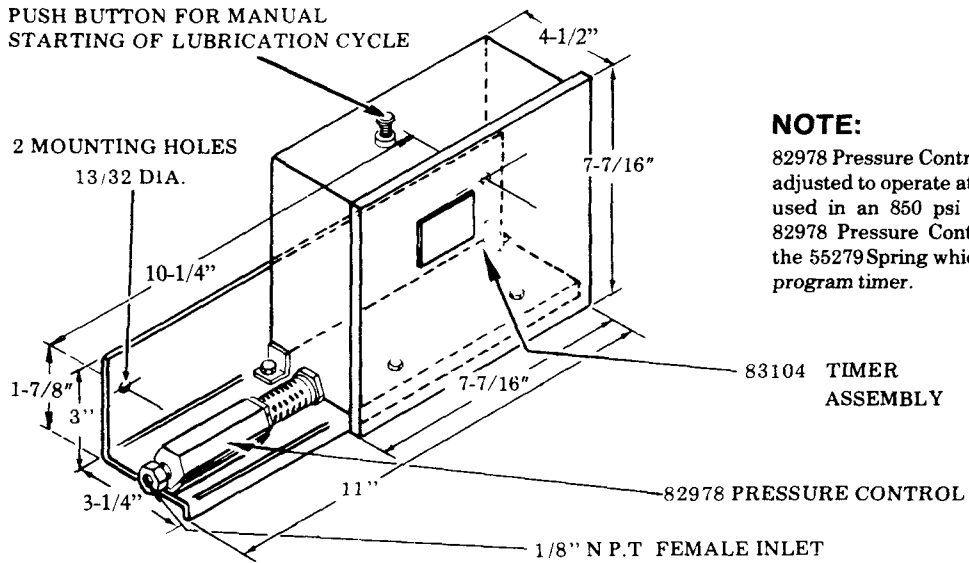
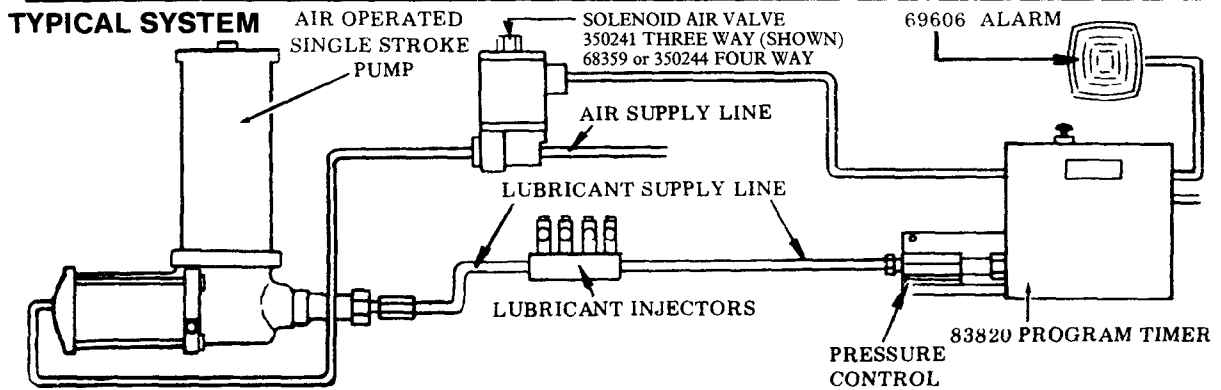
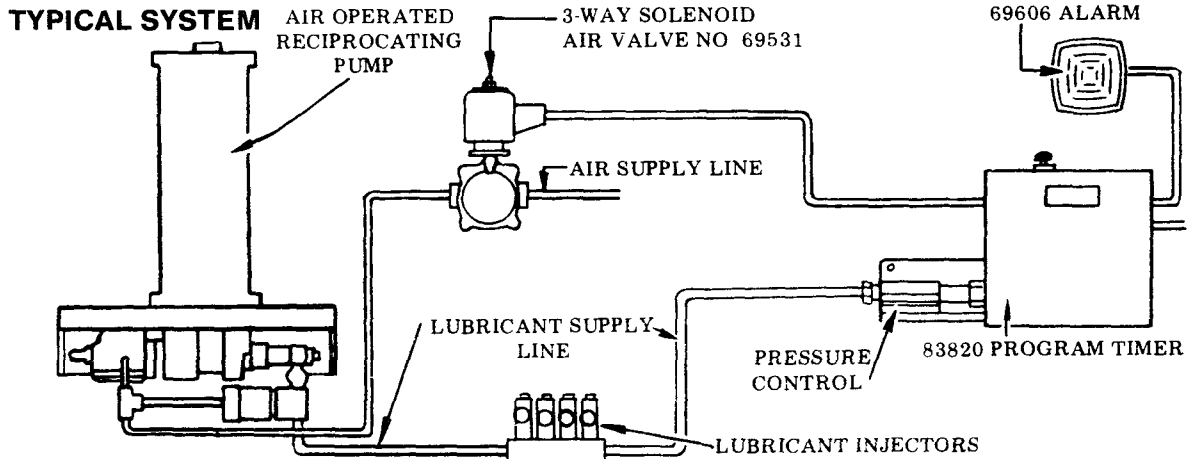


