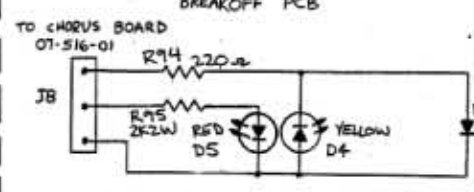


NOTES:
 1) UNLESS OTHERWISE SPECIFIED ALL RESISTORS ARE IN OHMS, 1/4 WATT, 5%. UNLESS OTHERWISE SPECIFIED, ALL CAPACITORS ARE IN MICROFARADS, AND HAVE A 50 VOLT RATING.
 2) MEASUREMENTS AT TEST POINTS ARE MADE WITH A 1 MEGOHM INPUT OSCILLOSCOPE.

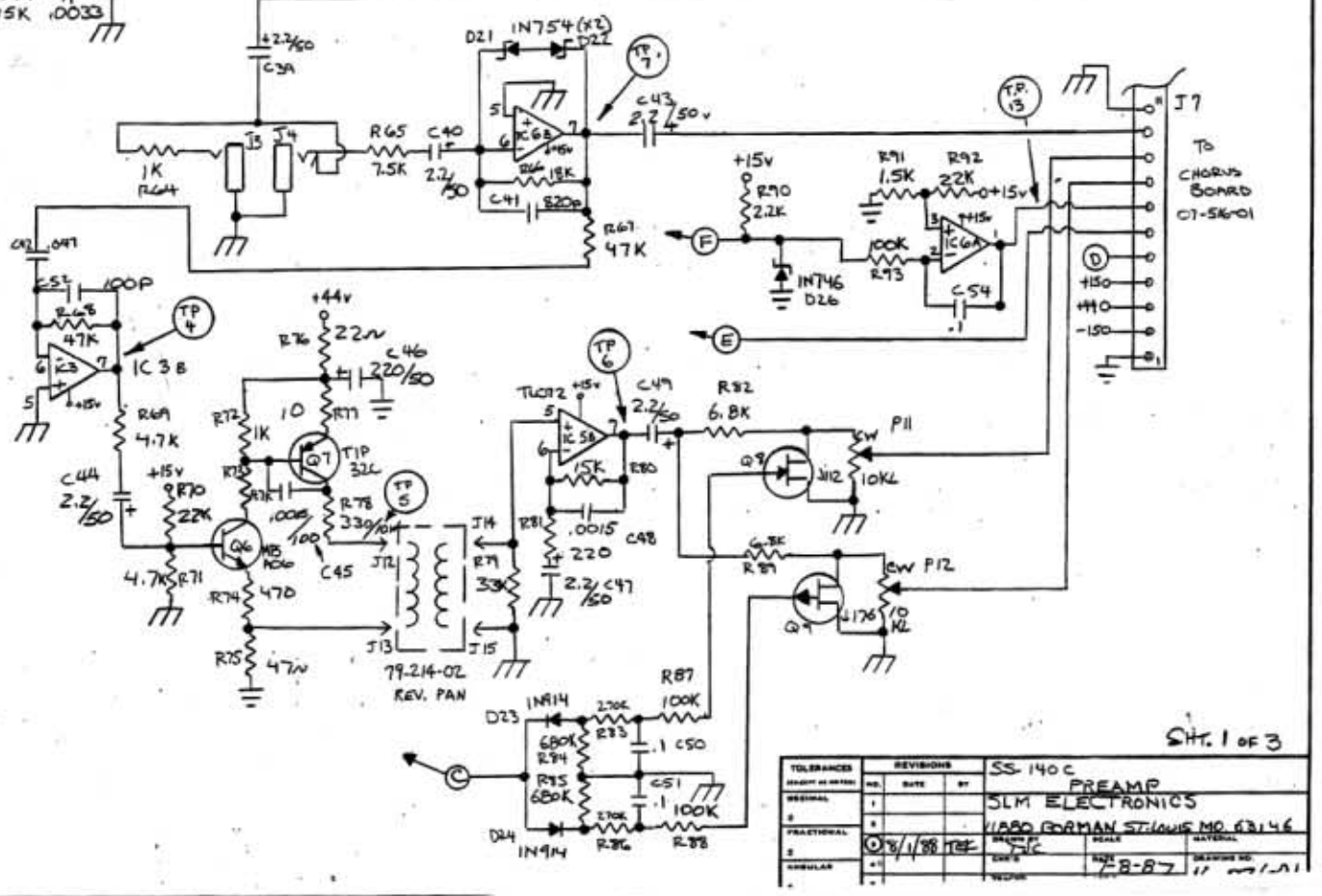


TEST CONDITIONS
 CHANNEL A: GAIN, LEVEL, LOW; HIGH @ 10, MID @ 5
 CHANNEL B: GAIN, LEVEL, LOW; MID, HIGH @ 10; BRIGHT BOOST "OFF"

