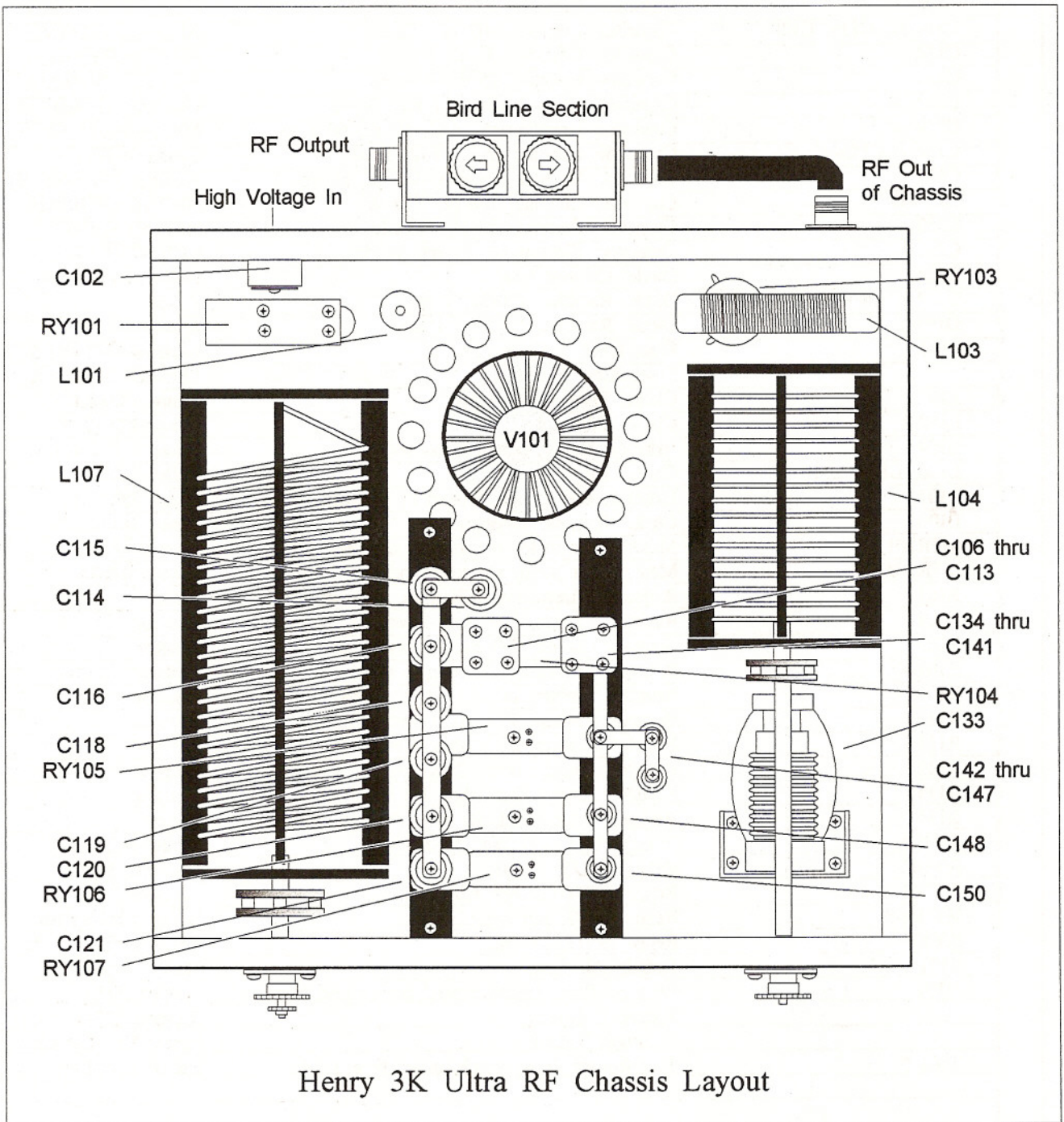


HENRY 3K/8K ULTRA OPERATING AND MAINTENANCE MANUAL

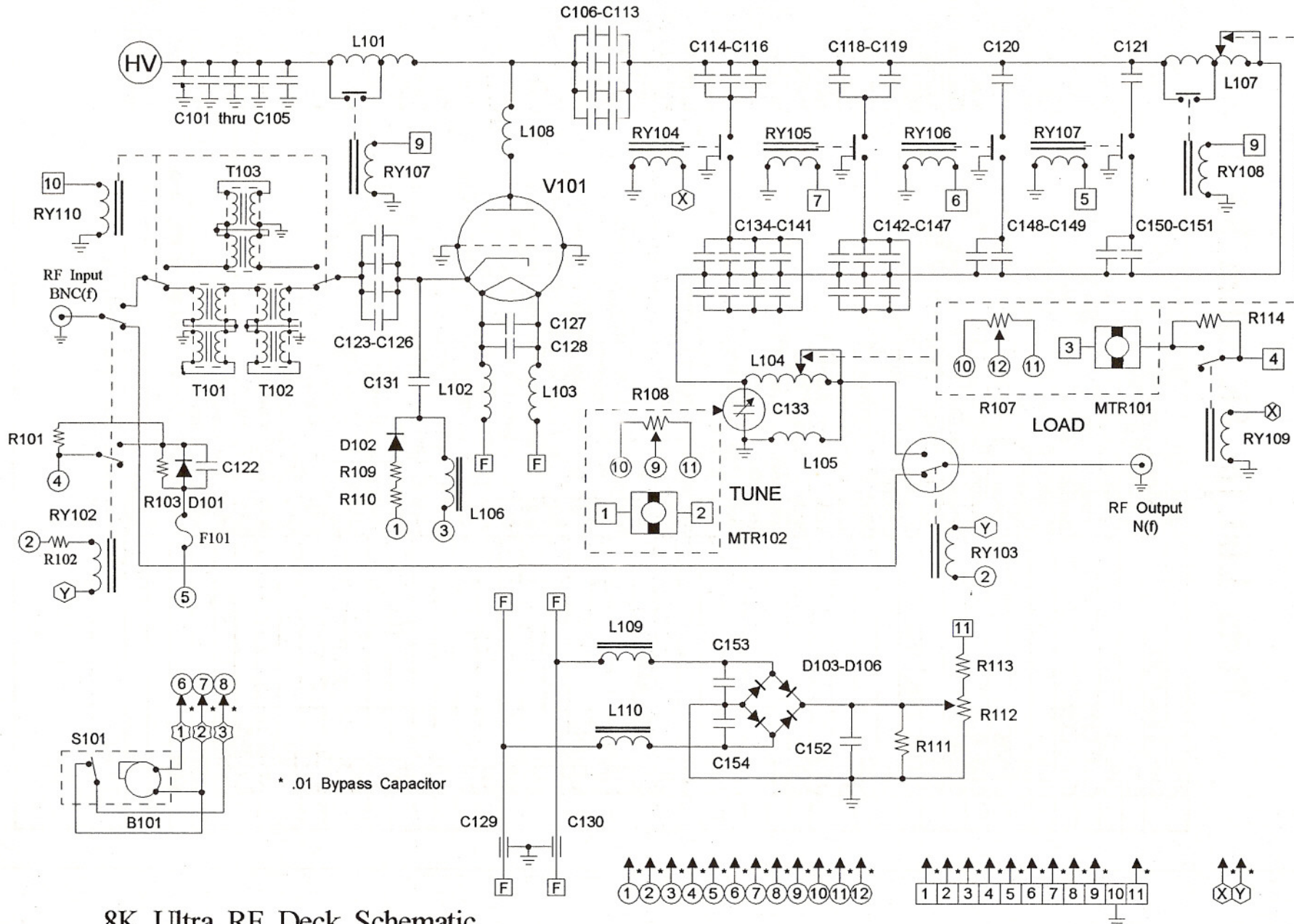
Parts List for 3K Ultra RF Chassis

B101	Blower: 230vac, 50/60 Hz, squirrel cage.	Dayton 2C915A
C101, C104, C105	Capacitor: Ceramic disc, .0047 uf, 6kvdc.	Sprague 60GAD47
C102-3	Capacitor: Bypass, 500 pf, 20kvdc.	Sprague 20DKT5
C106-13	Capacitor: Ceramic, 1000 pf, 7.5kvdc.	HEC HH50v102MA
C114-16, C119, C120	Capacitor: Ceramic, 100 pf, 15kvdc.	HEC HT57Y101MA
C118	Capacitor: Ceramic, 50 pf, 15kvdc.	HEC HT57Y500MA
C121	Capacitor: Ceramic, 25 pf, 7.5kvdc.	HEC HT50V250MA
C122-28	Capacitor: Ceramic disc, .01 mf, 1kvdc.	Centralab DD103
C129-30	Capacitor: Feedthrough, .5mf, 50vdc, 60 amp.	NWL 907-245301
C131-2, C153-4	Capacitor: Ceramic disc, .01mf, 1kvdc.	Centralab DD103
C133	Capacitor: Vacuum variable, 465 pf, 5kvdc.	Jennings USLS465-5D
C134-48	Capacitor: Ceramic, 100 pf, 7.5kvdc.	HEC HT50V101MA
