



BXR 100 SERVICE MANUAL

PARTS LIST

JUNE 1993

120V 0224401000
230V 0224461000
100V 0224471000

NOTICE:

The information contained herein is CONFIDENTIAL and PROPRIETARY to Fender Musical Instruments. 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 express permission of Fender Musical Instruments. All specifications subject to change without notice.

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

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

RESISTOR CODES

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

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 Plating

NOTICE:

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

PRINTED CIRCUIT BOARD ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE	DESIGNATION
1	040685	PCB ASSY BXR100 100/120V	(STUFFED)	
1	031910*	BREAKER THERMAL 15a 155/195DEG	TS1	
3	028101	BUTTON PUSH SWITCH RED	(@ S1,2,3)	
1	029719	CABLE FLAT 5 CKT 10 inch	(PREAMP TO POWER AMP)	
1	040987	CABLE RIBBON 10CKT	(EQ INTERCONNECT)	
2	031756	CAP AE 4700µF 50V	C69,70	
13	026517	CAP AE AX 2.2µF 50V 20%	C4,8,16,43,45,47,49,51-54,62,71	
12	038692	CAP AE AX 10µF 35V 20%	C9,18,21,24,27,30,33,36,39,41,44,61	
2	028465	CAP AE RDL 22µF 25V 20%	C59,60	
4	028471	CAP AE RDL 47µF 50V 20%	C55,56,67,68	
6	038703	CAP CA .1µF 50V 10%	C57,58,63-66	
2	038873	CAP CA 22pF 100V 5%	C5,42	
1	038698	CAP CA 47pF 100V 5%	C3	
1	039263	CAP CA 1000pF 100V 5%	C48	
1	039264	CAP CA 1500pF 100V 5%	C15	
2	027280	CAP MPF .15µF 63V 10%	C13,14	
2	033588	CAP PFF RDL .01µF 100V 10%	C1,2	
1	036234	CAP PFF RDL .015µF 100V 10%	C7	
3	033590	CAP PFF RDL .022µF 100V 10%	C10,11,12	
3	033591	CAP PFF RDL .033µF 100V 10%	C17,40,46	
1	033592	CAP PFF RDL .047µF 100V 10%	C6	
2	030934	CAP PFF RDL .0015µF 50V 5%	C37,38	
2	030950	CAP PFF RDL .022µF 50V 5%	C25,26	
2	030937	CAP PFF RDL .0027µF 50V 5%	C34,35	
2	030942	CAP PFF RDL .0056µF 50V 5%	C31,32	
2	030945	CAP PFF RDL .01µF 50V 5%	C28,29	
2	030953	CAP PFF RDL .039µF 50V 5%	C22,23	
2	030959	CAP PFF RDL .082µF 50V 5%	C19,20	
1	027940	CONTROL SNAPIN 50K 15A TAPER	R8	
1	027941	CONTROL SNAPIN 50K B TAPER	R67	
2	031087	CONTROL SNAPIN 25k 2B W/DETENT	R19,22	
7	040673	CONTROL SLIDE 20mm 50K CTR DET 3BM	R57-63	
2	064089	DIODE 1N4003 200PRV	CR14,15	
11	006260	DIODE 1N4448 75PRV	CR1-9,16,17	
4	029045	DIODE 6A 400PRV 6A4 LEAD FORMED	CR22-25	
4	028776*	DIODE BIAS BYV26D LEAD FORMED	CR10-13	
2	027329	DIODE ZENER 1N5228B 3.9V .5W 5%	CR18,19	
2	028119	DIODE ZENER 1N5353B 16V .5W 5%	CR20,21	
2	026000	FSTN TAB MALE PCB MT .187x.032	CP2,7	
8	025802	FSTN TAB MALE .250x.032 PCB MT	CP1,3-6,8-10	
2	025996	FUSE CLIP PCB .250 & 5MM FUSE	XF1	
1	039982	FUSE QA 1-1/4x1/4 250v 4AMP	F1	(100V/120V ONLY)
1	020794	FUSE QA 20mmX5mm 250V 2AMP	F1	(EXPORT 230V ONLY)
2	027393	HDR WFR PIN/SKT MLX 09-18-5033	P1,2	
1	027397	HDR WFR PIN/SKT MLX 09-18-5037	P3	
1	027419	HDR .1 CTR 10 CKT SQ PIN	P6	

