



# ***SERVICE MANUAL***

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MODEL TYPE: YS1087  
***YBA300***

**WEB ACCESS:** <http://www.yorkville.com>

## **WORLD HEADQUARTERS CANADA**

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**Quality and Innovation Since 1963**  
Printed in Canada

# IMPORTANT SAFETY INSTRUCTIONS



This lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

Ce symbole d'éclair avec tête de flèche dans un triangle équilatéral est prévu pour alerter l'utilisateur de la présence d'un « voltage dangereux » non-isolé à proximité de l'enceinte du produit qui pourrait être d'ampleur suffisante pour présenter un risque de choc électrique.



## CAUTION AVIS

**RISK OF ELECTRIC SHOCK  
DO NOT OPEN**

**RISQUE DE CHOC ELECTRIQUE  
NE PAS OUVRIR**



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Le point d'exclamation à l'intérieur d'un triangle équilatéral est prévu pour alerter l'utilisateur de la présence d'instructions importantes dans la littérature accompagnant l'appareil en ce qui concerne l'opération et la maintenance de cet appareil.

### FOLLOW ALL INSTRUCTIONS

**Instructions pertaining to a risk of fire,  
electric shock, or injury to a person**

**CAUTION: TO REDUCE THE RISK OF ELECTRIC  
SHOCK, DO NOT REMOVE COVER (OR BACK).**

**NO USER SERVICEABLE PARTS INSIDE.**

**REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**

**THIS DEVICE IS FOR INDOOR USE ONLY!**

### SUIVEZ TOUTES LES INSTRUCTIONS

**Instructions relatives au risque de feu,  
choc électrique, ou blessures aux personnes**

**AVIS: AFIN DE REDUIRE LES RISQUE DE CHOC ELECTRIQUE,  
N'ENLEVEZ PAS LE COUVERT (OU LE PANNEAU ARRIERE)**

**NE CONTIENT AUCUNE PIECE REPARABLE PAR L'UTILISATEUR.**

**CONSULTEZ UN TECHNICIEN QUALIFIE POUR L'ENTRETIEN**

**CE PRODUIT EST POUR L'USAGE À L'INTÉRIEUR SEULEMENT**

**Read Instructions:** The Owner's Manual should be read and understood before operation of your unit. Please, save these instructions for future reference and heed all warnings.

Clean only with dry cloth.

**Packaging:** Keep the box and packaging materials, in case the unit needs to be returned for service.

**Warning:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. *Do not use this apparatus near water!*

**Warning:** When using electric products, basic precautions should always be followed, including the following:

#### Power Sources

Your unit should be connected to a power source only of the voltage specified in the owners manual or as marked on the unit. This unit has a polarized plug. Do not use with an extension cord or receptacle unless the plug can be fully inserted. Precautions should be taken so that the grounding scheme on the unit is not defeated. An apparatus with CLASS I construction shall be connected to a Mains socket outlet with a protective earthing ground. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

#### Hazards

Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious personal injury and serious damage to the product. Use only with cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Follow the manufacturer's instructions when installing the product and use mounting accessories recommended by the manufacturer. Only use attachments/accessories specified by the manufacturer

Note: Prolonged use of headphones at a high volume may cause health damage on your ears.

The apparatus should not be exposed to dripping or splashing water; no objects filled with liquids should be placed on the apparatus.

Terminals marked with the "lightning bolt" are hazardous live; the external wiring connected to these terminals require installation by an instructed person or the use of ready made leads or cords.

Ensure that proper ventilation is provided around the appliance. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

#### Power Cord

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. The AC supply cord should be routed so that it is unlikely that it will be damaged. Protect the power cord from being walked on or pinched particularly at plugs. If the AC supply cord is damaged DO NOT OPERATE THE UNIT. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from the AC receptacle. The mains plug of the power supply cord shall remain readily operable.

Unplug this apparatus during lightning storms or when unused for long periods of time.

#### Service

The unit should be serviced only by qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

**Veillez Lire le Manuel:** Il contient des informations qui devraient être comprises avant l'opération de votre appareil. Conservez. Gardez S.V.P. ces instructions pour consultations ultérieures et observez tous les avertissements.

Nettoyez seulement avec le tissu sec.

**Emballage:** Conservez la boîte au cas où l'appareil devait être retourner pour réparation.

**Avertissement:** Pour réduire le risque de feu ou la décharge électrique, n'exposez pas cet appareil à la pluie ou à l'humidité. *N'utilisez pas cet appareil près de l'eau!*

**Attention:** Lors de l'utilisation de produits électrique, assurez-vous d'adhérer à des précautions de bases incluant celle qui suivent:

#### Alimentation

L'appareil ne doit être branché qu'à une source d'alimentation correspondant au voltage spécifié dans le manuel ou tel qu'indiqué sur l'appareil. Cet appareil est équipé d'une prise d'alimentation polarisée. Ne pas utiliser cet appareil avec un cordon de raccordement à moins qu'il soit possible d'insérer complètement les trois lames. Des précautions doivent être prises afin d'éviter que le système de mise à la terre de l'appareil ne soit désengagé. Un appareil construit selon les normes de CLASS I devrait être raccordé à une prise murale d'alimentation avec connexion intacte de mise à la masse. Lorsqu'une prise de branchement ou un coupleur d'appareils est utilisée comme dispositif de débranchement, ce dispositif de débranchement devra demeurer pleinement fonctionnel avec raccordement à la masse.

#### Risque

Ne pas placer cet appareil sur un chariot, un support, un trépied ou une table instables. L'appareil pourrait tomber et blesser quelqu'un ou subir des dommages importants. Utiliser seulement un chariot, un support, un trépied ou une table recommandés par le fabricant ou vendus avec le produit. Suivre les instructions du fabricant pour installer l'appareil et utiliser les accessoires recommandés par le fabricant. Utilisez seulement les attachments/accessoires indiqués par le fabricant

Note: L'utilisation prolongée des écouteurs à un volume élevé peut avoir des conséquences néfastes sur la santé sur vos oreilles. .

Il convient de ne pas placer sur l'appareil de sources de flammes nues, telles que des bougies allumées.

L'appareil ne doit pas être exposé à des égouttements d'eau ou des éclaboussures et qu'aucun objet rempli de liquide tel que des vases ne doit être placé sur l'appareil.

Assurez que l'appareil est fourni de la propre ventilation. Ne procédez pas à l'installation près de source de chaleur tels que radiateurs, registre de chaleur, fours ou autres appareils (incluant les amplificateurs) qui produisent de la chaleur.

Les dispositifs marqués d'une symbole "d'éclair" sont des parties dangereuses au toucher et que les câblages extérieurs connectés à ces dispositifs de connexion extérieure doivent être effectués par un opérateur formé ou en utilisant des cordons déjà préparés.

#### Cordon d'Alimentation

Ne pas enlever le dispositif de sécurité sur la prise polarisée ou la prise avec tige de mise à la masse du cordon d'alimentation. Une prise polarisée dispose de deux lames dont une plus large que l'autre. Une prise avec tige de mise à la masse dispose de deux lames en plus d'une troisième tige qui connecte à la masse. La lame plus large ou la tige de mise à la masse est prévu pour votre sécurité. La prise murale est désuète si elle n'est pas conçue pour accepter ce type de prise avec dispositif de sécurité. Dans ce cas, contactez un électricien pour faire remplacer la prise murale. Évitez d'endommager le cordon d'alimentation. Protégez le cordon d'alimentation. Assurez-vous qu'on ne marche pas dessus et qu'on ne le pince pas en particulier aux prises. **N'UTILISEZ PAS L'APPAREIL** si le cordon d'alimentation est endommagé. Pour débrancher complètement cet appareil de l'alimentation CA principale, déconnectez le cordon d'alimentation de la prise d'alimentation murale. Le cordon d'alimentation du bloc d'alimentation de l'appareil doit demeurer pleinement fonctionnel.

Débranchez cet appareil durant les orages ou si inutilisé pendant de longues périodes.

#### Service

Consultez un technicien qualifié pour l'entretien de votre appareil. L'entretien est nécessaire quand l'appareil a été endommagé de quelque façon que se soit. Par exemple si le cordon d'alimentation ou la prise du cordon sont endommagés, si il y a eu du liquide qui a été renversé à l'intérieur ou des objets sont tombés dans l'appareil, si l'appareil a été exposé à la pluie ou à l'humidité, si il ne fonctionne pas normalement, ou a été échappé.

