



Please refer to the Lancer web site ([www.lancercorp.com](http://www.lancercorp.com)) for information relating to Lancer Installation and Service Manuals, Instruction Sheets, Technical Bulletins, Service Bulletins, etc.

# INSTALLATION AND SERVICE MANUAL FOR LANCER ICE COOLED DISPENSER

**SERIES 2300 -- DROP IN  
SERIES 2400 -- FREE STANDING**

---

*This manual supersedes Installation and Service Manual, 28-0058/02, dated 10/17/97*

---



6655 LANCER BLVD. • SAN ANTONIO, TEXAS 78219 USA • (210) 310-7000

FAX SALES

• NORTH AMERICA – 210-310-7245 • INTERNATIONAL SALES – 210-310-7242 • CUSTOMER SERVICE – 210-310-7242 •  
• LATIN AMERICA – 210-310-7245 • EUROPE – 32-2-755-2399 • PACIFIC – 61-8-8268-1978 •

• FAX ENGINEERING: • 210-310-7096 •

"Lancer" is the registered trademark of Lancer • Copyright — 1998 by Lancer, all rights reserved.

REV:	05/22/98
P.N.	28-0058/03

## TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b> .....	<b>i</b>
<b>SPECIFICATIONS</b> .....	<b>i</b>
<b>1. INSTALLATION OF LANCER ICE COOLED DISPENSER</b> .....	<b>1</b>
1.1 RECEIVING .....	1
1.2 UNPACKING .....	1
1.3 SELECTING A COUNTER LOCATION .....	1
1.4 WATER SUPPLY .....	1
1.5 ELECTRICAL SUPPLY .....	1
1.6 SYRUP CONTAINERS .....	1
1.7 INSTALLATION OF THE UNIT .....	2
1.8 CONNECTION OF THE UNIT .....	2
1.9 START UP .....	3
1.10 ADJUSTING WATER FLOW .....	3
1.11 ADJUSTING WATER TO SYRUP RATIO (BRIX) .....	4
1.12 REPLENISHING SYRUP SUPPLY (5 GALLON TANKS) .....	4
<b>2. RECOMMENDED SERVICES AND MAINTENANCE</b> .....	<b>4</b>
2.1 SCHEDULED .....	4
2.2 CLEANING AND SANITIZING SYSTEMS .....	4
2.3 CLEANING AND SANITIZING FIGAL SYSTEMS .....	5
2.4 CLEANING AND SANITIZING BAG-IN-BOX (BIB) SYSTEMS .....	6
2.5 VALVES .....	7
2.6 ICE BIN COMPARTMENT ON ALL ICE CHESTS .....	7
<b>3. TROUBLESHOOTING</b> .....	<b>8</b>
3.1 NO CARBONATION .....	8
3.2 NOISY CARBONATOR PUMP .....	8
3.3 OFF TASTE IN SODA .....	8
3.4 VALVES INOPERABLE .....	8
<b>4. ILLUSTRATIONS, PARTS LISTINGS AND WIRING DIAGRAMS</b> .....	<b>10</b>
4.1 SERIES 2300 DROP-IN .....	10-11
4.2 SERIES 2400 FREE-STANDING .....	12-13
4.3 SERIES 2300 DROP-IN WITH PLUG-IN TOWERS .....	14-15
4.4 SERIES 2400 FREE-STANDING WITH PLUG-IN TOWERS .....	16-17
4.5 SERIES 2300 DROP-IN (PRE-MIX) .....	18-19
4.6 SERIES 2400 FREE-STANDING (PRE-MIX) .....	20-21
4.7 ICE COOLED UNIVERSAL WIRING DIAGRAM WITH BIN LID SWITCH .....	22
4.8 ICE COOLED UNIVERSAL WIRING DIAGRAM WITHOUT BIN LID SWITCH .....	23
4.9 LANCER ICE COOLED DISPENSER - ACCESSORIES .....	24

## SPECIFICATIONS

### **DIMENSION**

Cabinet	23 inches x 23 inches	(58.42 cm x 58.42 cm)
Rim	25 inches x 25 inches	(63.50 cm x 63.50 cm)
Height (without legs)	18 inches (45.72 cm)	above counter
	18 inches (45.72 cm)	below counter

### **WEIGHT**

Shipping	130 pounds	(59.09 kg)
Empty	106 pounds	(48.18 kg)
Operating	206 pounds	(93.64 kg)

### **ICE BIN CAPACITY**

	100 pounds	(45.46 kg)
--	------------	------------

### CAUTION

POURING **HOT** WATER INTO DRAIN MAY CAUSE THE DRAIN TUBE TO COLLAPSE. ALLOW ONLY LUKEWARM OR COLD WATER TO ENTER DRAIN TUBE.

POURING COFFEE, TEA, AND LIKE SUBSTANCES INTO DRAIN MAY CAUSE THE DRAIN TUBE TO BECOME CLOGGED WITH COFFEE OR TEA GROUNDS, OR OTHER SOLID PARTICLES.

## 1. INSTALLATION OF LANCER ICE COOLED DISPENSER

### 1.1 RECEIVING

Each unit is completely tested under operating conditions and thoroughly inspected before shipment. At the time of shipment, the carrier accepts the unit, and any claim(s) for damage must be made with the carrier. Upon receiving units from the delivering carrier, carefully inspect carton for visible indication(s) of damage. If damage exists, have carrier note same on bill of lading and file a claim with the carrier.

### 1.2 UNPACKING

- A. The Lancer ice cooled dispenser is shipped in a corrugated shipping carton.
- B. Remove the corrugated shipping carton from the unit.
- C. Remove parts from the ice compartment.
- D. Inspect unit and parts for concealed damage(s). If damage exists, notify delivering carrier and file claim against same.

### 1.3 SELECTING A COUNTER LOCATION

- A. Select a counter location which is close to a properly grounded electrical outlet, and a water supply that meets the requirements specified in Section 1.4 below.
- B. Counter location must be able to safely support a minimum 225 pounds (102.3 kg) after counter cutout is made.

### 1.4 WATER SUPPLY

#### **CAUTION**

FAILURE TO LIMIT WATER PRESSURE TO 50 PSI WILL RESULT IN IMPROPER PERFORMANCE OF THE DISPENSER.

- A. An adequate potable water supply must be provided. The water supply line must be at least a 3/8 inches (9.525 mm) pipe with a minimum of 20 PSI line pressure, but not exceeding a maximum of 50 PSI. Water pressure exceeding 50 PSI must be reduced to 50 PSI with a pressure regulator.

#### **CAUTION**

A FILTER IN THE WATER LINE MUST BE USED IF THE WATER SUPPLY CONTAINS ANY APPRECIABLE AMOUNT OF SILT, SAND, OR ANY OTHER DEBRIS. FAILURE TO DO SO CAN RESULT IN EQUIPMENT DAMAGE.

- B. The Carbonator Pump is equipped with a Strainer and a Tee on the outlet side for a plain water Valve (if required), but a water supply containing any appreciable quantity of silt, fine sand, or other debris requires a Filter ahead of the Unit. The Filter cartridge must be cleaned periodically, depending upon the condition of the water. Failure to do so may starve the Pump and cause it to burn out; thereby, voiding the equipment warranty

### 1.5 ELECTRICAL SUPPLY

#### **WARNING**

**THE POWER SUPPLY MUST BE PROPERLY ELECTRICALLY GROUNDED TO AVOID POSSIBLE ELECTRICAL SHOCK OR SERIOUS INJURY TO THE OPERATOR. THE POWER CORD IS PROVIDED WITH A THREE PRONG GROUNDED PLUG. IF A THREE-HOLE GROUNDED ELECTRICAL OUTLET IS NOT AVAILABLE, USE AN APPROVED METHOD TO GROUND THE UNIT.**

- A. A standard 15 AMP, 110 VAC, 60 Hz, single phase electrical power outlet with a ground connector should be provided for the operation of the unit

### 1.6 SYRUP CONTAINERS

- A. When the unit is used in the Coca-Cola Company installations, the syrup containers are to be attached as outlined in the appropriate Coca-Cola Company Service Manual.
- B. For other installations, the syrup containers, sold as an accessory, are stainless steel with a capacity of five gallons. They are equipped with a CO<sub>2</sub> gas quick disconnect fitting and a syrup

quick disconnect fitting. The standard syrup outlet is a 1/4 inch (6.350 mm) male flare (MF). A low pressure regulator manifold (an accessory) may be mounted on the wall above the syrup tanks.

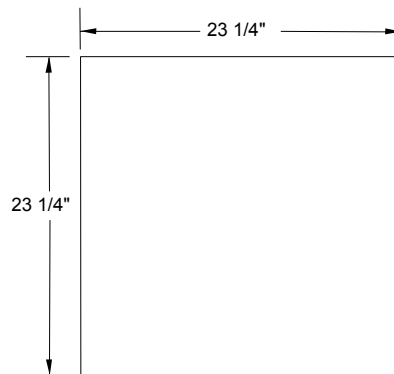
- C. The inlets on the unit, located on the left side of the machine, are tagged or coded to the proper valves. When making the connection to these inlets, provide a good, tight, leak-free joint to prevent twisting the tubing.

### 1.7 INSTALLATION OF THE UNIT

- A. Inspect the counter location where the unit is to be installed. Verify that the counter is strong enough to safely support a 225 pounds (102.3 kg) load, after the cutout for the unit is made.
- B. Verify that the unit will fit in the desired location. See Figure 1 for the counter cutout for the unit.

#### **NOTE**

Remember that the unit can extend up to 23 inches (58.42 cm) below the counter, including the shipping risers, which Lancer recommends be left attached to the unit. Should the dispenser ever require removal, the shipping risers will protect the inlet tubes from being damaged.



**Counter Cutout for dispenser**

**Figure 1**

- C. After the counter cutout is complete, the unit may be lowered into the counter.

### 1.8 CONNECTION OF THE UNIT

- A. Position the CO<sub>2</sub> gas tank in location. Assemble high pressure regulator to CO<sub>2</sub> gas tank and run jumper line to low pressure regulator.
- B. Attach the CO<sub>2</sub> gas line to the carbonator by attaching the line from the high pressure regulator to the single check valve marked "gas" on top of the carbonator tank. The setting of the high pressure CO<sub>2</sub> gas regulator should be 90 PSI to 110 PSI.

#### **CAUTION**

DO NOT TURN ON THE CO<sub>2</sub> AT THIS TIME.

- C. Position the syrup tanks in the desired location. Attach the CO<sub>2</sub> gas lines leading from the low pressure regulator to these tanks.
- D. Connect syrup lines from tanks to the appropriate inlets at the right front of the unit. The syrup inlets are identified.

#### **CAUTION**

A FILTER IN THE WATER LINE MUST BE USED IF THE WATER SUPPLY CONTAINS ANY APPRECIABLE AMOUNT OF SILT, SAND, OR ANY OTHER DEBRIS. FAILURE TO DO SO CAN RESULT IN EQUIPMENT DAMAGE.

- E. Mount the water filter assembly (if used) and water regulator in a convenient location.

#### **CAUTION**

FAILURE TO LIMIT WATER PRESSURE TO 50 PSI WILL RESULT IN IMPROPER PERFORMANCE OF THE DISPENSER.

