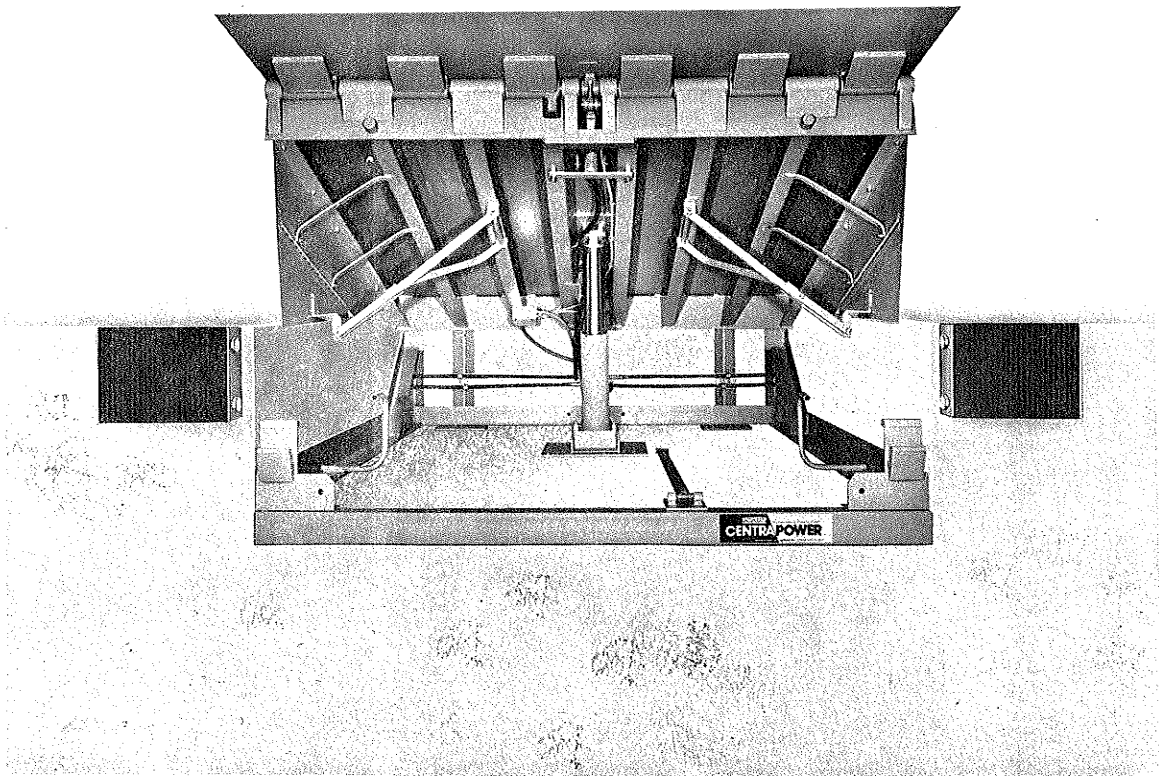

OWNER'S MANUAL

POWERAMP / MULTI-UNIT REMOTE HYDRAULIC SOURCE
CENTRA POWER®



MEETS OR EXCEEDS: American National Standard Institute ANSI MH14.1 - 1984 "Loading Dock Levelers and Dockboards" standards dated Nov. 15, 1984; US. Dept. of Commerce Standard CS-202-56 and OSHA standard requirements for dockboards (levelers) dated May 29, 1971.



HYDRAULIC OIL LEVEL CHECK

When all dock levelers are in the cross-traffic position, oil level should be within 3/16" of top of site glass or visible in hex site porthole. See standard Owner's Manual, page 11, for specific replacement oils.



