CED Series 1500

Operation Manual

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1500

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ABOUT THIS MANUAL

This booklet is an integral and essential part of the product. Please carefully read the guidelines and warnings contained herein as they are intended to provide the user with essential information for the continued safe use and maintenance of the product. In addition, it provides ***GUIDANCE ONLY*** to the user on the correct services and site location of the unit.

BEFORE GETTING STARTED

Each unit is tested under operating conditions and is thoroughly inspected before shipment. At the time of shipment, the carrier accepts responsibility for the unit. Upon receiving the unit, carefully inspect the carton for visible damage. If damage exists, have the carrier note the damage on the freight bill and file a claim with carrier. Responsibility for damage to the dispenser lies with the carrier.

The installation and relocation, if necessary, of this product must be carried out by qualified personnel with up-to-date safety and hygiene knowledge and practical experience, in accordance with current regulations.

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SAFETY NOTICES

READ ALL SAFETY INSTRUCTIONS BEFORE USING THIS UNIT.

This manual contains important safety information and all applicable safety precautions must be observed. To reduce the risk of fire, electric shock, damage to the equipment or personal injury when using this unit all instuctions/warnings on the product being used must be followed:

⚠ WARNING

Text following the Warning signal indicates a hazardous situation, which if not avoided, will result in death or serious injury. Be sure to read all Warning statements before proceeding with the installation.

⚠ CAUTION

Text following the Caution signal indicates a hazardous situation, which if not avoided, could result in death or serious injury. Be sure to read the Caution statements before proceeding with the installation

⚠ ATTENTION

Text following the Attention signal addresses a situation that if not followed could potentially damage the equipment. Be sure to read the Attention statements before proceeding

NOTE

Text following the Note signal provides you with information that may help you more effectively perform the installation procedures within this manual. Disregarding information will not cause damage or injury, however it may limit the performance of the dispenser.

IMPORTANT SAFETY INSTRUCTIONS

⚠ Intended Use

- The dispenser is for indoor use only
- This appliance is intended to be used in commercial applications such as restaurants or similar.
- This appliance should not be used by children or infirm persons without supervision.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Cleaning and user maintenance shall not be performed by children without supervision.
- This unit is not a toy and children should be advised not to play with the appliance.
- The min/max ambient operating temperature for the dispenser is 40°F to 90°F (4°C to 32°C).
- Do not operate unit below minimum ambient operation conditions.
- Should freezing occur, cease operation of the unit and contact authorized service technician.
- The maximum tilt for safe operation is 5°.
- This appliance must be installed and serviced by a professional.

⚠ Carbon Dioxide (CO_2)

- **WARNING:** Carbon Dioxide (CO2) is a colorless, noncombustible gas with a light pungent odor. High percentages of CO_2 may displace oxygen in the blood.
- **WARNING:** Prolonged exposure to CO_2 can be harmful. Personnel exposed to high concentrations of CO_2 gas will experience tremors which are followed by a loss of consciousness and suffocation.
- **WARNING:** If a CO_2 gas leak is suspected, immediately ventilate the contaminated area before attempting to repair the leak.
- **WARNING:** Strict attention must be observed in the prevention of CO_2 gas leaks in the entire CO_2 and soft drink system.

⚠ Power

- Follow all local electrical codes when making connections.
- Check the dispenser name plate label, located behind the splash plate for correct electrical requirements of unit. ***DO NOT*** plug into a wall electrical outlet unless the current shown on the serial number plate agrees with local current available.
- Each dispenser must have a separate electrical circuit.
- ***DO NOT*** use extension cords with this unit.
- ***DO NOT*** 'gang' together with other electrical devices on the same outlet.
- **WARNING:** Always disconnect electrical power to the unit to prevent personal injury before attempting any internal maintenance.
- The resettable breaker switch should not be used as a substitute for unplugging the dispenser from the power source to service the unit.
- Only qualified personnel should service internal components of electrical control housing.
- **WARNING:** Make sure that all water lines are tight and units are dry before making any electrical connections
- If this dispenser is installed in an area that is susceptible to ±10% variation of the nominal line voltage, consider installing a surge protector or similar protection device.

⚠ Water Notice

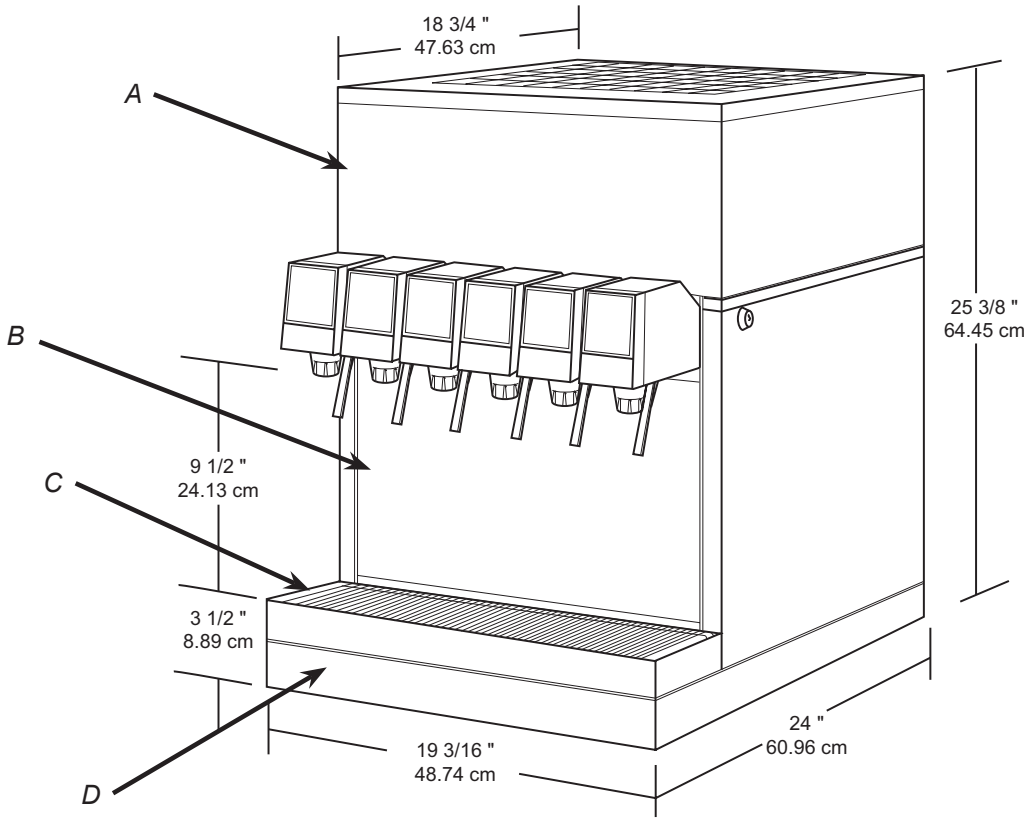
- Provide an adequate, potable water supply. Water pipe connections and fixtures directly connected to a potable water supply must be sized, installed, and maintained according to federal, state, and local codes.
- The water supply line must be at least a 3/8 inches (9.525 mm) pipe with a minimym of 25 PSI (0.172 MPA) line pressure, but not exceeding a maximum of 50 PSI (0.345 MPA). Water pressure exceeding 50 PSI (0.345 MPA) must be reduced to 50 PSI (0.345 MPA).
- Use a filter in the water line to avoid equipment damage and beverage off-taste. Check the water filter periodically, as required by local conditions.
- **CAUTION:** The water supply must be protected by means of an air gap, a backflow prevention device (located upstream of the CO_2 injection system) or another approved method to comply with NSF standards. A leaking inlet water check valve will allow carbonated water to flow back through the pump when it is shut off and contaminate the water supply.
- **CAUTION:** Ensure the backflow prevention device complies with ASSE and local standards. It is the responsibility of the installer to ensure compliance.

⚠ Automatic Agitation

- Units are equipped with an automatic agitation system and will activate unexpectedly.
- **CAUTION:** Do not place hands or foreign objects in the water bath tank. Unplug the dispenser during servicing, cleaning, and sanitizing.
- **CAUTION:** To avoid personal injury, do not attempt to lift the dispenser without assistance. For heavier dispensers, use a mechanical lift.

PRE-INSTALLATION

Specifications & Features



A. Bonnet
B. Splash Plate
C. Cup Rest
D. Drip Tray

DIMENSIONS

Width: 19.2 inches (487 mm)
Depth: 24 inches (610 mm)
Height (w/out legs): 25.4 inches (645 mm)

WEIGHT

Shipping: 150 lbs (68.2 kg)
Empty: 130 lbs (59.0 kg)
Operating: 220 lbs (99.8 kg)

ELECTRICAL

115 VAC / 60 Hz / 4.5 Amps
230 VAC / 50 Hz / 4.5 Amps

ICE BATH

Capacity: 30.0 lbs (13.6 kg)

PLAIN WATER SUPPLY

Min Flowing Pressure: 25 PSIG (0.172 MPA)
Max Static Pressure: 50 PSI (0.345 MPA)

CARBON DIOXIDE (CO_2) SUPPLY

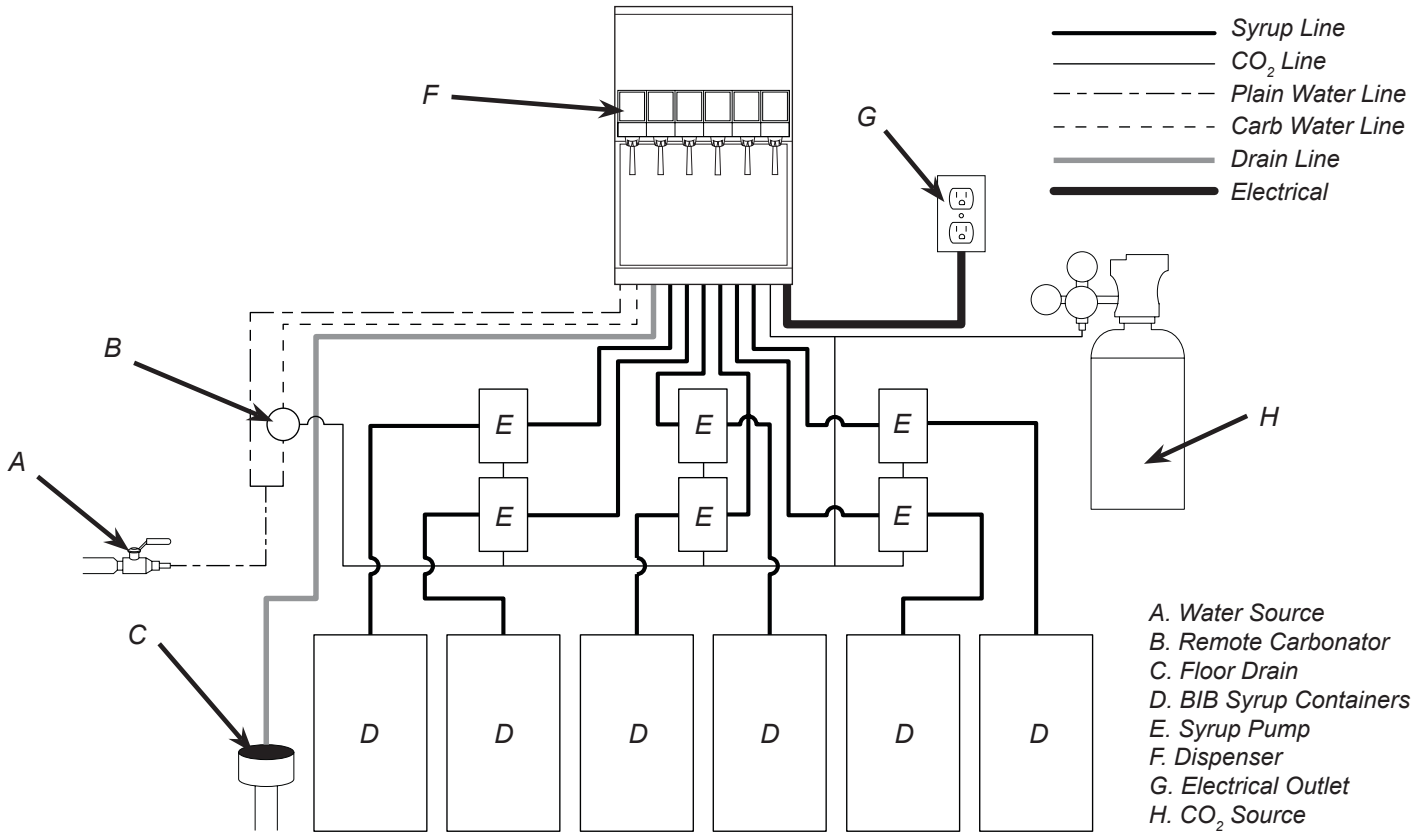
Min Pressure: 70 PSIG (0.483 MPA)
Max Pressure: 80 PSIG (0.552 MPA)

