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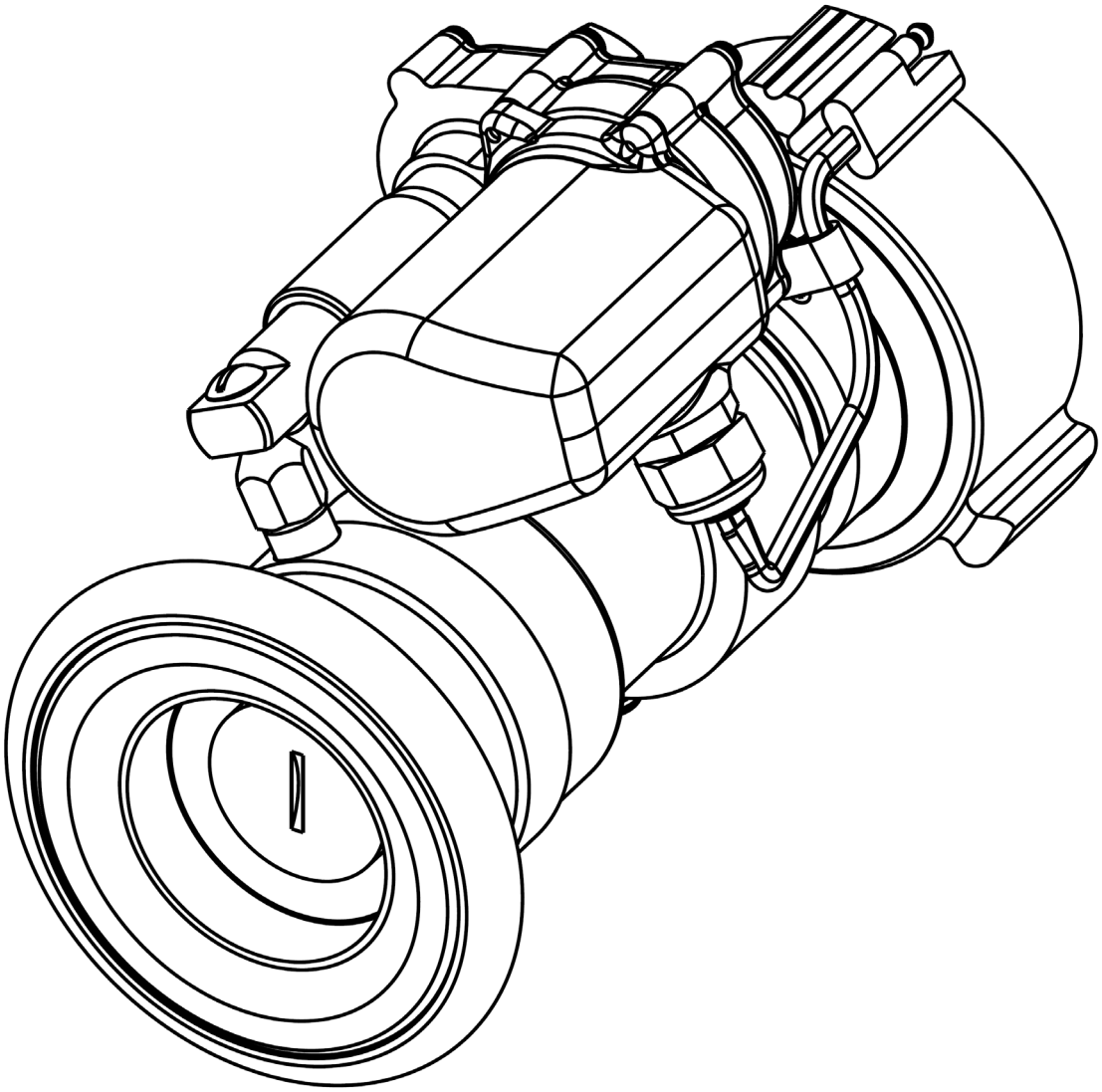
INSTRUCTIONS FOR ELKHART

"6000-200E" MONITOR NOZZLE



CAUTION:

Before installing and operating this equipment, read & study this manual thoroughly. Proper installation is essential to safe operation. In addition, the following points should be adhered to in order to ensure the safety of equipment and personnel:

- All personnel who may be expected to use this equipment must be thoroughly trained in its safe and proper use.
- The inlet connection of the nozzle must be securely tightened. Failure to do so may result in serious injury or death.
- The nozzle must be properly oriented on the monitor (see installation instructions).
- Before flowing water from this device, check that all personnel (fire service and civilian) are out of the stream path. Also, check to make sure stream direction will not cause avoidable property damage.
- Become thoroughly familiar with the hydraulic characteristics of this equipment, and the pumping system used to supply it. To produce effective fire streams operating personnel must be properly trained.
- Open water valve supplying this equipment slowly, so that piping and hose lines fill slowly, thus preventing possible water hammer occurrence.
- After each use, and on a scheduled basis, inspect & maintain this equipment per the instructions in this manual.

INSTALLATION:

Place the monitor discharge horizontal or parallel to the ground. Check to see that there is a gasket in place before threading the inlet swivel onto the 2.5" NHT male discharge of the monitor. Tighten the swivel hand tight. Press down on the finger pad of the locking lever and while holding it down grasp the nozzle's electric actuator assembly and rotate the front portion of the nozzle until the locking lever can be released to engage the slot corresponding to the desired flow setting. The gallonage ring has markings for the different flow settings with an arrow pointing to the notch that corresponds to that setting. The flow settings are marked according to the flow rate the nozzle will provide at 100 PSI (6.89 Bar). **Check that the locking lever is engaged in the correct slot for the desired flow setting.** Loosen the swivel and reposition the nozzle with the locking lever on the bottom (6 o/clock position) and the electric actuator assembly at the top (12 o/clock position) and tighten the swivel securely with a spanner wrench. This insures that the override nut is easily accessible and that the electric actuator assembly does not impede the travel of the monitor discharge. Plug the two way connector for the nozzle's electric actuator into the mating connector for the nozzle on the monitor's harness.

POWER REQUIREMENTS;

Motor power required is 11-14 VDC. Motor current draw is approximately 0.5 Amps.

OPERATION:

ELECTRIC;
The controls for the monitor can be used to change the nozzle's stream pattern from straight stream to wide fog. The 12V DC electric actuator uses a ball screw mechanism that free spins at each end of its stroke preventing the actuator motor from experiencing a stall condition at the ends of its stroke. The nozzle may be operated in any position from straight stream to wide fog. Refer to the chart for nozzle flow vs. pressure found on page 5 for nozzle performance.

MANUAL;
The electric actuator has a ¾ inch hex nut that can be used to change the stream pattern in the event that power is lost. Disconnecting the power lead to the nozzle will make it easier to turn the manual override nut. **NEVER** use anything but a hand wrench to operate the manual override. Using powered tools will damage the nozzle actuator and void the warranty.

FLUSH;
Press down on the finger pad of the locking lever and while holding it down grasp the nozzle's electric actuator assembly and rotate the front portion of the nozzle until the locking lever is past the 200 gpm as far as it will go. Flow water to flush out debris. Press down on the finger pad of the locking lever and while holding it down grasp the nozzle's electric actuator assembly and rotate the front portion of the nozzle until the locking lever can be released to engage the slot corresponding to the desired flow setting.

INSPECTION;

Inspect the nozzle after each use and at least monthly when not in use. Check the nozzle for any signs of damage or contamination from the environment. Check the nozzle operation by moving the nozzle tip through its entire range of motion several times. Grease if required (see Maintenance).

