



SERVICE MANUAL

TYPE: YS1026
A4.4

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

WORLD HEADQUARTERS CANADA

Yorkville Sound
550 Granite Court
Pickering, Ontario
L1W-3Y8 CANADA

Voice: (905) 837-8481
Fax: (905) 837-8746

U.S.A.

Yorkville Sound Inc.
4625 Witmer Industrial Estate
Niagara Falls, New York
14305 USA

Voice: (716) 297-2920
Fax: (716) 297-3689



Quality and Innovation Since 1963
Printed in Canada

IMPORTANT SAFETY INSTRUCTIONS



INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

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.

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

Read Instructions

The Owner's Manual should be read and understood before operation of your unit. Please, save these instructions for future reference.

Packaging

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

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.

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.

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.

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

Power Cord

The AC supply cord should be routed so that it is unlikely that it will be damaged. If the AC supply cord is damaged DO NOT OPERATE THE UNIT.

Service

The unit should be serviced only by qualified service personnel.

Veillez Lire le Manuel

Il contient des informations qui devraient être comprises avant l'opération de votre appareil. Conservez S.V.P. ces instructions pour consultations ultérieures.

Emballage

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

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.

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.

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.

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

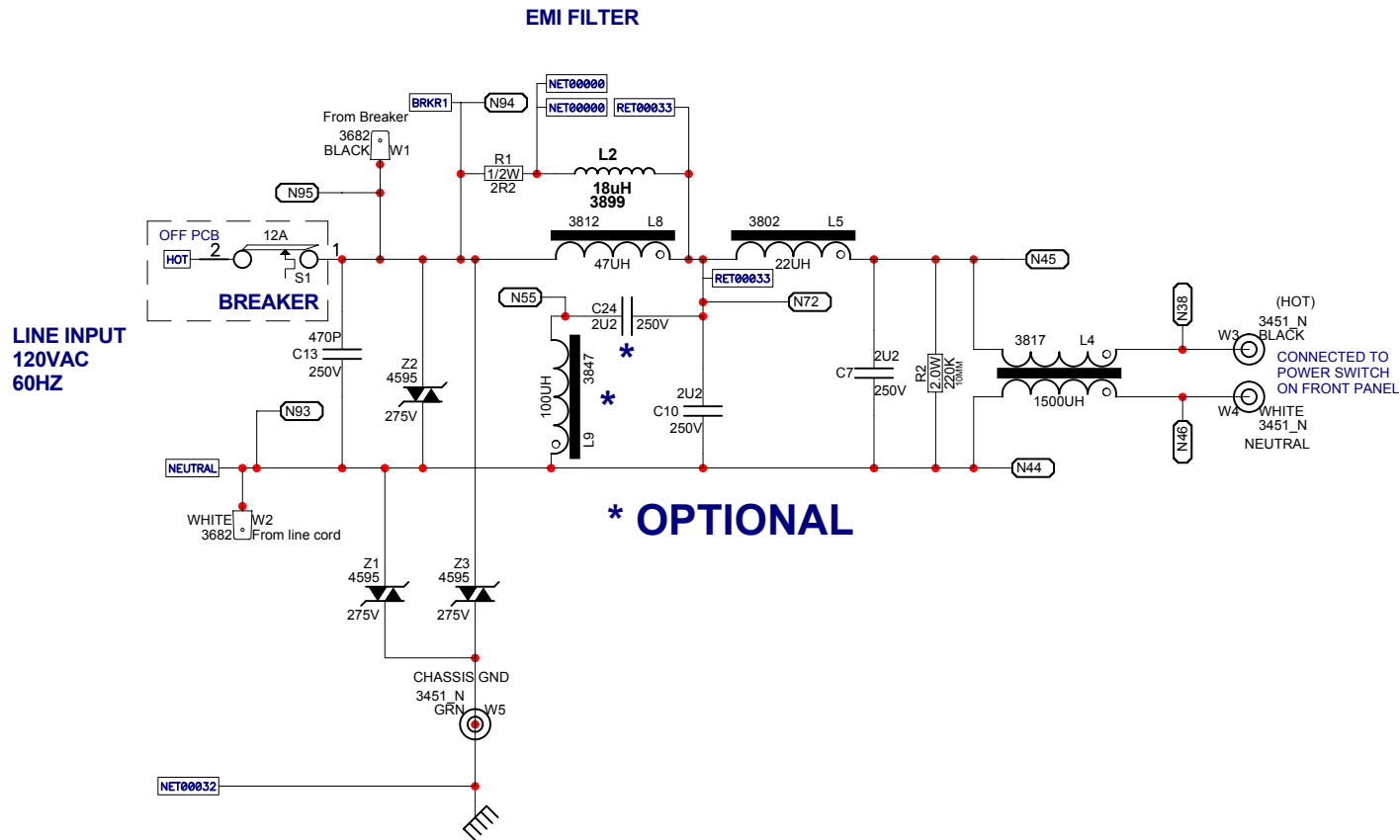
Évitez d'endommager le cordon d'alimentation. N'UTILISEZ PAS L'APPAREIL si le cordon d'alimentation est endommagé.

Service

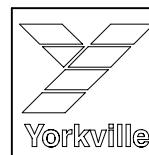
Consultez un technicien qualifié pour l'entretien de votre appareil.