FITTINGS

Water Inlet: 3/8 inch barb
Brand Syrup Inlets: 3/8 inch barb
CO_2 Inlet: 3/8 inch barb

This unit emits a sound pressure level below 70 dB

General System Overview



Pre-Installation Checklist

TOOLS REQUIRED:

- ☐ Oetiker Pliers
- ☐ Tubing Cutters
- ☐ Wrench
- ☐ Slotted Screwdriver
- ☐ Phillips Screwdriver
- ☐ Drill

BIB SYSTEM:

- ☐ BIB Rack
- ☐ BIB Syrup Boxes
- ☐ BIB Regulator Set
- ☐ BIB Connectors

POST MIX ACCESSORIES:

- ☐ CO_2 Regulator
- ☐ CO_2 Supply
- ☐ Chain for CO_2 Tank
- ☐ Beverage Dispenser
- ☐ Beverage Tubing
- ☐ Oetiker Clamp Fittings
- ☐ Water Booster (Lancer PN: 82-3401 or MC-163172
- ☐ Water Regulator (recommended)

CONSIDER THE FOLLOWING BEFORE INSTALLATION:

- ☐ Location of Water Supply Lines
- ☐ Location of Drain
- ☐ Location of Electrical Outlet
- ☐ Location of Heating and Air Conditioning Ducts
- ☐ Do you have enough space to install the dispenser?
- ☐ Is countertop level?
- ☐ Can the countertop support the weight of the dispenser?
- ☐ Is dispenser located away from direct sunlight or overhead lighting?
- ☐ Not in area where water jet could be used.

INSTALLATION

Read This Manual

This manual was developed by Lancer Corporation as a reference guide for the owner/operator and installer of this dispenser. Please read this manual before installation and operation of this dispenser. Please see pages 13-17 for troubleshooting or service assistance. If the service cannot be corrected please call your Service Agent or Lancer Customer Service. Always have your model and serial number available when you call.

Unpacking the Dispenser

1. Remove top portion of carton by lifting up.
2. Remove top inner carton pad and corners.
3. Remove accessory kit of loose parts from drip tray.
4. Lift unit up by plywood shipping base and remove lower portion of carton.

NOTE

Inspect unit for concealed damage. If evident, notify delivering carrier and file a claim against the same.

5. Remove splash plate.

NOTE

Splash plate is located under unit on shipping base for Series 1500E models only

6. Remove plywood shipping base from unit by moving unit so that one side is off the counter top or table allowing access to screws on the bottom of the plywood shipping base.

NOTE

If unit is to be transported, it is advisable to leave the unit secured to the plywood shipping base.

7. If leg kit has been provided, assemble legs by tilting unit.

⚠ ATTENTION

DO NOT LAY UNIT ON ITS SIDE OR BACK. DO NOT USE DRIP TRAY FRAME FOR A HANDLE.

8. Remove accessory kit of loose parts from drip tray.

Selecting/Preparing a Counter Location

NOTE

The dispenser should only be installed in a location where it can be overseen by trained personnel

1. The dispenser is designed to sit on a flat, supported surface capable of supporting a minimum weight of 400 lbs (182 kg). Select a location that is in close proximity to a properly grounded electrical outlet, within five (5) feet (1.5 m) of a drain, and a water supply that meets the requirements shown in the Specifications section found on page 4.
2. Select a location for the syrup pumps, CO_2 tank, syrup containers, water filter (recommended), and remote carbonator. Please see General System Overview on page 5 for reference.
3. The dispenser may either be counter or leg mounted. When the dispenser is to be permanently bolted to the counter top, use Lancer Sealant Kit (PN 15-0010) to seal dispenser base to counter top.

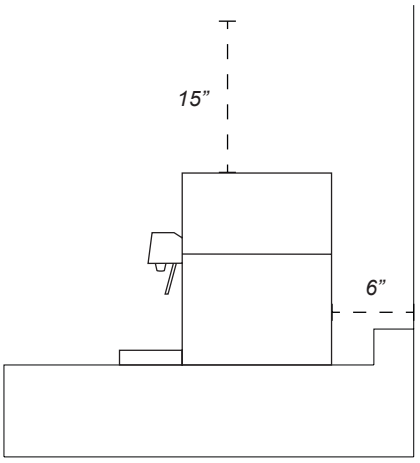
NOTE

NSF listed units must be sealed to the counter or have four (4) inch legs installed.

4. Condenser air is drawn in from the back grill located on the bonnet and discharged out the top of the bonnet. A minimum of fifteen (15) inches (380 mm) of clearance must be maintained over the top of the unit and a minimum of six (6) inches (152 mm) clearance behind the unit to provide for proper air flow and circulation.

⚠ ATTENTION

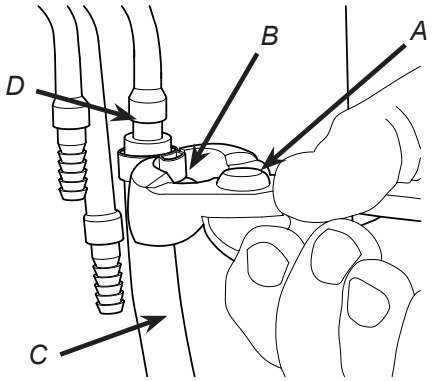
Failure to maintain specified clearance will cause the compressor to overheat and will result in compressor failure



5. Cut the necessary holes in counter for mounting in the designated dispenser location, using the template provided.

Dispenser Installation

1. Install the unit onto the counter.
2. Remove the bonnet from the dispenser by lifting up.
3. Remove the drip tray from the unit and connect the drain tube to the drain fitting located on the bottom. Secure drain tube with clamp provided in accessory kit.
4. Route the drain tube to a suitable drain and replace the unit's drip tray.
5. Route appropriate tubing from the syrup pump location to the syrup inlets. Connect tubing to inlets using the oetiker pliers and fittings. Repeat for all syrup connections.



A. Oetiker Pliers
B. Fitting
C. Tubing
D. Syrup/Water/CO_2 Inlet

6. Install remote carbonator per manufacturer's instructions.
7. Route appropriate tubing from the water source to the compressor deck fill hole, identified by the yellow cap, and ***ONLY*** connect tubing to water source.

NOTE

Leave 12 inches (305 mm) of extra tubing below the counter for servicing and moving the dispenser

8. Flush water supply line thoroughly.

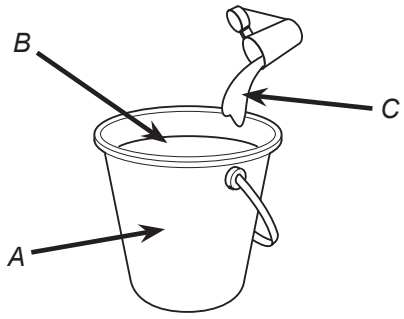
⚠ CRITICAL - to maximize performance

Carefully read this before filling the water bath tank. In order to optimize the maximum performance of the dispenser, the following MUST be adhered to:

9. Insert water line into a large bucket, and fill with approx. 5.4 gallons (20.4 L) of distilled water.
10. Add 1/8 oz (4 g) of baking soda to distilled water and stir.

⚠ ATTENTION

For proper function of the electronic ice bank control the total dissolved solids (TDS) measurements should be 300-500 ppm.



A. Bucket
B. Distilled Water (approx. 5.4 gal)
C. Baking Soda (approx. 1/8 oz)

11. Using a conductivity meter, measure the electric conductivity of the distilled water mixture.

⚠ ATTENTION

The E.C. measurement of the distilled water mixture must be between 100 and 300 uS/cm. Below 100 uS/cm, the compressor will not work properly and above 300 uS/cm could cause the lines to freeze.

12. Remove yellow cap from the water bath fill hole and insert and insert a funnel into the fill hole.
13. Remove the insulation strip from front of the refrigeration deck.
14. Carefully pour the distilled water mixture into the water bath tank until water flows out of the overflow tube at the front of the unit. (Repeat steps 9-11 if needed)

⚠ ATTENTION

The water bath compartment must be filled with water before plugging in the unit, otherwise the compressor fan may not operate properly.

15. Replace yellow cap, replace insulation, then connect water line to the water inlet in the front of the unit.

NOTE

Valves 2, 3, and 4 (on 5 valve units) and valves 3, 4, and 5 (on 6 valve units) have optional plain water or carbonated water capabilities. Use the Plumbing Diagram on page 29 to determine which valves are to be plumbed with plain water or carbonated water.

NOTE

Leave 12 inches (305 mm) of extra tubing below the counter for servicing and moving the dispenser

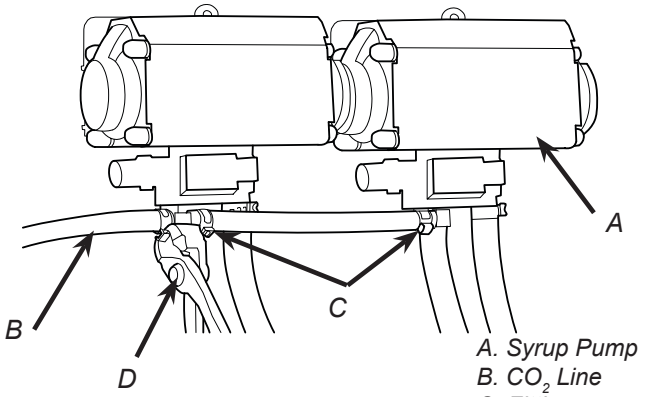
16. Route appropriate tubing from the syrup pump location to the carbonator CO_2 inlet and connect tubing to CO_2 inlet.
17. Re-attach splash plate and cup rest.
18. Plug in power cord to the unit control box.
19. Feed all tubing, power cord, and drain line through the counter top cutout.
20. Plug in the unit to a grounded electrical outlet then turn the unit on to begin building an ice bank.

⚠ WARNING

The dispenser must be properly electrically grounded to avoid serious injury or fatal electrical shock. The power cord has a three-prong grounded plug. If a three-hole grounded electrical outlet is not available, use an approved method to ground the unit. Follow all local electrical codes when making connections. Each dispenser must have a separate electrical circuit. Do not use extension cords. Do not connect multiple electrical devices on the same outlet.

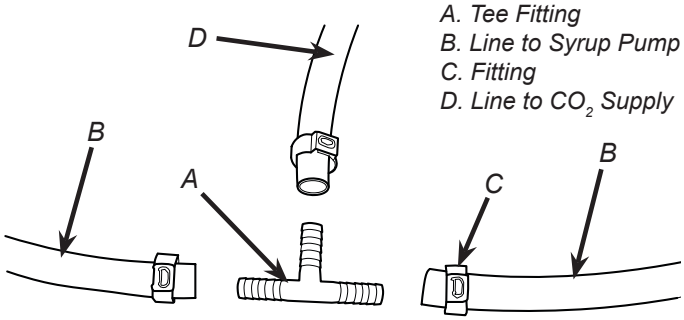
Installing Remote Syrup Pumps - Bag In Box

1. Install BIB rack and remote pumps according to manufacturers' instructions.
2. Once pumps and BIB rack are installed, measure and cut tubing to length between the pump CO_2 inlets, then connect tubing to all pumps.



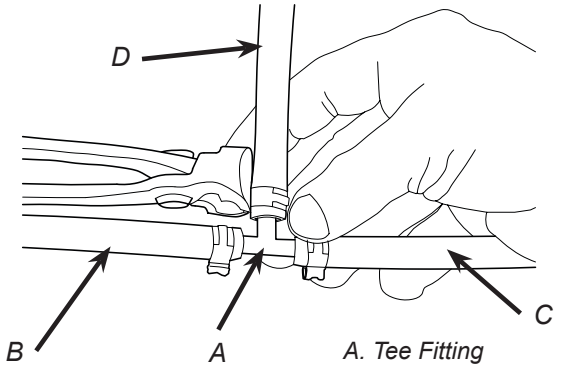
A. Syrup Pump
B. CO_2 Line
C. Fitting
D. Oetiker Pliers

3. Using tubing cutters, cut any pump CO_2 supply line and install tee fitting, then route appropriate tubing from the CO_2 supply to the tee fitting at syrup pumps.



