

**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.

SIGNATURES:	DATE:	1940 BORDMAN DR. ST. LOUIS, MISSOURI 63144
DRAWN: S. RADER	08/18/91	PROJECT NAME
CHK'D:	08/31/91	VL-1002
APP'D:	16W08301	DRAWING NAME
ORIGINAL ISSUED:		WIRING DIAGRAM
PLOT DATE:	09/18/91	DRAWING NO. 16W083-01
PLOT TIME:	08:32:10	SCALE: 1/1
FILE NAME:	16W08301	SHEET: 1 OF 1

DESIGNATOR DESCRIPTION P/N

R1	1M 1/2W 1%	77-105-02
R2	68.1K 1/2W 1%	77-683-02
R3	2.74K 1/2W 1%	77-272-02
R4	100K 1/2W 1%	77-104-02
R5	47.5K 1/2W 1%	77-473-02
R6	100K 1/2W 1%	77-104-02
R7	1.5K 1/2W 1%	77-152-02
R8	100K 1/2W 1%	77-104-02
R9	2.74K 1/2W 1%	77-272-02
R10	100K 1/2W 1%	77-104-02
R11	221K 1/2W 1%	77-224-02
R12	100K 1/2W 1%	77-103-02
R13	1.5K 1/2W 1%	77-152-02
R14	47.5K 1/2W 1%	77-473-02
R15	47.5K 1/2W 1%	77-473-02
R16	1K 1/2W 1%	77-102-02
R18	100K 1/2W 1%	77-104-02
R19	2.74K 1/2W 1%	77-272-02
R20	475K 1/2W 1%	77-474-02
R21	475K 1/2W 1%	77-474-02
R22	100K 1/2W 1%	77-104-02
R23	10K 1/2W 1%	77-103-02
R24	100K 1/2W 1%	77-104-02
R25	33.2K 1/2W 1%	77-333-02
R26	33.2K 1/2W 1%	77-106-02
R27	221K 1/2W 1%	77-224-02
R28	100K 1/2W 1%	77-104-02
R29	475K 1/2W 1%	77-474-02
R30	825 1/2W 1%	77-821-02
R31	3.3M 1/2W	77-335-01
R32	221K 1/2W 1%	77-224-02
R33	1M 1/2W 1%	77-105-02
R34	681 1/2W 1%	77-681-02
R35	4.7K 2W	78-472-01
R36	221K 1/2W 1%	77-224-02
R37	1.5K 1/2W 1%	77-152-02
R38	100K 1/2W 1%	77-104-02
R39	221K 1/2W 1%	77-224-02
R40	475K 1/2W 1%	77-474-02

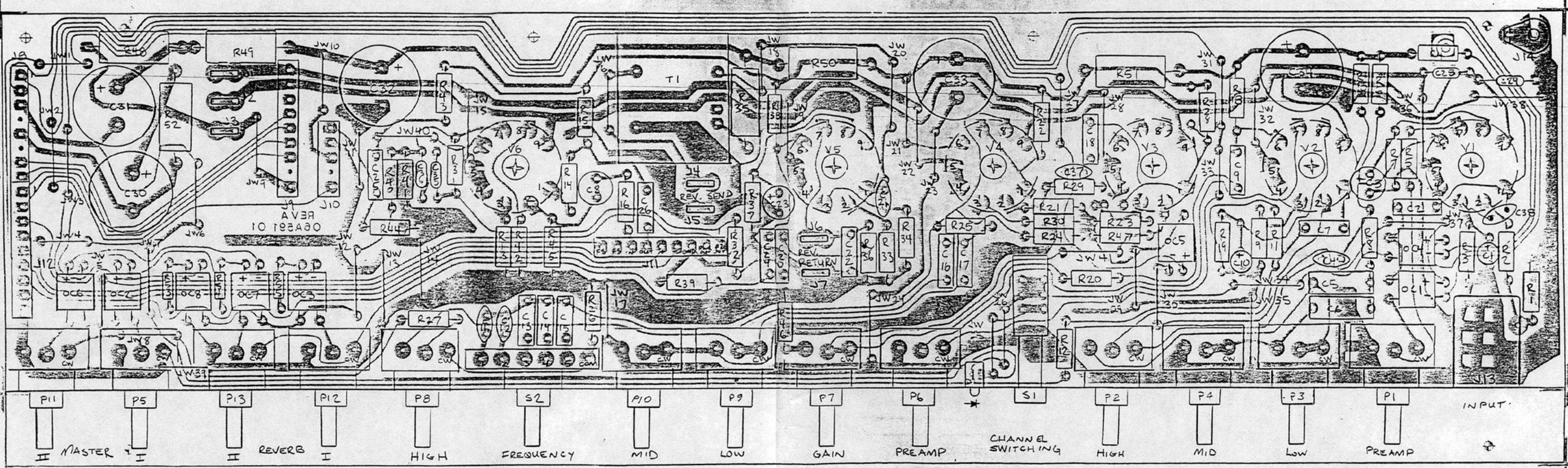
R41	221K 1/2W 1%	77-224-02
R42	2.21K 1/2W 1%	77-222-02
R43	100K 1/2W 1%	77-104-02
R44	1M 1/2W 1%	77-105-02
R45	221K 1/2W 1%	77-224-02
R46	10K 1/2W 1%	77-103-02
R47	475K 1/2W 1%	77-474-02
R48	4.7K 2W	78-472-01
R49	4.7K 2W	78-472-01
R50	10K 2W	78-103-03
R51	10K 2W	78-103-03
R52	56K 2W	78-563-01
R53	680 Ω	76-681-01
R54	220R	76-221-01
R55	220 Ω	76-221-01

C22	.0022/400V	10-222-10
C23	22uF/35V	12-226-32
C24	.0022/400V	10-222-10
C25	.022/400V	10-223-10
C26	.022/400V	10-223-10
C28	470pF/100V	10A471-11
C29	470pF/100V	10A471-11
C30	47uF/450V	12-476-42
C31	47uF/450V	12-476-42
C32	47uF/450V	12-476-42
C33	47uF/450V	12-476-42
C34	47uF/450V	12-476-42
C35	15pF/200V	10A150-21
C36	15pF/200V	10A150-21
C37	470pF/500V DISC	10-471-52
C38	470pF/500V DISC	10-471-52

P9	1M POT	70-105-10
P10	25KA POT	70-254-10
P11	250KA POT	70-254-10
P12	250KA POT	70-254-10
P13	250KA POT	70-254-10
T1	REV TRANS	94-029-01
V1	9-PIN TUBE SOCKET	17-450-09
V2	9-PIN TUBE SOCKET	17-450-09
V3	9-PIN TUBE SOCKET	17-450-09
V4	9-PIN TUBE SOCKET	17-450-09
V5	9-PIN TUBE SOCKET	17-450-09
V6	9-PIN TUBE SOCKET	17-450-09

