



# SUNN 300T

p/n 021-3302-000 (120V)

## SERVICE MANUAL

**SUNN 300T**  
(This is the model name for warranty claims)

JULY 1998

### IMPORTANT NOTICE:

The information contained herein is CONFIDENTIAL and PROPRIETARY to Fender Musical Instruments Co. It is disclosed solely for use by qualified technicians for purposes of equipment maintenance and service. It is not to be disclosed to others without the expressed permission of Fender Musical Instruments Co. All specifications subject to change without notice.

For warranty repair service, only Fender specified part numbers are to be used. It is recommended they also be used for post-warranty maintenance and repair.

Parts marked with an asterisk (\*) indicate the required use of that specific part. This is necessary for RELIABILITY and SAFETY requirements. **DO NOT USE A SUBSTITUTE!**

A coded naming convention is used in the description of certain parts. The codes and what they mean are as follows:

#### CAPACITOR CODES

CAP AE = Aluminum Electrolytic  
 CAP CA = Ceramic Axial  
 CAP CD = Ceramic Disk  
 CAP MPF = Metalized Polyester Film  
 CAP MY = Mylar  
 CAP PFF = Polyester Film/Foil

#### HARDWARE CODES

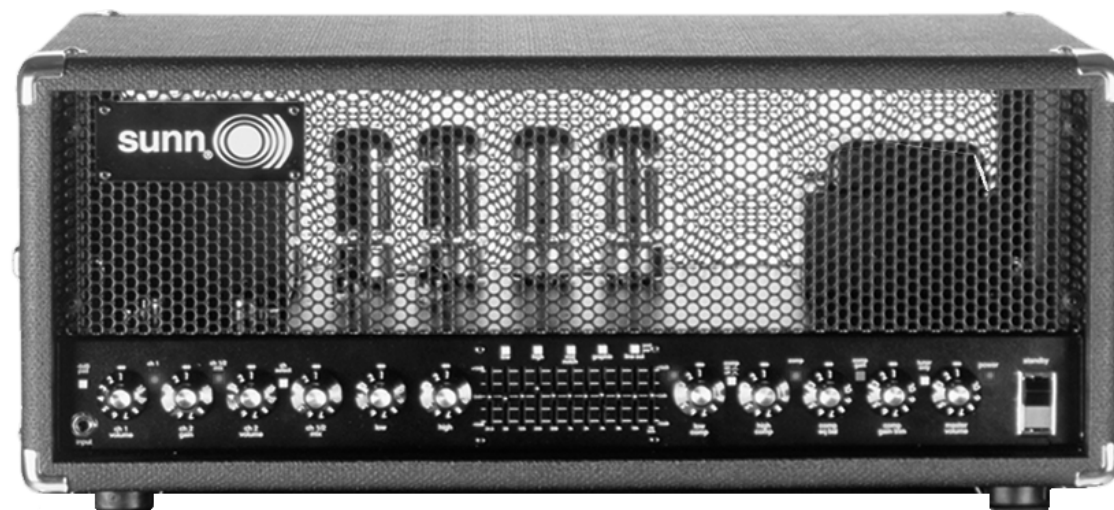
BLX = Black Oxide  
 CR = Chrome Plated  
 HWH = Hex Washer Head  
 M = Machine Screw  
 NI = Nickel Plated  
 OHP = Oval Head Phillips  
 PB = Particle Board  
 PHP = Pan Head Phillips  
 PHPS = Pan Head Phillips Sems  
 SMA = Sheet Metal "A" Point  
 SMB = Sheet Metal "B" Point  
 SS = Stainless Steel  
 TF = Thread Forming  
 ZI = Zinc Plated

#### RESISTOR CODES

RES CC = Carbon Comp  
 RES CF = Carbon Film  
 RES FP = Flame Proof  
 RES MF = Metal Film  
 RES WW = Wire Wound

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# SPECIFICATIONS

<b>Product Release No.:</b>	PR 347 <i>(This is not a model number)</i>
<b>Part Number:</b>	120V Version : 21-3302 240V Aust : 21-3332 230V UK : 21-3342 230V : 21-3362 100V : 21-3372
<b>Power Requirements:</b>	All Versions : 900W
<b>Preamp Section</b>	
<b>Input impedance:</b>	470 kΩ
<b>Full power sensitivity:</b>	12 mV
<b>Tone controls:</b>	Treble: +/- 15 dB @ 6kHz Bass: +/- 15 dB @ 40Hz
<b>Graphic equalizer:</b>	+/- 12 dB @ 31.5Hz, 63Hz, 125Hz, 250Hz, 500Hz, 1kHz, 2kHz, 4kHz, 8kHz, 16kHz
<b>Mid notch:</b>	-20 dB @ 700Hz
<b>Low boost:</b>	+10 dB @ 40Hz
<b>High boost:</b>	+10 dB @ 6kHz
<b>Compressor</b>	
<b>Crossover:</b>	400Hz
<b>Ratio:</b>	1:1 min to 4:1 max
<b>Line out level: (Transformer balanced)</b>	+6 dB referenced to input (pre), 0 dBV (post)
<b>Power amplifier section</b>	
<b>Input impedance:</b>	20 kΩ
<b>Power output:</b>	300 Watts RMS into 2, 4, 0r 8Ω @ <3% THD
<b>Sensitivity:</b>	1V RMS (0dBV)
<b>Speaker Complement:</b>	Designed for use with the Sunn 410H or Sunn 215 Bass Loudspeaker Enclosures
<b>Dimensions:</b>	
Height:	10.1" (25.7 cm)
Width:	25.5" (64.8 cm)
Depth:	15.6" (40 cm)
<b>Weight:</b>	75 lbs. (34 kg)

*Product specifications are subject to change without notice*

# CIRCUIT DESCRIPTION

## Preamp

The preamp section employs two 12AX7 tubes. Channel one (V1) is fairly conventional, while channel two (V2) uses a second tube with additional op-amp gain (U2B) to provide a 60's style overdrive sound. The op-amp is used as straight gain and is never allowed to become non-linear.

In typical operation, the drive channel and the clean channel are presented to the channel 1/2 mix control (R17) so that a "blend" can be established. The channel select button (S9) on the front panel (or it's foot switch counterpart) selects between this channel mix or channel one only. This selection employs JFETS Q1-Q4.

Signals are then presented to a second - order Sallen and Key filter set to  $F_0$  of 36.6 Hz and a Q of 2.1. This filter provides about 6.5dB of boost at 41 Hz.

The signal path is routed to U17B where low-boost (S3) , mid-notch (S2), and high-boost (S4) equalization switches can be used. These circuits are followed by conventional Baxendall low (R58) and high (R62) equalization. The Baxendall circuit output is then sent to a graphic equalizer which can be selected by the footswitch or graphic EQ button (S7) on the front panel. The far-right graphic EQ slider (R71) is a +/- 10dB trim for graphic EQ gain compensation.

Next, the signal is presented to a second-order state-variable filter before being presented to the compressor circuit. Said filter is set to 420 Hz. At the compressor, low-frequency compression ratio (R100) and high-frequency compression ratio (R119) are adjustable to suit the user. Audio is presented to the "compressor EQ balance" (R102). The compressor EQ balance controls the mix ratios of the compressor outputs. A compressor gain trim (R80) is provided to compensate for the amount of amplification lost due to using the compressor. The compressor-gain trim control is able to compensate for a compressed signal of up to 10dB.

The FETs Q5 and Q6 select between pre- and post-compressor via the front panel switch (S8) or footswitch. After passing through op-amp U9B and master-gain control R107, the signal is sent to output jack J2, effects-loop send. The signal input at J3, effects-loop return, goes to differential receiver U11A.

Heater voltage (24VDC for 2 series-connected 12AX7s in the preamp) is derived from the 32VDC supply (+/- 16VDC).. Excess voltage is dropped across across paralleled ballast resistors, R354-R356, on the preamp PCB.

# CIRCUIT DESCRIPTION (CONT)

## Output section

On the top side of the chassis, at the rear of each pair (total = 3) of output tubes, is an LED and a fuse. The LED glows green when the associated pair of tubes is operating properly, and glows red if a tube failure has caused the related fuse to blow. If a fuse blows, replace it only with one of the same type and rating. **NEVER use a fuse with a higher current rating, as this could damage the equipment and present a serious safety hazard.** Next, replace the tubes in their respective locations, check and adjust the bias and balance.

**NOTE: it is normal for the LEDs to glow red when the amp is in standby mode.**

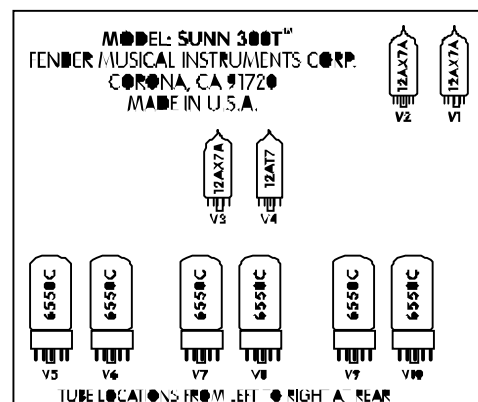
### Output tube bias adjustment instructions

1. Turn on the 300T and let it warm up for at least two minutes with the STANDBY switch in the ON position. Make sure the amplifier is connected to a speaker or equivalent load.
2. Remove the bias controls cover box.
3. With a DVM set to it's most sensitive DC voltage scale, measure the voltage between the **BIAS 100mV** test points, and adjust the **BIAS** control for a reading of .1 VDC (100mVDC)..
4. Next, connect the DVM to the **BALANCE 0V** test points, and adjust the **BALANCE** control for a reading of 0 VDC.
5. Replace the bias controls cover box.

### NOTES:

1. For optimum sonic performance, set bias to 100 mVDC first, then set balance.
2. If the output tubes cannot be biased to at least 80 mVDC, replace the 6550C output tubes.
3. If the output tubes cannot be balanced, check the bias setting and/or replace the 6550C output tubes.
4. If the power tube trouble LEDs are glowing green, it does not indicate that the tubes are not worn or weak.

