



IMI CORNELIUS INC
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Operator's Manual

THE PROFILE™ ICE/DRINK DISPENSER

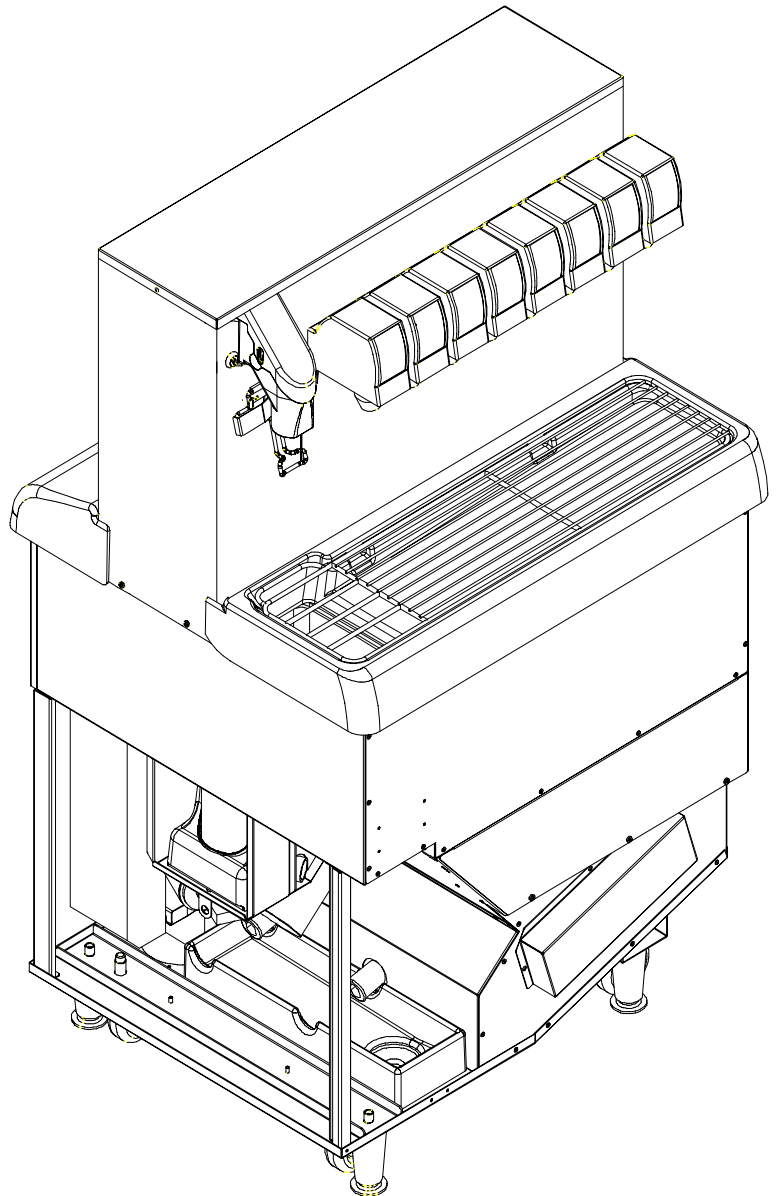
Model: PR150 BC

IMPORTANT:

TO THE INSTALLER.

It is the responsibility of the Installer to ensure that the water supply to the dispensing equipment is provided with protection against backflow by an air gap as defined in ANSI/ASME A112.1.2-1979; or an approved vacuum breaker or other such method as proved effective by test.

Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed, and maintained according to Federal, State, and Local Codes.



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Revision: D

THIS DOCUMENT CONTAINS IMPORTANT INFORMATION

This Manual must be read and understood before installing or operating this equipment

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SAFETY INFORMATION

Recognize Safety Information

This is the safety-alert symbol. When you see this symbol on our machine or in this manual, be alert to the potentially of personal injury.

Follow recommended precautions and safe operating practices.



Understand Signal Words

A signal word - **DANGER**, **WARNING**, OR **CAUTION** is used with the safety-alert symbol. **DANGER** identifies the most serious hazards.

Safety signs with signal word **DANGER** or **WARNING** are typically near specific hazards.

General precautions are listed on **CAUTION** safety signs. **CAUTION** also calls attention to safety messages in this manual.



Follow Safety Instructions

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Learn how to operate the machine and how to use the controls properly. Do not let anyone operate the machine without instructions. Keep your machine in proper working condition. Unauthorized modifications to the machine may impair function and/or safety and affect the machine life.

CO₂ (Carbon Dioxide) Warning

CO₂ Displaces Oxygen. Strict Attention *must* be observed in the prevention of CO₂ (carbon dioxide) gas leaks in the entire CO₂ and soft drink system. If a CO₂ gas leak is suspected, particularly in a small area, *immediately* ventilate the contaminated area before attempting to repair the leak. Personnel exposed to high concentration of CO₂ gas will experience tremors which are followed rapidly by loss of consciousness and suffocation.

Maximum CO₂ Operating Pressure 75–PSI

Shipping, Storing, Or Relocating Unit

CAUTION: Before shipping, storing, or relocating this Unit, the syrup systems must be sanitized and all sanitizing solution *must* be purged from the syrup systems. All water *must* also be purged from the plain and carbonated water systems. A freezing ambient temperature will cause residual water remaining inside the Unit to freeze resulting in damage to internal components of the Unit.

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SAFETY PRECAUTIONS

This dispenser has been specifically designed to provide protection against personal injury and eliminate contamination of the ice. To ensure continued protection and sanitation , observe the following.

ALWAYS: Disconnect electrical power from the dispenser before servicing or cleaning.

NEVER: Place hands inside the hopper or gate area without disconnecting electrical power from the dispenser. Agitator rotation occurs automatically when the dispenser is energized.

ALWAYS: Be sure the removable lid is properly installed to prevent unauthorized access to the hopper interior and possible contamination of the ice.

ALWAYS: Be sure the upper and lower front panels are securely fastened.

ALWAYS: Keep area around the dispenser clean of ice cubes.



CAUTION: The dispenser cannot be used with crushed or flaked ice. Use of bagged ice, which has been frozen into large chunks, can void the factory warranty. The dispenser agitator is not designed to be an ice crusher. Use of large chunks of ice which “jam up” inside the hopper will cause failure of the agitator motor and damage to the hopper. If bagged ice is used, it must be carefully and completely broken into small cube sized pieces before filling into the dispenser hopper.

The undercounter ice dispenser solves your ice service needs in a sanitary, space saving, economical way. Designed to be manually filled with ice, this dispenser will dispense ice cubes (up to 1–1/4 inches in size), cube-lets, and hard chipped or cracked ice.

SPECIFICATIONS

Model:	PR150 BC Ice Drink Dispenser (Eight-Flavor)
Dimensions	31–7/8 inches wide X 27–7/8 inches Deep X 21–1/4 inches High with 29 inches Depth Below Countertop
Electrical	120 VAC/1 Phase/60 Hz/5.2 Amps Total Current Draw
Recommended Electrical Supply	115 VAC/60 Hz/15.0 Amps, 3–Wire Grounded Circuit
Clearance Required	54-In. above counter front access.
Drain	Base Unit is plumbed for PVC or flex plastic tubing installed to local code.
CO ₂ or Air Requirements	CO ₂ = 80–100 PSI supply (preferred) or air = 70 PSI minimum supply.
Flavor Selections	Maximum of eight syrup flavors plus plain water and carbonated water.
Cup Selection	Five Sizes (12, 16, 21, 32, and 42 Oz.)
Ice Requirements	Ice bin capacity is 150 pounds of ice.
Water Supply	60–PSI flowing pressure (3/4 inch supply with shutoff valve.
Drink Draw Rate	Dispenses seven 21 oz. drinks per minute at or below 40° F continuous.

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INSTALLATION INSTRUCTIONS

COUNTER HEIGHT (INCHES)	DISPENSER DEPTH (INCHES)	AVAILABLE SPACE BELOW DISPENSER (INCHES)	USE KIT NO.
30	29	1	CONSULT FACTORY
31	29	2	CONSULT FACTORY
32	29	3	620517502 AND 629087406
33	29	4	629087406
34	29	5	629087406
34–1/2	29	5–1/2	629087412 AND 620517502
35	29	6	629087412
36	29	7	629087412

COUNTERTOP INSTALLATION

IMPORTANT: It is the responsibility of the installer to ensure that the drains from the dispensing equipment is installed and maintained according to Federal, State, and local laws.

