

CHASSIS SCREW

9904101530

CHASSIS-FINISH WASHER

0026004/000

CHASSIS NUT

0027861/000

TH-1 thermistor

0026411/000

FENDER 185 SERIES AMPLIFIERS

PRO 185 -- PART NUMBER 22-5600

STAGE 185 -- PART NUMBER 22-5200

LONDON 185 TOP -- PART NUMBER 22-5500

PARTS LIST PAGE 1 OF 6

This list itemizes parts common to all three 185 series models. Parts not common to all include the appropriate model name. A coded naming convention is used in the description of certain parts. The codes and what they mean follow:

RESISTOR CODES

RESCF carbon film  
RESCC carbon composition

RESISTOR CODES

RESWW wirewound  
RESFP flameproof

CAPACITOR CODES

CAPAT axial tantulum  
CAPRT radial tantulum  
CAPCD ceramic disc  
CAPRM radial monolithic

CAPACITOR CODES

CAPAF axial film  
CAPRF radial film  
CAPAE axial electrolytic  
CAPRE radial electrolytic

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
3	<del>025934</del> 031570	JACK PHONE STEREO INPUTS	J1-3
8	016795	OP-AMP DUAL JFET TLO72CP	U1-5,7-9
6	027261	CAPRF 100V.0047 10%	C1,2,4,27,28,62
4	028018	RESCF 1/4W 510K 5%	R1,4,53,54
6	024989	RESCF 1/4W 33K 5%	R5,58,73,49,51,52
2	028034	RESCF 1/4W 5.1K 5%	R2,55
2	024979	RESCF 1/4W 6.8K 5%	R6,57
4	024987	RESCF 1/4W 22K 5%	R8,13,60,65
7	027286	CAPRF 63V .47uF 10%	C5,31,59,70,40,16,83
9	027281	CAPRF 63V .22uF 10%	C6,32,58,52,44,37,38 +C19,82
4	027940	CTRL,50K (CH1,2 TREB,BASS)	R9,10,61,62
2	027937	CTRL,2K, (CH1,2 MID)	R11,63
2	025058	RESCF 1/4W 180K 5%	R1,64
5	028091	SW 2P2T ALT/ACTION	S1-3,5,6
4	025084	RESCF 1/4W 10MEG 5%	R7,44,59,178
2	025777	CAPCD 1KV 470pF 10% <i>RA</i>	C8,10
2	027949	CTRL, 250K (GAIN,BOOST)	R14,18
5	024977	RESCF 1/4W 4.7K 5%	R21,19,27,96,146
47	006260	DIODE SIGNAL 75PRV 1N4448	CR1-23,25-47,56
7	014689	N-CHAN JFET J-111	Q1-6,21
2	024970	RESCF 1/4W 1.8K 5%	R24,109
3	024959	RESCF 1/4W 330 5%	R26,144,147
4	025942	RESCF 1/4W 7.5K 5%	R23,68,124,87
4	024965	RESCF 1/4W 1K 5%	R25,37,38,164

FENDER 185 SERIES AMPLIFIERS

PARTS LIST PAGE 2 OF 6

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
4	027297	CAPRE 50V 2.2uF 20%	C13,20,33,11
2	027939	CTRL 5K (CONTOUR,G.OFFSET)	R43,80
2	027257	CAPRF 100V.0022 10%	C22,53
2	028955	RESCF 1/4W 130K 5%	R39,41
2	024991	RESCF 1/4W 39K 5%	R42,35
2	028956	RESCF 1/4W 43K 5%	R40,45
4	025951	CAPCD 1KV 750pF 10%	C21,7,15,29
6	027272	CAPRF 63V .047 10%	C23,9,45-48
2	027265	CAPRF 100V .015 10%	C24,57
1	027942	CTRL,50K 50%DET (PRESENCE)	R46
12	024981	RESCF 1/4W 10K 5%	R3,47,108,114,116,119 +R103,118,32,34,36,56
1	024980	RESCF 1/4W 8.2K 5%	R48
7	028465	CAPRE 25V 22uF 20%	C36,51,54,68,64,39,43
4	024971	RESCF 1/4W 2.2K 5%	R70,148,149,113
2	027943	CTRL,50K (CH1,2 VOLUME)	R69,50
2	<del>025929</del>	JACK PHONE MONO PREAM,FTSW	J4,5
13	025069	RESCF 1/4W 1MEG 5%	R74,75,110-112,115 +R117,120,127,131-133 +R177
1	026547	QUAD COMPARATOR <sup>LM</sup> 339	U6
11	024997	RESCF 1/4W 100K 5%	R20,33,66,92,98 +R121-123,126,128,153
3	027269	CAPRF 63V .033 10%	C60,61,25
8	024947	RESCF 1/4W 470K 5%	R97,140,142,157,165 +R166,94,95
6	027683	BARREL TERMINAL 552699-2	BT1-6
2	025979	CAPCD 1KV 50pF 10%	C56,12
1	025065	RESCF 1/4W 470K 5%	R104
1	024973	RESCF 1/4W 3.3K 5%	R105
1	027941	CTRL,50K (REVERB)	R106
1	028990	RESCF 1/4W 51K 5%	R99
2	025937	RESCF 1/2W 22 5%	R72,71
1	026473	SW 2P3T SLIDE	S4
2	024963	RESCF 1/4W 680 5%	R139,85
1	014867	XISTOR NPN MPS-U10	Q12
2	024952	RESCF 1/4W 100 5%	R155,145
1	028164	XISTOR NPN MJE15030	Q11
1	014866	XISTOR PNP MPS-U60	Q10
1	024942	RESCF 1/4W 22 5%	R156
1	024967	RESCF 1/4W 1.2K 5%	R151
1	025674	TRIMPOT 1.5K HORIZ (BIAS)	R152
1	016739	XISTOR NPN 2N4401	Q13
2	024961	RESCF 1/4W 470 5%	R160,163
2	025787	CAPRE 16V 100mF 20%	C73,74
4	028168	XISTOR NPN PWR MJ15003	Q17-20