PARTS LIST

PRINTED CIRCUIT BOARD ASSEMBLY
CONTINUED

QTY	PART #	DESCRIPTION	REFERENCE
<u>DESIGNATION</u>			
1	027404	IC CA3080AE OTA	U10
9	016795	IC DUAL OP AMP TL072CP	U1-9
1	028047	IC OP AMP MC1436	U11
4	040903	INSULATOR MICA TO-218	(@ Q3-6)
4	037036	JACK PHONE PCB MONO CA PREMIUM	J1-4
2	031570	JACK PHONE PCB STEREO PREMIUM	J5,6
1	026043	JUMPER WIRE 18GA .8x.175	JP1 (100V/120V ONLY)
25	020888	JUMPER WIRE 22GA .5x.175	W1-25
1	028039	LED RED 5x5mm SLB-55VR3	LD1
1	040684	PCB FAB BXR 100	(RAW BOARD)
1	040716	PLATE COUPLER HEATSINK	(TRANSISTOR MOUNT)
2	025818	RES CF 1/4w 5% 4.7_	R116,117
1	024952	RES CF 1/4w 5% 100_	R74
3	024965	RES CF 1/4w 5% 1k	R70,106,108
2	024967	RES CF 1/4w 5% 1.2k	R99,102
1	024970	RES CF 1/4w 5% 1.8k	R11
2	024971	RES CF 1/4w 5% 2.2k	R76,84
8	024973	RES CF 1/4w 5% 3.3k	R6,25,40,44,48,52,56,66
4	026504	RES CF 1/4w 5% 3.6k	R18,23,32,36
3	024977	RES CF 1/4w 5% 4.7k	R7,89,90
1	028948	RES CF 1/4w 5% 6.2k	R17
2	024979	RES CF 1/4w 5% 6.8k	R30,75
4	025942	RES CF 1/4w 5% 7.5k	R34,38,46,54
2	024980	RES CF 1/4w 5% 8.2k	R42,50
16	024981	RES CF 1/4w 5% 10k	R4,9,10,13,14,21,24,26-28,64,65,73, 79,81,82
2	029539	RES CF 1/4w 5% 13k	R15,16
4	024987	RES CF 1/4w 5% 22k	R68,71,98,107
4	024989	RES CF 1/4w 5% 33k	R20,72,80,83
1	024993	RES CF 1/4w 5% 47k	R29
8	028990	RES CF 1/4w 5% 51k	R33,37,45,53,85-88
2	024994	RES CF 1/4w 5% 56k	R41,49
2	024995	RES CF 1/4w 5% 68k	R1,2
5	024997	RES CF 1/4w 5% 100k	R12,31,39,47,69
5	028549	RES CF 1/4w 5% 110k	R35,43,51,55,91
1	025060	RES CF 1/4w 5% 270k	R3
1	029617	RES CF 1/4w 5% 750k	R5
2	025069	RES CF 1/4w 5% 1M	R77,78
2	031767	RES CF 1/2w 5% 15_	R111,112
1	028861	RES CF 1/2w 5% 3.3k	R115
2	041272	RES CF 1/2w 5% 5.6k	R100,101
1	028045	RES FILM 1w 5% 220_	R97
2	028030	RES FILM 1w 5% 680_	R95,96
2	028029	RES FILM 1w 5% 1.5k	R92,105
1	034705	RES FILM 2w 5% 270_	R110
4	028028	RES WW BT 5w 10% .47_	R93,94,103,104

