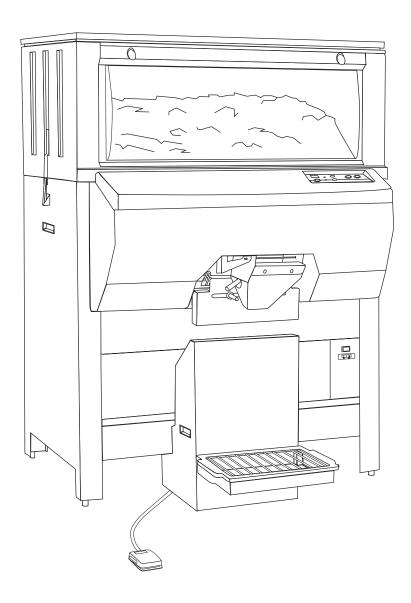
# Ice Pro<sup>™</sup> Automatic Ice Bagging and Dispensing System

Order parts online www.follettice.com

Installation, Operation and Service Manual



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





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#### Follett Corporation Equipment Return Policy

Follett equipment may be returned for credit under the following conditions:

- 1. The equipment is new and unused.
- 2. A return authorization number has been issued by customer service within 30 days after shipment.
- 3. Follett receives the equipment at the factory in Easton, PA within 30 days after issuance of the return authorization number.
- 4. The equipment must be returned in Follett packaging. If the packaging has been damaged or discarded, Follett will forward, at the customer's expense, new packaging.

**Note:** Return freight charges are the responsibility of the customer. If equipment is returned and is damaged because of improper packaging, Follett Corporation will not be held responsible.

Credit will be issued when:

The equipment has been inspected by Follett and deemed suitable to be returned to stock.

Note: A 15% restocking charge will be deducted from the credit. If the cost to return the product to stock exceeds 15%, the actual cost will be deducted.

# **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, (800) 523-9361 or (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 DB1000 series.

# **DB1000SA**

SA = Semi-Automatic ice dispensing and bagging



### 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.

Should local codes require a hard-wired connection and/or shielded wiring, eliminate the cord(s) and plug(s) and follow the appropriate wiring diagram.

Dispenser can accommodate most cube/cubelet ices up to 1" square. Crushed, flake, or nugget ice cannot be used. Use of these ices can jam dispenser and void warranty. For questions about ice compatibility, call Follett's customer service group toll free at (800) 523 9361 or (610) 252-7301.

Always disconnect power before cleaning or servicing the dispenser.

Failure to remove all sanitizer may result in health hazard.

# **Specifications**

#### **Electrical**

Each icemaker and dispenser requires separate circuit. Equipment ground required.

Standard electrical - 220V, 60Hz, 1 phase, Max. fuse - 5 amps, 15 amp circuit. Cord and plug provided.

## **Plumbing**

Drain 1" PVC FPT for hopper drain

Note: Drains should be hard piped and insulated. Maintain at least 1/4" per foot (1cm per 31cm run) slope

on drain line run

#### Clearance and access information

**Door entry** Installation sites must have an unobstructed path to installation location

with door openings no less than 34.25" (870mm)

Service Clearance A minimum of 12" (305mm) to left of unit is necessary for service

#### Ice type

Dispenser can accommodate most cube/cubelet ices up to 1" square. Crushed, flake, or nugget ice cannot be used. Use of these ices can jam dispenser and void warranty. For questions about ice compatibility, call Follett's technical service group toll free at (800) 523-9361 or (610) 252-7301.

# Icemaker weight limit

Icemaker(s) mounted on thin top may not exceed 800 lbs (364kg)

Icemaker(s) mounted on thick top may not exceed 1300 lbs (590kg)

#### **Container sizes**

Standard unit accommodates bag sizes up to 20 lbs (9kg) / 27.35" (696mm)

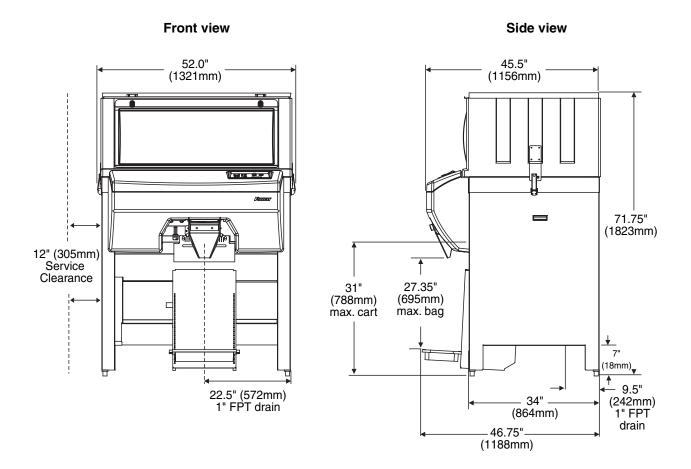
Standard dispense chute compatible with carts and containers up to 29.5" (750mm) high

Optional 6.5" (166mm) leg extension kit may be purchased to allow for up to 36" (915mm) high carts and bags up to 40 lbs (18kg) and 33.85" (860mm) high

# Bag pins

Bag pins may be adjusted to accommodate bag hole centers from 5" (127mm) to 10" (254mm)

# **Dimensions and clearances**



#### **Notes**

Special top required for icemakers weighing more than 800 lbs (364kg). Adds an additional 2.125" (54mm) to height. Contact factory.

