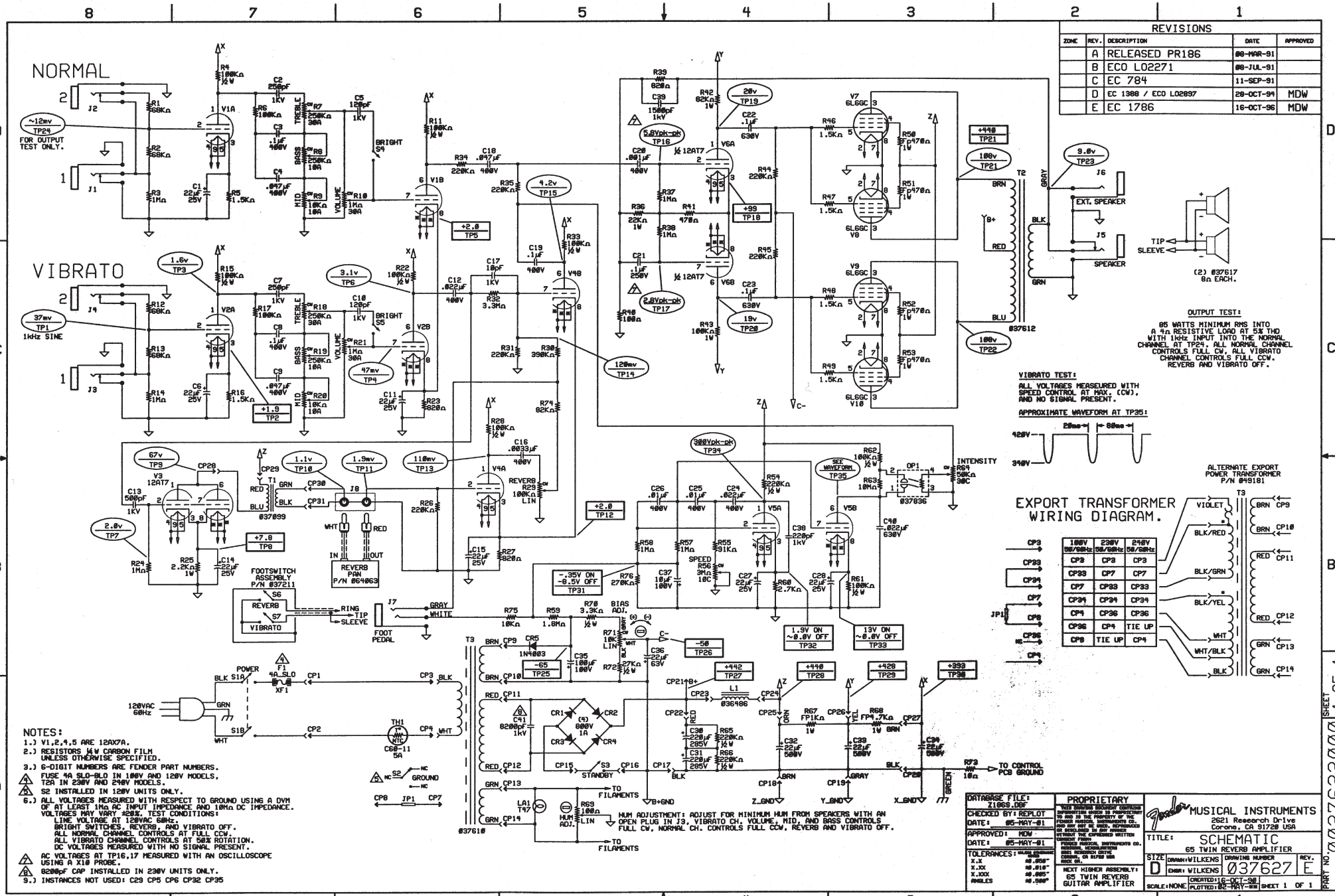
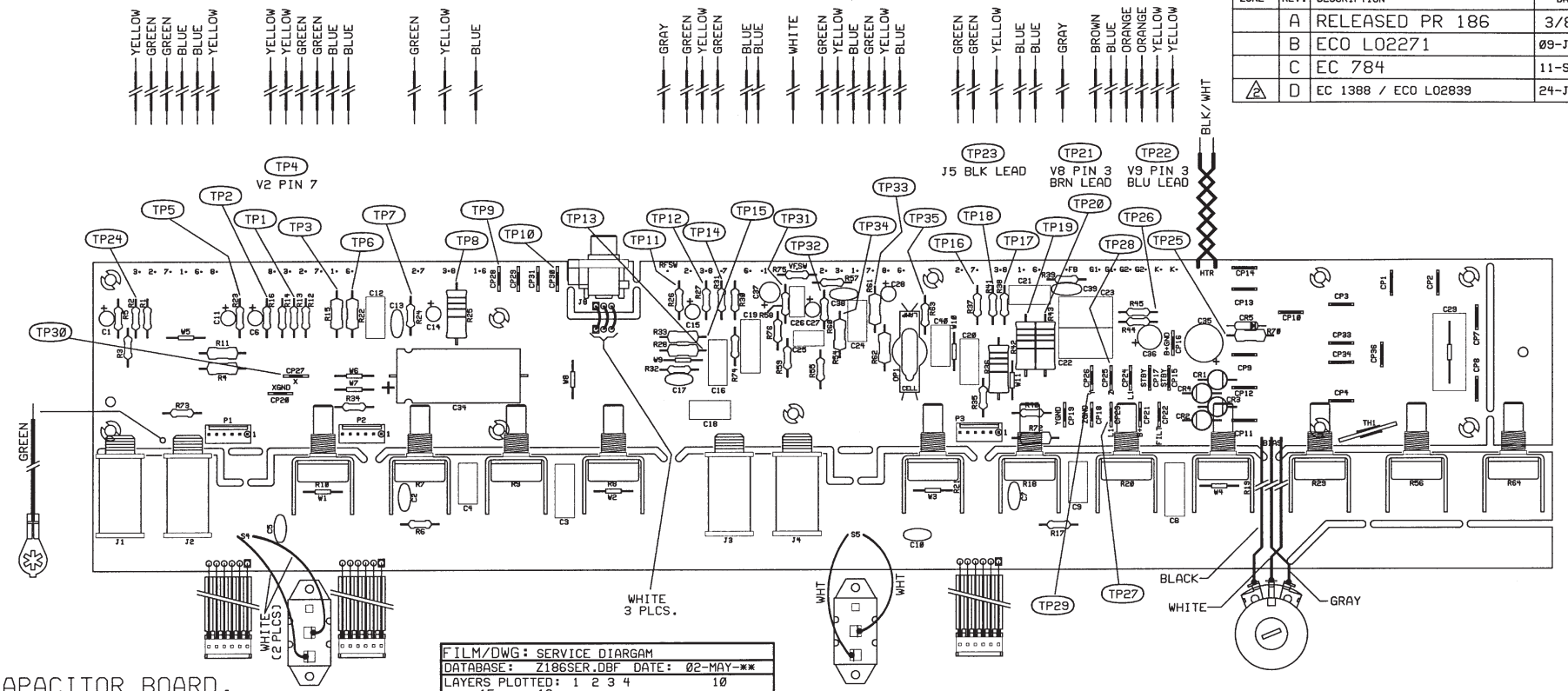
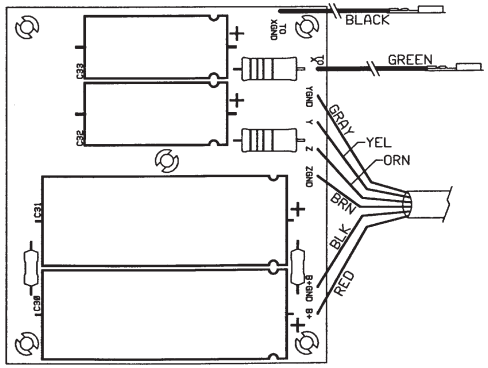

