



9444B Power Amplifier

## SERVICE INSTRUCTIONS

**\*\*\* CAUTION \*\*\***

**NO USER SERVICEABLE PARTS INSIDE. EXTREMELY HAZARDOUS VOLTAGES AND CURRENTS MAY BE ENCOUNTERED WITHIN THE CHASSIS. THE SERVICING INFORMATION CONTAINED WITHIN THIS DOCUMENT IS ONLY FOR USE BY ALTEC LANSING AUTHORIZED WARRANTY REPAIR STATIONS AND QUALIFIED SERVICE PERSONNEL. TO AVOID ELECTRIC SHOCK, DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO. OTHERWISE, REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.**

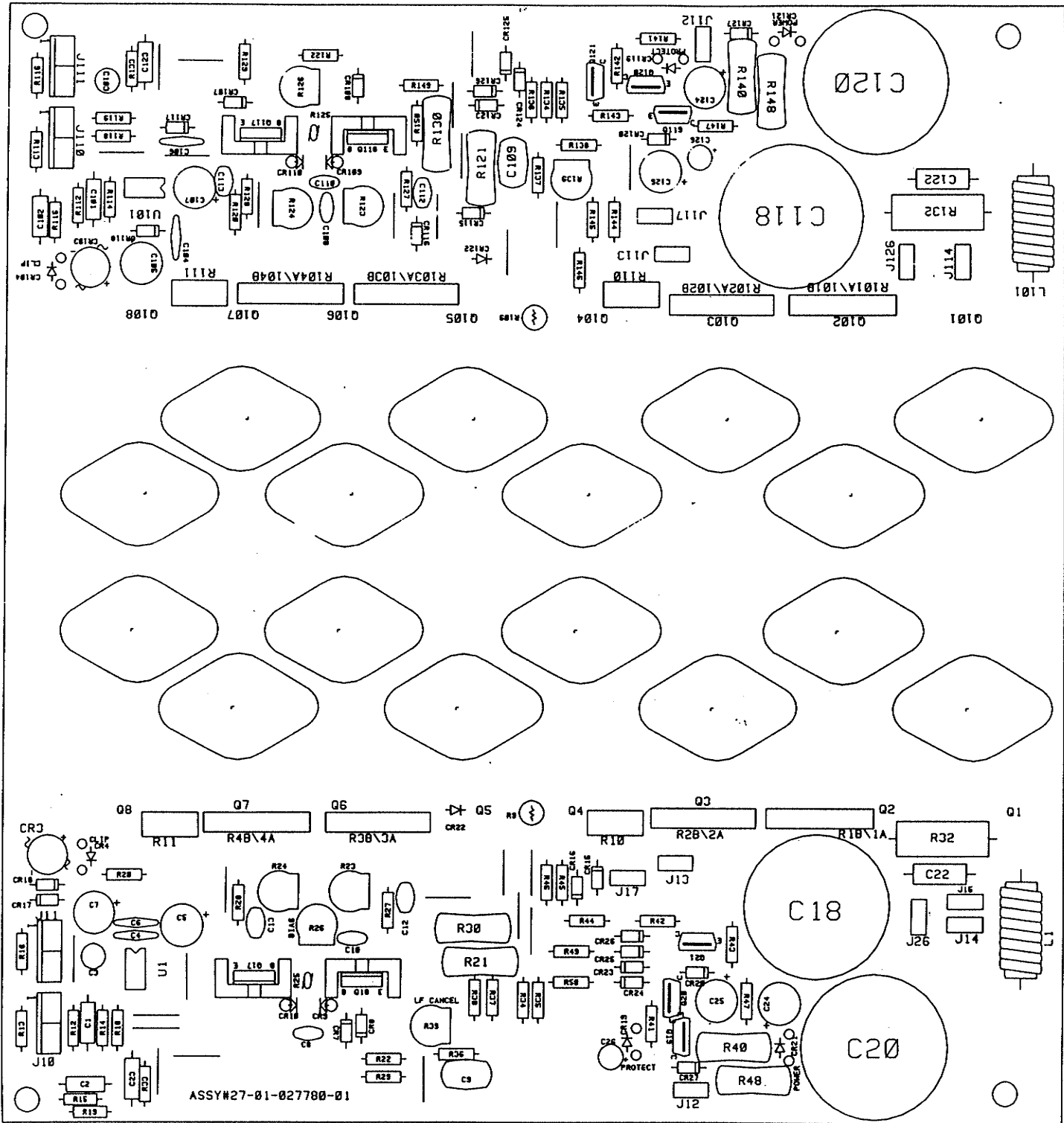


Figure 12 Component Layout of Dual Channel Board

# Operating and Service Instructions for the Altec Lansing 9444B Power Amplifier

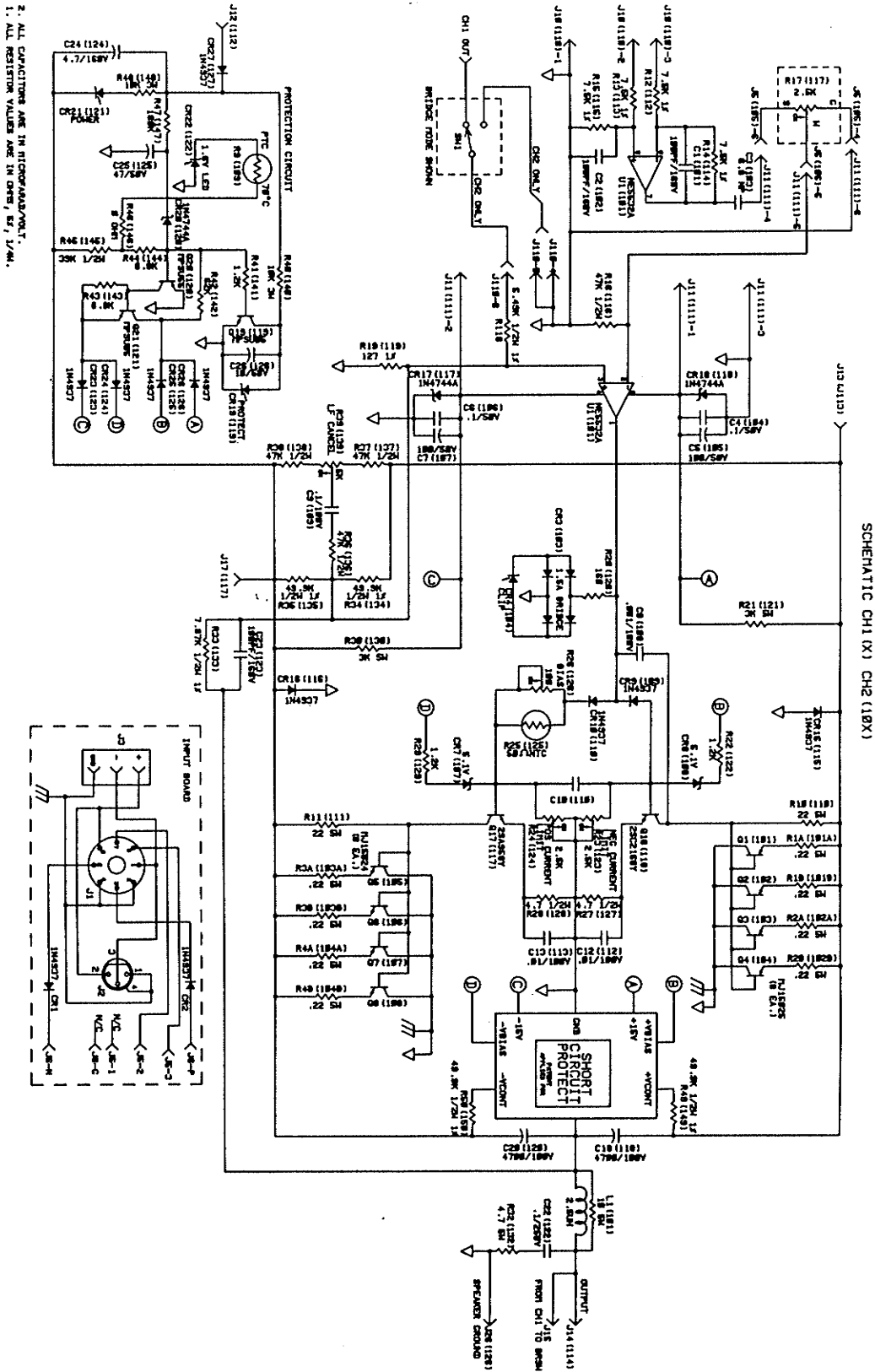


Figure 13 Schematic of 9444B, Sheet 1 of 2

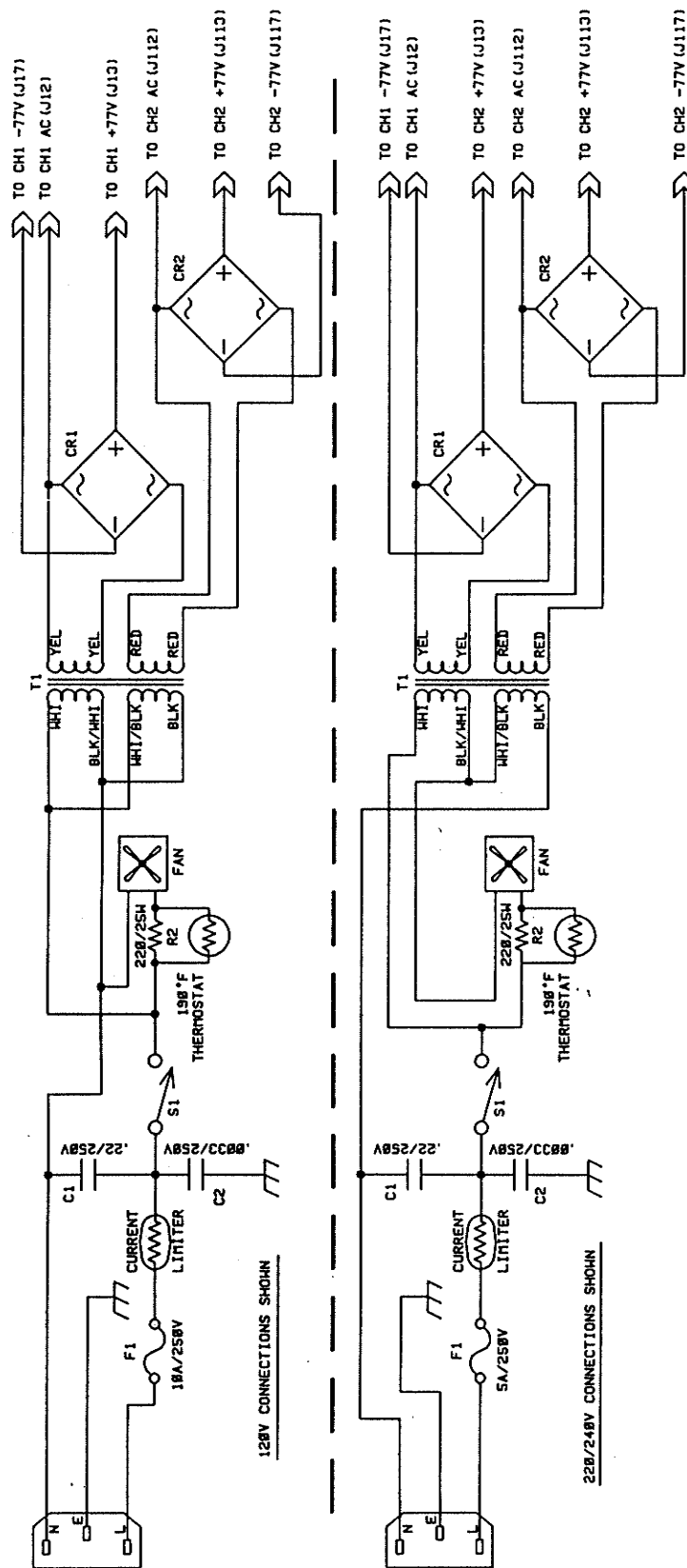


Figure 13 Schematic of 9444B, Sheet 2 of 2

## Component Parts Listing for the 9444B

Reference Designator	Ordering Number	Name and Description
R1, R2, R3, R4	47-09-125029	Resistor, 2 × 0.22 Ω, 5 watt, 5%
R9	47-09-125181	Resistor, 100 Ω @25 °C, Positive Temperature Coefficient
R10, R11	47-01-125064	Resistor, 22 Ω, 5 watt, 5%
R12, R13, R14, R15	47-03-124805	Resistor, 7.5 kΩ, 0.25 watt, 1%, metal film