C150	Capacitor: Ceramic, 50 pf, 7.5kvdc.	HEC HT50V500MA
C152	Capacitor: Electrolytic, 10 mf, 16vdc.	CDE WBR10-16
D101	Diode: Cathode bias.	EMI 12105408
D102	Diode: Rectifier, 200piv, 1 amp.	1N458
D103-6	Diode: Rectifier, 1000piv, 1 amp.	1N4007
F101	Fuse: 8AG, 1.5 amp, 250vac.	Littelfuse 361-001.5
	Fuseholder: 8AG type.	Littelfuse 372-001A
L101	Choke: Plate, center tapped.	Henry 3KU-L101
L102-3	Choke: Filament.	Henry 3KU-L02
L104	Inductor: Roller, output L network.	Henry 3KU-L104
L106, L109, L110	Choke: RF.	Miller 6302
L107	Inductor: Roller, lare, Output Pi network.	Henry 3KU-L107
L108	Choke: Parasitic suppressor.	Henry 3KU-L108
MTR101	Motor: Gear motor for loading capacitor C133.	Dayton 4Z837
MTR102	Motor: Gear motor for roller inductor L104-7.	Dayton 4Z835
R101	Resistor: Wirewound, 10K ohm, 10 watt, 5%.	Resistor
R102	Resistor: Carbon, 130 ohm, 2 watt, 10%.	Resistor
