Liquid End Sheet

LE-9X7NX

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 your metering pump.

Note: See parts list for materials of construction

A. INSTALLING INJECTION CHECK VALVE (FIGURE 1)

1. The Injection Check Valve prevents backflow from a treated line. Install the injection check valve at the location where chemical is being injected into the system.
2. A ¼" NPT female fitting with sufficient depth will accept the injection check valve.
3. PTFE tape must be used on tapered pipe threads so that there is a leak-proof seal.
4. To insure correct seating of the ball inside the injection check valve, the injection check valve should be positioned so that the valve enters the bottom of your pipe in a vertical position. Variations 40° left and right are acceptable.

B. CONNECTING DISCHARGE TUBING (FIGURE 2)

Note: Corrosion resistant ¼" Schedule 80 or Schedule 120 pipe should be used.

DO NOT USE SMALLER PIPE SIZES.

1. The discharge valve has a 1/4" NPT male outlet. A short 1/4" NPT union should be connected to both discharge and suction valves so that the metering pump may be removed without disturbing the piping.
2. PTFE tape must be used on tapered peipe threads so that there is a leak-proof seal.
3. Do not use PTFE tape on the straight thread which connects the discharge fitting with the pump head.

Note: Excessive force will crack or distort fittings. DO NOT OVERTIGHTEN.

C. CONNECTING SUCTION PIPE

1. Using the same size and material pipe as used on the discharge line, cut the suction pipe to length so that the foot valve is positioned just above the bottom of the solution container. Maximum recommended vertical suction lift is 5 ft (1.5 m).
2. PTFE tape must be used on tapered pipe threads so that there is a leak-proof seal. Suction side leaks are invisible, but if present will cause pump to suck in air during each pump stroke.

D. PRIMING

When all precautionary steps have been taken, the pump is mounted, and the tubing is securely attached, you may now start priming the pump.

1. Plug in or switch the pump on.
2. While the pump is running, set at 100% speed and 100% stroke length.
3. Turn the bleeder plug 1 to 2 turns counter-clockwise.
4. A small amount of solution will begin to discharge through the bleeder plug. Once this happens, turn the knob clockwise and snug tighten with a wrench. Shut the pump off.
5. The pump is now primed.

NOTE: Excessive force will crack or distort the bleeder plug. DO NOT OVERTIGHTEN.

NOTE: The pumps are normally self priming if suction lift is less than 5 feet (1.5 meters), check valves are wet (there is usually water in the pump head when shipped from the factory), and the steps above are followed. If the pump does not self prime, you can choose one of 2 ways to help prime:

1. Remove the discharge valve and slowly pour water or solution into the pump head until it is filled. Replace discharge valve and repeat steps above.
2. Temporarily improve suction conditions by pumping from a container closer to or above pump.

LE-9X7NX Series (FastPrime™)

Key Number	Description	Part Number	QUANTITY				
			907NP	917NP	927NP	937NP	947NP
1*	Injection Check Valve Asm.	32514	(1)	(1)	(1)	(1)	(1)
2*	Foot Valve Asm.	32515	(1)	(1)	(1)	(1)	(1)
10	Pump Head	48471	1	1			
		48472			1		
		48473				1	
		48474					1
90	O-Ring	48966	1	1	1	1	1
100	O-Ring	48760	1	1	1	1	1
120	Bleeder Plug	BV202139	1	1	1	1	1
190	Liquifram™	55322	1				
		48186		1			
		48187			1		
		48188				1	
		48189					1
606	Liquid End Hardware	48703	1	1	1	1	1
618	Check Valve Asm, Discharge	48767	1	1	1	1	1
619	Check Valve Asm, Suction	48768	1	1	1	1	1

*** Quantities shown in ( ) indicate optional valve assemblies not included with standard Liquid Handling Assemblies**