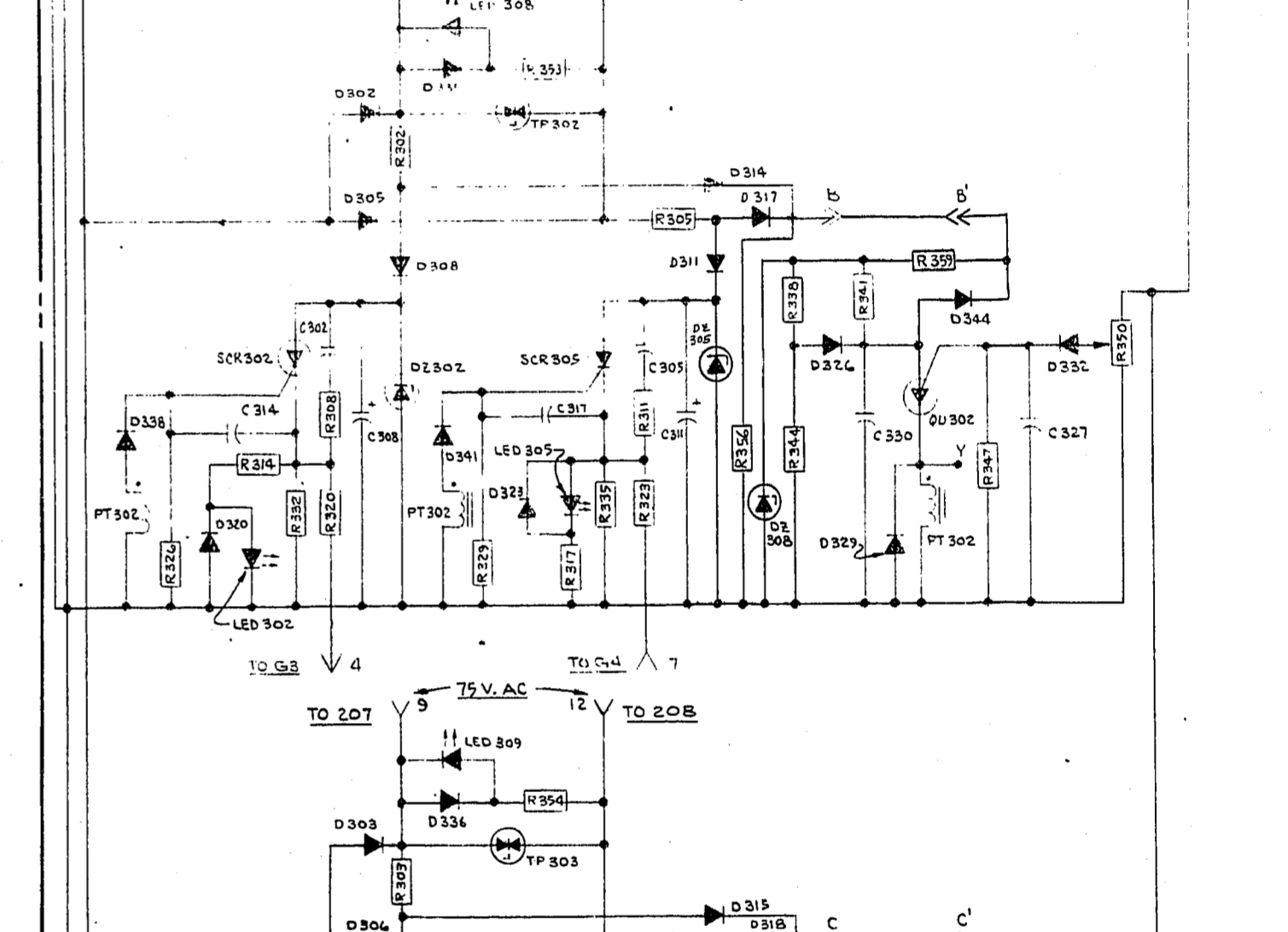
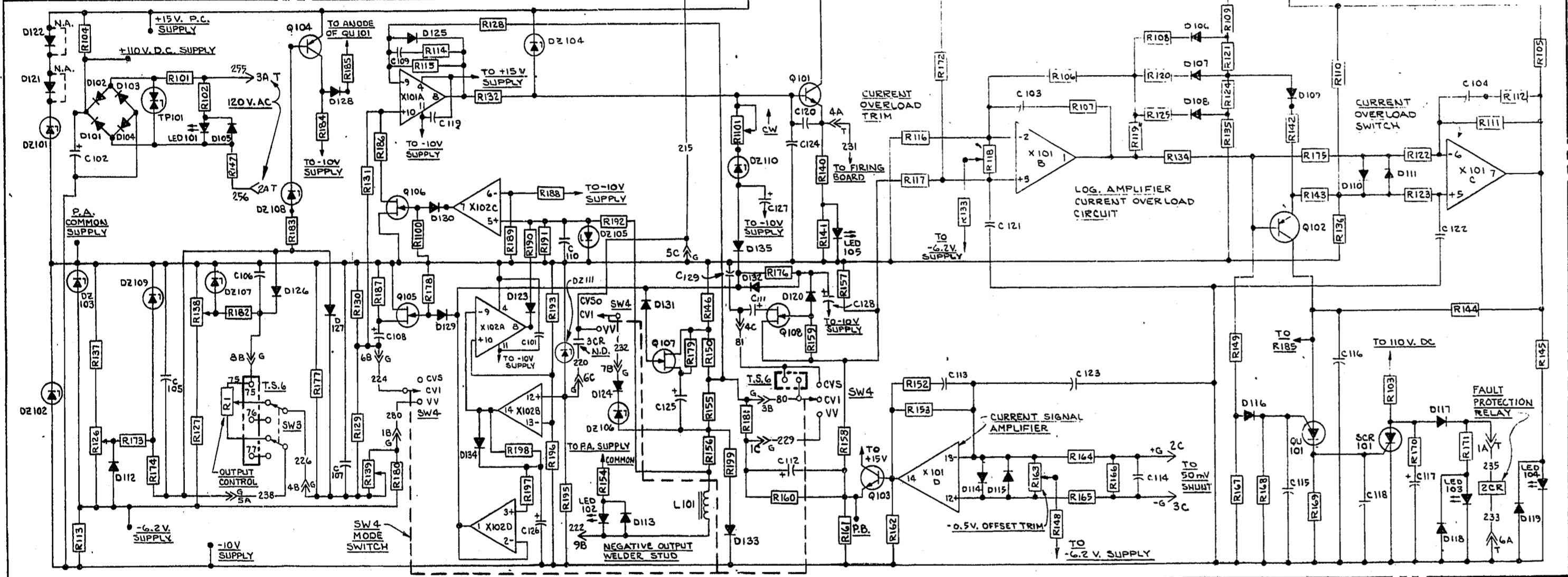