FENDER 185 SERIES AMPLIFIERS

PARTS LIST PAGE 3 OF 6

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
4	027478	RESWW 5W .22 10%	R167,169,170,173
1	027479	RESWW 10W .1 10%	R168
1	027387	INDUCTOR 2.5uH AIR CORE	L1
1	027627	RESCF 1W 10 5%	R174
6	027278	CAPRF 100V .1mF 10%	C41,42,69,75-77
2	027628	RESCF 2W 47 5%	R171,172
3	024988	RESCF 1/4W 27K 5%	R136,161,162
2	020534	DIODE, 200PRV, 3AMP 1N5402	CR48,49
1	025982	CAPCD 1KV 68pF 10%	C66
1	029022	RESWW 20W .22 10%	R141
4	025802	FASTON TAB, .250	CP1,2,13,14,
3	024969	RESCF 1/4W 1.5K 5%	R135,158,159
1	028164	XISTOR NPN MJE15030	Q15
1	028166	XISTOR PNP MJE15031	Q16
3	025751	XISTOR NPN 2SC2362	Q7-9
2	029341	RESCF 1/4W 360 5%	R143,154
6	028474	CAPRE 25V 100mF 20%	C49,50,65,71,72,84
2	069724	CAPCD 1KV 100pF 10%	C35,55
2	024999	RESCF 1/4W 150K 5%	R100,102
1	029450	RESCF 1/4W 240K 5%	R101
1	029453	RESCF 1/4W 1.6K 5%	R89
1	029451	RESCF 1/4W 430 5%	R90
2	024975	RESCF 1/4W 3.9K 5%	R88,150
2	024986	RESCF 1/4W 18K 5%	R83,31
4	024993	RESCF 1/4W 47K 5%	R76-79
2	029455	RESCF 1/4W 2.4K 5%	R82,84
1	028842	RESCF 1/4W 1.1K 5%	R81
2	029472	RESCF 1/4W 4.3K 5%	R137,138
3	027255	CAPRF 100V.001 10%	C17,18,63
1	025060	RESCF 1/4W 270K 5%	R67
4	027256	CAPRF 100V.0015 10%	C3,26,30,34
3	029539	RESCF 1/4W 13K 5%	R15-17
1	028862	RESCF 1/4W 1.3K 5%	R28
1	017518	CAPCD 1KV 560pF 10%	C14
2	025059	RESCF 1/4W 220K 5%	R29,30
2	024998	RESCF 1/4W 120K 5%	R22,91
1	028153	RESCF 1/4W 75K 5%	R93
1	024985	RESCF 1/4W 15K 5%	R125
3	016742	XISTOR PNP 2N4403	Q14,22,23
1	027347	RESCF 1W 2.2K 5%	R129
1	029717	RESCF 1W 2.7K 5%	R130
1	027348	RESCF 1W 3.3K 5%	R134
1	028460	CAPRE 50V 4.7uF 20%	C67
1	029870	RESCF 2W 1.5K 5%	R107
1	028865	RESCF 1/4W 30K 5%	R86
1	029898	ZENER 7.5V, .5W 5% 1N5236B	CR24
1	028039	LED RED, 5x5mm	LD1