Add 2" (51mm) to depth and 10 lbs (4.5kg) to shipping weight when drain pan accessory used.

# Installation

# **Door Entry**

Some disassembly may be necessary to gain access through door openings with a width of 34.25" (850mm) to 45.5" (1156mm).

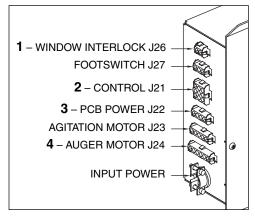
**Note:** Disassembly is **NOT** necessary for gaining entry through door openings larger than 45.5" (1156mm)

1. Remove lower splash panel with four screws (Fig. 1.1).

- 2. Detach the following plugs from the left side of control box:
  - a) Window interlock J26 (Fig. 2.1)
  - b) Control J21 (Fig. 2.2)
  - c) PCB power J22 (Fig. 2.3)
  - d) Auger motor J24 (Fig. 2.4) (model DB1000SA only)

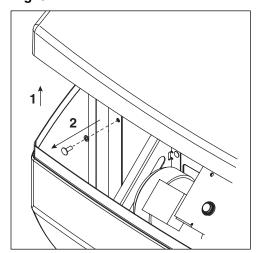
Fig. 2

Fig. 1



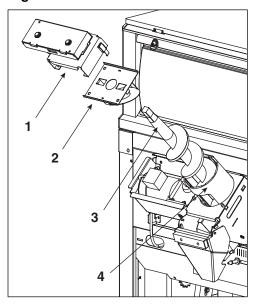
- 3. Remove control panel cover by lifting and detaching hook and loop tape (Fig. 3.1).
- 4. Remove lower cover with two thumbscrews, one from each side (Fig. 3.2).

Fig. 3



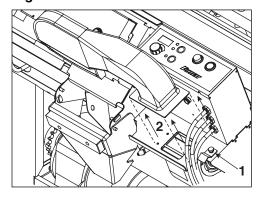
- 5. Remove transfer case with two latches (Fig. 4.1).
- 6. Remove ice deflection plate by lifting up (Fig. 4.2).
- 7. Remove auger by lifting up (Fig. 4.3).
- 8. Remove auger tube by lifting up. Note position of locating slot on lower end for reinstallation (Fig. 4.4).

Fig. 4



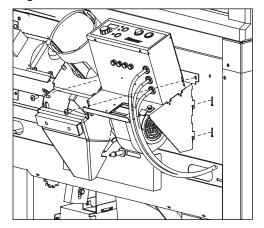
9. Remove blower duct by loosening thumb screw, rotating clip (Fig. 5.1) and lifting up (Fig. 5.2).

Fig. 5



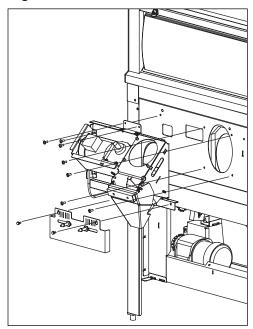
10. Remove control box/fan motor mounting assembly with two screws (Fig. 6).

Fig. 6



- 11. Remove auger motor bracket with 8 screws (Fig 7).
- 12. Remove bag pin bracket with two thumbscrews (Fig. 7).

Fig. 7



- 13. The unit's width may be further reduced by removing the upper ice storage section (Fig. 8). This reduces unit width by 1.75" (45mm) to an overall width of 34" (864mm).
  - a) Remove window.
  - b) Pull window interlock switch cable through wire trough in upper right corner of base (Fig. 8.1).
  - c) Cut tie wrap.
  - d) Release latch from each side of ice storage section (Fig. 8.2).
  - e) Lift upper ice storage section from base.

**Note:** Reinstallation of auger tube requires locating slot be in the 7 o'clock position and upper end of auger be flush to auger motor bracket.

# Locating unit

A minimum of 12" (305mm) to the left of the unit must be unobstructed for service clearance (see dimensions and clearances).

# Leg extension accessory

- 1. Raise unit off feet.
- 2. Remove each standard foot channel with four carriage bolts (Fig. 9.1).
- 3. Remove foot insert and cap insert from standard foot channel.
- 4. Align each accessory extension foot channel to the eight holes of leg.
- 4. Use the four carriage bolts removed in step 2 and four carriage bolts supplied with leg extension accessory to attach each extension channel to the eight holes of each leg (Fig. 9.2).
- 6. Place foot insert and cap insert into extension foot channel.
- 5. Verify each leg is in fully retracted position prior to lowering unit on feet.
- 6. Follow leveling instructions below.

