Model 1810
MANUAL CENTRO-LUBER, GREASE PUMP
Series "G"

DESCRIPTION

The 1810 Centro-Luber is a manually operated multiple stroke grease pump for use on machines where periodic manual lubrication is acceptable. It is used as the pumping unit for a centralized lubrication system having a single line circuit of Series SL-1, SL-32, or SL-33 Injectors. Injectors can be used in combination where bearing sizes or lubricant requirements indicate such a combination advantageous and most efficient.

Pump dispenses grease up through NLGI #1 and discharges an established amount (*.160 cu. in.) into the circuit for each full stroke of the pump handle. A built-in cycle indicator in the pump shows completion of the lubrication cycle.

*Based on lubricants that are free of entrapped air. Lubricants that are specifically aerated will reduce output of pump. Model 1810 has a spring loaded follower in the reservoir and is filled with a filler pump through a filler fitting.

SPECIFICATIONS

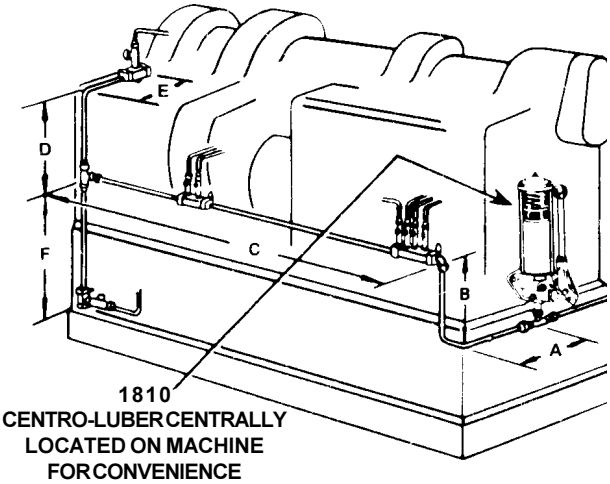
**Pressure indicator of pump set at factory.

LUBRICANT OUPUT	RESERVOIR CAPACITY	LUBRICANT OUTLET	LUBRICANT OPERATING PRESSURE (PSI)			
			INJECTOR SYSTEM	MINIUM	MAXIMUM	RECOMMENDED
* .160 cu in. per stroke	5 lb. (150 cu. in.)	1/4" NPTF Female	SL-1	1,850	3,500	2,500**
			SL-32 SL-33	1,200	3,500	2,500**

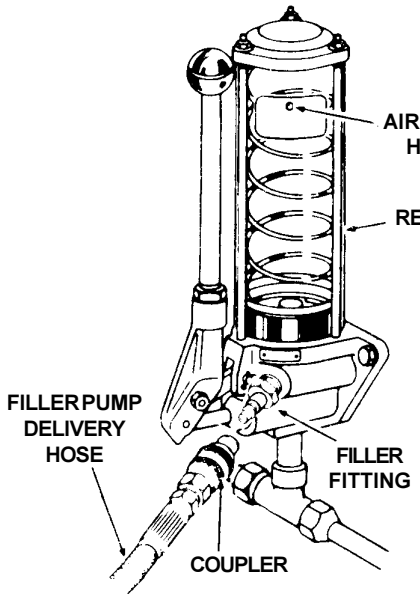
SUPPLY LINE SPECIFICATIONS

SEAMLESS STEEL TUBE SIZE	MAXIMUM LENGTH OF SUPPLY LINE GREASE	
	NLGI #0	NLGI #1
3/8" O.D. x .028" Wall	50 Ft.	25 Ft.

A + B + C + D + E + F must not exceed maximum supply line length shown above.



