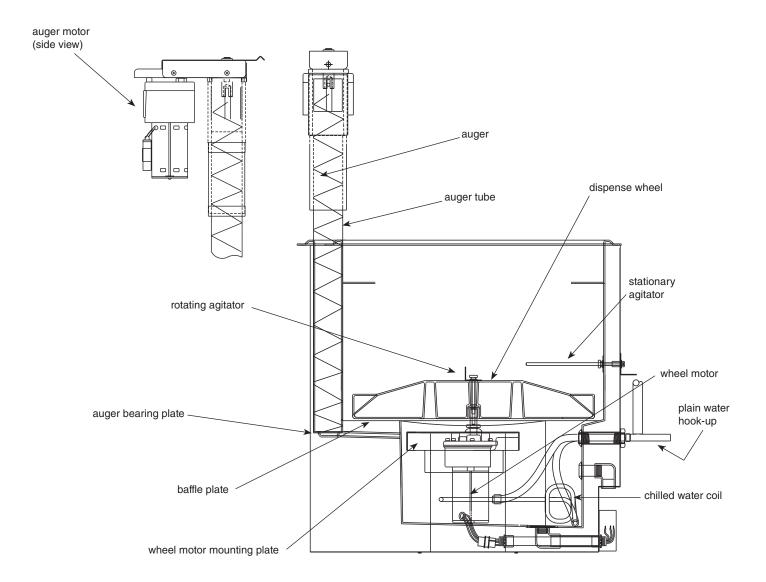


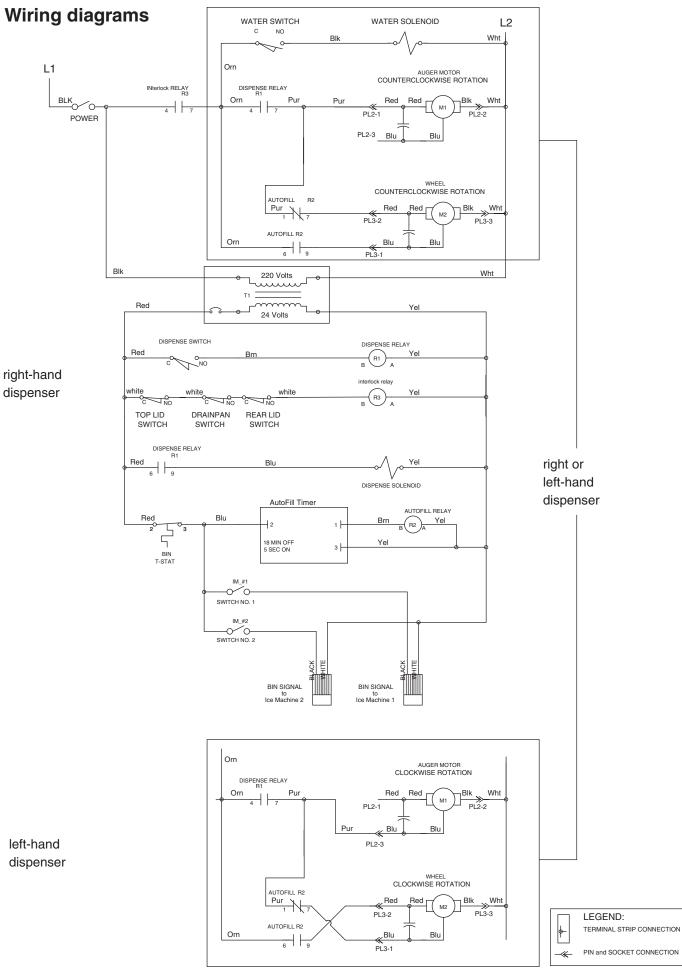
#### Fig. 2

# Dispense assembly, Top View right-hand unit



**Front View** 





### Dispenser troubleshooting guide

#### Before calling for service

- 1. Check that ice is in the dispenser and that congealed cubes are not causing a jam.
- 2. Check that circuit breaker and switches are in ON position.
- 3. Check that drain pan, rear lid and top are on securely. If ajar, dispenser will not operate. When the top is off, auger does not operate, even though the solenoids do.
- 4. Check that all drains are clear.

