

# LANCER®

## POST MIX VALVE LEV®

SERIES 100, 145



LEV®  
PORTION CONTROL

LEV®  
PUSH BUTTON

LEV®  
SELF-SERVE

LEV®  
CREW SERVE

LEV®  
EASY FILL®

## Operation Manual

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Lancer PN: 28-0027/07

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## ABOUT THIS MANUAL

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

***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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## 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.

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# SAFETY NOTICES

## READ ALL SAFETY INSTRUCTIONS BEFORE USING THIS UNIT.

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

### **WARNING**

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

### **ATTENTION**

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

### **CAUTION**

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

### **NOTE**

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

# VALVE SPECIFICATIONS

## FLOW RATE

- All Model 100 (3.0 Valve) valves are adjustable from 1.5 ounces/second (44.4 ml/sec) to 3.0 ounces/second (88.8 ml/sec) of finished drink.
- All Model 145 (4.5 Valve) valves are adjustable from 2.5 ounces/second (74.0 ml/sec) to 5.0 ounces/second (148.0 ml/sec) of finished drink.
- Restricted flow adjustment plug, maximum flow 2.0 ounces/second (59.2 ml/sec) in the Model 100 valves and 3.3 ounces/second (97.7 ml/sec) in the Model 145 valves.

## FLOW CONTROLS

- Water and syrup flow controls are individually adjustable without removing valve cover. Syrup flow control operates with both sugar and diet syrups.

## MOUNTING

Mounts on the same hole center as the following valves with the same mounting screws.

- Dole SEV
- Dole FFV
- Smart Valve
- Cornelius SF1
- McCann Coca-Cola Valve

**SODA/WATER LEVER** Manually operated and field convertible.

## WATER AND SYRUP REQUIREMENTS

### MODEL 100 (3.0 VALVES)

#### FLOWING PRESSURES AT VALVE

	Minimum	Maximum
Water/Soda	40 PSI (0.276 MPA)	110 PSI (0.758 MPA)
Syrup (Sugar)	20 PSI (0.138 MPA)	70 PSI (0.483 MPA)
Syrup (Diet)	10 PSI (0.070 MPA)	70 PSI (0.483 MPA)

### MODEL 145 (4.5 VALVES)

#### FLOWING PRESSURES AT VALVE

	Minimum	Maximum
Water/Soda	30 PSI (0.207 MPA)	110 PSI (0.758 MPA)
Syrup (Sugar)	15 PSI (0.103 MPA)	80 PSI (0.552 MPA)
Syrup (Diet)	10 PSI (0.070 MPA)	80 PSI (0.552 MPA)

## FLOW RATE

24 VAC, 50 / 60 HZ

# INSTALLATION

## RECEIVING

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 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.

## Removal of Existing Valve

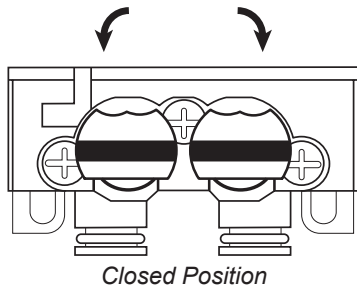
1. Turn **OFF** carbonated water supply to dispenser to depressurize the system.
2. Turn **OFF** all syrup supplies to dispenser.
3. Operate each valve to ensure complete depressurization of water and syrup in the system.
4. Remove existing valve and mounting block. Reuse the mounting block screws.

## Installation of Valve

### ⚠ CAUTION

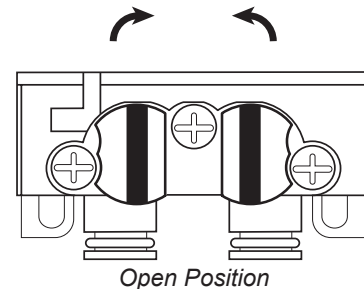
If the dispenser is connected to electrical power, the unit must be properly grounded to avoid possible fatal electrical shock or serious bodily injuries.

1. Slide ID panel up to expose cover mounting screw.
2. Loosen cover mounting screw (**DO NOT REMOVE**) and remove cover.
3. Turn both stems on mounting block to the **CLOSED** position.



4. Lift up wire retainer and remove mounting block from valve.
5. Replace the inlet water and syrup o-rings on dispenser valve fittings.
6. Lubricate o-rings on the fittings and mounting block with water or an FDA-approved lubricant.
7. If syrup-out light is furnished with valve, run light wires through mounting block and valve plate. Connect wiring to pressure switch in product line (24 VAC power supply required).
8. Install mounting block to valve plate using four (4) mounting screws removed from existing mounting block.
9. Install valve on mounting block. Push wire retainer down. This will lock valve to mounting block. (White stems must be in closed position.)

10. Turn on carbonator water supply and syrup supply to dispenser.
11. Turn both white stems on mounting block to the **OPEN** position. Top of stem will lock wire retainer in position.



12. If electric version, reconnect to 24 VAC power supply.
13. Operate the valve momentarily to ensure flow of carbonated water and syrup.

### NOTE

**Model 100 valves are factory preset for a flow rate of 3.0 ounces per second; an adjustment may be required. Model 145 valves are factory preset for a flow rate of 4.5 ounces per second; an adjustment may be required.**

14. Adjust water flow to correct flow rate (see following instructions).
15. Adjust ratio to correct setting (see following instructions).
16. Install cover on valve and tighten cover mounting screw.
17. Slide down ID panel.

# Adjust Water Flow Rate & Syrup/Water Ratio

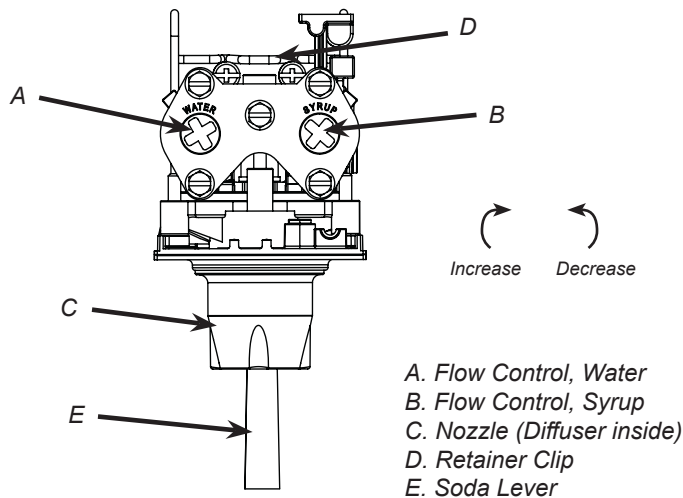
## NOTE

Ensure there is ice on the cold plate and the lines are cold before attempting to set the flow rates on the valves. The drink temperature should be no higher than 40°F (4.4°C) when flow rates are set.