### Tube layout:



# PARTS LIST

**NOTE: SHADED ITEMS ARE FOR REFERENCE ONLY**

## PRINTED CIRCUIT BOARD ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
4	054360	CAP AE AX 22uF 450V 20% 105C	C162 C166 C170 C176
2	054361	CAP AE AX 47uF 450V 20% 105C	C156 C159
4	033606	CAP AE RDL .47uF 50V 20%	C102 C126 C127 C130
2	054355	CAP AE RDL 1000uF 50V 20% 105C	C174-175
8	028463	CAP AE RDL 10uF 50V 20%	C41 C78 C81 C85 C88 C113 C178-179
1	028458	CAP AE RDL 1uF 50V 20%	C82
4	028459	CAP AE RDL 2.2uF 50V 20%	C27 C109 C112 C120
36	028467	CAP AE RDL 22uF 50V 20%	C16 C19-20 C31 C33-34 C36 C38-39 C45 C48 C51 C54 C57 C61 C64 C67 C70 C73-74 C80 C84 C86 C103 C107-108 C111 C115 C117 C124 C128 C144 C145 C147 C149-150
3	054356	CAP AE RDL 330uF 450V 20% 105C	C171-173
4	028460	CAP AE RDL 4.7uF 50V 20%	C2 C11 C12 C26
1	038699	CAP CA 100pF 100V 5%	C37
2	039265	CAP CA 2200pF 100V 5%	C79 C110
7	039259	CAP CA 220pF 100V 5%	C8 C40 C104-106 C114 C116
5	038873	CAP CA 22pF 100V 5%	C6 C15 C42 C59 C83
1	039261	CAP CA 330pF 100V 5%	C142
2	038701	CAP CA 470pF 50V 5%	C77 C163
2	039256	CAP CA 68pF 100V 5%	C118 C119
25	034788	CAP CD .1uF 50V 20% .15" cut	C4-5 C89-100 C121 C140-141 C146 C148 C151-155 C169 C167-168 C177
3	025995	CAP CD 8200pF 1000V 20% LL	C30
1	027256	CAP MPF .0015uF 100V 10%	C123 C125 C129
3	027260	CAP MPF .0039uF 100V 10%	C32 C35
2	027264	CAP MPF .01uF 100V 10%	C18
1	024823	CAP MPF .01uF 400V 10%	C23-25 C55-56 C58 C60 C62-63 C75-76
11	027267	CAP MPF .022uF 100V 10%	C160-161
2	024835	CAP MPF .022uF 630V 10%	C9-10 C87 C131-133 C138-139 C143
9	027272	CAP MPF .047uF 63V 10%	C22
1	027275	CAP MPF .068uF 100V 10%	C14
1	027277	CAP MPF .082uF 100V 10%	C28-29 C46-47 C49-50 C52-53
8	027280	CAP MPF .15uF 63V 10%	C157-158
2	024853	CAP MPF .1uF 250V 10%	C3 C7 C13 C17
4	024854	CAP MPF .1uF 400V 10%	C1 C21 C101 C122 C134-135
6	027278	CAP MPF .1uF 63V 10%	C137
1	027281	CAP MPF .22uF 63V 10%	

# PARTS LIST

## PRINTED CIRCUIT BOARD ASSEMBLY (CONT)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
2	027283	CAP MPF .33uF 63V 10%	C43-44
1	027286	CAP MPF .47uF 63V 10%	C136
6	030937	CAP PFF RDL .0027uF 50V 5%	C65-66 C68-69 C71-72
2	054357	CAP PPF .001uF 2kV 10%	C164-165
1	051679	CONTROL 10K5A 10K5C DET	R102
11	050514	CONTROL SLIDER 30MM 50KW	R71 R127-136
3	037600	CONTROL SNAPIN 100K B	R80 R100 R119
1	047540	CONTROL SNAPIN 250K 15A	R12
2	037597	CONTROL SNAPIN 250K 30A	R31 R42
1	041510	CONTROL SNAPIN 25K B	R107
2	051681	CONTROL SNAPIN 25K DET 2B	R58 R62
1	051677	CONTROL SNAPIN RND 10KB 250KB	R17
2	026133	CONTROL TRIM 25K LIN	R335 R361
14	064089	DIODE 1N4003 LL	CR75-78 CR80-87 CR101-102
17	026730	DIODE 1N4006 800V 1A	CR62-64 CR72 CR88-95 CR97-100 CR103
53	006260	DIODE 1N4448 SIGNAL LL	CR1-25 CR27 CR29-39 CR44-50 CR52 CR54-60 CR96
8	048361	DIODE 1N5407 800V 3A	CR65-71 CR74
2	029690	DIODE HV 3KV 200mA	CR73 CR79
32	025802	FSTN TAB MALE .250x.032 PCB MT	CP1-12 CP14-15 CP17-28 CP32-34 CP36-38
2	026000	FSTN TAB MALE PCB MT .187X.032	CP13 CP16
4	031041	FSTN TAB ML RTANG PCB .25x.032	CP29-31 CP35
6	051094	FUSE CLIP PCB 5MM (EXPT)	XF1 XF2 XF3
2	013112	FUSE TD 20mmx5mm 250v 1A	F1-2
1	013109	FUSE TD 20mmx5mm 250v 250mA	F3
3	033379	CABLE RIBBON 3 CKT 10"	P9A P11A P12A
3	049334	CABLE RIBBON 3 CKT 20"	P6A P7A P10A
6	027410	HDR .1 CTR 3 CKT SQ PIN	P6B P7B P9B P10B P11B P12B
1	051655	CABLE 6 CKT 14"	P5A
2	053856	CABLE RIBBON 6 CKT 8"	P3A P8A
3	027413	HDR .1 CTR 6 CKT SQ PIN	P3B P5B P8B
1	048914	CABLE RIBBON 8 CKT 7"	P4A
1	027416	HDR .1 CTR 8 CKT SQ PIN	P4B

# PARTS LIST

## PRINTED CIRCUIT BOARD ASSEMBLY (CONT)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
2	041808	HEADER 8 CKTx.1" LO	P1B P2B
2	041825	HEADER 8 PIN VERT.	P1A P2A
1	051680	IC AUDIO PROCESSOR SSM2120	U18
18	051198	IC DUAL OP AMP BA4560N SIP	U1 U5-8 U11-16 U19-23 U26-27
6	016795	IC DUAL OP AMP TL072	U2-4 U9-10 U17
1	051856	IC QUAD 2-IN NAND GATE 4011	U25
1	013562	IC REGULATOR +15V MC7815CT	U28
1	013564	IC REGULATOR -15V MC7915CT	U29
1	041261	IC VOLT REF LM4040DIZ-10.0	U24
2	051006	JACK 1/4 PCB DUAL TIP MONO	J1 J5
1	051007	JACK 1/4 PCB STEREO W/ SWITCH	J7
1	051658	JACK MONO R/A	J8
3	053450	JACK STEREO R/A	J2-4
3	026481	JACK TIP	J9-11
1	049892	JACK XLR MALE	J6
3	031871	LED BI-COLOR 5mmx5mm	LD6-8
5	028039	LED RED 5x5mm SLB-55VR3	LD2-5 LD9
1	033177	LED RED/GREEN 5x5mm BI-COLOR	LD1
1	051411	SPACER LED .4x.1 TURQUOISE	AT LD1
5	990470144	SPACER LED .7x.125 BLUE A6192-3	AT LD2-5 LD9
3	041527	SPACER RND NYL .680x.250x.147	AT LD6-8
4	025116	RES CF 1/2W 100K 5% LL	R10 R16 R27 R39
5	026368	RES CF 1/2W 100ohm 5% LL	R317-318 R354-356
1	048903	RES CF 1/2W 18k 5% LL	R331
4	026493	RES CF 1/2W 2.7K 5% LL	R234 R237 R241 R287
1	047436	RES CF 1/2W 270ohm 5% LL	R357
1	027869	RES CF 1/2W 470ohm 5% LL	R221
4	025941	RES CF 1/2W 560ohm 5% LL	R258 R337 R342 R347
4	024967	RES CF 1/4W 5% 1.2k LL	R6 R14 R79 R150
2	024969	RES CF 1/4W 5% 1.5k LL	R38 R50
2	025073	RES CF 1/4W 5% 1.5M LL	R124 R189
15	024997	RES CF 1/4W 5% 100k LL	R4 R29 R46 R75 R113 R181 R204 R226 R271 R273-275 R289-290 R307

# PARTS LIST

## PRINTED CIRCUIT BOARD ASSEMBLY (CONT)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
68	024981	RES CF 1/4W 5% 10k LL	R1 R5 R8 R15 R18 R20-21 R25 R28 R33 R36 R43-44 R48 R51 R56 R61 R63-64 R66-69 R76 R81-83 R87 R97 R99 R106 R108-109 R112 R114-116 R121 R125 R177 R184 R190 R193 R197 R200-201 R208-209 R212 R217 R228 R231-232 R243-245 R248 R253-254 R261 R266 R276 R285 R291 R298 R305 R308 R351 R178-180 R203 R296
5	024937	RES CF 1/4W 5% 10ohm LL	R13
1	024998	RES CF 1/4W 5% 120k LL	R53-54
2	029539	RES CF 1/4W 5% 13k LL	R35 R91 R292 R319-320
5	024999	RES CF 1/4W 5% 150k LL	R157 R163 R169 R175
4	024985	RES CF 1/4W 5% 15k LL	R84 R86 R145 R151
4	024986	RES CF 1/4W 5% 18k LL	R90 R94 R162 R174 R294-295 R297 R332
8	024965	RES CF 1/4W 5% 1k LL	R2 R19 R26 R32 R37 R45 R49 R92-93 R110 R210 R215 R219 R224 R236 R246-247 R251-252 R264 R279 R282 R286
23	025069	RES CF 1/4W 5% 1M LL	R170 R218 R225 R267 R98 R120 R146 R11 R207 R293 R95-96 R122 R182-183 R195 R205 R23 R40 R72-73 R78 R103 R214 R222 R229 R233 R238 R240 R242 R249 R259 R265 R268-269 R277 R284 R239 R255-256 R304
2	024971	RES CF 1/4W 5% 2.2k LL	R158
2	025075	RES CF 1/4W 5% 2.2M LL	R34 R140 R144 R152 R160 R164 R172 R57 R59 R138 R154 R153 R159 R165 R171 R270 R24 R230
3	029455	RES CF 1/4W 5% 2.4k LL	R60 R117 R137 R141 R147 R185 R191- 192 R198-199 R211 R227 R250 R278 R283
3	025059	RES CF 1/4W 5% 220k LL	R333 R353
7	024956	RES CF 1/4W 5% 220ohm LL	R88 R118 R186 R188 R148 R156 R168 R176 R166
20	024987	RES CF 1/4W 5% 22k LL	R47 R52 R142 R216 R235 R339 R344 R349 R213 R223
4	024988	RES CF 1/4W 5% 27k LL	
1	029005	RES CF 1/4W 5% 2k LL	
7	024973	RES CF 1/4W 5% 3.3k LL	
2	026504	RES CF 1/4W 5% 3.6k LL	
2	024975	RES CF 1/4W 5% 3.9k LL	
5	028865	RES CF 1/4W 5% 30k LL	
2	025061	RES CF 1/4W 5% 330k LL	
15	024989	RES CF 1/4W 5% 33k LL	
2	025063	RES CF 1/4W 5% 390k LL	
4	024991	RES CF 1/4W 5% 39k LL	
4	029610	RES CF 1/4W 5% 3k LL	
1	029472	RES CF 1/4W 5% 4.3k LL	
8	024977	RES CF 1/4W 5% 4.7k LL	
1	025828	RES CF 1/4W 5% 430k LL	
1	028956	RES CF 1/4W 5% 43k LL	

