

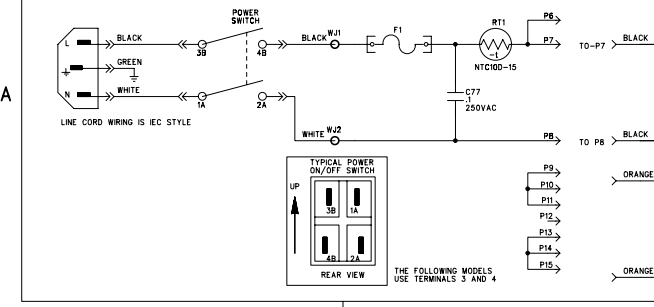
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR558	21-JUL-03	MCU

TP20 (INPUT PIN CHANNEL SELECT):
 WITH FOOTSWITCH:
 +12VDC DRIVE CH
 +2.3VDC NORM CH
 +3.0VDC DRIVE CH
 WITH FRONT PANEL SWITCH (S2):
 +2.3VDC DRIVE CH
 +7.5VDC NORM CH

TP24 (INPUT PIN DRIVE/MORE DRIVE):
 WITH FOOTSWITCH:
 -5.6VDC MORE DRIVE
 -3.5VDC DRIVE CH
 WITH FRONT PANEL SWITCH (S1):
 -5.6VDC MORE DRIVE
 -2.4VDC DRIVE

TP26 (REF PIN DRIVE/MORE DRIVE):
 -11.8VDC NORM CH
 -5.14VDC DRIVE CH
 -4.82VDC MORE DRIVE

MODELS:	F1 VALUE
100-120V	125V F4A
230-240V	250V F1.25A



- 6. AC AND DC VOLTAGES READ TO GROUND WITH A DVM UNDER THE FOLLOWING CONDITIONS:
 UNIT AT RATED LINE VOLTAGE
 NO INPUT SIGNAL (TP1-TP6, TP20-TP29 ONLY)
 VOLTAGES MAY VARY +/- 20%
- 7. LAST REFERENCE DESIGNATORS: C76, D62, J7, P15, Q26, R145, S2, TP27, U7, W99
- 8. TP17 VALUES ARE DEPENDENT UPON SPECIFIC EXCITATION FREQUENCY AND PARTICULAR REVERSE PAN FREQUENCY RESPONSE
- 9. ADDITIONAL CONDITION FOR TP10-TP13: DRIVE SELECT (S1) IN RED

1. ALL RESISTORS IN OHMS, S, K, M, OR 1/4W.
2. ALL UNPOLARIZED CAPACITORS IN uF, 10% OR BETTER; 50V MINIMUM. POWER SUPPLY BYPASS CAPACITORS ARE 20%.
3. ALL DIODES ARE IN4004.
4. ALL TRANSISTORS ARE 2N4003.
5. THIS SCHEMATIC IS FOR PDB FABRICATION P/N 0054281000 AND PCB ASSSEMBLY P/N 0054282000
6. ADDITIONAL CONDITIONS FOR TP7-TP9: 30V DCM SINEWAVE INPUT SIGNAL AT J1 OR SELECT (S2) ALDRIVE SELECT (S1) OUT YELLOW DRIVE CONTROL AT J3 REVERSE CONTROL AT J1 ALL OTHER CONTROLS AT S1-1/2 (DOOR ROTATION)
7. ADDITIONAL CONDITION FOR TP10-TP13: DRIVE SELECT (S1) IN RED

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CHECKED BY: _____ TITLE: SERVICE DIAGRAM, COMBINED (schematic)