- F. Connect water inlet line to water regulator, to water filter, and then to the water inlet of the

carbonator pump on the carbonator.

- G. Provide a suitable drain in the plumbing system and attach the one (1) inch (2.54 cm) diameter schedule 40 PVC drains to it. The drip pan drainage outlet is located at the center rear of the unit. The ice water drainage outlet is located at the right front of the unit.
- H. Be sure to place the ice trap in the drain outlet inside the ice bin **before** filling the cabinet with ice. This device holds the ice away from the drain outlet, allowing the ice water to drain properly.

### **WARNING**

**THE POWER SUPPLY MUST BE PROPERLY ELECTRICALLY GROUNDED TO AVOID POSSIBLE ELECTRICAL SHOCK OR SERIOUS INJURY TO THE OPERATOR. THE POWER CORD IS PROVIDED WITH A THREE PRONG GROUNDED PLUG. IF A THREE-HOLE GROUNDED ELECTRICAL OUTLET IS NOT AVAILABLE, USE AN APPROVED METHOD TO GROUND THE UNIT.**

- I. Plug in the transformer box to a standard 15 AMP, 110 VAC, single phase outlet. The unit will internally convert the 110 VAC to 24 VAC.

## **1.9 START UP**

- A. After all connections to water, CO<sub>2</sub> gas, electrical power, and syrup containers are made, check for leaks.
- B. Be sure syrup tanks contain syrup.

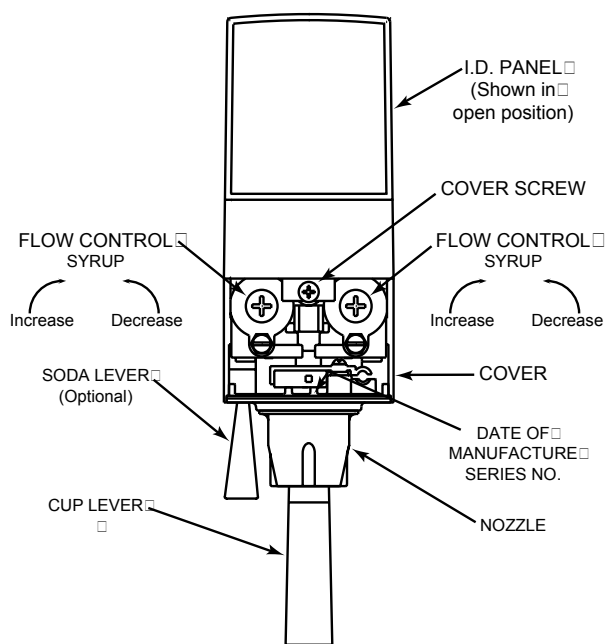
### **CAUTION**

**DO NOT OPERATE CARBONATOR PUMP WITH WATER SUPPLY SHUT OFF.**

- C. Turn on water; open the pressure relief valve on the carbonator tank by lifting the wire ring or flipping lever, and hold it open until water flows from the relief valve. Close the relief valve and turn on the CO<sub>2</sub> gas and electrical power in that order.
- D. To fill all lines with water, cycle the carbonator several times by operating the dispensing valves.
  - 1. A low pressure gas regulator controls the flow of syrup to each dispensing valve. For proper operation of the valves, the pressure regulator should be set so that 40 PSI is at the backblock of the valve.
  - 2. For diet type syrup, the tank pressures should be set at 10 PSI (or as recommended by the syrup supplier). Additional pressure may be necessary, depending on the distance from the syrup tank to the unit.
- E. The unit should now be filled with ice cubes to the level of the door opening.

## **1.10 ADJUSTING WATER FLOW**

- A. The water flow can be adjusted to either 1.25 ounces/second (37 ml/sec) or 2.50 ounces/second (74 ml/sec) on all dispensing valves, using the following procedure.
- B. The unit should have ice on cold plate for a least one hour before you attempt to brix the valves. The drink temperature should be no higher than 40°F (4.4°C) when the ratio is set. This is done after the unit has ice in the ice bin.
- C. Slide the ID panel UP, until the flow controls are exposed (see Figure 2).
- D. Remove nozzle by twisting counter clockwise and pulling down.
- E. Remove diffuser by pulling down.



**Valve Adjustments  
Figure 2**

- F. Install Lancer (yellow) syrup separator (PN 54-0031) in place of nozzle.
- G. Activate dispensing valve to fill separator syrup tube.
- H. Hold a Lancer brix cup under the syrup separator and dispense water and syrup into cup for four (4) seconds. Divide number of ounces (ml) of water in cup by four (4) to determine water flow rate per second.
- I. To obtain the proper flow, use a screwdriver to adjust water flow control (see Figure 2).
- J. Repeat process for each valve.

### **1.11 ADJUSTING WATER TO SYRUP RATIO (BRIX)**

- A. Hold the Lancer brix cup under the syrup separator and activate valve. Check ratio (brix).
- B. To obtain the proper ratio, use screwdriver to adjust syrup flow control (see Figure 2).
- C. Remove syrup separator.
- D. Install diffuser and nozzle.
- E. Slide ID panel DOWN.
- F. Repeat process for each valve.

#### **NOTE**

In all cases of reassembly of valves involving o-rings, be sure the o-ring is lubricated with an FDA approved lubricant or water to prevent leakage or damage to the o-ring.

### **1.12 REPLENISHING SYRUP SUPPLY (5 GALLON TANKS)**

- A. To add syrup to a tank after the system is in operation, the following procedure should be used.
  1. Shut off CO<sub>2</sub> gas supply system to syrup tanks.
  2. Snap off the self-sealing quick-coupler and allow gas in syrup tank to escape by pulling the outer shell of the quick-coupler toward the flexible line and allowing the whole connection to pull free.

#### **WARNING**

**TO AVOID POSSIBLE PERSONAL INJURY OR PROPERTY DAMAGE, DO NOT ATTEMPT TO REMOVE SYRUP TANK COVER UNTIL CO<sub>2</sub> PRESSURE HAS BEEN RELEASED FROM TANK.**

3. Remove the cover by pulling upward on the hinged locking bar.
4. Fill tank with appropriate syrup, leaving one (1) inch (2.54 cm) of space for CO<sub>2</sub> gas.
5. Replace locking cover insuring that the cover and cover gasket are properly aligned.
6. Snap on quick-coupler and lock it securely in place. Turn CO<sub>2</sub> gas pressure ON. When properly connected, the gas will automatically enter the tank with an audible noise.

## **2. RECOMMENDED SERVICE AND MAINTENANCE**

### **2.1 SCHEDULED**

- A. Daily – See Section 2.5 for daily cleaning.
- B. Monthly – See Section 2.6 for monthly cleaning.
- C. Periodic Sanitizing - See sections 2.2, 2.3, and 2.4 for sanitizing requirements.
- D. As Needed - Keep exterior surfaces (to include drip tray and cup rest) of dispenser cleaned with damp, clean cloth.

### **2.2 CLEANING AND SANITIZING SYSTEMS**

- A. General Information
  - (1) 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 and sanitizing procedures provided herein pertain to the Lancer equipment identified by this manual. If other equipment is being cleaned, follow the guidelines established for that equipment.

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

**IMPORTANT**

*Water lines are not to be disconnected during the cleaning and sanitizing of syrup lines to avoid contamination.*

- (3) Recommended Preparation of Cleaning Solutions.
- (a) Cleaning solutions (for example, Ivory Liquid, Calgon, etc.) mixed with clean, potable water at a temperature of 90 to 110 degrees Fahrenheit should be used to clean equipment. The mixture ratio, using Ivory Liquid, is one (1) ounce of cleanser to two (2) gallons of water. A minimum of four (4) gallons of cleaning mixture should be prepared.

**NOTE**

Extended lengths of product lines may require that an additional volume of solution be prepared.

- (b) Any equivalent cleanser may be used as long as it provides a caustic based, non-perfumed, easily rinsed mixture containing at least two (2) percent sodium hydroxide (NaOH).
- (4) Recommended Preparation of Sanitizing Solutions.

- (a) Sanitizing solutions should be prepared in accordance with the manufacturer's written recommendations and safety guidelines. Follow manufacturer's requirements so that the solution provides 200 parts per million (PPM) available chlorine at a temperature of 90°F to 120°F. A minimum of four (4) gallons of sanitizing solution should be prepared.

**NOTE**

Extended lengths of product lines may require that an additional volume of solution be prepared.

- (b) 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 200 parts per million (PPM) available chlorine.

**2.3 CLEANING AND SANITIZING FIGAL SYSTEMS**

- A. Remove all ice from ice bin by melting with hot water.  
B. Remove quick disconnect from syrup tank.

**CAUTION**

DO NOT USE A WIRE BRUSH TO CLEAN VALVES.

- C. Using a clean plastic bristle brush and a detergent soap solution prepared in accordance with the instructions in Section 2.2, scrub both valves of the disconnect. Rinse with clean, potable water.  
D. Using a mechanical spray bottle and a sanitizing solution prepared in accordance with the instructions in Section 2.2, spray both halves of the quick disconnects. Allow to air dry.

**NOTE**

Please note that a fresh water rinse cannot follow sanitization of equipment. Purge only with the end use product. This is an NSF requirement.

- E. Connect syrup line to a syrup tank filled with clean, potable, room temperature water. Connect CO<sub>2</sub> supply hose to tank and pressurize.  
F. Place waste container under applicable dispensing valve. Activate valve until water is dispensed. Flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of residual product.

**NOTE**

Extended lengths of product lines may require additional time for flushing and rinsing lines.

### **WARNING**

**TO AVOID POSSIBLE PERSONAL INJURY OR PROPERTY DAMAGE, DO NOT ATTEMPT TO REMOVE SYRUP TANK COVER UNTIL CO<sub>2</sub> PRESSURE HAS BEEN RELEASED FROM TANK.**

- G. Disconnect CO<sub>2</sub> supply hose from the water filled syrup tank.
- H. Prepare cleaning solution as described in Section 2.2 above. Fill a tank with cleaning solution. Connect syrup line to the tank. Connect CO<sub>2</sub> supply hose to tank and pressurize.
- I. Place waste container under applicable dispensing valve. Activate valve and draw cleaning solution through lines for a minimum of 60 seconds. This will ensure line is flushed and filled with cleaning solution. Allow line to stand for at least 30 minutes.

### **NOTE**

Extended lengths of product lines may require additional time for flushing and filling lines.

- J. Disconnect CO<sub>2</sub> supply hose from the tank.
- K. Connect syrup line to a tank filled with clean, potable, water at a temperature of 90 to 110°F. Connect CO<sub>2</sub> supply hose to tank and pressurize.
- L. Place waste container under applicable dispensing valve. Activate valve to flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of cleaning solution. Continue rinsing until testing with phenolphthalein shows that the rinse water is free of residual detergent.
- M. Disconnect CO<sub>2</sub> supply hose from the tank.
- N. Fill a tank with sanitizing solution. Connect syrup line to the tank. Connect CO<sub>2</sub> supply hose to tank and pressurize.
- O. Remove dispensing valve nozzle (twist and pull down) and pull out center mixing baffle. Using a plastic bristle brush and detergent soap solution scrub the nozzle, mixing baffle, bottom of dispensing valve, and cup lever. Rinse with clean water.
- P. Reassemble mixing baffle and nozzle.
- Q. Place waste container under applicable dispensing valve. Activate valve and draw sanitizing solution through line for a minimum of 60 seconds. This will ensure line is flushed and filled with sanitizing solution. Allow line to stand for at least 30 minutes.
- R. Disconnect CO<sub>2</sub> supply hose from the tank.
- S. Reconnect syrup lines to syrup containers (for example, quick disconnects, figal containers, etc.) and ready unit for operation.

