Liquid End Sheet

When purping 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 your metering purp.

Note: See parts list for materials of construction

A. INSTALLING INJECTION CHECK VALVE

- 1 The purpose of the injection check value is to prevent backflow from the treated line.
- 2. A 1/2" NPT female fitting with sufficient depth will accept the injection check valve.
- 3. To insure connect seating of the ball inside the injection check valve, the injection check valve should be installed upwards (vertically) into bottom of the pipe.

B. CONNECTING DISCHARGE TUBING

NOTE :

Aut tubing to length needed for discharge line.

- 1 Route tubing from the injection check value to the metering pump, making sure it does not touch hot or sharp surfaces, or is bent so sharply that it kinks.
- 2 Slide the small end of the coupling nut onto tubing.
- 3 Slide the long, straight end of the femule onto tubing such that tubing exits at the cone shaped end of the femule.
- 4 Insert tubing into the valve housing so that tubing butts up against valve housing and will not go any further.
- 5 Slide femule down so that the cone shaped end fits snugly into valve housing.
- 6 Slide the coupling nut to the threads and engage. While pushing the tubing into valve housing, tighten the coupling nut by hand until tubing is held securely in place.

EXCESSIVE FORCE WILL CRACK OR DISTORT FITTINGS. DO NOT USE PIPE WRENCH.

C. CONNECTING SUCTION TUBING

- 1 Out suction tubing to a length so that the foot value hangs just above the bottom of the solution container. Maximum recommended vertical suction lift is 5 ft (1.5 m).
- 2 Follow same procedure in connecting suction tubing to suction value and foot value (see **B. Connecting Discharge Tubing**)



D. PRIMING

- 1. Connect pressure relief tubing to pressure relief port on the four function valve.
- 2 Route tubing to solution reservoir and anchor with a plastic tie. Do not submerge tubing in solution.
- 3 Start pump. Set at 80% speed and 100% stroke.
- 4 Pull on Pressure Relief knob (red or black knob), holding knob out until solution is visible through translucent return tubing.
- 5 The pump is now primed.

NOTE:

(a) Rup is normally self-priming if section lift is not nore than 5 ft (1.5 m), values in the pump are wet with water (pump is shipped from factory with water in pump head) and the above steps (**D. Priming**) are followed.
(b) If the pump does not self prime, remove discharge value housing and ball and pour water or solution slowly into discharge port until head is filled. Follow step **D. Priming** 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 value is properly installed and is operating. If a gate value or globe value has been installed downstrean of injection check value, it should be closed. Be certain relief tubing from the four function value is connected and run to solution reservoir.

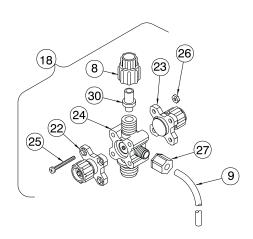
- 2 Pull on both anti-syphon and relief knobs.
- 3 The discharge line is now depressurized.
- 4 If injection check value is of higher elevation than pump head, disconnecting tubing at injection check value end will allow air to enter and cause solution to drain back to tark.

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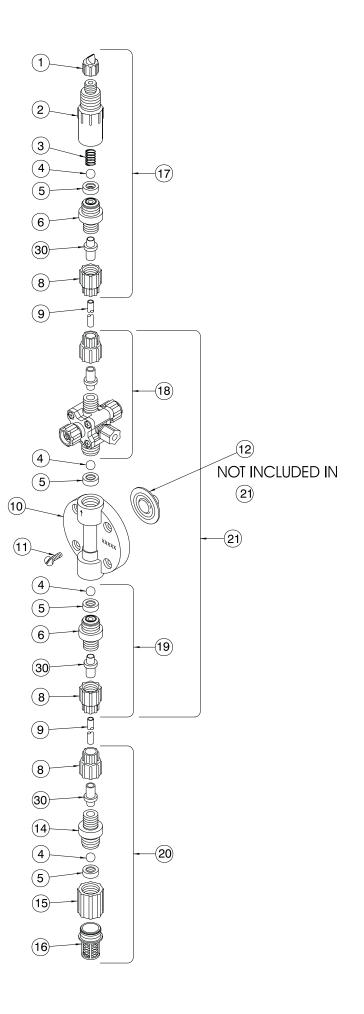
Replaces same of G 12/94 1396.H 2/97

