

ACOUSTASONIC PRO

p/n 022-1300-000 (120V)

SERVICE MANUAL

ACOUSTASONIC PRO
(This is the model name for warranty claims)

SERVICE MANUAL

JUNE 1999

IMPORTANT NOTICE:

The information contained herein is CONFIDENTIAL and PROPRIETARY to Fender Musical Instruments Corp. 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

DSP EFFECTS LIST

Product Release No.: PR 328 *(This is not a model number)*

Part Number: 120V Version : 22-1300
 240V Aust : 22-1330
 230V UK : 22-1340
 230V : 22-1360
 100V : 22-1370

Preamp Section

Input impedance: 10 MΩ (Inst), 1.82kΩ (Mic), 18.2kΩ (Line/Inst)

Tone Controls: Treble: +/- 15dB @ 15kHz(Inst)
 Mid: +/- 12dB @ 1kHz (Inst)
 Bass: +/- 12dB @ 100Hz (Inst)

Feedback Notch: -10dB from 63Hz to 400Hz (Instrument Channel)
 -10dB from 150Hz to 825Hz (Instrument Channel)

String Dynamics: 0 to -15dB @ 6.3kHz (Instrument Channel)

Phantom Power: +48VDC (Mic)

Power Amplifier Section

Power output: 80 Watts/channel (160W RMS total) into 8 ohms @ <.2% THD, both channels driven

Sensitivity: 186mV (both channels)

Power Requirements: 120V Version: 120 VAC 60 Hz, 450W
 230V : 230 VAC 50 Hz, 450W

Speaker Complement: Two 8 Ohm Special Design 8" Speaker (p/n 051016)
 One Piezo Horn (p/n 049260)

Dimensions: Height: 18" (46 cm)
 Width: 24" (61 cm)
 Depth: 12" (30.5 cm)

Weight: 45 lbs. (20.4 kg)

PRESET	INSTRUMENT EFFECT	MIC EFFECT	PARAMETER DESCRIPTION
--	Bypass	Bypass	Effects bypass
0-2	Chorus+Delay+Reverb	Chorus+Delay+Reverb	Stereo choruses, multi-tap delays, stereo reverbs
3-5	Delay+Chorus	Delay+Chorus	Stereo choruses w/ multi-tap delays
6-8	Chorus+Room 1	Chorus+Room 1	Stereo choruses w/ small room reverb
9-11	Chorus+Room 2	Chorus+Room 2	Stereo choruses w/ medium room reverb
12-15	Chorus+Hall	Chorus+Hall	Stereo choruses w/ hall reverb
16-17	Flange+Reverb	Flange+Reverb	Stereo flanges w/ medium reverb
18-21	Delay+Room 1	Delay+Room 1	Multi-tap delays w/ small room reverb
22-24	Delay+Room 2	Delay+Room 2	Multi-tap delays w/ medium room reverb
25-27	Delay+Hall	Delay+Hall	Multi-tap delays w/ hall reverb
28-34	Room Reverb	Room Reverb	Room increasing in size
35-41	Hall Reverb	Hall Reverb	Halls increasing in size
42-46	Plate Reverb	Plate Reverb	Plates increasing in size
47-51	Chorus	Chorus	Fast/Shallow to Slow/Deep settings
52-53	Flange	Flange	Fast/Shallow to Slow/Deep settings
54	Slap	Slap	125ms delay, no regeneration
55-64	Delay	Delay	Mono delays, Short to long times
65-69	Multi-Tap Delay	Multi-Tap Delay	Stereoized multi-tap delays
70-73	Vibratone	Vibratone	Slow/Deep to Fast/Shallow settings
74-76	Tremolo	Tremolo	Fender Tremolo, Slow to Fast settings
77-78	Pan	Pan	Left to Right pan
79-81	Reverb	Reverb	Small room rev on instrument, vocal rev on Mic
82-87	Fast Chorus	Reverb	Fast, shallow chorus, reverbs of increasing size
88-93	Slow Chorus	Reverb	Slow, deep chorus, reverbs of increasing
94-96	Delay	Reverb	Short to long delays, medium reverb
97-99	Vibratone	Reverb	Vibratones, medium reverb

Product specifications are subject to change without notice

PARTS LIST

NOTE: SHADED ITEMS ARE FOR REFERENCE ONLY

PRINTED CIRCUIT BOARD ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
3	048451000	BUTTON PUSH OFF WHITE	at S502-504
3	040987000	CABLE RIBBON 10CKT 3.75"	PW3-5
1	037943003	CAP AE RDL .33uF 50V 20%	C310
1	028492000	CAP AE RDL 1000uF 16V 20%	C314
2	028494000	CAP AE RDL 1000uF 35V 20%	C321-322
3	031040000	CAP AE RDL 100uF 100V 20%	C318-319 C326
1	028476003	CAP AE RDL 100uF 50V 20%	C454
11	028459003	CAP AE RDL 2.2uF 50V 20%	C102 C202 C320 C405-406C410 C423 C425 C506 C523 C527
2	028482003	CAP AE RDL 220uF 50V 20%	C316-317
21	028467003	CAP AE RDL 22uF 50V 20%	C101 C108-109 C201 C208-209 C301-306 C421-422 C504 C518-519 C525-526 C529- 530
2	028460003	CAP AE RDL 4.7uF 50V 20%	C435 C531
3	028485003	CAP AE RDL 470uF 16V 20%	C315 C457 C548
6	028471003	CAP AE RDL 47uF 50V 20%	C115-116 C215-216 C323-324
3	047195003	CAP AE RDL 47uF 63V 20%	C311 C403-404
2	037182000	CAP AE RDL 6800uF 63V 20%	C312-313
8	051405003	CAP CD 120pF 500V 5%	C401-402 C407-408 C431-432 C524 C528
2	051445003	CAP CD 22pF 500V 5%	C411 C505
2	051413003	CAP CD 33pF 500V 5%	C424 C426
2	051458003	CAP CD 470pF 500V 10%	C427-428
2	051459003	CAP CD 560pF 500V 10%	C414 C509
5	051409003	CAP CD 68pF 500V 5%	C111-112 C211-212 C515
51	034788003	CAP CR .1uF 50V 20% .15" cut	C113-114 C122-123 C213-214 C222-223 C325 C327-330 C436-453 C456 C458 C514 C532-547 C549
3	027257003	CAP MPF .0022uF 100V 10%	C511-513
2	027261003	CAP MPF .0047uF 100V 10%	C103 C203
2	027262003	CAP MPF .0068uF 100V 10%	C413 C508
6	027264003	CAP MPF .01uF 100V 10%	C106-107 C206-207 C417-418
1	047165000	CAP MPF .01uF 250V 20%	C307
4	027267003	CAP MPF .022uF 100V 10%	C415-416 C502 C516
6	027269003	CAP MPF .033uF 63V 10%	C104-105 C204-205 C429-430
2	027280003	CAP MPF .15uF 63V 10%	C433-434
8	052003003	CAP MPF .1uF 250V 10%	C119-121 C219-221 C308-309
3	027281003	CAP MPF .22uF 63V 10%	C455 C510 C520
4	027285003	CAP MPF .39uF 63V 10%	C409 C412 C507 C517
1	027286003	CAP MPF .47uF 63V 10%	C503
2	033477003	CAP MPF .68uF 63V 10%	C419 C521

PARTS LIST**PRINTED CIRCUIT BOARD ASSEMBLY (CONT.)**

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
4	033580003	CAP PFF RDL .0022uF 100V 10%	C117-118 C217-218
4	031089000	CONTROL 100K 10C	R424 R438 R453 R545 Fdbk1, Fdbk2, Aux Gain, Master
1	027949000	CONTROL SNAPIN 250K 30C TAPER	R531 Srting Dynamics
7	027942000	CONTROL SNAPIN 50K 2B CTR DET	R413-415 R510-512 R516 Bass, Mid, Treble, Attack
4	027943000	CONTROL SNAPIN 50K 30C TAPER	R410 R479 R506 R560 Inst gain & FX rtn;
2	027941000	CONTROL SNAPIN 50K B TAPER	MIC gain & FX rtn R446 R540 Inst DSP Send, Mic DSP Send
1	051931000	DIN CONNECTOR, 5-PIN FEMALE	J304
21	064089001	DIODE 1N4003 LL	D118-119 D218-219 D308-310 D316-317 D328-331 D312-315 D318-321
34	006260001	DIODE 1N4448 SIGNAL LL	D101-107 D112-115 D120-121 D201-207 D212-215 D220-221 D301 D324-327 D501-503 D304-307
4	029045000	DIODE 6A 400V 6A4 LEAD FORMED	D108-109 D208-209
4	025821001	DIODE HV FDH-400 SWITCHING LL	D110-111 D210-211
4	054210001	DIODE SCHOTTKY BAT85	D323 D504-505
3	031017001	DIODE ZEN 1N5223B 2.7v 5% LL	D116-117 D216-217 D311
5	031729001	DIODE ZEN 1N5231B.5w 5.1v 5%	D302-303
2	031635001	DIODE ZEN 1N5240B 10V 5% LL	D322
1	028119060	DIODE ZEN 1N5353B 16V 5W 5%	
14	025802000	FSTN TAB MALE .250X.032 PCB MT	CP101-104 CP201-202 CP301-302 CP305- 307 CP309-310 CP312
2	026000001	FSTN TAB MALE PCB MT .187X.032	CP308 CP311
6	051094003	FUSE CLIP, PCB 5MM (EXPT)	at F301-303
5	027419000	HDR .1 CTR 10 CKT SQ PIN	P1-5
6	050849000	HEATSINK PCB LEVEL	at Q111-112 Q211-212 U303-304
1	053575000	HEATSINK PLATE 160W AMPS	HS21
1	027404000	IC CA3080AE OTA	U504
2	016795000	IC DUAL OP AMP TL072	U501 U505
18	031611000	IC DUAL OP AMP PC4560	U101 U201 U301-302 U401-409 U502-503 U506- 508
1	013562000	IC REGULATOR +15V MC7815CT	U303
1	013564000	IC REGULATOR -15V MC7915CT	U304
4	038815000	INSULATOR SILICONE TO-3P	at U113-114 U213-214
7	051658000	JACK MONO R/A	J101-102 J201-202 J301-303
1	025933000	JACK PHONO DUAL PC MTG	J403
2	053450000	JACK STEREO R/A	J402 J501
1	049948000	LED, RED LONG LEAD LUMEX	D400