# PARTS LIST

## PRINTED CIRCUIT BOARD ASSEMBLY (CONT)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
4	025065	RES CF 1/4W 5% 470k LL	R41 R77 R206 R358
7	024961	RES CF 1/4W 5% 470ohm LL	R260 R272 R280-281 R338 R343 R348
9	024993	RES CF 1/4W 5% 47k LL	R104-105 R202 R373-378
10	024947	RES CF 1/4W 5% 47ohm LL	R7 R9 R65 R89 R126 R187 R257 R262- 263 R306
5	024978	RES CF 1/4W 5% 5.6k LL	R3 R30 R70 R74 R85
2	024994	RES CF 1/4W 5% 56k LL	R155 R167
1	028948	RES CF 1/4W 5% 6.2k LL	R55
2	024979	RES CF 1/4W 5% 6.8k LL	R194 R196
7	024995	RES CF 1/4W 5% 68k LL	R101 R111 R123 R139 R143 R334 R369
2	025942	RES CF 1/4W 5% 7.5k LL	R161 R173
1	024980	RES CF 1/4W 5% 8.2k LL	R149
8	025068	RES CF 1/4W 5% 820k LL	R288 R299-303 R321-322
2	027353	RES FILM 1W 100K LL 5% LL	R326-327
1	027349	RES FILM 1W 10K 5% LL	R359
2	041706	RES FILM 1W 470k 5% LL	R313-314
6	027354	RES FILM 1W 5% 220k LL	R336 R340-341 R345-346 R350
3	036470	RES MOX FP 1W 5% 10k LL	R328 R379-380
2	054213	RES MOX 2W 100k 5% LL	R311-312
1	053945	RES MOX 2W 150k 5% LL	R329
2	031629	RES MOX 2W 1ohm 5% LL	R365 R368
1	028021	RES MOX 2W 470ohm 5% LL	R220
12	027628	RES MOX 2W 47ohm 5% LL	R309-310 R324-325 R362-364 R366- 367 R371-372 R381
2	053947	RES MOX BT 18Kohm 5W 5%	R316 R323
1	053948	RES MOX BT 39Kohms 5W 5%	R360
2	031703	RES WW BT 10W 10% .22 ohm	R330 R352
1	026483	RES WW BT 10W 10% 2.7k	R370
1	053950	RES WW BT 18k 10W 10%	R315
5	050817	SWITCH PB PC VERT MNT DPDT	S2-4 S6 S9
1	049557	SWITCH PC MNT 2P3T	S10
4	028091	SWITCH PUSH SLFLK SHORT STROKE	S1 S5 S7-8
9	048451	BUTTON PUSH OFF WHITE	AT S1-9
1	026411	THERMISTOR 2.5 OHM 8A C30-19	TH1
6	029343	TUBE SOCKET 8 PIN PCB MOUNT	XV5-10

# PARTS LIST

## PRINTED CIRCUIT BOARD ASSEMBLY (CONT)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
4	051442	SOCKET TUBE 9 PIN PCB MOUNT	XV1-4
1	027325	XFMR LINE OUTPUT	T1
10	041465	XSTR N-CH JFET J113 TO-92	Q1-9 Q15
5	016739	XSTR NPN 2N4401 TO-92	Q11-12 Q19-21
6	016742	XSTR PNP 2N4403 TO-92	Q10 Q13-14 Q16-18
3	031729	DIODE ZEN 1N5231B.5W 5.1V 5%	CR42 CR51 CR53
1	029898	DIODE ZEN 1N5236B 7.5V 5% LL	CR43
3	031635	DIODE ZEN 1N5240B 10V 5%	CR40-41 CR61
2	031019	DIODE ZEN 1N5245B.5W 15V 5% LL	CR26 CR28
1	054385	WIRE SET PCB SUNN 300T	
2	025796	HEATSINK TO-220	AT U28-29
2	017746	WSHR SHLDR NYL 1/8x1/4	AT U28-29
2	017974	INSULATOR MICA TO-220	AT U28-29
2	027638	SCRW TF 4-40x3/8 HWHS ZI .1" HD	AT U28-29
12	014171	SCRW M 4-40x3/8 PHP BLX	AT XV5-10 TOP
16	039420	SCRW M 4-40x3/8 PHP SS SEMS	AT XV5-10 BOTTOM, GEQ REAR PCB
12	040533	STANDOFF 4-40x.937	AT XV5-10
4	016747	STNDOFF RND AL 4-40x3/4x1/4	AT GEQ REAR PCB

# PARTS LIST

## CHASSIS ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	053941	CHASSIS SUNN 300T	
1	053639	PCB ASSY SUNN 300T	
1	050853	XFMR PWR 300W 120V	DOMESTIC UNITS
1	053942	XFMR PWR 300W 100/230/240V	EXPORT UNITS
1	050854	TRANSFORMER, OUTPUT	
1	047213	CONNECTOR AC LINE MALE IEC	
3	036703	FUSE HOLDER 5MM FINGER GRIP	TUBES, EXPT. PWR (4 IN 230/240V)
1	036702	FUSE HOLDER 3AG FINGER GRIP	100,120V POWER
4	053893	TUBE SHIELD SUNN MODEL T	@ PRE TUBES
3	013004	FUSE TD 20mmx5mm 250V 100mA	SCREENS
1	028330	FUSE QA 1-1/4x1/4 250v 10A	DOMESTIC POWER
1	020798	FUSE QA 20mmx5mm 250v 5A	EXPORT POWER
8	025819	NUT KEPS 10-32 ZINC	4/XFMR
4	053479	NUT HEX 7/16 20X1/8 NI	@ REAN JACKS
5	016352	NUT HEX 3/8-32x3/32 TK NI	1/4" JACKS
12	039370	RETAINER ANCHOR TUBE SPRING	6550's
12	053956	SPRING, EXTENSION 2.49x.15"	6550's
6	039364	WASHER EPDM TUBE CLAMP DAMPNER	6550's
6	039369	RETAINER TOP TUBE SPRING	6550's
1	053892	COVER BOX BIAS CONTROLS	MODEL T RELEASE
11	024604	KNOB BLACK W/WHITE STAMP 1-10	@ CONTROLS
2	051155	SCRW SMB #4x3/8 PHP BLX	AT NEUTRIK XLR
2	021568	SCRW M 6-32x3/16 PHP NI	AT IMP SEL
23	031184	SCRW M6-32x1/4 PHPS BLX ITLW	PCA/CHASSIS
4	014171	SCRW M 4-40x3/8 PHP BLX	EQ PCB TO CHASSIS
1	038900	SCRW TF 6-32X1/4 PHP ZI	AC GND
4	032806	SCRW TF 6-32x1/4 PHP BLX	AT IEC, BIAS COVER
4	016747	STANDOFF 4-40X3/4" RND AL	EQ PCB
4	054386	STANDOFF M/F 4-40x9/16 HEX AL	EQ PCB
1	036570	SWITCH TOGGLE DPST W/NUTS	POWER
1	051855	SWITCH ROCKER DPST W/ BEZEL	STANDBY
1	022293	WSHR FLAT .473x.750 NI	@ PWR SW
4	053480	WASHER FLAT .442 X.692 NI	@ REAN JACKS
3	990430010	WASHER LCK INTL 3/8x.681x.032	IN & SPKR JACKS

# PARTS LIST

## CHASSIS ASSEMBLY (CONT)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
5	031153	WSHR FLAT 3/8x.614 NI	1/4" JACKS
6	048489	TUBE 6550WA OUTPUT	
3	013341	TUBE 7025/12AX7WA RUSSIAN MADE	
1	023531	TUBE 12AT7 CHINESE	

## CAB ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
8	0029071000	CORNER NOTCHED NICKLE (FD)	
4	0051049000	FOOT RUBBER 1.5 DIA	
2	0032524000	INSERT HANDLE	
4	0019279000	HANDLE CAP 2 HOLE NICKEL	
2	0027846000	HANDLE 9.25" NO LOGO	
16	0026571000	SCRW SMAB 8X5/8 THP NI	@ CORNERS
4	0026625000	SCRW WOOD 8x1 FH	
8	0031344000	SCREW SMA 10x3/4 OHP IN	
0.03	0027648000	TAPE ALUM 6"x60YDS	
8			
1.56	0051343000	VINYL TOLEX 4227A	

## END ITEM

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	0053932000	CHASSIS ASSY SUNN 300T 120V	
1	0053933000	CHASSIS ASSY SUNN 300T 240V AUST	
1	0053934000	CHASSIS ASSY SUNN 300T 230V UK	
1	0053935000	CHASSIS ASSY SUNN 300T 230V	
1	0053936000	CHASSIS ASSY SUNN 300T 100V	
1	0051392000	CAB ASSY SUNN 300T	
1	0047248000	CORD PWR W/IEC CONN DOM	DOMESTIC - 120V
1	0047250000	CORD PWR W/IEC CONN 240V AUST	240V AUST
1	0047249000	CORD PWR W/IEC CONN 230V UK	230V UK
1	0047251000	CORD PWR W/IEC CONN 230V	230V
1	0053997000	CORD PWR W/IEC CONN 100V	100V
1	0053895000	FOOTSWITCH 3 BUTTON SUNN BASS	1200S RELEASE
2	0051204000	FOAM TAPE 1/4" 1/16 3M4516	@ TOP OF FRONT GRILLE (PER FT.)