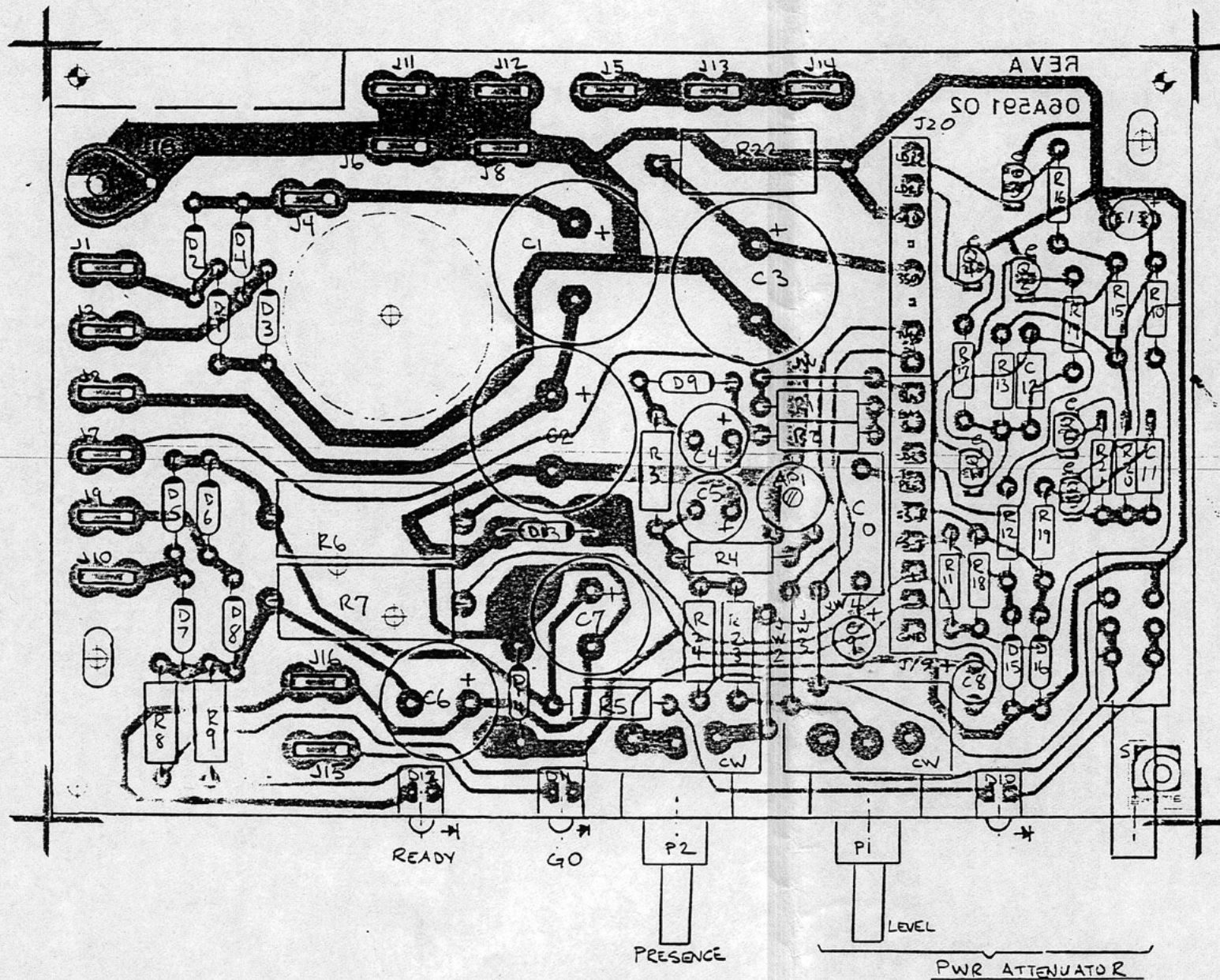
J13	CLIFF MONO JACK	39-119-01
J14	GROUND LUG	17-500-01
JW1-41	JUMPER	76-000-05
D1	RED LED ASSY	21-501-01
SCREW1	#6 SCREW	30-650-52
SCREW2	#6 SCREW	30-650-52
SCREW3	#6 SCREW	30-650-52
SCREW4	#6 SCREW	30-650-52
SCREW5	#6 SCREW	30-650-52
SCREW6	#6 SCREW	30-650-52
PCB1	VL-1002 PC	06A591-01

S1	DPDT SWITCH/LHT CAP	88-301-03
S2	5-POS ROTARY	88-107-01
J1	836TP .25" FST TB	17-836-01
J2	836TP .25" FST TB	17-836-01
J3	836TP .25" FST TB	17-836-01
J4	.187 ST. PC TAB	17-894-01
J5	.187 ST. PC TAB	17-894-01
J6	.187 ST. PC TAB	17-894-01
J7	.187 ST. PC TAB	17-894-01
J8	8 PIN STRAIGHT HDR	17-310-08
J9	9 PIN HEADER	17-310-09
J10	5-PIN HEADER	17-310-05
J11	9 PIN HEADER	17-310-09
J12	9 PIN HEADER	17-310-09



TOLERANCES	REVISIONS	NO.	DATE	BY
DECIMAL	1			
FRACTIONAL	2			
ANGULAR	3			

VL-502, VL-1002 MAIN SD.  
 Assy # 07-591-01  
 SLM ELECTRONICS ST. LOUIS,  
 1400 FERDINAND AVE. MO. 63133  
 DRAWN BY: KEM  
 CHECKED BY: KEM  
 DATE: 5-1-91  
 TRACED BY: KEM  
 MATERIAL: -  
 DRAWING NO: 07591-01



R3	15K 1/2W 1%	77-153-02
R4	47.5K 1/2W 1%	77-473-02
R5	2.21K 1/2W 1%	77-222-02
R6	10ohm/2W	78-100-01
R7	50 OHM 5 WATT	78-500-05
R8	2.21K 1/2W 1%	77-222-02
R9	2.21K 1/2W 1%	77-222-02
R10	22Ω	76-220-01
R11	2.2KΩ	76-222-01
R12	100KΩ	76-104-01
R13	10.0K 1%	76-103-02
R14	1MΩ	76-105-01
R15	10.0K 1%	76-103-02
R16	100KΩ	76-104-01
R17	100KΩ	76-104-01
R18	2.2KΩ	76-222-01
R19	100KΩ	76-104-01
R20	10.0K 1%	76-103-02
R21	1MΩ	76-105-01
R22	56K 2W	78-563-01
R23	221K 1/2W 1%	77-224-02
R24	221K 1/2W 1%	77-224-02

C1	100/450V SNAP-IN	12-107-93
C2	100/450V SNAP-IN	12-107-93
C3	47uF/450V	12-476-42
C4	10/100V	12-106-10
C5	10/100V	12-106-10
C6	1000/35V	12-108-32
C7	1000/35V	12-108-32
C8	47 MFD/35V	12-476-32
C9	47 MFD/35V	12-476-32
C10	.1/400V	10-104-10
C11	.1uF/50V	10A104-01
C12	.1uF/50V	10A104-01
C13	220uF/16V	12-227-12

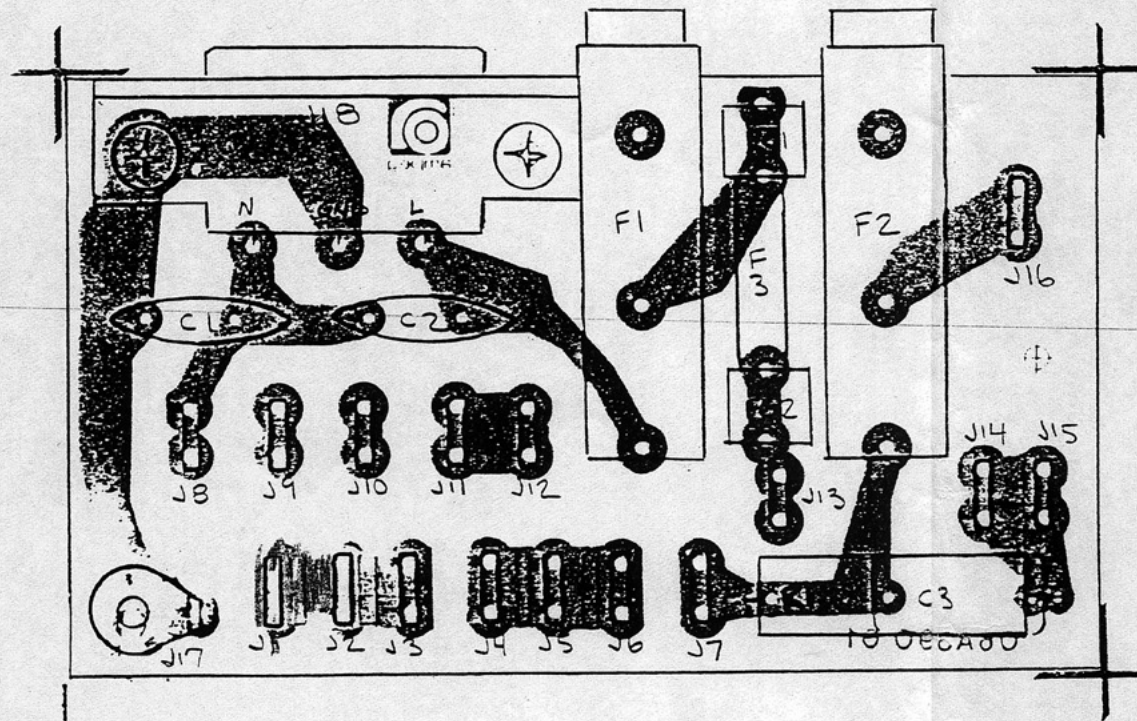
Q1	2N5210	96-510-01
Q2	MPS-A13	96-013-01
Q3	MPS-A13	96-013-01
Q4	MPS-A13	96-013-01
Q5	2N5210	96-510-01
Q6	MPS-A13	96-013-01

