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# INSTALLATION AND SERVICE MANUAL

## FOR

### TURBO-CARB HIGH CAPACITY CARBONATOR

Part Number 85-1923, 115 Volts, 50/60 Hz  
Part Number 85-1924, 230 Volts, 50/60 Hz  
Part Number 85-1926, 115 Volts, 50/60 Hz, with Insulated Tank  
Part Number 85-1965, 100 Volts, 50/60 Hz

#### SPECIFICATIONS

##### DIMENSIONS

Width	12 1/4 inches (31.11 cm)
Depth	15 1/4 inches (38.74 cm)
Height	11 1/2 inches (29.21 cm)

##### WEIGHT

Shipping	33.5 pounds (15.2 kg)
Empty	31.1 pounds (14.1 kg)
Operating	45.3 pounds (20.5 kg)

##### ELECTRICAL

<b>Domestic</b>	Operating Voltage	115
	Hertz	60
	Amps	6.2
<b>Export</b>	Operating Voltage	230
		100 (Japan Only)
	Hertz	50/60
	Amps	3.5/3.0

##### MOTOR

1/3 Horsepower (HP)

##### PUMP

125 Gallons Per Hour (GPH)  
[473 Liters Per Hour (LPH)]

##### WATER INLET

3/8 inch S.A.E. Male Flare

##### CO<sub>2</sub> INLET

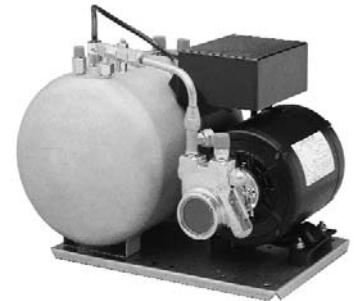
1/4 inch S.A.E. Male Flare

##### CARBONATED WATER OUTLET (TWO)

3/8 inch S.A.E. Male Flare

##### TANK OPERATING CAPACITY

215 Ounces (6.4 L)



***This Manual supersedes Installation and Service Manual 28-0022/04, dated 11/22/99, and is being published only on the Lancer Web Site.***

# **LANCER**

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

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DATE: 09/26/01  
P.N.: 28-0022/05

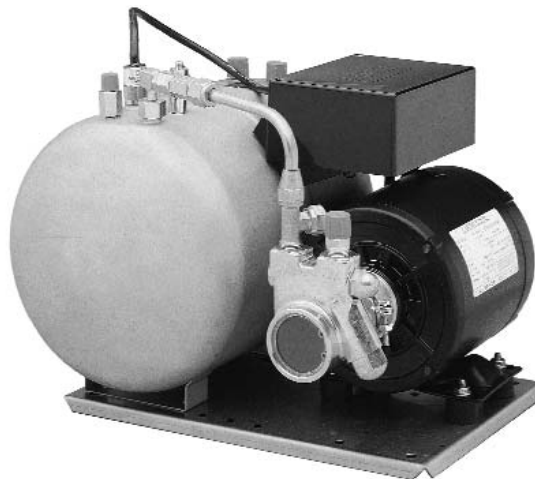
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### THEORY OF OPERATION

A carbonator is a device designed to dissolve carbon dioxide gas (CO<sub>2</sub>) in water, producing carbonated water. CO<sub>2</sub> gas is delivered through a regulator to the carbonator tank. Simultaneously, plain water is pumped into the tank. The CO<sub>2</sub> gas, under pressure, dissolves in the water and the result is carbonated water. When the level of carbonated water reaches a pre-determined point, the liquid level sensing device (inside the tank) signals the liquid level control module which, in turn, shuts off the pump motor. As carbonated water is drawn from the tank, the level of carbonated water will drop. At a certain point, the liquid level sensing device recognizes that drop in the level and turns on the pump motor which replenishes the amount of carbonated water that has been taken out of the tank.



## 1. INSTALLATION

### 1.1 RECEIVING

- A. Each unit is completely tested under operating conditions and thoroughly inspected before shipment. At time of shipment, the carrier accepts the unit and any claim for damage(s) 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.
- B. Open the top of the carton. Remove interior packing. Carefully lift the Carbonator out of carton.
- C. Inspect for concealed damage(s) and if detected, notify delivering carrier and file claim.

### 1.2 SELECTING LOCATION

- A. Select a level, well ventilated, accessible location convenient to water and electric supply.

