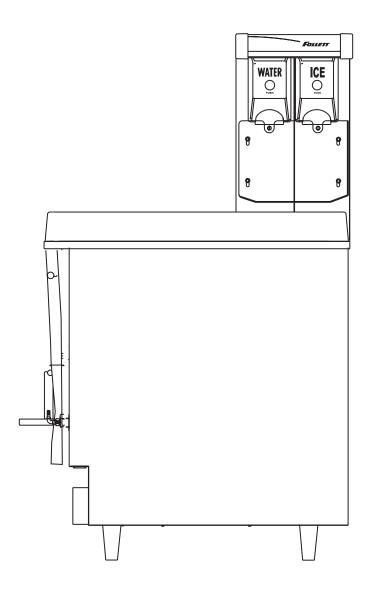
# VU155N Series Ice and Water Dispensers

Installation, Operation and Service Manual Service numbers above B50000



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



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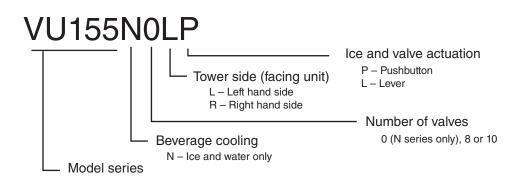
## Welcome to Follett

Follett equipment enjoys a well-deserved reputation for excellent performance, long-term reliability and outstanding after-the-sale support. To ensure that this 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, (877) 612-5086 or +1 (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 VU155 series.



## Important cautions

For indoor use only.

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 (877) 612-5086 or +1 (610) 252-7301.

## **Specifications**

## Electrical

Each ice machine and dispenser require a separate circuit with electrical disconnect within 10 ft (6 m). Equipment ground required. Standard electrical – 115V, 60Hz, 1 phase. For ice machine circuit requirements, refer to the ice machine specification sheet.

Model	Dispenser
number	amperage
VU155N series	2.4 amps

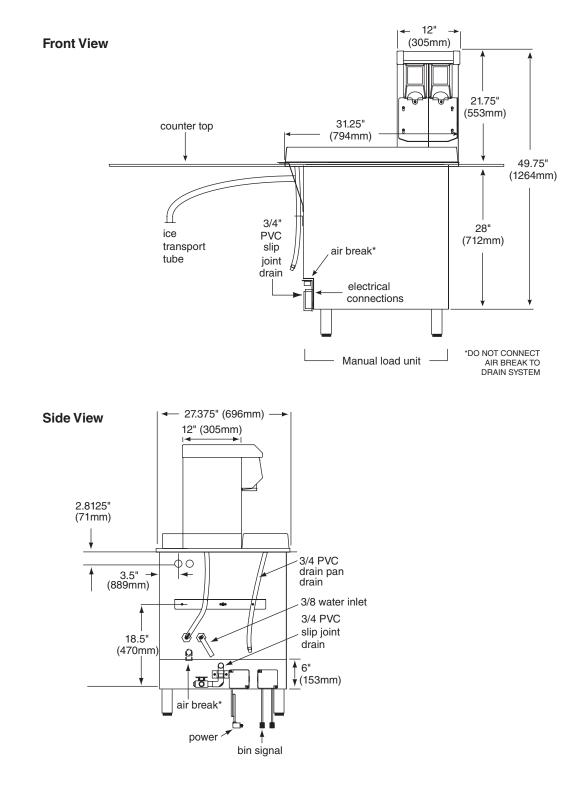
### Plumbing

- 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
- Ice machine Refer to detailed specifications in ice machine installation manual packed with ice machine

### **Dimensions and clearances**

#### **Required clearances**

- 51" (1295 mm) minimum above counter for installation if dispenser will be dropped into counter
- 36" (915 mm) minimum above counter for all units after installation for auger cleaning and servicing
- 12" (305 mm) minimum on side opposite ice chute for service
- 12" (305 mm) minimum on ice chute side if ice transport tube enters this side
- 12" (305 mm) minimum between dispenser side(s) and optional ice machine(s)



## Installation

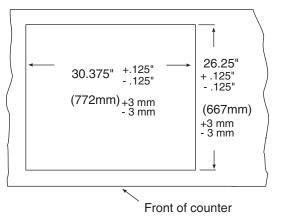
### Installing dispenser in counter

**Note:** All dispensers must be supported from below with supplied 6" – 9" (153 – 229 mm) 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.

