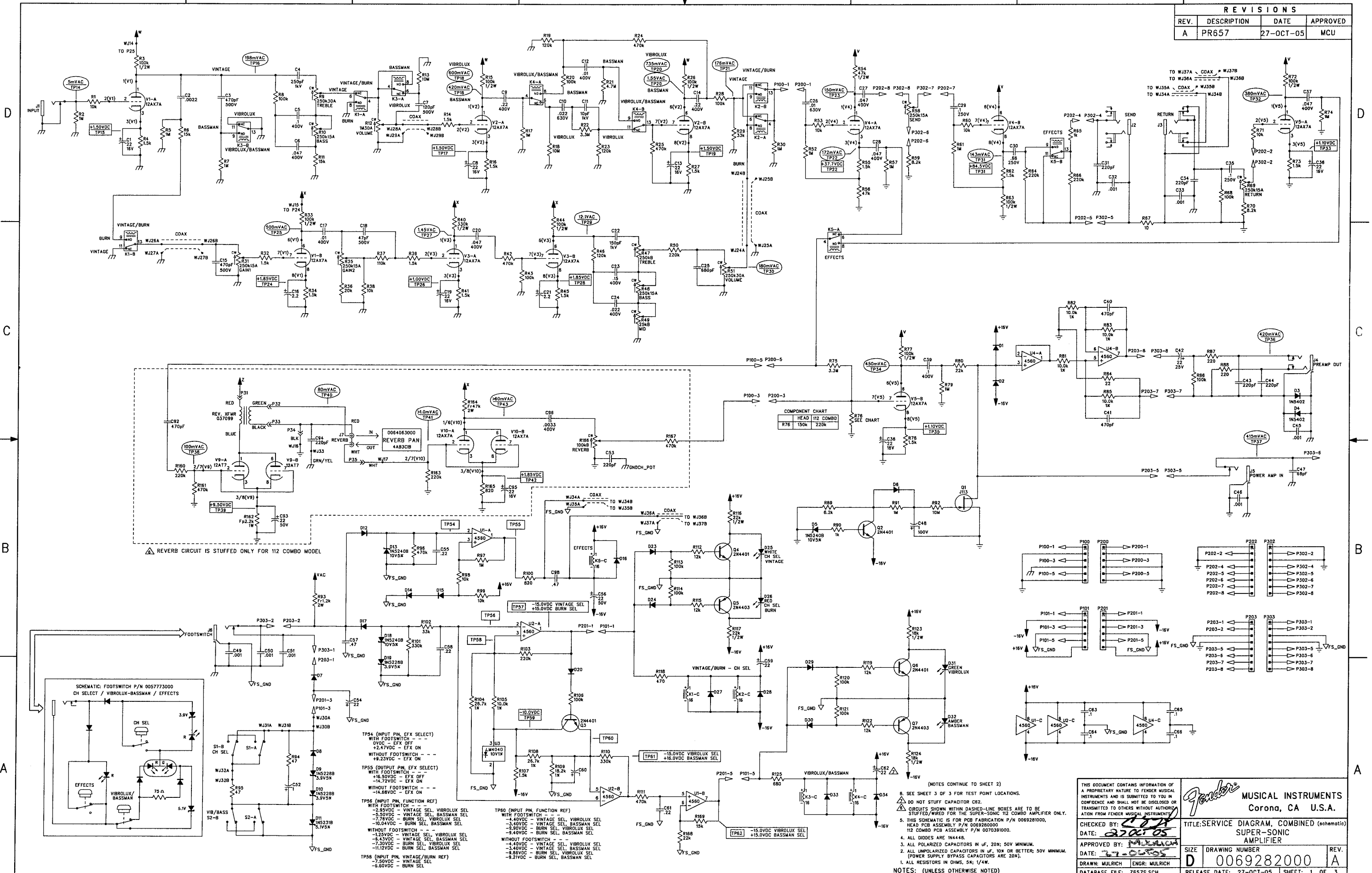


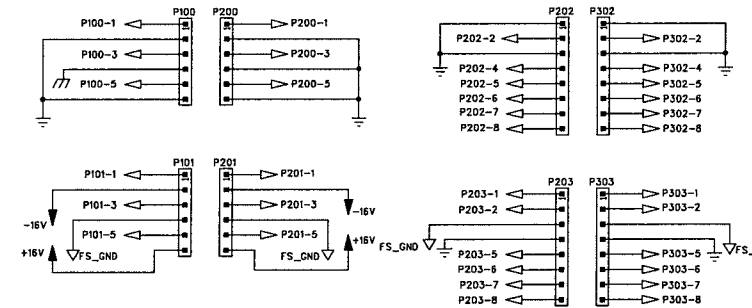
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR657	27-OCT-05	MCU



REVERB CIRCUIT IS STUFFED ONLY FOR 112 COMBO MODEL

COMPONENT CHART

REF	DESCRIPTION
R76	150k 220k



- TP54 (INPUT PIN, EFX SELECT)
 WITH FOOTSWITCH - - -
 0VDC - EFX OFF
 +2.47VDC - EFX ON
 WITHOUT FOOTSWITCH - - -
 +9.23VDC - EFX ON
- TP55 (OUTPUT PIN, EFX SELECT)
 WITH FOOTSWITCH - - -
 +16.50VDC - EFX OFF
 -14.72VDC - EFX ON
 WITHOUT FOOTSWITCH - - -
 -14.66VDC - EFX ON
- TP56 (INPUT PIN, FUNCTION REF)
 WITH FOOTSWITCH - - -
 -5.50VDC - VINTAGE SEL, VIBROLUX SEL
 -5.50VDC - VINTAGE SEL, BASSMAN SEL
 -7.76VDC - BURN SEL, VIBROLUX SEL
 -10.04VDC - BURN SEL, BASSMAN SEL
 -9.90VDC - BURN SEL, VIBROLUX SEL
 -9.90VDC - BURN SEL, BASSMAN SEL
 WITHOUT FOOTSWITCH - - -
 -1.25VDC - VINTAGE SEL, VIBROLUX SEL
 -4.33VDC - VINTAGE SEL, BASSMAN SEL
 -7.30VDC - BURN SEL, VIBROLUX SEL
 -11.2VDC - BURN SEL, BASSMAN SEL
- TP58 (INPUT PIN, VINTAGE/BURN SEL)
