

# AIR OPERATED OIL PUMP

SINGLE STROKE, AIR RETURN

**Model 82676**

**Series "D"**

## SPECIFICATIONS

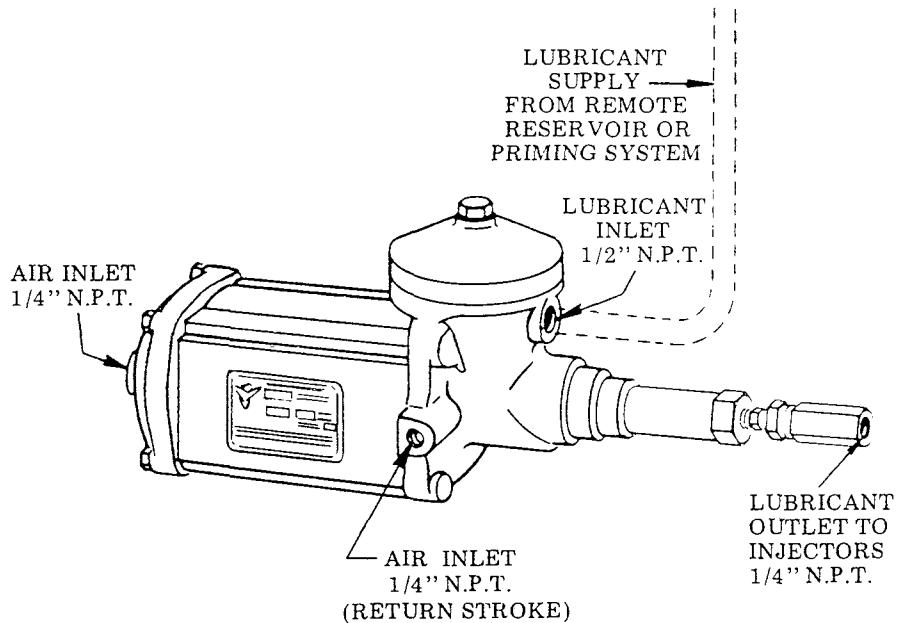
| Ratio | Lubricant Output (cu. in.) | Air Inlet             | Lubricant Outlet      | LUBRICANT OPERATING PRESSURE (P.S.I.) |                              |                                |                              |
|-------|----------------------------|-----------------------|-----------------------|---------------------------------------|------------------------------|--------------------------------|------------------------------|
|       |                            |                       |                       | Type of System                        | Minimum                      | Maximum                        | Recommended                  |
| 20:1  | 2.4*                       | 1/4" N.P.T.<br>Female | 1/4" N.P.T.<br>Female | SL-42<br>SL-43                        | 750<br>with 40<br>P.S.I. Air | 1,000<br>with 50<br>P.S.I. Air | 850<br>with 45<br>P.S.I. Air |

\* Based on lubricants that are free of entrapped air. Lubricants that are aerated will reduce output of pump.

The 82676 Pump is used as the pumping unit for a centralized lubrication system having a single line circuit of SL-42 Injectors and SL-43 Injectors.

It is an air operated single stroke pump requiring air for both forward and return stroke and discharges \* 2.4 cu. in. of fluid lubricant into the circuit for each pump stroke (Lubrication Cycle).

The total quantity of lubricant needed for the lubrication cycle of the system must not exceed the amount of lubricant discharged per pump stroke.



### TO PRIME SYSTEM

**SUPPLY LINES:** After pump reservoir has been filled with recommended lubricant, loosen (do not remove) all plugs in dead ends of the injector manifolds and supply lines. Operate pump until lubricant flows from around threads of any loosened plug. Tighten this plug and continue to operate pump until lubricant flows from around threads of another loosened plug. Repeat this procedure until all supply lines are primed.