FENDER 185 SERIES AMPLIFIERS

PARTS LIST PAGE 4 OF 6

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	028097	LED YELLOW, 5x5mm	LD3
1	028098	LED GREEN, 5x5mm	LD2
1	021709	BUSHING STRAIN RELIEF 3PL	BSH1
13	025952	KNOB POINTER RED	K1-13
1	026038	BUSHING STRAIN RELIEF SR6	BSH2
1	026116	BUSHING STRAIN RELIEF SR5	BSH3
1	026314	SCREW SM 6x3/16 PH	SC1
1	026479	SWITCH ROCKER DPST	SW1
1	026522	SCREW SMB 6x3/4 PHPS Z1	SC2
1	026541	CABLE ASS'Y PWR 100/120V	CB1
1	026790	KNOB CONTROL THUMB BLACK	K14
1	027515	XFMR PWR 120V	T1
1	027684	CHASSIS PRO 185	CH1
1	027826	CHASSIS LON/STG 185	CH1
1	027685	PANEL FRONT PRO 185	FP1
1	027827	PANEL FRONT LON/STG 185	FP1
5	027799	SCREW 10-32x1 HWH SLI Z1	SC3-7
6	027861	NUT RTNR 8-32 STEEL BLK	NT1-6
1	028564	END BELL XFMR 185 SERIES	XB1
1	028577	CABLE ASS'Y REVERB 30"	RC1
4	028591	NUT ACORN 8-32	NT7-10
1	029029	PCB ASS'Y (STUFFED)	PA1
1	029028	PCB FAB. (BLANK)	PD1
1	029184	HEATSINK BAR	HK1
1	029797	WIRE SET CHASSIS PRO 185	WS1
1	029027	WIRE SET CHASSIS STG 185	WS1
1	029814	WIRE SET CHASSIS LON 185	WS1
4	030007	WSHR LOCK INTERNAL #8	LW1-4
5	031153	WSHR FLAT FNSH 3/8 NI	FW1-5
1	027767	CABINET ASS'Y PRO 185	CT1
1	027830	CABINET ASS'Y STG 185	CT1
1	028814	CABINET ASS'Y LON 185	CT1
1	019170	HANDLE W/INSERT	HL1
4	019275	GLIDE CUSHION INSERT	GL1-4
4	019276	GLIDE CABINET	CG1-4
2	019279	CAP HANDLE	HC1
12	021972	NUT-T 10-32x3/4x9/325	NT11-22
4	022244	SCRW 10-32x1-1/8 OVH	SC8-11
4	023505	MTG. PLATE-SWIVEL PRO 185	VC1-4
4	026566	CORNER AMP 2 HOLE	CN1-4
4	026568	CORNER AMP 3 HOLE	CO1-4
10	026571	SCRW CORNER MTG	SC12-21
4	026625	SCRW WOOD 8x1 FH	SC22-25
16	027199	SCRW SMAB 10x7/8 PHPS BLX	SC26-41
2***	026570	VINYL BLACK *** SQ. YDS.	VB1
1	028543	GRILLE ASS'Y PRO 185	GL1
1	028542	GRILLE ASS'Y STG 185	GL1