CONNECTIONS SHOWN ARE FOR 440-460 V. ON DUAL VOLTAGE MACHINES. SEE CORRECT WIRING DIAGRAM AND CONNECTION DIAGRAM FOR TRIPLE VOLTAGE OR OTHER VOLTAGES.



**CONTROL CIRCUIT P.C. BOARD**

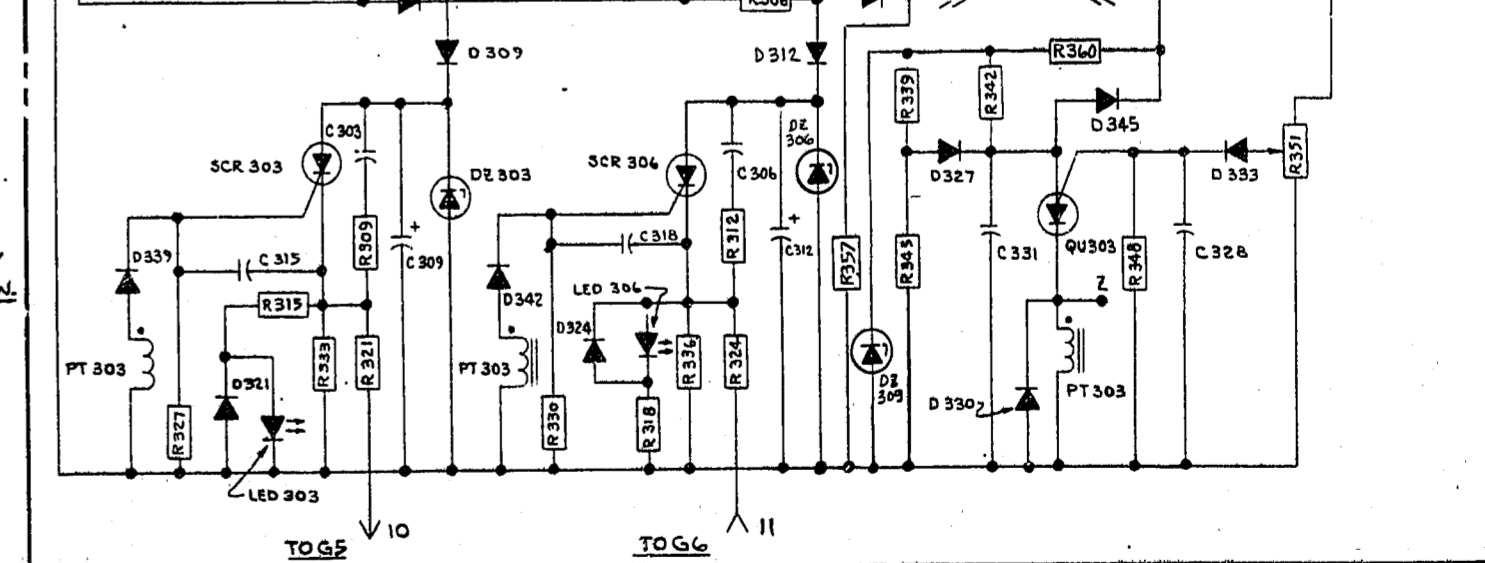
R101	100 Ω	R173	15 Ω	C106	.047 MFD	D112	1A, 400V	L101	33 mH
R102	27 K Ω	R174	47 Ω	C107	.047 MFD	D113	1A, 400V	LED101	RED LIGHT
R103	1 K Ω	R175	4.7 K Ω	C108	18 MFD	D114	1A, 400V	LED102	EMITTING
R104	1 K Ω	R176	6.8 K Ω	C109	1 MFD	D115	1A, 400V	LED103	DIODE
R105	47 K Ω	R177	4.7 K Ω	C110	2.2 MFD	D116	1A, 400V	TP101	TRANSIENT SUPPRESSOR
R106	33 K Ω	R178	100 K Ω	C111	18 MFD	D117	1A, 400V	Q101	2N5816
R107	15 K Ω	R179	100 K Ω	C112	6 MFD	D118	1A, 400V	Q102	2N5816
R108	6.8 K Ω	R180	100 K Ω	C113	.047 MFD	D119	1A, 400V	Q103	2N5816
R109	1 K Ω	R181	56 K Ω	C114	.022 MFD	D120	1A, 400V	Q104	2N5816
R110	680 Ω	R182	330 Ω	C115	.022 MFD	D121	1A, 400V	Q105	2N4857
R111	1.7 M Ω	R183	2.7 K Ω	C116	2 MFD	D122	1A, 400V	Q106	2N4857
R112	390 K Ω	R184	680 Ω	C117	2 MFD	D123	1A, 400V	Q107	2N4857
R113	330 Ω	R185	470 Ω	C118	.022 MFD	D124	1A, 400V	Q108	2N4857
R114	82 K Ω	R186	1 K Ω	C119	.02 MFD	D125	1A, 400V	Q109	2N5816
R115	1 M Ω	R187	10 K Ω	C120	.02 MFD	D126	1A, 400V	Q110	2N5816
R116	22 K Ω	R188	10 K Ω	C121	.02 MFD	D127	1A, 400V	Q111	2N5816