R103	Resistor: Carbon, 220 ohm, 2 watt, 10%.	Resistor
R107-8	Resistor: Precision, 150 ohm, 5 watt, 1%.	Resistor
R109	Resistor: Carbon, 1K ohm, 1 watt 5%.	Resistor
R110	Resistor: Carbon, 68 ohm, 1 watt, 5%.	Resistor
R111	Resistor: Carbon, 2.2K ohm, 1 watt, 5%.	Resistor
R112	Resistor: Potentiometer, 2.5K ohm, 5 watt, 5%.	Resistor
R113	Resistor: Carbon, 220 ohm, 1/2 watt, 10%.	Resistor
R114	Resistor: Wirewound, 10 ohm, 25 watt, 5%.	Resistor
RY101	Relay: DPST, solenoid, 26vdc.	Henry 3KU-RY101
RY102	Relay: DPDT, 12 vdc.	Guardian 1365PC
RY103	Relay: SPDT vacuum relay, 26 vdc.	Jennings R2B
RY104-8	Relay: DPST, solenoid, 26vdc.	Henry 3KU-RY104
RY109	Relay: SPDT, 12 vdc.	P&B KA5DY-12vdc
S101	Switch: Air flow.	Henry 3KU-S101
VI01	Electron Tube: Ceramic/metal power grid triode.	3CX1200D7
	Socket: Ceramic	Johnson 122-0275-001
	Chimney: Teflon.	Henry 3KU-Chimney
T101-2	Transformer: Input match, unum type 1:1.56.	Henry 3KU-T101

