

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 \rightarrow INPUT GROUND ∇ CHASSIS GROUND \oplus

DESIGNATOR	DESC.	PART NO.
AP1	500 ohm TRIMPOT	71-501-02
Q1, 8, 11, 19, 20	MPS-A-06	96-006-01
Q2, 14	2N5415	96-515-01
Q3, 13	2N3440	96-340-01
Q4-7	MJ15022	96-122-01
Q9	MPS-A-56	96-056-01
Q10	2N3402	96-342-01
Q12	MPS-A-55	96-055-01
Q15-18	MJ15023	96-123-01
TS1	120C THERM SW	88-252-01
TS2	60C ND THERM SW	88-251-01
D1-6	1N4002	21A402-01
D7-13, 15, 16, 18, 20, 21, 24-26, 29	1N914	21A914-01
D14	1N4747	21A447-01
D17, 19, 22, 23	1N3070	21A370-01
D30	1N4756	21A456-01
D32	1N5347	21-547-01
D33	1N5353B	21-553-01
D34, 35	1N4745	21A145-01
F1	10A 125V SB FUSE	23-310-02
F2	ABC15A 125V FUSE	23-315-01
F3, 4	.5A 250V SB FUSE	23-300-05
F5	1/8A SB FUSE	23-313-05
IC1	78M15	37-715-01
IC2	79M15	37-915-01
IC3	TLD-72CP	37-072-01
IC4	NE5532	37-532-01
K1	T-90 RELAY	82-090-01
L1	2.5uH	94-142-01
DC1	VTL-5C7 VACTROL	66-100-01
J1-11		
J12		
J13		
J14		
J15		
J16		
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J98		
J99		
J100		

DESIGNATOR	DESC.	PART NO.
J1-8, 13-19, 25-27, 30, 31, 33-39	836TP .25'FST TB	17-836-01
J9, 10	#6 GROUND LUG	17-500-01
J11	AC LINE CONN	17-604-01
J12	10 PIN .156 HDR	17-310-10
J20-22, J23, 24, 28, 29	.187 ST. PC TAB	17-894-01
J32	CLIFF T/S JACK	39-116-01
J32	MPSS156-2-D	17-309-02

TEST POINT CHART

TP	VAC RMS	VDC
1	.883V	0
2	1.0V	5mV \pm 5mV
3	2.7V	350mV \pm 50mV
4	0	7.5V \pm .5V
5	0	7.5V \pm .5V
6	40V	1.5V \pm .2V
7	40V	1.5V \pm .2V
8	.2Vp-p RIPPLE	71V \pm 2V
9	.2Vp-p RIPPLE	-71V \pm 2V
10	.01Vp-p RIPPLE	17V \pm 2V
11	.01Vp-p RIPPLE	-17V \pm 2V
12	0	10mV \pm 5mV
13	0	80mV \pm 20mV
14	39V	10mV \pm 5mV
15	(TS1 OPEN)	10V \pm 2V
15	(TS1 CLOSED)	26V \pm 2V
16	.01Vp-p RIPPLE	+15V \pm .5V
17	.01Vp-p RIPPLE	-15V \pm .5V

MEASUREMENT CONDITIONS:
.883 Vrms @ 1 KHz, LIMITER OFF, 120 Vac, NO LOAD.

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.

