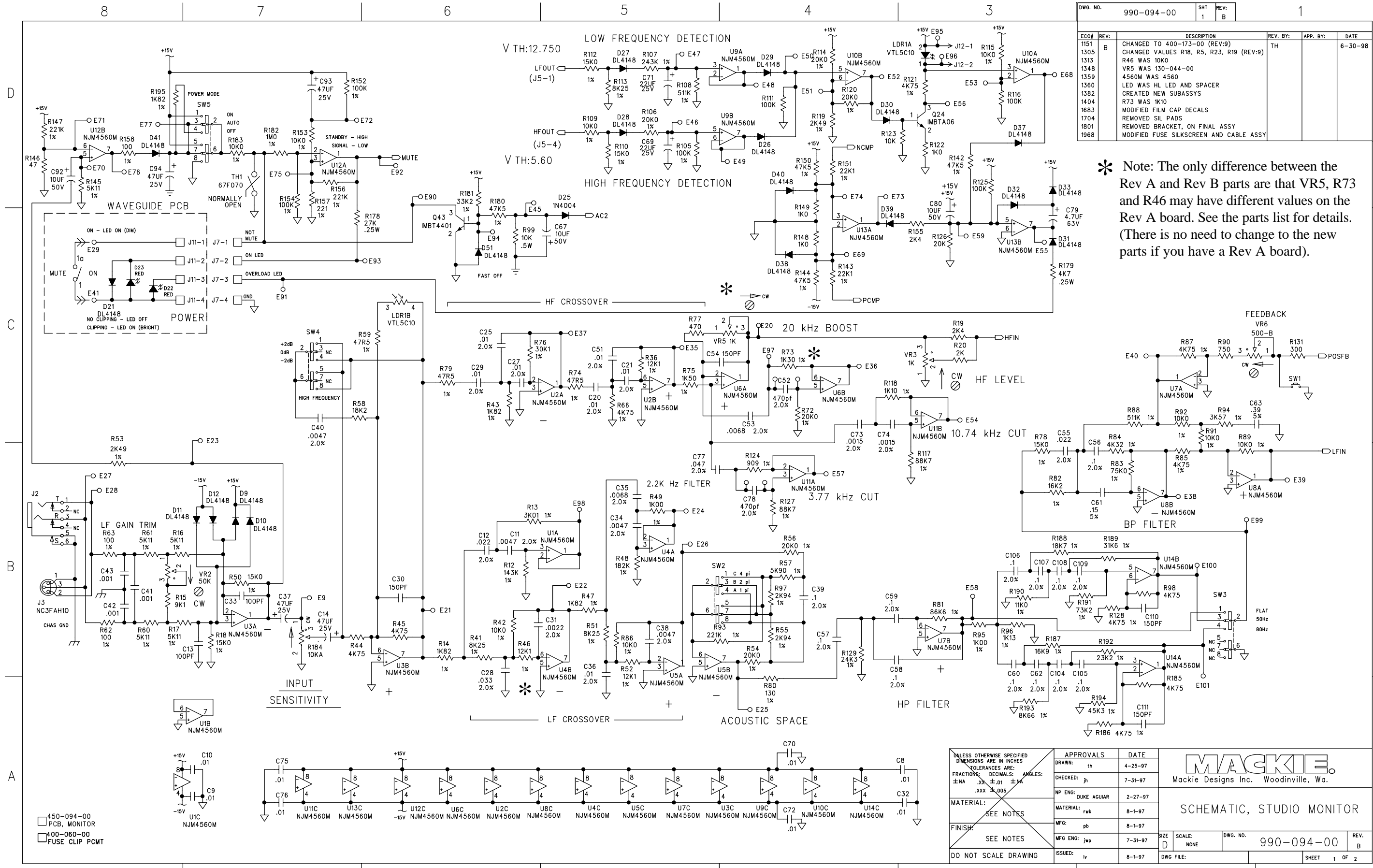
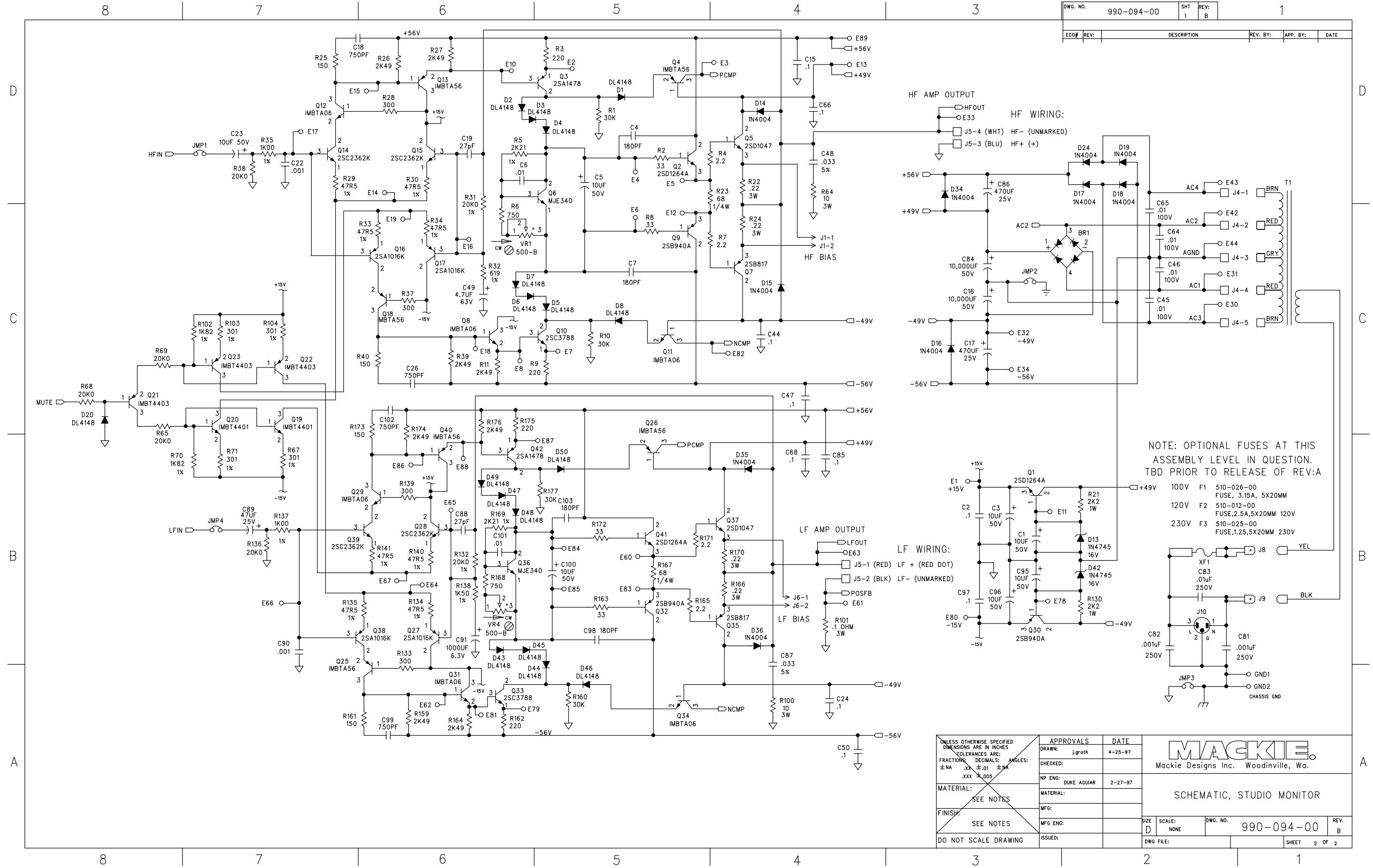


ECOM	REV.	DESCRIPTION	REV. BY:	APP. BY:	DATE
1151	B	CHANGED TO 400-173-00 (REV:9)	TH		6-30-98
1305		CHANGED VALUES R18, R5, R23, R19 (REV:9)			
1313		R46 WAS 10K0			
1348		VR5 WAS 130-044-00			
1359		4560M WAS 4560			
1360		LED WAS HL LED AND SPACER			
1382		CREATED NEW SUBASSYS			
1404		R73 WAS 1K10			
1683		MODIFIED FILM CAP DECALS			
1704		REMOVED SIL PADS			
1801		REMOVED BRACKET, ON FINAL ASSY			
1968		MODIFIED FUSE SILKSCREEN AND CABLE ASSY			

\* Note: The only difference between the Rev A and Rev B parts are that VR5, R73 and R46 may have different values on the Rev A board. See the parts list for details. (There is no need to change to the new parts if you have a Rev A board).



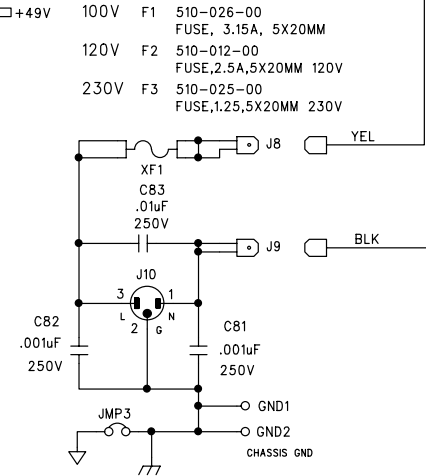
APPROVALS		DATE	<b>MACKIE</b> Mackie Designs Inc. Woodinville, Wa.
DRAWN: th	CHECKED: jh	4-25-97	
NP ENG: DUKE AGUIAR	MATERIAL: fmk	2-27-97	SCHEMATIC, STUDIO MONITOR
MFG: pb	MFG ENG: jwp	8-1-97	
ISSUED: lv	SCALE: NONE	8-1-97	SIZE D



