

REVISIONS

ZONE	REV.	DESCRIPTION	DATE	APPROVED
A	RELEASED	PR266	09-SEP-94	
B	EC 1511		14-JUL-95	MDW
C	EC 1577		29-SEP-95	MDW
D	EC 2239		16-DEC-98	MDW

OUTPUT TEST: 28.3V RMS INTO AN 8Ω RESISTIVE LOAD, 5% T.H.D., 1KHZ, WITH RATED LINE VOLTAGE AT POWER TRANSFORMER PRIMARY.

NOTES: UNLESS OTHERWISE SPECIFIED 0.1 INSTANCES NOT USED: CR2, R102, R110, R111 1.3 LAST INSTANCES: CR9, CR16, CR38, F1, I16, K4, L4, L02, P1, Q2, R185, S10, T3 TH1, US, V12 2.3 X = SOLDER TERMINAL EYELET 3.3 ALL RESISTORS ARE 1/4 W 5% CARBON FILM. 4.3 SIX DIGIT NUMBERS ARE FINDER PART NUMBERS. 5.3 LINE VOLTAGE LEVAGE RANGE: VOLTAGES MAY VARY 25%. TEST CONDITIONS: REVERB, MIX, AND PRESENCE CONTROLS FULL CCW, CHANNEL 2 GAIN CONTROL FULL CW. ALL OTHER CONTROLS SET TO 50% (50% ROTATION). EFFECTS AND REVERB SELECT TO "BOTH". BIAS SET FOR 400mA IDLE PER OUTPUT TUBE. SEE NOTE 6. ALL AC SIGNAL VOLTAGES MEASURED WITH INPUT SIGNALS NORMALIZED TO PRODUCE A 2.63V RMS AT TP16 WHICH PRODUCES AN OUTPUT OF 12.0V RMS INTO AN 8Ω RESISTIVE LOAD AT TP49. BIAS ADJUSTMENT - OUTPUT SWITCH SET TO HIGH (100%), NO SIGNAL APPLIED. ADJUST BALANCE CONTROL TO OBTAIN EQUAL SIGNAL BETWEEN TP10 AND TP11. SECOND - ADJUST BALANCE CONTROL TO OBTAIN MINIMUM, 0.8V MAXIMUM, 0.8V MINIMUM. GAIN IN PARENTHESES ARE FOR 230V AND 240V UNITS.

EXPORT TRANSFORMER WIRING DIAGRAM.

EXPORT POWER TRANSFORMER P/N 049652	WIRING
1.00V	CP6
2.30V	CP7
50/60HZ 50/60HZ 50/60HZ	CP8
CP4	CP6
S7B	CP7
CP7	S7B
CP6	CP8
S7B	S7B
CP6	S7B

EXPORT TRANSFORMER WIRING DIAGRAM.

EXPORT POWER TRANSFORMER P/N 049652	WIRING
1.00V	CP6
2.30V	CP7
50/60HZ 50/60HZ 50/60HZ	CP8
CP4	CP6
S7B	CP7
CP7	S7B
CP6	CP8
S7B	S7B
CP6	S7B

PROPRIETARY  
 THIS DRAWING DOCUMENT CONTAINS THE DESIGN INFORMATION OF THE TWIN AMP WHICH IS THE PROPERTY OF FENDER MUSICAL INSTRUMENTS CO. ANY REPRODUCTION OR USE OF THIS DOCUMENT WITHOUT THE EXPRESS WRITTEN PERMISSION OF FENDER MUSICAL INSTRUMENTS CO. IS PROHIBITED.  
 APPROVED: 1/19/94  
 DATE: 1/19/94  
 TOLERANCES: X.X .005" X.XX .005" X.XXX .005" ANGLES NEXT HIGHER ASSEMBLY

DATABASE FILE: 2266S.DBF  
 CHECKED BY: [Signature]  
 DATE: 1-19-94  
 APPROVED: [Signature]  
 DATE: 1/19/94  
 TOLERANCES: X.X .005" X.XX .005" X.XXX .005" ANGLES NEXT HIGHER ASSEMBLY

PROPRIETARY  
 FENDER MUSICAL INSTRUMENTS CO.  
 2621 Research Dr. I  
 Corona, CA 91720 USA  
 TITLE: SCHEMATIC DIAGRAM,  
 SIZE: DRAWN: WILKENS 047767 D  
 ENGR: WILKENS  
 SCALE: N/A  
 SHEET 1 OF 1

EXPORT TRANSFORMER WIRING DIAGRAM.

