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INSTALLATION AND SERVICE MANUAL

FOR

LANCER MAXI SYRUP PUMP

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
82-0109/01 (FAMILY)	LANCER MAXI SYRUP PUMP

For use with Disposable Bag-in-Box (BIB) Package



This manual, reactivated and revised by Lancer in June 1997, supersedes Installation Manual 28-0030, dated 08/07/90.



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REV. 06/20/97
P.N. 28-0030/01

TABLE OF CONTENTS

- 1. GENERAL DESCRIPTION1**
 - 1.1 GENERAL INFORMATION1
 - 1.2 SYRUP INLET FITTINGS1
 - 1.3 GAS INLET FITTING.....1
- 2. PRINCIPLES OF OPERATION1**
- 2. INSTALLATION2**
 - 2.1 RECEIVING AND INSPECTION2
 - 2.2 LOCATION OF PUMP2
 - 2.3 CONNECTING LINES TO UNIT2
 - 2.4 PREPARING UNIT FOR OPERATION3
 - 2.5 SOLD-OUT DEVICE (MAY BE OPTIONAL ON SOME MODELS).....3
- 3. SERVICE AND MAINTENANCE3**
 - 3.1 LUBRICATION.....3
 - 3.2 ADJUSTMENTS4
 - 3.3 PRIMING THE PUMP AT THE CORRECT PRESSURE4
 - 3.4 CLEANING AND SANITIZING4
 - 3.5 REPLENISHING SYRUP SUPPLY5
 - 3.6 WINTERIZING PUMP6
- 4. TROUBLESHOOTING.....6**
 - 4.1 PUMP WILL NOT CYCLE6
 - 4.2 PUMP WILL NOT STOP (WHEN DISPENSING VALVE IS CLOSED)6
 - 4.3 PUMP WILL NOT PRIME.....7
 - 4.1 PUMP WILL NOT DEVELOP PRESSURE7
- 5. ILLUSTRATIONS AND PARTS LISTINGS8**
 - 5.1 SYRUP PUMP ASSEMBLY (PN 82-0109/01)8
 - 5.2 REVERSING VALVE ASSEMBLY (PN 17-0406/01)9
 - 5.3 SOLD OUT VALVE (PN 17-0428)10
 - 5.4 BRACKETS11
 - 5.5 SYRUP INLET AND OUTLET FITTINGS11
 - 5.6 INLET GAS FITTINGS11

1. GENERAL DESCRIPTION

1.1 GENERAL INFORMATION

- A. The Lancer Syrup Pump is a pneumatically operated, double acting, diaphragm pump. It is designed to pump up to 1.5 ounces (45 ml) of syrup per second at up to 75 PSI (5.28 kg/cm²) line pressure. Either CO₂ gas or compressed air can be used to drive the pump. One pump is required for each product dispensed.

NOTE

If compressed air is used, the compressed air must be dry and oil free.

- B. Dimensions of the pump are 7.3 inches (18.6 cm) width x 4.5 inches (11.5 cm) depth x 6.0 inches (15.24 cm) height.

1.2 SYRUP INLET FITTINGS

- A. Syrup inlet fittings are 3/8 inch (0.95 cm) barbed hose connector. Syrup outlet fittings are either 1/4 inch (0.635 cm) or 3/8 inch (0.95 cm) barbed connectors, depending on the tubing used.

1.3 GAS INLET FITTING

- A. Gas inlet fitting is a 1/4 inch (0.635 cm) barbed hose connector.

2. PRINCIPLES OF OPERATION

2.1 The following describes the Lancer syrup pump theory of operation:

- A. When the system demands syrup for dispensing, gas pressure enters the reversing Valve and is directed to the Gas Chamber on the right, while the Gas Chamber on the left is allowed to exhaust gas. This causes the Diaphragm Assembly to move to the right (see Figure 1).
- B. As the Diaphragm Assembly moves to the right, syrup is forced out of right side Chamber through Check Valve and Syrup Outlet while syrup is sucked into the left side Chamber through the Inlet Check Valve.
- C. When the Diaphragm Assembly reaches the end of its stroke, the reversing Valve switches and directs gas pressure to the left Gas Chamber while the right Gas chamber is allowed to exhaust gas. This causes the Diaphragm Assembly to move to the left (see Figure 2).
- D. As the Diaphragm Assembly moves to the left, syrup is forced out of the left side Chamber through Check Valve and Pump Outlet while syrup is sucked into right side Chamber through Inlet Check Valve. The syrup pump cycle will be repeated as many times as necessary to fulfill syrup needs of Dispenser [approximately five (5) ounces (147.9 ml) of syrup are pumped per cycle].
- E. The Syrup Pump will pull syrup from a non-pressurized package. The Pump will normally self-prime up to ten (10) feet (3.0 m).