5 AMP SWITCH CAPACITY
115V, 60 Hz, 33 VA

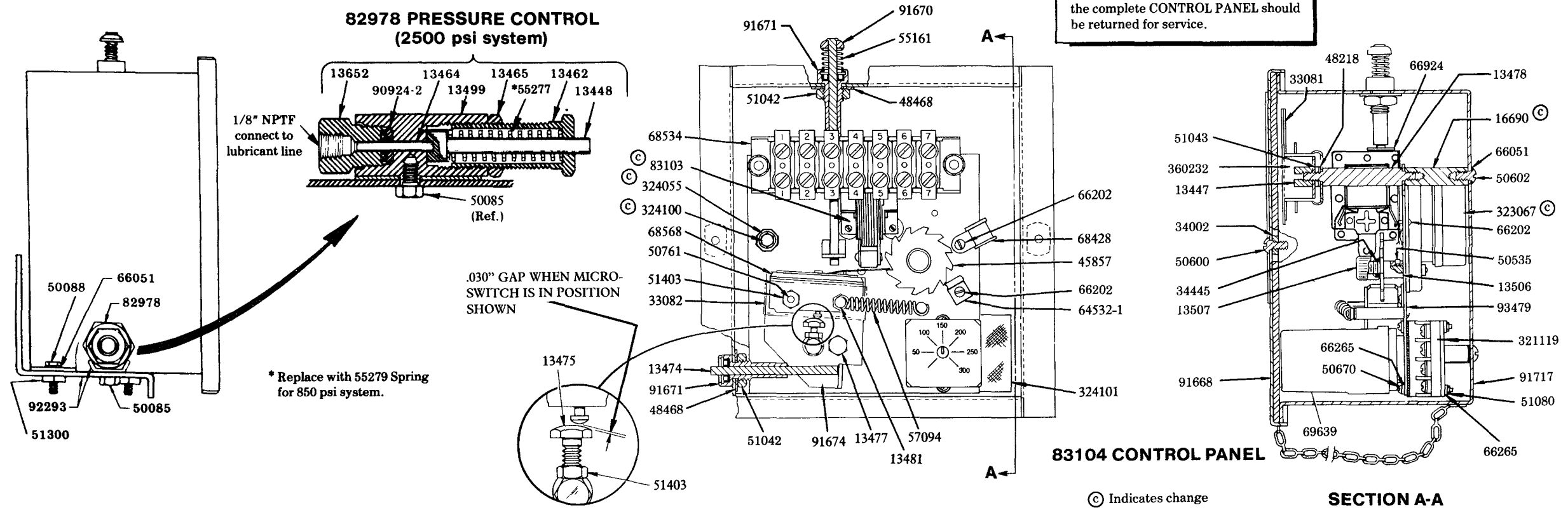


NOTE:

82978 Pressure Control of Model 83820 is factory adjusted to operate at 2500 psi. If Model 83820 is used in an 850 psi system, the spring in the 82978 Pressure Control must be replaced with the 55279 Spring which is packed loosely with the program timer.