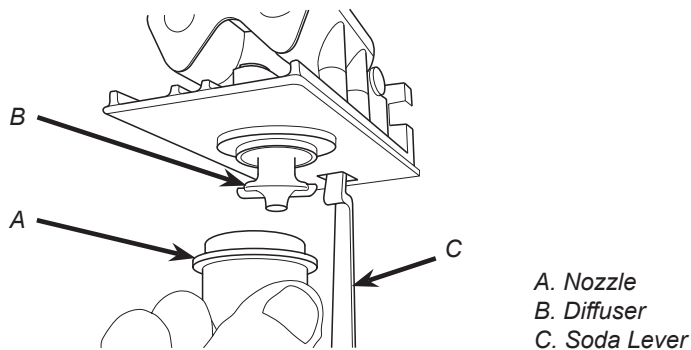
## NOTE

For units with flavor injector lines, it is required to remove the merchandiser to gain access to valves.

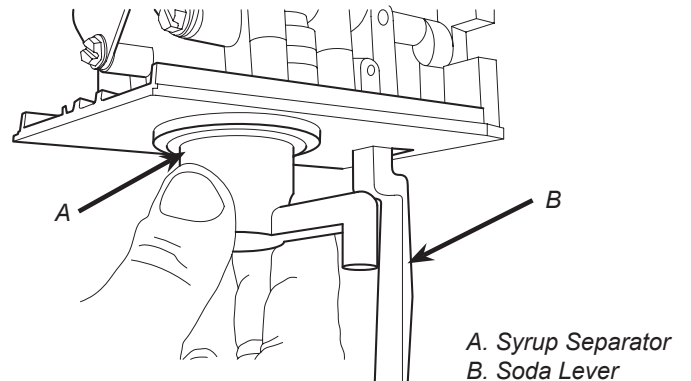
1. Remove valve cover from first valve.
2. Close syrup shut-off at mounting block for first valve, (see page 5 for reference).
3. Using a Lancer ratio cup verify water flow rate (5 oz. in 4 sec.). Use a screwdriver to adjust if needed.



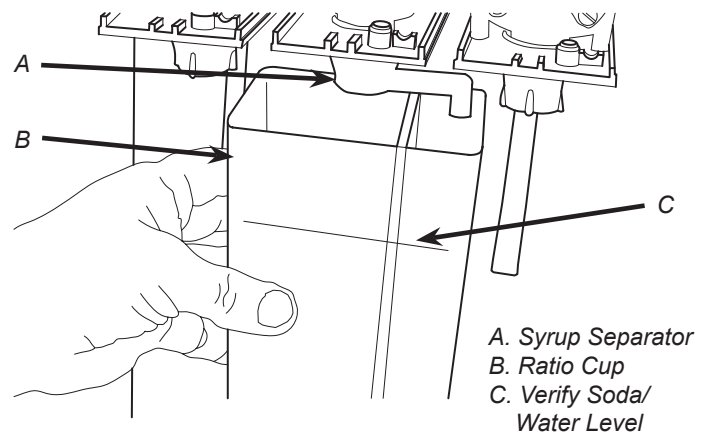
4. Remove nozzle by twisting counter clockwise and pulling down, then remove diffuser by pulling down.



5. Install Lancer (yellow) syrup separator (PN 54-0031) in place of nozzle.



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



9. Remove syrup separator and reinstall nozzle. Replace valve cover.
10. Repeat steps 1-8 for each valve.
11. Re-install merchandiser, splash plate, and top cover.

# VALVE CLEANING & SANITIZING

## General Information

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

### NOTE

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

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

### ⚠ ATTENTION

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

### ⚠ ATTENTION

**DO NOT** use Alcohol or any Solvent cleaning agents.

## Cleaning and Sanitizing Solutions

### Cleaning Solution

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

### Sanitizing Solution

Prepare the sanitizing solution in accordance with the manufacturer's written recommendations and safety guidelines. The type and concentration of sanitizing agent recommended in the instructions by the manufacturer shall comply with 40 CFR §180.940. The solution must provide 100 parts per million (PPM) chlorine (e.g. Sodium Hypochlorite or bleach) and a minimum of five gallons of sanitizing solution should be prepared.

## 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 cleaning solution (described above).

### NOTE

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

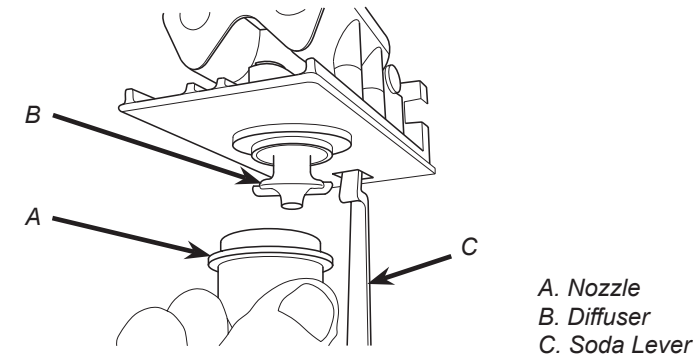
Ensure compliance with the instructions of the dispenser manufacturer to properly clean and sanitize the nozzle and diffuser and ensure no off-taste is present.

# Biweekly Sanitizing

**NOTE**

Nozzle and Diffuser must be cleaned biweekly.

- 1. Remove nozzle by twisting counter clockwise and pulling down.



- 2. Remove diffuser by pulling down.
- 3. Wash nozzle and diffuser with cleaning solution then immerse in sanitizing solution and let sit for fifteen (15) minutes.
- 4. Set nozzle and diffuser aside and let air dry. **DO NOT** rinse with water after sanitizing.
- 5. Reconnect 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.

## MISCELLANEOUS

### Additional Valve Kits

The following additional kit is available for purchase for the LEV Model 100's. For more information please contact a **LANCER** Service Agent or Customer Service.

Part Number	Description	Image
82-1458/02	Front Soda/Water Installation Kit	
82-5172	Front Soda/Water Push Button Installation Kit	



# Syrup Ratio Cup

Part Number	Description
05-0081	Soda Brix Cup
05-0083	Syrup Brix Cup 4.00 to 1
05-0084	Syrup Brix Cup 4.20 to 1
05-0085	Syrup Brix Cup 4.40 to 1
05-0171	Syrup Brix Cup 4.50 to 1
05-0169	Syrup Brix Cup 4.75 to 1

Part Number	Description
05-0170	Soda Brix Cup 5.00 to 1
05-0086	Syrup Brix Cup 5.20 to 1
05-0087	Syrup Brix Cup 5.30 to 1
05-0088	Syrup Brix Cup 5.40 to 1
05-0089	Syrup Brix Cup 5.50 to 1
05-0090	Universal Split Cup