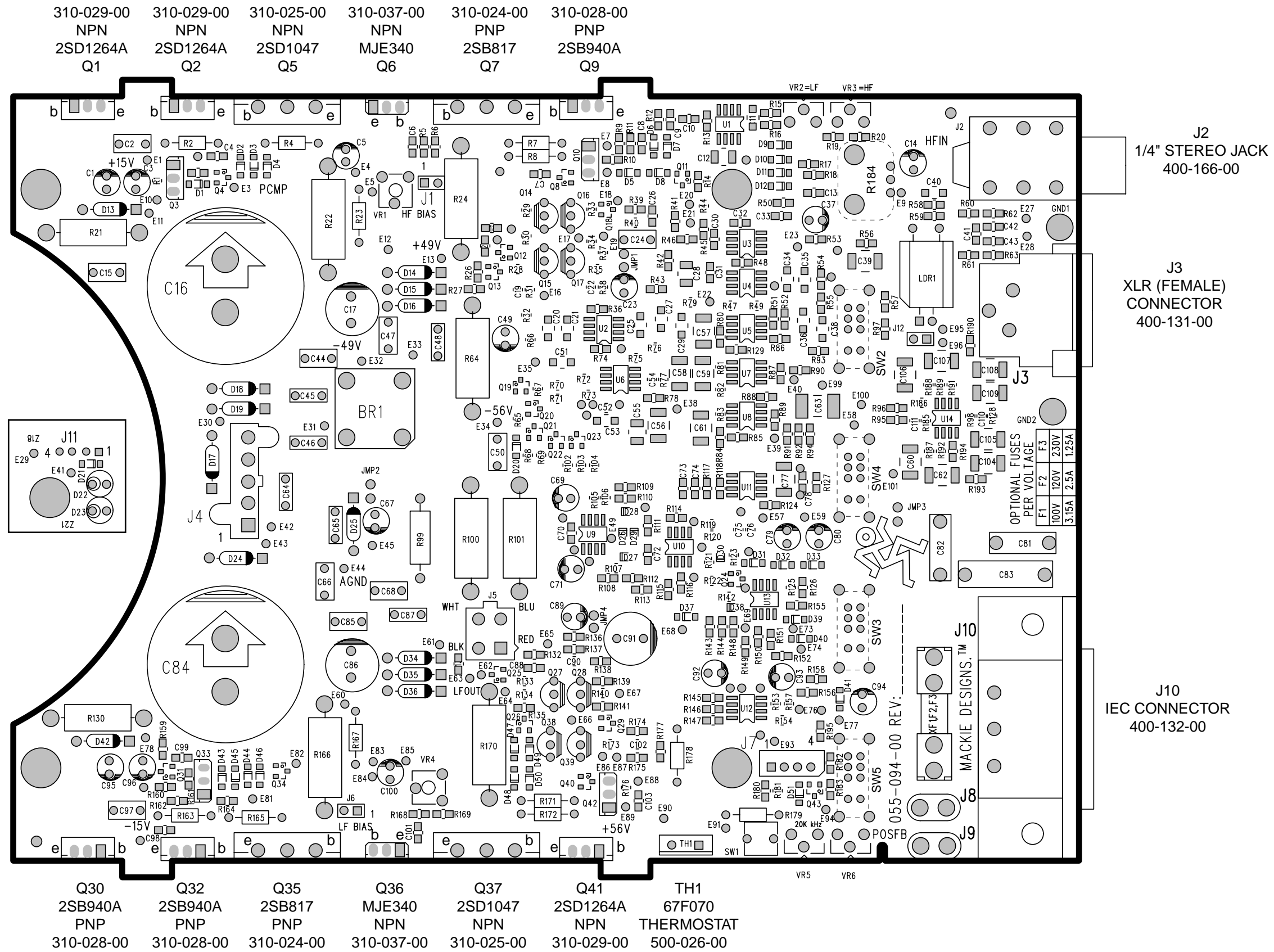
HF AMP OUTPUT  
 HF WIRING:  
 J5-4 (WHT) HF- (UNMARKED)  
 J5-3 (BLU) HF+ (+)

LF AMP OUTPUT  
 LF WIRING:  
 J5-1 (RED) LF+ (RED DOT)  
 J5-2 (BLK) LF- (UNMARKED)

NOTE: OPTIONAL FUSES AT THIS ASSEMBLY LEVEL IN QUESTION. TBD PRIOR TO RELEASE OF REV:A



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: ±.01 DECIMALS: ±.005 ANGLES: ±.005 MATERIAL: SEE NOTES FINISH: SEE NOTES DO NOT SCALE DRAWING	APPROVALS	DATE	Mackie Designs Inc. Woodinville, Wa.  SCHEMATIC, STUDIO MONITOR
	DRAWN: j.groth	4-25-97	
	CHECKED:		
	NP ENG: DUKE AGUIAR	2-27-97	
	MATERIAL:		
	MFG:		
	MFG ENG:		
	ISSUED:		
SIZE D	SCALE: NONE	DWG. NO. 990-094-00	REV. B
DWG FILE:			SHEET 2 OF 2



J2  
1/4" STEREO JACK  
400-166-00

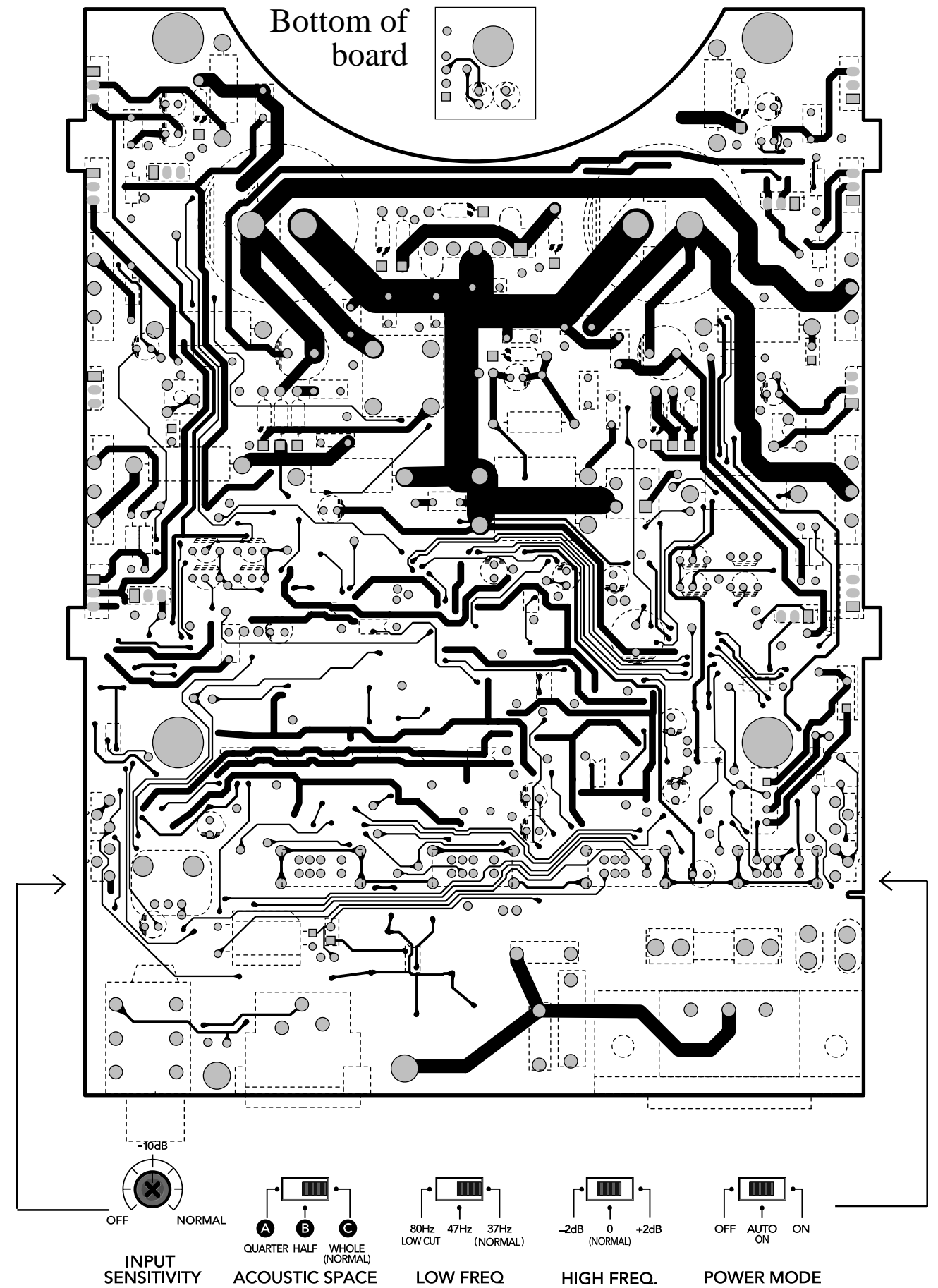
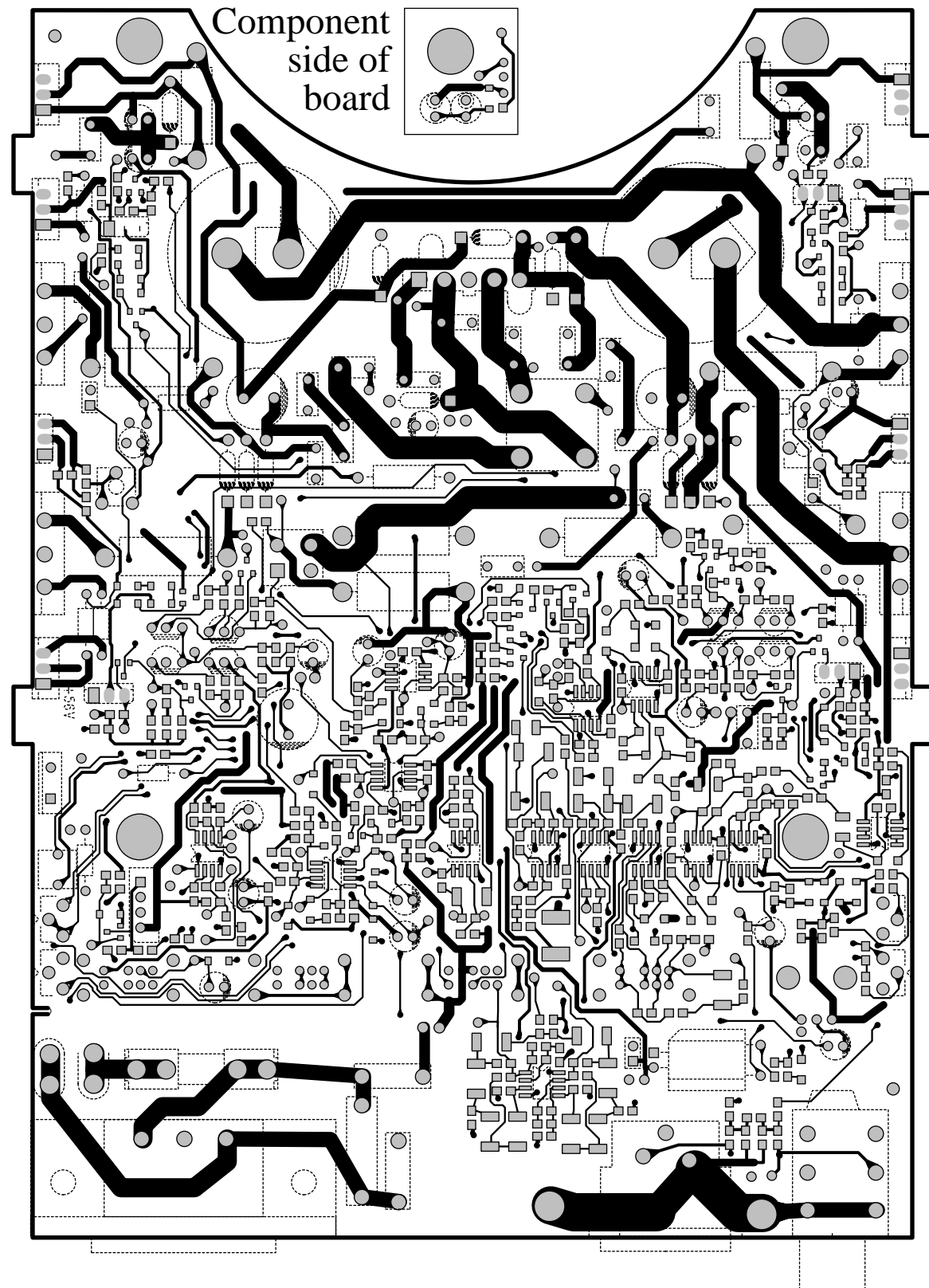
J3  
XLR (FEMALE)  
CONNECTOR  
400-131-00

