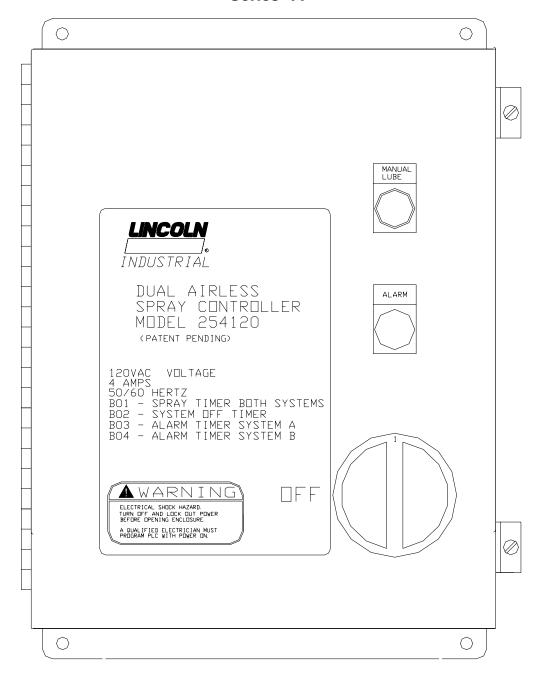


Airless Spray Controller Model 254120 Series "A"



Americas: One Lincoln Way St. Louis, MO 63120-1578 USA

Phone +1.314.679.4200 Fax +1.800.424.5359 Europe/Africa: Heinrich-Hertz-Str 2-8 D-69183 Walldorf Germany Phone +49.6227.33.0 Fax +49.6227.33.259 Asia/Pacific: 25 Int'l Business Park #01-65 German Centre Singapore 609916 Phone +65.562.7960 Fax +65.562.9967 © Copyright 2001 Printed in USA

Web site: www.lincolnindustrial.com



Table of Contents

	Page
Specifications	2
Description of Operation	2
Features	
Alarm	2
Changing the Parameters of the PLC Timers	3
Service Parts	4
Field Wiring Diagram	5
Ladder Wiring Diagram	



Electrical shock hazard. Turn off and lock out power before opening enclosure.



When changing timer values in the PLC the enclosure door is open with power on. This must be done by a qualified electrician.

400 \ (40 50 (00 1)

Specifications

Input Voltage	120 VAC 50/60 HZ
Current Consumption	4 Amps at 120 VAC - Dual System
	2 Amps at 120 VAC - Single System
	(Less alarm load)
Enclosure Rating	NEMA 12 Rating
Controller Ambient	
Temperature Range	32°F (0°C) to 131°F (55°C)
Net Weight	9 lbs (4 Kg)

Description of Operation

- The air to pump solenoid will turn on when one or both pressure switches are closed, indicating low pressure, and both spray solenoids are de-energized.
- 2. The pump will turn on and build pressure in both lube supply lines. When both pressure switches open, indicating high pressure, the pump will turn off, the green ready light will turn on and the system timer will begin timing out.
- When the system timer times out or the manual lube push-button is depressed, both spray solenoids will energize spraying the gear.

- 4. The spray solenoid will turn off when its spray timer times out and either one of the pressure switches close, indicating low pressure.
- 5. When both spray solenoids turn off and one or both of the pressure switches close, the cycle repeats itself.

Features

<u>Disconnect on door</u> - Removes power from controller and both lube systems "A" & "B".

<u>Manual Lube Push-button on door</u> - Depressing push-button will initiate a lube cycle (ready light must be on).

Ready Light on door - Indicates that both systems are fully

charged and manual lube can be depressed.

<u>Alarm Light on Door</u> – If the alarm timer for system A or system B times out the alarm light on door will turn on. See section on alarms.

<u>Prespray cycle</u> - When power is turned on, the controller will wait two minutes and then initiate a spray cycle. The two minute wait will allow the heater to warm the lubricant. The pump must build pressure within two minutes to open the pressure switches before a prespray cycle can take place. <u>Adjustable Off Timer</u> - Amount of time between lube cycles. Adjustable from 1 minute to 94 minutes.