1. Locate the dispenser indoors on a level countertop.

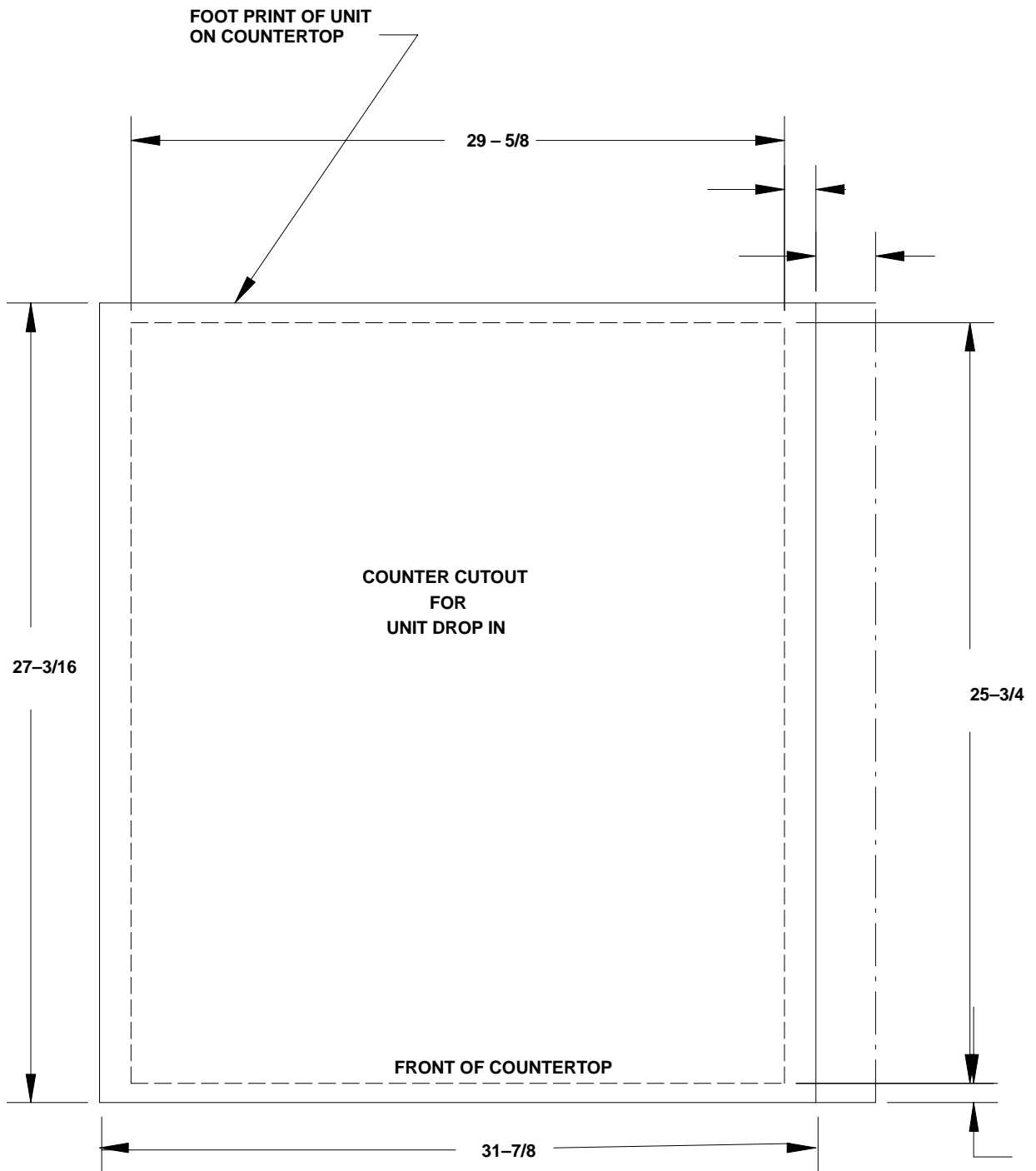
The dispenser *must* be sealed to the countertop. The MOUNTING TEMPLATE (see Figure 1) indicates the opening that *must* be cut in the countertop. Locate the desired position for the dispenser, then mark the outline dimension on the countertop using the dimensions given or use the full size template enclosed.

Apply a continuous bead of NSF International (NSF) listed silastic sealant (Dow 732 or equivalent) approximately 1/4 inch inside the dispenser outline dimensions and around all openings. Position the dispenser on the countertop within the outline dimensions. All excess sealant *must* be wiped away immediately.

2. The drain tube is routed through the large opening in the bottom of the dispenser. See the MOUNTING TEMPLATE (see Figure 1) for locating the required clearance hole in the countertop for these utility lines. The power cord is routed through hole in the side of the dispenser electrical control box.
3. SINK DRAIN ASSEMBLY: Connect the drain tube to an open drain. Additional drain tubing is provided with the Dispenser. The drain tube *must* continuously pitch downward and contain no “traps” or improper drainage will result.
 - A. Use 3/4–inch nominal plastic pipe.
 - B. To assure proper drainage, *do not* allow a “trap” to form in the drain line. *Be sure* drain line runs flat with bottom of the dispenser.

IMPORTANT: This dispenser *must* be installed with adequate backflow protection to comply with Federal, State, and Local Codes.

4. Clean the hopper interior (See CLEANING INSTRUCTIONS).
5. Connect dispenser power cord to 120 VAC 60 HZ 15–Amp 3–wire grounded receptacle.



THE ABOVE FIGURE SHOWS THE REQUIRED CUTOUT FOR PLACING THE ICE DISPENSER INTO A COUNTERTOP. THE DASHED LINE IS THE ACTUAL CUTOUT DIMENSIONS WHILE THE SOLID LINE SHOWS THE AMOUNT OF OVERHANG FOR THE DISPENSER.

FIGURE 1. MOUNTING TEMPLATE

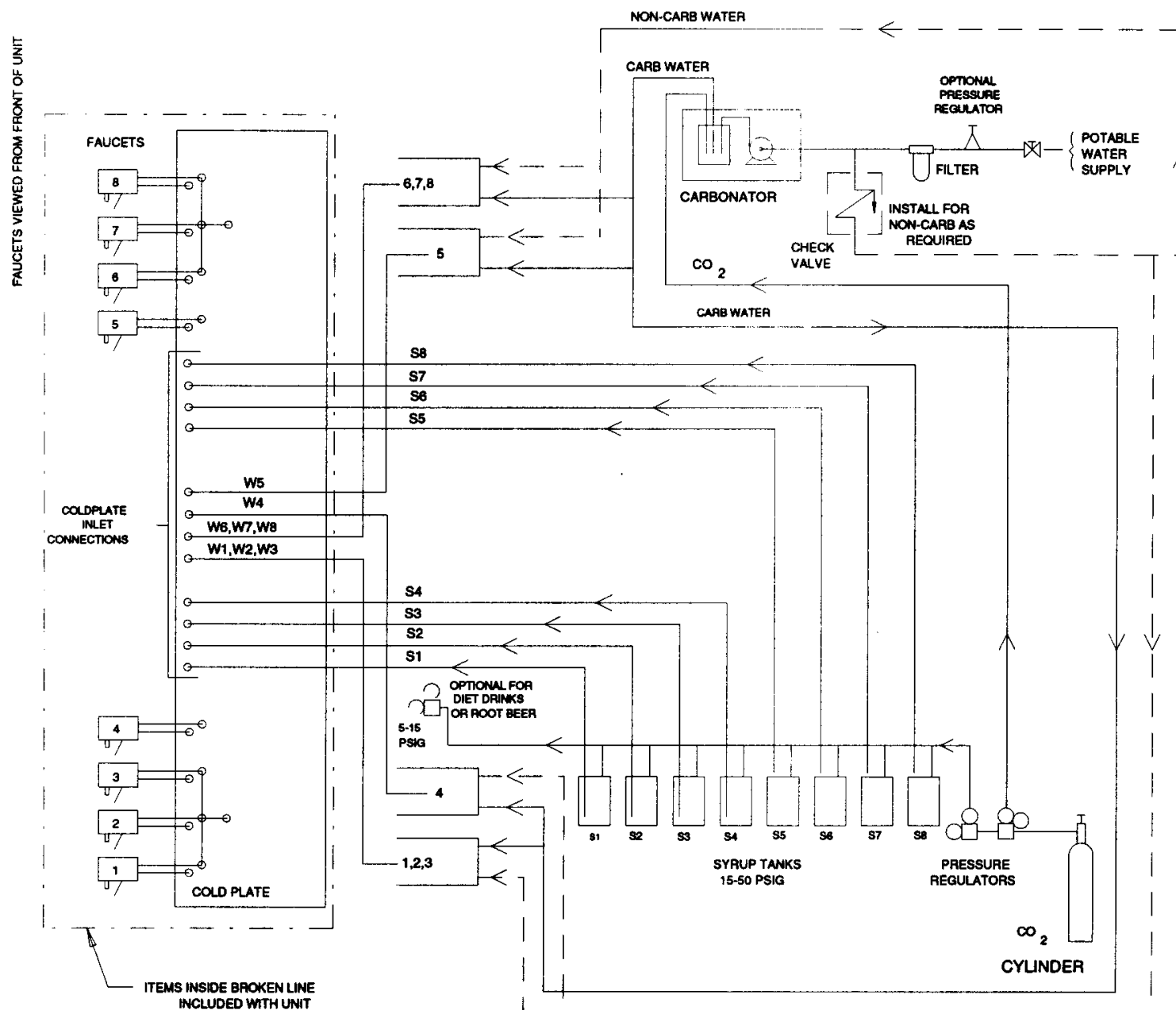


FIGURE 2. FLOW DIAGRAM

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MAINTENANCE

The following dispenser maintenance should be performed at the intervals indicated.

DAILY (or as required)

Remove foreign material from the vending area drip tray to prevent drain blockage. Clean vending area. Check for proper water drainage from the vending area drip tray.