### **WARNING**

**FLUSH SANITIZING SOLUTION FROM SYRUP SYSTEMS AS INSTRUCTED. RESIDUAL SANITIZING SOLUTION LEFT IN SYSTEM COULD CREATE A HEALTH HAZARD.**

- T. Draw drinks and refill lines with end product to flush sanitizing solution from the dispenser.

### **NOTE**

Please note that a fresh water rinse cannot follow sanitization of equipment. Purge only with the end use product. *This is an NSF requirement.*

- U. Test dispenser in normal manner for proper operation. Taste dispensed product to ensure there is no off-taste. If off-taste is found, additional flushing of syrup system may be required.
- V. Repeat cleaning, rinsing, and sanitizing procedures for each valve/syrup circuit.
- W. Clean exterior of unit as instructed in Section 2.6.
- X. Using a spray bottle of sanitizing solution, spray the underside of all dispenser valves, valve spouts and cup levers. Allow to air dry.

### **NOTE**

Thoroughly rinse inside and outside of syrup tank that was used for sanitizing solution with plain water to remove all solution residue.

- Y. Fill ice bin with ice. Install ice bin cover on unit.

## **2.4 CLEANING AND SANITIZING BAG-IN-BOX (BIB) SYSTEMS**

- A. Disconnect syrup quick disconnect coupling from syrup packages and connect coupling to a bag

- valve removed from an empty Bag-in-Box package.
- B. Place end of syrup inlet line, with bag valve attached, in a clean container filled with clean, potable, room temperature water.
  - C. Place waste container under applicable dispensing valve. Activate valve until water is dispensed. Flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of residual product.

**NOTE**

Extended lengths of product lines may require additional time for flushing and rinsing lines.

- D. Prepare cleaning solution as described in Section 2.2 above. Place end of syrup inlet line in container filled with cleaning solution.
- E. Place waste container under applicable dispensing valve. Activate valve and draw cleaning solution through lines for a minimum of 60 seconds. This will ensure line is flushed and filled with cleaning solution. Allow line to stand for at least 30 minutes.
- F. Place end of syrup inlet line in a clean container filled with clean, potable, water at a temperature of 90 to 110°F.
- G. Place waste container under applicable dispensing valve. Activate valve to flush and rinse line and fittings for a minimum of 60 seconds to remove all traces of cleaning solution. Continue rinsing until testing with phenolphthalein shows that the rinse water is free of residual detergent.
- H. Prepare sanitizing solution as described in Section 2.2 above. Place end of syrup inlet line in container filled with sanitizing solution which has been prepared.
- I. Activate valve and draw sanitizing solution through line for a minimum of 60 seconds. This will ensure line is flushed and filled with sanitizing solution. Allow line to stand for at least 30 minutes.
- J. Remove bag valve from quick disconnect coupling and reconnect syrup inlet line to syrup package. Ready unit for operation.

**WARNING**

**FLUSH SANITIZING SOLUTION FROM SYRUP SYSTEMS AS INSTRUCTED. RESIDUAL SANITIZING SOLUTION LEFT IN SYSTEM COULD CREATE A HEALTH HAZARD.**

- K. Draw drinks and refill lines with end product to flush sanitizing solution from the dispenser.

**NOTE**

Please note that a fresh water rinse cannot follow sanitization of equipment. Purge only with the end use product. *This is an NSF requirement.*

- L. Test dispenser in normal manner for proper operation. Taste dispensed product to ensure there is no off-taste. If off-taste is found, additional flushing of syrup system may be required.
- M. Repeat cleaning, rinsing, and sanitizing procedures for each valve circuit.

**2.5 VALVES**

- A. Valves may be cleaned and sanitized (see preparation in Section 2.2) in the same manner.
  - 1. Remove cover and disconnect power so the valve will not be activated during the cleaning procedure. Remove nozzle and diffuser. Wash these parts in cleaning solution; then immerse them in a bath of sanitizing solution for 15 minutes.
  - 2. Visually inspect around nozzle area for syrup residue. This area may be cleaned with warm water and cloth or with the nozzle brush supplied. Wipe off dispensing lever.
  - 3. Wearing sanitary gloves, remove, drain and air dry the nozzle and diffuser.
  - 4. Wearing sanitary gloves, replace diffuser, twist nozzle in place.
  - 5. Connect power and replace cover. Valve is ready for operation.

**2.6 ICE BIN COMPARTMENT ON ALL ICE CHESTS**

- A. The ice bin compartment of the dispenser should be thoroughly cleaned and sanitized at least once every month. Use the following procedure.
- B. Prepare cleaning solution and sanitizing solution in accordance with Section 2.2.
- C. Using the cleaning solution and a clean soft cloth, wash down the sides of the ice bin and the surface of the aluminum casting.

- D. Using clean, potable water, thoroughly rinse away the cleaning solution from the sides and surface of the casting.
- E. Using plastic sanitary gloves, soak a white cotton gauze cleaning rag in the sanitizing solution and wipe all surfaces in the ice compartment.

**NOTE**

Please note that a fresh water rinse cannot follow sanitization of equipment. Purge only with the end use product. *This is an NSF requirement.*

- F. Sanitizing of the ice compartment is complete. Refill with ice.

**3. TROUBLESHOOTING**

<b><u>TROUBLE</u></b>	<b><u>CAUSE</u></b>	<b><u>REMEDY</u></b>
-----------------------	---------------------	----------------------

**CAUTION**

POURING **HOT** WATER INTO DRAIN MAY CAUSE THE DRAIN TUBE TO COLLAPSE. ALLOW ONLY LUKEWARM OR COLD WATER TO ENTER DRAIN TUBE.

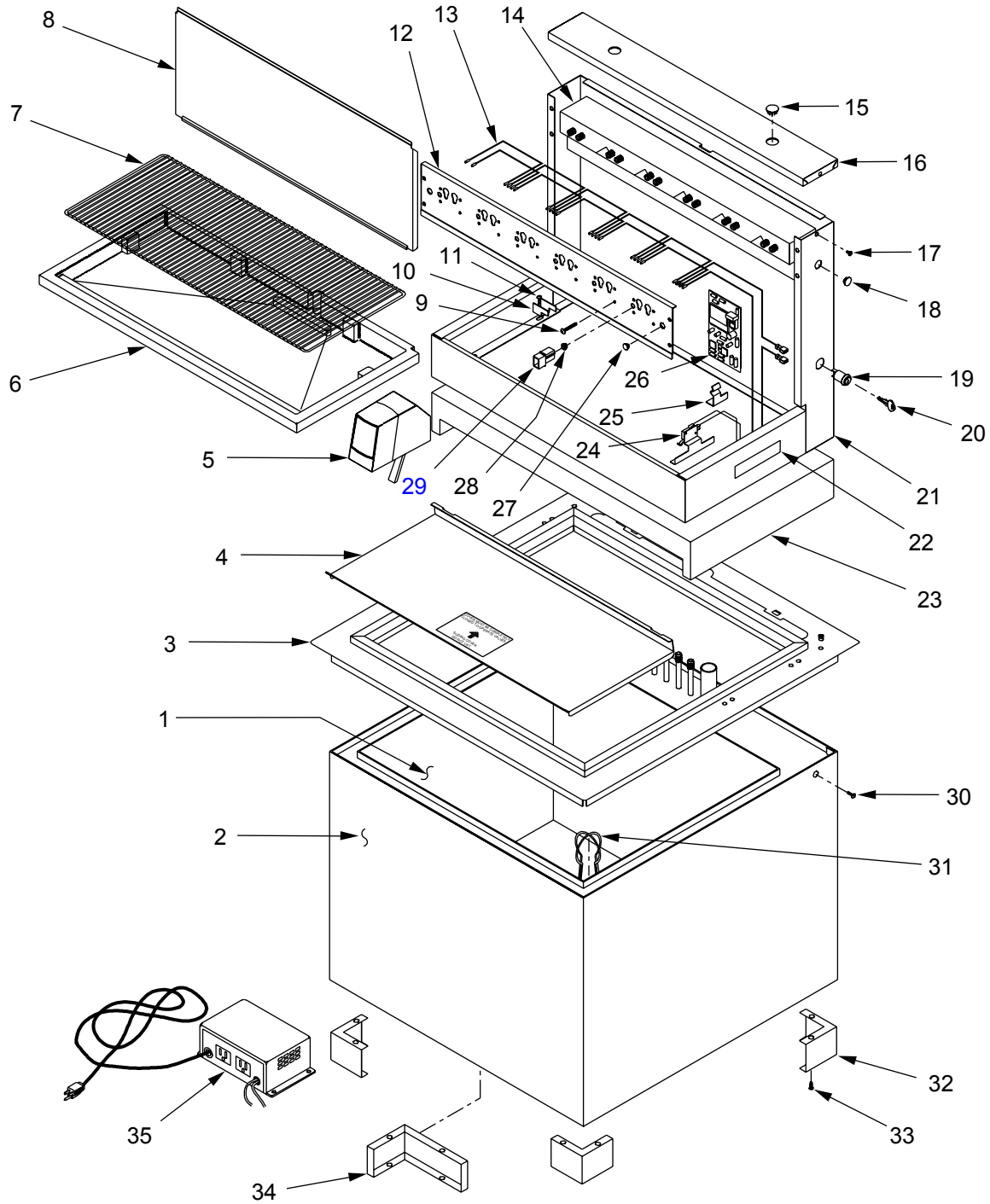
POURING COFFEE, TEA, AND LIKE SUBSTANCES INTO DRAIN MAY CAUSE THE DRAIN TUBE TO BECOME CLOGGED WITH COFFEE OR TEA GROUND, OR OTHER SOLID PARTICLES.

