

ROC PRO 700

SERVICE MANUAL



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ROC PRO 700

(This is the model name for warranty claims)

SERVICE MANUAL

MAY 1996

IMPORTANT NOTICE:

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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

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 Plated

ROC PRO 700

SPECIFICATIONS

Product Release No.:	PR 242 <i>(This is not a model number)</i>
Input impedance:	> 1M Ω
Nominal level:	100mV
Power output:	65 Watts RMS into 8 Ω @ 5% THD
Effects loop	Nominal level; Selectable +4, -7, -16 dBV Output Impedance: 1.2k Ω Input Impedance: 100k Ω
Dimensions:	Height: 16.5" (41.9 cm) Width: 20.5" (52.0 cm) Depth: 9.75" (24.7 cm)
Weight:	30 lbs. (13.6 kg)

Product specifications are subject to change without notice

PARTS LIST

PRINTED CIRCUIT BOARD ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	041481001	PCB ASSY PERFORMER 650 ALL V'S	(STUFFED)
1	028104	BUTTON PUSH SWITCH BLACK	(@S2)
1	028577	CABLE ASSY REVERB 30"	(@P1-4)
2	029719	CABLE FLAT 5CKT 10"	(@P5,6)
4	038689	CAP AE AX .47uF 100V 20%	C16,17,33,37
4	026517	CAP AE AX 2.2uF 50V 20%	C9,41,42,44
1	038691	CAP AE AX 4.7uF 50V 20%	C43
1	038692	CAP AE AX 10uF 50V 20%	C61
7	025960	CAP AE AX 22uF 16V 20%	C4,10,32,34,47,48,60
2	028471	CAP AE RDL 47uF 50V 20%	C45,46
2	028492	CAP AE RDL 1000uF 16V 20%	C53,54
2	028042	CAP AE RDL 2200uF 50V	C51,52
1	038873	CAP CA 22PF 100V 5%	C40
1	039256	CAP CA 68PF 100V 5%	C31
3	038699	CAP CA 100PF 100V 5%	C8,18,36
1	039260	CAP CA 270PF 100V 5%	C7
3	038701	CAP CA 470PF 50V 5%	C15,26,28
1	038874	CAP CA 560PF 50V 5%	C22