## TROUBLESHOOTING

TROUBLE	CAUSE	REMEDY
Water leakage around nozzle.	1. O-ring is damaged or missing.	1. Replace o-ring.
Leakage between upper and lower bodies	1. One or more retaining screws loose. 2. Paddle arm assemblies are worn or damaged	1. Tighten all six (6) retaining screws. 2. Replace paddle arm assemblies.
Miscellaneous leakage.	1. Gap between parts. 2. Damaged or improperly installed o-rings.	1. Tighten appropriate retaining screws 2. Replace or adjust appropriate o-rings
Insufficient water flow.	1. Insufficient incoming supply water pressure. 2. Shutoff on mounting block not fully open. 3. Foreign debris in water flow control. 4. Foreign debris in water pump strainer	1. Verify incoming supply water pressure is a minimum of 25 PSI (0.172 MPA). 2. Open shutoff fully. 3. Remove water flow control from upper body and clean out any foreign material to ensure smooth free spool movement. 4. Remove water pump strainer and clean.
Insufficient syrup flow.	1. Insufficient CO <sub>2</sub> pressure to BIB pumps. 2. Out of CO <sub>2</sub> . 3. Shutoff on mounting block not fully open. 4. Foreign debris in syrup flow control. 5. Bad syrup pump.	1. Adjust CO <sub>2</sub> pressure to 80 PSI (0.550 MPA) [minimum 70 PSI (0.480 MPA)] for BIB pumps. 2. Replace CO <sub>2</sub> tank/refill. 3. Open shutoff fully. 4. Remove syrup flow control from upper body and clean out any foreign material to ensure smooth free spool movement. 5. Replace BIB pump.
Erratic ratio.	1. Incoming water and/or syrup supply not at minimum flowing pressure. 2. Foreign debris in water and/or syrup flow controls.	1. Check pressure and adjust 2. Remove flow controls from upper body and clean out any foreign material to ensure smooth free spool movement.
Valve will not shut off.	1. Cup Lever may be sticking or binding. 2. Switch not actuating properly. 3. Solenoid armature not returning to bottom position. 4. Debris or damage to Paddle Arms.	1. Correct or replace lever. 2. Check switch for free actuation. 3. Replace defective solenoid armature or spring. 4. Remove debris and/or replace damaged paddle arms.



TROUBLE	CAUSE	REMEDY
No syrup dispensed	<ol style="list-style-type: none"> <li>1. Water and syrup shutoffs on mounting block not fully open.</li> <li>2. Electric current not reaching valve.</li> <li>3. Improper or inadequate water or syrup supply.</li> <li>4. Transformer Failure</li> <li>5. Bad valve solenoid(s)</li> </ol>	<ol style="list-style-type: none"> <li>1. Open shutoff fully.</li> <li>2. Check electric current supplied to valve. If current is adequate, check solenoid coil and switch, and replace if necessary.</li> <li>3. Remove valve from mounting block and open shutoffs slightly and check water and syrup flow. If no flow, check dispenser for freeze-up or other problems</li> <li>4. Reset transformer circuit breaker. If breaker trips again check for pinched wire harness at back blocks</li> <li>5. Replace Solenoid(s)</li> </ol>
Water only dispensed; no syrup; or syrup only dispensed, no water	<ol style="list-style-type: none"> <li>1. Water or syrup shutoff on mounting block not fully open.</li> <li>2. Improper or inadequate water or syrup flow.</li> <li>3. BIB supply too far from dispenser.</li> <li>4. CO<sub>2</sub> pressure too low.</li> <li>5. Stalled or inoperative BIB pump</li> <li>6. Kinked line.</li> </ol>	<ol style="list-style-type: none"> <li>1. Open shutoff fully.</li> <li>2. Remove valve from mounting block, open shutoffs slightly and check water and syrup flow. If no flow, check dispenser for freeze-up or other problems. Ensure BIB connection is engaged.</li> <li>3. Check that BIB supply is within six (6) feet of the dispenser.</li> <li>4. Check the CO<sub>2</sub> pressure to the pump manifold to ensure it is between 70 and 80 PSI (0.483 and 0.552 MPA).</li> <li>5. Check CO<sub>2</sub> pressure and/or replace pump.</li> <li>6. Remove kink or replace line.</li> </ol>
Excessive foaming.	<ol style="list-style-type: none"> <li>1. Incoming water or syrup temperature too high.</li> <li>2. CO<sub>2</sub> pressure too high.</li> <li>3. Water flow rate too high.</li> <li>4. Nozzle not installed correctly.</li> <li>5. Nozzle and nozzle injectors not clean.</li> <li>6. Air in BIB lines.</li> <li>7. Poor quality ice.</li> <li>8. High beverage temperature.</li> </ol>	<ol style="list-style-type: none"> <li>1. Correct prior to dispenser. Consider larger dispenser or pre-cooler.</li> <li>2. Adjust CO<sub>2</sub> pressure downward, but not less than 70 PSI (0.483 MPA).</li> <li>3. Re-adjust and reset ratio. Refer to "Adjust Water Flow Rate &amp; Syrup/Water Ratio" Section.</li> <li>4. Remove and reinstall properly.</li> <li>5. Remove nozzle and clean injectors.</li> <li>6. Bleed air from BIB lines.</li> <li>7. Check quality of ice used in drink.</li> <li>8. Check refrigeration system.</li> </ol>
No syrup-out light. (If equipped)	<ol style="list-style-type: none"> <li>1. Burned out or defective lamp.</li> <li>2. Faulty wiring and/or pressure switch in product line.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace harness.</li> <li>2. Repair or replace.</li> </ol>