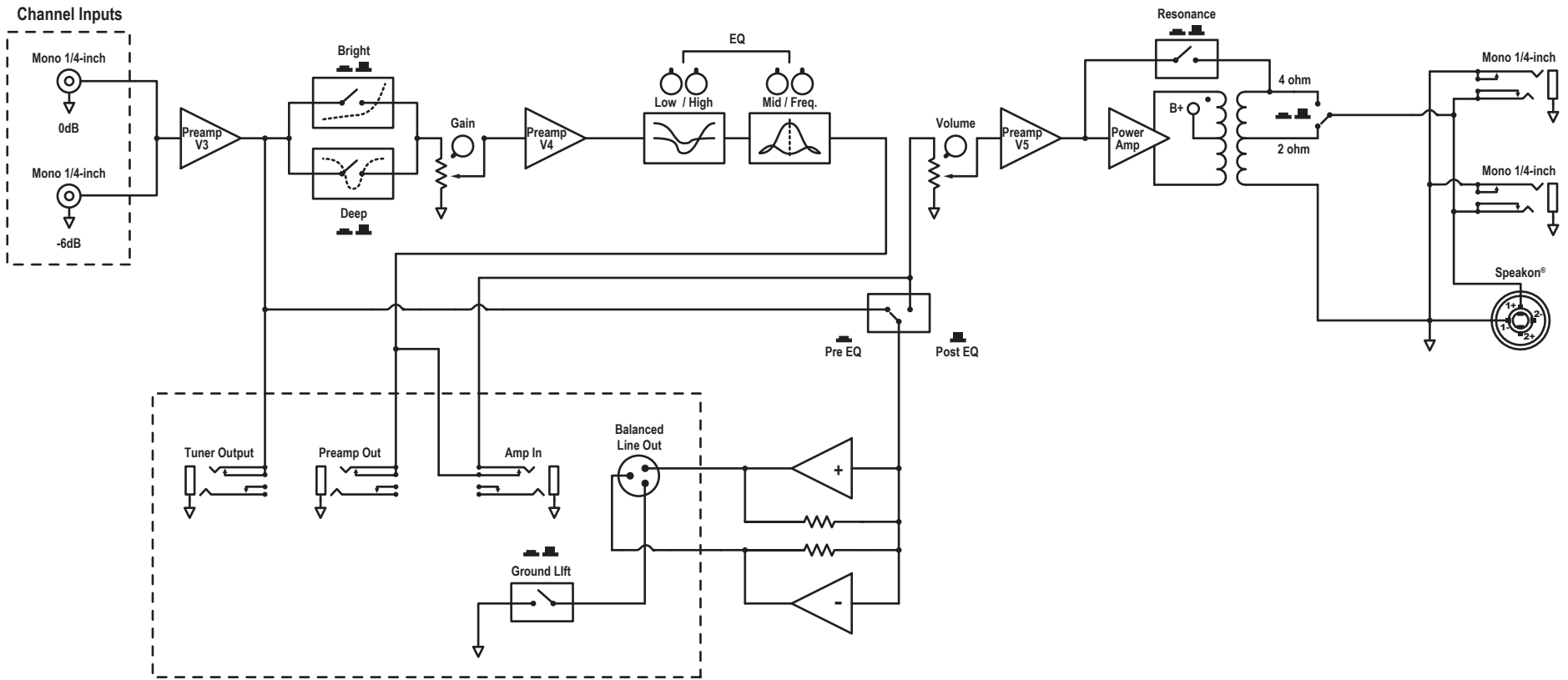
## Specifications

<b>Type</b>	All Tube Bass Head
<b>Power @ min. impedance (Watts)</b>	300 @ 2/4 ohms switchable
<b>Minimum Impedance (ohms)</b>	2
<b>Burst Power - 2 cycle</b>	400 Watts
<b>Frequency Response (Hz +/-3dB)</b>	30 - 16,000
<b>Hum and Noise (dB)</b>	-90db
<b>Input Channels</b>	1
<b>Channel 1 - inputs</b>	2 x 1/4inch
<b>Channel 1 - controls</b>	Gain
<b>Master Volume Control</b>	Yes
<b>Main Tone Controls</b>	Treble, Mid, Frequency, Bass, Bright Switch, Deep Switch, Resonance Switch
<b>Input Sensitivity (mV)</b>	20
<b>Master Outputs</b>	Pre-amp out (Pre Master)
<b>Line Out (type / configuration)</b>	XLR Balanced (Pre/Post, Grnd Lift)
<b>Line Out Sensitivity (Vrms)</b>	200mV
<b>Effects Loop / Location</b>	Pre-amp out, Power Amp in, Loop Thru
<b>Effects Return Sensitivity (Vrms)</b>	1V
<b>LED Indicators</b>	Power/Standby
<b>External speaker output / location</b>	2 x 1/4inch, 1 Speakon (Rear) Impedance Selector (2/4 ohms)
<b>Other Features</b>	Tubes: 3x12AX7, 1x12AU7, 12xEL34 Tuner output 1/4inch
<b>Dimensions (DWH, inches)</b>	11.5 x 24 x 10
<b>Dimensions (DWH, cm)</b>	29 x 61 x 25.4
<b>Weight (lbs / kg)</b>	51 / 23

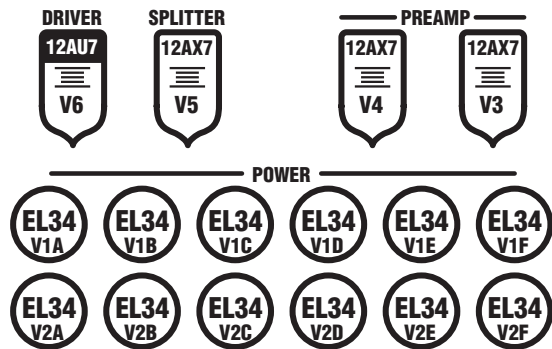
MODEL TYPE: YS1087

# Block Diagram for YBA300

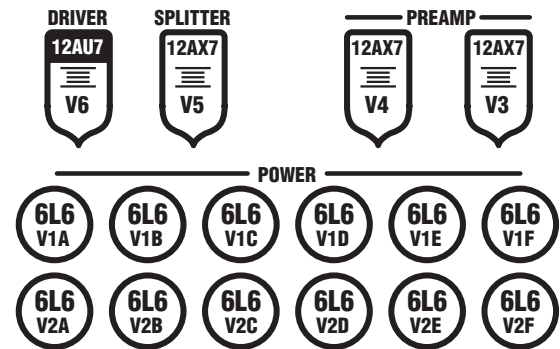
DESIGNED AND MANUFACTURED BY YORKVILLE SOUND

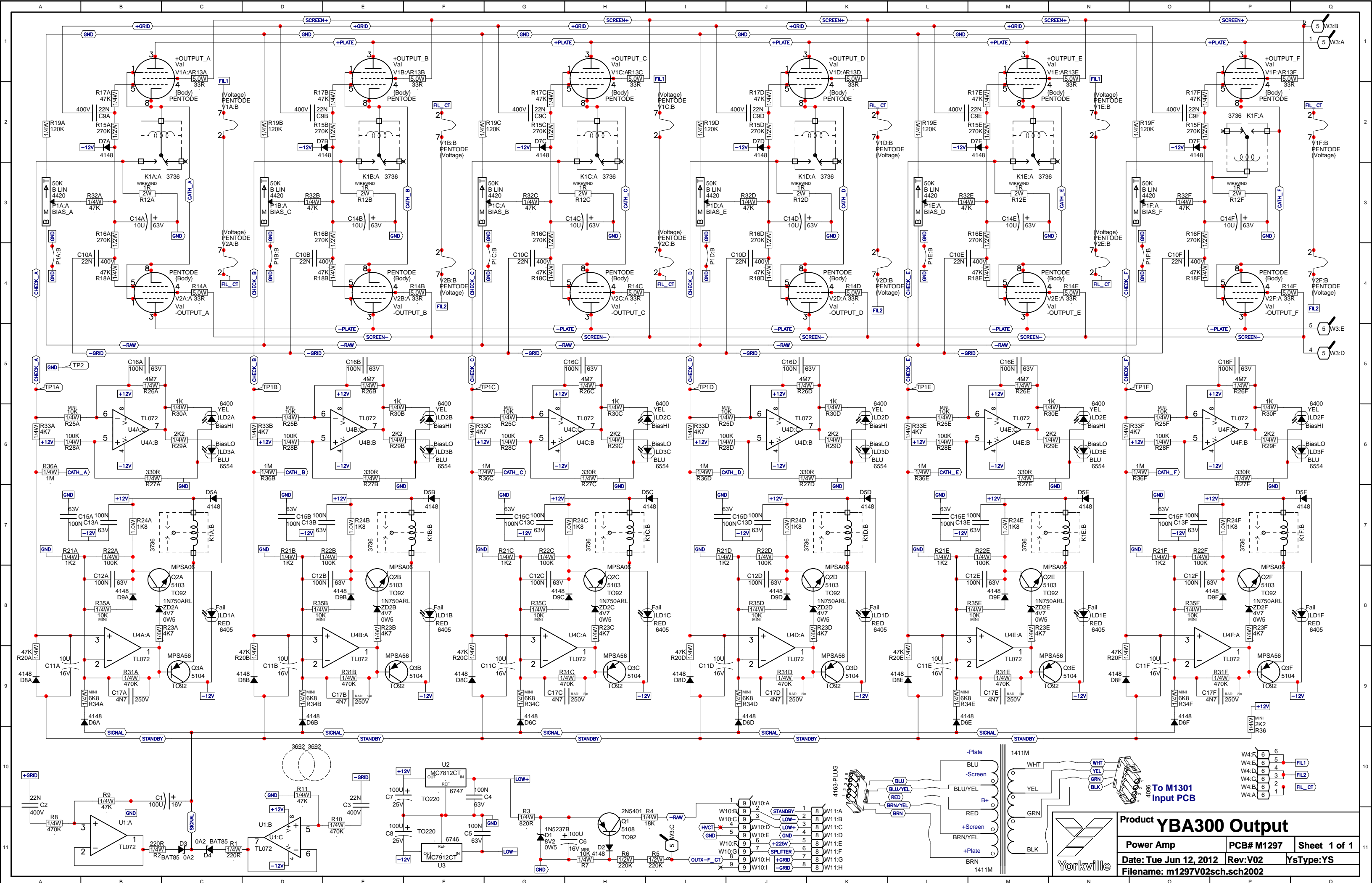


## TRAYNOR YBA300



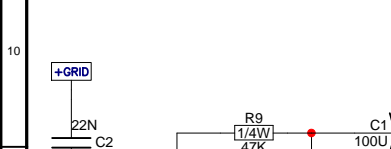
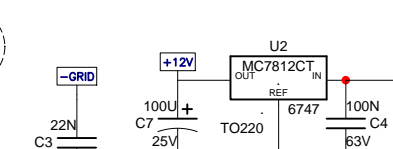
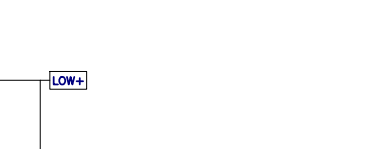
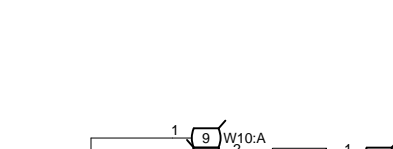
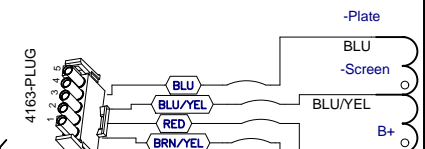
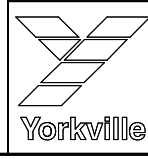
## TRAYNOR YBA300





**Product YBA300 Output**

Power Amp	PCB# M1297	Sheet 1 of 1
Date: Tue Jun 12, 2012	Rev:V02	YsType:YS
Filename: m1297V02sch.sch2002		







# PROPOSAL FOR CHANGE

PRIORITY	NORM	X-JOB	PC No.	TEMP
P	N	X	8437	T

REJECTED The Proposal for Change has been reviewed and considered but will *not* be implemented. DATE

DATE REQUIRED:

PCBSA #57	Wiring #55	T&R #70	WACM #52	P/Engineering #25	Sales #10
PCBM #58	Metal Fab #50	Finishing #65	Board & Test #53	LAB #20	Service #09
Auto Insertion #59	W/Shop #60	Chas Screening #51	QC #65		

MODEL	PCB/CHAS	VERSION	TASK ORDER
YBA300	m1291		

APPROVAL	
SL	<i>[Signature]</i>
BW	<i>[Signature]</i>
TW	<i>[Signature]</i>
PM	<i>[Signature]</i>
DESIGNER	

ORIGINATOR	
FROM	RAY HEMBEAULT
DEPT	LAB.
DATE	APRIL 9, 2012.
ORIGINATOR'S SIGNATURE	UPON COMPLETION
DESIGNER'S SIGNATURE	UPON COMPLETION

DESCRIPTION OF CHANGE	DOCUMENT UPDATE/CORRECTION	PROGRAM UPDATE/CORRECTION
- CHANGE C2 & C3 TO 22N/250V (5840)		

**REASON FOR CHANGE**

- TO PREVENT PREMATURE SHUTDOWN AT LOW FREQUENCIES.

