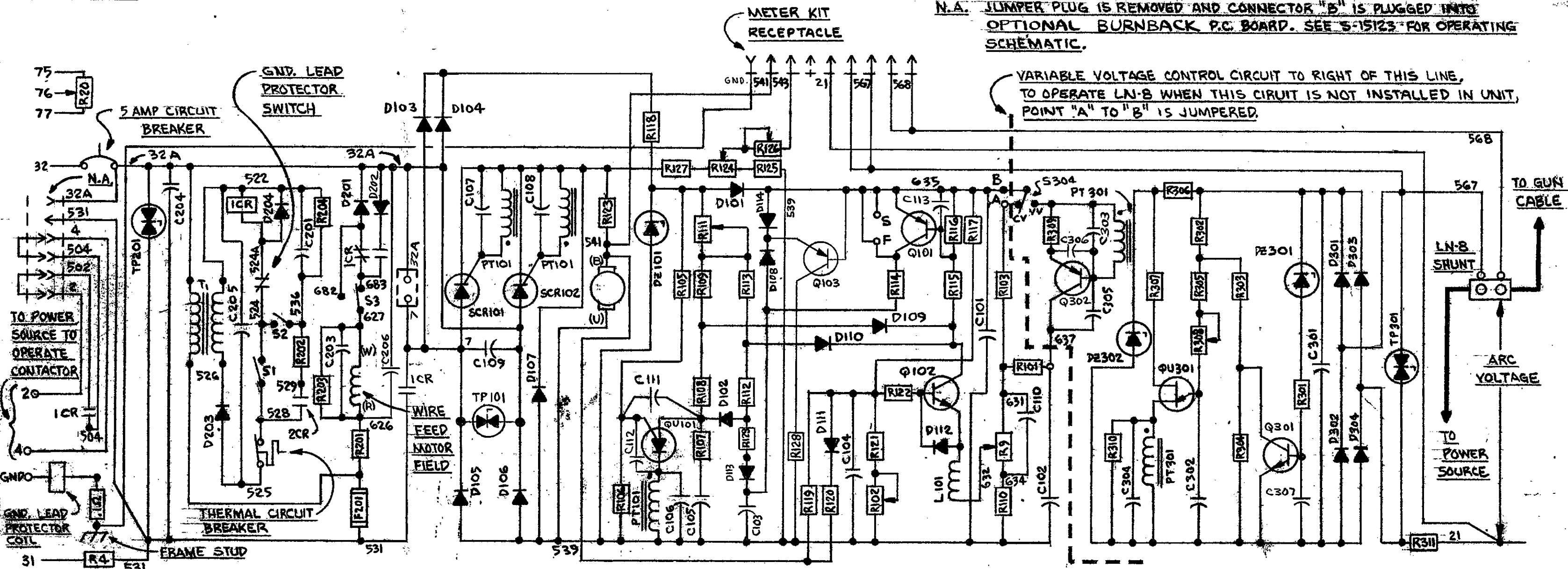


N.A. JUMPER PLUG IS REMOVED AND CONNECTOR "B" IS PLUGGED INTO OPTIONAL BURNBACK P.C. BOARD. SEE S-15123 FOR OPERATING SCHEMATIC.

VARIABLE VOLTAGE CONTROL CIRCUIT TO RIGHT OF THIS LINE, TO OPERATE LN-8 WHEN THIS CIRCUIT IS NOT INSTALLED IN UNIT, POINT "A" TO "B" IS JUMPED.



CONTROL CIRCUIT (BOARD #1)

C101 1MFD	L101 5.6 MH
C102 2MFD	Q101 2N4125
C103 39MFD ±10%	Q102 2N4123
C104 4.7 MFD	Q103 2N 5815
C105 .10 MFD	Q10101 2N6027
C106, C110, C111 } .02 MFD	TP101 TRANSIENT PROTECTION
C112, C113 } .02 MFD	SCR101 12A, 400V.
C107, C108 .047 MFD	SCR102 12A, 400V.
C109 .005 MFD	PT101 1:1:1 PULSE TRANSFORMER
D101 1A.	R101 6.8KΩ
D102 1A.	R102 2KΩ TRIMMER
D103 1A.	R103 10KΩ
D104 1A.	R105 4.7 KΩ
D105 16A.	R106 4.7 KΩ
D106 16A.	R107 15 Ω
D107 16A.	R108 33 KΩ
D108 1A.	R109 33 KΩ
D109 1A.	R110 750Ω
D110 1A.	R111 50KΩ TRIMMER
D111 1A.	R112 27KΩ
D112 1A.	R113 39 KΩ
D113 1A.	R114 10 KΩ
D114 1A.	R115 68 KΩ
D115 20V.	

RELAY CIRCUIT (BOARD #2)

C201 50 MFD
C203 50 MFD
C204 .005 MFD
C205 50 MFD
C206 .005 MFD
1CR 3PDT 24 V. D.C.
D201 1A.
D202 1A.
D203 1A.
D204 1A.
R201 40Ω 12W.
R202 100Ω
R203 100KΩ
R204 39 KΩ
TP201 TRANSIENT PROTECTION
F201 1/2 A. 125V. OR 250V. SLOW BLOW FUSE.

VARIABLE VOLTAGE CIRCUIT (BOARD #3)

C301 2 MFD	R301 6.8KΩ
C302 .10 MFD	R302 5.6 KΩ (2%)
C303 .01 MFD	R303 1KΩ (2%)
C304 .047 MFD	R304 3.9 KΩ (2%)
C305 .01 MFD	R305 3.3 KΩ
C306, C307 .02 MFD	R306 4.7KΩ 2 W.
D301 1A.	R307 100Ω
D302 1A.	R308 5KΩ TRIMMER
D303 1A.	R309 15 Ω
D304 1A.	R310 47Ω
DE301 .62 V.	R311 68Ω
DE302 10 V.	S304 POWER SOURCE SELECTOR SW.
Q301 2N3393	Q301 UJT
Q302 2N4125	
PT301 1:1:1 PULSE TRANSFORMER	
TP301 TRANSIENT PROTECTION	

COMPONENTS NOT ON P.C. BOARD

R4 2Ω 50W.
R9 5KΩ 2W. POT.
R20 10KΩ 2W. POT.
T1 115-24 V. TRANSFORMER
2CR REED SWITCH (ACTUATED BY WELDING CURRENT)
4CR GROUNDING LEAD PROTECTOR

LEAD COLOR CODING	
B	BLACK
R	RED
U	BLUE
W	WHITE

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

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.

Ch'ge. Sht. No.	2-180N
11-4-77	12-18-80
2-17-78H	
9-29-78C	
3-31-79B	
11-16-79G	

THE LINCOLN ELECTRIC CO. EQUIP. TYPE	LN-8N-85
CLEVELAND, OHIO U. S. A.	SUBJECT OPERATING SCHEMATIC
SCALE	
DR. G.G.P.	DATE 4-30-76 CHK
SUP'D/GC (M-13072)	SHT. NO. M-13353