PARTS LIST**PRINTED CIRCUIT BOARD ASSEMBLY (CONT.)**

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
6	097360000	NUT, HEX 4-40 EX LOCK	at Q111-112 Q211-212 U303-304
1	051903000	PCB FAB ACOUSTASONIC PRO	
1	031767001	RES CF 1/2W 15 ohm 5%	R323
4	024997001	RES CF 1/4W 100k 5%	R314 R322 R447 R541
15	024981001	RES CF 1/4W 10k 5%	R324 R419-421 R427-428 R430 R433-435 R441-442 R444 R456 R458
9	024937001	RES CF 1/4W 10ohm 5%	R131-132 R231-232 R432 R482-483 R551 R559
3	024985001	RES CF 1/4W 15k 5%	R106 R206 R328
4	024986001	RES CF 1/4W 18k 5%	R425-426 R439-440
18	024965001	RES CF 1/4W 1k 5%	R111-113 R115-116 R152 R211-213 R215- 216 R252 R318-320 R325 R522 R530 R429 R443
2	025069001	RES CF 1/4W 1M 5%	R105 R109 R125 R128 R205 R209 R225 R228
16	024971001	RES CF 1/4W 2.2k 5%	R315 R412 R416 R423 R437 R504 R509 R513 R126-127 R226-227
4	029455001	RES CF 1/4W 2.4k 5%	R418 R505 R515 R529
4	025059001	RES CF 1/4W 220k 5%	R464-467 R471-474 R476 R478 R532-535 R552- 553
16	024987001	RES CF 1/4W 22k 5%	R114 R120 R153 R214 R220 R253
6	024988001	RES CF 1/4W 27k 5%	R317
1	029610001	RES CF 1/4W 3k 5%	R417 R514
2	028865001	RES CF 1/4W 30k 5%	R110 R210 R431 R445 R451-452
6	024989001	RES CF 1/4W 33k 5%	R119 R219 R409 R507 R536-537 R547-548 R555- 556
10	024977001	RES CF 1/4W 4.7k 5%	R524
1	025828001	RES CF 1/4W 430k 5%	R411 R449 R508 R538-539 R543 R549-550 R557-558
10	025065001	RES CF 1/4W 470k 5%	R102-103 R202-203 R316 R327 R329 R517- 519
10	024993001	RES CF 1/4W 47k 5%	R101 R201 R302 R304-307 R309 R311-312 R457 R460-462 R468-470 R475 R477 R523 R502
20	024952001	RES CF 1/4W 5% 100 ohm LL	R107-108 R207-208
1	025084001	RES CF 1/4W 5% 10M LL	R480 R561
4	024983001	RES CF 1/4W 5% 12k LL	R450 R544
2	024954001	RES CF 1/4W 5% 150 ohm LL	R137 R139 R237 R239
2	024955001	RES CF 1/4W 5% 180 ohm LL	R313 R459 R463
4	024972001	RES CF 1/4W 5% 2.7k LL	R117-118 R217-218
3	029006001	RES CF 1/4W 5% 20k LL	R527
4	024942001	RES CF 1/4W 5% 22 ohm LL	R422 R436
1	025079001	RES CF 1/4W 5% 4.7M LL	R326
2	026510001	RES CF 1/4W 5% 9.1k LL	R104 R204 R301 R303 R308 R310
1	028948001	RES CF 1/4W 6.2k 5%	R454-455 R546 R554
6	024979001	RES CF 1/4W 6.8k 5%	R503
4	024995001	RES CF 1/4W 68k 5%	
1	025942001	RES CF 1/4W 7.5k 5%	

PARTS LIST**PRINTED CIRCUIT BOARD ASSEMBLY (CONT.)**

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	027627001	RES FILM 1W 10ohm 5%	R321
4	037354001	RES FILM 1W 4.7k 5% LL	R129 R134 R229 R234
4	054368001	RES FP 1/2W 1.5k 5%	R130 R133 R230 R233
2	015581001	RES MF 1/4 W 9.53k LL 1%	R448 R542
2	031819001	RES MF 1/4W 1% 1.82k LL	R403-404
1	015582001	RES MF 1/4W 1% 10k LL	R520
4	031818001	RES MF 1/4W 1% 18.2k LL	R405-408
1	025816001	RES MF 1/4W 1% 20k LL	R521
2	016961001	RES MF 1/4W 1% 6.81k LL	R401-402
2	016953001	RES MF 1/4W 1.78k LL 1%	R481 R562
4	027750001	RES MF FUSE 1/4W 5% 100ohm	R123-124 R223-224
8	051731001	RES MF FUSE 1/4W 5% 1k ohm	R121-122 R138 R140 R221-222 R238 R240
6	036960001	RES MF FUSE 1/4W 5% 47 OHM LL	R135-136 R144 R235-236 R244
4	031628001	RES MOF 2W 5% .22ohm LONG LEAD	R146-147 R246-247
2	051417001	RES MOX 2 W 22 OHM LL 5%	R149 R249
1	034704001	RES MOX 2W 180ohm 5% LL	R400
2	041500000	RES WW BT 5W 10% 4.7 ohm	R331
1	037845000	RES WW BT 5W 10% 47 ohm	R151
6	039420000	SCRW M 4-40X3/8 PHP SS SEMS	at Q111-112 Q211-212 U303-304
2	037985000	SCRW SMA 2x3/8 PHP BLX	At J304
4	027638000	SCRW TF 4-40x3/8 HWHS ZI .1"HD	At Q113-114 Q213-214
5	032908000	SCRW TF 6-32X3/8 PHP ZI	At HS21
1	036178000	SPACER LED .5x.1 BRN	At D400
3	028091000	SWITCH PUSH SLFLK SHRT STROKE	S502-504
1	051418003	THERMAL SENSOR PTC 100DEG C	RT301
1	051019000	XLR CONNECTOR FEMALE RT ANGLE	J401
1	049892000	XLR JACK MALE	J305

PARTS LIST

PRINTED CIRCUIT BOARD ASSEMBLY (CONT.)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	014689003	XSTR N-CH JFET J111 TO-92	Q308
2	016739003	XSTR NPN 2N4401 TO-92	Q109 Q209
7	025751003	XSTR NPN 2SC2362K/2SC2389STPS	Q101-103 Q201-203 Q303
2	028760000	XSTR NPN 2SC3298A TOP-220	Q111 Q211
3	051448003	XSTR NPN 2SD1857	Q107 Q207 Q304
2	051725000	XSTR NPN MJW21192 TO 247	Q113 Q213
3	014867003	XSTR NPN MPSW42 (TO-92)	Q106 Q206 Q307
3	016742003	XSTR PNP 2N4403 TO-92	Q110 Q210 Q301
3	025752003	XSTR PNP 2SA1038STPS	Q104 Q204 Q302
3	028759000	XSTR PNP 2SA1306A TOP-220	Q112 Q212 Q306
3	051447003	XSTR PNP 2SB1236	Q108 Q208 Q305
2	051724000	XSTR PNP MJW21191 TO 247	Q114 Q214
2	014866003	XSTR PNP MPSW92 TO-226AE	Q105 Q205

CHASSIS ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	050833000	CHASSIS ACOUSTASONIC PRO	
1	020795000	FUSE QA 20mmx5mm 250v 2.5A	230V/240V ONLY
1	053885000	FUSE QA 20mmx5mm 250v 5A	100V/120V ONLY
2	013112000	FUSE TD 20mmx5mm 250V 1A	ALL VARIATIONS
1	048974000	HEATSINK EXTRUDED BXR 200	
1	054798000	JEWEL ASSY., LED	
1	051752000	KNOB BROWN/BLANK	
18	051017000	KNOB ROTARY BRN/WHT	
1	051895000	PANEL FRONT ACOUSTASONIC PRO	
1	051896000	PANEL REAR ACOUSTASONIC PRO	
1	051899000	PCB ASSY ACOUSTASONIC PRO	
1	051900000	PCB ASSY ACOUSTASONIC PRO DSP	

CHASSIS ASSEMBLY (CONT)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	028069000	BUSHING SNAP 3/4x1-1/8 WHT	CABLES
5	069393000	NUT 6-32 HEX EXT LOCK	DSP/GND
1	031625000	NUT HOLDER PILOT LIGHT 1/16-27	
6	017716000	SCRW 8-32x1/2 PHP BLX	@ HS/CHASSIS
1	017433000	SCRW M 6-32x3/8 PHP BLX	GND
6	031184000	SCRW M6-32x1/4 PHPS BLX ITLW	@ STANDOFFS
5	051155000	SCRW SMB #4X3/8 PHP BLX	@ XLR & RCA
4	037997000	SCRW TF 10-32x5/8 HWHS BLX	@ XFMR
5	027636000	SCRW TF 8-32x5/8 HWH BLX	@ HS/PLATE
1	054642000	SOCKET, IEC SNAP IN	
4	051905000	SPACER RND NYL .120X.187X.315	@ DSP
4	025936000	STANDOFF NYL PCB SNAP 3/8" NAT	@ DSP SNDWCH
2	051404000	STANDOFF, NYLON BLACK	@ BTM PCB
3	016440000	STNDOFF RND AL 6-32x1x1/4	@ PWR AMP
1	031153000	WSHR FLAT 3/8x.614 NI	ENCODER/CHS
1	040582000	SWITCH DPST .250 TAB GLOBAL	POWER 230V/240V ONLY
1	039236000	SWITCH ROCKER DPST PSEUDO-IEC	POWER 100V/120V ONLY
1	053886000	XFMR PWR DOMESTIC 120V 160W	120V DOMESTIC ONLY
1	053888000	XFMR PWR EXPORT 230V 160W	230V-240V EXPORT ONLY
1	053887000	XFMR PWR JAPAN 100V 160W	100V JAPAN ONLY

CABINET ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
0.4	036797000	CLOTH GRILLE TAN/BRN	
1.6	036796000	TOLEX BROWN COVERING	
0.2	029086000	VELCRO STRIP HOOK 1.5"wd BLK	
0.2	029085000	VELCRO STRIP LOOP 1.5"wd BLK	
2	026566000	CORNER 2 HOLE w/TAB NI	
2	029071000	CORNER NOTCHED NICKEL (FD)	
4	019276000	GLIDE CAB 1.24x.335 NI	
4	019275000	INSERT GLIDE CUSHION 1.27 DIA.	
2	025395000	HANDLE CAP 1 HOLE NI(DWG17240)	
1	037121000	HANDLE STRAP BRN	
1	032524000	INSERT HANDLE	
10	021972000	NUT T 10-32x3/4 STR 3 PRNG BLX	
2	022244000	SCRW M 10-32X1-1/8 OHP NI	
4	037543000	SCRW SMAB 8x3/4 OHP NI	
4	026625000	SCRW WOOD 8x1 FH	