FENDER 185 SERIES AMPLIFIERS

PARTS LIST PAGE 5 OF 6

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	029542	GRILLE ASS'Y LON 185	GL1
1	011307	JUMPER 10" WHT PRO 185	JP1
1	011308	JUMPER 10" BLK PRO 185	JP2
1	022491	CLAMP CABLE NYL 5/16	CC1
4	023513	CASTER SWIVEL PRO 185	SV1-4
4	026201	GROMMET RUBBER	RG1-4
2	026488	SPEAKER 12" 8 OHM PRO 185	SP1-2
1	026488	SPEAKER 12" 8 OHM STG 185	SP1
1	011028	JACK #13E STG/LON 185	J6
1	021956	JACK #11 LON 185	J7
8	026577	SCREW M 10-32x1 PHP BLK	SC42-49
1	028055	REVERB PAN 3 SPRING	RP1
1	028508	LABEL REAR 120V PRO 185	RL1
1	027840	LABEL REAR 120V STG 185	RL1
1	029647	LABEL REAR 120V LON 185	RL1
1	028540	NAMEPLATE PRO 185	NP1
1	028539	NAMEPLATE STG 185	NP1
1	029667	NAMEPLATE LON 185	NP1
1	029000	CHASSIS ASS'Y PRO 185	HS1
1	029026	CHASSIS ASS'Y STG 185	HS1
1	029813	CHASSIS ASS'Y LON 185	HS1
8	029527	WSHR FNSH #8-5/8 FLNGD	FW6-13
4	029821	EYELET .215 OD x.315 L	YL1-4
4	029828	SCRW PB 8x3/4 PHP Z1	SC50-53
1	030858	SCRW SM #8x5/8 PH NI	SC54
2	410098**	SCRW MA 4x3/8 PHPS BLX	SC55,56 **SUNN P/N
6	410155**	SCRW M 8-32x1-1/4 OHPS	SC57-62 **SUNN P/N
1	028146	FOOTSWITCH ASS'Y 3 BUTTON	FT1
1	028109	HSG END CUP LEFT FTSW	HG1
1	028141	HSG FTSW 3 BUTTON	HG3
1	028143	HSG END CUP RIGHT FTSW	HG2
1	028145	PLATE TOP 3 BUTTON FT SW	TP1
4	028501	WSHR FLAT NKL .477x.625	FW14-17
8	028889	SCRW SMB 6x1/4 PHP	SC63-70
1	028149	PCB ASS'Y FT SW (STUFFED)	PC1 <i>foot pedal</i>
1	028148	PCB FAB. FT SW (BLANK)	PF1
3	028714	SW. PUSH SPDT	SW2-4
1	028895	CABLE ASS'Y FTSW 12'	CB2
2	006260	DIODE 1N4448 SIGNAL	CR01,02
1	027327	DIODE ZENER 1N5234B 6.2V	CR03
3	028039	LED 5x5mm RED SLB-55VR3	LD01-03
1	025929	JACK PHONE S-G4111	J01
3	028444	SPACER LED .78	LS1
5	028101	RED PUSH BUTTON	PS1-5
1	012697	FUSE SB 6.25 A 250V	F1
2	025996	FUSE CLIP PCB .250 & 5mm	XF1
1	026411	THERMISTOR 2.5 OHM 8 AMP	TH1

*270-27W*  
*0029047/000*

FENDER 185 SERIES AMPLIFIERS

PARTS LIST PAGE 6 OF 6

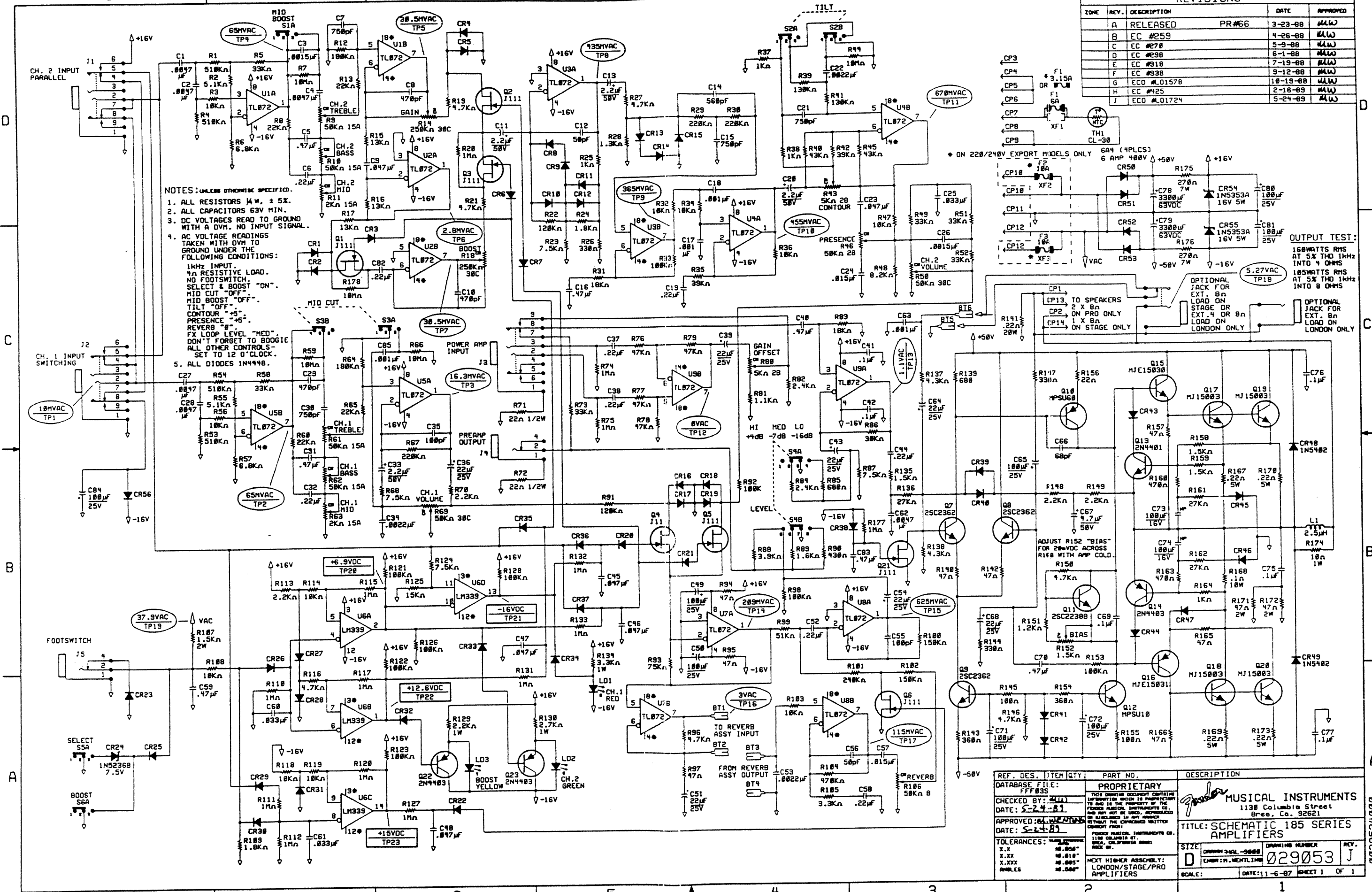
QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
4	029045	DIODE 6A4 6A 400V	CR50-53
1	029183	HEATSINK PLATE	KP1
2	029047	RES CER WW 270 OHM 7 W	R175,176
1	029697	SHIELD 6x1.25	SX1
1	029719	CABLE FLAT 5 CKT 10"	CB3
1	029779	BREAKER THERMAL NC 0248F	TS1
2	025796	HEATSINK TO-220	TK1

