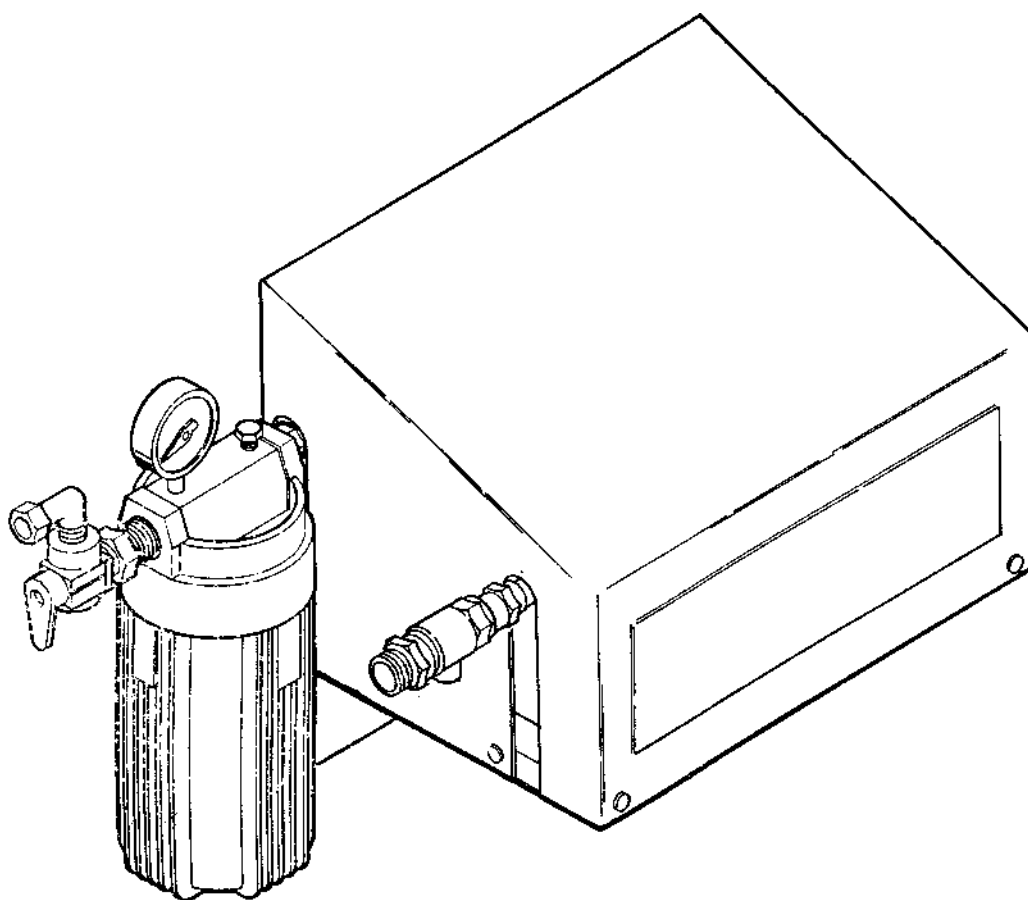


LUBRI-KLENZ 260

INSTALLATION AND OPERATION MANUAL



KLENZADE®
Division of Ecolab Inc.

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I. PREFACE

This manual has been written to represent the basic installation and operational characteristics of the Lubri-Klenz 260 dispenser.

Guidelines will be suggested as to the preferred method of installation, however varying types of conditions and surrounding physical environments will dictate the actual installation of the Lubri-Klenz Model 260.

The Lubri-Klenz Model 260 dispenser is a water driven proportioning lube dispensing system which offers easy installation and accurate concentration control. The piston pump injects product from the shipping container into a mixing chamber connected inline with the nozzles.

WARNING - THESE INSTALLATION AND SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED PERSONNEL. THE INSTALLATION MUST BE IN ACCORDANCE WITH LOCAL PLUMBING CODES.