AP1	25K TRIMPOT	71-253-25
J1	836TP.25°FST TB	17-836-01
J2	836TP.25°FST TB	17-836-01
J3	836TP.25°FST TB	17-836-01
J4	836TP.25°FST TB	17-836-01
J5	836TP.25°FST TB	17-836-01
J6	836TP.25°FST TB	17-836-01
J7	836TP.25°FST TB	17-836-01
J8	836TP.25°FST TB	17-836-01
J9	836TP.25°FST TB	17-836-01
J10	836TP.25°FST TB	17-836-01
J11	836TP.25°FST TB	17-836-01
J12	836TP.25°FST TB	17-836-01
J13	836TP.25°FST TB	17-836-01
J14	836TP.25°FST TB	17-836-01
J15	836TP.25°FST TB	17-836-01
J16	836TP.25°FST TB	17-836-01
J18	#6 GROUND LUG	17-500-01
J19	9 PIN HEADER	17-310-09
J20	8 PIN STRAIGHT HDR	17-310-08

D1	1N4007	21A407-01
D2	1N4007	21A407-01
D3	1N4007	21A407-01
D4	1N4007	21A407-01
D5	1N4002	21A402-01
D6	1N4002	21A402-01
D7	1N4002	21A402-01
D8	1N4002	21A402-01
D9	1N4002	21A402-01
D10	YELLOW LED ASSY	21-503-01
D11	GREEN LED ASSY	21-502-01
D12	RED LED ASSY	21-501-01
D13	1N4744	21A444-01
D14	1N4744	21A444-01
D15	1N746	21A146-01
D16	1N746	21A146-01

P1	250KA POT	70-254-10
P2	25KRA POT	70-253-12
S1	DPDT SWITCH/WHT CAP	88-301-03

TOLERANCES		REVISIONS		VL502, 100Z LOGIC BOARD		
(EXCEPT AS NOTED)		NO.	DATE	BY	PICT. ASSY # 07-591-02	
DECIMAL	±	1			SLM ELECTRONICS	
FRACTIONAL	±	2			DRAWN BY	SCALE 2X MATERIAL
ANGULAR	±	3			CHK'D	DATE 6-5-91 DRAWING NO.
		4			TRACED	APP'D 07P591-02



DESIGNATOR	DESCRIPTION	P/N
PCB1	PC BOARD	06A390-01
J1	836TP.25 *FST TB	17-836-01
J2	836TP.25 *FST TB	17-836-01
J3	836TP.25 *FST TB	17-836-01
J4	836TP.25 *FST TB	17-836-01
J5	836TP.25 *FST TB	17-836-01
J6	836TP.25 *FST TB	17-836-01
J7	836TP.25 *FST TB	17-836-01
J8	836TP.25 *FST TB	17-836-01
J9	836TP.25 *FST TB	17-836-01
J10	836TP.25 *FST TB	17-836-01
J11	836TP.25 *FST TB	17-836-01
J12	836TP.25 *FST TB	17-836-01
J13	836TP.25 *FST TB	17-836-01
J14	836TP.25 *FST TB	17-836-01
J15	836TP.25 *FST TB	17-836-01
J16	836TP.25 *FST TB	17-836-01
J17	#6 GROUND LUG	17-500-01
J18	AC LINE CONN	17-604-01
C1	.0027uF UL	10-272-01
C2	.0027uF UL	10-272-01
C3	.047uF/600V	10-473-61
FC1	3AG FUSE CLIP	23-926-01
FC2	3AG FUSE CLIP	23-926-01
F1	FUSE HOLDER	23-346-01
F2	FUSE HOLDER	23-346-01
F3	10 AMP SLOW BLOW	23-310-02
R1	150K 2W 5% RES	78-154-02
S1	6-32 x 3/8 screw	30-638-53
S2	6-32 x 3/8 screw	30-638-53
N1	6-32 KEPNUT	30-700-01
N2	6-32 KEPNUT	30-700-01

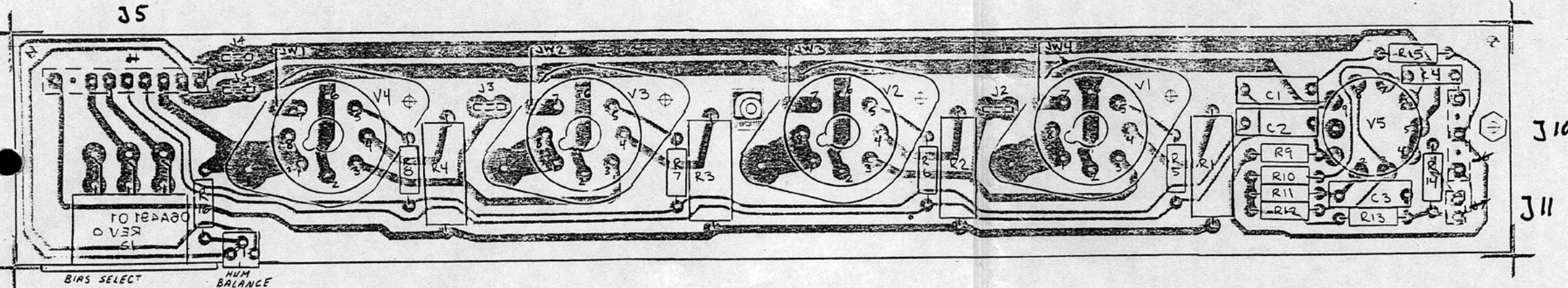
TOLERANCES (EXCEPT AS NOTED)	REVISIONS			AC TERMINATION BD PICT. ASSY # 07-790-01		
	NO.	DATE	BY	SLM ELECTRONICS		
DECIMAL	1					
FRACTIONAL	2					
ANGULAR	3					
	4					
	5					

DRAWN BY <i>REM</i>	SCALE 2X	MATERIAL
DATE 6-5-91	DRAWING NO.	
APP'D		07P390-01

DESIGNATOR	DESCRIPTION	P/N
R1	1K 5W	78-102-05
R2	1K 5W	78-102-05
R3	1K 5W	78-102-05
R4	1K 5W	78-102-05
R5	1.5K 1/2W 1%	77-152-02
R6	1.5K 1/2W 1%	77-152-02
R7	1.5K 1/2W 1%	77-152-02
R8	1.5K 1/2W 1%	77-152-02
R9	100K 1/2W 1%	77-104-02
R10	1M 1/2W 1%	77-105-02
R11	1M 1/2W 1%	77-105-02
R12	475 1/2W 1%	77-471-02
R13	10K 1/2W 1%	77-103-02
R14	4.75K 1/2W 1%	77-472-02
R15	82.5K 1/2W 1%	77-823-02
R16	100 1/2W 1%	77-101-02
C1	.1/400V	10-104-10
C2	.1/400V	10-104-10
C3	.1/400V	10-104-10
C4	.022/400V	10-223-10
J1	9 PIN HEADER	17-310-09
J2	836TP .25" FST TB	17-836-01
J3	836TP .25" FST TB	17-836-01
J4	.187 ST. PC TAB	17-894-01
J5	.187 ST. PC TAB	17-894-01
J6	5-PIN HEADER	17-310-05
J7	2 PIN HEADER	17-310-02
JW1-4	JUMPER	76-000-05
F1	200 OHM TRIMPOT	71-201-11
V1	8-PIN TUBE SOCKET	17-450-08
V2	8-PIN TUBE SOCKET	17-450-08
V3	8-PIN TUBE SOCKET	17-450-08
V4	8-PIN TUBE SOCKET	17-450-08
V5	9-PIN TUBE SOCKET	17-450-09

