

LE-92AS

LIQUID HANDLING ASSEMBLIES

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 and face shield when working on or near metering pump.

NOTE: See parts list for materials of construction

A. INSTALLING INJECTION CHECK VALVE

1. The purpose of the injection check valve is to prevent backflow from the treated line.
2. A 1/2" NPT female fitting with sufficient depth will accept the injection check valve.
3. To insure correct seating of the ball inside the check valve, the injection check valve should be installed upwards (vertically).

B. CONNECTING DISCHARGE TUBING

NOTE:

Cut tubing to length needed for discharge line.

1. Route tubing from the injection check valve to the metering pump, making sure it does not touch hot or sharp surfaces, or is bent so sharply that it kinks.
2. Slide small end of the coupling nut onto tubing, then slide the clamp ring onto the tubing.
3. Insert the tubing onto the discharge valve housing nozzle so that tubing butts up against the valve housing and will not go any further.
4. While pushing tubing into valve housing, slide the coupling nut down to the threads and engage. Tighten coupling nut by hand 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 so 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 in connecting suction tubing to suction valve and foot valve (B. Connecting Discharge Tubing).

D. PRIMING

1. Connect the pressure release tubing to the pressure release ports on the four function valve.
2. Route tubing to the solution reservoir. Do not submerge tubing in solution.
3. Set the pump at 80% speed and 100% stroke. Start the pump.
4. Pull on the Pressure Release knob (red or black knob), holding the knob out until the solution is visible through the 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 therefore the valves are wet), and the above steps are followed (D. Priming).

(b) If the pump does not self-prime, remove discharge valve housing and ball. Pour water or solution slowly into discharge port until it is filled. Follow steps above thereafter (D. Priming).

E. DEPRESSURIZING DISCHARGE LINE

1. It is possible to depressurize the discharge line and the pump head without removing the tubing or loosening the 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 runs to the solution reservoir.

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

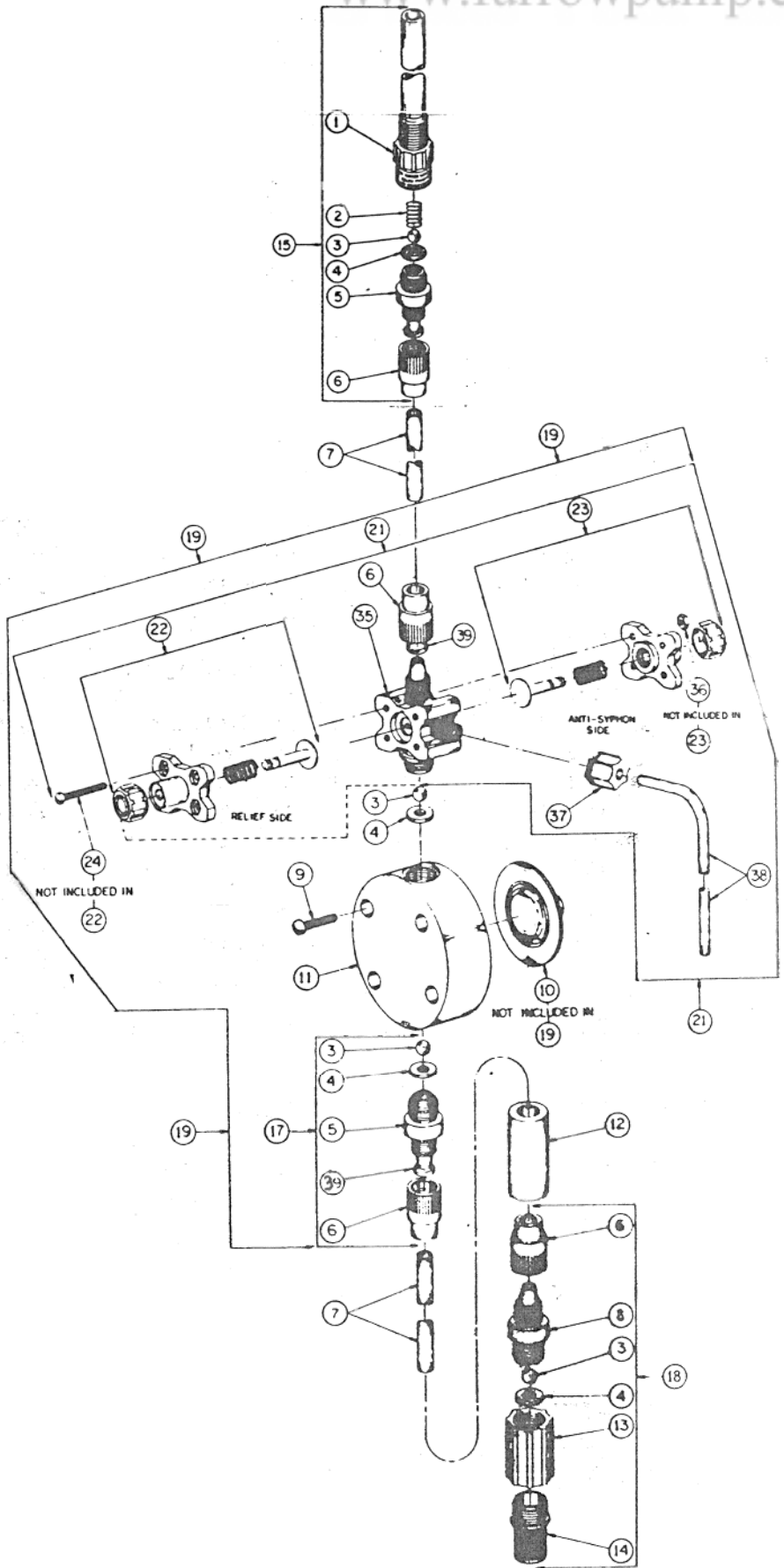


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LE-92AS

KEY NO.	PART NO.	DESCRIPTION	QUANTITY
1	10361	Nozzle Assembly	1
2	10339*	Spring, PVDF	1
3	10338*	Ball, Ceramic .375"	4
4	10407*	Seal Ring, Teflon	4
5	10292	Valve Seat, PVC	2
6	10299	Coupling Nut, PP	4
7	10342 -16	Tubing, Polyethylene, .375" OD	1
8	10293	Valve Housing, PVC	1
9	10340	Screw, 10-24 x 3/4" S.S.	4
10	30917*	Liquifram, 0.9 SI, Fluorofilm	1
11	10213	Head, PVC 0.9 SI	1
13	10978	Foot Valve Seat	1
14	10123	Strainer, Polypropylene	1
15	25670	Injection Check/Back Pressure Valve	1
17	25232	Suction Valve Assembly	1
18	25234	Foot Valve Assembly	1
19	25697	Head Assembly, LE-92S 0.9 SI	1
21	27048	Anti-Syphon Pressure Release Valve	1
22	28447	Pressure Release Cap Assembly	1
23	27045	Anti-Syphon Cap Assembly	1
24	25627	Screw, 6-32 x 1 1/4" S.S.	4
26	27352	Flapper Valve	1
35	26847	Valve Body	1
36	25628	Nut, 6-32 Hex S.S.	4
37	25631	Nut, Ferrule	1
38	25636 -10	Tubing, Polyethylene, .250" OD	1
39	26136	Clamp Ring	3
--	32293	Suction Tubing Straightener (not shown)	1



*Parts included in Spare Parts Kit No. SP-U1