R117	22 K Ω	R189	6.8 K Ω	C122	.02 MFD	D128	1A, 400V	Q112	2N4857
R118	50 K Ω TRIMMER	R190	10 K Ω	C123	.02 MFD	D129	1A, 400V	Q113	2N4857
R119	6.8 K Ω	R191	82 K Ω	C124	.01 MFD	D130	1A, 400V	Q114	2N4857
R120	1.5 K Ω	R192	82 K Ω	C125	.47 MFD	D131	1A, 400V	Q115	2N4857
R121	470 Ω	R193	1.5 K Ω	C126	.47 MFD	D132	1A, 400V	Q116	2N4857
R122	2.2 K Ω	R194	1.8 K Ω	C127	10 MFD	D133	1A, 400V	Q117	2N4857
R123	2.2 K Ω	R195	220 K Ω	C128	10 MFD	D134	1A, 400V	Q118	2N4857
R124	470 Ω	R196	2.2 K Ω	C129	.047 MFD	D135	1A, 400V	Q119	2N4857
R125	680 Ω	R197	1 K Ω	D101	1A, 1000V	DE101	15V, 5W	Q120	2N4857
R126	1 K Ω TRIMMER	R198	22 K Ω	D102	1A, 1000V	DE102	10V, 5W	Q121	2N4857
R127	2.2 K Ω	R199	47 K Ω	D103	1A, 1000V	DE103	6.2V, 4W	Q122	2N4857
R128	4.7 K Ω	R200	2.2 K Ω	D104	1A, 1000V	DE104	10V, 1W	Q123	2N4857
R129	27 K Ω	R201	2.2 K Ω	D105	1A, 400V	DE105	12V, 1W	Q124	2N4857
R130	3 K Ω	R202	47 Ω	D106	1A, 400V	DE106	3V, 5W	Q125	2N4857
R131	4.7 K Ω	R203	47 K Ω	D107	1A, 400V	DE107	25V, 5W	Q126	2N4857
R132	4.7 K Ω	R204	1 M Ω	D108	1A, 400V	DE108	15V, 1W	Q127	2N4857
R133	68 K Ω	R205	4.7 Ω	D109	1A, 400V	DE109	20V, 1W	Q128	2N4857
R134	2.2 K Ω	R206	330 Ω	D110	1A, 400V	DE110	20V, 1W	Q129	2N4857
R135	2.2 K Ω	R207	4.7 K Ω	D111	1A, 400V	DE111	20V, 1W	Q130	2N4857
R136	1.6 K Ω	R208	4.7 K Ω	D112	1A, 400V	DE112	20V, 1W	Q131	2N4857