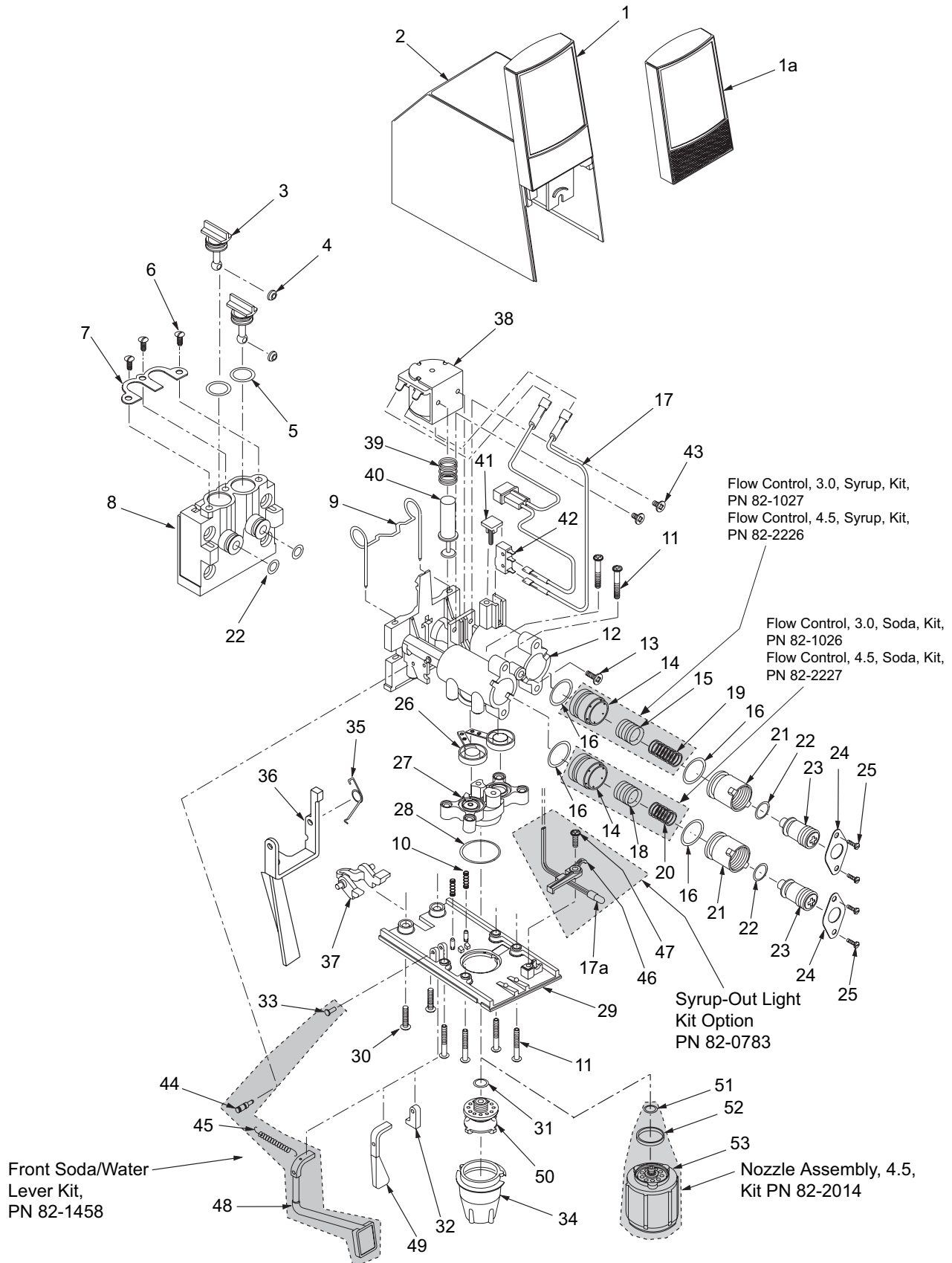
## Appliance Disposal



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

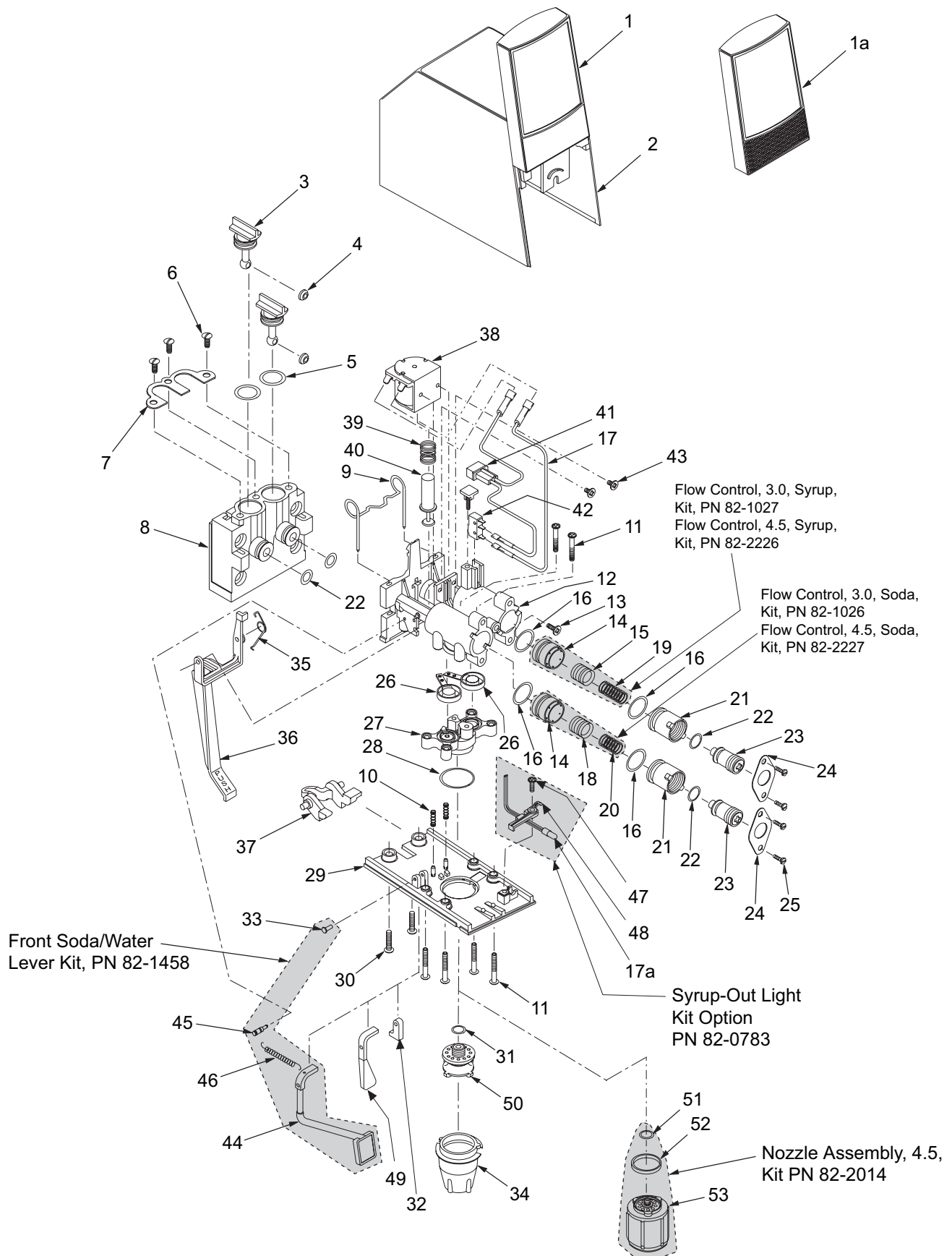
# ILLUSTRATIONS AND PART LISTINGS

## LEV® (Model 100L, 3.0 oz/sec and Model 145L, 4.5 oz/sec)



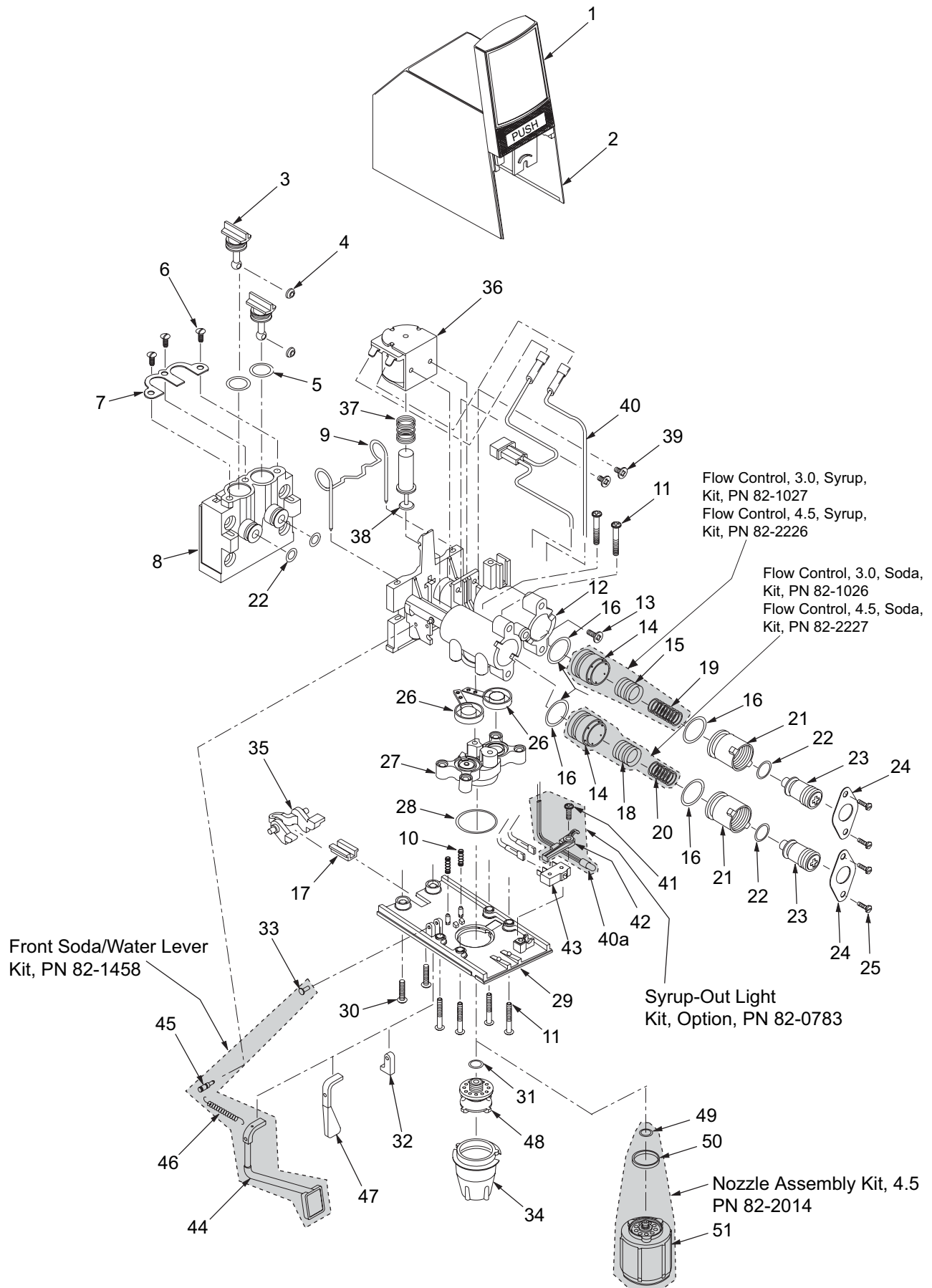
<b><u>Item</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>	<b><u>Item</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>
1	05-0287	ID Panel	27	54-0046	Body Assy, Lower, 3.0
1a	54-0057	ID Panel (Syrup-Out)	-	54-0188	Body Assy, Lower, 4.5
2	54-0029	Cover Sub Assy	28	02-0408	O-Ring, Nozzle, Red, 3.0 (Used in Valves produced through September 1998)
-	54-0030	Cover Assy (Item No. 1-2)			
-	54-0059	Cover Assy (Item No. 1a-2)	29	05-0232	Plate, Bottom, 3.0
3	05-0266	Stem, Valve, Mounting Block	-	05-1108	Plate, Bottom, 4.5
4	05-0267	Washer	30	04-0310	Screw
5	02-0047	O-Ring	31	02-0133	O-Ring (Used in Valves produced through September 1998)
6	04-0269	Screw			
7	03-0087	Retainer, Stem, Valve, Mounting Block	32	05-0281	Plug, Bottom Plate
8	05-0265	Mounting Block	33	04-0775	Pin, Lever, Soda
-	82-0274	Block Assy, Mounting (Item No. 3-8, 22)	34	05-0233	Nozzle, 3.0 (Used in Valves produced through September 1998)
9	03-0233	Retainer, Valve, 1-Piece	-	05-1463	Nozzle, 3.0 (Used in Valves produced in September 1998 and later)