OPTIONAL FUSES  
PER VOLTAGE

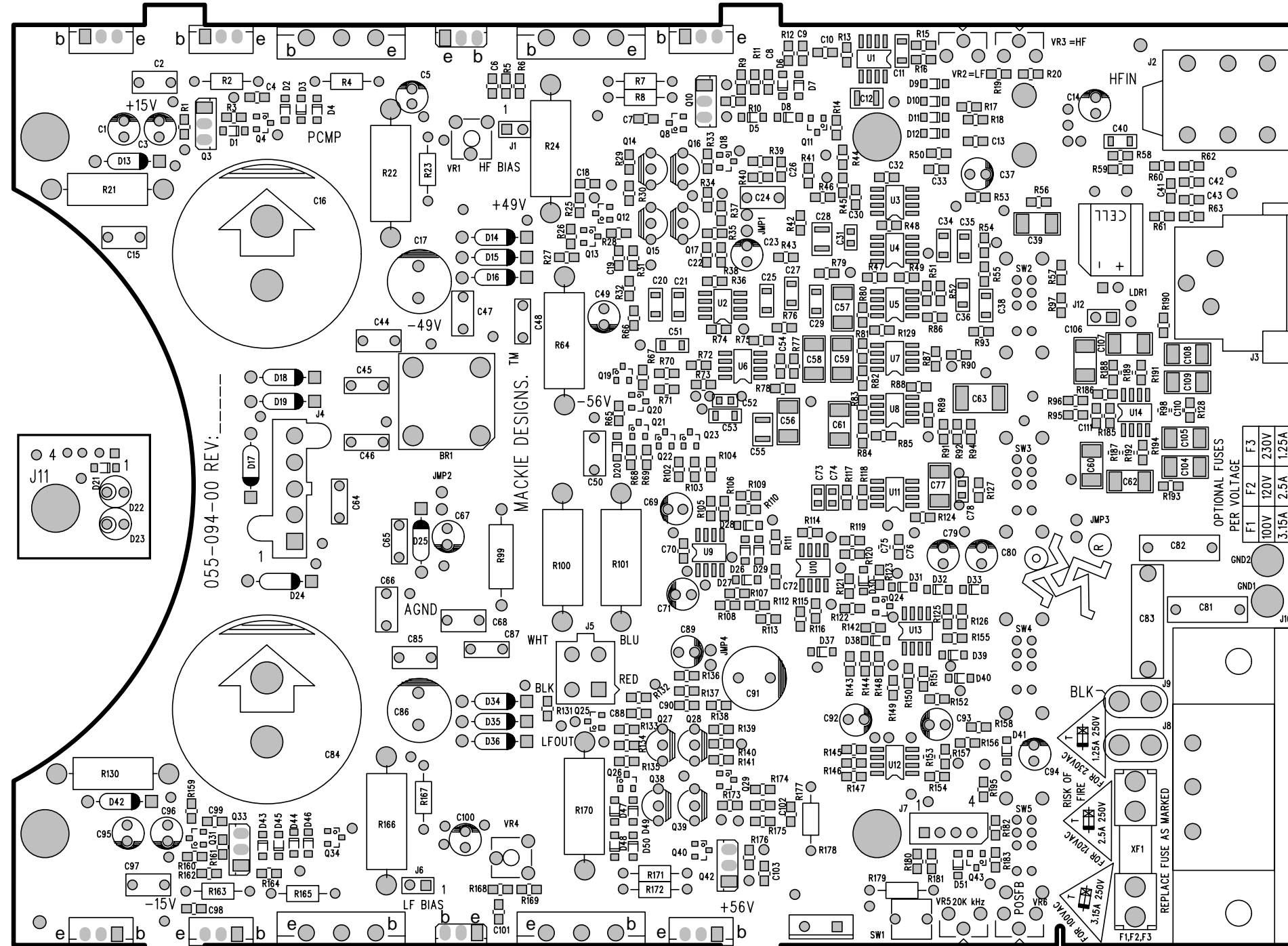
F1	F2	F3
100V	120V	230V
3.15A	2.5A	1.25A

J10  
IEC CONNECTOR  
400-132-00

055-094-00 REV.



310-029-00	310-029-00	310-025-00	310-037-00	310-024-00	310-028-00
NPN	NPN	NPN	NPN	PNP	PNP
2SD1264A	2SD1264A	2SD1047	MJE340	2SB817	2SB940A
Q1	Q2	Q5	Q6	Q7	Q9



Q30	Q32	Q35	Q36	Q37	Q41	TH1
2SB940A	2SB940A	2SB817	MJE340	2SD1047	2SD1264A	67F070
PNP	PNP	PNP	NPN	NPN	NPN	THERMOSTAT
310-028-00	310-028-00	310-024-00	310-037-00	310-025-00	310-029-00	500-026-00

