

LE-198S LE-198SU 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 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 injection check valve should always be installed as close as possible to the point of solution.
2. Purpose of the 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 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 coupling nut onto tubing.
3. Push tubing over tapered nozzle of discharge valve housing so that tubing flares out and reaches the shoulder. (If tubing is stiff from cold, dip end in hot water.)
4. Slide down the coupling nut until threads are engaged. Tighten 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 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.

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 not 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 discharge valve housing and ball and pour water or solution slowly into discharge port until head is filled. Follow steps D1 thru D5 thereafter.

E. DEPRESSURIZING DISCHARGE LINE

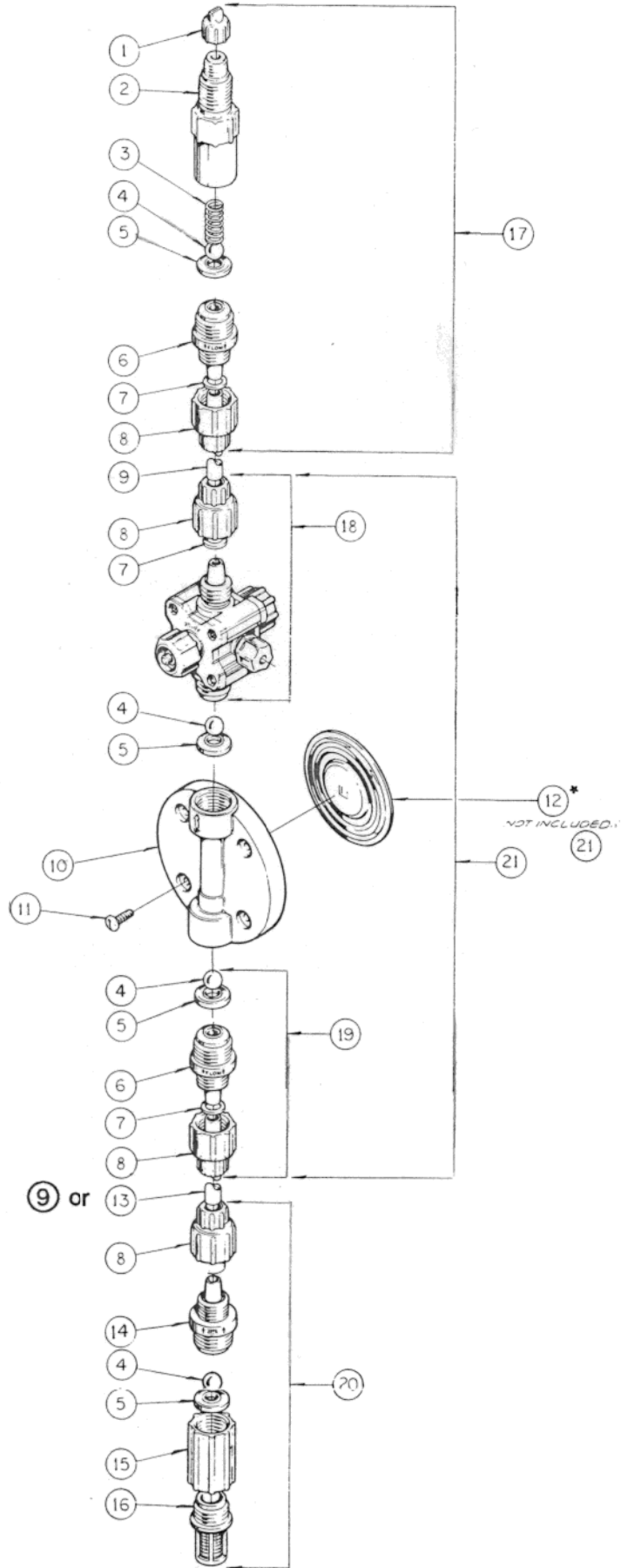
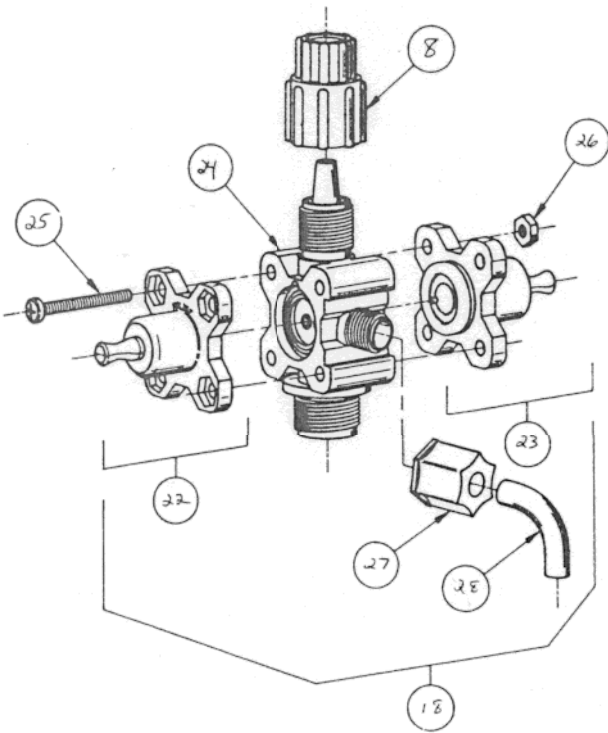
1. It is possible to depressurize discharge line and pump head without removal of tubing or loosening of fittings.

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	Quantity	
			LE-198S	LE-198SU
1	27352	Flapper Valve	1	1
2	10294	Injector Fitting, PVC	1	1
3	10339	Spring	1	1
4	10338	Ball, Ceramic .375"	4	4
5	29443	Seal Ring, Polyprel	4	4
6	10292	Valve Seat, PVC .375"	2	2
7	26136	Clamp Ring	3	3
8	10299	Coupling Nut	4	4
9	10342-16	Tubing, 3/8" O.D. PE	1	
	27342-16	Tubing, 3/8" O.D. UVPE		1
10	30913	Head, 0.9 PVC	1	1
11	10340	Screw, 10-24 x 3/4" S.S.	4	1
12	30917	Liquifram™, 0.9 SI TFE Copolymer	1	1
14	10293	Valve Housing, PVC .375"	1	1
15	10978	Foot Valve Seat	1	1
16	10123	Strainer, Polypropylene	1	1
17	32088	Injection Check/Back Pressure Valve Asm	1	1
18	25690X	Anti-syphon/Pressure Relief Valve Asm	1	
	31682	Anti-syphon/Pressure Relief Valve Asm		1
19	27602	Suction Valve Assembly	1	1
20	27603	Foot Valve Assembly	1	1
21	30945	Head Assembly, LE-198S	1	
	31680	Head Assembly, LE-198SU		1
22	28447X	Relief Cap Assembly	1	1
23	27045X	Anti-syphon Cap Assembly	1	1
24	30425	Valve Body, PVC	1	1
25	25627	Screw, 6-32 x 1 1/4" S.S.	4	4
26	25628	Nut, Hex 6-32 S.S.	4	4
27	25631	Coupling Nut	1	1
28	25636-10	Tubing, .250" O.D. PE	1	
	28636-10	Tubing, .250" O.D. UVPE		1