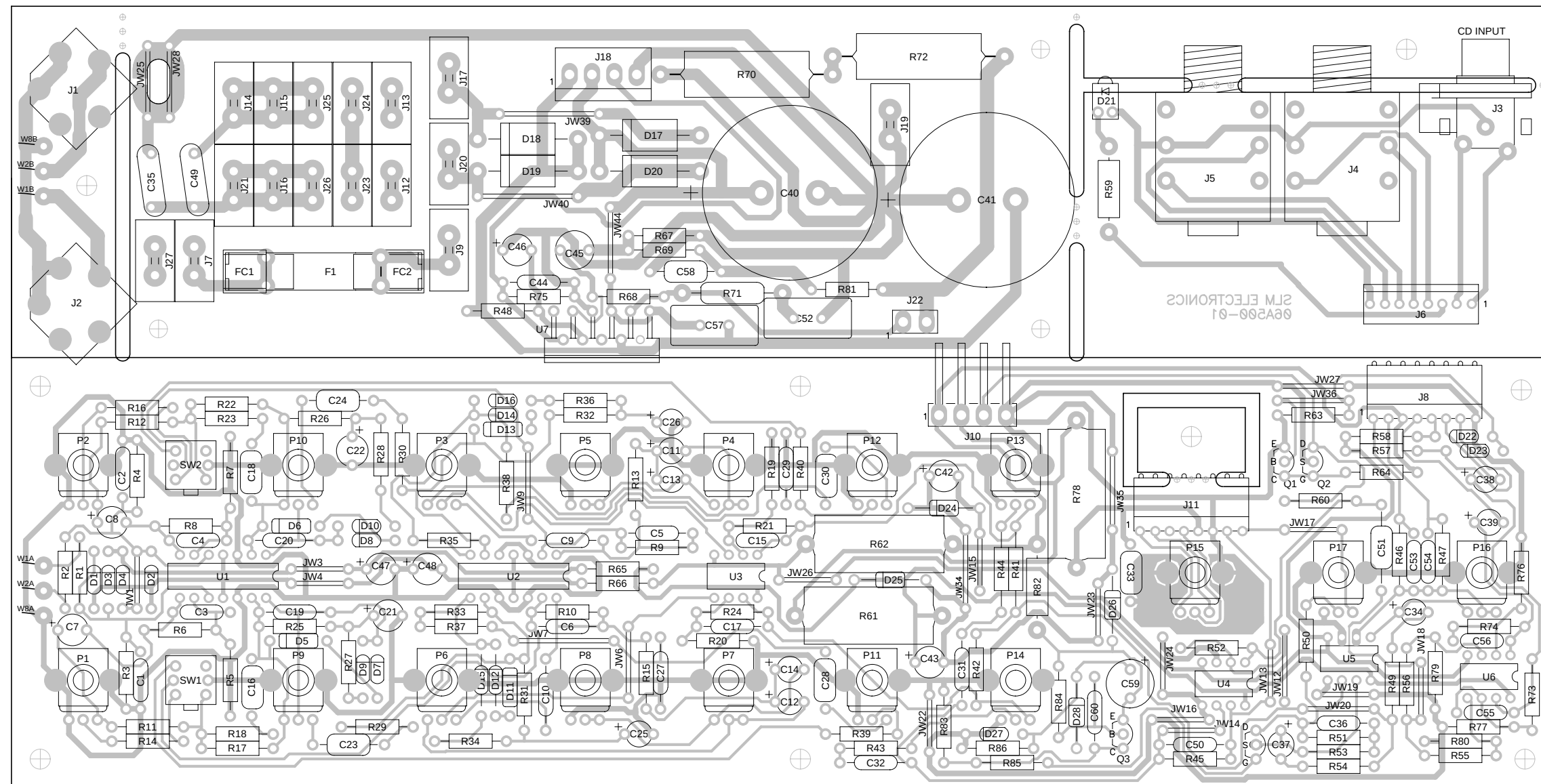




NOTES:

1. GOOP IN ACCORDANCE WITH PRODUCTION S.O.P.

CAUTION:
THIS ASSEMBLY DRAWING 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.