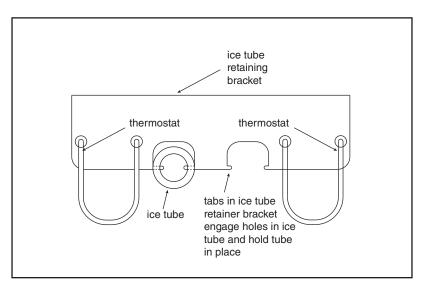
#### Plan View counter cut-out



- 2. Place support blocks in cabinet to raise dispenser to a height of 12" (305 mm).
- 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 1/8" (4 mm) clearance between dispenser lip and countertop to verify there is no load on flange.
- 7. Apply a bead approximately 1/4" (6 mm) 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 1/8" (4 mm) radius.
- 8. Install a PVC drain line with at least a 1/4" per foot (20 mm per 1 m) 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.

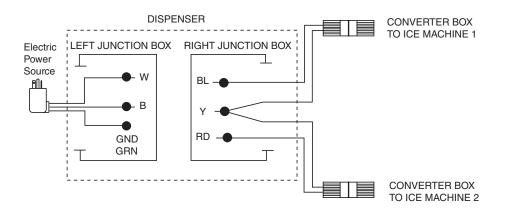
Do not reduce drain line size or tie drains together.

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



### Installing optional auto-fill ice machine kit(s)

Correct installation of RIDE<sup>™</sup> model ice machine(s) is critical to proper performance of the ice machine. Refer to installation manual packed with ice machine 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 (877) 612-5086 or +1 (610) 252-7301.
- 3. Turn power switch located on dispenser control box to ON position.
- 4. For automatic fill units, follow detailed instructions in ice machine installation section of installation manual, then turn ice machine (bin signal) switch(es) located on dispenser control box to ON position and begin to make ice.
- 5. When dispenser has at least 6" (153 mm) of ice in storage area, test operation.

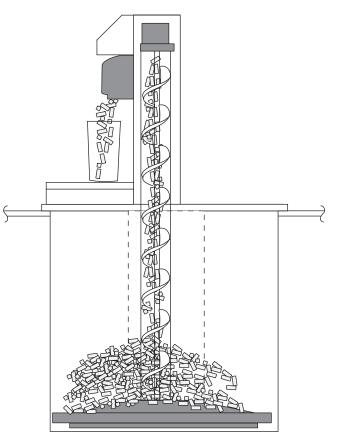
## Operation

### How the dispenser works

Follett's dispensers are available in automatic load configurations, fed from one or two Follett RIDE model ice machines 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 RIDE model ice machines. These ice machines may be located up to 20 ft (6 m) 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 ice machine off to avoid overfilling of the bin. The ice machine 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.

<b>•</b> • • •		(00 I)		
Solution A:	Combine 1 oz (	(30 ml)	bleach with 2 ga	I (8 L) hot water.

Solution B: Combine 1/4 oz (7 ml) bleach with 2 gal (8 L) hot water.

Note: Cleaning solutions temperature must be at 75 – 125 F (24 to 52 C)

#### 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 1 gallon (4 L) 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 one cup (8 oz/237 ml) household bleach mixed with one gallon (3.8 L) 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 MC400A/W (R404A refrigerant) ice machines, 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 ice machine.

Units equipped with optional ice machines require cleaning of ice machine system at least every six months, and more often if local water conditions dictate. Failure to clean ice machine system will result in decreased performance and potential damage to ice machine. Refer to Ice machine 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

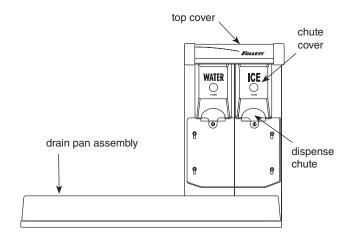
- 1. Remove drain pan assembly and bin access cover.
- Remove center thumbnut and threaded rod on dispense wheel assembly and lift wheel out front access opening.

#### Auger motor assembly removal

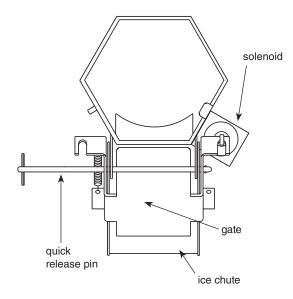
- 1. Remove top cover.
- 2. Remove one thumbnut on rear of motor bracket.
- 3. Lift motor bracket up and unplug electric quick disconnects.
- 4. Remove motor assembly.

