

LE 014 LE 016 LE 017
LIQUID HANDLING ASSEMBLIES
For Series R

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 peristaltic pump.

MATERIALS

Fittings	PVC
Seal Rings	Polyprel
Pumping-Tubing Element	PVC

A. INSTALLING INJECTION CHECK VALVE

1. 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.
2. Purpose of the injection check valve is to prevent backflow from the 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. The discharge tubing is relatively stiff, black polyethylene tubing.
2. Route tubing from injection valve to peristaltic pump making sure it does not touch hot surfaces, sharp surfaces, or is bent so sharply that it kinks.
3. Slide small end of coupling nut onto tubing.
4. Slide clamp ring approximately 1/2" onto tubing.
5. Push tubing over tapered nozzle of discharge valve housing so that tubing flares out and reaches the shoulder. (If tubing is stiff from the cold, dip end in hot water.)
6. Slide the coupling nut down 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.

7. Follow same procedure for connecting tubing to injection valve.

C. CONNECTING SUCTION TUBING

1. Suction tubing is also stiff, black polyethylene tubing.
2. Cut suction tubing to a length such that the foot valve hangs just above the bottom of the chemical container. Maximum recommended vertical suction lift is 5 feet (1.5m).
3. Follow procedure B for connecting suction tubing to suction valve and foot valve.
4. If suction tube straightener is desired, one may be fabricated from a 3 ft. piece of 3/4" Schedule 80 PVC pipe.

D. PRIMING

1. Temporarily remove tubing from injection check valve and hold the end of the tubing so it is above pump level.
2. Set pump at 100% speed and start pump.
3. As soon as chemical is visible in pumping tubing element through clear pump cover, stop the pump.
4. Pump is now primed.
5. Reconnect tubing to injection check valve.
6. Insert drain tubing into pump cover and route drain tubing to chemical solution container.

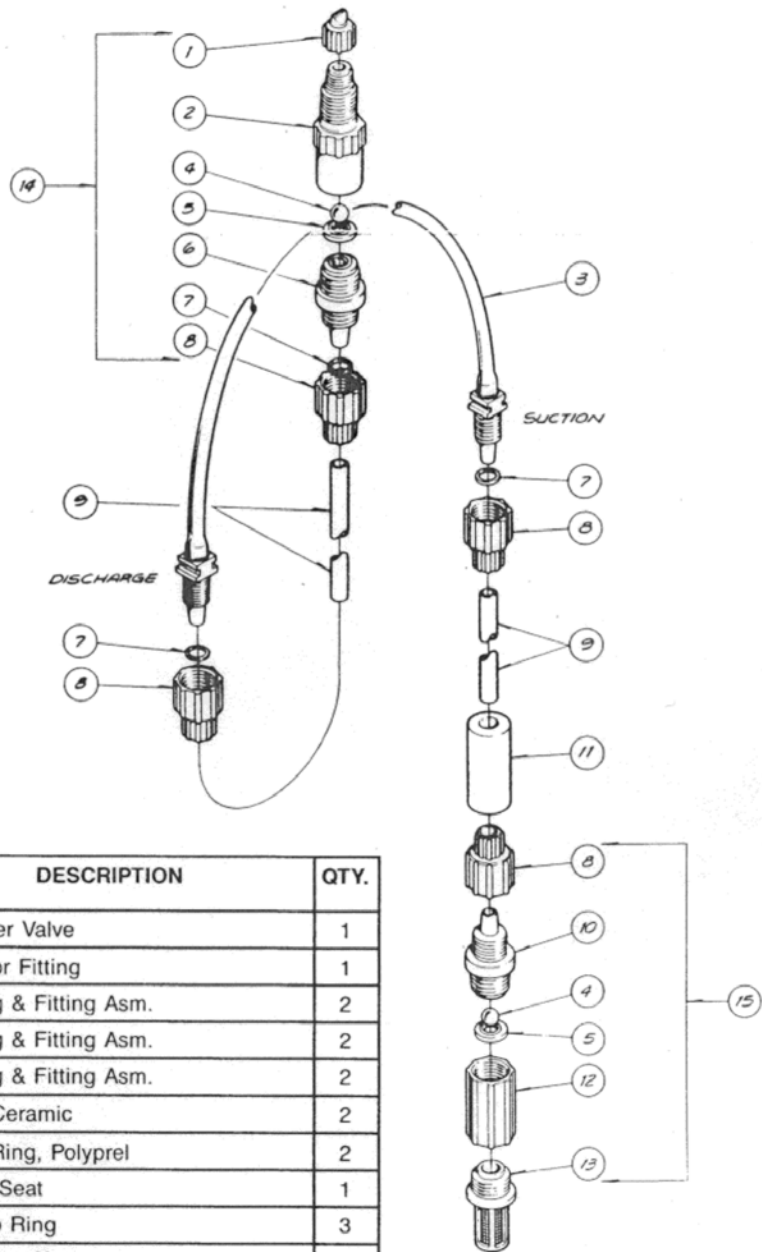
NOTE:

- A. Pump is normally self-priming when suction lift is no more than 5 feet (pump is shipped from factory with water in the pumping-tubing element) and the above steps are followed.
- B. If pump does not prime, remove tubing from injection check valve and follow steps D2 thru D5. If unit does not prime, stop pump and check all connections and foot valve.

LIQUID METRONICS INCORPORATED

19 CRAIG ROAD • ACTON, MA 01720-5495, U.S.A. • 617-263-9800 • TELEX 95-1781 • FAX: 617-264-9172

LIQUID ENDS 014, 016, 017 PARTS LIST



KEY NO.	PART NO.	FOR LE NO.	DESCRIPTION	QTY.
1	27352	014, 016, 017	Flapper Valve	1
2	29961	014, 016, 017	Injector Fitting	1
3*	28436	014	Tubing & Fitting Asm.	2
3*	28437	016	Tubing & Fitting Asm.	2
3*	28438	017	Tubing & Fitting Asm.	2
4	10338	014, 016, 017	Ball, Ceramic	2
5	29443	014, 016, 017	Seal Ring, Polyprel	2
6	10392	014, 016, 017	Valve Seat	1
7	26136	014, 016, 017	Clamp Ring	3
8	10299	014, 016, 017	Coupling Nut	4
9	27342-16	014, 016, 017	Tubing, .375" OD Black Poly	1
10	10393	014, 016, 017	Valve Housing	1
11	10322	014, 016, 017	Weight	1
12	10978	014, 016, 017	Foot Valve Seat	1
13	10123	014, 016, 017	Strainer	1
14	28730	014, 016, 017	Injection Valve Asm.	1
15	28014	014, 016, 017	Foot Valve Asm.	1
-	10469-06	014, 016, 017	Drain Tubing (not shown)	1

* Each pump is supplied with a spare tubing & fitting assembly

LIQUID METRONICS INCORPORATED

19 CRAIG ROAD • ACTON, MA 01720-5495, U.S.A. • 617-263-9800 • TELEX 95-1781 • FAX: 617-264-9172