

(5WATT)
FENDER DELUXE 85 GUITAR AMPLIFIER (022-5100-000)

PARTS LIST

This parts list outlines most parts needed to service the Deluxe 85 guitar amplifier. Certain parts, commonly available and stocked by most service centers such as non-precision (5% or more) low power (1/4 or 1/2W) fixed value carbon film resistors have been omitted from the list to keep it from becoming unnecessarily long. Capacitors called out as "poly" are metalized polyester film.

P.C. BOARD ASSEMBLY, [002-8088-000]:

REFERENCE	PART NUMBER	DESCRIPTION	QTY
CB1	0028087-000	Circuit board fab. [not stuffed]	1
HS1	0028497-000	Heatsink plate	1
U1,3,4-7	0016795-000	I.C. TL072 op amp	6
U8	0028120-000	I.C. 4053 triple 2 chan mux CMOS	1
U9	0028047-000	I.C. MC1436P1 op amp	1
U2	0026547-000	I.C. LM339N quad comparator	1
OP1	0028036-000	Optoisolator/coupler VTL5C4	1
TH1	0028503-000	Thermistor NTC	1
Q1	0014689-000	Transistor J111 N-channel JFET	1
Q2	0028114-000	Transistor TIP142 NPN pwr drlngthn	1
Q3	0028115-000	Transistor TIP147 PNP pwr drlngthn	1
CR1-9,14 16,20,21 23-29,34	0006260-000	Diode signal 1N4448	21
CR10-13	0028776-000	Diode bias 2mv/degree C 50V PIV	4
CR30-33	0020534-000	Diode rect 1N5402 3A 200V PIV	4
CR18,19	0064089-000	Diode rect 1N5059 1A 200V PIV	2
CR15,17	0027329-000	Diode zener 1N5228B 1/2W 3.9V	2
CR35,36	0028119-000	Diode zener 1N5353A 5W 16V	2
CR22	0027327-000	Diode zener 1N5234B 1/2W 6.2V	1
LD4	0028039-000	LED red large 5x5mm	1
LD1,2,3	0028040-000	LED red small 2x2mm	1
C13	0017518-000	Capacitor 560pfd 1KV disc	1
C8,44	0025777-000	Capacitor 470pfd 1KV disc	2
C57	0069724-000	Capacitor 100pfd 1KV disc	1
C30,33,59	0025979-000	Capacitor 50pfd 1KV disc	3
C47,48	0028042-000	Capacitor 2200ufd 50V elec	2
C3,26,28, 34,39,40	0028465-000	Capacitor 22ufd 25V elec	6
C36	0028460-000	Capacitor 4.7ufd 50V elec	1
C25,35,60,61 C37,38,49	0027297-000	Capacitor 2.2ufd 50V elec	4
50,55	0028471-000	Capacitor 47ufd 50V elec	5
C15,17,22	0027255-000	Capacitor 0.001ufd 100V poly	3
C14,16,29			
56,58	0027257-000	Capacitor 0.0022ufd 100V poly	5
C12	0027259-000	Capacitor 0.0033ufd 100V poly	1
C1,2,20,21	0027261-000	Capacitor 0.0047ufd 100V poly	4

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PARTS LIST (CONTINUED)

P.C. BOARD ASSEMBLY, [002-8088-000]:

