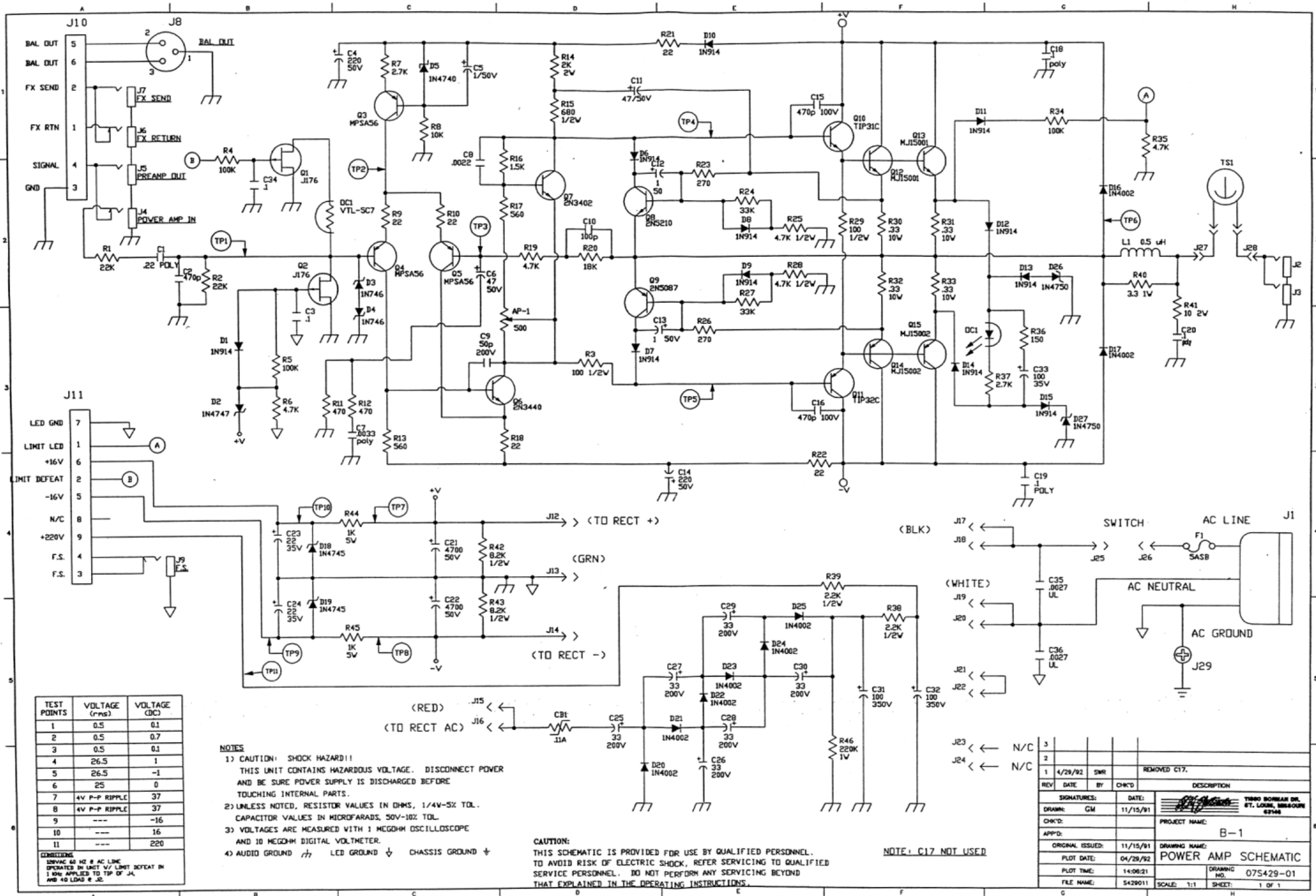


- NOTES:**
- 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS 50V-10% TOL.
 - 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
 - 4) CIRCUIT GROUND H CHASSIS GROUND \oplus
 - 5) BIAS ADJUSTMENT: WITH AMP IN PERIODIC MODE AND NO SIGNAL APPLIED, ADJUST P14 FOR GLOSSY ± 2 DIV. BETWEEN TP1 AND TP2
 - 6) \square VOLTAGES, NO SIGNAL APPLIED
 - 7) \circ AC SIGNAL, 10% CHANSEL, "0" ALL CONTROLS \oplus "0" EXCEPT REVERSE \ominus "0"

CAUTION:
THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

3				
2				
1	4/21/92	REM		R60 WAS 1.5K
REV	DATE	BY	CHK'D	DESCRIPTION
SIGNATURES:		DATE:	1990 BORNMAN DR. ST. LOUIS, MISSOURI 63146	
DRAWN: GM		10/16/91	PROJECT NAME: B-1	
CHK'D:		DRAWING NAME: PREAMP SCHEMATIC		
APP'D:		DRAWING NO.: 075529-01		
ORIGINAL ISSUED:		11/18/91	SCALE: 1:1	
PLOT DATE:		12/02/91	SHEET: 1 OF 1	
PLOT TIME:		06:31:53		
FILE NAME:		07552951		



