

PRIMARY THERMOSTAT
RECTIFIER THERMOSTAT

THIS LEAD IS NOT USED WHEN POLARITY SWITCH IS INSTALLED

L2 IS LOCATED NEAR POSITIVE OUTPUT TERMINAL ON OLDER MACHINES

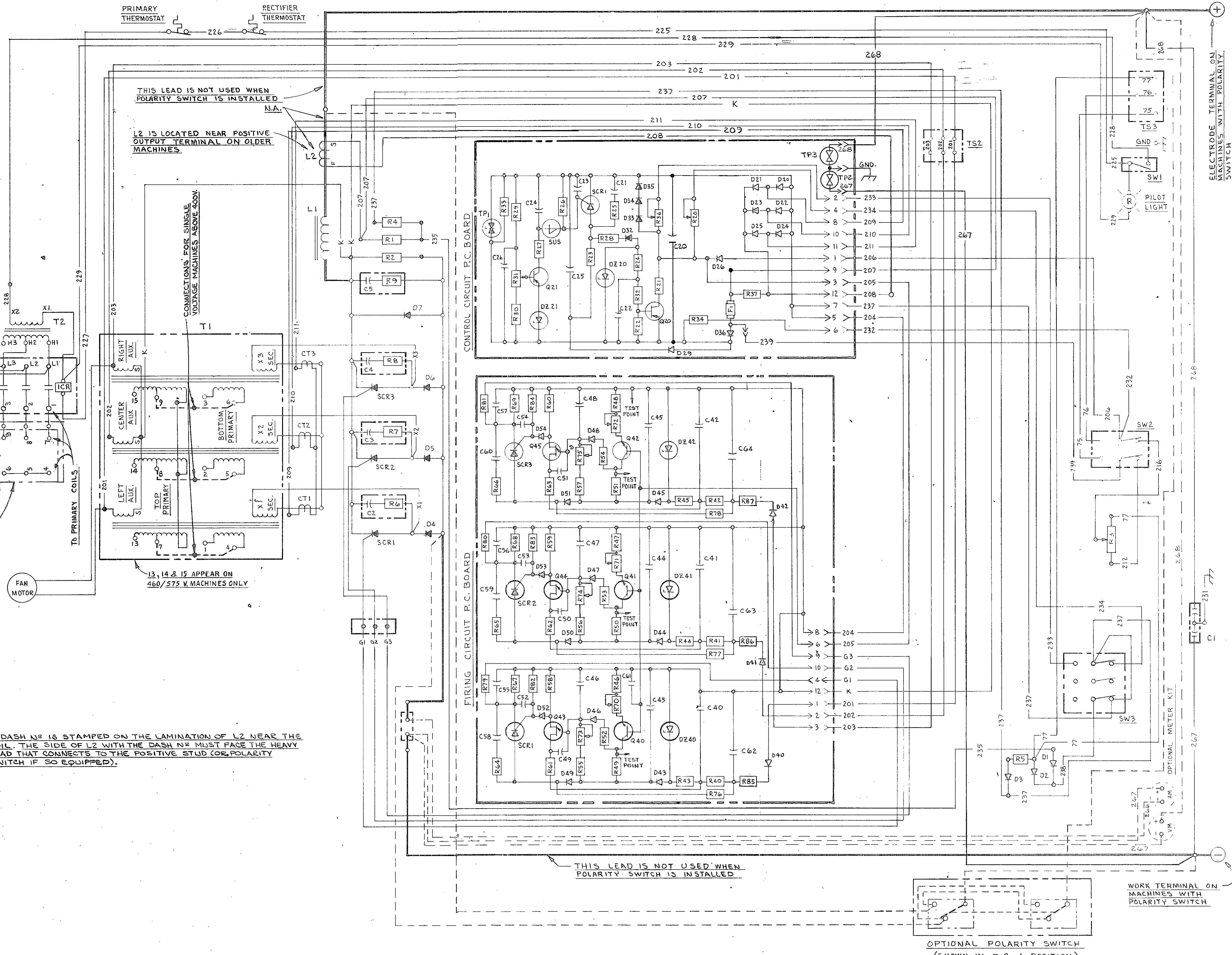
CONNECTIONS FOR SINGLE VOLTAGE MACHINES ABOVE ROOM

13, 14 & 15 APPEAR ON 460/575 V. MACHINES ONLY

TO GROUND PER NATIONAL ELECTRICAL CODE

TO SUPPLY LINES

RECONNECT PANEL NOT USED ON SOME MACHINES. REFER TO WIRING DIAGRAM & INPUT CONNECTION DIAGRAM



N.A. A DASH # IS STAMPED ON THE LAMINATION OF L2 NEAR THE COIL. THE SIDE OF L2 WITH THE DASH # MUST FACE THE HEAVY LEAD THAT CONNECTS TO THE POSITIVE STUD (OR POLARITY SWITCH IF SO EQUIPPED).