 WITH FOOTSWITCH - - -
 +7.50VDC - VINTAGE SEL
 -5.60VDC - BURN SEL
- TP59 (INPUT PIN, FUNCTION REF)
 WITH FOOTSWITCH - - -
 -4.40VDC - VINTAGE SEL, VIBROLUX SEL
 -3.40VDC - VINTAGE SEL, BASSMAN SEL
 -9.40VDC - BURN SEL, VIBROLUX SEL
 -9.40VDC - BURN SEL, BASSMAN SEL
 WITHOUT FOOTSWITCH - - -
 -4.40VDC - VINTAGE SEL, VIBROLUX SEL
 -3.40VDC - VINTAGE SEL, BASSMAN SEL
 -8.80VDC - BURN SEL, VIBROLUX SEL
 -8.21VDC - BURN SEL, BASSMAN SEL
- TP60 (INPUT PIN, FUNCTION REF)
 WITH FOOTSWITCH - - -
 -4.40VDC - VINTAGE SEL, VIBROLUX SEL
 -3.40VDC - VINTAGE SEL, BASSMAN SEL
 -9.40VDC - BURN SEL, VIBROLUX SEL
 -9.40VDC - BURN SEL, BASSMAN SEL
 WITHOUT FOOTSWITCH - - -
 -4.40VDC - VINTAGE SEL, VIBROLUX SEL
 -3.40VDC - VINTAGE SEL, BASSMAN SEL
 -8.80VDC - BURN SEL, VIBROLUX SEL
 -8.21VDC - BURN SEL, BASSMAN SEL
- TP61 (INPUT PIN, VIBROLUX SEL)
 WITH FOOTSWITCH - - -
 -15.0VDC - VIBROLUX SEL
 +15.0VDC - BASSMAN SEL
- TP62 (INPUT PIN, VIBROLUX SEL)
 WITH FOOTSWITCH - - -
 -15.0VDC - VIBROLUX SEL
 +15.0VDC - BASSMAN SEL