FOLLOWING ARE ALTERNATIVE PARTS USED ON  
VARIOUS FENDER 185 SERIES EXPORT MODELS:

QTY	PART #	DESCRIPTION	REFERENCE DESIGNATION
1	026541	CABLE ASS'Y PWR 100/120V	CB1
1	026767	CABLE ASS'Y PWR 220/240V	CB4
1	029344	XFMR PWR 100/220/240V	T1
2	013688	FUSE 10A 5mm	F3,4
4	020775	FUSE CLIP 5mm	XF2,3
1	026559	FUSE SB 3A 250V	F2
2	025996	FUSE CLIP PCB .250 & 5mm	XF1
1	012697	FUSE SB 6.25A 250V	F1

ZONE	REV.	DESCRIPTION	PR#	DATE	APPROVED
A	RELEASED		PR#66	3-23-88	MLW
B	EC #259			4-26-88	MLW
C	EC #278			5-9-88	MLW
D	EC #298			6-1-88	MLW
E	EC #318			7-19-88	MLW
F	EC #338			9-12-88	MLW
G	ECO #L01578			10-19-88	MLW
H	EC #425			2-16-89	MLW
J	ECO #L01724			5-24-89	MLW

- NOTES: UNLESS OTHERWISE SPECIFIED:
1. ALL RESISTORS 1/4 W. ± 5%.
  2. ALL CAPACITORS 63V MIN.
  3. DC VOLTAGES READ TO GROUND WITH A DVM. NO INPUT SIGNAL.
  4. AC VOLTAGE READINGS TAKEN WITH DVM TO GROUND UNDER THE FOLLOWING CONDITIONS:  
1kHz INPUT.  
4Ω RESISTIVE LOAD.  
NO FOOTSWITCH.  
SELECT & BOOST "ON".  
MID CUT "OFF".  
TILT "OFF".  
CONTOUR "5".  
REVERB "0".  
FX LOOP LEVEL "MED".  
DON'T FORGET TO BOOGIE!  
ALL OTHER CONTROLS SET TO 12 O'CLOCK.
  5. ALL DIODES 1N4148.



REF. DES.	ITEM QTY	PART NO.	DESCRIPTION
DATABASE FILE: FFF035			
CHECKED BY: [Signature]			
DATE: 5-24-87			
APPROVED: [Signature]			
DATE: 5-24-87			
TOLERANCES: -			
MUSICAL INSTRUMENTS			
1138 Columbia Street			
Brea, Ca. 92621			
TITLE: SCHEMATIC 185 SERIES AMPLIFIERS			
SIZE	DRAWING NO.	REV.	
D	029053	J	
SCALE: DATE: 11-6-87 SHEET 1 OF 1			

0028524000

ZONE	REV.	DESCRIPTION	DATE	APPROVED
		RELEASED PR#66	3-23-88	UW
	A	EC #270	5-9-88	UW
	B	EC #298	6-1-88	UW
	C	EC #318	7-19-88	UW
	D	ECO #A01578	10-19-88	UW

