## **OPERATION & INSTALLATION**

The 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).

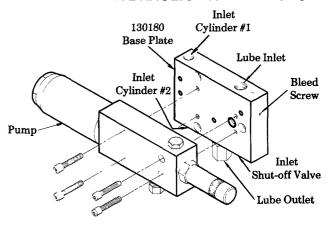
The pump has a single acting piston with a double acting cylinder using hydraulic pressure to power the piston on the delivery stroke and return it to priming position. Hydraulic pressure from a fourway solenoid is connected to Inlet Cylinder #1 & #2. The pump can operate at a maximum of 55 strokes per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

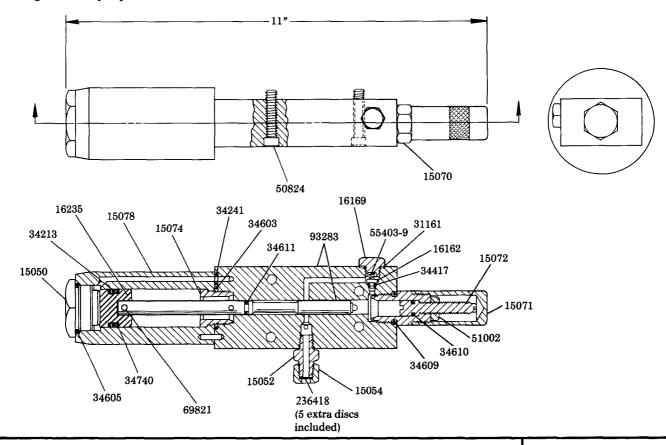
All piping is connected to the 130180 Base Plate, allowing the pump to be removed without disturbing the existing piping. Lubricant flow can be shut-off using inlet valve in base plate, permitting removal of pump. Turn 15069 Inlet Valve clockwise to

## 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.

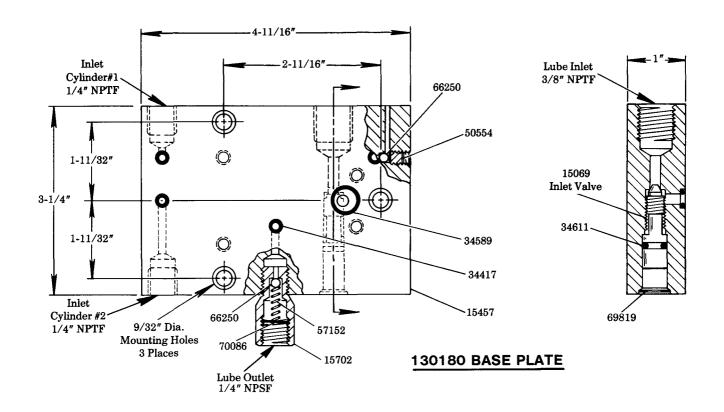
These pumps can be used equally well with grease or oil to supply Modular Lube Systems. Viton o-ring seals for petroleum or synthetic base fluids and lubricants are standard with the 130180 Base Plate.





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## **SERVICE PARTS**

| Part  | Qty. | Description            | Part    | Qty. | Description           |
|-------|------|------------------------|---------|------|-----------------------|
| 15050 | 1    | Piston enclosure screw | 34589   | 1    | O-ring (Viton)        |
| 15052 | 1    | Connector              | 34603   | 1    | O-ring (Buna-N)       |
| 15054 | 1    | Nut                    | 34605   | 1    | O-ring (Buna-N)       |
| 15069 | 1    | Inlet valve            | 34609   | 1    | O-ring (Viton)        |
| 15070 | 1    | Adjustment housing     | 34610   | 1    | O-ring (Viton)        |
| 15071 | 1    | Adjustment screw cover | 34611   | 2    | O-ring (Viton)        |
| 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      | 69819   | 1    | Retainer              |
| 31161 | 1    | Gasket                 | 69821   | 1    | Groove pin            |
| 34213 | 1    | O-ring (Buna-N)        | 70086   | 1 1  | Retainer              |
| 34241 | 1    | O-ring (Buna-N)        | 93283   | 1    | Body & piston         |
| 34417 | 5    | O-ring (Viton)         | 236418  | 1    | Disc (yellow colored) |

## - 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.