- (NOTES CONTINUE TO SHEET 2)
- SEE SHEET 3 OF 3 FOR TEST POINT LOCATIONS.
 - DO NOT STUFF CAPACITOR C62.
 - CIRCUITS SHOWN WITHIN DASHED-LINE BOXES ARE TO BE STUFFED/WIRED FOR THE SUPER-SONIC 112 COMBO AMPLIFIER ONLY.
 - THIS SCHEMATIC IS FOR PCB FABRICATION P/N 006928000. HEAD PCB ASSEMBLY P/N 006928000. 112 COMBO PCB ASSEMBLY P/N 007391000.
 - ALL DIODES ARE 1N4448.
 - ALL POLARIZED CAPACITORS IN μ F, 20% OR BETTER; 50V MINIMUM.
 - ALL UNPOLARIZED CAPACITORS IN μ F, 10% OR BETTER; 50V MINIMUM. (POWER SUPPLY BYPASS CAPACITORS ARE 20%).
 - ALL RESISTORS IN OHMS, 5% 1/4W.
- NOTES: (UNLESS OTHERWISE NOTED)

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

TITLE: SERVICE DIAGRAM, COMBINED (schematic)
 SUPER-SONIC AMPLIFIER

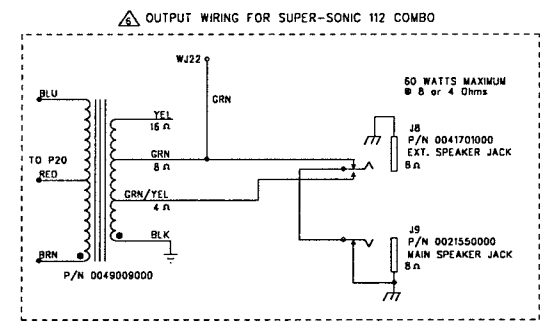
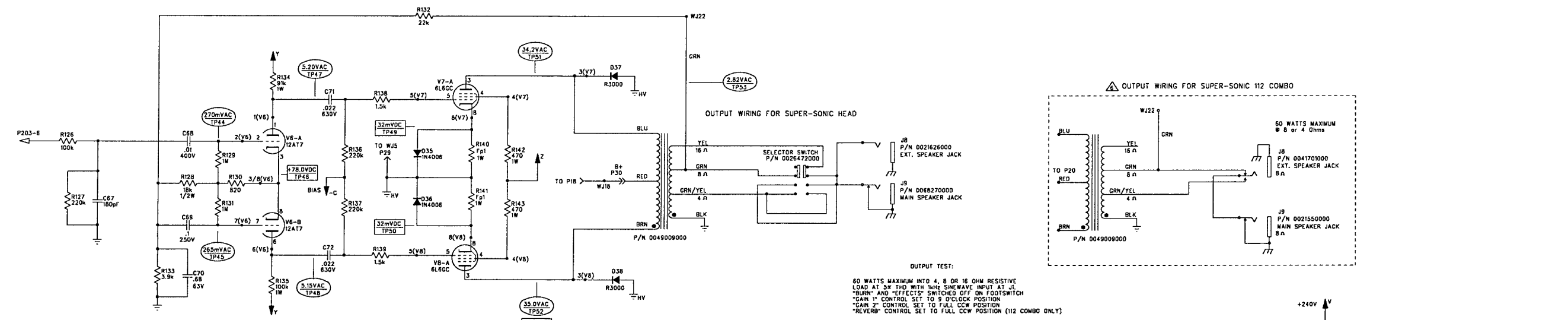
