

LANCER | SOFT DRINK SYSTEMS

VERSAPOUR VALVES

Installation, Operation & Service Manual



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ABOUT THIS MANUAL

This booklet is an integral and essential part of the product and should be handed over to the operator after the installation and preserved for any further consultation that may be necessary. Please read carefully the guidelines and warnings contained herein as they are intended to provide the user with essential information for the continued safe use and maintenance of the product. In addition, it provides ***GUIDANCE ONLY*** to the user on the correct services and site location of the unit.

BEFORE GETTING STARTED

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

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

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1. Specifications and Features

1.1. Models

Part Number	Description
21000165	VALVE VERSAPOUR 3.0 OZ SSL
21000166	VALVE VERSAPOUR 3.0 SS METAL LVR
21000175	VALVE VERSAPOUR 3.0 LVR
21000176	VALVE VERSAPOUR 3.0 PB
21000177	VALVE VERSAPOUR 3.0 PC
21000178	VALVE VERSAPOUR 3.0 PC W/O MOUNTING BLOCK (MB)
21000179	VALVE VERSAPOUR 3.0 LVR W/O MB
21000180	VALVE VERSAPOUR 3.0 PB W/O MB
21000181	VALVE VERSAPOUR 3.0 OZ SSL W/O MB
21000182	VALVE VERSAPOUR METAL 3.0 W/O MB

1.2. Product Features

The VersaPour is a post-mix valve that utilizes electrical and mechanical components to actuate the paddle arms and combine syrup and carbonated/plain water to dispense the finished beverage.

1.3. Specifications

Actuations			Self-Serve Push Button Portion Control Lever
Flowing Pressures at Valve	Minimum	Water/Soda	40 PSIG (0.276 MPA)
		Syrup (Sugar)	20 PSIG (0.138 MPA)
		Syrup (Diet)	20 PSIG (0.138 MPA)
	Maximum	Water/Soda	110 PSIG (0.758 MPA)
		Syrup (Sugar)	70 PSIG (0.483 MPA)
		Syrup (Diet)	70 PSIG (0.483 MPA)
Electrical Requirements			24 VAC, 50/60 Hz
Flow Rate	Minimum		1.5 oz/sec (44.4 ml/sec)
	Maximum		3.0 oz/sec (88.8 ml/sec)
Flow Control			Water and Syrup flow individually adjustable. Syrup operates with both sugar and diet syrups.
Operating Temperature	Minimum		32° F (0° C)
	Maximum		105° F (40.6° C)

MOUNTING: Mounts onto all industry standardized valve mounting patterns

SODA/WATER BUTTON: Optional kit that can be retrofitted in field

2. Safety Information

2.1. Safety Instructions

For your personal safety, and that of others working around you please read, understand, and follow thoroughly all safety instructions included in this manual.

- Review all applicable WHS (Work Health and Safety) regulations.
- Learn how to operate the Appliance and use the controls properly.
- Ensure that the Appliance is maintained according to service manual instructions.
- Do not allow any unauthorised modifications to the machine.

3. Installation

3.1. Removal of Existing Valve

NOTE: Water, Syrup and CO2 systems must be depressurised prior to removing existing valves

- Turn OFF carbonated water supply and plain water supply to dispenser to depressurize the system.
- Disconnect syrup connector at syrup container.
- Operate each valve to ensure complete depressurization of water and syrup in the system, CO2 will still flow from the valve after water and syrup are emptied.
- Turn OFF CO2 at the supply.
- Operate each valve to depressurize CO2 from the lines.
- Remove existing valve and mounting block. Reuse the mounting block screws

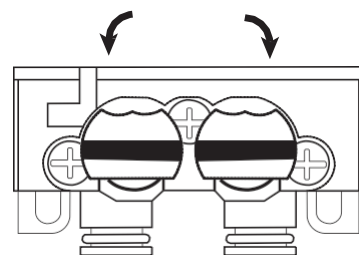
3.2. Installation of Valve



Caution

If dispenser is connected to electrical power, the unit must be properly grounded to avoid possible fatal electrical shock or serious bodily injuries.