# PARTS LIST

## END ITEM (CONT)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	0053564000	GRILLE FRONT SUNN 300T	
1	0053598000	GRILLE REAR SUNN 300T	
8	0069393000	NUT 6-32 HEX EXT LOCK	@ NAMEPLATES
8	0036112000	SCRW SMAB 6x1-1/4 OHP BLX w/WS	GRILLE MOUNTING
8	0036199000	SCRW M 8-32x1-3/16 OHP BLX CP	CAB/CHASSIS
8	0017433000	SCRW M 6-32x3/8 PHP BLX	@ NAMEPLATES
8	0029527000	WSHR FNSH 8-5/8 FLNGD BLX WX	@ CAB/CHASSIS SCREWS
1	0051380000	PLATE SUNN LOGO	
1	0054382000	PLATE SUNN 300T	

# PARTS LIST

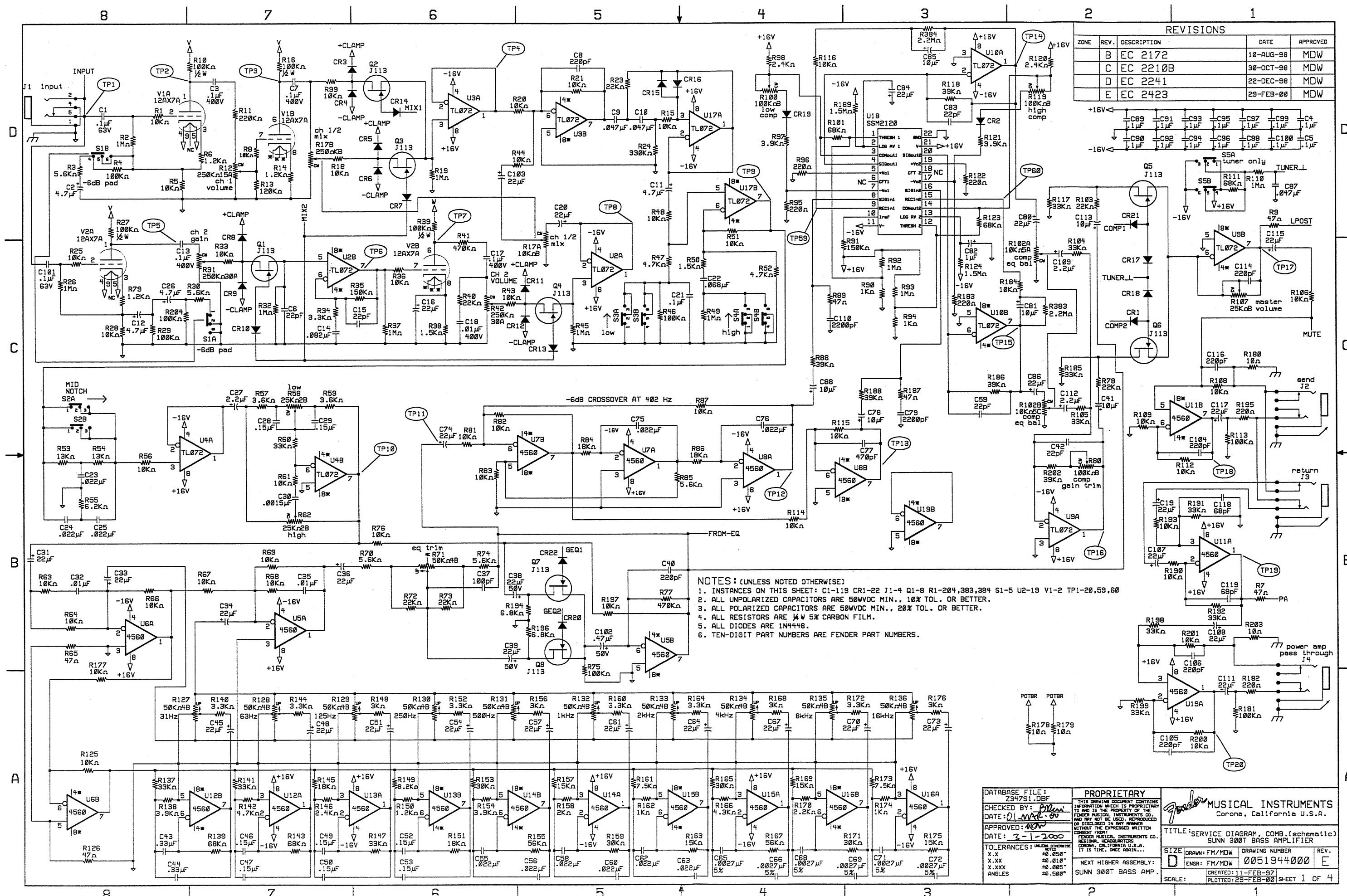
## FOOTSWITCH END ITEM

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	053897	PCB ASSY FTSW 3 BTN SUNN BASS	
1	053896	PLATE FTSW 3 BTN SUNN BASS	
1	028895	CABLE ASSY FTSW RT ANG 12'	
1	028109	HSG END CUP LEFT FTSW	
1	028143	HSG END CUP RIGHT FTSW	
1	028141	HSG FTSW 3 BUTTON	
1	031647	NUT HEX 12mmx1mm NI	
8	028684	SCRW SMB 6x3/8 PH PHS BLX	
3	031899	WSHR NYL .485x.775x.150 TK	

## FOOTSWITCH PCB ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	053898	PCB FAB FTSW 3 BTN SUNN BASS	
2	000626	DIODE 1N4448 SIGNAL LL	
1	031017	DIODE ZEN 1N5223B 2.7V 5%	
2	027327	DIODE ZEN 1N5234B 6.2V	
3	028039	LED RED 5x5MM SLB-55VR3	
1	037036	JACK PHONE PCB MONO CA PREMIUM	
3	041527	SPACER RND NYL .680x.250x.147	
3	028714	SWITCH PUSH SPDT	



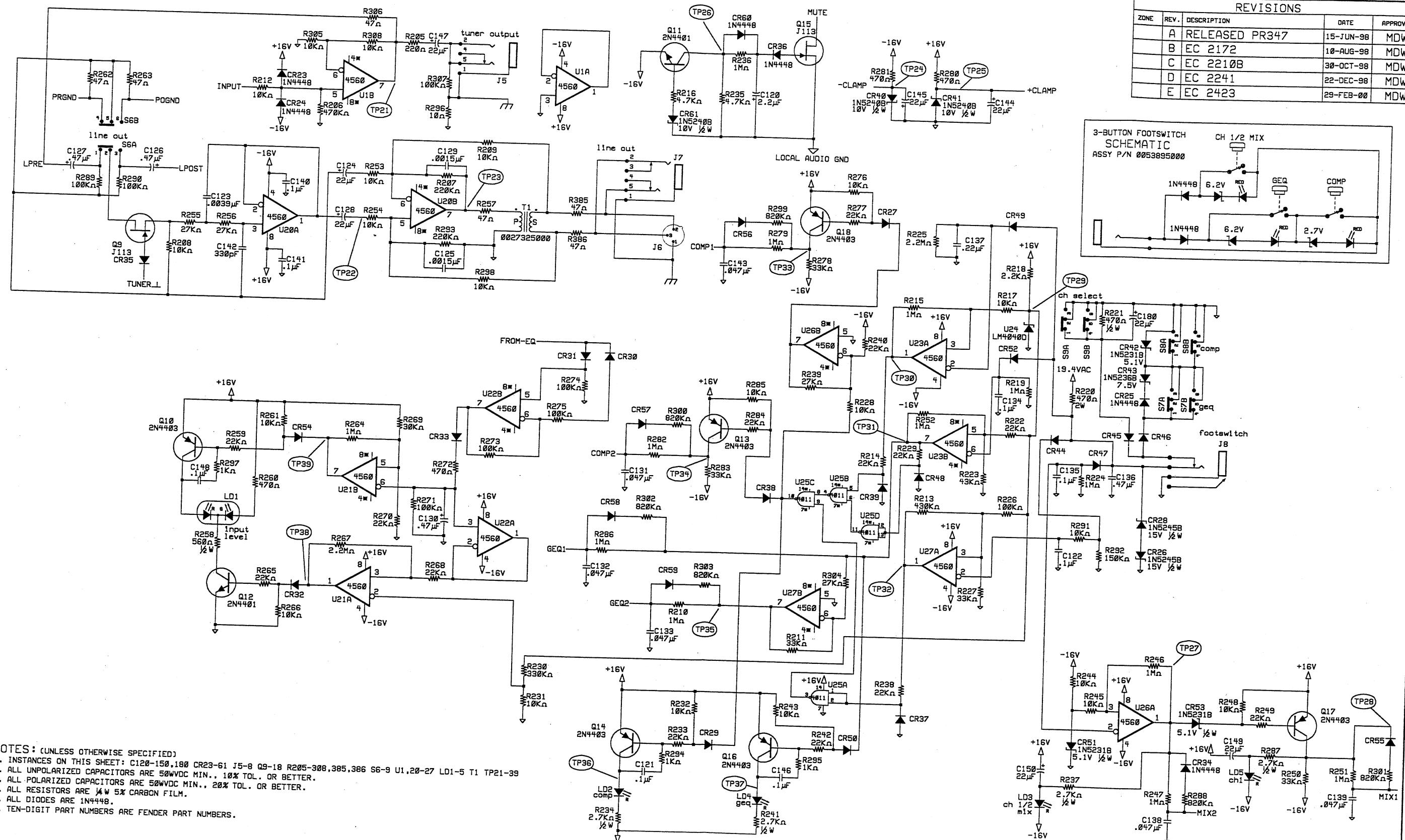
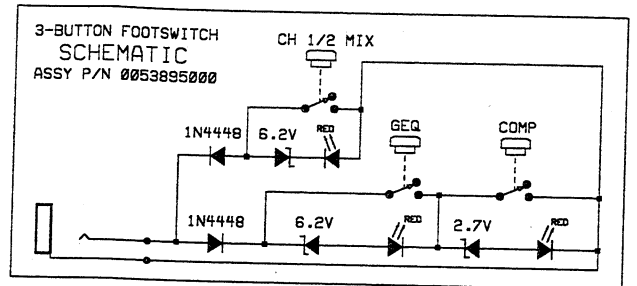


REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	B	EC 2172	10-AUG-98	MDW
	C	EC 2210B	30-OCT-98	MDW
	D	EC 2241	22-DEC-98	MDW
	E	EC 2423	29-FEB-00	MDW

- NOTES: (UNLESS NOTED OTHERWISE)
1. INSTANCES ON THIS SHEET: C1-119 CR1-22 J1-4 Q1-8 R1-204,383,384 S1-5 U2-19 V1-2 TP1-20,59,60
  2. ALL UNPOLARIZED CAPACITORS ARE 50WVDC MIN., 10% TOL. OR BETTER.
  3. ALL POLARIZED CAPACITORS ARE 50WVDC MIN., 20% TOL. OR BETTER.
  4. ALL RESISTORS ARE 1/4W 5% CARBON FILM.
  5. ALL DIODES ARE 1N4448.
  6. TEN-DIGIT PART NUMBERS ARE FENDER PART NUMBERS.