### 1.3 CONNECT WATER LINE TO PUMP

- A. Connect Flexible Pressure Tubing, 3/8 inch ID or larger, from water supply to Pump Inlet using a 3/8 inch SAE Female Swivel Nut and Flare Seal Washer.
- B. A Shutoff Valve should be installed in water line to Carbonator.
- C. Water supply must provide a minimum flow rate of 125 GPH (473 LPH), and have a minimum pressure of 25 PSIG (1.83 kg/cm<sup>2</sup>) and a maximum of 80 PSIG (5.62 kg/cm<sup>2</sup>). If water pressure exceeds 80 PSIG (5.62 kg/cm<sup>2</sup>), install a Regulator and adjust to 50 PSIG (3.51 kg/cm<sup>2</sup>).
- D. Off tastes and/or excessive silt, sand, or iron require that a water filter be installed in the water line supplying the Carbonator. The water filter should be checked periodically, as required by local conditions.

#### **NOTE**

Do not connect to a heated (hot) water source or a water source supplying soft water. This will cause excessive foaming.

### 1.4 CONNECT CO<sub>2</sub> LINE TO TANK

- A. Connect Flexible Pressure Tubing, 1/4 inch ID or larger from CO<sub>2</sub> Regulator to the Tank Inlet using a 1/4 inch SAE Female Swivel Nut and Flare Seal Washer.
- B. CO<sub>2</sub> supply must have a Regulator and Gauge adjustable from 0 to 150 PSIG (3.5 kg/cm<sup>2</sup>) minimum.

### 1.5 CONNECT CARBONATED WATER TO DISPENSING SYSTEM

- A. Connect Flexible Pressure Tubing, 3/8 inch ID or larger, from Dispensing System to Outlet on Tank, using a 3/8 inch SAE Female Swivel Nut and Flare Seal Washer.
- B. If only one Carbonated Water Outlet on the Tank is used, the other Outlet must be capped with a Stainless Steel Cap Nut and Flare Seal Washer.

### 1.6 ELECTRIC POWER SUPPLY

#### **WARNING**

**THIS UNIT MUST BE PROPERLY ELECTRICALLY GROUNDED TO AVOID POSSIBLE FATAL 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. The electric power supply must be a three prong, ground convenience outlet having the same configuration as the power cord.
- B. Outlet must have proper voltage, cycles and ampere ratings. See Carbonator Name Plate for ratings.

#### **NOTE**

*Do not plug into electrical outlet unless ratings on name plate agree with local current available.*

## 2. START UP

### 2.1 START UP PROCEDURE

- A. Turn water supply ON, and start filling Tank.
- B. Pull UP on Pressure Relief Valve Ring to allow air to escape.
- C. Hold Pressure Relief Valve OPEN, until Tank is full and water spurts out of Valve.
- D. Check for water leaks.

#### **WARNING**

**THIS UNIT MUST BE PROPERLY ELECTRICALLY GROUNDED TO AVOID POSSIBLE FATAL 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.**

- E. Plug in power supply.
- F. Turn on CO<sub>2</sub> supply and set Regulator at 100 PSIG (7.03 kg/cm<sup>2</sup>).
- G. Check for CO<sub>2</sub> leaks (see Section 3.1).
- H. Open a Dispensing Valve. Allow water to flow until Pump Motor turns on.
- I. Close Dispensing Valve and allow Pump Motor to cycle off.
- J. Repeat steps H and I several times, until carbonated water flows freely from Valve.
- K. Check for leaks.
- L. Check CO<sub>2</sub> Regulator to ensure that CO<sub>2</sub> pressure has not changed.

## 3. CLEANING AND REPLACEMENT

### 3.1 INLET WATER CHECK VALVE

#### **CAUTION**

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.

- A. UNPLUG Power Cord.
- B. Shut water supply OFF to Pump.
- C. Set CO<sub>2</sub> pressure at 100 to 125 PSIG (7.0 to 8.8 kg/cm<sup>2</sup>).
- D. Disconnect Stainless Steel Water Line from Water Inlet Check Valve. *Do not loosen Check Valve Assembly.*

#### **CAUTION**

DO NOT PROBE CHECK VALVE WITH ANY OBJECT.

