

# Model No. 83834 AIR OPERATED **GREASE PUMP** Series "D"

#### SPECIFICATIONS

#### SINGLE STROKE, AIR RETURN

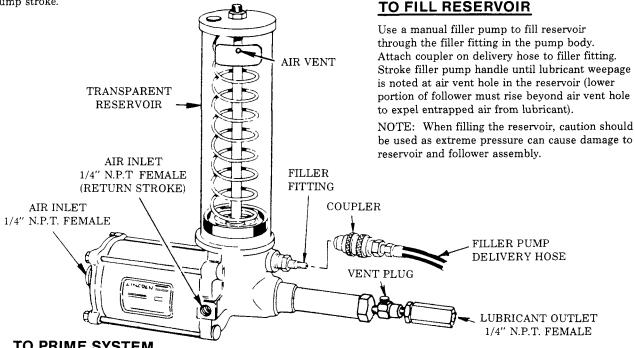
	Lubricant				Lubricant Operating Pressure (P.S.I.)			
Ratio	Output (cu. in.)	Reservoir Capacity	Air Inlet	Lubricant Outlet	Type of System	Minimum	Maximum	Recommended
25:1	*2.15	4 lb.	1/4" N.P.T.	1/4" N.P.T. Female	SL-1	1,850 With 75 P.S.I Air	3,500 With 140 P.S.I. Air	2,500 With 100 P.S.I. Air
25:1	2.10	ч IU.	Female		SL-32 SL-33	1,200 With 50 P.S.I. Air	3,500 With 140 P.S.I. Arr	1,500 With 60 P.S.I. Air

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

The 83834 Pump is used as the pumping unit for a centralized lubrication system having a single line circuit of SL-1, SL-32 or SL-33 Injectors. Dispenses grease up through N.L.G.I. No. 1.

It is an air operated single stroke pump requiring air for both forward and return stroke and discharges \*2.15 cu. in. of 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**

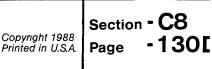
SUPPLY LINES: After pump reservoir has been filled with recommended lubricant, turn vent plug counter-clockwise one complete turn and operate pump until lubricant flows freely from opening in vent plug to expel air pockets trapped between the pump and the supply line connection. Tighten vent plug. Remove all plugs in dead ends of the injector manifolds and supply lines. Operate pump until lubricant flows from any plug opening. Close opening with plug. Continue operating pump until lubricant flows from another plug opening. Repeat this procedure until all supply lines are primed and plug openings closed.

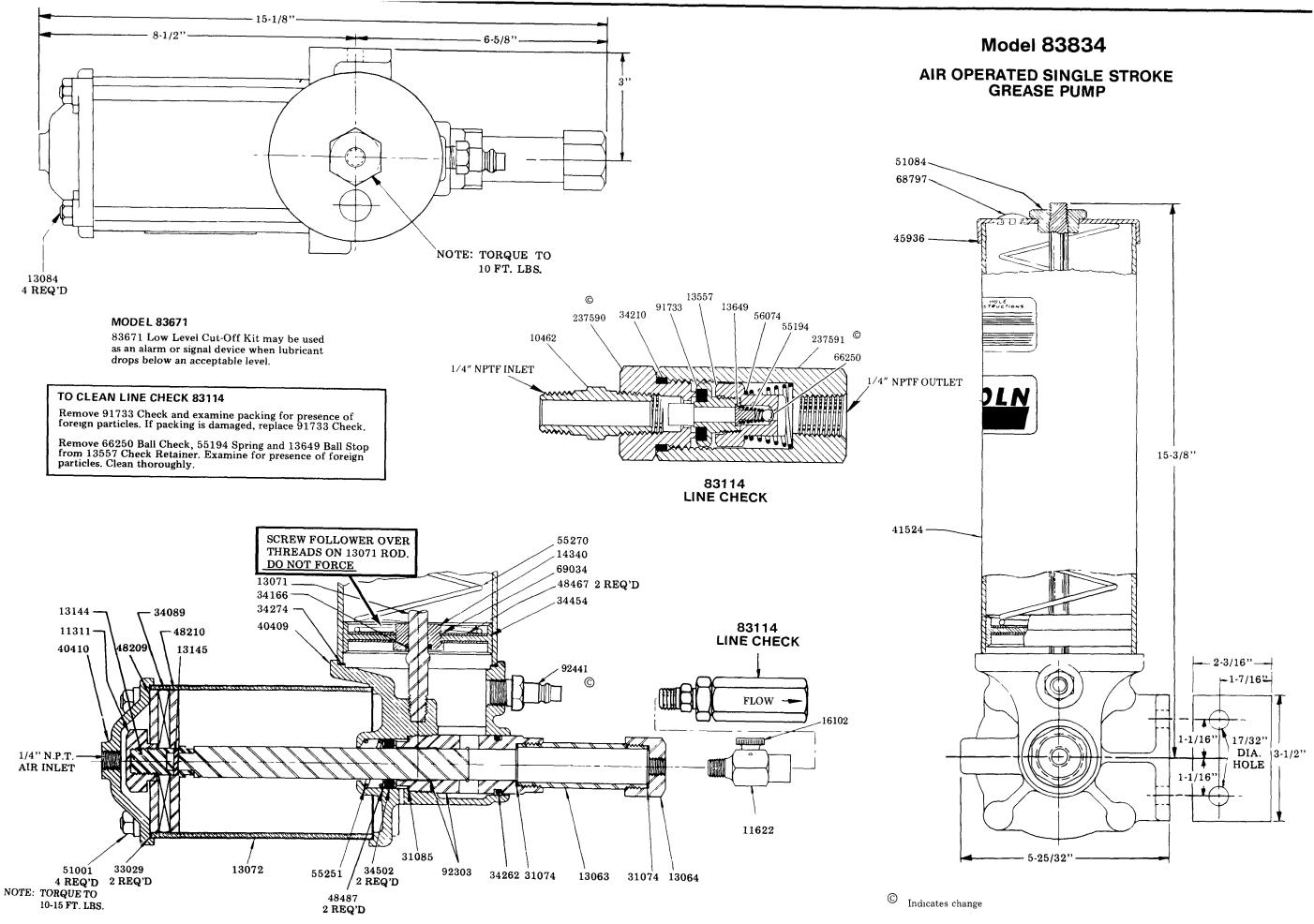
FEEDER LINES: Fill each feed line with lubricant before connecting lines to outlet of injectors and bearings. This will prevent having to cycle each injector for every inch of feed line between injector and bearing.