Leveling

Leveling the unit is important for the proper operation of any top mounted icemaker. The dispenser is shipped with the legs in the fully retracted position. Each leg may be adjusted independently by turning clockwise to lower the leg or counterclockwise to raise the leg.

# **Utility connections**

#### Drain

Drain connection is made to the 1" FPT PVC fitting (Fig. 10). Leave a minimum of 1/4" per foot (1cm per 31cm run) slope on drain line run. Insulate the entire run length to prevent condensation from forming on outside of drain line.

Note: Avoid excessive tightening force when connecting

to this fitting.

**Note:** Do not apply excessive heat if any sweating of fittings is

necessary. Heat conduction through metal may melt

threads in plastic drain.

#### **Electrical**

Make electrical connections in accordance with local and NEC codes. Each icemaker and dispenser requires separate circuit. Equipment ground required.

Standard electrical – 220V, 60Hz, 1 phase. Max. fuse – 5 amps, 15 amp circuit. Cord and plug provided.

# Foot pedal

The foot pedal is installed to the dispenser at the factory. Remove packaging and place on floor near bag stand on front of dispenser.

Fig. 9

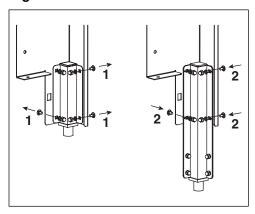
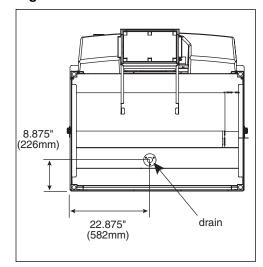


Fig. 10



# **Bag wicket**

Note: Bags must be placed behind rear stainless chute.

- 1. Move chute lever to down position (Fig. 11.1).
- 2. Transfer bags from wicket to bag pins by removing cardboard backing and sliding 15 to 20 bags onto pins at a time until posts are full (Fig. 11.2).
- 3. Return chute lever to up position (Fig. 12).

#### **Sanitize**

Follow cleaning and sanitizing instructions.

#### **Icemaker**

Follow icemaker manufacturer's recommendations for installation.

**Note:** Icemaker(s) mounted on thin top may not exceed 800 lbs (364kg). Icemaker(s) mounted on thick top may not exceed 1300 lbs (590kg).

# **Adjustments**

The installer should make the following initial adjustments to ensure proper operation of the dispenser.

### Bagger starter kit (DB1000SA models only)

The Ice Pro model DB100SA includes 250 bags.

- 1. Begin using the bags by locating the bagger starter kit and following the the instructions for bag wicket on page 10.
- 2. Follett recommends ordering new replacement bags immediately and confirming delivery date.

# Tie-down adjustment

- 1. Release latch on side of dispenser.
- 2. Rotate bolt clockwise to increase tension.
- 3. Engage latch and verify tension has been increased.

#### Bag stand

The bag stand platform may be raised or lowered to accommodate multiple bag sizes (Fig. 13). The bottom of bags should touch platform when adjustment is complete.

- 1. Lift bag stand platform up and out of receiving slot on bag stand base.
- 2. Insert bag stand platform in and down into next receiving slot above bottom of bag.

#### **Dispense duration** (model DB1000SA only)

In timed mode, the dispense duration dial of the control panel adjusts the length of time the unit dispenses ice.

- 1. Rotate dial clockwise to lengthen dispense duration. Rotate counterclockwise to shorten dispense duration.
- 2. Verify timed mode is selected.
- 3. Press start button to test length of duration. Adjust as necessary.

Fig. 11

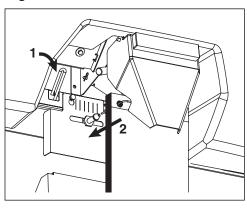


Fig. 12

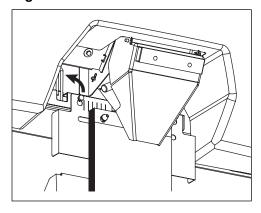
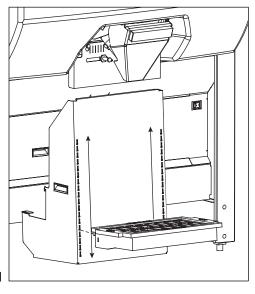


Fig. 13



# Review operation procedures with appropriate operations person.

# Give manual to appropriate operations person.

# Cleaning and sanitizing

#### Solution A - Cleaning solution:

Combine 1 oz (250ml) bleach with 2 gal (8L) hot water or use Ecolab Mikro-chlor Cleaner per manufacturers instructions.

#### Solution B - Sanitizing solution:

Combine 1/4 oz (50ml) bleach with 2 gal (8L) hot water or use Ecolab Mikro-chlor Cleaner per manufacturers instructions.

# Cleaning brush

A cleaning brush is included with the Ice Pro – it should be mounted for easy access on either side of the bin in the bracket provided.

#### **Exterior care**

The stainless steel exterior of the bin can be cleaned with a stainless cleaner such as 3M Stainless Steel Cleaner & Polish or equivalent.

