

OPERATION & INSTALLATION

The APHVD-2510 pump is a hydraulically powered valved piston pump, with pump cycles controlled by a timer in conjunction with a solenoid valve. Pumps develop a 6:1 ratio of lubricant to hydraulic pressure using a minimum hydraulic pressure of 275 psi and a maximum of 2000 psi. A rupture indicator is supplied to warn of excessive lubricant pressure (above 1450 psi).

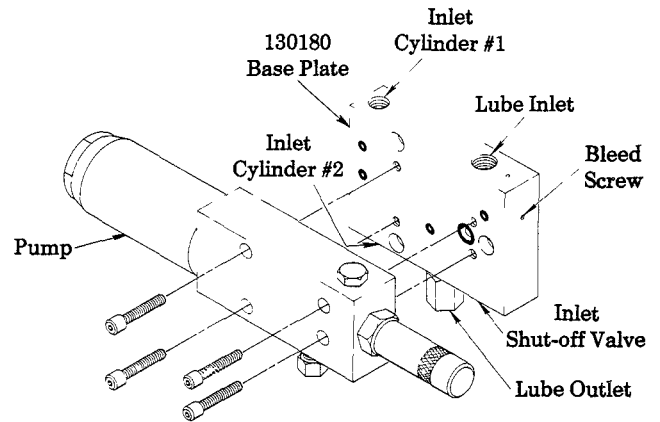
The pump has a single acting piston with a double acting cylinder using hydraulic pressure to power the piston on the delivery stroke and return it to priming position. Hydraulic pressure from a four-way solenoid is connected to Inlet Cylinder #1 & #2. The APHVD Pump can operate at a maximum of 55 strokes per minute with oil, 31 strokes per minute with grease.

If maximum pump speed is desired, inlet lube pressure must be increased proportionally (not to exceed 2000 psi or 4 times the hydraulic 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.

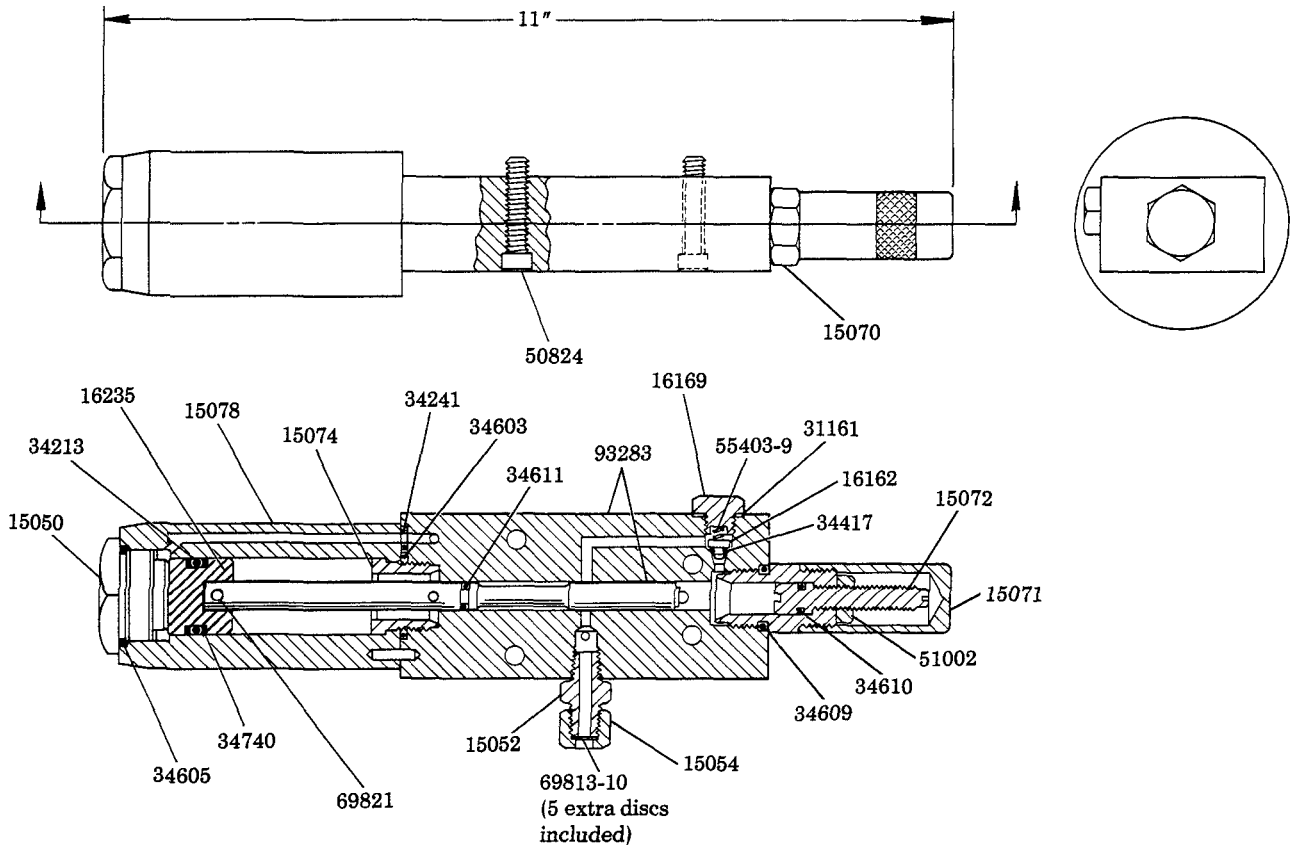
All piping is connected to the 130180 Base Plate, allowing the pump to be removed without disturbing the existing piping. Lubricant flow can be shut-off using inlet valve in base plate, permitting removal of pump. Turn 15069 Inlet Valve clockwise to

