## APPVS & APPVD 2510 PUMPS

AUTOMATION PUMP
PNEUMATIC VALVED PISTON



Series"B"

## **OPERATION & INSTALLATION**

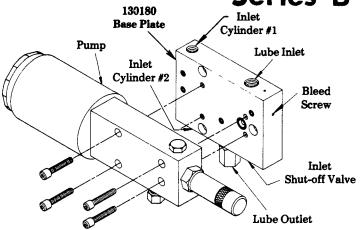
APPVS & APPVD Pumps are pneumatically powered valved piston pumps, with pump cycles controlled by a timer in conjunction with a solenoid valve. Pumps develop a 25:1 ratio of lubricant to air pressure using a minimum pneumatic pressure of 40 psi and a maximum of 150 psi. A rupture indicator is supplied to warn of excessive lubricant pressure (above 1450 psi).

If maximum pump speed is desired, inlet lube pressure must be increased proportionally (not to exceed 2000 psi or 20 times the air pressure).

Lubricant output is adjustable from .025 - .100 cu. in. per stroke. One complete turn of the adjustment screw will change the lubricant output by .004 cu. in. per stroke. To increase lubricant output turn adjustment screw counter-clockwise. To decrease output turn adjustment screw clockwise.

All piping is connected to the 130180 Base Plate, allowing the pump to be removed without disturbing the existing piping. An inlet shut-off valve in the base plate permits the removal of the pump without draining the reservoir. A bleed screw is provided in the base block to purge the pump during installation or when the reservoir was allowed to run dry.

These pumps can be used equally well with grease or oil to supply Modular Lube Systems. O-rings seals for petroleum base lubricants are standard with the 130180 Base Plate. Special o-rings can be ordered separately for use with synthetic base lubricants by referring to the chart below.



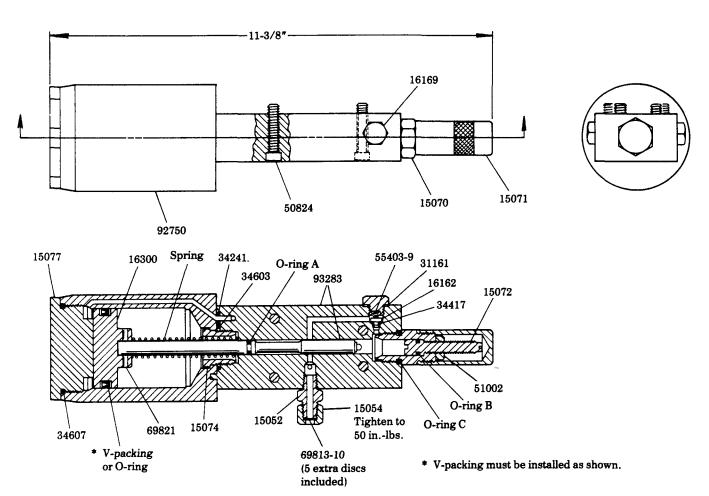
The 130177 (Buna-N o-rings) and 130177A (Viton o-rings) APPVS single acting piston pumps have one pneumatic connection to power the piston on the delivery stroke. A spring returns the piston to prime position. Air pressure from a three-way solenoid valve is connected to Inlet Cylinder #1. Installing 69295 Screen (not shown) into Inlet Cylinder #2 is recommended. APPVS Pumps can operate at a maximum of 30 strokes per minute with oil, 22 strokes per minute with grease.

The 130245 APPVD (Viton o-rings) is a single acting piston pump with a double acting air cylinder using air pressure to power the piston on the delivery stroke and return it to priming position. Air pressure from a four-way solenoid is connected to Inlet Cylinder #1 and #2. The APPVD Pump can operate at a maximum of 100 strokes per minute with oil, 36 strokes per minute with grease.

· ·		Buna-N O-ring	34241	34579	34592	
		Viton O-ring	34417	34611	34589	
		- <b>4</b> -11/16"		-		
Inlet Cylinder #1	-	2-11/16"			250	Lube Inlet 3/8" NPTF
1/4" NPTF				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	250	
1-11/32"	•	\(\frac{1}{2} \)			50554	
3-1/4"	•			-		15069
1-11/32"	<b> </b>    •	•	φ <u>·</u>		34592	34579
<u> </u>					34241	
Inlet Cylinder #2	66250 92" Dia. 70095	57152	-		15457	69819
Moun	ting Holes Places Lube Outle 1/4" NPT	15702		13018	BO BASE	PLATE

<u>LINCOLN</u>

LINCOLN, One Lincoln Way St. Louis, Missouri 63120-1578 (314) 679-4200 Customer Service, (314) 679-4300 SECTION - M23
PAGE - 4A



MODEL	O-RINGS	RETURN	SPRING	V-PACKING	O-RING	O-RING A	O-RING B	O-RING C
130177 130177A 130245	Buna-N Viton Viton	Spring Spring Air	55380 55380	34751 34751	34667	34579 34611 34611	34224 34610 34610	34604 34609 34609

## **SERVICE PARTS**

OLIVIOLI AITO							
PART	QUAN.	DESCRIPTION	PART	QUAN.	DESCRIPTION		
15052	1	Connector	34592	1	O-ring		
15054	1	Nut	34603	1	O-ring		
15069	1	Inlet Valve	34607	1	O-ring		
15070	1	Adjustment housing	50554	1	Screw		
15071	1	Adjustment screw cover	50824	4	Screw		
15072	1	Adjustment screw	51002	1	Nut		
15074	1	Coupling nut	55403-9	1	Spring		
15077	1	Piston enclosure screw	57152	1	Spring		
15457	1	Base plate	66250	2	Ball		
15702	1	Body	69295	1	Screen (not shown)		
16162	1	Check	69813-10	1	Disc (yellow colored)		
16169	1	Check valve plug	69819	1	Retainer		
16300	1	Pneumatic plunger	69821	1	Roll pin		
31161	1	Gasket	70086	1	Retainer		
34241	5	O-ring	92750	1	Piston enclosure assembly		
34417	1	O-ring	93283	1	Body & pin assembly		
34579	1	O-ring					

## - RETAIN THIS INFORMATION FOR FUTURE REFERENCE -

When ordering replacement parts, list: Part Number, Description, Model Number, and Series Letter. LINCOLN ST. LOUIS provides a Distributor Network that stocks equipment and replacement parts.