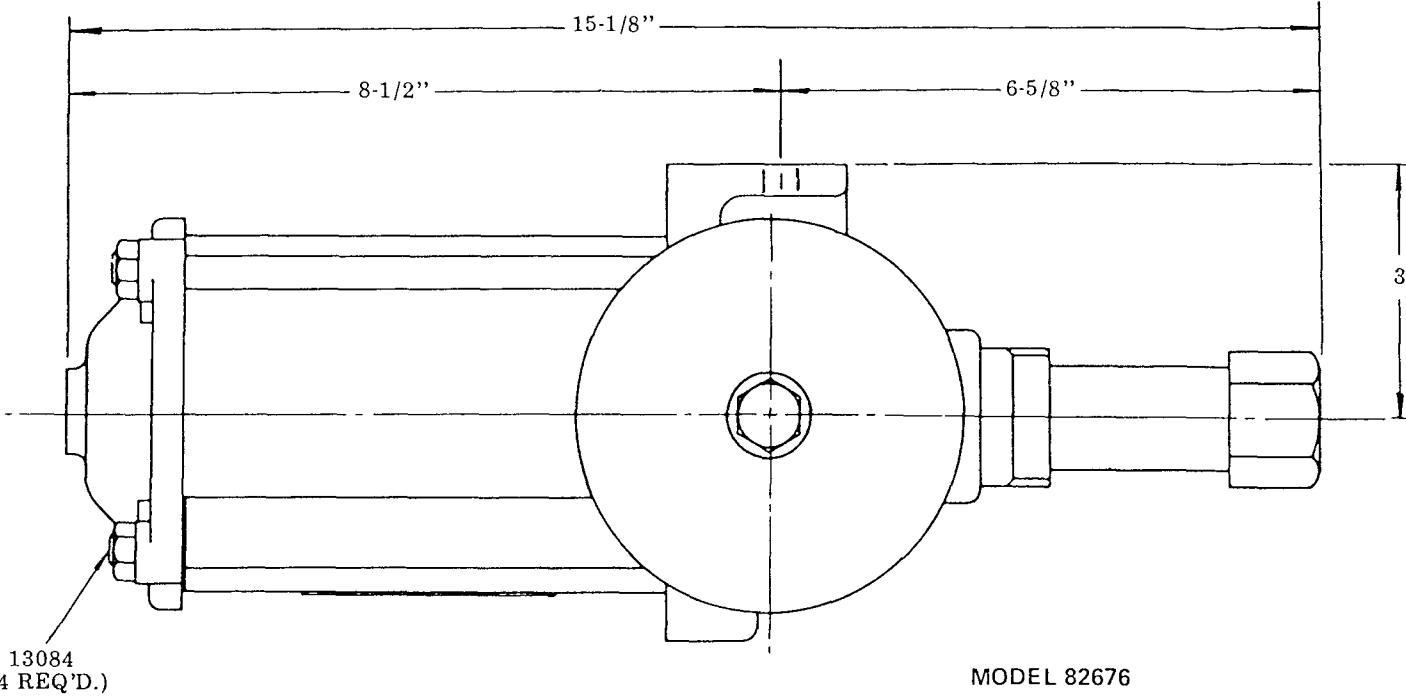
**FEEDER LINES:** Fill each feed line with lubricant before connecting lines to outlet of injectors and bearings. This will prevent having to cycle each injector to fill line between injector and bearing.

**INJECTORS:** Check each injector for proper operation. Injector stem moves when injector discharges lubricant to bearing. This may require cycling system several times. After checking injectors for operation adjust injectors for the volume required for each bearing.