PARTS LIST

PRINTED CIRCUIT BOARD ASSEMBLY
CONTINUED

QTY	PART #	DESCRIPTION	REFERENCE
<u>DESIGNATION</u>			
3	036940	RES WW 5w 10% 270_	R109,113,114
4	027638	SCRW TF 4-40x3/8 HWH ZI	(@ Q3,4,5,6)
2	041595	SCRW 6-32x3/16 PHP STL ZI SEMS	(@ TS1)
2	031188	SCRW M 4-40x1/4 PHPS ZI w/WSHR	(EQ PCB STANDOFF MOUNT)
4	032908	SCRW TF 6-32x3/8 PHP ZI	(PCB TO HEATSINK MOUNT)
1	9904701440	SPACER LED .7x.125 BLUE	(@ LD1)
2	016746	STNDOFF RND AL 4-40x1/2x1/4	(@ EQ PCB)
3	028091	SWITCH PUSH SLFLK SHORT STROKE	S1,2,3
1	028503	THERMISTOR NTC 10ohm 5AMP	TH1 (EXPORT 230V ONLY)
4	028169	WSHR SHLDR NYL 5/32x1/4	(@ Q3,4,5,6)
1	014689	XSTR N-CH JFET J111 TO-92	Q1
1	014408	XSTR PNP DARLNGTN MPSA63 TO-92	Q2
2	028114	XSTR NPN TIP142 TO-218AC	Q3,5
2	028115	XSTR PNP TIP147 TO-218AC	Q4,6

CHASSIS ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE
<u>DESIGNATION</u>			
1	040689	CHS ASSY BXR 100 120V	(COMPLETE CHASSIS)
1	007565	BUSHING SR .625x.125x37/64 BLK	(@ POWER CABLE 100V/120V ONLY)
1	010401	BUSHING SR .625x.125x37/64WHT 230V	(@ POWER CABLE 230V)
1	026527	CABLE ASSY POWER W/.187 TABS	(100V/120V ONLY)
1	026528	CABLE ASSY POWER 230V W/.187 TABS	(PWR CABLE 230V EXPORT ONLY)
1	036479	CABLE ASSY POWER AUST.W/.187 TABS	(240V AUSTRALIA ONLY)
1	040688	CHS BXR 100	(RAW CHASSIS)
1	033045	END BELL XFMR PWRCH	(TRANSFORMER MOUNT)
7	041109	KNOB EQ BXR SERIES	(@ SLIDE CONTROLS)
4	026403	KNOB POINTER BLACK 180 DEG	
4	028591	NUT ACORN 8-32	(TRANSFORMER MOUNT)
1	040686	PANEL FRONT BXR 100	
1	040687	PANEL REAR BXR 100	
6	028937	SCRW 6-32x5/8 PHP ZI ROLOK	(PCB TO CHASSIS MOUNT)
4	027636	SCRW 8-32x5/8 HWH BLX	(HEATSINK TO CHASSIS MOUNT)
2	014172	SCRW M 4-40x1/4 PHP BLX	(EQ PCB TO CHASSIS MOUNT)
2	017433	SCRW M 6-32x3/8 PHP BLX	(THERMAL BREAKER MOUNT)
2	038900	SCRW TF 6-32x1/4 PHP ZI	(@ GROUND LUGS)
6	025936	STAND OFF PCB PUSH ON NY 3/8L	(PCB TO CHASSIS MOUNT)
1	039287	SWITCH DPST .187 TAB GLOBAL	(POWER SWITCH)
4	030007	WSHR LCK INTL 8x.330x.02 ZI	(TRANSFORMER MOUNT)
1	040696	XFMR POWER 120V 100W BXR 100	(120V DOMESTIC ONLY)
1	040697	XFMR POWER EXPORT 100W BXR100	(100V/115V/230V)