1810 CENTRO-LUBER CENTRALLY LOCATED ON MACHINE FOR CONVENIENCE OF FILLING AND OPERATION



TO FILL MODEL 1810 WITH FILLER PUMP

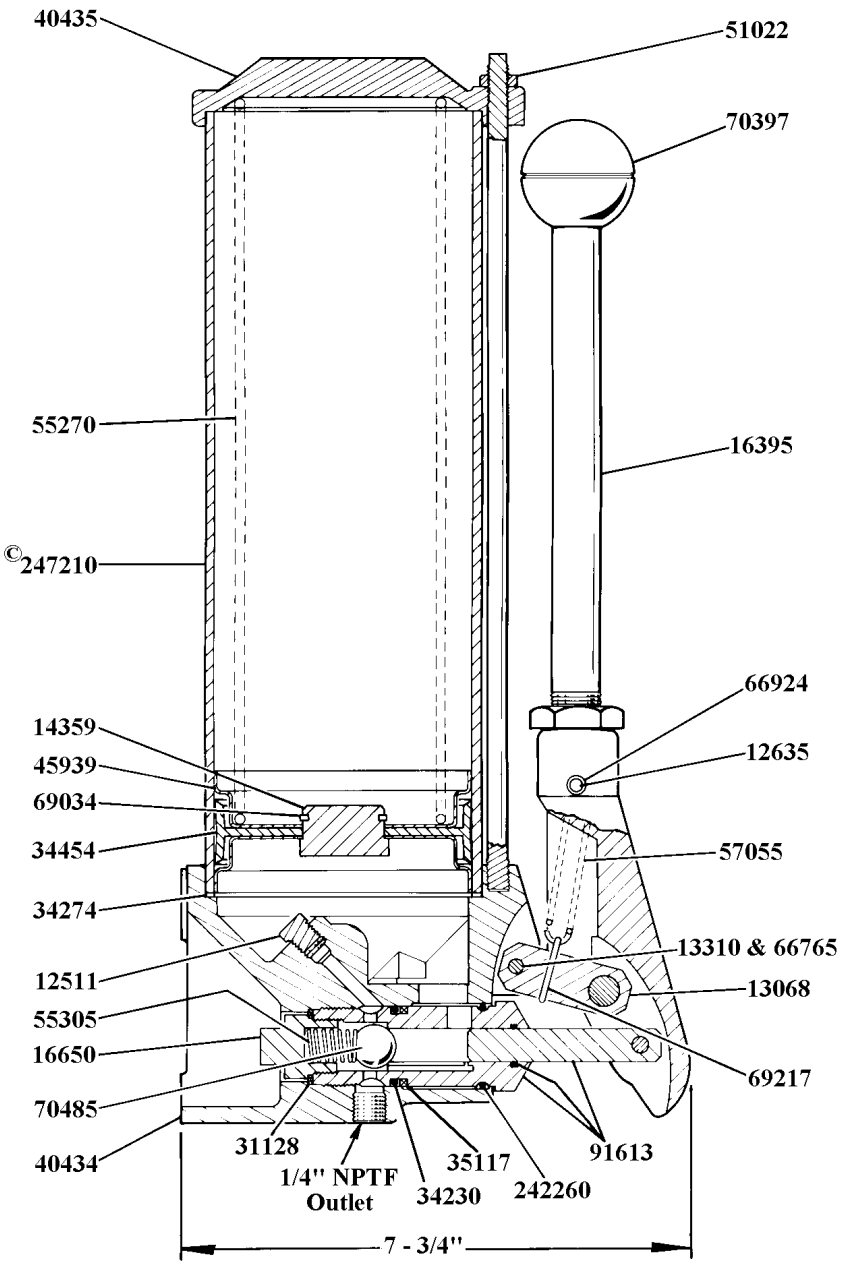
1) Use a manual filler pump to fill reservoir through the filler fitting in the pump body. Attach coupler on delivery hose to filler fitting. Stroke filler pump handle until lubricant weepage is noted at air vent hole in the reservoir (lower portion of follower must rise beyond air vent hole to expel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

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

2) A strainer is behind the filler fitting to prevent foreign material from entering the reservoir. Remove filler fitting to inspect and clean strainer periodically.

Assembly Note:

Loosely install 16650 and 31128 onto 91613. Then install 91613 into 40434 and tighten to 75 ft-lbs. Tighten 16650 to 60 ft-lbs.



