

LE 71LS

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.

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 injection.
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 should be installed upwards.

B. CONNECTING DISCHARGE TUBING

1. Route tubing from discharge 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 such that the foot valve hangs just above the bottom of the solution container. Maximum recommended vertical suction lift is 5 feet (1.5 m).
2. Follow same procedure (see B) for 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. (1.5 m), valves in the pump are wet with water (pump is shipped from factory with water in the pump head) and the above steps (D1 through 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 through D5 thereafter.

E. DEPRESSURIZING DISCHARGE LINE

1. It is possible to depressurize the 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 an injection check valve, it should be closed. Be certain relief tubing is connected and run to solution reservoir.

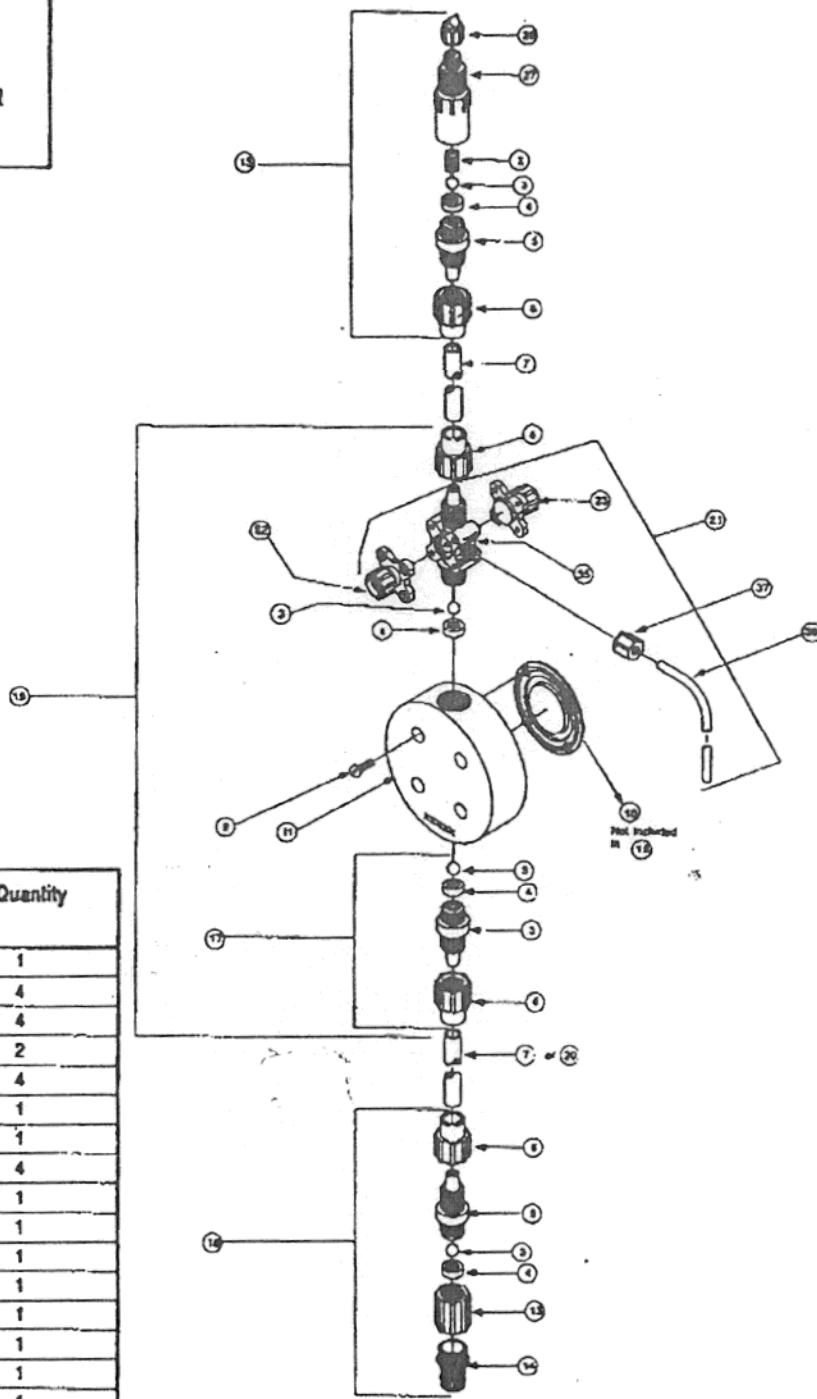
2. Pull on both the anti-syphon and relief knobs.
3. The discharge line is now depressurized.
4. If injection check valve is of higher elevation than pump head, disconnecting tubing at injection check valve end will allow air to enter and cause solution to drain back to tank.



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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).



Key No.	Part No.	Description	Quantity
2	10339	Spring	1
3	10338	Ball, Ceramic	4
4	20443	Seal Ring, Polypiral	4
5	10492	Valve Seat, PVC	2
6	10411	Coupling Nut, PVC	4
7	10142-10	Tubing, Polyethylene, 5" OD	1
8	10493	Valve Housing, gray PVC	1
9	10340	Screw, 10-24 x 3/4" S.S.	4
10	31420	Liquifram™, 1.8 SI Fluorofilm	1
11	10104	Head, 1.8 SI Acrylic	1
13	10978	Foot Valve Seal, black polypropylene	1
14	10123	Strainer, white polypropylene	1
15	27610	Injection Check/Back Pressure Valve Asm	1
17	27612	Suction Valve Assembly	1
18	27613	Foot Valve Assembly	1
19	33634	Head Assembly, LE 71-LS	1
20	10141-08	Tubing, vinyl, 5" OD	1
21	33060	4-FV Asm.	1
26	27352	Flapper valve	1
27	10284	Injector Filling, PVC	1
28	32700	Suction Tube Straightener (Not Shown)	1
38	25636-10	Tubing, .250" OD PE	1