TEST POINTS	VOLTAGE (rms)	VOLTAGE (DC)
1	0.5	0.1
2	0.5	0.7
3	0.5	0.1
4	26.5	1
5	26.5	-1
6	25	0
7	4V P-P RIPPLE	37
8	4V P-P RIPPLE	37
9	---	-16
10	---	16
11	---	220

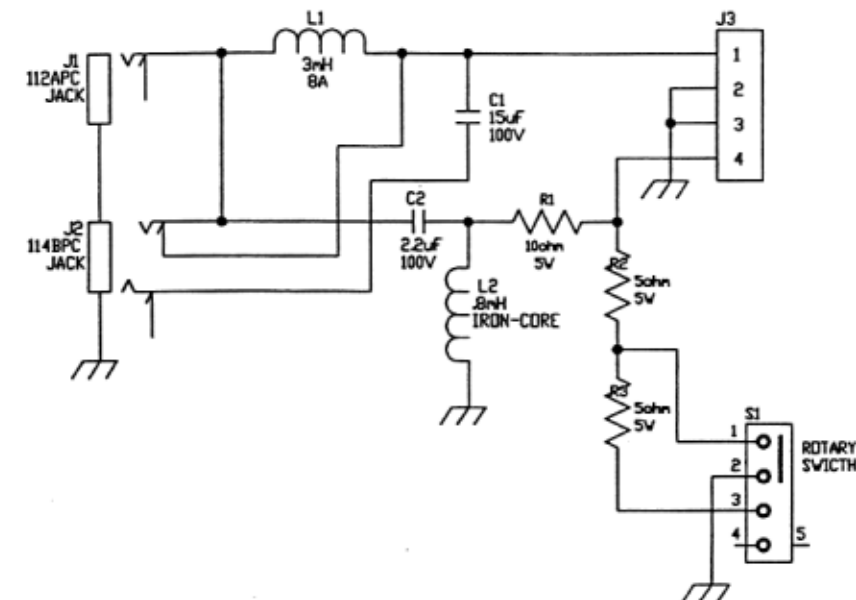
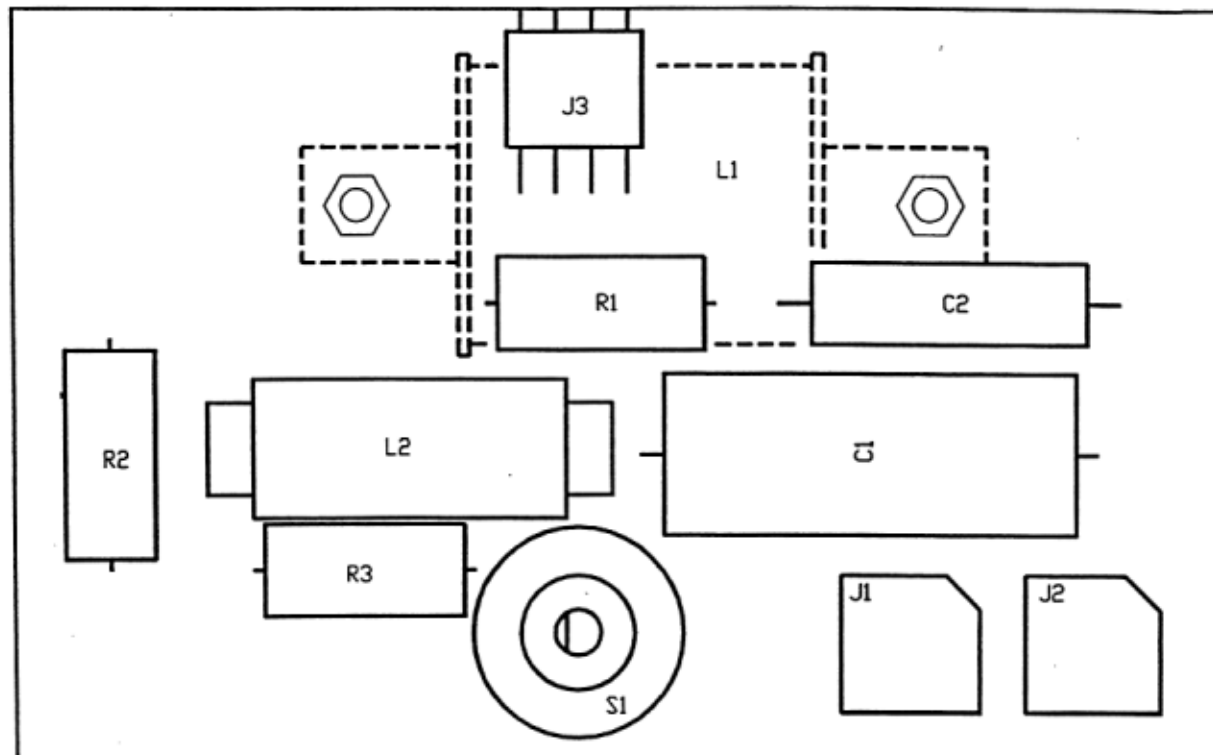
CONDITIONS
SERVAC 60 HZ 8 AC LINE
OPERATED IN UNIT W/ LIMIT DEFEAT IN
1 KHZ APPLIED TO TIP OF J4,
AND 40 LOAD @ J2.