0	2-18-00	CONTROL ISSUE				
C		INITIAL ISSUE				
REV	Date	DESCRIPTION	Ecr(s)/Ecn(s)	Chgd By	Appvd by	Date
THE INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC						
Signatures:		Date:	 11880 Borman Drive, St. Louis, MO 63146			
Drawn:	RLB	11-19-99				
Checked:						
Released:			First Used On:	GFX50a		
Plot Date: Thu Jan 18, 2001	Drawing Size:	B		Drawing Title:	PWA, STUDENT LESSON AMP	
Plot Time: 11:39:05	Drawing Type:	ASSEMBLY		Drawing Number:	07-500-XX	
Tolerance:		Class Code:	NONE			
		Sheet	1	of	1	

1	4/26/00	ADD -02	N00282	RLB		4/26/00
0	2/18/00	CNTRL ISSUE				
A	11/22/99	INITIAL ISSUE				
Rev.	Date	DESC.	ECR(s)/ECN(s)	Chgd by	Appvd by	DATE
THE INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO						
ST. LOUIS MUSIC, INC.						
mainxl.hlp!184C						
			SLM Electronics			
			11880 Borman Drive, St. Louis, MO 63141			
Signatures:		Date:				
Drawn: RLB		11/22/99				
Checked:			First Used On:		GFX50a	
Released:						
Tolerance:	Drawing Size:	A	Drawing Title:		STUDENT AMP	
	Drawing Type:	PL				
	Class Code:		Drawing No.:		07-500-PL	
	Scale:	N/A				

ASSEMBLY PART #

07-500-01

REVISION 1

ITEM	QTY	REFDES	P/N	DESC
1	1	PWB1	06A500-01	PWB1
2	2	C35	10-332-01	.0033 UF [20% TOL] UL/VDE DISK
		C49		
3	2	C1	10A101-21	100 PF 200V 10% NPO
		C2		
4	2	C3	10A102-11	.001 uF 100V 10% X7R
		C4		
5	1	C60	10A103-11	.01 uF 100V 10% X7R
6	6	C16	10A104-01	.1 uF 50V 10% X7R
		C18		
		C28		
		C30		
		C33		
		C58		
7	2	C5	10A221-11	220 pF 100V 10% NPO
		C6		
8	8	C9	10A222-11	.0022uF 100V 10% NPO
		C10		
		C15		
		C17		
		C53		
		C54		
		C55		
		C56		
9	1	C36	10A223-01	.022 uF 50V 10% X7R
10	1	C51	10A224-01	.22 uF 50V 10% X7R
11	2	C31	10A332-01	.0033 uF 100V 10% X7R
		C32		
12	3	C19	10A471-11	470 pF 100V 5% NPO
		C20		
		C44		
13	2	C27	10A472-11	.0047 uF 100V 10% X7R
		C29		
14	2	C23	10A473-11	.047 uF 100V 10% X7R
		C24		
15	1	C50	10A561-11	560 pF 100V 10% NPO
16	2	C52	10F224-03	.22 uF 100V 10% RAD POLY FORMED
		C57		
17	2	C40	12-478-32	4700 uF 35V 20% EL
		C41		
18	6	C13	12R105-50	1 uF 50V 20% EL
		C14		
		C34		
		C37		
		C38		
		C39		
19	9	C7	12R106-35	10 uF 35V 20% EL
		C8		
		C21		