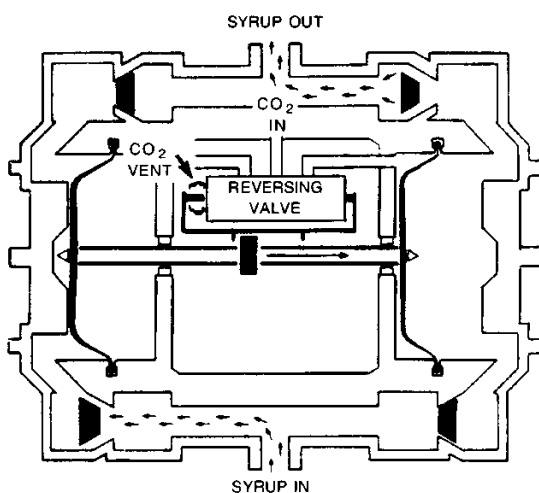


Figure 1

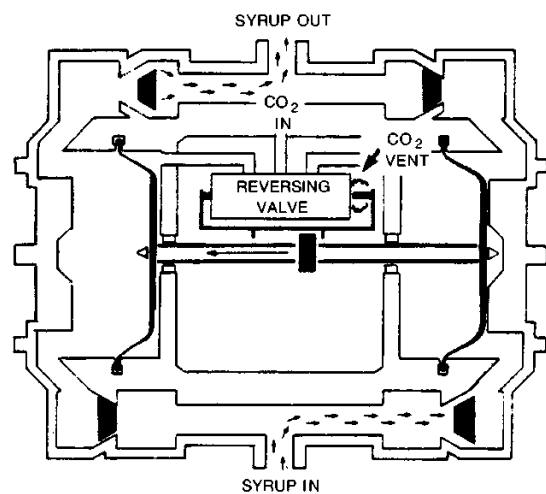


Figure 2

2. INSTALLATION

2.1 RECEIVING AND INSPECTION

- A. Each Pump is tested and thoroughly inspected before shipment. At the time of shipment, the carrier accepts the Pump and any claim for damages must be made with the carrier. Upon receiving Dispensers 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. After Pump has been unpacked, remove shipping tape and other packing material. Check for obvious damage and follow installation instructions. If shipping damage is evident, notify delivering carrier and file claim against the same.

2.2 LOCATION OF PUMP

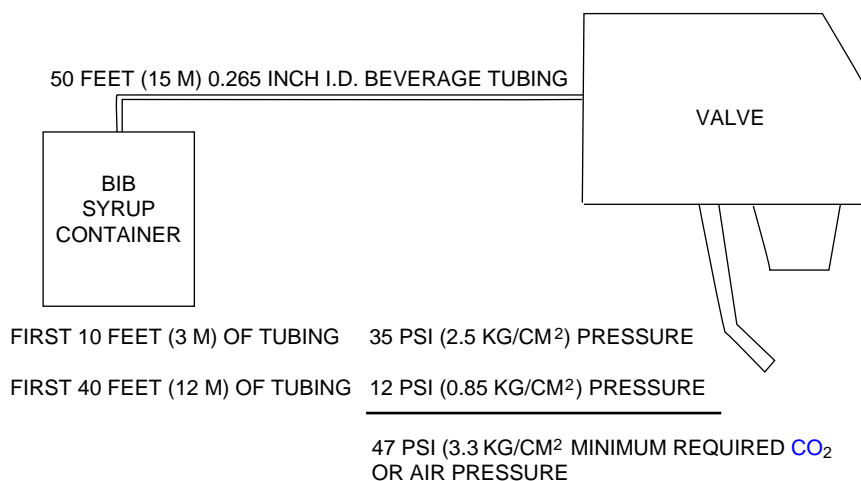
WARNING

CARBON DIOXIDE (CO₂) IS A HEAVIER THAN AIR, COLORLESS, NONCOMBUSTIBLE GAS WITH A FAINTLY PUNGENT ODOR. SINCE HIGH PERCENTAGES OF CO₂ MAY DISPLACE OXYGEN IN THE BLOOD, PROLONGED EXPOSURE TO CO₂ MAY BE HARMFUL.

- A. Syrup Pumps that are operated by CO₂ gas should be installed in well ventilated areas.
- B. If a Syrup Pump is installed in a basement, it should be operated on compressed air. CO₂ gas may be used for a basement installation, provided the area has a positive ventilation system (exhaust fans) capable of changing the room air every 20 minutes (minimum) or a vented Pump is used.
- C. It is best to locate the Syrup Pump in a place near the syrup supply to keep the line from the package to the Pump Inlet as short as possible. A maximum recommended Syrup Inlet Line is 12 feet (3.66 m) of 0.375 inch (0.95 cm), or larger, ID tubing must be used.
- D. The Syrup Pump must be installed above the syrup package, but no more than 10 feet (3.0 m) higher than the syrup package.
- E. The Syrup Pump should be mounted on a wall or other support using the Bracket provided on the Pump Body. Mounting should be horizontal with the Syrup Outlet Line as the top as shown in Figure 3. The Pump is identified showing IN and OUT ports and direction of mounting.
- F. Used enclosed Screws provided for mounting the Syrup Pump Bracket.

2.3 CONNECTING LINES TO UNIT

- A. Syrup Inlet Line, a Syrup Outlet Line and a Gas line must be connected to the Syrup Pump for operation (see Figure 3).
- B. Attach 0.375 inch (0.95 cm) ID by 0.630 inch (1.6 cm) OD, approved, vinyl beverage tubing line to the Inlet Fitting on the Pump and attach a Bag-in-Box (BIB) Quick Disconnect Coupling to the other end of the tubing.



**Diagram of Pressure Drop-BIB Syrup Container to Valve
Figure 3**

- C. Attach 0.265 inch (0.635 cm) ID braided beverage tubing from the Outlet Fitting on the Pump to the Dispenser. Where a long run to the Dispenser is encountered, use 0.375 inch (0.95 cm) ID braided beverage tubing.
- D. Attach 0.265 inch (0.635 cm) ID braided beverage tubing from the Gas Regulator to the Pump Inlet Gas Fitting.
- E. If Pump is operated by compressed air, the supply line from the air compressor should include a five (5) micron air filter. If the compressed air contains a substantial amount of water, a drier should be used to remove the water. Excess water in the air supply will wash the lubricant out of the Reversing Air Valve and cause excessive wear of the O-Rings, and thereby shorten the life of the Pump.