- NOTES**
- 1) CAUTION: SHOCK HAZARD!!
THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 - 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
 - 4) AUDIO GROUND ∇ LED GROUND ∇ CHASSIS GROUND ∇

CAUTION:
THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

NOTE: C17 NOT USED

REV	DATE	BY	CHK'D	DESCRIPTION
1	4/28/92	SWR		REMOVED C17.
SIGNATURES:				DATE:
DRAWN: GM				11/15/91
CHK'D:				
APP'D:				
ORIGINAL ISSUED:				11/15/91
PLOT DATE:				04/28/92
PLOT TIME:				14:06:21
FILE NAME:				S429011
DRAWING NO.:				075429-01
PROJECT NAME:				B-1
DRAWING NAME:				POWER AMP SCHEMATIC
SCALE:				1:1
SHEET:				1 OF 1



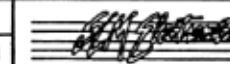
DESIGNATOR	DESCRIPTION	P/N
R1	10 OHM 5W	78-100-05
R2	5 5W	78-050-05
R3	5 5W	78-050-05
C1	15MFD 100VDC	12-156-82
C2	2.2MFD 50VAC	12-225-82
L1	3mH 8A COIL	94-185-01
L2	0.8mH COIL	94-181-01
S1	ROTARY SW	88-103-01
J1	112APC JACK	39-012-01
J2	114BPC T/R/S	39-114-02
J3	4 PIN LOCK HDR	17-313-04
H1	SVT-A XOVER PC	06-747-01
H2	NYLON SCREW	30-895-01
H3	NYLON SCREW	30-895-01
H4	NYLON HEX NUT	30-896-01
H5	NYLON HEX NUT	30-896-01
H6	NYLON SPACER	85-929-01
H7	NYLON SPACER	85-929-01

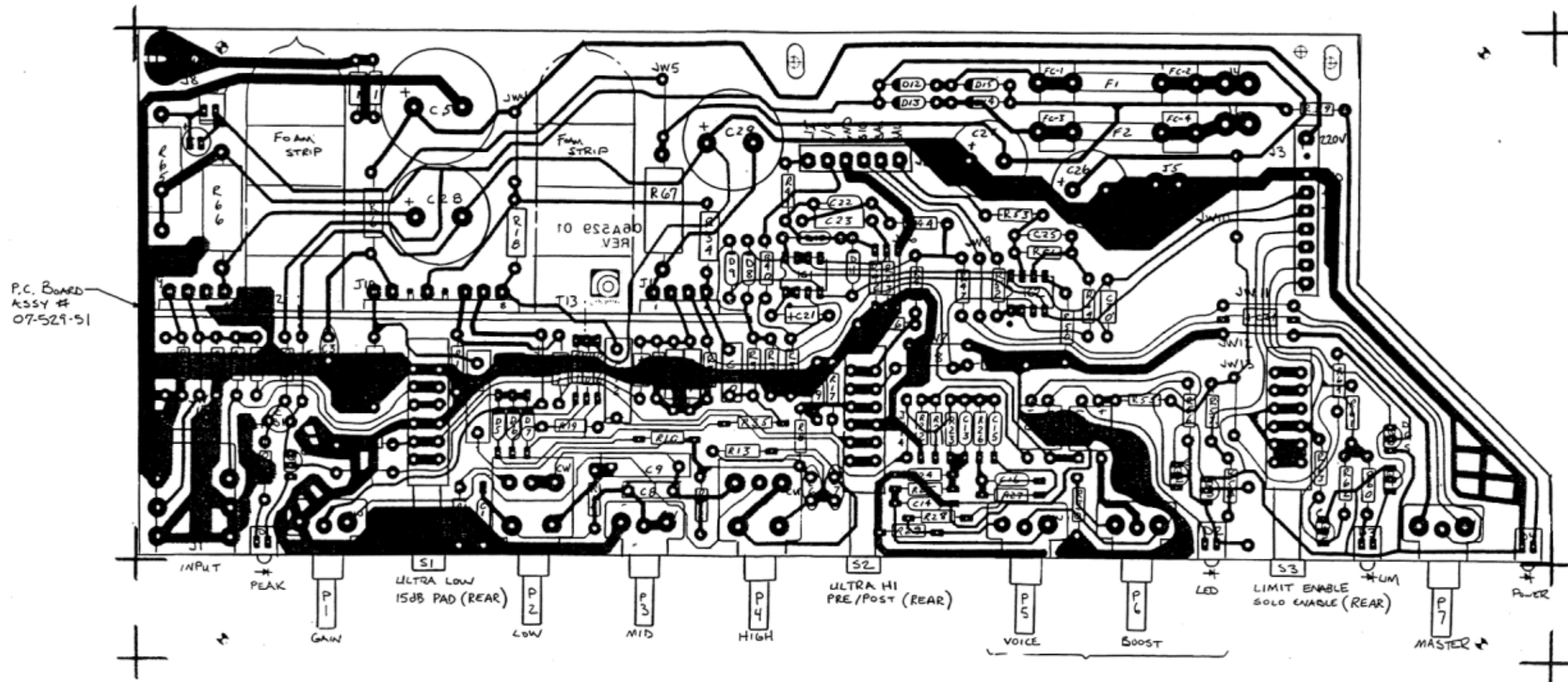
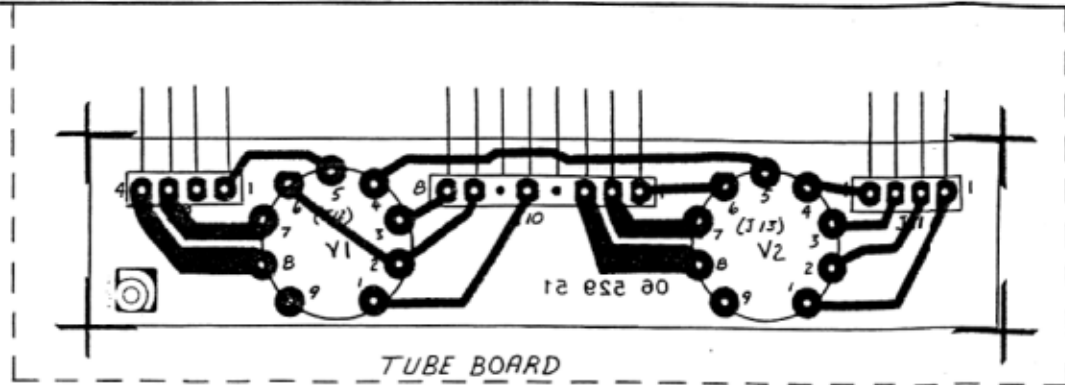
CAUTION:

THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

NOTES

- 1) CAUTION: SHOCK HAZARD!!
THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
- 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL.
CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
- 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
- 4) CIRCUIT GROUND \perp

SIGNATURES:	DATE:	 TIBBO BORMAN DR. ST. LOUIS, MISSOURI 63168
DRAWN: MGA	12/16/91	
CHK'D: G.M.	12/16/91	PROJECT NAME:
APP'D: G.M.	12/16/91	B1 BASS AMP
ORIGINAL ISSUED:	12/23/91	DRAWING NAME:
PLOT DATE:	12/23/91	CROSSOVER PICTORIAL
PLOT TIME:	10:18:29	DRAWING NO. 07P747-01
FILE NAME: P74701	SCALE: 1:1	SHEET: 1 OF 1



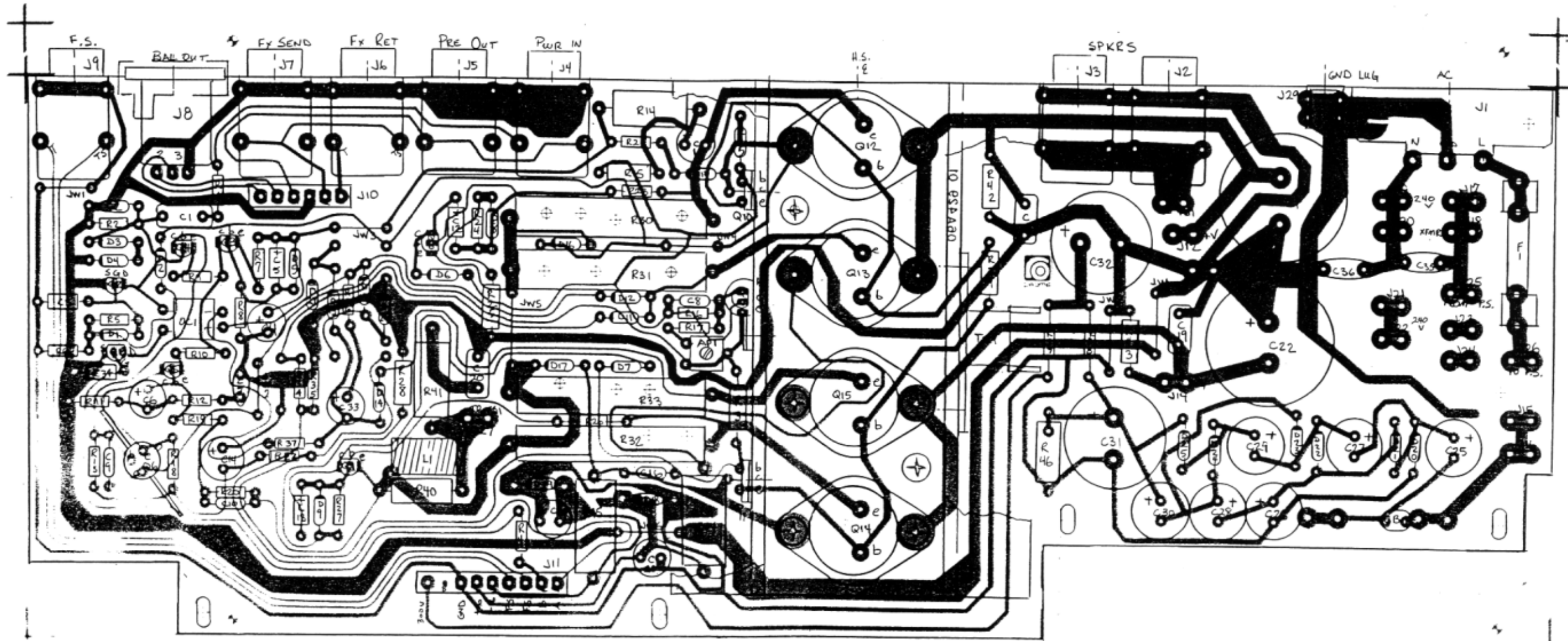
DESIGNATOR	DESCRIPTION	P/N
R1	220	76-220-01
R2	47K	76-473-01
R3	1M	76-105-01
R4	10K	76-103-01
R5	1.5K	76-152-01
R6	100K 1/2W 1%	77-104-02
R7	221K 1/2W 1%	77-224-02
R8	330K	76-334-01
R9	22K	76-223-01
R10	1M	76-105-01
R11	47K	76-473-01
R12	100K	76-104-01
R13	3.3M	76-335-01
R14	3.3M	76-335-01
R15	4.7K	76-472-01
R16	3.3K	76-332-01
R17	100K	76-104-01
R18	221K 1/2W 1%	77-224-02
R19	1M	76-105-01
R20	100K	76-104-01
R21	330K	76-334-01
R22	22K	76-223-01
R23	680K	76-684-01
R24	230K	76-234-01
R25	220K	76-224-01
R26	330K	76-334-01
R27	330K	76-334-01
R28	220K	76-224-01
R29	330K	76-334-01
R30	470K	76-474-01
R31	3.3M	76-335-01
R32	3.3K	76-332-01
R33	100K	76-104-01
R34	221K 1/2W 1%	77-224-02
R35	680K	76-684-01
R36	100K	76-104-01
R37	100K	76-104-01
R38	220K	76-224-01
R39	22K	76-223-01
R40	1K	76-102-01
R41	1K	76-102-01
R42	220K	76-224-01
R43	470K	76-474-01
R44	47K	76-473-01
R45	22K	76-223-01
R46	1K	76-102-01
R47	1K	76-102-01
R48	1M	76-105-01
R49	10K	76-103-01
R50	4.7K	76-472-01
R51	10K	76-103-01
R52	330K	76-331-01
R53	330K	76-331-01
R54	1.5K	76-152-01
R55	1K	76-102-01
R56	10K	76-103-01
R57	1.5K	76-152-01
R58	22K	76-223-01
R59	1.5K	76-152-01
R60	680 Ω	76-681-01
R61	22K	76-223-01