REV	DATE	BY	CHK'D	DESCRIPTION
8	8/26/91	SWR	DP	CHANGED D27, D28 FROM: 1N4002 TO: 1N5303

SIGNATURES: _____ DATE: _____

DRAWN: DAP 02/21/91

CHK'D: DAP 03/06/91

APP'D: DAP 03/06/91

ORIGINAL ISSUED: _____

PLOT DATE: 08/26/91

PLOT TIME: 10:54:28

FILE NAME: 7542301A

SCALE: NONE

SHEET: 1 OF 1

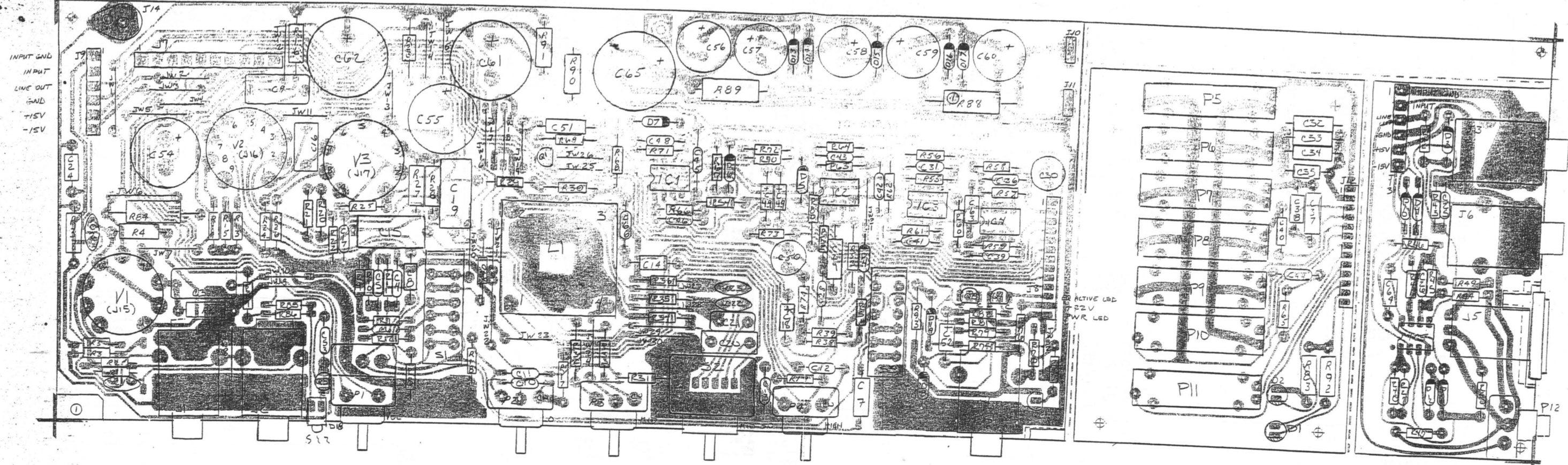
PROJECT NAME: SVT-III BASS AMP

DRAWING NAME: POWER AMP SCHEMATIC

DRAWING NO. 07S423-01

1180 BORMAN DR. ST. LOUIS, MISSOURI 63148

PREAMP GND
 PREAMP OUT
 EFF. RETURN
 LIMIT SWITCH
 LIMIT SWITCH
 +15V
 -15V
 +22V
 +22V



DESIGNATOR	DESCRIPTION	P/N
C1	.0047uF POLY	10-472-01
C2	50pF 500V NPO	10-500-02
C3	.1uF 400V POLY	10-104-41
C4	.0022uF/100V	10A222-11
C5	.0022uF/100V	10A471-21
C6	.0022uF/100V	10A222-11
C7	470pF/200V	10A104-01
C8	.1uF/50V	10-104-41
C9	.1uF 400V POLY	10A102-11
C10	.001uF/100V	10A103-11
C11	.01uF/100V	10A471-21
C12	470pF/200V	10A472-11
C13	.0047uF/100V	10A104-01
C14	.1uF/50V	10-684-21
C15	.68uF 200V	10-103-41
C16	.01uF 400V POLY	10A500-21
C17	50pF/200V	10A500-21
C18	10uF/16V	12A106-11
C19	.68uF 200V	10-684-21
C20	.22uF/100V POLY	10-224-03
C21	.15uF POLYCAP	10-154-02
C22	.033uF 100V POLY	10-333-02
C23	.033uF 100V POLY	10-333-02
C24	.047uF/100V	10A473-11
C25	1.00uF/200V	10A101-21
C26	1.00uF/200V	10A101-21
C27	330pF/100V	10A331-11
C28	.022uF/50V	10A223-01
C29	.22uF/50V	10A224-01
C30	10uF/50V NP	12-106-81
C31	.0047uF/100V	10A472-11
C32	.22uF/50V	10A224-01
C33	.22uF/50V	10A224-01
C34	.22uF/50V	10A224-01
C35	.1uF/50V	10A104-01
C36	.015uF/50V	10A153-01
C37	.22uF/50V	10A224-01
C38	.1uF/50V	10A104-01
C39	.0068uF/50V	10A682-01
C40	.1uF/50V	10A104-01
C41	.0022uF/100V	10A222-11
C42	.047uF/100V	10A473-11
C43	680pF/100V	10A681-11
C44	.047uF/100V	10A473-11
C45	680pF/100V	10A681-11
C46	680pF/100V	10A681-11
C47	10uF/16V	12A106-11
C48	330pF/100V	10A331-11
C49	10uF/50V NP	12-106-81
C50	.22uF/50V	10A224-01
C51	.22uF/50V	10A224-01

