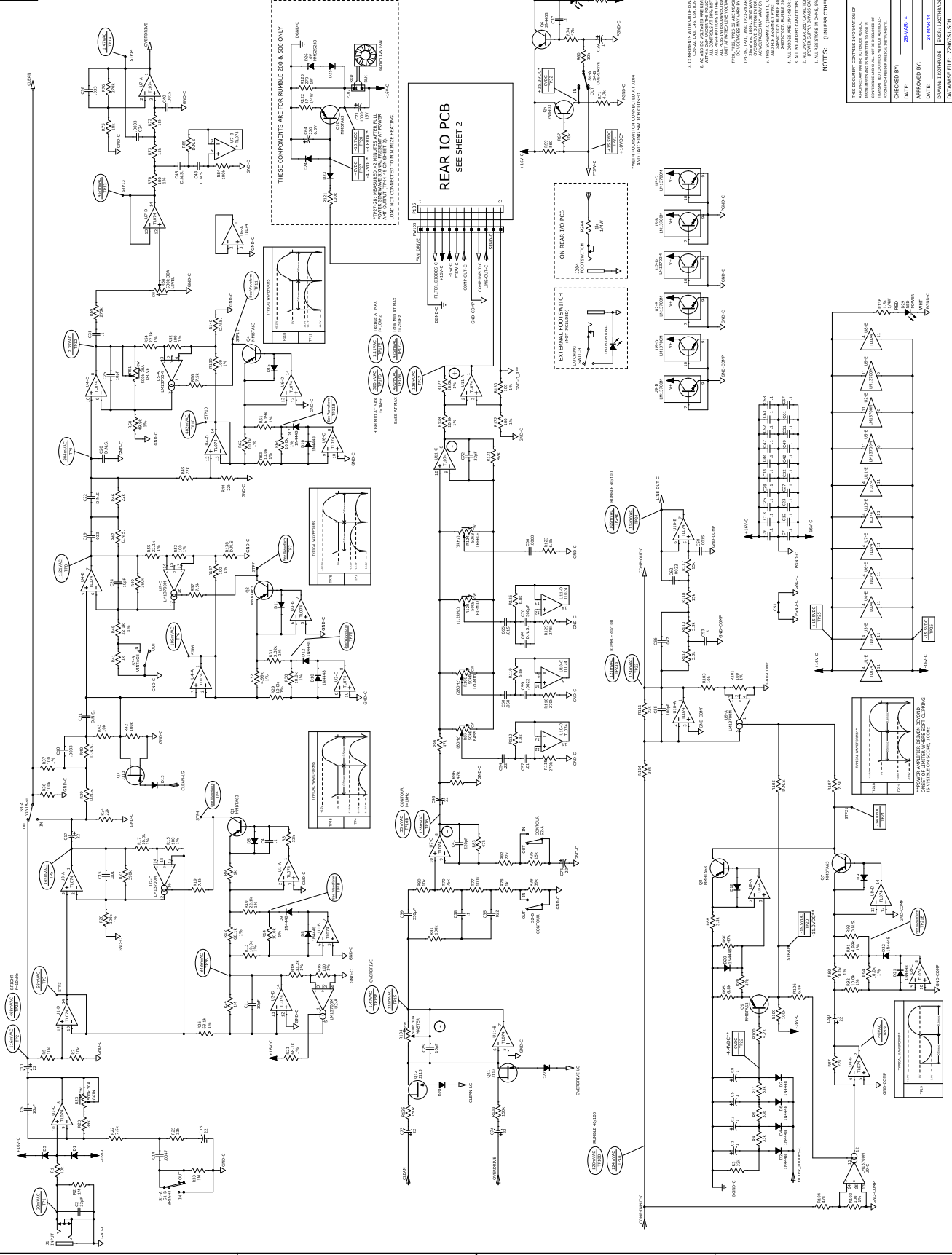


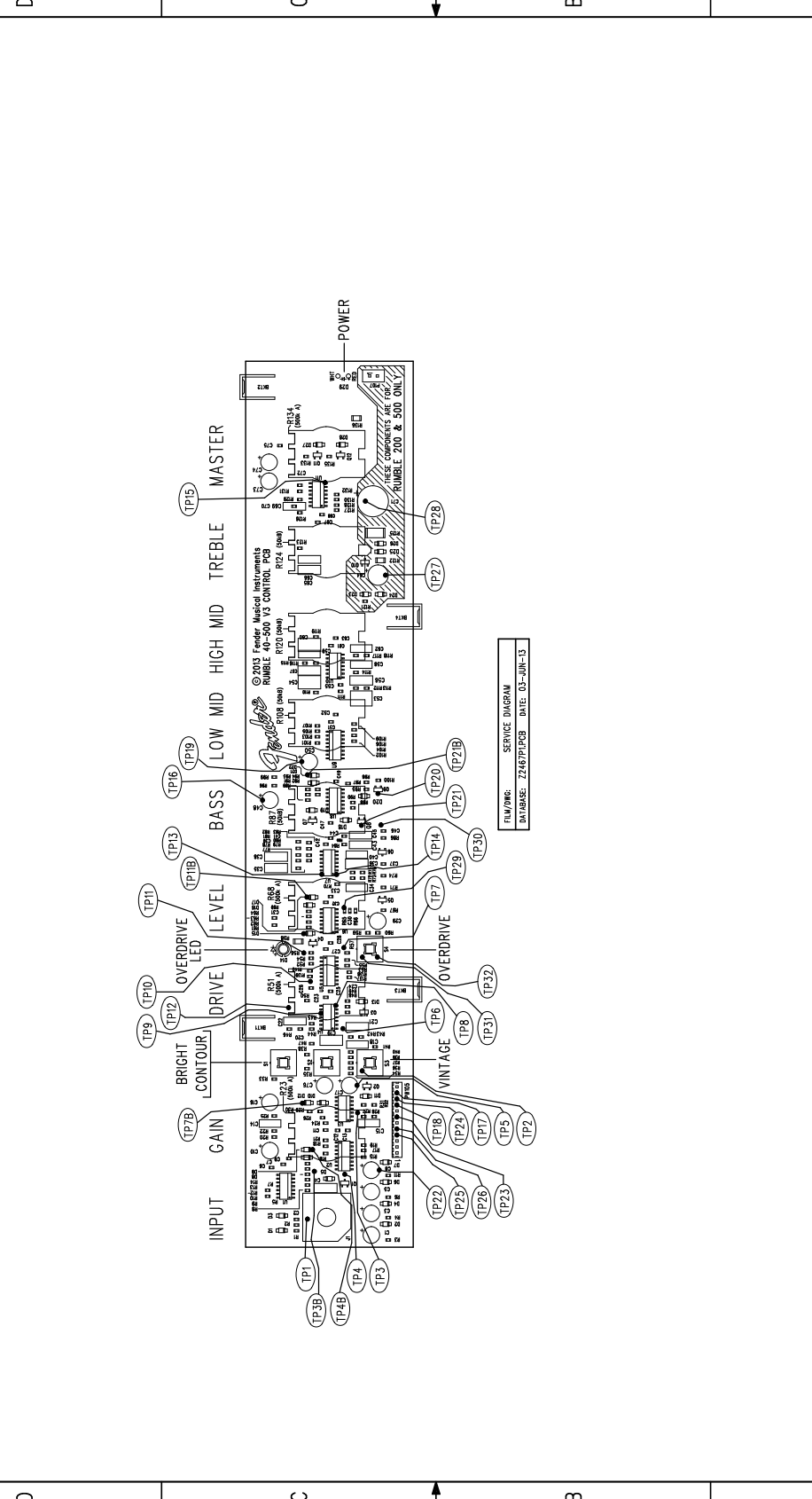
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR 2467	28-JUN-13	IDK/UBL



MUSICAL INSTRUMENTS Corona, CA U.S.A.		REV: A
TITLE: SERVICE DIAGRAM, CONTROL PCB RUMBLE 40-500 V3		REV: A
DESIGNED BY: IDK/UBL	DATE: 28-JUN-13	SIZE: D
APPROVED BY: 246AR/SL	DATE: 28-JUN-13	DRAWING NUMBER: 2467ICT011
MANUAL: 246AR/SL	REAR I/O EXPANSION	RELEASE DATE: 28-JUN-13
SHEET: 1 OF 4		

8 7 6 5 4 3 2 1

R E V I S I O N S			
REV.	DESCRIPTION	DATE	APPROVED
A	PR2467	03-JUN-13	dbl



FILE/PCB: SERVICE DIAGRAM  
DATABASE: Z2467PCB DATE: 03-JUN-13

**Fender** MUSICAL INSTRUMENTS  
Corona, CA U.S.A.

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CHECKED BY: 28-MAR-14  
DATE: 28-MAR-14

APPROVED BY: 25-MAR-14  
DATE: 25-MAR-14

DRAWN: LJO/THADE ENGR: LJO/THADE  
DATABASE FILE: Z2467PCB

TITLE: SERVICE DIAGRAM, COMBINED (PCB assy)  
RUMBLE 40-500 V3 CONTROL PCB

SIZE: DRAWING NUMBER: C  
DRAWING NUMBER: 2467ICT01

REV. A  
RELEASE DATE: 03-JUN-13 SHEET 3 OF 4

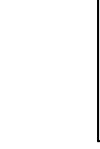
2. WHERE POSSIBLE, THRU HOLE PADS WERE SELECTED FOR TEST POINTS, BUT SOME TEST POINTS ARE ONLY FOUND ON TOP SIDE SMT PADS. REFER TO PCB BOTTOM SIDE SILSCREEN TO HELP IDENTIFY TEST POINT LOCATIONS.  
1. SEE SHEET 1 FOR STUFFING OPTIONS, TEST CONDITIONS, AND TEST POINT VALUES.  
NOTES: (UNLESS OTHERWISE NOTED)