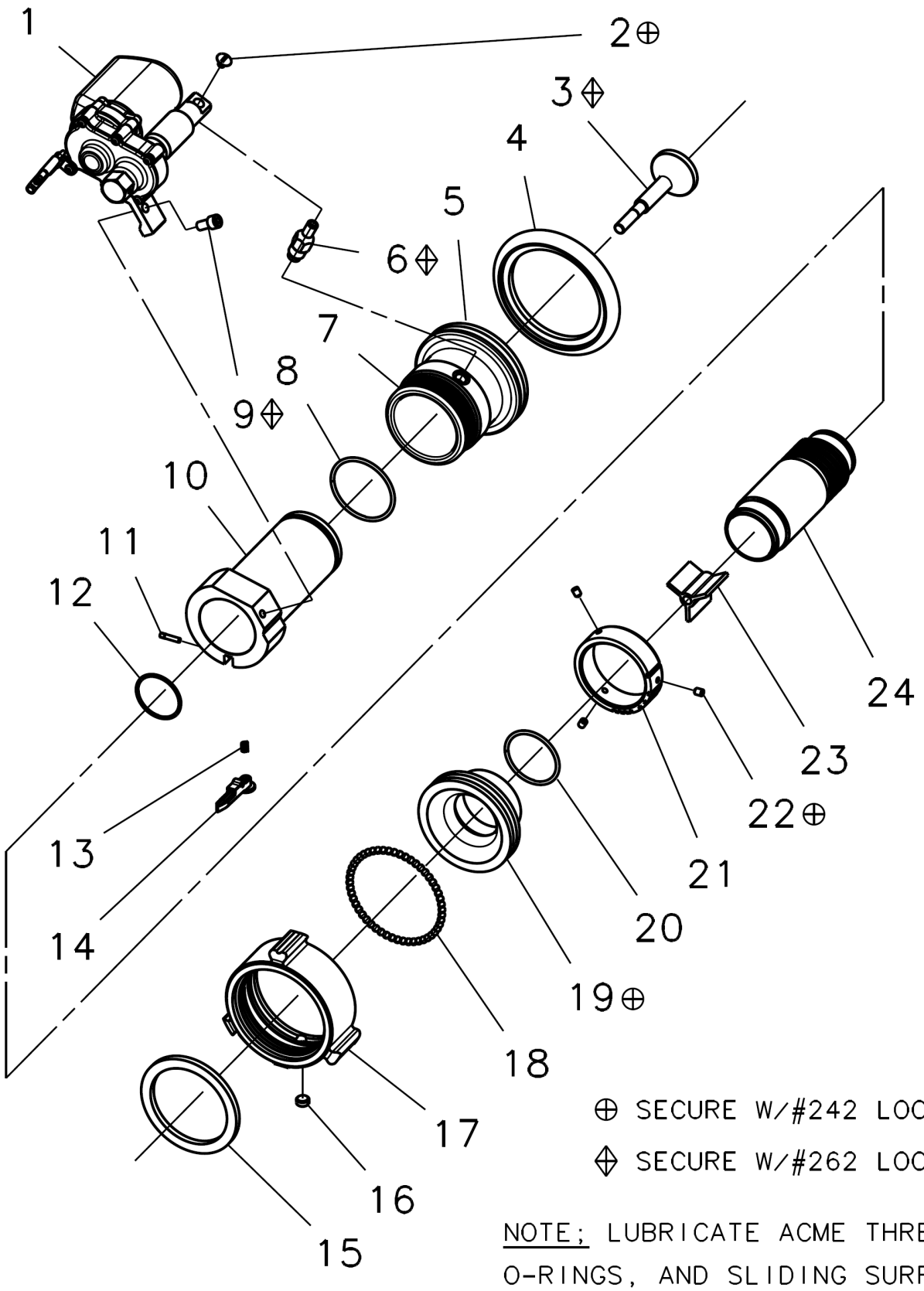
MAINTENANCE:

AFTER EACH USE; With the nozzle in the straight stream position, wipe clean the inside surface of the nozzle tip at the discharge end, the surface of the center barrel directly behind the tip, and the outside surface of the telescoping portion of the electric actuator. After cleaning apply a thin coating of lubricant (Dow Corning #7 Lubricant/Sealant) to the clean surfaces. Move the nozzle tip through its entire range of motion several times to distribute the grease. With the tip in the wide fog position, wipe off any excess grease with a clean rag. Storing the nozzle in the wide fog position will help protect the greased surfaces from exposure to the elements and contaminants that may be attracted by the grease.