C52	10uF/16V	12A106-11
C53	.047uF/100V	10A473-11
C54	2200u/35V RADIAL	12-228-32
C55	2200u/35V RADIAL	12-228-32
C56	33uF/200V	12-336-20
C57	33uF/200V	12-336-20
C58	33uF/200V	12-336-20
C59	33uF/200V	12-336-20
C60	33uF/200V	12-107-93
C61	100uF/450V	12-336-20
C62	100uF/450V	12-107-93
C63	.047uF/100V	10A473-11
C64	.047uF/100V	10A473-11
C65	100uF/450V	12-107-93
C66	50pF/200V	10A500-21

J1	1/4 JACK CHROME	39-119-01
J2	1/4 JACK CHROME	39-119-01
J3	CLIFF T/S JACK	39-116-01
J4	1/4 JACK CHROME	39-119-01
J5	XLR MALE RA PC MT	39-308-01
J6	CLIFF T/S JACK	39-116-01
J7	10 PIN .156 HDR	17-310-10
J8	13 PIN .100 HDR	17-101-13
J9	6 PIN .156 HDR	17-310-06
J10	836TP .25" FST TB	17-836-01
J11	836TP .25" FST TB	17-836-01
J12	13 PIN .100 HDR	17-101-13
J13	6 PIN .156 HDR	17-310-06
J14	#6 GROUND LUG	17-500-01

R5	1.5K	76-152-01
R6	220K 1/2W	77-224-01
R7	470K	76-474-01
R8	10K	76-103-01
R9	120K	76-124-01
R10	68K	76-683-01
R11	150K	76-154-01
R12	150K	76-154-01
R13	220K	76-224-01
R14	1.5K	76-152-01
R15	3.3K	76-332-01
R16	100 Kohm 1/2W 1%	77-104-02
R17	220K	76-224-01
R18	22K	76-223-01
R19	120K	76-124-01
R20	220K	76-224-01
R21	560	76-561-01
R22	10K	76-103-01
R23	220K 1/2W	77-224-01
R24	1M	76-105-01
R25	470K	76-474-01
R26	3.3K	76-332-01
R27	100K 1/2W	77-104-01
R28	100K 1/2W	77-104-01
R29	2.2K	76-222-01
R30	4.7K	76-472-01
R31	220K	76-224-01
R32	560	76-561-01
R33	470	76-471-01
R34	220K	76-224-01
R35	220K	76-224-01
R36	220K	76-224-01
R37	100 1/2W	77-100-01
R38	100K	76-104-01
R39	100K	76-104-01
R40	15K	76-153-01
R41	330	76-331-01
R42	15K	76-153-01
R43	47K	76-473-01
R44	15K	76-153-01
R45	47K	76-473-01
R46	10K	76-103-01
R47	4.7K	76-472-01
R48	10K	76-103-01
R49	330	76-331-01
R50	330	76-331-01
R51	22K	76-223-01
R52	22K	76-223-01
R53	220K	76-224-01
R54	6.8K	76-682-01
R55	1.5K	76-152-01