- E. Cover end of Check Valve with soap suds. If Check Valve is defective, gas bubbles will appear. If a leak is detected, continue with the following steps. If no leak is detected, proceed to Step J below.
- F. Turn CO<sub>2</sub> pressure OFF. Release pressure in Tank, using Relief Valve.
- G. Disassemble Check Valve Body and components. Inspect Spring and O-Rings. Replace as required.
- H. Reassemble and reinstall Check Valve.
- I. Reconnect Stainless Steel Line to water inlet Check Valve.
- J. Follow start up procedure (see Section 2.1) to put Carbonator back into operation.

### 3.2 CO<sub>2</sub> CHECK VALVE

- A. UNPLUG Power Cord.
- B. Shut water supply OFF to Pump.
- C. Turn CO<sub>2</sub> supply OFF and set CO<sub>2</sub> pressure regulator at 0 PSIG.
- D. Disconnect CO<sub>2</sub> supply line from CO<sub>2</sub> Check Valve.

#### **CAUTION**

DO NOT PROBE CHECK VALVE WITH ANY OBJECT.

- E. Cover end of Check Valve with soap suds. If Check Valve is defective, gas bubbles will appear. If a leak is detected, continue with the following steps.

- F. Release pressure in Tank, using Relief Valve.
- G. Disassemble Check Valve Body and components. Inspect Spring and O-Rings. Replace as required.
- H. Reassemble and reinstall Check Valve.
- I. Reconnect CO<sub>2</sub> supply line to CO<sub>2</sub> Check Valve.
- J. Follow start up procedure (see Section 2.1) to put Carbonator back into operation.

### 3.3 PUMP STRAINER SCREEN

- A. UNPLUG Power Cord.
- B. Shut water supply OFF to Pump.
- C. Unscrew Brass Plug on Pump, and remove Strainer from Pump.
- D. Inspect and clean, or replace, Strainer Screen.
- E. Reinstall Strainer, and tighten Brass Plug.
- F. Turn water supply ON.
- G. Check for leaks. If a leak is detected, carefully tighten Brass Plug.

#### **WARNING**

**THIS UNIT MUST BE PROPERLY ELECTRICALLY GROUNDED TO AVOID POSSIBLE FATAL 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.**

- H. Plug Power Cord into electrical outlet.

### 3.4 REPLACING PROBE

- A. UNPLUG Power Cord.
- B. Shut water and CO<sub>2</sub> gas supplies OFF.
- C. Remove Cover from PC Board enclosure.
- D. Unplug Probe Leads from PC Board.
- E. Pull ring on Pressure Relief Valve to relieve CO<sub>2</sub> pressure on Tank.
- F. Unscrew Probe from top of Tank.
- G. Screw new Probe into top of Tank. *Be sure to install White Plastic Washer as a water tight seal seal will not be obtained without the washer.*
- H. Connect Probe Leads to PC Board as follows:

Green	G
Black	LO
White	HI

- I. Slide Probe Strain Relief into slot, replace cover and secure cover with screws.
- J. Follow start-up procedure (see Section 2.1) for putting Carbonator back into operation.

### 3.5 REPLACING PC BOARD

- A. UNPLUG Power Cord.
- B. Carefully remove Cover from PC Board enclosure.
- C. Unplug Probe Leads, Power Cord Leads, and Motor Cord Leads from PC Board.
- D. Unscrew and remove PC Board Assembly.
- E. Install new PC Board and secure with screws.
- F. Connect push on Leads to PC Board as follows.

1. <u>Probe</u>	2. <u>Power Cord</u>	3. <u>Motor Cord</u>
Green G	Black 1	Black 3
Black LO	White 2	White 4
White HI		

- G. Install cover. Secure cover with two (2) screws.
- H. Plug Power Cord IN.