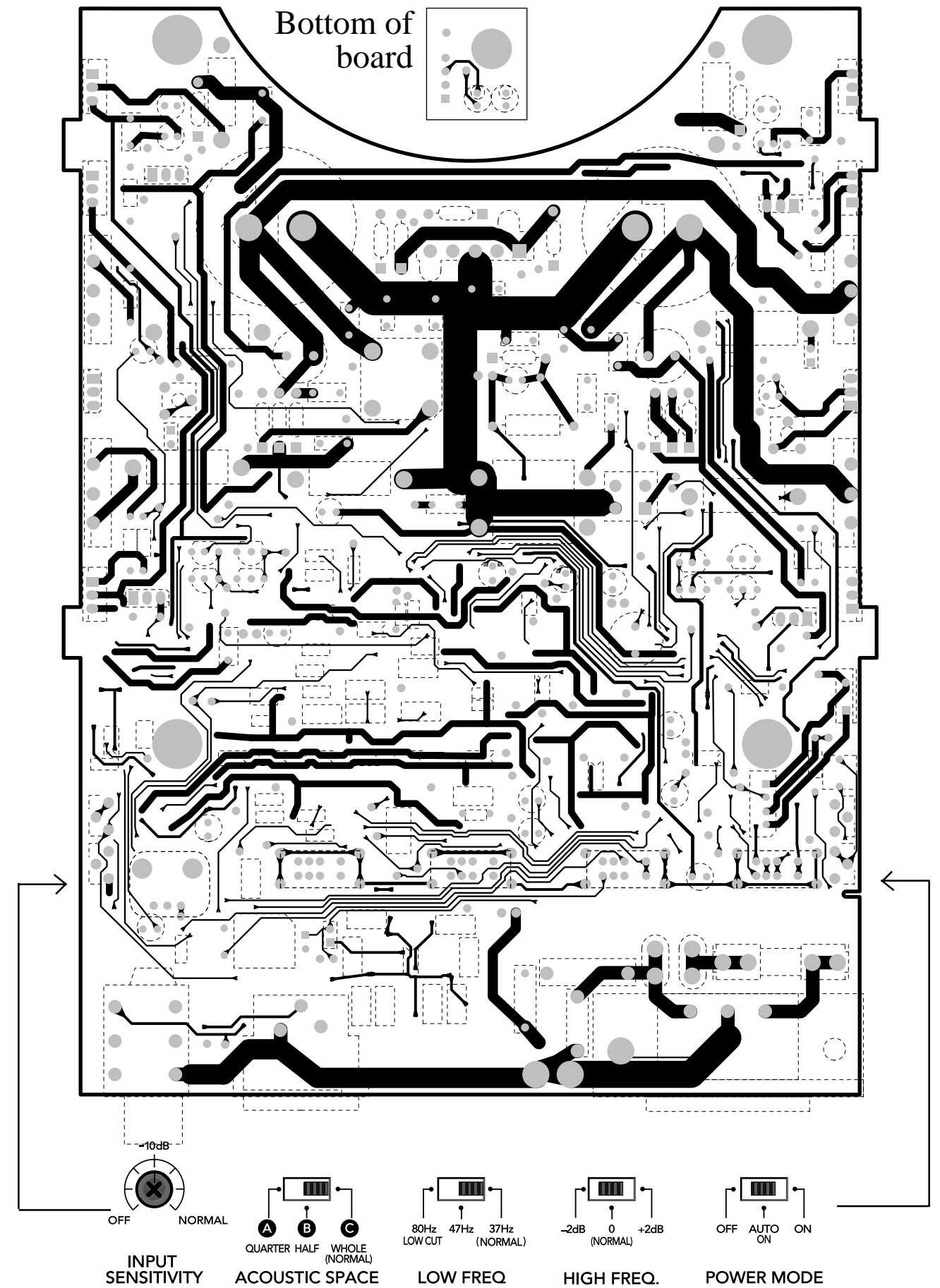
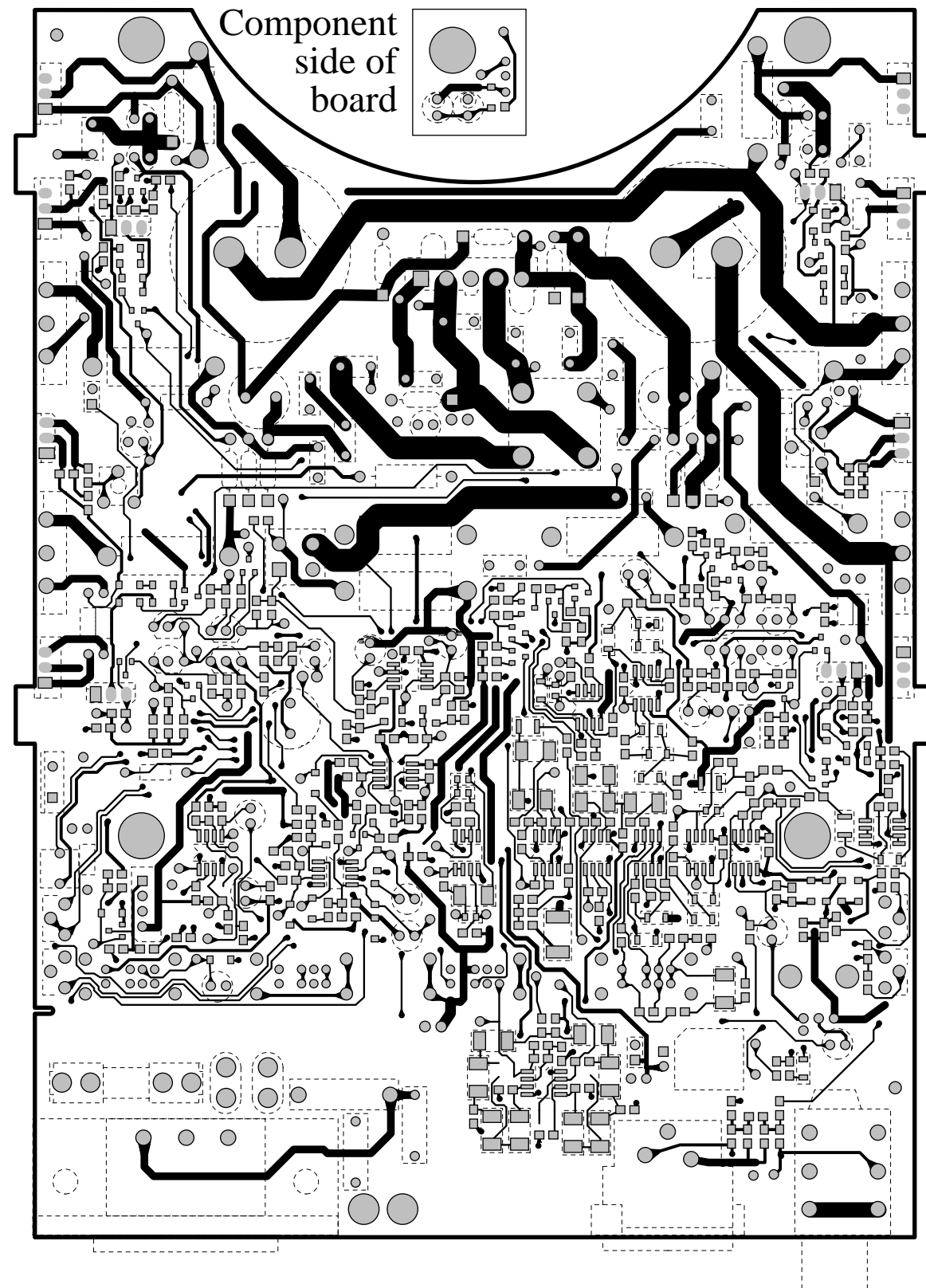
J2  
1/4" STEREO JACK  
400-166-00

J3  
XLR (FEMALE)  
CONNECTOR  
400-131-00

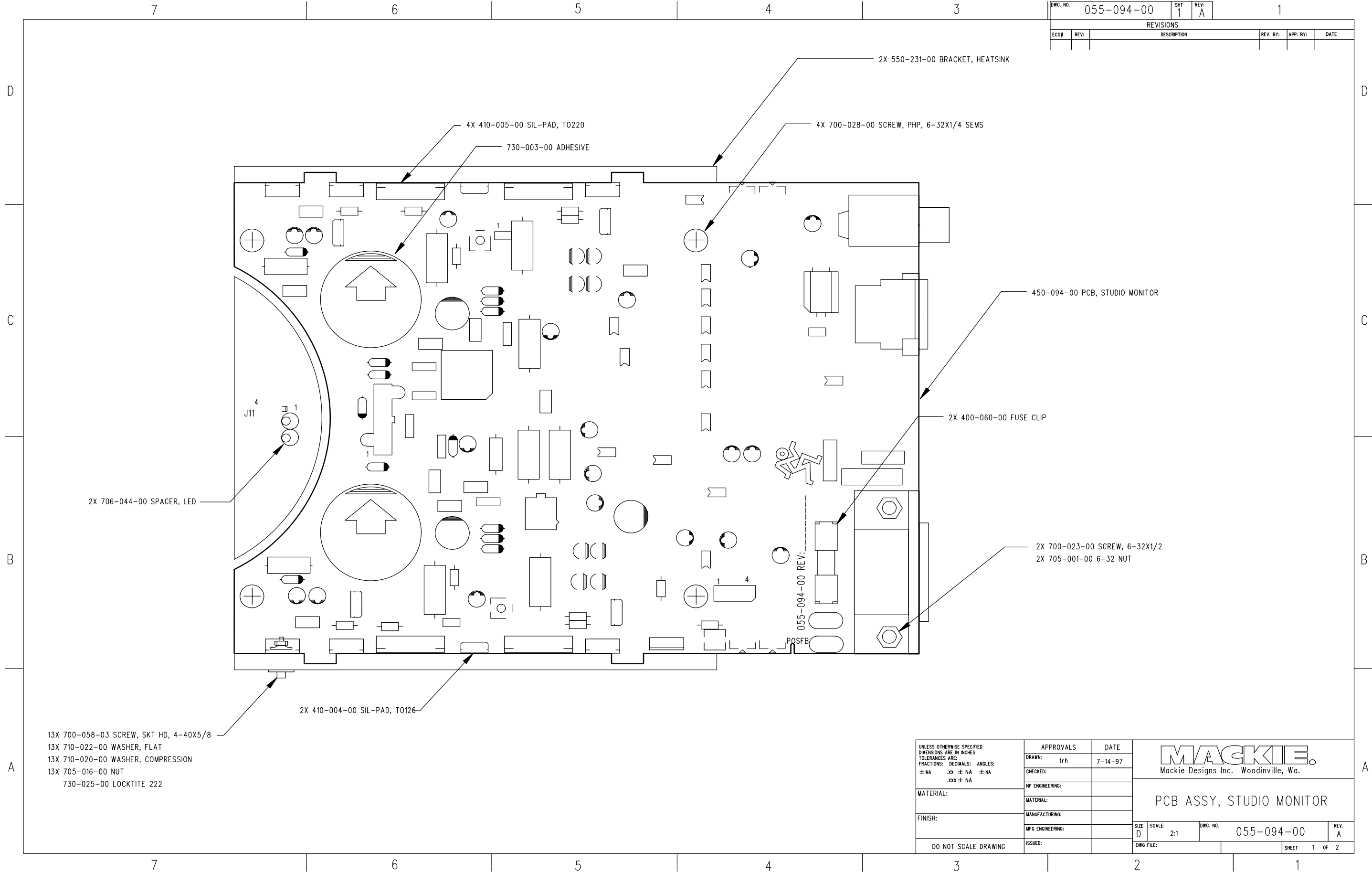
Note: The main difference between the Rev A and Rev B boards is in the trace layout at this end of the board

OPTIONAL FUSES		
PER VOLTAGE	F1	F2
100V	1.25A	2.30V
230V	3.15A	2.5A
1.25A		

J10  
IEC CONNECTOR  
400-132-00



REVISIONS				
ECO#	REV.	DESCRIPTION	REV. BY:	APP. BY:



- 13X 700-058-03 SCREW, SKT HD, 4-40X5/8
- 13X 710-022-00 WASHER, FLAT
- 13X 710-020-00 WASHER, COMPRESSION
- 13X 705-016-00 NUT
- 730-025-00 LOCKTITE 222

