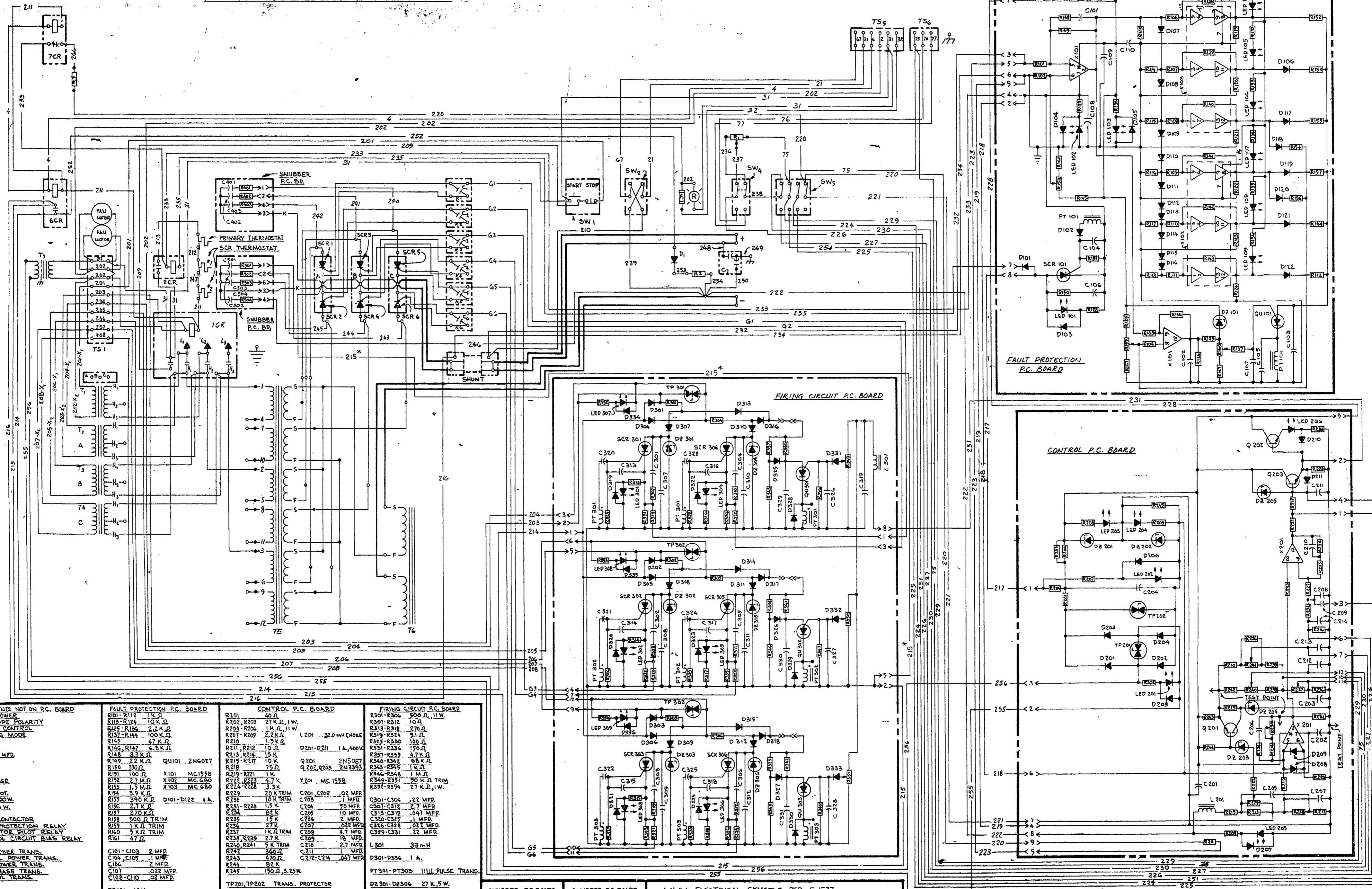


\* THIS LEAD ADDED TO MACHINES MADE AFTER NOV. 1976



**COMPONENTS NOT ON P.C. BOARD**

SW1 INPUT POWER  
 SW2 ELECTRODE POLARITY  
 SW3 OUTPUT POLARITY  
 SW4 WELDING MODE

C1-C6 .15 MFD.  
 C7 .05-.05 MFD.

