

## LE 34 LIQUID HANDLING ASSEMBLY For Series D With 6.0 Liquifram

### 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.

### MATERIALS

|            |             |
|------------|-------------|
| Fittings   | PVC         |
| Seal Rings | Teflon      |
| Balls      | Ceramic     |
| Head       | PVC         |
| Liquifram  | Teflon Face |
| Suction    | ½" NPT Male |
| Discharge  | ½" NPT Male |

#### 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 piping run.
2. Purpose of injection check valve is to prevent backflow from *treated line* and to prevent syphoning or overpumping of chemical.
3. A ½" NPT female fitting with sufficient depth will accept the injection check valve.

#### B. CONNECTING DISCHARGE PIPE

Note: Corrosion resistant ½" Schedule 80 or Schedule 120 should be used. Do not use ¼" pipe.

1. Discharge valve has ½" NPT male outlet. A ½" NPT union should be connected to both discharge and suction valves so that chemical 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. Use of Teflon tape on tapered pipe threads is again highly recommended, to be sure connections are leakproof. Suction side leaks are invisible but if a leak is present pump will suck in air during each suction stroke.
3. Maximum recommended vertical suction lift is 5 ft. (1.5m).

#### D. PRIMING

1. Temporarily loosen the union on top of discharge valve.
2. Start pump and set pump at near maximum (80%) speed and 100% stroke.

*"D" series stroke cannot be adjusted until pump is operating electrically. Turn lower knob while unit is stroking.*

3. As soon as chemical 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.



# LIQUID METRONICS INCORPORATED

19 CRAIG ROAD • ACTON, MA. 01720, U.S.A. • 617-263-9800 • TELEX 95-1781

1. Maximum pump pressure rating is reduced by 10 psi (0.7 bar) with anti-syphon spring installed.
2. Do not remove anti-syphon spring if pressure at injection point is less than 5 psi (.35 bar).

**NOTE:**  
Threaded connections into pump head are 1"-12 straight threads. **Do not use Teflon tape.** These joints are sealed by seal ring valve seats (Item 6 on exploded view).

### LE 34

| Ref. No. | Part No. | Description                      | Quantity |
|----------|----------|----------------------------------|----------|
| 1        | 26716    | Injection/Anti-syphon Valve Asm. | 1        |
| 2        | 10208    | Injector Fitting, gray PVC       | 1        |
| 3        | 10339*   | Spring                           | 1        |
| 4        | 10138*   | Ball, Ceramic                    | 4        |
| 6        | 25128*   | Seal Ring, Teflon                | 4        |
| 7        | 26001    | Valve Seat, gray PVC             | 2        |
| 10       | 26018    | Head Assembly, LE34              | 1        |
| 11       | 26019    | Discharge Valve Assembly         | 1        |
| 12       | 26024    | Valve Housing, gray PVC          | 2        |
| 13       | 26020    | Suction Valve Assembly           | 1        |
| 14       | 10340    | Screw, 10 - 24 x 3/4" S.S.       | 6        |
| 15       | 25905    | Head, 6.0 SI, PVC                | 1        |
| 16       | 25719*   | Liquifram, 6.0 SI, Teflon Face   | 1        |
| 18       | 26021    | Foot Valve Assembly              | 1        |
| 20       | 25600    | Foot Valve Seat, Polypropylene   | 1        |
| 21       | 10123    | Strainer                         | 1        |

\*Parts included in Spare Parts Kit No. SP-U6.

