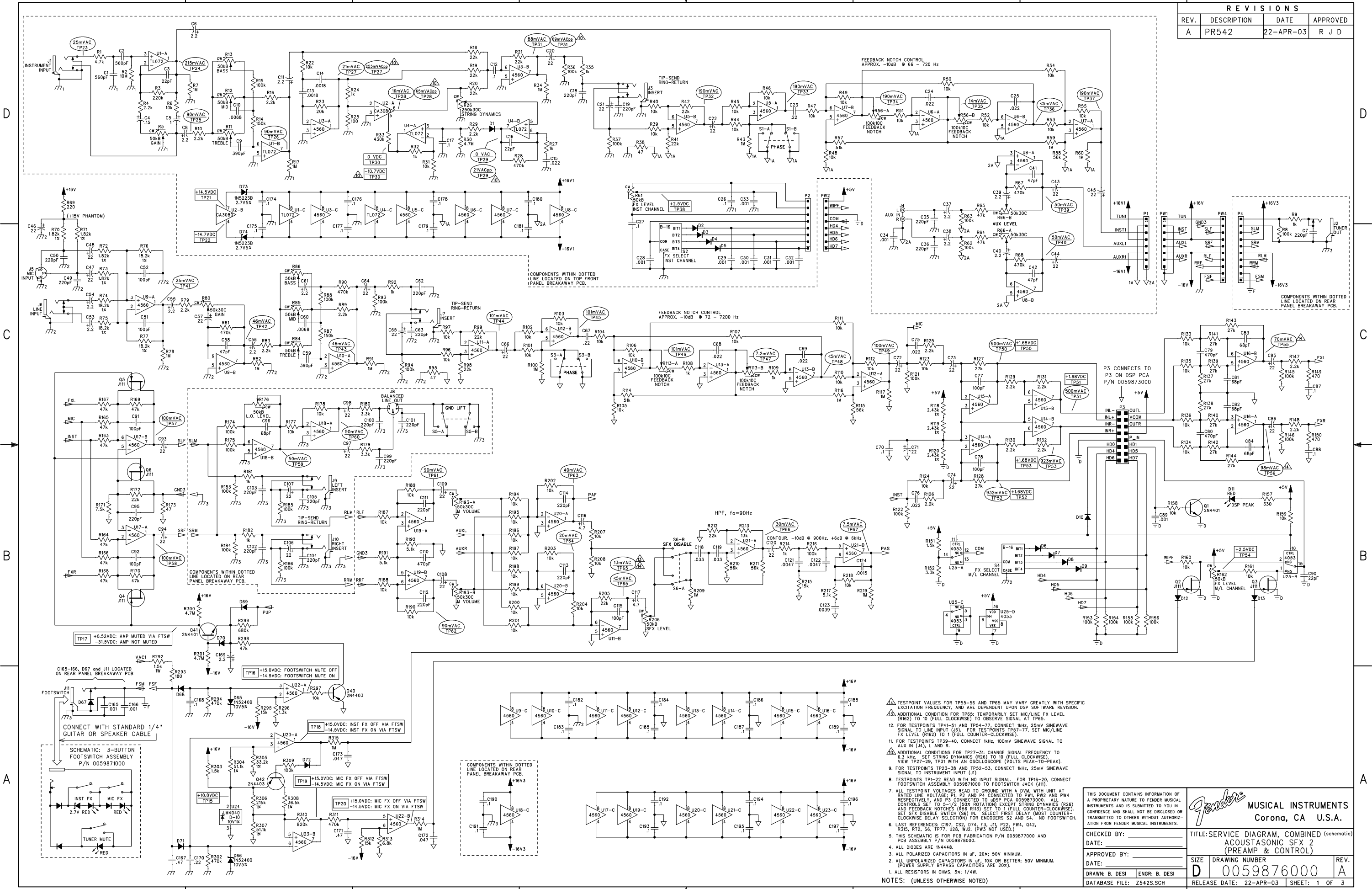


REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR542	22-APR-03	R J D



- TESTPOINT VALUES FOR TP55-56 AND TP65 MAY VARY GREATLY WITH SPECIFIC EXCITATION FREQUENCY, AND ARE DEPENDENT UPON DSP SOFTWARE REVISION.
- ADDITIONAL CONDITION FOR TP65: TEMPORARILY SET MIC/LINE FX LEVEL (PWR2) TO FULL (CLOCKWISE) TO OBSERVE SIGNAL AT TP65.
12. FOR TESTPOINTS TP41-51 AND TP54-77, CONNECT 1kHz, 25mV SINEWAVE SIGNAL TO LINE INPUT (J6). FOR TESTPOINTS TP57-77, SET MIC/LINE FX LEVEL (PWR2) TO 1 (FULL COUNTER-CLOCKWISE).
13. FOR TESTPOINTS TP39-40, CONNECT 1kHz, 100mV SINEWAVE SIGNAL TO AUX IN (J4), L AND R.
14. ADDITIONAL CONDITIONS FOR TP27-35: CHANGE SIGNAL FREQUENCY TO 6.3 kHz. SET STRING DYNAMICS (R26) TO 10 (FULL CLOCKWISE) VIEW TP27-29, TP31 WITH AN OSCILLOSCOPE (VOLTS PEAK-TO-PEAK).
9. FOR TESTPOINTS TP23-38 AND TP52-53, CONNECT 1kHz, 25mV SINEWAVE SIGNAL TO INSTRUMENT INPUT (J1).
8. TESTPOINTS TP1-22 READ WITH NO INPUT SIGNAL. FOR TP16-20, CONNECT FOOTSWITCH ASSEMBLY 0059871000 TO FOOTSWITCH JACK (J11).