NORMAL
VIBRATO
REVISIONS
ZONE | REV. | DESCRIPTION | DATE | APPROVED
A | RELEASED PR186 | 08-MAR-91
B | ECO L02271 | 08-JUL-91
C | EC 784 | 11-SEP-91
D | EC 1388 / ECO L02897 | 28-OCT-94 | MDW
E | EC 1786 | 16-OCT-96 | MDW
OUTPUT TEST:
85 WATTS MINIMUM RMS INTO A 4Ω RESISTIVE LOAD AT 5% THD WITH 1kHz INPUT INTO THE NORMAL CHANNEL AT TP24. ALL NORMAL CHANNEL CONTROLS FULL CW. ALL VIBRATO CHANNEL CONTROLS FULL CCW. REVERB AND VIBRATO OFF.
VIBRATO TEST:
ALL VOLTAGES MEASURED WITH SPEED CONTROL AT MAX. (CW). AND NO SIGNAL PRESENT.
APPROXIMATE WAVEFORM AT TP35:
EXPORT TransformER WIRING DIAGRAM.
ALTERNATE EXPORT POWER TRANSFORMER P/N 043181
NOTES:
1.) V1,2,4,5 ARE 12AX7A.
2.) RESISTORS ¼W CARBON FILM UNLESS OTHERWISE SPECIFIED.
3.) 6-DIGIT NUMBERS ARE FENDER PART NUMBERS.
4.) FUSE 4A SLO-BLO IN 100V AND 120V MODELS, T2A IN 230V AND 240V MODELS.
5.) S2 INSTALLED IN 120V UNITS ONLY.
6.) ALL VOLTAGES MEASURED WITH RESPECT TO GROUND USING A DVM OF AT LEAST 1MΩ AC INPUT IMPEDANCE AND 10MΩ DC IMPEDANCE. VOLTAGES MAY VARY ±20%. TEST CONDITIONS: LINE VOLTAGE AT 120VAC 60Hz. BRIGHT SWITCHES, REVERB, AND VIBRATO OFF. ALL NORMAL CHANNEL CONTROLS AT FULL CCW. ALL VIBRATO CHANNEL CONTROLS AT 50% ROTATION. DC VOLTAGES MEASURED WITH NO SIGNAL PRESENT.
7.) AC VOLTAGES AT TP16,17 MEASURED WITH AN OSCILLOSCOPE USING A X10 PROBE.
8.) 8200pF CAP INSTALLED IN 230V UNITS ONLY.
9.) INSTANCES NOT USED: C29 CP5 CP6 CP32 CP35
HUM ADJUSTMENT: ADJUST FOR MINIMUM HUM FROM SPEAKERS WITH AN OPEN PLUG IN J9, VIBRATO CH. VOLUME, MID, AND BASS CONTROLS FULL CW, NORMAL CH. CONTROLS FULL CCW, REVERB AND VIBRATO OFF.
DATABASE FILE: Z186S.DDF
CHECKED BY: REPLOT
DATE: 05-MAY-01
APPROVED: MDW
DATE: 05-MAY-01
TOLERANCES: X.X ±0.050" X.XX ±0.010" X.XXX ±0.005" ANGLES ±0.500°
PROPRIETARY
NEXT HIGHER ASSEMBLY: 65 TWIN REVERB GUITAR AMPLIFIER
Fender MUSICAL INSTRUMENTS
2621 Research Drive
Corona, CA 91720 USA
TITLE: SCHEMATIC
65 TWIN REVERB AMPLIFIER
SIZE D | DRAWN: WILKENS | DRAWING NUMBER 037627 | REV. E
ENGR: WILKENS
SCALE: NONE | CREATED: 16-OCT-96 | PLOTTED: 02-MAY-01 | SHEET 1 OF 1
PART NO. 037633000 SHEET 1 OF 1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	RELEASED PR 186	3/8/91	
	B	ECO L02271	09-JUL-91	
	C	EC 784	11-SEP-91	
2	D	EC 1388 / ECO L02839	24-JAN-95	WDW