R56	220K	76-224-01
R57	1K	76-102-01
R58	220K	76-224-01
R59	1K	76-102-01
R60	180K	76-184-01
R61	1K	76-102-01
R62	220K	76-224-01
R63	1K	76-102-01
R64	220K	76-224-01
R65	1.5K	76-152-01
R66	6.8K	76-682-01
R67	3.3K	76-332-01
R68	220K	76-224-01
R69	10K	76-103-01
R70	3.3K	76-332-01
R71	10K	76-103-01
R72	2.2K	76-222-01
R73	1K	76-102-01
R74	100K	76-104-01
R75	3.3M	76-335-01
R76	47K	76-473-01
R77	100K	76-104-01
R78	1.5K	76-152-01
R79	10K	76-103-01
R80	10K	76-103-01
R81	4.7K	76-472-01
R82	10K	76-103-01
R83	1.5K 1/2W	77-152-01
R84	100hm/2W	78-100-01
R85	4.7K	76-472-01
R86	120K	76-124-01
R87	270	76-271-01
R88	100 2W	78-100-01
R89	220 Kohm 1W	78-224-01
R90	2.2K 1/2W	77-222-01
R91	2.2K 1/2W	77-222-01
R92	1.5K 1/2W	77-152-01
R93	1M	76-105-01

S1	STACKED DPDT SW	88-303-01
S2	5 POS RA PC MT	88-108-01
S3	STACKED DPDT SW	88-303-01

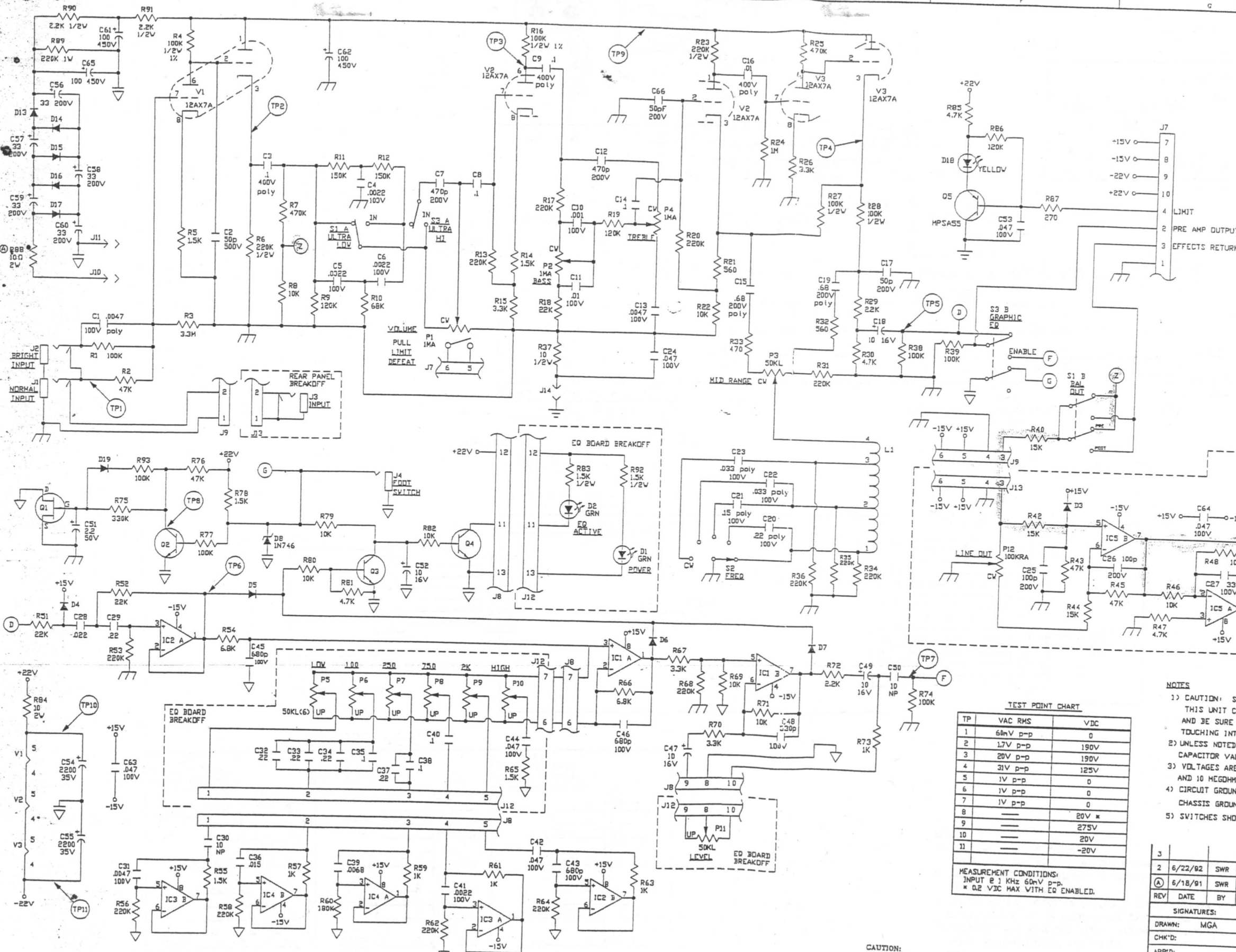
V1	TESTED 12AX7	97-927-01
V2	TESTED 12AX7	97-927-01
V3	TESTED 12AX7	97-927-01