#### Interior care

The polyethylene liner should be cleaned and sanitized periodically with cleaning solution prescribed below.

# Recommended semi-annual cleaning (every 6 months)

- 1. Disconnect power from ice machine and dispenser.
- 2. Remove all ice from storage area.
- 3. Remove ice storage window (Fig. 14.1).
- 4. Remove control panel cover by lifting and detaching latch and loop tape (Fig. 14.2).
- 5. Remove transfer case with two latches (Fig. 15.1).
- 6. Remove ice deflection plate by lifting up (Fig. 15.2).
- 7. Remove auger by lifting up (Fig. 15.3).
- 8. Remove auger tube by lifting up. Note position of locating slot on lower end for reinstallation (Fig. 15.4).
- 9. Remove blower duct by loosening thumb screw, rotating clip and lifting up (Fig. 15.5).
- 10. Remove ice chute assembly (Fig. 15.6).
- 11. Remove drip tray from bag stand (Fig. 15.7).
- 12. Clean all components and bin storage surfaces with supplied brush and Solution A. Rinse thoroughly with clean water. Sanitize all components and bin storage surfaces with Solution B.
- 13. Pour a solution of one cup (8oz/237ml) household bleach mixed with one gallon (3.8L) hot water into drain to help prevent algae growth in drain lines.

Fig. 14

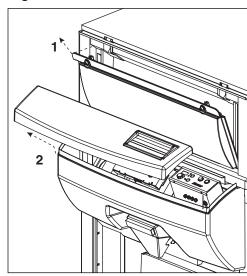
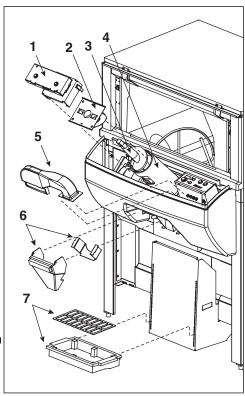


Fig. 15



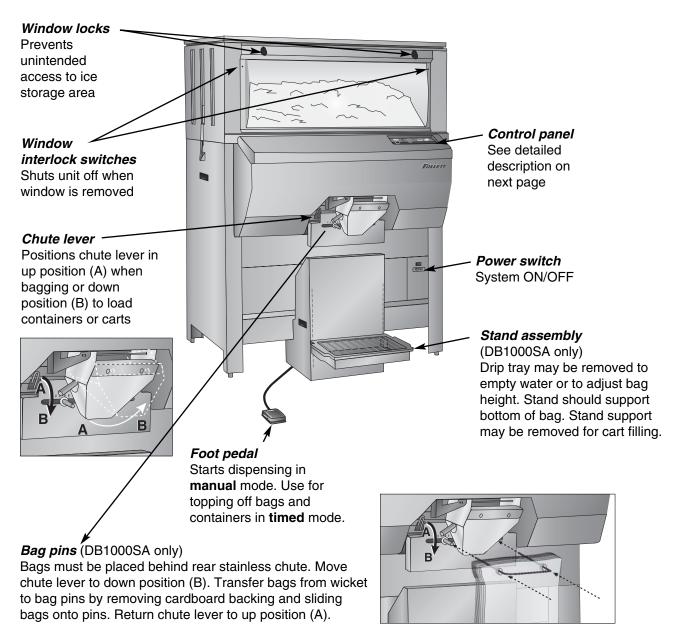
# **Operation**

### How the dispenser works

Follett's Ice Pro bagging and dispensing system is available in manual or semi-automatic ice dispensing and bagging configurations. The semi-automatic model includes a blower to puff bags open for high volume, handsfree dispensing, bag holder pins for use with wicketed bags and programmable dispense timer.

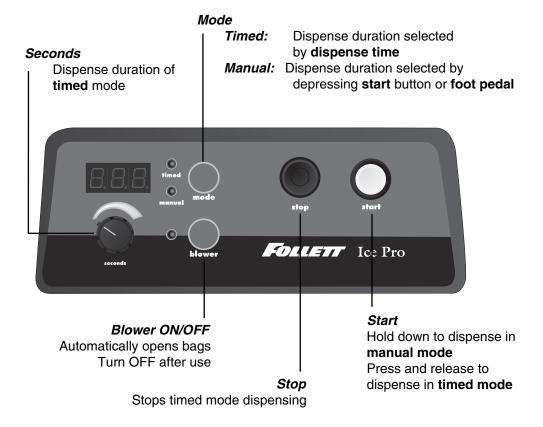
Ice is stored above a dispense auger in the dispenser storage area. An automatic agitation cycle keeps the ice from congealing by periodically activating the agitator. When the start button is pressed, the dispense motor is activated. This causes the auger assembly in the storage area to move ice to the dispense chute where it drops by gravity into a container.