**FIRING CIRCUIT P.C. BOARD**

R301-R306	250 Ω, 11W
R307-R312	10 Ω
R313-R318	4.7 Ω
R319-R324	5.1 Ω
R325-R330	100 Ω
R331-R336	150 Ω
R337-R342	4.7 K Ω
R343-R348	68 K Ω
R349-R354	1 K Ω
R355-R360	1 M Ω
R361-R366	50 K Ω TRIMMER
R367-R372	27 K Ω
R373-R378	680 Ω, 2W
R379-R384	270 Ω
R385-R390	1 A
R391-R396	1 A
R397-R402	2.7 V, 5W
R403-R408	25 V, .5W
L-301	35 mH

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

R1	10 K Ω POT.
R2	30 Ω, 100W
C7	.05+.05 MFD.
F1	8 A. FUSE
1CR	INPUT STARTER
2CR	FAULT PROTECTION RELAY
3CR	CURRENT ACTIVATED REED SW.
4CR	OUTPUT PILOT RELAY
SW1	INPUT POWER
SW2	ELECT. POLARITY
SW3	OUTPUT CONTROL
SW4	WELDING MODE
T1	MAIN POWER TRANS.
T2	CONTROL TRANS.



**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.

N.C. CONTROL CIRCUIT CONNECTORS ARE DESIGNATED A, B, & C FROM TOP TO BOTTOM AS MOUNTED IN MACHINE. PINS ARE NUMBERED ACCORDINGLY.

N.D. REED SWITCH CLOSURES WHEN OUTPUT CURRENT FLOWS.

N.E. OPTIONAL METERS AND MULTI-PROCESS SWITCH NOT SHOWN. SEE WIRING DIAGRAM.