2.4 PREPARING UNIT FOR OPERATION

CAUTION

DO NOT OPERATE THE PUMP WITHOUT SYRUP SINCE THIS COULD DAMAGE THE DIAPHRAGM OVER A PERIOD OF TIME. THE GAS LINE TO THE PUMP MUST BE CONTROLLED BY A LOW PRESSURE CO₂ REGULATOR CAPABLE OF BEING SET WITH UP TO 75 PSI (5.28 KG/CM²) OUTLET PRESSURE.

- A. After all lines and a full BIB Package have been connected to the Pump, turn on the Gas Pressure and adjust the Regulator Pressure between 35 and 75 PSI (2.5 kg/cm² and 5.28 kg/cm²).

NOTE

Pumps for **sugar free** products can be operated at the same pressure as other products since there is no contact between the syrup and gas.

- B. Bleed off air in the system by opening Dispensing Valve until flow is steady and full. After air is removed, **no bubbles** should be seen in Inlet and Outlet Lines to the Pump. If bubbles appear, check for leak(s) in the Inlet Line.
- C. The minimum pressure needed for an installation is 35 pounds (2.5 kg/cm²) for packages within 10 feet (3 m) of the Dispenser. For packages located more than 10 feet (3 m) from the Dispenser, add 3 pounds (0.21 kg/cm²) for each additional 10 feet (3 m).

CAUTION

GAS PRESSURE TO PUMP MUST **NOT EXCEED** 75 PSI (5.28 KG/CM²).

NOTE

Examples below are for 0.265 inch ID beverage tubing. The pressure drop for 0.375 inch ID beverage tubing is approximately one-third (1/3) of that for 0.265 inch ID beverage tubing.

- D. After removing air and setting Regulator for correct pressure, set the proper syrup/water ratio or brix for the product.
- E. Pump will now operate automatically when drinks are dispensed. If pump continues to cycle after dispensing is stopped, bleed system to remove air and check for syrup and/or air leaks.

2.5 SOLD-OUT DEVICE (MAY BE OPTIONAL ON SOME MODELS)

- A. An optional Sold-Out Device can be used to automatically shut off the Syrup Pump when the Package(s) is empty. This stops the operation of the Pump and the exhaust of gas until a new syrup package is connected to the Pump.
- B. The Lancer Sold-Out device measures syrup vacuum in the Pump Inlet Line. When the Syrup Package is empty, the Pump increases vacuum causing the device to shut off the gas pressure to stop the Pump. The Lancer Sold-Out automatically resets, after new Syrup Packages are connected.

3. SERVICE AND MAINTENANCE

3.1 LUBRICATION

PUMPS ARE FACTORY LUBRICATED. FIELD LUBRICATION IS NOT NECESSARY.

3.2 ADJUSTMENTS

- A. *There are **no** adjustments to be made on the Syrup Pump.*
- B. Once the gas pressure has been set for dispensing, it should be rechecked periodically to assure continued operation.

3.3 PRIMING THE PUMP AT THE CORRECT PRESSURE

- A. For the Syrup Pump to operate correctly, it is necessary to remove all air from the system. After all lines to the Syrup Pump and Syrup Packages are connected and CO₂ (or air pressure) is set, the system should be primed as follows:
 - 1. Disconnect Wire to Soda Solenoid or close Shut Off Valve on soda side so that only syrup will be dispensed when Dispensing Valve is operated.
 - 2. Operate Valve for five (5) seconds and then release for five (5) seconds. Continue drawing syrup until flow is steady and full.
 - 3. After priming, look for air pockets in Syrup Inlet or Outlet Lines. Repeat priming to remove any air pockets found.
 - 4. After priming, replace the Wire to Soda Solenoid or open Soda Shut Off Valve on Dispensing Valve.
 - 5. Repeat above procedure for all Syrup Pumps.

3.4 CLEANING AND SANITIZING

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.*

CAUTION

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 (32°C to 43°C) should be used to clean equipment. The mixture ratio, using Ivory Liquid, is one (1) ounce (30 ml) of cleanser to two (2) gallons (7.5 L) of water. Approximately four (4) gallons (15 L) 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. Mix sanitizing solution in clean, potable water at a temperature of 90 to 110 degrees Fahrenheit (32°C to 43°C) so that the solution

provides 50 to 100 parts per million (PPM) available chlorine. Approximately four (4) gallons (15 L) of sanitizing solution should be prepared.

NOTE

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

- (b) Any equivalent sanitizing solution may be used as long as it is prepared in accordance with the manufacturer's written recommendations and safety guidelines, and provides 50 to 100 parts per million (PPM) available chlorine.