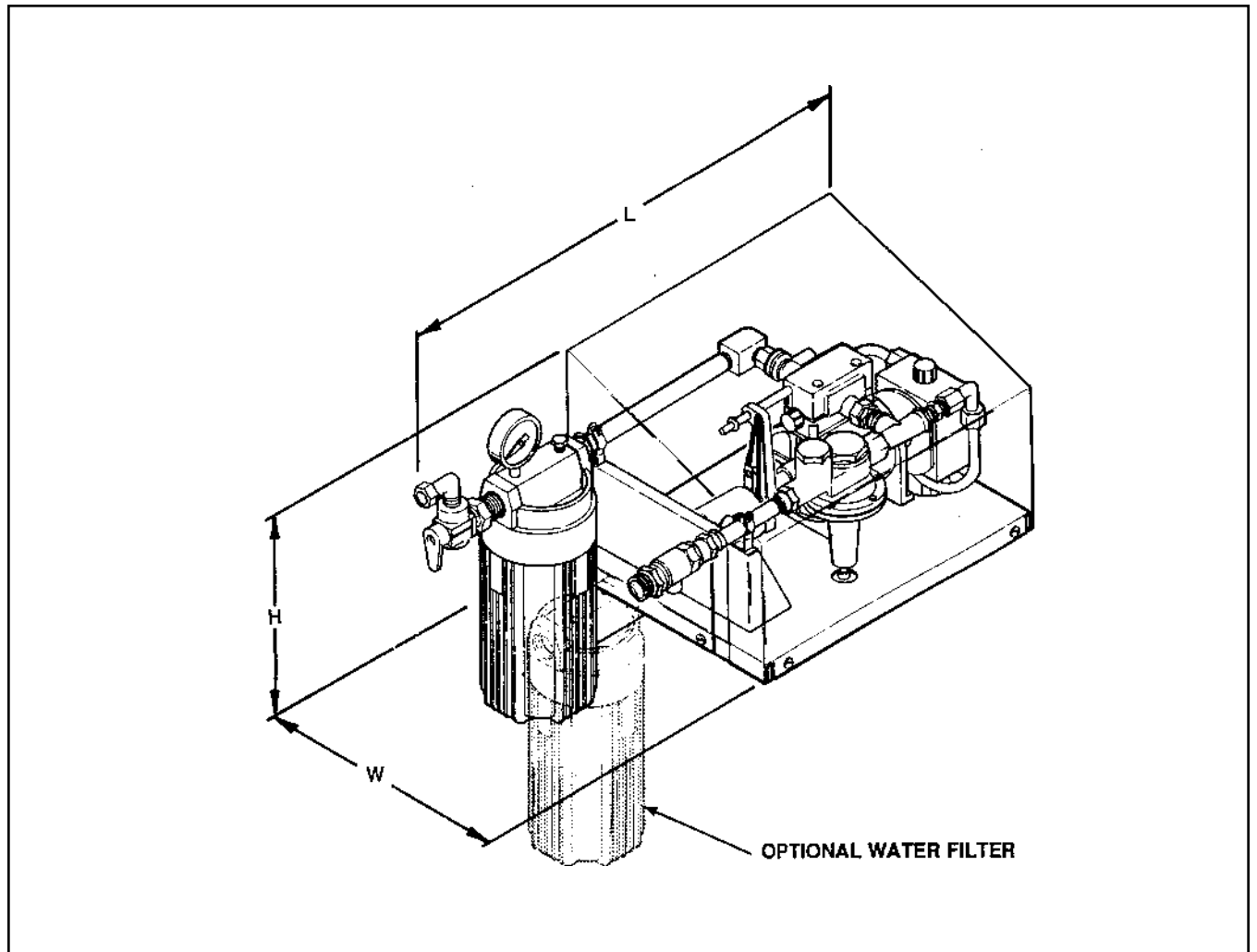
II. INTRODUCTION

The Lubri-Klenz Model 260 dispenser is a water driven proportioning lube dispensing system. The piston pump injects products from the shipping container into a mixing chamber connected inline with the nozzles. The dispenser is designed to handle from 15 to 300 one gallon per hour nozzles. A water filter is internally modified to be used as a mixing chamber. This mixing chamber does not contain a filter cartridge.

- A 25 micron water filter is available as an option. This filter could be located on the water inlet supply.
- The Lubri-Klenz Model 260 dispenser has an internal pressure regulator for regulating system pressure.
- The Lubri-Klenz Model 260 dispenser can be operated in conjunction with a Klenz-Ject Timer.

Water passing through the pump supplies the necessary energy to operate the piston pump. As the pump is operating, the lube is drawn from the shipping container and injected at a predetermined rate into the input of the pumps. The product mixes with the water and passes through the pump motor. The diluted solution is then distributed to the nozzles.

III. SPECIFICATIONS



DIMENSIONS

Height: 18-1/2"

Length: 22"

Width: 14-1/2"

SERVICES REQUIRED

Water supply - minimum 10 psi, maximum 125 psi

Water volume - minimum .25 gpm, maximum 5 gpm

Water temperature - minimum 40 degrees F, maximum 180 degrees F.