PRESSURE RELIEF SETTINGS

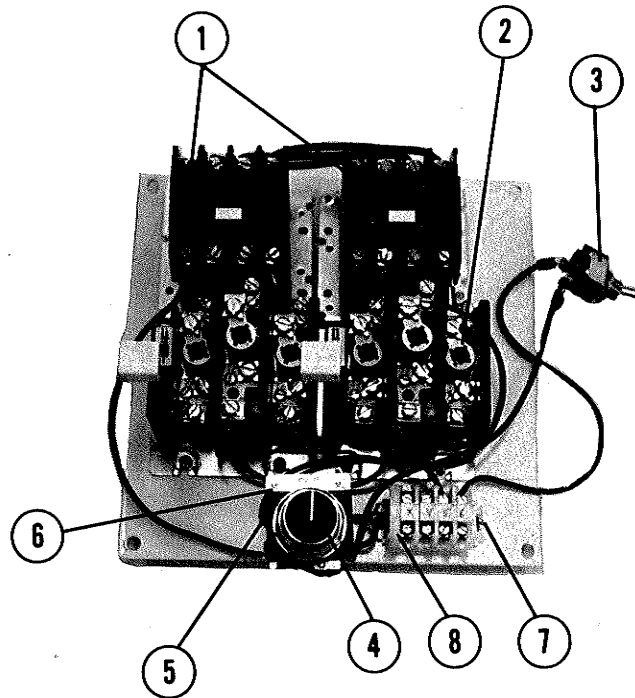
These are pre-set at the factory

If pressure relief requires readjustment after servicing, remove acorn nut and seal washer (1). Loosen jam nut. With flat blade screwdriver, turn screw clockwise until screw bottoms. Then back screw out, counterclockwise, three turns. Tighten jam nut, replace seal washer and acorn nut.

DOUBLE MOTOR STARTER

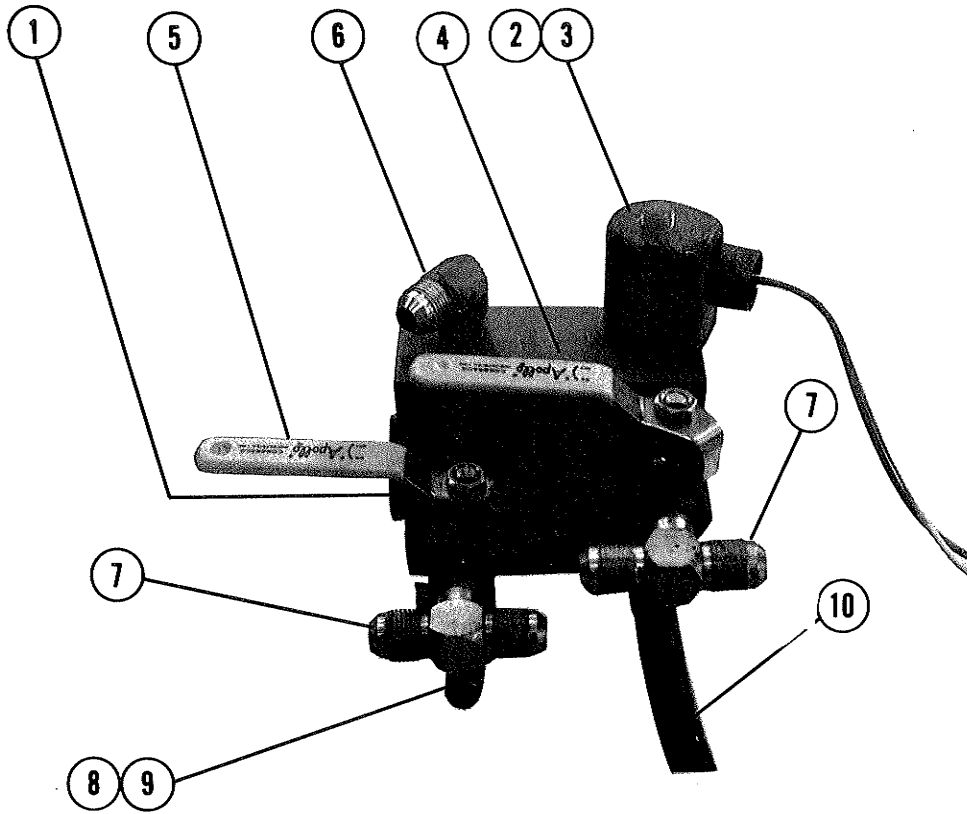
Operation of Double Motor Starter M1, Both, M2

In the event of a breakdown of either L.H. or R.H. motor and pump assembly, open cover of 10 x 10 double motor starter box, locate selector switch M1, "Both," M2. If L.H. motor and pump assembly is not functioning, switch from "Both" to M2. This isolates the L.H. motor and pump assembly both electrically and hydraulically and can be worked on. For R.H. motor and pump assembly, reverse procedure listed above. NOTE: Normal operation is "Both".



