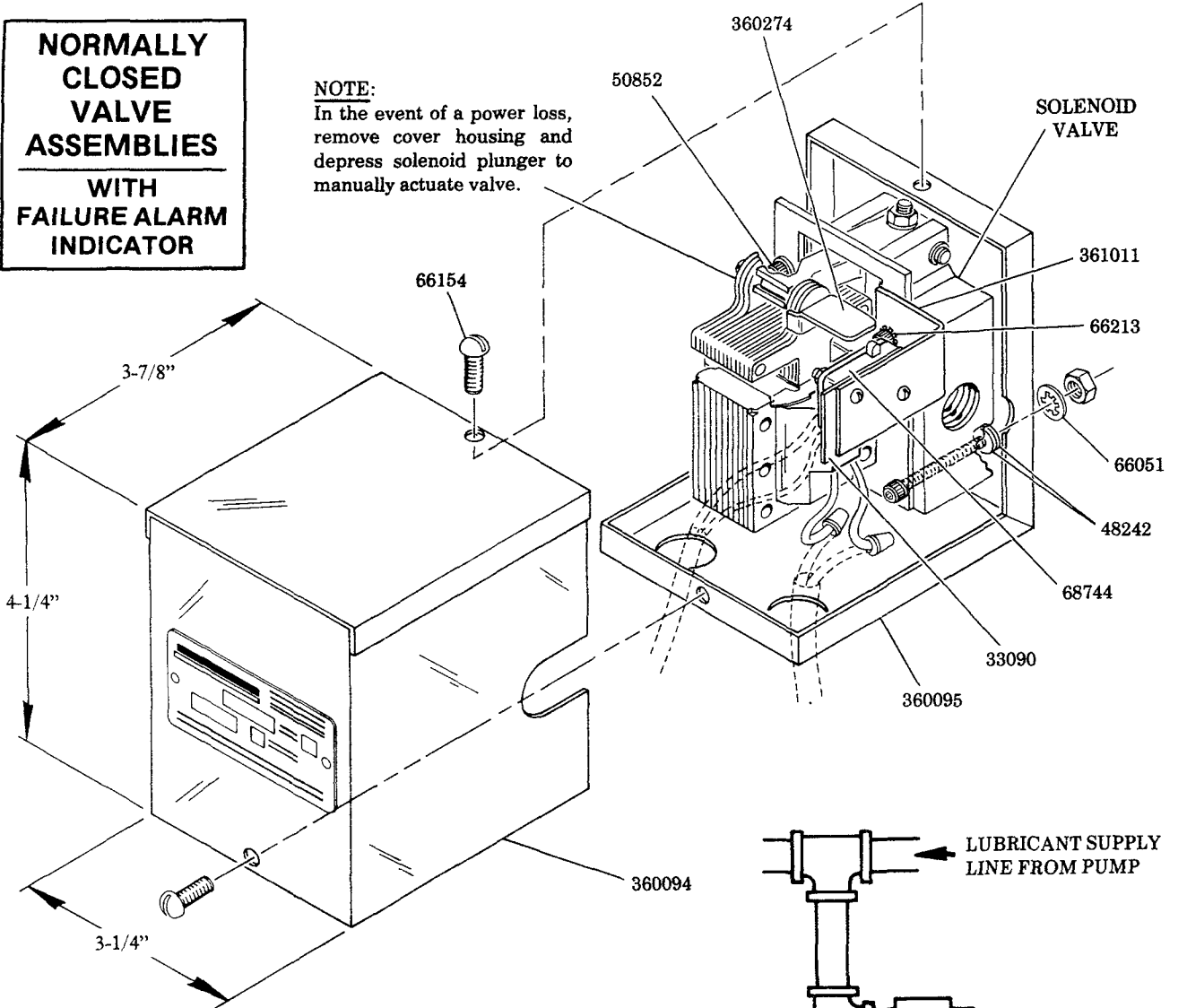


# SOLENOID VALVES TWO-WAY

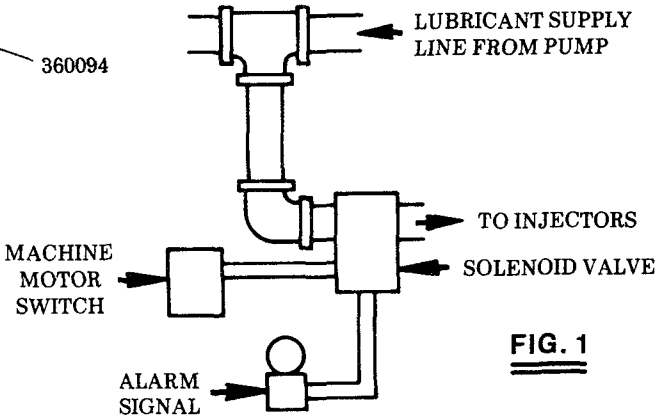
**OPERATING PRESSURE:  
3000 PSI MAXIMUM**

**NORMALLY  
CLOSED  
VALVE  
ASSEMBLIES  
WITH  
FAILURE ALARM  
INDICATOR**

**NOTE:**  
In the event of a power loss,  
remove cover housing and  
depress solenoid plunger to  
manually actuate valve.



SOLENOID ASSEMBLY	SOLENOID VALVE	VOLTAGE
82237-1	68309-1	115V., 60 Hz.
82237-2	68309-2	230V., 60 Hz.
82237-3	68309-3	460V., 60 Hz.
83549	68979	220V., 50 Hz.



**FIG. 1**

**DESCRIPTION** (See Fig. 1)

The two-way, normally closed solenoid valve is an accessory that can be mounted on a machine serviced by a Lincoln Centro-Matic lubrication system. This solenoid valve is controlled by the machine motor switch. When the machine is started, the solenoid valve opens admitting lubricant to the injectors. When the machine is stopped, the solenoid valve automatically shuts off lubricant flow to the injectors. (Machine is not lubricated when it is inactive.)

Included with the solenoid valve is a micro-switch that is actuated by the valve solenoid. The micro-switch can be used in a signal circuit to indicate that the valve is open and is supplying lubricant to the machine. If the valve should fail, the micro-switch will activate a warning device such as a horn or light to indicate abnormal valve action.



One Lincoln Way  
St. Louis, Missouri 63120-1578  
(314) 679-4200

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## NORMALLY OPEN

### DESCRIPTION

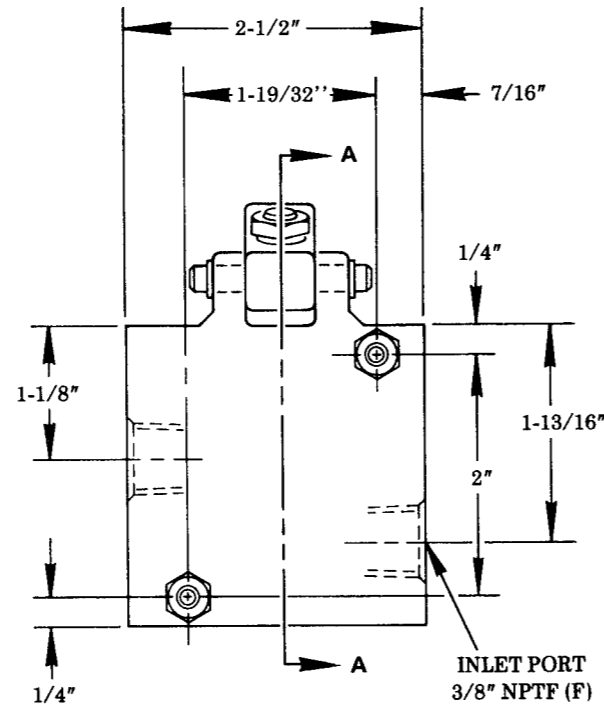
The 68307 & 68980 Two-Way Normally Open Solenoid Valves are used as electric vent valves on Models 84066 & 84088 Centro-Matic Control Panels.

