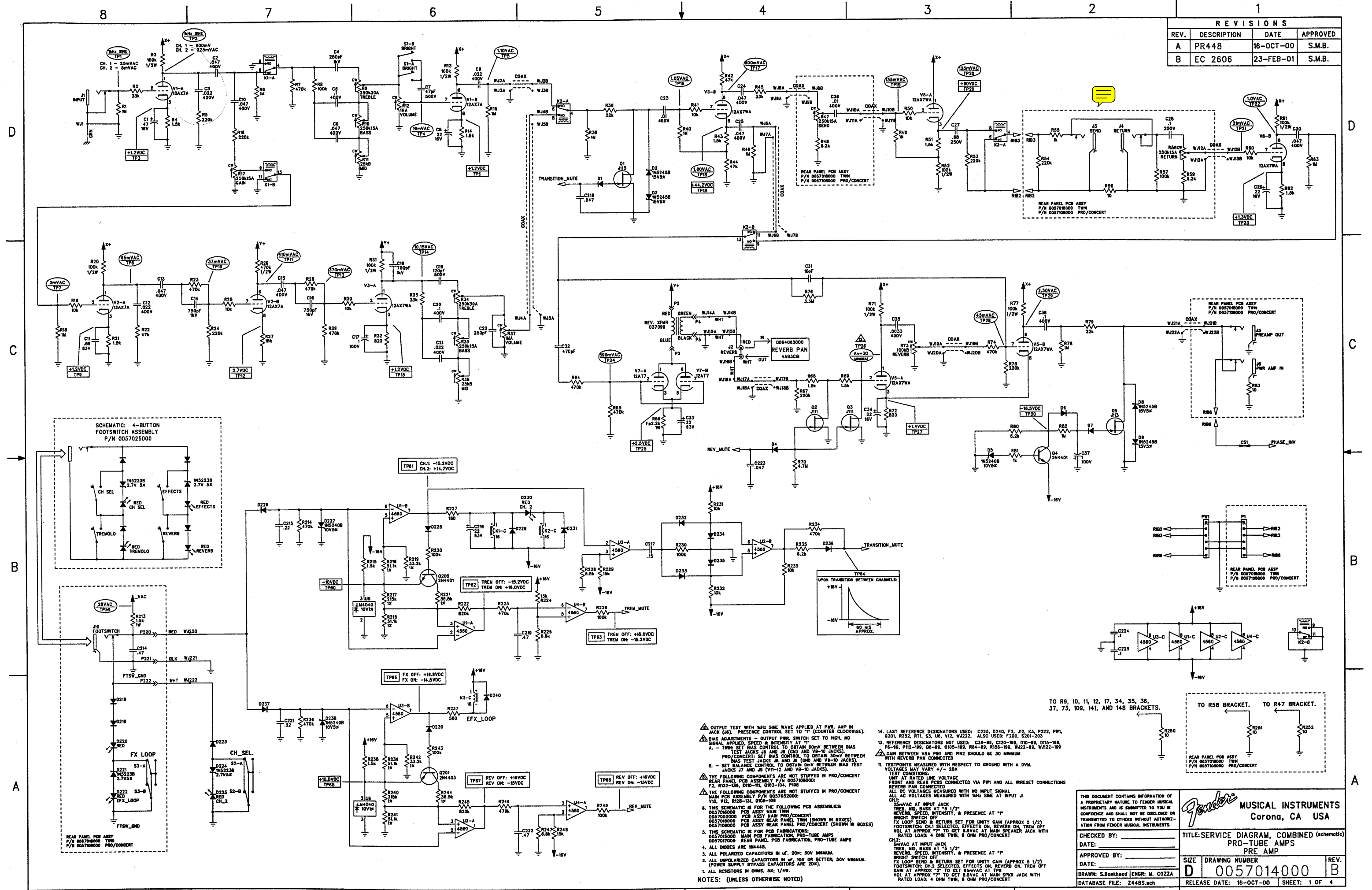


REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR448	16-OCT-00	S.M.B.
B	EC 2606	23-FEB-01	S.M.B.