MONTHLY

Clean and sanitize the hopper interior and the beverage system if applicable (see CLEANING INSTRUCTIONS)

ADJUSTMENTS

CO₂ REGULATORS ADJUSTMENTS



WARNING: CO₂ displaces oxygen. Strict attention *must* be observed in the prevention of CO₂ (carbon dioxide) gas leaks in the entire CO₂ and soft drink system. If a CO₂ gas leak is suspected, particularly in a small area, *immediately* ventilate the contaminated area before attempting to repair the leak. Personnel exposed to high concentration of CO₂ gas will experience tremors which are followed rapidly by loss of consciousness and suffocation.

NOTE: To readjust CO₂ regulator to a lower setting, loosen adjusting screw lock nut, then turn screw to the left (counterclockwise) until pressure gage reads 5 psi lower than new setting will be. Turn the adjusting screw to the right (clockwise) until the gage registers new setting, then tighten the lock nut.

Adjusting Carbonator CO₂ Regulator.

UNIT WITH INTEGRAL (BUILT-IN) COLD CARBONATOR

Adjust CO₂ regulator for the Unit integral (built-in) carbonator at 60-psi maximum.

UNIT REQUIRING REMOTE CARBONATOR

Adjust CO₂ regulator for the remote carbonator to CO₂ pressure specified in manual provided with the carbonator.

Adjusting Syrup Source CO₂ Regulator.

SUGAR SYRUP TANKS CO₂ REGULATOR

Adjust syrup tanks CO₂ regulator to a minimum of 45-psi.

SYRUP PUMPS (BAG-IN-BOX SYSTEM)

Adjust the syrup pumps CO₂ regulator to 70-psi. *DO NOT EXCEED MAXIMUM CO₂ PRESSURE SPECIFIED ON THE SYRUP PUMPS.*

ADJUSTING DISPENSING VALVES WATER FLOW RATE

(see Figure 3)

1. Remove cover from the dispensing valve by lifting the front cover up 1/4 inch and pulling forward.
2. Install syrup diversion tube assembly on the dispensing valve by pushing rubber end of the syrup diversion tube onto the syrup outlet of the inner nozzle.
3. Measure the water flow rate by dispensing water into a graduated cup for a set period of time.

NOTE: Adjusting screw stops are built into the valve to prevent leakage when the screws are adjusted too far clockwise. Stop adjusting clockwise when turning resistance increases. Turn the screw counterclockwise 1–1/2 turns after the stop are contacted.

4. Turn the water flow regulator adjusting screw to the left (counterclockwise) to decrease the water flow rate or turn the adjusting screw to the right (clockwise) to increase the water flow rate, then recheck the flow rate. Adjustments should be no more than 1/4 turn at a time.
5. Remove syrup diversion tube from the dispensing valve, then install cover on the dispensing valve.

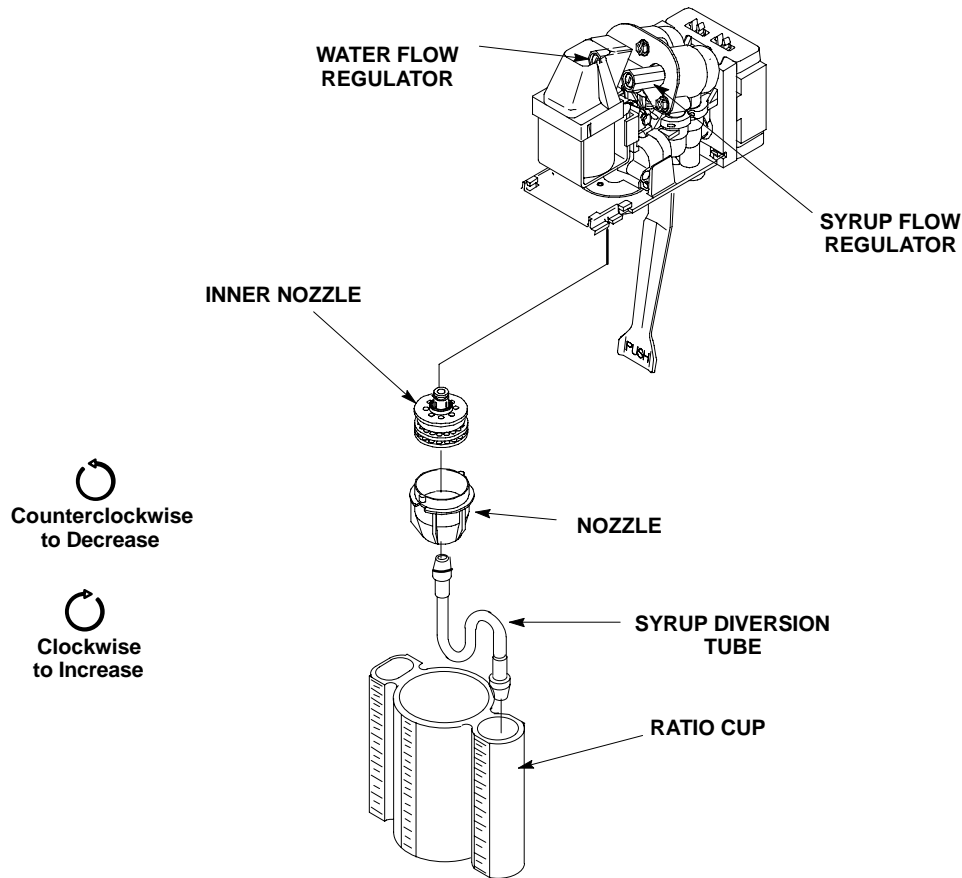


FIGURE 3. UF-1 DISPENSING VALVE

ADJUSTING WATER-TO-SYRUP “RATIO” (BRIX) OF DISPENSED PRODUCT

(see Figure 3)

NOTE: Make sure the dispensing valve water flow rate is as desired before adjusting the valve for Water-to-Syrup “Ratio” (Brix) of the dispensed product.

Adjust Water-to-Syrup “Ratio” (Brix) of the dispensed product by using ratio cup (P/N 311100000) and syrup diversion tube assembly (P/N 319540000) as follows:

1. Remove cover from the dispensing valve by lifting front cover up 1/4 inch and pulling forward.

2. Install syrup diversion tube assembly on the dispensing valve by pushing the rubber end of the syrup diversion tube onto the syrup outlet of the inner nozzle.

Notice: Refer to syrup manufacturer's recommendations on syrup package for water-to-syrup ratio.

3. Dispense enough to fill syrup diversion tube with syrup.
4. Hold large chamber of the ratio cup under the dispensing valve nozzle. Place free end of the syrup diversion tube into the syrup chamber marked for the proper ratio. Dispense approximately 6 ounces of water into the ratio cup. Water and syrup levels should be even in cup.

Note: Adjusting screw stops are built into the valve to prevent leakage when the screws are adjusted clockwise too much. Stop adjusting clockwise when turning resistance increases. Turn the screw counterclockwise 1–1/2 turns after the stop are contacted.

5. **Adjusting Syrup Flow Regulator** – If water and syrup levels are uneven in the ratio cup, adjust by turning the dispensing valve syrup flow regulator adjusting screw labeled **SYRUP** as follows.
 - A. For less syrup, turn the adjusting screw counterclockwise no more than 1/4 turn at a time.
 - B. For more syrup, turn the adjusting screw clockwise no more than 1/4 turn at a time.
6. Repeat water-to-syrup ratio test and adjust syrup flow regulator as many times as necessary until proper ratio of dispensed drink is achieved.
7. Remove syrup diversion tube assembly from dispensing valve.
8. Install dispensing valve front cover.

START-UP AND OPERATING INSTRUCTIONS

Fill the hopper with ice. Dispense a large cup of ice. Repeat this procedure when ever the dispenser has run out of ice.

In normal operation, pushing the ice dispenser lever will cause ice to flow from the ice chute. Ice flow will continue to flow as long as the lever is held depressed.



CAUTION: Use caution to avoid spilling ice when filling the dispenser. Clean up immediately any spilled ice from filling or operating the dispenser. To prevent contamination of the ice, the lid *must* be installed on the dispenser at all times.

If the dispenser fails to dispense beverage or ice, refer to TROUBLESHOOTING in back of the manual.

AUGER ASSEMBLY BREAKDOWN

1. For cleaning, the auger assembly is constructed for simple (tools not required) breakdown. First remove the tower cover (item 69) by removing the 2 knurled screws.
2. Once the tower cap is out of the way you will see a wire retainer (item 77). By placing your fingers on the backside of the ice chute (item 65) with your thumbs pointing upward, place the thumbs on the retainer wire and with a slight upward movement push the wire retainer towards the rear of the unit. The retainer should pop out of the saddle and swing backwards.
3. At this point, you should be able to pull up on the ice chute and remove it from the assembly. You will notice that the ice chute is made up of three pieces. That is the ice chute, the ice chute cover and the auger gate which is respectively (Items 65, 66, and 67). Take note so that when reassembling the ice chute, the auger gate cradles in the ice chute with the short tang side up.
4. The auger (Item 73) can now be removed by just grasping it and pulling up. Notice that the bottom of the auger has a depression in the form of a D pattern. When replacing the auger, it will be necessary to rotate the auger after insertion in the tube to engage the motor shaft.