#### 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.

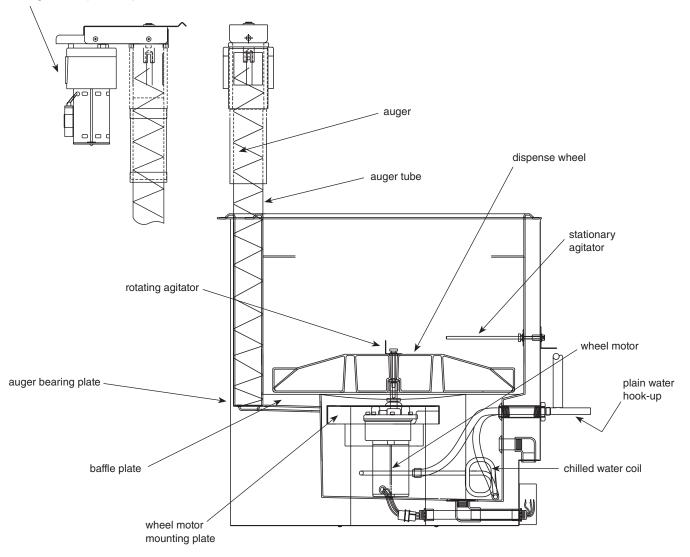






#### Fig. 1 – Front View, Right Hand Unit

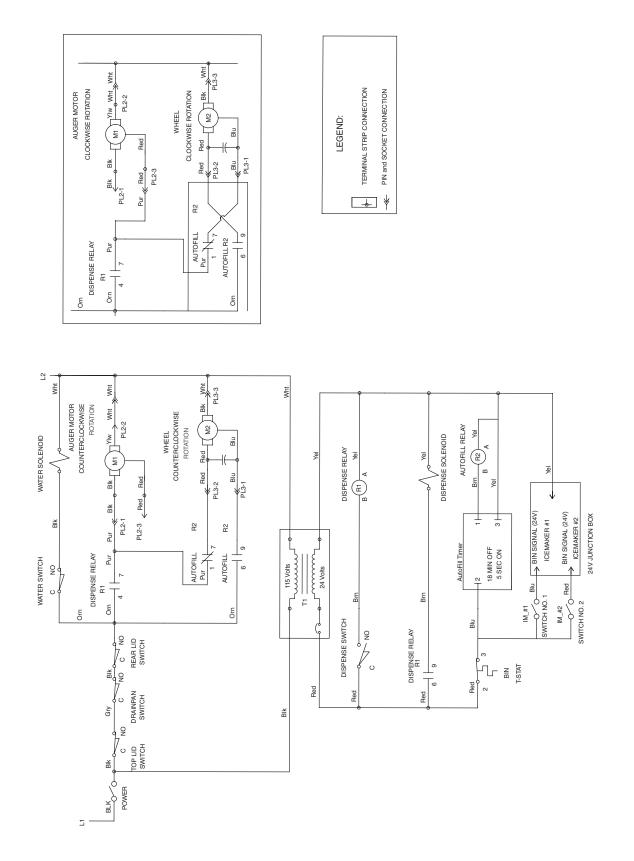
auger motor (side view)



## Wiring diagrams

Right hand unit

Left hand unit



### 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 (page 16).
- 4. Check that all drains are clear.

**Note:** For units equipped with Follett compressed nugget ice machine, see Ice machine 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>Ice machine 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 ice machine Operation and Service Manual for diagnosing</li> <li>Check for power and bin signal on ice machine PC board.</li> </ol>

# If problems persist after following this basic troubleshooting guide, call Follett's technical service department at (877) 612-5086 or +1 (610) 252-7301.

