

# LE-75LS

## LIQUID HANDLING ASSEMBLY

### CAUTION

When pumping solutions, make certain that all tubing is securely attached to the fittings. It is recommended that tubing or pipe lines be shielded to prevent possible injury in case of rupture or accidental damage. Always wear protective clothing when working on or near solution metering pump.

### A. INSTALLING INJECTION CHECK VALVE

1. The injection check valve should always be installed as close as possible to the point of solution injection, at the very end of the tubing run.
2. Purpose of injection check valve is to prevent backflow from treated line.
3. A 1/2" NPT female fitting with sufficient depth will accept the injection check valve.
4. To insure correct seating of the ball inside the check valve, the injection check valve must be installed vertically upwards.

### B. CONNECTING DISCHARGE TUBING

*NOTE: Cut tubing to length needed for discharge line.*

1. Route tubing from injection check valve to chemical metering pump making sure it does not touch hot surfaces, sharp surfaces, or is bent so sharply that it kinks.
2. Slide small end of coupling nut onto tubing.
3. Insert tubing into discharge valve housing so that tubing butts up against valve housing and will not go any further.
4. Slide down the coupling nut until threads are engaged. Tighten coupling nut by hand, maintaining pressure on tubing towards valve housing until tubing is held securely in place.

**Excessive force will crack or distort fittings.  
DO NOT USE PIPE WRENCH.**

5. Follow the same procedure for connecting tubing to injection valve.

### C. CONNECTING SUCTION TUBING

1. Cut suction tubing to a length such that the foot valve hangs just above the bottom of the solution container. Maximum recommended vertical suction lift is 5 ft. (1.5m).
2. Follow same procedure (see B) in connecting suction tubing to suction valve and foot valve.

### MATERIALS OF CONSTRUCTION

Fittings	Polypropylene
Seal Rings	Polyprel™
Balls	Ceramic
Head	Polypropylene
Liquifram™	Teflon Face
Suction	.5" O.D. Polyethylene
Discharge	.5" O.D. Polyethylene

### D. PRIMING

1. Connect pressure release tubing to pressure release port.
2. Route tubing to solution reservoir and anchor with plastic tie provided.
3. Set pump at 80% speed and 100% stroke. Start pump.
4. Pull on pressure release knob (red or black knob), holding knob out until solution is visible through translucent return tubing.
5. Pump is now primed.

#### NOTE:

*(a) Pump is normally self-priming if suction lift is no more than 5 ft. (1.5m), valves in the pump are wet with water (pump is shipped from factory with water in pump head) and the above steps (D1 thru D5) are followed.*

*(b) If the pump does not self-prime, remove Anti-Syphon Pressure Release Valve Assembly and discharge valve ball and pour water or chemical slowly into discharge port until head is filled. Replace valve ball and valve assembly and follow steps D1 thru D5 thereafter.*

### E. DEPRESSURIZING DISCHARGE LINE

1. It is possible to depressurize discharge line and pump head without removal of tubing or loosening of fittings.

*Be sure injection check valve is properly installed and is operating. If a gate valve or globe has been installed, downstream of injection check valve, it should be closed. Be certain relief tubing is connected and run to solution reservoir.*

2. Pull on both anti-syphon and relief knobs.
3. The discharge line is now depressurized.
4. If injection check valve is of higher elevation than pump head, disconnecting tubing at injection check valve end will allow air to enter and cause solution to drain back to tank.



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KEY NO.	PART NO.	DESCRIPTION	QTY.
2	10339*	Spring	1
3	10338*	Ball, Ceramic	4
4	29443*	Seal Ring, Teflon	4
5	10792	Valve Seat, Ivory Polypropylene	2
6	10411	Coupling Nut	4
7	10142-16	Tubing, Polyethylene, 0.5" O.D.	1
8	10793	Valve Housing, Ivory Polypropylene	1
9	10340	Screw, 10-24 x 3/4" S.S.	4
10	10305*	Liquifram™, 1.8 SI, Ivory Polypropylene	1
11	10304	Head, 1.8 SI, Ivory Polypropylene	1
12	10322	Weight, Ceramic	1
13	10978	Foot Valve Seat	1
14	10123	Strainer, Polypropylene	1
15	29523	Injection Check/Back Pressure Valve Asm.	1
17	29527	Suction Valve Assembly	1
18	29524	Foot Valve Assembly	1
19	32275	Head Assembly	1
21	25900	Anti-Syphon/Pressure Release Valve Asm.	1
22	28446	Pressure Release Cap Assembly	1
23	25838	Anti-Syphon Cap Assembly	1
24	25627	Screw, 6-32 x 1 1/4" S.S.	4
27	10394	Injector Fitting	1
35	25870	Valve Body	1
36	25628	Nut, 6-32 Hex S.S.	4
37	25631	Nut, Ferrule	1
38	25636-10	Tubing, Polyethylene, .250" O.D.	1

\*Parts included in Spare Parts Kit SP-72L