EXPORT POWER TRANSFORMER P/N 049652	WIRING
1.00V	CP6
2.30V	CP7
50/60HZ 50/60HZ 50/60HZ	CP8
CP4	CP6
S7B	CP7
CP7	S7B
CP6	CP8
S7B	S7B
CP6	S7B

EXPORT TRANSFORMER WIRING DIAGRAM.

EXPORT POWER TRANSFORMER P/N 049652	WIRING
1.00V	CP6
2.30V	CP7
50/60HZ 50/60HZ 50/60HZ	CP8
CP4	CP6
S7B	CP7
CP7	S7B
CP6	CP8
S7B	S7B
CP6	S7B

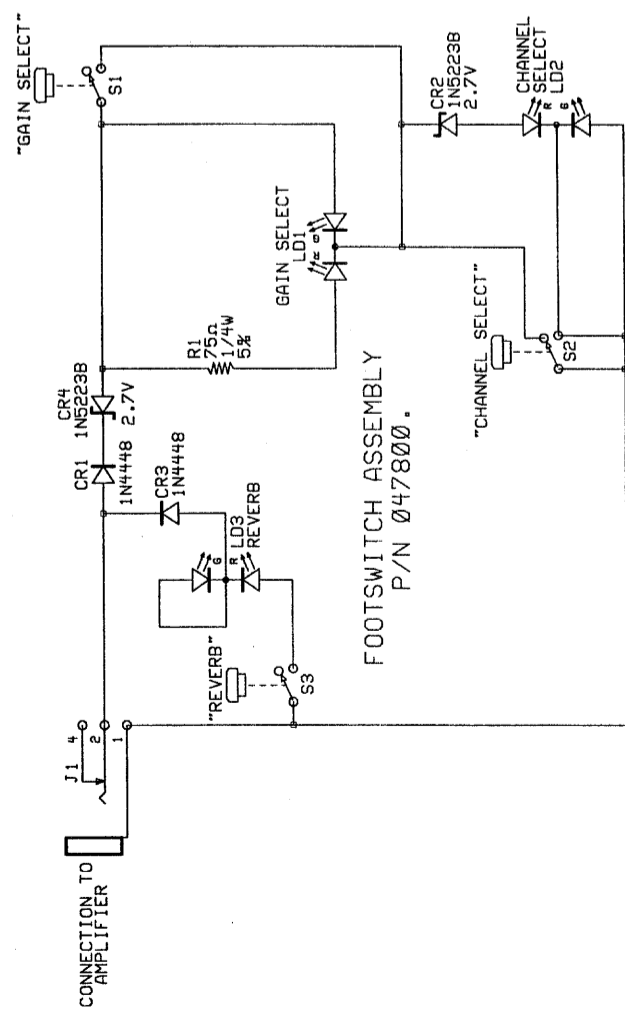
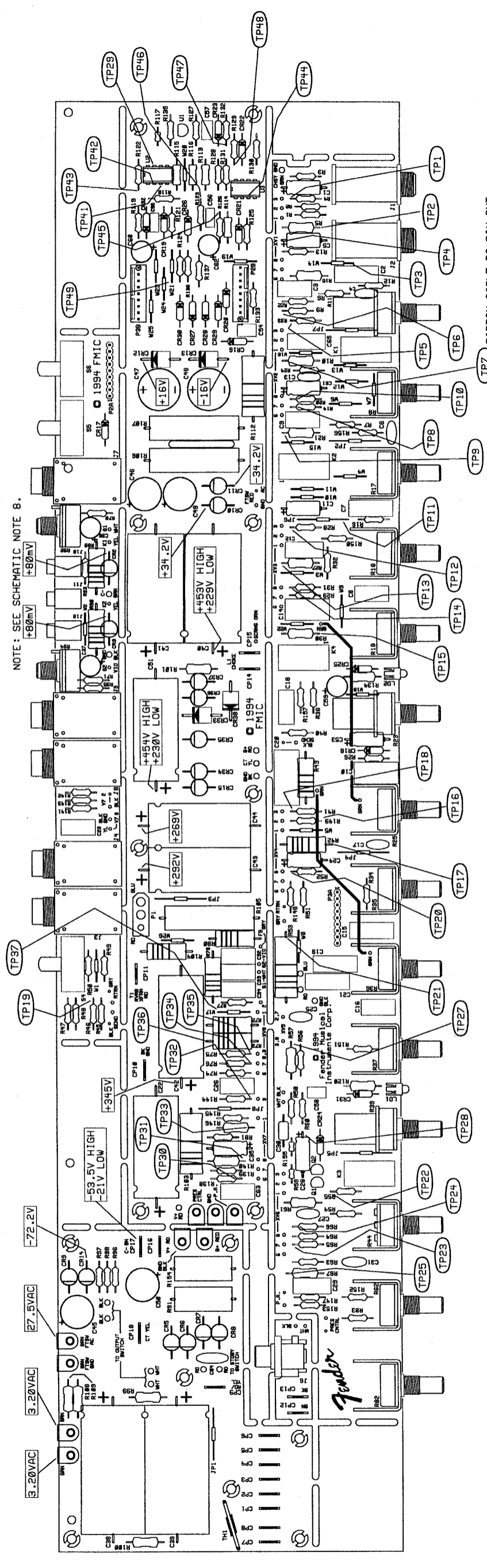
EXPORT TRANSFORMER WIRING DIAGRAM.

