

CENTRO-LUBERS

MANUALLY OPERATED GREASE PUMP

Models 1810, 1811

Series "G"

DESCRIPTION

The 1810 and 1811 Centro-Lubers are manually operated multiple stroke grease pumps for use on machines where periodic manual lubrication is acceptable. They are 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. Model 1811 is the same as the 1810 except it has a weighted follower connected to the reservoir cover with a chain to permit removal for manual filling.

SPECIFICATIONS

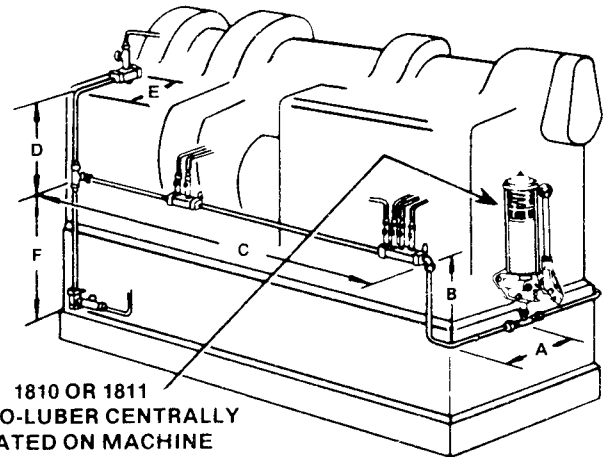
**Pressure indicator of pump set at factory

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

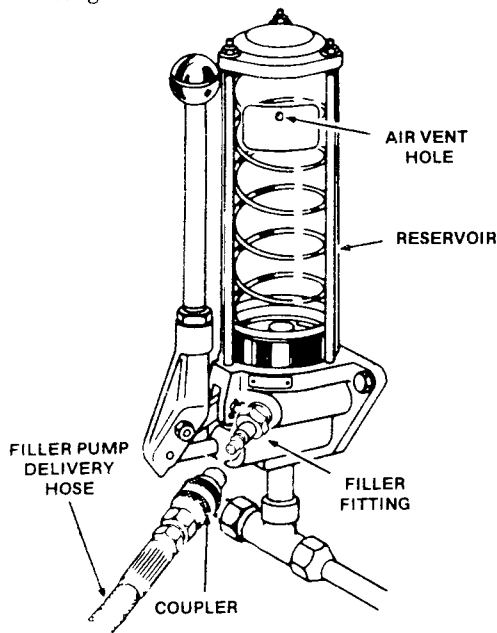
SUPPLY LINE SPECIFICATIONS

| SEAMLESS STEEL TUBE SIZE | MAXIMUM LENGTH OF SUPPLY LINE GREASE | |
|--------------------------|--------------------------------------|---------|
| | NLGI #0 | NLGI #1 |
| 1/4" O.D. x .028" Wall | 15 Ft. | — |
| 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 OR 1811
CENTRO-LUBER CENTRALLY
LOCATED ON MACHINE
FOR CONVENIENCE
OF FILLING AND
OPERATING