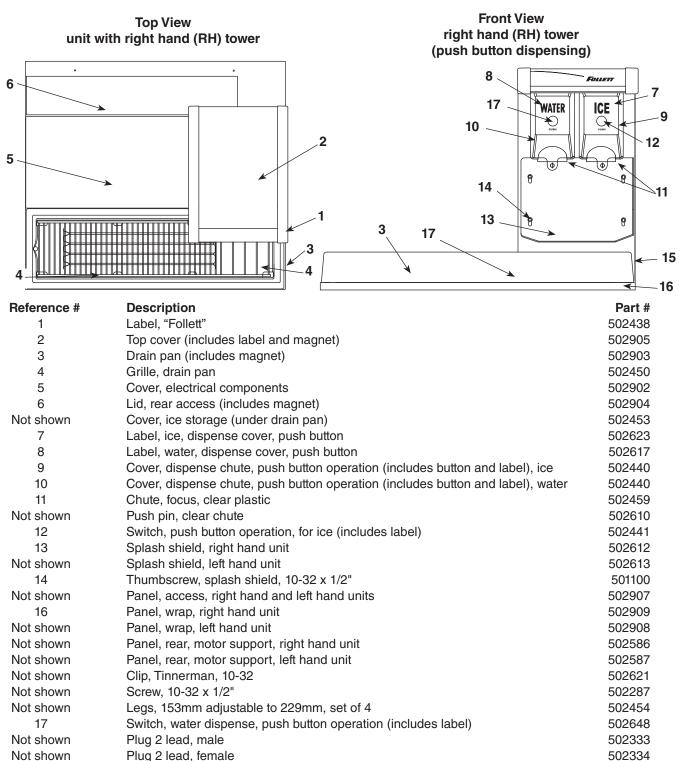
**Note:** For units equipped with Follett Chewblet icemaker, see Icemaker Operation and Service Manual for service and troubleshooting information.

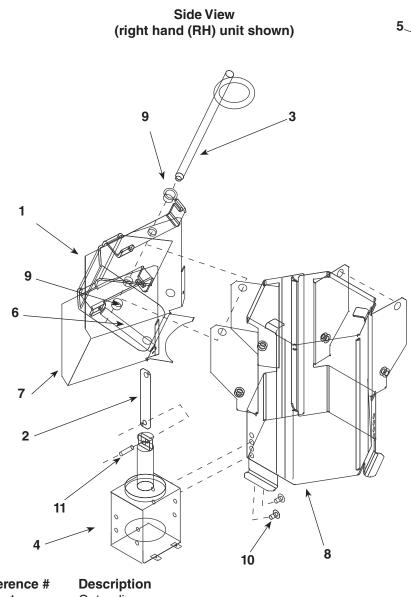
Symptom	Possible cause	Solution
Ice does not dispense. • Auger motor does not run • Wheel motor does not run	<ol> <li>Power switch faulty or in OFF position; loose connection.</li> <li>Faulty dispense switch.</li> <li>Faulty transformer.</li> <li>Drain pan ajar.</li> <li>Faulty drain pan safety switch.</li> </ol>	<ol> <li>Turn power switch to ON position; check connections.</li> <li>Replace switch.</li> <li>Replace transformer.</li> <li>Check pan and reseat.</li> <li>Replace switch.</li> </ol>
Ice does not dispense. • Auger motor runs • Wheel motor runs • Gate does not open	<ol> <li>Loose electrical connection.</li> <li>Linkage problem between solenoid and gate.</li> <li>Faulty solenoid.</li> </ol>	<ol> <li>Check connections.</li> <li>Check linkage.</li> <li>Replace solenoid.</li> </ol>
Ice does not dispense. • Auger motor does not run • Wheel motor runs	<ol> <li>Loose electrical connection.</li> <li>Faulty auger motor.</li> <li>Faulty run capacitor.</li> </ol>	<ol> <li>Check connections.</li> <li>Check auger motor.</li> <li>Check run capacitor.</li> </ol>
Ice does not dispense. • Auger motor runs • Wheel motor does not run	<ol> <li>Loose electrical connection.</li> <li>Faulty wheel motor.</li> <li>Faulty run capacitor.</li> </ol>	<ol> <li>Check connections.</li> <li>Check wheel motor.</li> <li>Check capacitor.</li> </ol>
No ice in dispenser.	<ol> <li>Power switch in OFF position or faulty.</li> <li>Bin signal switches in OFF position or faulty.</li> <li>Faulty bin thermostat.</li> <li>Faulty transformer.</li> <li>Icemaker related problem.</li> <li>Faulty run capacitor.</li> </ol>	<ol> <li>Check switch and replace if necessary.</li> <li>Check switch and replace if necessary.</li> <li>Replace bin thermostat.</li> <li>Replace transformer.</li> <li>Refer to icemaker Operation and Service Manual for diagnosing.</li> <li>Check for power and bin signal on icemaker PC board.</li> </ol>