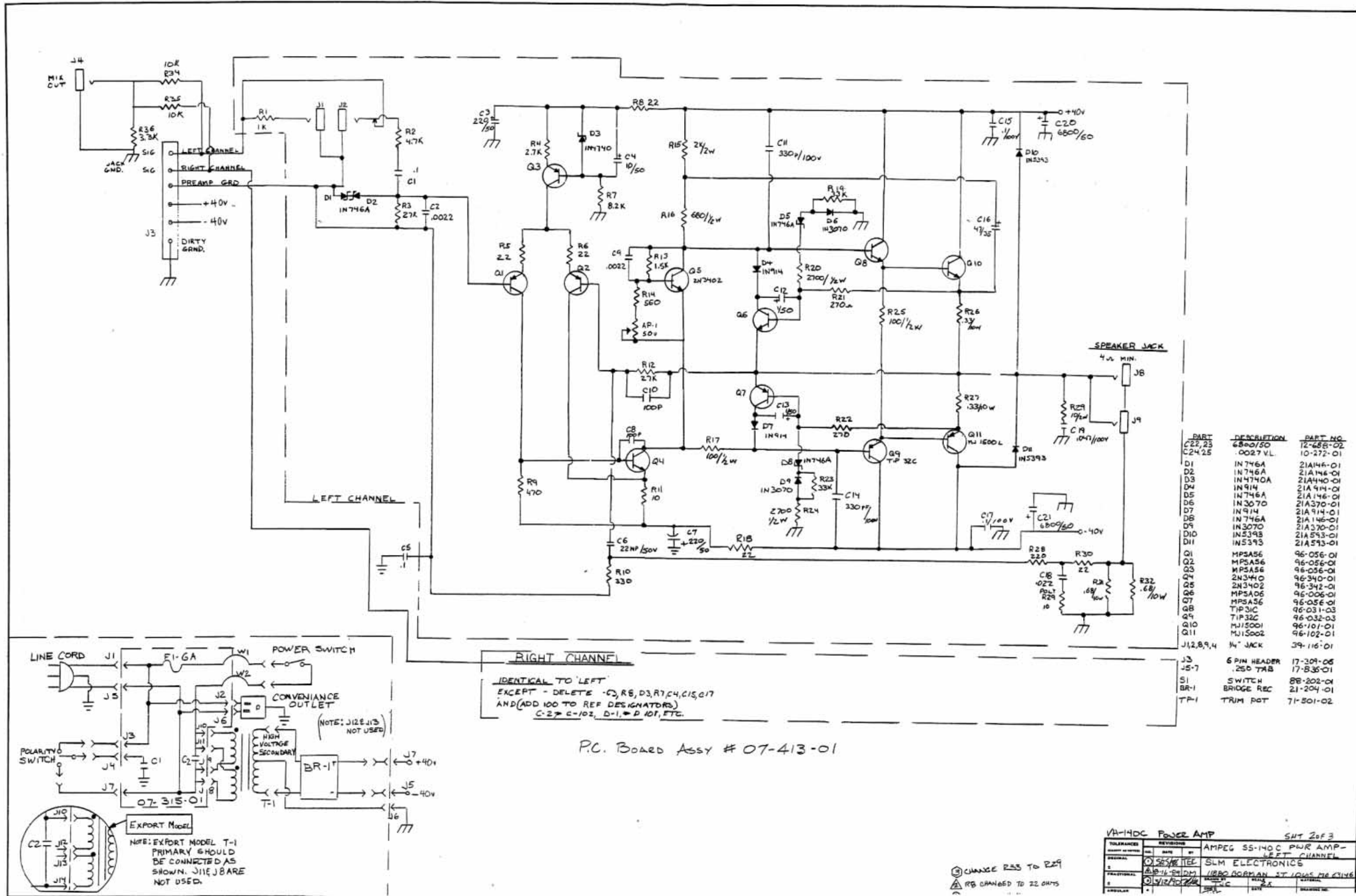
PARTIAL PARTS LIST

TR	WAVE SHAPE	VOLTAGE	WAVE SHAPE	VOLTAGE
1	Sine	20V P-P	Sine	20V P-P
2	Sine	9mV P-P	Sine	16V P-P
3	Sine	0V	Sine	.8V P-P
4	Sine	12V P-P	Sine	6V P-P
5	Sine	15V P-P	Sine	9V P-P
6	Sine	24V P-P	Sine	24V P-P
7	Sine	15V P-P	Sine	6V P-P
8	Sine	9.5mV P-P	Sine	0V
9	Sine	13V P-P	Sine	0V
10	Sine	2.1V P-P	Sine	0V
11	Sine	-13	Sine	0V
12	Sine	7.2V P-P	Sine	25V P-P
13	Sine	-14VDC	Sine	-14VDC
14	Sine	-14VDC	Sine	15VDC
15	Sine	-12VDC	Sine	13VDC