C1	.047μF/100V	10A473-11
C2	22μF/35V	12-226-32
C3	50p 500V	10-500-02
C4	.1μF 400V	10-104-10
C5	100μF 350V	12-107-94
C6	330pF 400V DISC	10-331-04
C7	330pF 400V DISC	10-331-04
C8	.022μF 400V	10-223-10
C9	.047μF 400V	10-473-10
C10	.0047μF/100V	10A472-11
C11	.022μF/50V	10A223-01
C12	.1μF 400V	10-104-10
C13	.001μF/100V	10A102-11
C14	220pF/100V	10A221-11
C15	100pF/200V	10A101-21
C16	.0047μF/100V	10A472-11
C17	10μF/16V	12A106-11
C18	.22μF/50V	10A224-01
C19	.22μF/50V	10A224-01
C20	.022μF 400V	10-223-10
C21	10μF/16V	12A106-11
C22	.015μF/50V	10A153-01
C23	.15μF/50V	10A154-01
C24	10μF/16V	12A106-11
C25	330pF/100V	10A331-11
C26	1000μF 35V	12-100-32
C27	1000μF 35V	12-100-32
C28	2200μF 35V	12-228-35
C29	2200μF 35V	12-228-35
C30	.047μF/100V	10A473-11
C31	22μF/35V	12-226-32
D1	RED LED	21-501-01
D2	YEL LED	21-503-01
D3	RED LED	21-501-01
D4	GREEN LED ASSY	21-502-01
D5	1N914	21A914-01
D6	1N914	21A914-01
D7	1N914	21A914-01
D8	1N914	21A914-01
D9	1N914	21A914-01
D10	1N914	21A914-01
D11	1N914	21A914-01
D12	1N4002	21A402-01
D13	1N4002	21A402-01
D14	1N4002	21A402-01
D15	1N4002	21A402-01
F1	MPSA13 NPN DARL.	96-013-01
F2	ZHS210	96-510-01
F3	ZHS210	96-510-01
F4	MPSA13 NPN DARL.	96-013-01
F5	ZHS210	96-510-01
F6	J 176 FET	96-176-01
F7	MESS32	37-532-01
F8	MESS32	37-532-01
F9	1MΩ	70-105-22
F10	250KΩ W/ SW	70-254-25
F11	50KΩ POT	70-133-01
F12	250KΩ W/ SW	70-254-25
F13	1MΩ POT	70-105-21
F14	1MΩ POT	70-105-21
F15	10K AUDIO POT	70-103-22
F16	VTL-SC1	66-104-01
F17	VTL-SC1	66-104-01
F18	STACKED DPDT SW	88-303-01
F19	STACKED DPDT SW	88-303-01
F20	STACKED DPDT SW	88-303-01
F21	1/4" TIS CHROME	39-120-01
F22	6 PIN HEADER	17-310-06
F23	9 PIN HEADER	17-310-09
F24	-.250 ST. PC TAB	17-836-01
F25	-.250 ST. PC TAB	17-836-01
F26	-.250 ST. PC TAB	17-836-01
F27	-.250 ST. PC TAB	17-836-01
F28	1/2A 5B	23-300-05
F29	1/2A 5B	23-300-05
F30	FUSE CLIP	23-924-01
J1	2 PIN .1" HDR	17-102-02
J2	86 GROUND LUG	17-500-01
J3	4 PIN RA HDR	17-311-04
J4	8 PIN RA HDR	17-311-08
J5	4 PIN RA HDR	17-311-04