B. Cleaning of the Syrup Pump is required every six (6) months under normal use conditions.

C. Five step sanitizing procedure.

1. Disconnect each Syrup Quick Disconnect Coupling from Syrup Packages and connect Coupling to a Bag Valve removed from an empty BIB package.
2. Fill clean empty container with potable (drinking water) flush water, then place all Syrup Inlet Lines in flush water.
3. Depress and hold each Dispensing Valve until no more syrup flows from Dispensing Spout, then release and wait five (5) seconds. Repeat procedure until syrup is purged from system and clear flush water flows from each Dispensing Spout.
4. Remove flush water container after all syrup systems are flushed.
5. Following manufacturer's instructions, prepare detergent solution in clean container.
6. Place all Syrup Inlet Lines in detergent solution container.
7. Repeat Step 3 above, purging flush water from each syrup system until detergent solution flows from all Dispensing Spouts.
8. Allow detergent solution to remain in syrup system for a contact time of at least ten (10) minutes. Replace detergent solution container with flush water container.
10. Repeat step 3 above, purging of detergent solution from each syrup system and until flush water flows from each Dispensing Spout.
11. Following manufacturer's instructions, prepare sanitizing (chlorine) solution in clean container to a concentration of 50 ppm chlorine.
12. Place all Pump Inlet Lines in sanitizing solution container.
13. Repeat Step 3 above, purging flush water from each syrup system until sanitizing solution flows from all Dispensing Spouts.
14. Allow sanitizing solution to remain in syrup systems for a contact time of 30 minutes.
15. Remove Bag Valves from Quick Disconnect Couplings and reconnect Syrup Packages to Syrup Inlet Lines.
16. Purge the sanitizing solution from each syrup system using syrup. Continue to flush system until off-taste disappears.

NOTE:

NSF does **NOT** allow a water flush after sanitizing.

17. Test Dispenser in normal manner for proper operation. Test dispensed product to ensure there is no off-taste. If off-taste is found, additional flushing of syrup system may be required.

C. Yearly Maintenance.

1. Follow Lubrication instruction in Section 3.1.
2. If Pump has a Sold-Out Device, it should be tested for proper operation. Disconnect Syrup Package(s) from Pump to see that Sold-Out Device Shuts off Pump. Reconnect Syrup Package(s). The Lancer Sold-Out Device resets automatically. The Sold-Out Device requires no lubrication.
3. If Pump is operated by compressed air, the gas supply line should include an air filter with a five (5) micron filter element. The element should be replaced no less than yearly.

3.5 REPLENISHING SYRUP SUPPLY

A. Remove empty Syrup Package from system by turning Collar on Quick Disconnect Coupling counterclockwise.

- B. On a new Package, push in on tab located above perforated opening flap.
- C. After breaking seal on flap, pull the flap up.
- D. Reach in the box and pull the Bag Valve out. Remove the Dust Cap (see Figure 4).
- E. Connect the Quick Disconnect Coupling by turning the Collar clockwise until stopped by the Bag Valve.
- F. The Lancer Sold-Out Device will reset automatically.
- G. If air has entered the Syrup System, prime the Syrup Pump following the instructions in Section 3.3.

3.6 WINTERIZING PUMP

- A. On a Pump removed from accounts, ensure that all sanitizing steps (see Section 3.4.B) have been completed.
- B. Remove water by operating Pump with CO2 or air.
- C. Turn Pump on side with fittings down. Let drain and store in original shipping carton.