Henry 3K Ultra RF Deck Schematics and Parts List



Henry 3K Ultra RF Chassis Layout



8K Ultra RF Deck Schematic

* .01 Bypass Capacitor

HENRY 3K/8K ULTRA OPERATING AND MAINTENANCE MANUAL

Parts List for 8K Ultra RF Chassis

B101	Blower: 230vac, 50/60 Hz, squirrel cage.	Dayton 2C915A
C101, C104, C105	Capacitor: Ceramic disc, .0047 uf, 6kvdc.	Sprague 60GAD47
C102-3	Capacitor: Bypass, 500 pf, 20kvdc.	Sprague 20DKT5
C106-13	Capacitor: Ceramic, 1000 pf, 7.5kvdc.	HEC HH50v102MA
C114, C120	Capacitor: Ceramic, 50 pf, 15kvdc.	HEC HT57Y500MA
C115, C118	Capacitor: Ceramic, 100 pf, 15kvdc.	HEC HT57Y101MA
C116	Capacitor: Ceramic, 200 pf, 7.5kvdc.	HEC HT57Y201MA
C121	Capacitor: Ceramic, 25 pf, 7.5kvdc.	HEC HT50V250MA
C122-28	Capacitor: Ceramic disc, .01 mf, 1kvdc.	Centralab DD103
C129-30	Capacitor: Feedthrough, .5mf, 50vdc, 60 amp.	NWL 907-245301
C131-2, C153-4	Capacitor: Ceramic disc, .01mf, 1kvdc.	Centralab DD103
C133	Capacitor: Vacuum variable, 465 pf, 5kvdc.	Jennings USLS465-5D
C134-45, C148, C150	Capacitor: Ceramic, 100 pf, 7.5kvdc.	HEC HT50V101MA
C146	Capacitor: Ceramic, 50 pf, 7.5kvdc.	HEC HT50V500MA
C152	Capacitor: Electrolytic, 10 mf, 16vdc.	CDE WBR10-16
D101	Diode: Cathode bias.	EMI 12105408
D102	Diode: Rectifier, 200piv, 1 amp.	1N458
D103-6	Diode: Rectifier, 1000piv, 1 amp.	1N4007
F101	Fuse: 8AG, 1.5 amp, 250vac.	Littelfuse 361-001.5
	Fuseholder: 8AG type.	Littelfuse 372-001A
L101	Choke: Plate, center tapped.	Henry 8KU-L101
L102-3	Choke: Filament.	Henry 8KU-L02
L104	Inductor: Roller, output L network.	Henry 8KU-L104
L105	Choke: Output choke.	Miller RFC28
L106, L109, L110	Choke: RF.	Miller 6302
L107	Inductor: Roller, large, Output Pi network.	Henry 8KU-L107
L108	Choke: Parasitic suppressor.	Henry 8KU-L108
MTR101	Motor: Gear motor for loading capacitor C133.	Dayton 4Z837
MTR102	Motor: Gear motor for roller inductor L104-7.	Dayton 4Z835
R101	Resistor: Wirewound, 10K ohm, 10 watt, 5%.	Resistor
R102	Resistor: Carbon, 130 ohm, 2 watt, 10%.	Resistor
R103	Resistor: Carbon, 220 ohm, 2 watt, 10%.	Resistor
R107-8	Resistor: Potentiometer, 10K ohm, 10T, 2 watt, 5%.	Resistor
R109	Resistor: Carbon, 1K ohm, 1 watt, 5%.	Resistor
R110	Resistor: Carbon, 68 ohm, 1 watt, 5%.	Resistor
R111	Resistor: Carbon, 2.2K ohm, 1 watt, 5%.	Resistor
R112	Resistor: Potentiometer, 2.5K ohm, 5 watt, 5%.	Resistor
R113	Resistor: Carbon, 220 ohm, 1/2 watt, 10%.	Resistor
R114	Resistor: Wirewound, 10 ohm, 25 watt, 5%.	Resistor
RY101	Relay: DPST, solenoid, 26vdc.	Henry 8KU-RY101
RY102	Relay: DPDT, 12 vdc.	Guardian 1365PC
RY103	Relay: SPDT vacuum relay, 26 vdc.	Jennings R2B
RY104-8	Relay: DPST, solenoid, 26vdc.	Henry 8KU-RY104
RY109	Relay: SPDT, 12 vdc.	P&B KA5DY-12vdc
S101	Switch: Air flow.	Henry 3KU-S101
V101	Electron Tube: Ceramic/metal power grid triode.	3CX3000A7
	Socket: Ceramic	Henry 3CX3000A7 Sckt
	Chimney: Teflon.	Henry 8KU-Chimney
T101-2	Transformer: Input match, unum type 1:1.56.	Henry 8KU-T101