PARTS LIST

PARTS LIST

END ITEM ASSEMBLY

<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>	<u>REFERENCE DESIGNATION</u>
1	050832000	CAB ASSY ACOUSTASONIC PRO	
1	051876000	CHASSIS ASSY AC PRO 100V	100V JPN
1	051872000	CHASSIS ASSY AC PRO 120V	120V DOM
1	051875000	CHASSIS ASSY AC PRO 230V	230V EUR
1	051873000	CHASSIS ASSY AC PRO 230V U.K.	230V U.K.
1	051874000	CHASSIS ASSY AC PRO 240V AUST	240V AUST
1	053997000	CORD PWR W/IEC CONN 100V JPN	100V JPN
1	047251000	CORD PWR W/IEC CONN 230V	230V EUR
1	047249000	CORD PWR W/IEC CONN 230V UK	230V U.K.
1	047250000	CORD PWR W/IEC CONN 250V	240V AUST
1	047248000	CORD PWR W/IEC CONN DOM	120V DOM
1	051900008	DSP ASSEMBLY	
1	054819000	EFFECTS LIST, ACOUSTASONIC PRO	
1	051894000	FOOTSWITCH ASSY. 4 BUTTON DSP	(SCHEMATIC IS PART OF SERVICE DIAGRAM)
1	049260000	HORN CERAMIC PIEZO KXR 60	
2	051016000	SPEAKER 8" 8 OHM Hi-Fi	
2	051904000	LEG AMP TILTBACK 15"	LEGS
1	051870000	LOGO PLATE, ACOUSTASONIC PRO	
1	036795000	NAMEPLATE 62 FENDER	LOGO
2	021998000	NUT FLEX LOCK W/NYLON IN	@ LEGS
A/R	036650000	PIN ESCUTCHEON #18x3/8 NI	@ NAMEPLATE
4	9904101110	SCREW PB 8x5/8 PHP BLX	@ HORN
6	053483000	SCRW 8-32x1-3/8#6 OHP w/WSHR NI	CHS MNT
8	026577000	SCRW M 10-32X1 PHP BLX	@ SPEAKERS
2	022277000	SCRW M 10-32X1-1/2 OHP NI	@ LEGS
2	031344000	SCRW SMA 10X3/4 OHP NI	@ LEGS
4	037210000	SCRW SMA 2x3/8 OHP NI	@ LOGO
2	024646000	WASHER LEG STOP TN	@ LEGS
6	022319000	WSHR FLAT 1/4x9/16 NI	@ LEGS
2	022285000	WSHR SP LOCK 1/4x.493 ZI	@ LEGS

FOOTSWITCH ASSEMBLY

<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>	<u>REFERENCE DESIGNATION</u>
1	051928000	CABLE, 5-PIN DIN	
1	033263000	HOUSING FTSW 4 BUTTON	
1	028109000	HSG END CAP LEFT FTSW	
1	051927000	HSG END CAP RIGHT FTSW	
1	051926000	PLATE TOP 4 BUTTON DSP FTSW	
1	054773000	PCB ASSY FTSW 4 BTN DSP	
1	051931000	CONNECTOR, DIN, 5-PIN FEMALE	PART OF PCB ASSY
1	051929000	PCB FAB FOOTSWITCH DSP	PART OF PCB ASSY
4	051930000	SWITCH PUSH PCB MTG. TYPE	PART OF PCB ASSY
2	051155000	SCRW SMB #4X3/8 PHP BLX	@ MIDI JACK
8	028684000	SCRW SMB 6x3/8 PH PHS BLX	@ END CAPS
4	031899000	WSHR NYL .485x.775x.150 TK	

DSP ASSEMBLY

<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>	<u>REFERENCE DESIGNATION</u>
1	040987000	CABLE RIBBON 10 CKT 3.75"	
1	054303000	CABLE RIBBON 10 CKT 7.5"	
1	038692001	CAP AE AX 10uF 35V 20%	
4	028463003	CAP AE RDL 10uF 50V 20%	
2	028458003	CAP AE RDL 1uF 50V 20%	
2	028460003	CAP AE RDL 4.7uF 50V 20%	
6	051445003	CAP CD 22pF 500V 5%	
4	051413003	CAP CD 33pF 500V 5%	
31	034788003	CAP CR .1uF 50V 20% .2" LS	
2	027260003	CAP MPF .0039uF 100V 10%	
2	027283003	CAP MPF .33uF 63V 10%	
2	030931003	CAP PFF RDL .001uF 50V 5%	
1	030946003	CAP PFF RDL .012uF 50V 5%	
1	051197000	CRYSTAL, 16.384MHz, 18pF	
1	051195000	CRYSTAL, 4.000 MHz, 18 pF	
7	006260001	DIODE 1N4448 SIGNAL LL	
1	051924000	ENCODER, 2 BIT, 36 DETENT	
1	041812000	IC REGULATOR +5V 1.5A	
1	054380003	IC REGULATOR +5V 100mA	
1	053540000	IC, CODEC, AK4520A	
1	051050000	IC, DSP, 56004	
1	051189000	IC, EEPROM, SERIAL, 128x8	
1	055347000	IC, EPROM, 64Kx8	

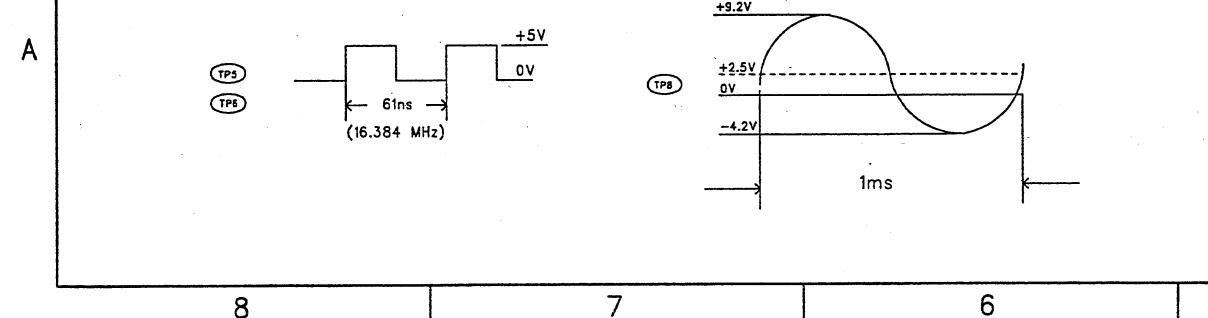
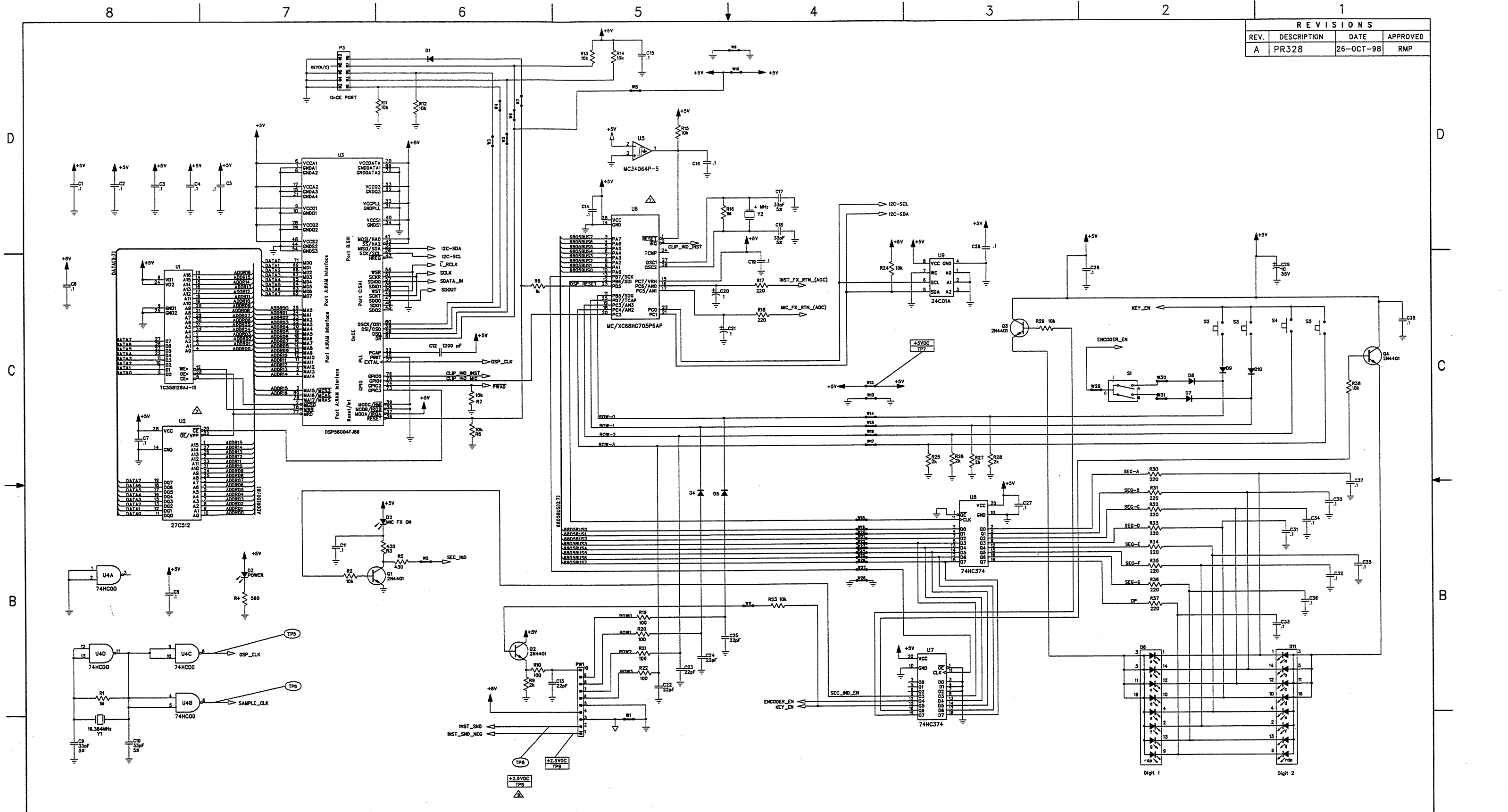
ACOUSTASONIC PRO

PARTS LIST

DSP ASSEMBLY (CONT)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	055348000	IC, MICROCNTRLLR, 68HC705	
2	511910000	IC, OCTAL LATCH	
1	511900000	IC, QUAD NAND GATE	
1	051193003	IC, RESET CNTRLLR, +5V	
1	051188000	IC, SRAM, 128Kx8	
1	053951003	LED RED T-1.75 CLR	
1	051925000	LED, 7 SEG, CMN ANODE, RED	
1	049948003	LED, RED LONG LEAD LUMEX	
1	054768000	PCB FAB, AC PRO DSP ASSY	
5	024952001	RES CF 1/4W 5% 100ohm LL	
12	024981001	RES CF 1/4W 5% 10k LL	
1	024937001	RES CF 1/4W 5% 10ohm LL	
2	024955001	RES CF 1/4W 5% 180ohm LL	
1	024965001	RES CF 1/4W 5% 1k LL	
2	025069001	RES CF 1/4W 5% 1M LL	
10	024956001	RES CF 1/4W 5% 220ohm LL	
5	029005001	RES CF 1/4W 5% 2k LL	
4	024973001	RES CF 1/4W 5% 3.3k LL	
2	029451001	RES CF 1/4W 5% 430ohm LL	
2	024993001	RES CF 1/4W 5% 47k LL	
5	024962001	RES CF 1/4W 5% 560ohm LL	
1	097360000	NUT HEX 4-40 EX LOCK	
1	039420000	SCRW M 4-40X3/8	
2	051145000	SOCKET, IC, DIP, 28 PIN	
1	054657000	SPACER LED .2X.1 ORANGE	
4	025936000	STANDOFF NYL PCB SNAP	
4	051194000	SWITCH, SPST N/O, MOM	
4	016739003	XSTR NPN 2N4401 TO-92	