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5 29443 6 28664 28883 10299 8 10299 9 25636 28637 28636 28636 28636 10 29603 11 10340 12 30916 14 28665 28033 28033 15 10976 16 10122 17 28003 2884 31692 28040 31692 28040 31692 28041 31692 28042 28042 20 28033 21 28077 31688 28077 31688 28077 31687 27044 23 25838 27044 28073 31687 27044 23 25834 24 28703	10338*	Ball, Ceramic .375	4	4	4	4
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14 2866! 2888: 2888: 15 10978 16 1012: 17 2800: 2803: 2803: 18 2801: 3169: 2804: 3169: 2804: 20 2803: 21 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2704: 23 2583: 2704: 2870:	30916*	Liquifram, 0.5 Fluorofilm	1	1	1	1
15 10978 16 10123 17 28003 28033 28034 31693 28044 28044 31694 19 28044 20 28033 21 28077 31684 28077 31685 28077 316863 28077 31687 22 223 25837 27044 23 24 28707	28665	Valve Housing, Polypropylene .250	1	1		
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16 1012: 17 2800: 2803: 2803: 18 28010 3169: 28040 3169: 28040 2804 3169: 2804 3169: 2804 28040 2804 28040 20 28033 21 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 3168: 2807: 21 2583: 22 2583: 23 2583: 2704: 2870: 24 2870:	10978	Foot Valve Seat	1	1	1	1
2803 18 28010 3169 28040 3169 28040 3169 28040 19 28000 20 28030 280 28030 21 2807 31688 2807 21 2583 22 2583 23 25833 24 28701	10123	Strainer, Polypropylene	1	1	1	1
2803 18 28010 3169 28040 3169 28040 19 28000 200 28030 21 2807 3168 2807 3168 2807 3168 2807 3168 2807 21 2583 22 2583 27044 23 24 28701	28001	Inj. Check/Back Pressure Valve Asm	1	1		
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28044 31694 28004 28044 28044 2807 28033 28077 31687 28077 28077 28077 28077 28077 28077 28077 28077 28077 28077 28077 28077 28077 28077 27044 28077 27044 28077 27044 28077 27044 28077 27044 28077 27044 28077 27044 28077 27044 28077 27044 28077 27044 28077 27044 28077 27044 28077 27044 28077 27044 20077 2	28010	Anti-Syphon/Pressure Relief Valve Asm	1			
31694 19 28004 2804 28044 20 28033 21 2807 31684 2807 31685 2807 31686 2807 31687 2807 31686 2807 22 25837 23 25838 27044 28704 24 28705	31693	Anti-Syphon/Pressure Relief Valve Asm		1		
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28038 21 2807 31688 2807 3168 2807 3168 2704 2583 2704 23 25838 2704 23 25838 2704	28040	Suction Valve Asm			1	1
21 2807: 3168: 2807 3168: 22 2583 2704 23 2583 2704 23 2583 2704 24 2870	28002	Foot Valve Asm	1	1		
31688 28077 31687 22 25837 27044 23 25836 27044 23 27045 24	28038	Foot Valve Asm			1	1
2807 3168 22 2583 27044 23 2583 27045 24 2870	28071	Head Asm, LE-151S	1			
3168 22 2583 27044 23 25836 27045 24 28703	31688	Head Asm, LE-151SU		1		
22 2583* 27044 23 25838 27045 24 28705	28077	Head Asm, LE-152S			1	
27044 23 25838 27045 24 28703	31687	Head Asm, LE-152SU				1
23 25838 27049 24 28703	25837	Relief Cap Assembly	1	1		
27045 24 28703	27044	Relief Cap Assembly			1	1
24 28703	25838	Anti-Syphon Cap Assembly	1	1		
	27045	Anti-Syphon Cap Assembly			1	1
28704	28703	Valve Body, Polypropylene .250	1	1		
2070	28704	Valve Body, PVDF .250			1	1
25 2562	25627	Screw, 6-32 x 1 1/4" SS	4	4	4	4
26 25628	25628	Nut, Hex 6-32 SS	4	4	4	4
	25631	Coupling Nut	1	1	1	1
	28663	Ferrule	4	4	4	4
	32293	Tubing Straightner Asm.	1	1	1	1



Note:

Threaded connectins into pump head ar 3/4" - 16 straight threads. Do not use Teflon tape. These joints are sealed by seal ring valve seats (Item 5 on exploded view)





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