EQUIPMENT SUPPLIED

The Lubri-Klenz Model 260 dispenser is supplied with a back flow preventer. This back flow preventer is located at the inlet to the system. The mixing chamber is a water filter that is internally modified to allow maximum mixing of the water and the chemical before going to the distribution system.

EQUIPMENT NOT SUPPLIED

Inlet and outlet shut off valves are not supplied with the installation kit. A water filter housing without cartridge, mounting bracket and a stainless steel water filter cartridge are available if needed (See optional installation items under Lube systems in the *Repair Parts Manual*). This filter should be connected into the input water supply line.

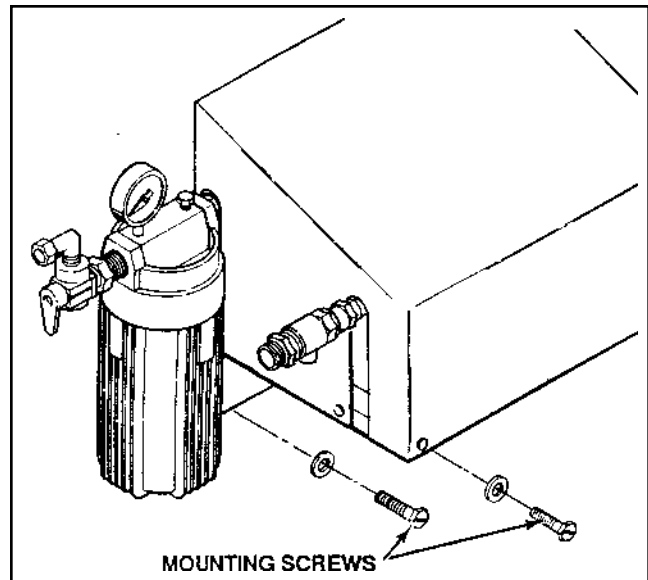
IV. INSTALLATION PROCEDURES

WARNING - THESE INSTALLATION AND SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED PERSONNEL ONLY. INSTALLATION MUST BE IN ACCORDANCE WITH THE LOCAL PLUMBING CODES.

1. Remove the system from the shipping container. The system may be installed either adjacent to the application points or in a remote location.

The system should be mounted approximately 5 feet above floor level for ease of installation and service. This will also provide for easy removal of the pick-up probe from the drum.

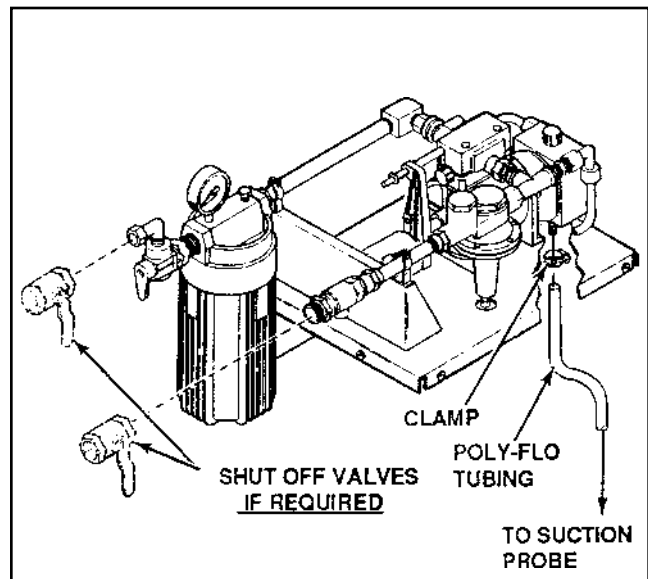
Mount the system on the wall using the screws and wall anchors provided.



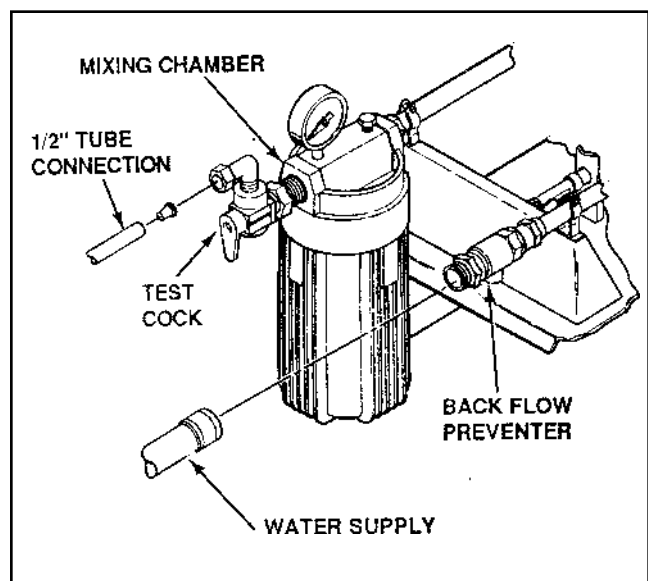
2. If required, install shut off valves up stream (inlet) and down stream (outlet) of the Lubri-Klenz 260.
3. Connect the suction probe keeping in mind that the suction line should not be longer than 10 feet. Using 3/8" tubing, insert a 3/8" tube into the poly-flo suction probe. Connect the other end of the 3/8" tubing to the chemical pumps lower port (through bottom of unit) and fasten, using the stainless steel clamp provided.