- OUTPUT TEST WITH MHz SINE WAVE APPLIED AT PWR. AMP IN JACK (J6). PRESENCE CONTROL SET TO "T" (COUNTER CLOCKWISE). SIGNAL APPLIED: SPEED & INTENSITY AT "H".
- BIAS ADJUSTMENTS - OUTPUT PWR. SWITCH SET TO HIGH, NO SIGNAL APPLIED: SPEED & INTENSITY AT "H".
- A. - TUNE SET BIAS CONTROL TO OBTAIN 80mV BETWEEN BIAS TEST JACKS J8 AND J9 (GND AND V8-10 JACKS). PRO/CONCERT: SET BIAS CONTROL TO OBTAIN 30mV BETWEEN BIAS TEST JACKS J8 AND J9 (GND AND V8-10 JACKS).
- B. - SET BALANCE CONTROL TO OBTAIN 0mV BETWEEN BIAS TEST JACKS J7 AND J8 (V11-12 AND V8-10 JACKS).
- THE FOLLOWING COMPONENTS ARE NOT STUFFED IN PRO/CONCERT REAR PANEL PCB ASSEMBLY P/N 005708000:
F2, R133-134, D10-11, G103-104, P108
- THE FOLLOWING COMPONENTS ARE NOT STUFFED IN PRO/CONCERT MAIN PCB ASSEMBLY P/N 0057052000:
V12, V12, R128-131, D108-109
6. THIS SCHEMATIC IS FOR THE FOLLOWING PCB ASSEMBLIES:
005708000 PCB ASSY MAIN TWIN
0057052000 PCB ASSY MAIN PRO/CONCERT
005708000 PCB ASSY REAR PANEL TWIN (SHOWN IN BOXES)
005708000 PCB ASSY REAR PANEL PRO/CONCERT (SHOWN IN BOXES)
7. THIS SCHEMATIC IS FOR PCB FABRICATIONS:
005705000 MAIN PCB FABRICATION, PRO-TUBE AMPS
0057017000 REAR PANEL PCB FABRICATION, PRO-TUBE AMPS
8. ALL DIODES ARE 1N4448.
9. ALL POLARIZED CAPACITORS IN μ F, 20%: 50V MINIMUM.
10. ALL UNPOLARIZED CAPACITORS IN μ F, 10% OR BETTER: 50V MINIMUM. (POWER SUPPLY BYPASS CAPACITORS ARE 20%).
11. ALL RESISTORS IN OHMS, SX: 1/4W.
- NOTES: (UNLESS OTHERWISE NOTED)
14. LAST REFERENCE DESIGNATORS USED: C225, D240, F2, J12, K3, P222, PW1, Q201, R152, R11, S3, U6, V12, R222. ALSO USED: Z20, S201-203
15. REFERENCE DESIGNATORS NOT USED: C38-89, C120-189, D10-89, D116-189, P8-89, P112-189, D8-89, O105-189, R84-89, R150-189, WJ22-89, WJ22-189
16. GAIN BETWEEN V5A PWR IN AND PH2 SHOULD BE 30 MINIMUM WITH REVERB PAN CONNECTED.
17. TEST POINTS MEASURED WITH RESPECT TO GROUND WITH A DVM. VOLTAGES MAY VARY +/- 20%
- TEST CONDITIONS:
UNIT AT RATED LINE VOLTAGE
FRONT AND REAR PCB'S CONNECTED VIA PW1 AND ALL WRESET CONNECTIONS
REVERB PAN CONNECTED
ALL DC VOLTAGES MEASURED WITH NO INPUT SIGNAL
ALL AC VOLTAGES MEASURED WITH MHz SINE AT INPUT J1
CH1: 25mVAC AT INPUT JACK
TREB. MD. BASS AT "S 1/2"
REVERB, SPEED, INTENSITY, & PRESENCE AT "T"
BRIGHT SWITCH OFF
FX LOOP SEND & RETURN SET FOR UNITY GAIN (APPROX 5 1/2)
FOOTSWITCH: CH1 SELECTED, EFFECTS ON, REVERB ON, TREM OFF
VOL AT APPROX "7" TO GET 8.0VAC AT MAIN SPEAKER JACK WITH RATED LOAD: 4 OHM TWIN, 8 OHM PRO/CONCERT
- CH2: 8mVAC AT INPUT JACK
TREB. MD. BASS AT "S 1/2"
REVERB, SPEED, INTENSITY, & PRESENCE AT "T"
BRIGHT SWITCH OFF
FX LOOP SEND & RETURN SET FOR UNITY GAIN (APPROX 5 1/2)
FOOTSWITCH: CH2 SELECTED, EFFECTS ON, REVERB ON, TREM OFF
VOL AT APPROX "2" TO GET 8.0VAC AT MAIN SPEAKER JACK WITH RATED LOAD: 4 OHM TWIN, 8 OHM PRO/CONCERT

