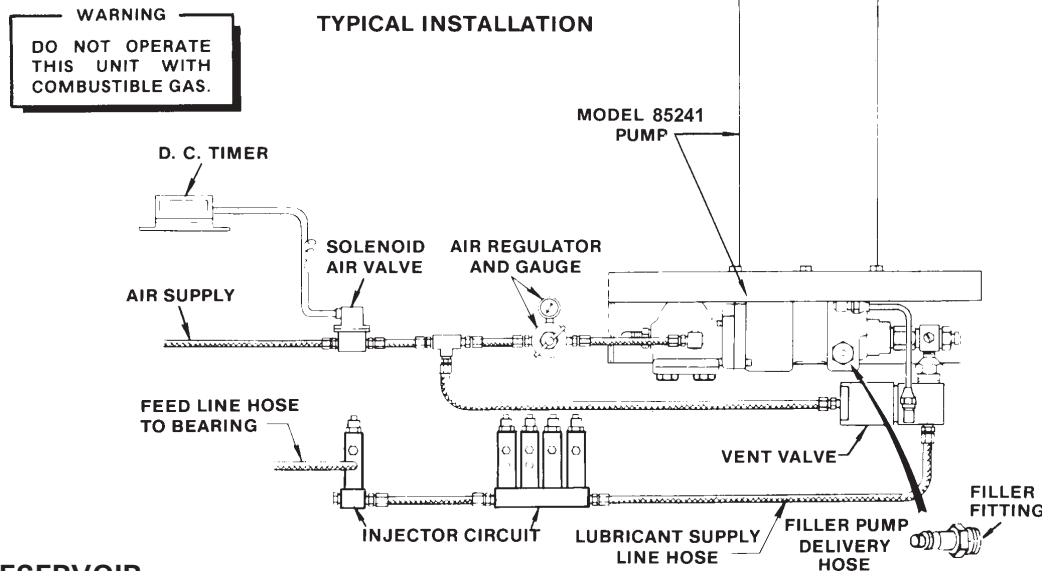


SPECIFICATIONS

FOR OFF-HIGHWAY MINING TRUCKS

Ratio	Lubricant Output (cu. in.)		Reservoir Capacity	Air Inlet	Lube Outlet	Lubricant Operating Pressure (PSI)			
	Per Cycle	Per Min @100 PSI				Type of System	Minimum	Maximum	Recommended
40:1	*.11	12	12 lbs.	1/4" NPTF	3/4" NPTF	SL-1	1850	3500	2500
						SL-11			
						SL-32 SL-33	1200	3500	1500

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



WARNING
DO NOT OPERATE THIS UNIT WITH COMBUSTIBLE GAS.

TYPICAL INSTALLATION

TO FILL RESERVOIR

Use a manual filler pump to fill reservoir through the filler fitting in the pump body. Attach coupler on delivery hose to filler fitting. Stroke 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).

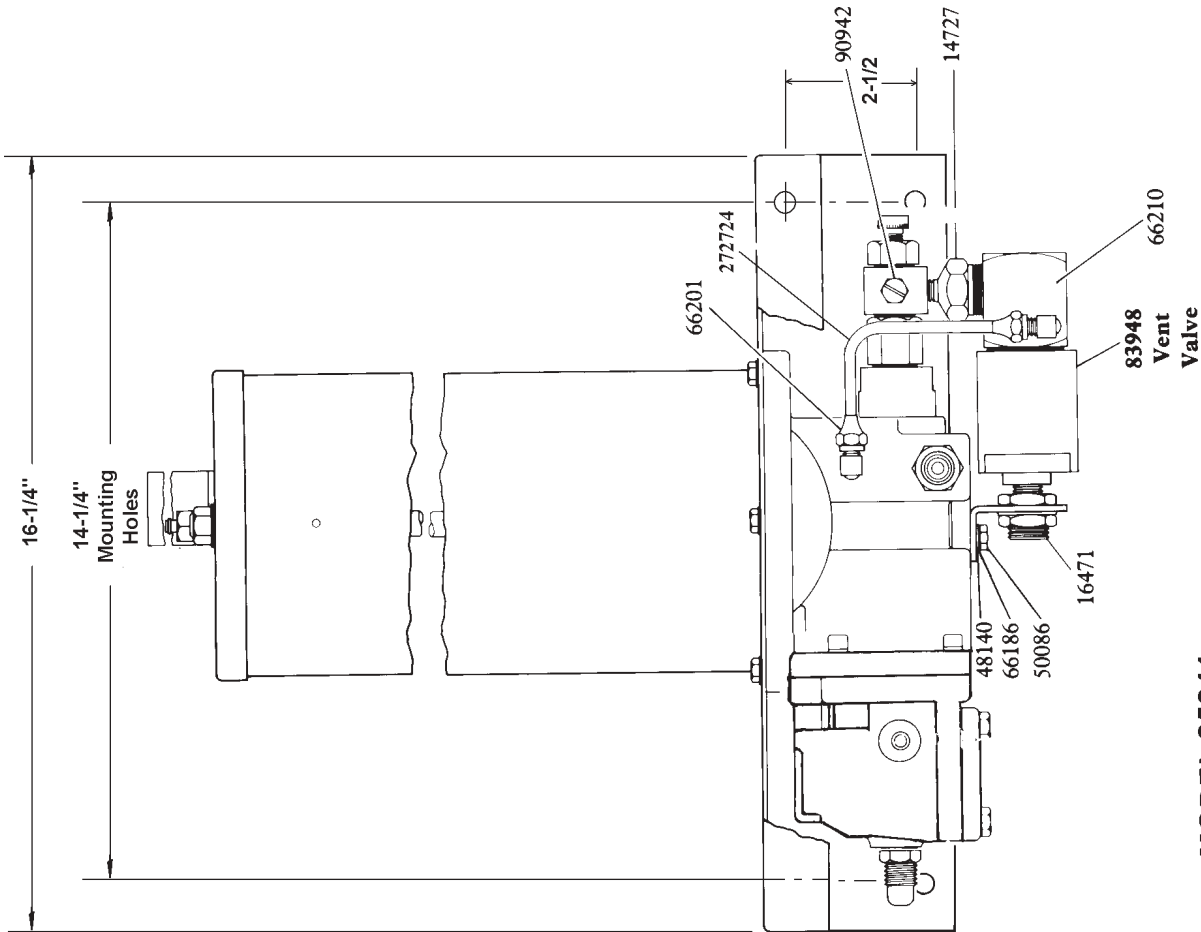
NOTE: When filling the reservoir, caution should be used as extreme pressure can cause damage to reservoir and follower assembly.