FILM/DWG: SERVICE DIARGAM
DATABASE: Z186SER.DBF DATE: 02-MAY-**
LAYERS PLOTTED: 1 2 3 4 10 15 18

CAPACITOR BOARD.



NOTES:

1.) PCB SHOWN AS FABRICATED, EXCEPT WITH CAPACITOR BREAK-AWAY BOARD SEPARATED.

2 REV. D REFLECTS THE REMOVAL OF SECONDARY FUSING IN EXPORT UNITS THAT USE POWER TRANSFORMER P/N 049181, AND THE REMOVAL OF THE LINE BYPASS CAPACITOR IN DOMESTIC UNITS.

DATABASE FILE: Z186SER.DBF	
CHECKED BY: REPLOT	
DATE: 02-MAY-01	
APPROVED: WDW	
DATE: 02-MAY-01	
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
STILL GLOWING...

NEXT HIGHER ASSEMBLY:
65 TWIN REVERB
GUITAR AMPLIFIER

Fender MUSICAL INSTRUMENTS
2621 Research Drive
Corona, CA 91720 USA

TITLE: SERVICE DIAGRAM
65 TWIN REVERB

SIZE	DRAWN: WILKENS	DRAWING NUMBER	REV.
B	ENGR: WILKENS	037632	D

SCALE: NONE | CREATED: 01-NOV-90 | PLOTTED: 02-MAY-** | SHEET 1 OF 1