ASSEMBLY PART #

07-500-01

REVISION 1

ITEM	QTY	REFDES	P/N	DESC
		C22		
		C42		
		C43		
		C46		
		C47		
		C48		
20	1	C59	12R107-32	100 uF 35V 20% EL
21	4	C11	12R225-50	2.2 uF 50V 20% EL
		C12		
		C25		
		C26		
22	1	C45	12R475-82	4.7 uF 50V 20% EL NP
23	1	J6	17-105-08	.1" ST POL LOCK MTSS100-8 HEADER
24	2	J11	17-106-08	.1 R/A POL LOCK MTAS100-8 HEADER
		J8		.1" R/A POL LOCK MTAS100-8 HEADER
25	1	J18	17-309-04	.156 ST POL MPSS156-4-D HEADER
26	1	J22	17-310-02	.156" ST POL MFSS156-2-D HEADER
27	1	J10	17-311-04	.156 R/A MFAS156-4-D HEADER
28	14	J7	17-836-01	.250 PC TAB STBL LOC 6021-6
		J12		
		J13		
		J14		
		J15		
		J16		
		J17		
		J19		
		J20		
		J21		
		J23		
		J24		
		J26		
		J27		
29	2	J9	17-894-01	.187 PC TAB STBL LOC 6024-6
		J25		
30	1	D21	21-501-01	RED LED ASSY, HI EFF.
31	4	D17	21-541-01	1N5401 DIODE/MOTOROLA 3 AMP
		D18		
		D19		
		D20		
32	4	D5	21A146-01	3.3V .4W ZENER 28 ohm Zz
		D6		
		D11		
		D13		
33	2	D24	21A443-01	13V 1W ZENER 10 ohm Zz
		D25		
34	1	D28	21A444-01	15V 1W ZENER 14 ohm Zz
35	1	D26	21A447-01	20V 1W ZENER 22 ohm Zz
36	4	D7	21A754-01	6.8V .5W ZENER 5 ohm Zz
		D8		
		D12		

ITEM		REFDES	P/N	DESC
		D14		
37	11	D1	21A914-01	75V PIV 10mA/1V .5W
		D2		
		D3		
		D4		
		D9		
		D10		
		D15		
		D16		
		D22		
		D23		
		D27		
38	1	F1	23-301-05	1AMP SLO BLO FUSE 250V
39	2	FC1	23-926-02	Universal Fuse Clip
		FC2		
40	3	U3	37-072-01	TLO-72CP DUAL OP-AMP
		U4		
		U5		
41	2	U1	37-074-01	TLO-74 QUAD OP-AMP
		U2		
42	1	U6	37-532-01	NE5532(N/P) DUAL OP-AMP
43	1	U7	37-886-02	LM3886TF11B 68W PWR AMP W/MUTE
44	2	J1	39-114-04	VERT TRS JACK W/SHUNTS L.S.
		J2		
45	2	J4	39-117-01	TRS JACK HORIZ
		J5		
46	1	J3	39-121-05	DUAL RCA HORIZ MOUNT
47	10	P1	70-103-41	10K AUDIO
		P2		
		P3		
		P4		
		P6		
		P7		
		P13		
		P14		
		P16		
		P17		
48	5	P9	70-254-40	250K LINEAR
		P10		
		P11		
		P12		
		P15		
49	2	P5	70-501-40	500 AUDIO
		P8		
50	28	JW1	76-000-05	22 GA TINNED COPPER
		JW3		
		JW4		
		JW6		
		JW7		
		JW9		

ITEM	QTY	REFDES	P/N	DESC
		JW12		
		JW13		
		JW14		
		JW15		
		JW16		
		JW17		
		JW18		
		JW19		
		JW20		
		JW22		
		JW23		
		JW24		
		JW25		
		JW26		
		JW27		
		JW28		
		JW34		
		JW35		
		JW36		
		JW39		
		JW40		
		JW44		
51	2	R65	76-101-01	100 OHM .25W 5% RESISTOR
		R66		
52	2	R76	76-102-01	1K OHM .25W 5% RESISTOR
		R77		
53	13	R17	76-103-01	10K OHM .25W 5% RESISTOR
		R22		
		R39		
		R40		
		R43		
		R44		
		R50		
		R51		
		R55		
		R56		
		R60		
		R79		
		R80		
54	4	R68	76-104-01	100K OHM .25W 5% RESISTOR
		R73		
		R74		
		R85		
55	1	R67	76-105-01	1M OHM .25W 5% RESISTOR
56	4	R5	76-152-01	1.5K OHM .25W 5% RESISTOR
		R7		
		R19		
		R20		
57	9	R1	76-222-01	2.2K OHM .25W 5% RESISTOR
		R2		