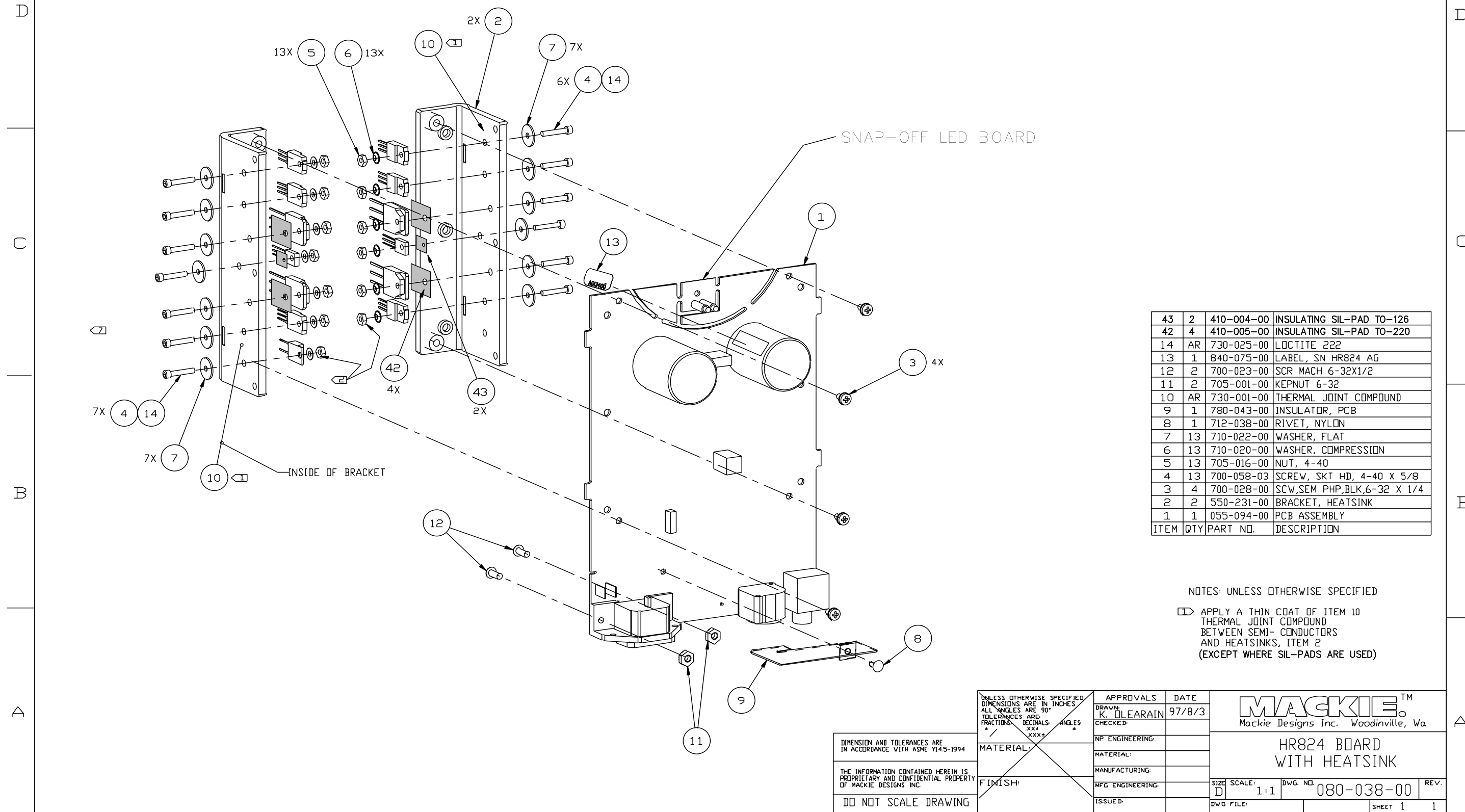
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ±NA .XX ±NA ±NA .XXX ±NA	APPROVALS	DATE
DRAWN:	trh	7-14-97
CHECKED:		
NP ENGINEERING:		
MATERIAL:		
FINISH:		
DO NOT SCALE DRAWING	ISSUED:	

**MACKIE.**  
Mackie Designs Inc. Woodinville, Wa.

PCB ASSY, STUDIO MONITOR

SIZE D	SCALE: 2:1	DWG. NO. 055-094-00	REV. A
DWG FILE:		SHEET 1 OF 2	

DWG. NO.	080-038-00	SHT	1	REV.	A	1	
REVISIONS							
ECDW	REV.	DESCRIPTION			REV. BY:	APP. BY:	DATE
1382	A	PRODUCTION RELEASE			KD		8/3/97



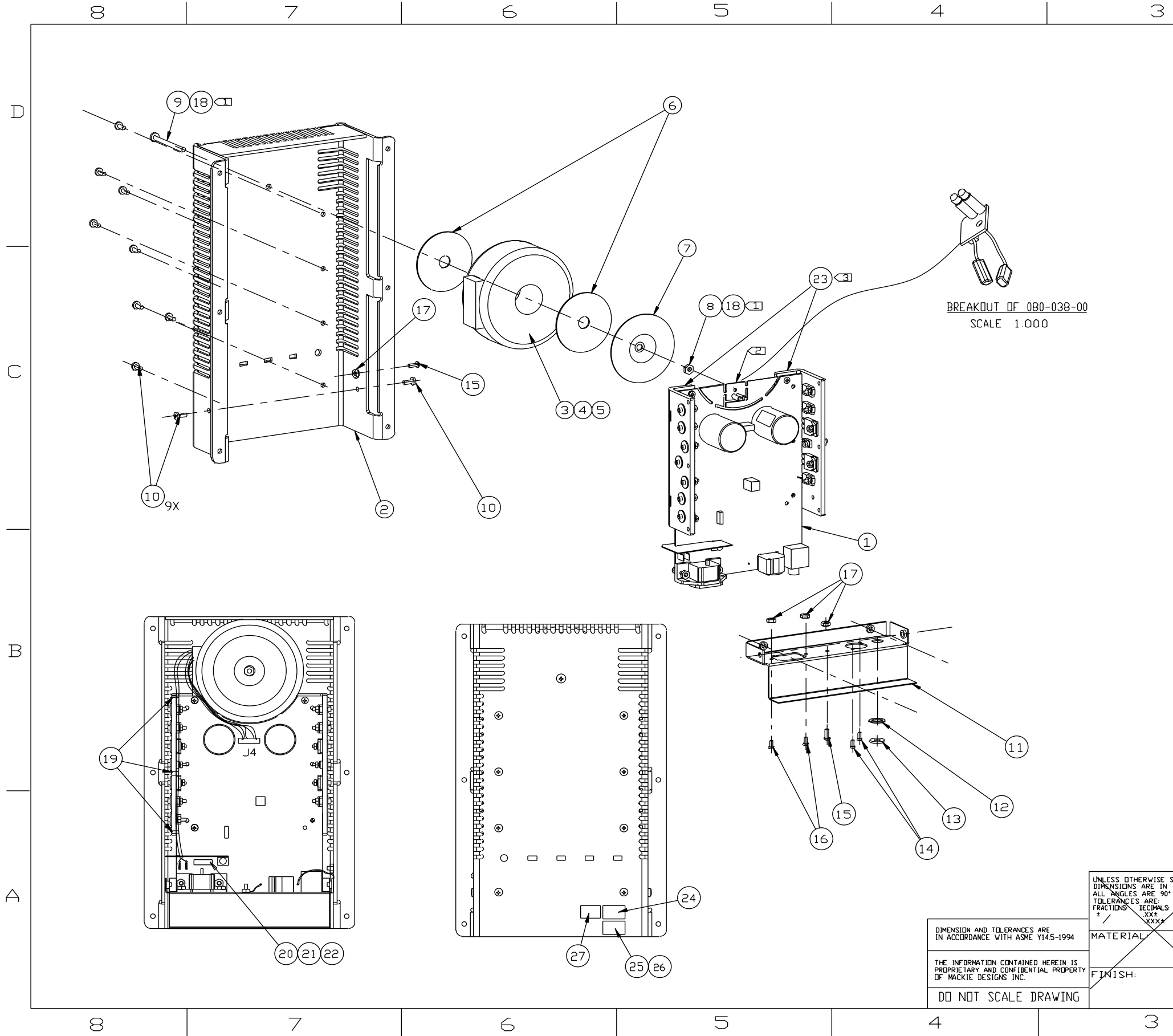
43	2	410-004-00	INSULATING SIL-PAD TO-126
42	4	410-005-00	INSULATING SIL-PAD TO-220
14	AR	730-025-00	LOCTITE 222
13	1	840-075-00	LABEL, SN HR824 AG
12	2	700-023-00	SCR MACH 6-32X1/2
11	2	705-001-00	KEPNUT 6-32
10	AR	730-001-00	THERMAL JOINT COMPOUND
9	1	780-043-00	INSULATOR, PCB
8	1	712-038-00	RIVET, NYLON
7	13	710-022-00	WASHER, FLAT
6	13	710-020-00	WASHER, COMPRESSION
5	13	705-016-00	NUT, 4-40
4	13	700-058-03	SCREW, SKT HD, 4-40 X 5/8
3	4	700-028-00	SCW, SEM PHP, BLK, 6-32 X 1/4
2	2	550-231-00	BRACKET, HEATSINK
1	1	055-094-00	PCB ASSEMBLY
ITEM	QTY	PART NO.	DESCRIPTION

NOTES: UNLESS OTHERWISE SPECIFIED  
 □ APPLY A THIN COAT OF ITEM 10 THERMAL JOINT COMPOUND BETWEEN SEMI- CONDUCTORS AND HEATSINKS, ITEM 2 (EXCEPT WHERE SIL-PADS ARE USED)

DIMENSION AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5-1994  THE INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL PROPERTY OF MACKIE DESIGNS INC.  DO NOT SCALE DRAWING	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. ALL ANGLES ARE 90°. TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: * .XX# * .XXXX *	APPROVALS DRAWN: K. OLEARAIN CHECKED:	DATE 97/8/3	MACKIE.™ Mackie Designs Inc. Woodinville, Wa  HR824 BOARD WITH HEATSINK
	MATERIAL:	NP ENGINEERING:		
	FINISH:	MANUFACTURING:		
		MFG ENGINEERING:		
	ISSUED:			SIZE: D SCALE: 1:1 DWG. NO: 080-038-00 REV. 1 DWG FILE: SHEET 1 1



DWG. NO. 080-039-XX	SHT 1	REV. A	1
REVISIONS			
ECD#	REV.	DESCRIPTION	REV. BY: APP. BY: DATE
1382	A	PRODUCTION RELEASE	LLH