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR328	26-OCT-98	RMP

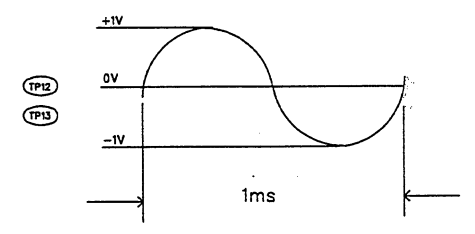
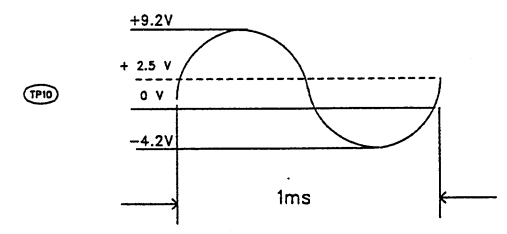
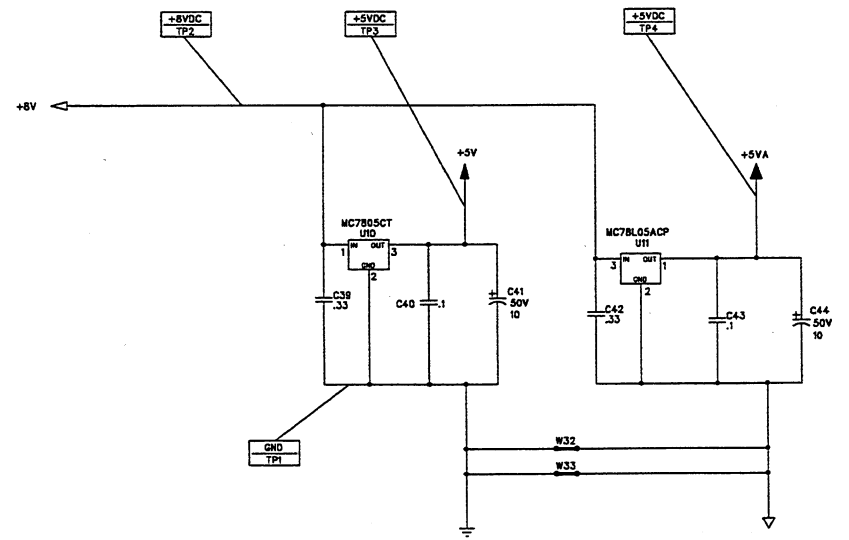
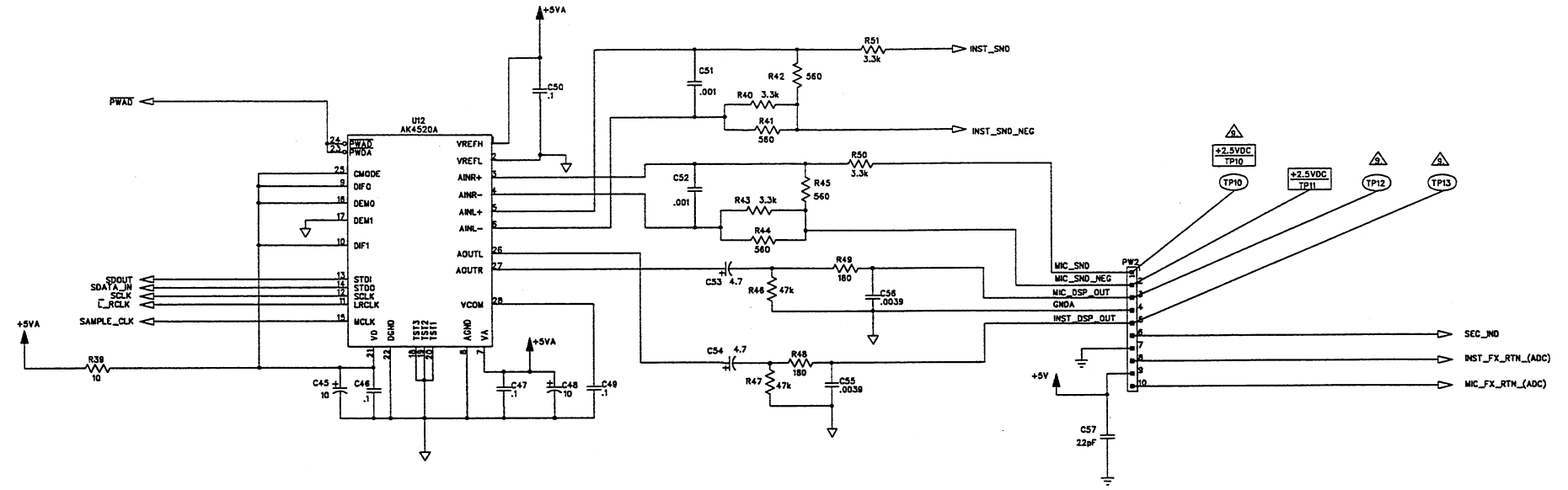


- COMPONENTS NOT STUFFED: W1, W32, W33, P3.
- LAST REFERENCE DESIGNATORS: C57, D11, P3, G4, R51, S5, U12, W33, Y2, TP13
- IN THE AUDIO LOOPBACK MODE THE MODULE'S OUTPUT AT TP12 AND TP13 WILL BE A REPLICA OF THE INPUT SIGNALS AT TP1 AND TP11. REFER TO THE SERVICE MANUAL FOR INSTRUCTIONS ON HOW TO INITIATE THE MODULE SELF-TEST AND INVOKING THE AUDIO LOOPBACK MODE.
- ESD PRECAUTIONS: THIS MODULE IS ESD SENSITIVE AND SHOULD ONLY BE HANDLED UNDER CONDITIONS WHICH PREVENT ANY ELECTRO-STATIC DISCHARGES INTO THIS MODULE. THE SERVICE WORK AREA MUST INCLUDE A PROPERLY INSTALLED ESD MAT SURFACE WHICH CONNECTS TO THE SERVICE PERSONNEL VIA AN ESD WRIST STRAP. THE ESD MAT SHOULD BE CONNECTED TO EARTH GROUND AND ALL HANDLING OF THE MODULE SHOULD BE DONE WEARING THE WRISTSTRAP.
- IC INSERTION AND REMOVAL: THE REMOVAL OF U2 AND U5 MUST BE DONE WITH THE PROPER REMOVAL TOOL. FAILURE TO USE THE PROPER TOOL FOR THE DEVICE CAN RESULT IN DAMAGE TO U2, U5, PCB, OR THE SOCKET.
- DC VOLTAGES READ TO GROUND (TP1) WITH A 0VW UNDER THE FOLLOWING CONDITIONS: +5VDC SUPPLIED TO MODULE ON PIN 4 OF FW1 CONNECTOR. DC VOLTAGES SHOWN ARE +/- 10%. AC VOLTAGES READ TO GROUND (TP1) WITH A STD OSCILLOSCOPE PROBE UNDER THE FOLLOWING CONDITIONS: +5VDC SUPPLIED TO MODULE ON PIN 4 OF FW1 CONNECTOR. AC VOLTAGES SHOWN ARE +/- 10%. ADDITIONAL CONDITIONS FOR TP8-TP11: DC VOLTAGES ARE MEASURED WITH NO AC INPUT SIGNALS AT ANY OF THESE TEST POINTS. AC WAVEFORMS AT TP12 AND TP13 ARE ONLY VALID IF MODULE HAS BEEN FORCED INTO THE SELF-TEST MODE (SEE NOTE 3) WITH A 10VZ SINEWAVE OF AMPLITUDE +/-1.5V P-P APPLIED TO TP8 AND TP10 AS SHOWN, WITH A BIAS OF +2.5 VDC APPLIED TO TP8, 8, 10, 11.
- THIS SCHEMATIC IS FOR PCB FABRICATION P/N 0054788000 AND PCB ASSEMBLY P/N 005900000.
- ALL DIODES ARE 1N4148.
- ALL POLARIZED CAPACITORS IN uF; 20% 50V MINIMUM.
- ALL UNPOLARIZED CAPACITORS IN uF; 10% OR BETTER; 50V MINIMUM. (POWER SUPPLY BYPASS CAPACITORS ARE 20%).
- ALL RESISTORS IN OHMS; 5% 1/4W.

NOTES: (UNLESS OTHERWISE NOTED)