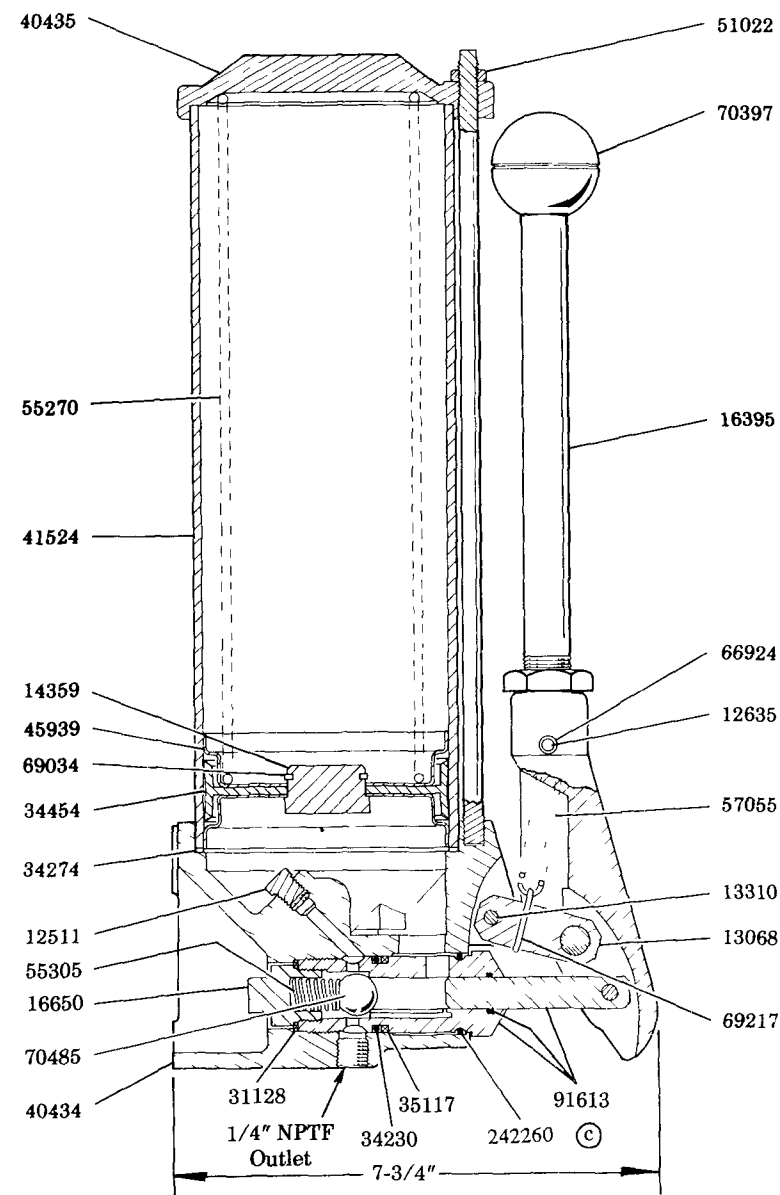


TO FILL MODEL 1810 WITH FILLER PUMP

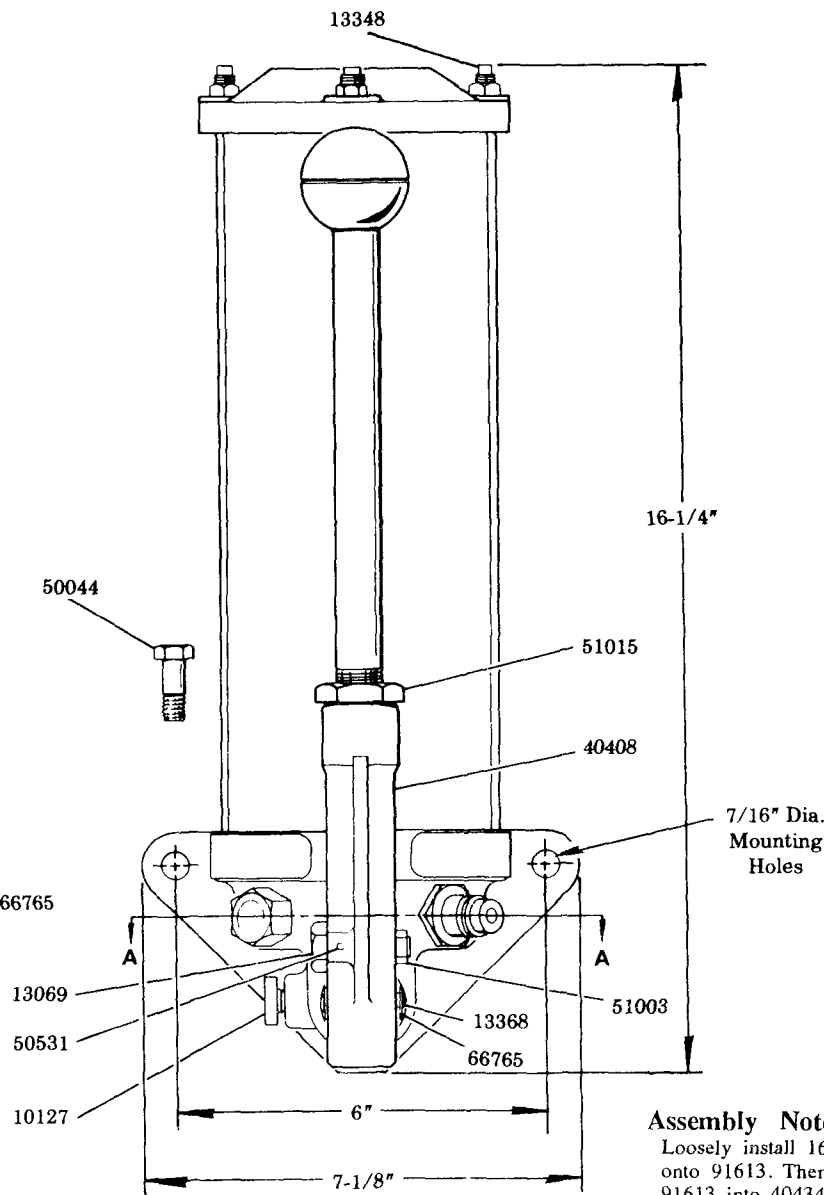
- 1) Use a manual filler pump to fill reservoir through the filler fitting in the pump body. Attach coupler on delivery hose to filler fitting. Stroke filler pump handle until lubricant weepage is noted at air vent hole in the reservoir (lower portion of follower must rise beyond air vent hole to expel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