4.4V P-P, 10KHz SIGNAL APPLIED TO J14



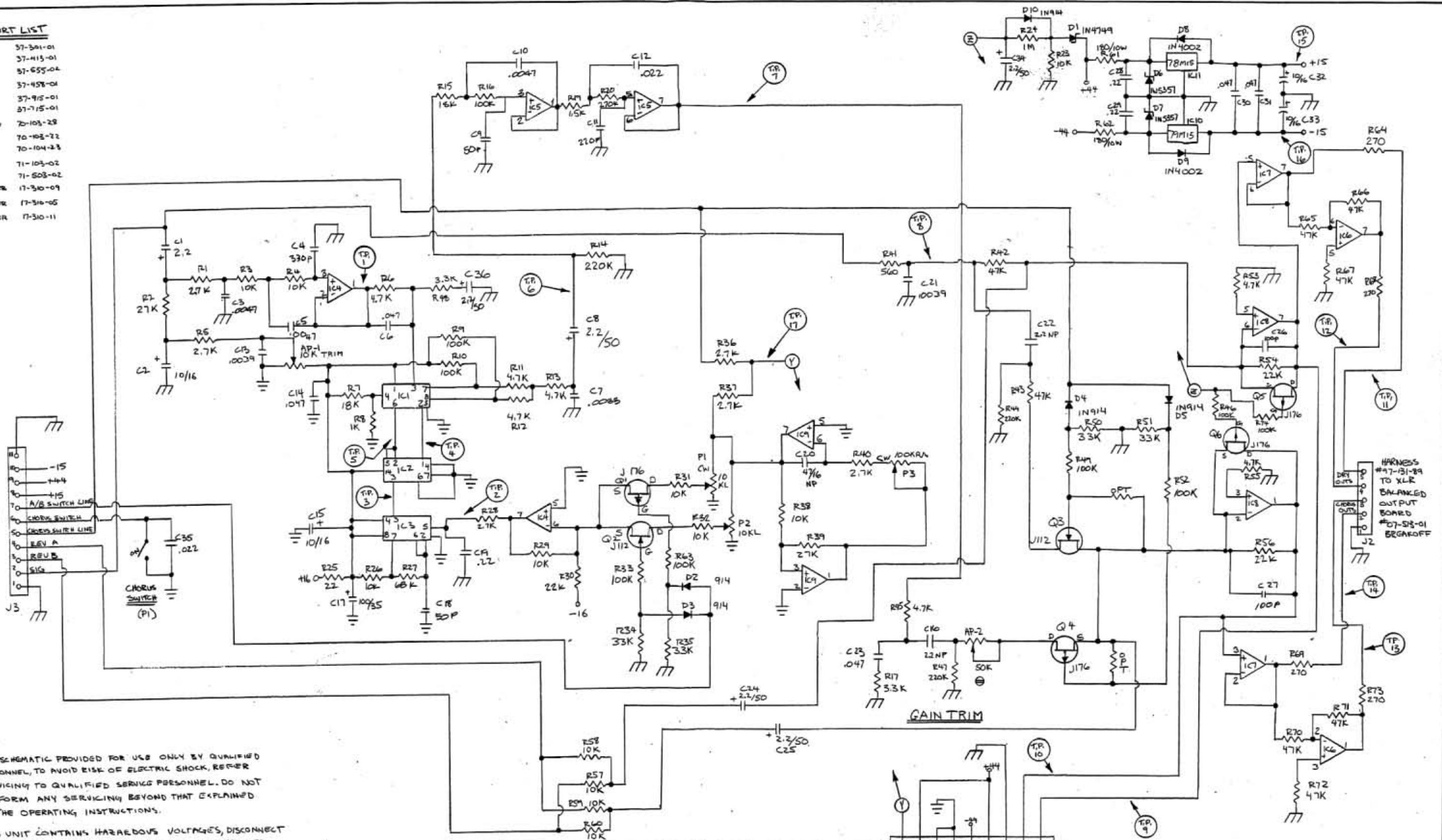
SS-140 C
 PREAMP
 SLM ELECTRONICS
 1100 GORMAN ST. LANSING, MI. 48214
 08/11/88
 11-11-11



PARTIAL PART LIST

K1	3001	37-301-01
K2	4013	37-413-01
K3	TUCSSS	37-655-02
K4	4558	37-458-01
K10	74M15	37-915-01
K11	78M15	37-715-01
P1	10KL 45W	70-103-28
P2	10KL	70-103-22
P3	100GR	70-104-23
AP-1	10KTRIM	71-103-02
AP-2	50KTRIM	71-503-02
J1	9PIN HEADER	17-310-09
J2	5PIN HEADER	17-310-05
J3	11PIN HEADER	17-310-11

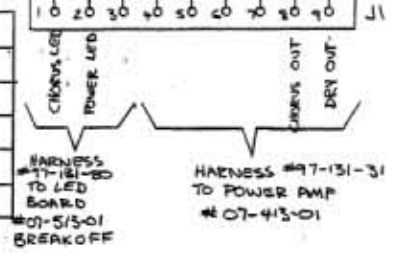
HARNESSES #47-131-96 FROM PREAMP BOARD #07-513-01



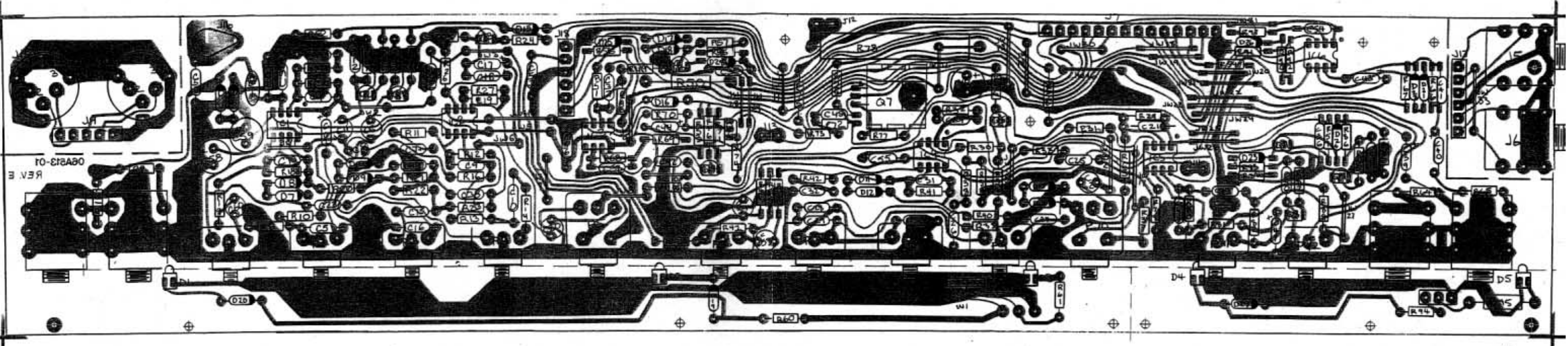
NOTES:

- 1) THIS SCHEMATIC PROVIDED FOR USE ONLY 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.
- 2) THIS UNIT CONTAINS HAZARDOUS VOLTAGES, DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
- 3) UNLESS OTHERWISE SPECIFIED ALL RESISTORS ARE IN OHMS, 1/4 WATT, 5%. ALL CAPACITORS ARE IN MICROFARADS AND HAVE A 50V RATING
- 4) MEASUREMENTS AT TEST POINTS ARE MADE WITH A 1MΩ INPUT OSCILLOSCOPE UNDER THE FOLLOWING CONDITIONS:
 A/B SWITCH LINE @ -15V, CHORUS SWITCH LINE @ -15V, 24pp INPUT @ 1KHz, EXCEPT AS NOTED.

TP	WAVE FORM	VOLTAGE	SPECIAL CONDITIONS	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	~	74pp, 7KHz		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	~	85pp, 2.1KHz	DEPTH @ 10, RATE @ 10	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
"	~	6.8VDC	DEPTH @ 10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
"	~	58pp, 2.2KHz	DEPTH @ 10, RATE @ 10	5	6	7	8	9	10	11	12	13	14	15	16	17		
"	~	6.8VDC	A/B SW LINE @ +15V, DEPTH @ 10	6	7	8	9	10	11	12	13	14	15	16	17			
"	~	58pp, 2.2KHz	A/B SW LINE @ +15V, DEPTH @ 10, RATE @ 10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
"	~	58pp, 2.2KHz	A/B SW LINE @ +15V, DEPTH @ 10, RATE @ 10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
"	~	58pp, 2.2KHz	A/B SW LINE @ +15V, DEPTH @ 10, RATE @ 10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"



TOLERANCES	REVISIONS	SS-140C
RESISTOR	NO. DATE	POWER AND CHORUS
FRACTIONAL	1	SLM ELECTRONICS
DECIMAL	2	1180 BORMAN ST. LOUIS, MO. 63146
ANGULAR	3	SCALE
	4	DATE
	5	REV
	6	APP'D

