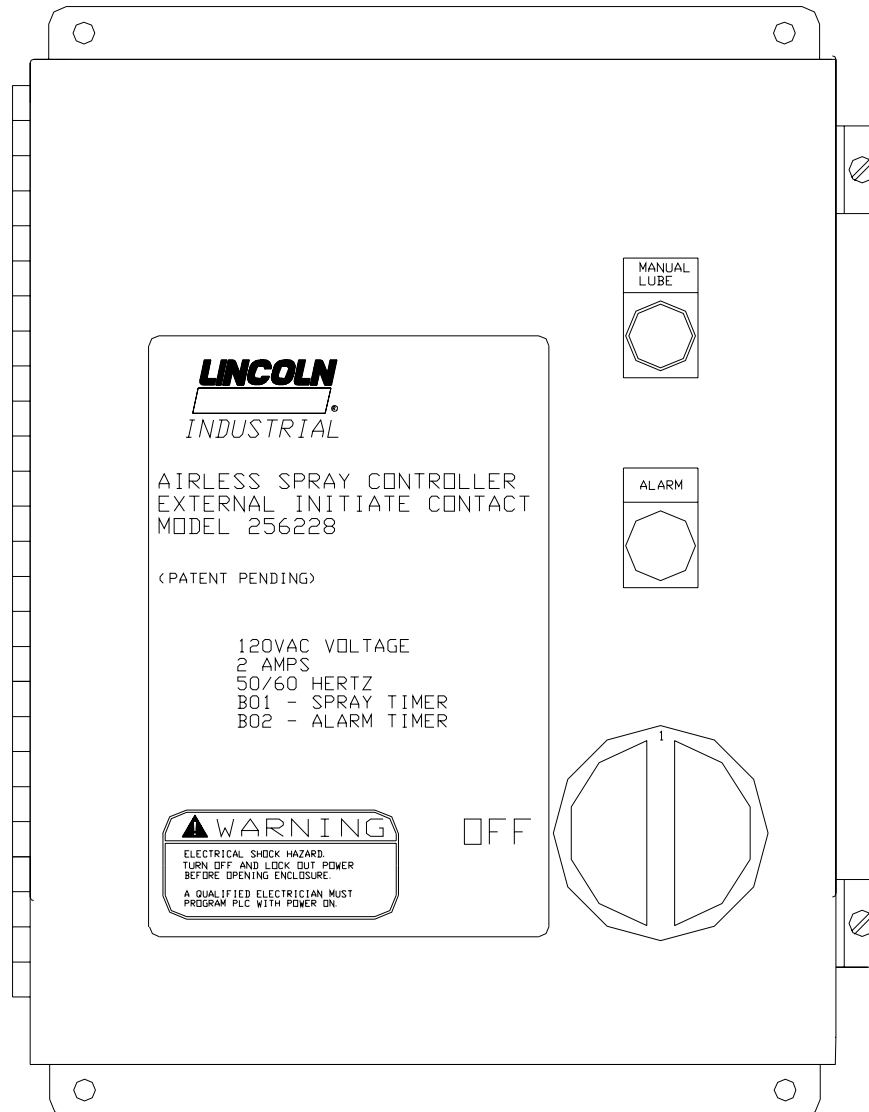


**Airless Spray Controller  
External Initiate Contact  
Model 256228  
Series "A"**



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

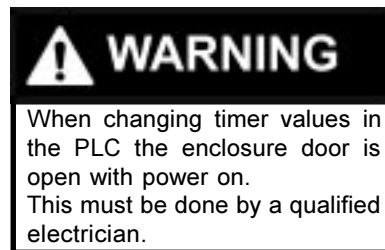
Asia/Pacific:  
25 Int'l Business Park  
#01-65 German Centre  
Singapore 609916  
Phone +65.562.7960  
Fax +65.562.9967

© Copyright 2001  
Printed in USA

Web site:  
[www.lincolnindustrial.com](http://www.lincolnindustrial.com)