83820 CENTRO-MATIC PROGRAM TIMER



OPERATION

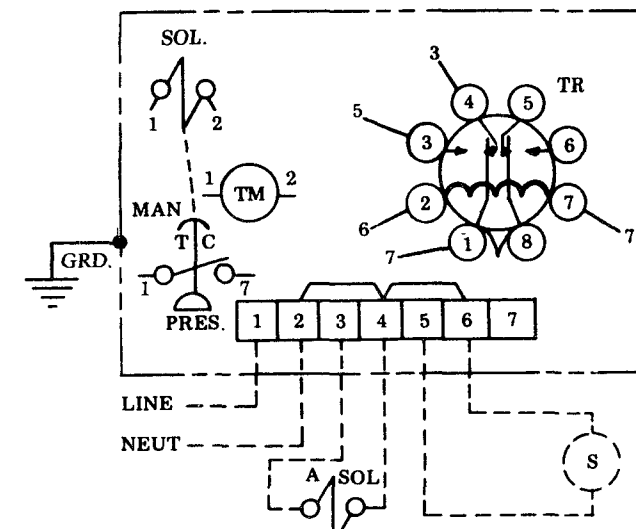
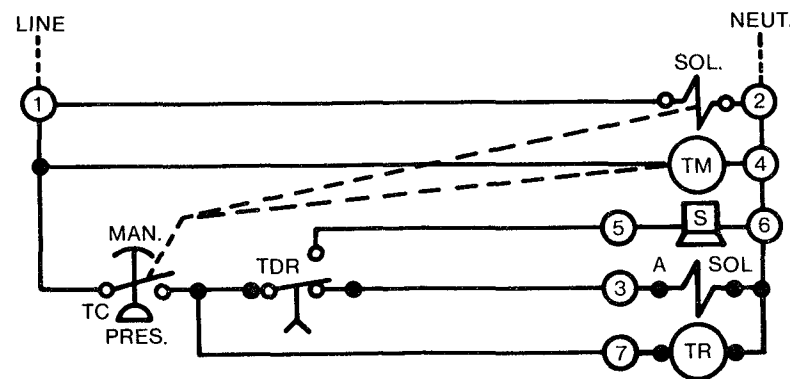
With power "On", timer motor (TM) is energized and rotates cam which closes timer contact (TC) at intervals determined by the number of cam teeth. The cam completes one revolution every hour with lobes to cycle unit every five minutes. Cam can be reworked to reduce the number of cycles per hour.

When cam closes timer contact (TC), lubricant pump starts lubrication cycle and time delay relay (TR) begins timing out. Timer contact (TC) remains closed until reset by pressure control. Pump dispenses lubricant into supply line, cycles all injectors and then builds lubricant pressure until pressure control resets timer contact (TC). Timer contact opens, de-energizing time delay relay (TR). Pump stops, supply line lubricant pressure vents and injectors recharge for next lubrication cycle.

Should a system failure occur, such as an empty lubricant reservoir or a broken supply line, lubricant pressure will not increase to actuate the pressure control and the time delay relay (TR) will time out. Time delay relay (TR), adjustable 20-300 seconds, will close when pump operates for a longer than normal period. Closed time delay relay (TR) contacts activate signal(s) and shuts off pump. Signal will remain activated until line switch is opened.

PRE-LUBE

The solenoid (SOL) is energized when current is on. When the machine is shut off at the end of a work period, the solenoid is de-energized permitting the weighted solenoid plunger to drop on the micro-switch lever arm moving the switch to the "On" position. With the micro-switch in the "On" position, the electro-luber will operate when the machine is started. A vertical mounted push button through the top of the control panel is used for contacting the micro-switch to manually start the unit at any time.