#### 4. TROUBLESHOOTING

<u>TROUBLE</u>	<u>CAUSE</u>	<u>REMEDY</u>
4.1 Motor fails to start (Motor hums).	A. Pump binding. B. Open Winding infield.	A. Loosen Pump Clamp and rotate Pump slightly to free binding, If this fails, replace Pump. B. Replace Motor.
4.2 Motor fails to start (Motor does not hum).	A. Cutout due to overloading by Pump binding. B. Blown Fuse, or Circuit Breaker tripped. C. Defective Motor. D. Defective PC Board. E. Defective Probe.	A. Let Motor cool and follow Pump binding remedy. B. Replace Fuse or reset Circuit Breaker. C. Replace Motor. D. Replace PC Board. E. Replace Probe.
4.3 Motor runs continuously.	A. Water supply shut off. B. Water supply pressure less than 25 PSIG (1.86 kg/cm <sup>2</sup> ).  C. Restriction in Water Supply Line. D. Restriction in Inlet Water Check Valve. E. Restriction in Pump.  F. Defective PC Board. G. Defective Probe.	A. Reestablish water supply. B. Connect Pressure Gage to Pump Tee and increase Pump By-Pass pressure to 200 PSIG (14.1 kg/cm <sup>2</sup> ). C. Locate restriction and establish proper flow. D. Disassemble Inlet Water Check Valve and clean. E. Remove and clean Pump Strainer. If Pump is still restricted, replace Pump. F. Replace PC Board. G. Replace Probe.
4.4 Pressure Relief Valve releases water.	A. Defective seal in Pressure Relief Valve. B. Defective Spring in Pressure Relief Valve.	A. Replace Pressure Relief Valve. B. Replace Pressure Relief Valve.
4.5 Low Carbonation.	A. Low CO <sub>2</sub> pressure. B. Leaking CO <sub>2</sub> Supply Line.	A. Increase CO <sub>2</sub> pressure or replace CO <sub>2</sub> tank. B. Locate leak and repair.
4.6 Foamy Product.	A. Over carbonation. B. Dirty Product Valve.  C. Product temperature too high.	A. Reduce CO <sub>2</sub> pressure. B. Disassemble and clean Product Valve. C. Product temperature must be below 42°F (5.5°C). Check cooling system.

## 5. BASIC GO/NO GO CARBONATOR CONTROL TEST

This is a test to determine if the liquid level control is operating properly. The test will simulate the rising and falling of the water level in the tank. The test assumes the motor is known to be good.

1. Unplug Unit from AC power line.
2. Remove cover from control box.

### **WARNING**

**115 OR 220 VAC IS PRESENT ON TERMINALS 1, 2, 3, AND 4.**

3. Remove the 3 wire probe cable connectors from the **G**, **LO** and **HI** terminals on the control board.
4. Plug the Unit into the AC power line. If the motor fails to run, the control board is bad. If motor does run, go to step 5.

### **NOTE**

The carbonator motor should start running when plugged in with no probe wires attached to the control board.

5. Connect clips to the **G** and to **LO** terminals. The motor should continue to run. If the motor does not continue to run, the board is bad. If motor runs, go to step 6.
6. Connect the remaining clip to the **HI** terminal. The motor should stop. If the motor does not stop, the board is bad. If motor stops, go to step 7.

### **NOTE**

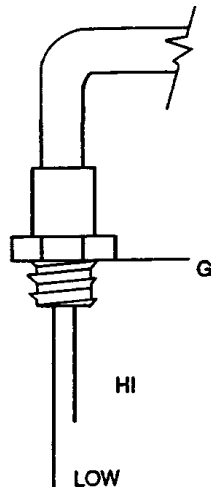
The carbonator motor should stop running as soon as the **HI** terminal is touched.

7. Remove clip from **HI** terminal and the motor should stay OFF. If the motor starts, the board is bad. If motor does not run, go to step 8.
8. Remove clip from **LO** terminal and the motor should start running. If the motor does not run, the board is bad. If motor runs, go to step 9.

### **WARNING**

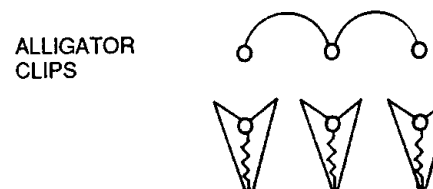
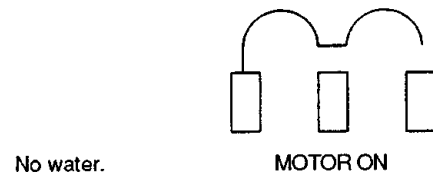
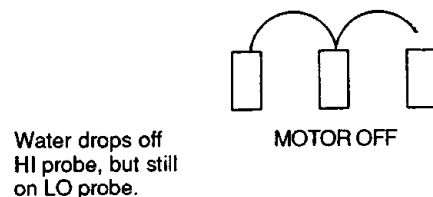
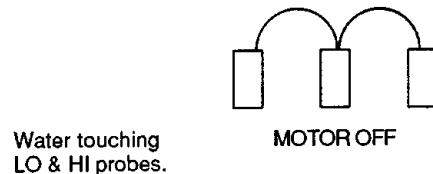
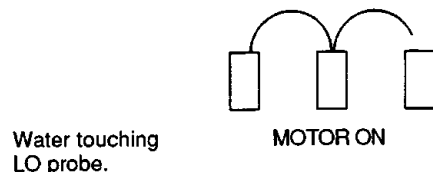
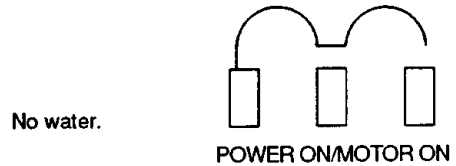
#### **UNPLUG UNIT.**