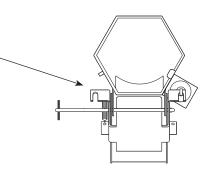
# If problems persist after following this basic troubleshooting guide, call Follett's technical service department at (610) 252-7301.

### **Replacement parts**

### **Dispenser exterior**

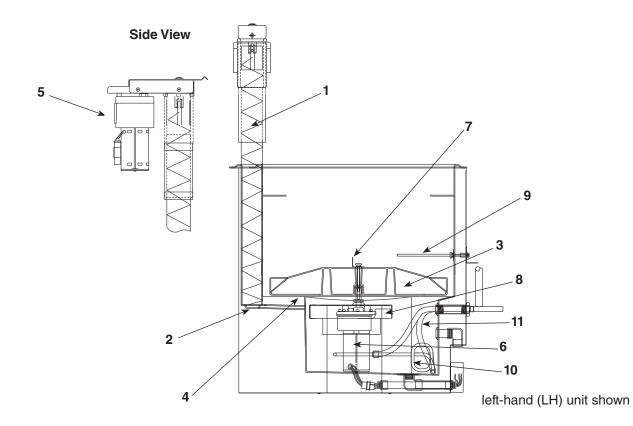






**Top View** 

Reference #	Description	Part #
1	Gate, dispense	502455
2	Linkage pin, gate/solenoid	502456
3	Pin, quick release, 141mm, dispense gate	502102
4	Solenoid (includes linkage pin)	501961
5	Dispense mechanism assembly, right hand unit	502458
Not shown	Dispense mechanism assembly, left hand unit	502496
6	Spring, dispense mechanism (1 per side)	501950
7	Chute, ice	502457
8	Wrap, dispense mechanism	502607
9	Bushing, Ni liners	501249
10	Screw, 8-32 x 5/16"	502625
11	Pin, spring	502624