Item	Part No.	Description	Qty.
1	7141-0010 - 3 ph - 480V	Motor Starter C.H.	2
1	7141-0011 - 3 ph - 240V	Motor Starter C.H.	2
2	State voltage & Qty.	Heater Coil	6
3	0961-0003	Switch On-Off	1
4	0961-0012	Selector Switch	1
5	0961-0013	Contact Block	1
6	1751-0018	Legend Plate	1
7	1431-0001	Terminal Blocks	4
8	1431-0002	Terminal Block End	1

IN-PIT MANIFOLD



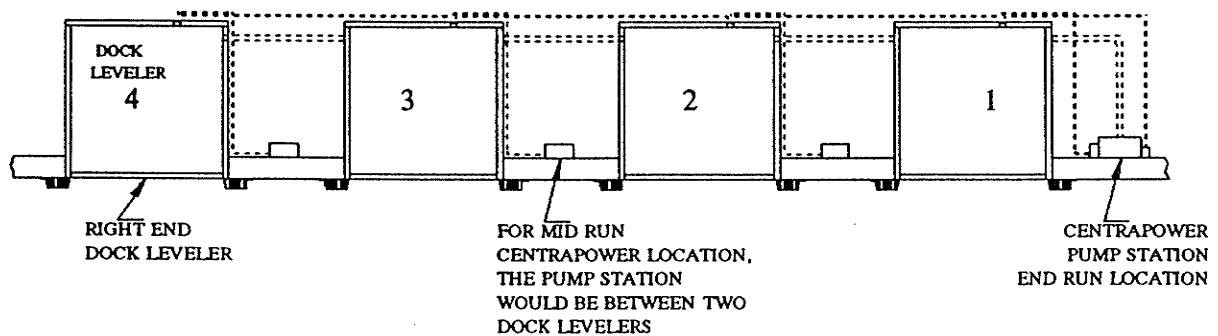
Item	Part No.	Description	Qty.
1	8585-0002	Complete Assembly	1
2	8581-0005	Spool 3 Way	1
3	8581-0004	Solenoid 110 vac	1
4	8581-0002	Valve Shut Off (Press)	1
5	8581-0001	Valve Shut Off (Return)	1
6	0521-0017	90° Elbow (Hyd.)	1
7	9301-0054	Tee (Hyd.)	2
8	8581-0003	Check Valve	1
9	102-2002	Connector	1
10	9904-0003	Hose Assy., 28" lg.	1

CENTRAPOWER INSTALLATION

This addendum is intended to cover the additional steps required to install a Poweramp Centrapower dockleveler system.

First and foremost, it is necessary to become familiar with the terminology used. When describing the system, always stand at the rear hinge line of the dockleveler facing out of the building to describe right and left.

TYPICAL CENTRAPOWER INSTALLATION
(FIGURE 1)