ROC PRO 700

PRINTED CIRCUIT BOARD ASSEMBLY (CONT)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	039263	CAP CA 1000PF 50V 5%	C21
1	039265	CAP CA 2200PF 100V 5%	C35
1	039266	CAP CA 3300PF 100V 5%	C11
2	039268	CAP CA .4700PF 50V 5%	C2,3
3	027278	CAP MPF .1uF 63V 10%	C27,49,50
2	027281	CAP MPF .22uF 63V 10%	C6,30
3	027286	CAP MPF .47uF 63V 10%	C5,29,55
1	036234	CAP PFF RDL .015uF 100V 10%	C38
7	033591	CAP PFF RDL .033uF 100V 10%	C12,13,14,25,39,56,58
8	033592	CAP PFF RDL .047uF 100V 10%	C1,19,20,23,24,57,59,62
1	027937	CONTROL SNAPIN 2K 15A TAPER	R12 (MID/CH1)
3	027940	CONTROL SNAPIN 50K 15A TAPER	R10,11,53(TREBLE/CH1,BASS/CH1 BASS/CH2)
4	027941	CONTROL SNAPIN 50K B TAPER	R19,44,52,75(VOLUME/CH1,MID /CH2 TREBLE/CH2REVERB
1	027943	CONTROL SNAPIN 50K 30C TAPER	R28 (GAIN)
1	027945	CONTROL SNAPIN 100K B TAPER	R47 (VOLUME/CH2)
25	006260	DIODE 1N4448 75PRV	CR1-3,6-14,19,21,31,35-37,39-42
4	020534	DIODE 1N5402 RECTIFIER 200PRV 3AMP C&F	CR25-28
2	064089	DIODE 1N4003 200PRV 1 AMP	CR23,24
4	028776	DIODE BIAS BYV26D LEAD FORMED	CR15-18
2	027329	DIODE ZEN 1N5228B 3.9V .5W5%	CR20,22
2	028119	DIODE ZEN 1N5353B 16V 5W 5%	CR29,30
2	041320	DIODE ZEN 1N5341B 6.2V 5W 5%	CR4,5
10	025802	FSTN TAB MALE .250X.032 PCB MT	CP1-5,7-11
2	026000	FSTN TAB MALE PCT MT .187X.032	CP6,12
2	025996	FUSE CLIP PCB .250 & 5MM FUSE	XF1
1	048827	FUSE QA 1-1/4X1/4 250V 2AMP	F1 (100V/120V ONLY)
1	020789	FUSE QA 20mmX5mm 250V 1AMP	F1 (EXPORT 230V ONLY)
1	028497	HEATSINK PLATE	(TRANSISTOR MOUNT)
7	016795	IC DUAL OP AMP TL072	U1-6,8
1	028047	IC OP AMP MC1436/SG1436Y	U7
2	040903	INSULATOR MICA TO-218	(@Q5,6)
3	031570	JACK PHONE PCB STEREO PREMIUM	J1,3,5
2	037036	JACK PHONE PCB MONO CA PREMIUM	J2,4
25	020888	JUMPER WIRE 22GA .5X.175	W1-25
1	025926	LED RED PC MOUNT 3MM	LD1
1	040270	LED RED 5MM ROUND PC MT	LD2
1	041480	PCB FAB PERFORMER 650	(RAW PCB)
1	025818	RES CF 1/4W 5% 4.7Ω	R133
1	024947	RES CF 1/4W 5% 47Ω	R71
2	024956	RES CF 1/4W 5% 220Ω	R36,37
1	029604	RES CF 1/4W 5% 300Ω	R13
2	029451	RES CF 1/4W 5% 430Ω	R54,59
1	029609	RES CF 1/4W 5% 910Ω	R127
5	024965	RES CF 1/4W 5% 1K	R22,42,46,63,112
1	028842	RES CF 1/4W 5% 1.1K	R60
1	024967	RES CF 1/4W 5% 1.2K	R58
3	024969	RES CF 1/4W 5% 1.5K	R35,38,74
4	024971	RES CF 1/4W 5% 2.2K	R18,48,94,95
1	024972	RES CF 1/4W 5% 2.7K	R61
2	024937	RES CF 1/4W 5% 3.3K	R26,29
1	026504	RES CF 1/4W 5% 3.6K	R41
2	024975	RES CF 1/4W 5% 3.9K	R83,99
1	024977	RES CF 1/4W 5% 4.7K	R70
2	028034	RES CF 1/4W 5% 5.1K	R6,65
1	024979	RES CF 1/4W 5% 6.8K	R8
1	025942	RES CF 1/4W 5% 7.5K	R17
1	024980	RES CF 1/4W 5% 8.2K	R25
8	024981	RES CF 1/4W 5% 10K	R68,72,111,114,115,121,122,125
1	029539	RES CF 1/4W 5% 13K	R67

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PRINTED CIRCUIT BOARD ASSEMBLY (CONT)