NOTES:
 1) UNLESS OTHERWISE SPECIFIED: ALL RESISTORS ARE IN OHMS, 1/4 WATT, 5% ALL CAPACITORS ARE IN MICROFARADS AND HAVE A 50 VOLT RATING (MINIMUM).

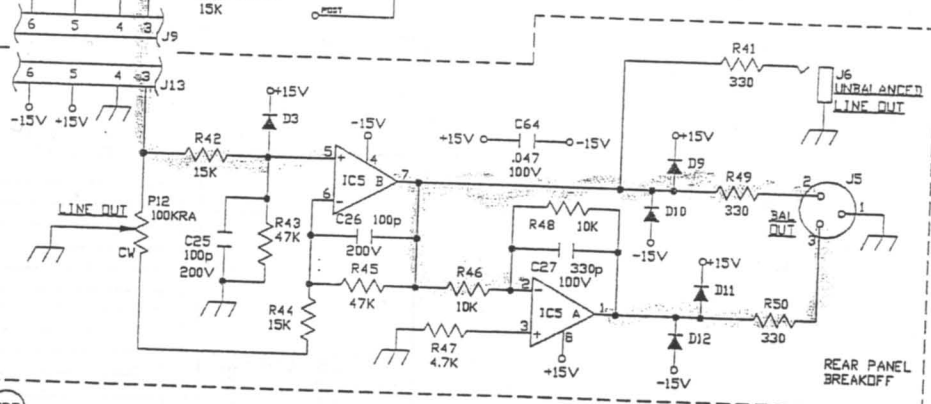
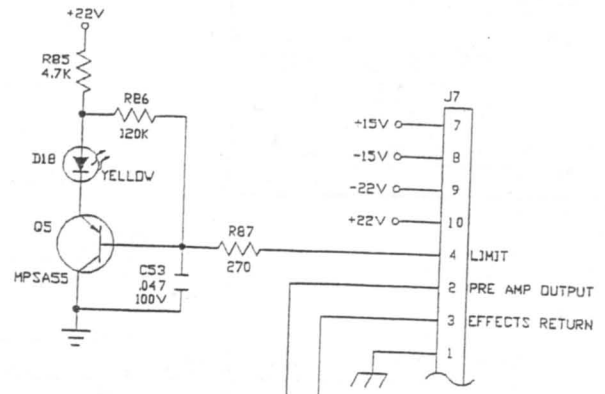
REV 1 - MOVED MOUNTING HOLES, ENLARGED CORNER ROUTE, CHANGED R54 TO 2W.