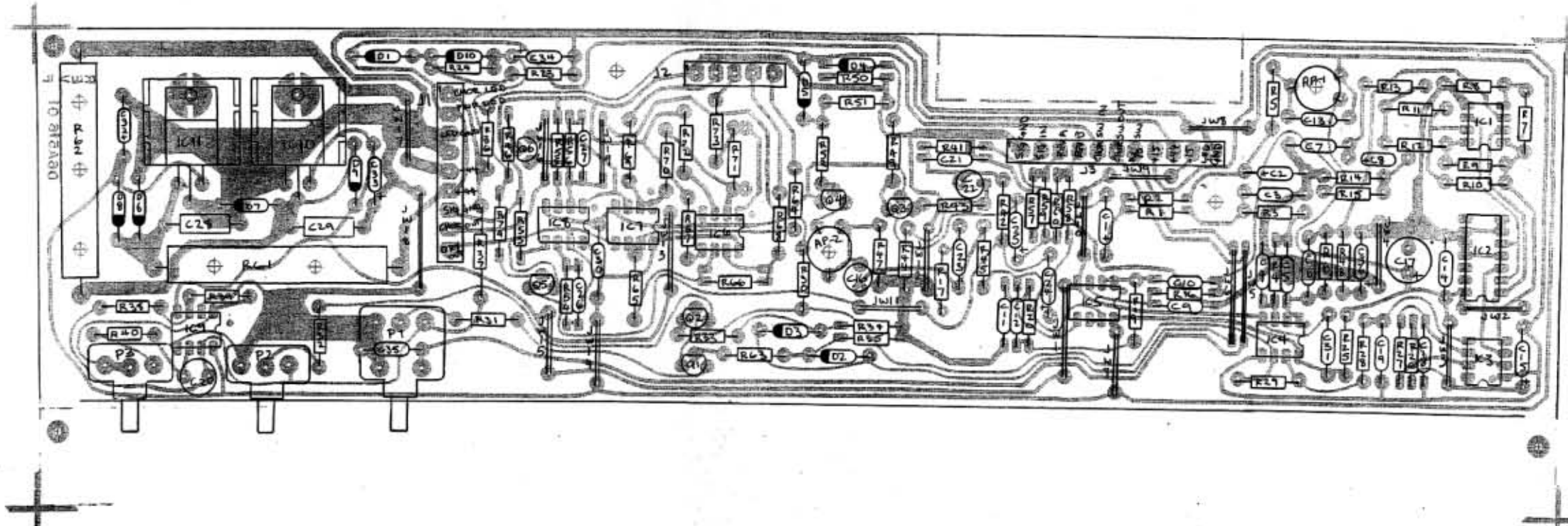


R1	22K	76-223-01	R36	100K	76-104-01	R71	47K	76-472-01	C8	2.2NP	12-225-81	C46	220/50	12-227-02	D20	1N914	21A914-01	P8	10KA	70-103-22
R2	22K	76-223-01	R37	270K	76-274-01	R72	1K	76-102-01	C9	.047	10A473-11	C47	2.2/50	12A225-51	D21	1N754	21A754-01	P9	250KA	70-254-22
R3	270K	76-274-01	R38	1.5K	76-152-01	R73	47K	76-472-01	C10	.22	10A221-01	C48	.0015	10A152-11	D22	1N754	21A754-01	P10	10A473-11	70-103-28
R4	1.5K	76-152-01	R39	5.3K	76-332-01	R74	470	76-471-01	C11	2.2NP	12-225-81	C49	22/50	12A225-51	D23	1N914	21A914-01	P11	OKL	70-132-01
R5	7.5K	76-752-01	R40	47K	76-472-01	R75	47	76-470-01	C12	.001	10A102-11	C50	.1	10A104-01	D24	1N914	21A914-01	P12	10KL	70-132-01
R6	Not Used		R41	33K	76-333-01	R76	22	76-220-01	C13	830p	10A830-11	C51	.1	10A104-01	D25	1N746	21A146-01	J1	6" JACK	39-117-01
R7	100K	76-104-01	R42	15K	76-153-01	R77	10	76-100-01	C14	.047	10A473-11	C52	100p	10A101-21	D26	1N746	21A146-01	J2	6" JACK	39-117-01
R8	33K	76-332-01	R43	490	76-471-01	R78	330/10W	76-331-10	C15	.022	10A223-01	C53	.022	10A223-01	D27	1N754	21A754-01	J3	6" JACK	39-117-01
R9	22K	76-223-01	R44	47K	76-472-01	R79	33K	76-333-01	C16	.01	10A103-11	C54	.1	10A104-01	D28	1N914	21A914-01	J4	6" JACK	39-117-01
R10	47K	76-473-01	R45	270K	76-274-01	R80	15K	76-153-01	C17	22/50	12A225-51	C55	.047	10A473-11	D29	1N914	21A914-01	J5	6" JACK	39-117-01
R11	100	76-101-01	R46	100K	76-104-01	R81	220	76-221-01	C18	22/50	12A225-51	C56	.047	10A473-11	Q1	J112	76-112-01	J6	6" JACK	39-117-01
R12	1.5K	76-152-01	R47	100K	76-104-01	R82	6.8K	76-682-01	C19	.01	10A103-11	C57	.047	10A473-11	Q2	J112	76-112-01	J7	14PIN HEADER	17-310-14
R13	1.5K	76-152-01	R48	22K	76-223-01	R83	270K	76-274-01	C20	22NP	12-225-81	C58	100/55	12-107-32	Q3	J112	96-112-01	J8	5PIN HEADER	17-310-03
R14	47	76-470-01	R49	1.5K	76-152-01	R84	680K	76-680-01	C21	100p	10A101-21	C59	100/35	12-107-32	Q4	J176	76-176-01	J9	5PIN ALADIC	17-310-05
R15	100K	76-104-01	R50	2K/2W	76-202-01	R85	680K	76-680-01	C22	.047	10A473-11	C60	2.2NP	12-225-81	Q5	J176	76-176-01	J10	CLR, MALE	39-306-01
R16	22K	76-223-01	R51	100K	76-104-01	R86	270K	76-274-01	C23	.1	10A104-01	C61	2.2/50	12A225-51	Q6	J176	76-176-01	J11	CLR, MALE	39-306-01
R17	270K	76-274-01	R52	33K	76-333-01	R87	100K	76-104-01	C24	100p	10A101-21	C62	2.2NP	12-225-81	Q7	MPS-AC6	76-006-01	J12	.187" TAB	17-974-01
R18	270K	76-274-01	R53	33K	76-333-01	R88	100K	76-104-01	C25	.002	10A223-01	D1	RED LED	21-501-01	Q8	TIP-32C	96-052-03	J13	.187" TAB	17-974-01
R19	470	76-471-01	R54	53K	76-333-01	R89	6.8K	76-682-01	C26	.022	10A223-01	D2	GREEN LED	21-502-01	Q9	J112	96-112-01	J14	.187" TAB	17-974-01
R20	4.7K	76-472-01	R55	33K	76-333-01	R90	2.2K	76-222-01	C27	220p	10A221-11	D3	YELLOW LED	21-503-01	Q10	J176	96-176-01	J15	.187" TAB	17-974-01
R21	1K	76-102-01	R56	2.2K	76-222-01	R91	1.5K	76-152-01	C28	.1	10A104-01	D4	YELLOW LED	21-503-01	Q11	MPS-455	76-055-01	J16	.187" TAB	17-974-01
R22	47K	76-473-01	R57	33K	76-333-01	R92	22K	76-223-01	C29	.047	10A473-11	D5	RED LED	21-501-01	Q12	J112	76-112-01	J17	6PIN HEADER	17-310-06
R23	47K	76-473-01	R58	270K	76-274-01	R93	100K	76-104-01	C30	.0068	10A682-01	D6	INT54	21A754-01	Q13	J176	96-176-01	J18	6PIN HEADER	17-310-06
R24	100K	76-104-01	R59	100K	76-104-01	R94	220	76-221-01	C31	50p	10A500-21	D7	INT54	21A754-01	Q14	J112	76-112-01	W1	LED HARNESS	97-131-02
R25	100K	76-104-01	R60	2.1K	76-222-01	R95	2K/2W	76-202-01	C32	.0033	10A332-01	D8	INT54	21A754-01	Q15	J112	76-112-01	Z	STANDOFFS	85-132-01
R26	270K	76-274-01	R61	100	76-101-01	JW1-53	02JUMPS	76-000-01	C33	1NP	12-105-81	D9	INT54	21A754-01	Q16	J112	76-112-01	Z	SCREWS	30-638-53
R27	83K	76-352-01	R62	59K	76-393-01	C1	247pF	10-473-03	C34	2.2NP	12-225-71	D10	INT54	21A754-01	Q17	J112	76-112-01	1	HEATSINK	33-541-01
R28	47K	76-472-01	R63	47K	76-472-01	C2	22/50	12A225-51	C35	.047	10A473-11	D11	INT54	21A754-01	Q18	J112	76-112-01	1	SCREW	30-440-52
R29	47K	76-472-01	R64	1K	76-102-01	C3	100p	10A101-21	C36	.1	10A104-01	D12	INT54	21A754-01	Q19	J112	76-112-01	1	NUT	30-442-52
R30	47K	76-472-01	R65	7.5K	76-752-01	C4	.001	10A102-11	C37	.1	10A104-01	D13	INT54	21A754-01	P1	100KRA	70-104-23			
R31	47K	76-473-01	R66	18K	76-183-01	C5	.047	10A473-11	C38	560p	10A561-11	D14	INT54	21A754-01	P2	100KRA	70-104-23			
R32	22K	76-223-01	R67	47K	76-473-01	C6	10NP	12-106-81	C39	22/50	12A225-51	D15	INT54	21A914-01	P3	50KA	70-503-23			
R33	15K	76-153-01	R68	47K	76-473-01	C7	33/50	12A335-51	C40	22/50	12A225-51	D16	INT54	21A914-01	P4	50KRA	70-503-23			
R34	15K	76-153-01	R69	47K	76-472-01	C8	.047	10A473-11	C41	820p	10A821-11	D17	INT54	21A914-01	P5	50KRA	70-503-23			
R35	100K	76-104-01	R70	22K	76-223-01	C9	2.2/50	12A225-51	C42	.047	10A473-11	D18	INT54	21A914-01	P6	50KL	70-133-01			
						C10	2.2/50	12A225-51	C43	2.2/50	12A225-51	D19	INT54	21A914-01	P7	250KA	70-254-22			
						C11	.047	10A473-11	C44	.0015/100V	10A152-11									