EXPORT MODELS

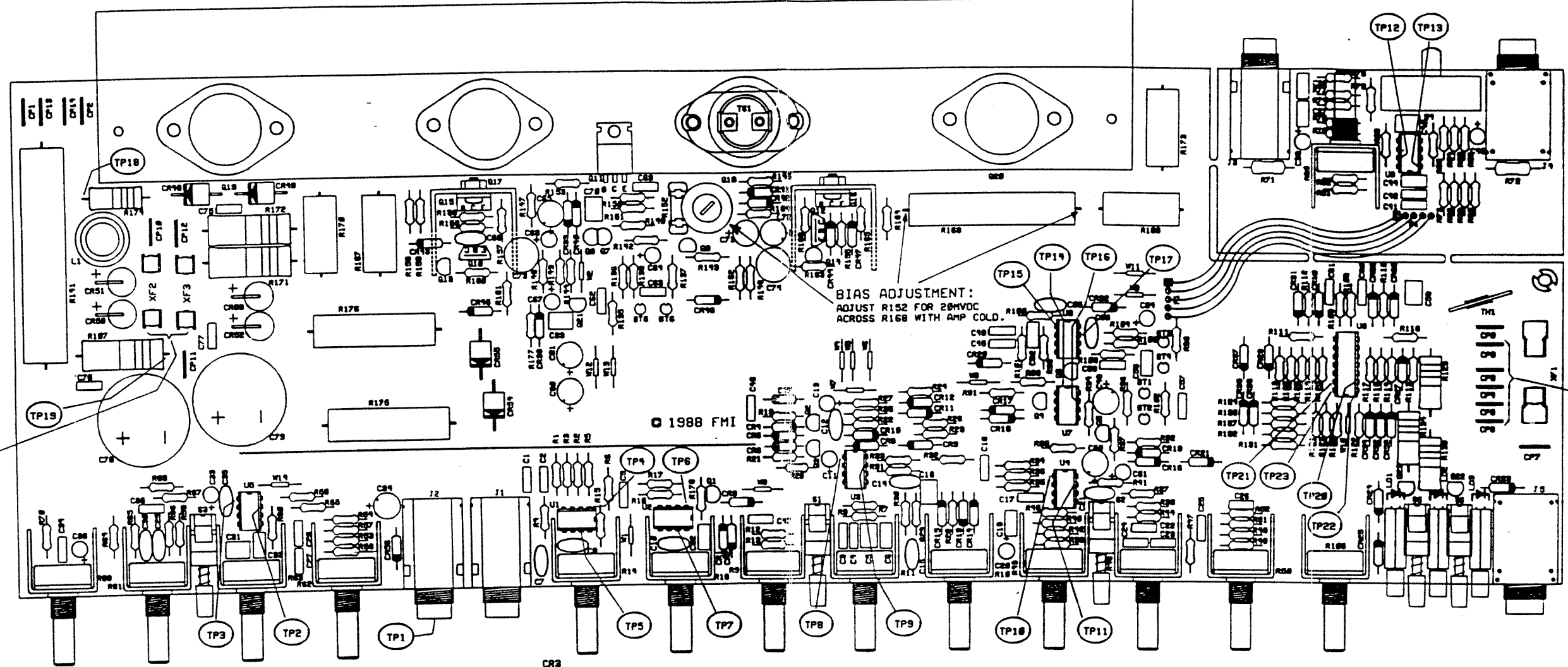
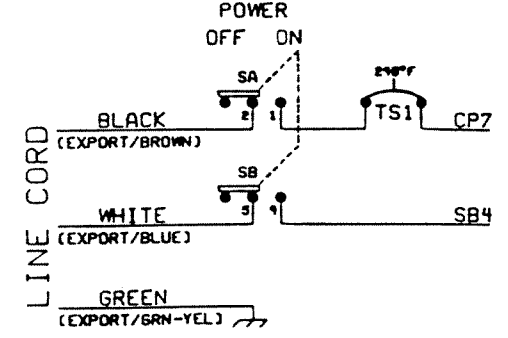
100V	120V	220V	240V
CP8	CP8	CP8	CP8
CP4	CP4	CP4	CP4
CP9	CP9	CP5	CP5
SB4	CP3	SB4	CP3
CP5	CP5	CP3	SB4

CP7 TO TS1 THERMOSTAT  
\* 120V-JUMPER CP6 TO SB4  
POWER TRANSFORMER PN 029344

DOMESTIC MODEL

100V	120V	220V	240V
CP10*	CP10*	CP10	CP10
CP11	CP11	CP11	CP11
CP12*	CP12*	CP12	CP12

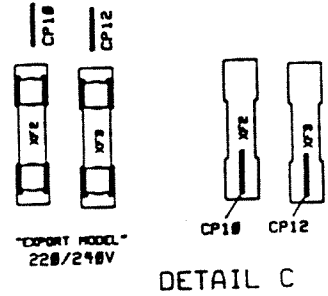
\* - SEE DETAIL C  
POWER TRANSFORMER PN 027515



