HYDRAULIC OPERATED LUBRIGUN

SINGLE STROKE (WITH ELECTRICAL CONTROLS)

Series "A" Model 83483

OPERATING INSTRUCTIONS PARTS AND SERVICE



HIGH PRESSURE (2500 P.S.I. MAX.) FLUID LUBRICANT SYSTEM. RATIO 31 TO 1 LUBRICANT OUTPUT PER STROKE 1.4 CUBIC IN. HYDRAULIC PRESSURE 100 P. S. I. MAX. LUBRICANT PRESSURE 1800 P. S. I. MIN 3000 P. S. I. MAX. RESERVOIR CAPACITY 5 PINTS. The 83483 Lubrigun is used as the Pumping Unit for a Centralized Lubrication System having a Single Line Circuit of Injectors. It is an HYDRAULIC Operated Single Stroke Pump requiring OIL for both forward and return stroke and discharges an established amount of Lubricant (1.4 cu. in.) 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. NOTE: Refer to "Lincoln Centro-Matic System Planning Manual" for layout and planning of System. FILLER CAP TO FILL RESERVIOR $\mathbf{\hat{o}}$ The Reservoir can be filled either STRAINER through the Filler Cap at the top of the Reservoir or through the Buttonhead Fitting in the Pump Body. 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 COUPLER ATTACH TO BUTTONHEAD O lift Strainer out and clean thoroughly. FITTING Use a Filler Pump to fill Reservoir through the Buttonhead Fitting in the Pump Body. Attach Coupler on delivery hose to Buttonhead Fitting. Stroke Filler Pump handle until Reservoir is filled. FILLER PUMP DELIVERY HOSE Centro-matic PUM BUTTONHEAD FITTING TO PRIME SYSTEM SUPPLY LINES: After Lubrigun Reservoir has been filled with recommended Lubricant. Remove all Plugs in dead ends of the Injector Manifolds and Supply Lines. Operate Lubrigun until Lubricant flows from any Plug Opening. Close opening with Plug. Continue operating Lubrigun 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 Feeder Line between Injector and Bearing. Check each individual Injector for proper operation. (Refer to "Lincoln Centro-Matic System INJECTORS: Planning Manual" for operation of the Injectors). LINĽOLN LINCOLN ENGINEERING COMPANY SECTION - C8 DIVISION OF THE MCNEIL MACHINE & ENGINEERING CO PAGE ST. LOUIS 20, MO. 4010 GOODFELLOW BLVD.



OPERATION

The predetermined frequency of the lubrication cycle is set on the adjustable ELECTRIC CONTROL SWITCH

(refer to 68895, Section C8, page 48 series for proper setting of ELECTRIC CONTROL SWITCH).

Lubrication cycle starts when a TRIP PIN in the DIAL of the ELECTRIC CONTROL SWITCH contacts the SINGLE POLE SWITCH, (or when OPERATOR holds PUSH BUTTON DEPRESSED) energizing the SOLENOID of the VALVE, opening PASSAGE PORTS to admit OIL to LUBRIGUN.

TRIP PIN contact with the SINGLE POLE SWITCH is pre-set and will vary from 15 seconds to one minute (or when operator releases PUSH BUTTON). SWITCH MOUNTING permits a slight adjustment.

This time interval permits OIL to enter the LUBRIGUN CYLINDER to powerize the system actuating the INJECTORS.

As the TRIP PIN contact is released (or operator releases PUSH BUTTON) the SOLENOID is DE-ENERGIZED. The VALVE returns to its normal position to direct OIL to the opposite side of the LUBRIGUN CYLINDER.

As LUBRIGUN returns to its normal 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.

<u>SYSTEM FAILS TO CYCLE</u> and LINCOLN CENTRO-MATIC SYSTEM PLANNING MANUAL has been followed - Lubricant is leaking by packing of 91733 check or 66250 check. Remove and clean. Failure of Injectors to cycle can also be caused by Leak in Supply Lines. Examine Supply Lines and Connections.

<u>PUMP FAILS TO OPERATE</u> - Check OIL Supply. 100 P.S.I. Maximum Required. Refer to Operation Instructions.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
5760	Button Head Fitting	34089	Packing	65178	Name Plate
10462	Nıpple	34262	"O" Ring Packing	66051	Lockwasher
11069	Needle	34274	Gasket	66081	Drive Screw
11311	Piston Nut	34286	Gland Packing	66210	90 ^o Tubing Connector
11622	Body	40409	Body Casting	66211	Straight Tubing Connector
13063	Pump Tube	40410	Cylinder Cap	66250	5/32 ¹¹ Dia. Steel Ball
13064	Outlet	41526	Reservoir & Stick-Cal	66320	1/2" Thin Wall Conduit
13071	Tie Rod	48209	Washer	66321	Straight Conduit Fitting
13072	Cylinder	48210	Washer	68514	90 ^o Conduit Fitting
13084	Tie Rod	48375	Washer	68797	Plug Button
13140	Check Seat	50084	Cap Screw	68849	Strainer
13144	Packing Stud	50301	Stove Bolt and Nut	68850	Filler Cap
13145	Pin	51001	Hex. Nut	68895	Electric Time Switch
13557	Check Retainer	51039	Hex. Nut	68896	Four Way Solenoid Valve
13649	Ball Stop	51304	Nut	83114	Check Assembly
13650	Body	55194	Spring	91354	Name Plate Bracket Assembly
31074	Gasket	55251	Spring	91403	Bushing and Plunger Assembly
31085	Gasket	56074	Spring	91580	Support Assembly
31105	Gasket	62301	Copper Tube	91733	Check Assembly
33029	Gasket	62302	Copper Tube	91980	Reservoir Cap

REPAIR PARTS LIST

PARTS - LOANER PUMPS - REPAIRS BY FACTORY TRAINED SERVICEMEN AVAILABLE IN AUTHORIZED SERVICE DEPARTMENTS. LIST FURNISHED UPON REQUEST.

LINCOLN ENGINEERING COMPANY

DIVISION OF THE MCNEIL MACHINE & ENGINEERING CO. 4010 GOODFELLOW BLVD. ST. LOUIS 20, MO.