APPROVED BY: _____ SIZE: DRAWING NUMBER

DATE: _____ DATE: 0061536000

DATABASE FILE: Z5588.SCH ENGR: MULRICH SHEET: 1 OF 2

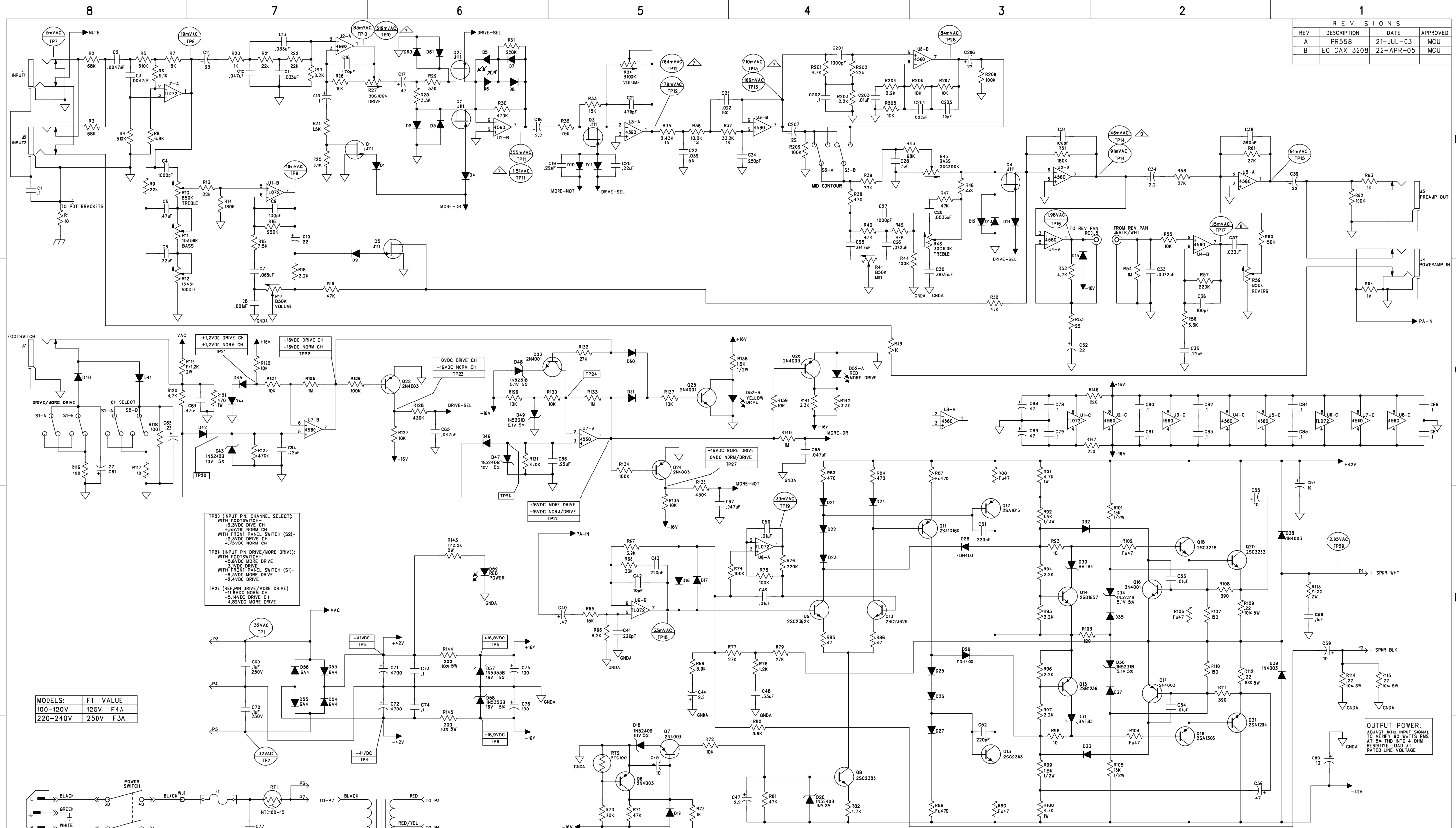
REVISIONS: A

RELEASE DATE: 21-JUL-03

OUTPUT POWER:
 ADJUST 100HZ INPUT SIGNAL TO VERIFY SO WATS RMS AT 5% THD INTO 4 OHM RESISTIVE LOAD AT RATED LINE VOLTAGE

Fender MUSICAL INSTRUMENTS
 Corona, CA 91720 USA

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR558	21-JUL-03	MCU
B	EC CAX 3208	22-APR-05	MCU