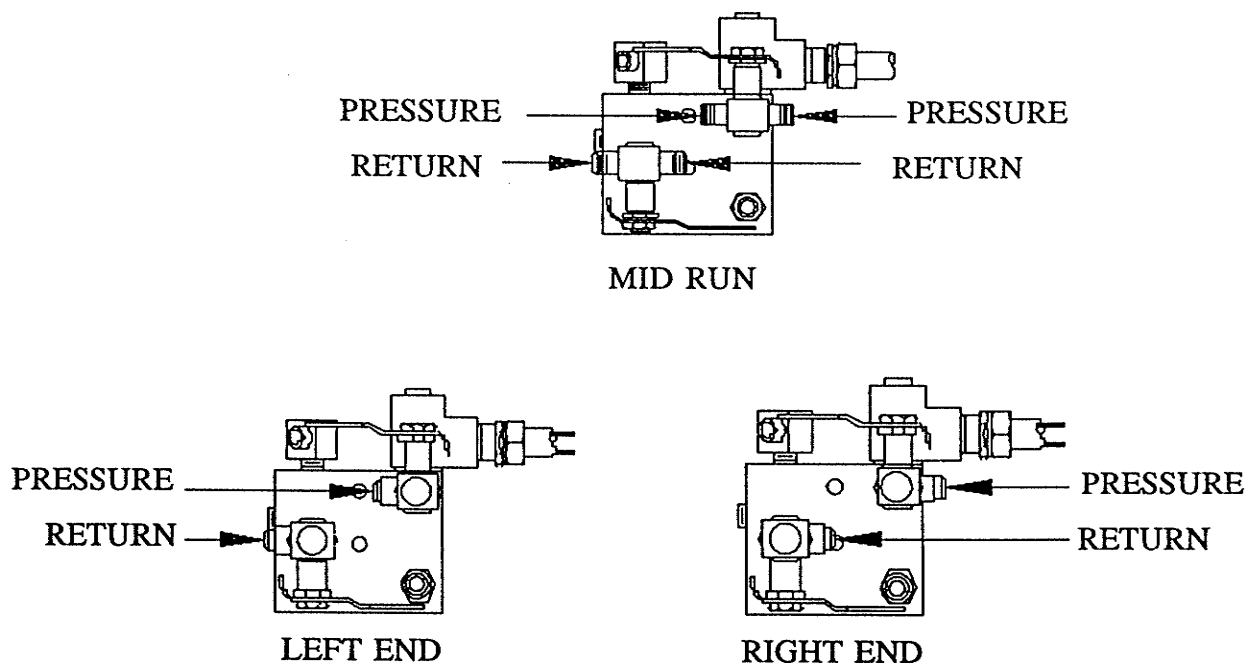
- | | |
|--------------------------|--|
| Centrapower | A series (or group) of docklevelers hydraulically powered from a centrally located pump station. |
| End Run | A dockleveler or pump station located at the end of a specific group or series of docklevelers. |
| Right End | The dockleveler at the far right end of a specific group of docklevelers. |
| Left End | The dockleveler at the left end of the group of docklevelers. |
| Centrapower Pump Station | The electric motor and hydraulic pump enclosure which operates a specific group of docklevelers. |

Installation:

- I. Read carefully and understand all installation information provided for the product being installed. Review the electrical and Centrapower layout drawings supplied for the job.
- II. Locate and place all end run docklevelers. The proper dockleveler and door location can be verified by comparing the Centrapower layout drawing to the loading dock area. All end run docklevelers will have the location marked on one of the vertical members of the back frame. If no markings appear, it is a mid run board.
- III. Locate and place all mid run docklevelers.