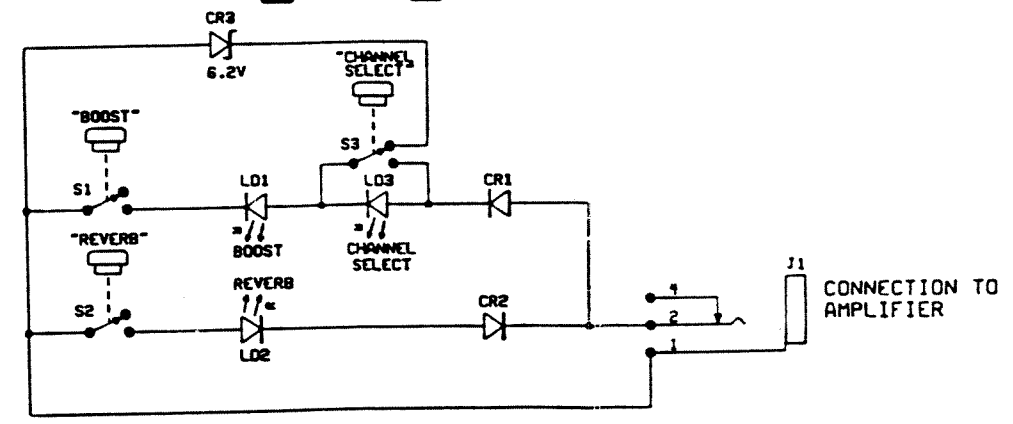
BIAS ADJUSTMENT:  
ADJUST R152 FOR 20MVDC  
ACROSS R168 WITH AMP COLD.

THESE FASTON TABS  
ARE ONLY INSTALLED  
ON EXPORT MODELS

SEE DETAIL C



XF2 OR XF3 WILL NOT BE  
INSTALLED ON DOMESTIC MODELS  
AND 100/120V EXPORT MODELS  
"DOMESTIC MODEL"  
"EXPORT MODEL"  
100/120V