# System overview

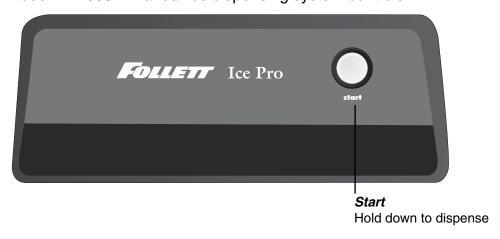


#### **Control functions**

Model DB1000SA – Semi-automatic ice bagging and dispensing system controls

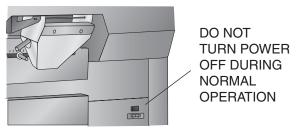


Model DB1000 - manual ice dispensing system controls



#### Power switch

**Note:** Do not turn power OFF during normal operation. Turning power OFF disables agitation cycle which may lead to congealed ice and damage to dispenser that may void warranty.



#### Bag pin - installing wickets (Model DB1000SA only)

Note: Bags must be placed behind rear stainless chute.

- 1. Move chute lever to down position (Fig. 16.1).
- 2. Transfer bags from wicket to bag pins by removing cardboard backing and sliding 15 to 20 bags onto pins at a time until posts are full (Fig. 16.2).
- 3. Return chute lever to up position (Fig. 17).

# Adjusting bag stand height (Model DB1000SA only)

The bag stand platform may be raised or lowered to accommodate multiple bag sizes (Fig. 18). The bottom of bags should touch platform when adjustment is complete.

- 1. Lift bag stand platform up and out of receiving slot on bag stand base.
- 2. Insert bag stand platform in and down into desired receiving slot on bag stand base.

# Using Totes<sup>™</sup> or other containers

The bag stand platform can accommodate containers of up to 29.5" (750mm) high.

- 1. Adjust bag stand height per instructions above.
- 2. Position chute lever in down position (Fig. 16.1).
- 3. Place container below dispense chute.
- 4. Press START.

# Using SmartCART<sup>™</sup> or other mobile ice storage devices

The bag stand platform must be removed to correctly position SmartCART under chute.

- 1. Remove bag stand per instructions below.
- 2. Position chute lever in down position.
- 3. Roll SmartCART under dispense chute.
- 4. Press START.

# Removing bag stand (Model DB1000SA only)

- 1. Lift bag stand platform up and out of receiving slots on bag stand base (Fig. 19.1).
- 2. Lift stand up and out of receiving slots on dispenser base (Fig. 19.2).

Fig. 16

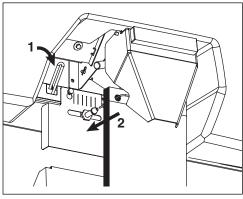


Fig. 17

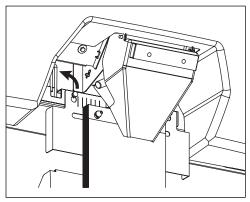


Fig. 18

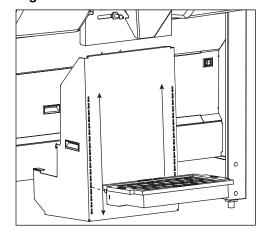
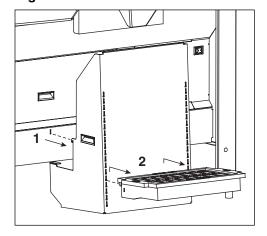


Fig. 19



# **Service**

# **Agitator removal**

- 1. Remove all ice from dispenser.
- 2. Disconnect power to dispenser and icemaker.
- 3. Remove window from upper ice storage section.
- 4. Remove connection pin from left side of agitator bar (Fig. 20).
- 5. Move agitator bar toward left dispenser wall (Fig. 21.1) while pulling out the right side from bearing (Fig. 21.2).
- 6. Push right side of agitator bar toward rear right corner of bin (Fig. 22.1) while pulling out the left side from the drive shaft (Fig. 22.2).
- 7. Position pin end of agitator in window frame and spiral clockwise out opening (Fig 23).

