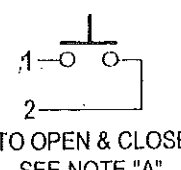
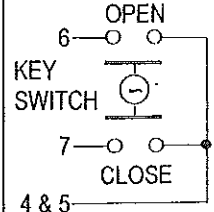
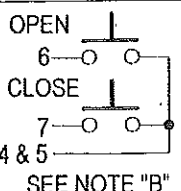
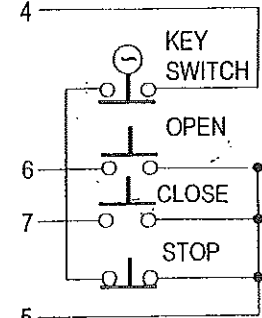
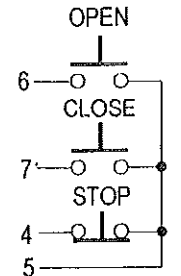
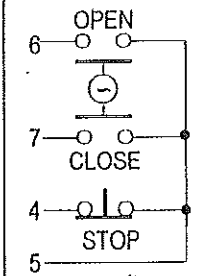
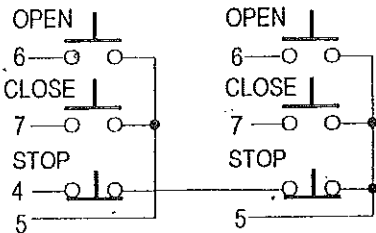
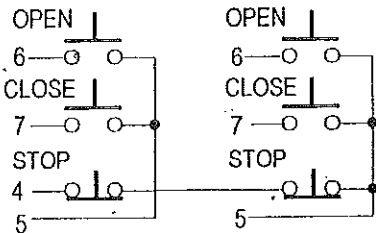
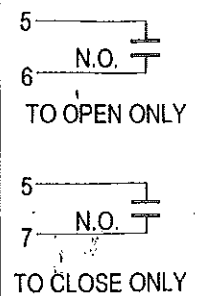
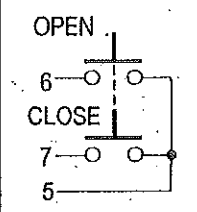


PowerMaster

DOOR OPERATORS

OPERATING STATION WIRING

OPERATING STATION WIRING	
SINGLE CONTACT AUX. DEVICE 	KEY STATION  <p>SEE NOTE "B"</p>
TWO BUTTON STATION  <p>SEE NOTE "B"</p>	THREE BUTTON STATION WITH KEYED LOCKOUT 
THREE BUTTON STATION 	KEY STATION WITH STOP BUTTON 
THREE BUTTON STATION  <p>NOTE: STOP BUTTONS TO BE WIRED IN SERIES.</p>	MULTIPLE CONTROL STATIONS  <p>NOTE: STOP BUTTONS TO BE WIRED IN SERIES.</p>
TREADLE/ LOOP DETECTOR  <p>TO OPEN ONLY</p> <p>TO CLOSE ONLY</p>	CEILING PULL SWITCH (CP-2)  <p>NOT TO BE USED WITH S.E. TO REV. WIRING</p>

TERMINAL	FIELD CONNECTIONS
	CONNECT TO:
L1 & L2	1Ø POWER: 115V, L1 NEUTRAL, L2 HOT LEG 220V, L1 & L2 HOT LEGS
L1, L2 & L3	3Ø POWER: IF MOTOR RUNS IN WRONG DIRECTION, REVERSE L1 & L2
1 & 2	TO OPEN & TO CLOSE BY SINGLE CONTACT AUXILIARY DEVICES
4, 5, 6, & 7	FOR OPERATING STATIONS
8 & 9	OBSTRUCTION SENSING DEVICE WITH NORMALLY OPEN CONTACT
13 & 14	TIMER DEFEAT SWITCH (WHEN REQUIRED), REMOVE JUMPER
R1, R2, & R3	RADIO CONTROL RECEIVER (24 VAC ONLY)

NOTES:

A- WHEN SPECIFIED, ANY OF THE FOLLOWING DEVICES CAN BE USED: RADIO CONTROL, CARD KEYS, KEY SWITCHES, PULL SWITCHES, OVERHEAD WANDS, PHOTOELECTRIC DEVICES, ONE BUTTON STATIONS, ETC..