3.1 No carbonation.	<ul style="list-style-type: none"> <li>A. Carbonator motor not running.</li> <li>B. Absence of CO<sub>2</sub> gas.</li> <li>C. Gas only from valves.</li> <li>D. Carbonator tank air bound.</li> <li>E. CO<sub>2</sub> gas pressure below 90 PSI.</li> <li>F. Carbonator motor running continuously.</li> </ul>	<ul style="list-style-type: none"> <li>A. Check power supply. Be sure toggle switch is in ON position.</li> <li>B. Replace with full tank of CO<sub>2</sub> gas.</li> <li>C. Check for power failure. Check fuses. Clean strainer on pump.</li> <li>D. Relieve gas pressure in tank by pulling ring on safety relief valve until water spurts out.</li> <li>E. Reset high pressure CO<sub>2</sub> gas regulator to 90-110 PSI. Change CO<sub>2</sub> tank if required.</li> <li>F. Check switch on carbonator. Check water in check valve for blockage. Check carbonator control. Check carbonator pump for efficiency.</li> </ul>
3.2 Noisy Carbonator Pump.	<ul style="list-style-type: none"> <li>A. Insufficient water supply or water leak, allowing air to be pulled into pump.</li> <li>B. Loose pump coupling.</li> </ul>	<ul style="list-style-type: none"> <li>A. Provide adequate water supply. Check strainer for Cleanliness.</li> <li>B. Tighten set screw on pump coupling.</li> </ul>
3.3 Off taste in soda.	<ul style="list-style-type: none"> <li>A. Leaking water check valve, allowing carbonated water to back into supply line.</li> </ul>	<ul style="list-style-type: none"> <li>A. Dismantle and clean check valve. Replace O-Ring, if torn or distorted.</li> </ul>
3.4 Valves inoperable.	<ul style="list-style-type: none"> <li>A. Loss of power.</li> </ul>	<ul style="list-style-type: none"> <li>A. Check power supply to see if plugged in. Check transformer circuit breaker. Check main power circuit breaker, 110V.</li> </ul>

# ***NOTES***

# 4. ILLUSTRATIONS, PARTS LISTINGS, AND WIRING DIAGRAMS

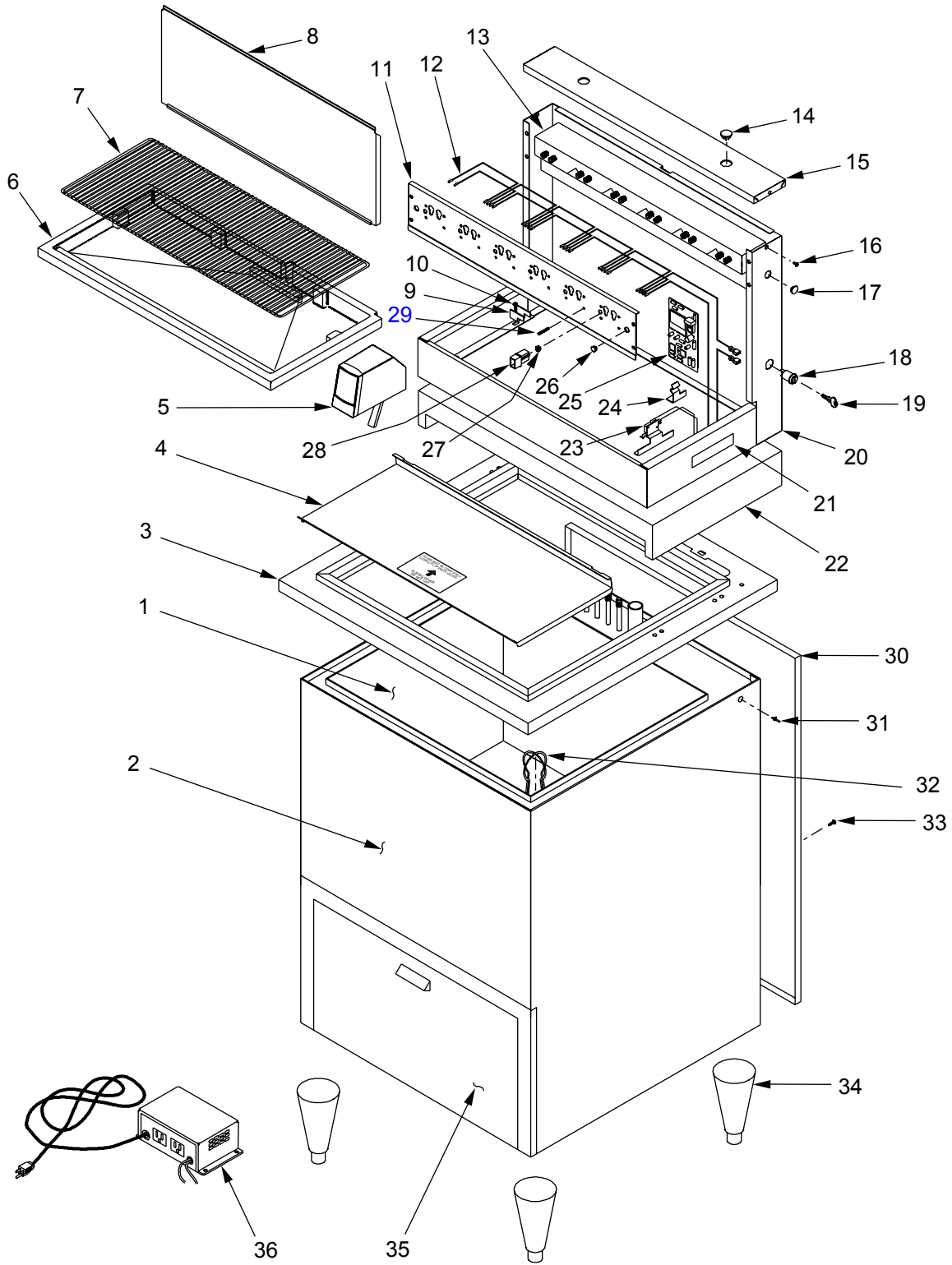
## 4.1 SERIES 2300 DROP-IN



#### 4.1 SERIES 2300 DROP-IN (CONTINUED)

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
1	42-0035	Tank Assy, High Performance
-	42-0036	Tank Assy, Standard Performance
2	30-5473/03	Tank Wrapper
3	51-1236/01	Rim Assy
4	30-7140	Lid, Ice Bin
5	19-0077	<b>LEV®</b>
-	19-0078	<b>LEV®</b> with Soda Lever
6	05-1074/01	Drip Tray
7	23-0797/02	Cup Rest
8	30-5424	Splash Plate
9	04-0459	Screw, 10 - 32 X 1.000 (for <b>LEV®</b> only)
10	30-6052	Door Stop
11	04-1028	Screw, 10 - 32 X 0.375
12	51-5089/01	Faucet Plate (5 Valve Stainless Steel)
-	51-5088/01	Faucet Plate (6 Valve Stainless Steel)
13	52-0828/03	Wire Harness Assy. (5 Valve)
-	52-0827/03	Wire Harness Assy. (6 Valve)
14	48-0776	Foamed Manifold (5 Valve, 4-1)
-	48-0767	Foamed Manifold (6 Valve, 5-1)
-	48-0851	Foamed Manifold (5 Valve, 2-1-2)
-	48-0850	Foamed Manifold (6 Valve, 3-1-2)
15	07-0360	Plug
16	30-5986	Tower Cap
17	04-0148	Screw, 10 - 32 X 0.250
18	07-0555	Plug
19	12-0097	Key Lock Switch Assy
20	81-0126	Key
21	51-5161/01	Tower Body (Stainless Steel)
22	06-0645-05	Nameplate (5 Valve)
-	06-0645-06	Nameplate (6 Valve)
23	51-5541	Base Assy.
24	82-1490	Switch Bracket Assy
25	30-7004	Wire Clip
26	82-1094	Casual Drink Device
27	07-0556	Plug
28	13-0015	Bushing
29	11-0015	Housing Socket
30	04-0072	Rivet
31	23-0862	Wire Drain Assy
32	30-0294	Shipping Riser
33	04-0510	Screw, 8 - 18 X 0.500
34	30-5151	Shipping Riser, Large
35	82-1103	Transformer Assy