- Slide I.D. panel up to expose cover mounting screw.
- Loosen mounting screw, DO NOT REMOVE, then remove cover.
- Turn both stems on mounting block to the closed position.
- Lift up wire retainer and remove mounting block from the valve.
- Replace inlet water and syrup o-rings on dispenser valve fittings. Make sure to lubricate new o-rings with water or FDA approved lubricant.
- Connect wiring to pressure switch in product line (24 VAC power supply required).
- Install mounting block to valve plate using four (4) mounting screws removed from existing mounting block.
- Install valve on mounting block. Push wire retainer down. This will lock valve to mounting block. White stems must be in closed position.
- Turn on carbonator water supply and syrup supply to dispenser.

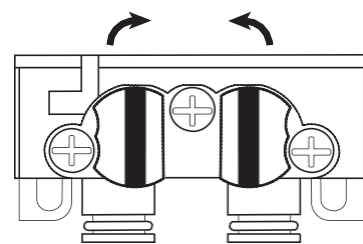


Closed Position

- Turn both white stems on mounting block to the open position. Top of the stem will lock wire retainer in position.
- If electric version, reconnect to 24 VAC power supply.
- Operate the valve momentarily to ensure flow of carbonated water and syrup.

NOTE: Versapour Model 100 valves are factory preset for a flow rate of 3.0 oz/sec; an adjustment may be required.

- Install cover on valve and tighten cover mounting screw.
- Slide down I.D. panel.

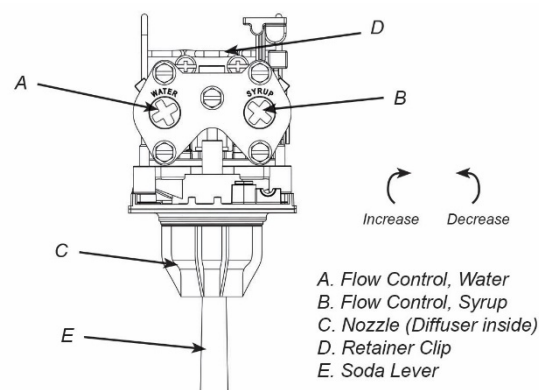
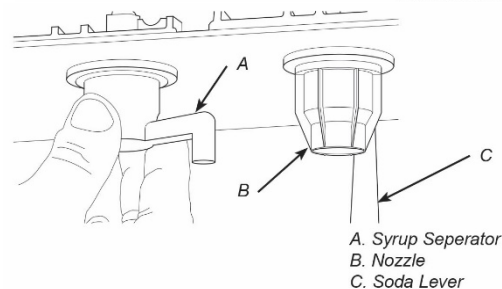
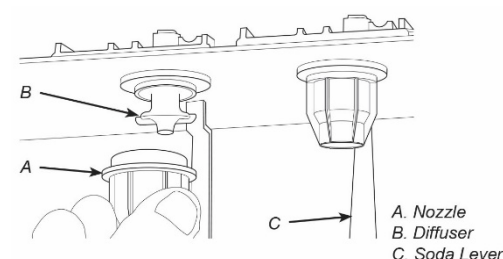


Open Position

3.3. Adjust Water Flow

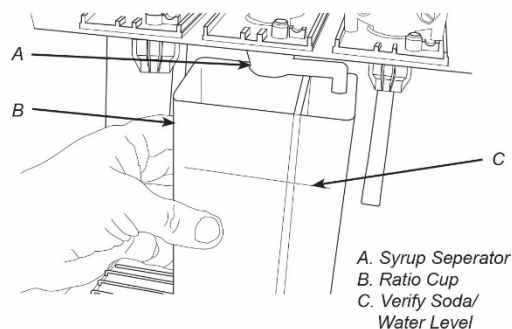
NOTE: VersaPour Valve - The water flow for the Model 100 may be adjusted from 1.25 oz/sec (37 ml/sec) to 2.50 oz/sec (74 ml/sec). The restricted flow adjustment plug (Model 100) adjusts to a maximum flow of 2.0 oz/sec (59.2 ml/sec).