WARNING - USE OF THE CLAMP AT THE INJECTION PORT OF THE CHEMICAL PUMP IS IMPORTANT AS THE LUBRICITY OF THE PRODUCT COULD CAUSE THE TUBE TO SLIP OFF IF THE CLAMP IS NOT USED.

Insert the drum probe in the chemical barrel.

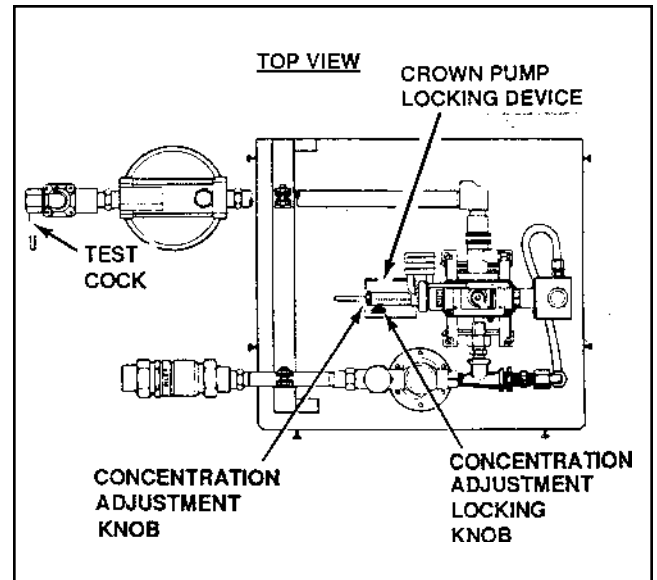


4. Connect the nozzle plumbing to the outlet valve (if valve is used) or to the 1/2" tube connection just past the test cock. The mixing chamber is labeled "mixing chamber." (The mixing chamber has no filter cartridge).
5. Connect the water supply to the inlet valve (if used) or to the back flow preventer on the Lubri-Klenz 260.