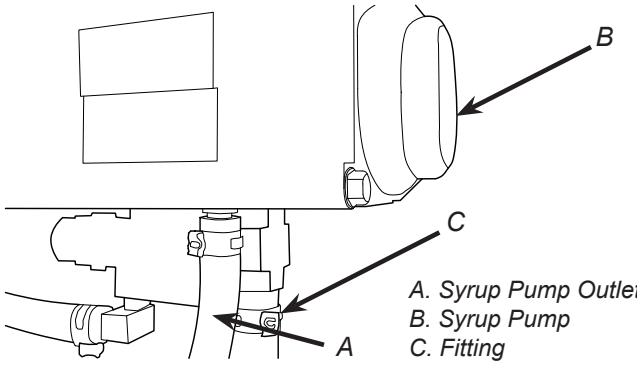
A. Tee Fitting
B. Line to Syrup Pump
C. Fitting
D. Line to CO_2 Supply

4. Cut tubing from CO_2 supply to tee fitting at syrup pumps and install another tee fitting.
5. Attach line from carbonator CO_2 inlet to tee fitting between syrup pumps and CO_2 supply.



A. Tee Fitting
B. Line to Tee at Syrup Pump
C. Line to CO_2 Supply
D. Dispenser CO_2 Inlet

6. Connect tubing from dispenser syrup inlet to the syrup pump outlet fitting. Repeat for each syrup line/pump.

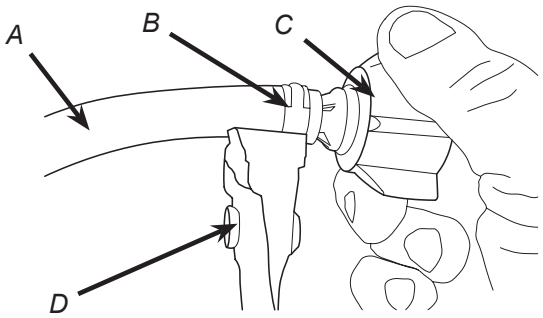


A. Syrup Pump Outlet
B. Syrup Pump
C. Fitting

7. Install BIB (bag in box) connectors onto the syrup pump inlet tubing.

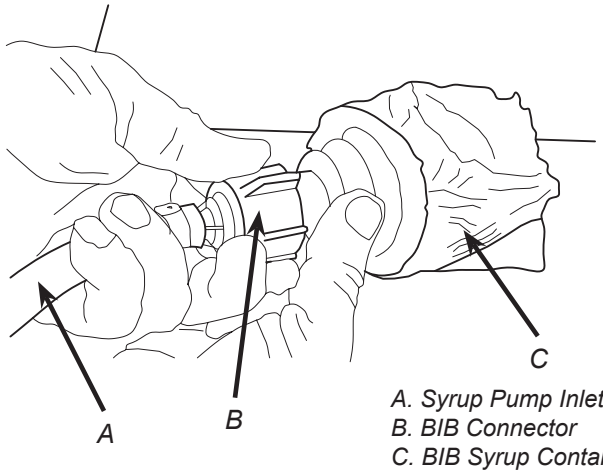
⚠ ATTENTION

Use proper connector for syrup manufacturer



A. Syrup Pump Inlet
B. Fitting
C. BIB Connector
D. Oetiker Pliers

8. Connect syrup BIBs to connectors. Repeat for each syrup line/pump and each flavor injector line/pump.



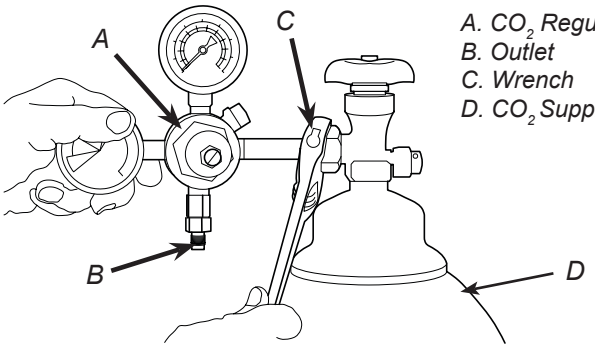
A. Syrup Pump Inlet
B. BIB Connector
C. BIB Syrup Container

Installing CO_2 Supply / Dispenser Setup

1. Connect high pressure CO_2 regulator assembly to CO_2 cylinder or bulk system.

⚠ ATTENTION

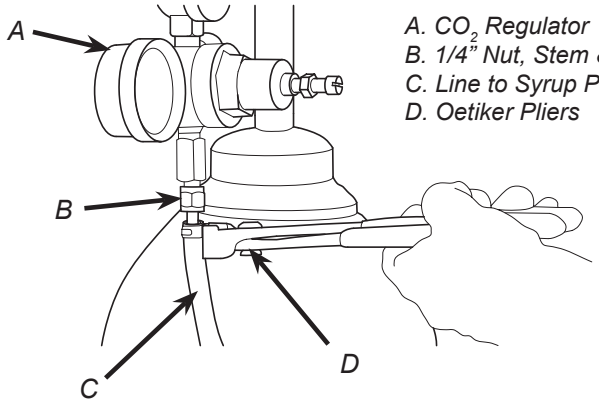
Before installing regulator, assure that a seal (washer or o-ring) is present in regulator attachment nut.



A. CO_2 Regulator
B. Outlet
C. Wrench
D. CO_2 Supply

- *Thread regulator nut on to tank, then tighten nut with wrench*

2. Connect a 1/4" nut, stem and seal to CO_2 regulator outlet. Then connect tubing routed from tee at syrup pumps.

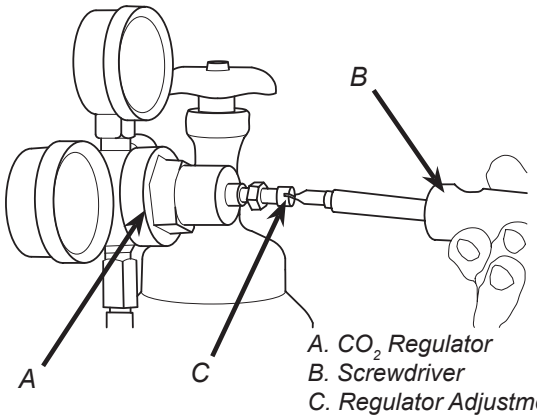


A. CO_2 Regulator
B. 1/4" Nut, Stem & Seal
C. Line to Syrup Pumps
D. Oetiker Pliers

3. Using a wrench, loosen lock nut on regulator adjustment screw then using a screwdriver back out lock nut screw all the way.

⚠ WARNING

DO NOT TURN ON CO_2 SUPPLY AT THIS TIME



A. CO_2 Regulator
B. Screwdriver
C. Regulator Adjustment Screw

4. Turn on water source then purge water to fill carbonator tank by opening carbonator relief valve. Close relief valve once water begins to comes out of relief valve.
5. Activate each valve until a steady flow of water is achieved.
6. Unplug the unit then unplug the Pump Motor Connector from the control box. Use the wiring diagram either on the unit control box or in the back of this manual for reference.

⚠ ATTENTION

Failure to disconnect the motor power supply will damage the carbonator motor, the pump and void the warranty

7. Turn on CO_2 and using a screwdriver, adjust regulator to 75 PSI (0.517 MPA) then tighten lock nut with wrench.
8. Activate each valve until gas-out is achieved.
9. Plug the Pump Motor Connector back into the control box then plug in unit.

NOTE

Pump Motor will run for a few seconds to fill carb tank

10. Re-attach bonnet.
11. Activate each valve until a steady flow of carbonated water is achieved.

Adjust Water Flow Rate & Syrup / Water Ratio

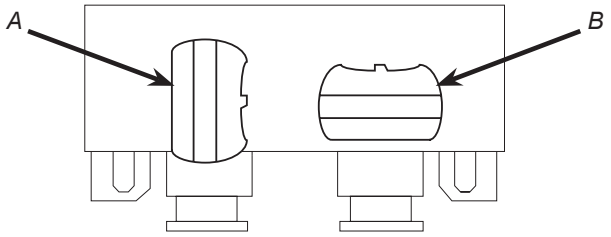
NOTE

The water flow can be adjusted between 1.25 oz/sec (37 ml/sec) and 2.50 oz/sec (74 ml/sec) on all dispensing valves using the following procedures:

NOTE

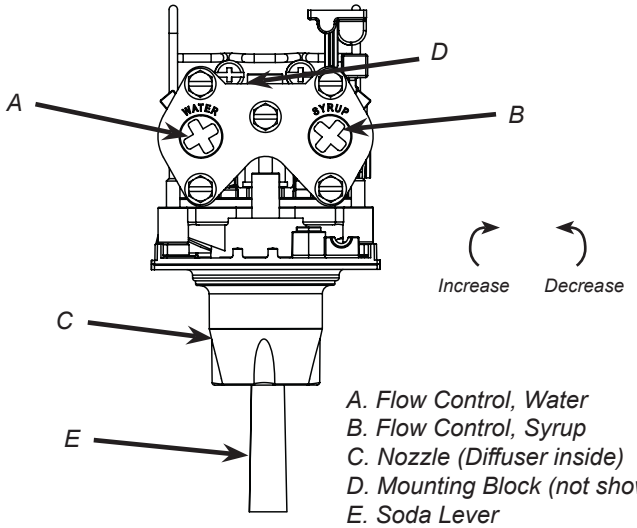
The refridgeration unit should have been running for at least one (1) hour before attempting to set flow rates on valves. The drink temperature should be no higher than 40°F (4.4°C) when flow rates are set. This is best done after the unit has already made an ice bank.

1. Close syrup shut-off at mounting block for first valve.



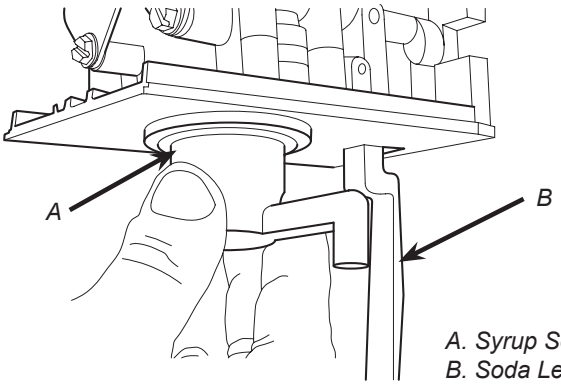
A. Plain Water ON
B. Syrup Closed

2. Slide up on ID panel until flow controls are exposed.
3. Using a Lancer ratio cup verify water flow rate (5 oz. in 4 sec.). Use a screwdriver to adjust if needed.



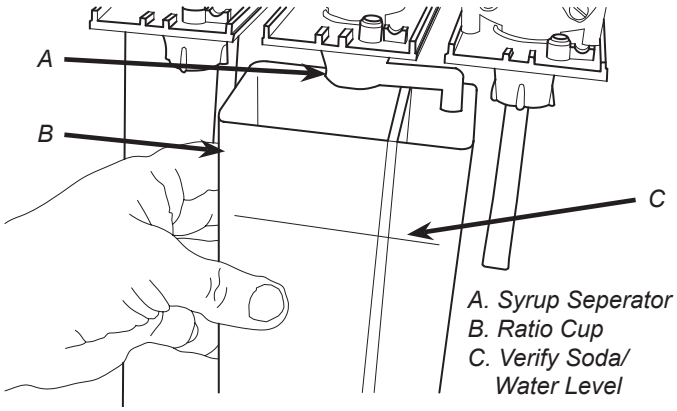
A. Flow Control, Water
B. Flow Control, Syrup
C. Nozzle (Diffuser inside)
D. Mounting Block (not shown)
E. Soda Lever

4. Remove nozzle by twisting counter clockwise and pulling down, then remove diffuser by pulling down.
5. Install Lancer (yellow) syrup seperator (PN 54-0031) in place of nozzle.



A. Syrup Seperator
B. Soda Lever

6. Re-open syrup shut-off at mounting block.
7. Activate valve to purge syrup until steady flow is achieved.
8. Using a Lancer ratio cup, activte the valve and capture a sample. Verify that the syrup level is even with the water level. Use a screwdriver to adjust if needed.