NOTE: 1) UNLESS OTHERWISE SPECIFIED ALL RESISTORS ARE IN OHMS, K=KIL, M=MEG, S=S. ALL CAPACITORS ARE IN MICROFARADS AND HAVE A 50 VOLT RATING.

DESIGNED FOR A-2 P. 26A513-01

TOLERANCES	REVISIONS	DATE	BY	55-140C PREAMP ASSY.
RESISTOR	1			
CAPACITOR	1			
MECHANICAL	1			
FUNCTIONAL	1	08/1/88	TEF	
ASSEMBLY	1			



R1	2.7K	76-272-01	R36	2.7K	76-272-01	R71	47K	76-473-01	C29	.22	10A224-01	Q1	J176	96-176-01
R2	2.7K	76-273-01	R37	2.7K	76-272-01	R72	47K	76-473-01	C30	.047	10A473-11	Q2	J112	96-112-01
R3	10K	76-103-01	R38	10K	76-103-01	R73	270	76-271-01	C31	.017	10A473-11	Q3	J112	76-112-01
R4	10K	76-103-01	R39	27K	76-273-01	R74	100K	76-104-01	C32	10/16	12A106-11	Q4	J176	76-176-01
R5	2.7K	76-272-01	R40	2.7K	76-272-01				C33	10/16	12A106-11	Q5	J176	96-176-01
R6	4.7K	76-472-01	R41	560	76-561-01				C34	2.2/50	12A225-51	Q6	J176	96-176-01
R7	10K	76-103-01	R42	47K	76-473-01				C35	.022	10A223-01			
R8	1K	76-102-01	R43	47K	76-473-01				C36	2.2/50	12A225-51			
R9	100K	76-104-01	R44	220F	76-224-01									
R10	100K	76-104-01	R45	4.7K	76-472-01									
R11	4.7K	76-472-01	R46	100K	76-104-01									
R12	4.7K	76-472-01	R47	220K	76-224-01									
R13	4.7K	76-472-01	R48	33K	76-332-01									
R14	220K	76-224-01	R49	100K	76-104-01									
R15	18K	76-185-01	R50	56K	76-563-01									
R16	100K	76-104-01	R51	55K	76-553-01									
R17	5.3K	76-332-01	R52	100K	76-104-01									
R18	NOT USED		R53	4.7K	76-472-01									
R19	1.5F	76-152-01	R54	22K	76-223-01									
R20	270K	76-274-01	R55	4.7K	76-472-01									
R21	NOT USED		R56	22K	76-223-01									
R22	NOT USED		R57	10K	76-103-01									
R23	10K	76-103-01	R58	10K	76-103-01									
R24	1M	76-105-01	R59	10K	76-103-01									
R25	22	76-220-01	R60	10K	76-103-01									
R26	10K	76-103-01	R61	100/10W	76-181-10									
R27	100F	76-103-01	R62	100/10W	76-181-10									
R28	2.7K	76-272-01	R63	100K	76-104-01									
R29	10K	76-103-01	R64	270	76-271-01									
R30	22K	76-223-01	R65	47K	76-473-01									
R31	10K	76-103-01	R66	47K	76-473-01									
R32	10K	76-103-01	R67	47K	76-473-01									
R33	100K	76-104-01	R68	270	76-271-01									
R34	55K	76-553-01	R69	270	76-271-01									
R35	35K	76-353-01	R70	47K	76-473-01									