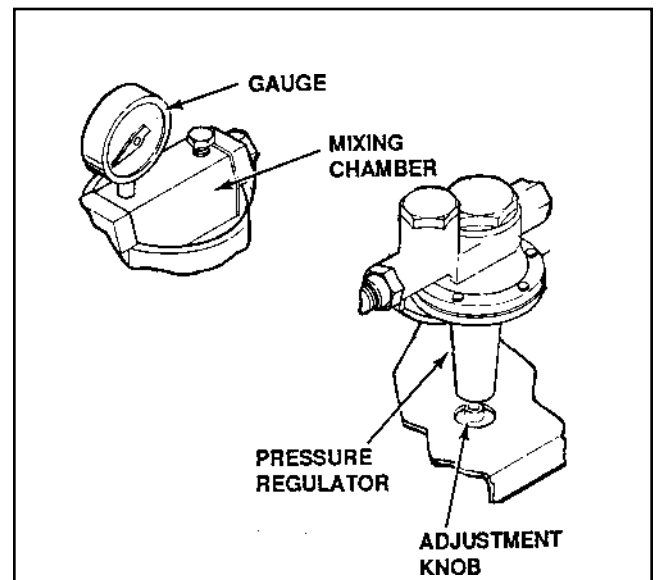


V. START-UP PROCEDURES

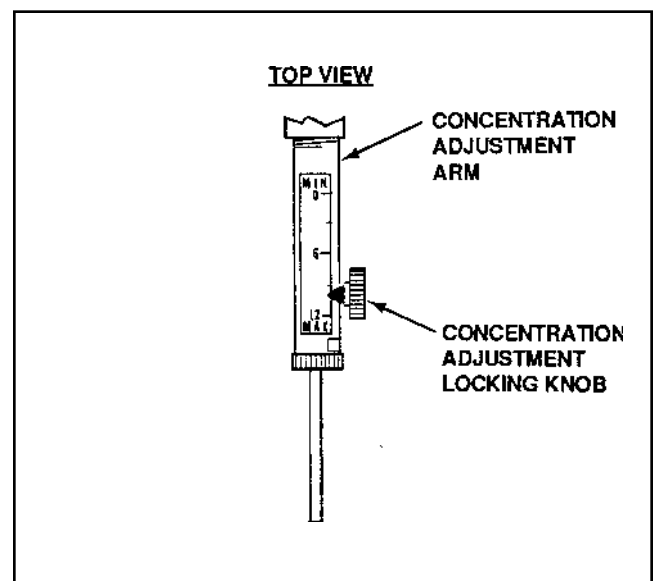
1. Loosen the adjustment locking knob (knob on side of concentration adjustment arm) and turn the concentration adjustment knob (knob on rear of concentration arm) to the maximum setting (position 12 or screw all the way out).
2. Turn on the water supply to the unit and open the test cock for maximum flow. As water flows through the water motor, the actuating arm and piston will move back and forth. The lubricant should start rising up the suction tube. When the lubricant reaches the mixing chamber the system is primed and the test cock can be turned off.



3. Flow is now through the nozzles. Adjust pressure regulator to approximately 30 psi (through bottom of unit). Use the gauge on the mixing chamber for your pressure readings to make the adjustments. Adjust the concentration adjustment knob as needed to give the desired product to water ratio.



4. The concentration adjustment is preset at 4. Using the keys, remove the padlock. Remove the locking device by turning it counterclockwise. The numbers on the concentration adjustment arm are reference marks only and do not represent any particular ratio. The