© **Indicates change**

TO PRIME SYSTEM

SUPPLY LINES

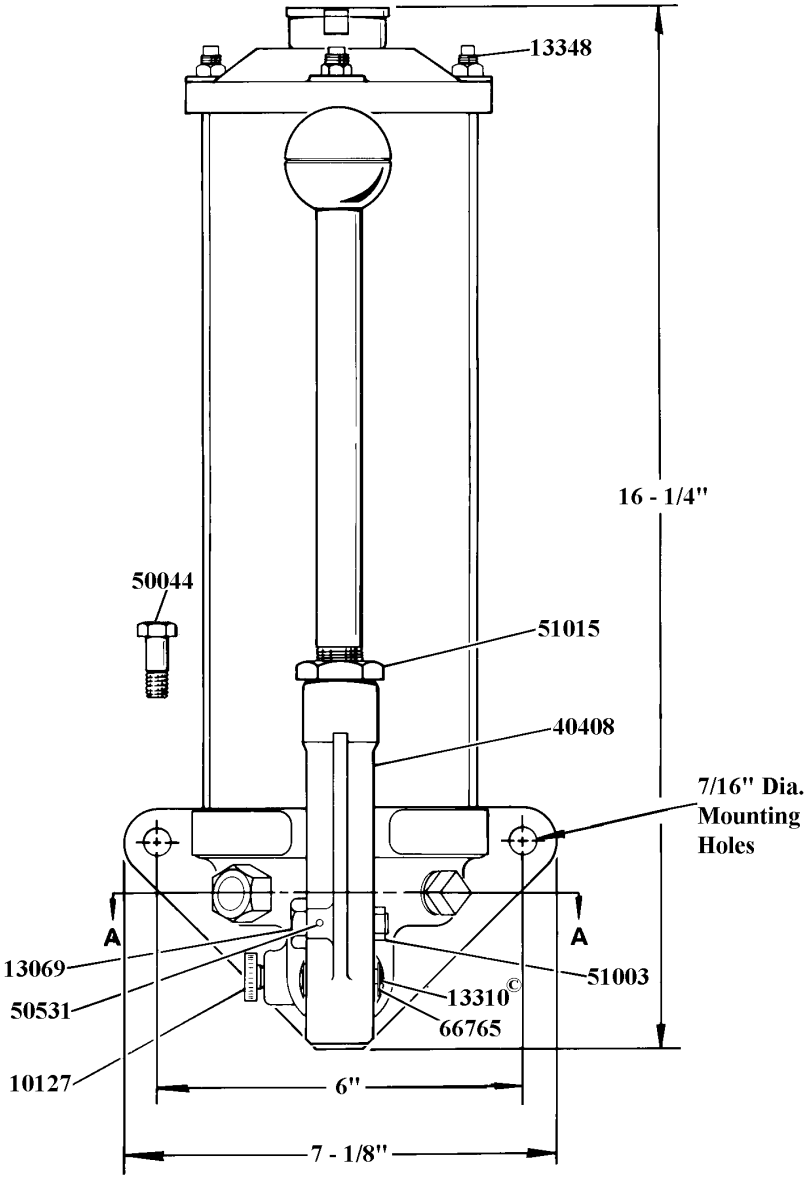
After pump reservoir has been filled with recommended lubricant, turn vent plug counterclockwise one complete turn and operate pump until lubricant flows freely from opening in vent plug to expel air pockets trapped between the pump and the supply line connection. Tighten vent plug. Remove all plugs in dead ends of the injector manifolds and supply lines. Operate pump until lubricant flows from any plug opening. Close opening with plug. 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

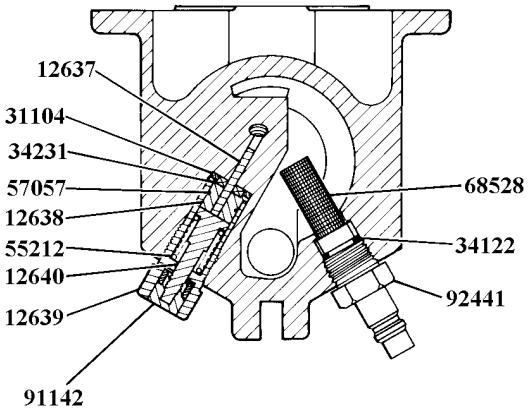
Fill each feed line with lubricant before connecting lines to outlet of injectors and bearings. This will prevent having to cycle each injector for every inch of feed line between injector and bearing.

INJECTORS

Check each 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 individual bearing.



SECTION A - A



SERVICE PARTS

PART	QTY.	DESCRIPTION
10127	1	Vent plug
12511	1	Pipe plug
12635	1	Pin
12637	1	Indicator extension
12638	1	Packing retainer
12639	1	Spring housing
12640	1	Indicator pin
13068	1	Toggle
13069	1	Eccentric cam
13310	1	Pin
13348	3	Tie rod
14359	1	Bushing
16395	1	Handle
16650*	1	Check stop
31104*	1	Gasket
31128*	1	Gasket
34122*	1	Packing (Nitrile)
34230*	1	O-ring (Nitrile)
34231*	1	Packing (Nitrile)
34274*	1	Gasket (Neoprene)
35117*	1	Packing (Nitrile)
40408	1	Handle casting
40434	1	Pump body casting
40435	1	Cover
45939	2	Follower guide
50044	2	Screw
50531	1	Set screw
51003	1	Jam nut
51015	1	Jam nut
51022	3	Nut
55305*	2	Spring
57055	1	Spring
57057	1	Snap ring
66765	4	Retaining ring
66924	2	Retaining ring
69217	1	Cotter pin
70397	1	Knob
70485*	1	Ball
91142	1	Indicator assembly
91613	1	Bushing &plunger assembly
242260*	1	O-ring (Nitrile)
247210	1	Reservoir assembly (Acrylic)