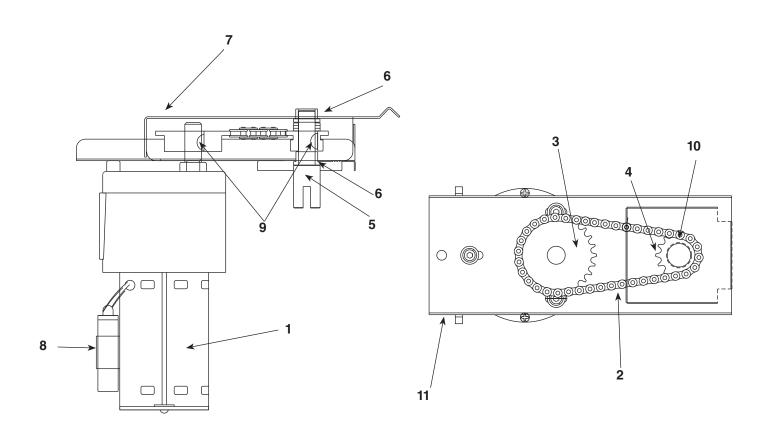


Reference #	Description	Part #
1	Auger, LH unit (black, stamped with "1")	502491
Not shown	Auger, RH unit (gray, stamped with "2")	502492
2	Plate, auger bearing	501696
Not shown	Tube, auger, right hand unit	502487
Not shown	Tube, auger, left hand unit	502488
3	Wheel, dispense (includes stud and rotating agitator)	501681
4	Baffle (under dispense wheel)	501684
Not shown	Drive bar (under dispense wheel)	501682
5	Motor, vertical auger	502889
6	Motor, wheel	502890
Not shown	Seal, wheel motor	501333
Not shown	Spacer, wheel motor	501768
Not shown	Capacitor, wheel motor	502891
7	Agitator, rotating, 534mm long	502484
8	Plate, wheel motor mounting	502615
9	Agitator, stationery	502490
Not shown	Bracket, ice tube, double tube	502497
Not shown	Ice transport tube (sold by the foot)	500366
Not shown	Ice transport tube, 3m (10 ft)	502522
Not shown	Ice transport tube, 6m (20 ft)	502523
Not shown	Insulation, transport tube (sold by the foot)	501176
10	Coil, plain water	502461
11	Tubing, water (sold by the foot)	502356
Not shown	Cover, blank ice entry	502674
Not shown	Gasket, ice entry	502672
Not shown	Plate, ice entry, 2 holes	502673

### Auger motor

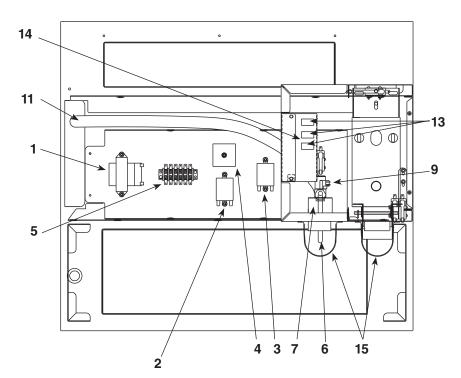
### Side View

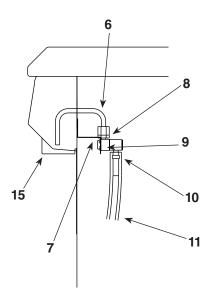
**Top View** 



Reference #	Description	Part #
	Auger motor/drive assembly, vertical (includes all items below)	502893
1	Motor, vertical auger (includes gearbox and capacitor)	502889
2	Chain, auger drive #35, 40p	502477
3	Sprocket 35#, 22T 5/8 bore	502478
4	Sprocket 35#, 12T 5/8 bore	502479
5	Drive shaft	502480
6	Bearing, auger, upper and lower	501314
7	Cover and bearing, chain drive (includes 501314)	502912
8	Capacitor, 25mf, 270V	502892
9	Key, Woodruff	502482
10	Washers, thrust (4)	501765
11	Mounting plate, auger motor (includes 501314)	502913

## **Electrical components**





Reference #	Description	Part #
1	Transformer, 24V	502885
2	Relay, dispense	501826
3	Relay, auto fill	501826
4	Timer, auto fill (automatic fill units)	502471
5	Strip, terminal	502472
6	Tube, water dispense, stainless steel	502356
7	Bracket, water solenoid	502611
8	Fitting, outlet, 1/8" MPT x 3/8", compression	502562
9	Valve, solenoid, water	502886
10	Fitting, inlet, plastic, 1/4 barb	502637
11	Tubing, water (sold by the foot)	502356
13	Switches (power and icemaker)	502209
14	Bracket, switch mounting, RH (power and icemaker)	502914
Not shown	Bracket, switch mounting, LH (power and icemaker)	502906
15	Chute, focus, clear plastic	502459
Not shown	Thermostat, bin level	500514
Not shown	Magnetic switch	502887
	(1) one located under top cover	
<b>N I I I</b>	(2) two located under electrical component cover	
Not shown	Magnets	502888
	(2) two located on drain pan	
	(1) one located on top cover	
	(1) one located on rear cover	

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