A. Syrup Seperator
B. Ratio Cup
C. Verify Soda/ Water Level

9. Repeat process for each valve.

MAINTENANCE

Scheduled Maintenance

As Needed	• Keep exterior surfaces of dispenser (include drip tray and cup rest) clean using a clean, damp cloth.
Daily	• Remove each nozzle and diffuser from each valve and rinse well in warm water. ***DO NOT*** use soap or detergent. This will cause foaming and off tast in finished product. • Remove cup rest and wash in warm soapy water. • Pour warm soapy water into the drip tray and wipe with a clean cloth. • With a clean cloth and warm water, wipe off all of the unt's exterior surfaces. ***DO NOT USE ABRASIVE SOAPS OR STRONG DETERGENTS.*** • Replace the cup rest and nozzles.
Weekly	• Taste each product for off tastes. • Remove cup rest and splash plate to view water level tube indicator. Replenish as required, and replace the cup rest and splash plate.
Monthly	• Unplug the dispenser from the power source. • Remove the bonnet and clean the dirt from the condenser using a soft brush. • Replace the bonnet and plug in the unit.
Every Six Months	• Clean and sanitize the unit using the appropriate procedures outlined in the Cleaning and Sanitizing section of this manual.
Yearly	• Clean water bath interior, including evaporator coils and refrigeration components. • Clean the entire exterior of the unit.

CLEANING AND SANITIZING

General Information

- Lancer equipment (new or reconditioned) is shipped from the factory cleaned and sanitized in accordance with NSF guidelines. The operator of the equipment must provide continuous maintenance as required by this manual and/or state and local health department guidelines to ensure proper operation and sanitation requirements are maintained.

NOTE

The cleaning procedures provided herein pertain to the Lancer equipment identified by this manual. If other equipment is being cleaned, follow the guidelines established by the manufacturer for that equipment.

- Cleaning should be accomplished only by trained personnel. Sanitary gloves are to be used during cleaning operations. Applicable safety precautions must be observed. Instruction warnings on the product being used must be followed.

⚠ ATTENTION

- **Use sanitary gloves when cleaning the unit and observe all applicable safety precautions.**
- ***DO NOT*** **use a water jet to clean or sanitize the unit.**
- ***DO NOT*** **disconnect water lines when cleaning and sanitizing syrup lines, to avoid contamination.**
- ***DO NOT*** **use strong bleaches or detergents; These can discolor and corrode various materials.**
- ***DO NOT*** **use metal scrapers, sharp objects, steel wool, scouring pads, abrasives, or solvents on the dispenser.**
- ***DO NOT*** **use hot water above 140° F (60° C). This can damage the dispenser.**
- ***DO NOT*** **spill sanitizing solution on any circuit boards. Insure all sanitizing solution is removed from the system.**

Cleaning and Sanitizing Solutions

Cleaning Solution

Mix a mild, non-abrasive detergent (e.g. Sodium Laureth Sulfate, dish soap) with clean, potable water at a temperature of 90°F to 110°F (32°C to 43°C). The mixture ratio is one ounce of cleaner to two gallons of water. Prepare a minimum of five gallons of cleaning solution. Do not use abrasive cleaners or solvents because they can cause permanent damage to the unit. Ensure rinsing is thorough, using clean, potable water at a temperature of 90°F to 110°F. Extended lengths of product lines may require additional cleaning solution.

Sanitizing Solution

Prepare sanitizing solutions in accordance with the manufacturer's written recommendations and safety guidelines. The solution must provide 100 parts per million (PPM) chlorine (e.g. Sodium Hypochlorite or bleach). A minimum of five gallons of sanitizing solution should be prepared. Any sanitizing solution may be used as long as it is prepared in accordance with the manufacturer's written recommendations and safety guidelines, and provides 100 parts per million (PPM) chlorine.

Cleaning and Sanitizing Syrup Lines

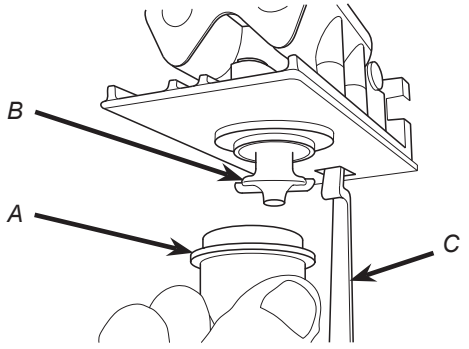
1. Disconnect syrup lines from BIB's
2. Place syrup lines, with BIB connectors, in a bucket of warm water.
3. Activate each valve to fill the lines with warm water and flush out syrup remaining in the lines.
4. Prepare Cleaning Solution described on previous page.
5. Place syrup lines, with BIB connectors, into cleaning solution.
6. Activate each valve until lines are filled with cleaning solution then let stand for ten (10) minutes.
7. Flush out cleaning solution from the syrup lines using clean, warm water.
8. Prepare Sanitizing Solution described above.
9. Place syrup lines into sanitizing solution and activate each valve to fill lines with sanitizer. Let sit for ten (10) minutes.
10. Reconnect syrup lines to BIB's and draw drinks to flush solution from the dispenser.
11. Taste the drink to verify that there is no off-taste. If off-taste is found, flush syrup system again.

⚠ CAUTION

Following sanitization, rinse with end-use product until there is no aftertaste. Do not use a fresh water rinse. This is a NSF requirement. Residual sanitizing solution left in the system creates a health hazard.

Cleaning and Sanitizing Nozzles

1. Disconnect power, so as to not activate valve while cleaning.
2. Remove nozzle by twisting counter clockwise and pulling down.
3. Remove diffuser by pulling down.



A. Nozzle
B. Diffuser
C. Soda Lever

4. Rinse nozzle and diffuser with warm water.
5. Wash nozzle and diffuser with cleaning solution then immerse in sanitizing solution and let sit for fifteen (15) minutes.
6. Set nozzle and diffuser aside and let air dry. ***DO NOT*** rinse with water after sanitizing.
7. Reconnect diffuser and nozzle.
8. Connect power.
9. Taste the drink to verify that there is no off-taste. If off-taste is found, flush syrup system again.

⚠ CAUTION

Following sanitization, rinse with end-use product until there is no aftertaste. Do not use a fresh water rinse. This is a NSF requirement. Residual sanitizing solution left in the system creates a health hazard.

TROUBLESHOOTING

TROUBLE	CAUSE	REMEDY
Water leakage around nozzle.	1. O-ring not properly installed above diffuser 2. O-ring is damaged or missing.	1. Install or replace o-ring correctly. 2. Replace o-ring.
Leakage between upper and lower bodies.	1. Gap between upper and lower valve bodies. 2. Worn or damaged paddle arm assemblies. 3. Cracked valve bodies	1. Tighten all six (6) retaining screws. 2. Replace paddle arm assemblies. 3. Replace Valve Body.
Miscellaneous leakage.	1. Gap between parts. 2. Damaged or improperly installed o-rings.	1. Tighten appropriate retaining screws 2. Replace or adjust appropriate o-rings
Insufficient water flow.	1. Insufficient incoming supply water pressure. 2. Shutoff on mounting block not fully open. 3. Foreign debris in water flow control. 4. Foreign debris in water pump strainer	1. Verify incoming supply water pressure is a minimum of 25 PSI (0.172 MPA). 2. Open shutoff fully. 3. Remove water flow control from upper body and clean out any foreign material to ensure smooth free spool movement. 4. Remove water pump strainer and clean.
Insufficient syrup flow.	1. Insufficent CO_2 pressure to BIB pumps. 2. Out of CO_2. 3. Shutoff on mounting block not fully open. 4. Foreign debris in syrup flow control. 5. Bad syrup pump.	1. Adjust CO_2 pressure to 80 PSI (0.550 MPA) [minimum 70 PSI (0.480 MPA)] for BIB pumps. 2. Replace CO_2 tank/refill. 3. Open shutoff fully. 4. Remove syrup flow control form upper body and clean out any foreign material to ensure smooth free spool movement. 5. Replace BIB pump.
Erratic ratio.	1. Incoming water and/or syrup supply not at minimum flowing pressure. 2. Foreign debris in water and/or syrup flow controls.	1. Check pressure and adjust 2. Remove flow controls from upper body and clean out any foreign material to ensure smooth free spool movement.
No product dispensed	1. Water and syrup shutoffs on mounting block not fully open. 2. The key switch on an electric valve is in the OFF position. 3. Cup lever arm or ID panel actuator on electric valve is not actuating the switch. 4. Electric current not reaching valve. 5. Improper or inadequate water or syrup supply. 6. Transformer Failure 7. Bad valve solenoid(s)	1. Open shutoff fully. 2. Turn key switch to ON position. 3. Repair 4. Check electric current supplied to valve. If current is adequate, check solenoid coil and switch, and replace if necessary. 5. Remove valve from mounting block and open shutoffs slightly and check water and syrup flow. If no flow, check dispenser for freeze-up or other problems 6. Reset transformer circuit breaker. If breaker trips again check for pinched wire harness at backblocks 7. Replace Solenoid(s)

TROUBLE	CAUSE	REMEDY
Water only dispensed; no syrup; or syrup only dispensed, no water	1. Water or syrup shutoff on mounting block not fully open. 2. Improper or inadequate water or syrup flow. 3. BIB supply too far from dispenser. 4. CO_2 pressure too low. 5. Stalled or inoperative BIB pump 6. Kinked line.	1. Open shutoff fully. 2. Remove valve from mounting block, open shutoffs slightly and check water and syrup flow. If no flow, check dispenser for freeze-up or other problems. Ensure BIB connection is engaged. 3. Check that BIB supply is within six (6) feet of the dispenser. 4. Check the CO_2 pressure to the pump manifold to ensure it is between 70 and 80 PSI (0.483 and 0.552 MPA). 5. Check CO_2 pressure and/or replace pump. 6. Remove kink or replace line.
No water just syrup, (Ice bank grew to water inlet line to carbonator tank.)	1. Low water bath level. 2. Unit not level. 3. Syrup in water bath. 4. Water cage is out of position. 5. Refrigerant leak. 6. Check water supply. 7. Carbonator timed out. 8. PCB malfunctioning.	1. Add water until it flows from overflow tube. 2. Level unit and add water. 3. Melt ice bank. Remove all water. Refill. Locate possible syrup leak area and repair. 4. Reposition water cage. 5. Find leak and recharge unit. (If unit is not frozen.) 6. Turn water ON and shut unit OFF, 7. Turn unit OFF then ON to reset 8. See page 18.
Valve will not shut off.	1. Cup lever may be sticking or binding. 2. Switch not actuating freely. 3. Solenoid armature not returning to bottom position.	1. Correct or replace lever. 2. Check switch for free actuation. 3. Replace defective armature or spring.
Syrup only dispensed. No water, but CO_2 gas dispensed with syrup.	1. Improper water flow to dispenser. 2. Carbonator pump motor has timed out. 3. Liquid level probe not connected properly to PCB. 4. Faulty PCB assembly. 5. Faulty liquid level probe. 6. Water bath frozen. 7. Water line frozen.	1. Check for water flow to dispenser (see Insufficient Water Flow on previous page). 2. Reset by turning the unit OFF and then 3. ON (by using the ON/OFF switch on top of the unit or unplugging unit momentarily). 4. Check connections of liquid level probe to PCB assembly. 5. Replace PCB assembly. 6. Replace liquid level probe. 7. Thaw water bath and repair faulty component. (See refrigeration related symptoms.) 8. Refer to “Compressor starts and continues to run until freeze and will not cut off” in Troubleshooting.