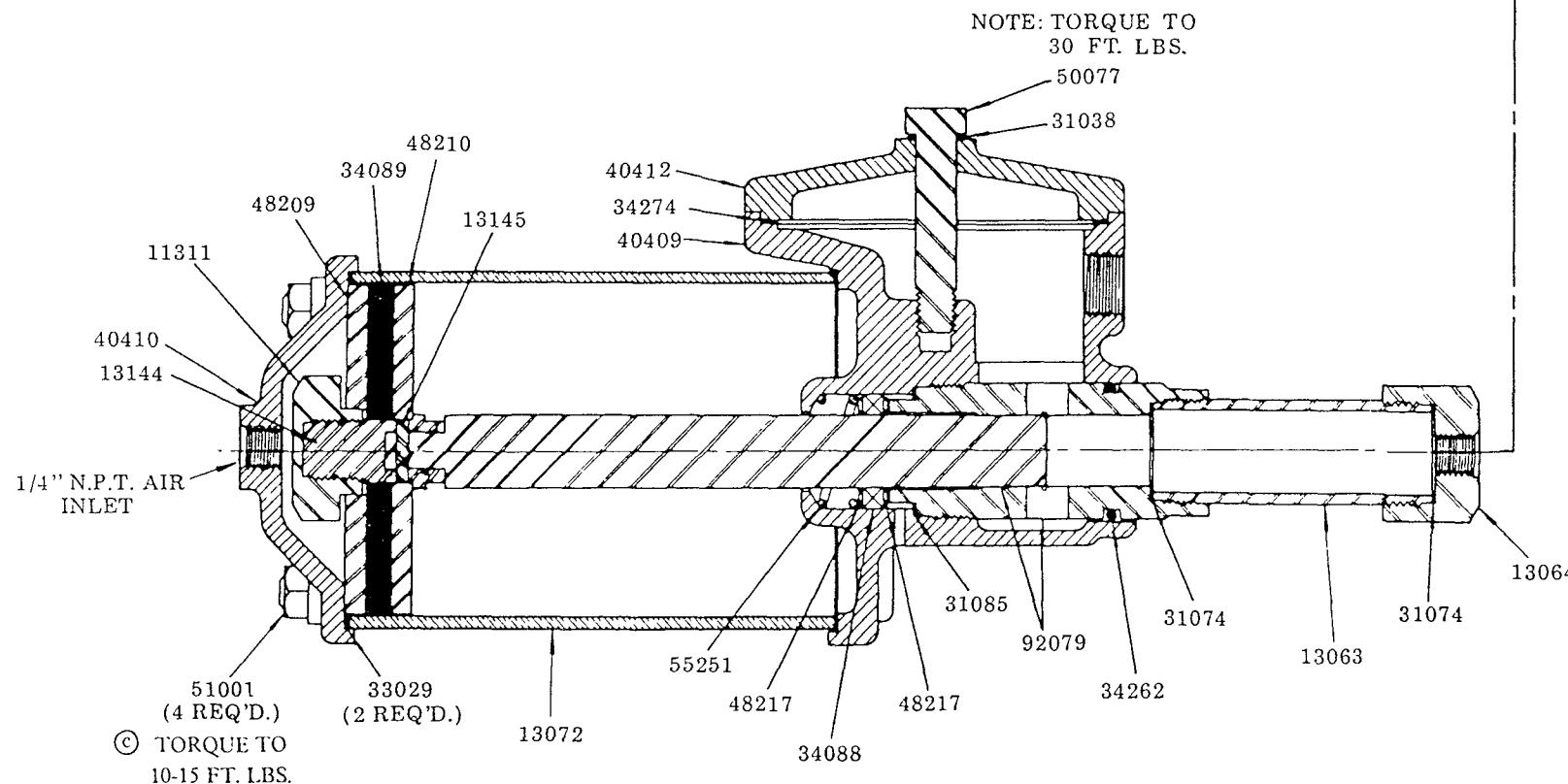
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MODEL 82676  
AIR OPERATED  
SINGLE STROKE PUMP  
SERIES "D"

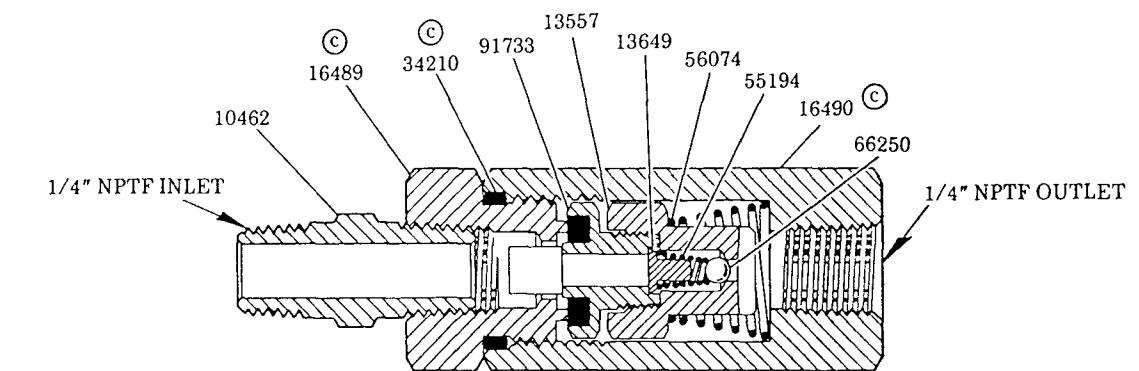


**NOTE:**  
Remote priming pressure must not exceed 80 PSI.

**TO CLEAN LINE CHECK 83114**

Remove 91733 Check and examine packing for presence of foreign particles. If packing is damaged, replace 91733 Check.