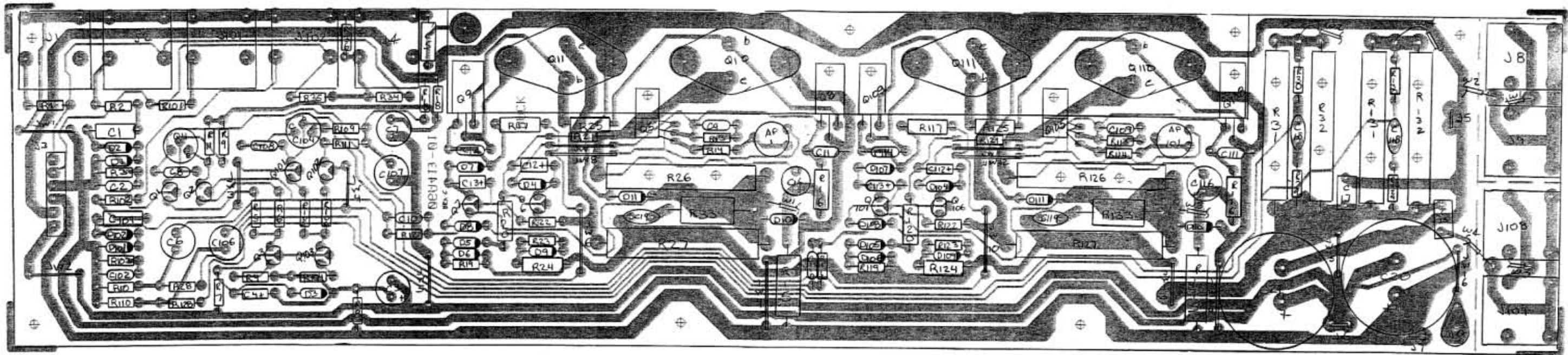
NOTE: 1) UNLESS OTHERWISE SPECIFIED ALL RESISTORS ARE IN OHMS, K WATT, 5%. ALL CAPACITORS ARE IN MICROFARADS AND HAVE A 50V-T RATING

F1	REL 4/5W	70-103-27
F2	10K	70-132-01
F3	100KPA	70-114-25
AP1	10K	71-103-02
AP2	50K	71-503-02

J1	9 PIN HEADER	17-310-09
J2	5 PIN HEADER	17-310-07
J3	11 PIN HEADER	17-310-11
Z1	2 SCREWS	30-440-52
Z2	2 NUTS	30-442-52
Z3	2 HEATSINKS	33-541-01

ART UP-DATE TO REV F
3 JUMPERS REMOVED
PART VALUE CHANGES

TOLERANCES		REVISIONS		DESIGNED FOR A-E	
RESISTOR	CAPACITOR	NO.	DATE	BY	REVISION NO.
RESISTOR	CAPACITOR	1			
RESISTOR	CAPACITOR	2			
RESISTOR	CAPACITOR	3			
RESISTOR	CAPACITOR	4			
RESISTOR	CAPACITOR	5			
RESISTOR	CAPACITOR	6			
RESISTOR	CAPACITOR	7			
RESISTOR	CAPACITOR	8			
RESISTOR	CAPACITOR	9			
RESISTOR	CAPACITOR	10			



