

**BOM 35 Volt 5 Amp Power Supply Kit**

Designation	Device	Notes	Sheet	Designation	Device	Notes	Sheet
Q1	TIP41	Pass Driver	2	R1	2.7K		3
Q2	TIP3055	Output Pass Trans	2	R2	2.7K	Volt Ref I Limit	1
Q3	TIP3055	Output Pass Trans	2	R3	20K		1
Q4	8050	RL1 Control	3	R4	3K		1
Q5	8050	RL2 Control	3	R5	33K		1
Q6	8050	Fan Speed Driver	3	R6	33K		1
Q7	TIP41	Fan Speed Output	3	R7	10K		3
D1	1N4007	Cont Power Input Pos	1	R8	10k		3
D2	1N4007	Cont Power Input Neg	1	R9	10K		1
D3	1N4007	RL1 Snubber	3	R10	470		1
D4	1N4007	RL2 Snubber	3	R11	470		2
D5	1N4007		1	R12	470		1
D6	1N5408	Output Snubber	2	R13	100		3
D7	1N4007		3	R14	100		1
D8	1N4007		3	R15	100		2
D9	1N4007	Utility Supply Rect.	3	R16	100		2
D10	Not Used	-----	----	R17	4.3K/2W	Input Bleeder	2
D11	1N4727	3 Volt Zener	3	R18	1k		3
D12	1N4727	3 Volt Zener	3	R19	4.3K/2W	Output Bleeder	2
D13	Not Used	-----	----	R20	Not Used	-----	----
D14	Not Used	-----	----	R21	10K		3
D15	Not Used	-----	----	R22	10K		3
D16	Not Used	-----	----	R23	1K		2
D17	1N4007		1	R24	0.22/5W	Amp Shunt/Equalize	2
BR1	1KV/10A Bridge	KBU1010	2	R25	0.22/5W	Amp Shunt/Equalize	2
C1	3300Uf/25V	Cont Power Input Neg	1	R26	56K		3
C2	3300Uf/25V	Cont Power Input Pos	1	R27	100K		3
C3	470pF	471	1	R28	10K		3
C4	15nF	153	1	R29	10K		3
C5	220uF/16V		1	R30	Not Used	-----	----
C6	220uF/16V		1	R31	Not Used	-----	----
C7	1uF	105	1	R32	Not Used	-----	----
C8	220/16v		3	R33	1 Meg		1
C9	470pF	471	1	R34	1 Meg		1
C10	0.1uF	104	3	R35	2.7K		3
C11	680uF/35v	Utility Supply Filter	3	R36	2.7K		3
C12	2200Uf/50v	Input Filter	2	J1	3-Pin	A-RP	1
C13	2200Uf/50v	Input Filter	2	J2	2-Pin	LED (CC Ind)	1
C14	2200Uf/50v	Input Filter	2	J3	3-Pin	V-RP	1
C15	470uF/25v	Utility 12 V. Filter	3	J4	2-Pin	5 Volt	3
C16	Not Used	-----	----	J5	2-Pin	NTC	3
C17	4.7uF/50V		3	J6	2-Pin	FAN	3
C18	1uF	105	1	J7	3-Pin	Cont AC In	1
C19	100Uf/50v	Output Filter	2	LED	Red	CC Ind	1
U1	LM358	Amp/Volt Control	1	A-RP	10K	Amp Limit Set	1
U2	LM358	RL1/RL2 Cotrol	3	V-RP	10K	Volt Out Set	1
U3	7812	+12 Volt Control Reg.	1	VR1	100K	Amps Max Set	1
U4	7912	-12 Volt Control Reg.	1	VR2	500	Volts Max Set	1
U5	TL431	Voltage Reference	1	VR3	10K	RL1 Set Point	3
U6	7812	12 Volt Utility Reg.	3	VR4	10K	RL2 Set Point	3
U7	7805	5 Volt Utility Reg.	3	VR5	10K	Fan Speed	3
NTC	10K Nom.	Fan Speed Temp Sensor	3	ST1	2-Screw	0 & 15 Volt Input	2
RL1	SPST 10A Rly	Second Stage Switch	2,3	ST2	2-Screw	23 & 31 Volt Input	2
RL2	SPST 10A Rly	Third Stage Switch	2,3	ST3	2-Screw	Ampmeter Con.	2