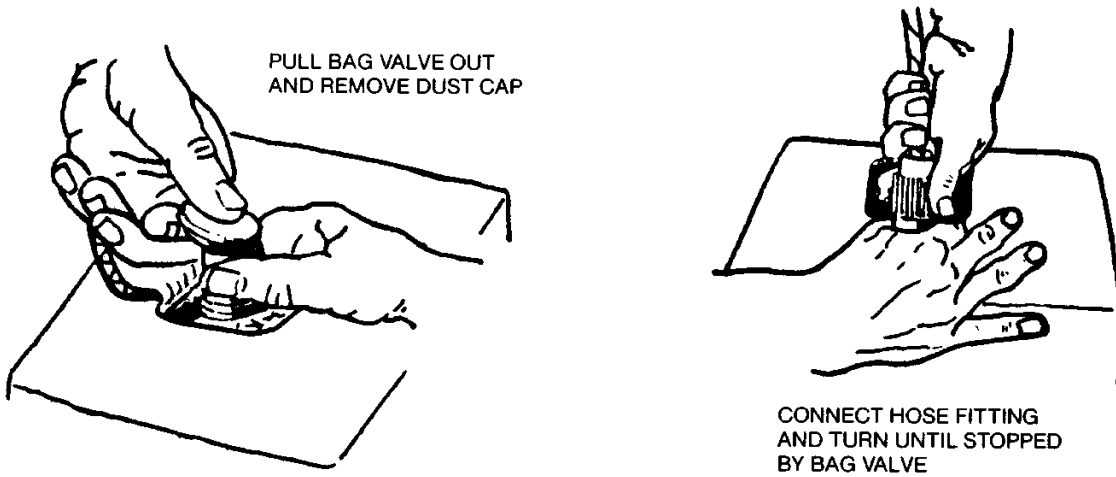


Figure 4

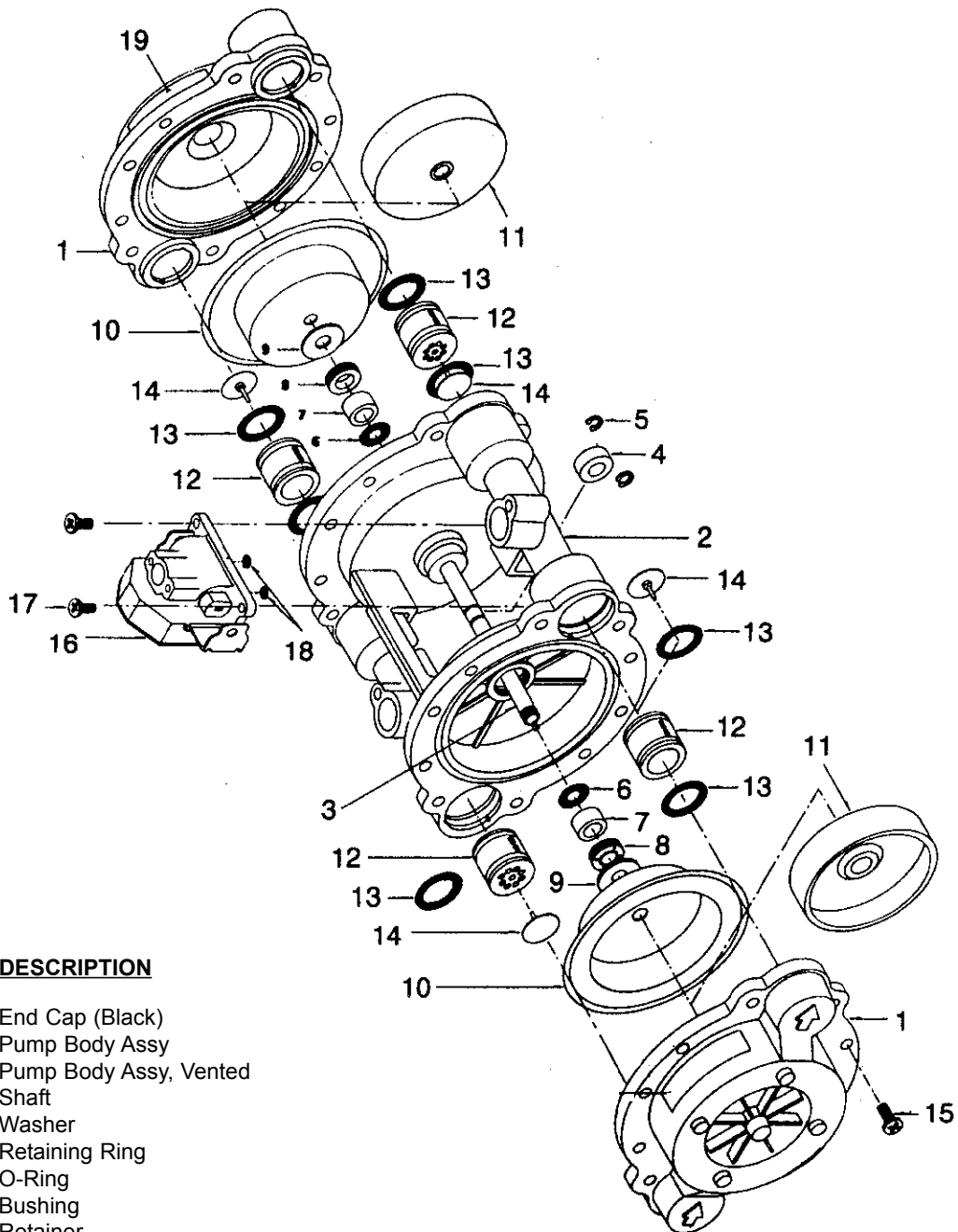
4 TROUBLESHOOTING

<u>TROUBLE</u>	<u>CAUSE</u>	<u>REMEDY</u>
4.1 Pump will not cycle.	<ul style="list-style-type: none"> A. Sold-Out Device has not been reset. B. Out of CO2 Gas or Gas Valve closed. C. Air pressure off. D. Valve at Dispenser does not open. E. Defective reversing Valve. F. Syrup Line frozen in Dispenser. G. Defective Sold-Out Device. 	<ul style="list-style-type: none"> A. Check for full syrup package and pull reset Lever. <i>NOTE: Lancer Sold-Out Device should reset automatically.</i> B. Replace CO2 Cylinder or open Cylinder Valve. C. Plug in Compressor Power Cord. Check Circuit Breaker fuse. D. Open Shut Off Valves, replace defective Switches, Solenoids, Wiring, etc. E. Replace reversing Valve. F. Thaw Dispenser. G. Replace Sold-Out Device.
4.2 Pump will not stop (when Dispensing Valve is closed).	<ul style="list-style-type: none"> A. Air in system. B. Syrup leak on Pump Discharge Line. C. Out of syrup and no Sold-Out Device on system. D. Defective Pump Check Valves. 	<ul style="list-style-type: none"> A. Bleed air from system. B. Stop leak. C. Replace empty packages with new full packages. D. Replace defective Pump Check Valve.

<u>TROUBLE</u>	<u>CAUSE</u>	<u>REMEDY</u>
4.3 Pump will not prime.	A. Defective Pump Inlet Check Valve. B. Air leak on Inlet Line (CO ₂). C. Quick Disconnect Coupling not open. D. Leak in Syrup Package (see note). E. Kink in Syrup Inlet Line. NOTE: It may be necessary to turn the package on its side to determine if bag leaks. If Pump has a Sold-Out Switch, squeeze Inlet Line closed and Pump should stop.	A. Replace Inlet Check Valves. B. Find and stop leak. C. Tighten Collar on Coupling until it is stopped by Bag Valve. D. Replace with new Package. E. Remove Line kink.
4.5 Pump will not develop pressure.	A. Pressure in gas or Air Line set too low. B. Defective Pump Outlet Check Valve O-Ring. C. Too many Dispensing Faucets being served by Pump (see note). NOTE: No more than six (6) Standard Flow (1-1/2 oz/sec) Valves or three (3) Fast Flow (3 oz/sec) Valves should be connected to each pump.	A. Increase Gas or Air pressure. B. Replace Outlet Check Valves. C. Install more Pumps.