9. To reconnect the 3 probe cable connectors, remember white wire to HI, black to LO, green to G.



### **WATER LEVEL SIMULATION**

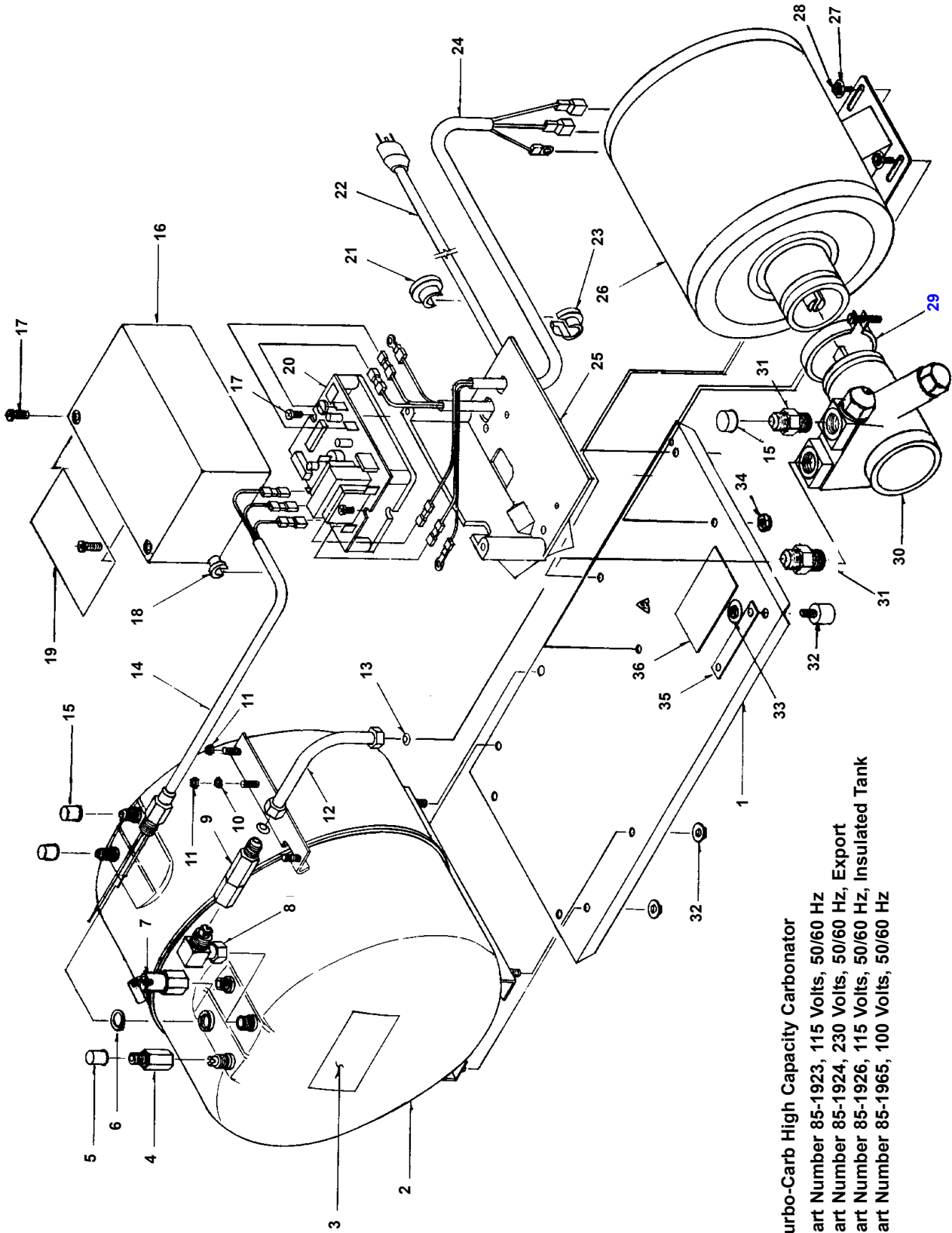
**G LO HI**



**NOTE: THIS SAME TEST SEQUENCE MAY BE USED WITH THE PROBE CONNECTED TO THE ELECTRONIC CONTROL AND USE THE ALLIGATOR JUMPER CONNECTED TO THE APPROPRIATE PROBE WIRE.**