Adjustable Spray Timer - Amount of time that spray solenoids are energized. Adjustable from 1 second to 99 seconds. Adjustable Alarm Timers - Both Alarm timers should be set 5 minutes longer than the adjustable "Off Timer." If a spray cycle doesn't take place within this alarm time setting, the system will go into alarm. A 120 VAC alarm signal is available. Disable for System B – If only one spray system is required system B can be disabled to prevent it from going into alarm. A jumper wire is needed between terminals 17 and 18. Nothing can be connected to terminals 9 through 14 (system B connections).

Alarm

Controller has an alarm light on the enclosure door and choice of two 120vac alarm signals for external signaling. The closing of the system pressure switch will reset the system alarm timer preventing it from timing out. The alarm timers are set 5 minutes longer than the OFF timer setting. Both alarm timers are set to the same value.

The alarm light located on the enclosure will signal an alarm as follows:

System A...... Alarm light will flash once, pause time and then will keep repeating this sequence.

System B Alarm light will flash twice, pause time and then will keep repeating

this sequence.
Both systems in faultAlarm light will stay on.

Two 120vac remote alarm signals are available. The alarm signal available at terminals 19 and 20 will signal the same as the light on the door. The 120vac alarm signal available at terminals 21 and 22 will remain on whenever there is a fault with system A, system B or both systems.

Page Number - 2 Form 402959



Changing the Parameters for the "Spray" timer, "System Off" timer and the "Alarm" timers.

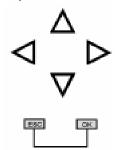
Changing the parameter for a timer only changes the time assigned to that timer. The time for the "Spray" timer is in seconds, the time for the "System Off" timer and "Alarm" timers is in minutes. When in the parameter mode, you cannot change or alter the program stored in the PLC. Changing the program can only be done in the programming mode.

Listed below are the four timers that can be viewed thru the window on the PLC. Using the keys on the PLC you can change timers B01, B02, B03 and B04.

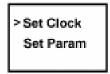
- B01 Spray timer for both systems
- B02 Off timer for both systems
- B03 Alarm timer for system A. Should be set 5 minutes longer than B02.
- B04 Alarm timer for system B. Should be set 5 minutes longer than B02.

Procedure for Changing Timer Parameters

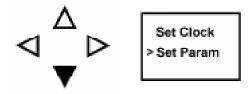
 To switch to the parameter mode, press the ESC and OK keys simultaneously:



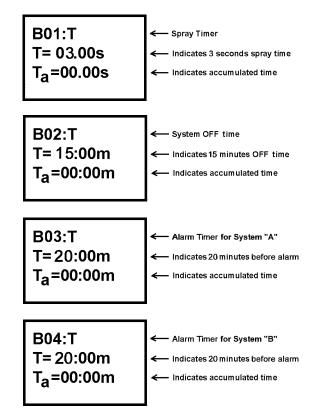
2. The PLC screen will change to the display shown below:



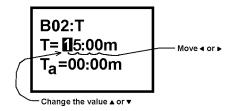
- 3. Select the "Set Param" option:
 - a) press the down arrow key
 - b) press the **OK** key



- 4. The PLC will display the timer parameters
 - a) press the up arrow key to view the four timers: B01, B02, B03, and B04



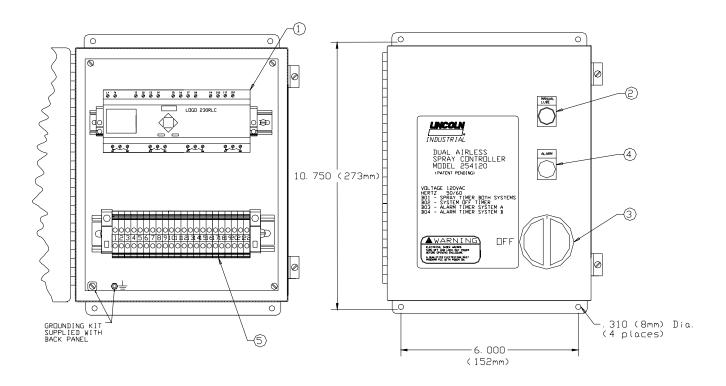
- 5. To change a time parameter it must be displayed on the screen.
 - a) press the **OK** key.
 - b) using the**◄or**▶ select the value to change.
 - c) using the ▲ or ▼ change the value.
 - d) when you have the desired value, press the OK key to accept the new value.
 - e) press the **ESC** key until the original screen appears.