J6	9 PIN TUBE SOCKET	17-450-09
J7	9 PIN TUBE SOCKET	17-450-09
J8	1MΩ	70-105-22
J9	250KΩ W/ SW	70-254-25
J10	50KΩ POT	70-133-01
J11	250KΩ W/ SW	70-254-25
J12	1MΩ POT	70-105-21
J13	1MΩ POT	70-105-21
J14	10K AUDIO POT	70-103-22
J15	VTL-SC1	66-104-01
J16	VTL-SC1	66-104-01
J17	STACKED DPDT SW	88-303-01
J18	STACKED DPDT SW	88-303-01
J19	STACKED DPDT SW	88-303-01
J20	1/4" TIS CHROME	39-120-01
J21	6 PIN HEADER	17-310-06
J22	9 PIN HEADER	17-310-09
J23	-.250 ST. PC TAB	17-836-01
J24	-.250 ST. PC TAB	17-836-01
J25	-.250 ST. PC TAB	17-836-01
J26	-.250 ST. PC TAB	17-836-01
J27	1/2A 5B	23-300-05
J28	1/2A 5B	23-300-05
J29	FUSE CLIP	23-924-01

TOLERANCES	REVISIONS	B-1 PREAMP	
FRAC.	NO.	DATE	BY
1	1	9-21-92	RM
2			
3			
4			
5			

07-529-01 PICTORIAL

REVISIONS: 2X, 3X, 4X, 5X, 6X, 7X, 8X, 9X, 10X, 11X, 12X, 13X, 14X, 15X, 16X, 17X, 18X, 19X, 20X, 21X, 22X, 23X, 24X, 25X, 26X, 27X, 28X, 29X, 30X, 31X, 32X, 33X, 34X, 35X, 36X, 37X, 38X, 39X, 40X, 41X, 42X, 43X, 44X, 45X, 46X, 47X, 48X, 49X, 50X, 51X, 52X, 53X, 54X, 55X, 56X, 57X, 58X, 59X, 60X, 61X, 62X, 63X, 64X, 65X, 66X, 67X, 68X, 69X, 70X, 71X, 72X, 73X, 74X, 75X, 76X, 77X, 78X, 79X, 80X, 81X, 82X, 83X, 84X, 85X, 86X, 87X, 88X, 89X, 90X, 91X, 92X, 93X, 94X, 95X, 96X, 97X, 98X, 99X, 100X



DESIGNATOR	DESCRIPTION	P/N
R1	22K	76-223-01
R2	22K	76-223-01
R3	100K 1/2W	77-101-01
R4	100K	76-104-01
R5	100K	76-104-01
R6	4.7K	76-472-01
R7	2.7K	76-272-01
R8	10K	76-103-01
R9	220	76-220-01
R10	220	76-220-01
R11	4700	76-471-01
R12	4700	76-471-01
R13	5600	76-561-01
R14	2K 2W	78-202-01
R15	6800 1/2W	77-680-01
R16	1.5K	76-152-01
R17	5600	76-561-01
R18	220	76-220-01
R19	4.7K	76-472-01
R20	18K	76-183-01
R21	220	76-220-01
R22	220	76-220-01
R23	2700	76-271-01
R24	33K	76-333-01
R25	4.7K 1/2W	77-472-01
R26	2700	76-271-01
R27	33K	76-333-01
R28	4.7K 1/2W	77-472-01
R29	1000 1/2W	77-101-01
R30	.33 10MA	78-330-10
R31	.33 10MA	78-330-10
R32	.33 10MA	78-330-10
R33	.33 10MA	78-330-10
R34	100K	76-104-01
R35	4.7K	76-472-01