ASSEMBLY PART #

07-500-01

REVISION 1

ITEM	QTY	REFDES	P/N	DESC
		R6		
		R8		
		R11		
		R12		
		R14		
		R16		
		R53		
58	10	R25	76-223-01	22K OHM .25W 5% RESISTOR
		R26		
		R27		
		R28		
		R46		
		R47		
		R52		
		R75		
		R83		
		R86		
59	1	R63	76-224-01	220K OHM .25W 5% RESISTOR
60	3	R3	76-274-01	270K OHM .25W 5% RESISTOR
		R4		
		R64		
61	2	R13	76-332-01	3.3K OHM .25W 5% RESISTOR
		R15		
62	1	R81	76-470-01	47 OHM .25W 5% RESISTOR
63	3	R18	76-471-01	470 OHM .25W 5% RESISTOR
		R23		
		R69		
64	8	R21	76-472-01	4.7K OHM .25W 5% RESISTOR
		R24		
		R29		
		R30		
		R41		
		R42		
		R49		
		R54		
65	10	R31	76-473-01	47K OHM .25W 5% RESISTOR
		R32		
		R34		
		R36		
		R37		
		R38		
		R45		
		R48		
		R57		
		R58		
66	2	R33	76-474-01	470K OHM .25W 5% RESISTOR
		R35		
67	2	R9	76-752-01	7.5K OHM .25W 5% RESISTOR
		R10		
68	1	R84	76-822-01	8.2K OHM .25W 5% RESISTOR

ASSEMBLY PART #

07-500-01

REVISION 1

ITEM	QTY	REFDES	P/N	DESC
69	1	R82	77-222-01	2.2K OHM .5W 5% RESISTOR
70	1	R59	77-272-01	2.7K OHM .5W 5% RESISTOR
71	2	R70	78-001-03	.1 OHM 3W 5% WIREWOUND
		R72		
72	1	R71	78-033-01	3.3 OHM 1W 5% MOX OR CF BULK
73	3	R61	78-271-05	270 OHM 5W 5% W/FEET
		R62		
		R78		
74	2	SW1	88-907-01	DPDT PB SW TL22001EE W/1D BLK BUTN
		SW2		
75	2	Q2	96R112-01	J112 N-CH -35Vdg -5Vgs(off) 50ohmRdsON
		Q4		
76	1	Q3	96R510-01	2N5210 NPN 50V 1.5W 50mA
77	1	Q1	96R587-01	2N5087 PNP -50V 1.5W -50mA
78	2	W2A	97-168-62	6.5 RED STRIP WIRE 20G
		W2B		
79	2	W1A	97-168-64	6.5 YELLOW STRIP WIRE 20G
		W1B		
80	2	W8A	97-168-66	6.5 BLACK STRIP WIRE 20G
		W8B		
81	0		0	0

ASSEMBLY PART #

07-500-02

REVISION 1

ITEM	QTY	REFDES	P/N	DESC
1	1	PWB1	06A500-01	PWB1
2	2	C35	10-332-01	.0033 UF [20% TOL] UL/VDE DISK
		C49		
3	2	C1	10A101-21	100 PF 200V 10% NPO
		C2		
4	2	C3	10A102-11	.001 uF 100V 10% X7R
		C4		
5	1	C60	10A103-11	.01 uF 100V 10% X7R
6	6	C16	10A104-01	.1 uF 50V 10% X7R
		C18		
		C28		
		C30		
		C33		
		C58		
7	2	C5	10A221-11	220 pF 100V 10% NPO
		C6		
8	8	C9	10A222-11	.0022uF 100V 10% NPO
		C10		
		C15		
		C17		
		C53		
		C54		
		C55		
		C56		
9	1	C36	10A223-01	.022 uF 50V 10% X7R
10	1	C51	10A224-01	.22 uF 50V 10% X7R
11	2	C31	10A332-01	.0033 uF 100V 10% X7R
		C32		
12	3	C19	10A471-11	470 pF 100V 5% NPO
		C20		
		C44		
13	2	C27	10A472-11	.0047 uF 100V 10% X7R
		C29		
14	2	C23	10A473-11	.047 uF 100V 10% X7R
		C24		
15	1	C50	10A561-11	560 pF 100V 10% NPO
16	2	C52	10F224-03	.22 uF 100V 10% RAD POLY FORMED
		C57		
17	2	C40	12-478-32	4700 uF 35V 20% EL
		C41		
18	6	C13	12R105-50	1 uF 50V 20% EL
		C14		
		C34		
		C37		
		C38		
		C39		
19	9	C7	12R106-35	10 uF 35V 20% EL
		C8		
		C21		