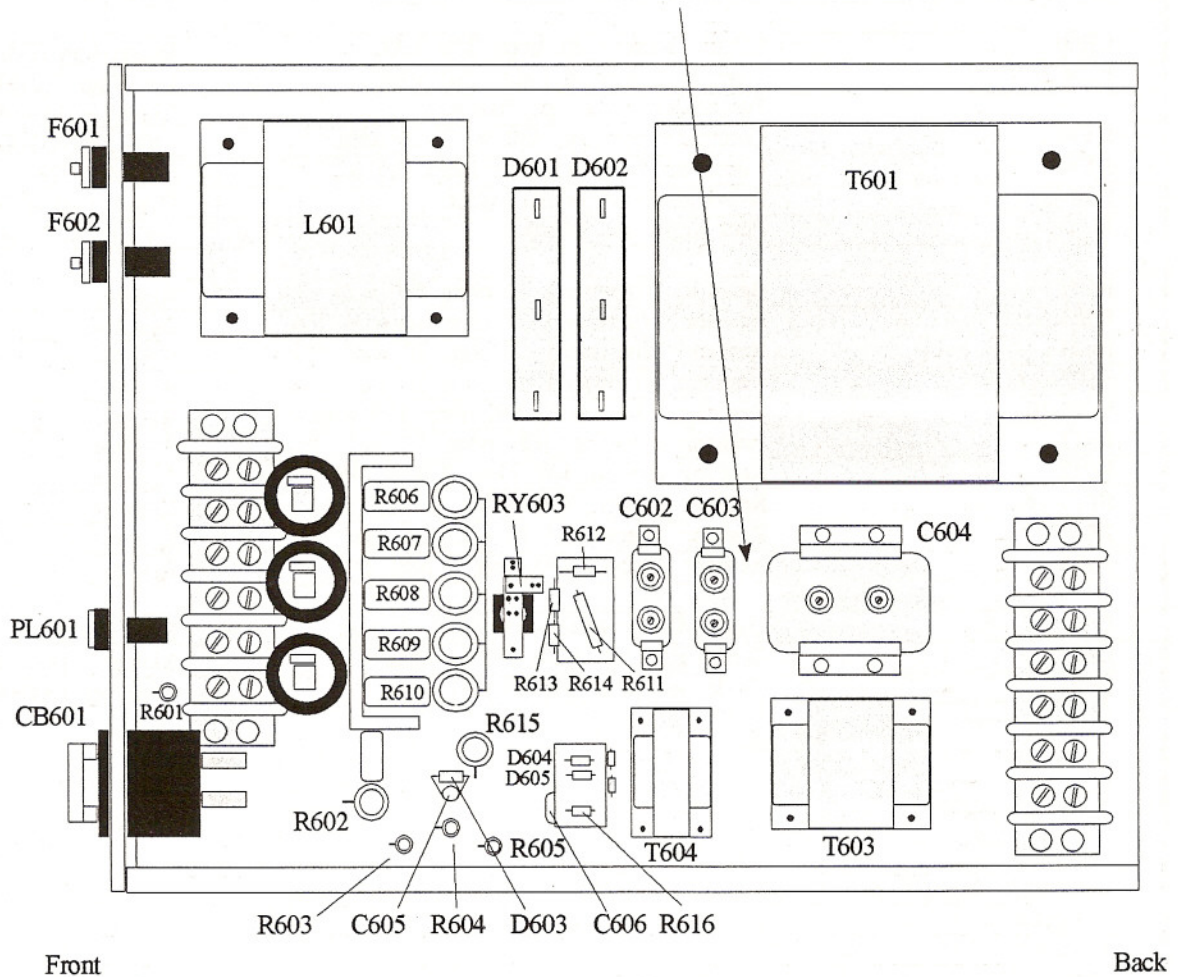
HENRY 3K/8K ULTRA OPERATING AND MAINTENANCE MANUAL

Parts List for 3K Ultra Power Supply

T601	Transformer: HV, 4500VAC/230VAC, 1 ph.	ECA 1214A
T602	Transformer: Stepdown, 220/110 VAC	ECA 1347
T603	Transformer: Filament.	ECA 1228
T604	Transformer: Relay Supply.	ECA 1188
L601	Choke: HV filter.	ECA 5020
C601 (60 Hz)	Capacitor: Oil filled, 0.2uf, 15kv.	High Energy CC610
C601 (50 Hz)	Capacitor: Oil filled, 0.3uf, 15kv.	High Energy CC621
C604	Capacitor: Oil filled, 16uf, 7.5kv.	High Energy CC634
C605	Capacitor: Ceramic disc, 0.05uf, 16v.	Centralab UK16-503
C606	Capacitor: Electrolytic, 1000uf, 50v.	Capacitor
CB601	Circuit Breaker: 40 amps, 250 VAC.	Heinemann AM2-A3-A40
F601-2	Fuse: 3AG type, 6 amps, 250 VAC.	Littelfuse 312-006
	Fuseholder: 3AG type, indicating.	Littelfuse 344-250
RY601	Contact: Mercury, 480 VAC, 35 amp.	MDI 235NO12D