- Slide up I.D. panel until flow control adjustments are exposed.
- Remove nozzle by twisting counter clockwise and pulling down.
- Remove diffuser by pulling down.
- Install LANCER syrup separator (red) (HL 22000006 for Model 100 valves) in place of the nozzle.
- Activate valve to fill separator syrup tube.
- Hold a LANCER brix cup under syrup separator. Dispense water and syrup into cup for two (2) seconds. Divide number of ounces (ml) of water in cup by two (2) to determine water flow rate per second.
- To obtain desired water flow rate, use a screwdriver to adjust water flow control.



3.4. Adjust Water to Syrup Ratio

- Hold LANCER ratio cup under the syrup separator and activate valve. Check ratio.
- To obtain desired ratio, use screwdriver to adjust syrup flow control, (See previous page).
- Remove syrup separator.
- Install diffuser and nozzle.
- Slide down I.D. panel.



3.5. Portion Control Programming

NOTE: The Portion Control Keypad for the VersaPour valve operates at the touch of a finger and has 5 actuators (selections): small, medium, large, extra large, and pour/cancel. The Portion Control Keypad has three (3) automated features: a five (5) second timer for setting the flow rate, a no top off pour feature, and a top off pour feature.

Portioned Drink Dispense

- Fill any cup with the appropriate amount of ice and place underneath the nozzle.
- Touch the appropriate portion size button. The valve will pour the appropriate amount determined by the selection in the previous step.

Flow Rate Setting

- Place a ratio cup underneath the nozzle.
- Touch the Small and Large size buttons at the same time.
- The valve will pour for five (5) seconds.
- 4. Use the amount poured to adjust flow rate as needed, (See previous page).

No Top Off Programming

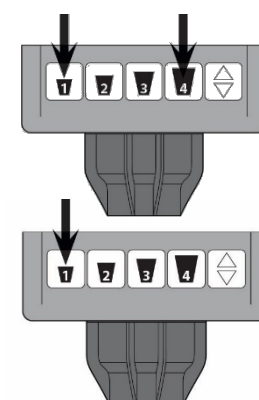
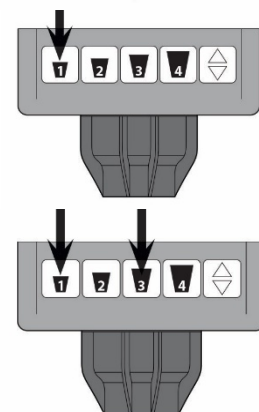
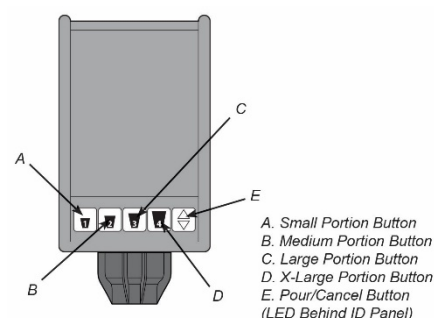
- Place a cup underneath the nozzle.
- Slide the ID Panel up on the Valve Cover to gain access to Valve LED light located on the back of the ID Panel

NOTE: When programming slide the ID panel up, removal is not required. This will enable the blinking LED to be viewed, reflecting on the top of the valve cover.

- To enter programming mode, touch the small and extra large sizes at the same time.
- To set the portions, touch the corresponding portion size button until the desired liquid level is obtained.

NOTE: There is a timeout feature that will exit programming mode after 25.5 seconds of continuous pouring or 25.5 seconds of inactivity. If timeout occurs, all data will be retained; however you must re-enter programming mode to set any remaining sizes.