A4.4 Parts List 3/12/2004

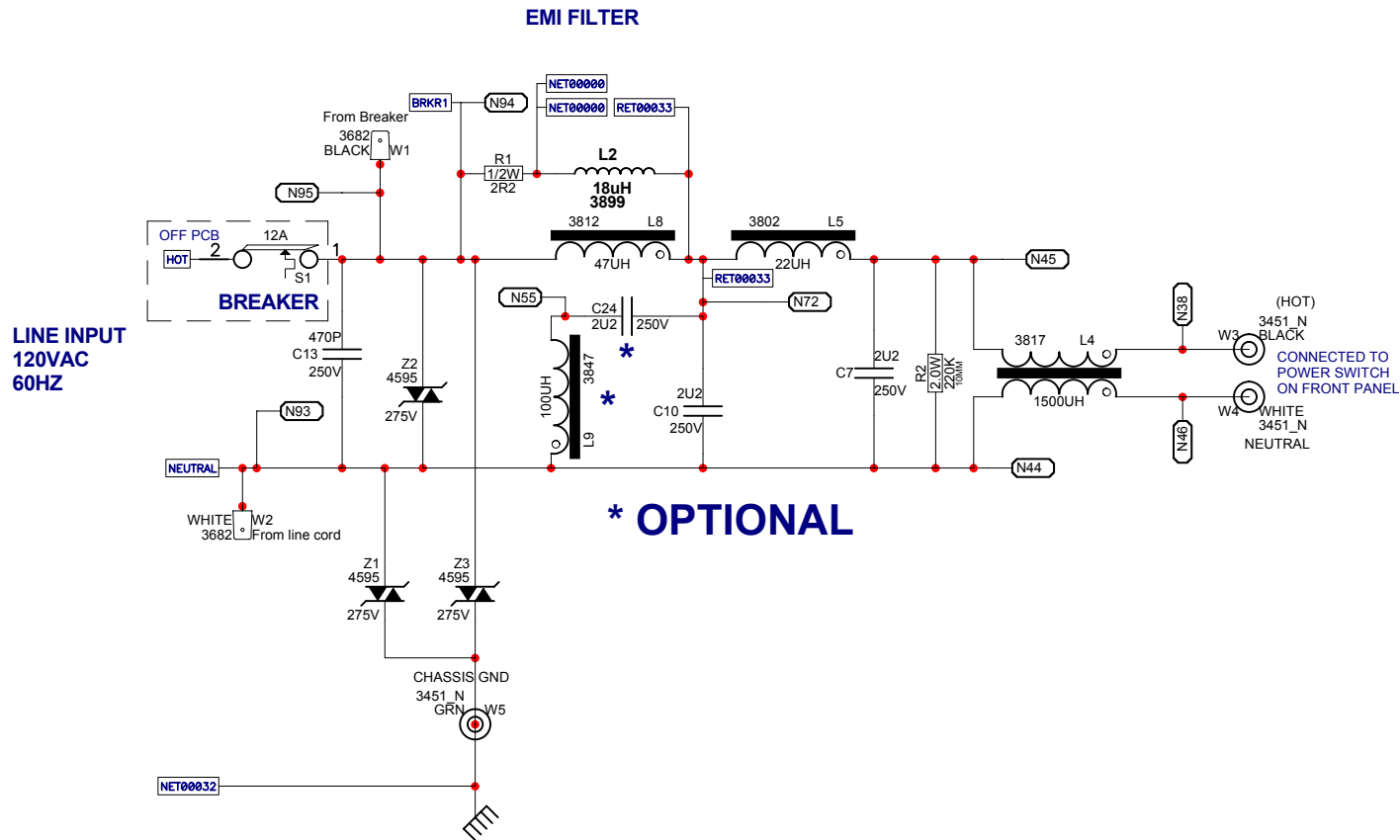
YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.
3564	8-PIN SOCKETS	1	5927	.3U3 20V 20%CAP T&R RAD TINT.2" L5	2	4697	5.0W 0R005 1% BLK RES	1	4898	1/4W 91K 5% T&R RES	4
5906	RED 3MM LED 1V9 20MA 4SPCR T&R	3	5259	.4U7 63V 20%CAP T&R RAD 2"EL	1	4745	5.0W 0R1 5% BLK RES	12	4838	1/4W 100K 5% T&R RES	2
5908	GRN 3MM LED 1V9 20MA 4SPCR T&R	3	5281	.10U 16V 20%CAP T&R RAD 2"NP	2	4749	5.0W 0R15 5% BLK RES	4	4976	1/4W 120K 5% MINI T&R RES	2
6770	BRIDGE 50A 400V WIRE LEAD SIP	1	5282	.10U 16V 20%CAP T&R 5X7MM 2"NP	1	2005	1.0W 0R47 5%FLAME PROOF T&R RES	2	4839	1/4W 150K 5% T&R RES	2
6425	BAV21 200V 0A25 DIODE T&R	4	5629	.10U 160V 20%CAP BLK 10X13MM EL	4	2006	1.0W 1R 5%FLAME PROOF T&R RES	5	6137	1/4W 200K 5%MINI T&R RES	1
6821	STTA1206D 600V 12A DIODE ULTRAFAS	9	5945	.10U 63V 20%CAP T&R RAD 2"EL	4	4677	1/2W 1R 5% T&R RES	4	4668	2.0W 220K 5%10MM BODY T&R RES	3
6825	1N4148 75V 0A45 DIODE T&R	62	5260	.22U 50V 20%CAP T&R RAD 2"EL	10	4688	1/2W 2R2 5% T&R RES	1	4841	1/4W 220K 5% T&R RES	2
6826	STTA806D 600V 8A DIODE ULTRAFAS	8	5631	.22U 50V 20%CAP T&R 6X7MM 2"EL	5	4911	1/4W 2R2 5% T&R RES	8	6126	1/4W 220K 5%MINI T&R RES	4
6888	HER508 1000V 3A0 DIODE ULTRAFAS	2	5961	.33U 16V 20%CAP T&R RAD 2"NP	12	4748	2.0W 3R9 5% T&R	2	4879	1/4W 270K 5% T&R RES	1
6892	UF4004 200V 1A0 DIODE ULTRAFAS	4	5232	.47N 600V 5%CAP BLK RAD FILM FOIL	2	4733	5.0W 5R6 5% BLK RES	2	4842	1/4W 330K 5% T&R RES	1
6896	UF5404 200V 3A0 DIODE ULTRAFAS	2	5627	.47U 10V 20%CAP BLK RAD NP	3	4813	1/4W 6R2 5% T&R RES	2	4843	1/4W 470K 5% T&R RES	2
6438	1N4007 400V 1A0 DIODE T&R	4	5267	100U 25V 20%CAP T&R RAD 2"EL	6	2010	1/8W 10R0 2%FLAME PROOF T&R RES	8	4948	1/4W 1M 5% 2"U T&R RES	1
6934	MR854 400V 3A0 DIODE FASREC	20	5630	330U 25V 20%CAP BLK 10X13MM EL	6	4605	1/8W 10R 5% T&R RES	2	4888	1/4W 4M7 5% T&R RES	2
6439	1N5225B 3V0 0W5 ZENER 5% T&R	2	5622	470U 16V 20%CAP BLK AXIAL EL	2	4875	1/4W 10R 5% T&R RES	2	6132	1/4W 8M2 5%MINI T&R RES	2
6440	1N750ARL 4V7 0W5 ZENER 5% T&R	10	5632	470U 63V 20%CAP BLK LOW ESR EL	1	2013	1/8W 22R1 1%FLAME PROOF T&R RES	2	3690	"8" 4C-28AWG RIB 1 W/LCK HDR 098R	1
6450	1N5242B 12V0 0W5 ZENER 5% T&R	4	5635	1000U 35V 20%CAP RADIAL ELECT BUL	1	4816	1/4W 33R 5% T&R RES	4	3565	10" 4C-28AWG RIBBON CABLE 0.1"	1
6822	1N41745A 16V0 1W0 ZENER 5% T&R	8	5904	2200U 80V 20%CAP BLK 25X30MM ELS	8	2016	1/8W 39R 2%FLAME PROOF T&R RES	12	3709	"7" 6C-26AWG RIB 1 W/LCK HDR 098	1
6824	1N5246B 16V0 0W5 ZENER 5% T&R	4	5886	6800U 80V 20%CAP BLK 30X45MM ELS	8	4899	1/4W 39R 5% T&R RES	6	3706	13" 8C-26AWG RIB 1 W/LCK HDR 098R	2
6432	1N5248B 18V0 0W5 ZENER 5% T&R	1	4390	.10K AUD 16MM DETENT P22	2	2017	1/4W 47R5 1%FLAME PROOF T&R RES	4	3622	14" 14C-28AWG DIP HDR CABLE .05"	1
5101	BC550C TO92 NPN TRAN T&R TB	17	4520	.10K TRIM POT	2	4811	1/4W 68R 5% T&R RES	2	3696	RELAY 1C 02AMP DC24 006MA PC-S	1
5102	BC560C TO92 PNP TRAN T&R TB	21	2448	15.0 AMP CIRCUIT BREAKER	1	2020	1/8W 150R 2%FLAME PROOF T&R RES	4	3790	EMI FILTER FOR RIBBON CABLE	1
5104	MPSA56 TO92 PNP TRAN T&R TA	2	711	30 X 50 X 1.5MIL PLASTIC BAG	1	4859	1/4W 150R 5% T&R RES	4	8870	# 4 X 1/4 PAN PH TYPE A ZINC	2
5113	MPSA42 TO92 NPN TRAN T&R TA	2	3820	.4UH COIL 14AWG ZOBEL HORIZONTAL	2	6103	1/4W 196R 1%MINI MF T&R RES	4	8877	4-40 X 1/4 FILLISTER PH MS ZN	1
5114	MPSA92 TO92 PNP TRAN T&R TA	4	3899	.18UH HI-Q MINI INDUCTOR T&R	1	2021	1/4W 200R 1%FLAME PROOF T&R RES	6	8729	# 4 X 3/8 FLAT QUAD TYPE A JS500 BLK	4
6854	2N6517 TO92 NPN TRAN TA	2	3486	CLIP 250X032 22-18AWG DISCO-L&K	15	2022	1.0W 220R 5%FLAME PROOF T&R RES	1	8742	4-40 X 3/8 PAN PH TAPITTE JS500	2
5105	MPSA13 TO92 NPN DARL T&R TA	1	3490	CLIP 250X032 14-16AWG DISCO/INSL	11	2023	1/8W 220R0 1%FLAME PROOF T&R RES	4	8861	4-40 X 3/8 PAN PH MS JS500	11
5106	MPSA63 TO92 PNP DARL T&R TA	1	3601	RING TERMINAL 16AWG WIRE & #8 SCREW	2	4977	1/4W 220R 5%MINI T&R RES	8	8741	4-40 X 1/2 PAN PH MS JS500	19
6815	MUF6388 T212D NPN TRAN DARL TJ	1	3618	STAR RING TERMINAL 14-16AWG #10SCREW	4	2024	1/8W 249R 2%FLAME PROOF T&R RES	8	8827	4-40 X 1/2 FLAT PH TAPITTE JS500	26
6873	MJE340 T0126 NPN TRAN TG	6	3682	250 MALE PCB TAB REEL	17	4986	1/4W 270R 5%MINI T&R RES	4	8871	4-40 X 5/8 PAN PH MS JS500	9
6874	MJE350 T0126 PNP TRAN TG	6	3788	QUICKON MALE TAB	1	5033	3.0W 330R 5% T&R	1	8808	4-40 X 3/4 FL AT PH MS JS500	1
6911	BDX54C TO220 PNP TRAN DARL TE	1	3410	RED ON LEFT DUAL BINDING POST TTP5	1	4821	1/4W 470R 5% T&R RES	4	8799	# 6 X 1/4 PAN PH TYPE B JS500	4
6912	BDX53C TO220 NPN TRAN DARL TE	1	3415	RED ON RIGHT DUAL BINDING POST TTP5	1	4980	1/4W 470R 5%MINI T&R RES	4	8832	6-32 X 1/4 PAN PH TAPITTE JS500	1
6752	MPT10N15L TO220 NCH MFET TN	2	3918	1/4" JCK PCB MT HORZ SLIM W/SCREW	2	4671	1/2W 560R 5% T&R RES	2	8807	6-32 X 5/16 PAN PH MS JS500	1
6925	MTP82P TO220 PCH MFET TN	2	3628	SPKON 4C PCB MT VERT 250TAB GR4	2	5019	1/4W 620R 5%MINI T&R RES	5	8801	6-32 X 3/8 PAN PH TAPITTE JS500	3
6909	MJ21196 TO3 NPN TRAN TH	16	3417S	6-32 SCREW TERMINAL PC MNT SNAP-IN	1	2030	1/8W 681R 1%FLAME PROOF T&R RES	2	8829	6-32 X 3/8 FLAT PH TAPITTE B0#4 HEA	25
6989	MUL1302A TO3P PNP TRAN TK	2	3657	XLR FEML PCB MT HORZ NO SHELL	2	4869	1/4W 750R 5% T&R RES	1	8761	6-32 X 1/2 PAN PHIL MS ZINC CLEAR	64
6990	MUL3281A TO3P PNP TRAN TK	2	3451	EYELET SMALL 0.089 OD PLATED	57	4623	1/2W 1K 5% T&R RES	2	8828	6-32 X 3/4 PAN PH TAPITTE JS500	8
6910	MJ21195 TO3 PNP TRAN TH	16	3860	FAN 80MM X 80MM 40CFM 12VDC	1	4913	1.0W 1K 5% T&R RES	2	8986	6-32 X 1/2 PAN PH MS JS500	2
6734	IRG4PC50W TO247 NPN TRAN IGBT TM	2	8434	AP SERIES PLASTIC HANDLE PAIR	1	4934	1/4W 1K 5% 2"U T&R RES	1	8802	8-32 X 3/8 PAN QUAD TPITTE JS500	1
6840	MC33078P IC DUAL OP AMP	6	3894	AAVD 5972-B HS W/TAB B.O.	4	4981	1/4W 1K 5%MINI T&R RES	10	8849	8-32 X 1/2 PAN PHIL MS TIN PLATED	1
6883	TC4427CPA IC FET DUAL DRIVER	1	3501	B522007006 COMP WASH #4 SMALL	41	4988	1/4W 1K5 5%MINI T&R RES	6	8869	8-18 X 1/2 THRD CUTTING FOR PLASTIC	4
5190	MBS4992 TO92 8V5 DIAC T&R	2	3745	DUAL XSIATOR PBL SPRING CLEAR ZINC	1	4791	1/4W 1K64 1% T&T RES	4	8999	8-32 X 5/8 PAN PH TAPITTE JS500	17
6444	MAC224-4 TO220 40A TRIAC 200V	2	3552	NYLON SPRING CLAMP	1	4975	3.0W 1K8 5% T&R RES	4	8809	10-32 X 1/4 PAN PH TAPITTE JS500	4
6858	NSL-32SR2 OPTO-COUPLER LDR	2	3803	NYLON SECUR-A-TACH MINI PLASTIC TIE	1	4946	1/4W 2K 5% 2"U T&R RES	1	8731	10-16 X 5/8 TYPE B HEX W/SLOT JS500	15
6881	H11A817C IC OPTO-COUPLER CSA	5	3810	4" NYLON CABLE TIE	17	6113	1/4W 2K 5%MINI T&R RES	6	8821	10-16 X 1/32 TYPE B HEX W/SLOT BL	2
6467	10K 10% THERMISTOR NTC TO-92	2	3827	SQUARE BUMPER BUTTON BLACK	5	4919	1/4W 2K05 1%-NO SUBS- T&R RES	2	8663	11/64 NYLON SPACER (MICRO PLASTIC)	66
4595	VARIATOR 23J 275V MOV 7MM	3	8433	AP SERIES PLASTIC KNOB	2	4847	1/4W 2K2 5% T&R RES	2	8656	.171 X 1/4 NYLON SPACER #SP42	1
5401	.10P 500V 5%CAP T&R RAD CER.2"NPO	4	8661	BUTTON KNOB FLAT GREY	3	4664	1/2W 2K7 5% T&R RES	2	3833	8 X 3/8 (250 OD,.171 ID)N SPACER	5
5199	100P 100V 2%CAP T&R RAD CER.2"NPO	2	8437	FAN FILTER LABEL	1	4805	1/4W 2K87 1% T&R RES	2	3741	.5 SPACER ID-.171 OD-.25 #912-500	2
5410	100P 100V 10%CAP T&R BEAD NPO	2	3468	8' 3/16 SJT AC LINE CORD STRIP 17"	1	6124	1/4W 3K 5%MINI T&R RES	6	8615	4-40 X 1/8" HEX SPACER ALUMINUM	2
5412	220P 100V 10%CAP T&R BEAD NPO	12	3821	HEYCO #1200 STRAIN RELIEF	1	6136	1/4W 3K3 5%MINI T&R RES	4	8657	6-32 X 3/8" HEX SPACER ALUMINUM	10
5417	330P 50V 10%CAP T&R BEAD NPO	2	3793	.20UH COIL 5AMP SNUBR	1	5032	5.0W 3K6 5% STANDOFF BLK RES	8	8667	SHOULDER WASHER SWS-229 LENGTH 1/8	4
5419	330P 500V 5%CAP BLK MICA	1	3802	.22UH COIL 15AMP FILTER	1	4774	1/4W 4K12 1% T&R RES	2	8670	SHOULDER WASHER 125X140#4 HITMP BLK	16
5201	470P 100V 5%CAP T&R RAD CER.2"NPO	6	3812	.47UH COIL 15AMP INPUT	1	4910	1/4W 4K3 5% T&R RES	5	3511	#6 FLAT WASHER NYLON	2
5416	470P 50V 10%CAP T&R BEAD NPO	2	3816	.50UH COIL 5AMP BOOST	1	4982	1/4W 4K7 5%MINI T&R RES	13	8485	#6 SPLIT WASHER ZINC	2
5418	470P 250V 20% Y2 CAP DISC T&R	1	3817	.15MH COIL INPUT COM MODE	1	6128	1/4W 4K99 1%MINI MF T&R RES	2	8925	#4 INTERNAL TOOTH LOCKWASHER	1
5815	680P 200V 5%CAP T&R RAD CER.2"NPO	4	3847	.100UH COIL 5AMP POWER VERT MTG	5	6138	1/4W 5K1 5%MINI T&R RES	4	8850	#10 INT TOOTH LOCKWASHER BO	4
5422	.1N 50V 10%CAP T&R BEAD NPO	3	3536	12PIN STACKER VERTICAL .100	1	4887	1/4W 7K5 5% T&R RES	4	3502	NYLON FLAT WASHER OD.158ID.110H.070	2
5273	.1N5 200V 5%CAP T&R RAD CER.2"NPO	2	3654	PCB CONN 4 CIR .100 LOCKING	1	4762	1/4W 9K760 0.1% *** T&R RES	8	3436	DPDT PUSH SW PCMT H BREAK B4 MAKE	3
5208	.2N2 400V 5%CAP T&R RAD .2"FLM	6	3658	.8 CIR WAFER W/LCK RA 0.1" GOLD	2	4800	1/4W 10K0 1% T&R RES	2	3587	DPDT ROKR SW QUIK 250'AC/PWR ON-OFF	1
5209	.4N7 250V 5%CAP T&R RAD .2"FLM	2	3662	.6 CIR WAFER W/LCK VT 0.1" GOLD	1	4829	1/4W 10K 5% T&R RES	2	3705	4P3T SLID SW PCMT H	1
5204	.10N 100V 10%CAP T&R RAD .2"FLM	2	3672	6 CIR CABLE HOLDER .098	5	4983	1/4W 10K 5%MINI T&R RES	18	3395	THERMO/BRKR/N/CLOSING OPEN @82C	1
5523	.10N 250V 20%CAP BLK RAD Y2 AC	2	3676	8 CIR CABLE HOLDER .098	2	5031	1.0W 10K0 5% T&R	4	4193	A4.4 PC MOUNT SWITCHING T'RD	1
5834	.10N 250V 20%CAP BLK RAD POLY FLM	3	3728	.4" 6C-26 AWG RIBBON CABLE 0.1"	1	6116	1/4W 10K0 1%MINI MF T&R RES	12			
5210	.22N 100V 10%CAP T&R RAD .2"FLM	8	4005	17" 6C-26 AWG RIBBON CABLE 0.1"	1	4856	1/4W 12K 5% T&R RES	4			
6435	.22N 275V 20%CAP BLK 'X2' 15MM AC	1	5989	4 CIR CABLE HOLDER .098	3	4830	1/4W 15K 5% T&R RES	3			
5224	.47N 100V 10%CAP T&R RAD .2"FLM	2	8701	4-40 KEPS NUT ZINC	39	4771	1/4W 17K8 1% T&R RES	2			
5226	.68N 100V 5%CAP T&R RAD .2"FLM	4	8793	4-40 HEX NUT ZINC	3	6125	1/4W 18K 5%MINI T&R RES	3			
5228	100N 100V 5%CAP T&R RAD .2"FLM	13	8760	6-32 KEPS NUT TIN PLATED	64	6123	1/4W 20K0 1%MINI MF T&R RES	7			
5314	100N 50V 10%CAP T&R BEAD X7R	9	8800	6-32 KEPS NUT ZINC	18	4777	1/4W 21K5 1% T&R RES	2			
5865	100N 250V 10%CAP BLK RAD POLY FLM	9	8787	8-32 KEPS NUT ZINC	2	4832	1/4W 22K 5% T&R RES	2			
5229	150N 63V 10%CAP T&R RAD .2"FLM	4	3796	ELASTOMER PAD TSIL 1.0X0.8	2	5024	1/4W 22K6 1% T&R RES	1			
5231	220N 63V 10%CAP T&R RAD .2"FLM	2	3797	TO-247 THERMO CONDUCTIVE PAD	4	4833	1/4W 27K 5% T&R RES	6			
5882	220N 250V 10%CAP BLK RAD POLY FLM	4	3846	TO220 THERMO PAD LARGE HOLE 56359B	24	4890	1/4W 30K 5% T&R RES	3			
5602	330N 250V 10%CAP BLK RAD POLY FLM	1	3916	TO3							