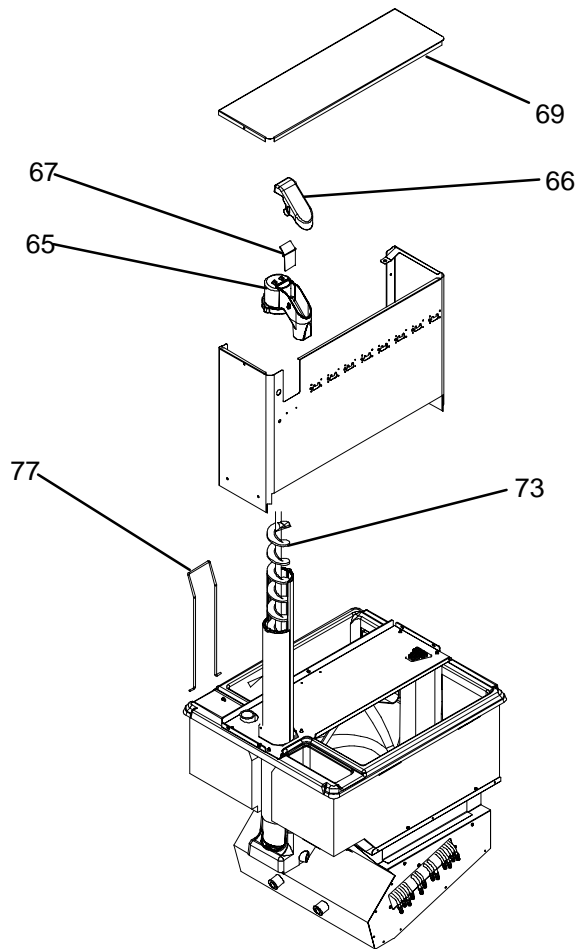


FIGURE 4. AUGER ASSEMBLY

CLEANING AND SANITIZING INSTRUCTIONS



WARNING: Disconnect electrical power to the dispenser before cleaning. *Do not* use metal scrapers, sharp objects, or abrasives on the ice storage hopper, top cover, and the agitator disk as damage may result. *Do not* use solvents or other cleaning agents as they may attack the plastic material.

Soap Solution – Use a mixture of mild detergent and warm (100° F) potable water.

Sanitizing Solution – Use 1/2-ounce of household bleach in one gallon of potable water. Preparing the sanitizing solution to this ratio will create a solution of 200 PPM.

Cleaning Dispenser

1. CLEANING EXTERIOR SURFACES

IMPORTANT: Perform the following daily.

- A. Remove cup rest from the drip tray.
- B. Wash the drip tray with soap solution. Rinse with potable water and allow solution to run down the drain.

- C. Wash cup rest with soap solution and rinse with potable water. Install cup rest in drip tray.
- D. Clean all exterior surfaces of the dispenser with soap solution and rinse with potable water.

2. CLEANING INTERIOR SURFACES



CAUTION: When pouring liquid into the hopper, *do not* exceed the rate of 1/2-gallon per minute.

IMPORTANT: Perform the following at least once a month.

- A. Lift drip tray to expose the hopper, then then remove all ice from the hopper.
- B. The drip tray can be removed from the dispenser by grasping at rear side panels and pulling gently outward.

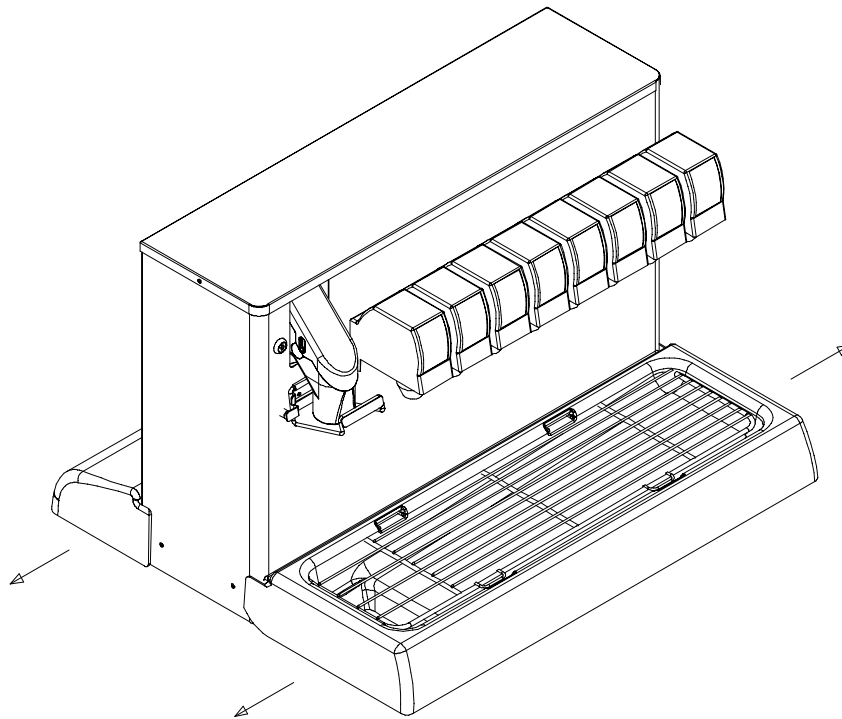


FIGURE 5. DRIP TRAY AND REAR COVER REMOVAL

- C. Remove agitator disk and agitator assembly.
- D. Remove tower cover by removing two thumb screws.
- E. Move the retaining bail to the rear of the tower which will allow removal of the ice chute assembly.
- F. Grasp the auger by the shaft end and lift out the auger tube. Take care not to damage either end of the auger.
- G. Remove the auger tube by lifting upward. The tube will separate into two halves for easy cleaning when fully removed.
- H. Open the front door of the cabinet below the hopper. This will give you access to the lower auger drive area and the passage between the hopper and the auger for cleaning.
- I. Using the previously prepared detergent solution, clean the valves, the hopper covers, agitator disk, agitator assembly, interior of the hopper, both halves of the ice chute, auger, auger tubes, and the lower auger area of the auger housing. Thoroughly rinse all of the previously cleaned parts with potable water.

- J. Reassemble the agitator assembly and disc into the hopper. Make certain the retaining screw is tight.
 - K. Using a mechanical spray bottle filled with sanitizing solution, spray the entire interior of the hopper and the agitator assembly. Go to the lower auger drive area and also spray with sanitizing solution. Allow to air dry.
 - L. Using the spray bottle, spray the inside of the two halves of the auger tube, the auger, the two halves of the chute assembly, and the undersides of the right and left covers. Allow to air dry.
 - M. Reassemble the two halves of the auger tube and place back into it's mounting. Holding the auger by the upper shaft end, insert into the guide tube. Make certain that the auger slips into it's drive pin. The chute assembly will not assemble properly if the auger is not seated on it's drive pin. Reassemble the upper auger and chute assembly onto the auger and lock down by snapping the ball onto the upper housing. Reinstall the tower cover with the thumb screws.
 - N. Reinstall the covers. Put the right cover on first before you close the left cover.
3. Last are the auger housings (Items 74 and 75). They are dislodged by pulling upward. Check their orientation and the fact that the longer tube is on the front side. When positioning the housings back in the dispenser, the longer tube should be placed first so as to seat in the lower housing to set up the orientation (top and bottom are marked on end of the tube tab at the top), otherwise the ice chute spout will not point towards the front of the dispenser.

Cleaning Dispensing Valves

Refer to addendum supplied with the unit that is applicable to the manufacturer of the valves installed on the unit.

Sanitizing Syrup Tanks System

Only trained and qualified persons should perform these cleaning and sanitizing procedures.

Sanitize syrup tanks system as follows:

1. Remove all the quick disconnects from all the tanks. Fill a suitable pail or bucket with soap solution.
2. Submerge all disconnects (gas and liquid) in the soap solution and then clean them using a nylon bristle brush. **(Do not use a wire brush)**. Rinse with clean water.
3. Prepare sanitizing solution and using a mechanical spray bottle, spray the disconnects. Allow to air dry.
4. Using a clean, empty tank, prepare five (5) gallons of the sanitizing solution. Rinse the tank disconnects with approximately 9 oz. of the sanitizing solution. Close the tank.
5. Prepare cleaning tank by filling clean five (5) gallon tank with a mixture of mild detergent and potable water (120°F).
6. Connect a gas disconnect to the tank and then apply one of the product tubes to the cleaning tank. Operate the appropriate valve until liquid dispensed is free of any syrup.
7. Disconnect cleaning tank and hook up sanitizing tank to syrup line and CO₂ system.
8. Energize beverage faucet until chlorine sanitizing solution is dispensed through the faucet. Flush at least two (2) cups of liquid to ensure that the sanitizing solution has filled the entire length of the syrup tubing.
9. Allow sanitizer to remain in lines for fifteen (15) minutes.
10. Repeat the step above, applying a different product tube each time until all tubes are filled with the sanitizing solution.

11. For post-mix valves, remove the nozzle and syrup diffuser and clean them in a mild soap solution. Rinse with clean water and reassemble the nozzle and syrup diffuser on the valve.
12. For pre-mix valves, disconnect all product tubes from the tank of sanitizing solution and then open the valves to allow the pressure to be relieved. Remove the valves from the dispenser, disassemble and wash thoroughly in a mild soap solution.
13. Rinse the parts in clean water, reassemble the valve and reconnect it to the dispenser.
14. Discard the tank of sanitizing solution and reconnect the product (syrup or pre-mix) tanks. Operate the valves until all sanitizer has been flushed from the system and only product (syrup or pre-mix) is flowing.