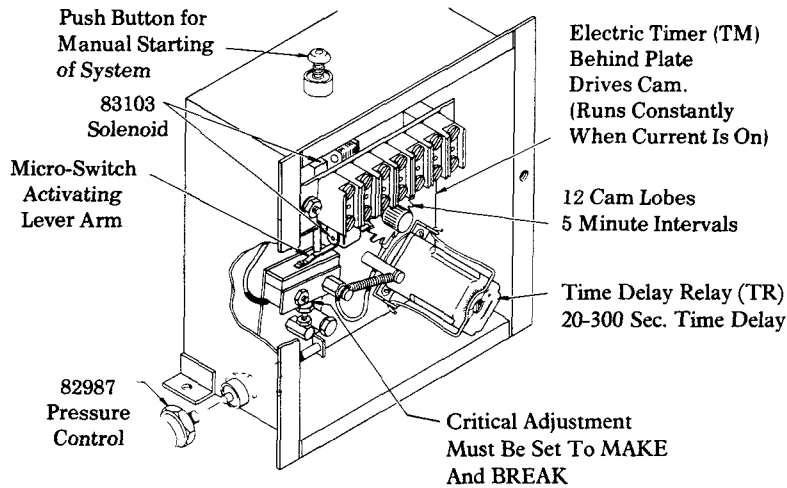
PARTS LIST

Code	Description	Part
TM	Timer Motor	323067
TC	Timer Contact	68568
TR	Timer Relay	69639
SOL	Solenoid	83103
A SOL	Air Solenoid Valve	69531 or 350241 Three Way Valve 68359 or 350244 Four Way Valve
S	Signal	Supplied by Customer

INTERCONNECTION DIAGRAM

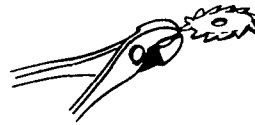
NOTE
RATED CAPACITY 5 AMPS PILOT DUTY

A RELAY OR SIMILAR DEVICE
MUST BE USED TO OPERATE
DEVICES REQUIRING HIGH
INRUSH CURRENTS



TO CHANGE LUBRICATION FREQUENCY

Remove cam by rotating retaining knob counter-clockwise. Refer to the cam illustrations and break off the appropriate number of lobes by bending them back and forth with pliers. An extra cam is furnished with the program timer.



TIME DELAY RELAY ADJUSTMENT

- 1) After priming the system, measure the pumping time required for one lubrication cycle.
- 2) Adjust the time delay relay to pumping time plus 30 seconds.

12 Lobes 5 Minutes	
6 Lobes 10 Minutes	
4 Lobes 15 Minutes	
3 Lobes 20 Minutes	
2 Lobes 30 Minutes	
1 Lobe 60 Minutes	

SERVICE PARTS

Part	Qty.	Description	Part	Qty.	Description	Part	Qty.	Description
13447	2	Nut	50085	1	Screw	68534	1	Terminal block
13448	1	Spring guide	50088	4	Screw	*68568	1	Micro-switch
13462	1	Housing	50535	1	Set screw	*69639	1	Time delay relay
13464	1	Pin	50600	2	Screw	82978	1	Pressure control
13465	1	Nut	50602	3	Screw	83103	1	Solenoid
13474	1	Rod	50670	2	Screw	83104	1	Timer assembly
13475	1	Screw	50761	2	Screw	*90924-2	1	Packing
13477	1	Bolt	51042	2	Nut	*91668	1	Cover & gasket
13478	2	Stud	51043	2	Nut	91670	1	Rod
13481	1	Nut	51080	2	Nut	91671	2	Bushing
13499	1	Body	51300	4	Nut	91674	1	Sleeve & plate
13506	1	Cam shaft	51403	2	Nut	91717	1	Electrical box
13507	1	Knob	55161	1	Spring	92293	1	Timer bracket
13652	1	Adapter	*55277	1	Spring	93479	1	Electrical panel
16690	3	Spacer	*55279	1	Spring	321119	1	Octal socket
33081	1	Insulator	57094	1	Spring	323067	1	Timer motor
33082	1	Insulator	64532-1	1	Clip	324101	1	Insulator
34002	2	Gasket	66051	7	Lockwasher	324055	1	Lockwasher
34445	1	Gasket	66202	4	Screw	324100	1	Grounding screw
*45857	2	Cam	66265	4	Lockwasher	360232	1	Cover
48218	4	Washer	66924	1	Retaining ring			
48468	2	Washer	68428	1	Clamp			

*Recommended service parts inventory.

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.