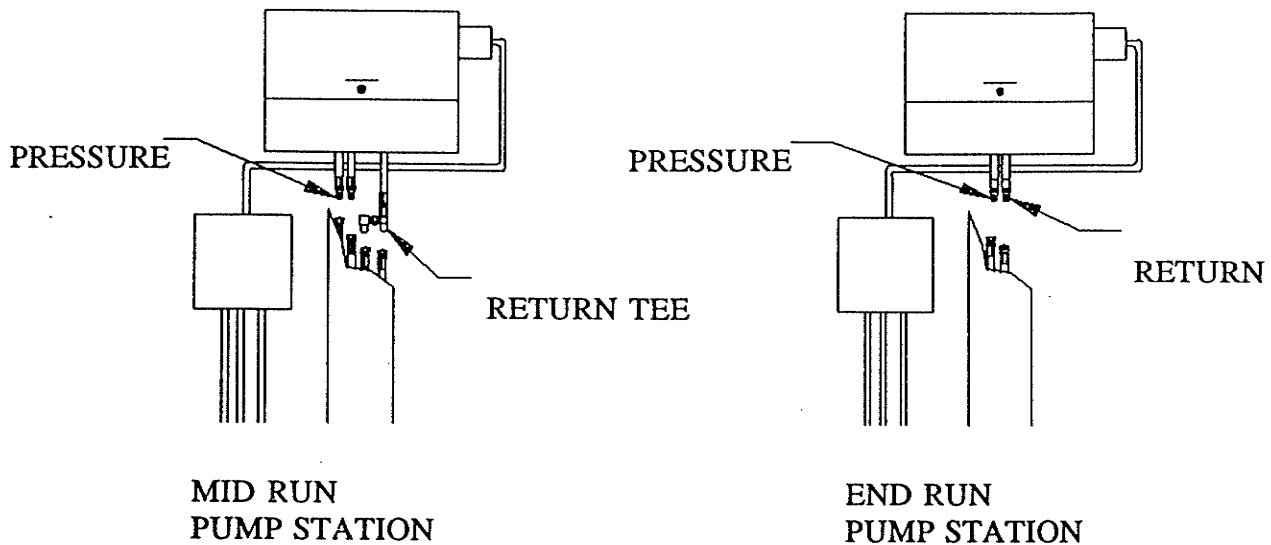
- IV. Un-carton the hydraulic lines supplied. Be careful so as to not remove the shipping plugs, this will be done at a later time. If any plugs have fallen out, replace them before proceeding.
- V. Sort the hoses by size and length. Review Centrapower layout to determine intended location of hydraulic hose assemblies.
- VI. Starting at the end of the run, feed the pressure hoses (typically a 1/2" 100 RI hose with caps on) through the PVC conduit from pit to pit. Also feed the pressure hose through PVC conduit from pit to pump station. PVC in the finished floor will be located 7" out from the back pit wall and 7" up from the pit floor. Pressure lines are to be connected to the elbows or tee fittings on the Centrapower valve block. These fittings will be connected to the steel (black in color) ball valves (see Figure 2).

(FIGURE 2)



- VII. Step VI can be repeated for the return lines at this time. Return tank lines are to be connected to the elbows or tee fittings on the Centrapower valve block. These fittings will be connected to the brass (gold in color) ball valve (see Figure 2).
- VIII. When connecting the hydraulic hoses to the pump station, connect the return line to the hose on the far right and the pressure line to the hose on the far left (when viewed from the front). If the pump station is located between two docklevelers, 2 pressure lines will be extending down past the pump station and one return line with a tee fitting will be provided.

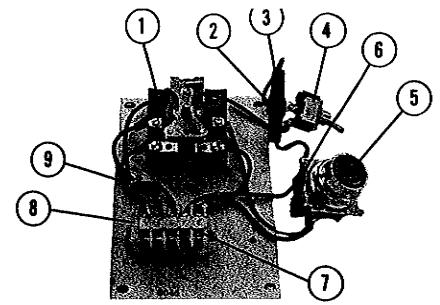
(FIGURE 3)