ITEM	QTY	REFDES	P/N	DESC
		C22		
		C42		
		C43		
		C46		
		C47		
		C48		
20	1	C59	12R107-32	100 uF 35V 20% EL
21	4	C11	12R225-50	2.2 uF 50V 20% EL
		C12		
		C25		
		C26		
22	1	C45	12R475-82	4.7 uF 50V 20% EL NP
23	1	J6	17-105-08	.1" ST POL LOCK MTSS100-8 HEADER
24	2	J11	17-106-08	.1 R/A POL LOCK MTAS100-8 HEADER
		J8		.1" R/A POL LOCK MTAS100-8 HEADER
25	1	J18	17-309-04	.156 ST POL MPSS156-4-D HEADER
26	1	J22	17-310-02	.156" ST POL MFSS156-2-D HEADER
27	1	J10	17-311-04	.156 R/A MFAS156-4-D HEADER
28	14	J7	17-836-01	.250 PC TAB STBL LOC 6021-6
		J12		
		J13		
		J14		
		J15		
		J16		
		J17		
		J19		
		J20		
		J21		
		J23		
		J24		
		J26		
		J27		
29	2	J9	17-894-01	.187 PC TAB STBL LOC 6024-6
		J25		
30	1	D21	21-501-01	RED LED ASSY, HI EFF.
31	4	D17	21-541-01	1N5401 DIODE/MOTOROLA 3 AMP
		D18		
		D19		
		D20		
32	4	D5	21A146-01	3.3V .4W ZENER 28 ohm Zz
		D6		
		D11		
		D13		
33	2	D24	21A443-01	13V 1W ZENER 10 ohm Zz
		D25		
34	1	D28	21A444-01	15V 1W ZENER 14 ohm Zz
35	1	D26	21A447-01	20V 1W ZENER 22 ohm Zz
36	4	D7	21A754-01	6.8V .5W ZENER 5 ohm Zz
		D8		
		D12		

ITEM		REFDES	P/N	DESC
		D14		
37	11	D1	21A914-01	75V PIV 10mA/1V .5W
		D2		
		D3		
		D4		
		D9		
		D10		
		D15		
		D16		
		D22		
		D23		
		D27		
38	1	F1	23-301-05	1AMP SLO BLO FUSE 250V
39	2	FC1	23-926-02	Universal Fuse Clip
		FC2		
40	3	U3	37-072-01	TLO-72CP DUAL OP-AMP
		U4		
		U5		
41	2	U1	37-074-01	TLO-74 QUAD OP-AMP
		U2		
42	1	U6	37-532-01	NE5532(N/P) DUAL OP-AMP
43	1	U7	37-886-02	LM3886TF11B 68W PWR AMP W/MUTE
44	2	J1	39-114-04	VERT TRS JACK W/SHUNTS L.S.
		J2		
45	2	J4	39-117-01	TRS JACK HORIZ
		J5		
46	1	J3	39-121-05	DUAL RCA HORIZ MOUNT
47	10	P1	70-103-41	10K AUDIO
		P2		
		P3		
		P4		
		P6		
		P7		
		P13		
		P14		
		P16		
		P17		
48	5	P9	70-254-40	250K LINEAR
		P10		
		P11		
		P12		
		P15		
49	2	P5	70-501-40	500 AUDIO
		P8		
50	28	JW1	76-000-05	22 GA TINNED COPPER
		JW3		
		JW4		
		JW6		
		JW7		
		JW9		