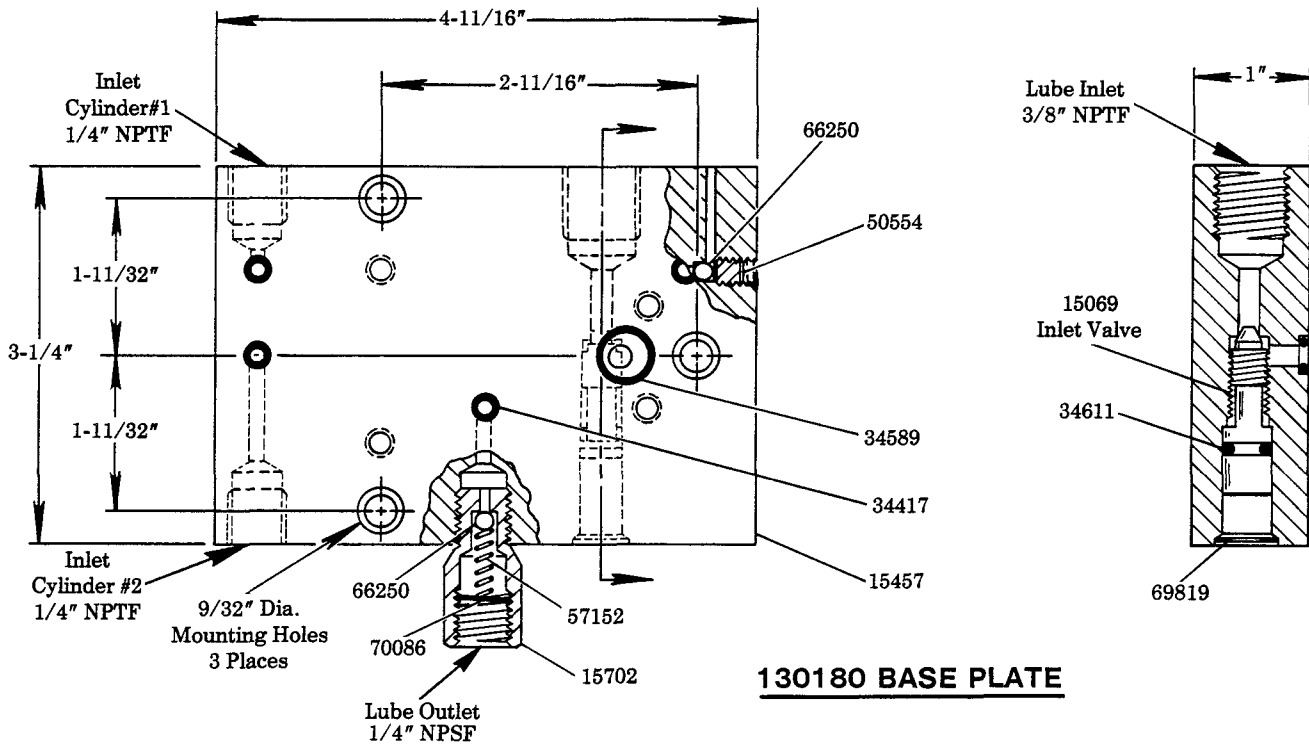
AUTOMATION PUMP HYDRAULIC VALVED PISTON



close, counter-clockwise to open. Valve is fully open when it contacts 69819 Retainer. A bleed screw is provided in the base plate 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. Viton o-ring seals for petroleum or synthetic base fluids and lubricants are standard with the 130180 Base Plate.





130180 BASE PLATE

SERVICE PARTS

Part	Qty.	Description	Part	Qty.	Description
15050	1	Piston enclosure screw	34589	1	O-ring
15052	1	Connector	34603	1	O-ring
15054	1	Nut	34605	1	O-ring
15069	1	Inlet valve	34609	1	O-ring
15070	1	Adjustment housing	34610	1	O-ring
15071	1	Adjustment screw cover	34611	2	O-ring
15072	1	Adjustment screw	34740	2	Back-up ring
15074	1	Coupling nut	50554	1	Screw
15078	1	Piston enclosure body	50824	4	Screw
15457	1	Base plate	51002	1	Nut
15702	1	Check valve body	55403-9	1	Check valve spring
16162	1	Check	57152	1	Spring
16169	1	Check valve plug	66250	2	Ball
16235	1	Hydraulic plunger	69813-10	1	Disc (yellow colored)
31161	1	Gasket	69819	1	Retainer
34213	1	O-ring	69821	1	Groove pin
34241	1	O-ring	70086	1	Retainer
34417	5	O-ring	93283	1	Body & piston

RETAIN THIS INFORMATION FOR FUTURE REFERENCE

When ordering replacement parts, list: Part Number, Description, Model Number, and Series Letter.

LINCOLN provides a Distributor Network that stocks equipment and replacement parts.