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

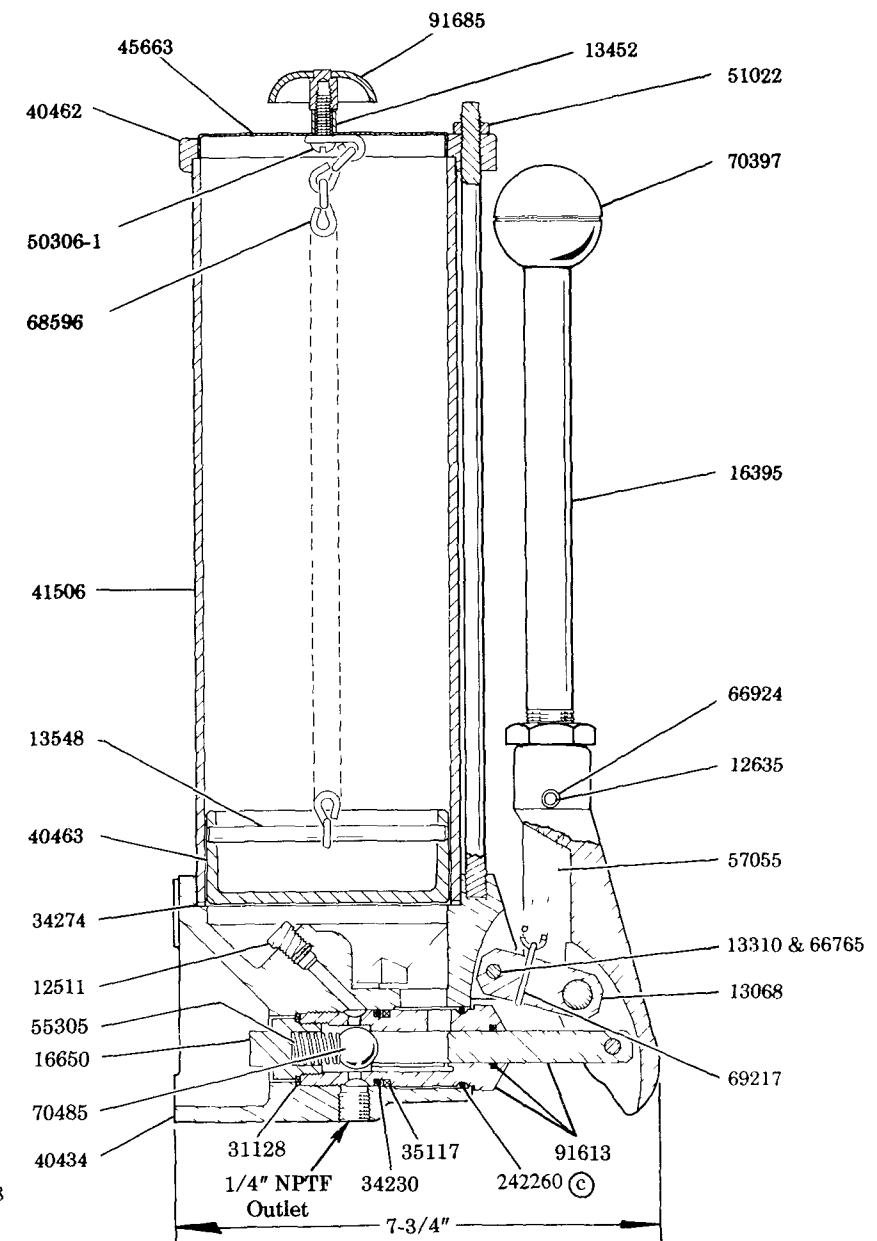
- 2) A strainer is behind the filler fitting to prevent foreign material from entering the reservoir. Remove filler fitting to inspect and clean strainer periodically.