<input type="checkbox"/> Update units coming in for SERVICE?	Will a model or prototype be needed?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<input type="checkbox"/> Update FINISHED units in warehouse?	Will the current test fixtures be affected?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
<input checked="" type="checkbox"/> UPDATE WIP?	If yes, what is the estimated cost of fixture?		
<input type="checkbox"/> Electrical compliance affected?	Before serial number		
By doing this change, are units currently out in field compatible?		<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

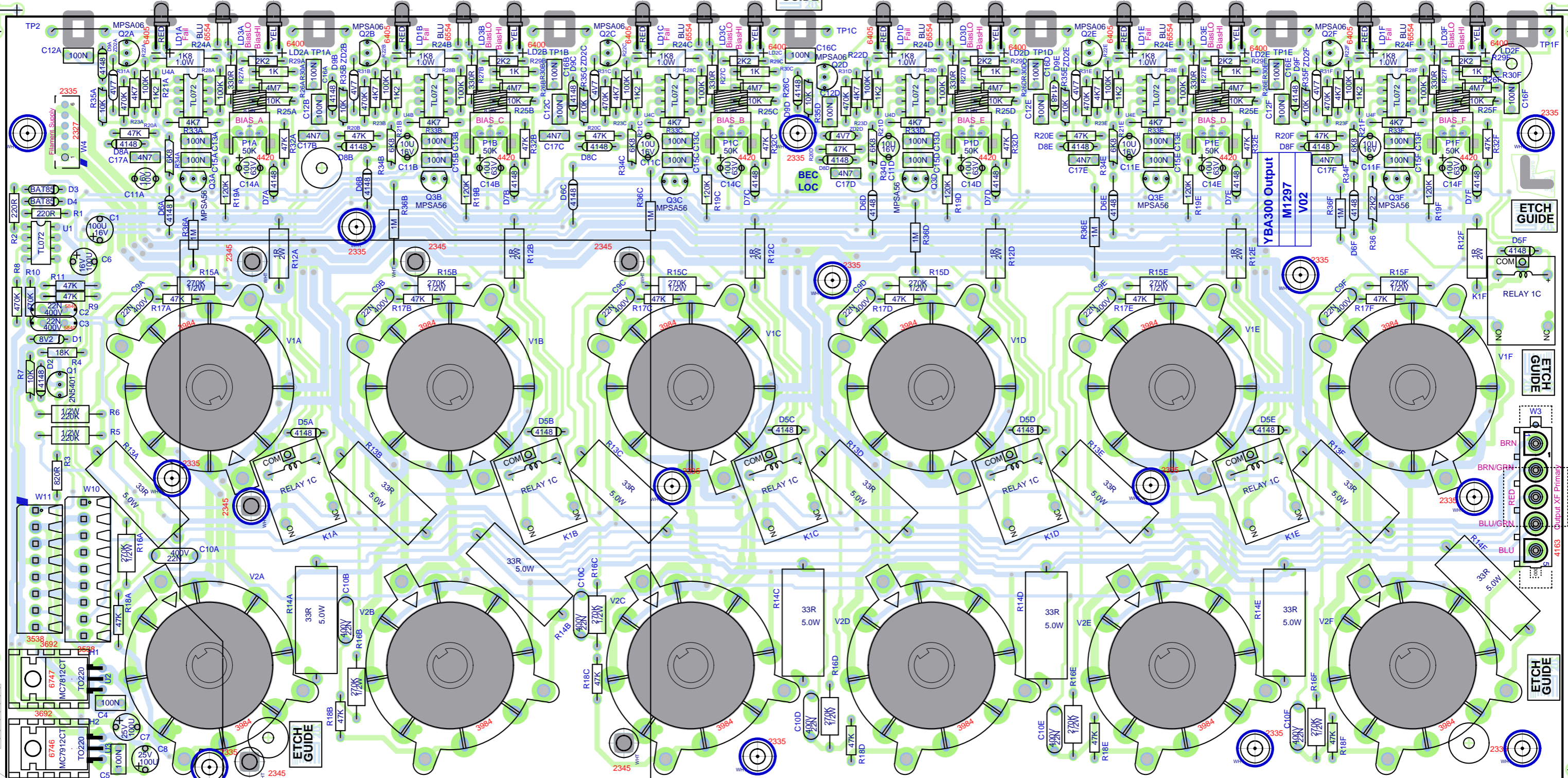
PART	DESCRIPTION	OLD	NEW	D	M	A	COST/UNIT	TOTAL

<input type="checkbox"/> <b>PRIORITY</b> Priority will be given to these PC's and will be implemented by the date required.	<input checked="" type="checkbox"/> <b>X-JOB</b> These PC's will be collected and implemented in the future when or if other PC's are being executed for the product
<input type="checkbox"/> <b>NORM</b> These PC's will be collected and processed normally, executed when time and manpower permits.	<input type="checkbox"/> <b>TEMP</b> Temporary changes will be made for the stated run only!

Peter Afshin Pete George Andrew Adel Henry James Carl L.

MAKE A NEW COPY EVERYTIME. CHANGES ARE BEING MADE ALL THE TIME





CLINCH ORIGIN

INSERT ORIGIN

VCC

Top M1297 V02

Bottom M1297

Pcb Mech M1297V02  
Top Assy M1297V02

2ozCopper

SEE LAYOUT DOCUMENTATION

SEE LAYOUT DIAGRAM

# M1297 PRODUCTION NOTES

M1297 PCB History			
MODEL(S):- YBA300			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	Aug 09	1.00P0	First Prototype
2	2010/01/20	1.00p1	Complete re-design. Bias moved to back.
3	2010/02/22	1.00p2	Added R36 to standby bus.
4	2010/09/03	.	Split screen net into +&- . Added header for X-F. Tweak bias.
5	2010/09/23	1.00	Changed #4646 to 650 pattern.
6	2010/12/10	.	Chg R33A-F from 10k to 4k7. Final proto building 50pcs.
7	2011/01/25	2.00	PC8214: Add R36A-F, C17A-F. Move BEC_LOC and VCD. GG
8	12-JUN-2012	V02	PC8437: CHANGE C2, C3 TO #5840 22N 250V GG
9	D	V	N
10	D	V	N
11	D	V	N
12	D	V	N
13	D	V	N
1	D	V	N
2	D	V	N
3	D	V	N
4	D	V	N
5	D	V	N
6	D	V	N
7	D	V	N
8	D	V	N
9	D	V	N
10	D	V	N
11	D	V	N
12	D	V	N
13	D	V	N

M1297 Drilling History			
MODEL(S):- YBA300			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	D	V	N
2	D	V	N
3	D	V	N
4	D	V	N
5	D	V	N
6	D	V	N

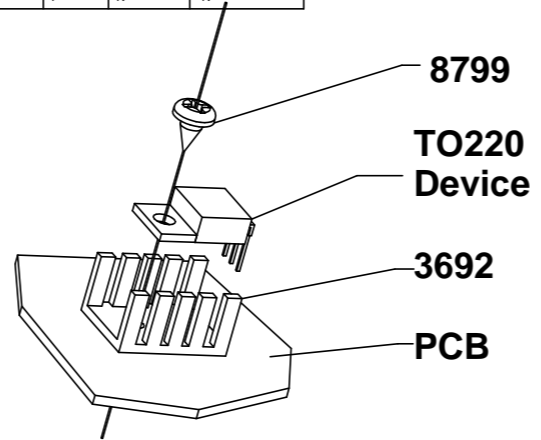
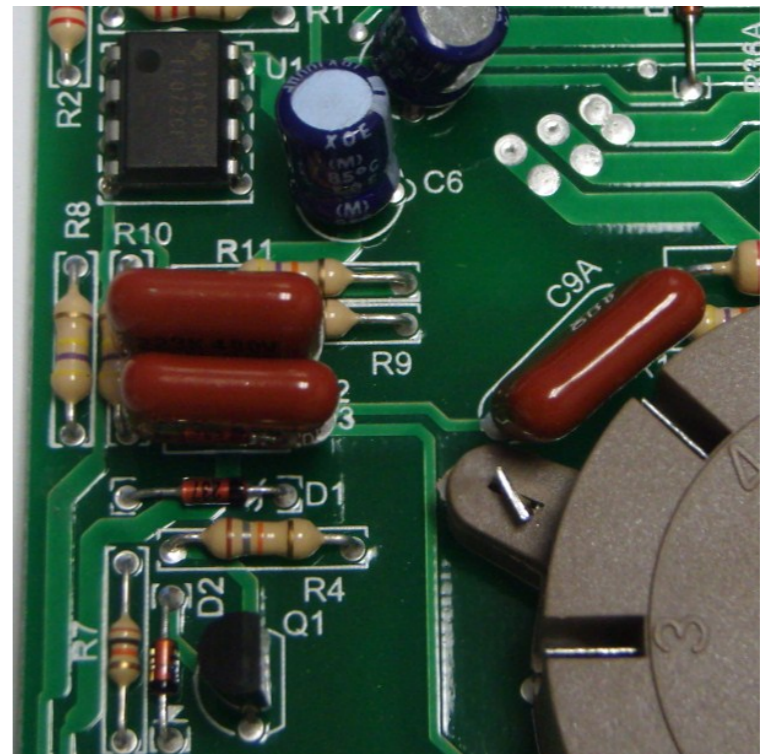
M1297 PENDING CHANGES	
MODEL(S):- YBA300	
#	PC#
1	PC
2	PC
3	PC
4	PC
5	PC
6	PC

\*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY

M1297 Potlist				
MODEL(S):- YBA300				
REF	FUNCTION	PART#	KNOB	{NEW}
P1A	BIASA	4420	K	N
P1B	BIASB	4420	K	N
P1C	BIASC	4420	K	N
P1D	BIASD	4420	K	N
P1E	BIASE	4420	K	N
P1F	BIASF	4420	K	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N

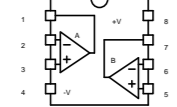
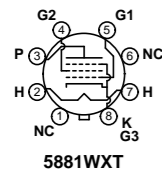
1. Six #2345 spacers mount on top of the board.
2. Put the knobs on all the pots with glue before mounting the pcb.
3. C2, C3 #5840 are manual insert. See picture PC8437.