- Press any of the different size buttons to save the portion data.
- To exit programming mode, touch the pour/cancel button.

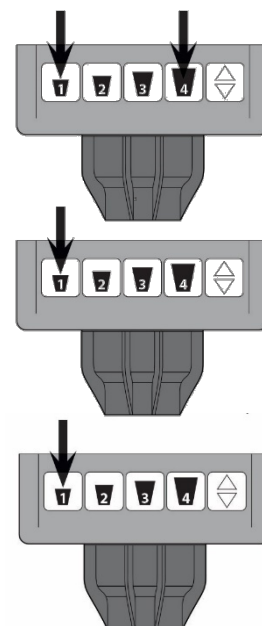


Top Off Programming

- Place a cup underneath the nozzle.
- To enter programming mode, touch the small and extra large sizes at the same time.
- To set the portions, touch the corresponding portion size button until the desired liquid level is obtained.

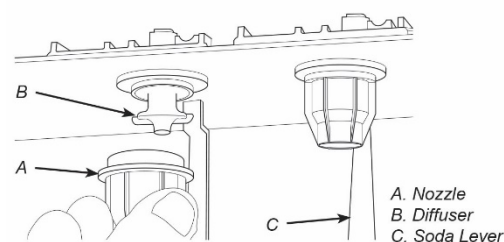
NOTE: There is a timeout feature that will exit programming mode after 25.5 seconds of continuous pouring or 25.5 seconds of inactivity. If timeout occurs, all data will be retained; however you must re-enter programming mode to set any remaining sizes.

- To set the top off portion, let foam settle and touch the same portion button again until the cup is full.
- To exit programming mode, touch the pour/cancel button.

**4. Cleaning and Sanitizing****4.1. Daily Cleaning**

NOTE: Nozzle and Diffuser must be cleaned daily.

- Remove nozzle by twisting counter clockwise and pulling down.
- Remove diffuser by pulling down.
- Rinse nozzle and diffuser with warm water.
- Wash nozzle and diffuser with mild cleaning solution in warm water. Ensure that cleaning solution is thoroughly rinsed from nozzle and diffuser. Residual solution will cause foaming and off taste in finished product.
- Reinstall diffuser and nozzle.



