

**CONTROL CIRCUIT P.C. BOARD**

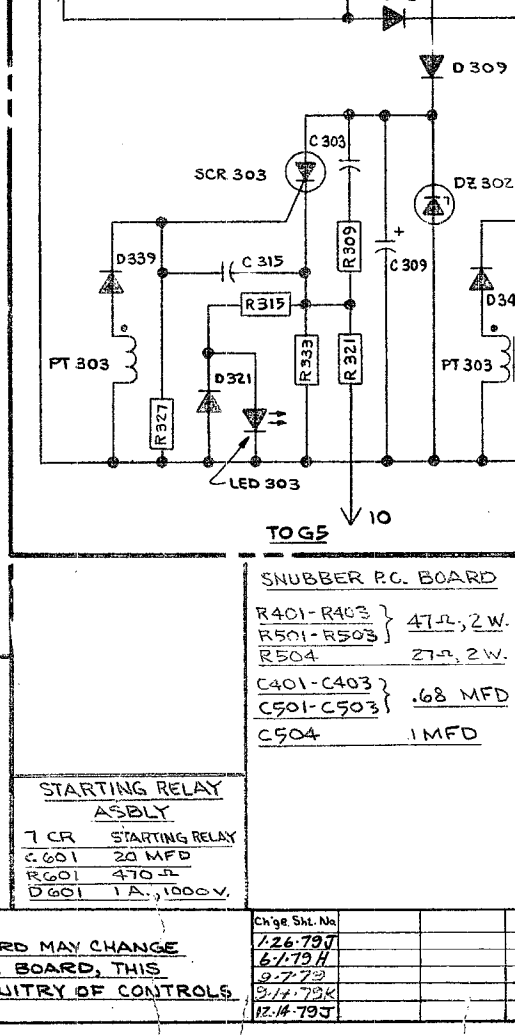
R101, R151	100 Ω
R102, R154	27 K Ω
R103, R104	1 K Ω
R105, R114, R117	4.7 K Ω
R106, R129, R112	33 K Ω
R107	15 K Ω
R108, R119	6.8 K Ω
R109, R123, R160, R116, R117	1 K Ω
R110, R125	680 Ω
R111	1.5 M Ω
R112	390 K Ω
R113, R146, R170	330 Ω
R115, R116	1 M Ω
R117, R118, R130	4.7 K Ω
R119, R120, R121, R134	2.2 K Ω
R122, R123, R127, R134	2.2 K Ω
R125, R131, R158	2.2 K Ω
R124, R141, R147, R151	270 Ω
R126, R138	1 K Ω TRIMMER
R133, R143, R153	6.8 K Ω
R136	1.8 K Ω
R139	20 K Ω TRIMMER
R143, R152, R180	22 K Ω
R144	27 M Ω
R149	10 K Ω
R150, R164, R165	1.5 K Ω
R152, R156	82 K Ω
R157, R169	47 Ω
R174	150 K Ω
R178	100 K Ω
R179	5 K Ω TRIMMER
L101	33 mH
LED 101 THRU 105	RED LIGHT EMITTING DIODE
SCR 101	4 A
TP 101	TRANSIENT SUPPRESSOR
X101	QUAD. OP. AMP
X102	DUAL OP. AMP
C102	50 MFD
C103	.1 MFD
C104, C114, C115, C118	.022 MFD
C105, C106, C107, C113	.047 MFD
C126, C129	.047 MFD
C108, C111, C112	18 MFD
C109	.22 MFD
C110	6.8 K Ω
C116, C117	2 MFD
C119, C120, C121, C122	.02 MFD
C123, C127, C128	.02 MFD
D101, D106 THRU D111	1A. 400V.
D113 THRU D122, D123, D126	1A. 1000V.
D102, D103, D104, D105	1A. 1000V.
DZ 101	15V., 5W.
DZ 102, DZ 104	10V., 1W.
DZ 103	6.2V., 400 mW
DZ 105	6.2V., 500 mW.
QU 101	2N6027
Q101, Q103	2N5816
Q102	2N5815

**FIRING CIRCUIT P.C. BOARD**

R201-R206	500 Ω, 11W.
R207-R312	10 Ω
R313-R318, R358-R360	270 Ω
R319-R324	5.1 Ω
R325-R330-R361	100 Ω
R331-R336	150 Ω
R337-R339	4.7 K Ω
R340-R342	6.8 K Ω
R343-R348	1 K Ω
R349-R351	1 MEG Ω
R352-R354	27 K Ω, 1W.
R355-R357	680 Ω, 2W.
R359-R367	1A.
DZ 301 THRU DZ 306	27V., 5W.
DZ 307 THRU DZ 309	25V., 0.5W.
DZ 310	12V., 1W.
L-301	33 mH
LED 301 THRU 309	RED LT. EMIT. DIODE
QU 301 THRU QU 303	2N6027
PT 301-PT 303	1:1:1 PULSE TRANSF.
SCR 301-SCR 306	4 A., 400 V.
TP 301-TP 303	TRANSIENT SUPPRESSOR
C301-C306	.22 MFD
C329-C331	.22 MFD
C307-C312	2.7 MFD
C313-C319	.047 MFD
C326-C328	.022 MFD

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

R1	10K Ω POT.
R2	30 Ω 300W.
C1-C6	.15 MFD
C7	.057 MFD.
D1	16 A.
F1	5 A. SLOW BLOW
1CR	INPUT CONTACTOR
2CR	FAULT PROTECTION RELAY
3CR 4CR	CURRENT ACTIVATED REED SW.
6CR	CONTRACTOR PILOT RELAY
SW1	INPUT POWER
SW2	ELECTRODE POLARITY
SW4	OUTPUT CONTROL
SW5	WELDING MODE
T1	AUX. POWER TRANSFORMER
T2-T4	CONTROL POWER TRANSFORMER
T5	MAIN POWER TRANSFORMER
T6	INTERPHASE REACTOR
T7	CONTROL TRANSFORMER
SCR 1-SCR 6	850 A. 500 V.



**STARTING RELAY ASSEMBLY**

T CR	STARTING RELAY
C 601	20 MFD
R 601	470 Ω
D 601	1A., 1000V.

**SNUBBER P.C. BOARD**

R401-R403	47 Ω, 2W.
R501-R503	27 Ω, 2W.
R504	27 Ω, 2W.
C401-C403	.68 MFD
C501-C503	.68 MFD
C504	1 MFD

**NOTES**

N.A. ONE OR BOTH DIODES (D121 & D122) MAY BE SHORTED WITH A JUMPER.

N.B. CIRCLED CONNECTION PIN NOS. ON FIRING BOARD INDICATE THE SMALLER OF THE TWO MOLEX CONNECTORS.