DATABASE FILE: 234751.DBF CHECKED BY: <i>Allen</i> DATE: <i>01-MAR-00</i> APPROVED: <i>MDW</i> DATE: <i>3-1-2000</i> TOLERANCES: UNLESS OTHERWISE NOTED X.X .050" X.XX .018" X.XXX .0027" ANGLES 5%	<b>PROPRIETARY</b> THIS DRAWING DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF THE FENDER MUSICAL INSTRUMENTS CO. AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT FROM FENDER MUSICAL INSTRUMENTS CO. REGIONAL HEADQUARTERS CORONA, CALIFORNIA U.S.A. IT IS TIME, ONCE AGAIN... NEXT HIGHER ASSEMBLY: SUNN 300T BASS AMP.	<b>Fender</b> MUSICAL INSTRUMENTS Corona, California U.S.A. TITLE: SERVICE DIAGRAM, COMB. (schematic) SUNN 300T BASS AMPLIFIER SIZE: DRAWN: FM/MDW ENGR: FM/MDW SCALE:	DRAWING NUMBER <b>0051944000</b> REV. <b>E</b> CREATED: 11-FEB-97 PLOTTED: 29-FEB-00 SHEET 1 OF 4
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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	RELEASED PR347	15-JUN-98	MDW
	B	EC 2172	18-AUG-98	MDW
	C	EC 2210B	30-OCT-98	MDW
	D	EC 2241	22-DEC-98	MDW
	E	EC 2423	29-FEB-00	MDW



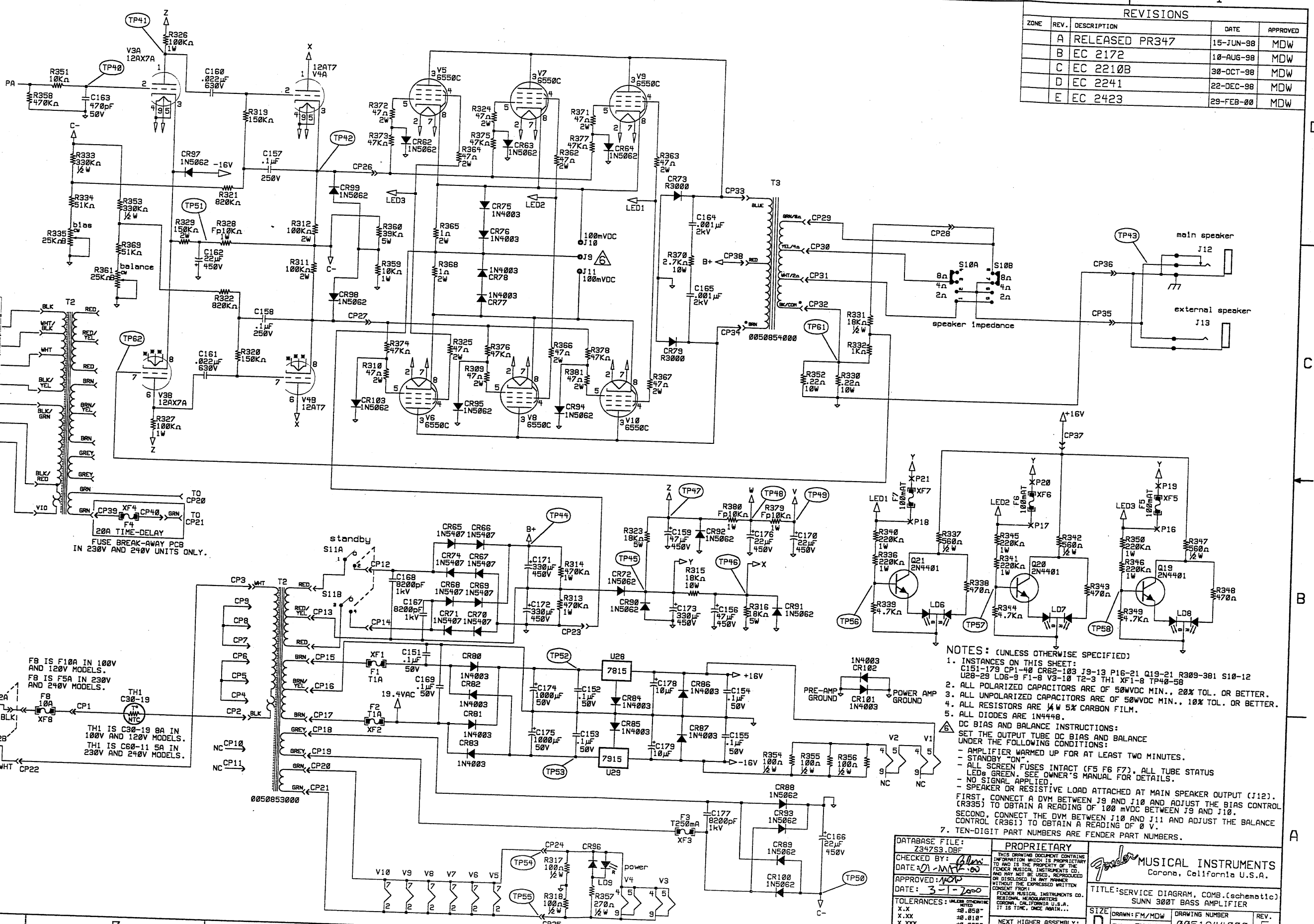
- NOTES: (UNLESS OTHERWISE SPECIFIED)
1. INSTANCES ON THIS SHEET: C120-150, 180 CR23-61 J5-8 Q9-18 R205-308, 385, 386 S6-9 U1, 20-27 LD1-5 T1 TP21-39
  2. ALL UNPOLARIZED CAPACITORS ARE 50WVDC MIN., 10% TOL. OR BETTER.
  3. ALL POLARIZED CAPACITORS ARE 50WVDC MIN., 20% TOL. OR BETTER.
  4. ALL RESISTORS ARE 1/4 W 5% CARBON FILM.
  5. ALL DIODES ARE 1N4448.
  6. TEN-DIGIT PART NUMBERS ARE FENDER PART NUMBERS.

DATABASE FILE: Z347S2.DBF CHECKED BY: <i>[Signature]</i> DATE: 01-MAR-99 APPROVED: <i>[Signature]</i> DATE: 3-1-2000 TOLERANCES: UNLESS OTHERWISE NOTED X.X      ±0.050" X.XX     ±0.010" X.XXX    ±0.005" ANGLES   ±0.500°	<b>PROPRIETARY</b> THIS DRAWING DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF THE FENDER MUSICAL INSTRUMENTS CO. AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT FROM FENDER MUSICAL INSTRUMENTS CO. REGIONAL HEADQUARTERS CORONA, CALIFORNIA U.S.A. IT IS TIME, ONCE AGAIN... NEXT HIGHER ASSEMBLY: SUNN 300T BASS AMP.	<b>Fender MUSICAL INSTRUMENTS</b> Corona, California U.S.A. TITLE: SERVICE DIAGRAM, COMB.(schematic) SUNN 300T BASS AMPLIFIER SIZE: DRAWN: FM/MDW   DRAWING NUMBER: 0051944000 ENGR: FM/MDW CREATED: 05-APR-97 PLOTTED: 29-FEB-00 SHEET 2 OF 4
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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	RELEASED PR347	15-JUN-98	MDW
	B	EC 2172	18-AUG-98	MDW
	C	EC 2210B	30-OCT-98	MDW
	D	EC 2241	22-DEC-98	MDW
	E	EC 2423	29-FEB-00	MDW

100V 50/60Hz	230V 50/60Hz	240V 50/60Hz
CP8	CP7	CP3
CP10	CP3	CP7
CP3	CP11	CP11
CP5	CP5	CP5
CP7	CP4	CP4
CP4	CP10	CP10
CP2	CP2	CP2

WIRING DIAGRAM,  
EXPORT POWER  
TRANSFORMER.  
0053942000



TO CP20  
TO CP21  
20A TIME-DELAY  
FUSE BREAK-AWAY PCB  
IN 230V AND 240V UNITS ONLY.

FB IS F10A IN 100V  
AND 120V MODELS.  
FB IS F5A IN 230V  
AND 240V MODELS.  
TH1 IS C30-19 8A IN  
100V AND 120V MODELS.  
TH1 IS C60-11 5A IN  
230V AND 240V MODELS.