RY602	Contact: Mercury, delay relay, 0.5 sec.	MDI SP1072
RY603	Solenoid: SSB/CW HV select.	Henry 3KU-RY603
PL601	Pilot Light: AC Mains.	Switchcraft L8940-1255
R602	Resistor: Wirewound, 50 ohm, 100 watt, 5%	Resistor
R603	Resistor: Wirewound, 25 ohm, 10 watt, 5%	Resistor
R604	Resistor: Wirewound, 75 ohm, 10 watt, 5%	Resistor
R605	Resistor: Wirewound, 12 ohm, 10 watt, 5%	Resistor
R606-10	Resistor: Wirewound, 20K ohm, 100 watt, 5%	Resistor
R611	Resistor: Precision, 10M ohm, 7.5 watt, 1%	Resistor
R612	Resistor: Carbon, 10K ohm, 2 watt, 5%	Resistor
R613-14	Resistor: Carbon, 470K ohm, 2 watt, 5%	Resistor
R615	Resistor: Wirewound, 25 ohm, 25 watt, 5%	Resistor
R616	Resistor: Carbon, 470 ohm, 2 watt, 5%	Resistor
D601-2	Diode: HV rectifier, 15K VDC, 3 amp.	EMI 120257
D603	Diode: Rectifier, 1000 PIV, 3 amp.	Motorola 1N4720
D604-7	Diode: Rectifier, 1000 PIV, 1 amp.	Motorola 1N4004