R16, R36, R37, R38	47-01-102119	Resistor, 47 kΩ, 0.25 watt, 5%, carbon film
R17 (9444B)	47-06-124795	Potentiometer, 2.5 kΩ, log taper, 20%
R17 (9444B/SA)	47-06-124578	Stepped attenuator, 2.5 kΩ
R18	47-03-125185	Resistor, 5.49 kΩ, 0.5 watt, 1% metal film
R19	47-01-125099	Resistor, 127 Ω, 0.25 watt, 1% metal film
R20	47-01-102059	Resistor, 160 Ω, 0.25 watt, 5% carbon film
R21, R30	47-01-125102	Resistor, 3 kΩ, 5 watt, 5%
R22, R29, R41	47-01-102080	Resistor, 1.2 kΩ, 0.25 watt, 5% carbon film
R23, R24	47-06-027458	Trimpot, 2.5 kΩ, 0.15 watt, horizontal mount
R25	47-09-125021	Resistor, 50 Ω @25 °C, Negative Temperature Coefficient
R26	47-06-036008	Trimpot, 100 Ω, 0.15 watt, horizontal mount
R27, R28	47-01-102208	Resistor, 4.7 Ω, 0.5 watt, 5%
R31	47-01-125028	Resistor, 450 Ω, 5 watt, 5%
R32	47-01-124834	Resistor, 4.7 Ω, 5 watt, 5%
R33	47-03-125106	Resistor, 7.87 kΩ, 0.5 watt, 1% metal film
R34, R35, R49, R50	47-03-125033	Resistor, 49.9 kΩ, 0.5 watt, 1% metal film
R39	47-06-027459	Trimpot, 5 kΩ, 0.15 watt, horizontal mount
R40, R48	47-01-125066	Resistor, 10 kΩ, 3 watt, 5%
R42	47-01-102122	Resistor, 62 kΩ, 0.25 watt, 5% carbon film