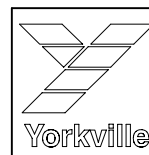
M1164 LINE FILTER FOR (SMPS)			
MODEL(S):- A4.4 / A4.4CE			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	AUG 28 2001	V2.00	Mounting NPH changed from 156 to 189
2	Sept 17 2001	V2.00	W3 & W4 changed from tab to eyelets
3	SEPT 17 2001	V2.00	L4,L5,L8 POLARITY SHOWN
4	OCT 04 2001	V2.00	ADD L2&R1 ACROSS L8
5	JAN 24 2002	V2.10	pc#6497 ADD R2 ACROSS C7
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



Product {Drawing Number}		
EMI FILTER	PCB# M1164	Sheet 1 of 2
Date: Sat Feb 23, 2002		Rev: V2.10
Filename: M11642V1sch.SCH2001		



M1164 LINE FILTER FOR (SMPS)			
MODEL(S):- A4.4 / A4.4CE			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	AUG 28 2001	V2.00	Mounting NPH changed from 156 to 189
2	Sept 17 2001	V2.00	W3 & W4 changed from tab to eyelets
3	SEPT 17 2001	V2.00	L4,L5,L8 POLARITY SHOWN
4	OCT 04 2001	V2.00	ADD L2&R1 ACROSS L8
5	JAN 24 2002	V2.10	pc#6497 ADD R2 ACROSS C7
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