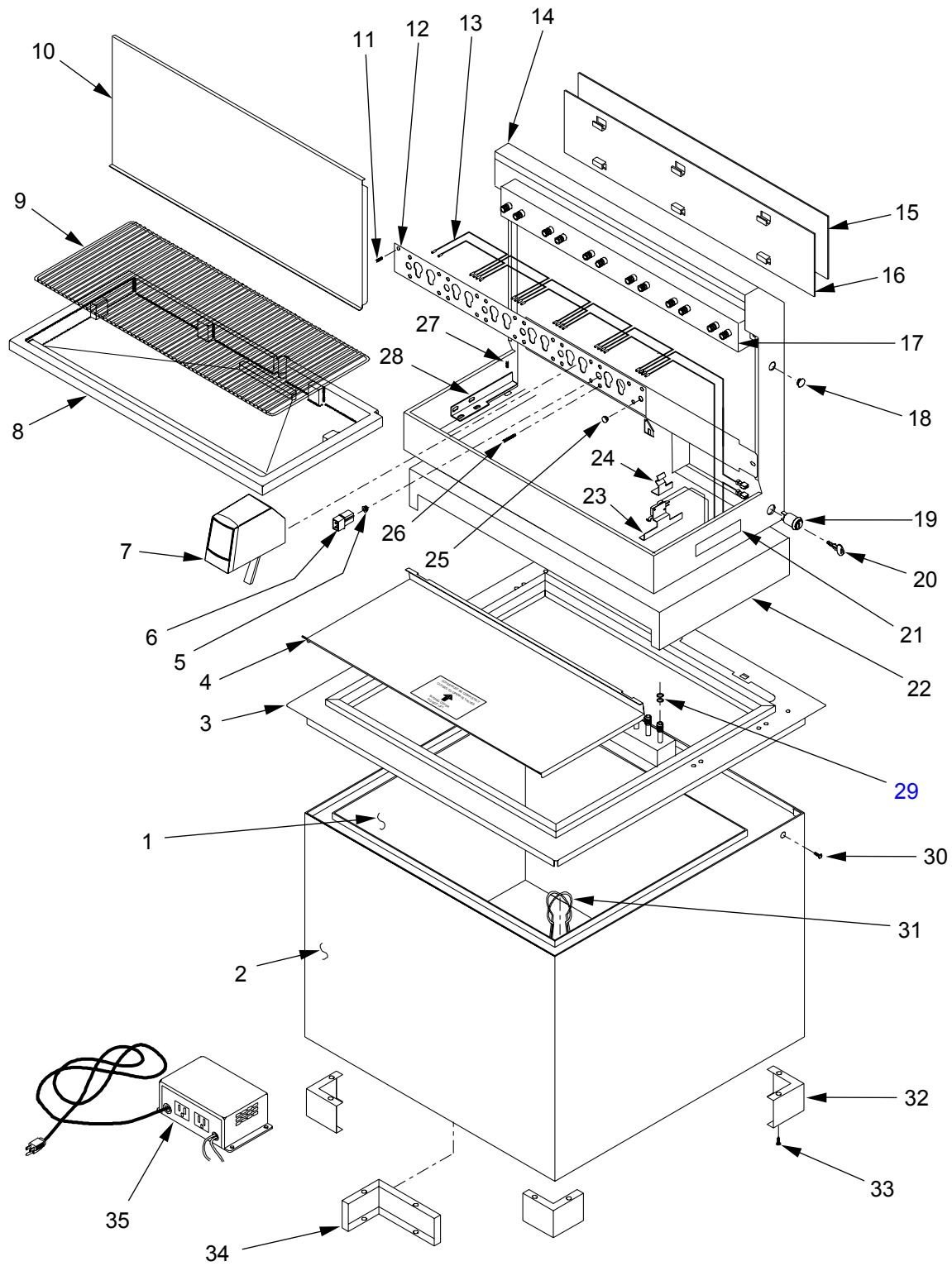
## 4.2 SERIES 2400 FREE-STANDING



## 4.2 SERIES 2400 FREE-STANDING

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	42-0035	Tank Assy, High Performance
-	42-0036	Tank Assy, Standard Performance
2	51-0641/02	Tank Wrapper
3	51-5227/02	Rim Assy
4	30-7140	Lid, Ice Bin
5	19-0077	<b>LEV®</b>
-	19-0078	<b>LEV®</b> with Soda Lever
6	05-1074/01	Drip Tray
7	23-0797/02	Cup Rest
8	30-5424	Splash Plate
9	30-6052	Door Stop
10	04-1028	Screw, 10 - 32 X 0.375
11	51-5089/01	Faucet Plate (5 Valve Stainless Steel)
-	51-5088/01	Faucet Plate (6 Valve Stainless Steel)
12	52-0828/03	Wire Harness Assy. (5 Valve)
-	52-0827/03	Wire Harness Assy. (6 Valve)
13	48-0776	Foamed Manifold (5 Valve, 4-1)
-	48-0767	Foamed Manifold (6 Valve, 5-1)
-	48-0851	Foamed Manifold (5 Valve, 2-1-2)
-	48-0850	Foamed Manifold (6 Valve, 3-1-2)
14	07-0360	Plug
15	30-5986	Tower Cap
16	04-0148	Screw, 10 -32 X 0.250
17	07-0555	Plug
18	12-0097	Key Lock Switch Assy
19	81-0126	Key
20	51-5161/01	Tower Body (Stainless Steel)
21	06-0645-05	Nameplate (5 Valve)
-	06-0645-06	Nameplate (6 Valve)
22	51-5541	Base Assy
23	82-1490	Switch Bracket Assy
24	30-7004	Wire Clip
25	82-1094	Casual Drink Device
26	07-0556	Plug
27	13-0015	Bushing
28	11-0015	Housing Socket
29	04-0459	Screw, 10 - 32 X 1.000 (for <b>LEV®</b> only)
30	30-6200	Back Access Door
31	04-0072	Rivet
32	23-0862	Wire Drain Assy
33	04-0608	Screw, 10 - 32 X 1.500
34	81-0011	Legs
35	30-0797/01	Front Access Door
36	82-1103	Transformer Assy

### 4.3 SERIES 2300 DROP-IN WITH PLUG IN TOWERS



### 4.3 SERIES 2300 DROP-IN WITH PLUG IN TOWERS (CONTINUED)

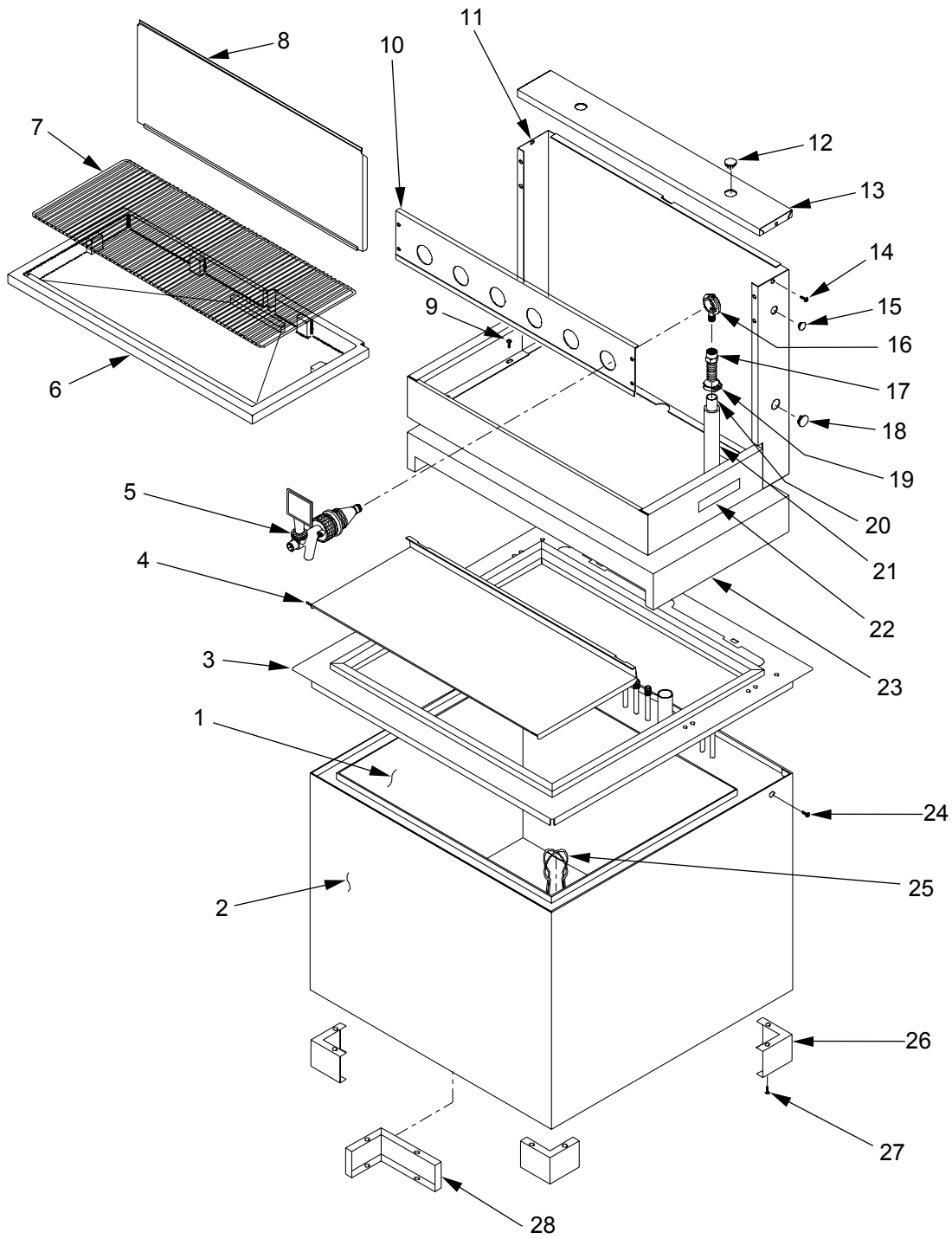
<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	42-0048	Tank Assy
2	30-5473/03	Tank Wrapper
3	51-1236/01	Rim Assy
4	30-7140	Lid, Ice Bin
5	13-0005	Bushing
6	11-0015	Housing Socket
7	19-0077	<b>LEV®</b>
-	19-0078	<b>LEV®</b> with Soda Lever
8	05-1147	Drip Tray
9	23-0797/02	Cup Rest
10	30-5424	Splash Plate
11	04-0558	Screw, 10 - 32 X 0.375
12	51-5089/01	Faucet Plate (5 Valve Sabre)
-	51-0711/01	Faucet Plate (6 Valve Sabre)
-	51-5089/01	Faucet Plate (5 Valve Stainless Steel)
-	51-5088/01	Faucet Plate (6 Valve Stainless Steel)
13	52-0828/03	Wire Harness Assy (5 Valve)
-	52-0827/03	Wire Harness Assy (6 Valve)
14	51-5161/01	Tower Body (Stainless Steel)
-	51-5019/01	Tower Body (Sabre)
15	06-0234	Coca-Cola, Sabre, Sign
16	05-0332	Mounting Graphic Panel
17	48-1134	Foamed Manifold (5 Valve Sabre Plug In)
-	48-0744	Foamed Manifold (6 Valve Sabre Plug In)
-	48-1133	Foamed Manifold (5 Valve Stainless Steel Plug In)
-	48-0951	Foamed Manifold (6 Valve Stainless Steel Plug In)
18	05-1516	Plug, Sabre, Gray
19	12-0097	Key Lock Switch Assy
20	81-0126	Key
21	06-0645-55	Nameplate (5 Valve Sabre)
-	06-0645-56	Nameplate (6 Valve Sabre)
-	06-0645-05	Nameplate (5 Valve Stainless Steel)
-	06-0645-06	Nameplate (6 Valve Stainless Steel)
22	51-5541	Base Assy
23	82-1490	Switch Bracket Assy
24	30-7004	Wire Clip
25	07-0556	Plug
26	04-0459	Screw
27	04-1028	Screw, 10 - 32 X 0.375
28	30-6184/01	Bracket, Tower Stiffener
29	02-0003	O-ring
30	04-0072	Rivet
31	23-0862	Wire Drain Assy
32	30-0294	Shipping Riser
33	04-0510	Screw, 8 - 18 X 0.500
34	30-5151	Shipping Riser, Large
35	82-1103	Transformer Assy



#### 4.4 SERIES 2400 FREE-STANDING WITH PLUG IN TOWERS (CONTINUED)

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	42-0048	Tank Assy
2	51-0641/02	Tank Wrapper
3	51-5227/02	Rim Assy
4	30-7140	Lid, Ice Bin
5	13-0005	Bushing
6	11-0015	Housing Socket
7	19-0077	<b>LEV®</b>
-	19-0078	<b>LEV®</b> with Soda Lever
8	05-1147	Drip Tray
9	23-0797/02	Cup Rest
10	30-5424	Splash Plate
11	04-0558	Screw, 10 - 32 X 0.375
12	51-5089/01	Faucet Plate (5 Valve Sabre)
-	51-0711/01	Faucet Plate (6 Valve Sabre)
-	51-5089/01	Faucet Plate (5 Valve Stainless Steel)
-	51-5088/01	Faucet Plate (6 Valve Stainless Steel)
13	52-0828/03	Wire Harness Assy (5 Valve)
-	52-0827/03	Wire Harness Assy (6 Valve)
14	51-5161/01	Tower Body (Stainless Steel)
-	51-5019/01	Tower Body (Sabre)
15	06-0234	Coca-Cola Sabre Sign
16	05-0332	Mounting Graphic Panel
17	48-1134	Foamed Manifold (5 Valve Sabre Plug In)
-	48-0744	Foamed Manifold (6 Valve Sabre Plug In)
-	48-1133	Foamed Manifold (5 Valve Stainless Steel Plug In)
-	48-0951	Foamed Manifold (6 Valve Stainless Steel Plug In)
18	05-1516	Plug Sabre Gray
19	12-0097	Key Lock Switch Assy
20	81-0126	Key
21	06-0645-55	Nameplate (5 Valve Sabre)
-	06-0645-56	Nameplate (6 Valve Sabre)
-	06-0645-05	Nameplate (5 Valve Stainless Steel)
-	06-0645-06	Nameplate (6 Valve Stainless Steel)
22	51-5541	Base Assy
23	82-1490	Switch Bracket Assy
24	30-7004	Wire Clip
25	07-0556	Plug
26	04-0459	Screw, 10 - 32 X 1.000 (for <b>LEV®</b> only)
27	04-1028	Screw, 10 - 32 X 0.375
28	30-6184	Bracket, Tower Stiffener
29	02-0003	O-ring
30	30-6200	Back Access Door
31	04 0072	Rivet
32	23-0862	Wire Drain Assy
33	04-0608	Screw, 10 - 32 X 1.500
34	81-0011	Legs
35	30-0797/01	Front Access Door
36	82-1103	Transformer Assy