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
2	024985	RES CF 1/4W 5% 15K	R3,5
6	024987	RES CF 1/4W 5% 22K	R9,14,23,24,40,49
2	024988	RES CF 1/4W 5% 27K	R84,86
7	024993	RES CF 1/4W 5% 47K	R27,43,45,51,80,81,82
1	028990	RES CF 1/4W 5% 51K	R66
1	026507	RES CF 1/4W 5% 62K	R50
2	029613	RES CF 1/4W 5% 91K	R20,21
5	024997	RES CF 1/4W 5% 100K	R31,57,64,69,128
2	025058	RES CF 1/4W 5% 180K	R15,30
4	025059	RES CF 1/4W 5% 220K	R16,55,73,78
3	025065	RES CF 1/4W 5% 470K	R56,79,130
2	028018	RES CF 1/4W 5% 510K	R4,7
2	025067	RES CF 1/4W 5% 680K	R85,132
1	029617	RES CF 1/4W 5% 750K	R1
14	025069	RES CF 1/4W 5% 1M	R2,39,76,77,113,116-119,123,124,131,134,135
1	025084	RES CF 1/4W 5% 10M	R129
3	031767	RES CF 1/2W 5% 15Ω	R62,103,104
1	026493	RES CF 1/2W 5% 2.7K	R126
1	026549	RES CF 1/2W 5% 1.5K	R109
1	028045	RES FILM 1W 5% 220Ω	R87
2	028030	RES FILM 1W 5% 680Ω	R88,89
1	029722	RES FILM 1W 5% 1K	R110
3	027346	FES FILM 1W 5% 1.2K	R100,101,102
2	028029	RES FILM 1W 5% 1.5K	R90,91
2	037354	RES CF 1W 5% 4.7K	R92,93
1	027478	RES WW BT 5W 10% .22Ω	R98
2	028028	RES WW BT 5W 10% .47Ω	R96,97
7	041256	RES WW 5W 10% 470Ω	R32-34, 105-108
2	027638	SCRW TF 4-40X3/8 HWHS ZI	(Q5,6)
2	032908	SCRW TF 6-32X3/8 PHP ZI	(HEATSINK TO PCB MOUNT)
1	029167	SOCKET TUBE 9 PIN PCB MOUNT	XV1
1	028091	SWITCH PUSH SLFLK SHORT STROKE DPDT	S2 (CHANNEL SELECT)
1	038652	SWITCH SLIDE 4P3T	S1 (LEVEL)
1	028503	THERMISTOR 10Ω 5AMP C60-11	TH1
1	013341	TUBE VACUUM 7025-12AX7	V1
2	028169	WSHR SHLDR NYL 5/32X1/4	(@Q5,6)
1	041465	XSTR N-CHNL J-FET J113 TO-92	Q3
3	014689	XSTR N-CHNL J-FET J111 TO-92	Q1,2,4
1	016739	XSTR NPN 2N4401 TO-92	Q7
1	028114	XSTR NPN TIP142 TO-218AC	Q5
1	028115	XSTR PNP TIP147 TO-218AC	Q6

CHASSIS ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	050318	CHS ASSY ROC PRO 700 120V	(COMPLETE CHASSIS)
1	021709	BUSHING SR .437X.602X13/32 BLK	(@ SPEAKER CABLE)
1	026038	BUSHING SR .625X.062X37/64 BLK	(@ POWER CABLE 100V/120V)
1	010401	BUSHING SR .625X.125X37/64 WHT 230V	(@ POWER CABLE 230V)
1	026116	BUSHING SR .500X.063X7/16 BLK	(@ REVERB CABLE)
1	026527	CABLE ASSY POWER W/.187 TABS	(100V/120 ONLY)
1	026528	CABLE ASSY POWER 230V W/.187 TABS	(POWER CABLE 230V EXPORT)
1	036479	CABLE ASSY POWER AUST. W/.187 TABS	(240V AUSTRALIA ONLY)
1	028560	END BELL XFMR 85W	
1	028499	HEATSINK BAR	(COUPLER TO CHASSIS)
10	019798	KNOB ROTARY SS	
4	028591	NUT ACORN 8-32	(TRANSFORMER MOUNT)
1	050315	PANEL FRONT ROC PRO 700	
1	050316	PANEL REAR ROC PRO 700	
3	028500	SCRW TF 8-32X3/4 HWH SLTD ZI	(CHASSIS TO HEATSINK MOUNT)
4	028937	SCRW TF 6—32X5/8 PHPZI ROLOK	(PCB TO CHASSIS MOUNT)

**ROC PRO 700
CHASSIS ASSEMBLY (CONT)**

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	025935	SWITCH POWER DPST	120V DOMESTIC ONLY
1	039287	SWITCH POWER DPST .187 TAB GLOBAL	(EXPORT ONLY)
REF	016420	TUBING SHRINK 1-1/2 BLK	(VACUUM TUBE MOUNT)
4	030007	WSHR LCK INTL 8X.330X.02 ZI	(TRANSFORMER MOUNT)
1	027668	XFMR PWR 120V 85A	(120 DOMESTIC ONLY)
1	039357	XFMR PWR EXP 230V	(100V/230V EXPORT ONLY)

