CPM-200 CONTROL PANEL

120 VOLTS, 60 Hz.
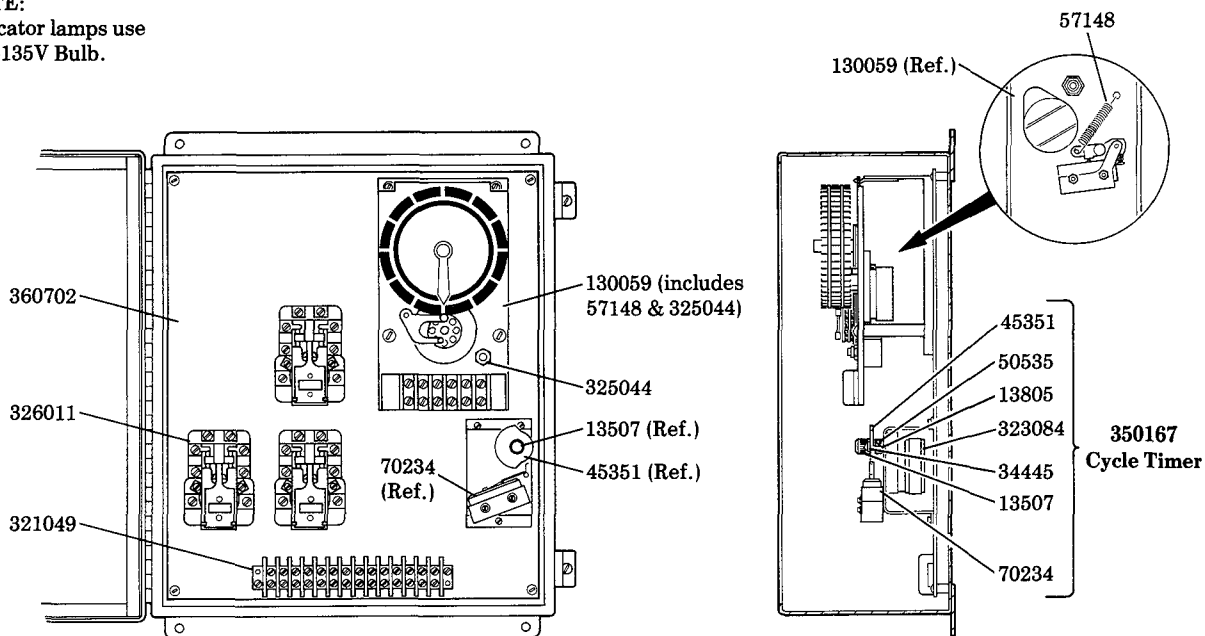**1 HOUR TIMER**

Modular Tube lubrication systems

Model 130166

Series "A"

12"

5/16" Dia.
4 Mtg. Holes

6-3/16"

325025

328518

328521

328520

16-3/4"

350109
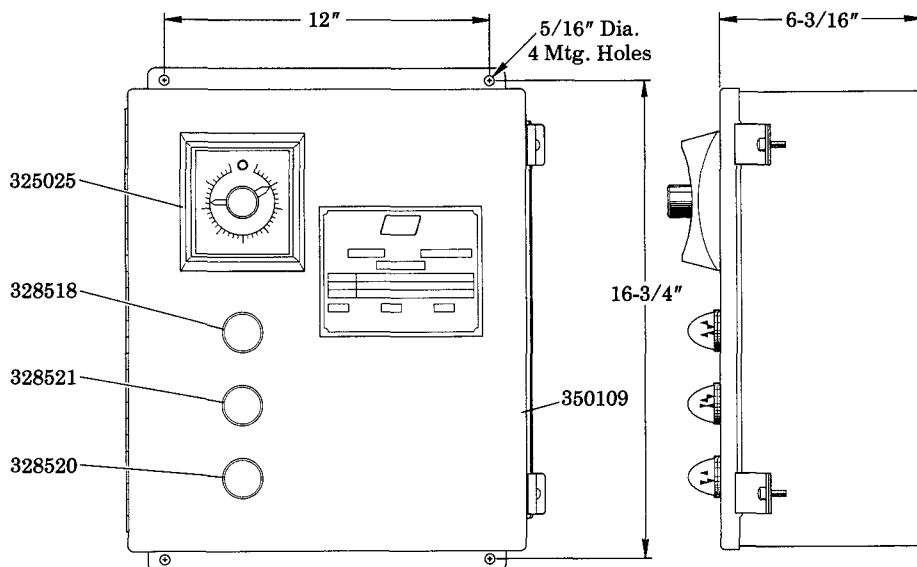
NOTE:
Indicator lamps use
6S6-135V Bulb.

57148

130059 (Ref.)

360702

130059 (includes 57148 & 325044)

325044

13507 (Ref.)

70234 (Ref.)

45351 (Ref.)