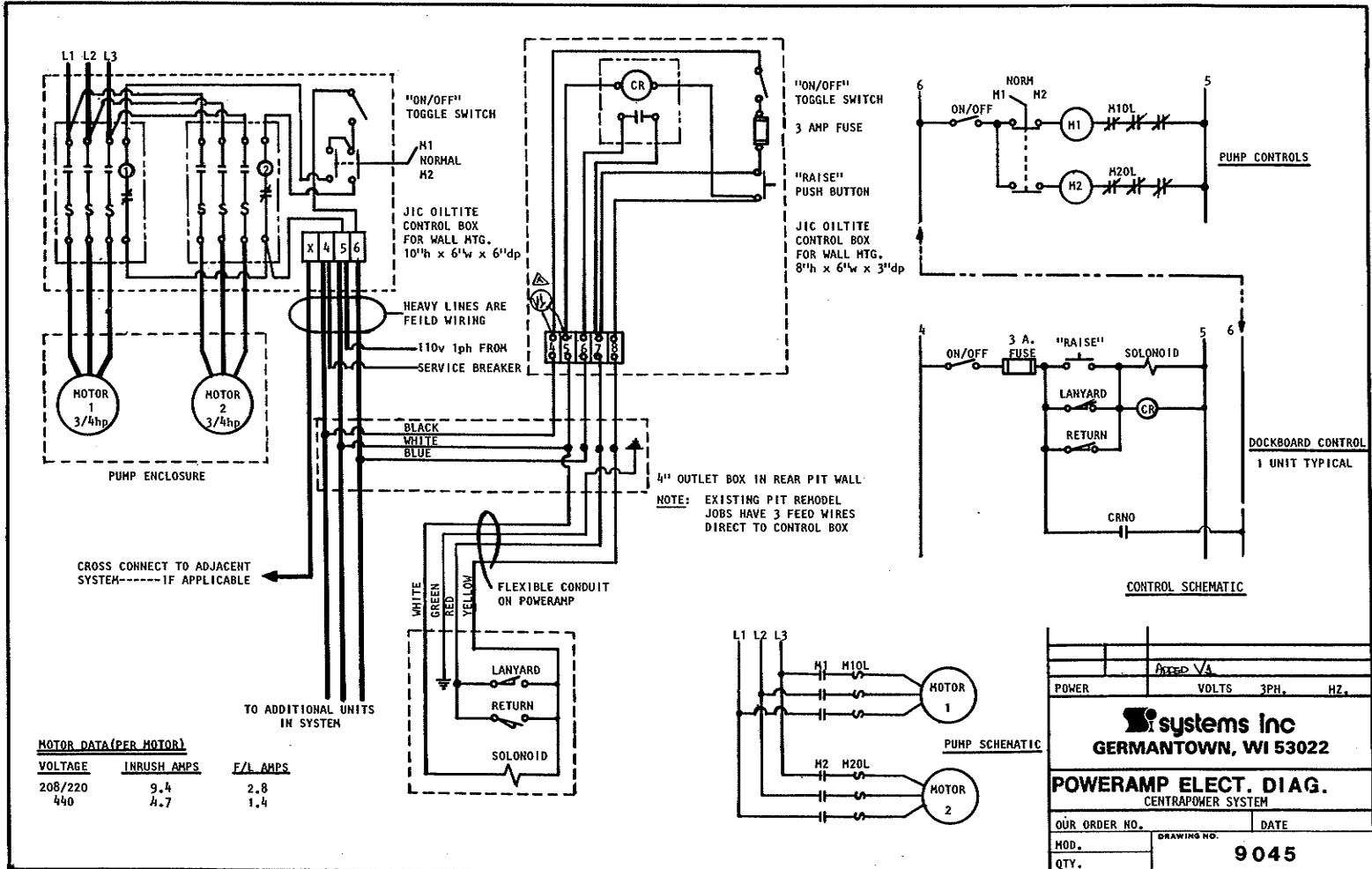
- IX. Complete electrical installation per electrical drawing supplied.
- X. When all hoses are tight, fill reservoir to full mark on sight glass.
- XI. Run each docklevelers through several cycles to assure proper operation and refill Centrapower pump station reservoir as required with hydraulic fluid when complete. Hydraulic fluid level must be checked when docklevelers are in the cross traffic position. Over filling will occur if the reservoir is filled with the docklevelers on the maintenance props.
- XII. The Centrapower pump station is equipped with two motors. During dockleveler testing be sure to select both motor 1 and motor 2. This will assure proper electrical hook up to both motors. After testing both motors for proper operation, place selector switch in "Both" position or in the "M1" position if "Both" is unavailable.

