

# Model No. 83800 AIR OPERATED GREASE PUMP Series "G"

## SINGLE STROKE, AIR RETURN (WITH ELECTRIC CONTROLS)

RATIO	LUBRICANT OUTPUT (cu. in.)	RESERVOIR CAPACITY	AIR INLET	LUBRICANT OUTLET	LUBRICANT OPERATING PRESSURE			
					TYPE OF SYSTEM	MINIMUM	ΜΑΧΙΜυΜ	RECOM- MENDED
25:1	2.14*	4 LB. (120 cu. in.)	1/4" NPTF(F)	1/4" NPTF(F)	SL-1	1,850 With 60 PSI Air	3,550 With 100 PSI Air	2,500 With 82 PSI Air
					SL-32 SL-33	1,200 With 40 PSI Air	3,550 With 100 PSI Air	1,500 With 50 PSI Air

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

Air Vent

Lubricant

Reservoir

Coupler

Vent Plug

Filler

Fitting

The pumping unit is for a centralized lubrication system having a single line circuit of SL-1 and/or SL-32, SL-33 or Injectors. It 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 that 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.

#### **Electrical Power Requirements**

AC 120/60, 110/50 Inrush: 20 Volt-Amps (.167 Amps) Holding Current: 15 Volt-Amps (.125 Amps)

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



Filler Pump Delivery Hose - Lubricant Outlet 1/4" NPTF(F)

Use a Manual Filler Pump 81834 to fill reservoir through the filler fitting in the pump body. Attach coupler on delivery hose to filler fitting. Stroke filler pump handle until lubricant weepage is noted at air vent hole in the reservoir (lower portion of follower must rise beyond air vent hole to expel entrapped air from lubricant).

NOTE: When filling the reservoir, caution should be used, as extreme pressure can cause damage to reservoir and follower assembly.

## TO PRIME SYSTEM

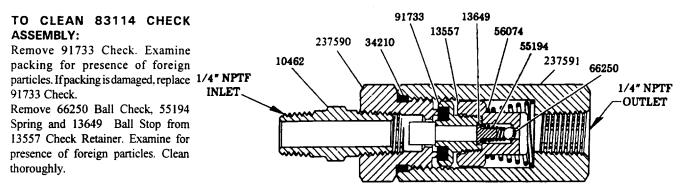
Supply Lines: After pump reservoir has been filled with recommended lubricant, turn vent plug counterclockwise one complete turn and operate pump until lubricant flows freely from opening in vent plug to expel air pockets trapped between the pump and the supply line connection. Tighten vent plug. Remove 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. Contiue operating pump until lubricant flows from another plug opening. Repeat this procedure until all suppluy 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 to fill line between injector and bearing.

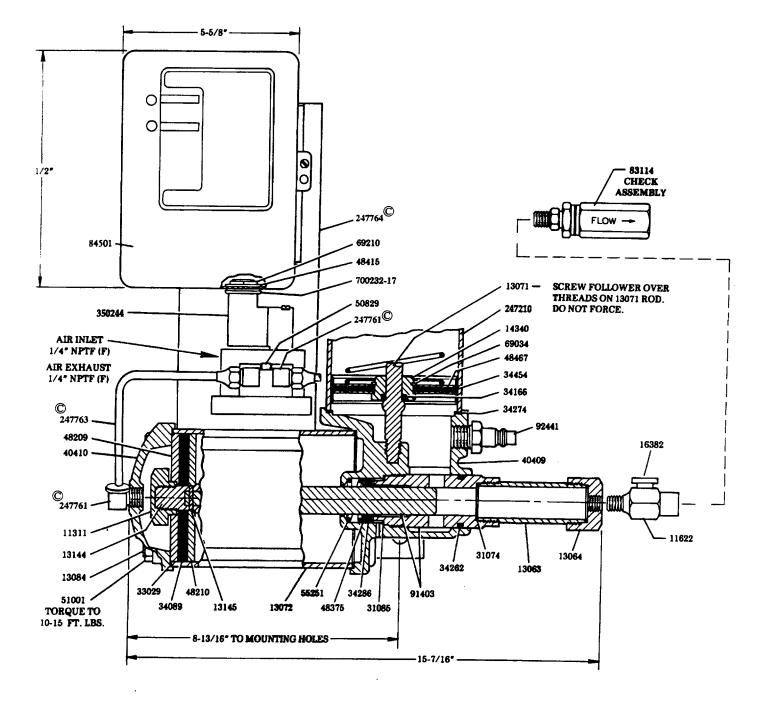
Injectors: check each individual injector for proper operation. Injector stem moves when injector discharges lubricant to bearing. This may require cycling system several times. After checking injectors for operation, adjust injectors for the volume required for each bearing.



