Model Nos. 82573, 83550
AIR OPERATED OIL PUMP
Series "N"

SINGLE STROKE, AIR RETURN (WITH ELECTRIC CONTROLS)

SPECIFICATIONS

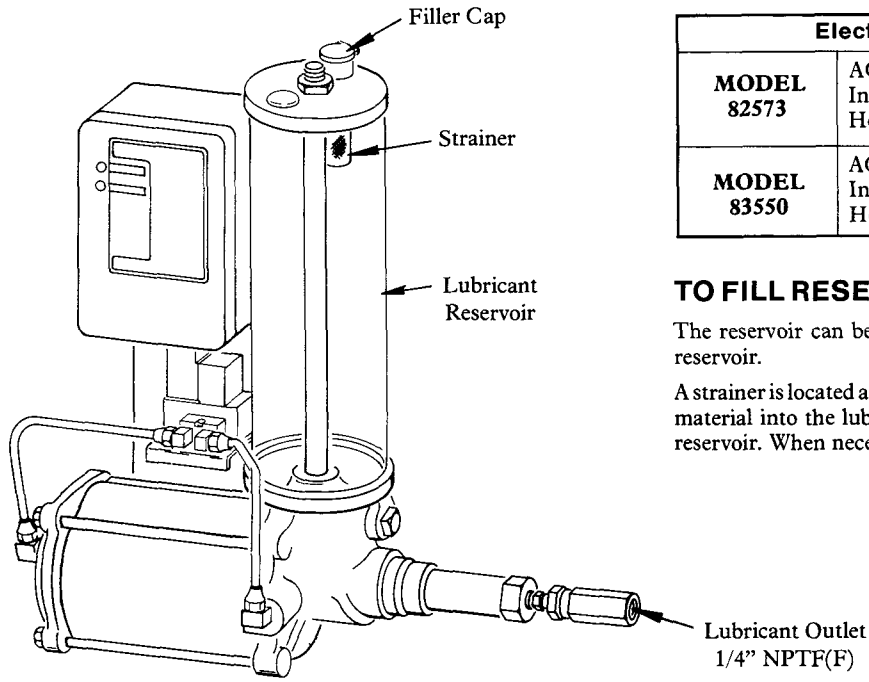
Ratio	Lubricant Output (Cu. In.)	Reservoir Capacity	Air Inlet	Lubricant Outlet	Lubricant Operating Pressure			
					Type of System	Minimum	Maximum	Recommended
20:1	2.4*	5 Pints	1/4" NPTF(F)	1/4" NPTF(F)	SL-42 SL-43 SL-41 SL-44	750 with 40 PSI Air	1,000 with 50 PSI Air	850 with 45 PSI Air

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

The pumping unit is for a centralized lubrication system having a single line circuit of SL-41 and/or SL-44, SL-42 and/or SL-43 Injectors dispensing oil.

It is an air operated single stroke pump requiring air for both forward and return stroke that discharges *2.4 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.



Electrical Power Requirements	
MODEL 82573	AC 120/60, 110/50 Inrush: 20 Volt-Amps (.167 Amps) Holding Current: 15 Volt-Amps (.125 Amps)
MODEL 83550	AC 240/60, 220/50 Inrush: 20 Volt-Amps (.083 Amps) Holding Current: 15 Volt-Amps (.063 Amps)

TO FILL RESERVOIR

The reservoir can be filled through the filler cap at the top of the reservoir.

A strainer is located at the filler cap to prevent the induction of foreign material into the lubricant reservoir. Inspect strainer before filling reservoir. When necessary, lift strainer out and clean thoroughly.

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	Solenoid Valve
82573	350244
83550	350245

FOR 84501 PROGRAM TIMER REFER TO SERVICE MANUAL SECTION C8, PAGE 222 SERIES.

MODELS 82573, 83550
AIR OPERATED SINGLE STROKE OIL PUMP
(WITH ELECTRIC CONTROLS)