6. ILLUSTRATIONS, PARTS LISTINGS, AND WIRING DIAGRAMS

6.1 LARGE CARBONATOR TANK

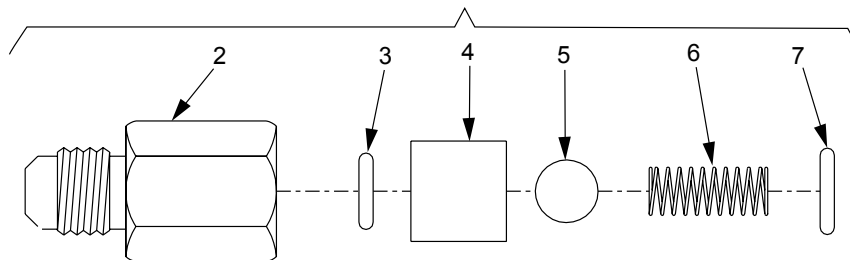


Turbo-Carb High Capacity Carbonator  
Part Number 85-1923, 115 Volts, 50/60 Hz  
Part Number 85-1924, 230 Volts, 50/60 Hz, Export  
Part Number 85-1926, 115 Volts, 50/60 Hz  
Part Number 85-1965, 100 Volts, 50/60 Hz

## 6.1 LARGE CARBONATOR TANK (CONTINUED)

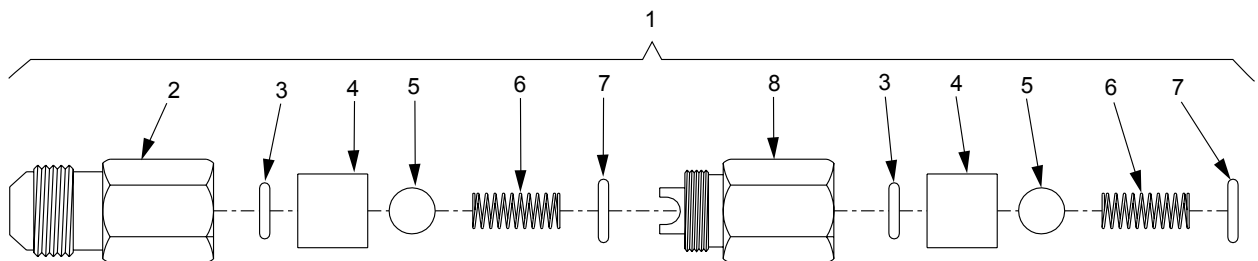
ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	07-0199/01	Base Plate	20	52-1017	PC Board, 115 Volt
2	23-0369	Tank Assy	-	52-1018	PC Board, 230 Volt
-	42-0015	Tank Assy, Insulated	21	13-0028	Strain Relief
3	06-0039	Label, Warning	22	52-0588	Power Cord Assy
4	17-0342	CO2 Check Valve Assy	23	13-0008	Strain Relief
5	04-0044	Protector Cap	24	52-0585	Motor Cord Assy
6	02-0096	Washer	25	05-0529	Enclosure Control
7	54-0066	Relief Valve Assy	26	91-0008	Motor, 115V/50-60Hz
8	17-0083	Fitting Assy	-	91-0011	Motor, 230V/50-60Hz
9	17-0341	Check Valve Assy	-	91-0132	Motor, 100V/50-60Hz (Japan)
10	04-0049	Nut	27	04-0033	Washer
11	04-0297	Keps Nut	28	04-0520	Hex Bolt, 1/4 - 20 x 1/2 Inch
12	48-1449	Tube Assy, Insulated	29	07-0017	Clamp
-	48-1469	Tube Assy, Non-Insulated	30	86-0085	Pump
13	05-0017	Flare Seal	31	01-0111	Adapter
14	52-0590/01	Probe	32	04-0247	Isolator Foot
15	04-0045	Protector Cap	33	04-0032	Nut, 1/4 - 20, Nylock
16	05-0528	Cover, Control	34	04-0034	Lock Nut
17	04-0470	Screw	35	11-0004	Connector
18	13-0026	Strain Relief	36	06-0003/02	Name Plate
19	06-0266/02	Label, Wiring Diagram			