CABINET ASSEMBLY

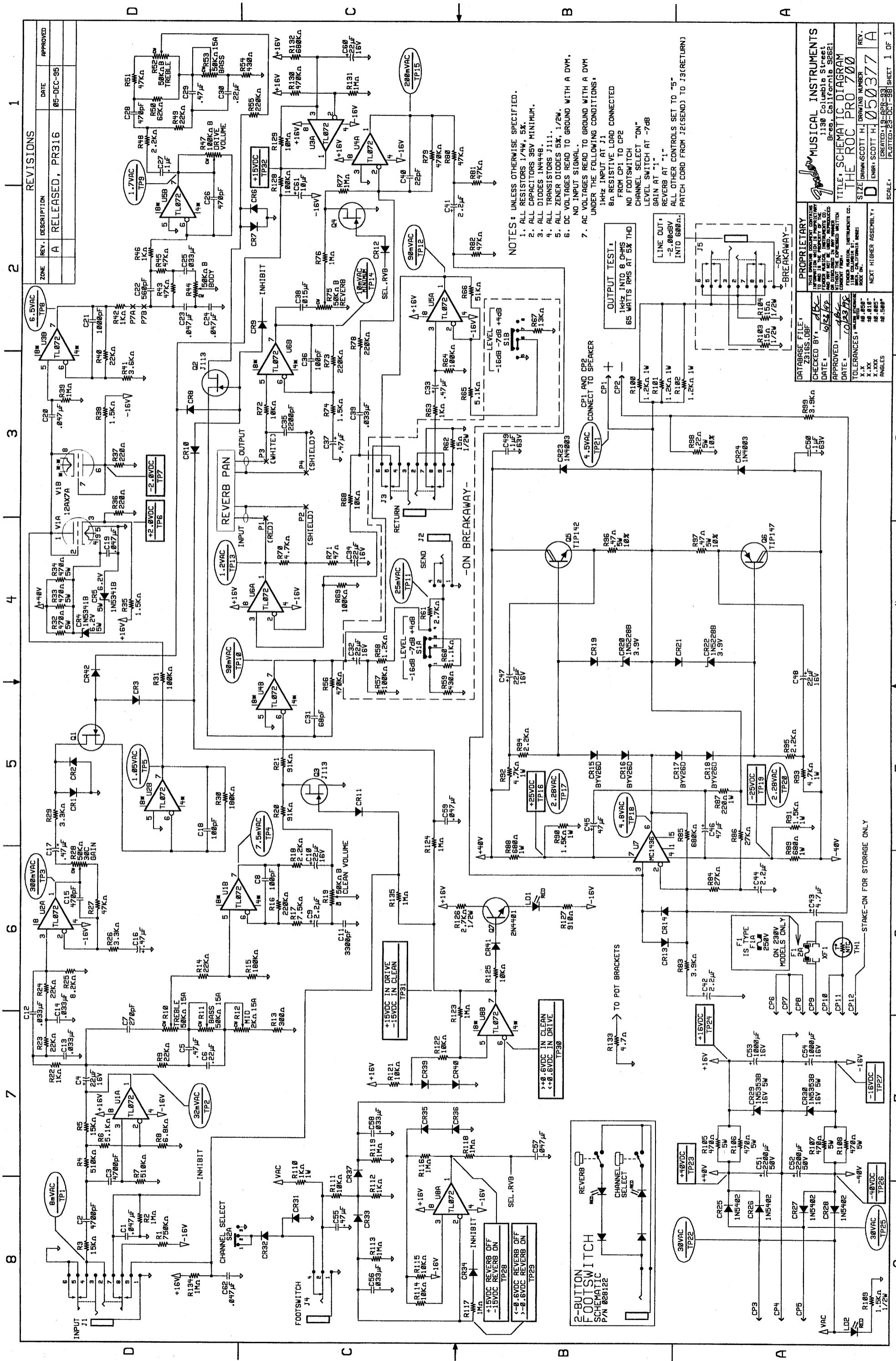
QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	050254	CAB ASSY ROC PRO 700/DLX 112+	(COMPLETE CABINET)
1	022491	CLAMP CABLE NYL SCRW MNT 5/16	(@REVERB CABLE)
4	026566	CORNER 2 HOLE W/ TAB NI	
2	026568	CORNER 3 HOLE NI	
4	029821	EYELET RFLNGD .215 OD X.315L	(@REVERB PAN)
4	019276	GLIDE CAB 1.24X.335NI	(STEEL ONLY, NO INSERT)
4	019275	GLIDE CUSHION INSERT	(RUBBER ONLY)
1	050335	GRILLE ROC PRO 700	(COMPLETE GRILLE)
1	027846	HANDLE 9.25" NO LOGO	(RUBBER ONLY, NO INSERT)
2	019279	HANDLE CAP 2-3/16 NI	(HANDLE MOUNT)
1	032524	INSERT HANDLE	(SPRING STEEL)
1	047600	NAMEPLATE LOGO BLACK	
4	050311	NUT 2-56 NYLON INSERT 2CNME-2	(LOGO MOUNT)
8	021972	NUT T 10-32X3/4 STR 3 PRNG BLX	(HANDLE/SPEAKER MOUNT)
1	028055	REVERB UNIT 800 Ω 8EB2C1B DN	
10	026571	SCRW CORNER MOUNTING	
4	022244	SCRW M 10-32X1-1/8 OHP NI	(HANDLE MOUNT)
4	026577	SCRW M 10-32X1 PHP BLX	(SPEAKER MOUNT)
6	036199	SCRW M 8-32X1-3/16 OHP BLX WX	(CHASSIS MOUNT)
5	029828	SCRW PB 8X3/4 PHP ZI	(REVERB PAN MOUNT)
8	011678	SCRW SMA 8X1-1/2 OPH BLX	(GRILLE MOUNT)
4	050312	SCRW M 2-56X3/8 FHP NI	(LOGO MOUNT)
4	026652	SCRW WOOD 8X1 FH	(GLIDE MOUNT)
8	050317	STANDOFF RUBBER .75 DIA X.77	(GRILLE MOUNT)
1	025923	SPEAKER 12" 8 Ω 75 WATT	
12	029527	WSHR FNSH 8-5/8 FLNGD BLX WX	(CHASSIS/GRILLE MOUNT)