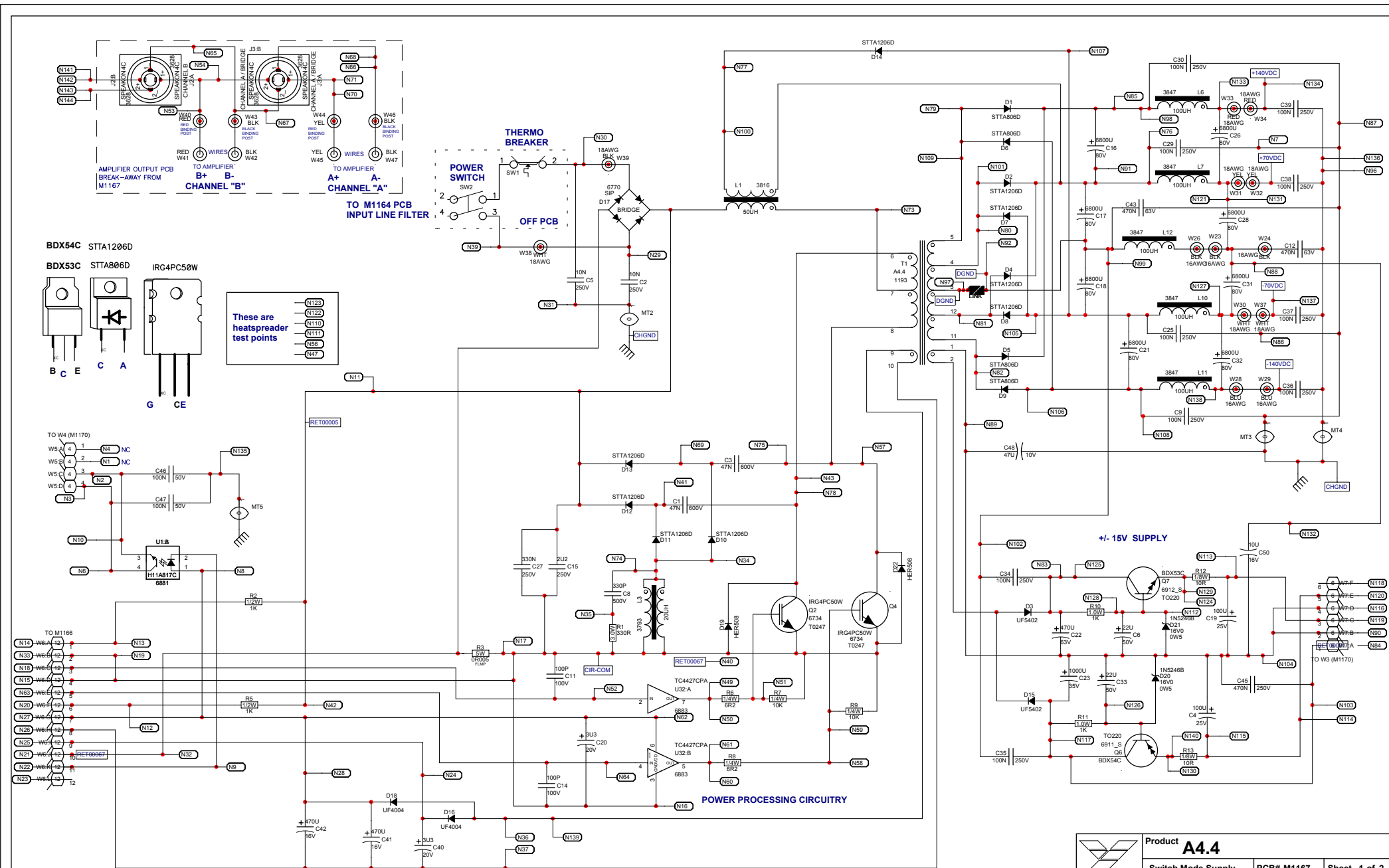


Product **{Drawing Number}**

EMI FILTER PCB# M1164 Sheet 1 of 2

Date: Sat Feb 23, 2002 Rev: V2.10

Filename: M11642V1sch.SCH2001



BIAS SUPPLY

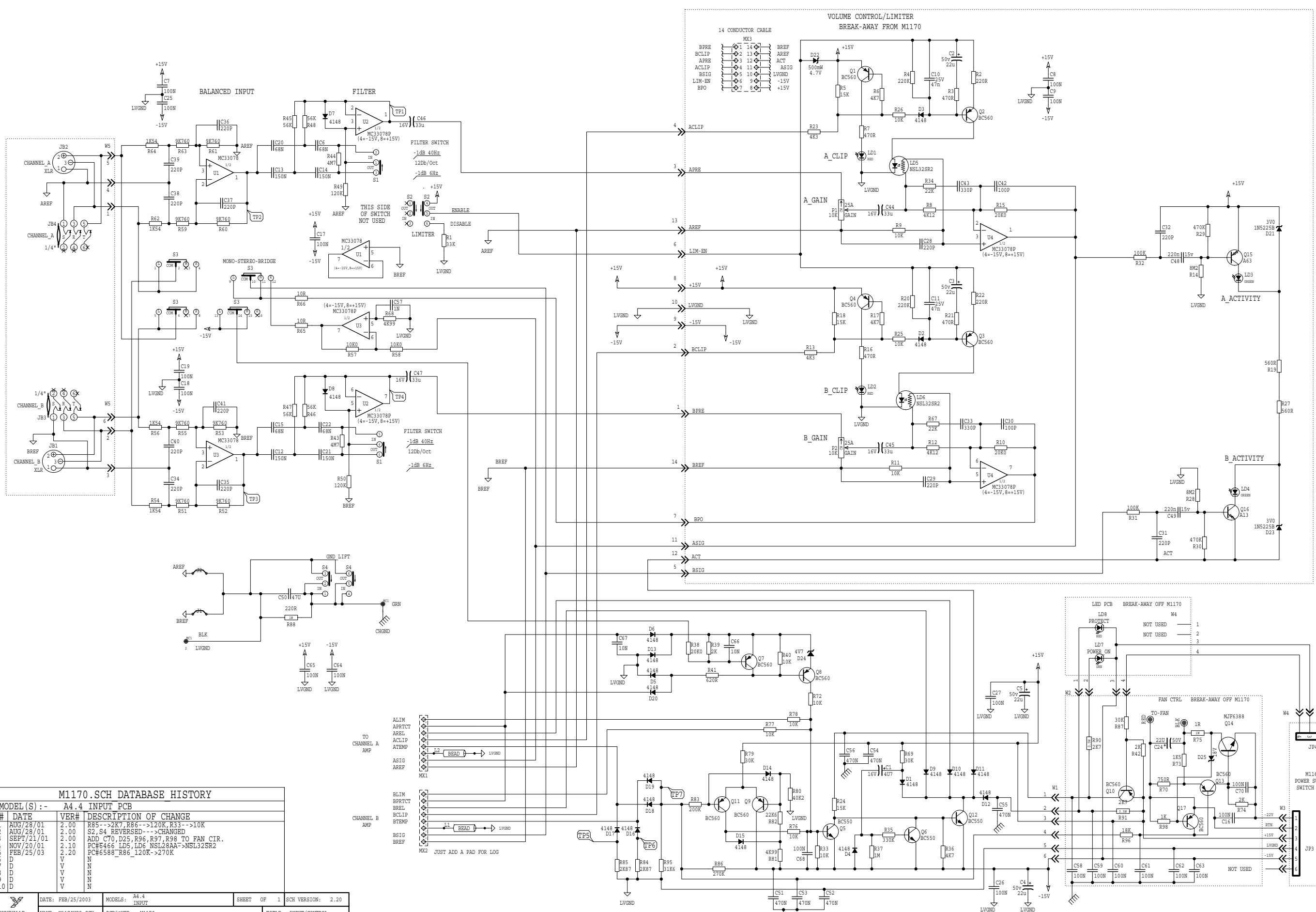
POWER PROCESSING CIRCUITRY

+/-15V SUPPLY

NOTE: PRIMARY LINE IS LIVE
DANGER HIGH VOLTAGE ON PRIMARY SIDE



Product A4.4		
Switch Mode Supply	PCB# M1167	Sheet 1 of 2
Date: Tue Oct 07, 2003	Rev: 2.20	
Filename: m1167 2V2 SCH.SCH2002		

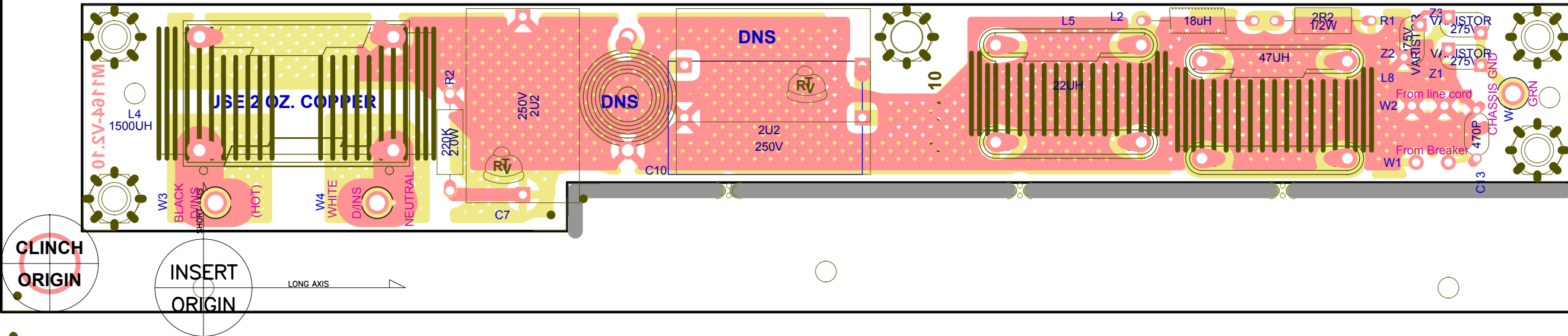


M1170.SCH DATABASE HISTORY			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	AUG/28/01	2.00	R85-->2K7, R86-->120K, R33-->10K
2	AUG/28/01	2.00	S2, S4 REVERSED-->CHANGED
3	SEPT/21/01	2.00	ADD C70, D25, R96, R97, R98 TO FAN CIR.
4	NOV/20/01	2.10	PC#6466 LD5, LD6 NSL28AA->NSL32SR2
5	FEB/25/03	2.20	PC#6588_R86_120K->270K
6	D	V	N
7	D	V	N
8	D	V	N
9	D	V	N
10	D	V	N

YORKVILLE	DATE: FEB/25/2003	MODELS: A4.4 INPUT	SHEET OF 1	SCH VERSION: 2.20
	NAME: M1170V22.SCH	PCB#&VER: M1170		TITLE: INPUT/CONTROL

- ALIM APPTCT
 - AREL
 - ACLIP
 - ATEMP
 - ASIG
 - AREP
 - MX1
 - BLIM
 - BPRCT
 - BRRL
 - BCLIP
 - BTEMP
 - BSIG
 - BRFP
 - MX2
- TO CHANNEL A AMP
- CHANNEL B AMP
- JUST ADD A PAD FOR LOG

M167 POWER SUPPLY SWITCH MODE



M1164 LINE FILTER FOR (SMPS)

MODEL(S):- A4.4 / A4.4CE

#	DATE	VER#	DESCRIPTION OF CHANGE
1	AUG 28 2001	V2.00	Mounting NPH changed from 156 to 189
2	Sept 17 2001	V2.00	W3 & W4 changed from tab to eyelets
3	SEPT 17 2001	V2.00	L4,L5,L8 POLARITY SHOWN
4	OCT 04 2001	V2.00	ADD L2&R1 ACROSS L8
5	FEB 14 2002	V2.1	ADD R2 220K 2W ACROSS C7
6	FEB 14 2002	V2.1	FIX HOLE SIZE FOR L5&L8
7	FEB 14 2002	V2.1	FIX MASKING PROBLEM FOR R1&L2
8	D	V	N
9	D	V	N
10	D	V	N
11	D	V	N
12	D	V	N
13	D	V	N