number 12 setting would be the maximum concentration ratio and the number 0 is minimum concentration ratio. When the proper concentration is reached, tighten concentration adjustment locking knob. Finger tight is sufficient. Reinstall the Locking Device and put the padlock on.



VI. TROUBLESHOOTING

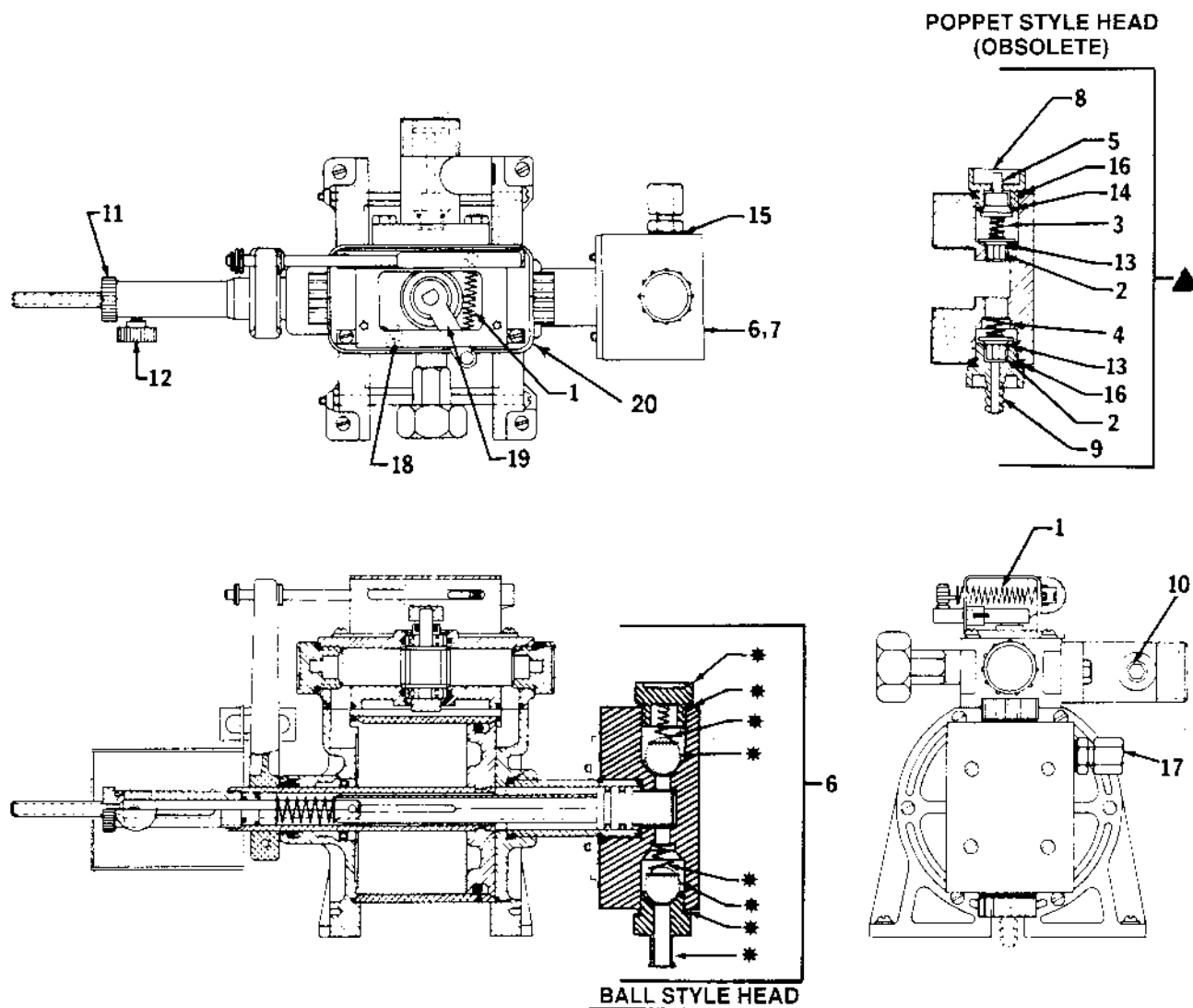
PROBLEM	CAUSE OR FAILURE MODE	ACTION
1. Lubri-Klenz 260 water motor will not run.	Water turned off to unit.	Turn water on to unit.
	Water filter (if applicable) is clogged.	Replace cartridge.
	Discharge lines shut off or clogged.	Check and clear all lines.
2. Pump motor stalls or is intermittent with good water flow. Sluggish toggle switching action.	Toggle leverage spring bad or upper valve block assembly bad.	Replace toggle lever spring or upper valve block as necessary.
3. Will not draw lubricant.	Proportioner concentrate adjustment set on minimum.	Re-adjust setting on adjustment arm .
	Upper or lower valve screw sucking air.	Tighten fittings - <u>hand tighten only</u> . Be sure suction tube is secure.
	Foreign material on ball seats.	Remove valve balls and clean ball seats. Clean and or replace O-rings.
	Excessive discharge back pressure.	Relieve downstream back pressure.