EXPORT POWER TRANSFORMER P/N 049652	WIRING
1.00V	CP6
2.30V	CP7
50/60HZ 50/60HZ 50/60HZ	CP8
CP4	CP6
S7B	CP7
CP7	S7B
CP6	CP8
S7B	S7B
CP6	S7B

FILM/DWG: SERVICE DIAGRAM  
 DATABASE: Z266P.DBF DATE: 20-JAN-99  
 LAYERS PLOTTED: 1 2 3 4 10 18

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	B	EC 1511	14-JUL-95	
	C	EC 1577	29-SEP-95	
	D	EC 2239	16-DEC-98	

NOTE: SEE SCHEMATIC NOTE 8.



RIBBON CABLE P2 PIN-OUT.

PIN NO.	CONNECTS NODE COMMON TO:
1	R112, C54, CR19 A, CR20 A, R133
2	J7 SHUNT, CR16 A, CR17 K
3	R119, R120, R134, S5 PIN 4, K1 K4 PIN 16, C60 -
4	S5 PIN 2, R136
5	U2B PIN 7, R135, R137, S5 PIN 1
6	+16V SUPPLY TO S6 PIN 4
7	CR28 A, CR29 K, S6 PIN 2
8	-16V SUPPLY TO S6 PIN 1
9	FOOTSWITCH CIRCUITRY GROUND

- (TP26) AT XV5 PINS 1&6 (BLUE WIRE).
- (TP38) AT XV10 PIN 3 (BROWN WIRE).
- (TP39) AT XV12 PIN 3 (BLUE WIRE).
- (TP40) AT MAIN SPEAKER JACK TIP (GREEN WIRE).

RIBBON CABLE P3 PIN-OUT.

PIN NO.	CONNECTS NODE COMMON TO:
1	+16V SUPPLY, C59 +, K1 K2 K4 PIN1
2	R124, CR25 A, K2 PIN 16, C59 -
3	FTSW GND, C53 -, CR18 A, S2 PIN 2
4	R128, C58, Q1 GATE
5	R119, R120, R134, S5 PIN 4, K1 K4 PIN 16, C60 -
6	CR27 K, CR28 K, K3 PIN 1
7	+16V SUPPLY, CR31 A
8	CR29 A, CR30 A, K3 PIN 16
9	R124, CR25 A, K2 PIN 16, C59 -

NOTES:  
 1.) PCB SHOWN AS FABRICATED BEFORE BREAKAWAYS ARE PLACED IN CHASSIS.  
 2.) WIRES NOT SHOWN FOR CLARITY.