5. ILLUSTRATIONS AND PARTS LISTS

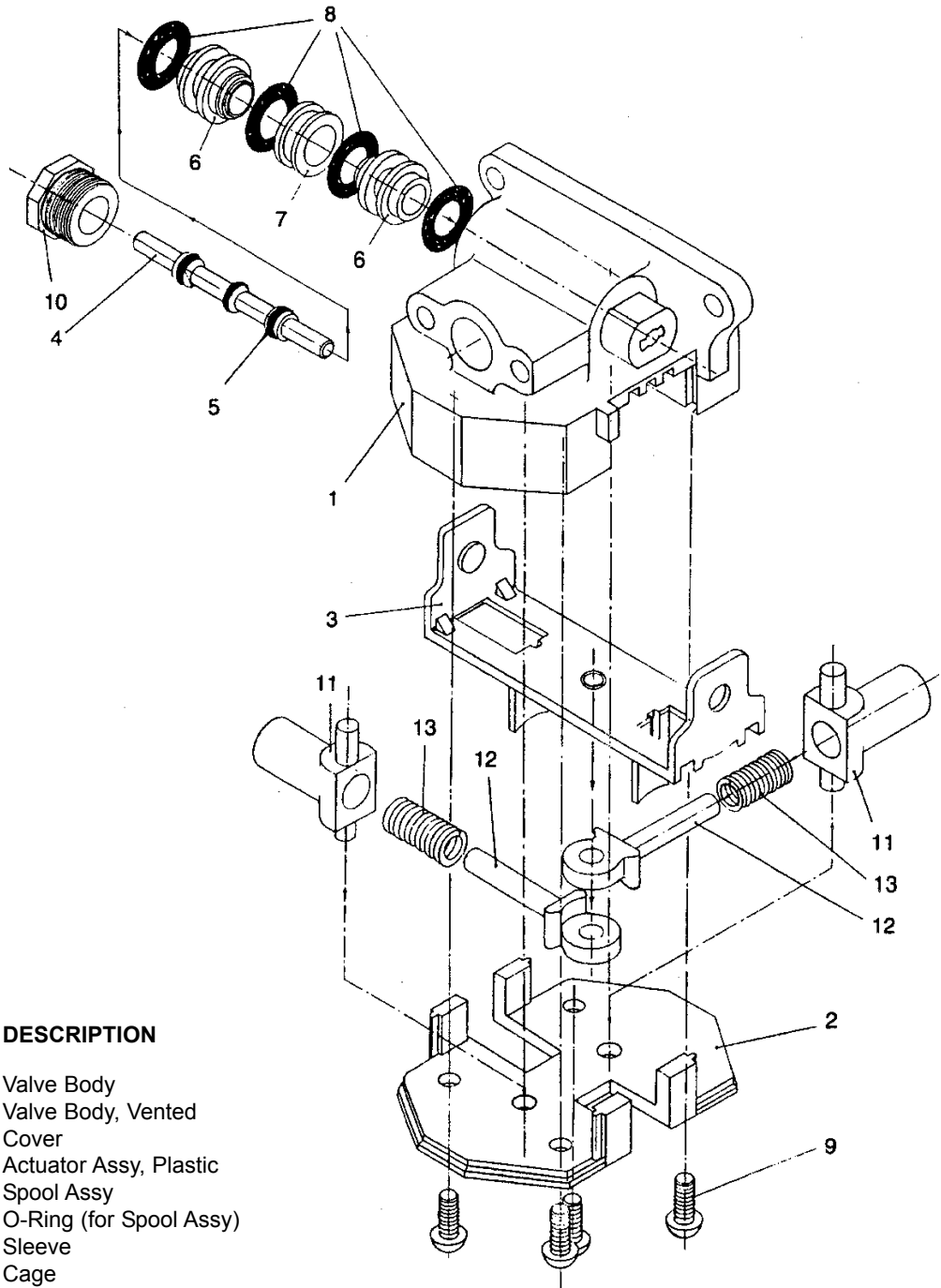
5.1 SYRUP PUMP ASSEMBLY (PN 82-0109/01)



ITEM	PART NO.	DESCRIPTION
R 1	05-0125/02	End Cap (Black)
2	82-0110	Pump Body Assy
2a	82-0277	Pump Body Assy, Vented
3	10-0063	Shaft
4	10-0045	Washer
5	03-0055	Retaining Ring
6	02-0092	O-Ring
7	05-0131	Bushing
8	05-0128	Retainer
9	04-0304	Washer
R 10	02-0128/01	Diaphragm
R 11	23-0155/01	Piston Assy
12	05-0123	Check Valve Body
13	02-0068	O-Ring
14	02-0097	Check Valve
R 15	04-0624	Screw
R 16	17-0406/01	Reversing Valve Assy
16a	17-0416	Reversing Valve Assy, Vented
17	04-0299	Screw
18	02-0085	O-Ring
R 19	06-0474/01	Label

NOTE: R in margin indicates revision.