M1164 PENDING CHANGES

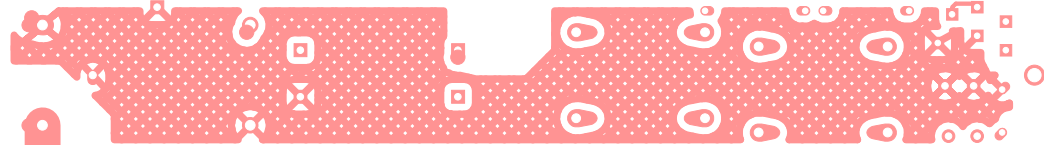
MODEL(S):- A4.4

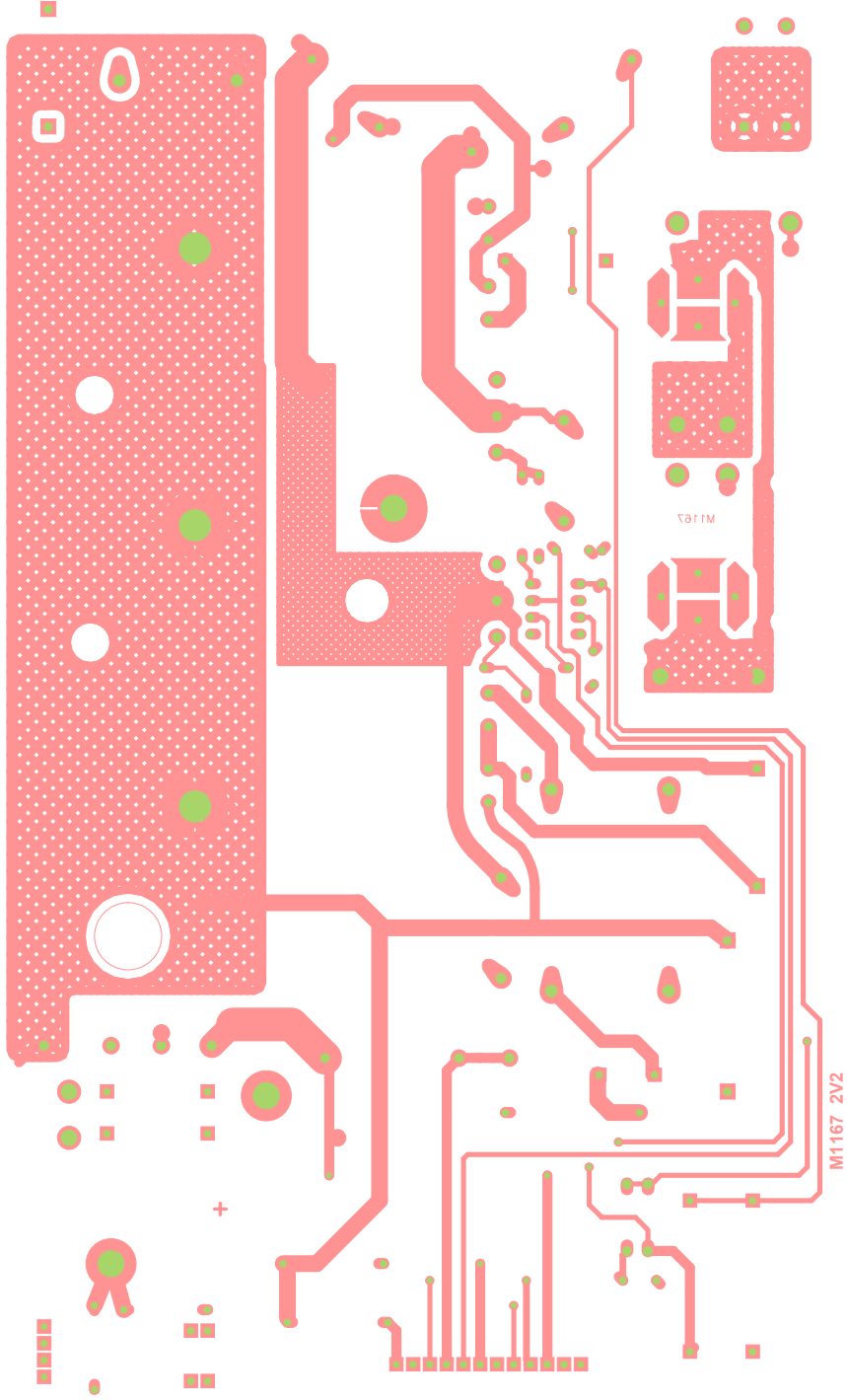
#	PC#	PENDING CHANGE
1	PC	Force update parts #4595, 5521, 3682 which have new pads that reduce the chance of shorting.
2	PC	X
3	PC	X
4	PC	X
5	PC	X
6	PC	X
7	PC	X
8	PC	X
9	PC	X
10	PC	X
11	PC	X
12	PC	X
13	PC	X

*PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY

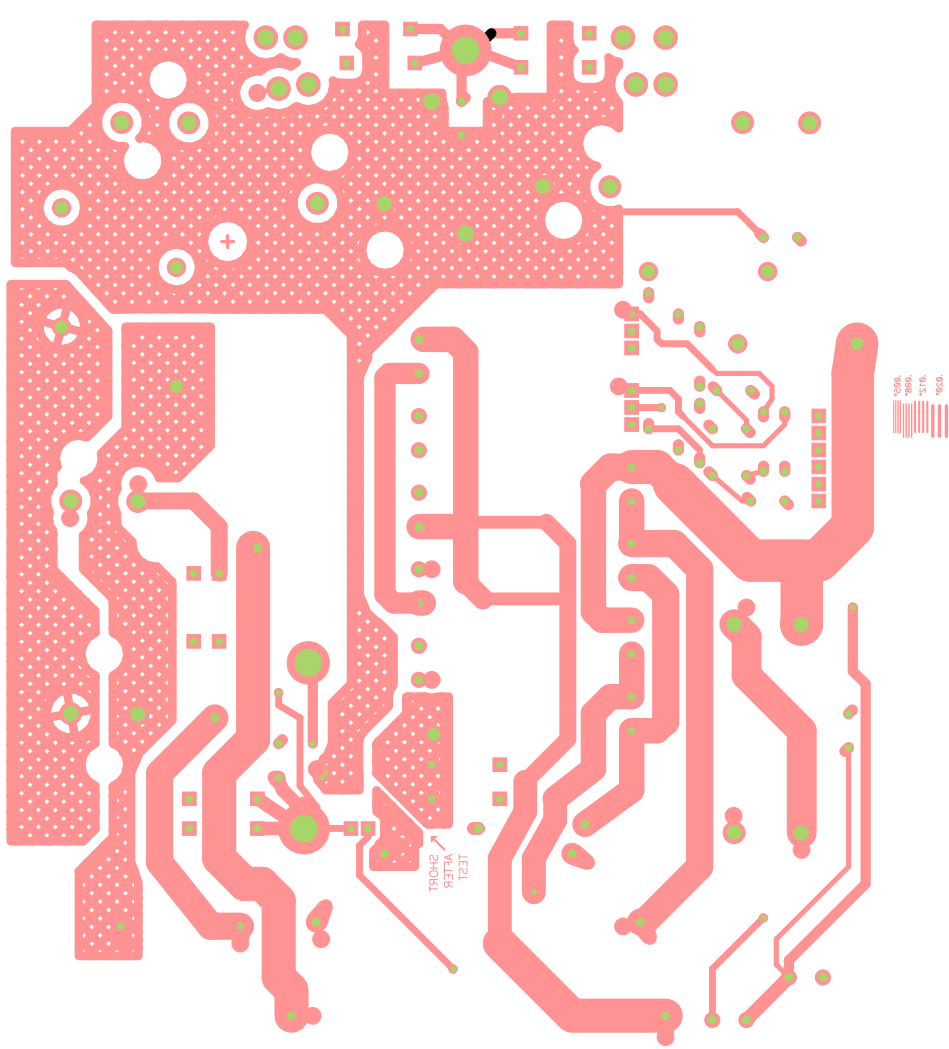


Ø1.5V-4ø1.1M





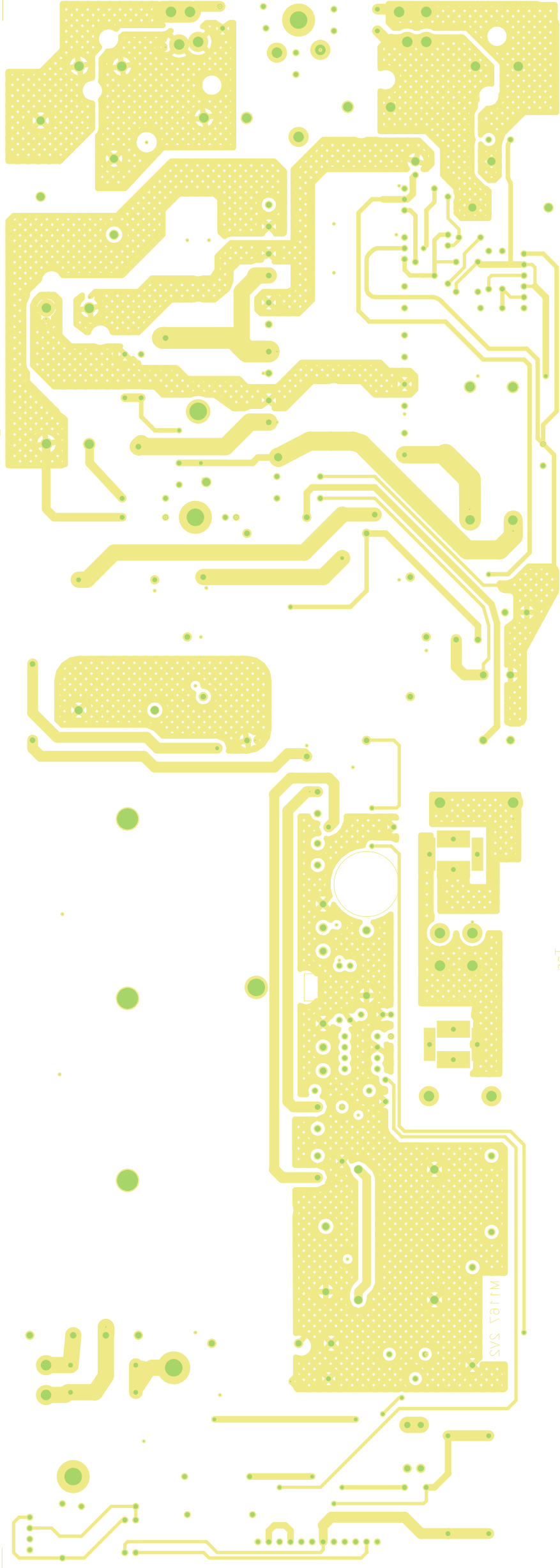
D2 Bottom M1167SAS



PROBE
VIA
LEFT

0.005"
0.005"
0.010"
0.010"
0.020"

PROBE
GAGE
CATCHHOLE



qoT

USE 2 OZ. COPPER

0.005"
0.005"
0.010"
0.010"
0.020"

.005"
.010"
.010"
.020"