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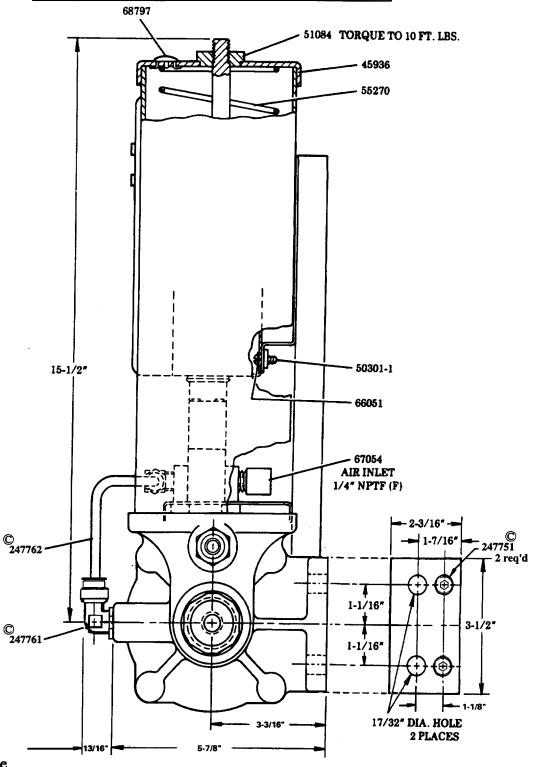
83114 CHECK ASSEMBLY



# MODEL 82800 AIR OPERATED SINGLE STROKE OIL PUMP (WITH ELECTRIC CONTROLS)

## Model 83671 (Optional)

83671 Low Level Cut-Off Kit may be used as an alarm signal device when lubricant drops below an acceptable level.



#### 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 recharge.

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.

10462 11311 11622 13063 13064 13071 13072 13084 13144 13145 13557 13649 14340	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Nipple Piston nut Body Pump tube Outlet Tie Rod Air cylinder Tie Rod	48467 50301-1 50829 51001 51084 *55194 55251	1 2 2 4 1	Washer Screw Screw Nut Nut
11622 13063 13064 13071 13072 13084 13144 13145 13557 13649 14340	1 1 1 1 1 1 1	Body Pump tube Outlet Tie Rod Air cylinder Tie Rod	50829 51001 51084 *55194 55251	2 4 1	Screw Nut Nut
13063 13064 13071 13072 13084 13144 13145 13557 13649 14340	1 1 1 1 1 1	Pump tube Outlet Tie Rod Air cylinder Tie Rod	51001 51084 *55194 55251	4	Nut Nut
13064 13071 13072 13084 13144 13145 13557 13649 14340	1 1 1 1 1	Outlet Tie Rod Air cylinder Tie Rod	51084 *55194 55251	1	Nut
13071 13072 13084 13144 13145 13557 13649 14340	1 1 1 1 1	Tie Rod Air cylinder Tie Rod	*55194 55251	1 ·	
13072 13084 13144 13145 13557 13649 14340	1 1 1 1	Air cylinder Tie Rod	55251	1	
13084 13144 13145 13557 13649 14340	1 1 1	Tie Rod			Spring
13144 13145 13557 13649 14340	1			1	Spring
13145 13557 13649 14340	1		55270	1	Spring
13557 13649 14340	•	Packing Stud	*56074	1	Spring
13649 14340	1	Pin	*66051	2	Lockwasher
14340	1	Check retainer	*66250	1	Steel ball
	1	Ball Stop	67054	1	Elbow
	1	Bushing	68797	1	Plug button
16382	1	Vent plug	69034	1	Retaining ring
*31074	2	Gasket	69210	1	Chase nipple
*31085	1	Gasket	83114	1	Check assembly
*33029	2	Gasket	84501	1	Program timer
*34089	1	Packing (Nitrile)	*91733	1	Check
*34166	1	O-ring (Nitrile)	92303	1	Bushing & plunger
*34210	1	O-ring (Nitrile)	92441	1	Filler fitting
*34262	1	O-ring (Nitrile)	237590	1	Check seat
*34274	1	Gasket (Neoprene)	237591	1	Check body
*34286	1	Gland (Nitrile)	247210	1	Reservoir assembly (Acrylic)
*34454	1	Follower Packing (Nitrile)	247751	2	Screw
40409	1	Body casting	247761	4	Tube fitting
40410	1	Cylinder cap	247762	1	Tubing (Polyurethane)
45936	1	Cover cap	247763	1	Tubing (Polyurethane)
48209	1	Washer	247764	1	Support
48210	1	Washer	350244	1	Solenoid
48415	1	Washer	700232-17	1	Gasket

### SERVICE PARTS

\*Recommended Service Parts Inventory

© Indicates Change

### 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.