PARTS LIST

CABINET ASSEMBLY

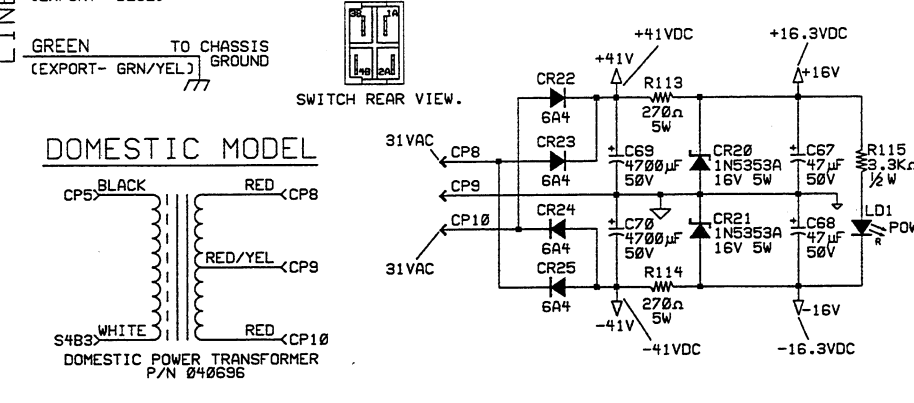
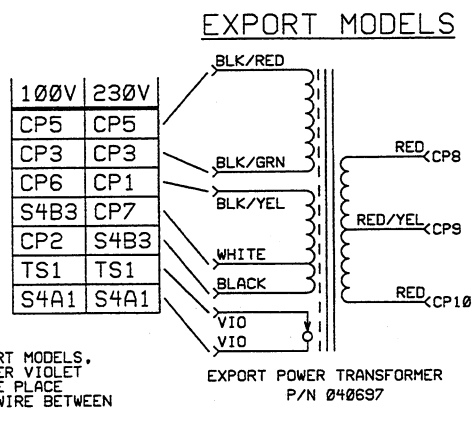
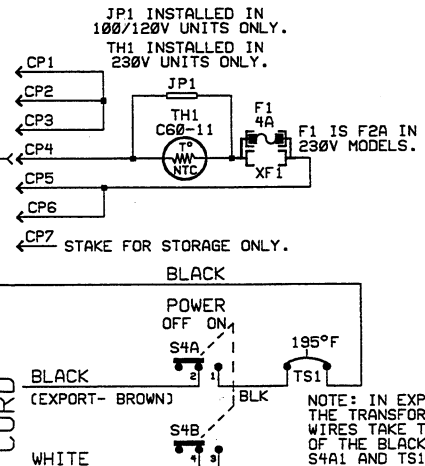
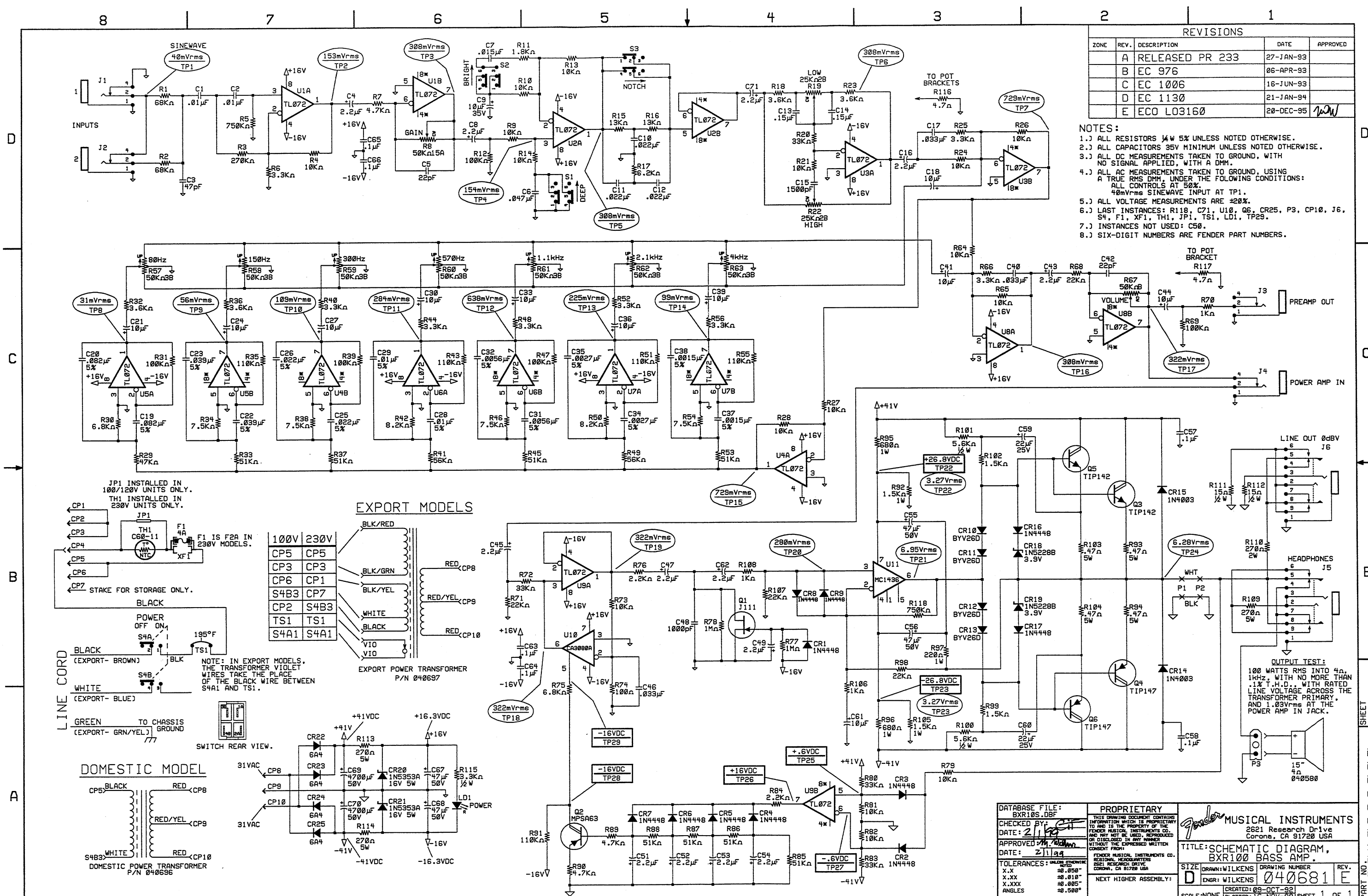
<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>	<u>REFERENCE</u>
		DESIGNATION	
1	040693	CAB ASSY BXR 100	(COMPLETE CABINET)
6	031867	CORNER 2 HOLE w/NOTCH BLK PWDR	
2	031840	CORNER 3 HOLE BLK PWDRD	
4	027849	GLIDE CAB 1.24x.335 BLX WAX	(STEEL ONLY)
4	019275	GLIDE CUSHION INSERT	(RUBBER ONLY)
1	040968	GRILLE ASSY BXR 100	(COMPLETE GRILLE)
1	027846	HANDLE 9.25	(RUBBER ONLY. NO INSERT)
1	032524	INSERT HANDLE	(SPRING STEEL)
1	011298	NAMEPLATE FENDER SMALL	
12	021972	NUT T 10-32x3/4 STR 3 PRNG BLX	(SPEAKER/HANDLE MOUNT)
4	017393	SCRW M 10-32x1-1/8 OHP BLX	(HANDLE MOUNT)
14	026576	SCRW SMA 8x5/8 TH BLACK	(CORNER MOUNT)
4	017942	SCRW WOOD 8X1 BLACK	(GLIDE MOUNT)
8	026577	SCRW M 10-32x1 PHP BLX	(SPEAKER MOUNT)
6	036199	SCRW M 8-32x1-3/16 OHP BLX WX	(CHASSIS TO CABINET MOUNT)
2	018113	SCRW SMA 4x1/2 OHP BLX	(LOGO MOUNT)
1	040580	SPEAKER 15" 4ohm 100 WATT	
6	029527	WSHR FNSH 8-5/8 FLNGD BLX WX	(CHASSIS TO CABINET MOUNT)