REFERENCE	PART NUMBER	DESCRIPTION	QTY
C7	0027264-000	Capacitor 0.01ufd 100V poly	1
C11,32	0027265-000	Capacitor 0.015ufd 100V poly	2
C41,42	0027278-000	Capacitor 0.1ufd 100V poly	2
C4	0027277-000	Capacitor 0.082ufd 100V poly	1
C5,6,27			
45,46	0027269-000	Capacitor 0.033ufd 63V poly	5
C19,24,31	0027281-000	Capacitor 0.22ufd 63V poly	3
C9,10,18			
23,43,54	0027286-000	Capacitor 0.47ufd 63V poly	6
R103,107,113	0028861-000	Resistor CF .5W 5% 3.3K ohm	3
R70,73	0028030-000	Resistor CF 1W 5% 680 ohm	2
R71,72			
88,114	0028029-000	Resistor CF 1W 5% 1.5K ohm	4
R75	0028045-000	Resistor CF 1W 5% 220 ohm	1
R86,87	0028021-000	Resistor CF 2W 5% 470 ohm	2
R85	0028022-000	Resistor CF 2W 5% 120 ohm	1
R80,81,82	0028028-000	Resistor WW 5W 10% 0.47 ohm	3
R115,116	0028898-000	Resistor WW 5W 5% 240 ohm	2
W1-14	0020888-000	Jumper zero ohm resistor	14
R35	0027937-000	Control 2K 15A (ch 2 mid)	1
R33	0027940-000	Control 50K 15A (ch 2 treble)	1
R34	0027940-000	Control 50K 15A (ch 2 bass)	1
R46	0027940-000	Control 50K 15A (ch 1 treble)	1
R47	0027940-000	Control 50K 15A (ch 1 bass)	1
R62	0027941-000	Control 50K B (reverb)	3
R18	0027947-000	Control 100K 30C (gain)	1
R20	0027947-000	Control 100K 30C (boost)	1
R24	0027950-000	Control 1meg 5C (limiter)	1
R54	0027943-000	Control 50K 30C (ch 1 volume)	1
R37	0027945-000	Control 100K B (ch 2 volume)	1
PB1,2,3	0028101-000	Pushbutton red (mid bst, bst, sel)	3
S1,2,3	0028091-000	Switch 2P2T mid boost-boost-select	3
F1	0048827-000	Fuse 2A 250V (120, 100V only)	1
F1	0013112-000	Fuse 1AT 250V 5mm (240, 220V only)	1
F2,3	0013681-000	Fuse 5A 250V 5mm (240, 220V only)	2
XF1	0025996-000	Fuse clips 3AG	2
XF2,3	0020775-000	Fuse clips 5mm (240, 220V only)	4
J1,2,6	0025931-000	Jack phone stereo ch inpts-headph	3
J3,4,5	0025929-000	Jack phone mon ftsw-pre out-pwr in	3
CP7,12	0026000-000	Tab, male faston (export only)	2
CP1-6,8-11	0025802-000	Tab, male faston .250	10
BT1-4	0027683-000	Terminal barrel	4
QW1,2	0028566-000	Washer mica T0-218	2

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PARTS LIST (CONTINUED)**CHASSIS ASSEMBLY, [002-8085-000]:**

REFERENCE	PART NUMBER	DESCRIPTION	QTY
S1	0025935-000	Switch power DPST	1
PK1-11	0025952-000	Knob pointer red	11
CB1	0026527-000	Power line cord w/tabs (120/100V)	1
CB1	0026528-000	Power line cord w/tabs (240/220V)	1
XF1	0027668-000	Power transformer 120V	1
XF1	0028590-000	Power transformer (export)	1
CS1	0027824-000	Chassis	1
FP1	0027825-000	Front panel	1
PC1	0028088-000	PCB assembly [stuffed]	1
WS1	0028053-000	Wire set	1
HS1	0028499-000	Heatsink bar	1
XFB	0028560-000	End bell transformer	1
AN1-4	0028591-000	Acorn nut finished	4
RC1	0028577-000	Reverb cable assembly 30"	1

FOOTSWITCH ASSEMBLY 3 BUTTON, [002-8146-000]:

REFERENCE	PART NUMBER	DESCRIPTION	QTY
HSG	0028141-000	Housing footswitch 3 button	1
EC1	0028109-000	End cap housing	1
EC2	0028143-000	End cap housing w/hole	1
TPL	0028145-000	Footswitch top plate 3 button	1
PCBA	0028149-000	P.C. board assy (stuffed)	1
PCB	0028148-000	P.C. board fab (not stuffed)	1
S1,2,3	0028714-000	Switch push SPDT	3
J1	0025929-000	Jack phone mono S-G4111	1
CR1,2	0006260-000	Diode 1N4448 signal 75PIV	2
LD1,2,3	0028039-000	LED red 5x5mm SLB-55VR3	3
CR3	0027327-000	Diode zener 1N5234B 1/2W 6.2V	1

MISCELLANEOUS:

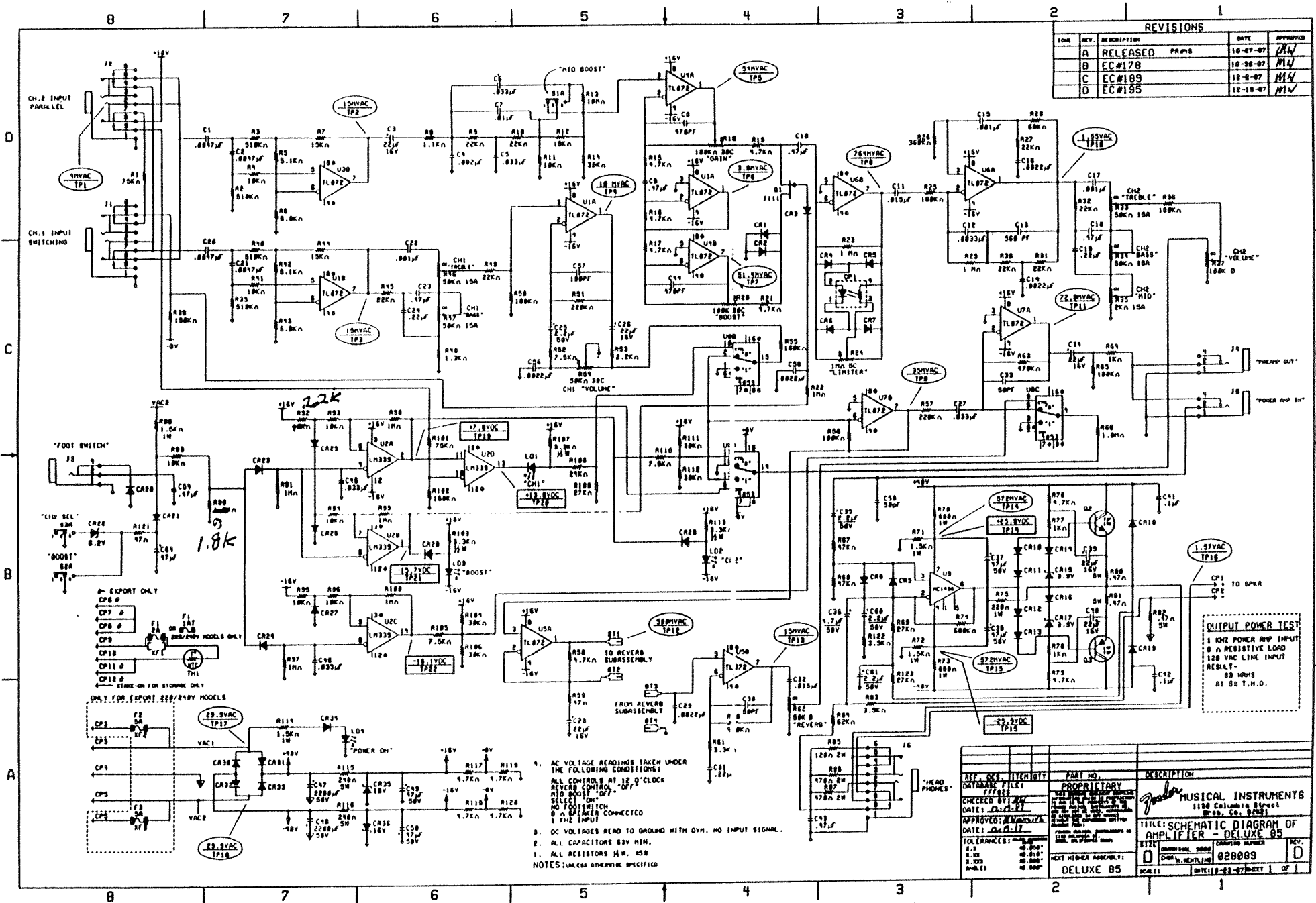
REFERENCE	PART NUMBER	DESCRIPTION	QTY
H1	0019170-000	Handle w/insert	1
HC1,2	0019279-000	Handle cap	2
GL1-4	0019276-000	Glide	4
GI1-4	0019275-000	Glide insert	4
CN1-4	0026566-000	Corner 2 hole	4
CR1,2	0026568-000	Corner 3 hole	2
CS1-12	0026571-000	Screw corner mounting	12
HS1-4	0022244-000	Screw handle mounting	4
GS1-4	0026625-000	Screw glide mounting	4

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PARTS LIST (CONTINUED)

MISCELLANEOUS:

REFERENCE	PART NUMBER	DESCRIPTION	QTY
VB	0026570-000	Vinyl black	YD
GC	0026319-000	Grille cloth gray/black	YD
NP	0028536-000	Name plate Deluxe 85	1
CBN	0027828-000	Cabinet assembly complete	1
SPK	0025923-000	Speaker 12" 8 ohms	1
RP1	0028055-000	Reverb pan 3 spring	1
FTC	0028895-000	Cable assy footsw. 12' rt. ang.	1
OMN	0028896-000	Owners manual Deluxe 85	1



REVISIONS				
DATE	REV.	DESCRIPTION	DATE	APPROVED
10-27-87	A	RELEASED	PA/8	PA/
10-30-87	B	EC#178		PA/
10-2-87	C	EC#189		PA/
12-18-87	D	EC#195		PA/

- AC VOLTAGE READINGS TAKEN UNDER THE FOLLOWING CONDITIONS:
 ALL CONTROLS AT 12 O'CLOCK
 REVERSE CONTROL "OFF"
 "MID BOOST" "OFF"
 "SEL" "ON"
 NO SPEAKER CONNECTED
 1 KHZ INPUT
 - DC VOLTAGES READ TO GROUND WITH DVM. NO INPUT SIGNAL.
 - ALL CAPACITORS 50V MIN.
 - ALL RESISTORS 1/4W, 5%
- NOTES: UNLESS OTHERWISE SPECIFIED

OUTPUT POWER TEST
 1 KHZ POWER AMP INPUT
 8 OHM RESISTIVE LOAD
 120 VAC LINE INPUT
 RESULT: 88 W RMS AT 85 T.H.D.

REF. DES. IDENTIFY	PART NO.	DESCRIPTION
120A 2H		
470A 2H		
470A 2H		
470A 2H		
C10		

CHECKED BY: JAY	DATE: 12-21-87
APPROVED BY: [Signature]	DATE: 12-21-87
TOLERANCES: 1% 0.5% 0.1% 0.05%	
NEET HIGHER ASSEMBLY:	

TITLE: SCHEMATIC DIAGRAM OF AMPLIFIER - DELUXE 85	REV. 1
DATE: 10-27-87	REV. 1
SCALE: 1:1	REV. 1

REVISIONS

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	RELEASED PR#46	10-27-87	mw
	B	EC#189	12-2-87	mw
	C	EC#195	12-19-87	mw
	D	EC#196	12-28-87	mw

EXPORT MODELS

100V	120V	220V	240V
CP10	CP10*	CP10	CP10
CP8	CP8	CP8	CP8
CP11	CP11	CP6	CP6
SW-2	CP12	SW-2	CP12
CP7	CP7	CP12	SW-2

POWER TRANSFORMER

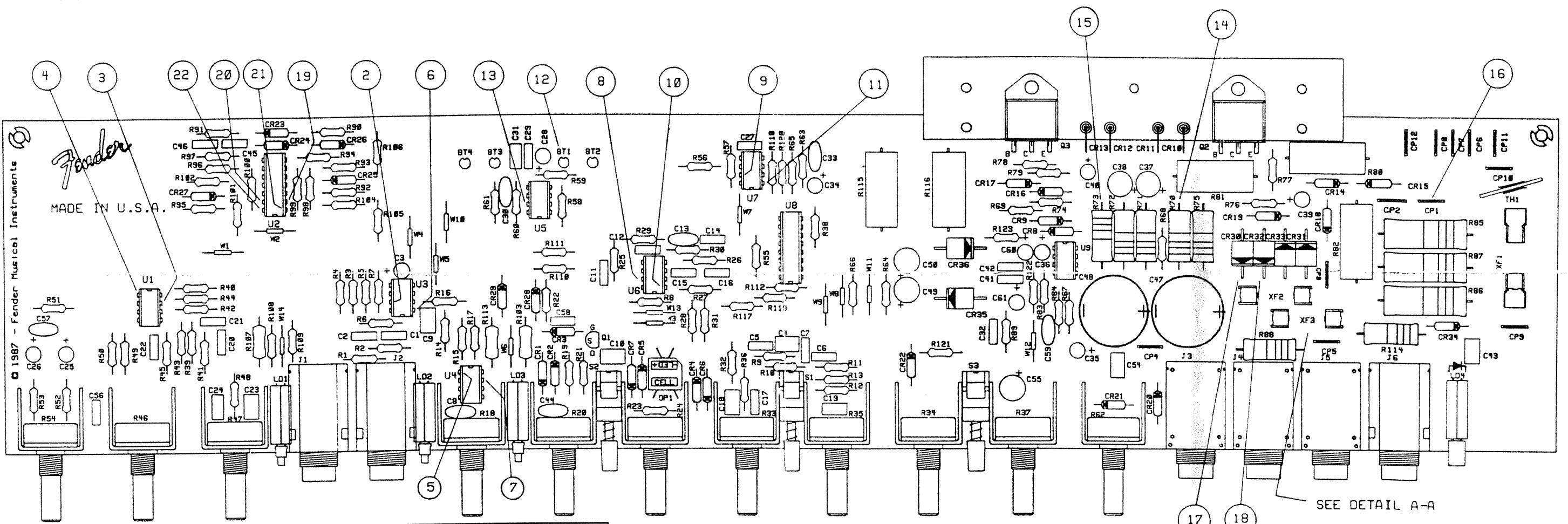
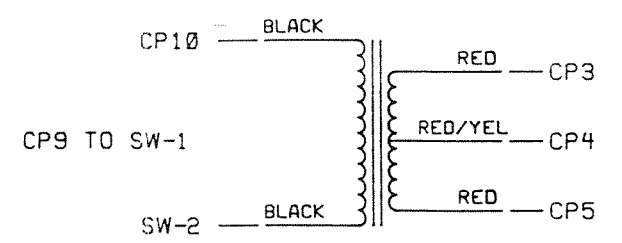
SW = POWER SWITCH
* - CP6 TO SW-2
CP9 TO SW-1