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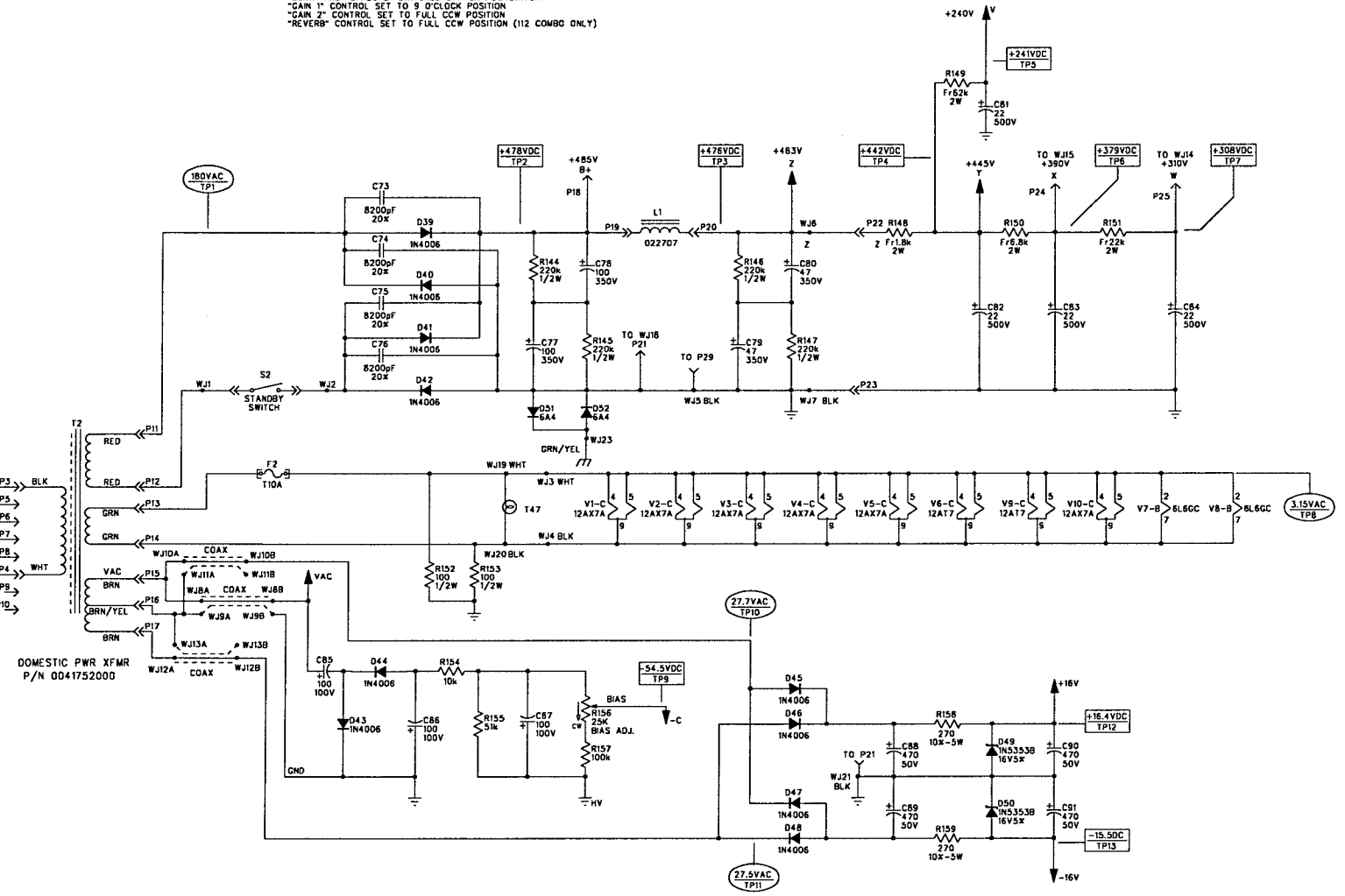
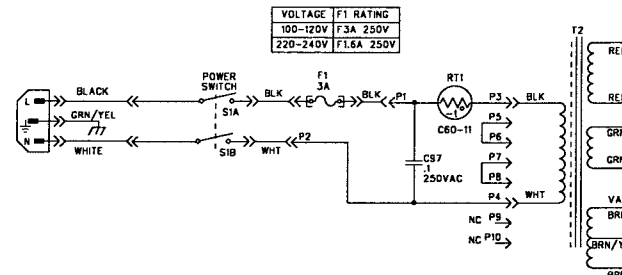
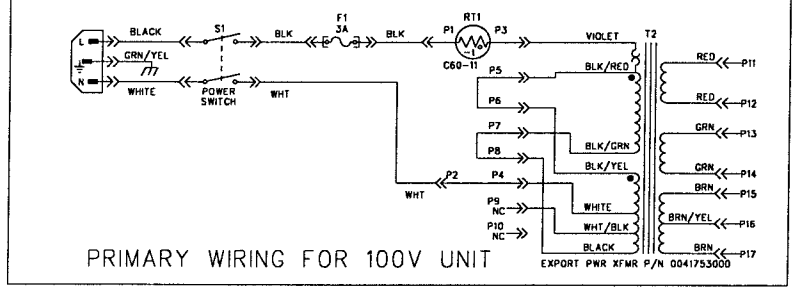
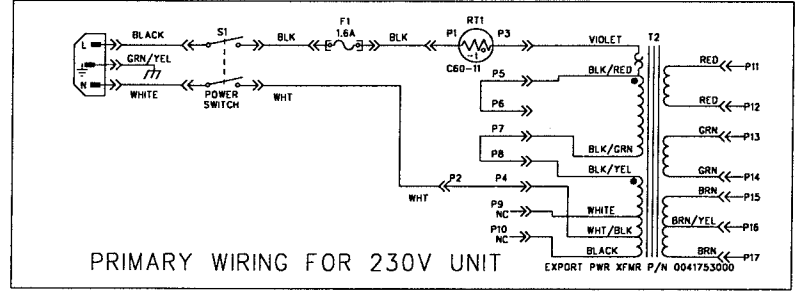
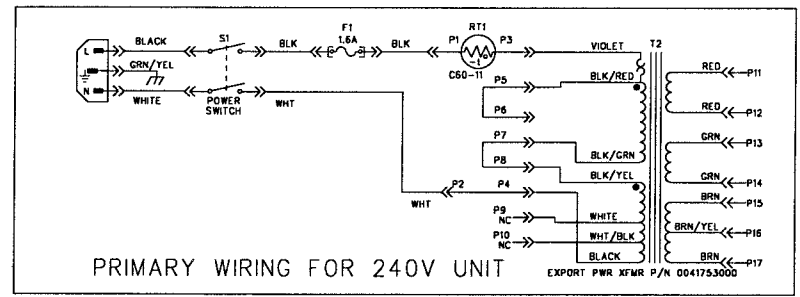
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SIZE: D
 DRAWING NUMBER: 0069282000
 RELEASE DATE: 27-OCT-05 SHEET: 1 OF 3