PROPRIETARY  
 THIS DRAWING DOCUMENT CONTAINS  
 INFORMATION WHICH IS PROPRIETARY  
 TO FENDER MUSICAL INSTRUMENTS CO.  
 WITHOUT THE EXPRESSED WRITTEN  
 PERMISSION OF FENDER MUSICAL  
 INSTRUMENTS CO., THIS INFORMATION  
 IS TO BE KEPT CONFIDENTIAL.

CHECKED BY: *[Signature]*  
 DATE: 1/19/99

APPROVED: *[Signature]*  
 DATE: 1/19/99

TOLERANCES:  
 X.X .001"  
 X.XX .0005"  
 X.XXX .0001"  
 ANGLES 50 50/80°

MUSICAL INSTRUMENTS  
 2621 Research Drive  
 Corona, CA 91726 USA

TITLE: SERVICE DIAGRAM,  
 TWIN AMP.

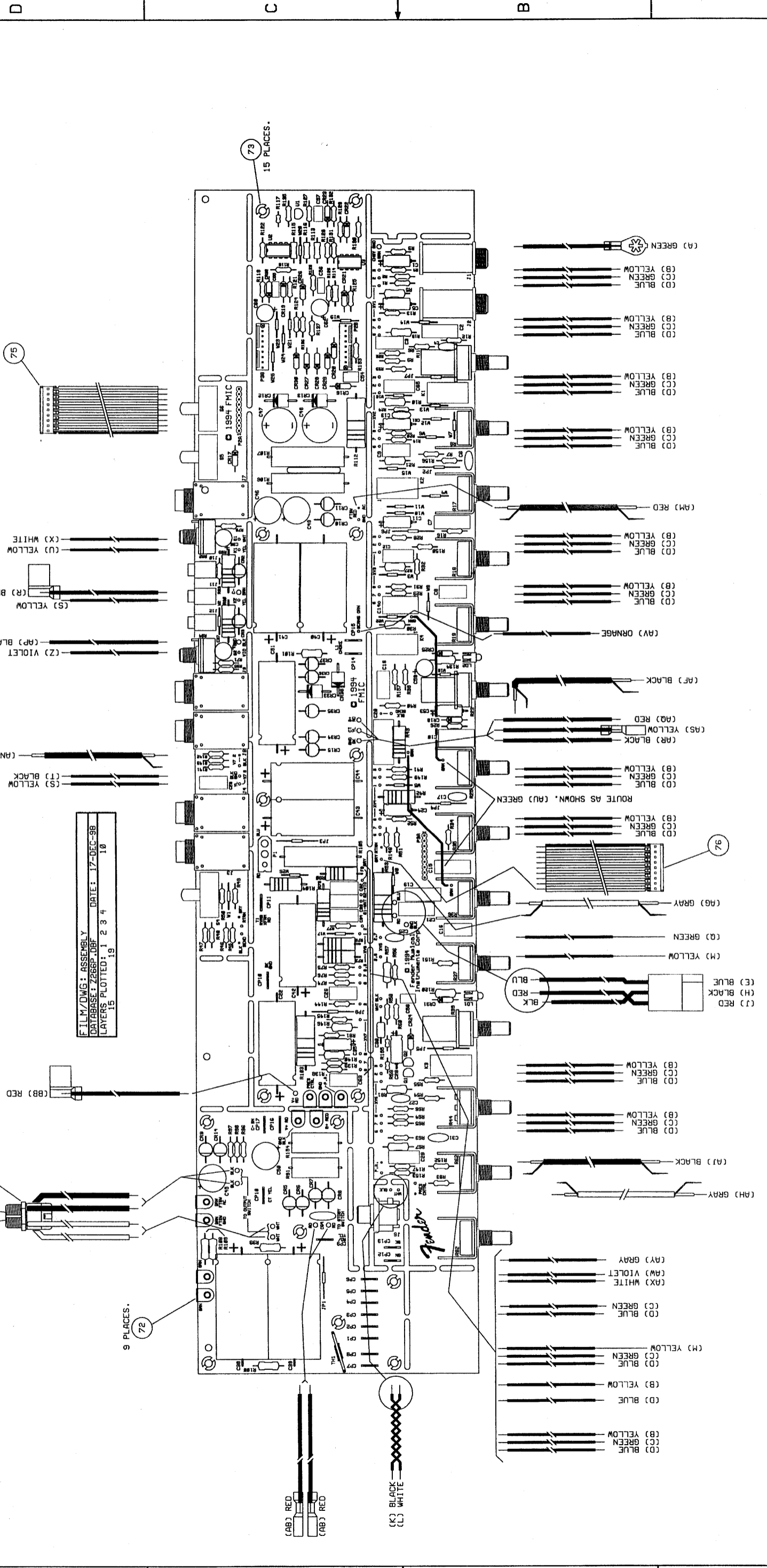
SIZE: DRAWN: WILKENS  
 ENGR: WILKENS  
 DRAWING NUMBER: 047769  
 REV. D