PC8437 PHOTO



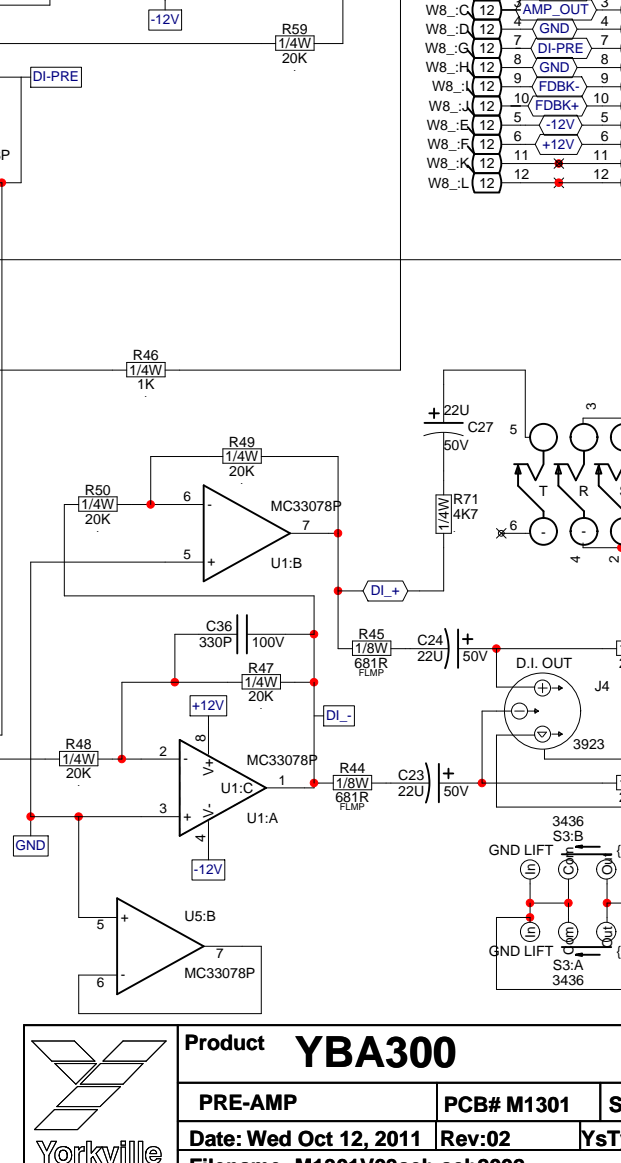
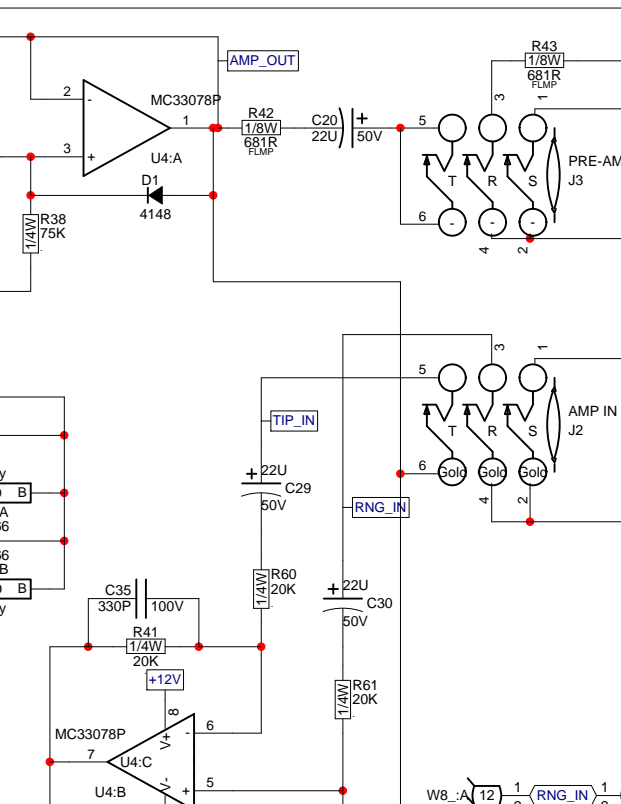
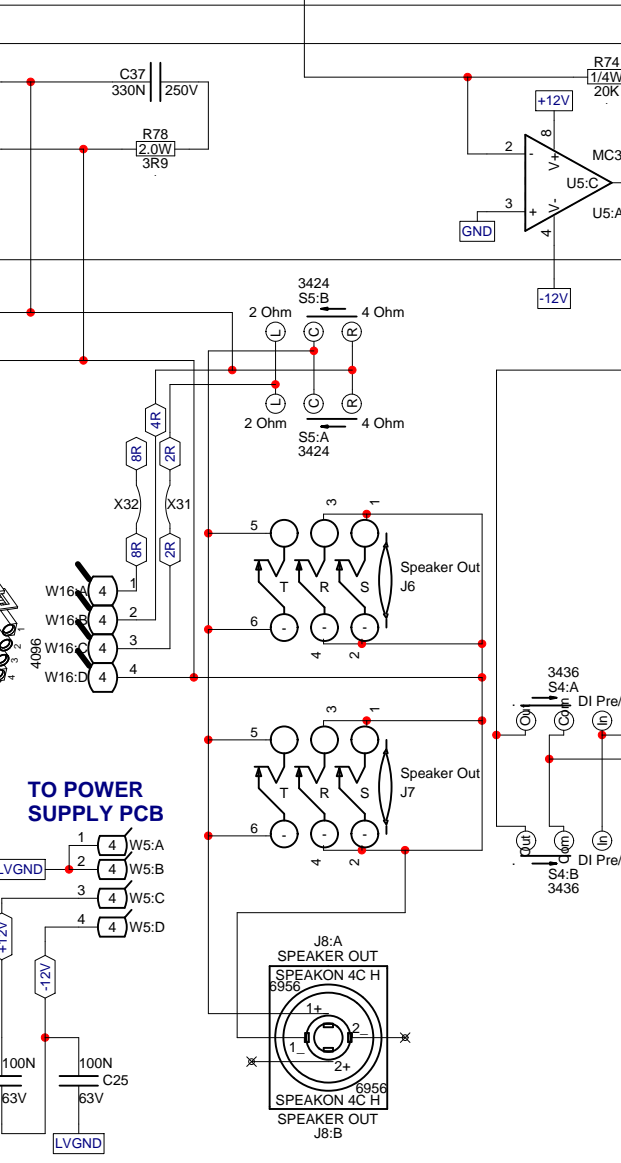
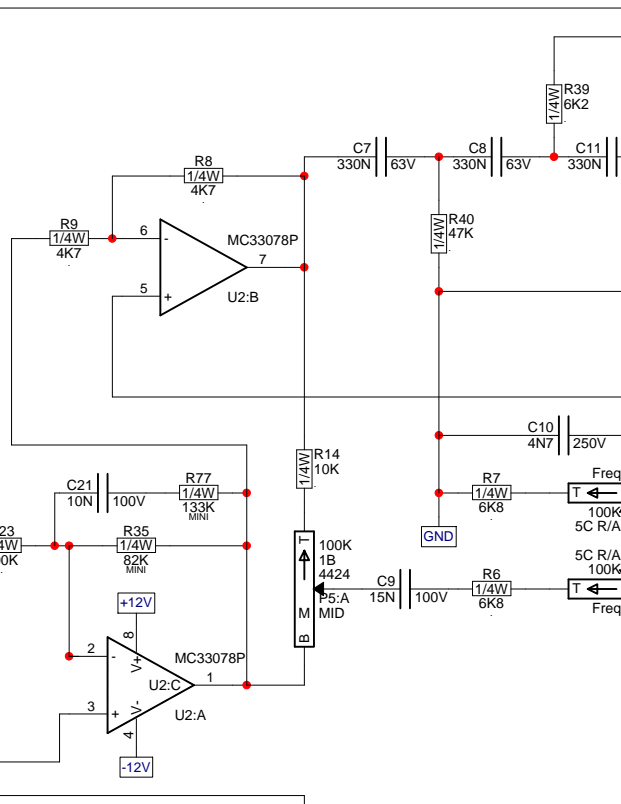
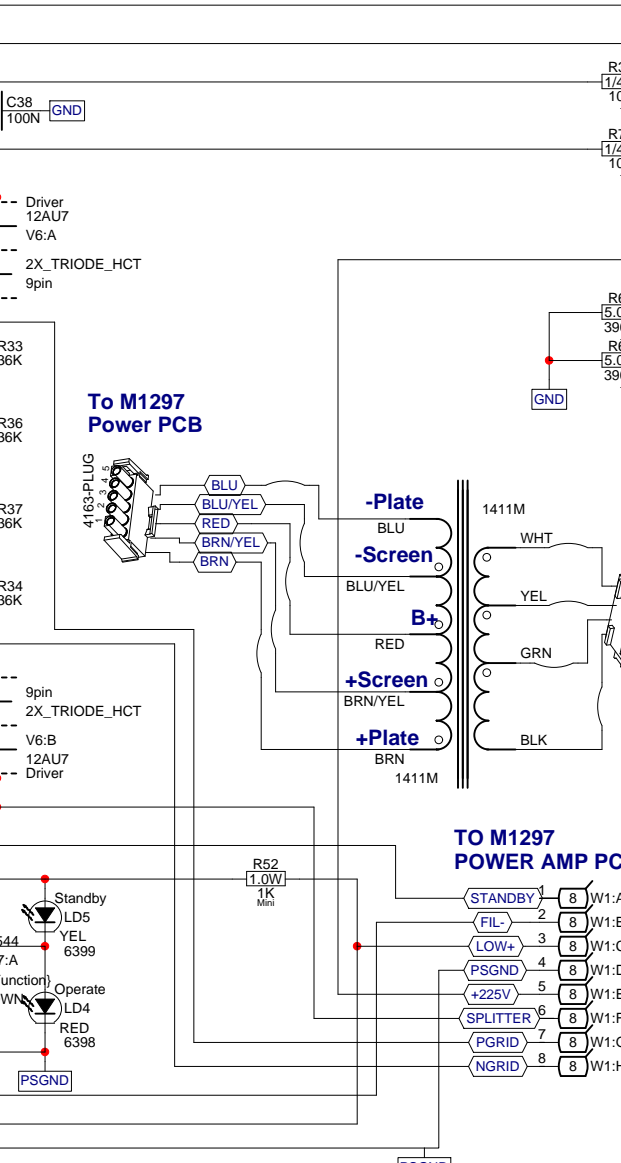
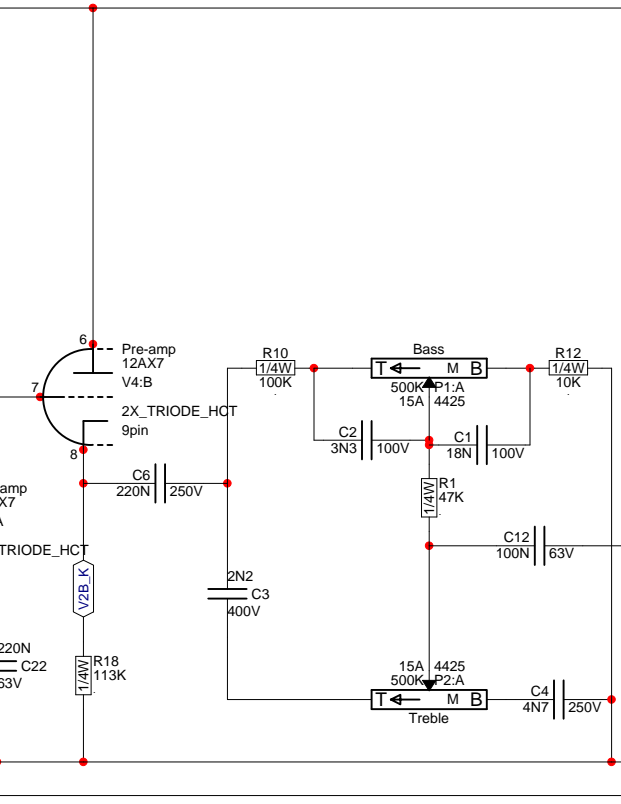
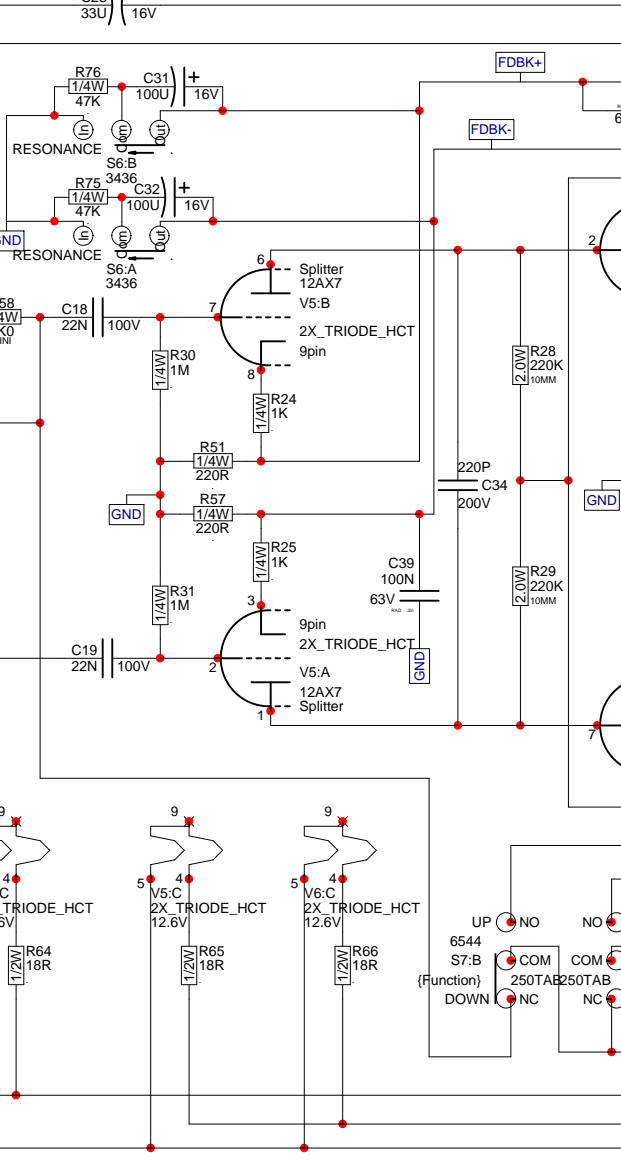
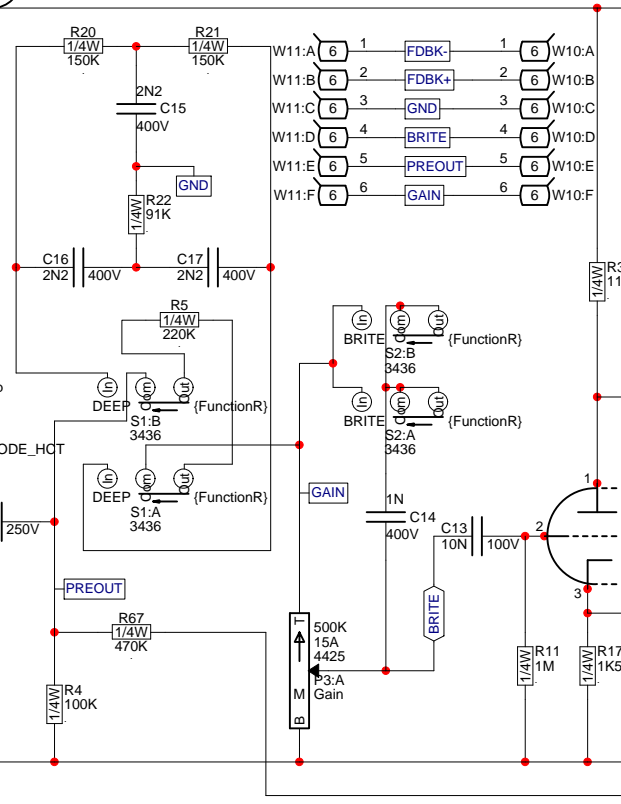
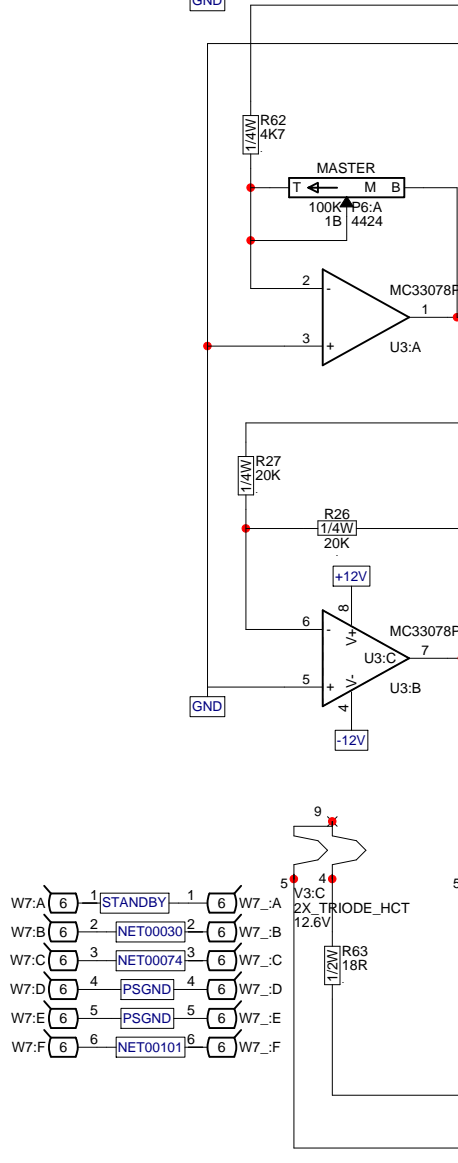
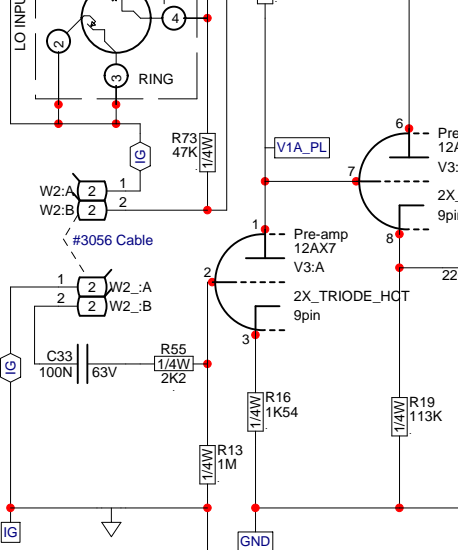
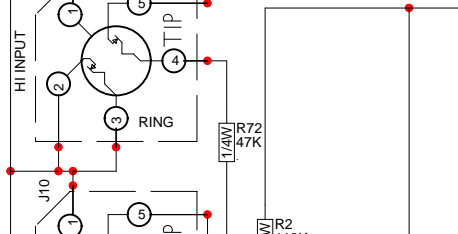
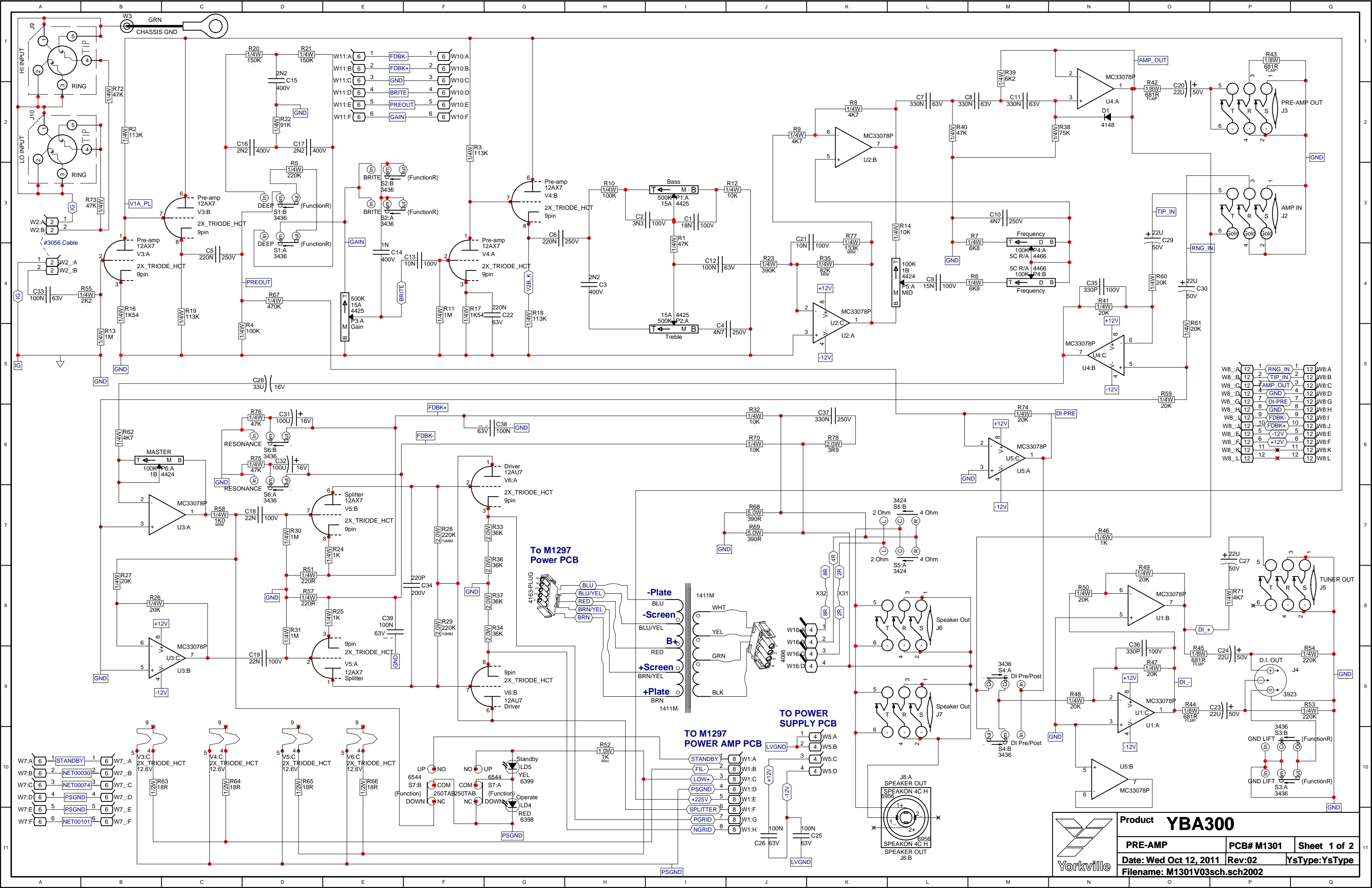
LEAD/PIN REFERENCE