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR657	27-OCT-05	MCU



OUTPUT TEST:
 60 WATTS MAXIMUM INTO 4, 8 OR 16 OHM RESISTIVE LOAD AT 5% THD WITH 1kHz SINEWAVE INPUT AT J1.
 "BURN" AND "EFFECTS" SWITCHES OFF ON FOOTSWITCH.
 "GAIN 1" CONTROL SET TO 9 O'CLOCK POSITION.
 "GAIN 2" CONTROL SET TO FULL CCW POSITION.
 "REVERB" CONTROL SET TO FULL CCW POSITION (112 COMBO ONLY).



9. ALL VOLTAGES MEASURED WITH RESPECT TO GROUND USING A DVM OF AT LEAST 1MΩ AC INPUT IMPEDANCE AND 10MΩ DC IMPEDANCE. VOLTAGE MAY VARY +/- 20%.

INITIAL TEST CONDITIONS:
 UNIT AT RATED LINE VOLTAGE
 ALL PCBs ARE CONNECTED TOGETHER, INSTALLED IN THE CHASSIS
 REVERB PAN 0064083000 CONNECTED AT J7
 8Ω RESISTIVE LOAD CONNECTED TO J8
 IMPEDANCE SELECTOR SWITCH SET TO 8 Ω (HEAD ONLY)
 "BURN" SWITCHED OFF; "EFFECTS" SWITCHED ON WHEN USING FOOTSWITCH
 "GAIN 1" CONTROL SET TO 9 O'CLOCK POSITION
 "GAIN 2" CONTROL SET TO FULL CCW POSITION
 "REVERB" CONTROL SET TO FULL CCW POSITION (112 COMBO ONLY)
 "SEND" CONTROL IN FULL CW POSITION; "RETURN" CONTROL IN FULL CCW POSITION
 ALL OTHER CONTROLS SET TO 12 O'CLOCK POSITION
 BIAS CONTROL: R158 SET TO -54.5VDC (OR 32mV AT BOTH TP50 AND TP51)
 ALL DC VOLTAGES MEASURED WITH NO INPUT SIGNAL.

ADDITIONAL TEST CONDITIONS:
 TP24-TP30, "BURN" SHOULD BE SWITCHED ON.
 TP38-TP44 APPLY TO 112 COMBO ONLY. SET "REVERB" CONTROL TO 12 O'CLOCK.

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CHECKED BY: <i>[Signature]</i> DATE: <i>27-09-05</i> APPROVED BY: <i>[Signature]</i> DATE: <i>27-09-05</i> DRAWN: MULRICH ENGR: MULRICH DATABASE FILE: 26575.SCH		
TITLE: SERVICE DIAGRAM, COMBINED (schematic) SUPER-SONIC AMPLIFIER		SIZE: D DRAWING NUMBER: 0069282000 REV: A
RELEASE DATE: 27-OCT-05		SHEET: 2 OF 3

NOTES: (CONT. FROM SHEET 1)