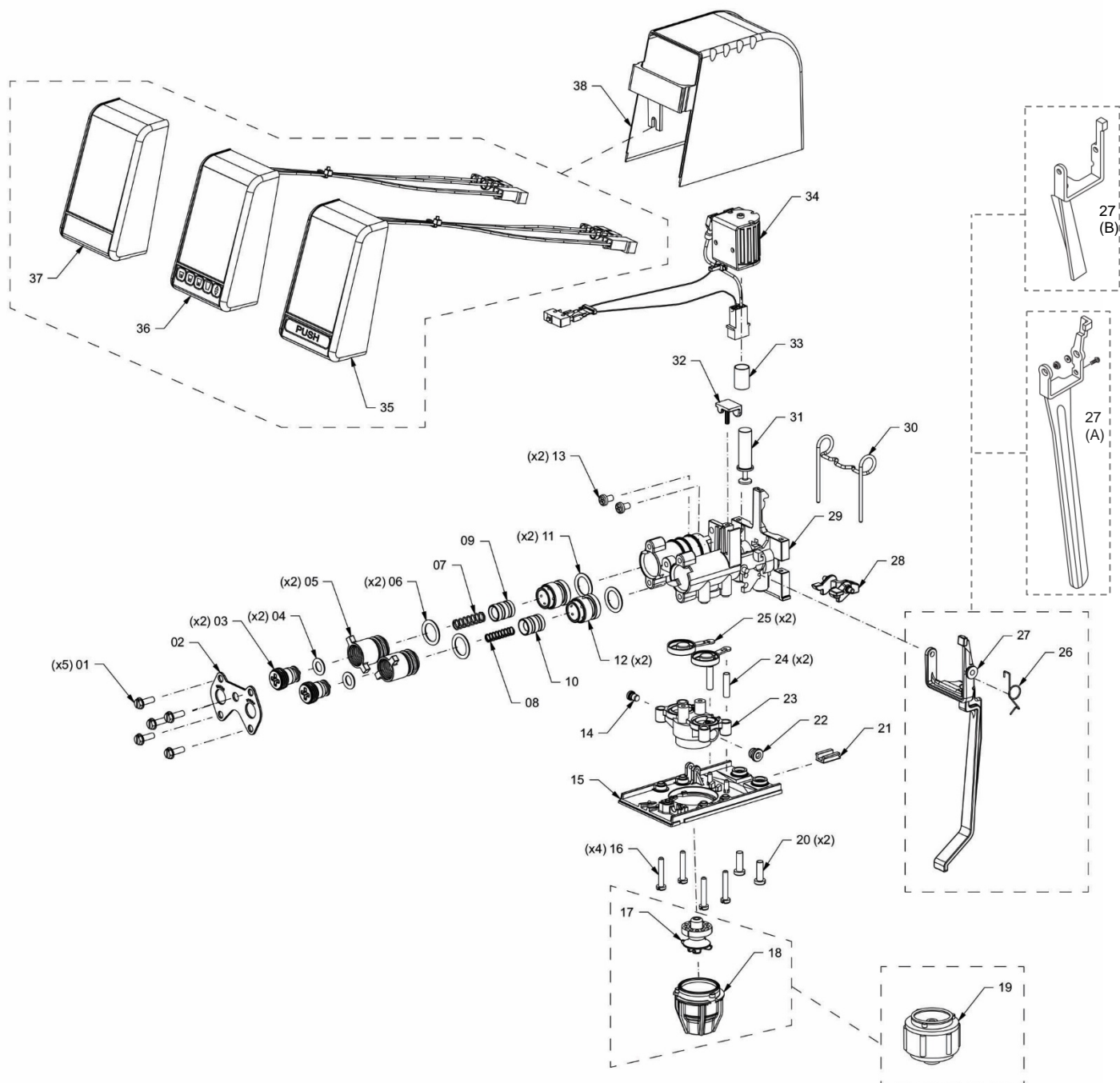
NOTE: Ensure compliance with the instructions of the dispenser manufacturer to properly clean and sanitize the nozzle and diffuser and ensure no off-taste is present.

4.2. Bi-Weekly Sanitising

- Nozzle and diffuser must be sanitized bi-weekly. Comply with the instructions of the dispenser manufacturer to properly sanitize the nozzle and diffuser, and ensure no off-taste is present.