## 6.2 CO2 CHECK VALVE ASSEMBLY



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	17-0342	CO2 Check Valve Assy	5	01-0674	Ball
2	01-0669	Body	6	03-0021	Spring
3	02-0025	O-Ring	7	02-0003	O-Ring
4	01-0689	Sleeve			

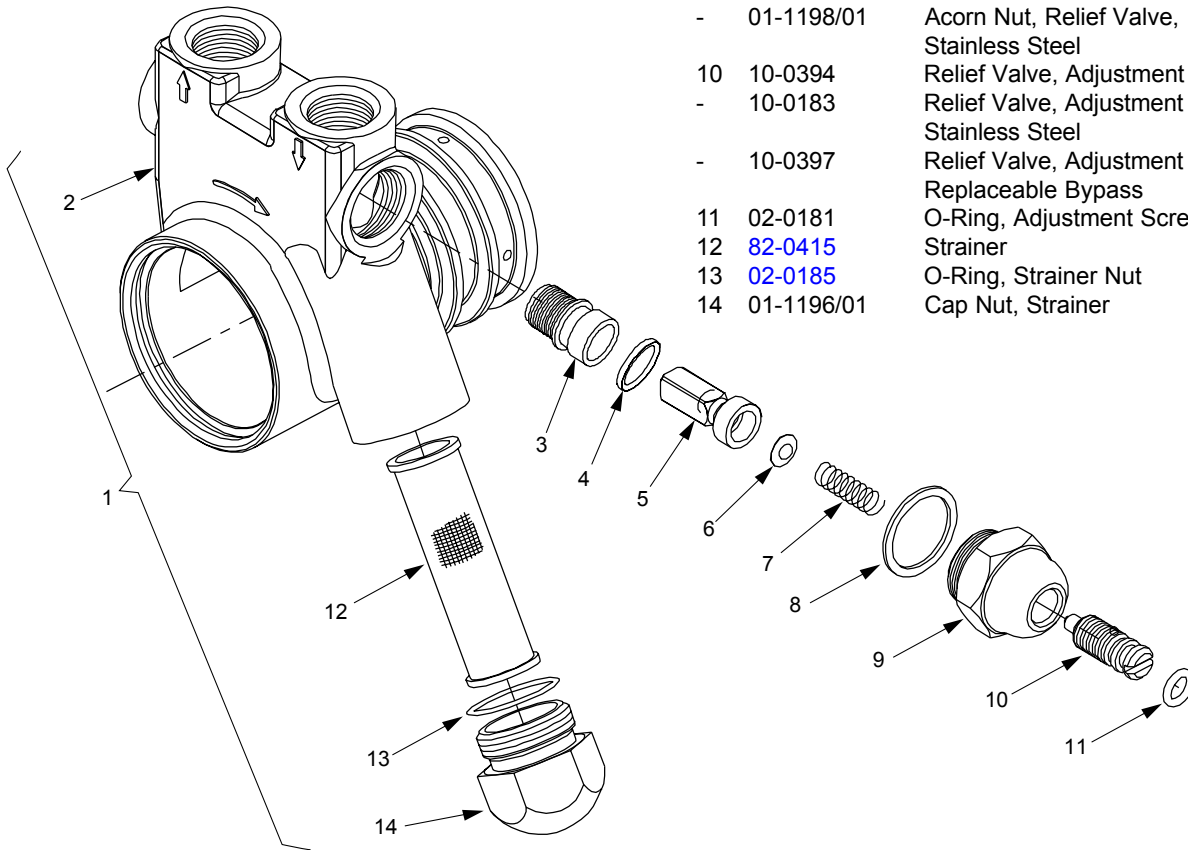
## 6.3 CHECK VALVE ASSEMBLY



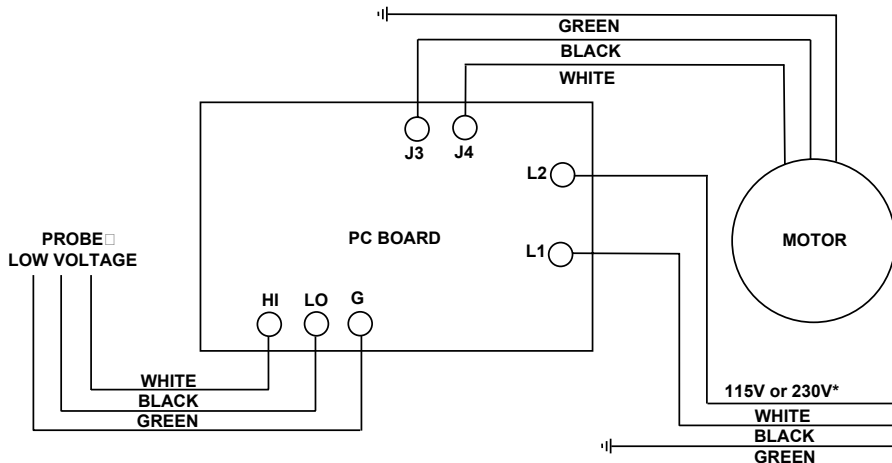
ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	17-0341	Check Valve Assy	5	01-0674	Ball
2	01-0673	Body	6	03-0021	Spring
3	02-0025	O-Ring	7	02-0003	O-Ring
4	01-0689	Sleeve	8	01-0670	Body

### 6.4 PUMP ASSEMBLY

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	86-0085	Pump Assy	5	17-0438	Bypass Valve Assy
2	10-0175	Housing	-	17-0439	Bypass Valve Assy, Stainless Steel
-	10-0176	Housing, Stainless Steel	-	10-0396	Bypass Valve Assy, Replaceable Bypass
-	10-0395	Housing, Replaceable Bypass	6	81-0103	Bypass Valve Filter
3	54-0152	Bypass Seat Sub Assy	7	03-0132	Spring Relief Valve
4	02-0115	O-Ring	8	02-0192	Gasket, Acorn Nut
			9	01-1771	Acorn Nut, Relief Valve
			-	01-1198/01	Acorn Nut, Relief Valve, Stainless Steel
			10	10-0394	Relief Valve, Adjustment Screw
			-	10-0183	Relief Valve, Adjustment Screw, Stainless Steel
			-	10-0397	Relief Valve, Adjustment Screw, Replaceable Bypass
			11	02-0181	O-Ring, Adjustment Screw
			12	82-0415	Strainer
			13	02-0185	O-Ring, Strainer Nut
			14	01-1196/01	Cap Nut, Strainer



### 6.5 WIRING DIAGRAM (PN 06-0266/02)



\*100V FOR PN 85-1965

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

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 FAX: 55-11-4612-2219  
 e-mail: fabio.queiroz@bras.com.br

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 Coopers Plains 4108  
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 Shanghai, 200436, China  
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 FAX: 86-21-5650-2666  
 e-mail: daniel@freser.com.cn

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

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 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  
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 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**

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 Kangnam-Ku  
 Seoul, Korea  
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 FAX: 82-2-557-5615  
 e-mail: tahoe@netgo.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**

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 Taipei 103, Taiwan R.O.C.  
 Phone: 886-2-2553-1555  