**MODELS 68307 & 68980 ARE NOT AVAILABLE WITH AN ENCLOSURE NOR A FAILURE ALARM INDICATOR**

### ADJUSTMENT PROCEDURE

To adjust for proper opening, hold solenoid plunger down by hand, loosen jam nut and turn socket head set screw in until it bottoms. Release solenoid plunger. Back off set screw until there is clearance between set screw and steel ball (minimum 1/3 turn). Contact between set screw and ball can be determined by feel when plunger is depressed slowly by hand. Tighten jam nut securely.

SOLENOID VALVE	SOLENOID	VOLTAGE
68307	68307-58 ©	115V., 60 Hz., Single phase
68980	68979-2 ©	220V., 50 Hz., Single phase



### END VIEW DIMENSIONS

(Same for all valves)

### NORMALLY CLOSED

SOLENOID VALVE	SOLENOID	VOLTAGE
68309-1	68307-58 ©	115V., 60 Hz., Single phase
68309-2	68309-61 ©	230V., 60 Hz., Single phase
68309-3	68309-62 ©	460V., 60 Hz., Single phase
68979	68979-2 ©	220V., 50 Hz., Single phase

### INSTALLATION

(1) Locate the solenoid valve on the machine convenient for both lubricant and electrical connections. The valve will operate equally well in any position.

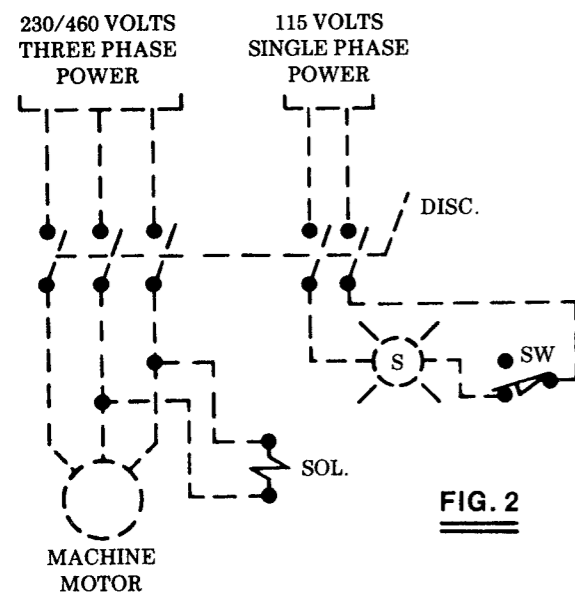
(2) Follow the wiring diagram (Fig. 2) when installing valve.