6. Pressing the **ESC** key will return you to the original screen.

Form 402959 Page Number - 3

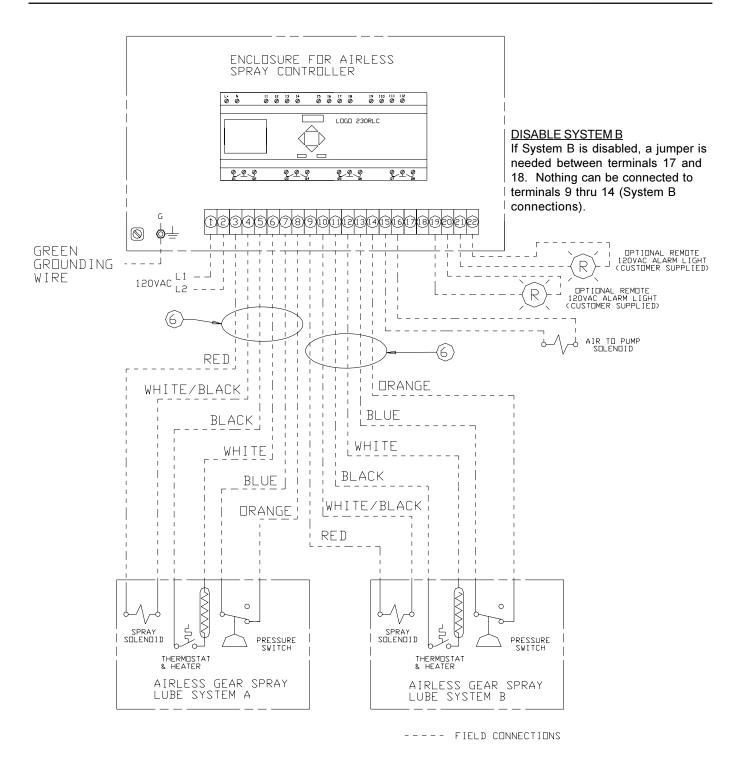




SERVICE PARTS				
ITEM	QTY	P/N	DESCRIPTION	
1	1	256235	PLC W/PROGRAM	
2	1	256232	GREEN "MANUAL LUBE & READY LIGHT" PUSHBUTTON	
3	1	256233	DISCONNECT SWITCH	
4	1	256234	RED "ALARM" PILOT LIGHT	
5	1	256238	TERMINAL BLOCK	
6	1	256241	12' CABLE ASSEMBLY	

Page Number - 4 Form 402959

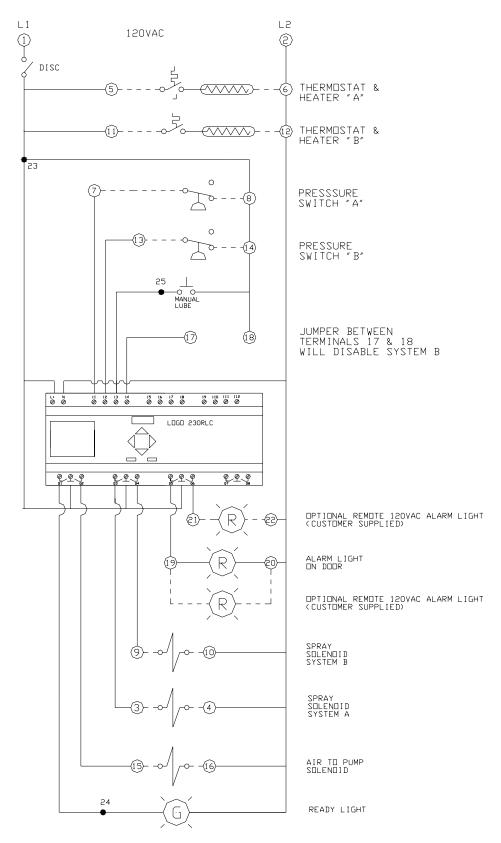




Field Wiring Diagram

Form 402959 Page Number - 5





Ladder Diagram

Page Number - 6 Form 402959