10	03-0143	Spring, Pin, LEV®			
11	04-0270	Screw	35	03-0081	Lever, Spring, Electric
12	54-0189	Body Assy, Upper	36	05-0231	Lever, Electric
13	04-0302	Screw	37	05-0238	Yoke, Electric
14	81-0274	Sleeve, Syrup/Water, 3.0	38	52-0288	Coil Assy, LEV®
-	81-0382	Sleeve, Syrup/Soda, 4.5	39	03-0125	Spring, Solenoid, LEV®
15	81-0273	Piston, Syrup, 3.0	40	10-0117	Armature, LEV®
-	81-0383	Piston, Syrup, 4.5	41	05-0935	Plug, Retainer, Micro-Switch
16	02-0132	O-Ring	42	26-0265	Micro-Switch
17	52-0622	Wire Harness	43	04-0486	Screw
17a	52-0902	Wire Harness (Syrup-Out)	44	04-0724	Pin, Stud
18	81-0275	Piston, Soda, 3.0	45	03-0238	Spring, Front Soda/Water Lever
-	81-0384	Piston, Soda, 4.5	46	05-0490	Holder
19	03-0169	Spring, Syrup, Flow Control, LEV®	47	04-0470	Screw
20	03-0171	Spring, Soda, Flow Control, LEV®	48	09-0120	Lever, Front, Soda/Water
21	05-0262	Bonnet, Flow Control	49	05-0274	Lever, Soda, 3.0
22	02-0126	O-Ring	50	54-0028	Diffuser Assy, 3.0 (Used in Valves produced through September 1998)
23	05-1919	Plug, Adjustment, Flow Control, White	-	05-1593	Diffuser Assy, 3.0 (Used in Valves produced in September 1998 and later)
-	82-0527/01	Plug, Adjustment Assy, White (Item No. 16, 21-23)			
24	03-0088	Retainer, Flow Control	51	02-0133	O-Ring
25	04-0267	Screw	52	02-0421	Seal, Nozzle, 4.5
26	82-2929	Arm, Paddle, Assy	53	54-0183	Nozzle Assy, 4.5