Sanitize B-I-B Systems

1. Remove all the quick disconnects from all the B-I-B containers.
2. Fill a suitable pail or bucket with soap solution.
3. Submerge all disconnects (gas and liquid) in the soap solution and then clean them using a nylon bristle brush. **(Do not use a wire brush).** Rinse with clean water.
4. Using a plastic pail, prepare approximately five (5) gallons of sanitizing solution.
5. Rinse the B-I-B disconnects in the sanitizing solution.
6. Sanitizing fittings must be attached to each B-I-B disconnect. If these fittings are not available, the fittings from empty B-I-B bags can be cut from the bags and used. These fittings open the disconnect so the sanitizing solution can be drawn through the disconnect.
7. Place all the B-I-B disconnects into the pail of sanitizing solution. Operate all the valves until the sanitizing solution is flowing from the valve. Allow sanitizer to remain in lines for fifteen (15) minutes.
8. Remove the nozzle and syrup diffuser from each valve and clean them in a soap solution. Rinse with clean water and reassemble the nozzle and syrup diffuser to the valve.
9. Remove the sanitizing fittings from the B-I-B disconnects and connect the disconnects to the appropriate B-I-B container. Operate the valves until all sanitizer has been flushed from the system and syrup is flowing freely.

ICE AUGER SPEED CONTROL

The ice auger is a variable speed device. A potentiometer is used to control this speed. The potentiometer is located on the CB 1 control board (see Figure 4). The CB 1 control board is located inside the electrical control box which is below the counter facing towards the front of the counter. Removing the three screws and cover will expose the CB 1 Control board. By turning the potentiometer knob located on the CB1 control board CCW (counterclockwise) will increase the speed of the ice delivery. Turning the potentiometer knob CW (clockwise) will decrease the speed of the ice delivery.