2N5401  
2N5551  
MPSA06  
MPSA13  
MPSA43  
MPSA56  
MPSA63  
  
E B C  
TO-92



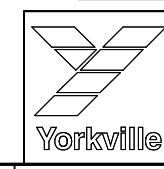
5881WXT





**Product YBA300**

PRE-AMP	PCB# M1301	Sheet 1 of 2
Date: Wed Oct 12, 2011	Rev:02	YsType:YsType
Filename: M1301V03sch.sch2002		



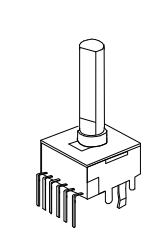
M1301.PCB\_DATABASE\_HISTORY

MODEL(S):- YBA300			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	2010/02/02	1.00p1	All new layout.
2	2010/09/10	1.00p2	Value changes for sound tweaks. Change x-f to connector.
3	.	.	Add shield to switch pcb. Move DI switch to back.
4	2010/10/13	1.00p3	Change input link to #2345 connectors with 3056 cable.
5	.	.	Moved some XH connectors to make them accessible
6	2010/12/10	1.00	Final proto and first run build.
7	2011/01/05	.	Deleted 'Polarized' attribute from C22
8	2011/04/06	2.00	Revised per PC# 8247
9	.	.	Added two 100N caps C38 and C39
10	12-JULY-2011	V03	PC8294: Add W3 and GRN wire to chassis. GG
11	12-OCT-2011	.	PC8303: USE ONLY MC33078 FOR #6840 GG
12	D	V	N
13	D	V	N

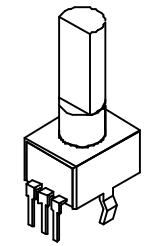
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2	D	V	N
3	D	V	N
4	D	V	N
5	D	V	N
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1	D	V	N
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10	D	V	N
11	D	V	N
12	D	V	N
13	D	V	N