*** Recommended service parts inventory**

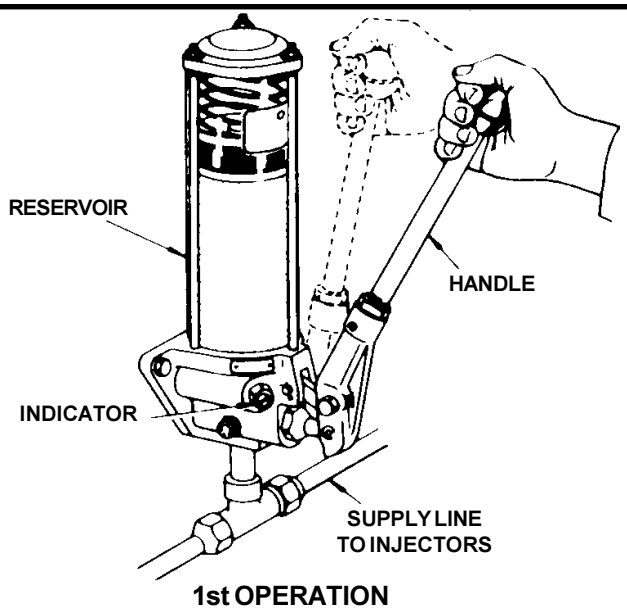
OPERATION

The Centro-Luber System lubrication cycle consists of two operations:

1st OPERATION

The outward stroke of the handle forces lubricant into the supply line. As handle is operated, lubricant pressure is built up until it reaches 2,500 PSI. When this pressure is reached, the indicator will move out to its extended position exposing a red ring on the indicator stem. This indicates that the necessary pressure needed to operate the system has been reached and operation of pump handle is no longer required.

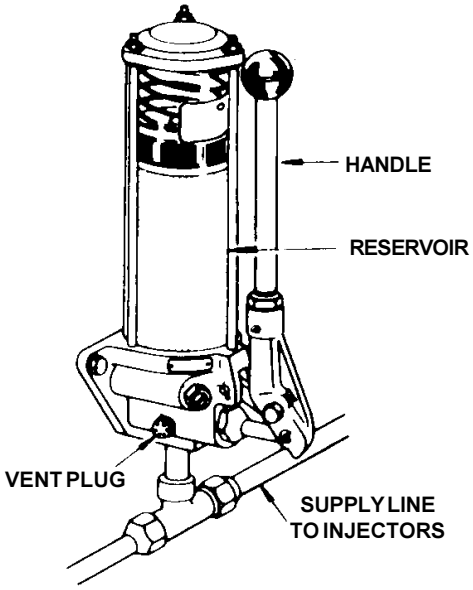
Lubricant pressure built up in the supply line operates the injectors which dispense a measured amount of lubricant into the bearing.



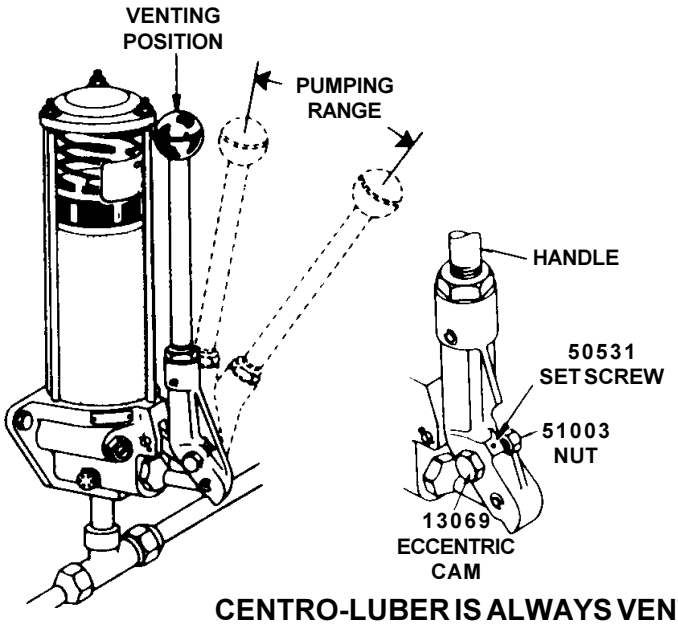
1st OPERATION

2nd OPERATION

Release handle and return it to its normal position against the reservoir. When handle is in this position lubricant pressure in the system vents back into the reservoir. handle must be released for pump to vent. Operator's hand, gripping the handle, prevents the pump from venting between strokes. Injectors re-charge for next lubrication cycle.



2nd OPERATION



CENTRO-LUBER IS ALWAYS VENTED EXCEPT DURING PUMPING PERIOD

To adjust Vent Position of Handle loosen the 50531 Set Screw. Then unthread the 51003 Nut approximately one full turn. The 13069 Eccentric Cam can then be moved to the desired vent postion. Re-tighten nut and set screw.

NOTE: It may be necessary to try several positions of eccentric cam before desired venting adjustment is obtained.

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.