

Instruction Sheet

Liquifram™ Removal and Installation



WARNING

ALWAYS wear protective clothing, face shield, safety glasses and gloves when working near or performing any maintenance or replacement on your pump. See MSDS Sheet from solution supplier for additional precautions.



LMI metering pumps are designed for trouble-free operation, yet routine maintenance of elastomeric parts is essential for optimum performance. This involves replacing the Liquifram™ seal rings, valve balls, and the Injection Check Valve spring. LMI recommends replacing these parts at least once a year, however, frequency will depend on your particular application.

When replacing the Liquifram™, the valve balls, seal rings and the injection check valve spring should also be replaced. A Spare Parts Kit (SP-#) containing these parts may be obtained from your local distributor. (See the Liquid Handling Assembly Sheet for Spare Parts Kit Part Number.)

INSTALLATION

1. Carefully depressurize, drain, and disconnect the discharge line (see pump Instruction Manual). Place the Foot Valve into a container of water or other neutralizing solution. Turn the pump on to flush the head assembly. Once the pump head has been flushed, lift the Foot Valve out of the solution and continue to pump air into the pump head until the pump head is purged of water or neutralizing solution. Turn the pump off. Remove the four screws to the head and immerse the head in water or other neutralizing solution.

NOTE:

If the liquid cannot be pumped due to Liquifram™ rupture, using protective gloves, carefully disconnect the suction and discharge tubing. Remove the four screws to the head and immerse the head in water or other neutralizing solution.

2. Start the pump. While running, set the stroke knob to zero and turn the pump off.
3. With the unit off, unscrew the Liquifram™ by carefully grasping the outer edge of the Liquifram™ and turning it counter clockwise. Discard old Liquifram™. Remove the Liquifram™ disk if so equipped (located behind the Liquifram™) and check that the size code matches the size code on the replacement Liquifram™ (see Figure A).

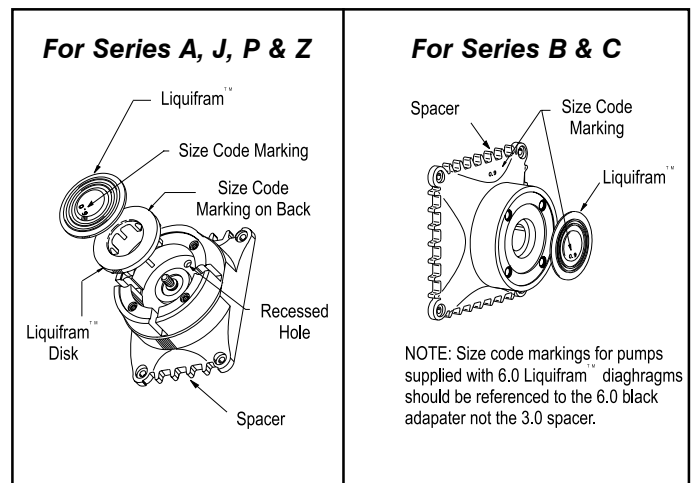


Figure A

4. Reinstall the disk so the alignment pin on the disk (if present) seats in the recessed hole in the EPU.

WARNING: Take care not to scratch the Teflon® face of the new Liquifram™.

5. Start the pump and turn the stroke knob to the setting indicated on Stroke Setting Chart (Figure B) which matches the pump model number located on the pump data plate. With the pump stroking (running), screw on the new Liquifram™ clockwise until the center begins to buckle inward. Stop the pump.



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Liquifram™ Stroke Setting Chart	
Pump	Stroke Knob Setting
All A, B, J, P, Z Series C10, C11, C12, C70, C71, C72 E70, E71, E72	90%
All L Series	85%
C78	50%
C13, C14, C73, C74, C77 E73, E74	70%
All U and M Series	100%. But Liquifram™ must be bottomed completely. (Turned all the way) Do Not Use Straight Edge.

Figure B

- Grasp the outer edge of the Liquifram™ and adjust by screwing it in or out so that the center of the Liquifram™ is flush with the outside of the spacer edge (see Figure C).
- Once the Liquifram™ is properly positioned, remount the pump head to the spacer using the four screws. Tighten in a crisscross pattern. After one week of operation, recheck the screws and tighten if necessary.