ITEM	QTY	QTY	QTY	QTY	PART NUMBER	DESCRIPTION
27	1	1	1	1	840-075-00	LABEL -SN HR824 AG
26				1	840-077-00	LABEL -100V 50/60HZ 100W
25		1			840-076-00	LABEL -230V 50/60HZ 100W
24	1	1	1	1	840-024-00	LABEL DATE CODE
23	AR	AR	AR		730-001-00	THERMAL CODE
22				1	510-026-00	FUSE SB 3.15A 5X 0MM 250V
21		1			510-025-00	FUSE SB 1.25A 5X20MM 250V
20	1				510-029-00	FUSE SB 2.5A 5X20MM 250V
19	3	3	3		740-001-00	TYRAP 3-1/4L
18	AR	AR	AR		730-016-00	LOCTITE 242
17	4	4	4		705-001-00	NUT LOCK 6-32
16	2	2	2		700-030-04	SCR MCH 6-32X3/8 PHP BLKZC
15	2	2	2		700-031-02	SCR MCH 6-32X3/8 BTN PIN BLKZC
14	2	2	2		700-055-00	SCR MCH 4-24X3/8 PHP BLK HI-LO
13	1	1	1		705-015-00	NUT SLOT NCKL (SPLD W/JACK)
12	1	1	1		710-019-00	WASHER FIBRE BLK (SPLD W/JACK)
11	1	1	1		550-230-00	SMTL BRKT INTERCONNECT
10	10	10	10		700-005-00	SCR SEM 8-32X1/2 PHP BLKZC
9	1	1	1		700-052-00	SCR MCH 10-32X2-1/4 PHP BLKZC
8	1	1	1		705-011-00	NUT LOCK 10-32
7	1	1	1		550-248-00	SMTL PLATE XFMR MTG (SPLD W/XFMR)
6	2	2	2		780-107-00	RUBBER WASHER (SPLD W/XFMR)
5				1	600-019-02	XFMR HR824 100V
4		1			600-019-01	XFMR HR824 230V
3	1				600-019-00	XFMR HR824 120V
2	1	1	1		550-228-00	SMTL REAR COVER
1	1	1	1		080-038-00	BOARD W/ HEATSINK

NOTES: UNLESS OTHERWISE SPECIFIED

1) APPLY LOCITE ITEM (18) TO ITEM (9) AND ITEM (8)

2) BREAKOUT BOARD (INCLUDING HALF CIRCLE), BEFORE INSTALLING TO ITEM (2), USE LED ON 090-056-XX

3) APPLY THIN COAT OF ITEM (26) TO ENTIRE BOTTOM OF BOTH HEATSINKS.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ALL ANGLES ARE 90° TOLERANCES ARE: FRACTIONS: XXXX DECIMALS: .XX ANGLES: ±	APPROVALS	DATE	<b>MACKIE™</b> Mackie Designs Inc. Woodinville, Wa		
	DRAWN: LHETZEL	8/10/97			
	CHECKED:		AMPLIFIER SUBASSY - HR824		
	NP ENGINEERING:				
MATERIAL:		SIZE: D	SCALE: 1:2	DWG. NO. 080-039-XX	REV. A
FINISH:		ISSUED:	DWG FILE:	SHEET 1	1
DIMENSION AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5-1994		DO NOT SCALE DRAWING			

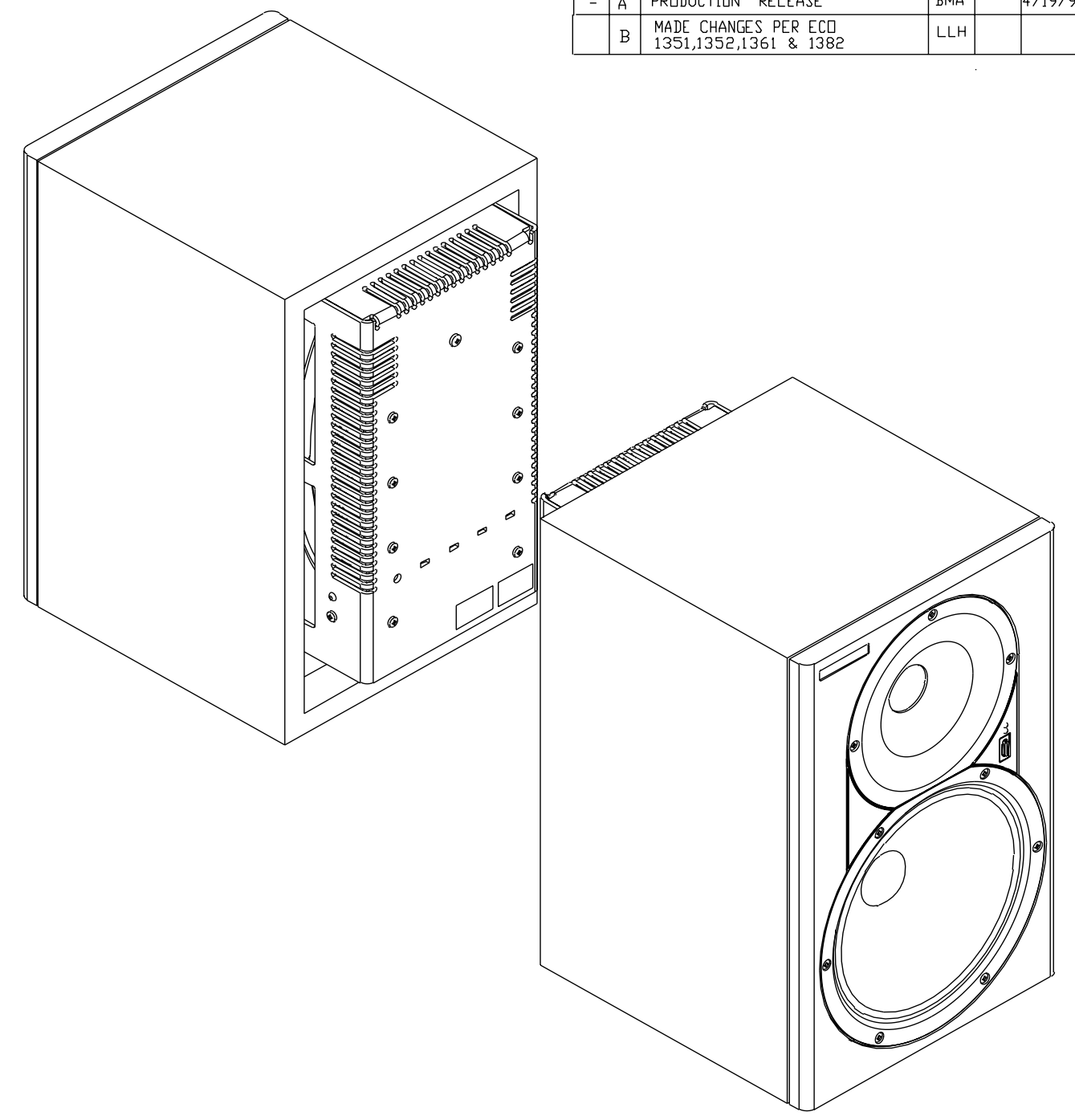
DWG. NO.	090-056-XX	SHT	1	REV.	B	1
REVISIONS						
ECD#	REV.	DESCRIPTION	REV. BY:	APP. BY:	DATE	
-	A	PRODUCTION RELEASE	BMA		4/19/97	
	B	MADE CHANGES PER ECO 1351,1352,1361 & 1382	LLH			

- NOTES (UNLESS OTHERWISE SPECIFIED)
1. ASSEMBLE PER MACKIE ASSEMBLY STANDARDS.
  2. BEND MAGNETS ITEM #9 & ITEM #10 USING ITEM #41  
ACTIVATE LOCTITE WITH ITEM #16
  3. THREAD BUNDLE THROUGH CUT OUT IN PASSIVATE RADIATOR ASSY.  
(SEE HR824 WIRING HARNESS ASSY INSTRUCTION SHEET)  
NOTE MAX. DISTANCE OF BUNDLE. INSTALLED DISTANCE IS 1/2 - 3/8"  
INSIDE CABINET HOLE.
  4. BEND ITEMS 24 AND 25 FOAM PARTS INTO SPEAKER BOX, THEN USE ITEMS 18 AND 17  
TO SECURE (ITEM #24) FOAM.
  5. SEE PARTS LIST FOR APPROPRIATE FUSE AND TRANSFORMER.
  6. LED BOARD FROM 080-038-00 AFTER 080-039-00

41	AR	AR	AR	730-021-00	LOCTITE 326	2
40	1	1	1	840-074-00	L.B.L. MACKIE LOGO 3D	3
39			1	640-002-02	LINECORD (100V)	NS
38		1		640-002-01	LINECORD (230V)	NS
37	1			640-001-00	LINECORD (120V)	NS
36	1	1	1	790-002-00	12 X 18 POLY BAG FOR MANUAL	NS
35			1	840-035-00	PACK SLIP POCKET- KORG	NS
34	1	1	1	830-021-00	BIRTH CERTIFICATE	NS
33	1			830-017-00	CARD REG. & WARR - HR SERIES	NS
32	1	1	1	820-063-00	OWNERS MANUAL, ENGLISH, DOMESTIC	NS
31	1	1	1	810-060-00	INST COLLAR 2	NS
30	1	1	1	810-059-00	INST COLLAR	NS
29	8	8	8	810-058-00	INST CORNER	NS
28	1	1	1	800-068-00	BOX SHIP OUTER	NS
27	1	1	1	800-067-00	BOX SHIP INNER	NS
26	1	1	1	790-019-00	POLY FOAM 28"	NS
25	1	1	1	810-052-00	FOAM TWEETER	3
24	1	1	1	810-050-00	FOAM WOOFER	3
23	1	1	1	780-103-00	GASKET WOOFER	2
22	1	1	1	780-110-00	GASKET PASSIVE	3
21	1	1	1	780-102-00	GASKET WAVE GUIDE	2
20	3	3	3	740-001-00	TYRAP 3-1/4L	4
19	4	4	4	750-002-00	BUMPON FLT RND BLK, 14H	NS
18	AR	AR	AR	730-019-00	ACCELERATOR, BLK MAGIC 737 ADHESIVE	3
17	AR	AR	AR	730-027-00	LOCTITE 410 ADHESIVE	3
16	AR	AR	AR	730-022-00	PRIMER FOR LOCTITE 326	2
15	17	17	17	701-012-05	SCR SM A-B 8X1 PAN TORX BLK OX	2
14	5	5	5	710-005-00	WASHER INSTAR N06 BLK	2
13	5	5	5	700-010-04	SCR TF 6-32X 3/8 PHP BLKZC	2
12	1	1	1	551-501-00	CAST WAVE GUIDE	2
11	1	1	1	500-016-00	SW RCKR SPST 6A/250V	2
10	1	1	1	490-017-00	SPEAKER BUCKING MAGNET WOOFER	2
9	1	1	1	490-016-00	SPEAKER BUCKING MAGNET TWEETER	2
8	1	1	1	490-010-00	CABINET SPEAKER	2
7	1	1	1	490-003-00	TWEETER 1" ALUM 60HM	2
6	1	1	1	490-001-00	WOOFER 8IN 40HM	2
5	1	1	1	080-046-00	HARNESS, CABLES HR824	3
4	1	1	1	080-029-00	SUB ASSY PASSIVE RADIATOR	3
3			1	080-039-02	SUB ASSY AMPLIFIER	3
2			1	080-039-01	SUB ASSY AMPLIFIER	3
1	1			080-039-00	SUB ASSY AMPLIFIER	3