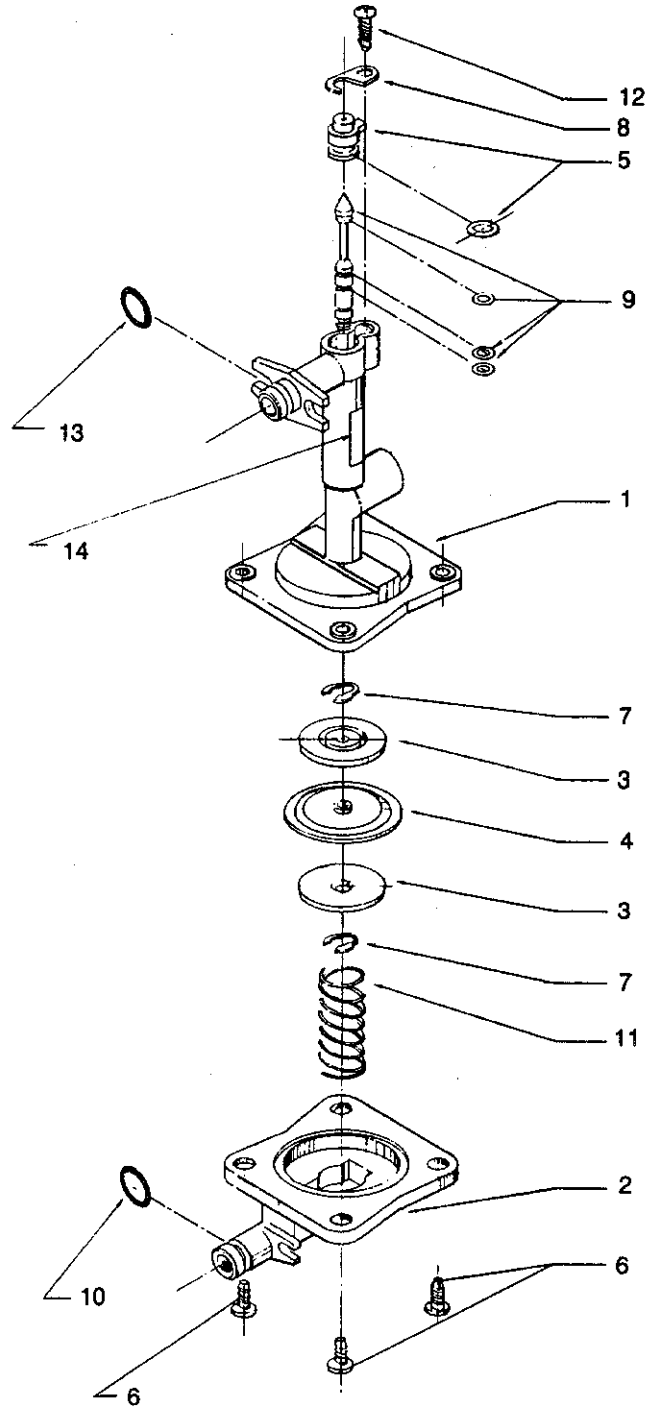
5.2 REVERSING VALVE ASSEMBLY (PN 17-0406/01)



ITEM	PART NO	DESCRIPTION
R 1	05-0117/01	Valve Body
-	05-0218	Valve Body, Vented
2	05-0116	Cover
3	82-0285	Actuator Assy, Plastic
4	82-0111	Spool Assy
5	02-0091	O-Ring (for Spool Assy)
6	10-0055	Sleeve
7	10-0056	Cage
8	02-0003	O-Ring
9	04-0158	Screw
R 10	05-0115/01	Threaded End Cap
-	05-0216	Threaded End Cap, Vented
R 11	05-0129/01	Spring Guide
R 12	05-0130/01	Spring Retainer
13	03-0052	Spring

NOTE: R in margin indicates revision.

5.3 SOLD OUT VALVE (PN 17-0428)

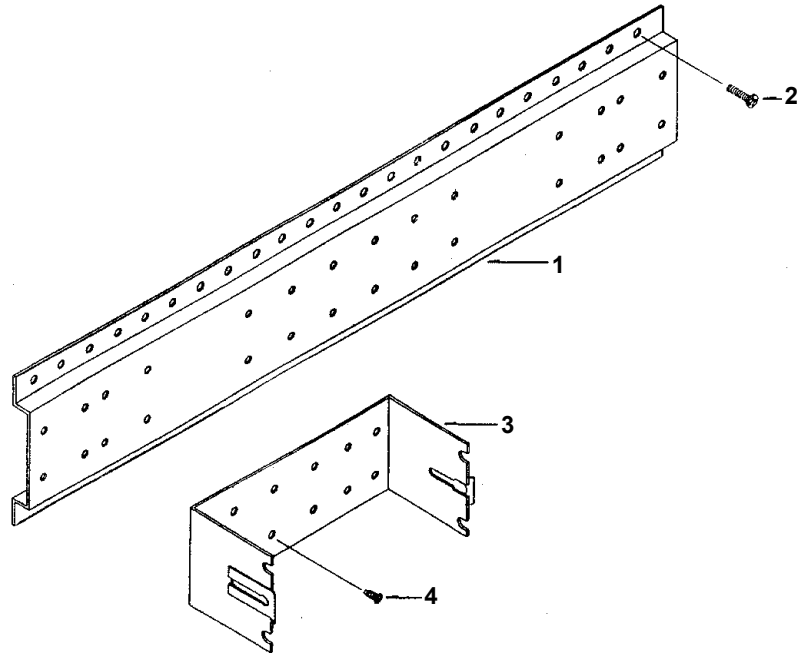


ITEM	PART NO.	DESCRIPTION
-	17-0428	Sold Out Valve, Complete
1	05-0227	Body, Upper Assy
2	05-0225	Body, Lower
3	05-0075	Piston
4	02-0117	Diaphragm
5	01-1059	Plug Assy
-	02-0005	O-Ring for Plug Assy
6	04-0266	Screw
7	03-0086	Retainer Ring
8	03-0005	Retainer
9	82-0204	Shaft Assy
-	02-0125	O-Ring for Shaft Assy
10	02-0089	O-Ring
R 11	03-0080/01	Spring
12	04-0155	Screw
13	02-0005	O-Ring
14	06-0173	Label

NOTE: R in margin indicates revision.