TROUBLE	CAUSE	REMEDY
Excessive foaming.	1. Incoming water or syrup temperature too high. 2. CO_2 pressure too high. 3. Water flow rate too high. 4. Nozzle and diffuser not installed. 5. Nozzle and diffuser not clean. 6. Air in BIB lines. 7. Poor quality ice. 8. High beverage temperature.	1. Correct prior to dispenser. Consider larger dispenser or pre-cooler. 2. Adjust CO_2 pressure downward, but not less than 70 PSI (0.483 MPA). 3. Re-adjust and reset ratio. Refer to “Adjust Water Flow Rate & Syrup/Water Ratio” Section on page 12. 4. Remove and reinstall properly. 5. Remove and clean. 6. Bleed air from BIB lines. 7. Check quality of ice used in drink. 8. Check refrigeration system.
Water continually overflows from water bath into drip tray.	1. Loose water connection(s). 2. Flare seal washer leaks. 3. Faulty water coil.	1. Tighten water connections. 2. Replace flare seal washer. 3. Replace water coil.
Compressor starts and continues to run until freeze and will not cut off.	1. PCB malfunctioning or faulty ice bank probe. 2. Ice bank probe positioned improperly. 3. Ice bank probe shorted to ground.	1. See page 18. 2. Check positioning of ice bank probe, and replace if needed. 3. Replace ice bank probe.
Warm drinks.	1. Restricted airflow. 2. Dispenser connected to hot water supply. 3. Refrigeration system not running. 4. Refrigerant leak. 5. Condenser fan motor not working. 6. Dirty condenser. 7. Dispenser capacity exceeded.	1. Check clearances around sides, top, and inlet of unit. Remove objects blocking airflow through grill. 2. Switch to cold water supply. 3. Refer to page 20, the correct relay will cause compressor failure. 4. Repair and recharge. 5. Replace condenser fan motor. 6. Clean condenser. 7. Add pre-cooler or replace with larger dispenser.
Compressor does not start (no hum), gas cooler fan does not run, and no ice bank.	1. There is a five (5) minute compressor and condenser fan delay. 2. Ice bank probe not completely submergered. 3. Circuit breaker or fuse tripped. 4. Inadeequate Voltage 5. PCB malfunctioning 6. Incorrect Wiring 7. Faulty ice bank probe. 8. Transformer failure. 9. Ice bank probe not connected properly to PCB.	1. Allow for five (5) minute delay to lapse. 2. Fill water reservoir until water flows from overflow tube. 3. Reset breaker or replace fuse. If problem persists: Determine reason and correct or electrical circuit overloaded; switch to another circuit. 4. Measure voltage across common and run terminal on compressor.Voltage must not drop below 90% of rated voltage. 5. See page 18. 6. Refer to wiring diagram and correct. 7. Replace ice bank probe. 8. Reset transformer circuit breaker. If breaker pops again, refer to “Circuit breaker tripping” in Troubleshooting. 9. Connect ice bank probe to PCB.

TROUBLE	CAUSE	REMEDY
Compressor does not start (no hum), but gas cooler fan motor runs.	1. Compressor relay capacitors or overload malfunctioning. 2. Inadequate voltage. 3. Incorrect wiring. 4. Compressor malfunctioning.	1. Replace compressor relay capacitors or overload. 2. Measure voltage across commom and run terminal on compressor. Voltage must not drop below 90% of rated voltage. 3. Refer to wiring diagram and correct. 4. Have the unit repaired by a qualified service technician.
Compressor does not start but hums.	1. Inadequate voltage. 2. Incorrect wiring. 3. Starting relay capacitors malfunctioning. 4. Compressor malfunctioning.	1. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage. 2. Refer to wiring diagram and correct. 3. Replace starting relay or capacitors. Be sure to use correct rating. Failure to use correct rating will cause compressor failure. 4. Have the unit repaired by a qualified service technician.
Compressor starts but does not switch off start winding (will run for only a few seconds before internal overload switches before internal overload switches compressor off).	1. Inadequate voltage. 2. Incorrect wiring. • Starting relay malfunctioning.	1. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage. 2. Refer to wiring diagram and correct. 3. Replace starting relay. Be sure to use correct relay. Failure to use correct relay will cause compressor failure.
Compressor starts and runs a short time but shuts off on overload.	1. Dirty condenser. 2. Insufficient or blocked air flow. 3. Inadequate voltage. 4. Incorrect wiring. 5. Defective condenser fan motor. 6. Refrigerant leak. 7. Compressor malfunctioning.	1. Clean the condenser. 2. Remove all obstruction and allow for minimum clearances of 8 inches (203 mm) over top. 3. Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage. 4. Refer to wiring diagram and correct. 5. Have the unit repaired by a qualified service technician. 6. Have the unit repaired by a qualified service technician. 7. Have the unit repaired by a qualified service technician.
Compressor runs normally, but water line is frozen.	1. Low water level in water bath. 2. Syrup in water bath. 3. Water cage is out of position. 4. Low refrigerant charge or slow refrigerant leak.	1. Add water to water bath until water runs out of overflow into drip tray. 2. Drain water from water bath and refill with clean water. 3. Reposition water cage. 4. Find and repair leak. Recharge system.
Compressor cycles on and off frequently during the initial pulldown and/or normal operations.	1. PCB malfunctioning 2. Defective probe. 3. Weak overload or pressure switch.	1. See page 18. 2. Replace probe. 3. Have the unit repaired by a qualified service technician.

TROUBLE	CAUSE	REMEDY
Circuit breaker tripping.	1. Valve wire harness shorted to itself or to faucet plate. 2. PCB is bad. 3. Secondary wire harness is bad. 4. Transformer failure.	1. Detect short by disconnecting input fasten to keylock and single pin connector. Restore power if breaker doesn't trip. Then valve wire harness is shorted. If OK, reconnect. 2. Detect short by disconnecting J1 connector (24 VAC input) from PCB. Restore power, if breaker doesn't trip. Then replace PCB. If breaker does trip, then PCB is OK. Reconnect J1 connector. 3. If it does not trip, locate short in secondary harness between transformer, PCB, and valve wire harness. 4. Detect short by disconnecting both transformerfastons and restore power. If breaker does trip, replace transformer.
BIB pump does not operate when dispensing valve opened.	1. A. Out of CO_2, CO_2 not turned on, or low CO_2 pressure. 2. Out of syrup. 3. BIB connector not tight. 4. Kinks in syrup or gas lines. 5. Bad BIB Pumps.	1. Replace CO_2 supply, turn on CO_2 supply, or adjust CO_2 pressure to 70-80 PSI (0.483-0.552 MPA) 2. Replace syrup supply. 3. Fasten connector tightly. 4. Straighten or replace lines. 5. Replace BIB pump.
BIB pump operated, but no flow.	1. Leak in syrup inlet or outlet line. 2. Defective BIB pump check valve.	1. Replace line. 2. Replace BIB pump
BIB pump continues to operate when bag is empty.	1. Leak in suction line. 2. Leaking o-ring on pump inlet fitting.	1. Replace line. 2. Replace o-ring.
BIB pump fails to restart after bag replacement.	1. BIB connector not on tight. 2. BIB connector is stopped up. 3. Kinks in syrup line 4. Bad BIB Pumps.	1. Tighten BIB connector. 2. Clean out or replace BIB connector. 3. Straighten or replace line. 4. Replace BIB pump.
BIB pump fails to restart when dispensing valve is closed.	1. Leak in discharge line or fittings. 2. Empty BIB. 3. Air leak on inlet line or bag connector.	1. Repair or replace discharge 2. Replace BIB. 3. Repair or replace.
No product out light.	1. Burned-out lamp 2. Faulty wiring or pressure switch in product line.	1. Replace lamp. 2. Repair or replace.
Low or no carbonation.	1. Low or no CO_2. 2. Excessive water pressure. 3. Worn or defective carbonator pump. 4. PCB malfunctioning.	1. Check CO_2 supply. Adjust CO_2 pressure to 70 PSI (0.483 MPA). 2. Water regulator should be set at 50 PSI (0.345 MPA) 3. Replace carbonator pump. 4. See page 18.

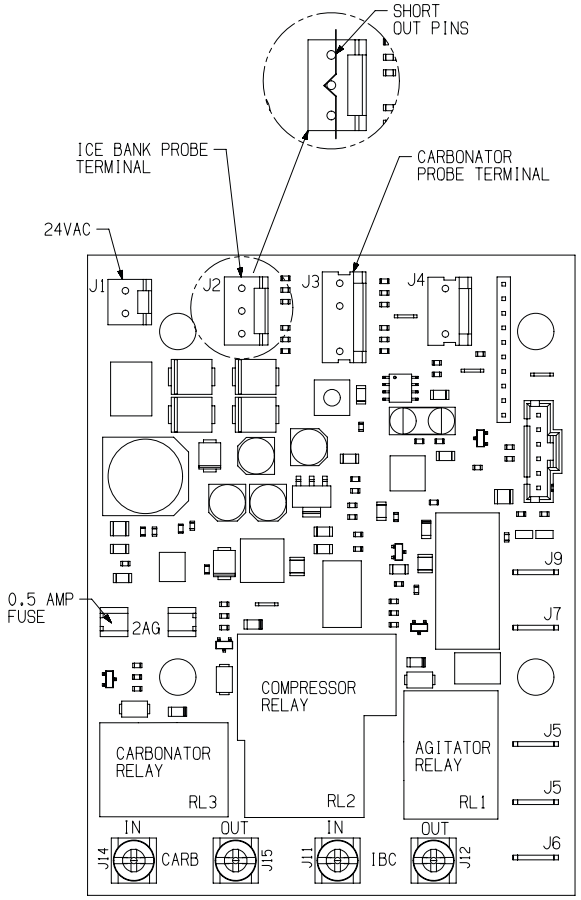
THE ELECTRONIC ICE BANK CONTROL (EIBC)

Checking the Normal PCB Operation

⚠ WARNING

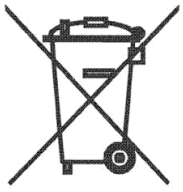
Terminal block has AC line voltage and should be covered with tape. Tape should cover bare electrical connections to prevent electrical shock.

1. Turn power OFF or insure that power has been disconnected from dispenser
2. Check condition of 0.5 amp fuse at location shown in diagram to the right. If fuse is blown, trace cause of short in valve wire harness and associated 24 VAC lines and replace fuse. If fuse is good, continue with next step.
3. Disconnect leads from the terminal block that connect to the PCB, noting their specific location for reconnection.
4. Disconnect both the Ice Bank probe (J2) and the Carbonator probe (J3) (if equipped) connections from board.
5. Use a short copper wire, paper clip, or other means to short the Ice Bank probe terminals (J2) on the PCB by touching all three (3) pins together.
6. Set Ohm test meter to measure continuity.
7. Reconnect power or turn dispenser ON.
8. Observe time and check continuity of the PCB screw lug connections:
   - Terminal 3 to 4 (Carbonator): During the first 2.5 to 3.5 minutes there should be continuity. After 2.5 to 3.5 minutes, there should be NO continuity.
   - Terminal 2 to 1 (Compressor): During first 4 to 6 minutes, there should be NO continuity. After 4 to 6 minutes, there should be continuity. There should be NO continuity from 2 to 1.
   - You should be able to hear a “click” sound of the relay closing when the time delay ends.



9. Turn electrical power OFF for 15 seconds and then back ON again to reset Carbonator timer. Again, measure continuity of the PCB screw lug connections
   - Terminal 3 to 4: There should be continuity. Use a short copper wire, paper clip, or other means to short the Carbonator probe terminals (J3) on the PCB by touching all three (3) pins together. This should be done before the 2.5 to 3.5 minute time limit has elapsed. Measure the continuity again between Terminal 3 to 4: There should be ***NO*** continuity.
10. If all the above work as noted, then the board is functioning properly. Remove tape and reconnect board. If any non-conformities are found, the PCB must be replaced (PN 52-1423/01).