D1 16 A.  
 F1 5 A. FUSE  
 R1 10 K.Ω POT.  
 R2 30 Ω, 300W.  
 R7 680 Ω, 1W.

ICR INPUT CONTACTOR  
 FCR FAULT PROTECTION RELAY  
 SCR CONTACTOR PILOT RELAY  
 TCR CONTROL CIRCUIT BIAS RELAY

T1 AUX. POWER TRANS.  
 T2 CONTROL POWER TRANS.  
 T3 MAIN POWER TRANS.  
 T4 INTERPHASE TRANS.  
 T5 CONTROL 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 5.6K.Ω  
 R148 3.3K.Ω  
 R149 22K.Ω  
 R150 330Ω  
 R151 100Ω  
 R152 27M.Ω  
 R153 1.5M.Ω  
 R154 3.9K.Ω  
 R155 390K.Ω  
 R156 27K.Ω  
 R157 270K.Ω  
 R158 500Ω TRIM  
 R159 1K.Ω TRIM  
 R160 5K.Ω TRIM  
 R161 47Ω

QU101 2NG027  
 X101 MC1558  
 X102 MC680  
 X103 MC680

D101-D122 1A.

SCR101 12A.

PT101 1-1 PULSE TRANS.

**CONTROL P.C. BOARD**

R201 40Ω  
 R202, R203 27K.Ω, 1W.  
 R204-R206 1K.Ω, 1W.  
 R207-R209 2.2K.Ω  
 R210 82Ω  
 R211, R212 10K.Ω  
 R213, R214 15K.Ω  
 R215-R217 10K.Ω  
 R218 75Ω  
 R219-R221 1K.Ω  
 R222, R223 6.7K.Ω  
 R224-R228 3.3K.Ω  
 R229 20K.Ω TRIM  
 R230 10K.Ω TRIM  
 R231-R235 15K.Ω  
 R236 82Ω  
 R237 10M.Ω  
 R238 15K.Ω  
 R239 27K.Ω  
 R240, R241 5K.Ω TRIM  
 R242 360Ω  
 R243 470Ω  
 R244 82K.Ω  
 R245 150Ω, 3.25W.

L201 330mH CHOKE  
 Q201-Q211 1A, 400V  
 Q202, Q203 2N5087  
 Q204, Q205 2N3393  
 Y201 MC1558

C201, C202 .02 MFD.  
 C203 1 MFD.  
 C204 90 MFD.  
 C205 10 MFD.  
 C206 2 MFD.  
 C207 .02 MFD.  
 C208 4.7 MFD.  
 C209 16 MFD.  
 C210 2.7 MFD.  
 C211 1 MFD.  
 C212-C214 .047 MFD.

TP201, TP202 TRANS. PROTECTOR  
 D2201, D2202 19V, 5W.  
 D2203 12V, 1W.  
 D2204 6.2V, 4W.  
 D2205 10V, 1W.

LED201-LED206 RED LIGHT EMITTING DIODE.

**FIRING CIRCUIT P.C. BOARD**

R301-R306 500Ω, 1W.  
 R307-R312 10Ω  
 R313-R318 270Ω  
 R319-R324 91Ω  
 R325-R330 100Ω  
 R331-R336 150Ω  
 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.

C301-C306 .22 MFD.  
 C307-C312 2.7 MFD.  
 C313-C319 .047 MFD.  
 C320-C325 1 MFD.  
 C326-C328 .022 MFD.  
 C329-C331 .22 MFD.

L301 39mH

PT301-PT303 1:1:1 PULSE TRANS.

D301-D306 27V, 5W.  
 QU301-QU303 2NG027  
 SCR301-SCR306 12A, 400V  
 TP301-TP305 TRANS. SUPPRESSOR  
 LED301-LED309 RED LIGHT EMITTING DIODE.

**SNUBBER P.C. BOARD**

R401-R403 47Ω, 2W.  
 C401-C403 .68 MFD.

**SNUBBER P.C. BOARD**

R501-R503 47Ω, 2W.  
 R504 27Ω, 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 INTER-CHANGEABILITY 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  
 SUPPLY DRG. 14-27 DR. G.R.C. SHEET NO. G-1435