



CAPACITORS = MFD/VOLTS
RESISTORS = OHMS

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

LEGEND

C4	.02/600
C5	150/50
C6	.02/25
C7	4.7/35
C8	.02/25
C9	.02/25
C10	.02/25
C11	.02/25
C12	4.7/35
C13	4.7/50
C14	.02/600
C15	.02/25
C16	.0047/1400

D5	20 AMPS
D6	20 AMPS
D7	20 AMPS
D8	20 AMPS
D9	3 AMPS
D10	20 AMPS
D11	1 AMP
D12	1 AMP
D13	20 AMPS
DZ1	27V. ZENER

1CR	A.C. RELAY
F1	10 AMP FUSE
Q1	.5A., 250 V.
Q2	2 A., 300 V.
Q3	20 A., 250 V.
X1	VOLTAGE REGULATOR IC
X2	QUAD OP-AMP IC
TP2	50 V., 12 J.
TP3	50 V., 12 J.
TP4	150 V., 10 J.
TP5	50 V., 12-J.

R1	.4
R2	.4
R8	80
R9	270
R10	150 K
R11	150 K
R13	10 K
R14	20 K TRIM.
R15	100 K
R16	100 K
R17	10 K
R18	100 K
R19	100 K
R20	150 K
R21	470

R22	100 K
R23	100 K
R24	33.2 K
R26	6.8 K
R27	10 K TRIM.
R28	220 K
R29	22 K
R30	200
R31	1 K
R32	1 K
R33	4.7 K
R34	27
R35	10 K
R36	.25 ± 1% 7W.
R37	470

NOT ON P.C. BOARDS	
C1	.47/400
C2	77K/50
D1	250 A.
D2	250 A.
D3	250 A.
D4	250 A.
R3	25
R4	20
R5	50 FINE VOLTAGE CONTROL
R6	4.7 K
R7	20
R12	10K WIRE SPEED CONTROL
2CR	INPUT CONTACTOR
TP1	130 V., 10 J
TH1	THERMOSTAT
S1	ON-OFF POWER SWITCH
S2	GUN TRIGGER SWITCH
S3	COARSE VOLTAGE CONTROL SWITCH
CIRCUIT BREAKER	2.5 AMPS

* H2 & T2 NOT PRESENT ON SINGLE VOLTAGE MACHINES

∇ = COMMON CONNECTION POINT

ELECTRICAL SYMBOLS PER E-1537

THE LINCOLN ELECTRIC CO. EQUIP. IDEALARC SP-200
 CLEVELAND, OHIO U.S.A. SUBJECT SCHEMATIC DIAGRAM
 NO. L-6419
 UNLESS OTHERWISE SPECIFIED TOLERANCE
 ON HOLE SIZES PER ISO 286 ± .03
 ON 2 PLACE DECIMALS IS ± .02
 ON ALL ANGLES IS ± .5° TO AGREE
 MATERIAL TOLERANCE IS TO AGREE
 WITH PUBLISHED STANDARDS.
 DR. T.J.P. DATE 7-8-80 CH. SEC. 1-9-80