ITEM	QTY	REFDES	P/N	DESC
		JW12		
		JW13		
		JW14		
		JW15		
		JW16		
		JW17		
		JW18		
		JW19		
		JW20		
		JW22		
		JW23		
		JW24		
		JW25		
		JW26		
		JW27		
		JW28		
		JW34		
		JW35		
		JW36		
		JW39		
		JW40		
		JW44		
51	2	R65	76-101-01	100 OHM .25W 5% RESISTOR
		R66		
52	2	R76	76-102-01	1K OHM .25W 5% RESISTOR
		R77		
53	12	R17	76-103-01	10K OHM .25W 5% RESISTOR
		R22		
		R39		
		R40		
		R43		
		R44		
		R51		
		R55		
		R56		
		R60		
		R79		
		R80		
54	4	R68	76-104-01	100K OHM .25W 5% RESISTOR
		R73		
		R74		
		R85		
55	1	R67	76-105-01	1M OHM .25W 5% RESISTOR
56	4	R5	76-152-01	1.5K OHM .25W 5% RESISTOR
		R7		
		R19		
		R20		
57	9	R1	76-222-01	2.2K OHM .25W 5% RESISTOR
		R2		
		R6		

ITEM	QTY	REFDES	P/N	DESC
		R8		
		R11		
		R12		
		R14		
		R16		
		R53		
58	10	R25	76-223-01	22K OHM .25W 5% RESISTOR
		R26		
		R27		
		R28		
		R46		
		R47		
		R52		
		R75		
		R83		
		R86		
59	1	R63	76-224-01	220K OHM .25W 5% RESISTOR
60	3	R3	76-274-01	270K OHM .25W 5% RESISTOR
		R4		
		R64		
61	2	R13	76-332-01	3.3K OHM .25W 5% RESISTOR
		R15		
62	1	R81	76-470-01	47 OHM .25W 5% RESISTOR
63	3	R18	76-471-01	470 OHM .25W 5% RESISTOR
		R23		
		R69		
64	9	R50	76-472-01	4.7K OHM .25W 5% RESISTOR
		R21		
		R24		
		R29		
		R30		
		R41		
		R42		
		R49		
		R54		
65	10	R31	76-473-01	47K OHM .25W 5% RESISTOR
		R32		
		R34		
		R36		
		R37		
		R38		
		R45		
		R48		
		R57		
		R58		
66	2	R33	76-474-01	470K OHM .25W 5% RESISTOR
		R35		
67	2	R9	76-752-01	7.5K OHM .25W 5% RESISTOR
		R10		
68	1	R84	76-822-01	8.2K OHM .25W 5% RESISTOR

ASSEMBLY PART #

07-500-02

REVISION 1

ITEM	QTY	REFDES	P/N	DESC
69	1	R82	77-222-01	2.2K OHM .5W 5% RESISTOR
70	1	R59	77-272-01	2.7K OHM .5W 5% RESISTOR
71	2	R70	78-001-03	.1 OHM 3W 5% WIREWOUND
		R72		
72	1	R71	78-033-01	3.3 OHM 1W 5% MOX OR CF BULK
73	2	R61	78-271-05	270 OHM 5W 5% W/FEET
		R62		
74	1	R78	78-101-05	100 OHM 5W 5% W/FEET
75	2	SW1	88-907-01	DPDT PB SW TL22001EE W/1D BLK BUTN
		SW2		
76	2	Q2	96R112-01	J112 N-CH -35Vdg -5Vgs(off) 50ohmRdsON
		Q4		
77	1	Q3	96R510-01	2N5210 NPN 50V 1.5W 50mA
78	1	Q1	96R587-01	2N5087 PNP -50V 1.5W -50mA
79	2	W2A	97-168-62	6.5 RED STRIP WIRE 20G
		W2B		
80	2	W1A	97-168-64	6.5 YELLOW STRIP WIRE 20G
		W1B		
81	2	W8A	97-168-66	6.5 BLACK STRIP WIRE 20G
		W8B		
82	0		0	0