VII. PERIODIC MAINTENANCE

- A. As pumping conditions demand, concentrations from the pump should be checked each visit.
- B. Observe pumps for leaks each visit.
- C. Observe output lines for air bubbles which would indicate suction tube leaks.
- D. Observe toggle level bumpers for wear especially if loud metallic clicking noise is heard from pump during plant visits.
- E. If input water filter is used check cartridge each visit.

REPLACEMENT PARTS

LUBRI-KLENZ MODEL 260



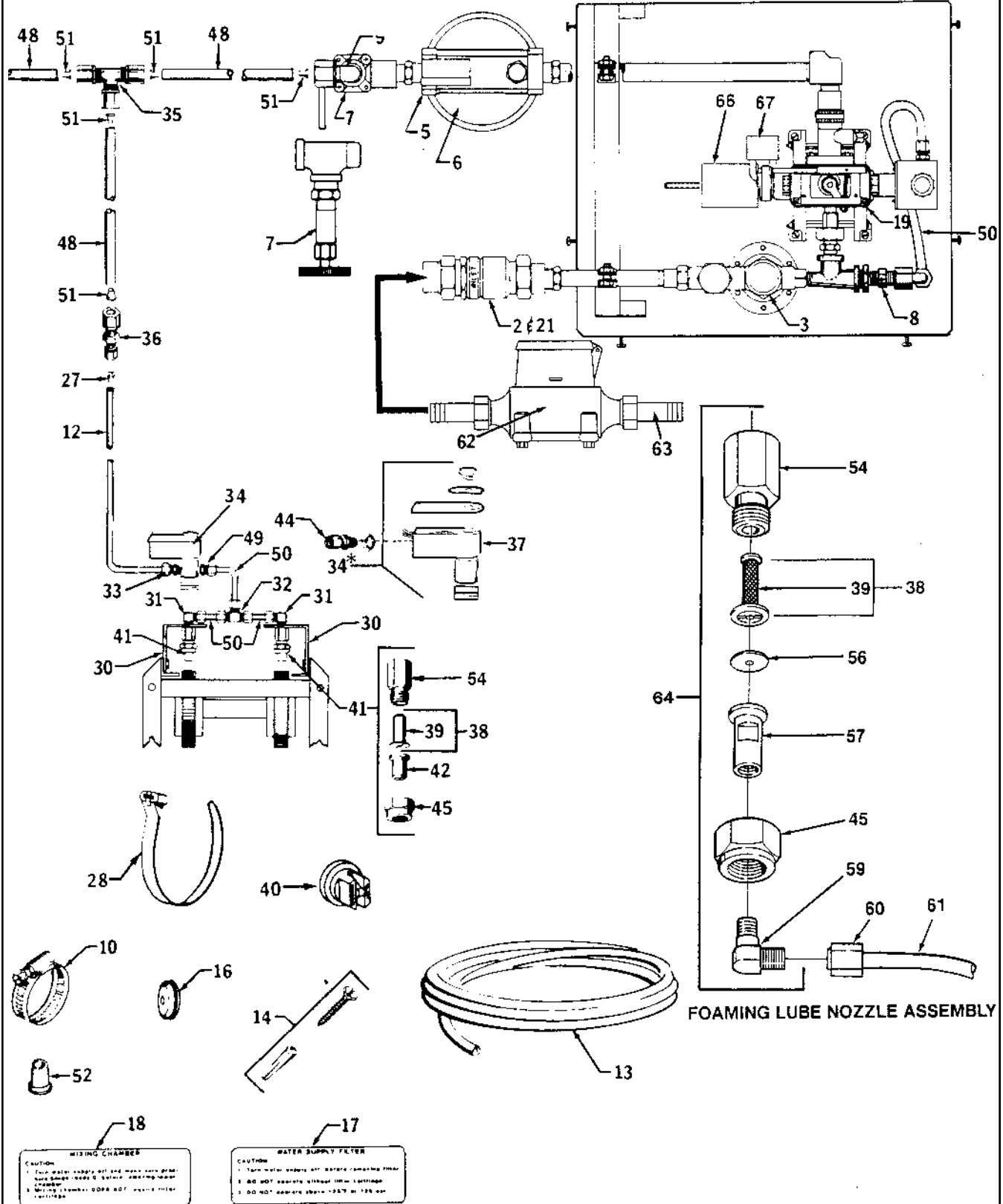
REF. NO.	PART NO.	DESCRIPTION
1	8480-5209	TOGGLE LEVER SPRING
2	8480-5217	CHEMICAL POPPET
3	8480-5225	OUTLET SPRING
4	8480-5233	INLET SPRING
5	8480-5241	VENT POPPET
6	8480-5258	PUMP HEAD ASM COMPLETE (MOLDED HEAD ACRYLIC)
7	● 8480-5316	HEAD REPAIR KIT
8	8480-5266	UPPER VALVE SCREW
9	8480-5274	LOWER VALVE SCREW

REF. NO.	PART NO.	DESCRIPTION
10	8480-5282	PLUG
11	8480-5290	MICRO-ADJ KNOB
12	8480-5308	ADJUSTMENT KNOB
13	8720-3139	O-RING $\frac{3}{8} \times \frac{9}{16}$
14	8720-3147	O-RING $\frac{7}{16} \times \frac{9}{16}$
15	8720-3113	O-RING $\frac{5}{16} \times \frac{7}{16}$
16	8720-3717	O-RING $\frac{11}{16} \times \frac{7}{8}$
17	8562-5010	JACO FITTING W/EXTRA NUT
18	8480-8468	TOGGLE LEVER BUMPER (RUBBER)
19	8480-5340	TOGGLE LEVER
20	9401-1228	UPPER VALVE BLOCK KIT