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CHECKED BY: _____
DATE: _____

APPROVED BY: _____
DATE: _____

DRAWN: S.Banhead ENGR: M. COZZA
DATABASE FILE: Z4485.sch

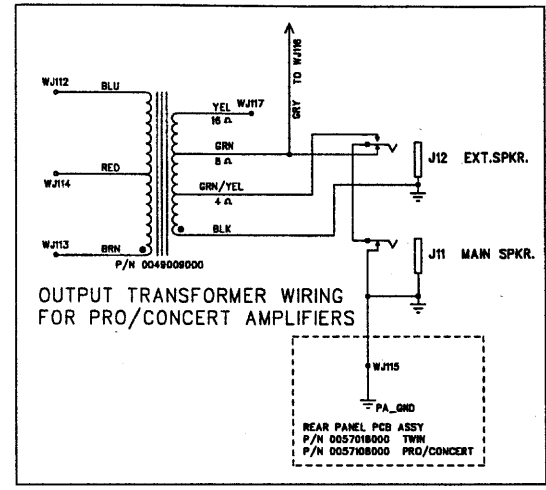
Fender MUSICAL INSTRUMENTS
Corona, CA USA

TITLE: SERVICE DIAGRAM, COMBINED (schematic)
PRO-TUBE AMPS
REAR AMP

SIZE: D
DRAWING NUMBER: 0057014000
REV. B

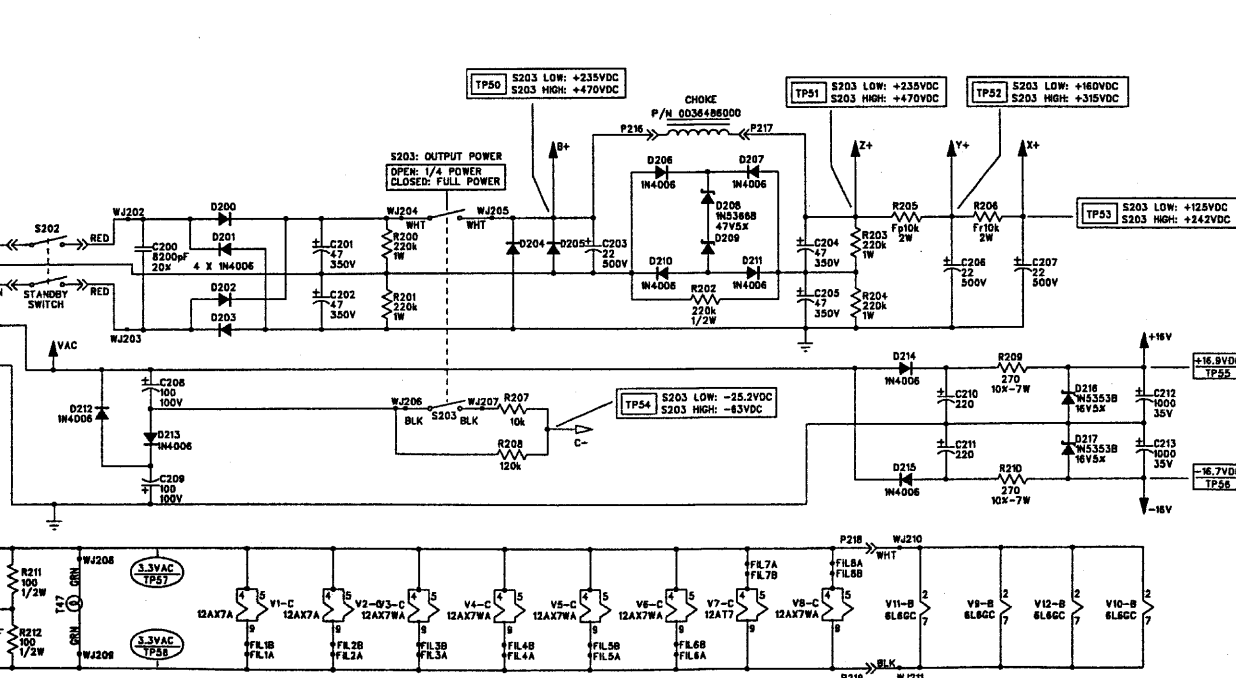
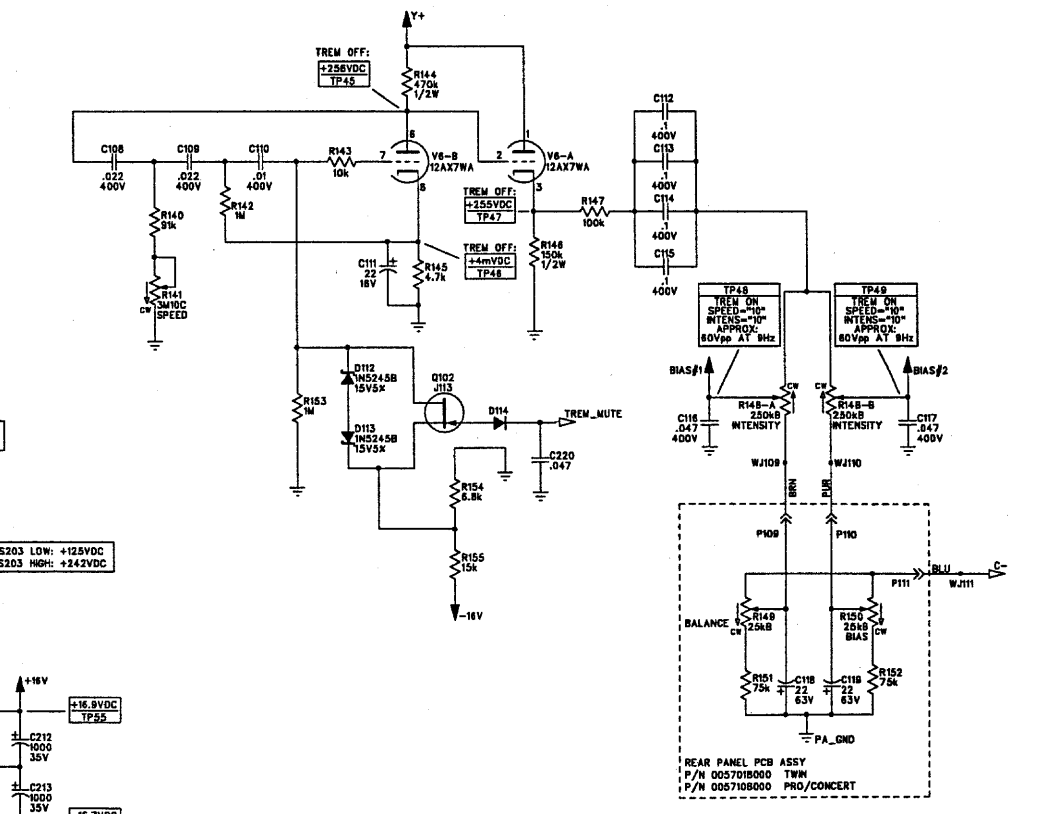
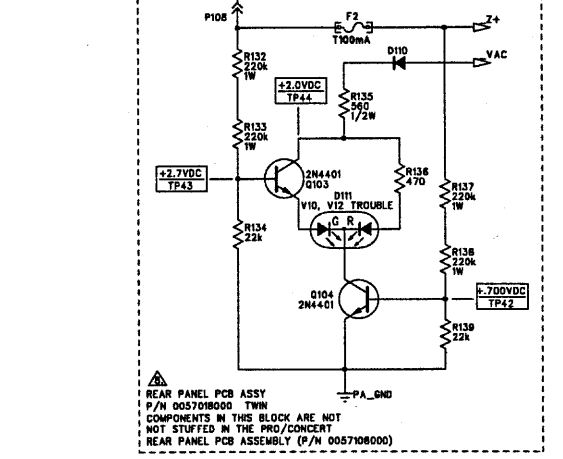
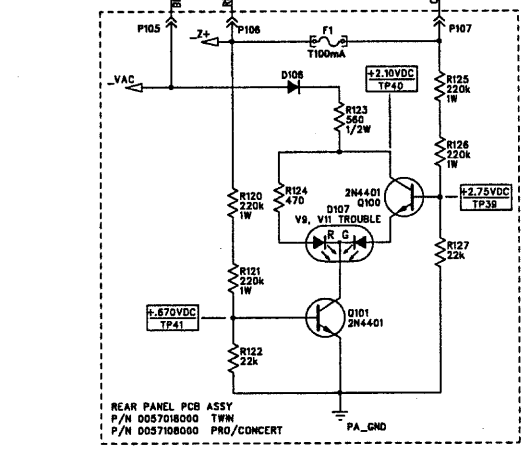
