

LE-97

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.

MATERIALS OF CONSTRUCTION

Fittings	316 S.S.
Seal Rings	Teflon
Balls	316 S.S.
Head	316 S.S.
Liquifram	Teflon
Suction	1/4" NPT F
Discharge	1/4" NPT F

A. INSTALLING INJECTION CHECK VALVE

(Optional - Not included with standard pump.)

1. The injection check valve should always be installed as close as possible to the point of solution injection, at the end of the piping run.
2. Purpose of injection/anti-syphon valve is to prevent backflow from *treated line* and to prevent syphoning or overpumping of solution.
3. A 1/2" NPT female fitting with sufficient depth will accept the injection/anti-syphon valve.

B. CONNECTING DISCHARGE PIPE

NOTE: Type 316 stainless steel or other corrosion resistant 1/4" Schedule 80 pipe should be used. DO NOT USE 1/8" PIPE.

1. Discharge valve has a 1/4" NPT female outlet. A short 1/4" pipe nipple and a 1/4" union should be connected to both discharge and suction valves so that 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

1. Using the same size and material pipe as used on discharge line, cut suction pipe to required length.
2. It is recommended that Teflon tape be used on tapered pipe threads so that there is a leakproof seal without overtightening of fittings. Suction side leaks are invisible, but if present will cause pump to suck in air during each suction stroke.
3. Maximum recommended vertical suction lift is 5 ft. (1.5m).

D. PRIMING

1. Temporarily disconnect the union on top of discharge valve.
2. Set pump at 80% speed and 100% stroke and start pump.
3. As soon as solution begins to leak at the union on top of discharge valve, stop the pump.
4. Pump is now primed.
5. Tighten union on top of discharge valve.



LMI
LIQUID METRONICS DIVISION
MILTON ROY

19 Craig Road
Acton, MA 01720 U.S.A.
TEL (508) 263-9800
FAX (508) 264-9172

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 5 on exploded view).

KEY NO.	PART NO.	DESCRIPTION	QTY.
1	10637	Head Assembly, LE-97	1
2	10635	Discharge Valve Assembly	1
3	10491	Valve Housing, 316 S.S., 1/4" NPT	1
4	10659	Ball, 316 S.S.	2(4)
5	10407	Seal Ring, Teflon	2(4)
6	10613	Head, S.S., 0.9 SI	1
7	10340	Screw, 10-24 x 3/4" PH S.S.	4
8	10302	Liquifram™ 0.9 SI, Teflon	1
9	10636	Suction Valve Assembly	1
10	10490	Valve Seat, 316 S.S., 1/4" NPT	1(2)
11	10634	Inj/Back Pressure Valve Assembly*	(1)
12	10494	Injector Fittingm 316 S.S.	(1)
13	10339	Spring, PVDF	(1)
14	25880	Valve Housing, Foot, 316 S.S.	(1)
15	25881	Valve Seat, Foot, 316 S.S.	(1)
16	26227	Foot Valve Assembly*	(1)

* Must be ordered separate as option.

() Qty. if ordered with optional Key No. 11 and 16.

SPARE PARTS KIT

For LE-97, order SP-97 which includes:

4 ea. 10659 Ball, S.S.
 4 ea. 10407 Seal Ring, Teflon
 1 ea. 10302 Liquifram™, 0.9 Teflon
 1 ea. 10973 Seal, Shaft