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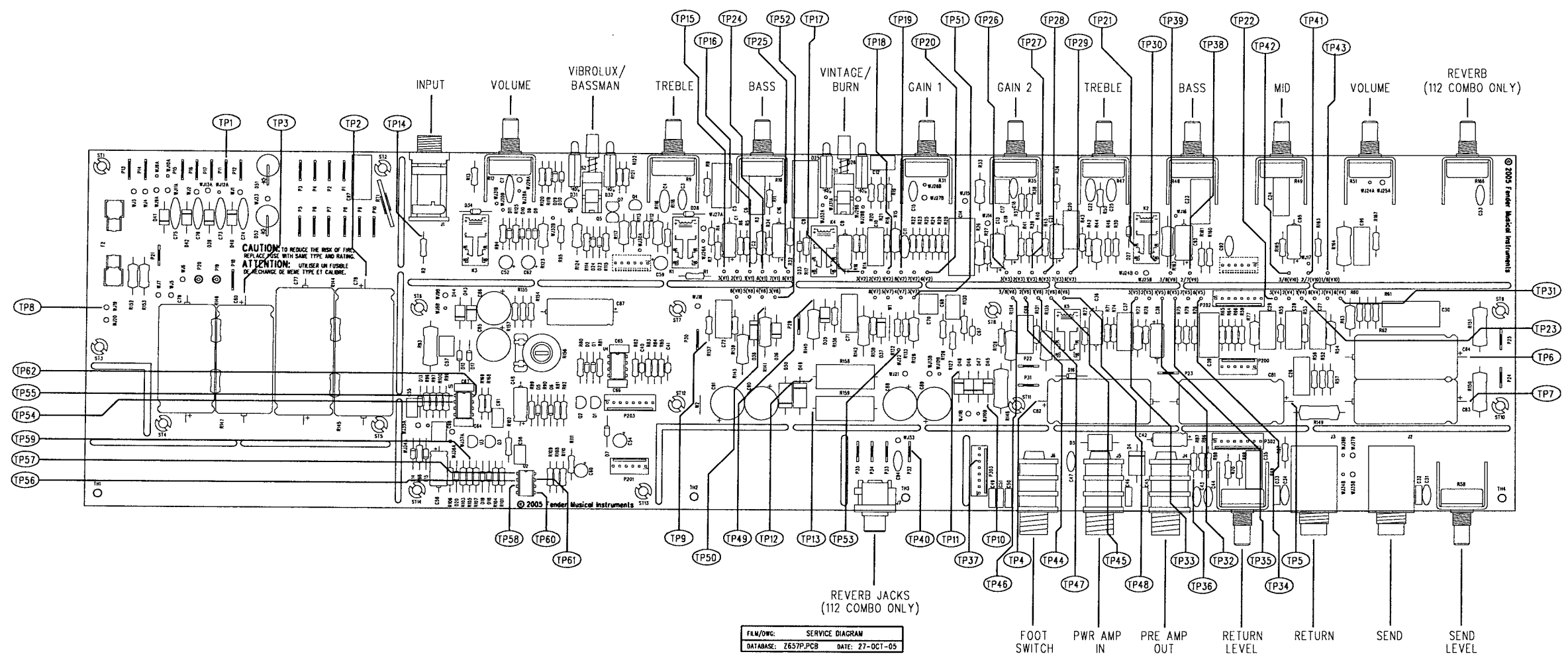
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR657	27-OCT-05	MCU



FILM/DWG: SERVICE DIAGRAM
 DATABASE: Z657P.PCB DATE: 27-OCT-05

1. SEE SHEET 1-2 OF 3 FOR TEST CONDITIONS AND TEST POINT VALUES.
 NOTES: (UNLESS OTHERWISE NOTED)

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CHECKED BY: <i>[Signature]</i>	DATE: <i>2/26/06</i>	TITLE: SERVICE DIAGRAM, COMBINED (PCB assy) SUPER-SONIC HEAD/112 COMBO	
APPROVED BY: <i>[Signature]</i>	DATE: <i>27-OCT-05</i>	SIZE: D	DRAWING NUMBER: 0069282000
DRAWN: MLR/RCH	ENGR: MLR/RCH	RELEASE DATE: 27-OCT-05	REV. A
DATABASE FILE: Z657P.PCB		SHEET 3 OF 3	