R36	1500	76-151-01
R37	2.7K	76-272-01
R38	2.2K 1/2W	77-222-01
R39	2.2K 1/2W	77-222-01
R40	3.3ohm 1W	78-033-01
R41	10ohm/2W	78-100-01
R42	8.2K 1/2W	77-822-01
R43	8.2K 1/2W	77-822-01
R44	1K 5MA	78-102-05
R45	1K 5MA	78-102-05
R46	22K 1W	78-224-01
C1	.22uF/100V POLY	10-224-03
C2	470pF/100V	10A471-11
C3	.1uF/50V	10A104-01
C4	220uF/50V	12-227-02
C5	.1uF/50V	12A105-51
C6	47/50V	12-476-52
C7	.0033uF 100V POLY	10-332-03
C8	.0022uF/50V	10A222-01
C9	50pF/200V	10A500-21
C10	100pF/200V	10A101-21
C11	47/50V	12-476-52
C12	.1uF/50V	12A105-51
C13	.1uF/50V	12A105-51
C14	220uF/50V	12-227-02
C15	470pF/100V	10A471-11
C16	470pF/100V	10A471-11
C17	100K 1/2W	77-101-01
C18	.1uF/100V POLY	10-104-03
C19	.1uF/100V POLY	10-104-03
C20	.1uF/100V POLY	10-104-03
C21	4700uF/50V	12-478-53
C22	4700uF/50V	12-478-53
C23	22uF/35V	12-226-32

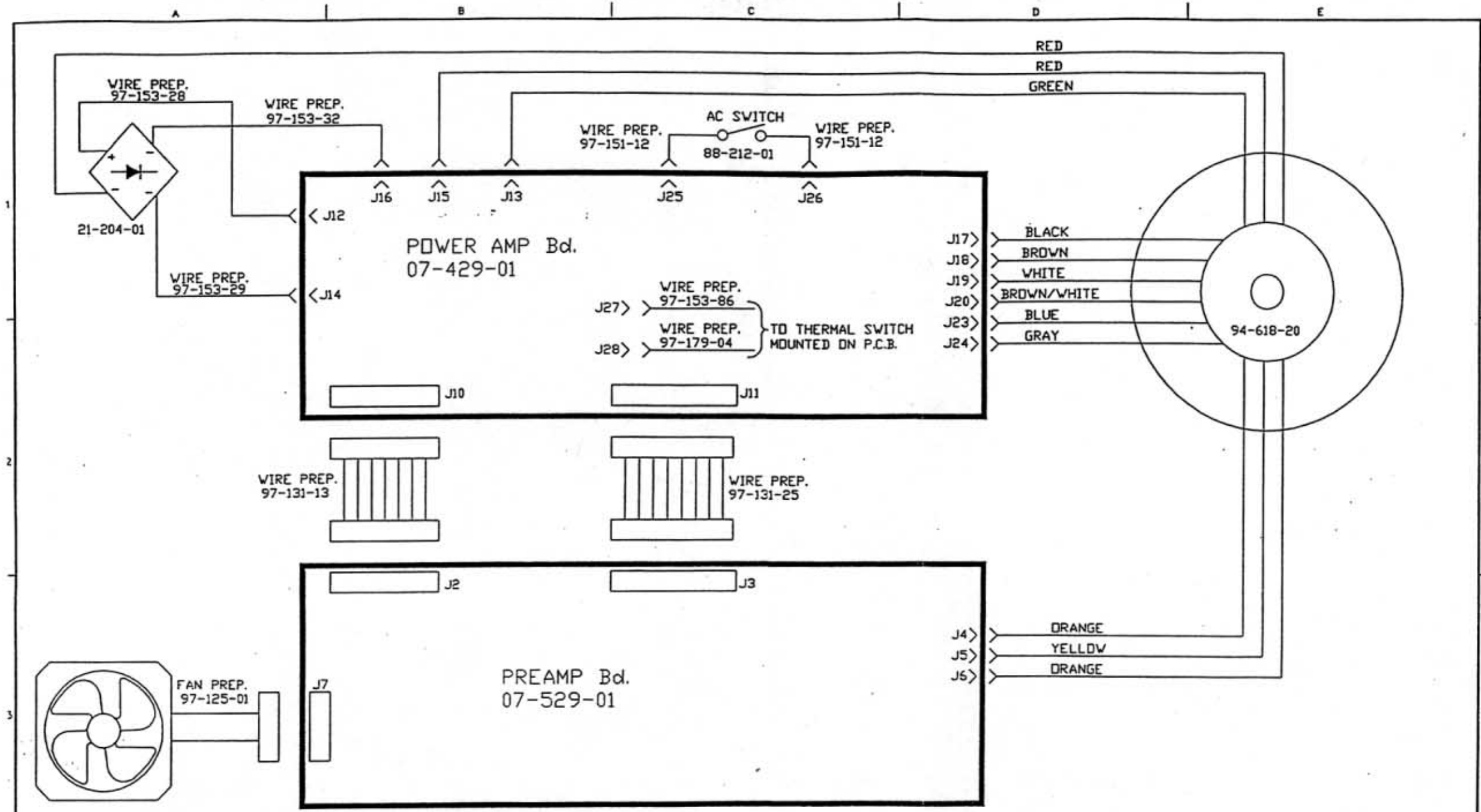
L24	22uF/35V	12-226-32
L25	33uF 200V	12-336-20
L26	33uF 200V	12-336-20
L27	33uF 200V	12-336-20
L28	33uF 200V	12-336-20
L29	33uF 200V	12-336-20
L30	33uF 200V	12-336-20
C31	100uF 350V	12-107-94
C32	100uF 350V	12-107-94
C33	100 MFD/35V	12-107-32
C34	.1uF/50V	10A104-01
C35	.0027uF UL	10-272-01
C36	.0027uF UL	10-272-01
Q1	1N914	21A914-01
Q2	1N4747	21A47-01
Q3	1N746	21A146-01
Q4	1N746	21A146-01
Q5	1N4740	21A440-01
Q6	1N914	21A914-01
Q7	1N914	21A914-01
Q8	1N914	21A914-01
Q9	1N914	21A914-01
Q10	1N914	21A914-01
Q11	1N914	21A914-01
Q12	1N914	21A914-01
Q13	1N914	21A914-01
Q14	1N914	21A914-01
Q15	1N914	21A914-01
U1	VTL-5C7 VACTROL	66-100-01
N1	500 ohm TRIMPOT	71-501-02
F1	5A SLO BLO	23-305-05
T1	130 C THERM SW	88-253-03
J1	AC LINE CONN	17-604-01
J2	CLIFF T/S JACK	39-116-01
J3	CLIFF T/S JACK	39-116-01
J4	CLIFF T/S JACK	39-116-01