MODEL 1810



PARTS COMMON TO BOTH MODELS



MODEL 1811

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 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.

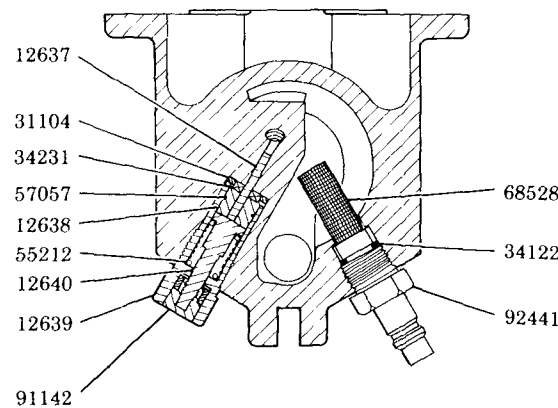
FEEDER LINES

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 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 | QUAN. | DESCRIPTION | PART | QUAN. | DESCRIPTION | PART | QUAN. | DESCRIPTION |
|--------|-------|---------------------|---------|-------|--------------------|--------|-------|--------------------|
| 10127 | 1 | Vent plug | 34122* | 1 | Packing | 51015 | 1 | Jam nut |
| 12511 | 1 | Pipe plug | 34230* | 1 | O-ring | 51022 | 3 | Nut |
| 12635 | 1 | Pin | 34231* | 1 | Packing | 55212* | 1 | Spring |
| 12637 | 1 | Indicator extension | 34274* | 1 | Gasket | 55270 | 1 | Spring |
| 12638 | 1 | Packing retainer | 34454 | 1 | Double acting cup | 55305* | 1 | Spring |
| 12639 | 1 | Spring housing | 35117* | 1 | Packing | 57055 | 1 | Spring |
| 12640 | 1 | Indicator pin | 40408 | 1 | Handle casting | 57057 | 1 | Snap ring |
| 13068 | 1 | Toggle | 40434 | 1 | Pump body casting | 66765 | 4 | Retaining ring |
| 13069 | 1 | Cam | 40435 | 1 | Cover | 66924 | 2 | Retaining ring |
| 13310 | 1 | Pin | 40462 | 1 | Support ring | 68528* | 1 | Strainer |
| 13348 | 3 | Tie rod | 40463 | 1 | Follower | 68596 | 1 | Jack chain |
| 13368 | 1 | Pin | 41506 | 1 | Tube | 69034 | 1 | Snap ring |
| 13452 | 1 | Check spacer | 41524 | 1 | Reservoir assembly | 69217 | 1 | Cotter pin |
| 13548 | 1 | Pin | 45663 | 1 | Reservoir cap | 70397 | 1 | Knob |
| 14359 | 1 | Bushing | 45939 | 2 | Follower guide | 70485* | 1 | Ball |
| 16395 | 1 | Handle | 50044 | 2 | Screw | 91142 | 1 | Indicator assembly |
| 16650* | 1 | Check stop | 50306-1 | 1 | Screw | 91613 | 1 | Bush. & plunger |
| 31104* | 1 | Gasket | 50531 | 1 | Set screw | 91685 | 1 | Handle knob assy |
| 31128* | 1 | Gasket | 51003 | 1 | Jam nut | 92441 | 1 | Filler fitting |
| | | | | | | 242260 | 1 | O-ring |

*Recommended service parts inventory.