# LEV® with Self-Serve Lever (Model 100SSL, 3.0 oz/sec and Model 145SSL, 4.5 oz/sec)



<b><u>Item</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>	<b><u>Item</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>
1	05-0287	ID Panel	27	54-0046	Body Assy, Lower, 3.0
1a	54-0057	ID Panel (Syrup-Out)	-	54-0188	Body Assy, Lower, 4.5
2	54-0029	Cover Sub Assy	28	02-0408	O-Ring, Nozzle, Red, 3.0 (Used in Valves produced through September 1998)
-	54-0030	Cover Assy (Item No. 1-2)			
-	54-0059	Cover Assy (Item No. 1a-2)	29	05-0232	Plate, Bottom, 3.0
3	05-0266	Stem, Valve, Mounting Block	-	05-1108	Plate, Bottom, 4.5
4	05-0267	Washer	30	04-0310	Screw
5	02-0047	O-Ring	31	02-0133	O-Ring (Used in Valves produced through September 1998)
6	04-0269	Screw			
7	03-0087	Retainer, Stem, Valve, Mounting Block	32	05-0281	Plug, Bottom Plate
8	05-0265	Mounting Block	34	05-0233	Nozzle, 3.0 (Used in Valves produced through September 1998)
-	82-0274	Block Assy, Mounting (Item No. 3-8, 22)	-	05-1463	Nozzle, 3.0 (Used in Valves produced in September 1998 and later)
9	03-0233	Retainer, Valve, 1-Piece			
10	03-0143	Spring, Pin, LEV®	35	03-0081	Lever, Spring, Electric
11	04-0270	Screw	36	05-0776/02	Lever, Self-Serve
12	54-0189	Body, Upper, Assy	37	05-0238	Yoke, Electric
13	04-0302	Screw	38	52-0288	Coil Assy
14	81-0274	Sleeve, Syrup/Water, 3.0	39	03-0125	Spring, Solenoid
-	81-0382	Sleeve, Syrup/Soda, 4.5	40	10-0117 A	rmature
15	81-0273	Piston, Syrup, 3.0	41	05-0935	Plug, Retainer, Micro-Switch
-	81-0383	Piston, Syrup, 4.5	42	26-0265	Micro-Switch
16	02-0132	O-Ring	43	04-0486	Screw
17	52-0622	Wire Harness	44	09-0120	Lever, Front Soda/Water
17a	52-0902	Wire Harness (Syrup-Out)	45	04-0724	Pin, Stud
18	81-0275	Piston, Soda, 3.0	46	03-0238	Spring, Front Soda/Water Lever
-	81-0384	Piston, Soda, 4.5	47	04-0470	Screw
19	03-0169	Spring, Syrup, Flow Control, LEV®	48	05-0490	Holder
20	03-0171	Spring, Soda, Flow Control, LEV®	49	05-0274	Lever, Soda, 3.0
21	05-0262	Bonnet, Flow Control	50	54-0028	Diffuser Assy, 3.0 (Used in Valves produced through September 1998)
22	02-0126	O-Ring	-	05-1593	Diffuser Assy, 3.0 (Used in Valves produced in September 1998 and later)
23	05-1919	Plug, Adjustment, Flow Control, White			
-	82-0527/01	Plug, Adjustment Assy, White (Item No. 16, 21-23)	51	02-0133	O-Ring
24	03-0088	Retainer, Flow Control	52	05-0421	Seal, Nozzle, 4.5
25	04-0267	Screw	53	54-0183	Nozzle Assy, 4.5
26	82-2929	Arm, Paddle, Assy			

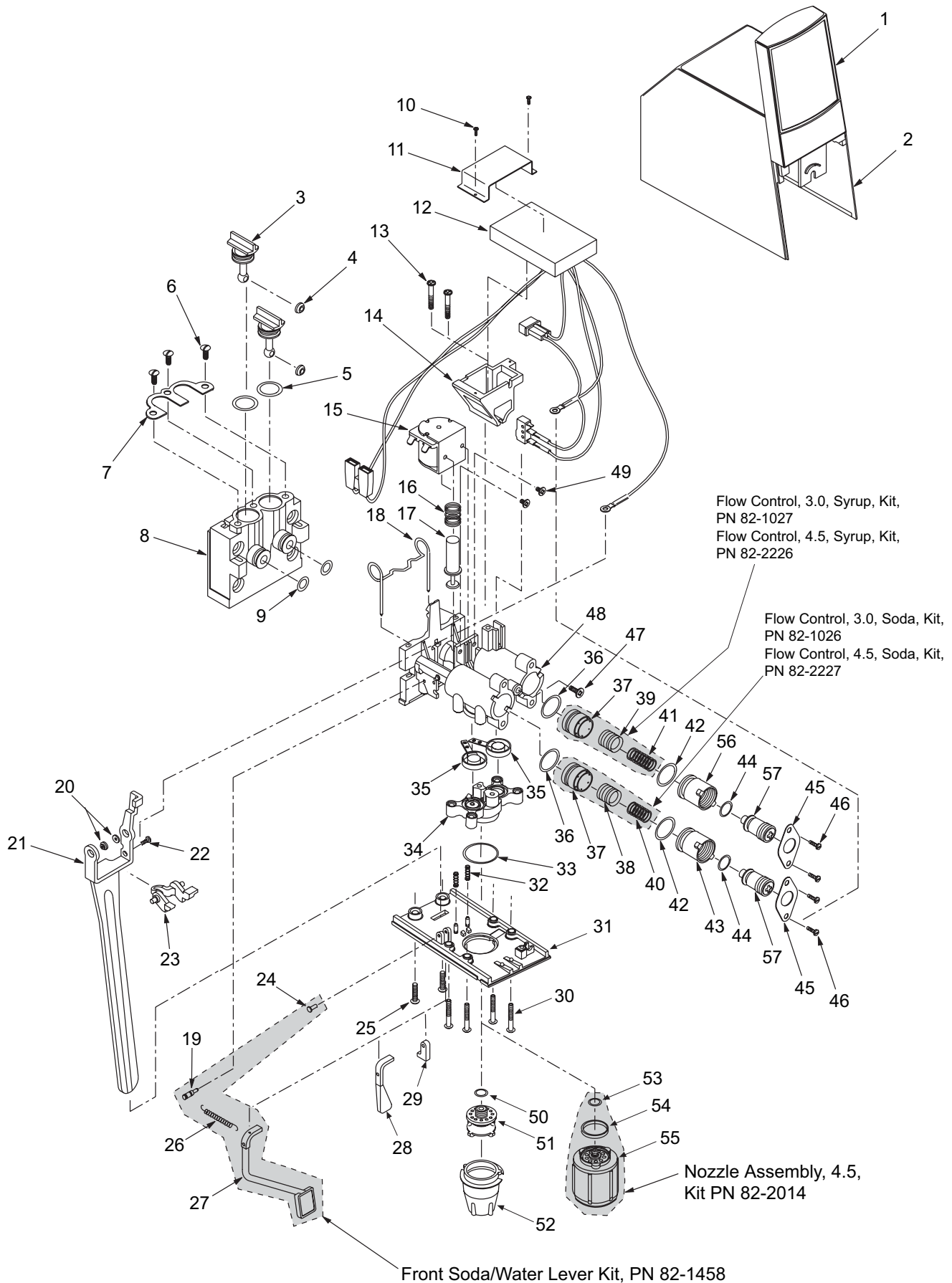
# LEV® with Pushbutton (Model 100P, 3.0 oz/sec and Model 145P, 4.5 oz/sec)