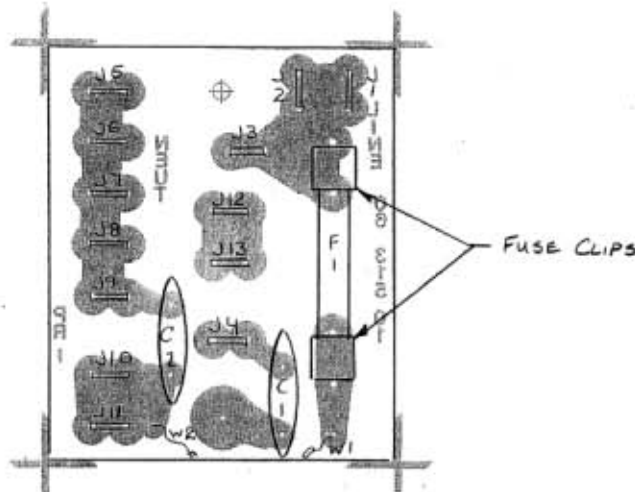
PART	DESCRIPTION	PART NO.
R14	560	76-561-01
R15	2K, 2W	78-202-01
R1, 101	1K	76-102-01
R2, 102	4.7K	76-472-01
R3, 103	2.7K	76-273-01
R4, 104	2.7K	76-272-01
R5, 105	22	76-220-01
R6, 106	22	76-220-01
R7, 107	22	76-220-01
R8, 108	22	76-220-01
R9, 109	22	76-220-01
R10, 110	330	76-331-01
R11, 111	10	76-100-01
R12, 112	27K	76-273-01
R13, 113	1.5K	76-152-01
R16, 116	680 / 1/2 W	77-680-01
R17, 117	100 / 1/2 W	77-101-01
R18, R118	22	76-220-01
R19, R119	33K	76-333-01
R20, 120	2700 / 1/2 W	77-270-01
R21, R121	270	76-271-01
R22, 122	270	76-271-01
R23, 123	33K	76-333-01
R24, 124	2700 / 1/2 W	77-272-01
R25, 125	100 / 1/2 W	77-101-01
R26, 126	.33 / 10 W	78-330-10
R27, 127	.33 / 10 W	78-330-10
R28, 128	220	76-221-01
R29, 129	10	76-100-01
R30, 130	22	76-220-01
R31, 131	.68 / 10 W	78-068-10
R32, 132	.68 / 10 W	78-068-10
R33, 133	10 / 2 W	78-100-01
R34, 134	10K	76-103-01
R35, 135	10K	76-103-01
R36, 136	3.3K	76-332-01
JW1-16		76-000-02
C1, 101	.1	10A104-01
C2, 102	.0022	10A222-01
C3	220 / 50V	12-227-02
C4	1 / 50V	12A105-51
C5, 105	.1	10A104-01
C6, 106	22 nF / 50V	12-226-81
C7, 107	220 / 50V	12-227-02
C8, 108	100p	10A101-21
C9, 109	.0022	10A222-01
C10, C110	100p	10A102-21
C11, 111	330p / 100V	10A331-11
C12, 112	1 / 50V	12A105-51
C13, 113	1 / 50V	12A105-51
C14, 114	330p / 100V	10A331-11
C15	1 / 100V	10A104-01

PART	DESCRIPTION	PART NO.
C16, 116	47 / 35V	12-476-32
C17	.1 / 100V	10A104-01
C18, 118	.022 POLY	10-223-02
C19, 119	.047 / 100V POLY	10-473-03
C20	6800 / 50	12-688-02
C21	6800 / 50	12-688-02
D1, 101	IN 746 A	21A146-01
D2, 102	IN 746 A	21A146-01
D3, 103	IN 4740A	21A440-01
D4, 104	IN 914	21A914-01
D5, 105	IN 746A	21A146-01
D6, 106	IN 3070	21A370-01
D7, 107	IN 914	21A914-01
D8, 108	IN 746 A	21A146-01
D9, 109	IN 3070	21A370-01
D10, 110	IN 5393	21A593-01
D11, 111	IN 5393	21A593-01
Q1, 101	MPS A56	96-056-01
Q2, 102	MPS A56	96-056-01
Q3, 103	MPS A56	96-056-01
Q4, 104	2N 3440	96-340-01
Q5, 105	2N 3402	96-342-01
Q6, 106	MPS A06	96-006-01
Q7, 107	MPS A56	96-056-01
Q8, 108	TIP 31C	96-031-03
Q9, 109	TIP 32C	96-032-03
Q10, 110	MJ 15001	96-101-01
Q11, 111	MJ 15002	96-102-01
J1, 2, 8, 9, 4, 10, 11, 12, 103, 104	1/4" JACK	39-116-01
J3	6 PIN HDR.	17-309-06
J5, 7, 10	.250 TAB, GROUND LUG	17-836-01
TP-1, 101	TRIM POT.	71-501-02
H.S.	BRACKET	33-117-01
W1	10.5" RED WIRE	97-168-02
W2	5.5" BLACK WIRE	97-168-56
W3	6.5" RED WIRE	97-168-62
W4	5.5" BLACK WIRE	97-168-56

ARB CHANGED TO 22 OHMS

TOLERANCES	REVISIONS	DATE	BY
RESISTOR	1	8-16-89	DM
FRACTIONAL	1		
ANGULAR	1		

DIN-07-413-01
 55-140CA PWR AMP
 VH-140C POWER AMP
 SLM ELECTRONICS
 11880 BORMAN ST. LOUIS, MO 63146
 DATE: 8/18/87
 DRAWING NO: 07-413-01



PART	DESCRIPTION	PART NO.
C1, C2	.0027 V.L.	10-272-01
J3, 4, 7	.187 TAB	17-894-01
J1, 2, 5, 6, 8-13	.250 TAB	17-836-01
W1, 2	4'SMS / 240 BMT	97-152-14
2	FUSE CLIPS	23-926-01
Δ F1	64.541 B/W/PLK	23-307-01
	PC. BOARD	06-315-01

TOLERANCES (UNLESS OTHERWISE NOTED)	REVISIONS			AC TERMINATION 3D FOR SVT-800T SS-MDC		
	NO.	DATE	BY			
DECIMAL	Δ	9-14-81	DSF	SLM ELECTRONICS		
FRACTIONAL				14580 BORMAN ST / NJS MO 67146		
ANGULAR				SCALE	2X	MATERIAL
				DATE	5-20-87	DRAWING NO.
				APP'D		07P315-01