# LE-74S LIQUID HANDLING ASSEMBLY

#### CAUTION

When pumping chemicals, 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 chemical metering pump.

#### MATERIALS OF CONSTRUCTION

Fittings PVC
Seal Rings Teflon
Balls Ceramic
Head PVC
Liquifram Teflon Face
Suction 1/4" NPT
Discharge 1/4" NPT

# A. INSTALLING INJECTION CHECK VALVE

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

## B. CONNECTING DISCHARGE PIPE

NOTE: Corrosion resistant 1/4" Schedule 80 pipe should be used. Do not use 1/8" pipe.

 Discharge valve has 1/4" NPT male outlet. A 1/4" NPT union should be connected to both discharge and suction valves so that chemical metering pump may be removed without disturbing piping.

It is recommended that Teflon tape be used on tapered pipe threads so that there is a leakproof seal without overtightening of fittings.

# C. CONNECTING SUCTION PIPE

 Using the same size and material pipe as used on discharge line, cut suction pipe to required length.

### D. PRIMING

 Connect pressure release tubing to pressure release port.

- Route tubing to solution reservoir and anchor with plastic tie provided.
- Start pump.
- Pull on Pressure Release knob (red or black knob), holding knob out until chemical 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 D4) 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 follow steps D1 thru D4 thereafter.

#### E. DEPRESSURIZING DISCHARGE LINE

1. It is possible to depressurize discharge line and pump head without 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 chemical reservoir.

- 2. Pull on both anti-syphon and relief knobs.
- 3. The discharge line is now depressurized.



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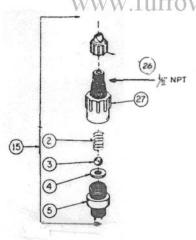
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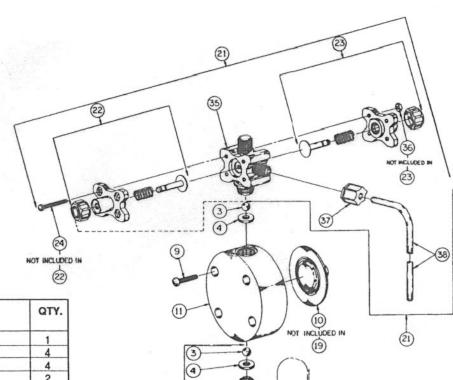
# NOTE:

Threaded connections into pump head are 3/4"-16 straight threads. Do not use Teflon tape. These joints are sealed by seal ring valve seats (item 4 on exploded view).

Maximum pump pressure rating is reduced by 25 psi (1.7 bar) with back pressure spring installed.

Do not remove back pressure spring if pressure at injection point is less than 20 psi (1.4 bar).





KEY NO.	PART NO.	DESCRIPTION	QTY.
2	10339*	Spring	1
3	10338*	Ball, Ceramic	4
4	10407*	Seal Ring, Teflon	4
5	10492-1	Valve Seat	2
8	10493-1	Valve Housing	1
9	10340	Screw	4
10	10305*	Liquifram, 1.8 SI, Teflon Face	1
11	10204	Head, gray PVC	1
13	10978	Foot Valve Seat	1
14	10123	Strainer	1
15	25029	Injection Valve Assembly	1
17	25031	Suction Valve Assembly	1
18	25032	Foot Valve Assembly	1
21	27051	Anti-Syphon/Pressure Release Valve	1
22	27044	Pressure Relief Cap Assembly	1
23	27045	Anti-Syphon Cap Assembly	1
24	25627	Screws	4
26	27352	Flapper Valve	1
27	26841	Injector Fitting	1
35	26856-1	Valve Body	1
36	25628	Nut	4
37	25631	Ferrule Nut	1
38	25636-10	Tubing, .250" O.D. Polyethylene	1
41	10156	Plastic Tie (not shown)	1