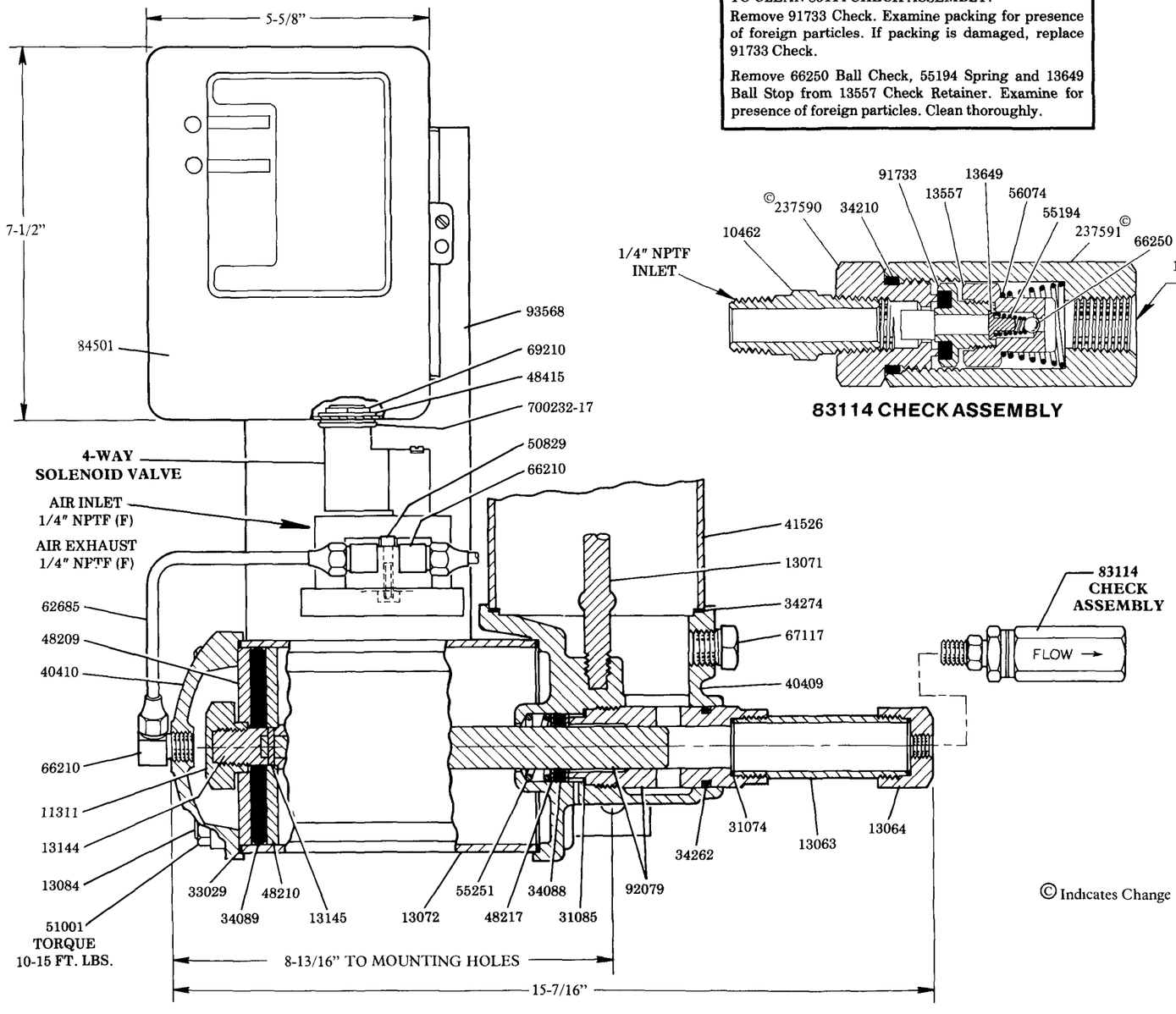
MODEL 83696 (Optional)

83696 Low Level Cut-Off Kit may be used as an alarm signal device when lubricant drops below an acceptable level.

TO CLEAN 83114 CHECK ASSEMBLY:

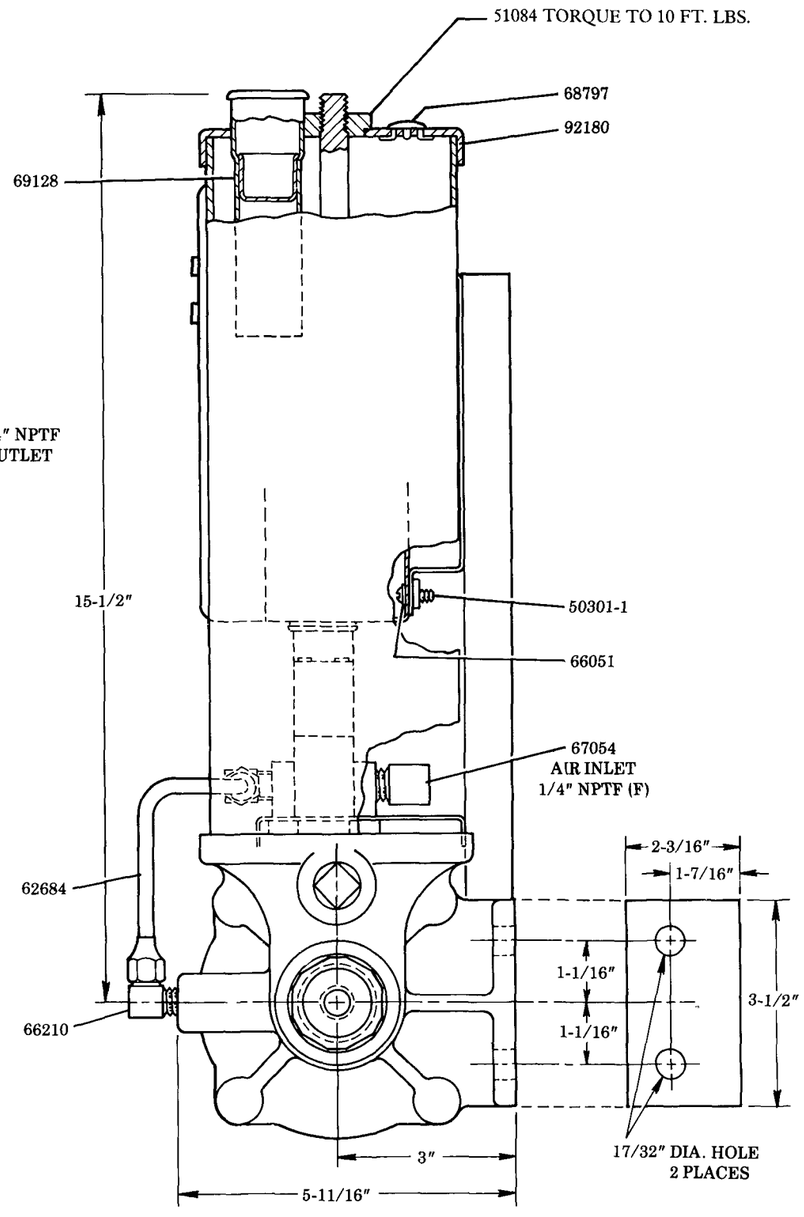
Remove 91733 Check. Examine packing for presence of foreign particles. If packing is damaged, replace 91733 Check.

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



83114 CHECK ASSEMBLY

© Indicates Change



OPERATION

The pre-determined lubrication cycle frequency is set on the adjustable program timer (Refer to Service Manual, Section C8, Page 222 Series for proper setting).

When a lubrication cycle is initiated either manually or by the timer, the air solenoid valve is energized and air is admitted to the pump. Lubricant is delivered to the injectors and the injectors discharge lubricant to bearings. When manual lube switch is released or timer times out, air is admitted to the opposite side of the pump air cylinder. As pump plunger returns to its retracted position, the lubricant pressure in the system is relieved, permitting the injectors to re-charge.

System is now ready for the next 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

Part	Qty.	Description	Part	Qty.	Description
10462	1	Nipple	50301-1	2	Screw
11311	1	Piston nut	50829	2	Screw
13063	1	Pump tube	51001	4	Nut
13064	1	Outlet	51084	1	Nut
13071	1	Tie rod	*55194	1	Spring
13072	1	Air cylinder	55251	1	Spring
13084	4	Tie rod	*56074	1	Spring
13144	1	Packing stud	62684	1	Copper tube
13145	1	Pin	62685	1	Copper tube
13557	1	Check retainer	66051	2	Lockwasher
13649	1	Ball stop	66210	4	Tube fitting
* 31074	2	Gasket	* 66250	1	Ball
* 31085	1	Gasket	67054	1	Elbow
* 33029	2	Gasket	67117	1	Pipe plug
* 34088	1	Packing	68797	1	Plug button
* 34089	1	Packing	69128	1	Strainer
* 34210	1	O-ring	69210	1	Chase nipple
* 34262	1	O-ring	83114	1	Check assembly
* 34274	1	Gasket	84501	1	Program timer
40409	1	Body casting	* 91733	1	Check
40410	1	Cylinder cap	92079	1	Bushing & plunger
41526	1	Reservoir assembly	92180	1	Cover cap
48209	1	Washer	93568	1	Support
48210	1	Washer	237590	1	Check seat
48217	2	Washer	237591	1	Check body
48415	1	Washer	700232-17	1	Gasket

* 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.