## Table of Contents

	Page
Specifications.....	2
Description of Operation.....	2
Features.....	2
Alarm.....	2
Changing the Parameters of the PLC Timers.....	3
Service Parts.....	4
Field Wiring Diagram.....	5
Ladder Wiring Diagram.....	6



## Specifications

Input Voltage.....	120 VAC 50/60 HZ
Current Consumption.....	2 Amps at 120 VAC (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

1. The air to pump solenoid will turn on when the pressure switch is closed, indicating low pressure, and the spray solenoid is de-energized.
2. The pump will turn on and build pressure in the lube supply line. When the pressure switch opens, indicating high pressure, the pump will turn off, the green ready light will turn on.
3. When the external initiate contact that is connected to terminals 11 and 12 closes, the solenoid will energize spraying the gear.
4. The spray solenoid will turn off when the spray timer times out and the pressure switch closes, indicating low pressure.

5. When the spray solenoid turns off and the pressure switch closes, the cycle repeats itself.

## Features

- Disconnect on door - Removes power from controller and lube system.
- Manual Lube Push-button on door - Depressing push-button will initiate a lube cycle (ready light must be on).
- Ready Light on door - Indicates that system is fully charged and manual lube can be depressed.
- Alarm Light on Door - If the alarm timer times out, the alarm light on door will turn on. See section on alarms.
- Prespray cycle - 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 switch before a prespray cycle can take place.
- Adjustable Alarm Timer - The alarm timer should be set long enough to allow a spray event to take place. A spray event consists of spraying the lubricant and then the closing of the pressure switch. The closing of the pressure switch will reset the alarm timer. The alarm timer is activated by the closing of the External Initiate contact, the manual lube pushbutton located of the enclosure door or the prespray cycle. If a spray cycle doesn't take place within this alarm setting, the system will go into alarm. A 120VAC alarm signal is available.
- Adjustable Spray Timer - Amount of time that the spray solenoid is energized. Adjustable from 1 second to 99 seconds.
- External Initiate Contact - The closing of this switch will initiate a spray event. This is a dry contact (no voltage) wired to terminals 11 and 12. The closing of this switch will also start the alarm timer.

## Alarm

The controller has an alarm light on the enclosure door and a 120 VAC alarm signal for external signaling. The closing of the system pressure switch will reset the system alarm timer preventing it from timing out. The alarm timer is set long enough to allow a spray event to take place. A spray event consists of spraying the lubricant and then the closing of the pressure switch.

The alarm signal available at terminals 13 and 14 will signal the same as the light on the door.

## Changing the Parameters for the “Spray” timer and the “Alarm” timer.

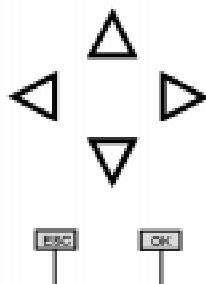
Changing the parameter for a timer only changes the time assigned to that timer. The time for the “Spray” timer is in seconds, the time for the “Alarm” timer is in minutes. When in the parameter mode, you cannot change or alter the program stored in the PLC. Changing the program can only be done in the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

Listed below are the two timers that can be viewed through the window on the PLC. Using the keys on the PLC you can change timers B01 and B02.

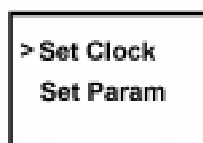
B01 - Spray timer  
B02 - Alarm timer

### Procedure for Changing Timer Parameters

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

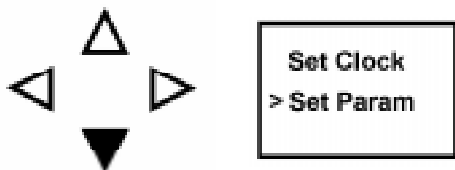


- The PLC screen will change to the display shown below:

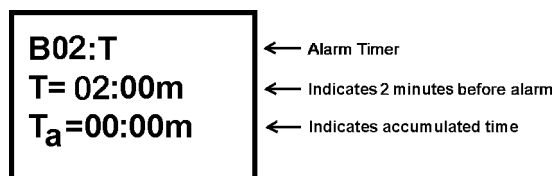
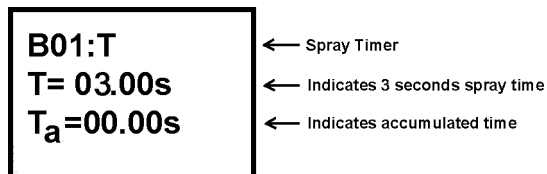


- Select the “Set Param” option:

- press the down arrow key
- press the **OK** key

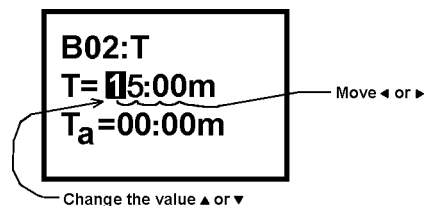


- The PLC will display the timer parameters
  - press the up arrow key to view the two timers: B01 and B02.

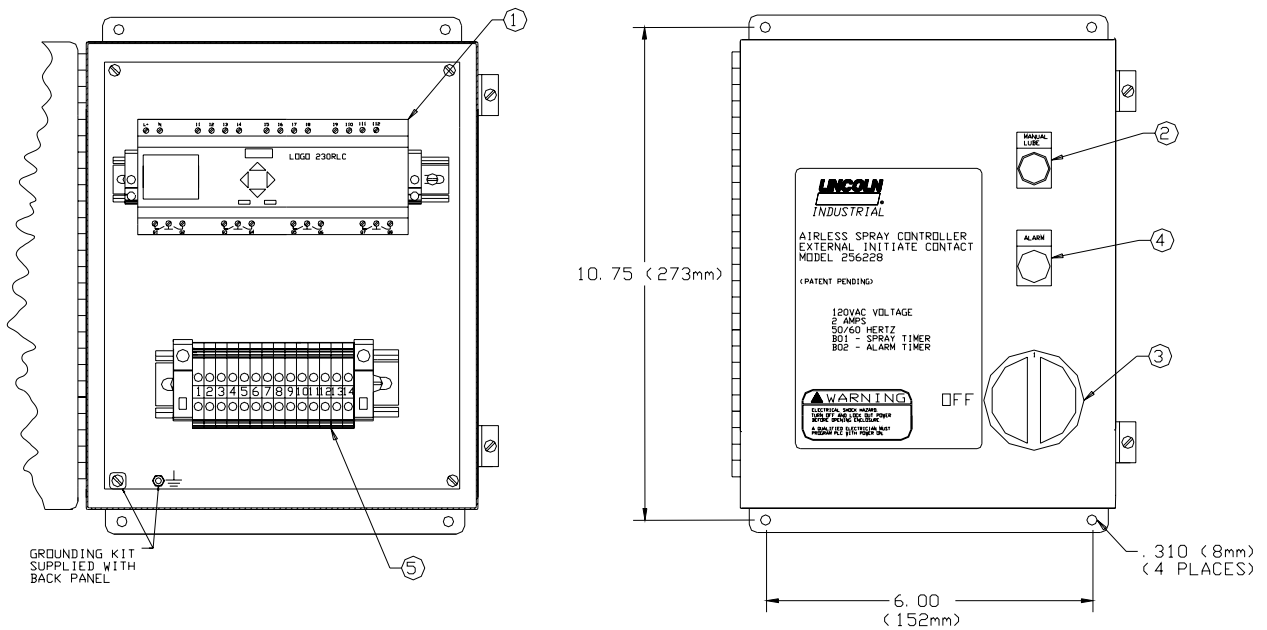


- To change a time parameter it must be displayed on the screen.

- press the **OK** key.
- using the **◀** or **▶** select the value to change.
- using the **▲** or **▼** change the value.
- when you have the desired value, press the **OK** key to accept the new value.
- press the **ESC** key until the original screen appears.