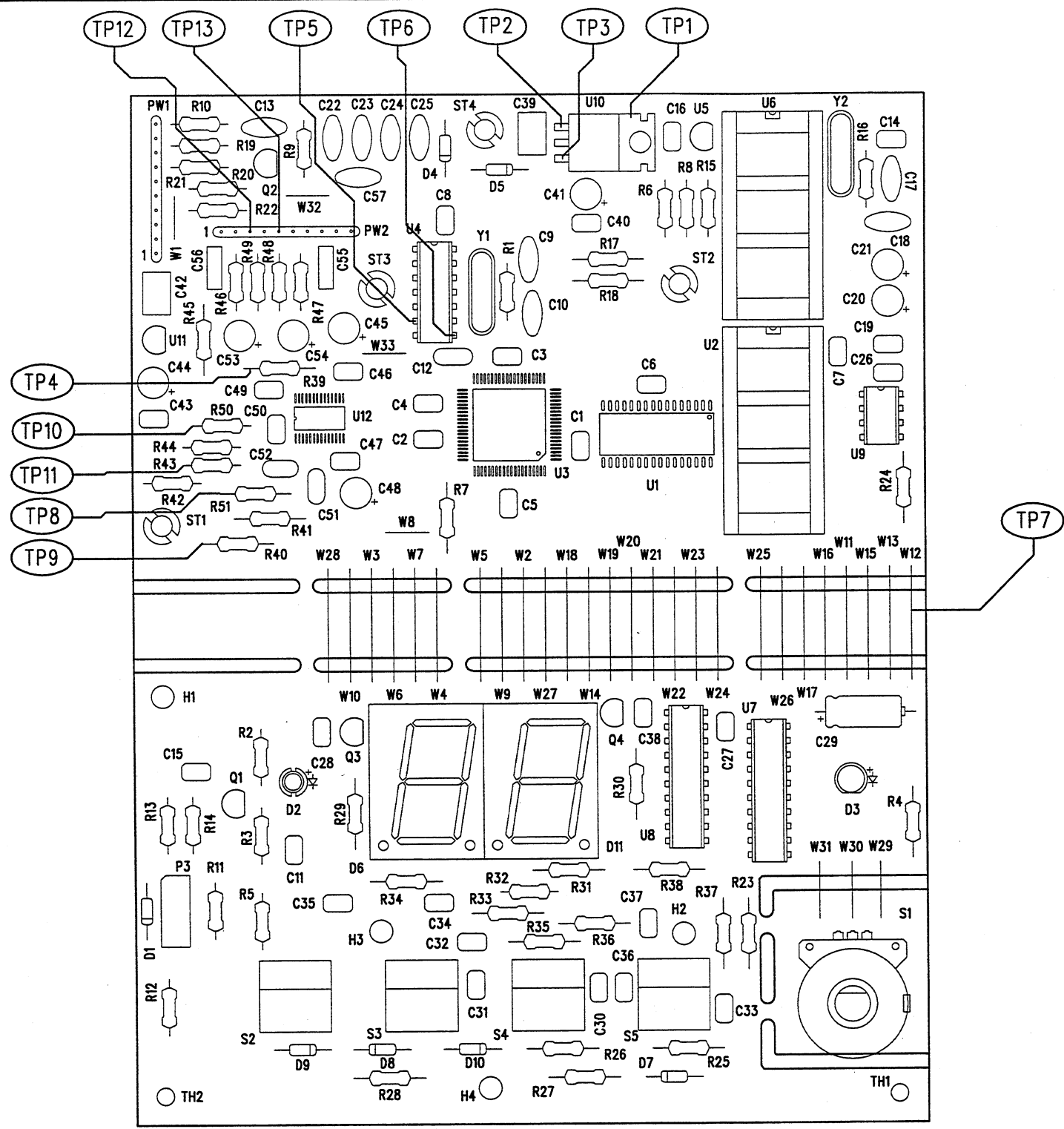
THIS DOCUMENT CONTAINS INFORMATION OF A PROPRIETARY NATURE TO FENDER MUSICAL INSTRUMENTS AND IS SUBMITTED TO YOU IN CONFIDENCE AND SHALL NOT BE DISCLOSED OR TRANSMITTED TO OTHERS WITHOUT AUTHORIZATION FROM FENDER MUSICAL INSTRUMENTS.		MUSICAL INSTRUMENTS 2621 Research Drive Corona, CA 91720 USA
CHECKED BY: <u>B. Dees</u> DATE: <u>23-OCT-98</u>	TITLE: SERVICE DIAGRAM, COMBINED (schematic) ACOUSTASONIC PRO DSP	
APPROVED BY: <u>R. Povinire</u> DATE: <u>23-OCT-98</u>	SIZE: <u>D</u> DRAWING NUMBER: <u>0051890000</u>	REV. <u>A</u>
DRAWN: R. Povinire [ENGR: R. Povinire] DATABASE FILE: Z32852.SCH	RELEASE DATE: 26-OCT-98	SHEET: 1 OF 3

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR328	26-OCT-98	RMP



<small>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.</small>		MUSICAL INSTRUMENTS 2621 Research Drive Corona, CA 91720 USA	
CHECKED BY: <u>B. Desi</u>	DATE: <u>23-OCT-98</u>	TITLE: SERVICE DIAGRAM, COMBINED (schematic) ACOUSTASONIC PRO DSP	
APPROVED BY: <u>R. P. [Signature]</u>	DATE: <u>23-OCT-98</u>	SIZE: D	DRAWING NUMBER: 0051890000
DRAWN: R. Povinire ENGR: R. Povinire		REV. A	
DATABASE FILE: Z32852.SCH		RELEASE DATE: 26-OCT-98	SHEET: 2 OF 3

SEE SHEET 1 FOR NOTES
 NOTES: (UNLESS OTHERWISE NOTED)




REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR328	26-OCT-98	RMP

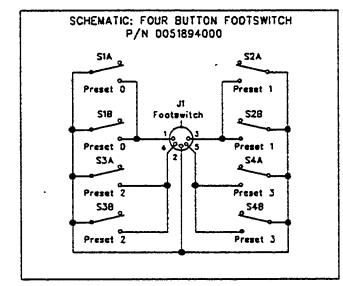
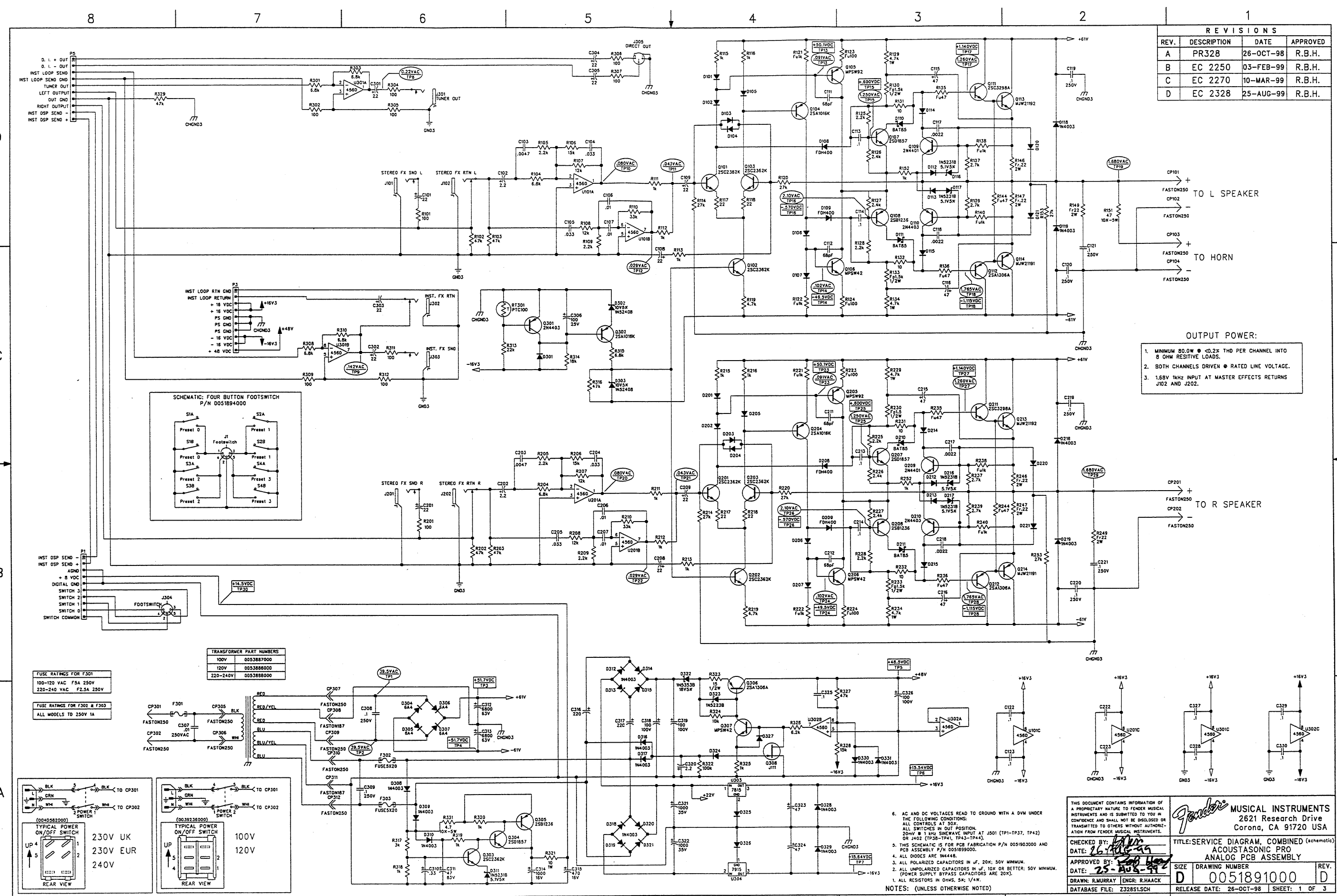
1. SEE SHEET 1 NOTES FOR:
 1) TEST CONDITIONS
 2) TEST POINT VALUES.
 3) LIST OF COMPONENTS STUFFED.

NOTES: (UNLESS OTHERWISE NOTED)

FILM/DWG: SERVICE DIAGRAM
 DATABASE: Z328P2.PCB DATE: 26-OCT-98

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.		 MUSICAL INSTRUMENTS 2621 Research Drive Corona, CA 91720 USA	
CHECKED BY: <u>B. Davis</u> DATE: <u>23-OCT-98</u>		TITLE: SERVICE DIAGRAM, COMBINED (PCB assy) ACOUSTASONIC PRO DSP	
APPROVED BY: <u>R. Povinmire</u> DATE: <u>23-OCT-98</u>		SIZE B	DRAWING NUMBER 0051890000
DRAWN: R. Povinmire ENGR: R. Povinmire		RELEASE DATE: 26-OCT-98	REV. A
DATABASE FILE: Z328P2.PCB		SHEET 3 OF 3	

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR328	26-OCT-98	R.B.H.
B	EC 2250	03-FEB-99	R.B.H.
C	EC 2270	10-MAR-99	R.B.H.
D	EC 2328	25-AUG-99	R.B.H.



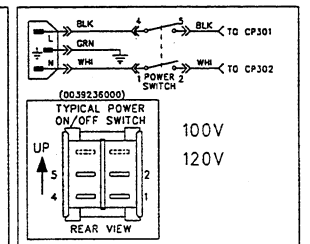
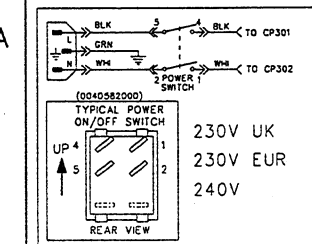
FUSE RATINGS FOR F301

100-120 VAC	F5A 250V
220-240 VAC	F2.5A 250V

FUSE RATINGS FOR F302 & F303
ALL MODELS TO 250V 1A

TRANSFORMER PART NUMBERS

100V	0053887000
120V	0053888000
220-240V	0053889000



- NOTES: (UNLESS OTHERWISE NOTED)**
1. ALL RESISTORS IN OHMS, Ω, 1/4W.
 2. ALL DIODES ARE 1N4448.
 3. ALL POLARIZED CAPACITORS IN μF, 20K, 50V MINIMUM.
 4. ALL UNPOLARIZED CAPACITORS IN μF, 10K OR BETTER; 50V MINIMUM. (POWER SUPPLY BYPASS CAPACITORS ARE 20K).
 5. AC AND DC VOLTAGES READ TO GROUND WITH A DVM UNDER THE FOLLOWING CONDITIONS:
ALL SWITCHES IN OFF POSITION.
20mV @ 1kHz SINEWAVE INPUT AT J501 (TP1-TP3, TP42) OR J402 (TP38-TP41, TP43-TP44).
 6. THIS SCHEMATIC IS FOR PCB FABRICATION P/N 0051903000 AND PCB ASSEMBLY P/N 0051899000.

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.