DOMESTIC MODEL

100V	120V	220V	240V
CP3*	CP3*	CP3	CP3
CP4	CP4	CP4	CP4
CP5*	CP5*	CP5	CP5

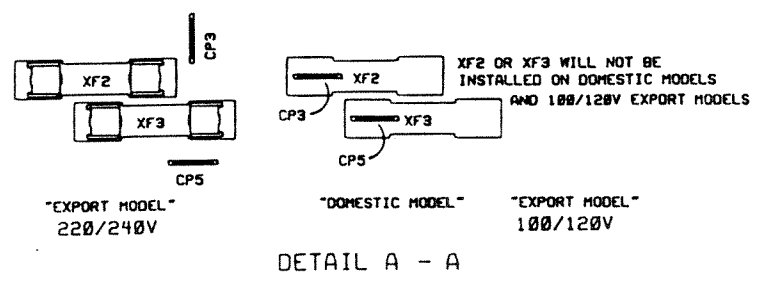
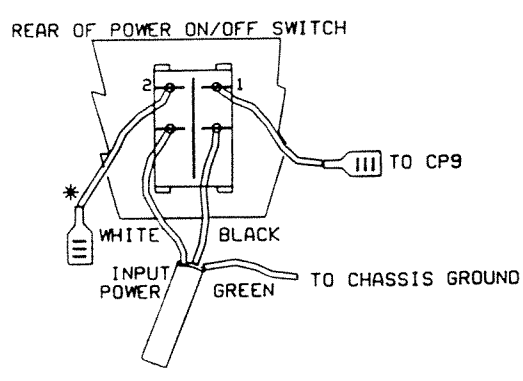
* - SEE DETAIL A - A

POWER TRANSFORMER



FILM/DWG: ASSEMBLY
DATABASE: FFF02SER
DATE: 11-2-87
LAYERS PLOTTED: 1 2 3 4 10
15 19

REFERENCE TEST POINTS FROM SCHEMATIC DWG.



REF. DES.	ITEM	QTY	PART NO.	DESCRIPTION
DATABASE FILE: FFF02SER				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. 1130 COLUMBIA ST. BREA, CALIFORNIA 92621
CHECKED BY: <i>mw</i> DATE: 12-28-87				
APPROVED: <i>M. WENTLING</i> DATE: 12-28-87				TITLE: SERVICING DIAGRAM FOR DELUXE 85 FENDER MUSICAL INSTRUMENTS CO. 1130 COLUMBIA ST. BREA, CALIFORNIA 92621
TOLERANCES: UNLESS OTHERWISE NOTED X.X ±0.050" X.XX ±0.010" X.XXX ±0.005" ANGLES ±0.500°				
NEXT HIGHER ASSEMBLY: DELUXE 85				SIZE: B DRAWN: HAL 9000 ENGR: M. WENTLING
SCALE:				DRAWING NUMBER: 028940 REV.: D DATE: 11-2-87 SHEET 1 OF 1