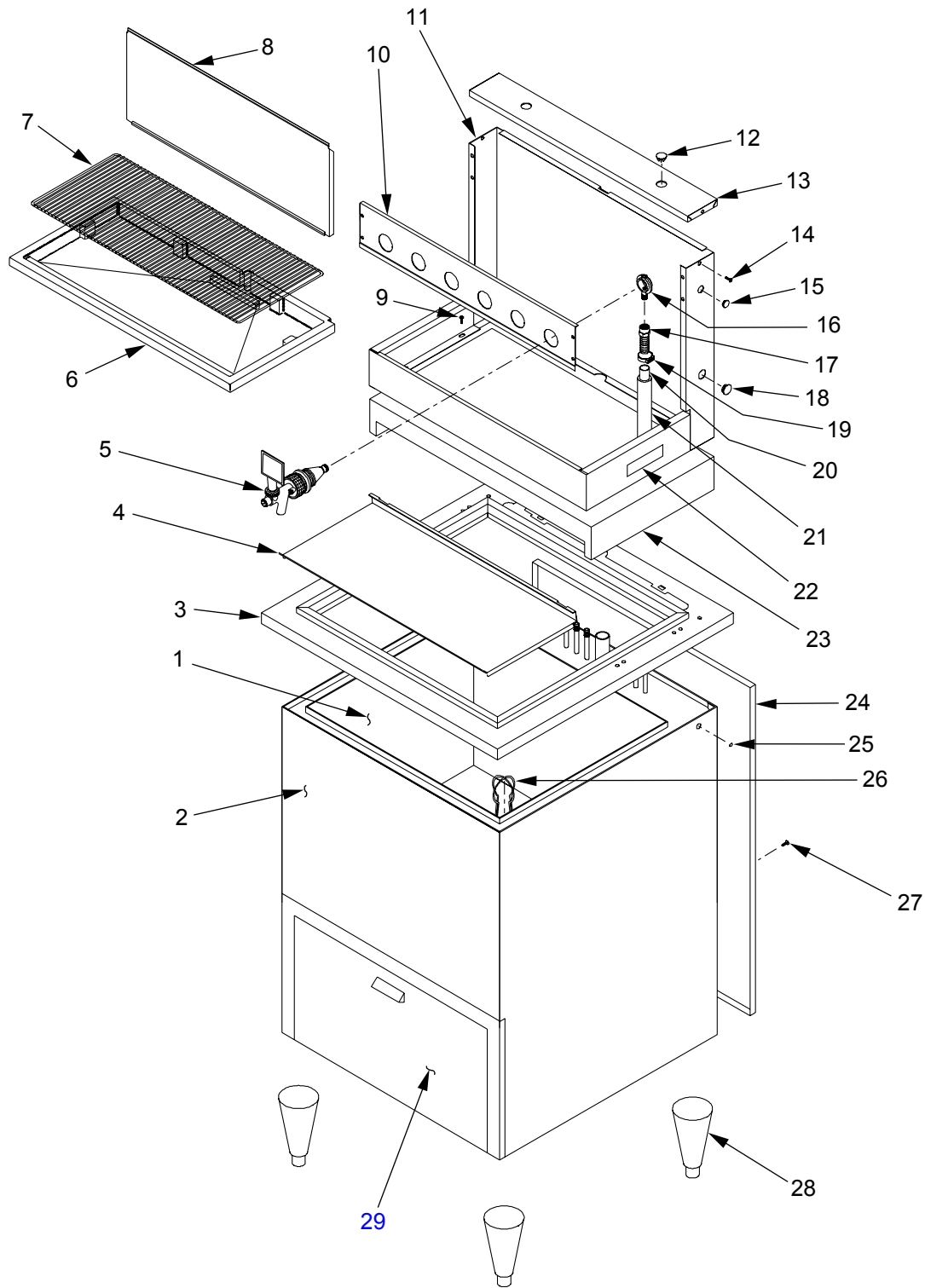
4.5 SERIES 2300 DROP-IN (PRE-MIX)



#### 4.5 SERIES 2300 DROP-IN (PRE-MIX) (CONTINUED)

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	42-0038	Tank Assy
2	30-5473/03	Tank Wrapper
3	51-1236/01	Rim Assy
4	<a href="#">30-7140</a>	Lid, Ice Bin
5	19-0002	Pre-Mix Valve
6	05-1074/01	Drip Tray
7	23-0797/02	Cup Rest
8	30-5424	Splash Plate
9	04-1028	Screw 10 - 32 X 0.375
10	30-5731	Faucet Plate (5 Valve)
-	30-5730	Faucet Plate (6 Valve)
11	51-5161/01	Tower Body (Stainless Steel)
12	07-0360	Plug
13	30-5986	Tower Cap
14	04-0148	Screw, 10- 32 X 0.250
15	07-0555	Plug
16	C-15-0794-100	Yoke Fitting
17	01-0222	Fitting
18	07-0405	Plug
19	<a href="#">07-0438</a>	Clamp, Oetiker
20	08-0263	Tubing, Red Line
21	88-0118	Insulation
22	06-0645-05	Nameplate (5 Valve)
-	06-0645-06	Nameplate (6 Valve)
23	51-5541	Base Assy
24	04-0072	Rivet
25	<a href="#">23-0862</a>	Wire Drain Assy
26	30-0294	Shipping Riser
27	04-0510	Screw, 8 - 18 X 0.500
28	30-5151	Shipping Riser, Large

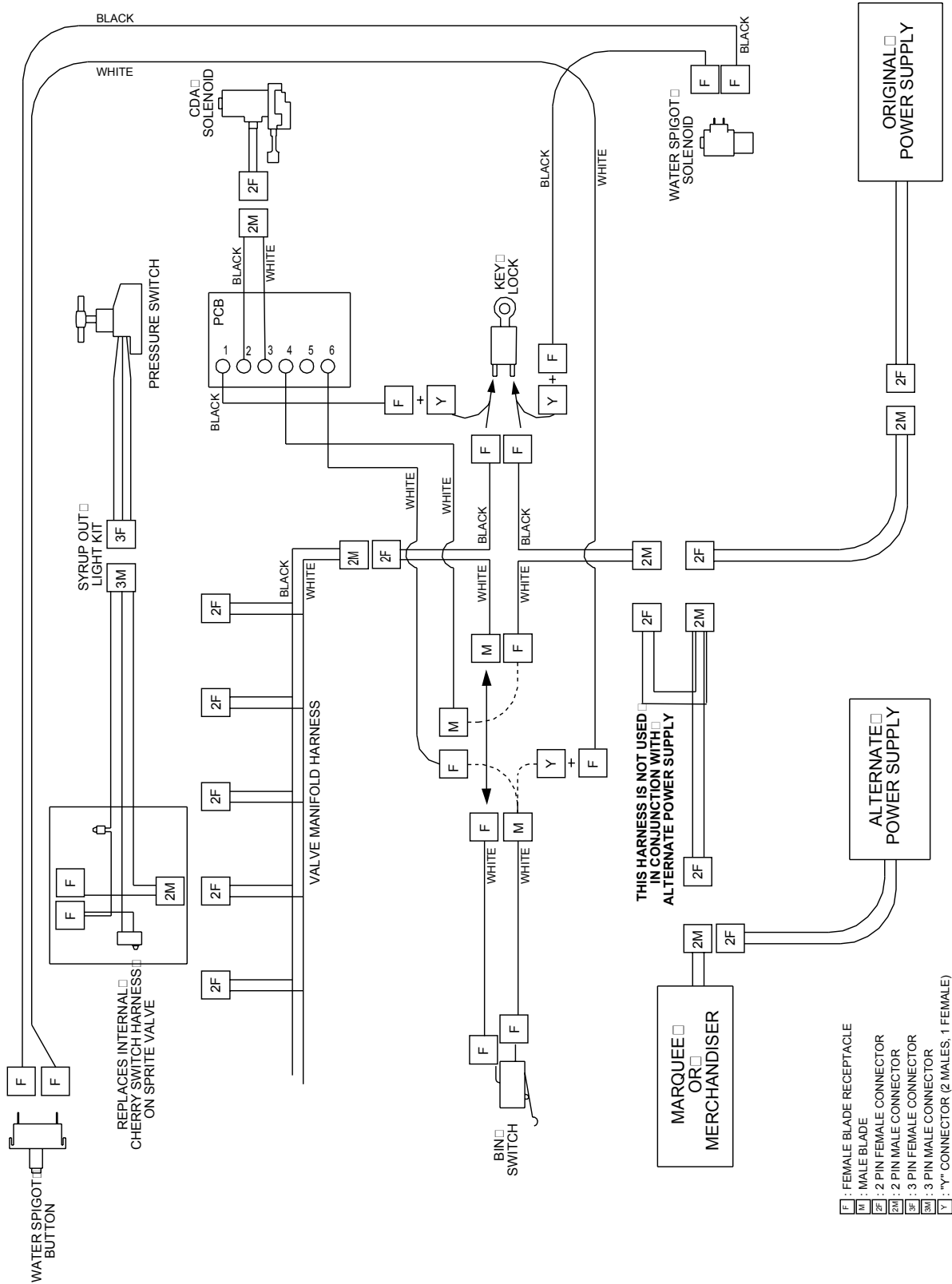
4.6 SERIES 2400 FREE-STANDING (PRE-MIX)