326011

321049

45351
50535
13805
323084
34445
13507

350167
Cycle Timer

70234

SERVICE PARTS

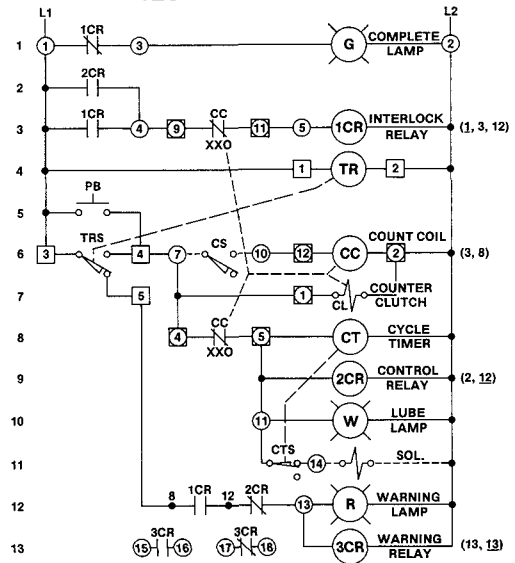| PART	QUAN.	DESCRIPTION	PART	QUAN.	DESCRIPTION	PART	QUAN.	DESCRIPTION
13507	1	Knob	130059	1	Sequence timer	328520	1	Red lamp
13805	1	Camshaft	321049	1	Terminal strip	328521	1	White lamp
34445	1	Gasket	323084	1	Timing motor	350109	1	Enclosure
45351	1	Cam	325025	1	Counter	350167	1	Cycle timer
50535	1	Set screw	325044	1	Pushbutton	360702	1	Mounting plate
57148	1	Spring	326011	3	Relay			
70234	1	Micro switch	328518	1	Green lamp			

SECTION - **M33**
PAGE - **23**

POSITION DIAGRAM
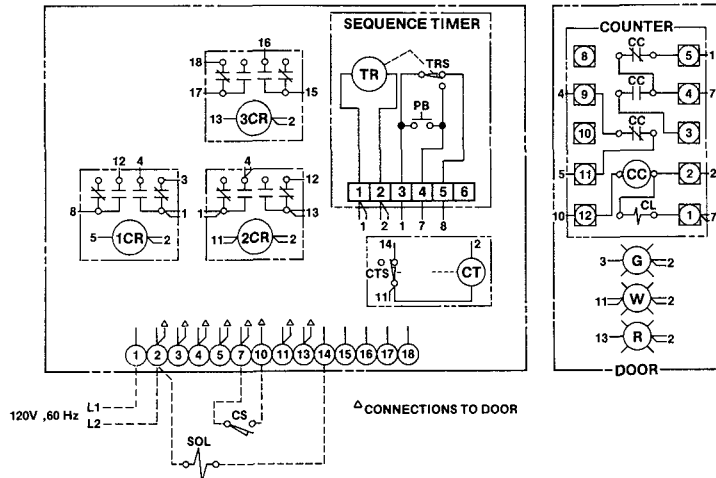
ELEMENTARY DIAGRAM
120 Volt - 60 Hz.

CODE	PART	DESCRIPTION	CODE	PART	DESCRIPTION
1CR		INTERLOCK RELAY	CC		COUNTER COIL
2CR	326011	CONTROL RELAY	CL	325025	COUNTER CLUTCH
3CR		WARNING RELAY	G	328518	GREEN LAMP
TR		TIMER MOTOR	W	328521	WHITE LAMP
TRS	PART OF 130059 SEQUENCE TIMER	SEQUENCE TIMER SWITCH	R	328520	RED LAMP
PB		MANUAL RUN PUSHBUTTON	CS	*87070	CYCLE SWITCH
CT	350167	CYCLE TIMER MOTOR	SOL.	*	AIR SOLENOID VALVE
CTS		CYCLE TIMER SWITCH	*NOT INCLUDED WITH MODEL 130166. MUST BE ORDERED SEPARATELY.		

OPERATION

Sequence timer is energized when machine is turned on (green lamp lights). Timer motor runs constantly. Trip arm of sequence timer contacts sequence timer switch energizing cycle timer. Lube cycle starts when cam lobe contacts cycle timer switch, energizing air solenoid valve (white lamp on, green lamp off). Air is allowed to the pump which delivers lubricant to the divider valve system. Cycle timer operates pump at 10 cycles per minute. When all divider valves have cycled, a signal transmitted from a divider valve cycle switch registers one count on the counter. Counter starts at pre-set number of cycles required to complete one lube event and counts down to zero. When the counter reaches zero, air solenoid valve is de-energized shutting off pump (white lamp off, green lamp on) and counter resets for next lube cycle. If the lubrication cycle is not completed within the total time setting of the sequence timer, a red warning lamp in the control panel will be energized. Warning lamp will remain lit until beginning of next lube cycle at which time the system will again attempt to complete a lube cycle.

TO SET LUBRICATION FREQUENCY

A manual run pushbutton on the sequence timer can be used to test or manually operate the system to determine actual cycle time. Depress button until green lamp lights indicating completion of a lubrication cycle. By timing this interval and adding approximately 50% of this time, the total cycle time can be determined. The sequence timer can then be set accordingly.

EXAMPLE:
One lubrication cycle requires 2 minutes. Adding 50% reserve cycle time results in a total cycle time of 3 minutes. On a one hour timer, each trip arm pulled up represents 37-1/2 seconds of "on" time. For a total cycle time of 3 minutes, a set of 5 consecutive trip arms would be pulled up.

For more than one lube cycle per hour, trip arm sets would be pulled up at equally spaced intervals. The sequence timer dial contains 96 trip arms. The minimum "on" time would be 37-1/2 seconds and the maximum would be 59 minutes 22-1/2 seconds.

To extend time between lubrication cycles to more than one hour, an omitting wheel is provided. Each consecutive screw turned up in the omitting wheel (7 max.) will increase time between cycles by one hour. A screw turned up in every other position will initiate a lube cycle every other hour. A 24 hour timer should be used for lubrication cycles at intervals longer than one every eight hours.

ACTUAL CYCLE TIME: 2 MINUTES

RESERVE CYCLE TIME: 1 MINUTE

5 TRIP ARMS IN "UP" POSITION

MANUAL RUN PUSHBUTTON

EVERY OTHER SCREW TURNED UP IN OMITTING WHEEL TO PROVIDE A LUBRICATION CYCLE EVERY TWO HOURS.