### SEQUENCE OF OPERATION

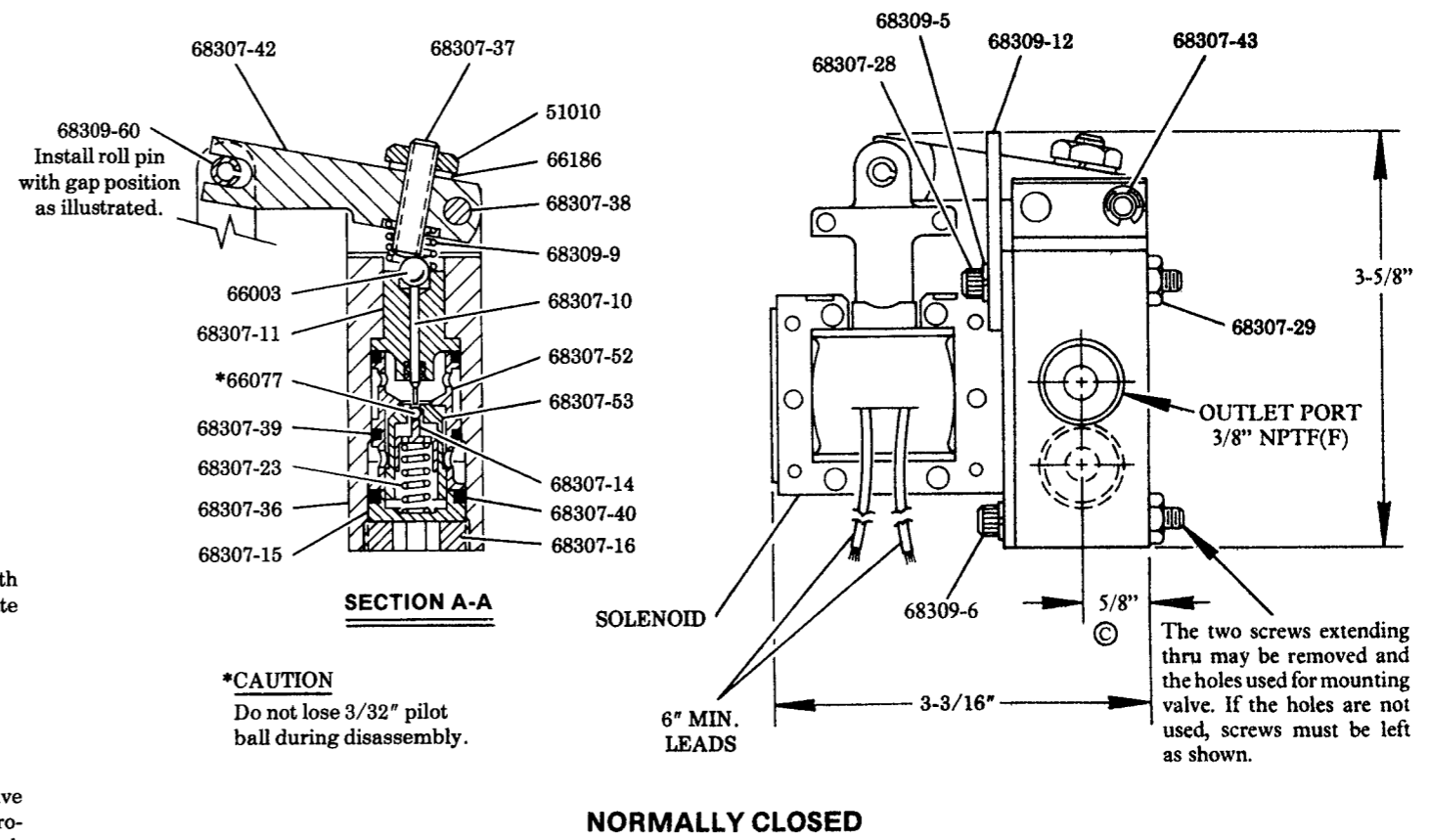
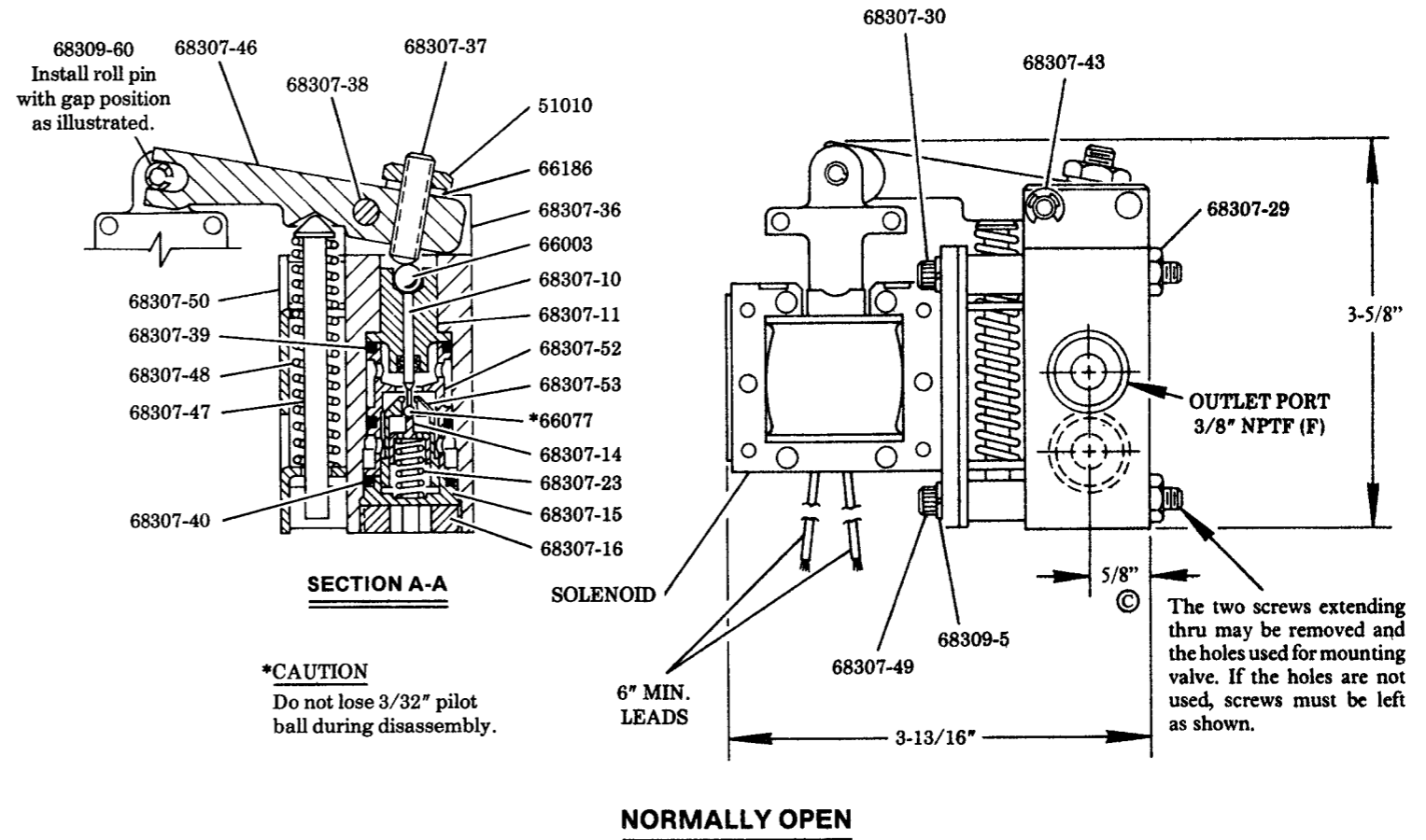
When disconnect is closed, machine motor starts, solenoid of valve is energized and valve opens. The closing of solenoid opens Micro-Switch (SW). If solenoid does not close completely, micro-switch will not open and Alarm Signal (S) will be energized.