R43, R44	47-01-102098	Resistor, 6.8 kΩ, 0.25 watt, 5% carbon film
R45	47-01-028531	Resistor, 39 kΩ, 0.5 watt, 5% carbon film
R46	21-01-110310	Resistor, 0 Ω jumper
R47	47-01-102126	Resistor, 91 kΩ, 0.25 watt, 5% carbon film
C1, C2, C23	15-06-037468	Capacitor, 100 pF, 160 volt, 5%, polypropylene
C3	15-01-125026	Capacitor, 6.8 μF, 50 VDC, non-polar, Aluminum
C4, C6	15-02-124437	Capacitor, 0.1 μF, 50 VDC, ceramic disk
C5, C7	15-01-124503	Capacitor, 100 μF, 50 VDC, Aluminum
C8	15-06-124587	Capacitor, 0.001 μF, 100 VDC, 5%, polypropylene
C9	15-06-124637	Capacitor, 0.1 μF, 100 VDC, 5%, polypropylene
C12, C13	15-06-124588	Capacitor, 0.01 μF, 100 VDC, 5%, polypropylene
C18, C20	15-01-036110	Capacitor, 4700 μF, 100 VDC, Aluminum, 10%
C22	15-06-100113	Capacitor, 0.1 μF, 250 VDC, 10%, Polyester
C24	15-01-125024	Capacitor, 4.7 μF, 160 VDC, Aluminum
C25	15-01-124508	Capacitor, 47 μF, 50 VDC, Aluminum
C26	15-01-124502	Capacitor, 10 μF, 50 VDC, Aluminum
L1	56-01-026510	Inductor, 2.0 μH, choke
CR1, CR2, CR9, CR5, CR6	48-01-125067	Diode, 1N4937, fast recovery rectifier
CR10, CR12, CR14, CR15, CR16		
CR23, CR24, CR25, CR26, CR27		
CR3	48-02-037580	Bridge Rectifier, 1.5 Amp, 70 V
CR4, CR19, CR21	39-01-124540	LED, red, with 12 inch leads