SCALE: NONE PLOTTED: 20-JAN-99 SHEET 1 OF 1

REVISIONS			
ZONE	REV. DESCRIPTION	DATE	APPROVED
	A	RELEASED PR266	
	B	EC 1349	09-SEP-94
	C	EC 1511	03-DEC-94
	D	EC 1577	14-JUL-95
	E	EC 2239	29-SEP-95
			MDW
			MDW

ZONE	REV. DESCRIPTION	DATE	APPROVED
	A	RELEASED PR266	
	B	EC 1349	09-SEP-94
	C	EC 1511	03-DEC-94
	D	EC 1577	14-JUL-95
	E	EC 2239	29-SEP-95
			MDW
			MDW

ZONE	REV. DESCRIPTION	DATE	APPROVED
	A	RELEASED PR266	
	B	EC 1349	09-SEP-94
	C	EC 1511	03-DEC-94
	D	EC 1577	14-JUL-95
	E	EC 2239	29-SEP-95
			MDW
			MDW



**NOTES:**

- LETTER AT WIRE DESIGNATES ITEM LETTER ON PCB WIRE SET P/N 049080.
- WIRES SHOWN WITH X-POSITION IN LINE WITH RESPECTIVE HOLES UNLESS SHOWN OTHERWISE.
- ADHERE C22, C38, C39, C40, C41, C42, C43, C51, C59, C60, C62, C44, R105, R106, R107 TO PCB WITH RTV SILICON RUBBER COMPOUND.
- INSTANCES NOT USED: C52 R102 R110 R111

**PROPRIETARY**  
THIS DRAWING CONTAINS INFORMATION THAT IS THE PROPERTY OF FENDER MUSICAL INSTRUMENTS CO. AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF FENDER MUSICAL INSTRUMENTS CO.

**DATABASE FILE:** Z266P.DBF  
**CHECKED BY:** [Signature]  
**DATE:** 20 DEC 98  
**APPROVED:** [Signature]  
**DATE:** 1/14/99

**TOLERANCES:** UNLESS OTHERWISE SPECIFIED:  
X.X .50, .018"  
X.XXX .50, .018"  
X.XXX .50, .005"  
ANGLES .500°

**REV. 1**  
DRAWN: WILKENS  
DRAWING NUMBER: 047771  
ENGR: WILKENS  
NEXT HIGHER ASSEMBLY: TWIN AMP

**MUSICAL INSTRUMENTS**  
2621 Research Drive  
Corona, CA 91720 USA  
TITLE: ASSEMBLY DIAGRAM,  
.94 TWIN.

SCALE: 1:1  
CREATED: JANUARY '98  
PLOTTED: 17-DEC-98  
SHEET 1 OF 4