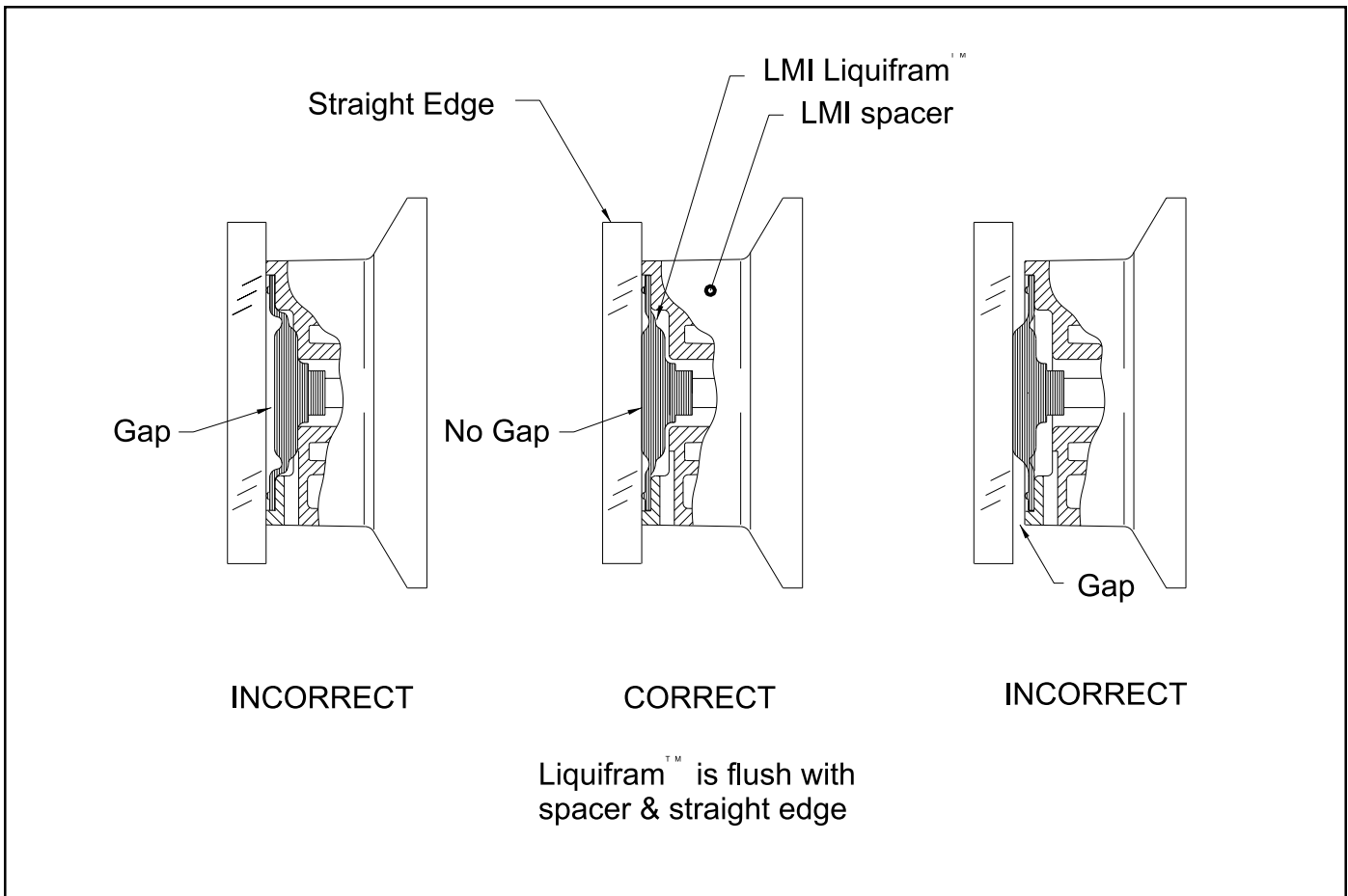


Figure C