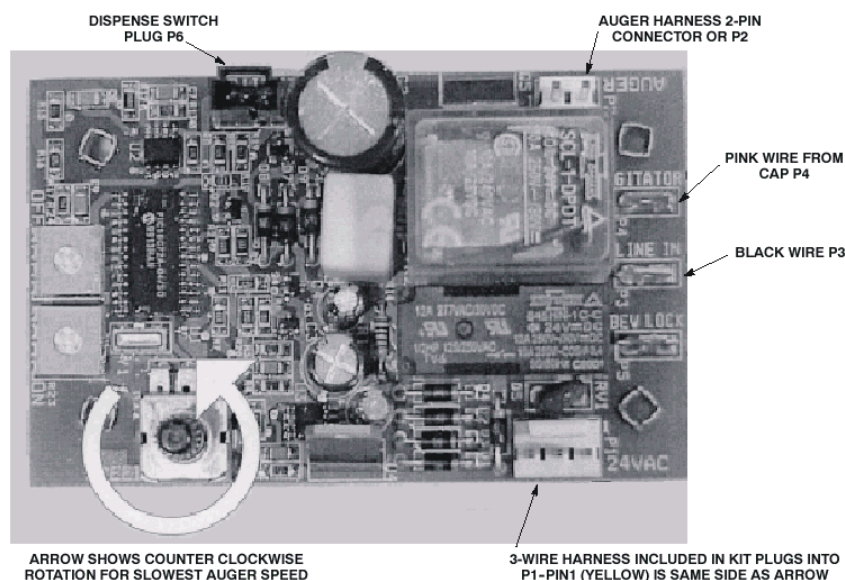


FIGURE 6. ICE AUGER SPEED CONTROL

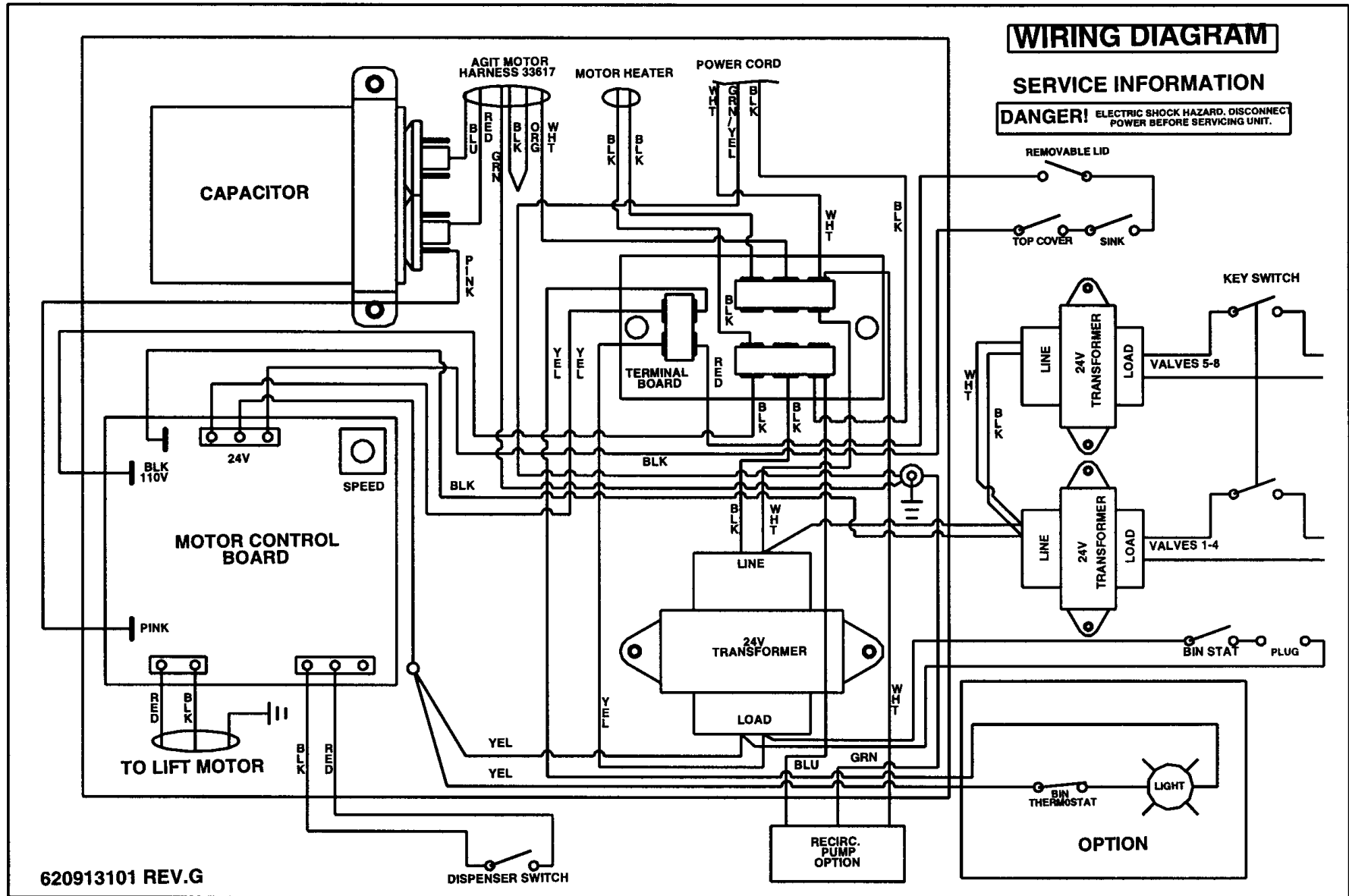


FIGURE 7. WIRING DIAGRAM

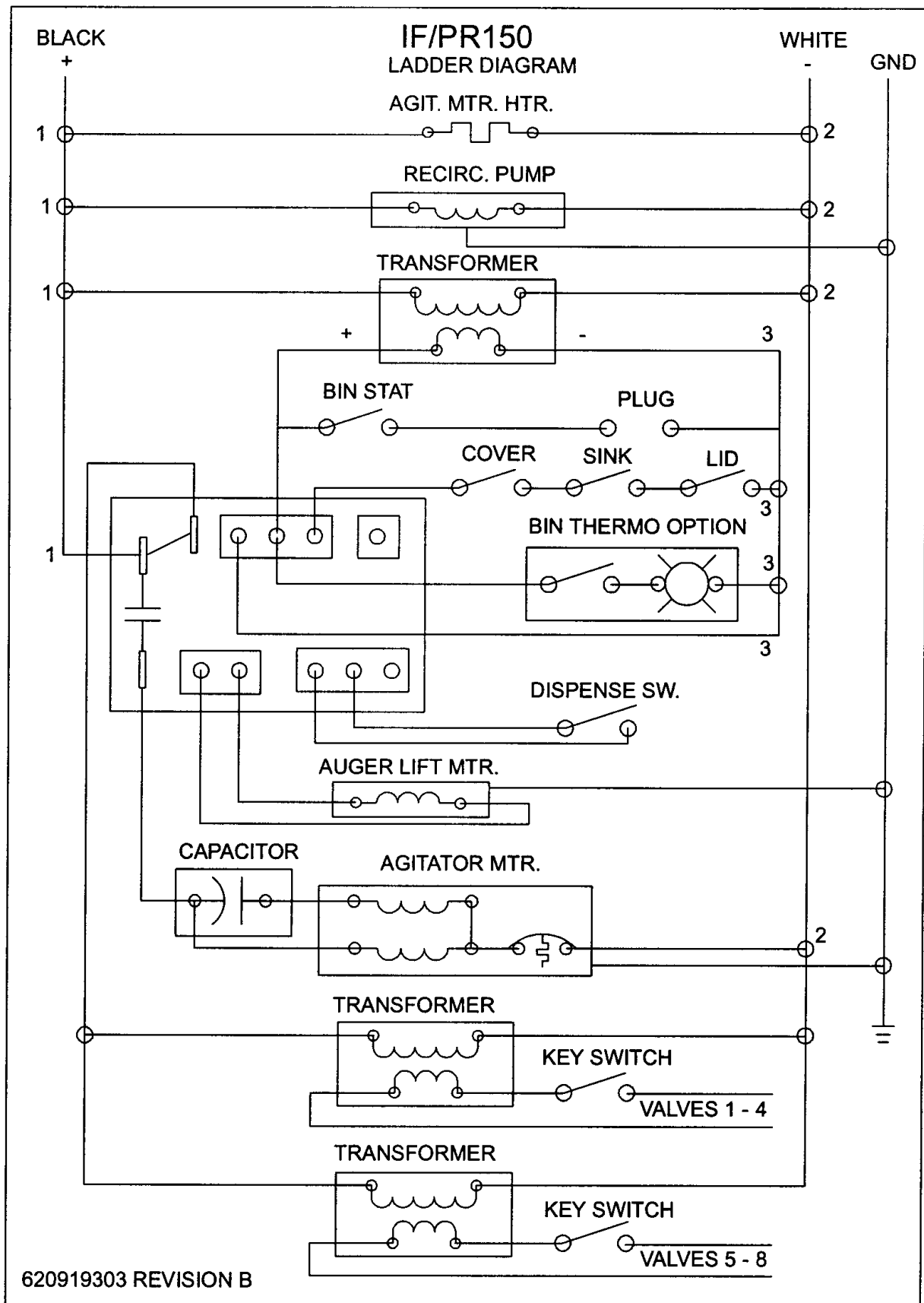


FIGURE 8. LADDER DIAGRAM

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TROUBLESHOOTING

IMPORTANT: Only qualified Personnel should service internal components or electrical wiring.



WARNING: If repairs are to be made to a syrup system, disconnect syrup supply from the applicable syrup system, then relieve the system pressure before proceeding. If repairs are to be made to the CO₂ system, stop dispensing, shut off the CO₂ supply, then relieve the system pressure before proceeding. If repairs are to be made to the unit electrical system, *make sure* electrical power is disconnected from the unit before proceeding.

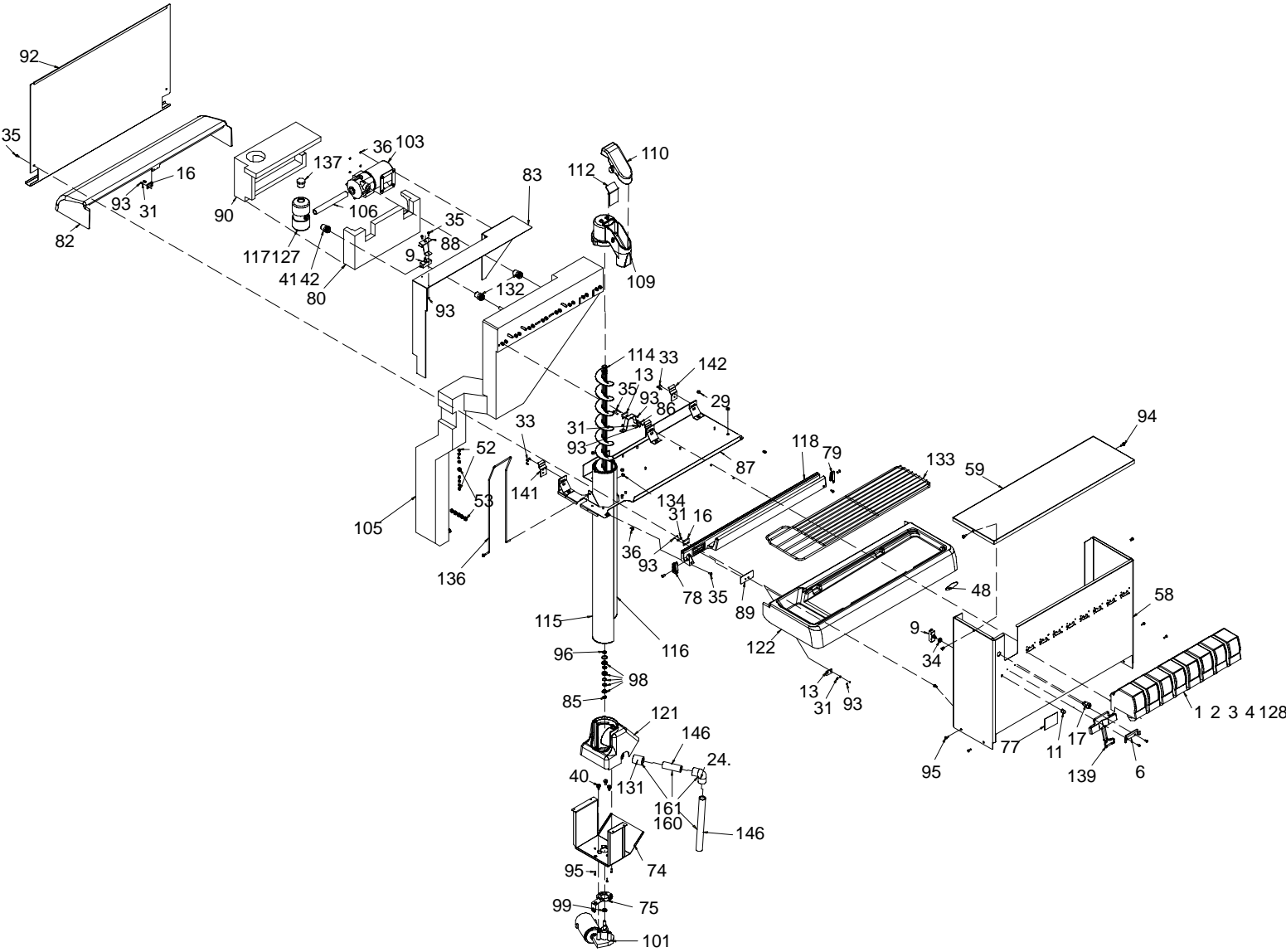
Should your unit fail to operate properly, check that there is power to the unit and that the hopper contains ice. If the unit does not dispense, check the following chart under the appropriate symptoms to aid in locating the defect.