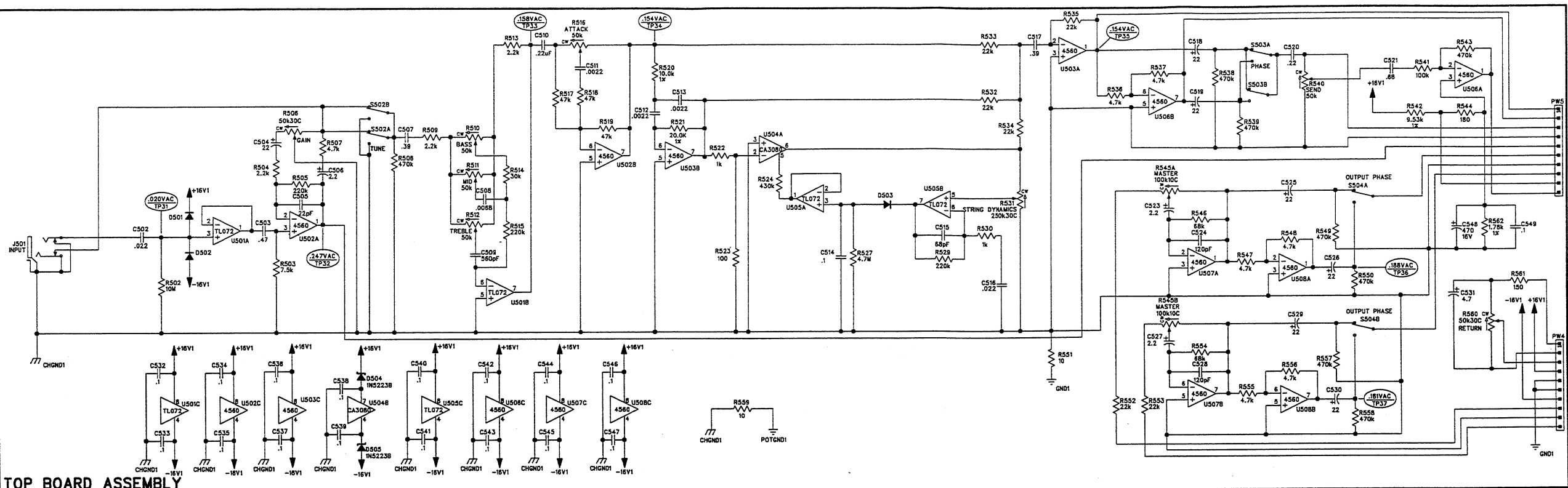
Fender MUSICAL INSTRUMENTS
2621 Research Drive
Corona, CA 91720 USA

CHECKED BY: *[Signature]*
DATE: 26-10-98
APPROVED BY: *[Signature]*
DATE: 25-AUG-99
DRAWN: R.MURRAY ENGR: R.HAAK
DATABASE FILE: Z3285LSCH

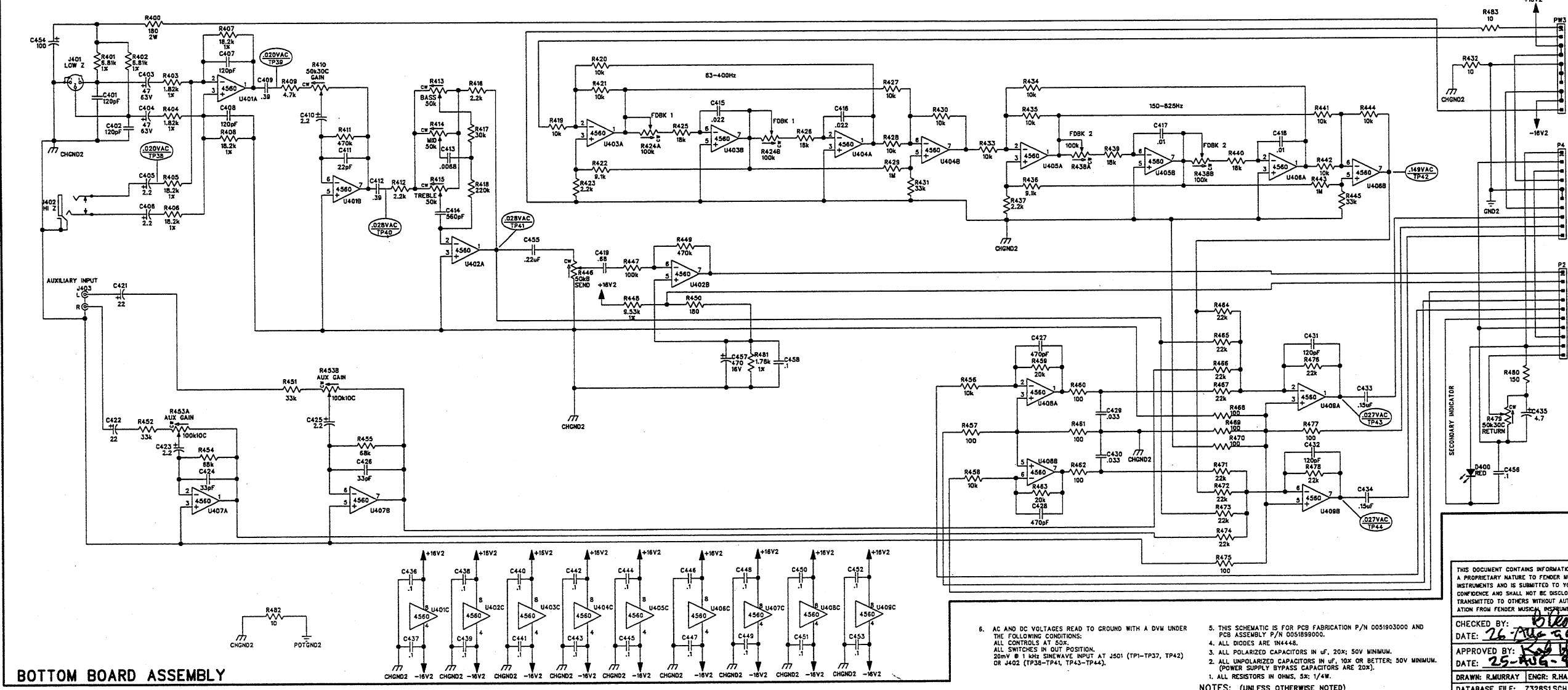
TITLE: SERVICE DIAGRAM, COMBINED (schematic)
ACOUSTASONIC PRO
ANALOG PCB ASSEMBLY

SIZE	D	DRAWING NUMBER	0051891000	REV.	D
RELEASE DATE:	26-OCT-98	SHEET:	1 OF 3		

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR328	26-OCT-98	R.B.H.
B	EC 2250	03-FEB-99	R.B.H.
C	EC 2270	10-MAR-99	R.B.H.
D	EC 2328	25-AUG-99	R.B.H.



TOP BOARD ASSEMBLY



BOTTOM BOARD ASSEMBLY

- D. L. + OUT
- D. L. - OUT
- INST LOOP SEND
- INST LOOP SEND GND
- TUNER OUT
- LEFT OUTPUT
- OUT GND
- RIGHT OUTPUT
- INST DSP SEND +
- INST DSP SEND -

- + 5 VDC (ADC)
- GND (ADC)
- INST FX RTN (ADC)
- + 16 VDC
- PS GND
- PS GND
- 16 VDC
- TO LEFT LEVEL CONTROL
- LEVEL CONTROL GND
- TO RIGHT LEVEL CONTROL

- INST LOOP RTN GND
- INST LOOP RETURN
- + 16 VDC
- + 16 VDC
- PS GND
- PS GND
- 16 VDC
- 16 VDC
- + 48 VDC
- + 5 VDC (ADC)
- GND (ADC)
- INST FX RTN (ADC)
- + 16 VDC
- PS GROUND
- PS GROUND
- 16 VDC
- TO LEFT LEVEL CONTROL
- LEVEL CONTROL GND
- TO RIGHT LEVEL CONTROL

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.		Fender MUSICAL INSTRUMENTS 2621 Research Drive Corona, CA 91720 USA	
CHECKED BY: <i>Oliver</i>	TITLE: SERVICE DIAGRAM, COMBINED (schematic)		
DATE: <i>26-Aug-99</i>	ACOUSTASONIC PRO ANALOG PCB ASSEMBLY		
APPROVED BY: <i>Rob Hood</i>	SIZE	DRAWING NUMBER	REV.
DATE: <i>25-AUG-99</i>	D	0051891000	D
DRAWN: R.MURRAY ENGR: R.HAACK	RELEASE DATE: 28-OCT-98	SHEET: 2 OF 3	
DATABASE FILE: Z328SLSCH			

6. AC AND DC VOLTAGES READ TO GROUND WITH A DVM UNDER THE FOLLOWING CONDITIONS:
 ALL CONTROLS AT 50K.
 ALL SWITCHES IN OUT POSITION.
 20mV @ 1 kHz SINEWAVE INPUT AT J501 (TP1-TP3, TP42) OR J402 (TP35-TP41, TP43-TP44).

5. THIS SCHEMATIC IS FOR PCB FABRICATION P/N 0051903000 AND PCB ASSEMBLY P/N 0051899000.
 4. ALL DIODES ARE 1N4148.
 3. ALL POLARIZED CAPACITORS IN uF, 20% 50V MINIMUM.
 2. ALL UNPOLARIZED CAPACITORS IN uF, 10% OR BETTER, 50V MINIMUM. (POWER SUPPLY BYPASS CAPACITORS ARE 20%).
 1. ALL RESISTORS IN OHMS, 5% 1/4W.

NOTES: (UNLESS OTHERWISE NOTED)

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR328	26-OCT-98	R.B.H.
B	EC 2250	03-FEB-99	R.B.H.
C	EC 2270	10-MAR-99	R.B.H.
D	EC 2328	25-AUG-99	R.B.H.