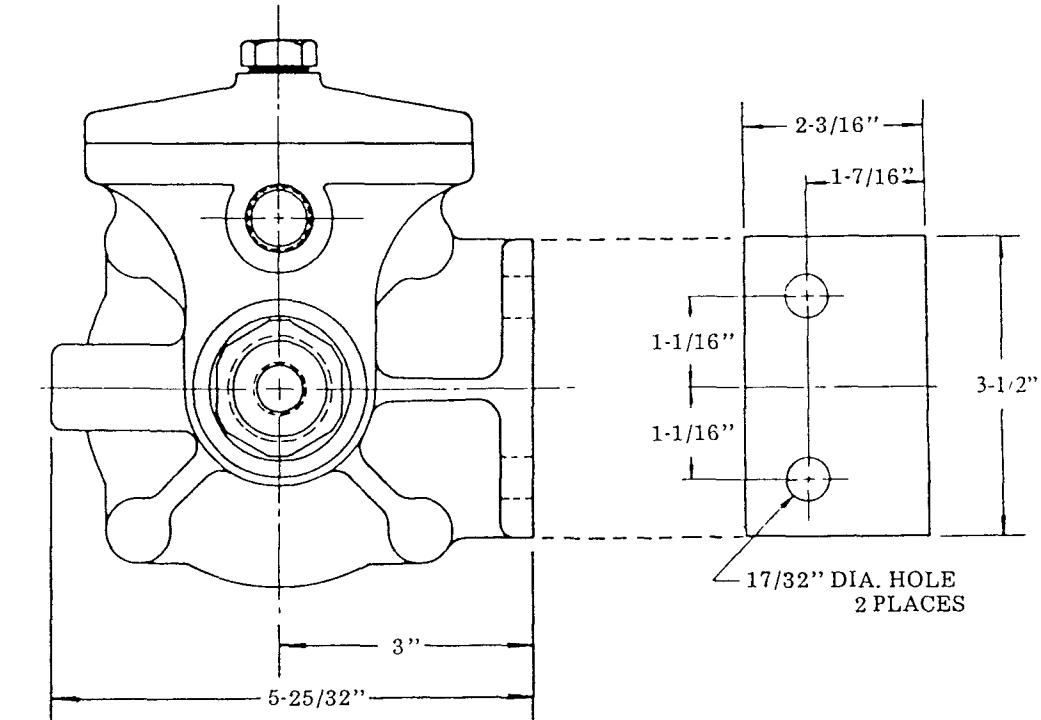
Remove 66250 Ball Check, 55194 Spring and 13649 Ball Stop from 13557 Check Retainer. Examine for presence of foreign particles. Clean thoroughly.



83114  
LINE CHECK



(C) Indicates change

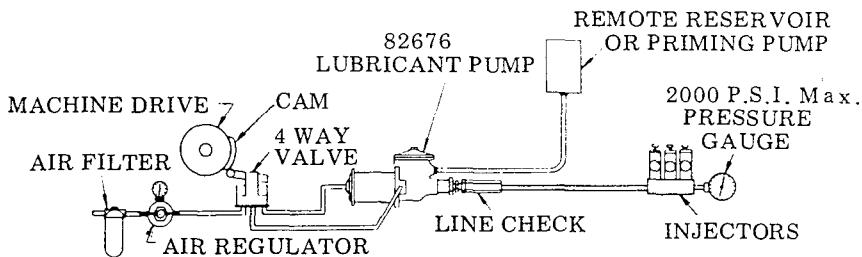


## TYPES OF INSTALLATIONS

Frequency of lubrication cycle can be controlled Manually, Mechanically or Electrically –  
Pump requires a four-way air valve for operation.