AS REQUIRED; Remove the two screws that retain the electric actuator and remove it. Remove the nozzle tip and the nozzle tip o-ring. Use a mild soap & water solution to clean the outside surface of the center barrel, the nozzle tip, and the o-ring. Inspect the o-ring and replace if worn or damaged. Apply a thin coat of lubricant (Dow Corning #7 Lubricant/Sealant) to the o-ring, the outside surface of the center barrel, and the inside surface of the nozzle tip. Reinstall the o-ring, nozzle tip, and electric actuator (see exploded drawing for Loctite requirements). Move the nozzle tip through its entire range of motion several times to distribute the grease. With the tip in the wide fog position, wipe off any excess grease with a clean rag. Storing the nozzle in the wide fog position will help protect the greased surfaces from exposure to the elements and contaminants that may be attracted by the grease.

6000-200E FLOW vs. PRESSURE

CATALOG NO.	FLOW SETTING GPM (LPM)	STREAM SETTING	NOZZLE DISCHARGE ---------- U.S. GPM (LPM)					
			NOZZLE PRESSURE ---------- PSI (BAR)					
			40 (2.76)	50 (3.45)	75 (5.17)	100 (6.89)	125 (8.62)	150 (10.34)
6000-200E	**15 (60)**	SS	9 (35)	11 (40)	13 (50)	**15 (60)**	17 (65)	18 (70)
		NARROW FOG						
		WIDE FOG						
	30 (120)	SS	19 (70)	21 (80)	26 (100)	**30 (120)**	34 (130)	37 (140)
		NARROW FOG						
		WIDE FOG						
	45 (170)	SS	28 (105)	32 (120)	39 (150)	**45 (170)**	50 (190)	55 (210)
		NARROW FOG						
		WIDE FOG						
	60 (250)	SS	38 (145)	42 (160)	52 (200)	**60 (250)**	67 (255)	73 (275)
		NARROW FOG						
		WIDE FOG						
	95 (360)	SS	60 (225)	67 (255)	82 (310)	**95 (360)**	106 (400)	116 (440)
		NARROW FOG						
		WIDE FOG						
	125 (500)	SS	79 (300)	88 (335)	108 (410)	**125 (500)**	140 (530)	153 (580)
		NARROW FOG						
		WIDE FOG						
	150 (550)	SS	95 (360)	106 (400)	130 (490)	**150 (550)**	168 (635)	184 (700)
		NARROW FOG						
		WIDE FOG						
	200 (750)	SS	126 (475)	141 (535)	173 (655)	**200 (750)**	224 (850)	245 (930)
		NARROW FOG						
		WIDE FOG						



⊕ SECURE W/#242 LOCTITE

⧫ SECURE W/#262 LOCTITE

NOTE; LUBRICATE ACME THREADS, O-RINGS, AND SLIDING SURFACES WITH DOW CORNING #7 SILICONE GREASE.

6000-200E Monitor Nozzle Parts List

INDEX NO.	PART NO.	QUANTITY PER UNIT	DESCRIPTION
1	81197001	1	Nozzle Actuator 12V
2	61078000	1	Screw #10-32 x 0.250 lg S/S
3	69076007	1	Nozzle Stem
4	16575310	1	Bumper
5	66432007	1	Nozzle Tip
6	17729001	1	Push Rod Bracket
7	44618000	1	Info Label
8	57319000	1	O-ring 1.925 ID x 0.103 C/S
9	61040000	1	Socket Cap Screw 0.25-20 x 0.500 lg S/S
10	18117007	1	Center Barrel
11	51063000	1	Drive Pin 0.125 Dia x 0.625 lg Type C S/S
12	57521000	1	O-ring 1.364 ID x 0.070 C/S
13	61762000	1	Coil Spring
14	44064105	1	Locking Lever
15	33083000	1	2.5 Swivel Gasket
16	63674000	1	Set Screw 0.375-24 x 0.156 lg Teflon
17	63069007	1	2.5 R/L Swivel
18	15018000	52	Ball Bearings 0.187 Dia S/S
19	10350007	1	2.5 O/BG Adapter
20	57297000	1	O-ring 1.612 ID x 0.103 C/S
21	59185007	1	Gallonage Ring
22	63678000	3	Set Screw #10-24 x 0.250 lg S/S
23	63418001	1	Stem (Web) Base
24	17196007	1	Nozzle Body

Elkhart Brass

Fire Fighting Equipment

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