Henry 3K Ultra Power Supply Schematics and Parts List

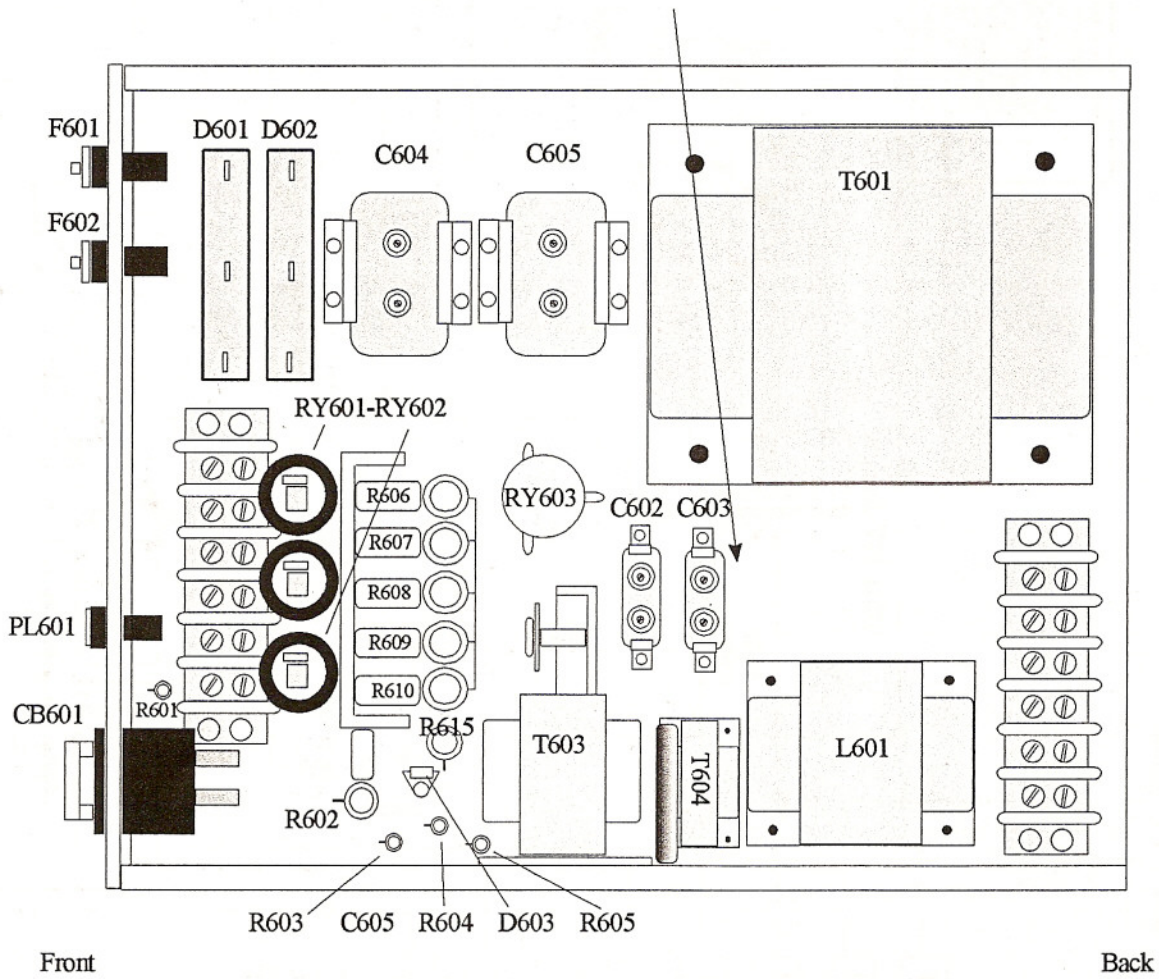
Note: There is an extra capacitor (C601)
for 50 Hz power supplies.