7. ALL TESTPOINT VOLTAGES READ TO GROUND WITH A DVM, WITH UNIT AT RATED LINE VOLTAGE; P1, P2 AND P4 CONNECTED TO PWR, PWR2 AND PWR4 RESPECTIVELY, AND P3 CONNECTED TO DSP PCA 0059873000. ALL CONTROLS SET TO 5-1/2 (50% ROTATION) EXCEPT STRING DYNAMICS (R26) AND FEEDBACK NOTCHES (R56, R13) SET TO 1 (FULL COUNTER-CLOCKWISE). SET SFX DISABLE SWITCH (S6) IN "SELECT FIRST DELAY (MOST COUNTER-CLOCKWISE DELAY SELECTION) FOR ENCODERS S2 AND S4. NO FOOTSWITCH.
6. LAST REFERENCES: C197, CS2, D74, F3, J11, P22, PWR4, Q42, R315, RT2, S6, TP77, U26, WJ2, WJ3 (PWS NOT USED).
5. THIS SCHEMATIC IS FOR PCB FABRICATION P/N 0059877000 AND PCB ASSEMBLY P/N 0059878000.
4. ALL DIODES ARE 1N4448.
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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**Fender** MUSICAL INSTRUMENTS  
Corona, CA U.S.A.

CHECKED BY: \_\_\_\_\_ TITLE: SERVICE DIAGRAM, COMBINED (schematic) ACUSTASONIC SFX 2 (PREAMP & CONTROL)

DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DRAWN: B. DESI ENGR: B. DESI