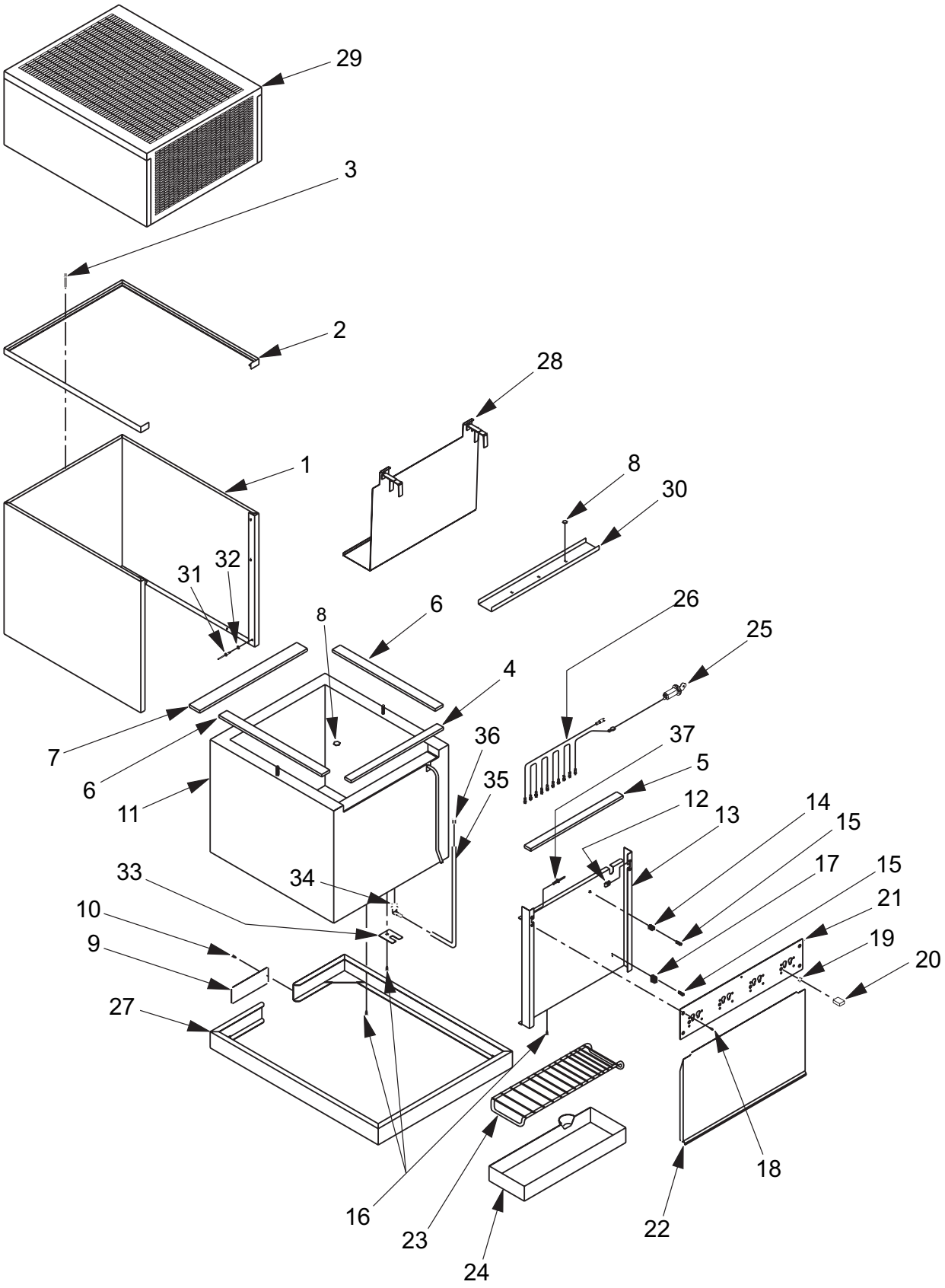
Dispenser Disposal



To prevent possible harm to the environment from improper disposal, recycle the unit by locating an authorized recycler or contact the retailer where the product was purchased. Comply with local regulations regarding disposal of the refrigerant and insulation.

ILLUSTRATIONS AND PART LISTINGS

Cabinet Assembly - High Performance

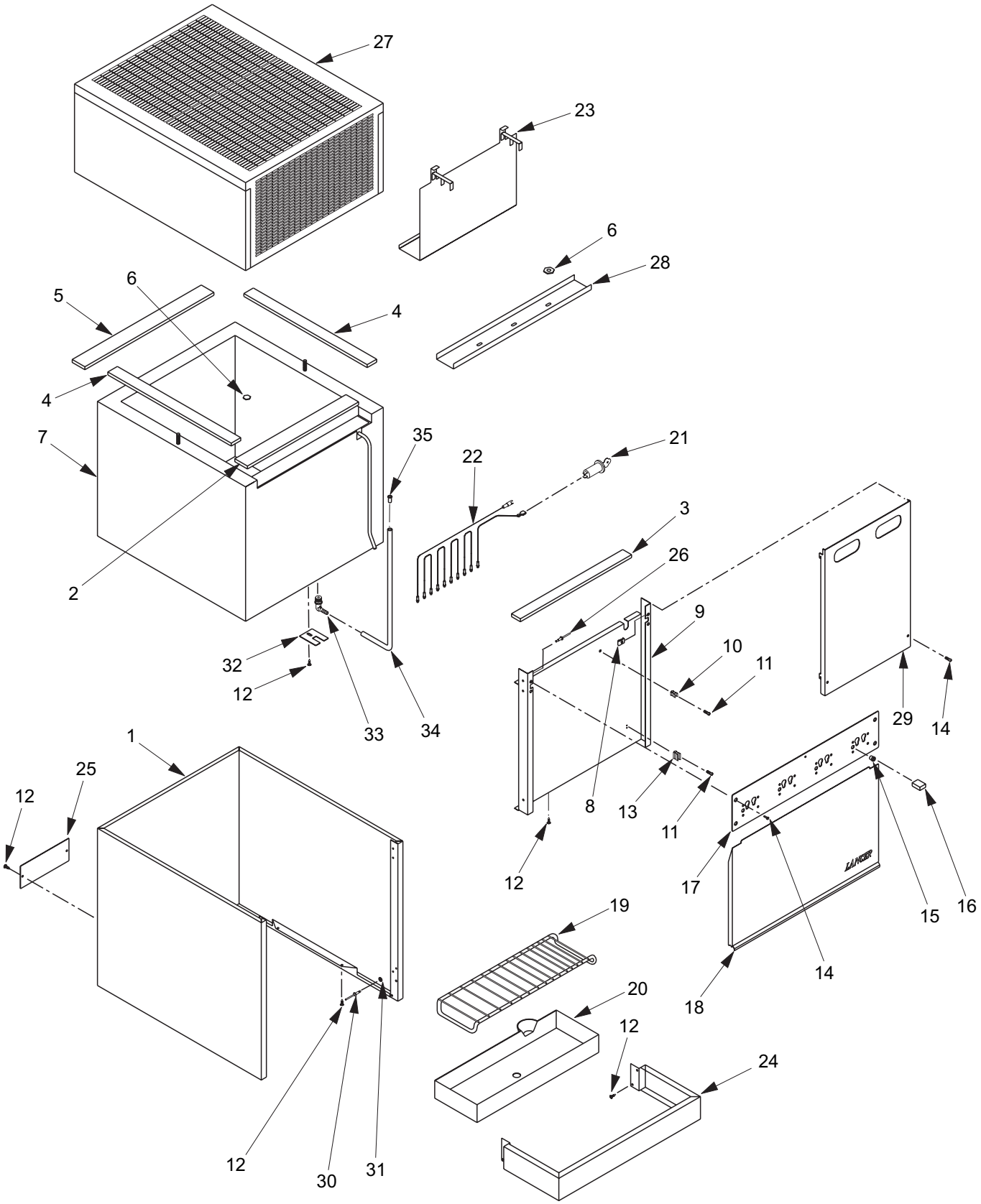


Item	Part No.	Description
1	30-0636/02	Wrapper, External
2	51-0568	Trim, Gray
3	04-0067	Rivet
4	50-0173	Insulation, Tape, Front
5	50-0178	Insulation, Top
6	50-0214	Insulation, Tape, Sides
7	50-0118	Insulation, Tape, Back
8	04-0082	Nut, Hex, 10-24, SS
9	30-0612	Back, Plate
10	04-0477	Screw, 8 - 32 x 3/8 inch
11	42-0032	Tank, Foamed
-	42-0046	Tank, Foamed (Philippines)
12	04-0074	Nut, Clip, 10-24
13	30-0624/01	Front Support Plate
-	30-6055/01	Front Support Plate (Philippines)
14	03-0036	Clip, Over Flow
15	04-0077	Screw, #4 x 1/4 inch
16	04-0061	Screw, 8 x 1/2 inch
17	30-0115	Clip, Retaining Tube
18	04-0443	Screw, 10 - 24 x 3/8 inch
19	13-0005	Bushing
20	11-0015	Connector Housing
21	23-0389	Faucet Plate, 6V
-	23-0394	Faucet Plate, 5V
-	23-0771	Faucet Plate, 4V
22	30-6644	Splash Plate, without Logo
-	30-6644-01	Splash Plate, with Logo
23	23-0159	Cup Rest
24	54-0017	Drip Tray
25	12-0097	Key Lock Switch
26	52-0891	Harness Assy, 6V
-	52-0890	Harness Assy, 5V
-	52-0889	Harness Assy, 4V
27	51-0580	Base Assy
28	23-0831	Insulated Plate Assy
29	23-0823/03	Bonnet Assy, Coca-Cola (Specify Graphics)
-	23-0824/01	Bonnet Assy, White
30	30-5854/01	Retainer Channel
31	04-0429	Rivet
32	04-0187	Spacer
33	30-5143	Clip, Drain
34	01-1483	Drain, Elbow Assy
35	08-0104	Drain, Tube
36	01-0450	Tube Support
37	04-0072	Rivet

NOTE: Cage Assembly Part Numbers are:

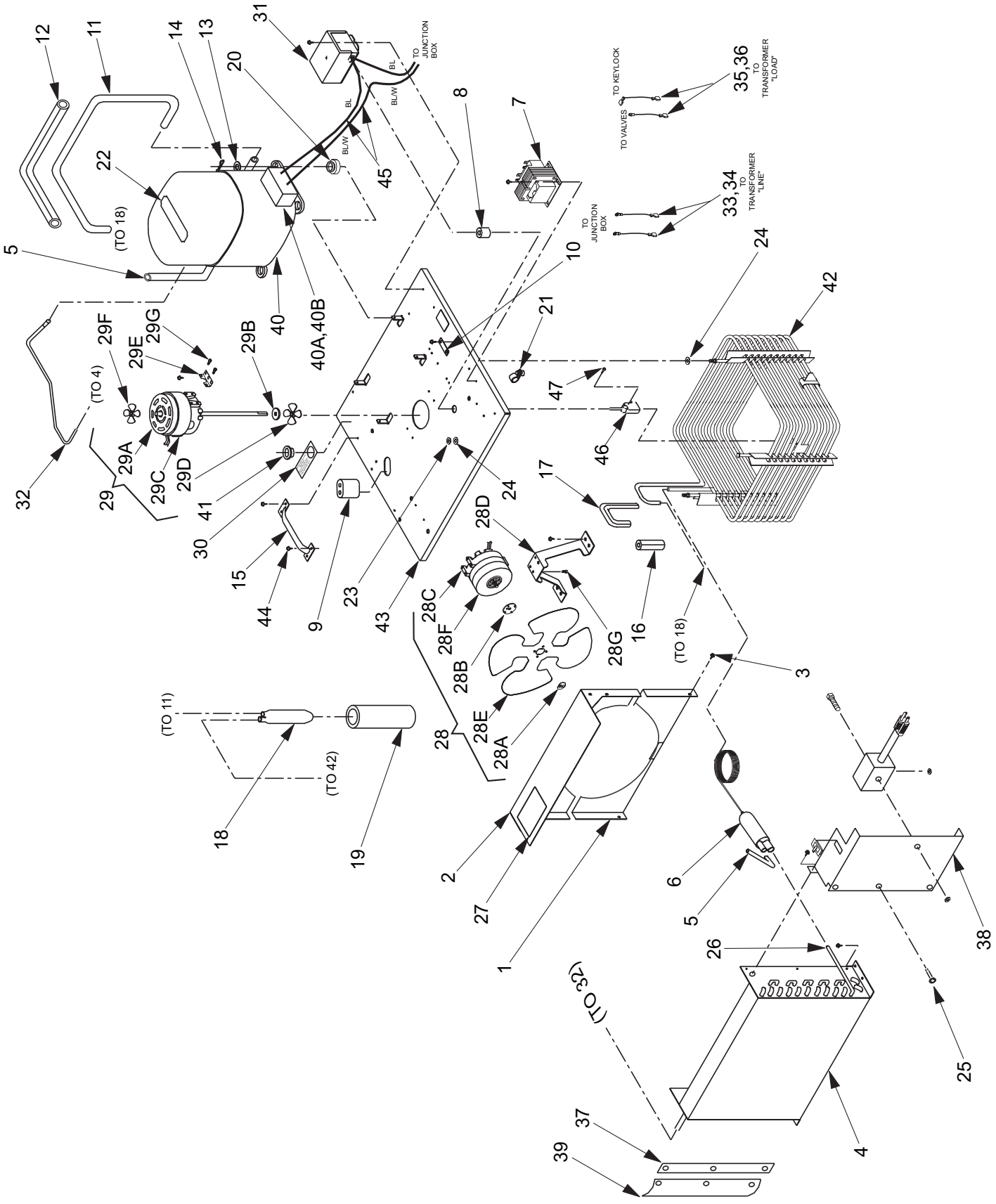
-	23-1047	4V, 4-0 Manifold, 3/8 inch Syrup Inlets
-	23-1064	5V, 2-2-1 Manifold, 3/8 inch Syrup Inlets - High Performance
-	23-1201/02	6V, 3-2-1 Manifold, 3/8 inch Syrup Inlets - High Performance