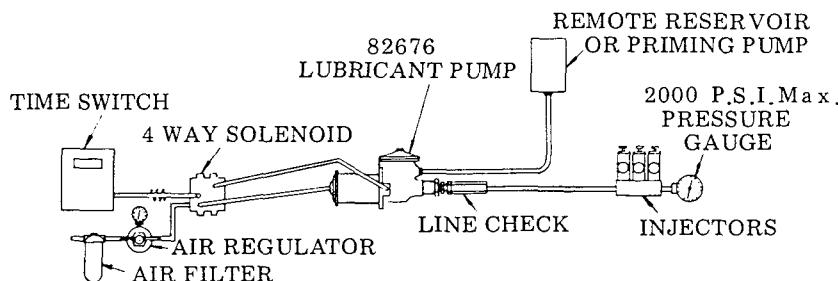
### MECHANICAL CONTROL

When using mechanical motion of machine to control lubrication frequency, four-way valve is engaged by cam permitting air to pass through valve to pump forcing air piston forward and lubricant through supply line to injectors. When valve is disengaged, air exhausts back through valve. Air also flows into return side of pump reversing air piston and completing lubrication cycle. Cam dwell on four-way valve must be arranged for a minimum of 10 seconds.



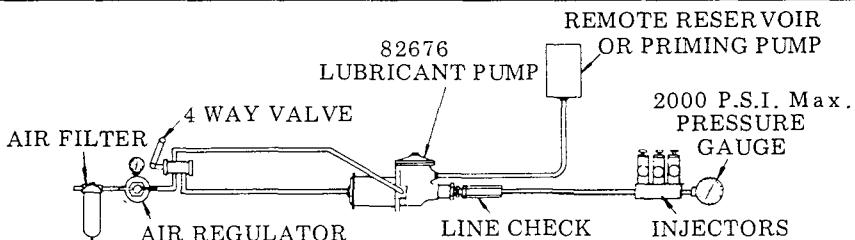
### ELECTRICAL CONTROL

Electrical time switch opens four-way valve permitting air to flow to pump forcing air piston forward and lubricant through supply line to injectors. When valve closes, air exhausts back through valve. Air also flows into return side of pump reversing air piston and completing lubrication cycle. Frequency of cycle can be set as desired by adjustable pins in time switch. See separate instructions of Time Switch 68358.



### MANUAL CONTROL

Opening four-way valve for a minimum of 10 seconds permits air to flow to pump forcing air piston forward and lubricant through supply line to injectors. When valve is closed air exhausts back through valve. Air also flows into return side of pump reversing air piston and completing lubrication cycle.



### WHAT TO DO IF:

PUMP LOSES PRIME — Check lubricant supply.

SYSTEM FAILS TO CYCLE and calculated system planning has been followed — Lubricant is leaking by packing of 91733 Check or 66250 Check. Remove and clean. Failure of injectors to cycle can also be caused by leak in supply lines. Examine supply lines and connections.

PUMP FAILS TO OPERATE — Check air supply. 40 P S I G minimum required.

### SERVICE PARTS

| PART NO. | DESCRIPTION    | PART NO. | DESCRIPTION  | PART NO. | DESCRIPTION         |
|----------|----------------|----------|--------------|----------|---------------------|
| 10462    | Nipple         | 31038    | Gasket       | 48209    | Washer              |
| 11311    | Piston nut     | * 31074  | Gasket       | 48210    | Washer              |
| 13063    | Pump tube      | * 31085  | Gasket       | 48217    | Washer              |
| 13064    | Outlet         | * 33029  | Gasket       | 50077    | Bolt                |
| 13072    | Air cylinder   | * 34088  | Packing      | 51001    | Nut                 |
| 13084    | Tie rod        | * 34089  | Packing      | * 55194  | Spring              |
| 13144    | Packing stud   | * 34210  | O-ring       | 55251    | Spring              |
| 13145    | Pin            | * 34262  | O-ring       | 56074    | Spring              |
| 13557    | Check retainer | * 34274  | Gasket       | * 66250  | Steel ball          |
| 13649    | Ball stop      | 40409    | Body casting | 83114    | Line check assembly |
| 16489    | Check seat     | 40410    | Cylinder cap | * 91733  | Check               |
| 16490    | Check body     | 40412    | Body cap     | 92079    | Bushing & plunger   |

\*Recommended Service Parts Inventory

### 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.

A list of Authorized Service Departments will be furnished upon request.