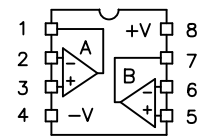
M1301 POTLIST				
MODEL(S):- YBA300				
REF	FUNCTION	PART#	KNOB	{NEW}
P3	GAIN	4425	8430	N
P1	BASS	4424	8430	N
P5	MID	4424	8430	N
P4	FREQ	4466	8430	N
P2	TREBLE	4424	8430	N
P6	MASTER	4424	8430	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N



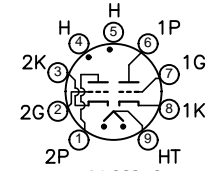
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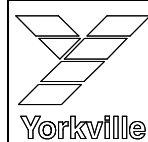
"STYLE\_P32"



6840 PC  
MC33078

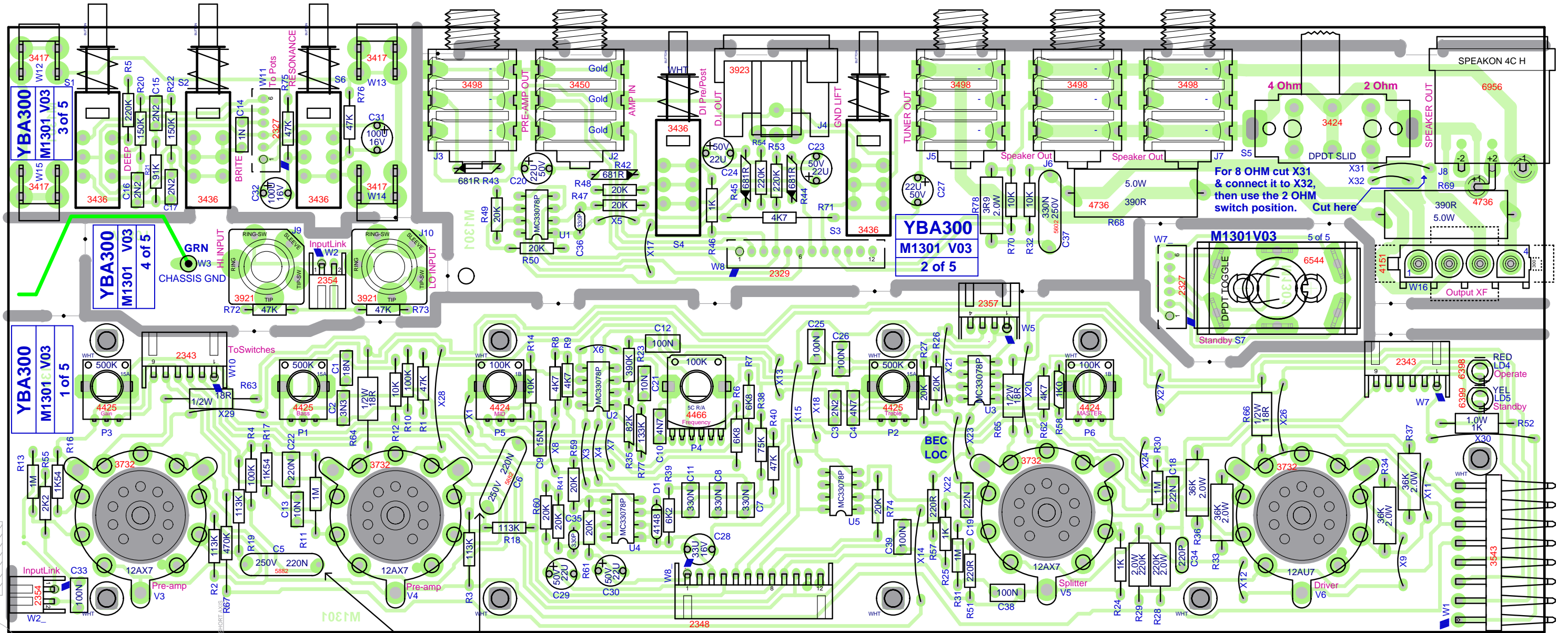


12AX7A  
12AU7



Product <b>YBA300</b>		
NOTES	PCB# M1301	Sheet 2 of 2
Date: Wed Oct 12, 2011	Rev:02	YsType:YsType
Filename: M1301V03sch.sch2002		

StepAndRepeat - X1@0.000Y2@4.925



# M1301 V03

BEND DOWN C5 AND C6

SEE LAYOUT DOCUMENTATION

BlankSize - 13500x10850

Pcb Mech M1301V03  
Top Assy M1301V03

ETCH GUIDE

ETCH GUIDE

CLINCH ORIGIN

INSERT ORIGIN

LONG AXIS

RED LD4 Operate  
YEL LD5 Standby

For 8 OHM cut X31 & connect it to X32, then use the 2 OHM switch position. Cut here

YBA300  
M1301 V03  
2 of 5

YBA300  
M1301 V03  
1 of 5

YBA300  
M1301 V03  
4 of 5

YBA300  
M1301 V03  
3 of 5

M1301V03  
5 of 5  
DPDT TOGGLE  
Standby S7

SPEAKON 4C H

Output XF

DPDT SLID

SPEAKER OUT

4 Ohm 2 Ohm

5.0W 5.0W

390R 4736

390R 4736

390R 4736

1.0W 1K

36K 2.0W

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# M1301



SEE LAYOUT DIAGRAM



## M1301.PCB\_DATABASE\_HISTORY

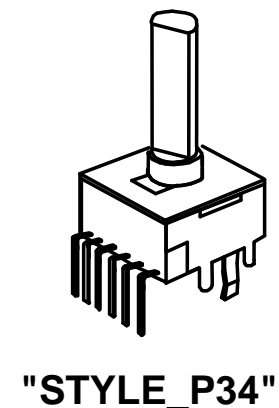
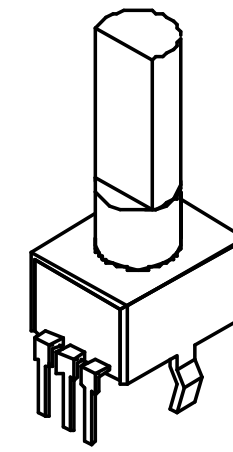
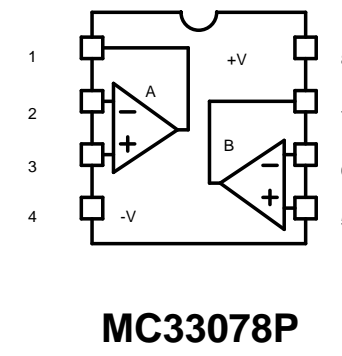
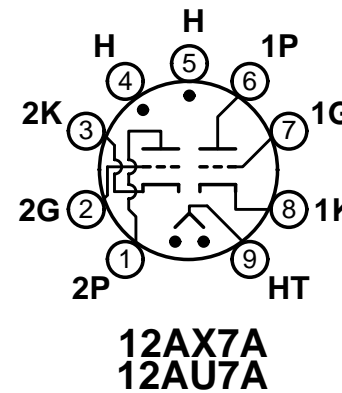
MODEL(S):- YBA300			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	2010/02/02	1.00p1	All new layout.
2	2010/09/10	1.00p2	Value changes for sound tweaks. Change x-f to connector
3	.	.	Add shield to switch pcb. Move DI switch to back.
4	2010/10/13	1.00p3	Change input link to #2345 connectors with 3056 cable.
5	.	.	Moved some XH connectors to make them accessible
6	2010/12/10	1.00	Final proto and first run build.
7	2011/01/05	.	Deleted 'Polarized' attribute from C22
8	2011/04/06	2.00	Revised per PC# 8247
9	.	.	Added two 100N caps C38 and C39
10	12-JULY-2011	V03	PC8294: Add W3 and GRN wire to chassis. GG
11	12-OCT-2011	.	PC8303: USE ONLY MC33078 FOR #6840 GG
12	D	V	N
13	D	V	N
1	D	V	N
2	D	V	N
3	D	V	N
4	D	V	N
5	D	V	N
6	D	V	N
7	D	V	N
8	D	V	N
9	D	V	N
10	D	V	N
11	D	V	N
12	D	V	N
13	D	V	N
1	D	V	N
2	D	V	N
3	D	V	N
4	D	V	N
5	D	V	N
6	D	V	N
7	D	V	N
8	D	V	N
9	D	V	N
10	D	V	N
11	D	V	N
12	D	V	N
13	D	V	N

## M1301.PCB\_DATABASE\_HISTORY

MODEL(S):- YBA300			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	D	V	N
2	D	V	N
3	D	V	N
4	D	V	N
5	D	V	N
6	D	V	N
M1301 PENDING CHANGES			
MODEL(S):- YBA300			
#	PC#	PENDING CHANGE	
1	PC	X	
2	PC	X	
3	PC	X	
4	PC	X	
5	PC	X	
6	PC	X	

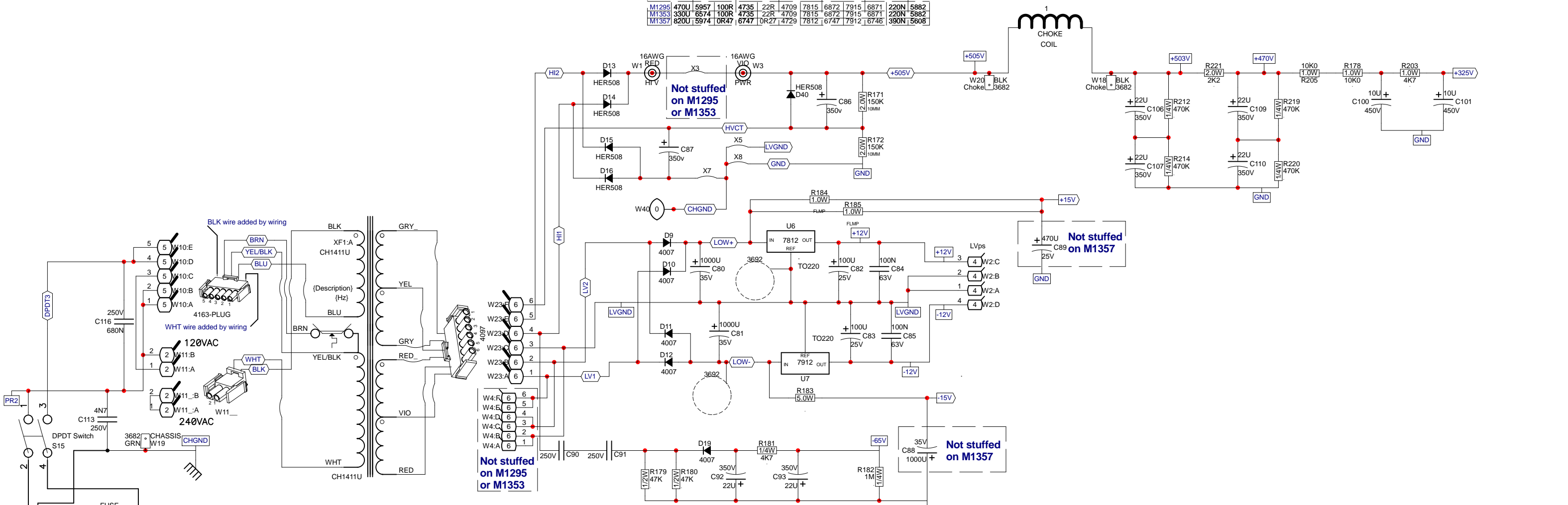
\*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY

### LEAD/PIN REFERENCE



### Variant Parts

PCB#	C86 and C87		R184 & 185		R183		U6		U7		C90 & C91	
	Value	Part#	Value	Part#	Value	Part#	Value	Part#	Value	Part#	Value	Part#
M1295	470U	5957	100R	4735	22R	4709	7815	6872	7915	6871	220N	5882
M1353	330U	6574	100R	4735	22R	4709	7815	6872	7915	6871	220N	5882
M1357	820U	5974	0R47	6747	0R27	4729	7812	6747	7912	6746	390N	5608



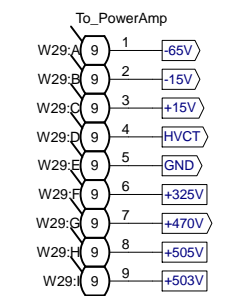
Not stuffed on M1295 or M1353

Not stuffed on M1357

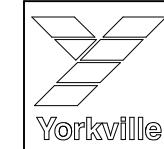
Not stuffed on M1295 or M1353

Not stuffed on M1357

### Power Amp Header



X8017 PCB_DATABASE_HISTORY			
MODEL(S):-		YBA300	
#	DATE	VER#	DESCRIPTION OF CHANGE
1	2010/06/17	1.00p0	New board with XF connectors.
2	.	.	Eyelets on PS caps, W1 and W3 changed to normal.
3	2010/09/08	1.00p1	Re-arranged AC input to prevent connector collisions.
4	.	.	.
5	.	.	.
6	.	.	.
7	19APR2011	V01	PC8247: CHANGE C90&C91 TO #5608 390N GG
8	.	.	PC8226: Add RTV hole under C116 GG
9	.	.	.
10	.	.	.
11	.	.	.
12	.	.	.
13	.	.	.