B- IF STOP BUTTON IS NOT USED, PROVIDE JUMPER FROM # 4 TO # 5.

-TERMINALS # 3 AND # 4 PROVIDE 24 VAC FOR AUX. DEVICES.

LIMIT ADJUSTMENT PROCEDURE

WARNING

TURN OFF MAIN POWER BEFORE
MAKING ANY ADJUSTMENTS!

1. BEFORE OPERATING DOOR SET GROOVED NUTS APPROXIMATELY 1" FROM LIMIT SWITCHES ON EACH SIDE.

* IMPORTANT *

BE SURE DOOR IS IN THE MIDWAY POSITION.

WARNING

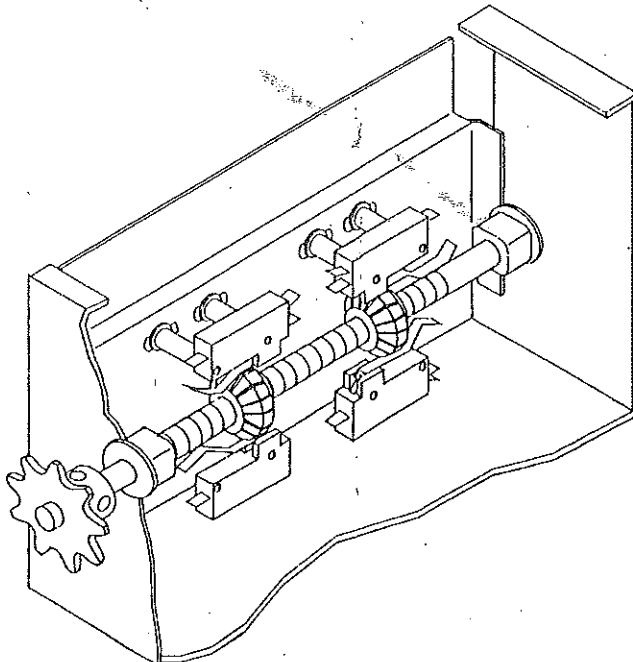
STAY CLEAR OF ALL MOVING PARTS AND ELECTRICAL
COMPONENTS OF OPERATOR AND DOOR WHILE TESTING!!