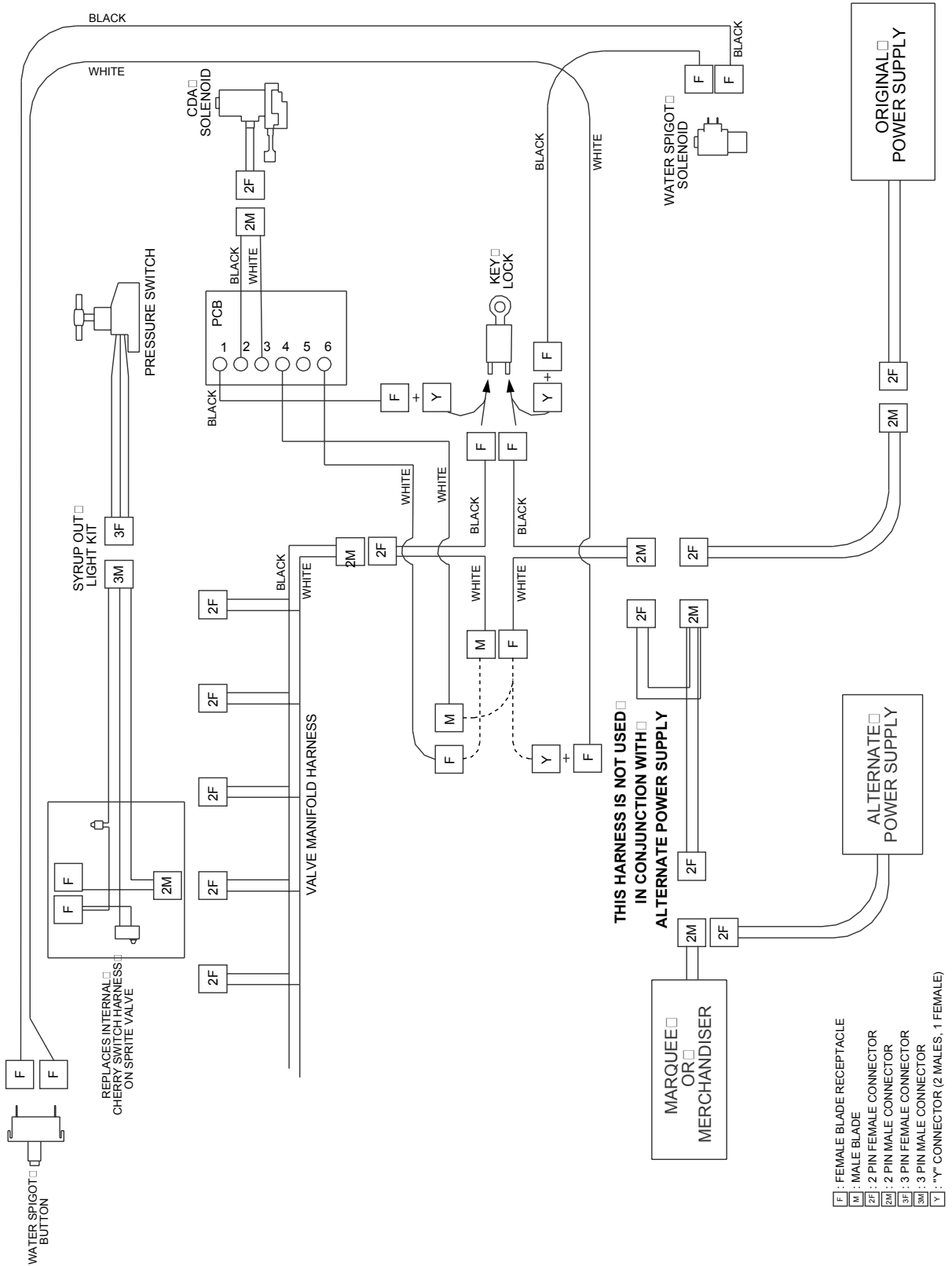
#### 4.6 SERIES 2400 FREE-STANDING (PRE-MIX) (CONTINUED)

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	42-0038	Tank Assy
2	51-0641/02	Tank Wrapper
3	51-5227/02	Rim Assy
4	30-7140	Lid, Ice Bin
5	19-0002	Premix Valve
6	05-1074/01	Drip Tray
7	23-0797/02	Cup Rest
8	30-5424	Splash Plate
9	04-1028	Screw, 10 - 32 X 0.375
10	30-5731	Faucet Plate (5 Valve)
-	30-5730	Faucet Plate (6 Valve)
11	51-5161/01	Tower Body (Stainless Steel)
12	07-0360	Plug
13	30-5986	Tower Cap
14	04-0148	Screw, 10 - 32 X 0.250
15	07-0555	Plug
16	C-15-0794-100	Yoke Fitting
17	01-0222	Fitting
18	07-0405	Plug
19	07-0438	Clamp, Oetiker
20	08-0263	Red Line, Tubing
21	88-0118	Insulation
22	06-0644-05	Nameplate (5 Valve)
-	06-0644-06	Nameplate (6 Valve)
23	51-5541	Base Assy
24	30-6200	Back Access Door
25	04-0072	Rivet
26	23-0862	Wire Drain Assy
27	04-0608	Screw 10 - 32 X 1.500
28	81-0011	Legs
29	30-0797/01	Front Access Door

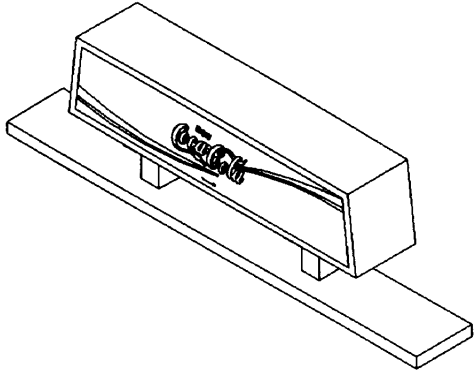
## 4.7 ICE COOLED UNIVERSAL WIRING DIAGRAM WITH BIN LID SWITCH



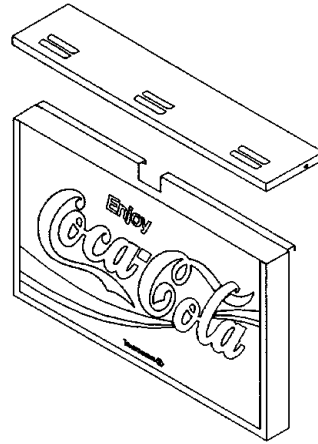
### 4.8 ICE COOLED UNIVERSAL WIRING DIAGRAM WITHOUT BIN LID SWITCH



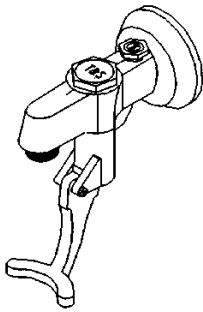
**4.9 LANCER ICE COOLED DISPENSER -- ACCESSORIES**



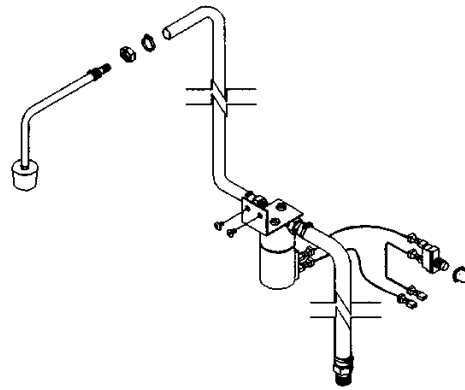
**Illuminated Merchiser  
PN 85-2304**



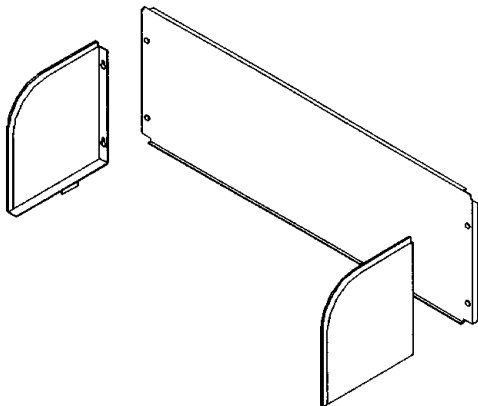
**Illuminated Marquee  
PN 85-2302**



**T & S Valve for Chilled Water  
PN 19-0036**



**Water Spigot for Ambient  
Temperature Water Kit  
PN 82-1597**



**Splash Guards Kit  
PN 82-2076**

*(Continued from previous page)***EcuLancer S.A. - Ecuador**

Lancer Sales Company  
 Contact: Luciano Lopez  
 Sector Las Acacias  
 Luis De Beethoven #958  
 Y Capitan Rafael Ramos  
 Quito, Ecuador  
 Phone: 593-22-401-598, 400-937, 406-418  
 FAX: 593-22-400-535  
 e-mail: Llopez@ecnet.ec

**Lancer Authorized Distributors****Eximport & Barter Co. - Caribbean**

2101 S.W. 56th Terrace  
 Hollywood, FL 33023 USA  
 Phone: (954) 967-9999  
 FAX: (954) 967-9900  
 e-mail: edbrandao@aol.com

**PromoVen, S.A. - Argentina**

Contact: Rafael Mendoza  
 Juncal 858 - Piso 3 Depto. "L"  
 (1062) Buenos Aires  
 Argentina  
 Phone: (54.11)4394.7654  
 FAX: (54.11)4394.1193  
 e-mail: promoven@customw.com.ar

**Bras Sulamericana LTDA. - Brasil**

Contact: Fabio Queiroz  
 Rua. Dr. Ladislau Retti, 1400  
 Parque Alexandre  
 Cotia Sao Paulo - Brasil  
 CEP: 06714-150  
 Phone: 55-11-4612-1122  
 FAX: 55-11-4612-2219  
 e-mail: fabio.queiroz@bras.com.br

**Lancer Chile Ltda. - Chile**

Contact: Heriberto Concha  
 Vicuna Mackenna 3019, San Joaquin  
 Santiago, Chile  
 Phone: 56-2-552-1657  
 FAX: 56-2-552-1961  
 e-mail: hconcha@lancer-intl.com

**Lancer Pacific****International Sales**

6655 Lancer Blvd.  
 San Antonio, TX 78219  
 Phone: (210) 310-7000  
 FAX: (210) 310-7242  
 1-800-729-1500  
 e-mail: asia@lancercorp.com

**Australia**

Lancer Pacific Pty Ltd  
 5 Toogood Avenue  
 Beverley 5009  
 South Australia  
 Phone: 61-8-8268-1388  
 FAX: 61-8-8268-1978  
 e-mail: ian-lunniss@lancer-pacific.com.au  
 steve-sotiriou@lancer-pacific.com.au  
 (for Fountain)  
 fiore-alvaro@lancer-pacific.com.au  
 (for Beer)  
 rob-burdock@lancer-pacific.com.au  
 (Senior Director - Asia)

Lancer Pacific Pty Ltd  
 7 Slough Avenue  
 Silverwater 2128  
 New South Wales  
 Australia  
 Phone: 61-2-9648-6840  
 FAX: 61-2-9648-6850  
 e-mail: richard-abraham@lancer-pacific.com.au

Lancer Pacific Pty Ltd  
 55 Keele Street  
 Collingwood 3066  
 Victoria  
 Australia  
 Phone: 03 8415 1920  
 FAX: 03 8415 1929  
 e-mail: glenn-blakiston@lancer-pacific.com.au

Lancer Pacific Pty Ltd  
 Unit 31, 284 Musgrave Drive  
 Coopers Plains 4108  
 Queensland  
 Australia  
 Phone: 61-7-3274-5700  
 FAX: 61-7-3875-1805  
 e-mail: brett-thomson@lancer-pacific.com.au

**New Zealand**

Lancer Pacific Ltd  
 9 O'Rorke Street  
 Onehunga, Auckland  
 New Zealand  
 Phone: 64-9-634-3612  
 FAX: 64-9-634-1472  
 e-mail: phil-mason@lancer-pacific.com.au

**Hong Kong**

Patrick Co - Area Manager - Asia  
 Phone: 852-29670900  
 FAX: 852-30105882  
 e-mail: patrickco@lancer-asia.com

**Lancer Authorized Distributors****Shanghai Freser International Co Ltd. - China**

1856, Hu Tai Road  
 Shanghai, 200436, China  
 Phone: 86-21-5650-3555  
 FAX: 86-21-5650-2666  
 e-mail: daniel@freser.com.cn

**Freser (HK) Company Ltd - Hong Kong**

Flat A, 24/F., Houston Industrial Bldg.  
 32-40 Wang Lung Street  
 Tsuen Wan, N. T., Hong Kong  
 Phone: 852-2408-2595  
 FAX: 852-2408-2605  
 e-mail: freserhk@netvigator.com