TOLERANCES	REVISIONS
DECIMAL	NO. DATE BY
FRACTIONAL	1 7/10/81 SLP SVT-III PREAMP
ANGULAR	2
	3
	4

DRAWN BY: SLP
 CHECKED BY: SLP
 DATE: 7/1-81
 MATERIAL: SLM ELECTRONICS
 SCALE: 2:1
 DRAWING NO.: JMW1-32



DESIGNATOR	DESCRIPTION	PART NO.
D1,2	GRN LED .3' SPCR	21-511-01
D3-7,9-12		
D8	1N914	21A914-01
D9	1N746	21A146-01
D13-17	1N4007	21A407-01
D18	YEL LED ASSY	21-503-01
IC1-4	RC4558	37-458-01
IC5	TLD-72CP	37-072-01
J1,2,4	1/4 JACK CHROME	39-119-01
J3,6	CLIFF T/S JACK	39-116-01
J5	XLR MALE RA PC MT	39-308-01
J7	10 PIN .156 HDR	17-310-10
J8,12	13 PIN .100 HDR	17-101-13
J9,13	6 PIN .156 HDR	17-310-06
J10,11	B36TP 25'FST TB	17-836-01
J14	#6 GROUND LUG	17-500-01
L1	PC MT TAPPED IND	94-602-32
P1	1M 15%LOG PULL SW	70-105-17
P2,4	1M 15% LOG	70-105-22
P3	50KL POT	70-133-01
P5-11	50KL 20mm SLIDER	70-503-25
P12	100 KRA	70-104-23
Q1	J176 FET	96-176-01
Q2,3,4	2N5210	96-510-01
Q5	MPS-A-55	96-055-01
S1,3	STACKED DPDT SW	88-303-01
S2	5 POS RA PC MT	88-108-01
V1,2,3	TESTED 12AX7	97-927-01