5. Assembly Diagrams & Parts List

5.1. VersaPour Assembly (Model 100 SSL, PB, PC 3.0 oz/sec)



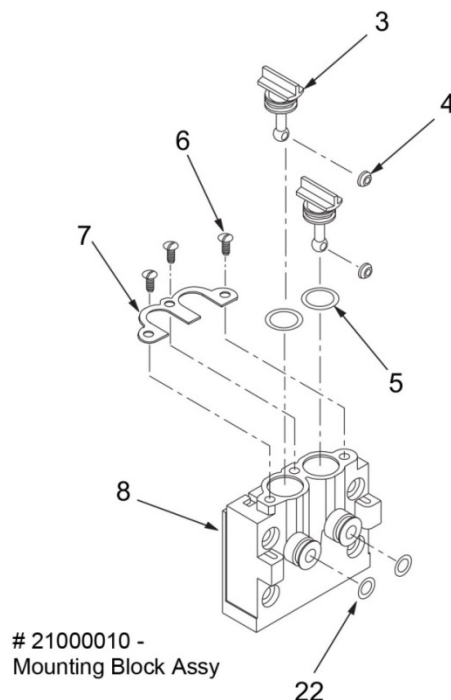
5.2. VersaPour Assembly Parts List

PARTS LIST				
ITEM	PART NO.	HL PART NO.	ALT. PART NO.	DESCRIPTION
1	04-0267/02	21000220		SCR,8-16X.5,PLSTI,HHSW/W,SS
2	03-0433/02	21000119		RETAINER FLOW CONTROL LEV
3	05-1919	21000032		PLUG ADJUSTMENT LEV
4	02-0126	79020126		ORING 2-109 97-0999 (GO-109)
5	05-0262/04	21000014		BONNET FLOW CONTROL LEV VALVE
6	02-0132	21020132		ORING LANCER
7	03-0171	21030171		SPRING SODA LANCER VALVE
8	03-0169	21030169		SPRING SYRUP FLOW CONTROL LEV
9	81-0275	21810275		PISTON,WATER,3OZ,VALVE
10	81-0273	21810273		PISTON,SYRUP,3OZ,VALVE
11	02-0132	21020132		ORING LANCER
12	81-0274	21810274		SLEEVE SYRUP LANCER 3OZ VALVE
13	04-0486	21000203		SCR,8-32X.270,PLNHD,PH/SL,MS
14	05-0234/01	21000204		PLUG,SMALL
15	05-1108/03	15000228		PLATE BOTTOM LEV 4.5OZ
16	04-0270	21000206		SCR,6-19X.910,PHD,PH/SL,PLT
17	05-1593/02	21051593		DIFFUSER VERSAPOUR 3.0OZ
18	05-3242	21000207		NOZZLE,BLACK,VERSAPOUR
19	54-0183/04	21000208		NOZZLE ASSY, 2-SHOT 4.5OZ/S
20	04-0310	21000209		SCR,8-16X.600,PHD,PH/SL,PLT
21*	05-0491/01	21000210		FILLER,LEV,PUSHBUTTON
22	05-0235	21000205		PLUG,LARGE
23	05-1109/01	21000211		BODY,LOWER,PRESSURE,4.5
24	03-0143	21000030		SPRING BANJO VALVE LEV
25	82-3869/01	21000212		PADDLE ARM,SIMRIT COMPOUND C
26**	03-0081	21000037		SPRING LEVER LEV VALVE
27**	05-0776/02	21540165		LEVER,ELECTRIC,SELF-SERV,LEV
27A	30-5416	21000117		LEVER SS METAL
27B	05-0231	21000025		LEVER SHORT
28	05-0238/06	21000054		YOKE LEV VALVE
29	05-1110/04	21000214		BODY UPPER, LEV
30	03-0233	21030233		RETAINER VALVE LEV VOL
31	10-0117/04	87000069		ARMATURE LEV VALVE
32**	05-0935	21000215		PLUG,CHERRY SWITCH
33	03-0125	21000038		SPRING SOLENOID LEV
34	52-1248/03	21521248		COIL HARNESS ASSY LEV
35	52-3630	21000216		ID PANEL ASSY, LPV, PB
36	52-3632	21000217		ID PANEL ASSY, LPV, PC
37	05-3241	21000218		PANEL,ID,BLACK,VERSAPOUR
38	05-3240	21000219		COVER,BLACK,VERSAPOUR

* denotes part only applicable in Versa Pour PB & PC

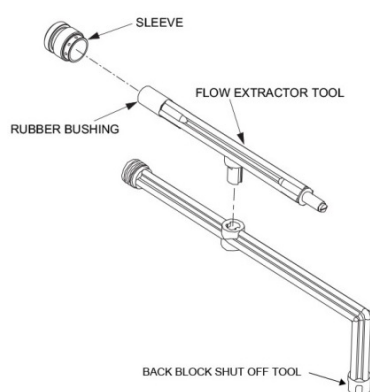
** denotes part only applicable in Versa Pour SSL, short lever