<b><u>Item</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>	<b><u>Item</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>
1	54-0140	ID Panel, Large Pushbutton	28	02-0408	O-Ring, Nozzle, Red, 3.0 (Used in Valves produced through September 1998)
2	54-0029	Cover Sub Assy			
–	54-0139	Cover Assy, Large (Pushbutton, Item No. 1-2)	29	05-0232	Plate, Bottom, 3.0
3	05-0266	Stem, Valve, Mounting Block	-	05-1108	Plate, Bottom, 4.5
4	05-0267	Washer	30	04-0310	Screw
5	02-0047	O-Ring	31	02-0133	O-Ring (Used in Valves produced through September 1998)
6	04-0269	Screw	32	05-0281	Plug, Bottom Plate
7	03-0087	Retainer, Stem, Valve, Mounting Block	33	04-0775	Pin, Lever, Soda
8	05-0265	Mounting Block	34	05-0233	Nozzle, 3.0 (Used in Valves produced through September 1998)
–	82-0274	Block Assy, Mounting (Item No. 3-8, 22)	-	05-1463	Nozzle, 3.0 (Used in Valves produced in September 1998 and later)
9	03-0233	Retainer, Valve, 1-Piece			
10	03-0143	Spring, Pin	35	05-0238	Yoke, Electric
11	04-0270	Screw	36	52-0288	Coil Assy, LEV®
12	54-0189	Body Assy, Upper	37	03-0125	Spring, Solenoid, LEV®
13	04-0302	Screw	38	10-0117	Armature, LEV®
14	81-0274	Sleeve, Syrup/Water, 3.0	39	04-0486	Screw
-	81-0382	Sleeve, Syrup/Soda, 4.5	40	52-0622	Wire Harness
15	81-0273	Piston, Syrup, 3.0	40a	52-0902	Wire Harness (Syrup-Out)
-	81-0383	Piston, Syrup, 4.5	41	04-0470	Screw
16	02-0132	O-Ring	42	05-0490	Holder
17	05-0491	Filler	43	26-0265	Micro-Switch
18	81-0275	Piston, Soda, 3.0	44	09-0120	Lever, Front Soda/Water
-	81-0384	Piston, Soda, 4.5	45	04-0724	Pin, Stud
19	03-0169	Spring, Syrup, Flow Control, LEV®	46	03-0238	Spring, Front Soda/Water Lever
20	03-0171	Spring, Soda, Flow Control, LEV®	47	05-0274	Lever, Soda
21	05-0262	Bonnet, Flow Control	48	54-0028	Diffuser Assy, 3.0 (Used in Valves produced through September 1998)
22	02-0126	O-Ring			
23	05-1919	Plug, Adjustment, Flow Control, White	-	05-1593	Diffuser Assy, 3.0 (Used in Valves produced in September 1998 and later)
–	82-0527/01	Plug, Adjustment Assy, White			
24	03-0088	Retainer, Flow Control	49	02-0133	O-Ring
25	04-0267	Screw	50	02-0421	Seal, Nozzle, 4.5
26	82-2929	Arm, Paddle, Assy	51	54-0183	Nozzle Assy, 4.5
27	54-0046	Body Assy, Lower, 3.0			
-	54-0188	Body Assy, Lower, 4.5			