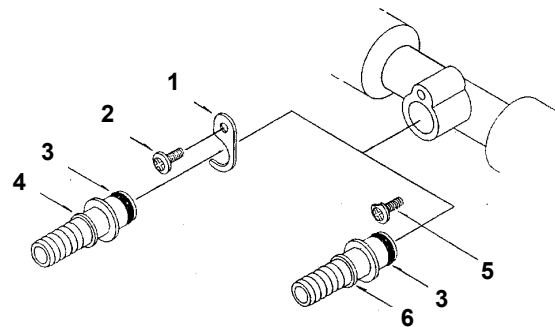
5.4 BRACKETS

ITEM	PART NO.	DESCRIPTION
1	51-0372	Wall Bracket
2	04-0289	Screw
3	23-0142	Pump Bracket Assy
4	04-0251	Screw



5.5 SYRUP INLET AND OUTLET FITTINGS

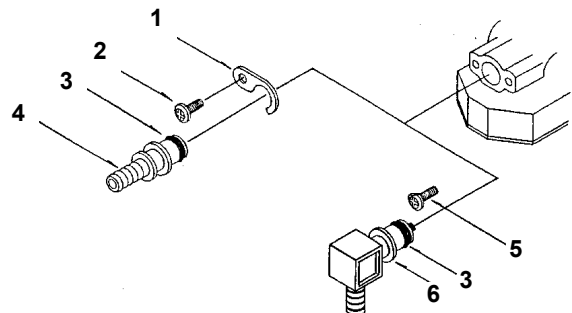
ITEM	PART NO.	DESCRIPTION
1	03-0056	Retainer
2	04-0155	Screw
3	02-0089	O-Ring
4	01-0774	Adaptor, Straight, 1/4 Inch Barb, SS
-	01-0804	Adaptor, Straight, 3/8 Inch Barb, SS
-	01-1095	Elbow, 1/4 Inch Barb, SS
R-	01-0844	Elbow, 3/8 Inch Barb, SS
5	04-0275	Screw
6	01-1040	Adaptor, Straight, 1/4 Inch Barb, Plastic
-	01-1039	Adaptor, Straight, 3/8 Inch Barb, Plastic
-	01-1074	Elbow, 1/4 Inch Barb, Plastic
-	01-1073	Elbow, 3/8 Inch Barb, Plastic



NOTE: R in margin indicates revision.

5.6 INLET GAS FITTINGS

ITEM	PART NO.	DESCRIPTION
1	03-0005	Retainer
2	04-0155	Screw
3	02-0005	O-Ring
4	01-0337	Adaptor, Straight, 1/4 Inch Barb, SS
R-	01-0416	Elbow, 1/4 Inch Barb, SS
5	04-0275	Screw
6	01-1072	Elbow, 1/4 Inch Barb, Plastic
-	01-1194	Elbow, 1/4 Inch Barb, Plastic, with Check Valves



NOTE: R in margin indicates revision.

NOTES

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

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 FAX: (210) 310-7242
 1-800-729-1500
 e-mail: asia@lancercorp.com

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 Phone: 61-8-8268-1388
 FAX: 61-8-8268-1978
 e-mail: ian-lunniss@lancer-pacific.com.au
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 e-mail: glenn-blakiston@lancer-pacific.com.au

Lancer Pacific Pty Ltd
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 Coopers Plains 4108
 Queensland
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 FAX: 61-7-3875-1805
 e-mail: brett-thomson@lancer-pacific.com.au

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

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 FAX: 852-30105882
 e-mail: patrickco@lancer-asia.com

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 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: tahoe@netnet.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
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 FAX: 65-6352-8594
 e-mail: fresersin@pacific.net.sg

Freser International Corporation - Taiwan

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 Taipei 103, Taiwan R.O.C.
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 FAX: 886-2-2553-2742
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Freser (Thailand) Co Ltd - Thailand

3/15 Moo 3, Soi Ruammitr
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 Pakkred, Nonthaburi, 11120
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 FAX: 662-961-9550
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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

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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)

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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
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Simgo (B.C.) Ltd.

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Surrey, B.C. V3W 7X4
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Phone: 604-590-4022
FAX: 604-590-1601

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Belgium - European Central Office

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17 Bembridge Gardens
Ruislip, Middlesex
HA4 7ER, England
Phone: 44-1895672667
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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
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Lancer Russia

Lancer Sales Company

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125015 Moscow, Russia
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FAX: 7-095-745-7109
Mobile Phone: 7-095-991-7778
7-095-139-0335
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vdemkin@ktv.ru

Lancer Middle East / Africa

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Lancer Authorized Distributor

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Sunward Park, 1470
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Lancer Latin America

Latin America Sales

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