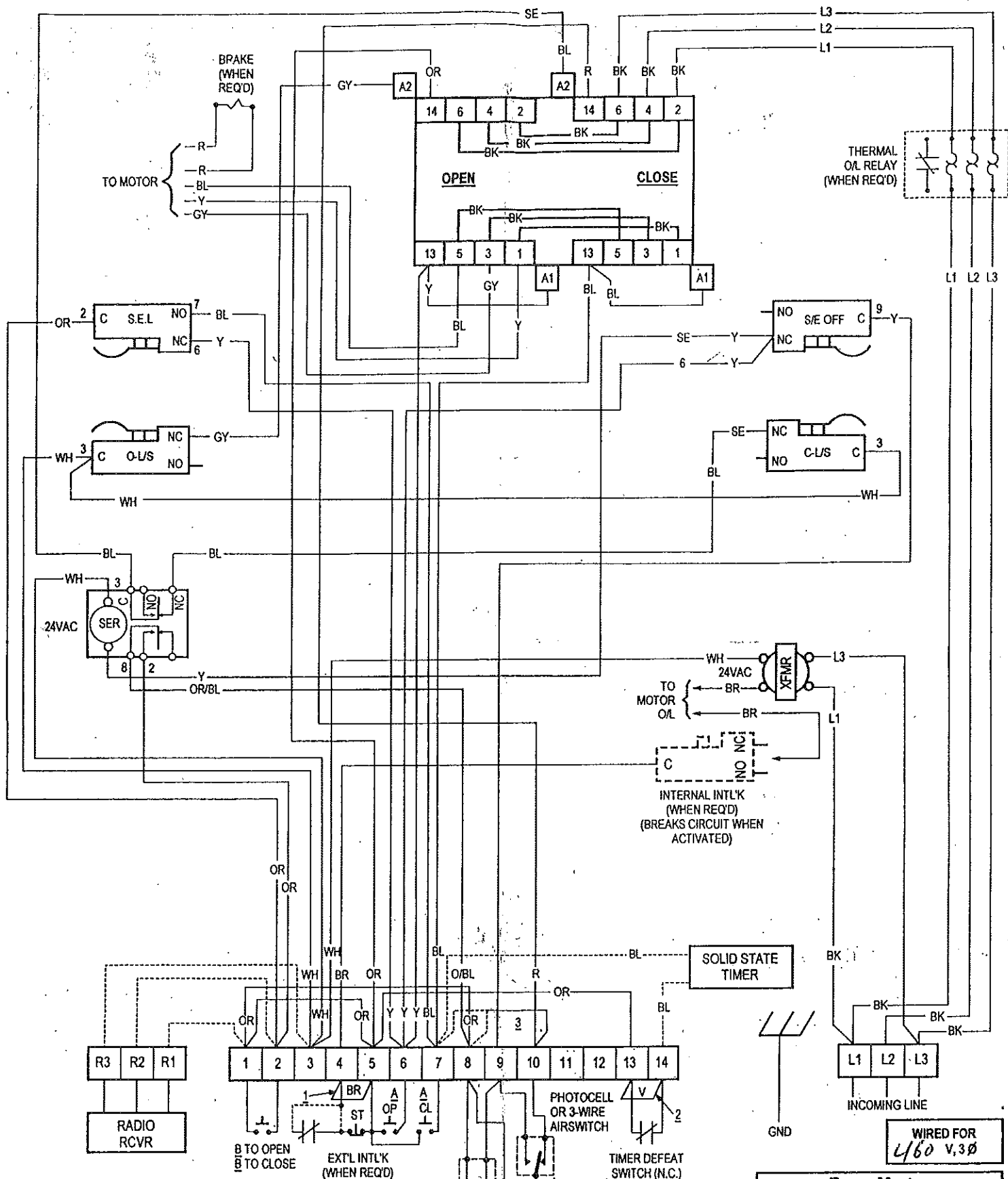
2. OPEN DOOR ELECTRICALLY. IF DOOR TRAVELS IN CORRECT DIRECTION, AND STOPS AT OPEN LIMIT PROCEED TO STEP 4.
IF DOOR TRAVELS IN THE CORRECT DIRECTION, AND NEARS THE END OF DOOR TRAVEL BUT DOES NOT STOP, **STOP DOOR!** CHECK TO SEE IF OPEN LIMIT HAS BEEN TRIPPED. IF IT HAS NOT BEEN TRIPPED, GO TO STEP 4.
IF OPEN LIMIT SWITCH HAS BEEN TRIPPED, BUT DID NOT STOP DOOR, CONSULT THE FACTORY TECH. LINE- (800-323-3674). IF DOOR TRAVELS IN WRONG DIRECTION, **STOP DOOR!** GO TO STEP 3.
3. IF DIRECTION OF TRAVEL IS WRONG:
ON 3-PHASE MACHINES ONLY: TURN OFF MAIN POWER AND SWAP POWER CONNECTION ON L1 AND L2 REPEAT LIMIT SWITCH TESTING.
ON SINGLE-PHASE MACHINES ONLY: IF ROTATION IS INCORRECT, AND LIMIT SWITCHES ARE INOPERATIVE, CHECK THAT DOOR CONTROLS ARE CONNECTED CORRECTLY. IF CONTROLS ARE CORRECT CONSULT THE FACTORY TECH. LINE

WARNING

UNDER NO CIRCUMSTANCES SHOULD CONTROL STATION WIRING
BE ALTERED IF ROTATION IS INCORRECT. TO DO SO WILL CAUSE
SOME CONTROL FUNCTIONS TO BE INOPERATIVE:
WHICH MAY RESULT IN PERSONAL INJURY, OR
DAMAGE TO DOOR AND/OR OPERATOR.

