



LEGEND

SPECIFIED VALUES OF NUMBERED COMPONENTS

CONTROL CIRCUIT P.C. BOARD

C20	.022 MFD	R26	500 Ω 1/4 W.
C21	.22 MFD	R27	100 Ω
C22	150 MFD	R28	2.2 K Ω
C23	.047 MFD	R29	270 Ω 1W
C24	100 MFD	R30	15 K Ω
C25	33 MFD	R31	10 Ω
C26	50 MFD	R32	100 Ω
		R33	39 K Ω
		R34	1.8 K Ω
		R35	68 K Ω
		R36	1 K Ω
		R37	1 K Ω 1/4 W.
		R38	3.9 K Ω
		R39	200 Ω 10 W.
		R40	4.7 K Ω 2 W.

D20 THRU D36 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 910 AMP SLOW BLOW FUSE

FOR CONTROL P.C. BOARD L9207-1 OR HIGHER USE M1162-1 SCHEMATIC FOR COMPONENT VALUES AND CIRCUIT CONNECTIONS.

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	27 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	1 K Ω
C62, C63, C64	2 MFD	R64, R65, R66	10 Ω
C65, C66, C67	100 MFD	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 2N3393 NPN
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.

THIS LEAD IS NOT USED WHEN POLARITY SWITCH IS INSTALLED

L2 IS LOCATED NEAR POSITIVE OUTPUT TERMINAL ON OLDER MACHINES

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

CONNECTIONS FOR SINGLE VOLTAGE MACHINES ABOVE

N.A. A DASH #2 IS STAMPED ON THE LAMINATION OF L2 NEAR THE COIL. THE SIDE OF L2 WITH THE DASH #2 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

THE LINCOLN ELECTRIC CO. CLEVELAND, OHIO U.S.A.	DATE 1-22-80 SCALE	TYPE IDEALARC R3R-400 (SINGLE & DUAL VOLTAGE)	SUBJECT SCHEMATIC
ARMCO AUSTRALIA 8-80 CANADA 2-80 FRANCE 3-80		FIG. NO. 6-1482 OF H.N.I. CUY	G-1523