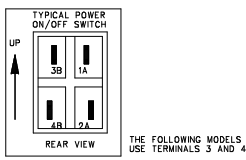
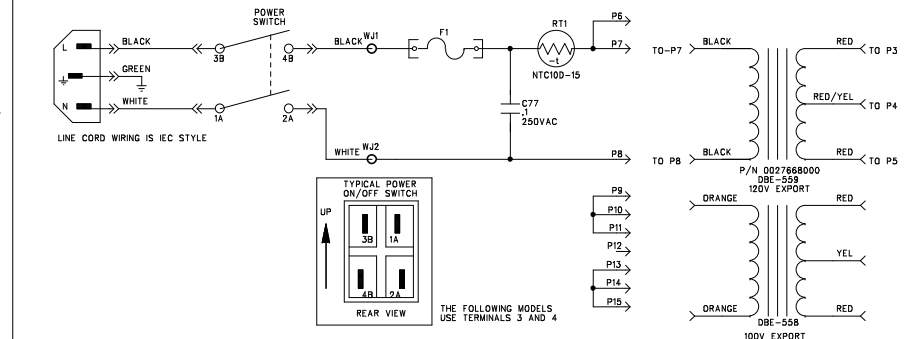


TP20 (INPUT PIN, CHANNEL SELECT):
 WITH FOOTSWITCH:
 +2.3VDC DRIVE CH
 +2.5VDC NORM CH
 WITH FRONT PANEL SWITCH (S2):
 +2.3VDC DRIVE CH
 +2.5VDC NORM CH

TP24 (INPUT PIN, DRIVE/MORE DRIVE):
 WITH FOOTSWITCH:
 -3.8VDC MORE DRIVE
 WITH FRONT PANEL SWITCH (S1):
 -3.3VDC DRIVE
 -3.3VDC MORE DRIVE
 -2.4VDC DRIVE

TP26 (REF. PIN, DRIVE/MORE DRIVE):
 -1.8VDC NORM CH
 -3.1VDC DRIVE CH
 -4.8VDC MORE DRIVE

MODELS:	F1 VALUE
100-120V	125V F4A
220-240V	250V F3A



- 6. AC AND DC VOLTAGES READ TO GROUND WITH A DVM UNDER THE FOLLOWING CONDITIONS:
 UNIT AT RATED LINE VOLTAGE.
 NO INPUT SIGNAL (TP1-TP28 ONLY).
 VOLTAGES MAY VARY +/- 20%.
- ADDITIONAL CONDITIONS FOR TP7-TP9:
 3mV RMS SINEWAVE INPUT SIGNAL AT J1
 CH SELECT (S2) IN DRIVE SELECT (S1) OUT YELLOW DRIVE CONTROL AT 3 REVERB CONTROL AT 1.
 ALL OTHER CONTROLS AT 5-1/2 (50% ROTATION).
- THIS SCHEMATIC IS FOR PCB FABRICATION P/N 005428000 AND PCB ASSEMBLY P/N 0054282000.
- 4. ALL DIODES ARE IN44448.
- 3. ALL POLARIZED CAPACITORS IN uF, 20% SOV MINIMUM.
- 2. ALL UNPOLARIZED CAPACITORS IN uF, 10% OR BETTER; 50V MINIMUM. (POWER SUPPLY BYPASS CAPACITORS ARE 20%).
- 1. ALL RESISTORS IN OHMS, 5% 1/4W.
- NOTES: (UNLESS OTHERWISE NOTED)

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CHECKED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____

DATABASE FILE: Z558S.SCH

Fender MUSICAL INSTRUMENTS
 Corona, CA 91720 USA

TITLE: SERVICE DIAGRAM, COMBINED (schematic)
 FM212R AMPLIFIER

SIZE: D DRAWING NUMBER: 0061536000 REV: B

RELEASE DATE: 21-JUL-03 SHEET: 1 OF 2

OUTPUT POWER:
 ADJUST 1kHz INPUT SIGNAL TO VERIFY 50 WATTS RMS AT 5% THD INTO 4 OHM RESISTIVE LOAD AT RATED LINE VOLTAGE