FOOTSWITCH ASSEMBLY

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	028122	FTSW ASSY 2 BTTN REVERB F/LOGO	(COMPLETE FOOTSWITCH)
1	028895	CABLE ASSY FTSW RT ANG 12'	
2	006260	DIODE 1N4448 SIGNAL BENT	CR1,2
1	037036	JACK PHONE PCB MONO CA PREMIUM	J1
2	028039	LED RED 5X5XMM SLB-55VR3	LD1,2
1	028448	PCB ASSY FTSW 2 BUTTON	
8	028889	SCRW SMB 6X1/4 PHP	(END CAP MOUNT)
2	03492	1SPACER RND NYL .147X.250X.780	
2	028714	SWITCH PUSH SPDT	
2	031899	WSHR NYL .485X.775X.150 TK	

MISCELLANEOUS

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	050367	MANUAL OWNERS ROC PRO 700	
1	050377	SCHEM REDU W/SVC ROC PRO 700	



- NOTES: UNLESS OTHERWISE SPECIFIED.
1. ALL RESISTORS 1/4W, 5%.
 2. ALL CAPACITORS 35V MINIMUM.
 3. ALL DIODES 1N4148.
 4. ALL TRANSISTORS J111.
 5. ALL ZENER DIODES 5%, 1/2W.
 6. DC VOLTAGES READ TO GROUND WITH A DVM. NO INPUT SIGNAL.
 7. AC VOLTAGES READ TO GROUND WITH A DVM UNDER THE FOLLOWING CONDITIONS:
 1KHz INPUT AT J1
 8Ω RESISTIVE LOAD CONNECTED FROM CP1 TO CP2
 NO FOOTSWITCH
 CHANNEL SELECT "ON"
 LEVEL SWITCH AT -7dB
 GAIN AT "1"
 REVERB AT "1"
 ALL OTHER CONTROLS SET TO "5"
 PATCH CORD FROM J2(SENDS) TO J3(RETURN)