J5	CLIFF T/S JACK	39-116-01
J6	CLIFF T/S JACK	39-116-01
J7	CLIFF T/S JACK	39-116-01
J8	XLR MALE	39-308-01
J9	CLIFF T/S JACK	39-116-01
J10	6 PIN HEADER	17-310-06
J11	9 PIN HEADER	17-310-09
J12	.250 ST. PC TAB	17-836-01
J13	.250 ST. PC TAB	17-836-01
J14	.250 ST. PC TAB	17-836-01
J15	.250 ST. PC TAB	17-836-01
J16	.250 ST. PC TAB	17-836-01
J17	.250 ST. PC TAB	17-836-01
J18	.250 ST. PC TAB	17-836-01
J19	.250 ST. PC TAB	17-836-01
J20	.250 ST. PC TAB	17-836-01
J21	.250 ST. PC TAB	17-836-01
J22	.250 ST. PC TAB	17-836-01
J23	.250 ST. PC TAB	17-836-01
J24	.250 ST. PC TAB	17-836-01
J25	.250 ST. PC TAB	17-836-01
J26	.250 ST. PC TAB	17-836-01
J27	.250 ST. PC TAB	17-836-01
J28	.250 ST. PC TAB	17-836-01
J29	PC MOUNT GND BRKT	17-836-01
C81	.11 A THERMISTOR	73-201-01
JW1-B	JUMPER	76-000-05

PC BOARD	06A429-01
HEAT SINK	33-134-01
3AG FUSE CLIP	23-926-01
INSULATOR	35-579-01
TO-3 INSULATOR	35-003-02
NYLON BUSHING	35-043-01
HEAT SINK	33-601-01
4-40 KEPS NUT	30-442-52
6-32X1/2 SCREW	30-650-53
6-32 KEPNUT	30-700-01
6-32X3/8 SCREW	30-638-53
4-40 SCREW	30-408-52

TOLERANCES		REVISONS		BY		DATE		BY		DATE	
DECIMAL	±	NO	DATE	BY	DATE	BY	DATE	BY	DATE	BY	DATE
FRACTIONAL	±										
ANGULAR	±										

B-1 POWER AMP PICT.
 ASSY # 07-429-01
 SLM ELECTRONICS
 REM
 SCALE 2X
 DATE 2-7-91
 DRAWING NO. 07P129-01




CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL.
 TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED
 SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND
 THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

100V		220V		240V	
FUSE=6A SLOW BLOW		FUSE=2 1/2A SLOW BLOW		FUSE=2 1/2A SLOW BLOW	
J17	BLUE	J17	BLACK	J17	BLACK
J18	GRAY	J20	BROWN/WHITE	J20	BROWN/WHITE
J19	WHITE	J21	WHITE	J21	WHITE
J20	BROWN/WHITE	J22	GRAY	J22	BROWN
J23	BLACK	J23	BLUE	J23	BLUE
J24	BROWN	J24	BROWN	J24	GRAY

NOTES

- 1) CAUTION: SHOCK HAZARD!!
 THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER
 AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE
 TOUCHING INTERNAL PARTS.

SIGNATURES:	DATE:	 TIBBO BORMAN DPL ST. LOUIS, MISSOURI 63168
DRAWN: S.RADER	12/17/91	
CHK'D:		PROJECT NAME:
APP'D:		B-1
ORIGINAL ISSUED:	12/17/91	DRAWING NAME:
PLOT DATE:	12/17/91	WIRING DIAGRAM
PLOT TIME:	06:45:34	DRAWING NO. 16W429-01
FILE NAME:	6W42901	SCALE: NONE SHEET: 1 OF 1