DESIGNATOR	DESCRIPTION	P/N
S1	SLIDE SWITCH	88-220-01
SCREW1	6-32 x 3/8 screw	30-638-53
SCREW2	6-32 x 3/8 screw	30-638-53
SCREW3	6-32 x 3/8 screw	30-638-53
SCREW4	6-32 x 3/8 screw	30-638-53
SCREW5	6-32 x 3/8 screw	30-638-53
SCREW6	6-32 x 3/8 screw	30-638-53
SCREW7	6-32 x 3/8 screw	30-638-53
SCREW8	6-32 x 3/8 screw	30-638-53
SCREW9	6-32 x 3/8 screw	30-638-53
SCREW10	6-32 x 3/8 screw	30-638-53
SCREW11	6-32 x 3/8 screw	30-638-53
SCREW12	6-32 x 3/8 screw	30-638-53
SCREW13	6-32 x 3/8 screw	30-638-53
SCREW14	6-32 x 3/8 screw	30-638-53
SCREW15	6-32 x 3/8 screw	30-638-53
SCREW16	6-32 x 3/8 screw	30-638-53
STANDOFF1	11/16" STANDOFF	85-116-01
STANDOFF2	11/16" STANDOFF	85-116-01
STANDOFF3	11/16" STANDOFF	85-116-01
STANDOFF4	11/16" STANDOFF	85-116-01
STANDOFF5	11/16" STANDOFF	85-116-01
STANDOFF6	11/16" STANDOFF	85-116-01
STANDOFF7	11/16" STANDOFF	85-116-01
STANDOFF8	11/16" STANDOFF	85-116-01
PCB1	PC BOARD	06A491-01



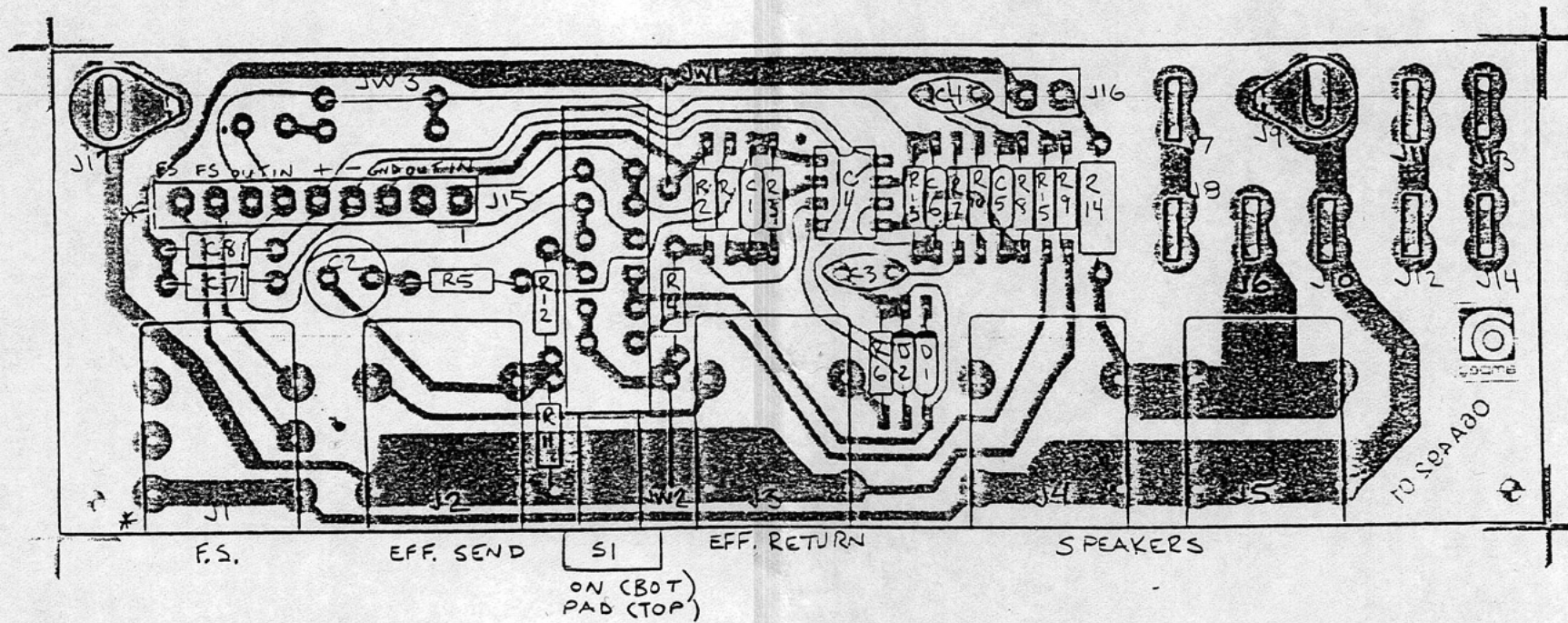
TOLERANCES	REVISIONS	VL SERIES - 100 WATT	
STANDARD	NO	DATE	BY
DECIMAL	1		
FRACTIONAL	2		
ANGULAR	3		
	4		
	5		
	6		

PWR AMP - Assy # 07-491-01  
 SLM ELECTRONICS ST. LOUIS  
 1400 FERGUSON AVE. MO. 63133  
 DRAWN BY: RGA SCALE: 2X MATERIAL: -  
 DATE: 5-1-91 DRAWING NO:  
 APPD: TRACED 07P491-01

DESIGNATOR	DESCRIPTION	P/N
R1	68K $\Omega$	76-683-01
R2	68K $\Omega$	76-683-01
R3	6.81K OHM 1%	76-682-02
R4	6.81K OHM 1%	76-682-02
R5	1.0K 1%	76-102-02
R6	10.0K 1%	76-103-02
R7	10.0K 1%	76-103-02
R8	82K $\Omega$	76-823-01
R9	10.0K 1%	76-103-02
R10	10.0K 1%	76-103-02
R11	100K $\Omega$	76-104-01
R12	330 $\Omega$	76-331-01
R13	82K $\Omega$	76-823-01
R14	100K 1/2W 1%	77-104-02
R15	3.3K $\Omega$	76-332-01
C1	10pF/200V	10A100-21
C2	22uF/16V NP	12-226-82
C3	.1uF/100V POLY	10-104-03
C4	.1uF/100V POLY	10-104-03
C5	100pF/200V	10A101-21
C6	100pF/200V	10A101-21
C7	.1uF/50V	10A104-01
C8	.1uF/50V	10A104-01