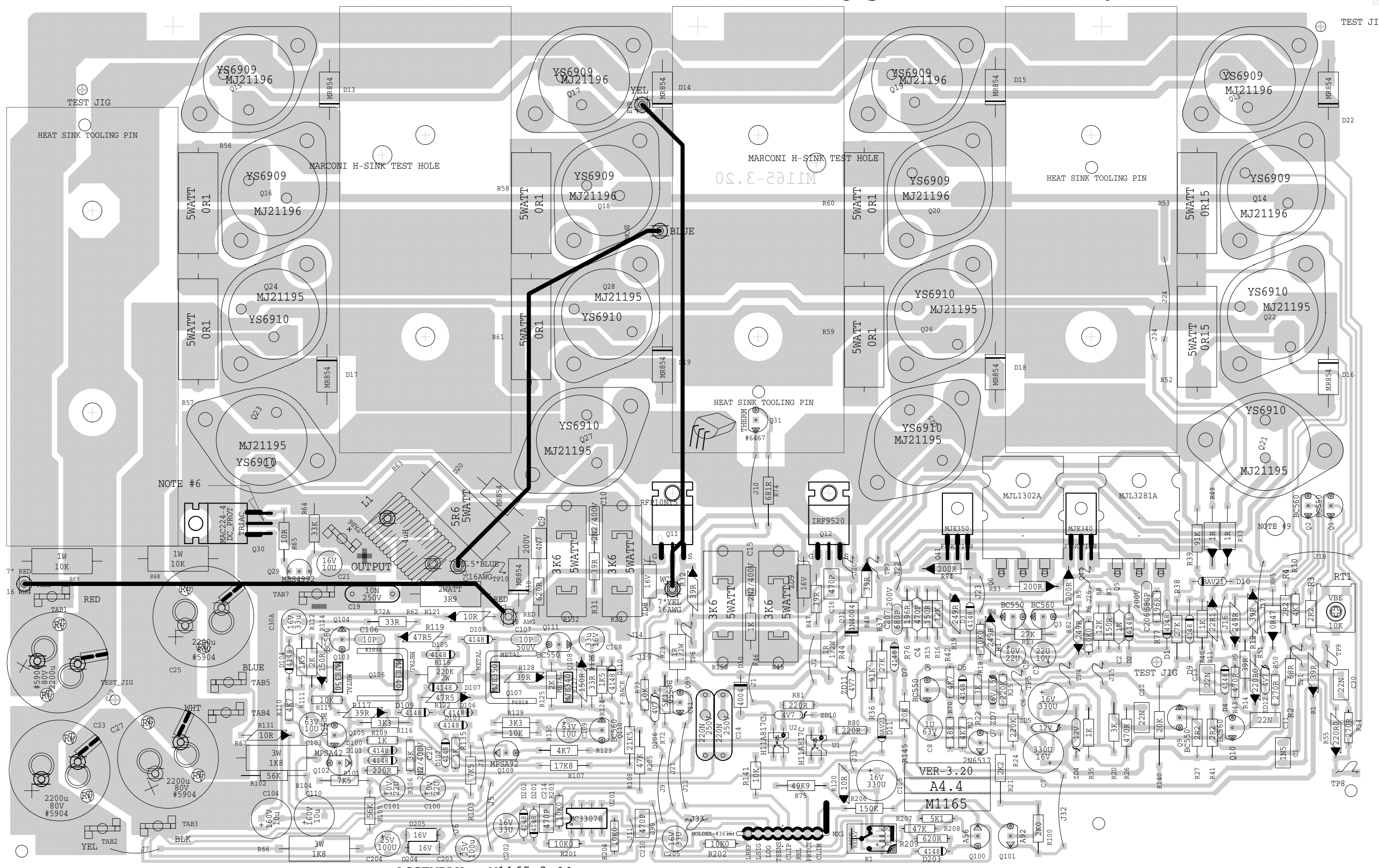
BLANK SIZE=14.500" X 9.500" X 0.0625" (1.1875" X 2.4125" X 0.015625")

SOZ. COBBLER

BLANK SIZE=14.500" X 9.500" X 0.0625" (1.1875" X 2.4125" X 0.015625")

M1165

A4.4



PRODUCTION NOTES

- 1 MOUNTING HARDWARE FOR Q5,Q6**
- 2 MOUNTING HARDWARE FOR Q40,Q41**
- 3 MOUNTING HARDWARE FOR Q11,Q12**
- 4 MOUNTING HARDWARE FOR TO3 OUTPUTS**

INITIAL TORQUE FOR TO-3'S IS 8 INCH/LB
FINAL TORQUE AFTER HEATSINK HAS COOLED FROM WAVE SOLDER IS 6 INCH/LB
- 5 USE #4973FP SMALL BODY 1R 1W FOR R33,R49**
- 6 MOUNTING DETAILS FOR Q30 TRIAC**

IMPORTANT AFTER MOUNTING DEVICE DO NOT CUT LEGS BEND LEGS IN DIRECTION SHOWN IT IS IMPERATIVE THAT LEGS MARKED 2 AND 3 ARE BENT FLAT AGAINST THE COPPER SURFACE

BEND DOWN 1/4" FROM BODY OF TRANSISTOR

ASSEMBLY M1165-3.20
PCB MECH M1165-3.20

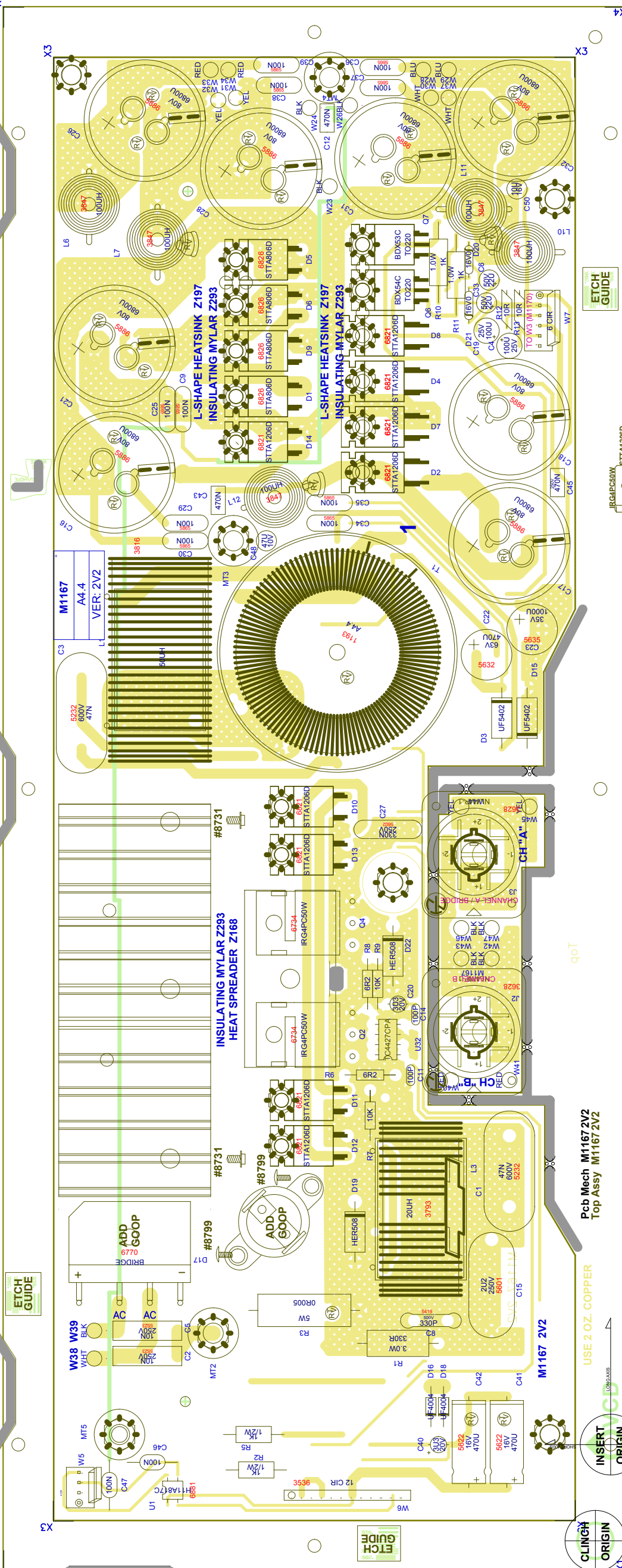
M1165 USE 2 oz. COPPER

M1165.PCB_DATABASE_HISTORY			
MODEL(S) :- A4.4			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	SEPT/05/01	2.00	ADD RC NETWORK ON Q40,Q41
2	SEPT/05/01	2.00	R66&R67-->1K8/3W R72-->5K1
3	JAN/21/02	3.00	PC#6495 R76/R77 470R->196R C206/C207 220P->680P TRACES_CHANGED
4			PC#6510 J4->R141 10K
5	FEB/05/02		
6	MAY/16/03	3.10	PC#6607 C10,C15,C20 #5427->#5208
7	SEP/08/03	3.20	PC#6621 Q101 MPSA93->MPSA92
8		V	N
9		V	N
10		V	N
11		V	N

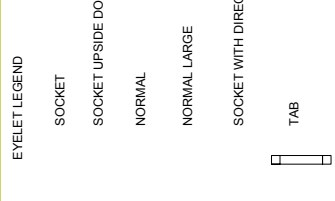
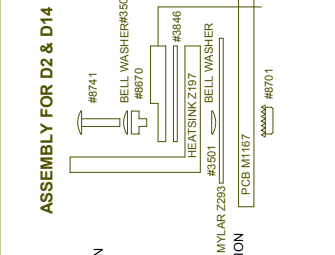
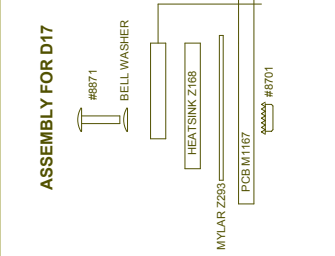
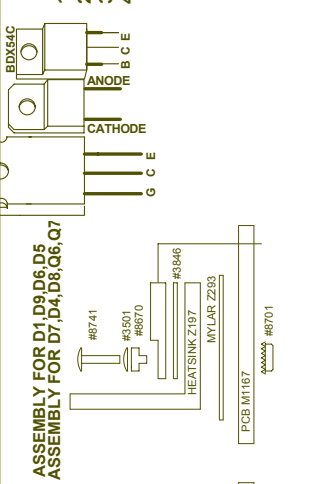
- 7 TAB WIRE COLOURS**
- TAB 1 RED 16AWG
 - TAB 2 YEL 16AWG
 - TAB 3 BLK 16AWG
 - TAB 4 WHT 16AWG
 - TAB 5 BLU 16AWG
 - TAB 6 OUTPUT +
 - TAB 7 OUTPUT -