D

D

C

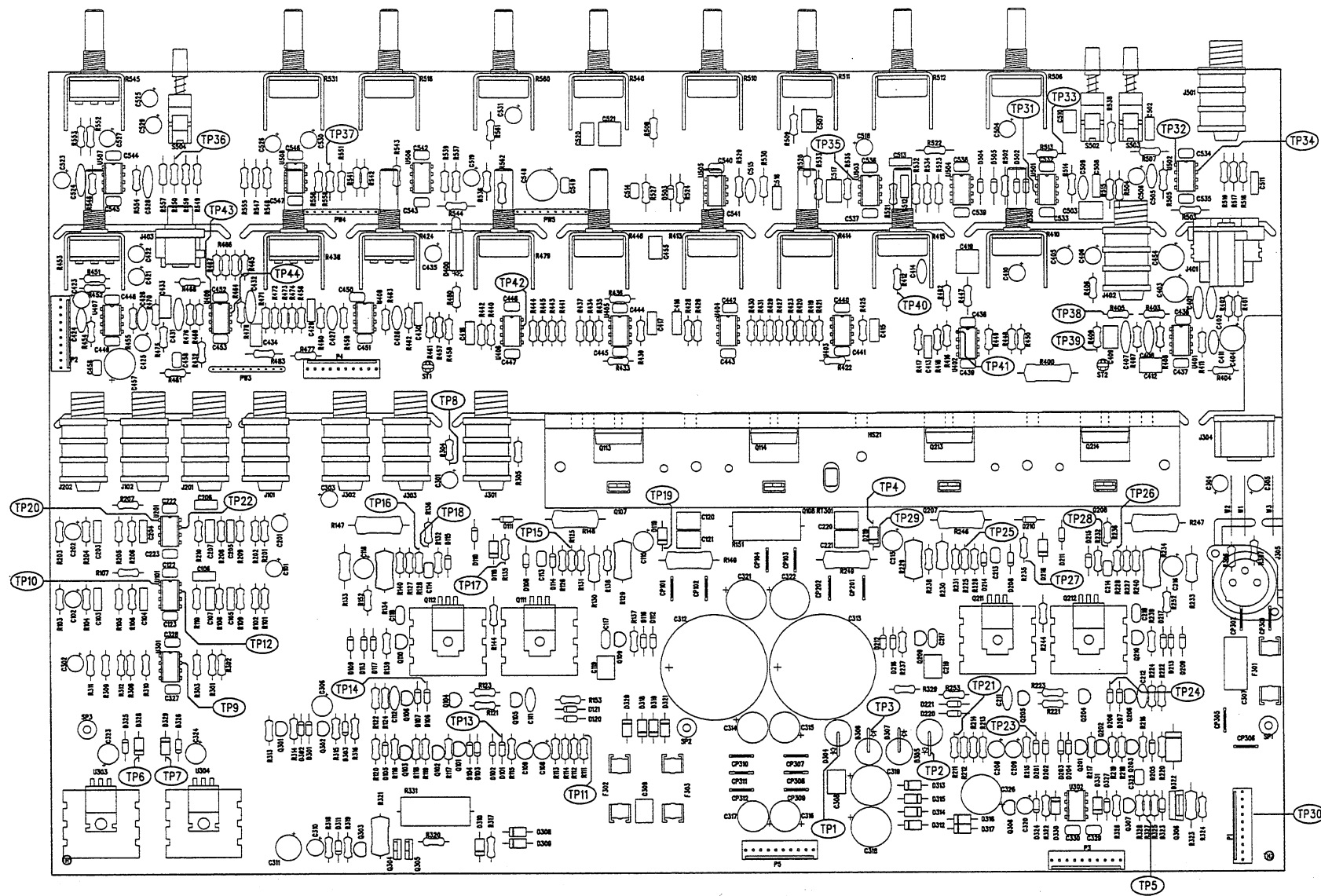
C

B

B

A


A



FILM/DWG: SERVICE DIAGRAM
 DATABASE: Z328PLPCB DATE: 25-AUG-99

1. SEE SHEETS 1 & 2 FOR PRIMARY WIRING, TEST CONDITIONS AND TEST POINT VALUES.

NOTES: (UNLESS OTHERWISE NOTED)

<small>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.</small>		 MUSICAL INSTRUMENTS 2621 Research Drive Corona, CA 91720 USA	
CHECKED BY: <i>[Signature]</i> DATE: <i>16-08-99</i>		TITLE: SERVICE DIAGRAM, COMBINED (PCB assy) ACOUSTASONIC PRO ANALOG PCB ASSEMBLY	
APPROVED BY: <i>[Signature]</i> DATE: <i>25-AUG-99</i>		SIZE: D	DRAWING NUMBER: 0051891000
DRAWN: R.MURRAY / R.RAACK		RELEASE DATE: 26-OCT-98	SHEET 3 OF 3
DATABASE FILE: Z328PLPCB		REV. D	

8

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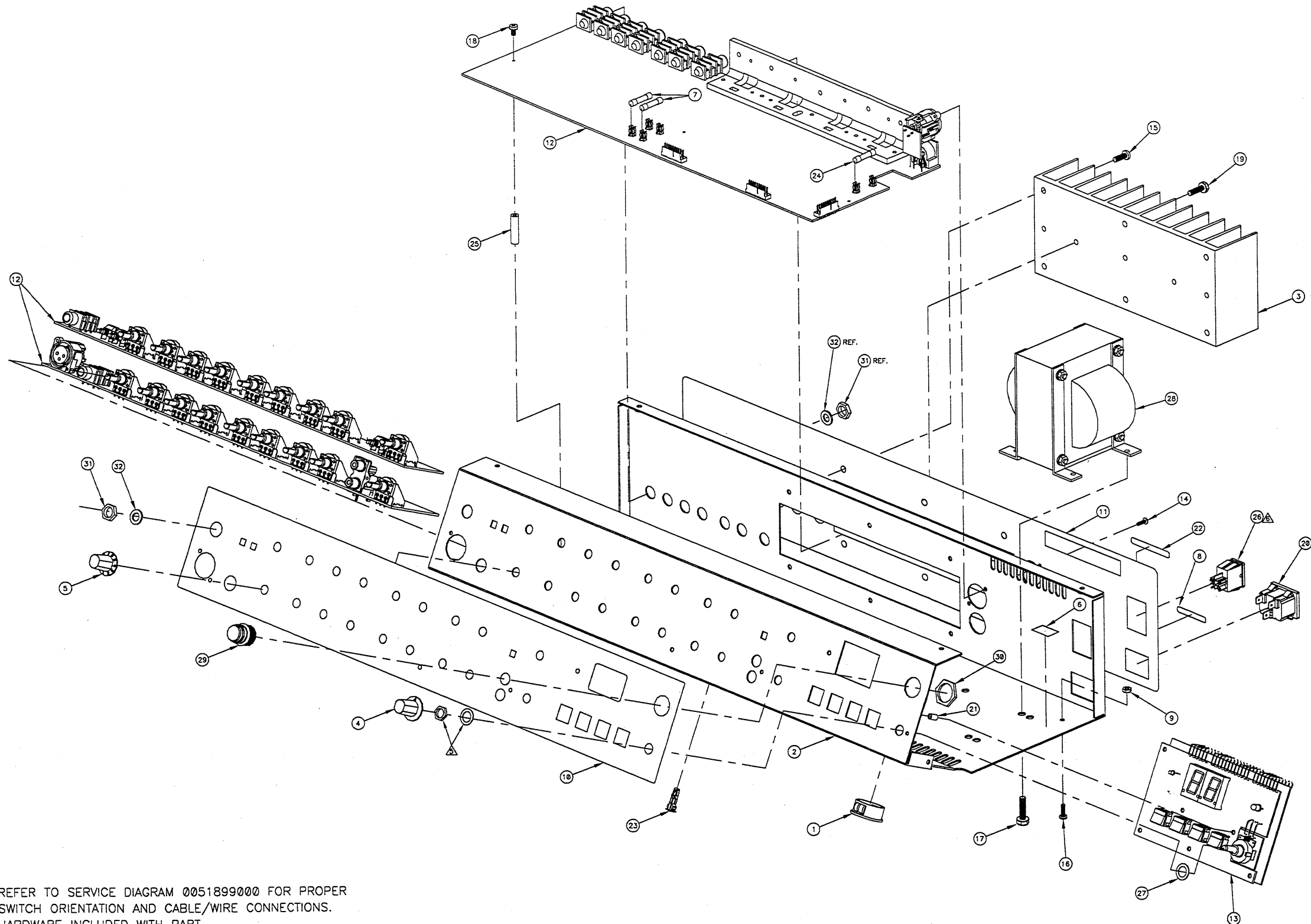
3

2

1

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/ARC/KC
C	EC 2328 DEL. PATENT PEND. STICKER	JR	08/24/99
D	EC 2370/2378 ADD ITEM 31 CHG. ITEM 22	JR/BW	1/13/2000
E	EC 2373/CR216 DEL. ITEM 22 MOVE 31 TO 22	JR	3/20/2000



32	9	0053480000	WASHER FLAT .442 X.692 NI
31	9	0053479000	NUT HEX 7/16 20X1/8 NI
30	1	0031625000	NUT HOLDER PILOT LIGHT 1/16-27
29	1	0054798000	JEWEL ASSY LED
28	1	SEE MATRIX	XFMR
27	1	0031153000	WSHR FLAT 3/8x.614 NI
26	1	SEE MATRIX	SWITCH
25	3	0016440000	STNDOFF RND AL 6-32x1x1/4
24	1	SEE MATRIX	FUSE QA
23	2	0051404000	STANDOFF NYLON BLK .375
22	1	SEE MATRIX	LABEL MADE IN USA 1-3/4x7/32
21	4	0051905000	SPACER RND NYL .120x.187x.315
20	1	0054642000	CONNECTOR IEC SNAP IN
19	5	0027636000	SCRW TF 8-32x5/8 HWH BLX
18	6	0031184000	SCRW M6-32x1/4 PHPS BLX ITLW
17	4	0037997000	SCRW TF 10-32x5/8 HWH BLX
16	1	0017433000	SCRW M 6-32x3/8 PHP BLX
15	6	0017716000	SCRW 8-32x1/2 PHP BLX
14	5	0051155000	SCRW SMB #4X3/8 PHP BLX
13	1	0051900000	PCB ASSEMBLY ACOUSTASONIC PRO DSP
12	1	0051899000	PCB ASSEMBLY ACOUSTASONIC PRO
11	1	0051896000	PANEL REAR LEXAN ACST PRO
10	1	0051895000	PANEL FRONT LEXAN ACST PRO
9	5	0069393000	NUT 6-32 HEX EXT LOCK
8	1	SEE MATRIX	LABEL VOLTAGE
7	2	0013112000	FUSE TD 20mmx5mm 250V 1A
6	1	0013020000	LABEL GROUNDING SEMKO
5	18	0055757000	KNOB BROWN W/CHR
4	1	0055759000	KNOB BROWN W/CHR BLANK
3	1	0048974000	HEATSINK EXTRUDED SFX/ACST
2	1	0056477000	CHS ACST PRO (NEW)
1	1	0028069000	BUSHING SNAP 3/4x1-1/8 WHT

REFER TO SERVICE DIAGRAM 0051899000 FOR PROPER SWITCH ORIENTATION AND CABLE/WIRE CONNECTIONS.
 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

ITEM	QTY.	PART NO.	DESCRIPTION
28		XFMR	0053886000 0053888000 0053888000 0053888000 0053887000
26		SWITCH	0039236000 0040582000 0040582000 0040582000 0039236000
24		FUSE QA	0053885000 0020795000 0020795000 0020795000 0053885000
22		LABEL "MADE IN USA"	- 0033485000 0033485000 0033485000 0033485000
8		LABEL, VOLTAGE	- 0050505000 0050505000 0050506000 0050507000
CHASSIS ASSEMBLY			
		ACOUSTASONIC PRO 120V DOM.	0051872000
		ACOUSTASONIC PRO 230V U.K.	0051873000
		ACOUSTASONIC PRO 230V	0051875000
		ACOUSTASONIC PRO 240V AUS.	0051874000
		ACOUSTASONIC PRO 100V JPN.	0051876000

ENGINEER HAACK
 DRAWN GOOLER
 DATE 9/8/98
 DFT. ENG. ENG. 3/2/00 2/10/00 3/2/00
 APPROVED: *[Signature]*
 DATE 30-MAR-00

Fender
 FENDER MUSICAL INSTRUMENTS CORP.
 CORONA, CALIFORNIA U.S.A.