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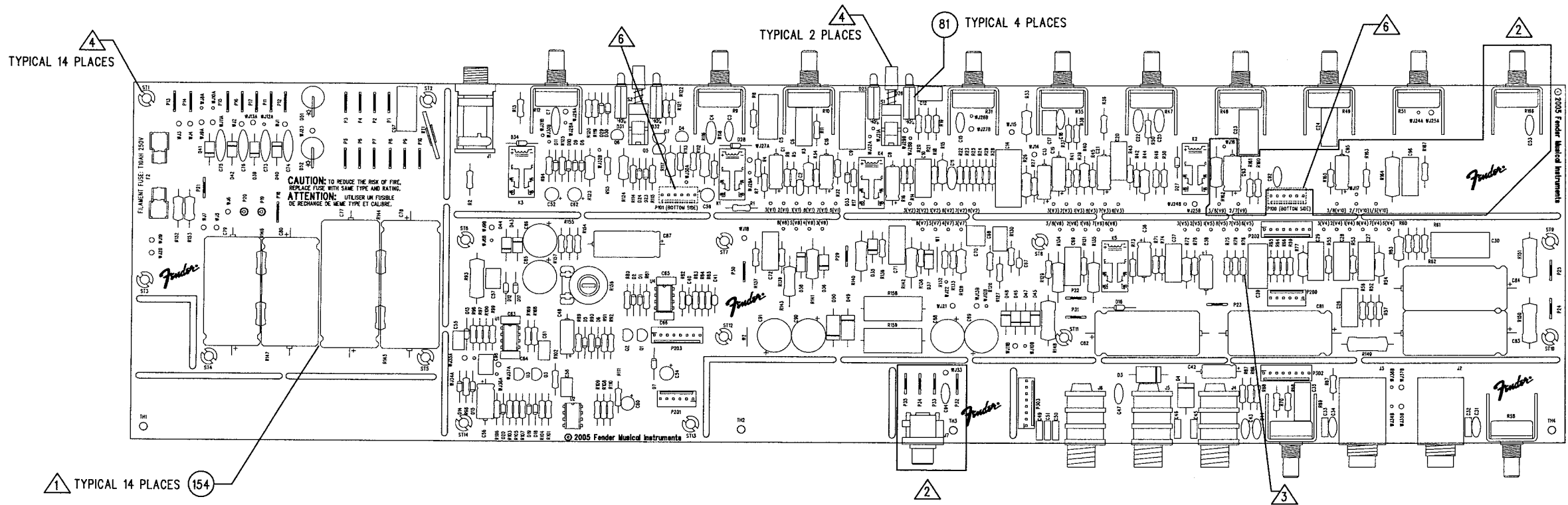
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR657	27-OCT-05	MCU



FLM/DWG: PCB ASSEMBLY DRAWING
 DATABASE: 2657P.PCB DATE: 27-OCT-05

- ▲ P100 AND P101, ITEM 66, ARE STUFFED ON THE SOLDER SIDE OF THE PCB ASSEMBLY IN THE ORIENTATION SHOWN.
 - 5. PCB WIRESETS, ITEM 157, ARE NOT SHOWN. REFER TO THE FOLLOWING DRAWINGS FOR PCB WIRESET CONNECTIONS:
 0069283000 - HEAD PCB WIRESET
 0070392000 - 112 COMBO PCB WIRESET
 - ▲ PUSH BUTTON CAPS AND STANDOFFS ARE NOT PART OF THIS ASSEMBLY AND ARE SHOWN FOR REFERENCE ONLY.
 - ▲ COMPONENT VALUE FOR R76:
 HEAD PCB ASSY: 150K
 112 COMBO PCB ASSY: 220K
 - ▲ NOT STUFFED IN THE HEAD PCB ASSEMBLY: C53, C92-96, J7, P32-35, R160-167, V9-10, W13-14, WJ33, LOCATED WITHIN BOXED AREA.
 - ▲ ADHERE THE FOLLOWING COMPONENTS WITH RTV SILICONE, ITEM 154: C77-86, C88-91.
- NOTES: (UNLESS OTHERWISE NOTED)

0070391000	SUPER-SONIC 112 COMBO
0069280000	SUPER-SONIC HEAD
PART NUMBER	DESCRIPTION
Fender MUSICAL INSTRUMENTS Corona, CA U.S.A.	
TITLE:	PCB ASSEMBLY, SUPER-SONIC HEAD/112 COMBO
SIZE	D
DRAWING NUMBER	0069280000
RELEASE DATE:	27-OCT-05
SHEET	1 OF 9

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 DATE: 27 OCT 05

APPROVED BY: *[Signature]*
 DATE: 27 OCT 05

DRAWN: MURICH ENGR: MURICH
 DATABASE FILE: 2657P.PCB

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