5.3. Mounting Block



PARTS LIST				
ITEM	PART NO.	HL PART NO.	ALT. PART NO.	DESCRIPTION
-	82-0274	21000010		MOUNTING BLOCK ASSY
-	82-2658	21822658		3 WAY MOUNTING BLOCK ASSY – WATER/SODA + SYRUP (NOT SHOWN)
3	05-0266	21000221		STEM, VALVE, MOUNTING BLOCK
4	05-0267	21000052		WASHER
5	02-0047	79001049		O-RING
6	04-0269	79000117		SCREW
7	03-0087	21000222		RETAINER, STEM, VALVE, MNT BLK
8	05-0265	21000026		MOUNTING BLOCK
22	02-0126	79020126		O-RING

5.4. Tools



PARTS LIST			
PART NO.	HL PART NO.	ALT. PART NO.	DESCRIPTION
54-0201 / 01	22000006		SEPARATOR LEV 4.5OZ VERSAPOUR
52-1950	22521950		FLOW CONTROL EXTRACTOR TOOL

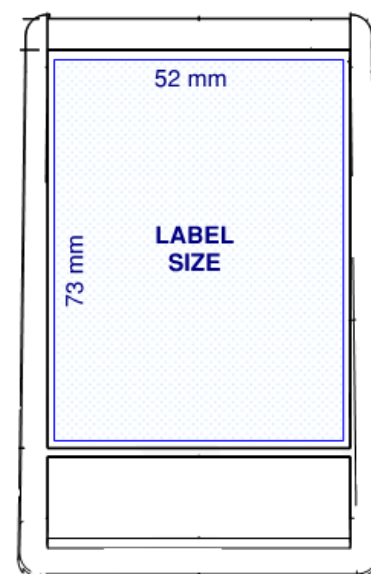
5.5. Optional Valve Kits



PARTS LIST			
PART NO.	HL PART NO.	ALT. PART NO.	DESCRIPTION
85-5172	21000183		KIT LEV VERSAPOUR SODA BUTTON

5.6. Label Size

52mm wide x 73mm high ($\pm 0.5\text{mm}$)



6. Trouble Shooting

TROUBLE	CAUSE	REMEDY
Water leakage around nozzle.	<ul style="list-style-type: none"> Damage to sealing surface of nozzle 	<ul style="list-style-type: none"> Replace nozzle.
Leakage between upper and lower bodies.	<ul style="list-style-type: none"> One or more retaining screws loose. Paddle arm assemblies are worn or damaged 	<ul style="list-style-type: none"> Tighten all six (6) retaining screws. Replace paddle arm assemblies.
Miscellaneous leakage.	<ul style="list-style-type: none"> Gap between parts. Damaged or improperly installed o-rings. 	<ul style="list-style-type: none"> Tighten appropriate retaining screws Replace or adjust appropriate o-rings
Insufficient water flow.	<ul style="list-style-type: none"> Water flowing pressure is too low, or restricted Foreign debris in water flow controls. 	<ul style="list-style-type: none"> Check incoming water from carbonator to ensure minimum flowing pressure. See SPECIFICATIONS. Check stems on mounting block to ensure it is in fully OPEN position. Remove water flow control from upper body and cleanout any foreign materials to ensure smooth free piston movement.