TEST POINT CHART

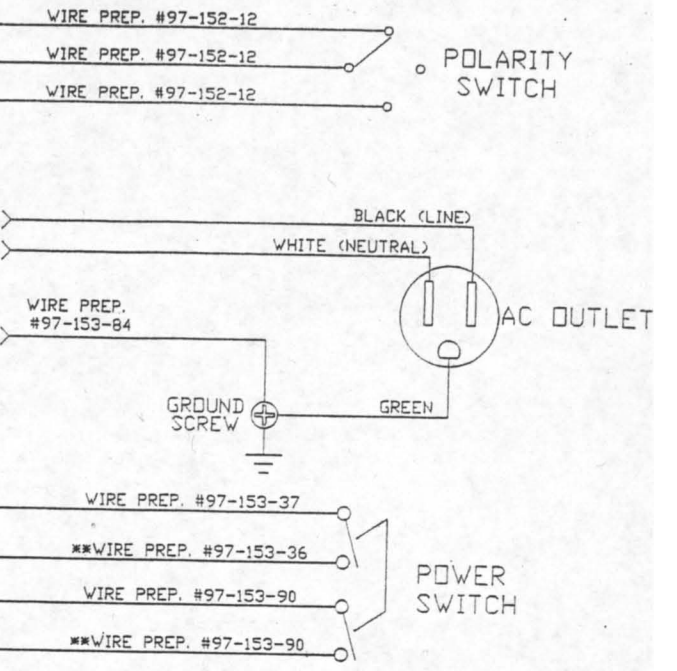
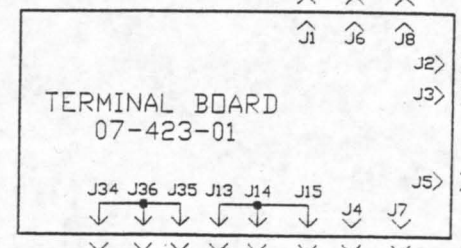
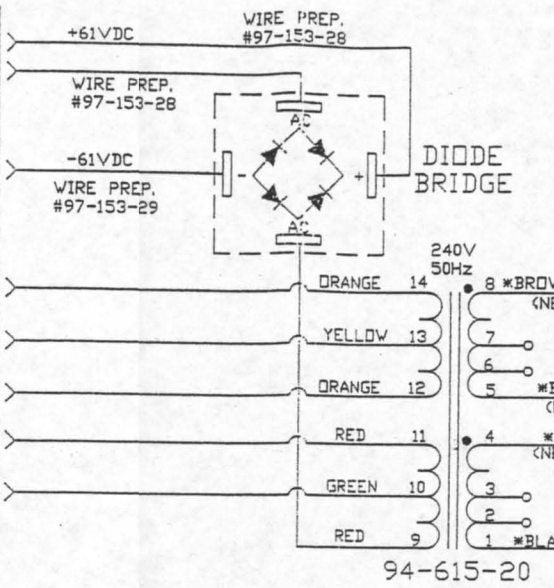
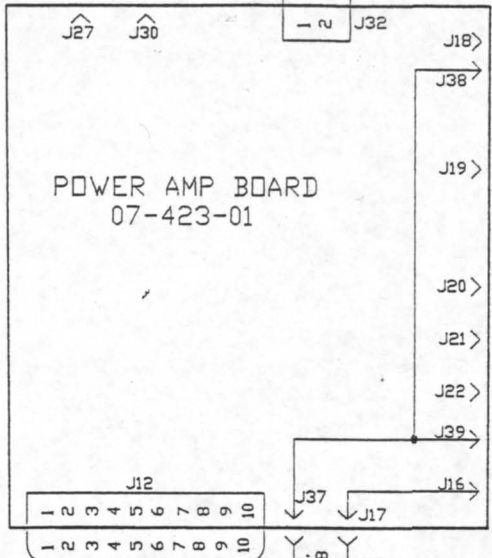
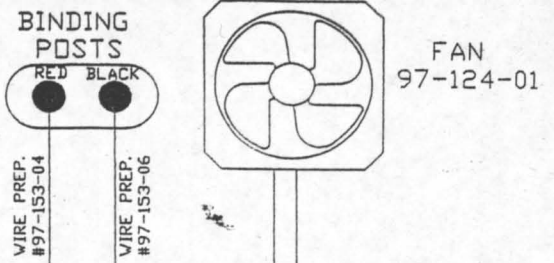
TP	VAC RMS	VDC
1	60mV p-p	0
2	1.7V p-p	190V
3	20V p-p	190V
4	31V p-p	125V
5	1V p-p	0
6	1V p-p	0
7	1V p-p	0
8		20V *
9		275V
10		20V
11		-20V

MEASUREMENT CONDITIONS:
 INPUT @ 1 KHz 60mV p-p.
 * 0.2 VDC MAX WITH EQ ENABLED.

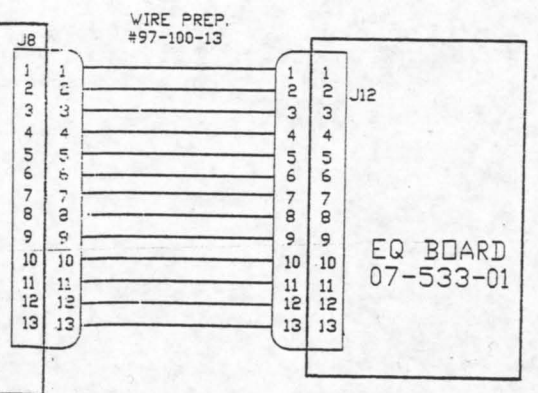
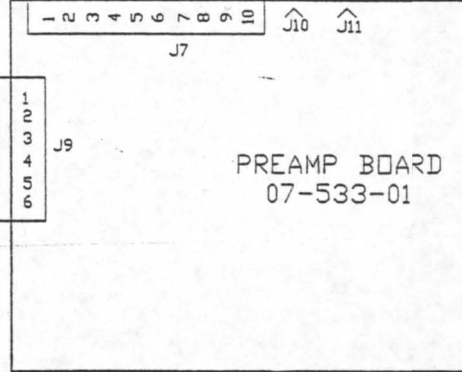
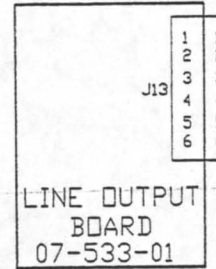
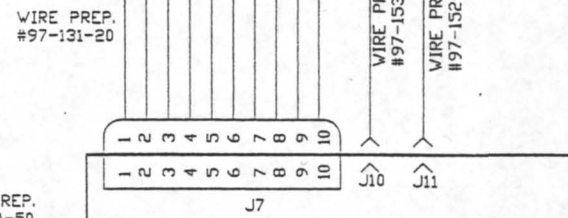
- NOTES**
- CAUTION: SHOCK HAZARD!! THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 - VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
 - CIRCUIT GROUND // EQ GROUND ⊕ CHASSIS GROUND + POWER GROUND ⊕
 - SWITCHES SHOWN IN 'OUT' POSITION.