D C B A

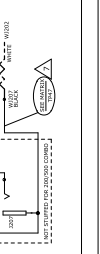
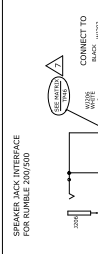
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR2467	10-JUL-2013	JBL



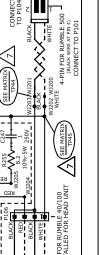
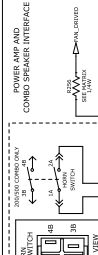
CHANGE OUT FOR RUMBLE		
100W	250W	500W
100W	100W	100W
100W	100W	100W
100W	100W	100W
100W	100W	100W



**CONTROL PCB ASSY**  
SEE SHEET 1

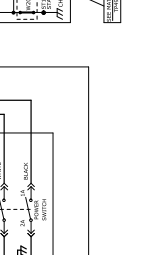
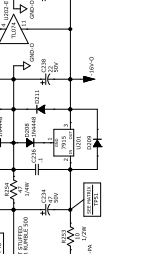
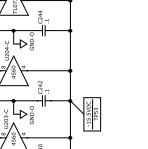
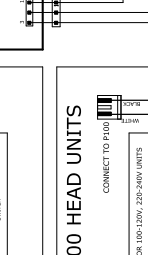
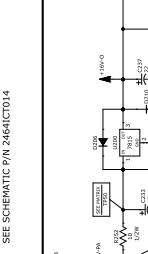
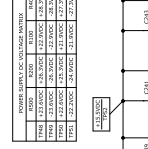
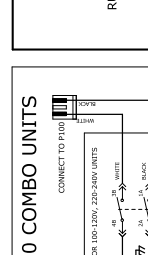
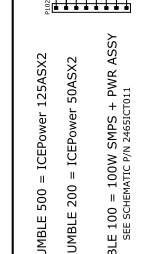
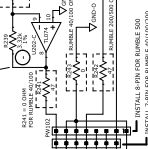
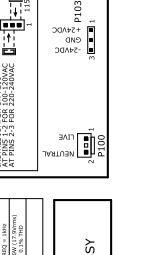
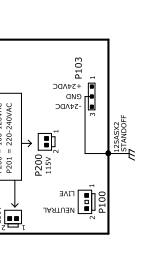
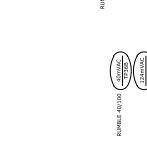
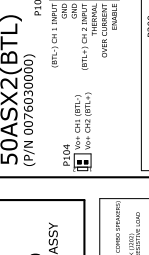


**COMBO UNIT INTERNAL SPEAKERS**  
INSTALL 2 200 OHM 1/4W RESISTORS IN SERIES WITH THE SPEAKERS.  
CONNECT TO P100.



**CAUTION:** RUMBLE 100 200 500 OUTPUT IS NOT GROUND REFERENCED. DO NOT GROUND EITHER TERMINAL (I.E. WITH OSCILLOSCOPE PROBE OR GROUND LEAD) OR UNIT WILL BE DAMAGED. VIEW OUTPUT WITH SCOPE IN DIFFERENTIAL MODE (RECOMMENDED) OR FLOAT SCOPE FROM EARTH GND. TR44-45 AND TR46-47 AC VOLTAGES SHOWN ARE FOR MEASUREMENTS TAKEN BETWEEN TP AND CHASSIS GROUND. THE VALUES WILL BE TWICE AS LARGE IF MEASURED WITH THE VOLTMETER BEING DIRECTLY ACROSS THE AMPLIFIER OUTPUT (BETWEEN TP 44-TR45 OR TR46-TR47).  
NOTE: POWER MODULE USES SWITCHING TECHNOLOGY RESULTING IN HIGH FREQUENCY NOISE (>100kHz) AT THE OUTPUT. RECOMMEND USING A LOW-PASS FILTER (SUCH AS THE AP A010-0025 SWITCHING AMPLIFIER MEASUREMENT FILTER) FOR OPTIMUM VIEWING AND MEASUREMENT OF OUTPUT SIGNALS.

**OUTPUT POWER TEST:**  
HATED AND UNDO SOLE TO BE USED TO MEASURE OUTPUT POWER. THIS TEST SHOULD BE PERFORMED AT THE OUTPUT OF THE AMPLIFIER. THE TEST SHOULD BE PERFORMED AT THE OUTPUT OF THE AMPLIFIER. THE TEST SHOULD BE PERFORMED AT THE OUTPUT OF THE AMPLIFIER. THE TEST SHOULD BE PERFORMED AT THE OUTPUT OF THE AMPLIFIER.