## **Replacement parts**

Order parts online www.follettice.com

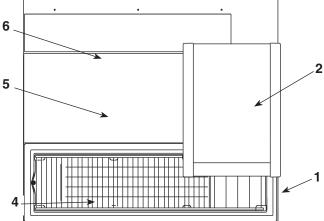
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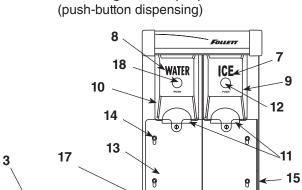
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### **Dispenser exterior**





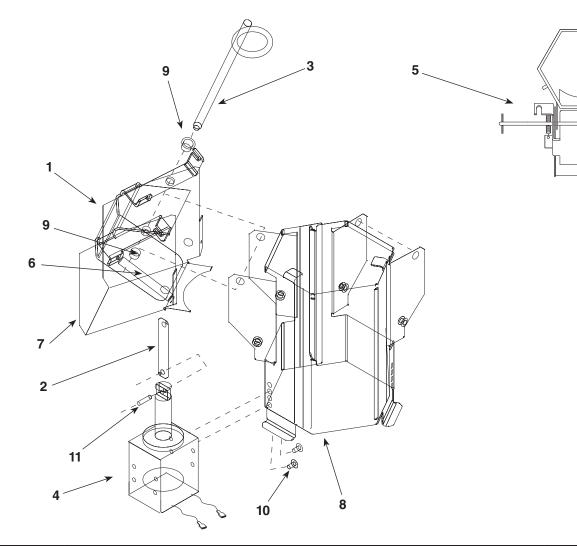


Reference #	Description	Part #
1	Label, "Follett"	502438
2	Top cover (includes label)	502606
3	Drain pan	502446
Ļ	Grille, drain pan	502450
5	Cover, electrical components	502593
6	Lid, rear access	502594
Not shown	Cover, ice storage (under drain pan)	502453
7	Label, ice, dispense cover, push-button	502623
Not shown	Label, ice, dispense cover, lever	502622
3	Label, water, dispense cover, push-button	502617
Not shown	Label, water, dispense cover, lever	502616
9	Cover, dispense chute, push-button operation (includes button and label), ice, black switch	502440
9	Chute cover, dispense, push-button, ice (includes stainless steel switch and label)	01156470
Not shown	Cover, dispense chute, lever operation, ice	502439
10	Cover, dispense chute, push-button operation (includes button and label), water, black switch	502620
10	Cover, dispense chute, push-button operation (includes stainless steel switch and label), water	0114548
Not shown	Cover, dispense chute, lever operation, water	502622
11	Chute, focus, clear plastic	502459
Not shown	Push pin, clear chute	502618
Not shown	Lever, dispense for water and ice	501953
12	Switch, dispense, push-button, black (includes label)	502441
12	Switch, push-button, stainless steel, ice (includes label)	01145507
13	Splash shield, right hand unit	502612
Not shown	Splash shield, left hand unit	502613
14	Thumbscrew, splash shield, 10-32 x 1/2	501100
Not shown	Switch, dispense lever for ice and water	502505
15	Panel, access, right hand and left hand units	502585
16	Panel, front, dispense mechanism, ice, right hand unit	502588
Not shown	Panel, front, dispense mechanism, ice, left hand unit	502589
17	Panel, front, side, back wrap, water dispense, right hand unit	502634
Not shown	Panel, front, side, back wrap, water dispense, left hand unit	502592
Not shown	Panel, rear, motor support, right hand unit	502586
Not shown	Panel, rear, motor support, left hand unit	502587
Not shown	Clip, Tinnerman, 10-32	502621
Not shown	Screw, 10-32 x 1/2	502287
Not shown	Legs, 6" (153 mm) adjustable to 9" (229 mm), set of 4	502454
18	Switch, water dispense, push-button operation, black (includes label)	502648
18	Switch, push-button, stainless steel, water (includes label)	01145473
Not shown	Plug 2 lead, male	502333
Not shown	Plug 2 lead, female 14	502334

#### Front View – Right Hand (RH) Tower (push-button dispensing)

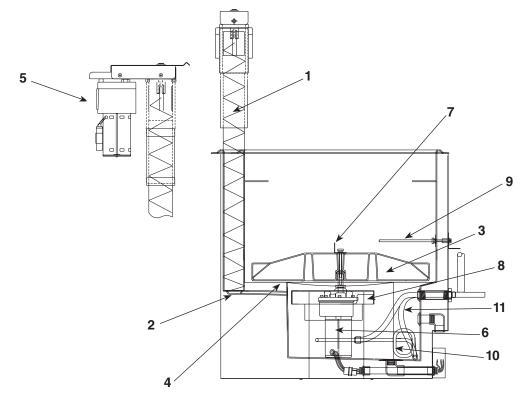
Side View (RH unit shown)