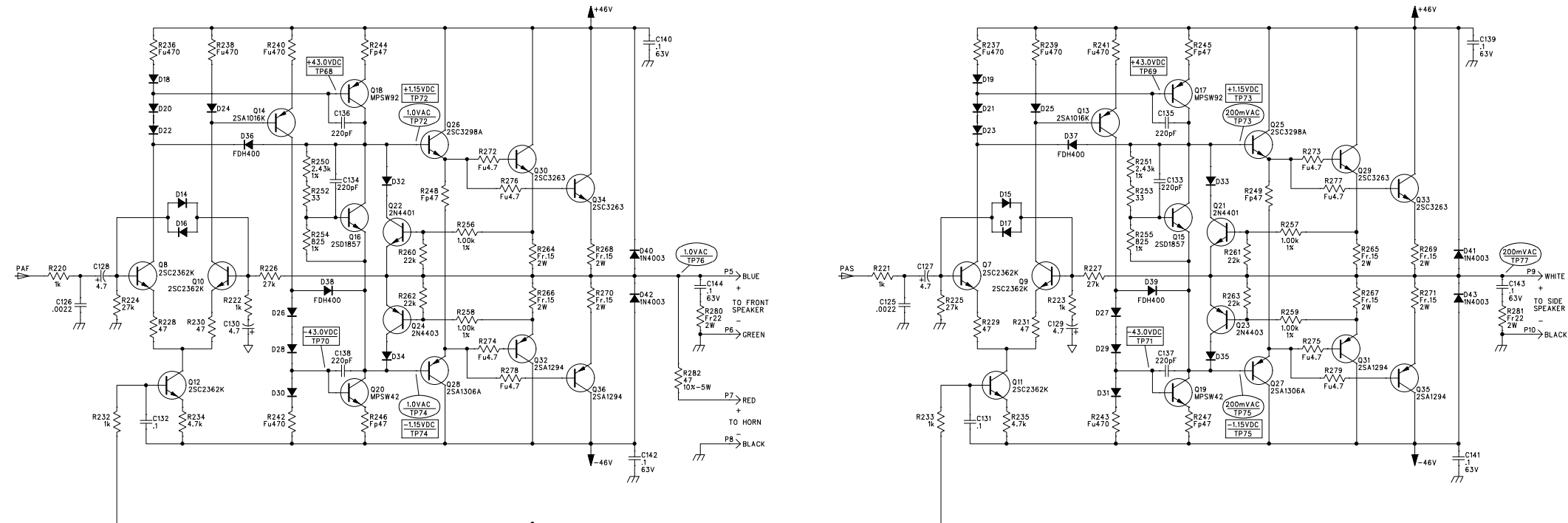
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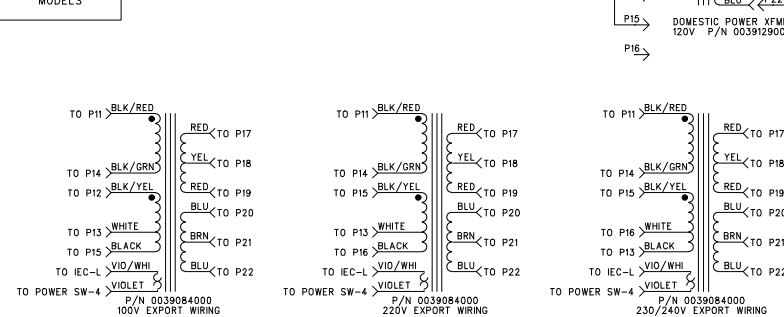
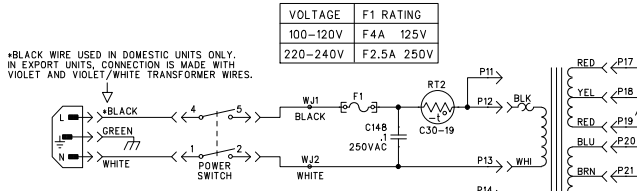
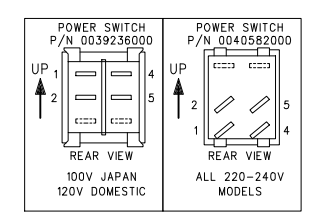
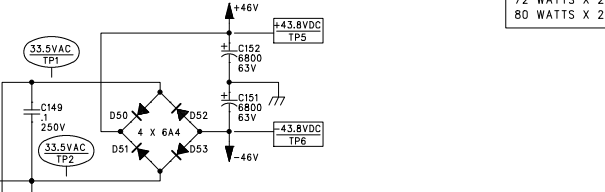
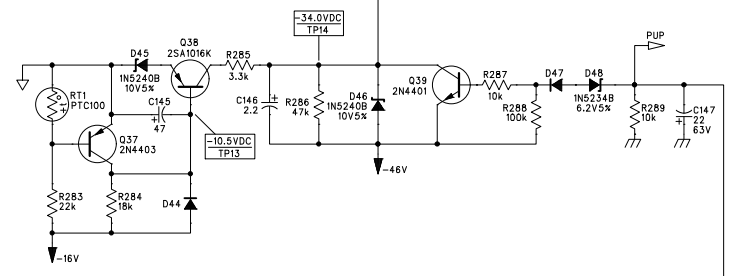
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RELEASE DATE: 22-APR-03 SHEET: 1 OF 3