D1	1N914	21A914-01
D2	1N914	21A914-01

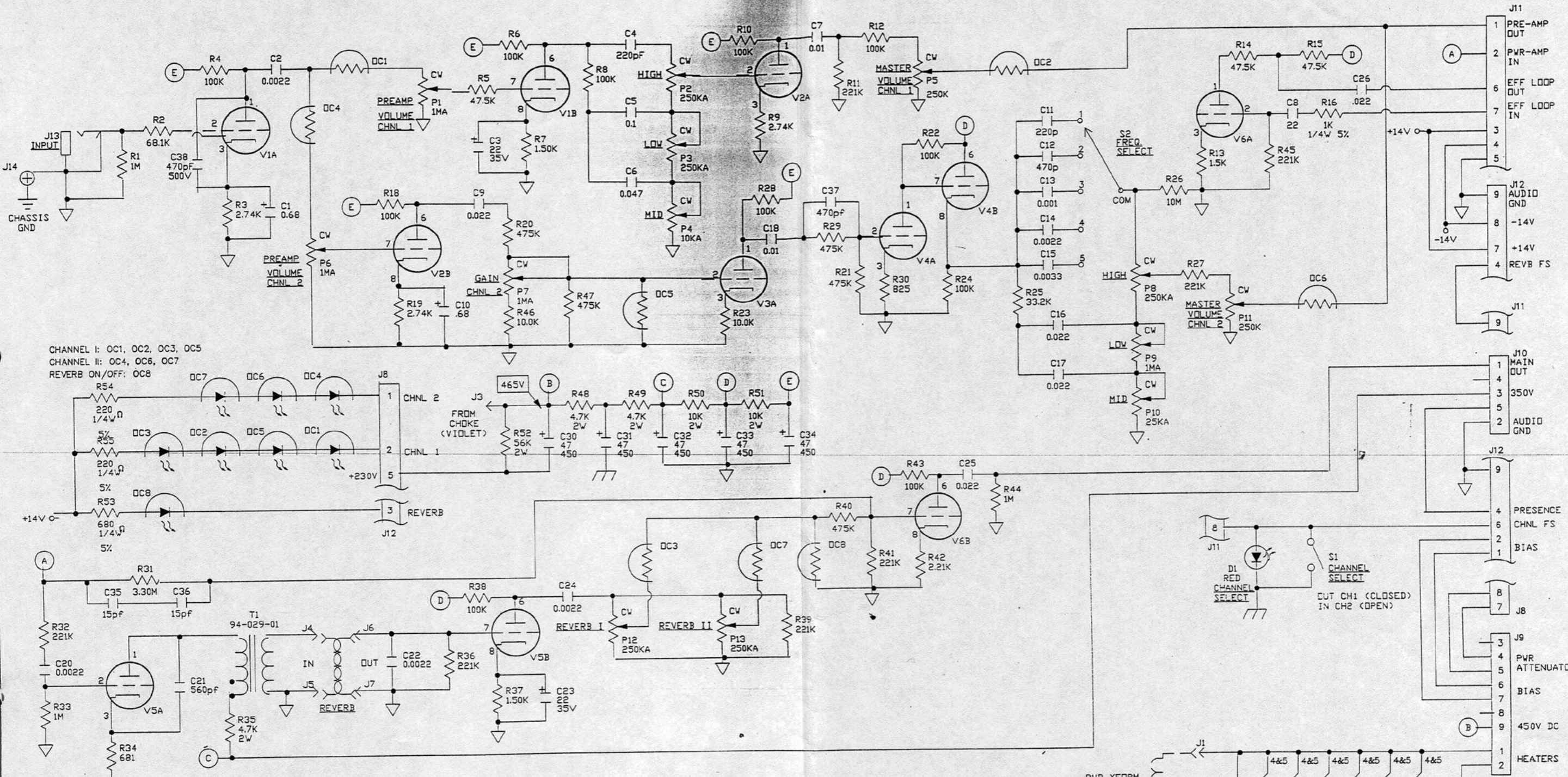
DESIGNATOR	DESCRIPTION	P/N
SW1	STACKED SW/ NO CAP	88-303-02
IC1	NE5532	37-532-01
JW1-3	JUMPER	76-000-05
J1	CLIFF STEREO JACK	39-120-01
J2	CLIFF MONO JACK	39-119-01
J3	CLIFF MONO JACK	39-119-01
J4	CLIFF MONO JACK	39-119-01
J5	CLIFF MONO JACK	39-119-01
J6	836TP .25" FST TB	17-836-01
J7	836TP .25" FST TB	17-836-01
J8	836TP .25" FST TB	17-836-01
J9	#6 GROUND LUG	17-500-01
J10	836TP .25" FST TB	17-836-01
J11	836TP .25" FST TB	17-836-01
J12	836TP .25" FST TB	17-836-01
J13	836TP .25" FST TB	17-836-01
J14	836TP .25" FST TB	17-836-01
J15	9 PIN HEADER	17-310-09
J16	2 PIN HEADER	17-310-02
J17	#6 GROUND LUG	17-500-01
PCB1	VL1001/1002 RAW PC	06A492-01



- \* J1 DELETED FOR 07P492-01
- \* J15 17-310-09 FOR 07P492-01

TOLERANCES (EXCEPT AS NOTED)	REVISIONS			MATERIAL
	NO.	DATE	BY	
DECIMAL	1			SLM ELECTRONICS VL-SERIES ASSY # 07-472-02 EFFECTS/OUTPUT B/D, DRAWN BY REM DATE 6-5-91 TRACED
±	2			
FRACTIONAL	3			
±	4			
ANGULAR	5			

DRAWING NO. 07P492-02



CHANNEL I: OC1, OC2, OC3, OC5  
 CHANNEL II: OC4, OC6, OC7  
 REVERB ON/OFF: OC8

PART	DESC.	PART NO.
D1	LED RED	21-501-01
OC1-8	LDRVTL5C1	66-104-01
P1, 6, 7, 9	1MA	70-105-10
P2, 3, 5, 8	250KA	70-254-10
P4	10KA	70-103-10
P10	25KA	70-253-10
V1-6	9 PIN SDC	17-450-09
S1	PUSH/SW	88-303-03
S2	5 POS.	88-107-01
J1-3	.250 FASTON	17-836-01
J4-7	.187 FASTON	17-894-01
J8	8PIN	17-310-08
J9, 11, 12	9 PIN	17-310-09
J10	5 PIN	17-310-05
J13	1/4" CLIFF T/S	39-119-01
J14	#6 GROUND LUG	17-500-01

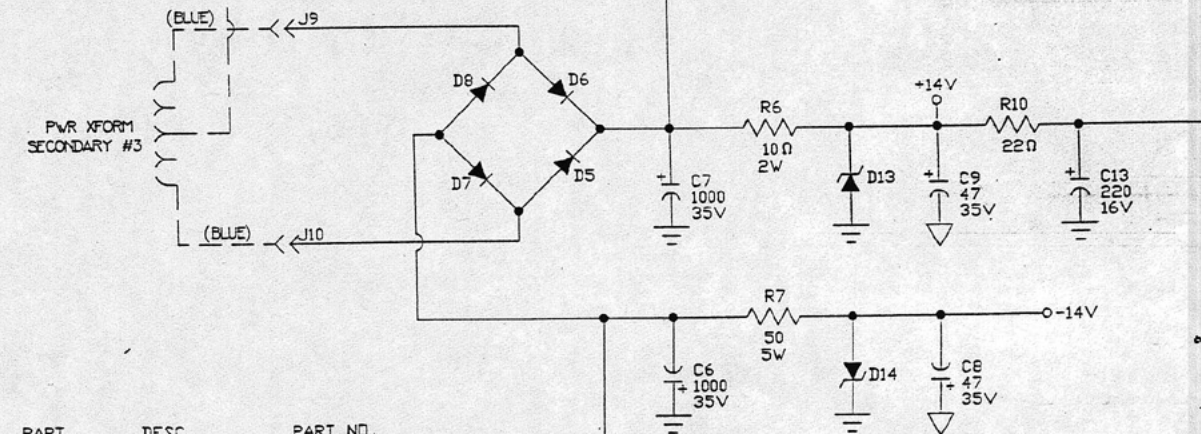
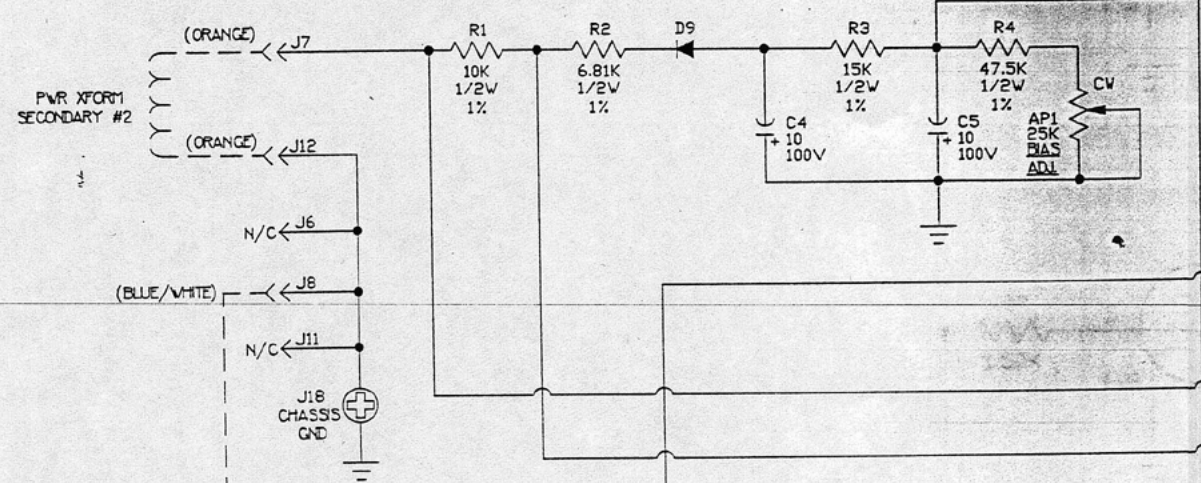
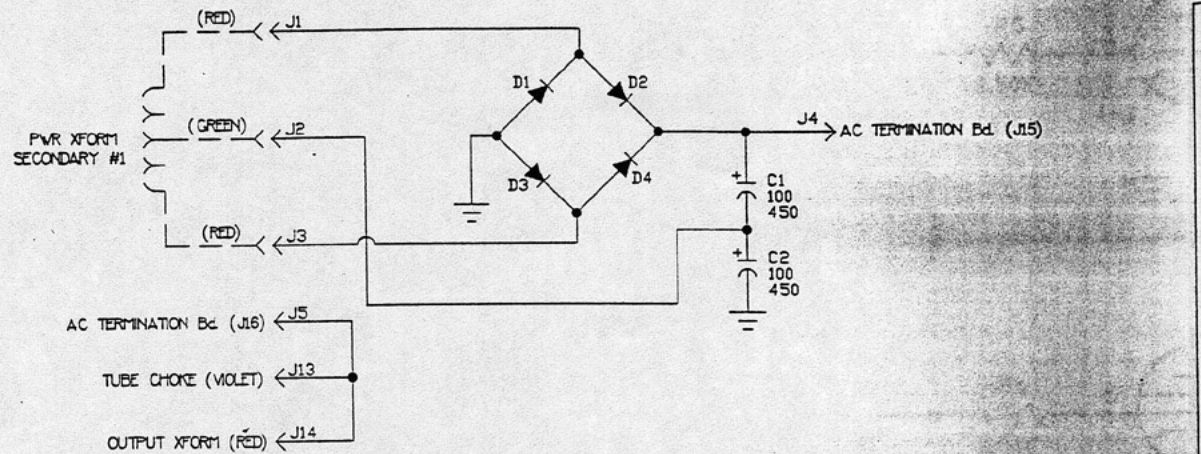
**NOTES**