**Top View** 

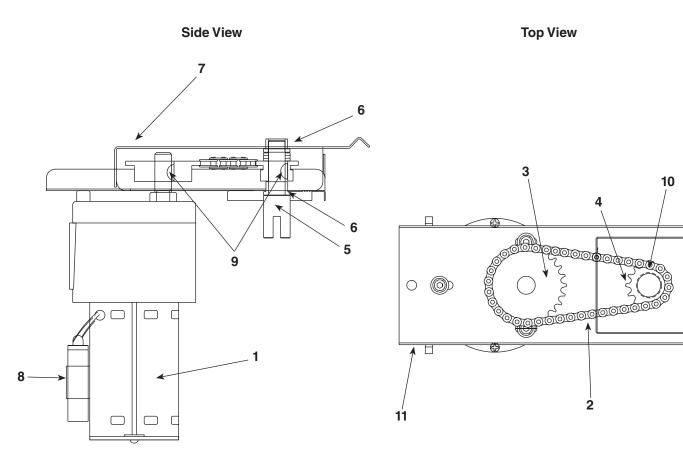


Reference #	Description	Part #
1	Gate, dispense	502455
2	Linkage pin, gate/solenoid	502456
3	Pin, quick release, 5.53" (141 mm), dispense gate	502102
4	Solenoid (includes linkage pin)	00126607
5	Dispense mechanism assembly, right hand unit	502458
Not shown	Dispense mechanism assembly, left hand unit	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

#### Side View (LH unit shown)



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)	501683
Not shown	Drive bar (under dispense wheel)	501682
5	Motor, vertical auger	502476
6	Motor, wheel	502560
Not shown	Seal, wheel motor	501333
Not shown	Spacer, wheel motor	501768
Not shown	Capacitor, wheel motor	501782
7	Agitator, rotating, 21" (534 mm) 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, 10 ft	502522
Not shown	Ice transport tube, 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



Reference #	Description	Part #	
Auger motor/di	Auger motor/drive assembly, vertical (includes all items below)		
1	Motor, vertical auger (includes gearbox and capacitor)	502476	
2	Chain, auger drive #35, 42 link	00931790	
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)	502481	
8	Capacitor, 25 mf, 270 V	501550	
9	Key, Woodruff	502482	
10	Washers, thrust (4)	501765	
11	Mounting plate, auger motor (includes 501314)	502483	

#### For dispensers with serial number C74152 and above only:

1	Motor, vertical auger (includes capacitor)

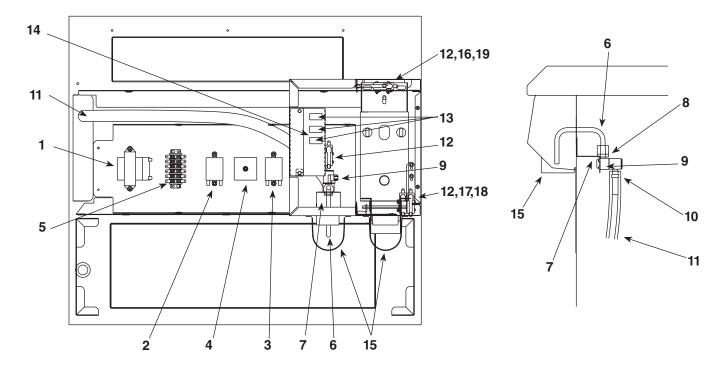
#### For dispensers with serial number below C74152 only: 2

Chain, auger drive #35, 40 link

502477

00907170

## **Electrical components**



Reference #	Description	Part #
1	Transformer, 24V	502058
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	502243
10	Fitting, inlet, plastic, 1/4 barb	502637
11	Tubing, water (sold by the foot)	502356
12	Switch, safety	502511
13	Switches (power and ice machine)	502209
14	Bracket, switch, mounting (power and ice machine)	502638
15	Chute, focus, clear plastic	502459
Not shown	Switch, safety, rear cover assembly, left hand unit	502498
16	Switch, safety, rear cover assembly, right hand unit	502499
Not shown	Switch, safety, drain pan assembly, left hand unit	502500
17	Switch, safety, drain pan assembly, right hand unit	502501
Not shown	Switch, dispense, lever	502505
18	Bracket, safety switch, drain pan, right hand unit	502609
Not shown	Bracket, safety switch, drain pan, left hand unit	502610
19	Bracket, safety switch, rear	502608
Not shown	Thermostat, bin level	500514
Not shown	Converter box, bin signal	01067156
Not shown	Relay	01020734

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