### WIRING DIAGRAM

(NORMALLY CLOSED VALVES ONLY)



DISC. - INTERLOCKED DISCONNECT SWITCH  
SOL. - SOLENOID VALVE  
SW - MICRO-SWITCH  
S - ALARM SIGNAL



### SERVICE PARTS

PART	QUAN.	DESCRIPTION	PART	QUAN.	DESCRIPTION
33090	1	Insulation	68307-39	2	O-ring packing
48242	4	Washer	68307-40	1	O-ring packing
50852	1	Screw	68307-42	1	Lever
51010	1	Jam nut	68307-43	2	Retaining ring
66003	1	Steel ball	68307-46	1	Lever
66051	2	Lockwasher	68307-47	1	Spring guide
66077	1	Steel ball	68307-48	1	Spring
66154	2	Screw	68307-49	2	Screw
66186	1	Lockwasher	68307-50	1	Plate
66213	1	Lockwasher	68307-52	1	Valve seat
68307-10	1	Rod	68307-53	1	Valve
68307-11	1	Plunger guide	68309-5	4	Lockwasher
68307-14	1	Spring guide	68309-6	2	Screw
68307-15	1	Retainer	68309-9	1	Spring
68307-16	1	Screw	68309-12	1	Stop
68307-23	1	Spring	68309-60	1	Roll pin
68307-28	2	Screw	68744	1	Switch
68307-29	2	Nut	360094	1	Cover
68307-30	2	Screw	360095	1	Solenoid base
68307-36	1	Body block	360274	1	Actuation arm
68307-37	1	Screw	361011	1	Bracket
68307-38	1	Pin			

**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.

A list of Authorized Service Departments will be furnished upon request.