8 Q31 IS HAND INSERTED AND BENT OVER WITH FLAT SIDE UP AS SHOWN.

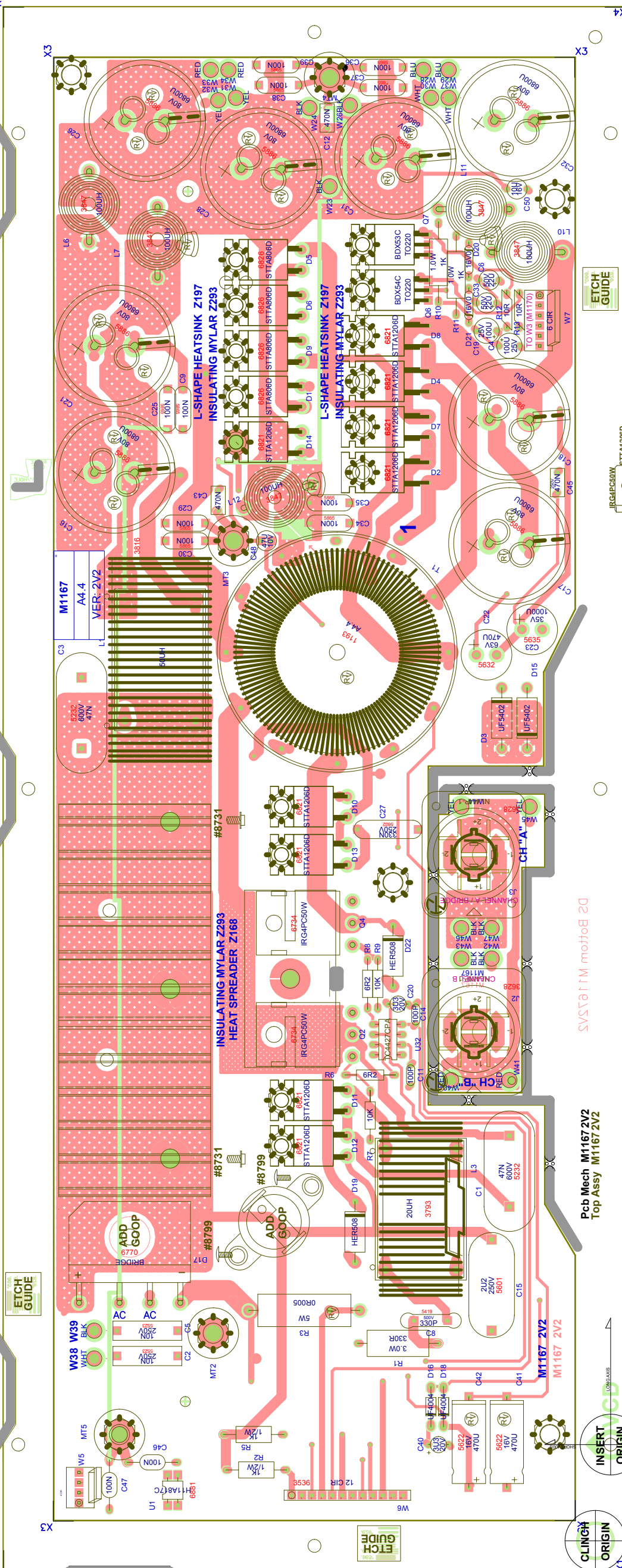
- 9 MOUNTING DETAILS FOR #6 SCREW**
-



- ### PRODUCTION NOTES:
1. CHECK ALL TO-220 & TO-3 PBL FOR SHORTS BEFORE WAVE SOLDER
 2. SHORT SOLDER LINK AFTER FINISHING
 3. USE I.C SOCKET FOR U32 PART #3564
 4. FOR PARTS USING TEAR DROP SHAPE PAD BEND LEADS TO FOLLOW BARE COPPER OF THE PAD AS SHOWN
 5. USE EPOXY TO GLUE T1 AND L1 TO PCB
 - USE NUT AND BOLT (8747-8800) TO MOUNT T1



MODEL(S):-		A4.4 SWITCH MODE POWER SUPPLY	
A4.4		A4.4	
#	DATE	DESCRIPTION OF CHANGE	VER#
1	D	Mounting NPH changed from 156 to 189	2.00
2	D	Mounting hole near C24 and C15&C1 moved. Enlarge MTH pad for D14&D2	2.00
3	D	Corrections to some pads	2.10
4	APR/05/02	D2, D4, D7, D8 #6826->#6821	2.20
5	Oct/07/2003	N N N N N N N N N N	V V V V V V V V V V
6		N N N N N N N N N N	V V V V V V V V V V
7		N N N N N N N N N N	V V V V V V V V V V
8		N N N N N N N N N N	V V V V V V V V V V
9		N N N N N N N N N N	V V V V V V V V V V
10		N N N N N N N N N N	V V V V V V V V V V
11		N N N N N N N N N N	V V V V V V V V V V
12		N N N N N N N N N N	V V V V V V V V V V
13		N N N N N N N N N N	V V V V V V V V V V



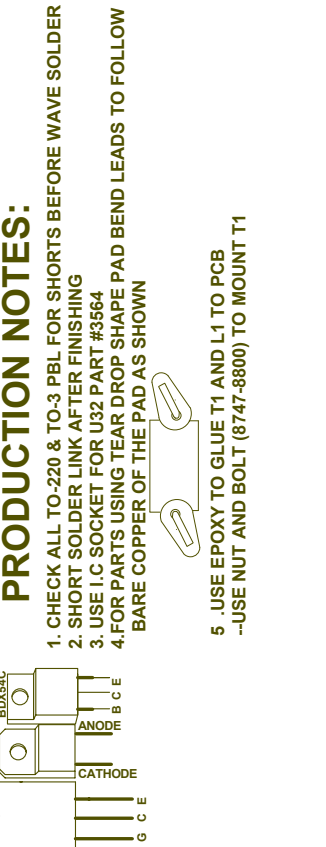
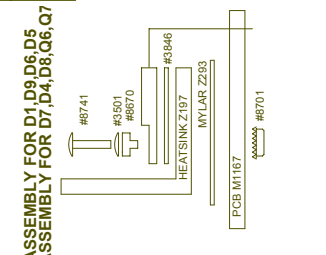
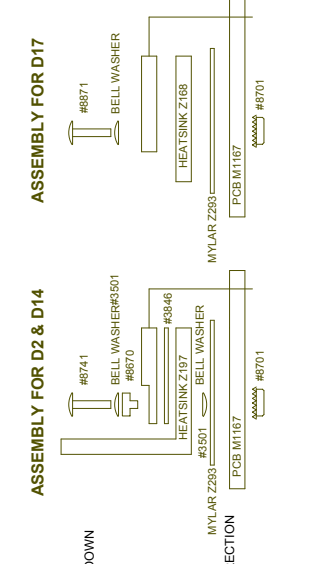
CLINGH ORIGIN

Pcb Mech M1167 2V2
Top Assy M1167 2V2

SVS5811 motorB 2d

ETCH GUIDE

MODEL(S):-		A4.4 SWITCH MODE POWER SUPPLY	
#	DATE	VER#	DESCRIPTION OF CHANGE
1	D	2.00	Mounting NPH changed from 156 to 189
2	D	2.00	Mounting hole near C24 and C15&C1 moved. Enlarge MTH pad for D14&D2
3	D	2.00	Corrections to some pads
4	APR/05/02	2.10	N N N N N N N N N N
5	Oct/07/2003	2.20	N N N N N N N N N N
6		V	N N N N N N N N N N
7		V	N N N N N N N N N N
8		V	N N N N N N N N N N
9		V	N N N N N N N N N N
10		V	N N N N N N N N N N
11		V	N N N N N N N N N N
12		V	N N N N N N N N N N
13		V	N N N N N N N N N N



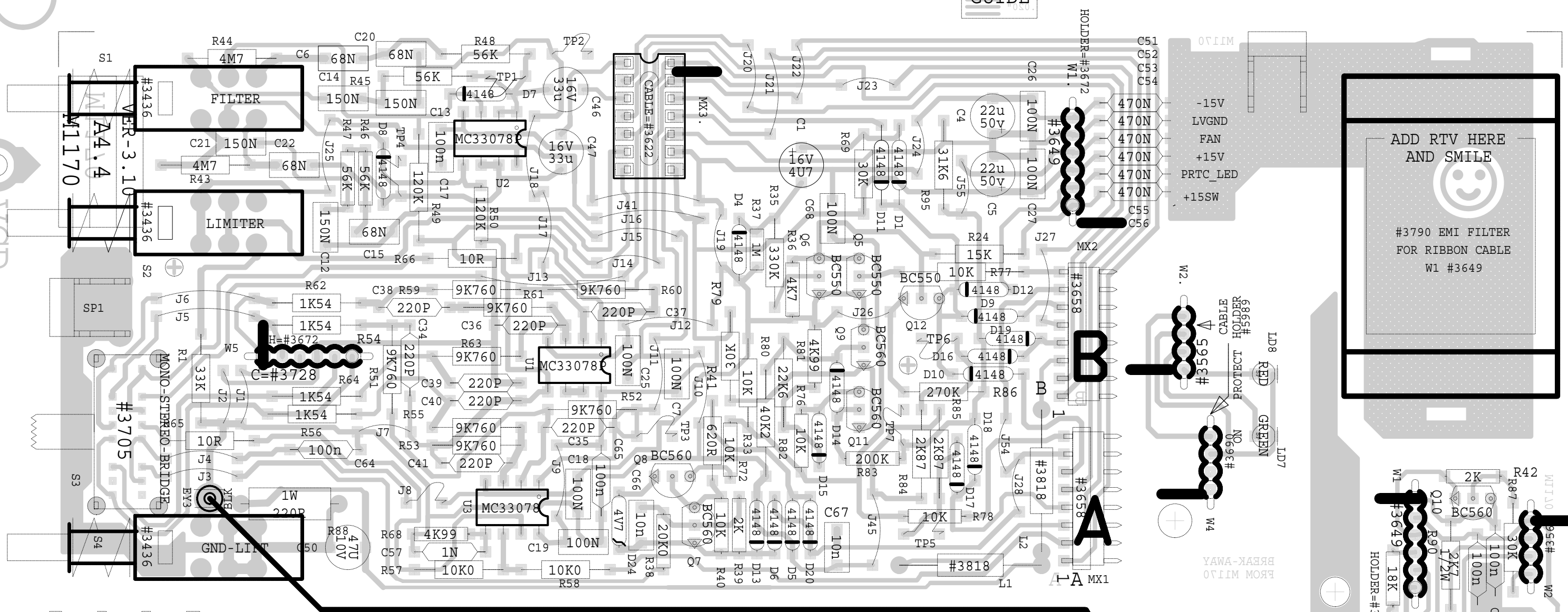
PRODUCTION NOTES:

1. CHECK ALL TO-220 & TO-3 PBL FOR SHORTS BEFORE WAVE SOLDER
2. SHORT SOLDER LINK AFTER FINISHING
3. USE I.C SOCKET FOR U32 PART #3564
4. FOR PARTS USING TEAR DROP SHAPE PAD BEND LEADS TO FOLLOW BARE COPPER OF THE PAD AS SHOWN
5. USE EPOXY TO GLUE T1 AND L1 TO PCB
- USE NUT AND BOLT (#8747-8800) TO MOUNT T1