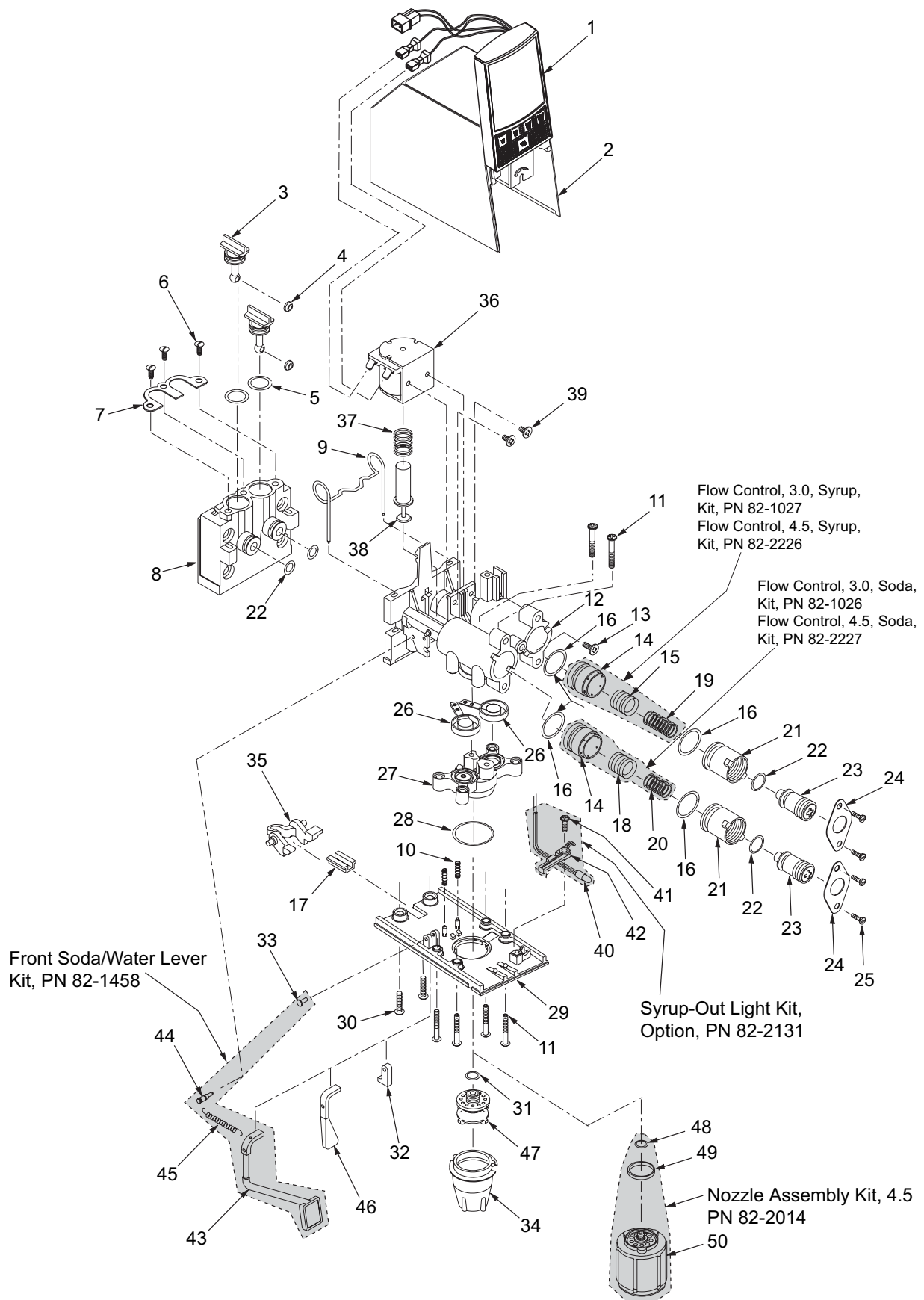


# LEV® with Surefill (Model 100SF, 3.0 oz/sec and Model 145SF, 4.5 oz/sec)



<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	05-0287	ID Panel	34	54-0046	Body Assy, Lower, 3.0
2	54-0029	Cover Sub Assy	-	54-0188	Body Assy, Lower, 4.5
-	54-0030	Cover Assy (Item No. 1-2)	35	82-2929	Arm, Paddle, Assy
3	05-0266	Stem, Valve, Mounting Block	36	02-0132	O-Ring
4	05-0267	Washer	37	81-0274	Sleeve, Syrup/Soda, 3.0
5	02-0047	O-Ring	-	81-0382	Sleeve, Syrup/Soda, 4.5
6	04-0269	Screw	38	81-0275	Piston, Soda, 3.0
7	03-0087	Retainer, Stem, Valve, Mounting Block	-	81-0384	Piston, Soda, 4.5
8	05-0265	Mounting Block	39	81-0273	Piston, Syrup, 3.0
-	82-0274	Block Assy, Mounting (Item No. 3-9)	-	81-0383	Piston, Syrup, 4.5
9	02-0126	O-Ring	40	03-0171	Spring, Soda, Flow Control, LEV®
10	04-0478	Screw	41	03-0169	Spring, Syrup, Flow Control, LEV®
11	30-7245	Strap	42	02-0132	O-Ring
12	82-1982	Module, Surefill	R 43	05-0796	Bonnet, Surefill, Black
13	04-0270	Screw	44	02-0126	O-Ring
14	05-0788	Module Bracket (Used in Valves produced through September 2000)	45	03-0088	Retainer
-	05-1928	Bracket, PCB, White (Used in Valves produced in October 2000 and later)	46	04-0267	Screw
15	52-0288	Coil Assy, LEV®	47	04-0302	Screw
16	03-0125	Spring, Solenoid, LEV®	48	54-0189	Body Assy, Upper
17	10-0117	Armature, LEV®	49	04-0486	Screw
18	03-0233	Retainer, Valve, 1-Piece	50	02-0133	O-Ring (Used in Valves produced through September 1998)
19	04-0724	Pin, Stud	51	54-0028	Diffuser Assy, 3.0 (Used in Valves produced through September 1998)
20	05-0777	Bushing, Lever	-	05-1593	Diffuser Assy, 3.0 (Used in Valves produced in September 1998 and later)
21	30-5416	Lever	52	05-0233	Nozzle, 3.0 (Used in Valves produced through September 1998)
22	04-0642	Screw, 6 - 32 x 0.250	-	05-1463	Nozzle, 3.0 (Used in Valves produced in September 1998 and later)
23	05-0238	Yoke, Electric	53	02-0133	O-Ring
24	04-0775	Pin, Lever, Soda	54	02-0421	Seal, Nozzle, 4.5
25	04-0310	Screw	55	54-0183	Nozzle Assy, 4.5
26	03-0238	Spring, Front Soda/Water Lever	R 56	05-0262	Bonnet, Flow Control, Red
27	09-0120	Lever, Front Soda/Water	57	05-1919	Plug Adjust, Flow Control, White Sub Assemblies Available
28	05-0274	Lever, Soda	R -	82-2992	Plug Adjust Assy, Soda (Items 42, 43, and 44)
29	05-0281	Plug, Bottom Plate	R -	82-0527	Plug Adjust Assy, Syrup (Items 42, 43, and 44)
30	04-0270	Screw	R in margin indicates revision or data change		
31	05-0801	Plate, Bottom, 3.0			
-	05-1544	Plate, Bottom, 4.5			
32	03-0143	Spring, Pin			
33	02-0408	O-Ring, Nozzle, Red, 3.0 (Used in Valves produced through September 1998)			

# LEV® with Portion Control (Model 100PC, 3.0 oz/sec and Model 145PC, 4.5 oz/sec)



<b><u>Item</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>	<b><u>Item</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>
1	52-1581	ID Panel (Used in Valves produced through May 2000)	26	82-2929	Arm, Paddle, Assy
-	52-2296	ID Panel, PC, Parylene (Used in Valves produced through June 2000 and later)	27	54-0046	Body Assy, Lower, 3.0
2	54-0029	Cover Sub Assy	-	54-0188	Body Assy, Lower, 4.5
-	54-0181	Cover Assy, Large (Items No. 1-2)	28	02-0408	O-Ring, Nozzle, Red, 3.0 (Used in Valves produced through September 1998)
3	05-0266	Stem, Valve, Mounting Block	29	05-0232	Plate, Bottom, 3.0
4	05-0267	Washer	-	05-1108	Plate, Bottom, 4.5
5	02-0047	O-Ring	30	04-0310	Screw
6	04-0269	Screw	31	02-0133	O-Ring (Used in Valves produced through September 1998)
7	03-0087	Retainer, Stem, Valve, Mounting Block	32	05-0281	Plug, Bottom Plate
8	05-0265	Mounting Block	33	04-0775	Pin, Lever, Soda
-	82-0274	Block Assy, Mounting (Item No. 3-8, 22)	34	05-0233	Nozzle, 3.0 (Used in Valves produced through September 1998)
9	03-0233	Retainer, Valve, 1-Piece	-	05-1463	Nozzle, 3.0 (Used in Valves produced in September 1998 and later)
10	03-0143	Spring, Pin	35	05-0238	Yoke, Electric
11	04-0270	Screw	36	52-0288	Coil Assy, LEV®
12	54-0189	Body Assy, Upper	37	03-0125	Spring, Solenoid, LEV®
13	04-0302	Screw	38	10-0117	Armature, LEV®
14	81-0274	Sleeve, Syrup/Water, 3.0	39	04-0486	Screw
-	81-0382	Sleeve, Syrup/Soda, 4.5	40	52-2069	Wire Harness (Syrup-Out)
15	81-0273	Piston, Syrup, 3.0	41	04-0470	Screw
-	81-0383	Piston, Syrup, 4.5	42	05-0490	Holder
16	02-0132	O-Ring	43	09-0120	Lever, Front Soda/Water
17	05-0491	Filler	44	04-0724	Pin, Stud
18	81-0275	Piston, Soda, 3.0	45	03-0238	Spring, Front Soda/Water Lever
-	81-0384	Piston, Soda, 4.5	46	05-0274	Lever, Soda
19	03-0169	Spring, Syrup, Flow Control, LEV®	47	54-0028	Diffuser Assy, 3.0 (Used in Valves produced through September 1998)
20	03-0171	Spring, Soda, Flow Control, LEV®	-	05-1593	Diffuser Assy, 3.0 (Used in Valves produced in September 1998 and later)
21	05-0262	Bonnet, Flow Control	48	02-0133	O-Ring
22	02-0126	O-Ring	49	02-0421	Seal, Nozzle, 4.5
23	05-1919	Plug, Adjustment, Flow Control, White	50	54-0183	Nozzle Assy, 4.5
-	82-0527/01	Plug, Adjustment Assy, White			
24	03-0088	Retainer, Flow Control			
25	04-0267	Screw			

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