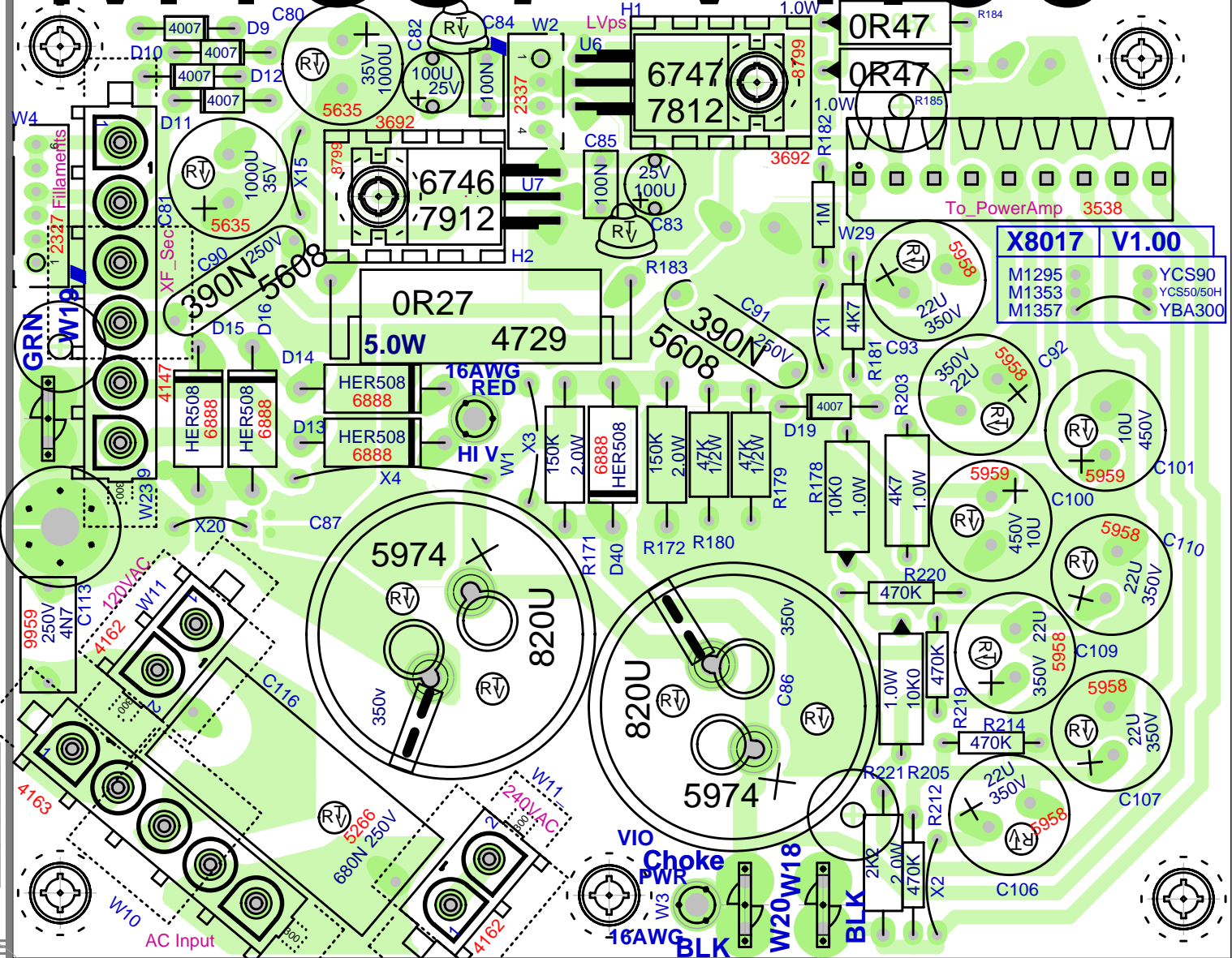


# M1357 V1.00

# YBA300

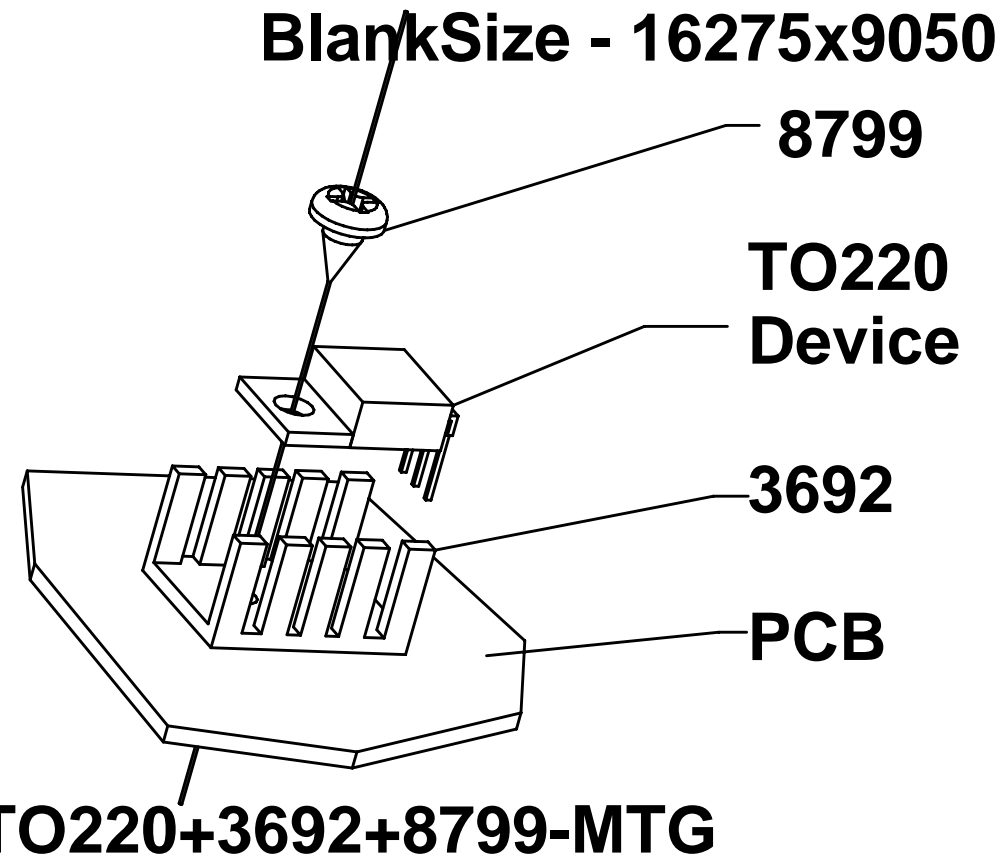
BlankSize - 16275x9050

CHASSIS



<b>X8017</b>	<b>V1.00</b>
M1295	YCS90
M1353	YCS50/50H
M1357	YBA300

BEC  
LOC



INSERT  
ORIGIN

ETCH  
GUIDE

SEE LAYOUT DOCUMENTATION



**SEE LAYOUT DIAGRAM**



**X8017 PRODUCTION NOTES ( M1357 M1353 M1295 )**

1. BEFORE CLINCHING, BREAK PANEL IN 2 ALONG LINE WHERE INDICATED.

2. B.A. Variant parts:

BOARD	C86	C87	BOARD	U7	U6
M1295	#5857, 470U	#5857, 470U	M1295	#6871, 15V	#6872, 15V
M1353	#6574, 330U	#6574, 330U	M1353	#6871, 15V	#6872, 15V
M1357	#5974, 820U	#5974, 820U	M1357	#6746, 12V	#6747, 12V

BOARD	R183	BOARD	C90 & C91
M1295	#4709, 22R	M1295	#5882, 220N
M1353	#4709, 22R	M1353	#5882, 220N
M1357	#4729, 0R27	M1357	#5608, 390N

BOARD	C89	C89
M1295	#5635, 1000U	#5618, 470U
M1353	#5635, 1000U	#5618, 470U
M1357	DNS	DNS

**X8017 PCB\_DATABASE\_HISTORY**

MODEL(S):- YBA300

#	DATE	VER#	DESCRIPTION OF CHANGE
1	2010/06/17	1.00p0	New board with XF connectors.
2	.	.	Eyelets on PS caps, W1 and W3 changed to normal.
3	2010/09/08	1.00p1	Re-arranged AC input to prevent connector collisions.
4	.	.	Changed primary to 2 + 5 pin connectors.
5	2010/12/14	1.00	Changed R220SE.093 pads to R220SENM.093 on PS caps
6	.	.	and eyelets.
7	19APR2011	V01	PC8247: CHANGE C90&C91 TO #5608 390N GG
8	.	.	PC8226: Add RTV hole under C116 GG
9	.	.	.
10	.	.	.
11	.	.	.
12	.	.	.
13	.	.	.