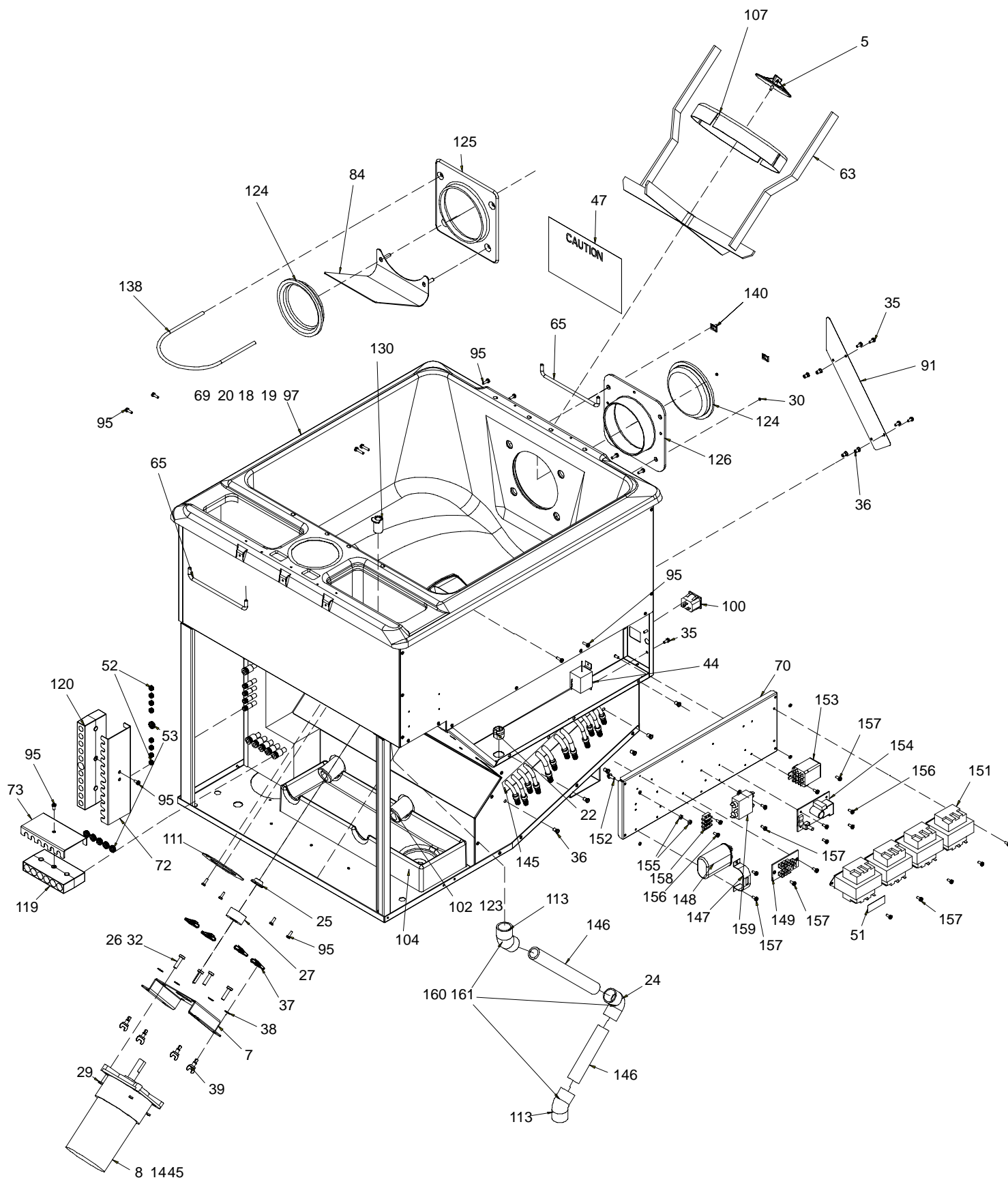
Trouble	Probable Cause		Remedy
BLOWN FUSE OR CIRCUIT BREAKER	A.	Short circuit in electrical wiring.	A. Repair electrical wiring.
	B.	Inoperative 24 VAC transformer.	B. Replace transformer.
	C.	Inoperative agitator motor.	C. Replace agitator motor.
	D.	Shorted motor.	D. Replace Agitator Auger motor.
AGITATOR DOES NOT TURN, AUGER DOES NOT TURN.	A.	No electrical power.	A. Restore electrical power.
	B.	Bent depressor plate (does not actuate switch).	B. Replace depressor plate.
	C.	Inoperative dispensing switch.	C. Replace dispensing switch.
	D.	Inoperative interlocks, lids not closed.	D. Replace interlocks.
	E.	Inoperative timer board.	E. Replace timer board.
	F.	Inoperative 24 VAC transformer.	F. Replace transformer.
ICE DISPENSES CONTINUOUSLY.	A.	Stuck or bent depressor plate (does not release switch).	A. Replace depressor plate.
	B.	Inoperative dispensing switch.	B. Replace dispensing switch.
	C.	Improper switch installation.	C. Correct switch installation.
	D.	Inoperative timer board.	D. Replace timer board.
SLUSHY ICE. WATER IN HOPPER.	A.	Blocked drain.	A. Unplug and flush out the drain.
	B.	Unit not sitting level.	B. Level the unit.
	C.	Poor ice quality due to water quality or icemaker problems.	C. Install water filter system. For icemaker problems, consult icemaker manual.
	D.	Improper use of flaked ice.	D. Use correct ice.
AGITATOR TURNS, AUGER DOES NOT TURN.	A.	Inoperative auger motor.	A. Replace auger motor.
	B.	Inoperative or improper setting of speed control.	B. Replace speed control or re-adjust speed control.

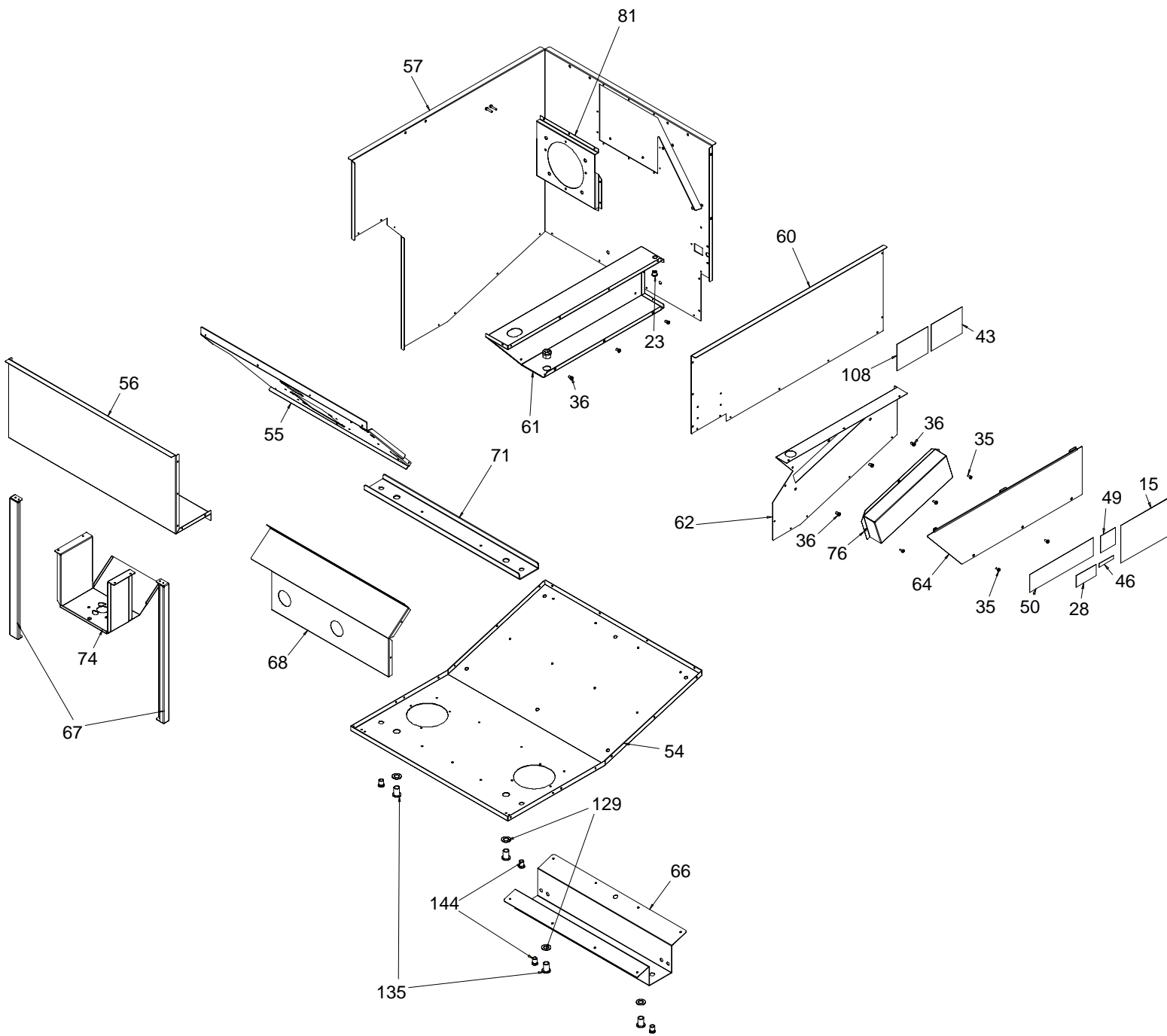
Trouble	Probable Cause	Remedy
AGITATOR TURNS, AUGER DOES NOT TURN (CONT'D)	C. Inoperative rectifier.	C. Replace rectifier.
	D. Ice jam.	D. Clear ice jam.
	E. Inoperative timer board.	E. Replace timer board.
AUGER TURNS, AGITATOR DOES NOT.	A. Inoperative agitator motor.	A. Replace agitator motor.
	B. Inoperative motor capacitor.	B. Replace motor capacitor.
	C. Inoperative timer board.	C. Replace timer board.
BEVERAGES DONOT DISPENSE	A. No 24 volts to dispensing valves.	A. Make sure unit is connected to electrical power. Check 24 VAC transformer.
	B. No CO ₂ pressure.	B. Check CO ₂ regulator. Check CO ₂ tank pressure.
BEVERAGES TOO SWEET.	A. Carbonator not operating.	A. Consult carbonator manual.
	B. No CO ₂ pressure in carbonator.	B. Check CO ₂ regulator. Check CO ₂ tank pressure.
	C. Dispensing valve brix requires re-adjustment.	C. Refer to dispensing valve manufacturer for brix adjustment instructions.
BEVERAGES NOT SWEET ENOUGH	A. Depleted syrup supply.	A. Replenish syrup supply.
	B. Dispensing valve brix requires re-adjustment.	B. Refer to dispensing valve manufacturer for brix adjustment instructions.
BEVERAGES NOT COLD.	A. Unit standing with no ice in it's hopper.	A. Replenish ice supply.

NOTE: Contact your local syrup or beverage equipment distributor for additional information and trouble shooting of your beverage system.