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 e-mail: allen@intl.freser.com.tw

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 Pakkred, Nonthaburi, 11120  
 Thailand  
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 FAX: 662-961-9550  
 e-mail: prachat@asianet.co.th

**Lancer - Indian Sub-Continent****India**

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 India and Sub-Continent  
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 78, LBS Marg, Bhandup (W)  
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 Cel No.: 91-98-2029-5252  
 FAX: 91-22-5637-4018  
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**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  
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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)

1425 South Wright Blvd.  
Schaumburg, IL 60193  
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 #43 - as of March 05, 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  
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Phone: 905-602-5800  
FAX: 905-602-5804  
e-mail: simgo@simgo.com

### Simgo (B.C.) Ltd.

16-8125 - 130th Street  
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FAX: 604-590-1601

### Lancer Europe

#### Belgium - European Central Office

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Ruislip, Middlesex  
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#### Hungary

H-2100 Gödöllő  
Isaszegi út 67  
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Phone: 36-28-417-179  
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### Lancer Authorized Distributors

#### Complete Beverage Services, Ltd.

#### Republic of Ireland and Northern Ireland

Gortrush Industrial Estate  
Omagh County Tyrone  
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Office: 44-1662 250 008  
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#### Intercom - Spain

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### Lancer Russia

#### Lancer Sales Company

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FAX: 7-095-745-7109  
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### Lancer Authorized Distributor

#### DispenseTech - South Africa

P.O. Box 17495  
Sunward Park, 1470  
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e-mail: david@dispensetech.co.za

### Lancer Latin America

#### Latin America Sales

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(Continued on reverse)