4. DEPRESS PRESSURE PLATE TO MOVE GROOVE NUTS TO DESIRED LOCATION: TO STOP DOOR EARLIER: MOVE NUT CLOSER TO LIMIT SWITCH PLUNGER. TO STOP DOOR LATER: BACK NUT AWAY FROM LIMIT SWITCH PLUNGER. WHEN MAKING FINE ADJUSTMENTS, TURN NUT ONLY 1/4 TO 1/2 TURN AT A TIME, AND RUN DOOR AGAIN ELECTRICALLY. AFTER SETTING NUTS IN DESIRED POSITION, MAKE CERTAIN THAT GROOVE IS ENGAGED BY THE PRESSURE PLATE.
5. REPEAT PROCEDURE FOR CLOSE LIMIT ADJUSTMENT.

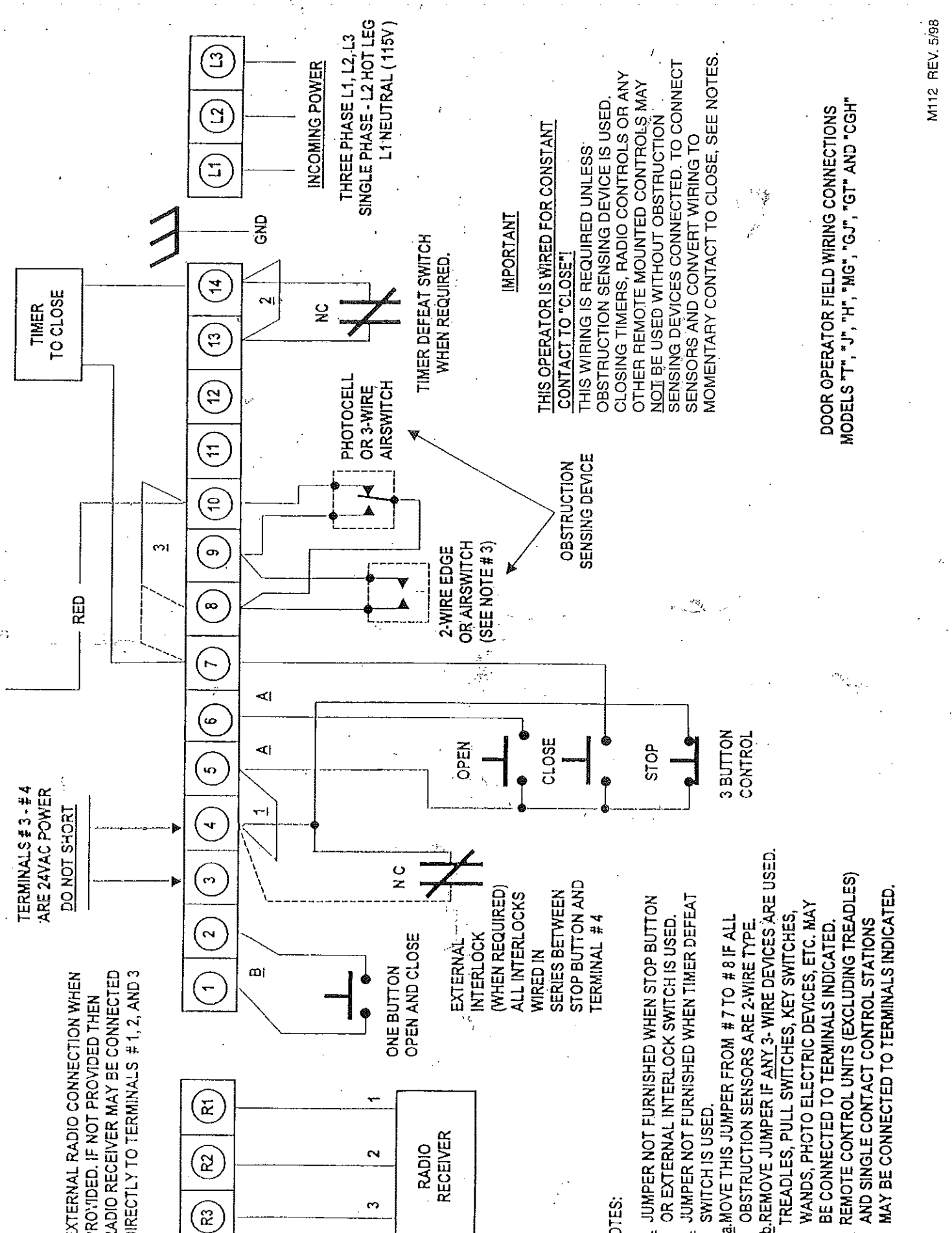




NOTES:

- 1- WIRE-NOT FURNISHED WHEN EXTERNAL INT'LK SWITCH IS USED.
- NOT FURNISHED WHEN STOP BUTTON IS USED.
- 2- WIRE-NOT FURNISHED WHEN TIMER DEFEAT SWITCH IS USED.
- 3a- MOVE THIS JUMPER FROM #7 TO #8 IF ALL OBSTRUCTIONS SENSORS ARE 2-WIRE TYPE.
- 3b- REMOVE JUMPER IF ANT 3-WIRE DEVICES ARE USED.
- A- TREADLES, PULL SWITCHES, KEY SWITCHES, PHOTO-ELECTRIC DEVICES, ETC. MAY BE CONNECTED TO TERMINALS INDICATED.
- B- REMOTE CONTROL UNITS (EXCLUDING TREADLES AND PHOTO-ELECTRIC UNITS), PULL SWITCHES AND SINGLE CONTACT CONTROL STATIONS, MAY BE CONNECTED TO TERMINALS INDICATED.

PowerMaster	
WIRING TYPE: SAFETY EDGE TO REVERSE WITH OPTIONAL TIMER	
MTR/CNTR: 3 Ø	
DATE: 2-20-98	REV. 9
BY: F.S.	
SPECIAL: OPTIONAL TIMER CIRCUIT IN DASHED LINES.	
WIRING DIAGRAM NO. 333-3	
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TERMINALS # 3 - # 4
ARE 24VAC POWER
DO NOT SHORT

EXTERNAL RADIO CONNECTION WHEN PROVIDED. IF NOT PROVIDED THEN RADIO RECEIVER MAY BE CONNECTED DIRECTLY TO TERMINALS # 1, 2, AND 3

ONE BUTTON
OPEN AND CLOSE

EXTERNAL INTERLOCK (WHEN REQUIRED) ALL INTERLOCKS WIRING IN SERIES BETWEEN STOP BUTTON AND TERMINAL # 4

EXTERNAL INTERLOCK (WHEN REQUIRED) ALL INTERLOCKS WIRING IN SERIES BETWEEN STOP BUTTON AND TERMINAL # 4

TIMER DEFEAT SWITCH WHEN REQUIRED.

IMPORTANT

THIS OPERATOR IS WIRED FOR CONSTANT CONTACT TO "CLOSE"

THIS WIRING IS REQUIRED UNLESS OBSTRUCTION SENSING DEVICE IS USED. CLOSING TIMERS, RADIO CONTROLS OR ANY OTHER REMOTE MOUNTED CONTROLS MAY NOT BE USED WITHOUT OBSTRUCTION SENSING DEVICES CONNECTED. TO CONNECT SENSORS AND CONVERT WIRING TO MOMENTARY CONTACT TO CLOSE, SEE NOTES.

DOOR OPERATOR FIELD WIRING CONNECTIONS MODELS "T", "J", "H", "MG", "GJ", "GT" AND "CGH"

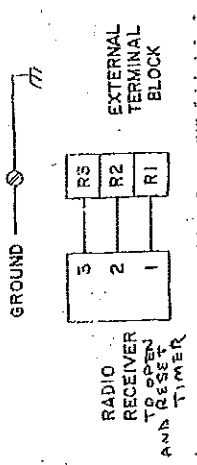
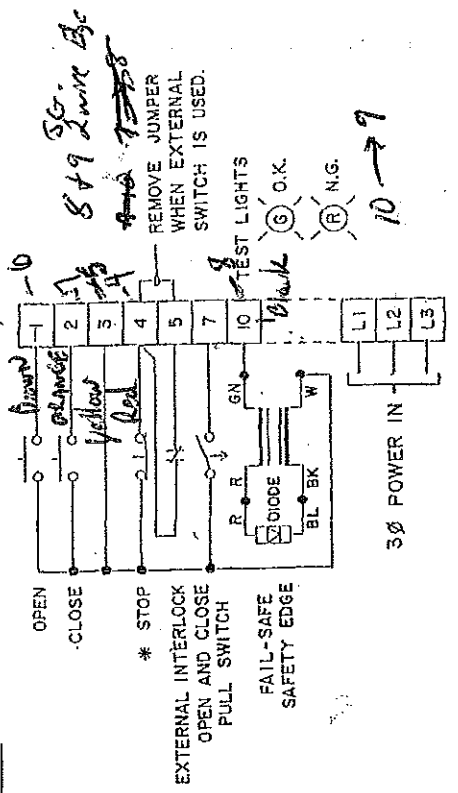
NOTES:

- JUMPER NOT FURNISHED WHEN STOP BUTTON OR EXTERNAL INTERLOCK SWITCH IS USED.
- JUMPER NOT FURNISHED WHEN TIMER DEFEAT SWITCH IS USED.
- MOVE THIS JUMPER FROM # 7 TO # 8 IF ALL OBSTRUCTION SENSORS ARE 2-WIRE TYPE.
- REMOVE JUMPER IF ANY 3- WIRE DEVICES ARE USED.
- TREADLES, PULL SWITCHES, KEY SWITCHES, WANDS, PHOTO ELECTRIC DEVICES, ETC. MAY BE CONNECTED TO TERMINALS INDICATED.
- REMOTE CONTROL UNITS (EXCLUDING TREADLES) AND SINGLE CONTACT CONTROL STATIONS MAY BE CONNECTED TO TERMINALS INDICATED.

3M COLUMBIA

FIELD WIRING

NOTE: IF SAFETY EDGE OR ITS WIRING IS DAMAGED, THE DOOR WILL NOT CLOSE.
WARNING! DO NOT APPLY POWER UNTIL AFTER READING INSTRUCTIONS.



RADIO RECEIVER TO OPEN AND RESET AND TIMER

* IF NO STOP BUTTON IS USED INSTALL A JUMPER BETWEEN TERMINALS 3 AND 4.
 ATTENTION ELECTRICIAN: WE RECOMMEND THE USE OF 16 GAUGE OR HEAVIER WIRE FOR ALL CONTROL CIRCUIT WIRING.

- WIRING INSTRUCTIONS
- 1) POSITION DOOR IN MID-POSITION SET LIMIT NUTS SO THAT BOTH OPEN AND CLOSE LIMIT SWITCHES ARE DEPRESSED (LISTEN FOR CLICK).
 - 2) CONNECT THE DIODE (FURNISHED IN OPERATOR CONTROL BOX) TO THE TWO WIRES OF THE FOUR WIRE SAFETY EDGE AS SHOWN THE REMAINING WIRE CORRECT FOR THE FAILSAFE CIRCUIT TO FUNCTION.
 - 3) CONNECT THE REMAINING TWO LEADS OF THE SAFETY EDGE TO TERMINALS 3 AND 10 AS SHOWN.
 - 4) REFER TO THE REMAINING TWO TEST LIGHTS BUILT INTO THE FAILSAFE CIRCUIT BOARD IN THE OPERATOR CONTROL BOX: A) IF RED LIGHT FLASHES, REVERSE CONNECTIONS TERMINALS 3 AND 10. B) IF BOTH RED AND GREEN LIGHTS FLASH THE DIODE IS CONNECTED IMPROPERLY CHECK CONNECTIONS. C) IF PER GREEN LIGHT ONLY IS ON, CONNECTIONS ARE CORRECT. PROCEED WITH LIMIT SWITCH ADJUSTMENT INSTRUCTION MANUAL.

PROJ:	LINK CONTROLS, INC.
CUST:	2111 Lakeland Avenue, ROCKONOMA, NY 11779 516-467-2500
DFTSMN:	J. W. ENGR: G. R.
S. O. NO.:	
EQUIP:	FAILSAFE SAFETY EDGE
DWG. NO.:	0193
REV.:	T
DATE:	5/31/88
TITLE:	3Ø F2-WIRING

SCHEMATIC