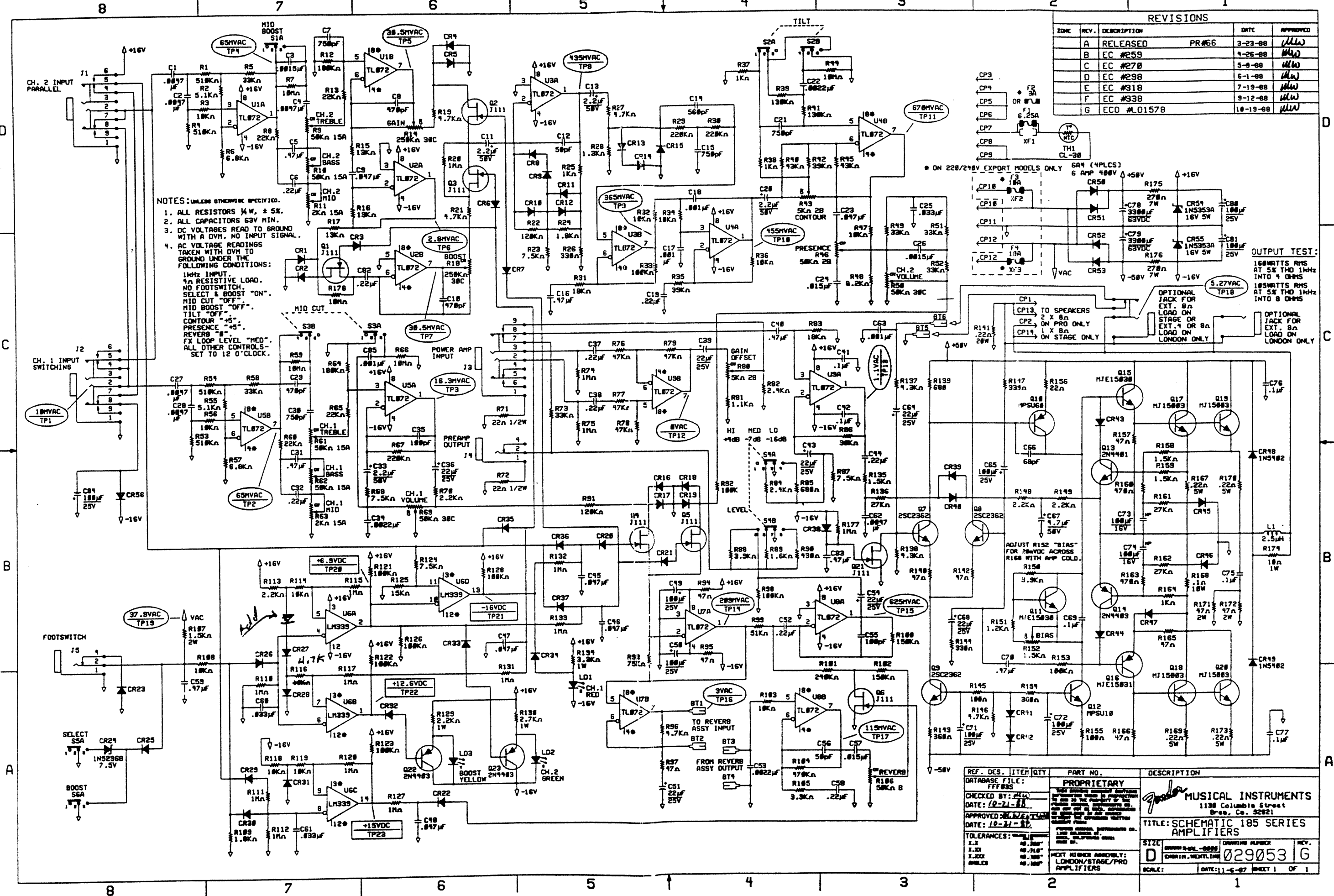
SCHEMATIC: TRIPLE FOOTSWITCH PN 029146

FILM/DWG: SCHEMATIC	DATE: 3-9-88
DATABASE: FFF03SER	
LAYERS PLOTTED: 1 2 3 4 10 15 19	

REF. DES.	ITEM	QTY	PART NO.	DESCRIPTION
DATABASE FILE: FFF03SER			PROPRIETARY	
CHECKED BY: UW			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 OR IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT FROM: MAKE TELL YOU SWP	
DATE: 10-31-88			FENDER MUSICAL INSTRUMENTS CO. 1120 COLUMBIA ST. BREA, CALIFORNIA 92621	
APPROVED: UW			TITLE: SERVICE DIAGRAM 185 SERIES AMPLIFIERS	
DATE: 10-31-88			SIZE: B	
TOLERANCES: UNLESS OTHERWISE SPECIFIED			DRAWING NUMBER: 029721	
X.X	±0.050"		REV. E	
X.XX	±0.010"		SCALE: DATE: 3-9-1988 SHEET 1 OF 1	
X.XXX	±0.005"			
ANGLES	±0.500°			



REVISIONS					
ZONE	REV.	DESCRIPTION	DATE	APPROVED	
	A	RELEASED	PR#56	3-23-88	MLW
	B	EC #259		4-26-88	MLW
	C	EC #270		5-9-88	MLW
	D	EC #298		6-1-88	MLW
	E	EC #318		7-19-88	MLW
	F	EC #338		9-12-88	MLW
	G	ECD #L01578		10-19-88	MLW



- NOTES: UNLESS OTHERWISE SPECIFIED:
1. ALL RESISTORS 1/4 W, ± 5%.
  2. ALL CAPACITORS 63V MIN.
  3. DC VOLTAGES READ TO GROUND WITH A DVM. NO INPUT SIGNAL.
  4. AC VOLTAGE READINGS TAKEN WITH DVM TO GROUND UNDER THE FOLLOWING CONDITIONS:  
 1kHz INPUT.  
 1Ω RESISTIVE LOAD.  
 NO FOOTSWITCH.  
 SELECT & BOOST "ON".  
 MID CUT "OFF".  
 TILT "OFF".  
 CONTOUR REVERSE "-5".  
 PRESENCE REVERSE "-5".  
 FX LOOP LEVEL "MED".  
 ALL OTHER CONTROLS SET TO 12 O'CLOCK.

REF. DES.	ITEM	QTY	PART NO.	DESCRIPTION
DATABASE FILE: FFF55				
CHECKED BY: [Signature]				
DATE: 10-21-88				
APPROVED: [Signature]				
DATE: 10-21-88				
TOLERANCES:				
X.X		± .50%		
X.XX		± .10%		
X.XXX		± .05%		
ANGLES		± .005"		
MUSICAL INSTRUMENTS 1138 Columbia Street Brook, Co. 52621				
TITLE: SCHEMATIC 185 SERIES AMPLIFIERS				
SIZE: D	DATE: 11-6-87	DRAWING NUMBER: 029053	REV.:	G
NEXT HIGHER ASSEMBLY: LONDON/STAGE/PRO AMPLIFIERS				
SCALE: 1:1 SHEET 1 OF 1				