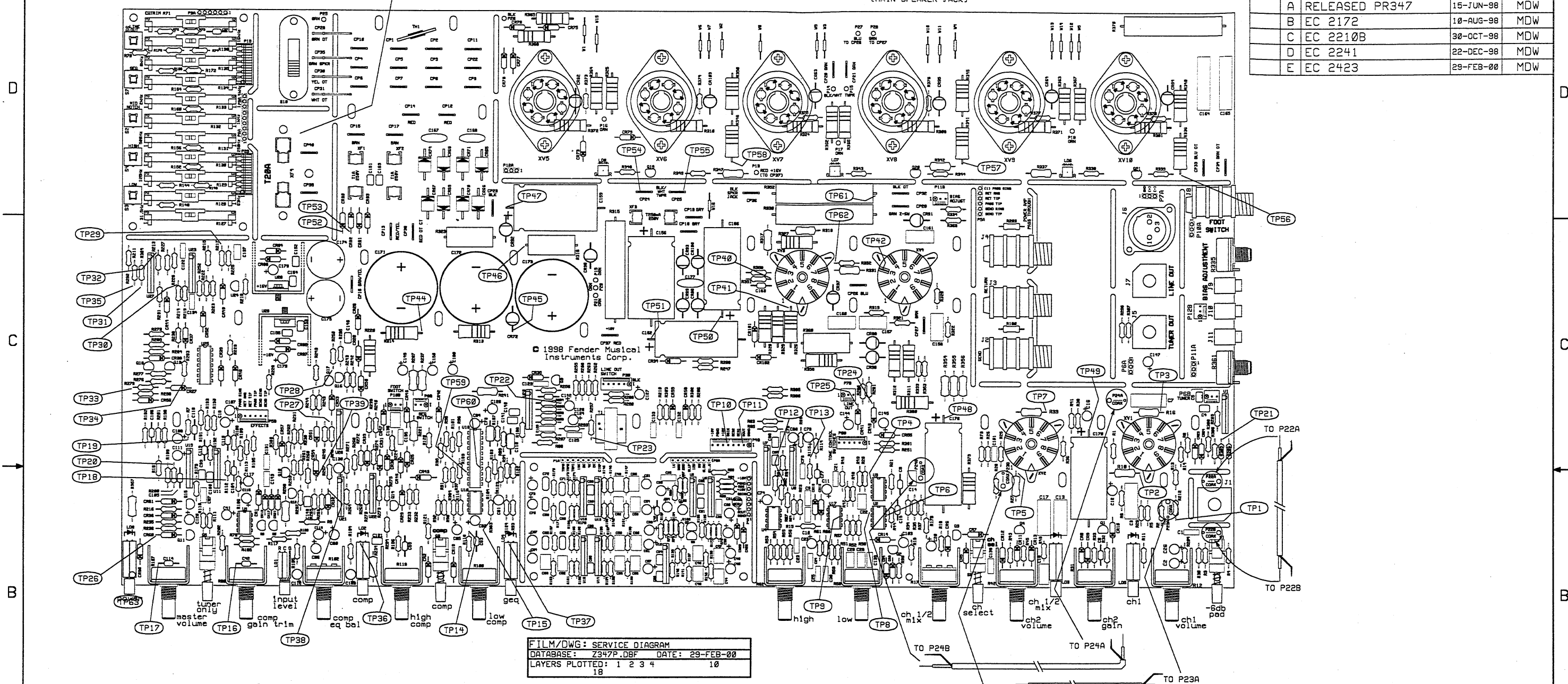
- NOTES: (UNLESS OTHERWISE SPECIFIED)
- INSTANCES ON THIS SHEET:  
C151-179 CP1-40 CR62-103 J9-13 P16-21 Q19-21 R309-381 S10-12  
U28-29 L05-9 F1-8 V3-10 T2-3 TH1 XF1-8 TP40-58
  - ALL POLARIZED CAPACITORS ARE OF 50WVDC MIN., 20% TOL. OR BETTER.
  - ALL UNPOLARIZED CAPACITORS ARE OF 50WVDC MIN., 10% TOL. OR BETTER.
  - ALL RESISTORS ARE 1/4 W 5% CARBON FILM.
  - ALL DIODES ARE 1N4448.
- DC BIAS AND BALANCE INSTRUCTIONS:  
SET THE OUTPUT TUBE DC BIAS AND BALANCE UNDER THE FOLLOWING CONDITIONS:  
- AMPLIFIER WARMED UP FOR AT LEAST TWO MINUTES.  
- STANDBY ON  
- ALL SCREEN FUSES INTACT (F5 F6 F7), ALL TUBE STATUS LEDs GREEN. SEE OWNER'S MANUAL FOR DETAILS.  
- NO SIGNAL APPLIED.  
- SPEAKER OR RESISTIVE LOAD ATTACHED AT MAIN SPEAKER OUTPUT (J12).
- FIRST, CONNECT A DVM BETWEEN J9 AND J10 AND ADJUST THE BIAS CONTROL (R335) TO OBTAIN A READING OF 100 mVDC BETWEEN J9 AND J10.  
SECOND, CONNECT THE DVM BETWEEN J10 AND J11 AND ADJUST THE BALANCE CONTROL (R361) TO OBTAIN A READING OF 0 V.
7. TEN-DIGIT PART NUMBERS ARE FENDER PART NUMBERS.

DATABASE FILE: Z34753.DBF CHECKED BY: DATE: 3-1-2000 APPROVED: [Signature] DATE: 3-1-2000 TOLERANCES: UNLESS OTHERWISE SPECIFIED X.X .05" X.XX .01" X.XXX .005" ANGLES .500"	<b>PROPRIETARY</b> THIS DRAWING DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF THE FENDER MUSICAL INSTRUMENTS CO. AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT FROM: FENDER MUSICAL INSTRUMENTS CO. REGIONAL HEADQUARTERS CORONA, CALIFORNIA U.S.A. IT IS THE POLICY OF FENDER...	<b>Fender</b> MUSICAL INSTRUMENTS Corona, California U.S.A. TITLE: SERVICE DIAGRAM, COMB. (schematic) SUNN 300T BASS AMPLIFIER SIZE: D DRAWN: FM/MDW DRAWING NUMBER: 0051944000 ENGR: FM/MDW REVISION: E SCALE: 1:1 CREATED: 05-APR-97 PLOTTED: 29-FEB-00 SHEET 3 OF 4
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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	RELEASED PR347	15-JUN-98	MDW
	B	EC 2172	10-AUG-98	MDW
	C	EC 2210B	30-OCT-98	MDW
	D	EC 2241	22-DEC-98	MDW
	E	EC 2423	29-FEB-00	MDW

XF4, CP39, CP40 INSTALLED IN 230V AND 240V UNITS ONLY.

TP43 AT J12 TIP (MAIN SPEAKER JACK)



FILM/DWG: SERVICE DIAGRAM  
 DATABASE: Z347P.DBF DATE: 29-FEB-00  
 LAYERS PLOTTED: 1 2 3 4 10 18

TP#	VOLTS DC	VOLTS AC	ADDITIONAL CONDITIONS/NOTES
1		25.8 mV	
2	+133 V	326 mV	
3	+133 V	470 mV	
4		468 mV	
5	+133 V	70 mV	
6		528 mV	
7	+153 V	26.7 V	WITH S9 (ch select) IN AND 5.9 mV AT TP1 (INPUT)
8		679 mV	
9		478 mV	
10		462 mV	
11		450 mV	
12		225 mV	
13		225 mV	
14		218 mV	225 mV MAXIMUM, APPROXIMATE
15		218 mV	225 mV MAXIMUM, APPROXIMATE
16		847 mV	918 mV MAXIMUM, APPROXIMATE
17		246 mV	
18		246 mV	
19		743 mV	
20		246 mV	
21		50.4 mV	

TP#	VOLTS DC	VOLTS AC	ADDITIONAL CONDITIONS/NOTES
22		49.5 mV	
23		48.4 mV	
24	-10.2 V		
25	+10.2 V		
26	-15.4 V		5 SECONDS AFTER TURN-ON
27	-13.9 V		
27	+14.1 V		WITH S9 (ch select) IN
28	+15.5 V		
28	-15.4 V		WITH S9 (ch select) IN
29	+10.0 V		
30	+14.9 V		
30	-14.1 V		WITH S8 (comp) AND S7 (geq) IN
31	+14.8 V		
31	-13.7 V		WITH S7 (geq) IN
32	+14.9 V		
32	-14.1 V		WITH S8 (comp) IN
33	+15.5 V		
33	-15.4 V		WITH S8 (comp) IN
34	-15.4 V		
34	+15.5 V		WITH S8 (comp) IN
35	-14.1 V		

TP#	VOLTS DC	VOLTS AC	ADDITIONAL CONDITIONS/NOTES
35	+14.8 V		WITH S7 (geq) IN
36	-14.1 V		
36	+15.5 V		WITH S8 (comp) IN
37	-14.2 V		
37	+15.5 V		WITH S7 (geq) IN
38	-14.1 V		
38	+14.7 V		WITH ≥10mV SIGNAL AT TP1, R12 (volume) AT FULL CW.
39	+15.1 V		
39	-13.8 V		WITH ≥100mV SIGNAL AT TP1, R12 (volume) FULL CW.
40		781 mV	
41	+171 V	8.72 V	SAME AT V3B PIN 6.
42	-49.4 V	8.57 V	SAME AT V4B PIN 8.
43		11.8 V	
44	+742 V		
45	+372 V		
46	+135 V		
47	+276 V		
48	+241 V		
49	+214 V		

TP#	VOLTS DC	VOLTS AC	ADDITIONAL CONDITIONS/NOTES
50	-327 V		
51	-306 V		
52	+24.6 V		
53	-24.6 V		
54		3.29 V	
55		3.29 V	
56	+2.83 V		0.0 V IN STANDBY OR WITH OPEN F6;
57	+2.83 V		0.0 V IN STANDBY OR WITH OPEN F5;
58	+2.83 V		0.0 V IN STANDBY OR WITH OPEN F4;
59	+2.00 V		DC BIAS AT U18 RECTIFIER INPUT PIN 9
60	+2.00 V		DC BIAS AT U18 RECTIFIER INPUT PIN 15
61		161 mV	
62	0.0 V	472 mV	