Cabinet Assembly - 1500E and Pre-Mix



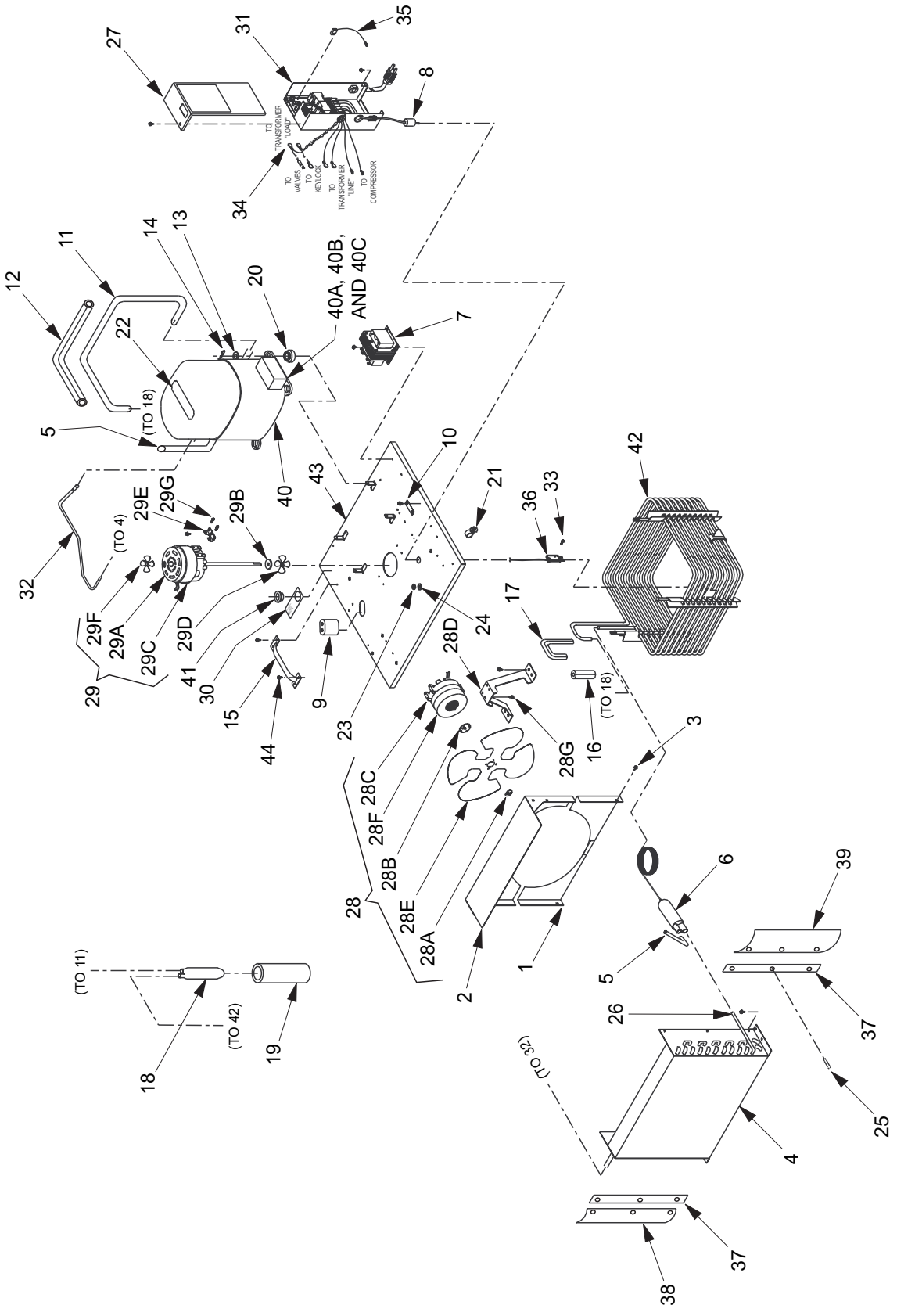
Item	Part No.	Description
1	51-0744/01	Wrapper, External
2	50-0173	Insulation, Tape, Front
3	50-0178	Insulation, Top
4	50-0214	Insulation, Tape, Sides
5	50-0118	Insulation, Tape, Back
6	04-0082	Nut, Hex, 10 - 24, SS
7	42-0032	Tank, Foamed
8	04-0074	Nut, Clip 10 - 24
9	30-0624/01	Front Support Plate
10	03-0036	Clip, Over Flow
11	04-0077	Screw, #4 x 1/4 inch
12	04-0061	Screw, #8 x 1/2 inch
13	30-0115	Clip, Retaining Tube
14	04-0443	Screw, 10 - 24 x 3/8 inch
15	13-0005	Bushing
16	11-0015	Connector Housing
17	23-0389	Faucet Plate, 6V
-	23-0394	Faucet Plate, 5V
-	23-0771	Faucet Plate, 4V
-	07-0467	Faucet Plate, Premix, 5V
-	30-5139	Stiffener, Faucet Plate, Premix, 5V
-	07-0468	Faucet Plate, Premix, 6V
-	30-5140	Stiffener, Faucet Plate, Premix, 6V
-	01-1369	Fitting, Premix Valve
-	19-0258	Valve, Premix, Becker
18	30-6644	Splash Plate, without Logo
-	30-6644-01	Splash Plate, with Logo
19	23-0159	Cup Rest
20	54-0017	Drip Tray
21	12-0097	Key Lock Switch
22	52-0891	Harness Assy, 6V
-	52-0890	Harness Assy, 5V
-	52-0889	Harness Assy, 4V
23	23-0831	Insulator Plate Assy
24	30-5310	Base, Drip Tray
25	07-0347	Plate, Cover
26	04-0072	Rivet
27	23-0823/03	Bonnet Assy, Coca-Cola (Specify Graphics)
-	23-0824/01	Bonnet Assy, White
28	30-5854/01	Retainer Channel
29	30-5535	Front Plate (Chiller Only)
30	04-0429	Rivet
31	04-0187	Spacer
32	30-5143	Clip, Drain
33	01-1483	Drain, Elbow Assy
34	08-0104	Drain, Tube
35	01-0450	Tube Support
NOTE: Cage Assembly Part Numbers are:		
-	23-0777	5V, Premix
-	23-0778	6V, Premix
-	23-1139	5V, 2-2-1 Manifold, 3/8 Inch Syrup Inlets, E-Model
-	23-1140	6V, 3-2-1 Manifold, 3/8 Inch Syrup Inlets, E-Model
-	48-1407	5V, Ambient Juice
-	48-1408	6V, Ambient Juice
-	23-0760	9 Circuit Chiller
-	23-0910	4 Circuit Chiller

Refrigeration Deck Assembly, R-134A, with Lancer Electronic Ice Bank Control (EIBC) PN: 82-2667; USA only



Item	Part No.	Description
1	30-5107	Shroud, Fan, Bottom
2	30-5106	Shroud, Fan, Top
3	04-0504	Screw, 8 - 18 x 0.375
4	23-0985	Condenser
5	47-0344	Tube, Process
6	23-0982	Dryer/Cap Assy
7	25-0047	Transformer, 115V/50-60Hz
8	02-0041	Seal
9	02-0040	Seal, Extrusion
10	11-0118	Connector, Ground
11	47-1269/01	Tube, Suction
12	50-0041	Insulation, 31.385
13	04-0537	Washer, 0.467 ID x 0.923 OD x 0.060,THK
14	03-0150	Retainer, Clip
15	07-0268	Handle
16	50-0029	Insulation, 2.500
17	50-0026	Insulation, 8.125
18	51-0061	Accumulator
19	50-0028	Boot
20	02-0114	Grommet
21	03-0049	Clip, Cord
22	06-0430	Label, 115V/60Hz, 1/3 HP
23	04-0032	Nut, 1/4 - 20, ST, NYLOCK
24	04-0063	Washer, Flat, 0.260 ID x 0.687 OD, SS
25	04-0518	Rivet, 0.125 DIA x 0.328, LG
26	47-1337	Tube, Outlet
27	06-1148/01	Label, Wiring Diagram
28	52-1369	Fan Motor Assy, 115V/60Hz, 9W
28A	04-0060	Nut, Fan Blade
28B	02-0413	Silencer, Fan Blade
28C	91-0007	Motor, Fan, 115V/60Hz, 9W
28D	30-5845	Bracket, Fan Motor
28E	07-0354	Fan Blade
28F	06-0433/01	Label, 115V/60Hz, 9W
28G	04-0059	Screw, 8 - 36 x 0.375
29	52-1259	Agitator Motor Assy, 115V/60Hz, 25W
29A	91-0084	Motor, Agitator, 115V/60Hz, 25W
29B	02-0032	Washer, Rubber, 1.0 Inch OD
29C	06-0633	Label, 115V/60Hz, 25W
29D	05-0502	Propeller, 2.250 DIA
29E	30-5113/01	Bracket, Agitator Motor
29F	05-0424/01	Propeller, 2.625 DIA
29G	04-0059	Screw, 8 - 36 x 0.375
30	06-0856/01	Label, Fill Hole
31	52-1882	Electronic Ice Bank Control (EIBC)
32	47-2025	Tube, High Side
33	52-0879	Lead Assy, Primary, BLK
34	52-0878	Lead Assy, Primary, BLK/WHT
35	52-1505	Wire Assy, Trans, Sec, BLK
36	52-1504	Wire Assy, Trans, Sec, WHT
37	30-7007	Retainer Strip
38	82-1692/01	Air Shield Assy, Right
39	50-0302	Baffle, Rubber, Right
40	83-0033	Compressor, 115V/60Hz, 1/3 HP
40A	12-0005	Relay
40B	12-0223	Overload
--	- - - - - - -	Refrigerant, R134A ONLY, 6.5 Oz
41	04-0538	Cap Plug
42	23-1203/01	Evaporator Assy
43	23-0993/02	Deck Assy
44	04-0260	Screw, 10 - 16 x 0.625
45	52-2004	Harness Assy, Ice Bank Control
46	52-1897	Probe Assy, EIBC
47	04-0394	Screw, 6 - 32 x 0.500, PHP, SS

Refrigeration Deck Assembly, R-134A, with Lancer Electronic Ice Bank Control (EIBC) PN: 82-2050E, 115V/60Hz; PN: 82-2099E, 230V/50Hz; PN 82-2048E, 240V/60Hz; Export only