ILLUSTRATED PARTS LIST







PR150BC ASSEMBLY

Item No.	Part No.	Name
1	1919	Mounting Block Ass'y, UF-1
2	1950	Cover, Valve, Back
3	1951	Cover, Valve, Front
4	1966	Dispensing Valve
5	15087	Retainer, Agitatotr
6	27107	Retainer, Ice Lever
7	29303R	Plate, Motor Mount
8	30794	Heater, Agitator Motor, 115v
	32826	Heater, Agitator Motor, 230v
9	02070	Kit Switch, includes switch, boot, and spacer
10	30995	Cord Ass'y, 115v
	620302901	Cord Ass'y, 230v
11	31007	Boot, Switch
12	31827	Wire Harness, Dispensing Valve
13	31981	Actuator
14	620307901	Gear Motor Kit, 115/120V 50/60HZ, includes motor, seal gasket, and hardware
	32824	Gear Motor, 230v 50/60HZ
15	620913101	Label, Wiring 115v
	620919341	Label, Wiring 230v
16	32953	Reed Switch Ass'y
17	32977	Switch, Key
18		
19		
20		
21		
22	50458	Strain Relief
23	50573	Snap Bushing, .375 I.D.
24	50951	Fitting, Elbow
25	51859	Seal, Motor Shaft
26	52132	Adhesive, Locktite
27	52876	Gasket, Motor Shaft
28	620911202	Label, Operate Auger Speed
29	70018	Hex Nut, 1/4-20 Keps
30	70023	Hex Nut, No. 4-40 STCA Keps
31	70048	Washer, .449 I.D.
32	70260	Machine Screw, Phil Rd Hd, 1/4-20 By 1-In. Long
33	70320	Pop Rivet, 125 Dia.
34	70847	Spacer, Switch
35	70894	Machine Screw, Phil Truss Hd, No. 8-32 By 3/4-In. Long
36	70959	Nut, No. 8-32
37	70992	Receptacle, 1/4 Turn
38	70993	Retainer, 1/4 Turn
39	70994	Stud, Wing Hd, 1/4 Turn
40	71028	Bolt, 1/4-20
41	720509208	Fitting, Push Connector, 3/8 By 3/8-NPTF
42	750700502	Clip, Locking, 3/8
43	620919303	Label, Wiring Ladder
44	638009387	Switch, Bin Control

PR150BC ASSEMBLY (CONT'D)

Item No.	Part No.	Name
45	90432	Label, Warning, Disconnect
46	90580	Label, Identification Data
47	90629	Label, Clean Hopper
48	91486	Medallion, Cornelius Logo
49	91956	Label, Warning Chiller Disconnect
50	92067	Label, Operation, Agitation Timer
51	92305	Label, Notice Transformer
52	31525003	O-Ring, .239 I.D. By .070 CS
53	31525017	O-Ring, .426 I.D. By .070 CS
54	620028201	Base, Cabinet
55	620028202	Plate, Motor Mount LH
	620028252	Plate, Motor Mount RH
56	620028204	Cover, Access LH
	620028269	Cover, Access RH
57	620028205	Wrap, Cabinet LH
	620028254	Wrap, Cabinet RH
58	620028209	Tower, Valve Mounting LH
	620028256	Tower, Valve Mounting RH
59	620028211	Cover, Tower Top
60	620028213	Wrap, Cabinet, Front LH
	620028255	Wrap, Cabinet, Front RH
61	620028214	Electrical Box LH
	620028257	Electrical Box RH
62	620028216	Panel, Base LH
	620028258	Panel, Base RH
63	620028218	Agitator Ass'y
64	620028222	Cover, Electrical Box LH
	620028261	Cover, Electrical Box RH
65	620028226	Bolt, 1/4-20
66	620028227	Bracket, Leg Adapter
67	620028232	Support Bracket, Auger Motor
68	620028234	Bracket, Lower Motor Mount LH
	620028263	Bracket, Lower Motor Mount RH
69	620028235	Hopper Ass'y LH
	620517201	Hopper Ass'y RH
70	620028223	Plate, Mounting
71	620028246	Stiffener, Base
72	620028249	Plate, Syrup Lines Alignment
73	620028250	Plate, Water Lines Alignmen
74	620028253	Bracket, Auger Motor Mount, Right-Hand
75	620028270	Plate, Auger Motor Spacing
76	620028282	Cover, Inlet Lines
77	620906404	Label, Ice Notice
78	620043104	End Cap, Hinge, Left-Hand
79	620043105	End Cap, Hinge, Right-Hand
80	620043201	Insulation Box Foamed
81	620043206	Icemaker Sleeve Mounting Box
82	620043507	Lid, Ice Fill, Back
83	620044601	Plate, Pump Mounting LH
	620044602	Plate, Pump Mounting RH
84	620044614	Plate, Deflector
85		
86	620045301	Bracket, Reed Switch

PR150BC ASSEMBLY (CONT'D)

Item No.	Part No.	Name
87	620045724	Base, Tower LH
	620045727	Base, Tower RH
88	620045904	Bracket, Dispense Switch
89	620045958	Bracket Ass'y, Interlock Switch
90	620046005	Cover, Reservoir
91	620046017	Cover, Bin Thermostat
92	620048102	Panel, Tower, Back
93	70076	Hex Nut, Keps, No. 8-32
94	70188	Screw, Knurled Hd, No. 8-32
95	70204	Screw, Self-Tapping, No. 8-32
96		
97	620711401	Insulation, Stop Ice Conduit
98	629088578	SuperSeal Kit
99		
100	620314201	Connector, Power Inlet
101	629087456	SuperSeal Upgrade Kit – units built before 2/02/2001 (Includes Motor, Seals, and Motor Housing)
	629087489	Motor and SuperSeal Asy Kit – units built after 2/01/2001 (Includes Motor and Seals)
102	620403001	Cold Plate LH
	620403002	Cold Plate RH
103	620403008	Pump, Recirculating
104	629087415	Drain Tray with Elbow Kit
105	620407601	Coil Pack Ass'y LH
	620407622	Coil Pack Ass'y RH
106	620407801	Fitting, Nipple, 1/2 By 1/2 NPTF
107	620503801	Agitator, Disk
108	620918901	Label, Plumbing
109	620504001	Ice Chute
110	620504002	Cover, Ice Chute
111	620504006	Seal, Hopper Conduit
112	620504011	Gate, Auger
113	620504021	Fitting, Elbow
114	620505502	Auger
115	620505703	Tube Ass'y, Auger, Front
116	620505704	Tube Ass'y, Auger, Back
117	620506512	Reservoir, Recirculating
118	620506513	Hinge, Drain Trough LH
	620506538	Hinge, Drain Trough RH
119	620506518	Block, Connector, Water Lines
120	620506519	Block, Connector, Syrup Lines
121	620506531	Housing, Auger
122	620517136	Drip Tray Ass'y Black, LH
	620517138	Drip Tray Ass'y Black, RH
123		
124	620516602	Cover, Icemaker Sleeve
125	620517501	Collar, Icemaker Sleeve
126	620517601	Sleeve, Icemaker
127	620202849	Propylene Glycol
128	620700602	Sheet Metal Screw, Phil Rd Hd, No. 10-16 By 1-In. Long
129	620701123	Washer, 9/16 I.D.
130	620718101	Strainer, Drip Tray
131	620704603	Coupling

PR150BC ASSEMBLY (CONT'D)

Item No.	Part No.	Name
132	620704604	Fitting, 3/8 By 1/2 MPT
133	620708524	Cup Rest
134	620705201	Pushon Nut, 3/16
135	620705401	Insert Nut, 1/2-13
136	620705501	Retainer, Ice Chute Holddown
137	620708202	Plug
138	620708908	Tube, Bin Stat
139	620709301	Lever, Ice
140	620709601	Clip, Pushon
141	620709604	Clip, Back Lid, Left-Hand
142	620707605	Clip, Back Lid, Right-Hand
143	620709901	Pop Rivet, 125 Dia.
144	620710201	Insert, 3/8-16
145	620710301	Stop, Insulation Foam Inlets
146	50336	PVC Pipe, 3/4
147	30514	Strap, Capacitor 115V
	620045302	Strap, Capacitor 230V
148	30774	Capacitor, Agitator Motor 115v
	620314301	Capacitor, Agitator Motor 230v
149	31107	Terminal Board
150	33617	Wire Harness, Agitator Motor
151	449999999	Transformer, 120V 60HZ
	560002114	Transformer, 230V 60HZ
152	70223	Screw, No. 10-32 By 3/4-In. Long
153	33082	Relay
154	620311701	Timer, Agitator 115V
	620311702	Timer, Agitator 230V
155	70015	Hex Nut, No. 10-32
156	70147	Sheet Metal Screw, Phil Rd Hd, No. 6 By 1/2-In. Long
157	70217	Sheet Metal Screw, No. 8 By 1/2-In. Long
158	32244	Terminal Board, 230V only
159	620307301	Filter
160	50158R	Armaflex
161	50326	Armaflex Tape
162	620307301	Filter RFI 230v only
163	620304601	Varistor Ass'y 230v only
164	629087412	6" Leg Kit (Not Shown)
165	629087430	Interlock Switch Bracket Kit (Not Shown)
166	70739	Key, Keyswitch Replacement (Not Shown)



WARRANTY

IMI Cornelius Inc. Products Company warrant that all equipment and parts are free from defects in material and workmanship under normal use and service. For a copy of the warranty applicable to your Cornelius product, in your country, please write, fax or telephone the IMI Cornelius office nearest you. Please provide the equipment model number and the date of purchase.

Locate the office in your area on the Cornelius web site, www.cornelius.com, under the contacts tab.

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