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR542	22-APR-03	R J D



**OUTPUT POWER TEST:**  
 UNIT AT RATED LINE VOLTAGE.  
 8 OHM RESISTIVE LOADS CONNECTED TO P5/P6 AND P9/P10.  
 ALL CONTROLS FULLY COUNTER-CLOCKWISE EXCEPT MASTER VOLUME (R193) SET FULLY CLOCKWISE.  
 SFX DISABLE SWITCH (S6) OUT.  
 CONNECT 1kHz SINEWAVE TO RING OF LEFT INSERT JACK (J9). (INSERT PLUG FULLY, THEN BACK OUT ONE CLICK.)  
 ADJUST SIGNAL LEVEL TO VERIFY THE FOLLOWING AT P5/P6:  
 76 WATTS AT 0.1% T.H.D.  
 84 WATTS AT 1.0% T.H.D.  
 93 WATTS AT 5.0% T.H.D.  
 SFX DISABLE SWITCH (S6) IN.  
 ADJUST SIGNAL FREQUENCY FOR EQUAL POWER AT BOTH LOADS (APPROX. 4.2kHz).  
 ADJUST LEVEL TO VERIFY THE FOLLOWING AT P5/P6 AND P9/P10:  
 62 WATTS X 2 = 124 WATTS AT 0.1% T.H.D.  
 72 WATTS X 2 = 144 WATTS AT 1.0% T.H.D.  
 80 WATTS X 2 = 160 WATTS AT 5.0% T.H.D.



- 11. FOR TESTPOINTS TP39-40, CONNECT 1kHz, 100mV SINEWAVE SIGNAL TO AUX IN (J4), L AND R.
- 12. FOR TESTPOINTS TP41-51 AND TP44-77, CONNECT 1kHz, 25mV SINEWAVE SIGNAL TO LINE INPUT (J6). FOR TESTPOINTS TP57-77, SET MIC/LINE FX LEVEL (R62) TO 1 (FULL COUNTER-CLOCKWISE).
- 13. FOR TESTPOINTS TP23-38 AND TP52-53, CONNECT 1kHz, 25mV SINEWAVE SIGNAL TO INSTRUMENT INPUT (J1).
- 14. FOR TESTPOINTS TP1-22 READ WITH NO INPUT SIGNAL. FOR TP16-20, CONNECT FOOTSWITCH ASSEMBLY 0059871000 TO FOOTSWITCH JACK (J11).
- 15. ALL TESTPOINT VOLTAGES READ TO GROUND WITH A 50MΩ WITH UNIT AT RATED LINE VOLTAGE; P1, P2 AND P4 CONNECTED TO P11, P12 AND P14 RESPECTIVELY; AND P3 CONNECTED TO JDSP PCA 0059873000.
- 16. SET SFX DISABLE SWITCH (S6) IN. SELECT FIRST DELAY (MOST COUNTER-CLOCKWISE DELAY SELECTION) FOR ENCODERS S2 AND S4. NO FOOTSWITCH.
- 17. LAST REFERENCES: C197, CS2, D74, F3, J11, P22, P14, Q42, R315, RT2, S6, TP77, U28, WJ2. (WJ3 NOT USED).
- 18. THIS SCHEMATIC IS FOR PCB FABRICATION P/N 0059871000 AND PCB ASSEMBLY P/N 0059878000.
- 19. ALL POLARIZED CAPACITORS IN μF, 20% OR BETTER; 50V MINIMUM. (POWER SUPPLY BYPASS CAPACITORS ARE 20%).
- 20. ALL DIODES ARE IN4448.
- 21. ALL RESTORERS IN OHMS, 5%; 1/4W.

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

CHECKED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

DRAWN: B. DESI ENGR: B. DESI  
 DATABASE FILE: Z9425.SCH

TITLE: SERVICE DIAGRAM, COMBINED (schematic)  
 ACOUSTASONIC SFX 2  
 (POWER AMP & POWER SUPPLY)

SIZE: DRAWING NUMBER  
**D** 0059876000

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RELEASE DATE: 22-APR-03 SHEET: 2 OF 3