ETCH GUIDE

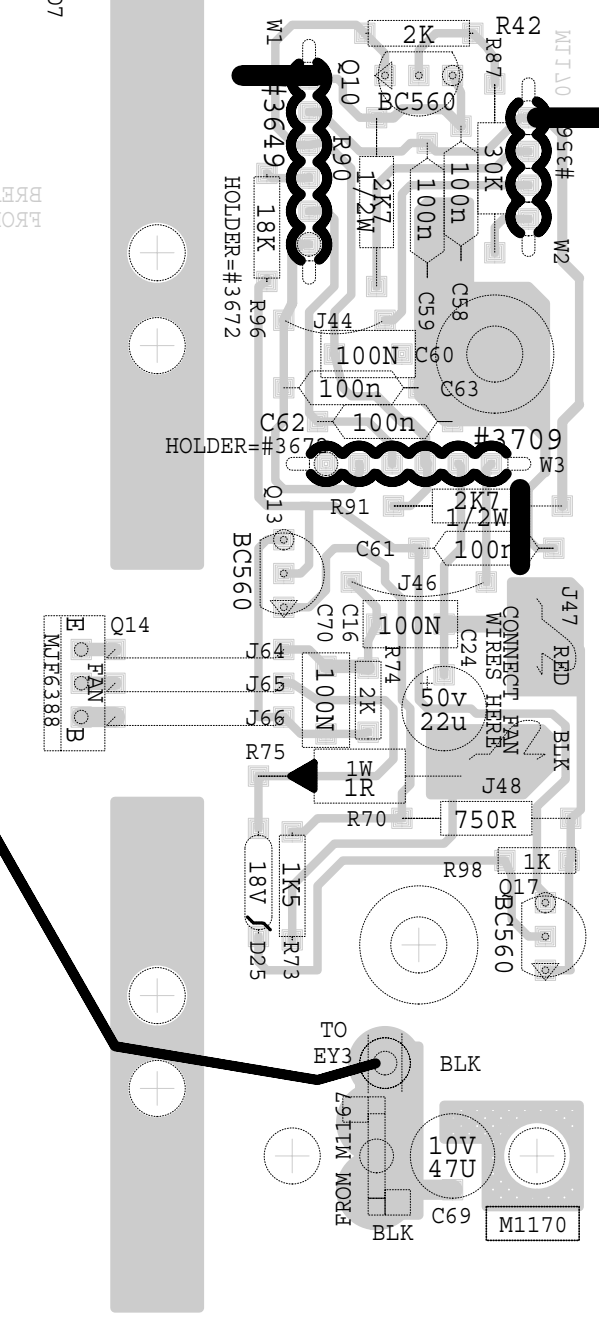
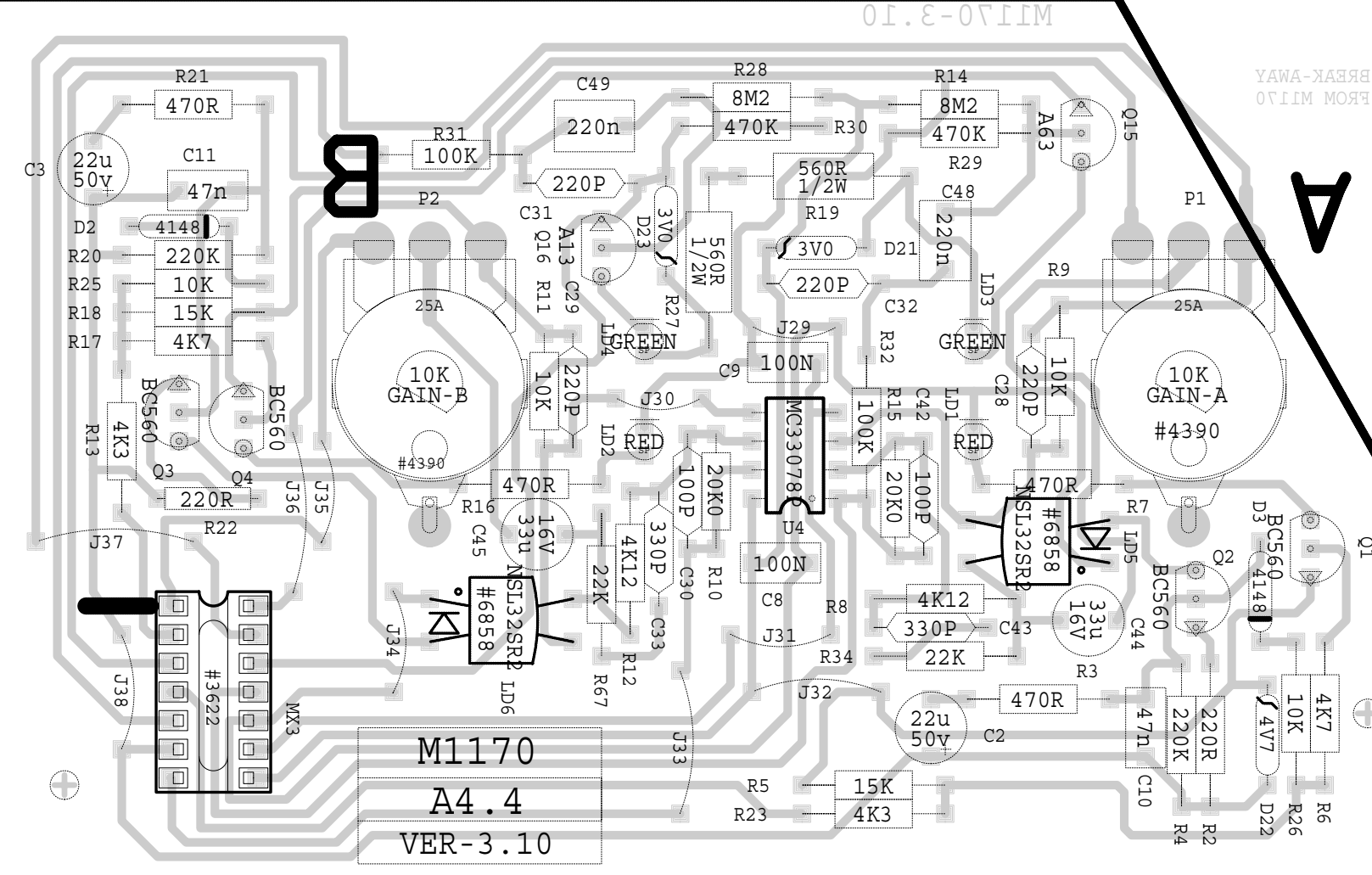
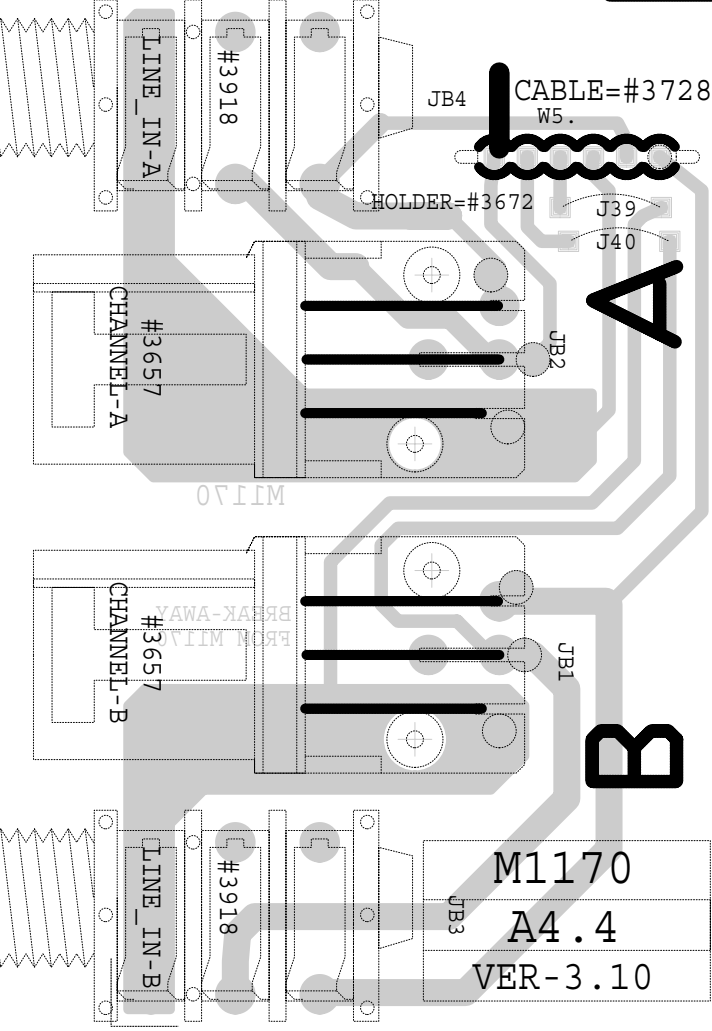
INSERT ORIGIN

CLINGH ORIGIN



ADD RTV HERE AND SMILE

#3790 EMI FILTER FOR RIBBON CABLE W1 #3649



M1170.PCB DATABASE HISTORY

M1170.PCB POT LIST

MODEL(S) :- A4.4 PCB MECH M1170-3.10

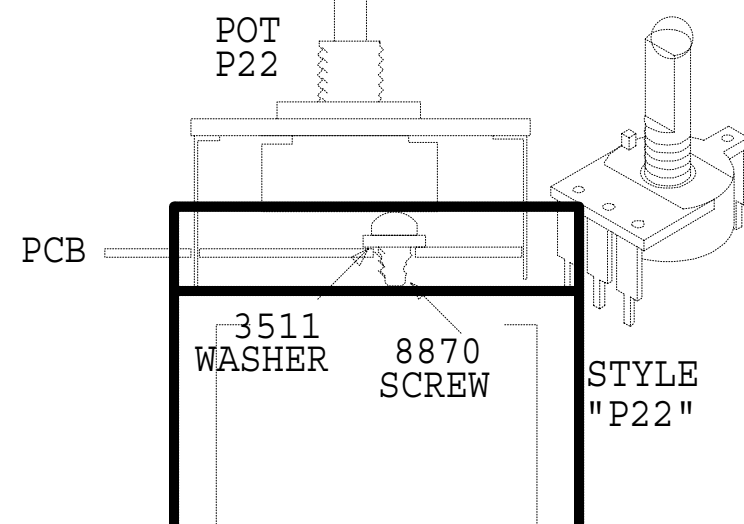
MODEL(S) :- A4.4

#	DATE	VER#	DESCRIPTION OF CHANGE
1	FEB/07/00	P1	FIRST PROTO
2	MAY/05/01	P2	2nd PROTO
3	AUG/28/01	V2	R33-->10K, R86-->120K, R85&R84-->2K87
4	AUG/28/01	V2	S2, S4 REVERSED-->CHANGED
5	AUG/28/01	V2	JB1, JB2 ADD HOLES FOR MOUNTING
6	SEP/11/01	V2	R73-->1K3, Q14-->MJF6388
7	SEP/11/01	V2	MOVE LED-PCB MOUNTING-HOLE
8	NOV/15/01	2.10	PC#6466 LD5, LD6 NSL28AA->NSL32SR2
9	FEB/11/02	3.00	PC# REPLACE AN WIRE_EYELETS WITH RADIAL JUMPERS
11	FEB/25/03	3.10	PC#6588_R86_120K->270K

REF	FUNCTION	PART#	KNOB	AS OF
P1	CHAN_A_GAIN	4395	8433	FEB/07/00
P2	CHAN_B_GAIN	4395	8433	FEB/07/00
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N
R	F	P	K	N

PRODUCTION NOTES:

- C24 USE #5631 (SHORT) 22U/50V



GOLDERSIDE M1170-3.10

M1170CMP.PRN

A4.4 AC WIRES
JUN/2001

POWER PCB,S