CR7, CR8	48-01-122988	Zener, 1N5231B, 5.1 volt, 0.5 watt, 5%
CR11, CR13, CR17, CR18, CR20	48-01-125098	Zener, 1N4744A, 15.0 volt, 1 watt, 5%
CR22	39-01-121926	LED, red, T1-3/4
U1	17-01-122832	IC, NE5532A

Reference Designator	Ordering Number	Name and Description
Q1, Q2, Q3, Q4	48-03-122979	Transistor, MJ15025, PNP
Q5, Q6, Q7, Q8	48-03-122978	Transistor, MJ15024, NPN
Q17	48-03-124475	Transistor, 2SA958Y, PNP
Q18	48-03-124474	Transistor, 2SC2168Y, NPN
Q19, Q21	48-03-028711	Transistor, MPS-U05, NPN
Q20	48-03-028712	Transistor, MPS-U55, PNP
C1	15-02-124994	Capacitor, 0.22 $\mu$ F, 250 VAC
C2	15-02-124993	Capacitor, 0.0033 $\mu$ F, 250 VAC
CR1, CR2	48-02-122651	Bridge Rectifier, 25 amp, 400 volt
F1	51-04-105890	Fuse, 10 amp, 250 volt, NB-UL-CER
(F1)	51-04-100470	Fuse, 5 amp, 250 volt, NB-UL-GLS
R2	47-02-123106	Resistor, 300 $\Omega$ , 25 watt, 5%
	53-02-125179	Surge suppressor, NTC Thermistor
S1	51-02-124582	Switch, power
T1	56-08-027782	Transformer, power
TS1	53-01-027945	Thermostat, 190 °F, normally open
	28-13-026422	Hardware, rack mount
	35-01-124521	Fan, equipment cooling, 100 CFM
	24-04-124846	Knob, black
	21-01-013567	Jumper, octal socket, gold flash