OPERATION

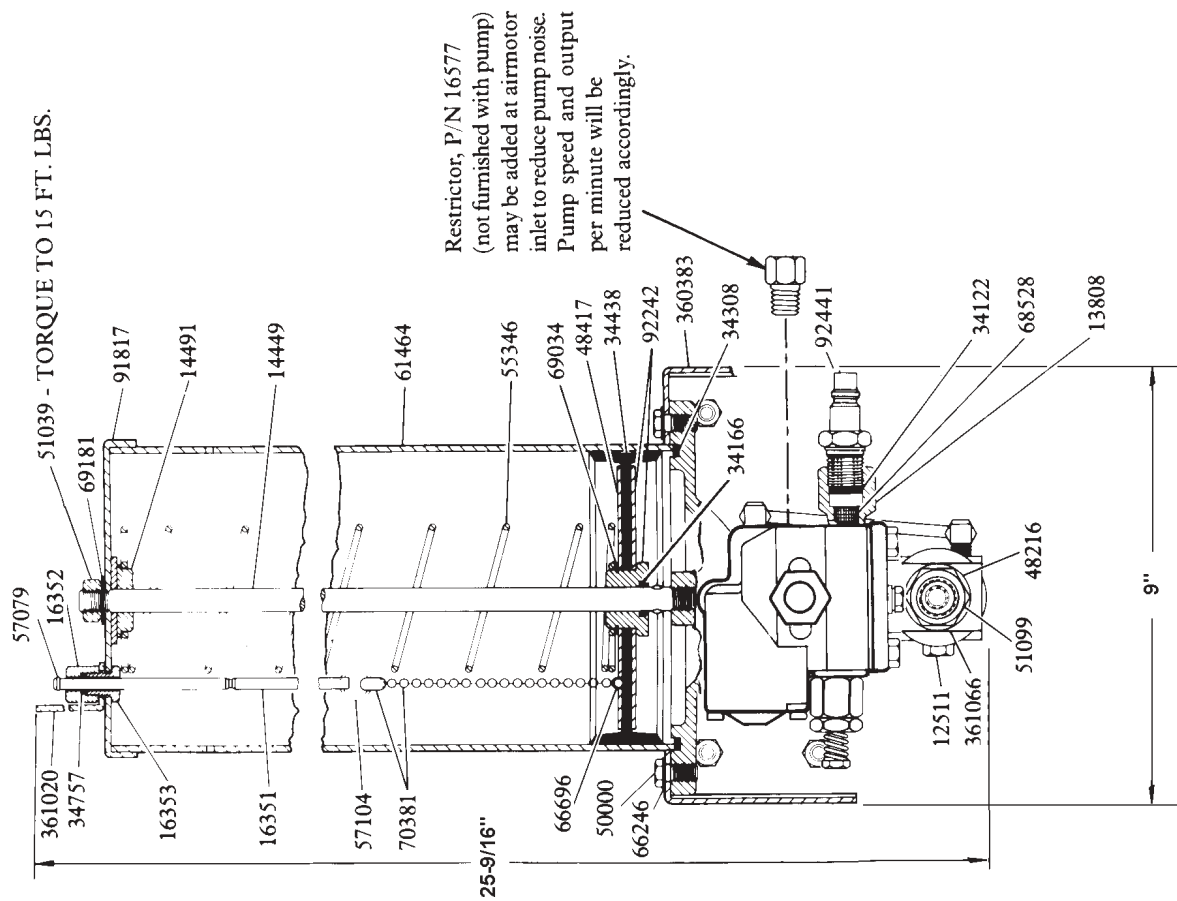
The operation of the 83599 Pump is fully automatic, controlled by a 12 or 24 volt D.C. electric timer and electric operated solenoid air valve. As the truck operates, the timer periodically turns on a switch which energizes the solenoid air valve. The solenoid air valve opens, and admits regulated air to the Centro-matic Pump, closing the vent valve. The pump begins to operate, delivering lubricant through the supply lines to each lubricant injector.