● PARTS NOT SHOWN

REPLACEMENT PARTS

LUBRI-KLENZ MODEL 260



* PARTS MUST BE RETURNED TO MECHANICAL

REPLACEMENT PARTS

LUBRI-KLENZ MODEL 260

REF. NO.	PART NO.	DESCRIPTION
1	•8530-0044	WATER FILTER HOUSING W/O CARTRIDGE (OPTIONAL FOR NEW STYLE-STANDARD FOR OLD STYLE)
2	8524-1511	BACKFLOW PREVENTER
3	8522-0002	REGULATOR 1/2"
4	•8538-0079	FILTER CARTRIDGE (POLYP)
	•8538-0053	FILTER CARTRIDGE SS (SOLD ONLY)
5	8539-0094	GAUGE 2" 100#
6	9401-9072	MIXING CHAMBER W/O CARTRIDGE
7	8525-4035	BALL VLV 3 WAY (PLASTIC NEW STYLE)
	8523-0043	NDL VLV 3/8PF x 1/4 MPT (OLD STYLE)
8	9275-0108	CHECK VALVE ASM
9	8563-5399	ELB 1/2 T x 1/2 MPT POLYP
10	8730-1032	CLAMP (FOR MIX CHAMBER)
12	8501-5121	PLASTIC TUBING 3/8 POLYP (ORDER BY FEET)
13	8501-5378	TUBE SOARC 3/8
14	9263-1027	WALL ANCHOR 1/4" 10 PK
16	8311-3076	GROMMET
17	9401-2770	FILTER LABEL
18	9401-2788	MIXING CHAMBER LABEL
19	*9401-9619	CROWN PUMP
20	•8528-4206	BACKFLOW PREVENTER RPR KIT
21	•8528-9668	BACKFLOW PREVENTER GASKET
26	•8538-0087	AMETEK MOUNTING BRACKET
27	8550-5659	TUBE INSERT 3/8
28	9263-1290	CABLE TIE 100 PACK WHITE NYLON
30	9401-9031	KJ NOZZLE BRACKET SS
31	8553-3347	ELBOW 1/4 P-F x 1/8 MPT
32	8554-3049	UNION TEE 1/4 P-F
33	8551-3091	CONN 3/8 P-F x 1/4 MPT
34	9204-1110	SLND VLV 240/480V ASCO KIT
35	8564-5091	UNION TEE 1/2T POLYP
36	8572-5596	RDCG UNION 1/2T x 3/8T W/SS GRPR
37	8528-9585	SLND VLV COIL 240/480 ASCO
38	8538-2109	CHECK VALVE & STRAINER
39	8538-2117	STRAINER SCREEN ONLY
40	8531-1751	NOZZLE TIP UNIJET .017 GPM
	8531-2007	NOZZLE TIP CONE-JET 1/8FPT TN .6
	8531-2015	NOZZLE TIP CONE-JET 1/8FPT TN 1
41	8531-2023	NOZZLE TIP CONE-JET 1/8FPT TN 1.5
	8531-2031	NOZZLE TIP CONE-JET 1/8 FPT TN 2

REF. NO.	PART NO.	DESCRIPTION
	8538-2000	NOZZLE TIP TN .6
	8538-2018	NOZZLE TIP TN 1
	8538-2026	NOZZLE TIP TN 1.5
	8538-2034	NOZZLE TIP TN 2
42	8538-0525	NOZZLE TIP 0°SOLID STREAM .5 GPH
	8538-0533	NOZZLE TIP 0°SOLID STREAM 1.1 GPH
	8538-0541	NOZZLE TIP CONE SPRAY 3 GPH SS
	8538-0558	NOZZLE TIP CONE SPRAY 4 GPH SS
44	8331-1019	CONDUIT CONNECTOR 1/2
45	8538-2091	NUT TN NOZZLE
48	8501-5139	PLASTIC TUBE 1/2 POLYP (ORDER BY FEET)
49	8551-3059	CONN 1/4 P-F x 1/4 MPT
50	8501-5105	PLASTIC TUBE 1/4 POLYP (ORDER BY FEET)
51	8550-5667	TUBE INSERT 1/2
52	9200-2385	TUBE INSERT 1/4
53	•9401-1194	UPSTREAM LUBE INJECTION KIT (Kit improves pump lubrication and performance in extreme hard water applications)
54	8538-0632	TYPE-T FEMALE INLET CONNECTION1/8"
56	8538-0574	ORIFICE PLATE, 1.5 GPH, #4916-14
	8538-0582	ORIFICE PLATE, 1.98 GPH, #4916-16
	8538-0590	ORIFICE PLATE, 2.46 GPH, #4916-18
57	9401-9601	ADAPTER, ECOLAB MODIFIED
59	8563-4343	1/8 x 1/4 MPT ELBOW
60	9263-1126	NUT & SLEEVE, 1/4T
61	9266-1024	1/4 OD x 50 FEET, PRECUT COPPER TUBING
62	8495-0187	WATER METER W/COUPLING KIT-HERSEY
63	8495-0161	COUPLING KIT FOR ROCKWELL WATER METER
64	9401-1269	FOAM LUBE NOZZLE ASM. 1.5 GPH
	9401-1277	FOAM LUBE NOZZLE ASM. 2.0 GPH
	9401-1285	FOAM LUBE NOZZLE ASM. 2.5 GPH
65	9401-2747	INSTALLATION AND OPERATION MANUAL
66	9401-1343	LOCK KIT W/PADLOCK
67	8702-2034	PADLOCK W/2 KEYS

• PARTS NOT SHOWN

* PARTS MUST BE RETURNED TO MECHANICAL

NOTE

SEE "GENERAL PARTS" FOR PROBES AND FOOT VALVES