- 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, 1/2W-1% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
- 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLT METER.
- 4) CIRCUIT GROUND  $\text{⏏}$  AUDIO GROUND  $\text{⏏}$  CHASSIS GROUND  $\text{⏏}$

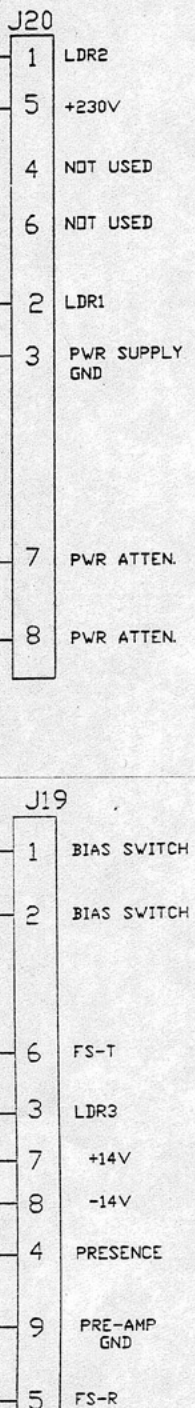
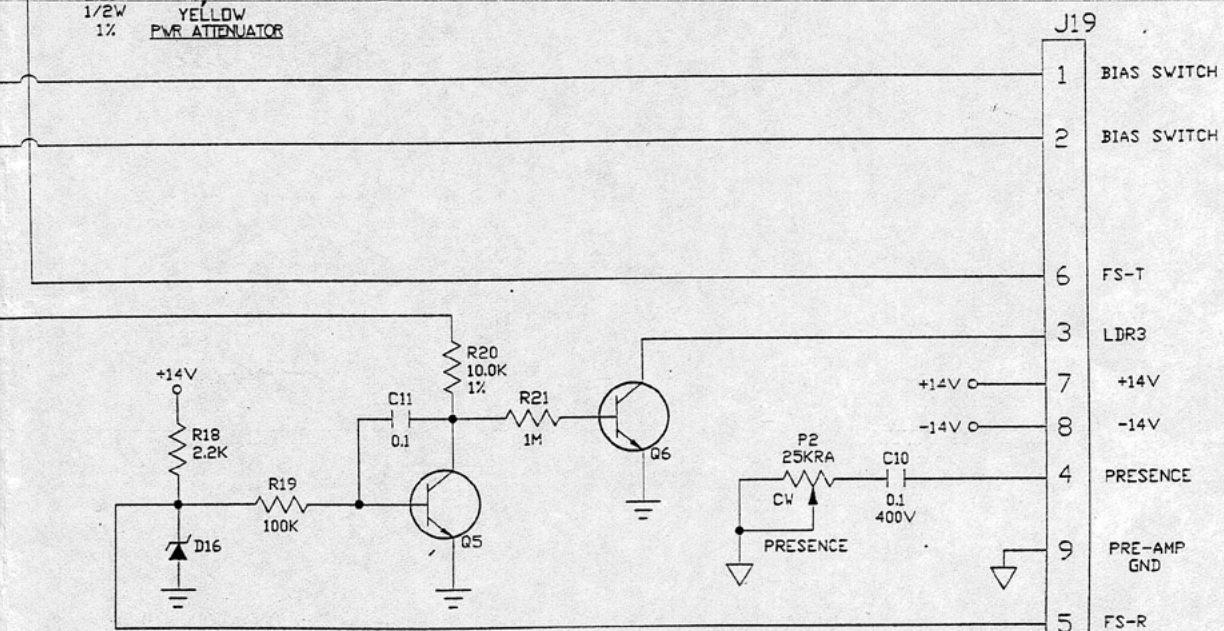
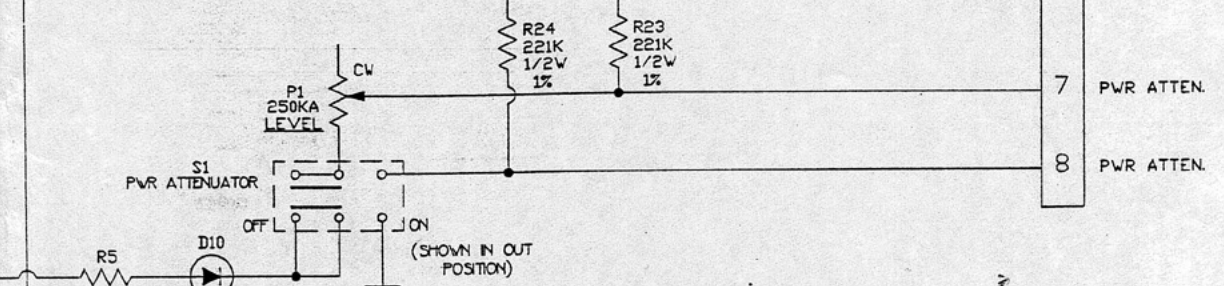
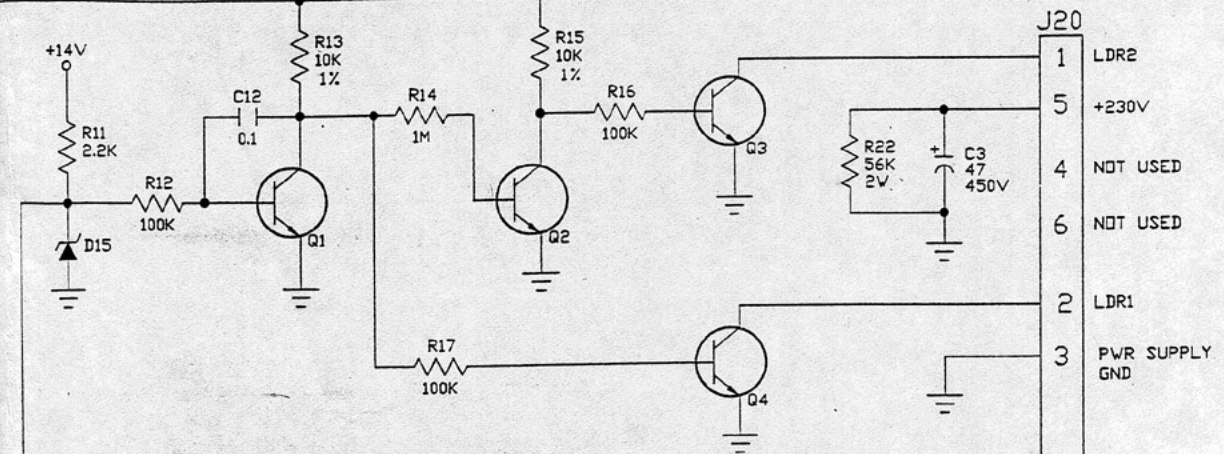
**CAUTION:**

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.