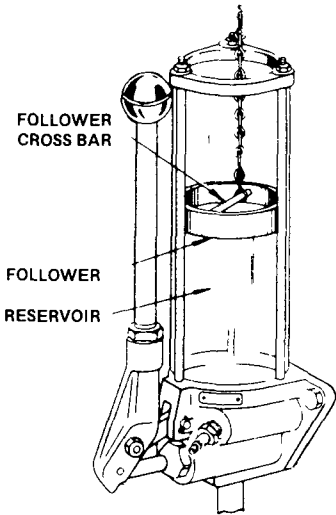
TO FILL MODEL 1811

MANUALLY

- 1) Remove cap from reservoir. Slide chain to one side of follower cross bar and lift up on chain, cocking the follower to break the lubricant seal on the underside. Remove follower from the reservoir.
- 2) Carefully fill reservoir with grease which should be packed to avoid air pockets. Care should be taken to prevent the induction of foreign material into the lubricant.
- 3) The follower is then replaced in the reservoir and pushed down firmly to make a good contact on the surface of the grease. The weight of the follower and atmospheric pressure provide the priming force as the lubricant is dispensed.

WITH FILLER PUMP

- 1) Same as step #1 above.
- 2) Use a manual filler pump to fill reservoir through filler fitting in the pump body. Attach coupler on delivery hose to filler fitting. Stroke filler pump handle until lubricant reaches fill line.
- 3) Same as step #3 above.
- 4) A strainer is behind the filler fitting to prevent foreign material from entering the reservoir. Remove filler fitting to inspect and clean strainer periodically.



OPERATION (Same for 1810 and 1811)

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

1st OPERATION

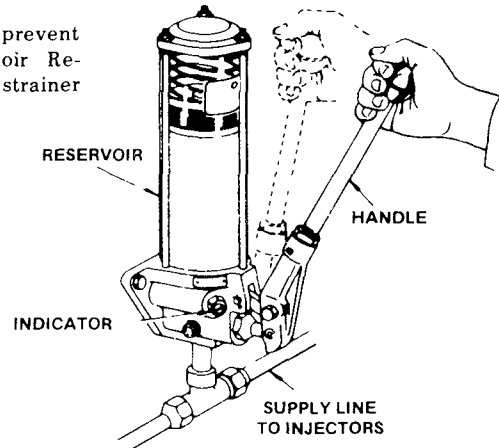
The outward stroke of the handle forces lubricant into the supply line. As the handle is operated, lubricant pressure is built up until it reaches 2,500 PSI. When this pressure is reached, the indicator will move out to its extended position, exposing a red ring on the indicator stem. This indicates 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.

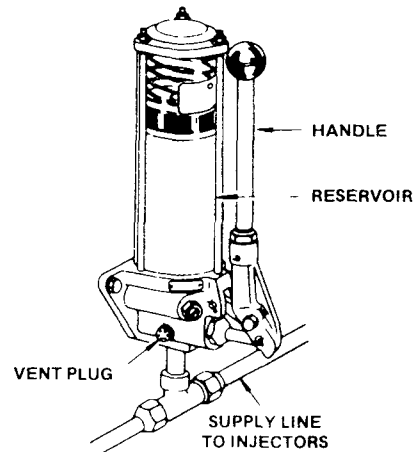
2nd OPERATION

Release handle and return it to its normal position against the reservoir. When the handle is in this position, lubricant pressure in the system vents back into the reservoir. The handle must be released for the pump to vent. The operator's hand, gripping the handle, prevents the pump from venting between strokes.

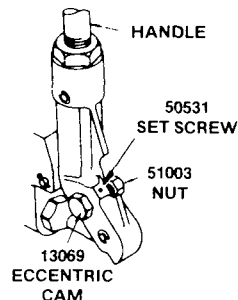
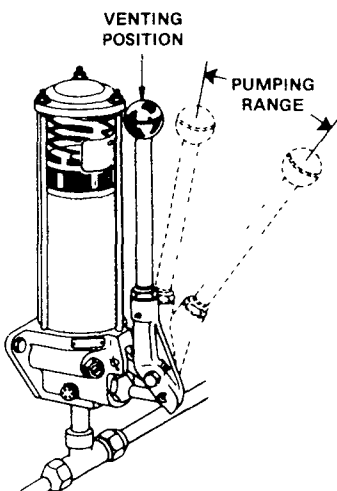
Injectors re-charge for the next lubrication cycle.



1st OPERATION



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 position. Re-tighten nut and set screw.

NOTE It may be necessary to try several positions of the 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 ST LOUIS provides a Distributor Network that stocks equipment and replacement parts.
A list of Authorized Service Departments will be furnished upon request.