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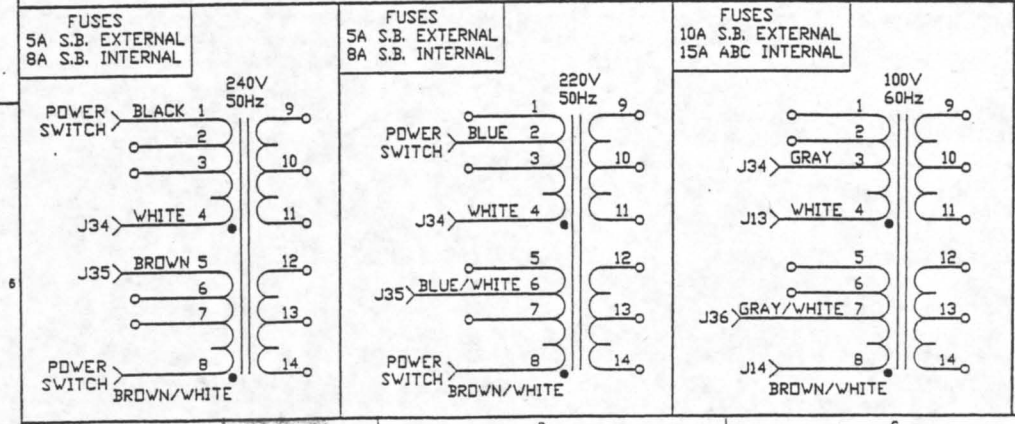
3	6/22/92	SWR	CHANGED VALUE COF C51, R75, & R92.	
2	6/18/91	SWR	CHANGED R88 FROM: 10 ohm, 1/4W TO: 10 ohm, 2W	
REV	DATE	BY	CHK'D	DESCRIPTION
SIGNATURES:		DATE:		
DRAWN: MGA		9-26-90	TIBBO BORMAN DR. ST. LOUIS, MISSOURI 63148	
CHK'D:		PROJECT NAME: SVT-III PRE AMP		
APP'D:		DRAWING NAME: SCHEMATIC		
ORIGINAL ISSUED:		DRAWING NO.: 075533-01		
PLOT DATE: 06/22/92		SCALE: NONE		
PLOT TIME: 08:41:53		SHEET: 1 OF 1		
FILE NAME: S533012				



* SEE EXPORT WIRING CONFIGURATION.
 ** NOT REQUIRED FOR 220V & 240V CONFIGURATIONS. SEE EXPORT WIRING CONFIGURATION.




EXPORT WIRING



CAUTION:
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 - 4) CIRCUIT GROUND ∇ SWITCH GROUND ∇ CHASSIS GROUND ∇

SIGNATURES:	DATE:		TIBBO BORMAN ST. LOUIS, MISSOURI 63146
DRAWN: S.RADER	3/1/91		PROJECT NAME: SVT III
CHK'D:		ORIGINAL ISSUED: 5/8/91	DRAWING NAME: WIRING DIAGRAM
APP'D: DR		PLOT DATE: 05/07/91	DRAWING NO. 16W413-0
		PLOT TIME: 14:03:47	FILE NAME: 16W41301
		SCALE: 1:1	SHEET: 1 OF 1