**YBA300 Parts List 2/7/2012**

YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.
6384	JEWELLED PILOT LAMP AMBER ROHS V1	1	4163-PLUG	CONN PLUG 5 POS. .084" V-2 FEMALE	1	8829	6-32 X 3/8 FLAT PH TAPTITE BO#C HEA	8
6398	RED 5MM LED 1V5 20MA HIGH EFF	1	4147	6 PIN POWER PIN HEADER MALE POLZED	1	8809	10-32 X 1/4 PAN PH TAPTITE JS500	2
6399	YEL 5MM LED 1V5 20MA HIGH EFF	1	3576	SOCKET TERMINAL 14-20 AWG TAPE/REEL	11	8740	5/16-18 X 3 GRD 5 HEX BOLT JS500	1
6405	RED 3MM LED 2V0 20MA BRT	6	8430	KNOB CHICKEN-BEAK	6	8770	1/4-20 X 1 5/16 TRUSS PH MS JS500	8
6554	BLUE 3MM LED 3V9 20MA	6	8649	BUTTON KNOB FLAT BLACK	5	3663	SNAP IEC PWR SOC W/.250TAB FOR .060	1
6400	YEL 3MM LED 1V9 6MA HIGHEFF	6	9921	KNOB 0-DEG GRY W/O COVERING	6	3752	SNAP IN 1/4 SPACER RICHCO	2
6825	1N4148 75V 0A45 DIODE T&R	32	3428	8' 3/18 SJT AC LINE CORD REMOVABLE	1	2335	NYLON STANDOFF NUT #4 500MIL	9
6888	HER508 1000V 3A0 DIODE ULTRAFAS	5	8268	TRAYNOR LOGO PLASTIC NICKEL PLATING	1	2342	NYLON STANDOFF NUT #4 530MIL BLACK	14
6438	1N4007 1000V 1A0 DIODE T&R	5	8900	6-32 KEPS NUT ZINC	3	2345	NYLON STANDOFF NUT #4 1INCH	6
6733	BAT85 30V 0A2 DIODE SCHT T&R	2	8787	8-32 KEPS NUT ZINC	4	3417	6-32 SCREW TERMINAL PC MNT SNAP-IN	4
6437	1N5237B 8V2 0W5 ZENER 5% T&R	1	8890	1/4-20 CAGE NUT C79-88142027	8	8482	3/8 1D FLAT WASHER	2
6440	1N750ARL 4V7 0W5 ZENER 5% T&R	6	8797	5/16-18 KEPS NUT JS500	1	8488	3/8 INT TOOTH LOCKWASHE ZINC	2
6746	MC7912CT TO220 N 12V0 REG V2	2	4597	22AWG STRAN TC WIR JMP	7	8818	3/4 OD X 3/8 ID X .080 THICK WASHER	2
6747	MC7812CT TO220 P 12V0 REG V1	2	4599	22AWG SOLID SC WIR T&R JMP	36	8817	#10 FLAT WASHER FOR 3/16" BOLT	8
5103	MPSA06 TO92 NPN TRAN T&R TA	6	4729	5.0W 0R27 5% BLK RES	1	3424	DPDT SLID SW PCMT H GOLD CONTACTS	1
5104	MPSA56 TO92 PNP TRAN T&R TA	6	2005	1.0W 0R47 5%FLAME PROOF T&R RES	2	3436	DPDT PUSH SW PCMT H BREAK B4 MAKE	5
5108	2N5401 TO92 PNP TRAN T&R TA	1	4646	2.0W 1R 5% WIREWIND T&R RES	6	6544	DPDT TOGGLE SW QUICK .250" 6 TERM	1
6840	MC33078P IC DUAL OP AMP	5	4748	2.0W 3R9 5% T&R	1	3554	DPST TOGGLE SW QUICK .250" 4 TERM	1
6882	TL072CP IC FET DUAL OP AMP	7	4612	1/2W 18R 5% T&R RES	4	3682	250 MALE PCB TAB REEL	3
5277	220P 200V 5%CAP T&R RAD CER.2NPO	1	4704	5.0W 33R 5% BLK RES	12	12AU7	12AU7 DUAL TRIODE PREAMP TUBE	1
5211	330P 100V 5%CAP T&R RAD CER.2NPO	2	4857	1/4W 220R 5% T&R RES	4	12AX7	12AX7 DUAL TRIODE PREAMP TUBE	3
5206	__1N 400V 5%CAP T&R RAD .2FLM	1	4855	1/4W 330R 5% T&R RES	6	6L6	6L6G VACUUM TUBE BULK	12
5208	__2N2 400V 5%CAP T&R RAD .2FLM	6	4736	5.0W 390R 5% BLK RES	2	3732	9 PIN PC MOUNT TUBE SOCKET BE	4
5275	__3N3 100V 5%CAP T&R RAD .2FLM	1	2030	1/6W 681R 1%FLAME PROOF T&R RES	4	3984	8 PIN PC MOUNT TUBE SOCKET BE	12
5209	__4N7 250V 5%CAP T&R RAD .2FLM	8	4822	1/4W 820R 5% T&R RES	1	1411M	YBA300 OPT	1
9959	__4N7 250V 20% X1Y2 CAP DISC BULK	1	4823	1/4W 1K 5% T&R RES	9	CH1411U	YBA300 XFMR	1
5204	__10N 100V 10%CAP T&R RAD .2FLM	2	4913	1.0W 1K 5% T&R RES	1			
5205	__15N 100V 10%CAP T&R RAD .2FLM	1	6110	1/4W 1K0 1%MINI MF T&R RES	1			
5207	__18N 100V 5%CAP T&R RAD .2FLM	1	4854	1/4W 1K2 5% T&R RES	6			
5210	__22N 100V 10%CAP T&R RAD .2FLM	2	4791	1/4W 1K54 1% T&T RES	2			
5840	__22N 400V 10%CAP BLK RAD POLY FLM	12	4683	1.0W 1K8 5% T&R RES	6			
5212	100N 63V 5%CAP T&R RAD .2FLM	34	4705	2.0W 2K2 5% T&R RES	1			
5231	220N 63V 5%CAP T&R RAD .2FLM	1	4847	1/4W 2K2 5% T&R RES	7			
5882	220N 250VDC 10%CAP BLK RAD PLY FLM	2	6104	1/4W 2K2 5%MINI T&R RES	1			
5233	330N 63V 5%CAP T&R RAD .2FLM	3	4681	1.0W 4K7 5% T&R RES	1			
5602	330N 250VDC 10%CAPBLK RAD POLY FLM	1	4827	1/4W 4K7 5% T&R RES	17			
5608	390N 250VDC 10%CAPBLK RAD POLY FLM	2	4870	1/4W 6K2 5% T&R RES	1			
5266	680N 250V 20%CAP BLK 'X2' 30MM AC	1	4828	1/4W 6K8 5% T&R RES	2			
5282	__10U 16V 20%CAP T&R 5X7MM .2NP	6	4978	1/4W 6K8 5%MINI T&R RES	6			
5945	__10U 63V 20%CAP T&R RAD .2EL	6	4829	1/4W 10K 5% T&R RES	4			
5959	__10U 450V 20%CAP BLK EL	2	4983	1/4W 10K 5%MINI T&R RES	13			
5631	__22U 50V 20%CAP T&R 6X7MM .2EL	6	5031	1.0W 10K0 5% T&R RES	2			
5958	__22U 350V 20%CAP BLK 13X25 EL	6	4831	1/4W 18K 5% T&R RES	1			
5961	__33U 16V 20%CAP T&R RAD .2IN NP	1	4885	1/4W 20K 5% T&R RES	11			
5267	100U 25V 20%CAP T&R RAD .2EL	4	4961	2.0W 36K 5% T&R RES	4			
5879	100U 16V 20%CAP T&R 8X7MM .2EL	4	4634	1/2W 47K 5% T&R RES	2			
5974	820U 315V 20%CAP BLK 30X50 EL	2	4834	1/4W 47K 5% T&R RES	32			
5635	1000U 35V 20%CAP BLK RADIAL ELECT	2	4760	1/4W 75K 5% T&R RES	1			
4420	50K B LIN 9MM HORIZONTAL P28	6	4586	1/4W 82K 5%MINI T&R RES	1			
4424	100K 1B LIN 9MM P32	2	4898	1/4W 91K 5% T&R RES	1			
4425	500K 15AAUDIO 9MM P32	3	4838	1/4W 100K 5% T&R RES	14			
4466	100K 5C R/A 12MM STEREO P34	1	4776	1/4W 113K 1% T&R RES	4			
2459	__7.00 AMP CIRCUIT BREAKER	1	4851	1/4W 120K 5% T&R RES	6			
6563	5000UH CHOKE 100MA	1	4991	1/4W 133K 1%MINI T&R RES	1			
8504	CORNER, 2 LEGS NOTCED LIP NICKEL	8	4790	2.0W 150K 5%10MM BODY T&R RES	2			
8521	RUBBER BUMPER WITH WASHER VERYSMALL	4	4839	1/4W 150K 5% T&R RES	2			
8522	RUBBER BUMPER WITH WASHER -SMALL-	4	4641	1/2W 220K 5% T&R RES	2			
3485	CLIP 250X032 18-22AWG RIGHT ANGL	3	4668	2.0W 220K 5%10MM BODY T&R RES	2			
3489	CLIP 250X032 18-22AWG DISCO/INSL	1	4841	1/4W 220K 5% T&R RES	3			
3490	CLIP 250X032 14-16AWG DISCO/INSL	4	4679	1/2W 270K 5% T&R RES	12			
3601	RING TERMINAL 16AWG WIRE & #8 SCREW	2	4865	1/4W 390K 5% T&R RES	1			
3602	RING TERMINAL 18AWG WIRE & #8 SCREW	1	4843	1/4W 470K 5% T&R RES	13			
9925	TINNERMAN CLIP 1/8" STUD SIZE ROUND	3	4844	1/4W 1M 5% T&R RES	11			
3450	1/4" JCK PCB MT ALL-GOLD SKT	1	4888	1/4W 4M7 5% T&R RES	6			
3498	1/4" JCK PCB MT HORZ	4	6615	13.0" 8C-22AWG RIBBON CABLE .156"	1			
3921	1/4" JCK PCB MT VERT STER RT SWT	2	6616	6.0" 9C-22AWG RIBBON CABLE .156"	1			
6956	SPKON 4C PCB MT HORZ GRY #4	1	3736	RELAY 1C 10AMP DC24 017MA PC-S	6			
3923	XLR MALE PCB MT HORZ MTHOLE-V SNAP	1	8842	#4 X 5/16 PAN QUAD TYPE A JS500 BLK	2			
3451	EYELET SMALL 0.089 OD PLATED	8	8729	#4 X 3/8 FLAT QUAD TYPE A JS500 BLK	2			
8600	HANDLE, RECESSED, PULL, BLACK METAL	2	8799	#6 X 1/4 PAN PH TYPE B JS500	5			
3692	HEATSINK TO-220 W/O TAB BLK ANODIZE	4	8784	#6 X 7/16 PAN QUAD FRAME BLACK PHOS	16			
1155	3.3X.6X.6 TAPPED BRACKET	2	8734	#10 X 1/2 PAN PH TYP A BRITE NICKEL	16			
3803	NYLON SECUR-A-TACH MINI PLASTIC TIE	1	8753	#10 X 1/2 PAN QUAD TY A JS500 BLACK	26			
3810	4" NYLON CABLE TIE	11	8756	#10 X 3/4 PAN PH TYPE A BLACK OXIDE	4			
4096	CONN PLUG 4 POS. .084" V-2 FEMALE	1	8727	#10 X 1" PAN PH TYPE A JS500 BLACK	4			
3543	20 PIN BRKAWAY 90 LOCK .156	0.5	8808	4-40 X 3/4 FLAT PHIL MS B.O.& WAX	22			
3538	24 PIN BREAKAWAY LOCK .156	0.819	8819	4-40 X 1.25 FLAT PH MS BLK ROHS	6			
4162	2 PIN POWER PIN HEADER MALE POLZED	2	8822	6-32 X 1/4 PAN PH MS ZN C/W SPLIT_W	4			
4151	4 PIN POWER PIN HEADER MALE POLZED	1	8832	6-32 X 1/4 PAN PH TAPTITE JS500	6			
4163	5 PIN POWER PIN HEADER MALE POLZED	2	8801	6-32 X 3/8 PAN PH TAPTITE JS500	7			