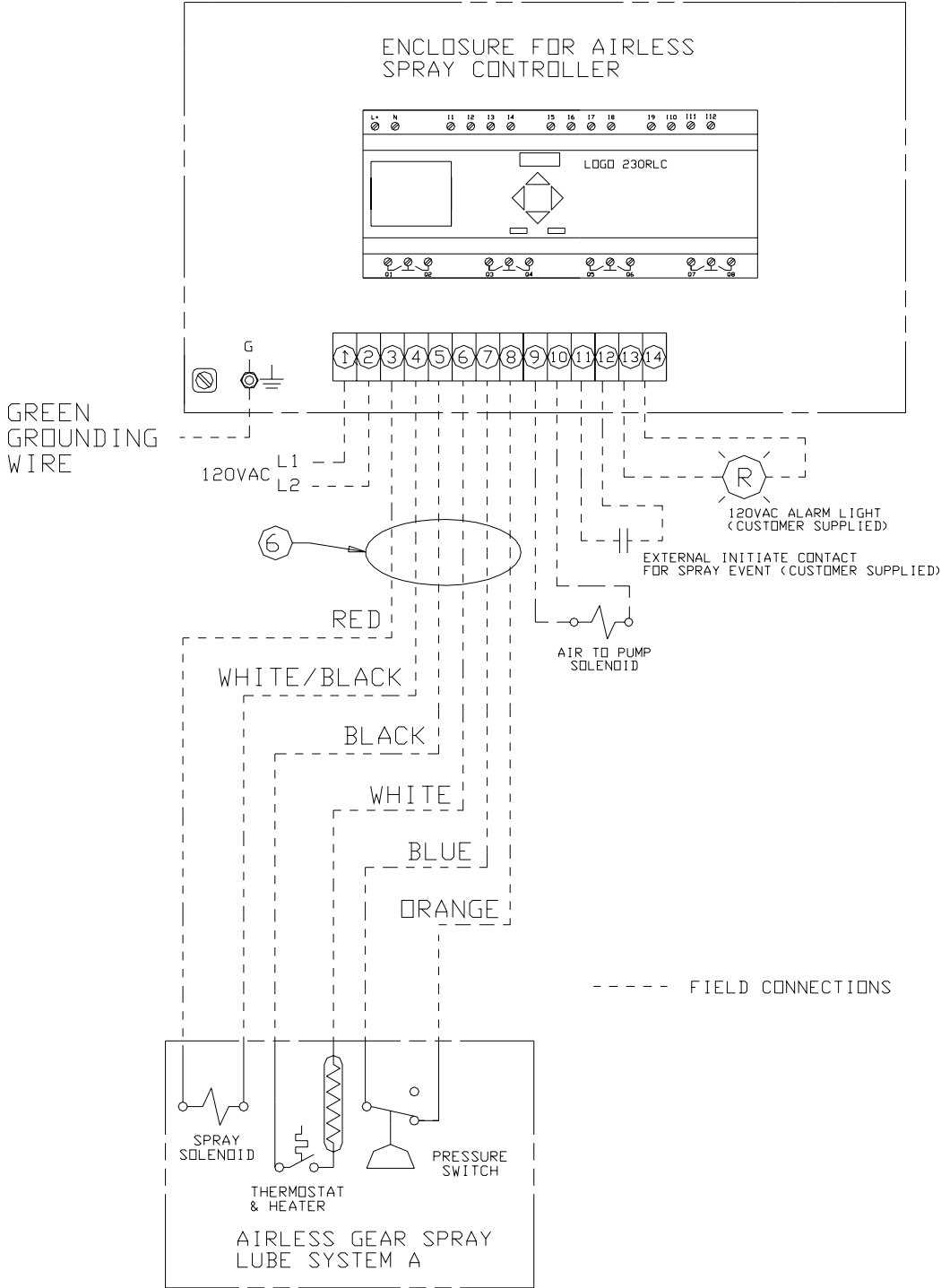


- Pressing the **ESC** key will return you to the original screen.