IGNATURES:	DATE:	1180 BORNHAY DR. ST. LOUIS, MISSOURI 63148
DRAWN: S.R.	2/20/91	
CHK'D:		PROJECT NAME: VL-502/1002
APP'D:		DRAWING NAME: MAIN BD. SCHEMATIC
ORIGINAL ISSUED:	9/11/91	DRAWING NO.: 07S591-01
PLOT DATE:	09/11/91	SCALE: NONE
PLOT TIME:	10:20:04	SHEET: 1 of 1
FILE NAME:	07S59101	



PART	DESC.	PART NO.
D1-4	1N4007	21A407-01
D5-9	1N4002	21A402-01
D10	LED YELLOW	21-503-01
D11	LED GREEN	21-502-01
D12	LED RED	21-501-01
D13,14	1N4744	21A444-01
D15,16	1N746	21A146-01
J1-16	.250 FASTONS	17-836-01
J18	GROUND TAB	17-500-01
J19	9 PIN HEADER	17-310-09
J20	8 PIN HEADER	17-310-08
Q1,5	2N5210 TRANS	96-510-01
Q2-4,6	MPSA13 TRANS	96-013-01
AP1	25K TRIM	70-253-25
P1	250KA POT	70-254-10
P2	25KRA POT	70-253-12
S1	DPDT SWT	88-301-03
PCB	PC BOARD	06A591-02

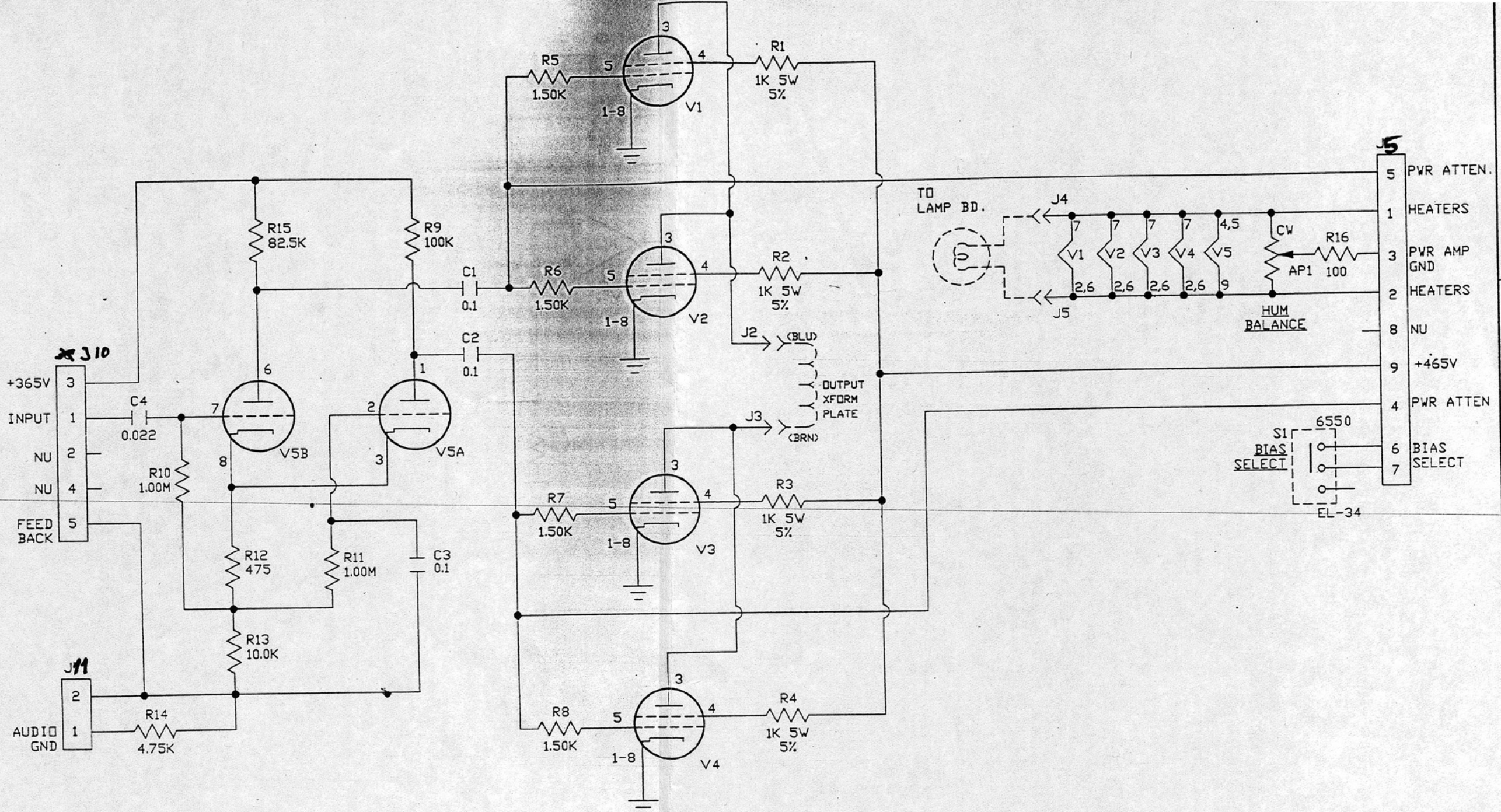


- NOTES**
- CAUTION SHOCK HAZARD !! THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
  - UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
  - VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
  - CIRCUIT GROUND  $\text{///}$  SWITCH GROUND  $\text{v}$  CHASSIS GROUND  $\text{+}$

**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.

SIGNATURES:	DATE:	1980 BORMAN DR. ST. LOUIS, MISSOURI 63146
DRAWN: S.R.	2/22/91	
CHK'D:		PROJECT NAME: VL-502/1002
APP'D:		DRAWING NAME: LOGIC BD. SCHEMATIC
ORIGINAL ISSUED:	9/11/91	DRAWING NO. 07S591-02
PLOT DATE:	09/11/91	SCALE: NONE
PLOT TIME:	10:08:31	SHEET: 1 of 1
FILE NAME:	07S59102	





PART	DESC.	PART NO.
V1-4	8 PIN	17-450-08
V5	9 PIN	17-450-09
AP1	200 OHM	71-201-11
S1	SWITCH	88-220-01
J1	9 PIN	17-310-09
J2,3	.250 FASTON	17-836-01
J4,5	.187 FASTON	17-894-01
J6	5 PIN	17-310-05
J7	2 PIN	17-310-02