**P.T. Ciptapratama Sentosamakmur - Indonesia**

Jl. Anggrek Nelly Murni, Blok A - 39, Slipi  
 Jakarta 11480, Indonesia  
 Phone: 62-21-532-3737  
 FAX: 62-21-532-3666  
 e-mail: ciptasm@indosat.net.id

**Hayakawa Sanki - Japan**

Hayakawa Sanki, Inc.  
 1-13-13, Kayaba-cho  
 Nihonbashi, Chuo-ku  
 Tokyo, 103-0025  
 Japan  
 Phone: 03-5651-1481  
 FAX: 03-5651-1445  
 e-mail: SANKI10217@aol.com

**Tahoe Corporation - Korea**

Tahoe Corporation  
 2FL, 835-66 Yocksam-dong  
 Kangnam-Ku  
 Seoul, Korea  
 Phone: 82-2-557-5612, -5614  
 FAX: 82-2-557-5615  
 e-mail: tahoeepark@netsgo.com

**Freser (MALAYSIA) SDN. BHD. - Malaysia**

No. 31, Jalan TPP 5/13, Taman  
 Perindustrian Puchong, Seksyen 5,  
 47100 Puchong, Selangor, Malaysia  
 Phone: 60-3-8061-6666  
 FAX: 60-3-8062-1007  
 e-mail: freser@tm.net.my

**R.B.P. Industrial Sales Inc - Philippines**

Unit 20, Facilities Centre Bldg.  
 548 Shaw Blvd  
 Mandaluyong City, Philippines  
 Phone: 632-531-1215/1221/1289  
 FAX: 632-531-1271  
 e-mail: rbpsales@info.com.ph

**Freser (S) Pte Ltd - Singapore**

Blk 998 Toa Payoh North  
 #04-12/14  
 Singapore 318993  
 Phone: 65-6352-0943  
 FAX: 65-6352-8594  
 e-mail: fresersin@pacific.net.sg

**Freser International Corporation - Taiwan**

No. 76, Gui-Sui Street  
 Taipei 103, Taiwan R.O.C.  
 Phone: 886-2-2553-1555  
 FAX: 886-2-2553-2742  
 e-mail: allen@intl.freser.com.tw

**Freser (Thailand) Co Ltd - Thailand**

3/15 Moo 3, Soi Ruammitr  
 Tivanont Road, Banmai  
 Pakkred, Nonthaburi, 11120  
 Thailand  
 Phone: 662-961-9543  
 FAX: 662-961-9550  
 e-mail: prachat@asianet.co.th

**Lancer - Indian Sub-Continent  
India**

Shabbir Shafiqui - Area Manager  
 India and Sub-Continent  
 B-7, Pannalal Silk Mill Compounds  
 78, LBS Marg, Bhandup (W)  
 Mumbai 400-078, India  
 Phone: 91-22-2561-6665  
 Cel No.: 91-98-2029-5252  
 FAX: 91-22-5637-4018  
 e-mail: shafiquis@vsnl.com

**Lancer Authorized Distributors****Western Refrigeration Ltd - India**

B-7, Pannalal Silk Mill Compounds  
 78 L.B.S. Marg, Bhandup (W)  
 Mumbai 400-078, India  
 Phone: 91-22-2561-6665  
 FAX: 91-22-2562-2257  
 e-mail: western@bom5.vsnl.net.in

**Bengal Marketing Company - Bangladesh**

Skylark Point (6th Floor)  
 Room #G-2  
 24/A Bijoy Nagar,  
 Dhaka-1000, Bangladesh  
 Phone: 880-2-934-2987  
 FAX: 880-2-935-0127  
 e-mail: bmc@dhaka.agni.com

**Dynamic Equipment - Pakistan**

Dynamic Equipment and Controls (Pvt.) Ltd.  
 F-1/23, Canal Cottages, Block-D.  
 New Muslim Town.  
 Lahore, Pakistan.  
 Phone: 0092-42-583-6737  
 0092-42-583-6787  
 FAX: 0092-42-586-7924  
 e-mail: info@dynamic-eqpt.com.pk

**Lancer USA  
Manufacturing Locations**

**Foster Road Facilities**

6655 Lancer Blvd  
San Antonio, TX 78219  
Phone: (210) 310-7000  
MFG FAX: (210) 310-7088  
ENG FAX: (210) 310-7096  
ACCT FAX: (210) 310-7091  
PURCH FAX: (210) 310-7094

**Lancer FBD**

5620 Business Park  
San Antonio, TX 78218  
Phone: (210) 666-0544  
FAX: (210) 666-2044

**Lancer Ice Link**

6655 Lancer Blvd  
San Antonio, TX 78219  
Phone: (210) 310-7174  
FAX: (210) 310-7245

**Remanufacturing**

6655 Lancer Blvd  
San Antonio, TX 78219  
Phone: (210) 310-7356  
FAX: (210) 310-7261  
1-800-729-1550

**Lancer North America**

**USA - Canada Sales**

6655 Lancer Blvd.  
San Antonio, TX 78219  
Phone: (210) 310-7000  
SALES FAX: (210) 310-7245  
CUSTOMER SERVICE FAX: (210) 310-7250  
1-800-729-1500

**Georgia Office**

1125 Northmeadow Parkway, Suite 116  
Roswell, GA 30076  
Phone: (770) 343-8828  
FAX: (770) 475-8646  
1-800-729-1750

**Lancer Authorized Distributors**

**Advanced Beverage Solutions (ABS)**

100 N. Gary Avenue, Suite C  
Roselle, IL 60172  
Phone: (847) 524-1707  
(877) 814-2271  
FAX: (847) 524-1710  
www.absone.com

**Bevco**

6900 Camille Avenue  
Oklahoma City, OK 73149  
Phone: (405) 672-7770  
FAX: (405) 672-7443  
e-mail: info@bevcoinc.com

**Joe Kirwan Company**

119 White Oak Lane  
Old Bridge, NJ 08857  
Phone: (732) 679-1900  
FAX: (732) 679-9236  
e-mail: sales@jkirwan.com

**L & M Beverage Equipment Co. Inc.**

12510 Santa Fe Trail Drive  
Lenexa, KS 66215  
Phone: (913) 888-8988  
FAX: (913) 888-9137  
e-mail: L7mco@aol.com

(Update #44 - as of May 01, 2003)

**Ernest F. Mariani Company**

614 West 600 South  
Salt Lake City, UT 84104  
Phone: (801) 359-3744  
FAX: (801) 531-9615  
e-mail: febell@efmco.com, or  
clay@efmco.com

**Mark Powers & Company, Inc.**

P.O. Box 72  
1821 Henry Street  
Guntersville, AL 35976  
Phone: (256) 582-6620  
FAX: (256) 582-8533  
e-mail: sales@markpowers-and-company.com

**Maurer Supply, Inc.**

843 Rainier Avenue South  
Seattle, WA 98144  
Phone: (206) 323-8640  
FAX: (206) 323-9286  
e-mail: maurersupply@qwest.net

**Simgo Ltd.**

5122 Timberlea Blvd.  
Mississauga, Ontario L4W 2S5  
Canada  
Phone: 905-602-5800  
FAX: 905-602-5804  
e-mail: simgo@simgo.com

**Simgo (B.C.) Ltd.**

16-8125 - 130th Street  
Surrey, B.C. V3W 7X4  
Canada  
Phone: 604-590-4022  
FAX: 604-590-1601

**Lancer Europe**

**Belgium - European Central Office**

Lancer Europe, S.A.  
Mechelsesteenweg 592  
B-1930 Zaventem  
Belgium  
Phone: 32-2-755-2390  
FAX: 32-2-755-2399  
e-mail: lancer.europe@glo.be

**England**

17 Bembridge Gardens  
Ruislip, Middlesex  
HA4 7ER, England  
Phone: 44-1895672667  
FAX: 44-1895637537  
e-mail: court4lancer@msn.com

**Hungary**

H-2100 Gödöllő  
Isaszegi út 67  
Hungary  
Phone: 36-28-417-179  
FAX: 36-28416-881  
e-mail: bodolai@compuserve.com

**Lancer Authorized Distributors**

**Complete Beverage Services, Ltd.  
Republic of Ireland and Northern Ireland**

Gortrush Industrial Estate  
Omagh County Tyrone  
Northern Ireland  
Office: 44-1662 250 008  
FAX: 44-1662-252-991

**Intercom - Spain**

Intercom  
Avda. Concha Espina 8  
28036 Madrid Spain  
Phone: 34-91-564 6900  
FAX: 34-91-564 3065  
e-mail: jmorales@bevserve.com

**Lancer Russia**

**Lancer Sales Company**

Vyatskaya Street 27  
Building 15, 4th Floor  
125015 Moscow, Russia  
Phone: 7-095-745-7108  
FAX: 7-095-745-7109  
Mobile Phone: 7-095-991-7778  
7-095-139-0335  
e-mail: lancer@online.ru  
vdemkin@ktv.ru

**Lancer Middle East / Africa**

Elsayed Moniem - Technical Manager  
Lancer Middle East/Africa  
7 Mubarak Street  
East Ain Shams 11311  
Cairo, Egypt  
Phone/FAX: 2-02-49-35-395  
Mobile Phone (GSM): 2-010-500-4007  
e-mail: elsayed\_lancer@msn.com

**Lancer Authorized Distributor**

**DispenseTech - South Africa**

P.O. Box 17495  
Sunward Park, 1470  
South Africa  
Phone: 27-11-397-7455  
FAX: 27-11-397-7648  
e-mail: david@dispensetech.co.za

**Lancer Latin America**

**Latin America Sales**

6655 Lancer Blvd.  
San Antonio, TX 78219  
Phone: (210) 310-7000  
FAX: (210) 310-7245  
1-800-729-1500  
e-mail: latinamerica@lancercorp.com

**Lancer de México, S.A. de C.V.**

Contact: Gerardo Canales  
Calle Lerdo De Tejada #544 PTE.  
Col. Las Villas  
San Nicolas De Los Garza, N.L.  
Monterrey, N. L., México C.P. 66422  
Phone: (52)-81-83-52-85-32  
Phone: (52)-81-83-52-85-34  
Phone: (52)-81-83-52-53-60  
FAX: (52)-81-83-32-54-10  
e-mail: direccion@lancer.com.mx

**Lancer de México, S.A. de C.V.**

**Branch Office, Mexico City**

Contact: Carlos Lopez  
Lancer de Mexico S.A. de C.V.  
Sucursal Mexico D.F.  
Calle: Centeotl No. 112  
Colonia: La Preciosa  
Delegacion: Azcapotzalco  
Mexico D.F. C.P. 02460  
Phone: (52)-55-53-53-89-28  
Phone: (52)-55-53-53-89-26  
Phone: (52)-55-53-53-88-60  
Phone: (52)-55-53-53-88-21  
FAX: (52)-55-53-52-46-30  
e-mail: lancer@prodigy.net.mx

**Lancer de México, Branch Office, Cd. Juarez**

Contact: Yolanda Puga  
Lancer de Mexico  
Camino de la Lomas # 4380  
Col. Partido Iglesias  
Cd. Juarez, CHIH, C.P. 32617  
México  
Phone and FAX: 521-605-00-86  
Phone: 521-605-00-87  
e-mail: cdjuarez@lancer.com.mx

(Continued on reverse)