REV.	DATE	APPROVED
A	05-DEC-95	

ZONE	REV. DESCRIPTION
	A RELEASED, PR316

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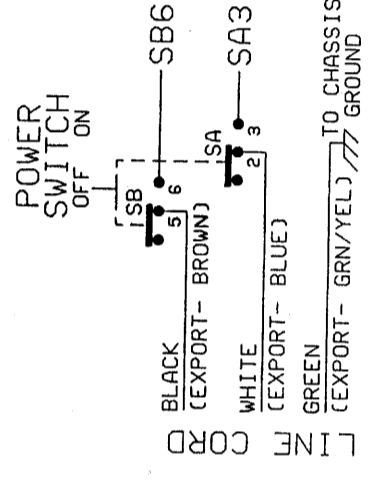
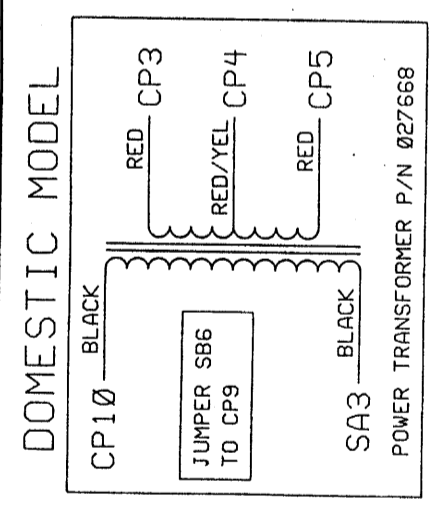
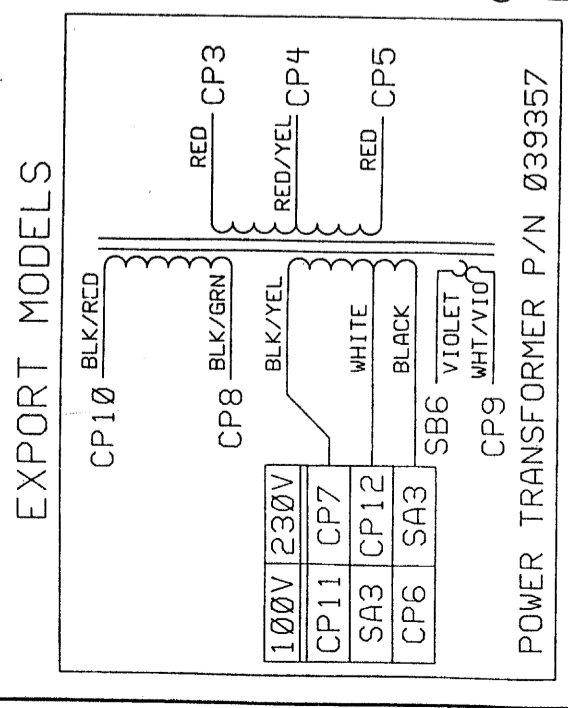
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THE ROC PRO 700

DATE: 05/12/95
 CHECKED BY: [Signature]
 APPROVED BY: [Signature]