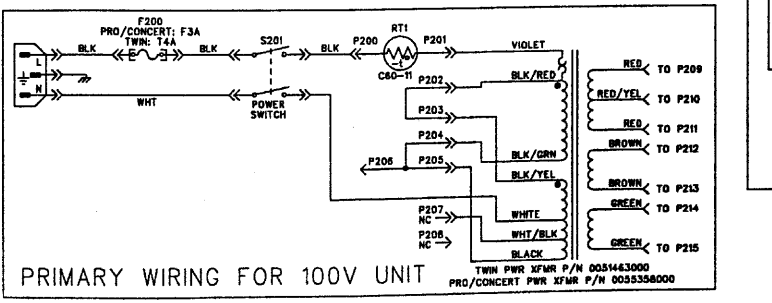
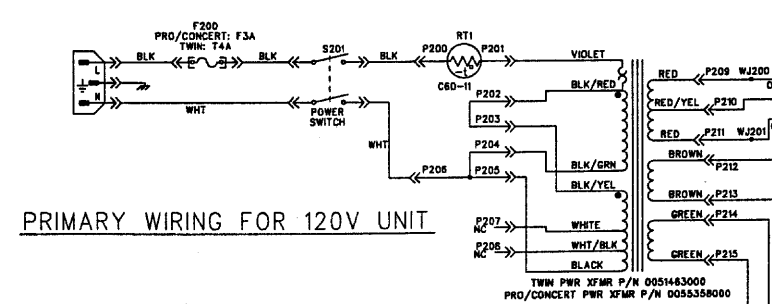
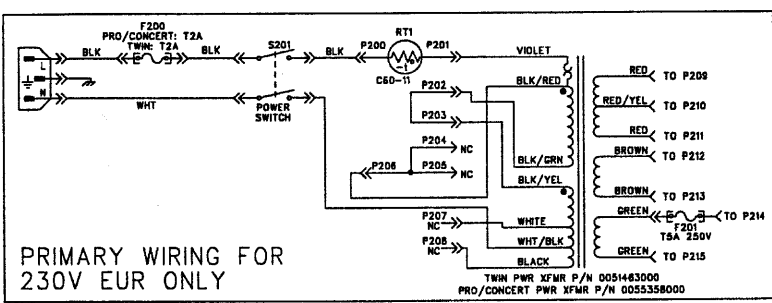
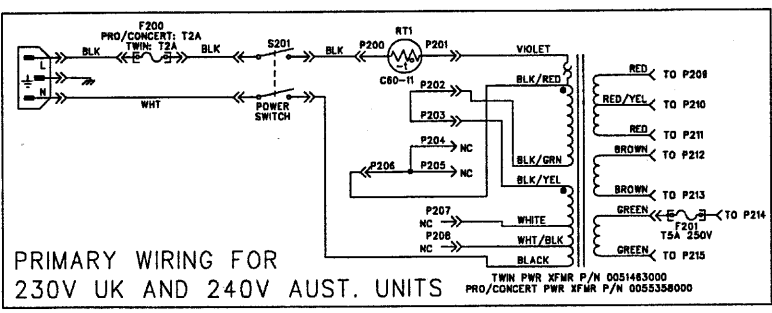
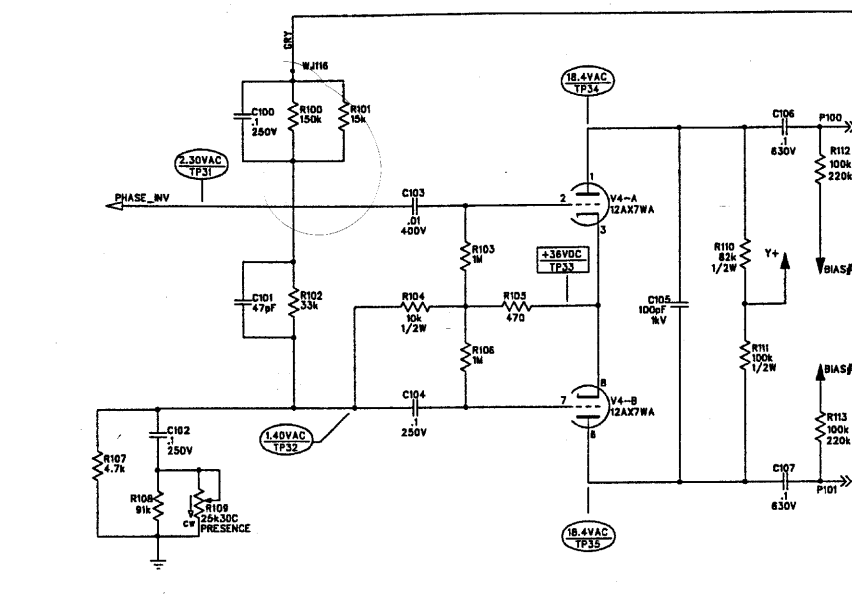
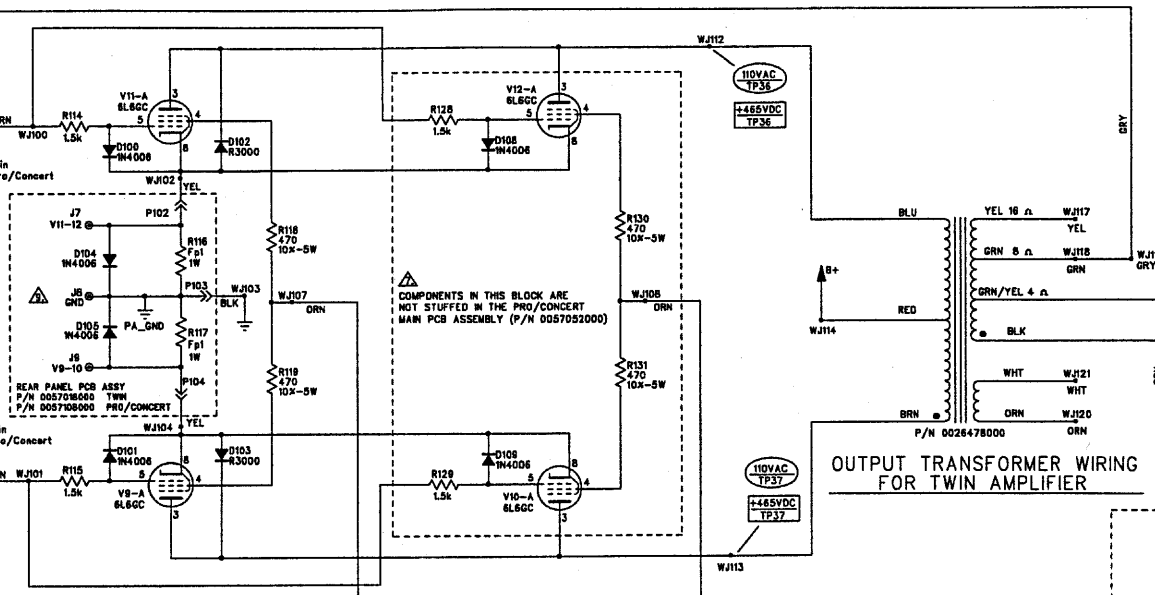
RELEASE DATE: 16-OCT-00
SHEET: 1 OF 4