Fig. 20

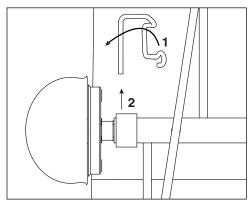


Fig. 21

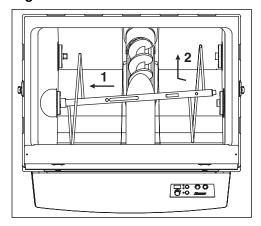


Fig. 22

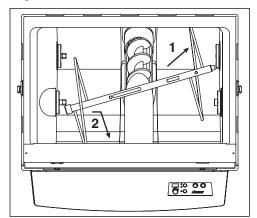
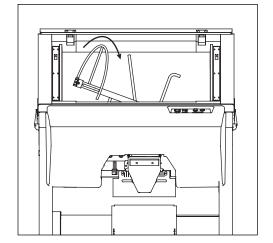
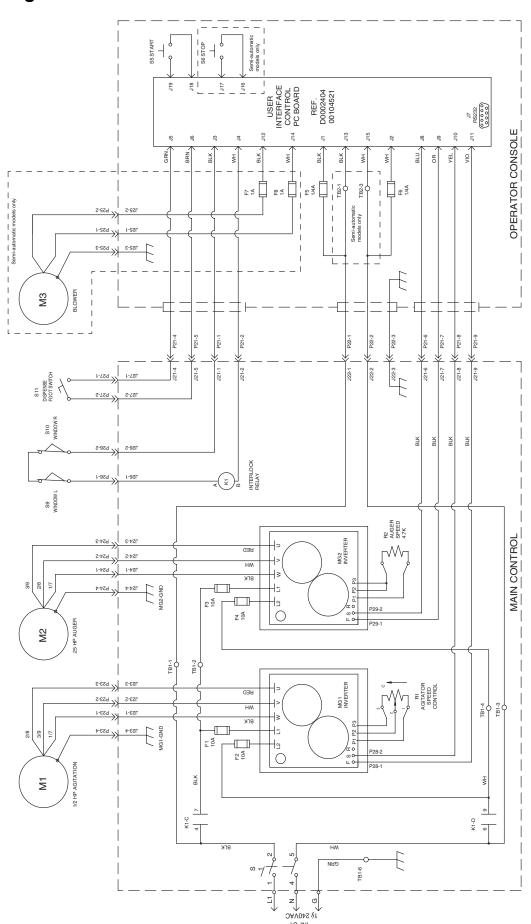


Fig. 23



# Wiring diagram



# Before calling for service

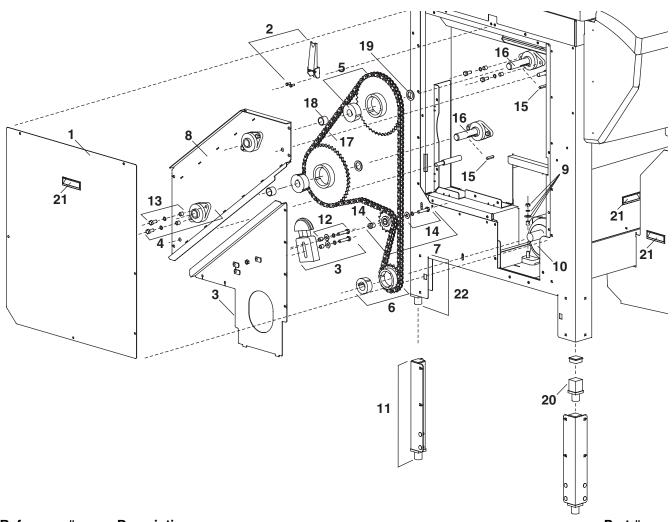
- 1. Check that ice is in the dispenser and that congealed cubes are not causing a jam.
- 2. Check that circuit breaker and switches are in ON position.
- 3. Check that window is on securely. If ajar, dispenser will not operate.
- 4. Check that all drains are clear.

# **Troubleshooting guide**

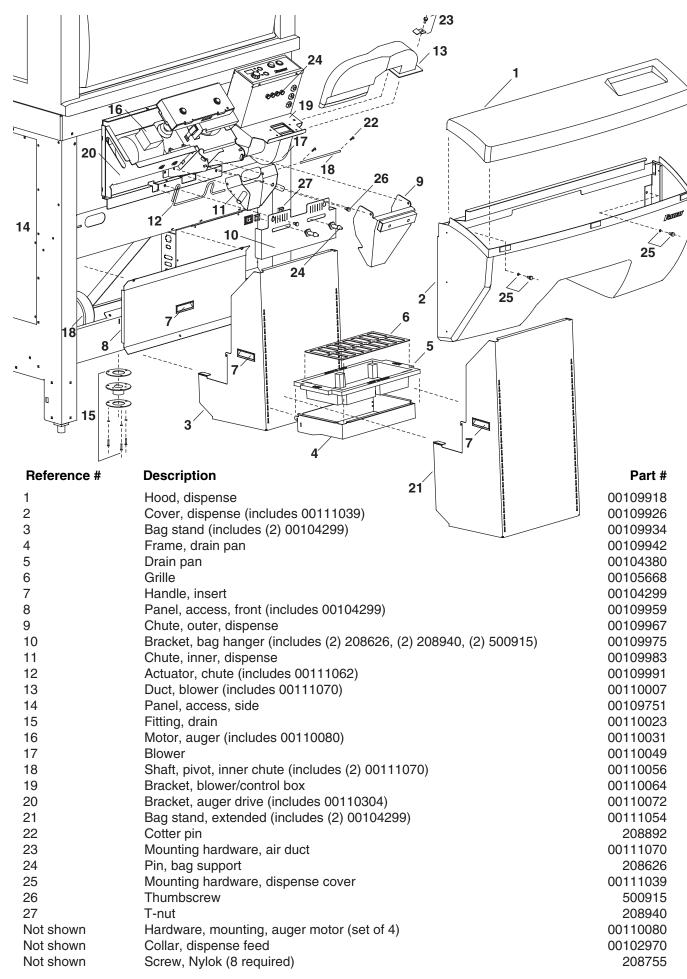
Symptom	Possible cause	Solution
Ice does not dispense	1. No ice in bin	Check operation of ice maker
	2. Dispense switch not closing	2. Check for contract closure
	3. Foot pedal not closing	Check for contact closure of switch inside foot pedal enclosure
	4. Auger motor not operating	4A. Check for power to motor  4B. Check for output from corresponding inverter  4C. Check fuses and power supply to LI & L2 of inverter  4D. Jump terminals F & S on inverter. If motor runs, replace PC board  Note: Voltage from inverter and auger motor must be tested with an analog meter
	5. Agitator motor not operating	5A. Check for power to motor 5B. Check for output from corresponding inverter 5C. Check fuses and power supply to LI & L2 of inverter 5D. Jump terminals F & S on inverter. If motor runs replace PC board  Note: Voltage from inverter and auger motor must be tested with an analog meter
	Both auger motor & agitator motor not operating	6A. Check that window is in place 6B. Check that both window interlock switch are fully depressed 6C. Check that interlock relay is energized
Bags tear off pins during filling	Bag platform not adjusted properly     Poor quality bags	Adjust bag platform to on notch above where bottom of bag contacts platform     Try bags from another supplier
More than one bag opens when blower is on	Stainless steel chute is not resting against bags	Move chute lever to up position to locate stainless steel chute in the rear position
Bags won't open	1. Blower switch not on	1. Turn blower switch on
	Blower duct missing or out of position     No power to blower motor	Reinstall/re-position blower duct     Check fuses and output power at operator control panel