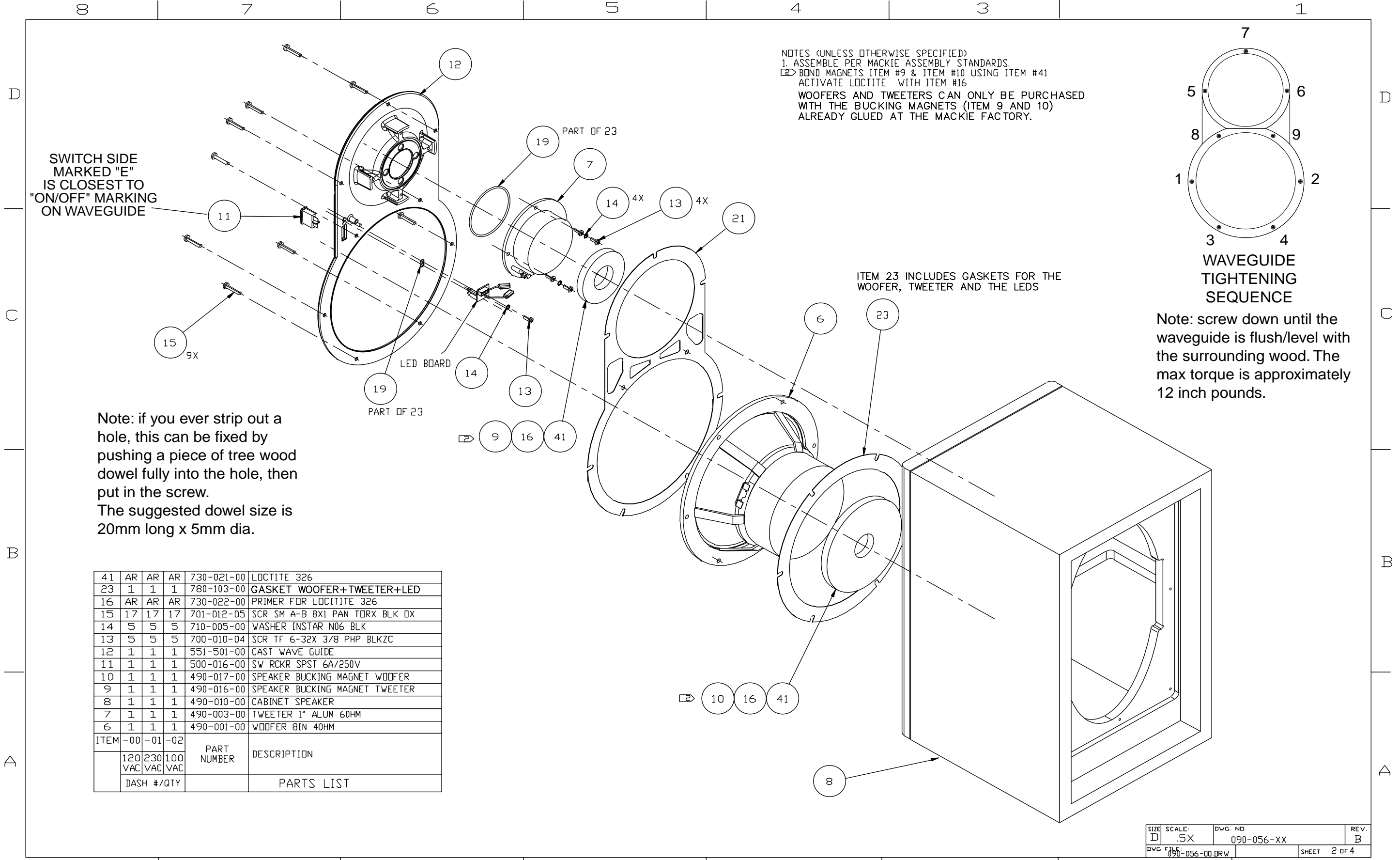
ITEM	-00	-01	-02			
	120	230	100	PART	DESCRIPTION	SHEET
	VAC	VAC	VAC	NUMBER		
	DASH #/QTY			PARTS LIST		



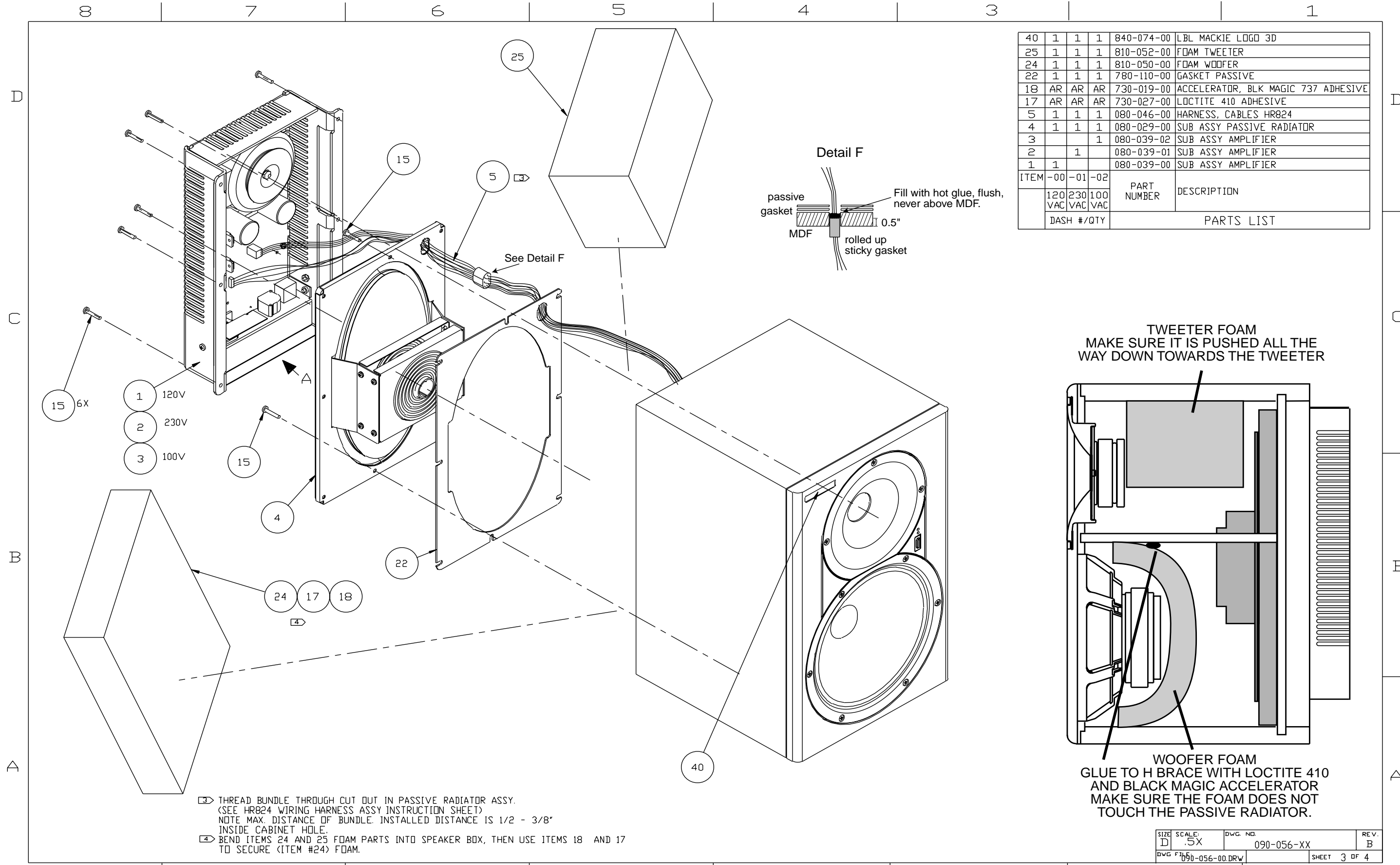
DIMENSION AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5-1994  THE INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL PROPERTY OF MACKIE DESIGNS INC.  DO NOT SCALE DRAWING	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ALL ANGLES ARE 90° TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: ± / .XXX±	APPROVALS DRAWN: BARCHER CHECKED: NP ENGINEERING: MATERIAL: MANUFACTURING: MFG ENGINEERING: ISSUED:	DATE 1/27/97	<b>MACKIE™</b> Mackie Designs Inc. Woodinville, Wa
	MATERIAL:  FINISH:	DATE 1/27/97	APPROVALS DRAWN: BARCHER CHECKED: NP ENGINEERING: MATERIAL: MANUFACTURING: MFG ENGINEERING: ISSUED:	DATE 1/27/97