THIS LEAD IS NOT USED WHEN POLARITY SWITCH IS INSTALLED

OPTIONAL POLARITY SWITCH (SHOWN IN D.C. + POSITION)

WORK TERMINAL ON MACHINES WITH POLARITY SWITCH

LEGEND

SPECIFIED VALUES OF NUMBERED COMPONENTS

CONTROL CIRCUIT P.C. BOARD

C20	.022 MFD.	R20	500 Ω 1/4 W.
C21	.22 MFD.	R21	100 Ω
C22	150 MFD.	R22	2.2 K Ω
C23	.047 MFD.	R23	270 Ω 1 W.
C24	100 MFD.	R24	15 K Ω
C25	.33 MFD.	R25	10 Ω
C26	50 MFD.	R26	100 Ω
		R27	39 K Ω
		R28	1.8 K Ω
		R29	10 K Ω
		R30	1 K Ω
		R31	1 K Ω 1/4 W.
		R32	3.9 K Ω
		R33	500 Ω 5 W.
		R34	2.2 K Ω 2 W.
		R36	1 K Ω 1/4 W.
		R37	470 Ω 1 W.

D20 THRU D26 } 1 AMP
D29 & D32 THRU D34 } 1 AMP

DZ20 20 V.
DZ21 6.2 V.

TP1 50V
TP2 150V
TP3 150V

Q20 1A, 200V. P.N.P.
Q21 1A, 200V. P.N.P.
SCR1 4 A. 400 V.
SUS 2N4989
F1 10 AMP SLOW BLOW FUSE

FIRING CIRCUIT P.C. BOARD

C40, C41, C42	.02 MFD	R40, R41, R42	430 Ω 5 W.
C43, C44, C45	4.7 MFD	R43, R44, R45	15 Ω
C46, C47, C48	.047 MFD	R46, R47, R48	150 Ω
C49, C50, C51	.047 MFD	R49, R50, R51	3.3 K Ω
C52, C53, C54	.1 MFD	R52, R53, R54	6.8 K Ω
C55, C56, C57	.022 MFD	R55, R56, R57	47 K Ω
C58, C59, C60	.22 MFD	R58, R59, R60	47 Ω
C61	.022 MFD	R61, R62, R63	680 Ω
C62, C63, C64	2 MFD	R64, R65, R66	10 Ω
		R67, R68, R69	47 Ω
		R70, R71, R72	500 Ω 1/4 W.
		R73, R74, R75	100 K Ω 1/4 W.
		R76, R77, R78	270 Ω 5 W.
		R79, R80, R81	5.1 Ω
		R82, R83, R84	100 Ω
		R85, R86, R87	68 Ω 5 W.

D40 THRU D54 1 AMP

DZ40, DZ41, DZ42 20 V. 1 W.

Q40, Q41, Q42 2N 3393 N.P.N.
Q43, Q44, Q45 UJT

SCR1, SCR2, SCR3 4 A. 400 V.

NOT ON P.C. BOARDS

C1	.05 + .05 MFD	R1	50 Ω 50 W.
C2	.68 MFD	R2	40 Ω 100 W.
C3	.68 MFD.	R3	10 K Ω 2 W.
C4	.68 MFD.	R4	50 Ω
C5	1 MFD.	R5	270 Ω
		R6	47 Ω
		R7	47 Ω
		R8	47 Ω
		R9	27 Ω

- CT1, CT2, CT3 CURRENT TRANS.
- L1 D.C. OUTPUT FILTER
- L2 FEEDBACK FILTER
- ICR INPUT STARTER
- SCR1 - D4
- SCR2 - D5
- SCR3 - D6
- D7
- SW1 POWER SWITCH
- SW2 MACH. REMOTE SWITCH
- SW3 DIAL SELECTOR SWITCH
- T1 MAIN TRANSFORMER
- T2 CONT. TRANSFORMER

A.N.S.I. ELECTRICAL SYMBOLS PER E-1537

NOTE: SINCE COMPONENTS OR CIRCUITRY ON A PRINTED CIRCUIT BOARD MAY CHANGE WITHOUT AFFECTING THE INTERCHANGEABILITY OF A COMPLETE BOARD, THIS DIAGRAM MAY NOT SHOW THE EXACT COMPONENTS OR CIRCUITRY OF CONTROLS HAVING A COMMON CODE NUMBER.

THE LINCOLN ELECTRIC CO.
CLEVELAND, OHIO U.S.A.

TYPE IDEALARC R3R-300 (SINGLE & DUAL VOLTAGE)
SUBJECT SCHEMATIC
SUPP 50 000 (6-1479) 04 HN CUR DEC
G-1521