Henry 3K Ultra Power Supply Layout 60 Hz Single Phase

Henry 8K Ultra Power Supply Schematics and Parts List

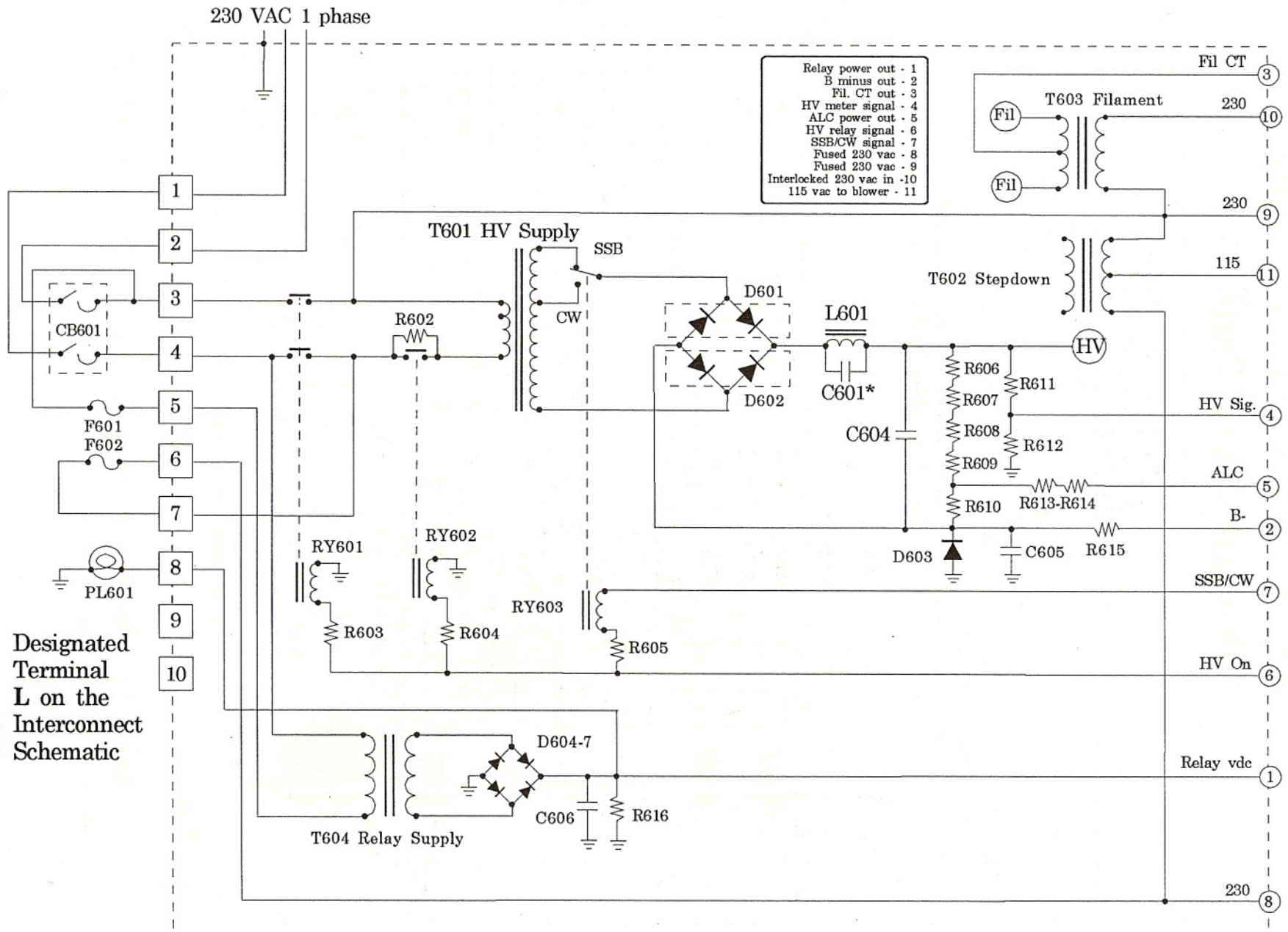
Note: There is an extra capcitor (C601)
for 50 Hz power supplies.



Henry 3K Ultra Power Supply Layout 60 Hz Single Phase

See terminal K on Interconnection Schematic for Connection Details

- Relay power out - 1
- B minus out - 2
- Fil. CT out - 3
- HV meter signal - 4
- ALC power out - 5
- HV relay signal - 6
- SSB/CW signal - 7
- Fused 230 vac - 8
- Fused 230 vac - 9
- Interlocked 230 vac in - 10
- 115 vac to blower - 11



Designated Terminal L on the Interconnect Schematic

3K Ultra Power Supply Schematic (1 Phase)

* C601 - .02 mf (60 Hz), .03 mf (50 Hz).