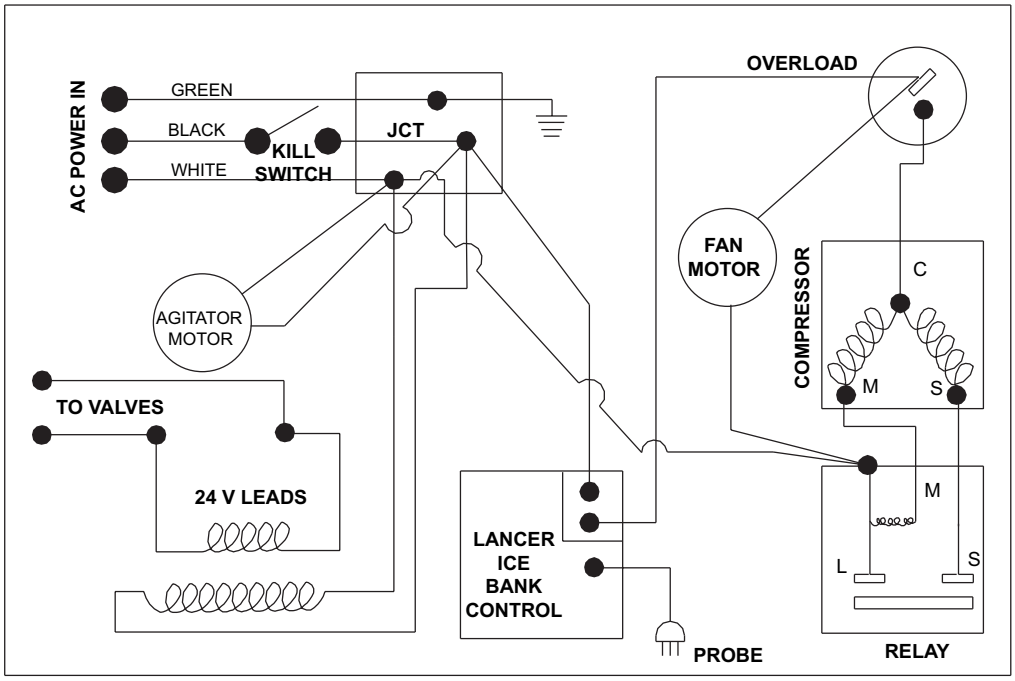


Item	Part No.	Description
1	30-5107	Shroud, Fan, Bottom
2	30-5106	Shroud, Fan, Top
3	04-0504	Screw, 8 - 18 x 0.375
4	23-0985	Condenser
5	47-0344	Tube, Process
6	23-0982	Dryer Cap Assy
7	25-0048	Transformer, 220V/50-60Hz
-	25-0047	Transformer, 115V/50-60Hz
8	02-0041	Seal
9	02-0040	Seal, Extrusion
10	11-0118	Connector, Ground
11	47-1269/01	Tube, Suction
12	50-0041	Insulation, 31.385
13	04-0537	Washer, 0.467 ID x 0.923 OD x 0.060,THK
14	03-0150	Retainer, Clip
15	07-0268	Handle
16	50-0029	Insulation, 2.500
17	50-0026	Insulation, 8.125
18	51-0061	Accumulator
19	50-0028	Boot
20	02-0114	Grommet
21	03-0049	Clip, Cord
22	06-0666	Label, 240V/60Hz
-	06-0460	Label, 230V/50Hz
-	06-0430	Label, 115V/60Hz
23	04-0032	Nut, 1/4 - 20, ST, NYLOCK
24	04-0063	Washer, Flat, 0.260 ID x 0.687 OD, SS
25	04-0518	Rivet, 0.125 DIA x 0.328, LG
26	47-1337	Tube, Outlet
27	06-1532	Label, Wiring Diagram, EIBC
28	52-1369	Fan Motor Assy, 115V/60Hz
-	52-1378	Fan Motor Assy, 220-240V/50-60Hz
28A	04-0060	Nut, Fan Blade
28B	02-0413	Silencer, Fan Blade
28C	91-0009	Motor, Fan, 220V/50-60Hz
-	91-0007	Motor, Fan, 115V/60Hz
28D	30-5845	Bracket, Fan Motor
28E	07-0354	Fan Blade
28F	06-0670	Label, 230V/50-60Hz
-	06-0433/01	Label, 115V/60Hz
28G	04-0059	Screw, 8 - 36 x 0.375
29	52-1259	Agitator Motor Assy, 115V/60Hz
-	52-1379	Agitator Motor Assy, 220-240V/ 50-60Hz
29A	91-0086	Motor, Agitator, 220V/50-60Hz
-	91-0084	Motor, Agitator, 115V/60Hz
29B	02-0032	Washer, Rubber, 1.0 Inch OD
29C	06-0634	Label, 230V/50Hz
-	06-0633	Label, 115V/60Hz
29D	05-0502	Propeller, 2.250 DIA
29E	30-5113/01	Bracket, Agitator Motor
29F	05-0424/01	Propeller, 2.625 DIA
29G	04-0059	Screw, 8 - 36 x 0.375
30	06-0856/01	Label, Fill Hole
31	52-2014	Electronic Ice Bank Control (EIBC)
32	47-2025	Tube, High Side
33	04-0394	Screw, 6 - 32 x 0.500
34	52-2008	Harness Assy, Trans, Sec
35	52-2027	Harness Assy, Ground
36	52-1773	Probe Assy
37	30-7007	Retainer Strip
38	50-0302	Baffle, Rubber, Right
39	50-0303	Baffle, Rubber, Left
40	83-0038	Compressor, 240V/60Hz
40A	12-0028	Relay
40B	12-0253	Overload
40C	12-0260	Start Capacitor
-	- - - - - - -	Refrigerant, R-134A Only, 6.5 Oz
-	83-0034	Compressor, 230V/50Hz
A	12-0031	Relay
B	12-0032	Overload
-	- - - - - - -	Refrigerant, R-134A Only, 6.5 Oz
-	83-0033	Compressor, 115V/60Hz
A	12-0005	Relay
B	12-0223	Overload
-	- - - - - - -	Refrigerant, R-134A Only, 6.5 Oz
41	04-0538	Cap Plug
42	23-1203/01	Evaporator
43	23-0993/02	Deck Assy
44	04-0260	Screw, 10 - 16 x 0.625

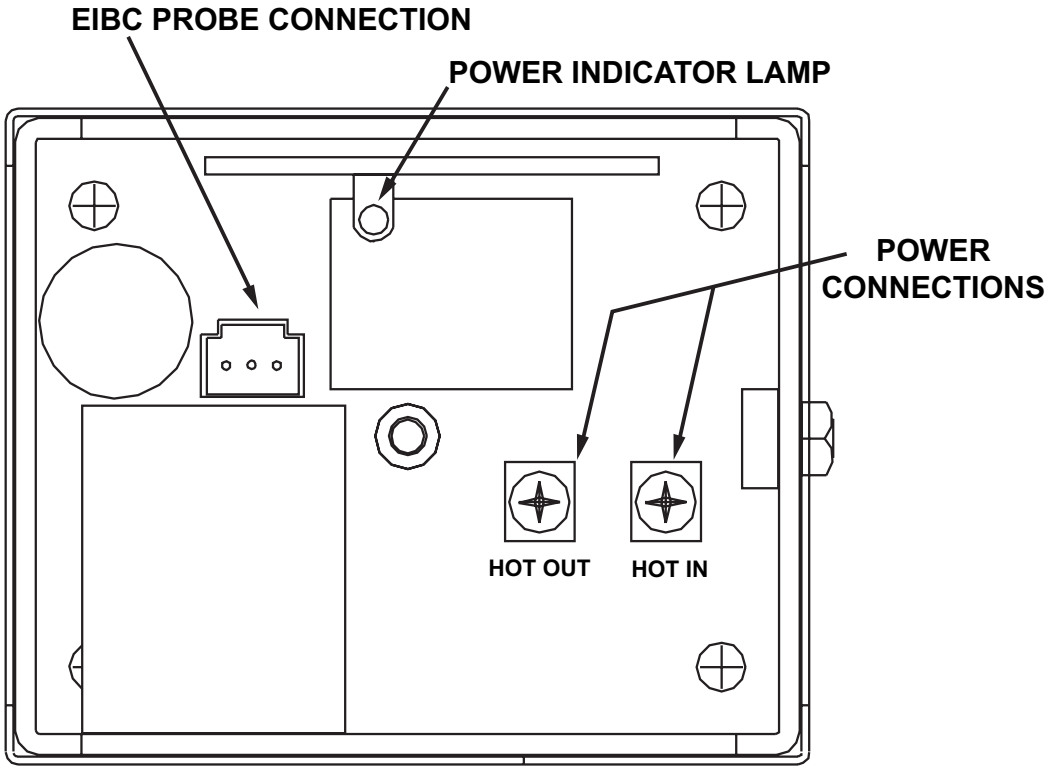
Wiring Diagram, Electronic Ice Bank Control (EIBC), USA only

IMPORTANT

WHEN STARTING UNIT OR IF CURRENT IS INTERRUPTED, THERE IS A FIVE (5) MINUTE DELAY BEFORE THE COMPRESSOR/FAN STARTS.



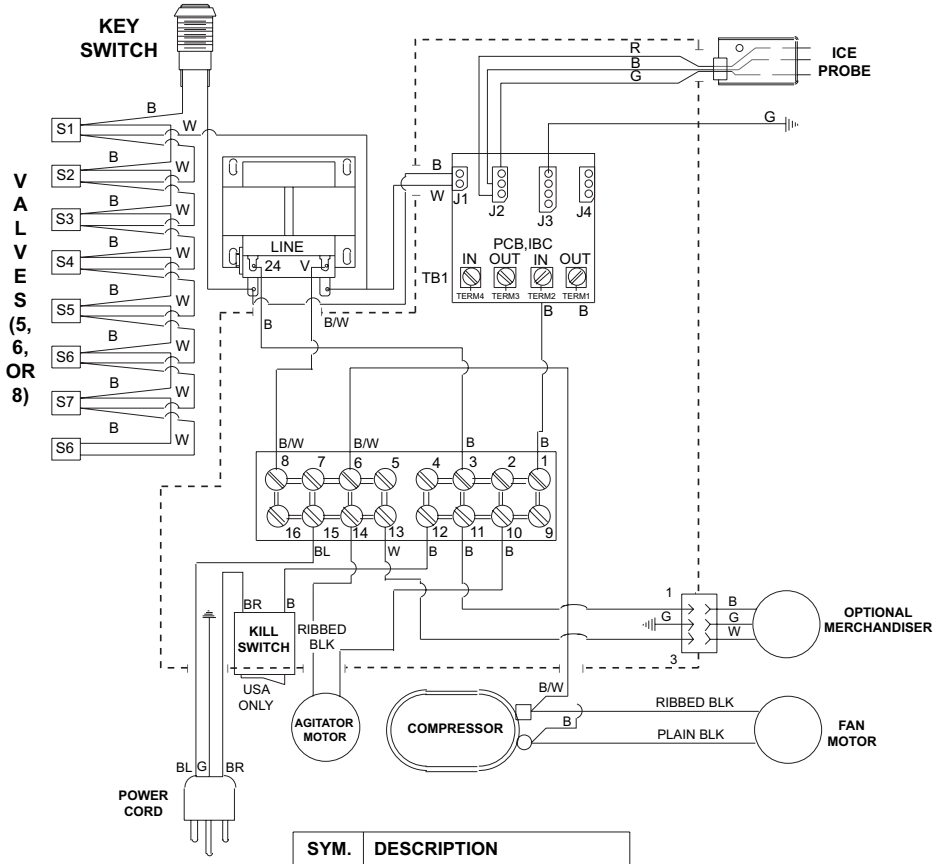
Control Housing Connections



Wiring Diagram, Electronic Ice Bank Control (EIBC), International only

IMPORTANT

WHEN STARTING UNIT OR IF CURRENT IS INTERRUPTED, THERE IS A FIVE (5) MINUTE DELAY BEFORE THE COMPRESSOR/FAN STARTS.

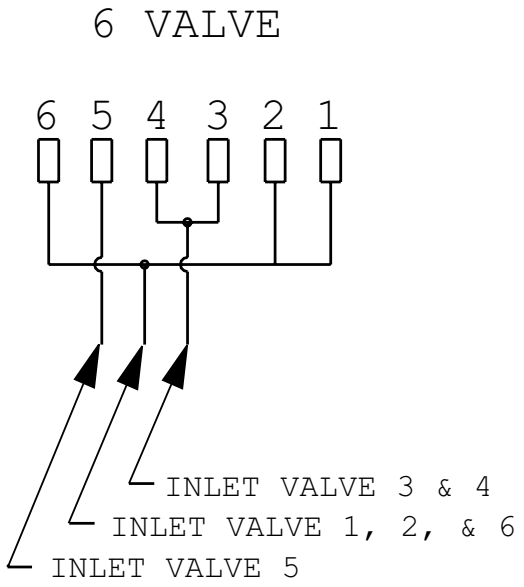


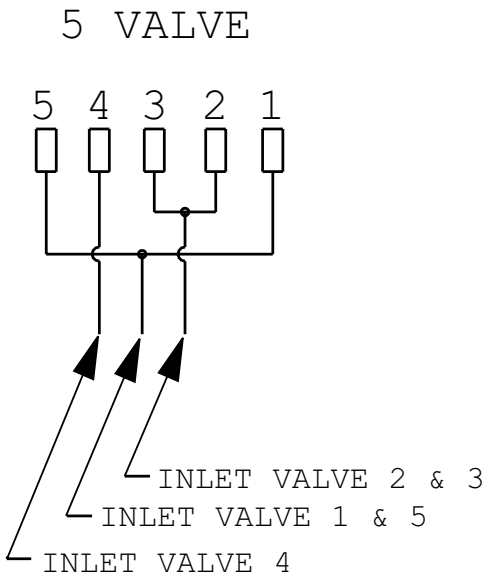
SYM.	DESCRIPTION
⏚	CHASSIS GROUND
- - - - -	CONTROL BOX
▱	CHAMFER PIN 1

1500CED

LANCER® **LABEL, WIRING DIAGRAM 06-1542**

Plumbing Diagram - 5 Valve and 6 Valve





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