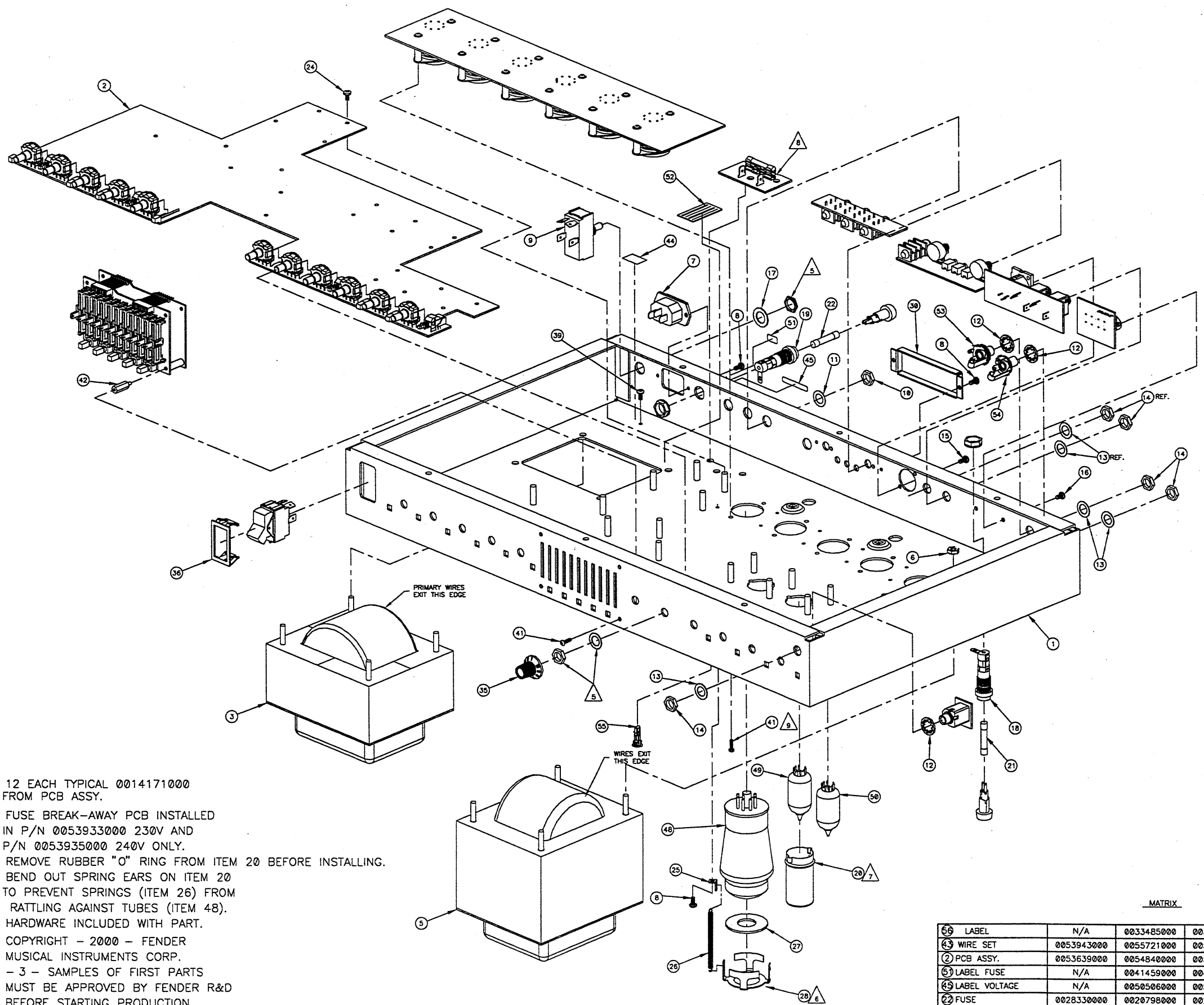
NOTES AND TEST CONDITIONS:

- VOLTAGES MEASURED WITH RESPECT TO GROUND USING A DVM OF AT LEAST 10MΩ DC AND 1MΩ AC INPUT IMPEDANCE. VOLTAGES MAY VARY ±20%.
- ALL DC AND SUPPLY VOLTAGES MEASURED WITH NO SIGNAL APPLIED.
- UNIT AT RATED LINE VOLTAGE.
- 8A RESISTIVE LOAD CONNECTED AT TP43 (J12), AND S10 (SPEAKER IMPEDANCE SWITCH) SET TO 8Ω.
- ALL CONTROLS AT CENTER ROTATION ("5-1/2").
- ALL PUSH BUTTON SWITCHES OUT.
- 25.8 mV 400 Hz SINEWAVE APPLIED AT TP1 (INPUT JACK).
- NO FOOTSWITCH CONNECTED.
- DC BIAS AND BALANCE CONTROLS R335 AND R361 SET TO OBTAIN A READING OF 100 mVDC FROM J10 AND J11 TO GROUND. SEE SCHEMATIC FOR INSTRUCTIONS.
- PCB SHOWN AS FABRICATED, WITH BREAK-AWAYS IN PLACE.

DATABASE FILE: Z347P.DBF CHECKED BY: DATE: 01-11-00 APPROVED: DATE: 3-1-2000	PROPRIETARY THIS DRAWING DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO AND IS THE PROPERTY OF THE FENDER MUSICAL INSTRUMENTS CO. AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT FROM FENDER MUSICAL INSTRUMENTS CO. REGIONAL HEADQUARTERS CORONA, CALIFORNIA U.S.A. IT IS TIME, ONCE AGAIN...	FENDER MUSICAL INSTRUMENTS Corona, California U.S.A. TITLE: SERVICE DIAGRAM COMB. (PCB 889J) SUNN 300T BASS AMPLIFIER SIZE: D DRAWN: WILKENS ENGR: FM/MDW DRAWING NUMBER: 0051944000 REV: E NEXT HIGHER ASSEMBLY: SUNN 300T BASS AMP. CREATED: 08-JUN-98 PLOTTED: 29-FEB-00 SHEET 4 OF 4
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THIS DOCUMENT CONTAINS INFORMATION OF A PROPRIETARY NATURE TO FENDER MUSICAL INSTRUMENTS AND IS SUBMITTED TO YOU IN CONFIDENCE AND SHALL NOT BE DISCLOSED OR TRANSMITTED TO OTHERS WITHOUT AUTHORIZATION FROM FENDER MUSICAL INSTRUMENTS CORP.

REV	EC NUMBER	BY	DATE
B	EC 2198	GHG	11/11/98
C	EC 2245-ADD ITEM 55, CHG QTY FOR ITEM 8 TO 16, CHG NOTE B	BS	1/18/99
D	EC 2378- ADD ITEM 56	BW	1/13/2000



(N.S.) = NOT SHOWN

56	1	SEE MATRIX	LABEL MADE IN USA 1-3/4 x 7/32 (N.S.)
55	3	0051404000	STANDOFF NYLON BLACK .375
54	1	0021956000	JACK PHONE OPEN CIRCUIT 11
53	1	0021550000	JACK PHONE TIP SHUNT 12A
52	1	0037139000	LABEL FUSE REPLACEMENT
51	1	SEE MATRIX	LABEL FUSE
50	1	0023531000	TUBE 12AT7 HIGH MJ TWIN TRIODE
49	3	0013341000	TUBE 7025/12AX7WA RUSSIAN MADE
48	6	0048489000	TUBE VACUUM 6550 OUTPUT
45	1	SEE MATRIX	LABEL VOLTAGE
44	1	0013020000	LABEL GROUNDING SEMKO
43	1	SEE MATRIX	WIRE SET SUNN 300T CHASSIS (N.S.)
42	4	0054386000	STANDOFF M/F 4-40x9/16 HEX AL
41	4	0014171000	SCRW M 4-40x3/8" PHP BLX
39	1	0038900000	SCRW TF 6-32x1/4 PHP ZI
36	1	0051855000	SWITCH ROCKER DPST W/BEZEL
35	11	0024604000	KNOB BLACK W/WHITE STAMP 1-10
30	1	0053892000	COVER BOX BIAS CONTROLS
28	6	0039369000	RETAINER TOP TUBE SPRING
27	6	0039364000	WASHER EPDM TUBE CLAMP DAMPNER
26	12	0053956000	SPRING, EXTENSION 2.49x.15"
25	12	0039370000	RETAINER ANCHOR TUBE SPRING
24	23	0031184000	SCRW M6-32x1/4 PHPS BLX ITLW
22	1	SEE MATRIX	FUSE
21	3	0013004000	FUSE TD 20mmx5mm 250V 100mA
20	4	0053893000	TUBE SHIELD SUNN MODEL T
19	1	SEE MATRIX	FUSE HOLDER
18	3	0036703000	FUSE HOLDER 5mm FINGER GRIP
17	1	0022293000	WSHR FLAT .473x.750 NI
16	2	0021568000	SCRW M 6-32x3/16 PHP NI
15	2	0051155000	SCRW SMB #4x3/8 PHP BLX
14	5	0016352000	NUT HEX 3/8-32x3/32 TK NI
13	5	0031153000	WSHR FLAT 3/8x.614 NI
12	3	9904300100	WASHER LCK INTL 3/8x.681x.032
11	4	0053480000	WASHER FLAT .442 x.692 NI
10	4	0053479000	NUT HEX 7/16 20x1/8 NI
9	1	0036570000	SWITCH TOGGLE DPST W/NUTS
8	16	0032806000	SCRW TF 6-32x1/4 PHP BLX
7	1	0047213000	CONNECTOR AC LINE MALE IEC
6	8	0025819000	NUT KEPS 10-32 ZINC
5	1	0050854000	TRANSFORMER, OUTPUT
3	1	SEE MATRIX	XFMR POWER
2	1	SEE MATRIX	PCB ASSY SUNN 300T
1	1	0053941000	CHASSIS SUNN 300T

- ⚠ 12 EACH TYPICAL 0014171000 FROM PCB ASSY.
  - ⚠ FUSE BREAK-AWAY PCB INSTALLED IN P/N 0053933000 230V AND P/N 0053935000 240V ONLY.
  - ⚠ REMOVE RUBBER "O" RING FROM ITEM 20 BEFORE INSTALLING.
  - ⚠ BEND OUT SPRING EARS ON ITEM 20 TO PREVENT SPRINGS (ITEM 26) FROM RATTLING AGAINST TUBES (ITEM 48).
  - 5. HARDWARE INCLUDED WITH PART.
  - 4. COPYRIGHT - 2000 - FENDER MUSICAL INSTRUMENTS CORP.
  - 3. - 3 - SAMPLES OF FIRST PARTS MUST BE APPROVED BY FENDER R&D BEFORE STARTING PRODUCTION.
  - 2. ALL DIMENSIONS ARE IN INCHES.
  - 1. DO NOT SCALE DRAWING.
- NOTES: UNLESS OTHERWISE NOTED

MATRIX

56	LABEL	N/A	0033485000	0033485000	0033485000
43	WIRE SET	0053943000	0055721000	0055721000	0053943000
2	PCB ASSY.	0053639000	0054840000	0054840000	0053639000
51	LABEL FUSE	N/A	0041459000	0041459000	N/A
45	LABEL VOLTAGE	N/A	0050506000	0050505000	0050507000
22	FUSE	0028330000	0020798000	0020798000	0028330000
19	FUSE HOLDER	0036702000	0036703000	0036703000	0036702000
3	XFMR POWER	0050853000	0053942000	0053942000	0053942000
1	CHASSIS ASSY.	SUNN 300T 120V DOM. 0053932000	SUNN 300T 240V AUST. 0053933000	SUNN 300T 230V 100V JPN. 0053935000	SUNN 300T 0053941000