TROUBLE	CAUSE	REMEDY
Insufficient syrup flow.	<ul style="list-style-type: none"> Syrup flowing pressure is too low, or restricted Foreign debris in syrup flow controls. 	<ul style="list-style-type: none"> Check incoming syrup to ensure minimum flowing pressure. See SPECIFICATIONS. Check shutoff on mounting block to ensure it is in fully OPEN position. Remove syrup flow control from upper body and cleanout any foreign materials to ensure smooth free piston movement.
Erratic Ratio Brix.	<ul style="list-style-type: none"> Incoming water and/or syrup supply not at sufficient flowing pressure. Foreign debris in water and/or syrup flow controls. 	<ul style="list-style-type: none"> Check incoming water and syrup supply to ensure sufficient flowing pressure. Remove flow controls and clean out any foreign materials to ensure smooth free piston movement.
No product dispensed.	<ul style="list-style-type: none"> Water and syrup shutoffs are not fully OPEN. Ensure cup lever arm, or I.D. Panel actuator is actuating switch. Electric current is not reaching valve. Improper or inadequate water or syrup supply. 	<ul style="list-style-type: none"> Check stems on mounting block to ensure they are in fully OPEN position. If not, repair or replace. Check electric current supplied to valve. See SPECIFICATIONS. If current is adequate, check solenoid coil and switch. Replace if necessary. Remove valve from mounting block and open stems slightly and check to ensure proper water and syrup supply. If no supply, check dispenser for freeze-up or other problems.
Water only dispensed, no syrup; or syrup only dispensed, no water.	<ul style="list-style-type: none"> Water or syrup stem on mounting block not fully OPEN. Improper or inadequate water or syrup supply. 	<ul style="list-style-type: none"> Check stems on mounting block to ensure they are in full OPEN position. Remove valve from mounting block and open stem slightly to check for proper syrup and water supply. If no supply, check dispenser for freeze-up or other problems.
Valve will not shut off.	<ul style="list-style-type: none"> Cup Lever may be sticking or binding Switch not actuating properly. Solenoid armature not returning to bottom position. Debris or damage to Paddle arms. 	<ul style="list-style-type: none"> Correct or replace lever. Check switch for free actuation. Replace defective solenoid armature or spring. Remove debris and/or replace damaged paddle arms.
Excessive Foaming	<ul style="list-style-type: none"> Incoming water or syrup temperature too high. Water flow rate too high. Nozzle and diffuser not clean. Nozzle and diffuser not properly installed. CO2 pressure too high. 	<ul style="list-style-type: none"> Correct at dispenser. Re-adjust and reset Brix. Remove and clean. Remove and install properly. Check for proper pressure setting.
No syrup-out light. (If equipped.)	<ul style="list-style-type: none"> Burned out or defective lamp. Faulty wiring and/or pressure switch in product line. 	<ul style="list-style-type: none"> Replace harness. Repair or replace.

7. Certificate of Warranty

It is the policy of Hoshizaki to provide to its current customers, warranty for all equipment supplied and installation work performed within a specified period.

Parts and Equipment

Lancer provides a warranty period of twelve (12) months from the date of original invoice for all manufactured parts. Repair or replacement of defective parts will be at the sole discretion of Lancer.

Changeover parts will be invoiced to the customer at the customer's normal purchase cost and upon return of the warranty item and validation of the claim, the invoice will be credited.

Installations

Lancer provides a warranty period of twelve (12) months from the date of final invoice for workmanship after the completion of any installation work, provided the parts and labour are completed by Lancer or its subcontractor.

Labour

Lancer will not normally cover any labour costs associated with a warranty claim. Subject to the approval of the Divisional Sales Manager, Lancer may choose to reimburse the customer for some or all labour costs associated with a warranty claim. Any claim for labour costs must be authorized by Lancer prior to the work being undertaken.

Exclusions

Lancer will not accept any liability or cost associated with any consequential losses (such as loss of syrup or beer), loss of profit or damage to property as a result of faulty product.

Warranty shall not apply:

- If in the opinion of Lancer, the equipment has been used in a situation the equipment has not been designed for;
- If in the opinion of Lancer, the equipment has been subject to abuse, negligence or accident;
- If connected to improper, inadequate or faulty power, water or drainage service or operated using incorrect, insufficient or contaminated lubricants, coolants, refrigerants or additives;
- Where the product is installed, maintained or operated otherwise than in accordance with the instructions supplied by Lancer;
- Where the product has been damaged by foreign objects;
- Where the product has been serviced, repaired, altered or moved otherwise than by Lancer or its nominees or using other than Lancer approved replacement parts.

To obtain full details of your warranty and approved service agency, please contact your dealer/supplier, or the nearest Hoshizaki Office.

Hoshizaki Lancer TEL: +61 8 8268 1388 FAX: +61 8 8268 1978