



- COMPONENTS NOT ON P.C. BOARD**
- SW1 INPUT POWER
 - SW2 ELECTRODE POLARITY
 - SW3 OUTPUT CONTROL
 - SW4 WELDING MODE
- C-C6 .15 MFD.
C7 .05-.05 MFD.
- D 1G.A.
- F 5 A. FUSE
- R1 10 K.Ω POT.
R2 30 Ω 300W.
R3 680 Ω 1W.
- IC1 INPUT CONTROLLER
IC2 FAULT PROTECTION RELAY
IC3 CONTACTOR PILOT RELAY
IC4 CONTROL CIRCUIT BIAS RELAY
- T1 ANY POWER TRANS.
T2 CONTROL POWER TRANS.

- FAULT PROTECTION P.C. BOARD**
- R101-R112 1K.Ω
 - R113-R124 10K.Ω
 - R125-R136 2.2K.Ω
 - R137-R144 100K.Ω
 - R145 47K.Ω
 - R146-R147 6.8K.Ω
 - R148 3.3K.Ω
 - R149 22K.Ω
 - R150 330Ω
 - R151 100Ω
 - R152 2.7M.Ω
 - R153 1.5M.Ω
 - R154 3.9K.Ω
 - R155 390K.Ω
 - R156 2.7K.Ω
 - R157 270K.Ω
 - R158 500 Ω TRIM
 - R159 1K.Ω TRIM
 - R160 4K.Ω TRIM
 - R161 47 Ω
- DI101 10V.
LED101-LED109 RED LIGHT EMITTING DIODE
SCR101 12A.
PT101 1-1 PULSE TRANS.

- CONTROL P.C. BOARD**
- R201 60 Ω
 - R202, R203 27K.Ω 1W
 - R204, R206 1K.Ω 1W
 - R207, R209 2.2K.Ω
 - R210 10K.Ω
 - R211, R212 10K.Ω
 - R213, R214 15K.Ω
 - R215 10K.Ω
 - R216 10K.Ω
 - R217 10K.Ω
 - R218 75 Ω
 - R219-R221 1K.Ω
 - R222 2.7K.Ω
 - R223 10K.Ω
 - R224 10K.Ω
 - R225 82K.Ω
 - R226 27K.Ω
 - R227 1K.Ω TRIM
 - R228, R229 27K.Ω
 - R230, R241 5K.Ω TRIM
 - R231 360 Ω
 - R232 470 Ω
 - R233 82K.Ω
 - R234 82K.Ω
 - R235 150 Ω 3.25W
- Q201 2N5057
Q202, Q203 2N3393
Q204 MC1598
Q205 MC1598
- C201, C202 .02 MFD
C203 .1 MFD
C204 90 MFD
C205 10 MFD
C206 2 MFD
C207 .02 MFD
C208 4.7 MFD
C209 10 MFD
C210 2.7 MFD
C211 1 MFD
C212-C214 .047 MFD
- TP201, TP202 TRANS. PROTECTOR

- FIRING CIRCUIT P.C. BOARD**
- R301-R304 500 Ω 1W
 - R307-R312 10 Ω
 - R313-R318 270 Ω
 - R319-R324 9.1 Ω
 - R325-R330 100 Ω
 - R331-R336 150 Ω
 - R337-R339 4.7K.Ω
 - R340-R342 68K.Ω
 - R343-R345 1K.Ω
 - R346-R348 1M.Ω
 - R349-R351 90K.Ω TRIM
 - R352-R354 27K.Ω 1W
- L201 33.0 mH CHOKE

D301-D303 1N4001
D304-D306 1N4004
D307-D309 1N4007
D310-D312 1N4001
D313-D315 1N4004
D316-D318 1N4007
D319-D321 1N4001
D322-D324 1N4004
D325-D327 1N4007
D328-D330 1N4001
D331-D333 1N4004
D334-D336 1N4007
D337-D339 1N4001
D340-D342 1N4004
D343-D345 1N4007
D346-D348 1N4001
D349-D351 1N4004
D352-D354 1N4007

SCR301-SCR303 2N5057
SCR304-SCR306 2N5057

C301-C304 .22 MFD
C305-C312 2.7 MFD
C313-C319 .047 MFD
C320-C325 1 MFD
C326-C331 .02 MFD
C332-C333 .22 MFD

L301 38 mH

PT301-PT303 1-1 PULSE TRANS.
D301-D306 21V, 5W
QU301-QU303 2N6027
SCR301-SCR306 12A, 400V
TP301-TP303 TRANS. SUPPRESSOR
LED301-LED309 RED LIGHT EMITTING DIODE

- SNUBBER P.C. BOARD**
- R401-R405 47 Ω 2W
 - C401-C403 .68 MFD

- SNUBBER P.C. BOARD**
- R501-R503 47 Ω 2W
 - C501-C503 .68 MFD
 - C504 1 MFD

A.N.S.I. ELECTRICAL SYMBOLS PER E-15.37

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.

DATE 9-18-75 SCALE

TYPE IDEALARC DC-1500
OPERATING SCHEMATIC

SUPP'D. DRG. G-1427 DR. S.G.R.C.M. SHEET NO. G-1427