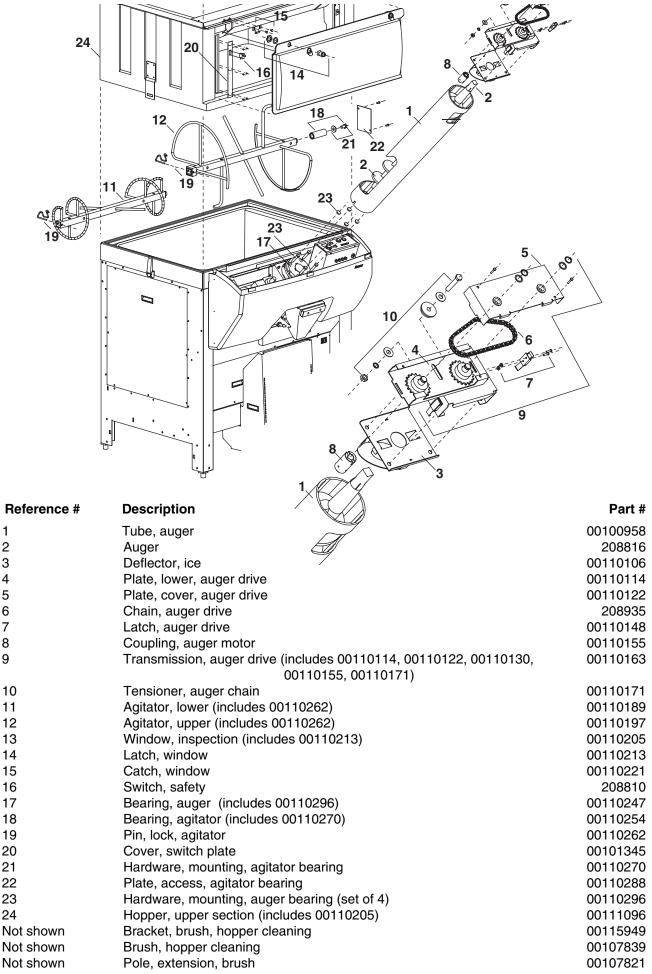
If problems persist after following this basic troubleshooting guide, call Follett's technical service department at (800) 523-9361 or (610) 252-7301.