MISCELLANEOUS

<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>	<u>REFERENCE</u>
		DESIGNATION	
1	037896	CARTON M80 BASS	
8	038561	EPERAN FOAM CORNER 4-3/4x4-3/4	
1	040695	MANUAL OWNERS BXR 100	
1	040682	SCHEM REDUCED W/SVC DIA BXR100	

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	RELEASED PR 233	27-JAN-93	
	B	EC 976	06-APR-93	
	C	EC 1006	16-JUN-93	
	D	EC 1130	21-JAN-94	
	E	ECO L03160	28-DEC-95	<i>WJK</i>

- NOTES:
- ALL RESISTORS 1/4W 5% UNLESS NOTED OTHERWISE.
 - ALL CAPACITORS 35V MINIMUM UNLESS NOTED OTHERWISE.
 - ALL DC MEASUREMENTS TAKEN TO GROUND, WITH NO SIGNAL APPLIED, WITH A DMM.
 - ALL AC MEASUREMENTS TAKEN TO GROUND, USING A TRUE RMS DMM, UNDER THE FOLLOWING CONDITIONS:
ALL CONTROLS AT 50%.
40mVrms SINEWAVE INPUT AT TP1.
 - ALL VOLTAGE MEASUREMENTS ARE ±20%.
 - LAST INSTANCES: R118, C71, U10, Q6, CR25, P3, CP10, J6, S4, F1, XF1, TH1, JP1, TS1, LD1, TP29.
 - INSTANCES NOT USED: C50.
 - SIX-DIGIT NUMBERS ARE FENDER PART NUMBERS.



DATABASE FILE: BXR100.DBF
 CHECKED BY: *[Signature]*
 DATE: 2/1/94
 APPROVED BY: *[Signature]*
 DATE: 2/1/94

TOLERANCES: UNLESS OTHERWISE NOTED
 X.X ±0.05"
 X.XX ±0.010"
 X.XXX ±0.005"
 ANGLES ±0.500°

PROPRIETARY
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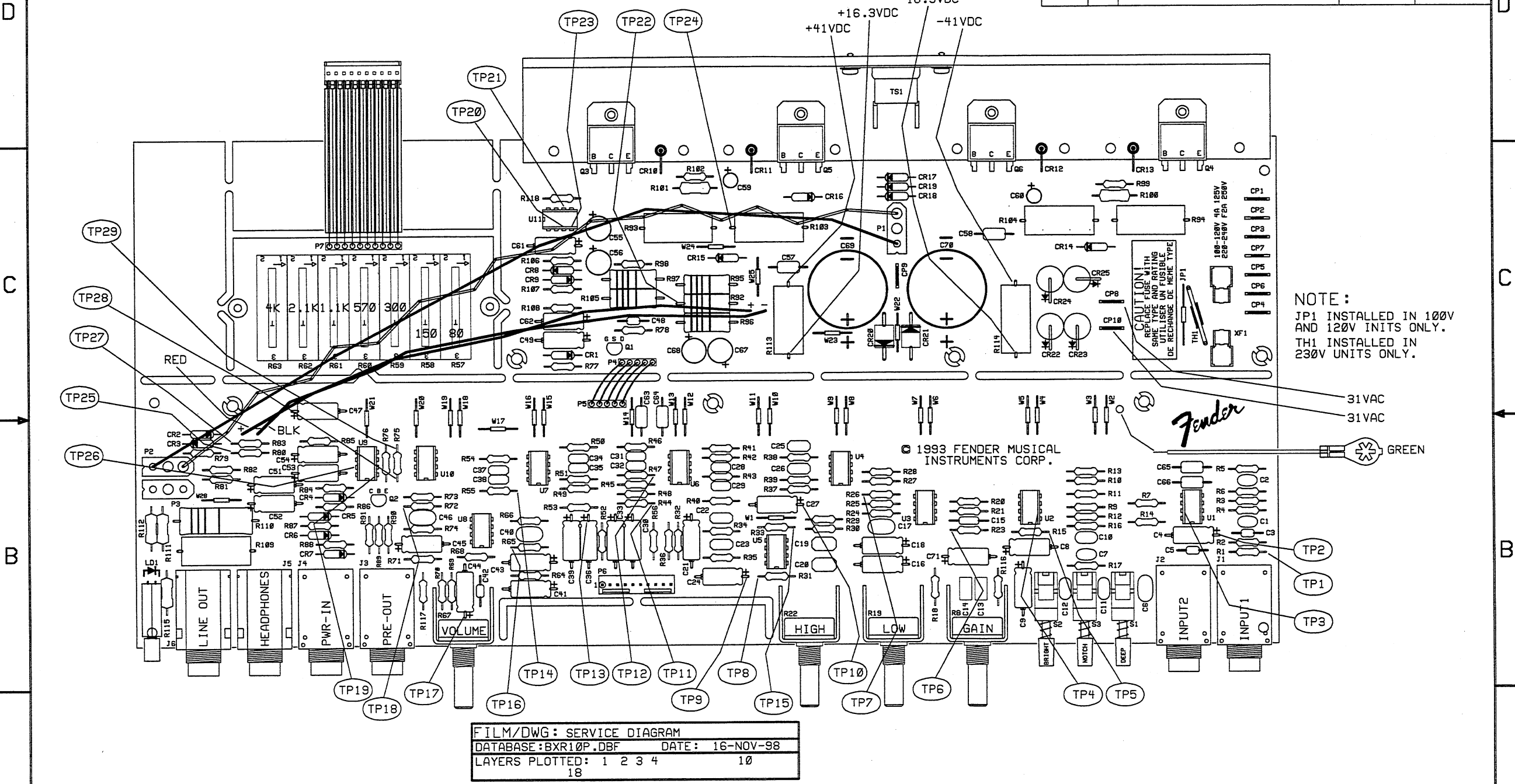
FENDER MUSICAL INSTRUMENTS
 2621 Research Drive
 Corona, CA 91720 USA