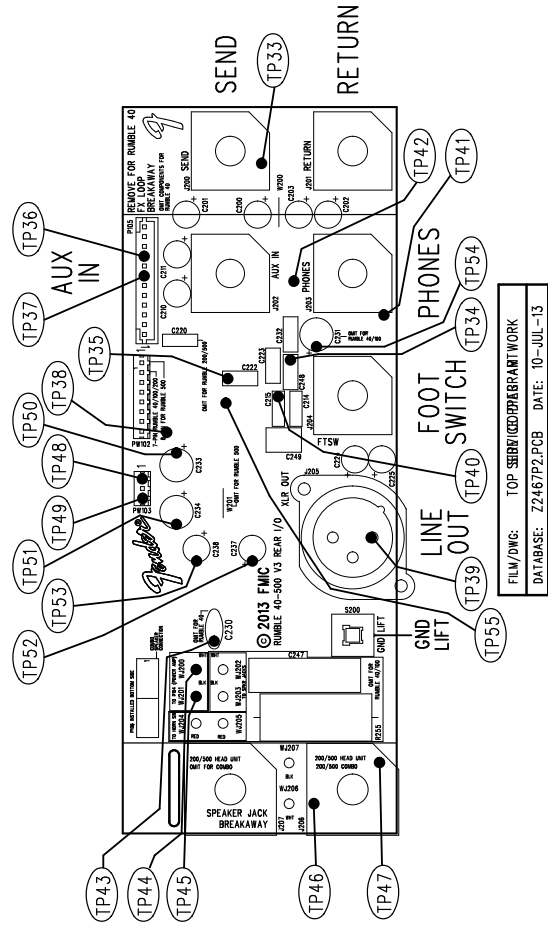


**NOTES:** (UNLESS OTHERWISE NOTED)  
1. ALL RESISTORS IN OHMS, P/N 131299.  
2. CAPACITORS UNLESS OTHERWISE SPECIFIED ARE IN PFD.  
3. ALL CAPACITORS UNLESS OTHERWISE SPECIFIED ARE IN PFD.  
4. ALL CAPACITORS UNLESS OTHERWISE SPECIFIED ARE IN PFD.  
5. THIS SCHEMATIC SHEET 7, RUMBLE 40 IS FOR THE FABRICATION P/N 2461CT014.  
6. THIS SCHEMATIC SHEET 7, RUMBLE 500 IS FOR THE FABRICATION P/N 2461CT014.  
7. THIS SCHEMATIC SHEET 7, RUMBLE 100 IS FOR THE FABRICATION P/N 2461CT011.  
8. THIS SCHEMATIC SHEET 7, RUMBLE 200 IS FOR THE FABRICATION P/N 2461CT011.  
9. THIS SCHEMATIC SHEET 7, RUMBLE 200/500 IS FOR THE FABRICATION P/N 2461CT014.  
10. THIS SCHEMATIC SHEET 7, RUMBLE 200/500 IS FOR THE FABRICATION P/N 2461CT014.

**MUSICAL INSTRUMENTS**  
Corona, CA U.S.A.  
RUMBLE 40-500 V0  
REAR IO PCB  
REV. 2 OF 4

**REVISIONS**

REV.	DESCRIPTION	DATE	APPROVED
A	PR2467	10-JUL-13	dbl



FILM/DWG: TOP SERVICED/PAPER/PRINT WORK  
 DATABASE: Z2467P2.PCB DATE: 10-JUL-13

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**Fender**  
 MUSICAL INSTRUMENTS  
 Corona, CA U.S.A.

CHECKED BY:	DATE:	TITLE: SERVICE DIAGRAM, COMBINED (PCB assy) RUMBLE 40-500 V3 REAR I/O PCB
APPROVED BY:	DATE:	SIZE: DRAWING NUMBER B 2467ICT011
DRAWN: D. LEWIS	ENGR: D. LEWIS	REV. A
DATABASE FILE: Z2467P2.PCB	RELEASE DATE: 10-JUL-13	SHEET 4 OF 4

2. WHERE POSSIBLE, THRU-HOLE PADS WERE SELECTED FOR TEST POINTS, BUT SOME TEST POINTS ARE ONLY FOUND ON BOTTOM (SMT) SIDE. REFER TO PCB BOTTOM (SMT) SIDE SILKSREEN TO HELP IDENTIFY TEST POINT LOCATIONS.  
 1. SEE SHEET 2 FOR TEST CONDITIONS, TEST POINT VALUES, AND STUFFING DIFFERENCES BETWEEN MODELS.

NOTES: (UNLESS OTHERWISE NOTED)