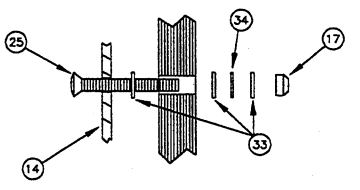
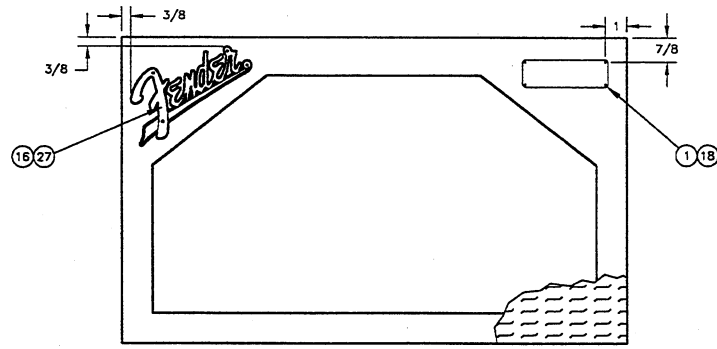
TITLE
 CHASSIS ASSEMBLY
 ACOUSTASONIC PRO

SHEET	SIZE	DRAWING NUMBER	REV.
1/1	D	0051872000	E
SCALE	N/A		
		MASTER/ASSEMBLY	

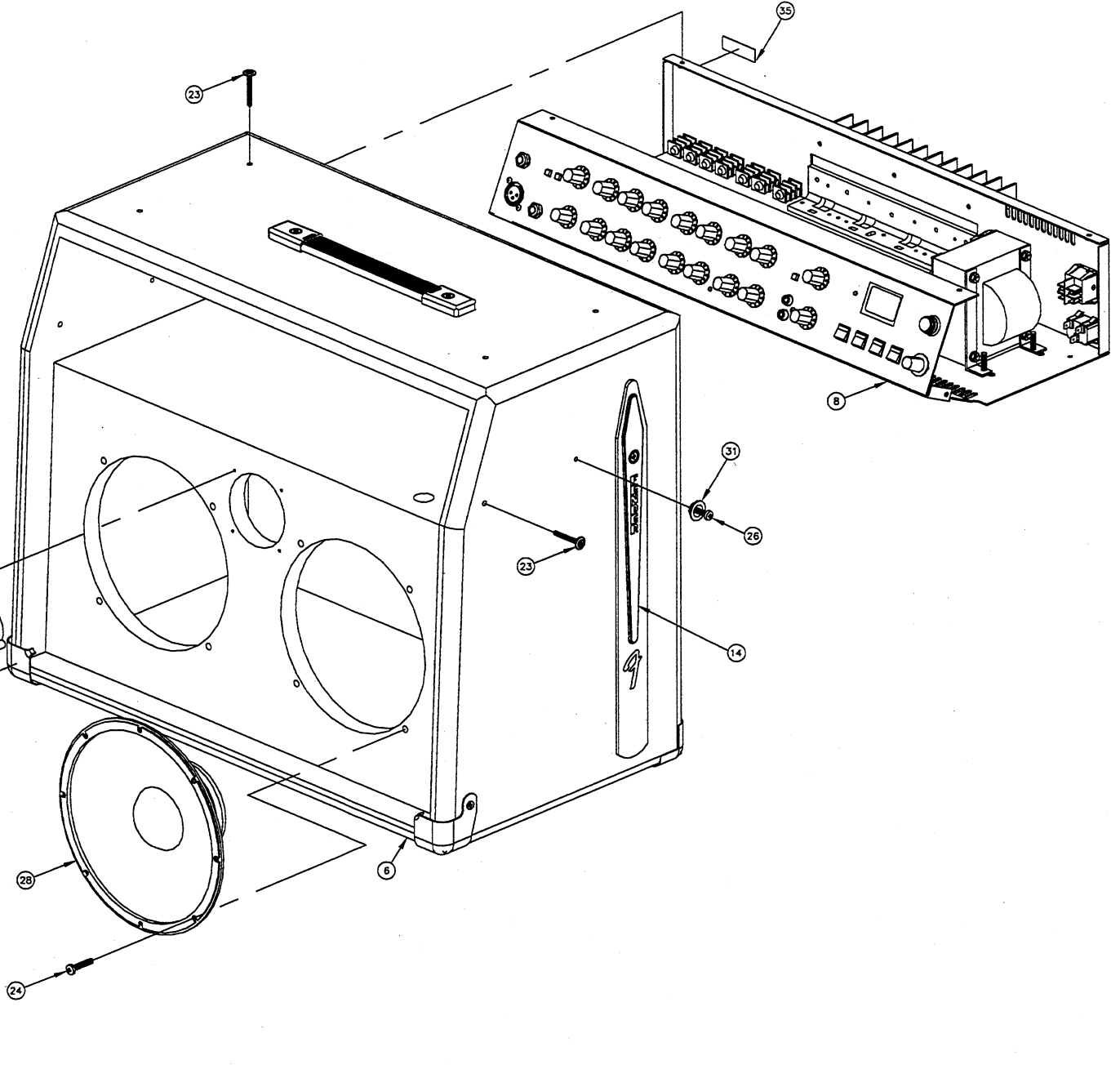
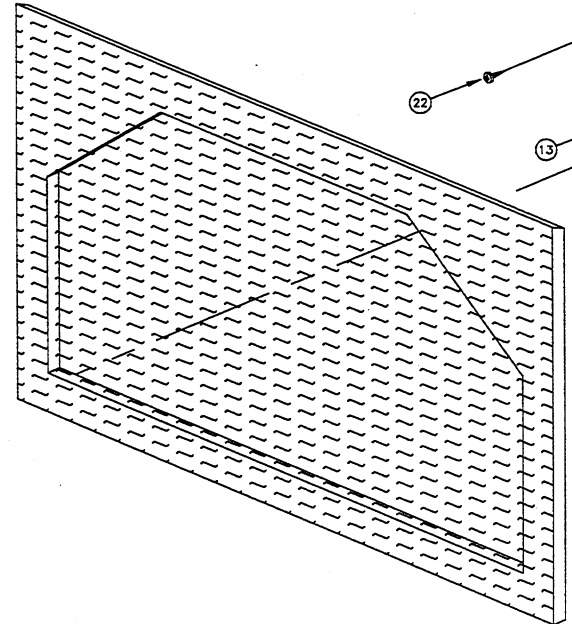
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REV	EC NUMBER	BY	DATE/AMOUNT
B	EC2250 CHG. END ITEM & #30 PART #	GHG	2/4/99
C	EC2370 CHG. CAB ASSY PART #	JR	12/27/99
D	EC2250-CHG. P/N 010032 TO 029757	BW	3/8/2000



TILT LEG MTG.
NO SCALE



(N.S.)=NOT SHOWN

ITEM	QTY.	PART NO.	DESCRIPTION
35	1	0049081000	LABEL SERIAL (CORONA)
34	2	0022285000	WSHR SP LOCK 1/4x.493 NI
33	6	0022319000	WSHR FLAT 1/4x9/16 NI
32	1	0051902000	WIRESET ACOUSTASONIC PRO (N.S.)
31	2	0024646000	WASHER LEG STOP TN
30	1	SEE MATRIX	TAG WARRANTY
29	1	0053454000	STICKER BUMPER FEND 1946 (N.S.)
28	2	0051016000	SPEAKER 8" 8 OHM HI-FI
27	4	0037210000	SCRW SMA 2x3/8 OHP NI
26	2	0031344000	SCRW SMA 10X3/4 OHP NI
25	2	0022277000	SCRW M 10-32X1-1/2 OHP NI
24	8	0026577000	SCRW 10-32X1 PHP BLX
23	6	0053483000	SCRW 8-32x1-3/8#6 OHPw/WSHR NI
22	4	9904101110	SCREW PB 8x5/8 PHP BLX
21	1	SEE MATRIX	REGISTRATION CARD (N.S.)
20	1	0051890000	SERVICE DIAGRAM COMB DSP ACOUSTASONIC PRO (N.S.)
19	1	0051891000	SERVICE DIAGRAM COMB ACOUSTASONIC PRO (N.S.)
18	.01	0036650000	PIN ESCUTCHEON #18x3/8 NI
17	2	0021998000	NUT FLEX LOCK W/NYLON IN
16	1	0036795000	NAMEPLATE 62 FENDER
15	1	0051888000	MANUAL OWNERS ACOUSTASONIC PRO (N.S.)
14	2	0051904000	LEG AMP TILTBACK 15"
13	1	0049260000	HORN CERAMIC PIEZO KXR 60
12	1	0051894000	FOOTSWITCH 4 BUTTON DSP (N.S.)
10	1	0054829000	FOAM INSERT ACST PRO
9	1	SEE MATRIX	CORD PWR. (N.S.)
8	1	SEE MATRIX	CHASSIS ASSY.
7	1	0051893000	CARTON ACOUSTASONIC PRO (N.S.)
6	1	0056478000	CAB ASSY ACOUSTASONIC PRO
5	1	9903320000	BAG POLY BOX ZIP 10X13 2M (N.S.)
4	1	0029757000	BAG POLY 35x22x52 .0015 (N.S.)
3	1	9903311400	BAG JIFFY #1 7-1/4x12 (N.S.)
2	1	0054819000	APRO EFFECTS LIST (LEXAN CARD) (N.S.)
1	1	0051870000	ACOUSTASONIC PRO LOGO PLATE

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

END ITEM	0051872000	0051874000	0051873000	0051875000	0051876000
ACOUST. PRO 120V DOM. 0221300000					
ACOUST. PRO 240V AUST. 0221330000					
ACOUST. PRO 230V U.K. 0221340000					
ACOUST. PRO 230V 0221350000					
ACOUST. PRO 100V JPN. 0221370000					

MATERIAL	n/a
FINISH	n/a
TOL. UNLESS NOTED	
FRACT.	1/32
.X	0.050
.XX	0.010
.XXX	0.005
ANGLES	0.5 DEGREES
HOLE DIA.	+0.005 - 0.001
UNMARKED ANGLES	90 DEGREES.

ENGINEER	HAACK
DRAWN	GOOLER
DATE	9/11/98
DFT. ENG. ENG.	DHS
DATE DATE DATE	3/11/99
DATE	14-MAR-00
TITLE	END ITEM ACOUSTASONIC PRO
SHEET	1/1
SCALE	N/A
SIZE	D
DRAWING NUMBER	0221300000
REV.	D
	MASTER/ASSEMBLY

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