TITLE: SCHEMATIC DIAGRAM, BXR100 BASS AMP.
 SIZE: DRAWN: WILKENS DRAWING NUMBER: 040681 E
 ENGR: WILKENS
 SCALE: NONE
 CREATED: 09-OCT-92
 PLOTTED: 16-NOV-93

PART NO. 040682000 SHEET 1 OF 1

8 7 6 5 4 3 2 1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	RELEASED PR 233	27-JAN-93	
	B	EC 976	06-APR-93	
	C	EC 1130	24-FEB-94	<i>AW</i>



FILM/DWG: SERVICE DIAGRAM
 DATABASE: BXR10P.DBF DATE: 16-NOV-98
 LAYERS PLOTTED: 1 2 3 4 10
 18

NOTES:
 1.) PCB SHOWN AS FABRICATED.
 2.) INSTANCES NOT USED: C50.

DATABASE FILE: BXR10P.DBF CHECKED BY: <i>CF</i> DATE: 2/1/99 APPROVED: <i>M. Wilkens</i> DATE: 2/1/99 TOLERANCES: UNLESS OTHERWISE NOTED X.X ±0.050" X.XX ±0.010" X.XXX ±0.005" ANGLES ±0.500°	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 2621 RESEARCH DRIVE CORONA, CA 91720 USA BY BASSIST FOR BASSISTS. NEXT HIGHER ASSEMBLY: BXR100 BASS AMP.	Fender MUSICAL INSTRUMENTS 2621 Research Drive Corona, CA 91720 USA TITLE: SERVICE DIAGRAM, BXR100 BASS AMP. <table border="1"> <tr> <td>SIZE</td> <td>DRAWN: WILKENS</td> <td>DRAWING NUMBER</td> <td>REV.</td> </tr> <tr> <td>B</td> <td>ENGR: WILKENS</td> <td>040683</td> <td>C</td> </tr> </table> CREATED: 06-JAN-93 PLOTTED: 16-NOV-98 SHEET 1 OF 1	SIZE	DRAWN: WILKENS	DRAWING NUMBER	REV.	B	ENGR: WILKENS	040683	C
SIZE	DRAWN: WILKENS	DRAWING NUMBER	REV.							
B	ENGR: WILKENS	040683	C							

8 7 6 5 4 3 2 1