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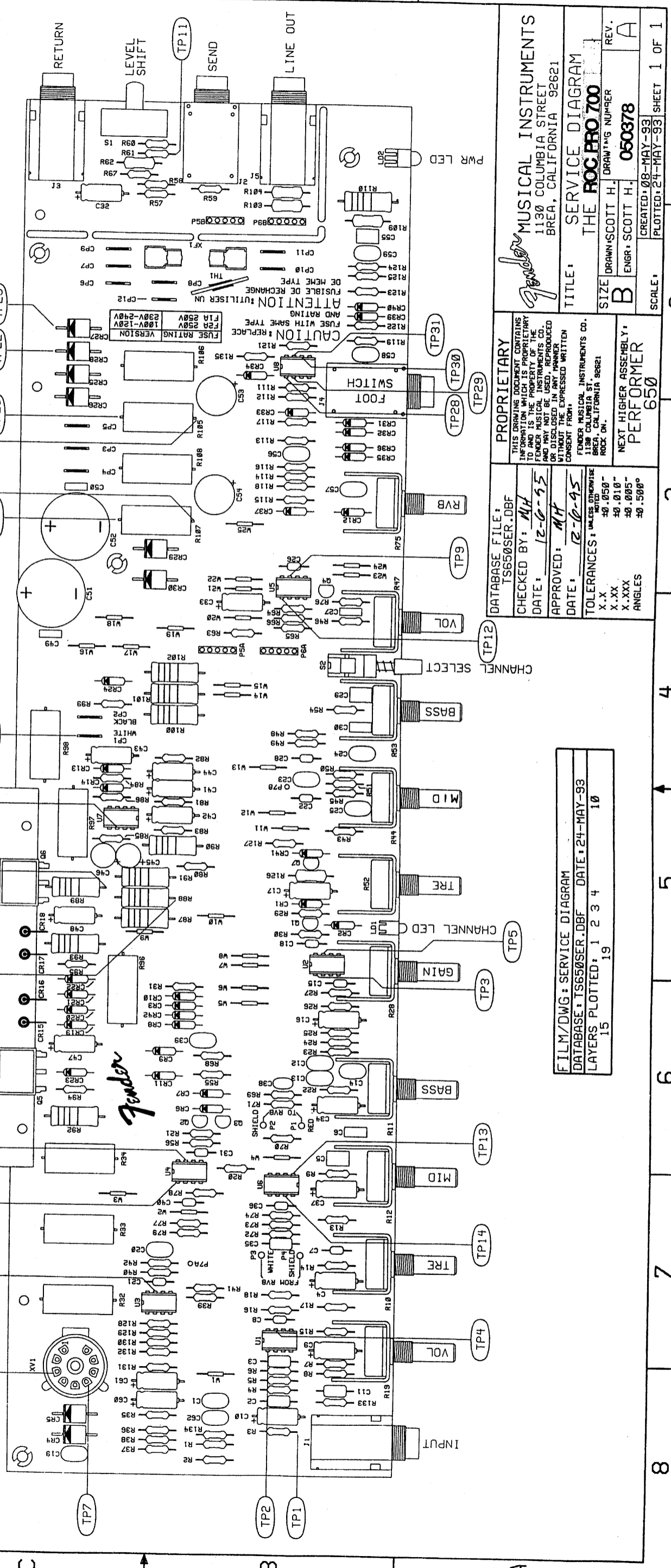
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 REV. 1

PLOTTED: 23-OCT-98
 SHEET 1 OF 1



REVISIONS

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	RELEASED, PR316	21-MAY-93	MH



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ROCK ON.

NEXT HIGHER ASSEMBLY: PERFORMER 650

SCALE: 1
 SHEET 1 OF 1

SIZE: B
 DRAWING NUMBER: 050378
 ENGR: SCOTT H.
 DRAWING NUMBER: A

TITLE: SERVICE DIAGRAM

THE **ROC PRO 700**
 1130 COLUMBIA STREET
 BREA, CALIFORNIA 92621

CREATED: 08-MAY-93
 PLOTTED: 24-MAY-93

FILM/DWG: SERVICE DIAGRAM
 DATABASE: TS650SER.DBF DATE: 24-MAY-93
 LAYERS PLOTTED: 1 2 3 4 10
 15 19

DATABASE FILE: TS650SER.DBF
 CHECKED BY: MH
 DATE: 12-0-95
 APPROVED: MH
 DATE: 12-0-95

TOLERANCES: UNLESS OTHERWISE NOTED
 X.X .050"
 X.XX .010"
 X.XXX .005"
 ANGLES .500°