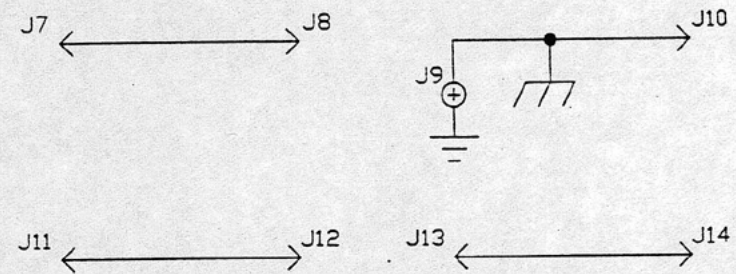
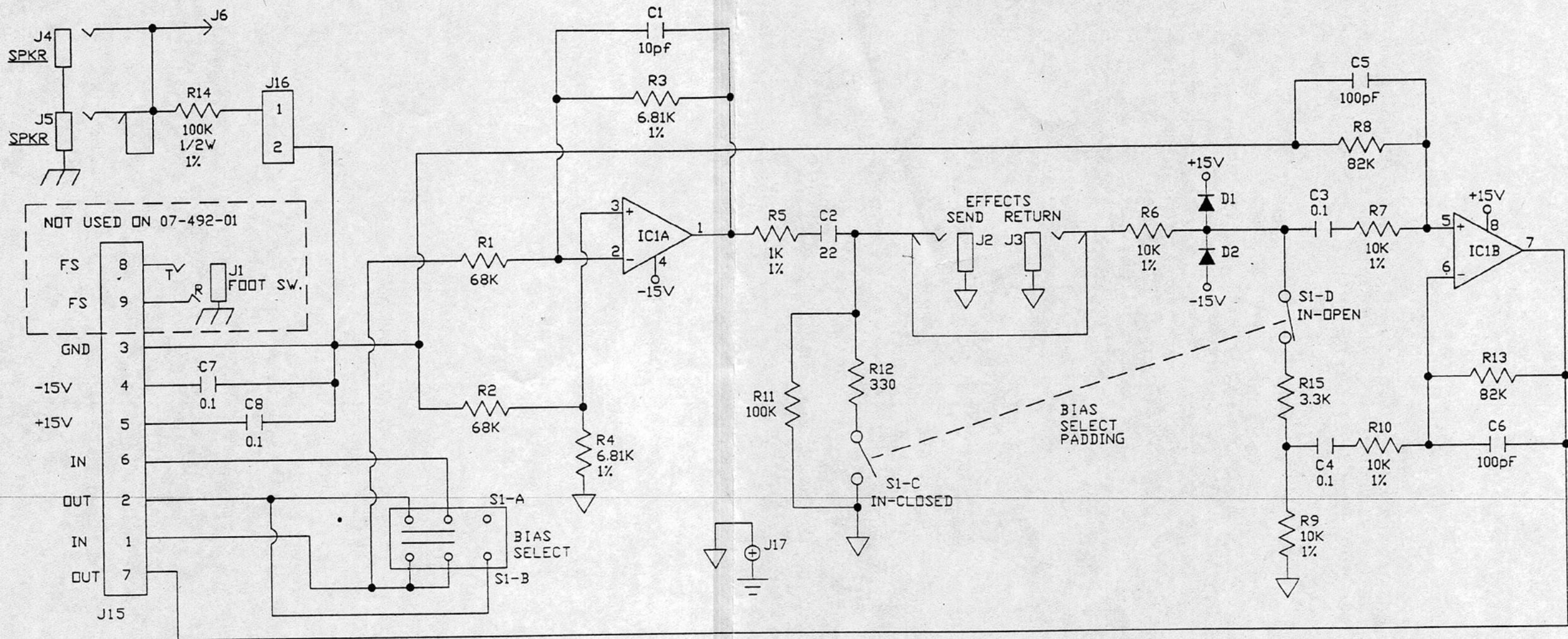
**NOTES**

- 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, 1/2W-1% TOL. CAPACITOR VALUES IN MICROFARADS, 400V-5% TOL.
- 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
- 4) CIRCUIT GROUND  $\uparrow$  SWITCH GROUND  $\nabla$  CHASSIS GROUND  $\perp$

**CAUTION:**

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SIGNATURES:	DATE:		1880 BORMAN DR. ST. LOUIS, MISSOURI 63143
DRAWN: S.R.	2-21-91		
CHK'D: L JACKSON		PROJECT NAME:	
APP'D: L JACKSON		VL-1001/1002	
ORIGINAL ISSUED:	9/12/91	DRAWING NAME:	
PLOT DATE:	09/12/91	TUBE BD. SCHEMATIC	
PLOT TIME:	10:08:19	DRAWING NO.	07S491-01
FILE NAME:	07S49101	SCALE: NONE	SHEET: 1 of 1




**NOTES**

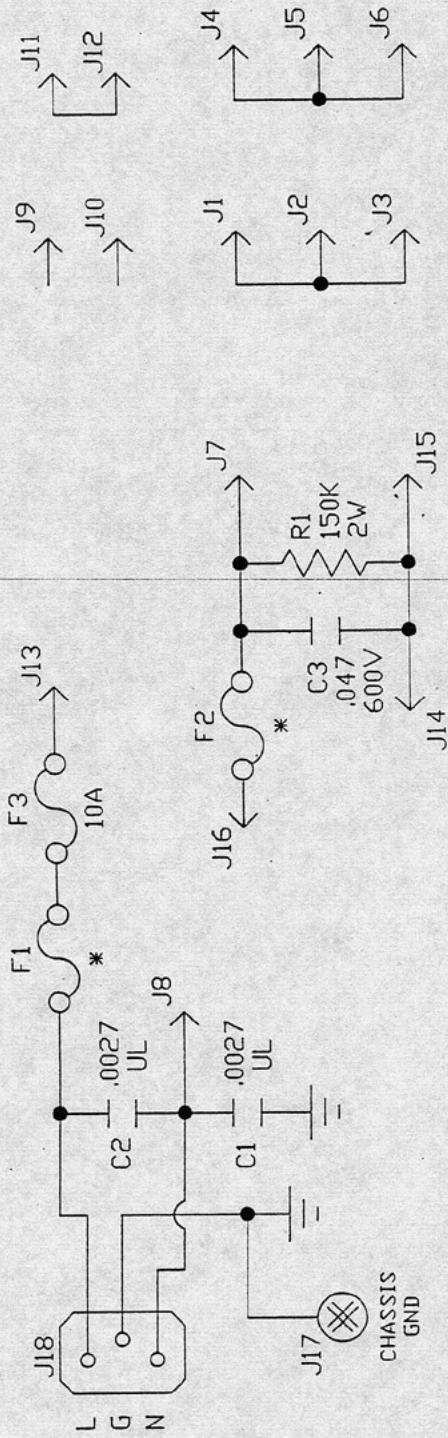
- 1) CAUTION: SHOCK HAZARD !! THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
- 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
- 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE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

**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.

PART	DESC.	PART NO.
D1,2	IN914	21A914-01
IC1	5532	37-532-01
J1	STEREO JACK	39-120-01
J2-5	JACK	39-119-01
J6-8	.250 FASTON	17-836-01
10-14	GROUND LUG	17-500-01
J9, J17	9 PIN	17-450-09
J15	2 PIN	17-450-02
J16		
SI	DPDT STACKED	88-303-01

SIGNATURES:	DATE:	 11880 BORNHAY DR. ST. LOUIS, MISSOURI 63145
DRAWN: S.R.	2-20-91	
CHK'D: L. JACKSON	05/09/91	PROJECT NAME: VL-1001/1002
APP'D: L. JACKSON	05/09/91	DRAWING NAME: OUTPUT BD. SCHEMATIC
ORIGINAL ISSUED:	05/09/91	DRAWING NO. 07S492-01/02
PLOT DATE:	05/09/91	SCALE: NONE
PLOT TIME:	15:33:10	SHEET: 1 of 1
FILE NAME:	07S49201	



\* - UNIT CHART

FUSE	VL-501 VL-502	VL-101 VL-102
F1	4A	5A
F2	1A	2A

- NOTES
- 1) CAUTION! SHOCK HAZARD!! THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING ANY 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  $\uparrow\uparrow$  SWITCH GROUND  $\nabla$  CHASSIS GROUND  $\oplus$

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.

SIGNATURES:	DATE:	1980 BORNHAM DR. ST. LOUIS, MISSOURI 63143
DRAWN: MCA	07/15/91	
CHK'D:		
APP'D:		
ORIGINAL ISSUED:	9/11/91	PROJECT NAME: VL SERIES
PLOT DATE:	09/11/91	DRAWING NAME: TERMINATION BD
PLOT TIME:	10:01:23	DRAWING NO. 07S390-01
FILE NAME:	07S39001	SCALE: 1:1 SHEET: 1 OF 1