CENTRA/POWER PUSH-BUTTON STATION 9045

Item	Qty.	Part No.	Description
1	1	7141-0001	Relay
2	1	5101-0013	Fuse
3	1	5101-0016	Fuse Holder
4	1	0961-0003	Switch On-Off
5	1	0961-0002	Pushbutton Raise
6	1	0961-0001	Contact Block
7	5	1431-0001	Terminal Blocks
8	1	1431-0002	Terminal Block End
9	1	5101-0017	Veristor (Surge Protector)

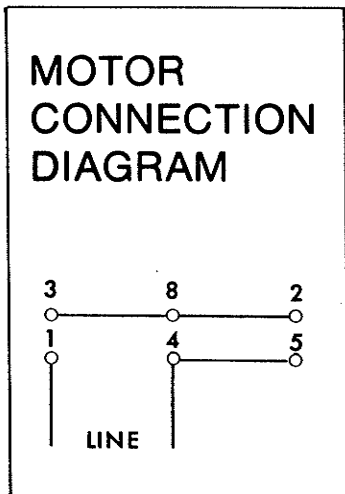
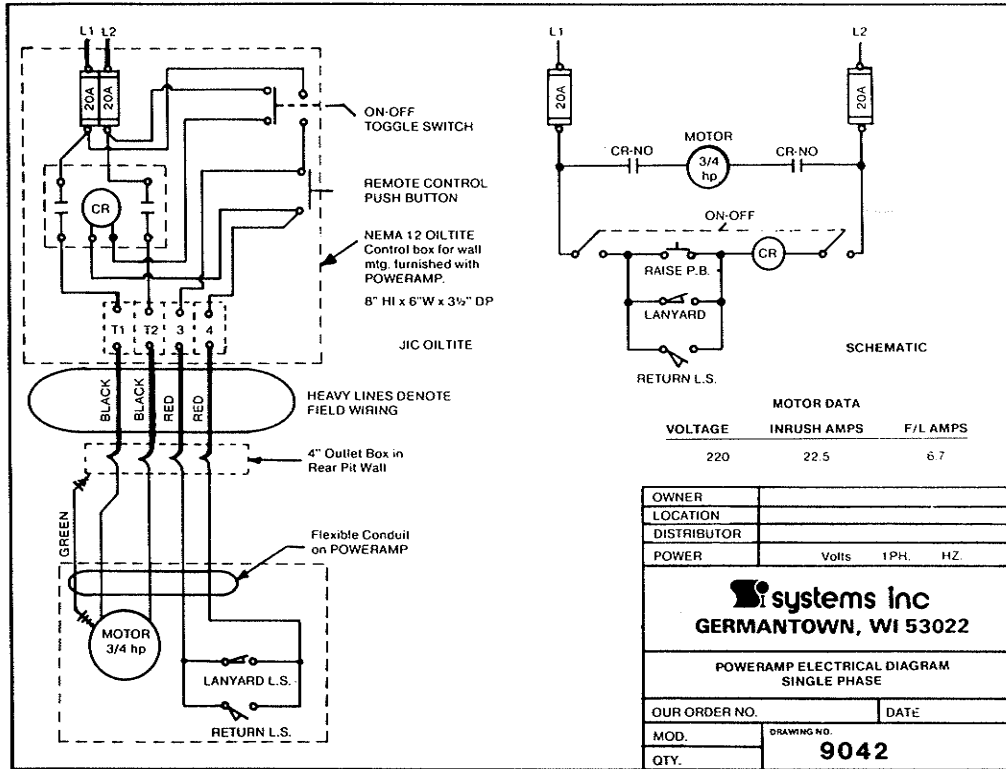


A-4



POWER			FIXED VA		
VOLTS			3PH.		
HZ.			HZ.		
systems inc GERMANTOWN, WI 53022					
POWERAMP ELECT. DIAG. CENTRAPOWER SYSTEM					
OUR ORDER NO.		DRAWING NO.		DATE	
MOD.		QTY.		9045	

SINGLE PHASE ELECTRICAL DIAGRAM (208-240V) ⁸



ITEM	PART NO.	DESCRIPTION
1	0961-0003	"On-Off" Toggle Switch
2	0961-0002	"Raise" Push-Button
3	0961-0001	Contact Block
4	7141-0003	Motor Relay — 1 ph. 208V
4	7141-0002	Motor Relay — 1 ph. 220-240V
5	5101-0001	20 Amp Fuse
6	5101-0003	Fuse Block
7	5101-0002	Fuse Block End
8	1431-0001	Terminal Blocks

NOTE: 2751-0001 Enclosure 6" x 8" x 3" JIC (not shown)