ENGINEER  
WILKENS  
DRAWN  
GOOLER  
DATE  
5/20/98  
DFT. ENG. LENG.  
DATE DATE DATE  
1/13/00  
APPROVED  
DATE  
1/17/2000

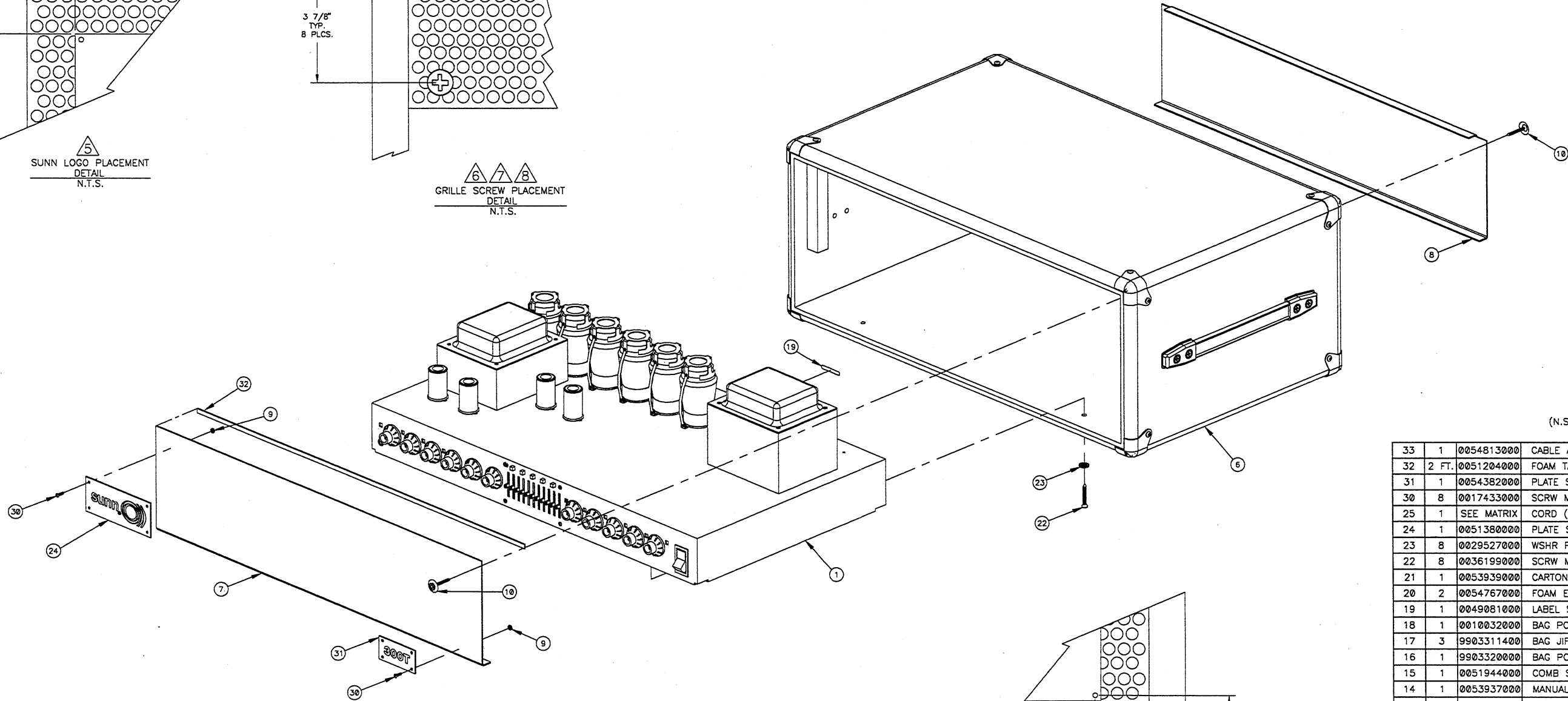
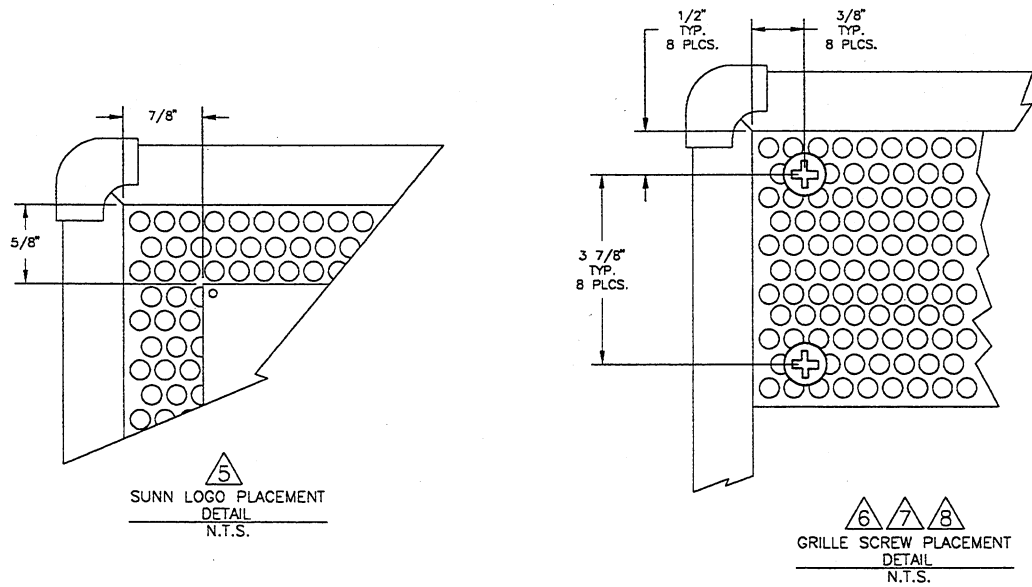
**Fender**  
FENDER MUSICAL INSTRUMENTS CORP.  
CORONA, CALIFORNIA 91720

TITLE  
CHASSIS ASSEMBLY  
SUNN 300T

SHEET	SIZE	DRAWING NUMBER	REV.
1/1	D	0053932000	D
SCALE	N/A	MASTER/ASSEMBLY	

THIS DOCUMENT CONTAINS INFORMATION OF A PROPRIETARY NATURE TO FENDER MUSICAL INSTRUMENTS AND IS SUBMITTED TO YOU IN CONFIDENCE AND SHALL NOT BE DISCLOSED OR TRANSMITTED TO OTHERS WITHOUT AUTHORIZATION FROM FENDER MUSICAL INSTRUMENTS CORP.

REV	EC NUMBER	BY	DATE/WORK
A	PR 347	GHG	6/11/98
B	EC 2155	B.S.	8/19/98
C	CR 199 CHG BOM	JR	2/2/99



(N.S.) = NOT SHOWN

33	1	0054813000	CABLE ASSY SPEAKER SUNN (N.S.)
32	2 FT.	0051204000	FOAM TAPE 1/4" 1/16 3M4516
31	1	0054382000	PLATE SUNN 300T
30	8	0017433000	SCRW M 6-32x3/8 PHP BLX
25	1	SEE MATRIX	CORD (N.S.)
24	1	0051380000	PLATE SUNN LOGO
23	8	0029527000	WSHR FN5H 8-5/8 FLNGD BLX WX
22	8	0036199000	SCRW M 8-32x1-3/16 OHP BLX CP
21	1	0053939000	CARTON SUNN 300T (N.S.)
20	2	0054767000	FOAM END CAP SUNN 300T (N.S.)
19	1	0049081000	LABEL SERIAL (CORONA)
18	1	0010032000	BAG POLY BOX BTM 23x17x40 .002 (N.S.)
17	3	9903311400	BAG JIFFY #1 7-1/4x12 (N.S.)
16	1	9903320000	BAG POLY BOX ZIP 10x13 2M (N.S.)
15	1	0051944000	COMB SVC DIAG PCB SUNN 300T (N.S.)
14	1	0053937000	MANUAL OWNERS SUNN 300T (N.S.)
11	1	0053895000	FOOTSWITCH 3 BUTTON SUNN BASS (N.S.)
10	8	0036112000	SCRW SMAB 6x1-1/4 OHP BLX w/WS
9	8	0069393000	NUT 6-32 HEX EXT LOCK
8	1	0053598000	GRILLE REAR SUNN 300T
7	1	0053564000	GRILLE FRONT SUNN 300T
6	1	0051392000	CAB ASSY SUNN 300T
1	1	SEE MATRIX	CHASSIS

ITEM	QTY.	PART NO.	DESCRIPTION
ENGINEER WILKENS			
DRAWN GOOLER			
DATE 5/21/98			
TITLE END ITEM SUNN 300T			
SHEET 1/1			
SCALE N/A			
DRAWING NUMBER 0213302000			
REV. C			

- △ 8. DISTANCE BETWEEN CHASSIS TOP AND REAR GRILLE 1/16".
  - △ 7. DISTANCE BETWEEN CHASSIS TOP AND FRONT GRILLE 1/16".
  - △ 6. LOCATE SCREWS AS HOLES WILL PERMIT.
  - △ 5. LOCATE LOGOS AS HOLES WILL PERMIT.
  - 4. COPYRIGHT - 1999 - FENDER MUSICAL INSTRUMENTS CORP.
  - 3. - 3 - SAMPLES OF FIRST PARTS MUST BE APPROVED BY FENDER R&D BEFORE STARTING PRODUCTION.
  - 2. ALL DIMENSIONS ARE IN INCHES.
  - 1. DO NOT SCALE DRAWING.
- NOTES: UNLESS OTHERWISE NOTED



MATRIX

23	CORD	0047248000	0047250000	0047249000	0047251000	0053997000
1	CHASSIS	0053932000	0053933000	0053935000	0053935000	0053936000
	END ITEM	SUNN 300T 120V DOM. 0213302000	SUNN 300T 240V AUST. 0213332000	SUNN 300T 230V U.K. 0213342000	SUNN 300T 230V 0213362000	SUNN 300T 100V JAP. 0213372000