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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# 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

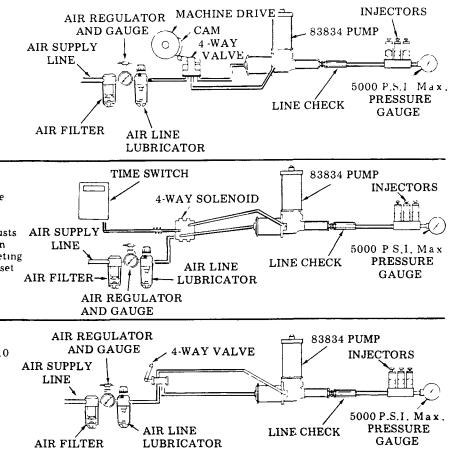
When using mechanical motion of machine to control lubrication frequency, four-way valve is engaged by cam permitting air to pass through valve to pump forcing air piston forward and lubricant through supply line to injectors. When valve is disengaged, air exhausts back through valve. Air also flows into return side of pump reversing air piston and completing lubrication cycle. Cam Dwell on four-way valves 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 for 84101, Time Switch, Section C8, Page 136 Series)

#### 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 the 66250 Check. Remove and clean. Failure of injectors to cycle can also be caused by a leak in supply lines. Examine supply lines and connections PUMP FAILS TO OPERATE - Check air supply

#### SERVICE PARTS

\*Recommended service parts inventory.

PART NO. DESCRIPTION		PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	
10462	Nipple	* 31074	Gasket	48467	Washer	
11311	Piston nut	<b>*</b> 31085	Gasket	48487	Washer	
11622	Outlet body	* 33029	Gasket	51001	Nut	
13063	Pump tube	<b>*</b> 34089	Packing	51084	Nut	
13064	Outlet	* 34166	O-ring	55194	Spring	
13071	Tie rod	* 34210	O-ring	55251	Spring	
13072	Air cylinder	* 34262	O-ring	55270	Spring	
13084	Tie rod	* 34274	Gasket	56074	Spring	
13144	Packing stud	* 34454	Follower packing	* 66250	Steel ball	
13145	Pin	34502	Packing	68797	Plug button	
13557	Check retainer	40409	Body casting	69034	Retaining ring	
13649	Ball stop	40410	Cylinder cap	83114	Line check assembly	
14340	Bushing	41524	Reservoir	* 91733	Check	
16102	Vent plug	45936	Cover cap	92303	Bushing & plunger	
237590	Check seat	48209	Washer	92441	Filler Fitting	
237591	Check body	48210	Washer			



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