As the pump builds up pressure, a measured amount of lubricant is dispensed to the bearings by each injector. After all injectors have cycled, lubricant pressure rises rapidly to 2400 psi with air regulated to 60 psi, and the pump stalls against pressure.

The timer switch contact is broken, and the solenoid air valve is de-energized, shutting off the air supply; air then exhausts from the pump and vent valve assembly. As air is relieved, the vent valve opens and lubricant pressure in the system vents back through the supply line to the lubricant reservoir. The injectors reload, and the system is ready for the next lubrication cycle.



**MODEL 85241
AIR OPERATED
GREASE PUMP**



TOPRIME SYSTEM

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

INJECTORS: Check each individual injector for proper operation.

VENT VALVE: The 83948 Vent Valve is operated by compressed air from the same source as that which operates the pump. When pump is in operation, air pressure keeps the vent valve closed and lubricant is directed through the outlet and to the injectors. When air to the pump is shut off, vent valve opens and the supply line pressure vents back into the reservoir.

SAFETY UNLOADER: The 90942 Safety Unloader is provided at the pump outlet to prevent the build up of dangerously high lubricant pressure in the system. It is factory set to open at approximately 3,750 to 4,250 psi.

NOTE: Safety unloader requires no adjustment and should not be tampered with.

SERVICE PARTS

Part	Qty.	Description	Part	Qty.	Description	Part	Qty.	Description
#*10061	1	Pump check disc	*34122	1	Check disc packing	66246	6	Lockwasher
10127	1	Plug	*34158	1	Gasket	66696	1	Sleeve
11470	1	Cap	*34165	1	O-ring (Nitrile)	68528	1	Strainer
#*11471	1	Trip rod collar	*34166	1	O-ring (Nitrile)	69034	1	Snap ring
#*11472	1	Trip rod pin	*34229	1	Packing (Nitrile)	69181	1	Lockwasher
#*11475	1	Trip shoe	*34308	1	Gasket (Nitrile)	70381	1	Bead chain
11904	1	Packing nut	#*34314	1	O-ring (Nitrile)	#*83063	1	Valve slide seat & gasket
11905	1	Packing cap	34438	1	Follower (Nitrile)	83948	1	Vent valve assembly
#*11947	1	Trip sleeve	*34757	1	O-ring (Nitrile)	84508	1	Bushing, plunger & o-ring
12093	1	Check housing	#38162	1	Valve gasket (Nitrile)	#*90770	1	Trip rod
12094	1	Air piston bolt	40821	1	Base casting	*90942	1	Safety unloader
12095	1	Outlet body	#45605	1	Valve guide plate	#*91331	1	Toggle plate
12096	1	Outlet block	48140	1	Washer	*91817	1	Reservoir cap
12511	2	Pipe plug	48212	2	Washer	92242	1	Bushing & washer ass'y.
12834	1	Spring retainer	48216	1	Washer	92441	1	Filler fitting
13808	1	Adapter	48237	1	Washer	236286	1	Cover
14449	1	Tie rod	48417	1	Follower washer	236615	1	Muffler cover
14491	1	Retainer washer	50000	6	Screw	#*236616	1	Gasket
14720	1	Air cylinder	50086	1	Bolt	236833	1	Muffler
*14721	1	Piston	50521	4	Screw	#236835	1	Packing
*14722	1	Needle	51039	1	Nut	236868	4	Screw
*14723	1	Valve seat	51099	1	Nut	*236869	6	Screw
14727	1	Reducer nipple	55138	4	Spring	236870	4	Valve seat bolt
16351	1	Indicator rod	*55231	1	Spring	237562	1	Air valve casting
16352	1	Indicator nut	55346	1	Follower spring	239330	1	Packing assembly
16353	1	Indicator plug	*56003	1	Spring	239336	1	Valve body
16471	1	Support adapter	*56038	2	Spring	#*244313	1	Seat
*30003	1	Gasket	57079	1	Ring	#*244359	1	O-ring (Nitrile)
#*31007	2	Gasket	57104	1	Ring	#*245425	1	Trip rod packing nut
*31047	2	Gasket	61464	1	Reservoir	246816	1	Gasket
*31054	1	Gasket	*66002	1	Steel ball	#247611	1	Gasket (Nitrile coated fiber)
*31056	1	Gasket	*66010	2	Steel ball	©272724	1	Steel tubing
#*33039	1	Gasket	66186	1	Lockwasher	360383	1	Base
*34090	1	Packing (Nitrile)	66201	1	Tube connector	361020	1	Indicator bracket
*34110	1	Packing (Nitrile)	66210	1	Tube connector	361066	1	Bracket

*Recommended Service Parts Inventory. #Included in 246415 Repair Kit.

© 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.