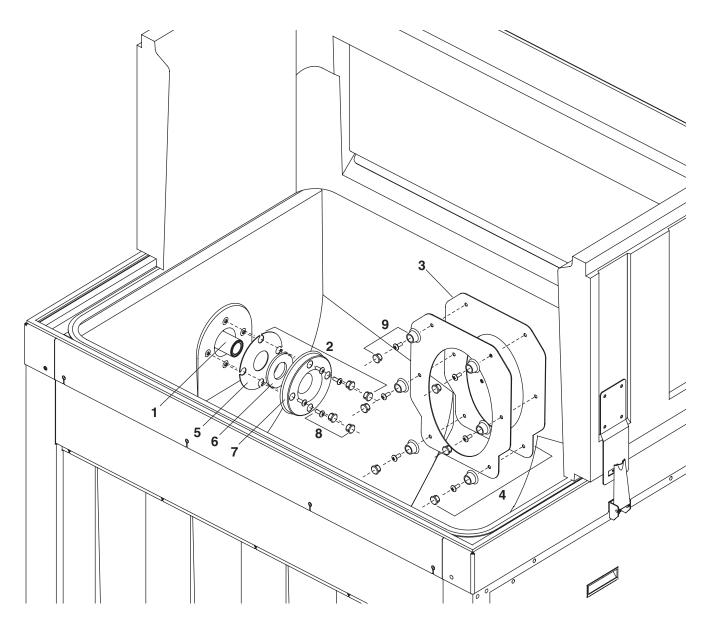
# Replacement parts



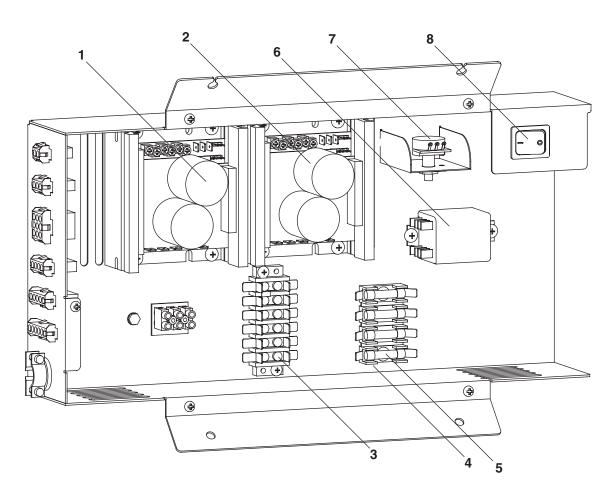
Reference #	Description	Part #
1	Panel, access, side	00109751
2	Latch, hopper	00109769
3	Tensioner (includes 00109868)	00109777
4	Bearing (includes 00109876)	00109785
5	Sprocket, agitator (includes 00101048)	00109793
6	Sprocket, drive	00109801
7	Sprocket, idler (includes 00109884)	00109819
8	Frame, outer bearing support (includes (2) 00109785, (2) 00109876)	00109827
9	Hardware, mounting, agitator motor	00109835
10	Motor, agitator (includes 00109835)	00109843
11	Leg, extension (one) (includes 00104315)	00109850
12	Hardware, mounting, tensioner (set of 2)	00109868
13	Hardware, mounting, bearing (set of 2)	00109876
14	Hardware, mounting, idler wheel (set of 2)	00109884
15	Key, coupling, drive	00101048
16	Coupling, drive (includes 00101048)	00105825
17	Chain	208652
18	Bushing, bronze	00104372
19	Shim	00104786
20	Insert, leg	00104315
21	Handle, insert	00104299
22	Leg, standard (includes 00104315)	00111021
Not shown	Hardware, leg mounting (set of 4)	00109900



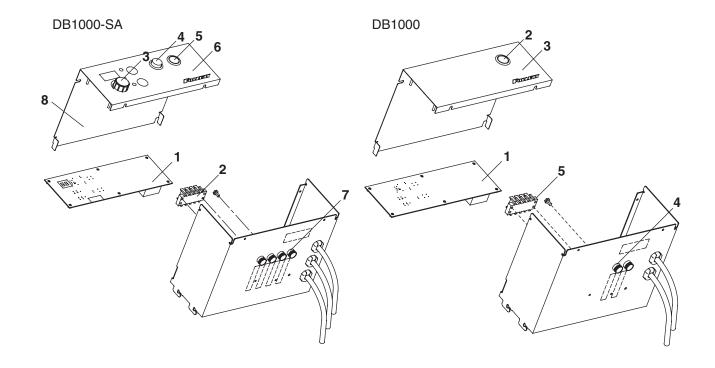




Reference #	Description	Part #
1	Bearing, agitator support	00110254
2	Kit, shaft seal, agitator (includes 00110338)	00110312
3	Gasket, tube seal, auger	00102061
4	Kit, tube seal, auger (includes 00102061, 00110346)	00110320
5	Base, seal	00101246
6	Seal, agitator	00103911
7	Collar, seal	00101535
8	Hardware, mounting, shaft seal (set of 4)	00110338
9	Hardware, mounting, tube seal (set of 6)	00110346



Reference #	Description	Part #
1	Inverter, auger	00146241
2	Inverter, agitator	00146258
3	Terminal strip	00110361
4	Fuse holder	00105411
5	Fuse, 10 amp	208823
6	Relay	00110387
7	Potentiometer, agitator speed	00110395
8	Switch, rocker	208867



Reference #	Description	Part #
DB1000-SA		
1	Control board (green display)	00104521
	Control board (red display) – obsolete. Use retrofit kit 00129833 below.	
2	Terminal strip	00110411
3	Control knob	00105528
4	Switch, stop	00105429
5	Switch, start	00101212
6	Label, console (green display)	00106054
6	Label, console (red display)	00129825
7	Fuse holder	208915
8	Cover, console (green display – includes 00106054)	00129858
8	Cover, console (red display – includes 00129825)	00129841
Not shown	Fuse, 1/4 amp	208825
Not shown	Fuse, 1 amp	208826
Not shown	Retrofit kit, control board, green display (includes 00129858, 00104521,	
	00105429 and 00101212)	00129833
DB1000		
1	Control board	00106922
2	Switch, start	00101212
3	Label, console	00102020
4	Fuse holder	208915
Not shown	Fuse, 1/4 amp	208825
5	Terminal strip	00110411
Not shown	Switch, foot	00115055