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR448	16-OCT-00	S.M.B.
B	EC 2606	23-FEB-01	S.M.B.



OUTPUT TEST
 TWIN:
 0.85 VAC, 100 Hz SINE AT PWR AMP IN (J6)
 4 OHM LOAD. PRESENCE CONTROL AT "1"
 FULL POWER: 23.5W AT 5% THD
 1/4 POWER: 12.5W AT 5% THD
 PRO/CONCERT:
 0.85 VAC, 100 Hz SINE AT PWR AMP IN (J6)
 8 OHM LOAD. PRESENCE CONTROL AT "1"
 FULL POWER: 50W AT 3.5% THD
 1/4 POWER: 12.5W AT 5% THD

OUTPUT TRANSFORMER WIRING FOR TWIN AMPLIFIER



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Fender MUSICAL INSTRUMENTS
 Corona, CA USA

CHECKED BY: _____ DATE: _____
 APPROVED BY: _____ DATE: _____
 DRAWN: S.Bankhead ENGR: M. COZZA

TITLE: SERVICE DIAGRAM, COMBINED (schematic)
 PRO-TUBE AMPS
 POWER AMP

SIZE: D DRAWING NUMBER: 0057014000 REV: B
 RELEASE DATE: 16-OCT-00 SHEET: 2 OF 4