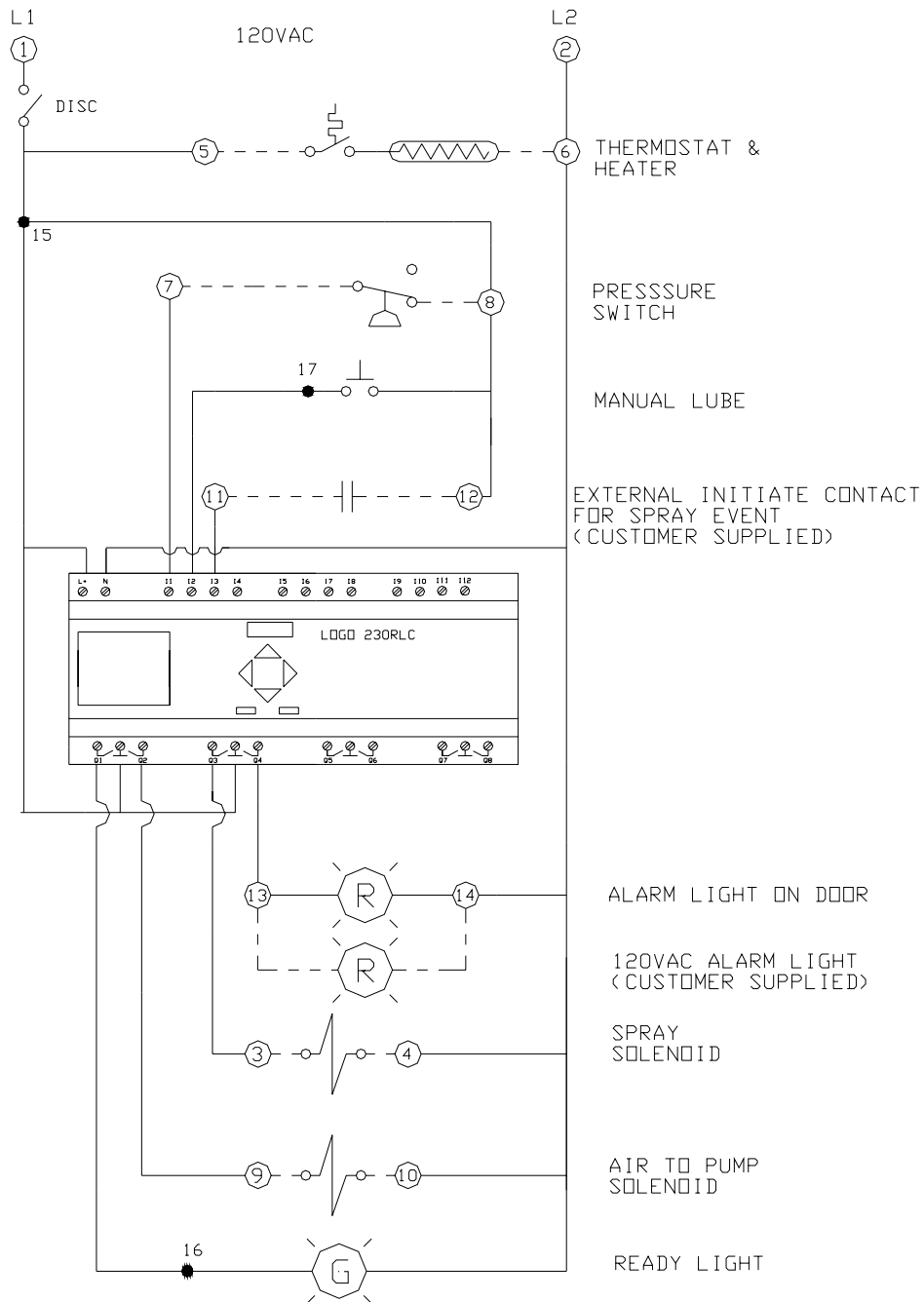


## SERVICE PARTS

ITEM	QTY	P/N	DESCRIPTION
1	1	256237	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



**Field Wiring Diagram**



**Ladder Diagram**