SIZE	SCALE	DWG. NO.	REV.
D	.5X	090-056-XX	B
DWG FILE 090-056-00		SHEET 1 4	



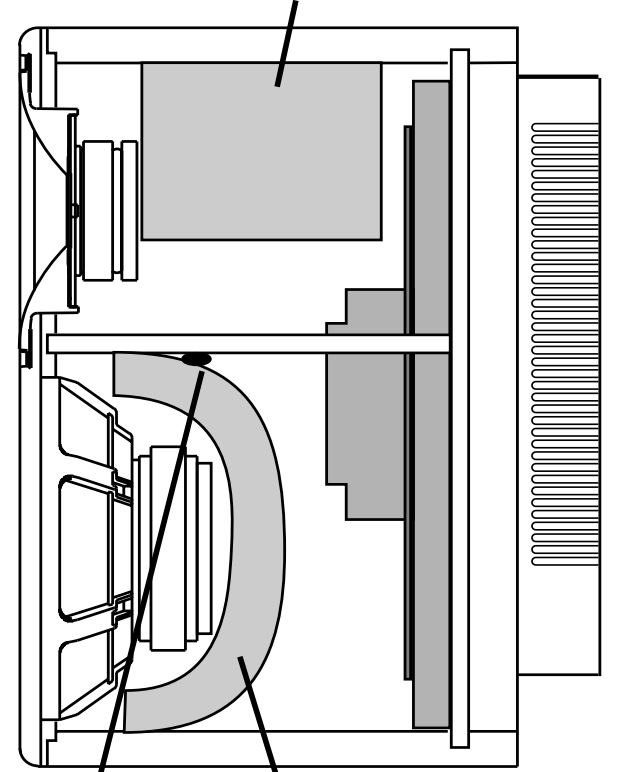
SIZE	SCALE	DWG. NO.	REV.
D	.5X	090-056-XX	B
DWG FILE	SHEET		
090-056-00.DRW	2 OF 4		



40	1	1	1	840-074-00	LBL MACKIE LOGO 3D
25	1	1	1	810-052-00	FOAM TWEETER
24	1	1	1	810-050-00	FOAM WOOFER
22	1	1	1	780-110-00	GASKET PASSIVE
18	AR	AR	AR	730-019-00	ACCELERATOR, BLK MAGIC 737 ADHESIVE
17	AR	AR	AR	730-027-00	LOCTITE 410 ADHESIVE
5	1	1	1	080-046-00	HARNESS, CABLES HR824
4	1	1	1	080-029-00	SUB ASSY PASSIVE RADIATOR
3			1	080-039-02	SUB ASSY AMPLIFIER
2			1	080-039-01	SUB ASSY AMPLIFIER
1	1			080-039-00	SUB ASSY AMPLIFIER

ITEM	-00	-01	-02	PART NUMBER	DESCRIPTION
	120	230	100		
	VAC	VAC	VAC		
	DASH #/QTY			PARTS LIST	

TWEETER FOAM  
MAKE SURE IT IS PUSHED ALL THE WAY DOWN TOWARDS THE TWEETER



WOOFER FOAM  
GLUE TO H BRACE WITH LOCTITE 410 AND BLACK MAGIC ACCELERATOR  
MAKE SURE THE FOAM DOES NOT TOUCH THE PASSIVE RADIATOR.

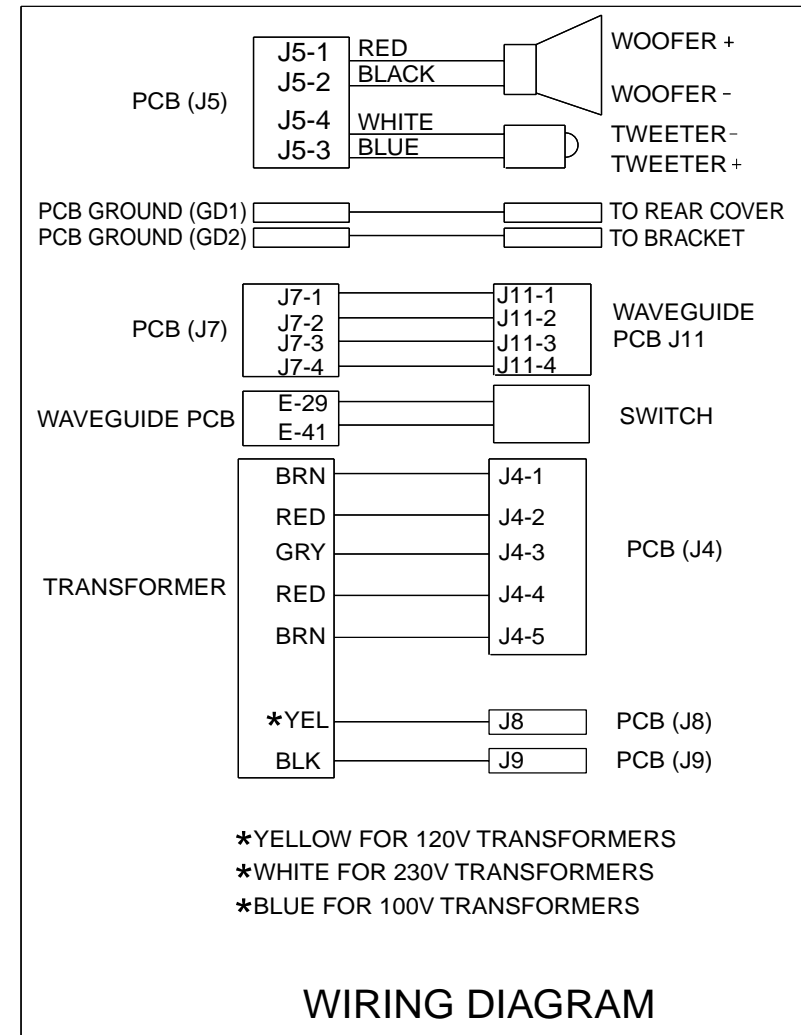
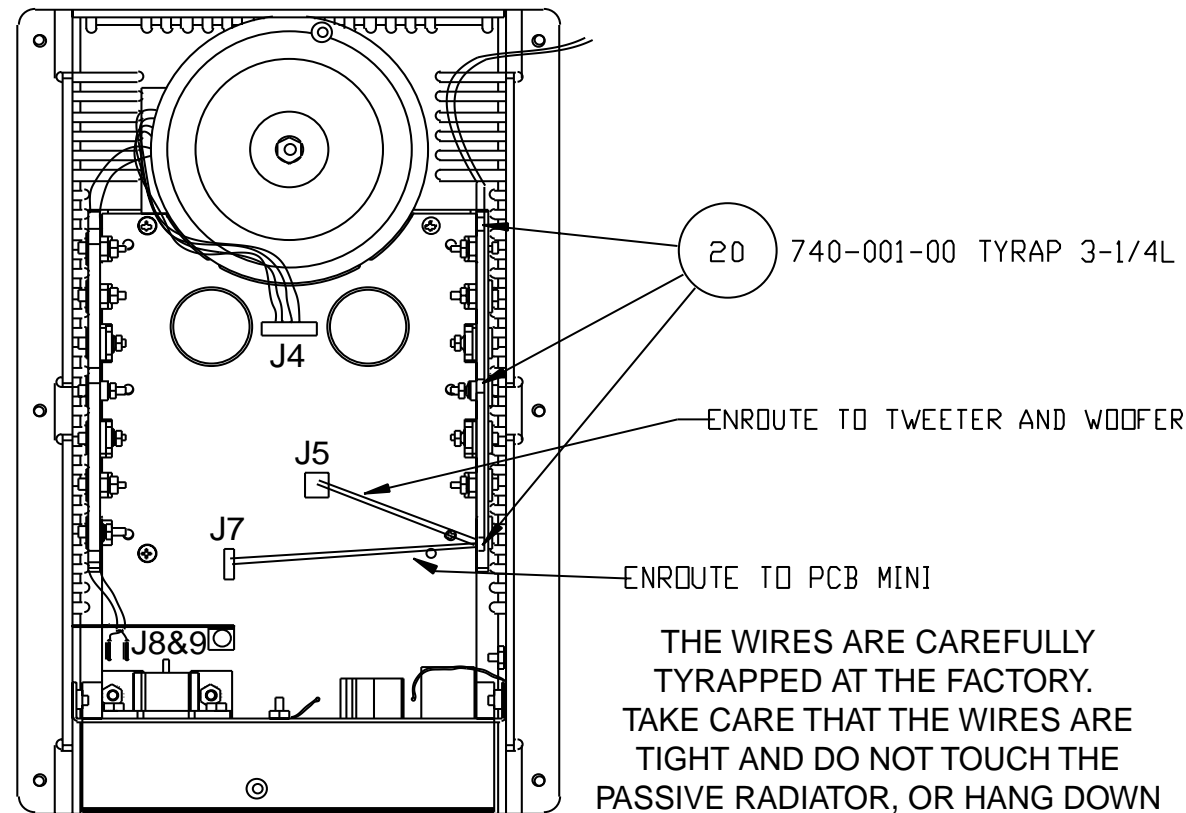
- 3 THREAD BUNDLE THROUGH CUT OUT IN PASSIVE RADIATOR ASSY. (SEE HR824 WIRING HARNESS ASSY INSTRUCTION SHEET) NOTE MAX. DISTANCE OF BUNDLE. INSTALLED DISTANCE IS 1/2 - 3/8" INSIDE CABINET HOLE.
- 4 BEND ITEMS 24 AND 25 FOAM PARTS INTO SPEAKER BOX, THEN USE ITEMS 18 AND 17 TO SECURE (ITEM #24) FOAM.

SIZE	SCALE	DWG. NO.	REV.
D	.5X	090-056-XX	B
DWG. F 090-056-00.DRW		SHEET 3 OF 4	

8 | 7 | 6 | 5 | 4 | 3 | 1

TRANSFORMER WIRING		
WIRE/PIN	COLOR	CONNECTION
1	YEL/WHT/BLU	TO J9
2	BLACK	TO J8
3	BROWN	PIN 1-J4
4	RED	PIN 2-J4
5	GREY	PIN 3-J4
6	RED	PIN 4-J4
7	BROWN	PIN 5-J4

SEE PARTS LIST FOR APPROPRIATE FUSE AND TRANSFORMER.



SIZE	SCALE:	DWG. NO.	REV.
D	.5X	090-056-XX	B
DWG FILE 090-056-00			SHEET 4 OF 4

8 | 7 | 6 | 5 | 4 | 3 | 2 | 1