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR542	22-APR-03	R J D

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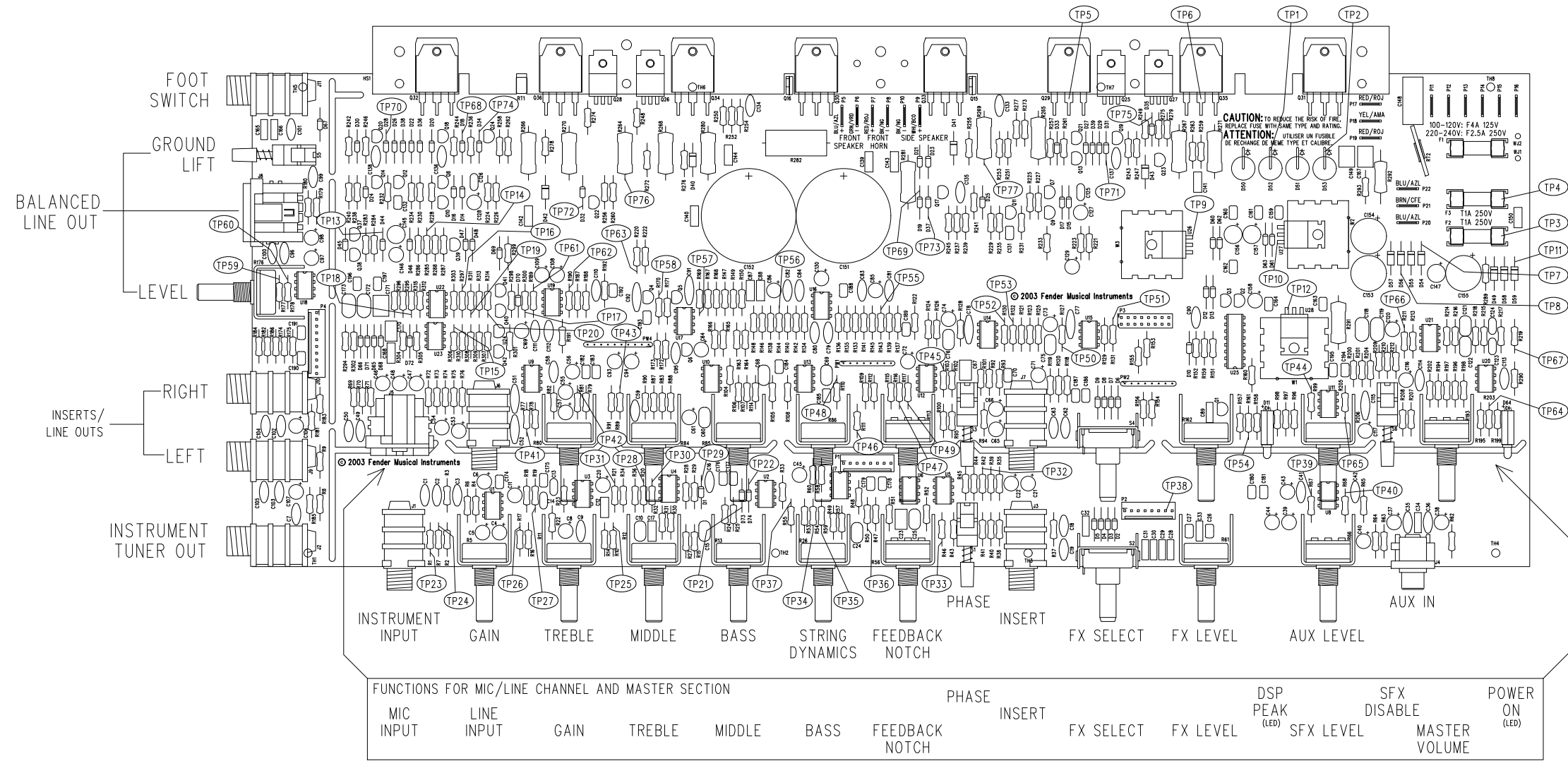
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2. DSP PCB ASSEMBLY P/N 0059873000 MUST BE CONNECTED TO P3 FOR SIGNAL TO APPEAR AT TP55 AND TP56.  
 1. SEE SHEETS 1 AND 2 FOR PRIMARY WIRING, TEST CONDITIONS AND TP VALUES.  
 NOTES: (UNLESS OTHERWISE NOTED)

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CHECKED BY: _____ DATE: _____ APPROVED BY: _____ DATE: _____ DRAWN: B. DESI    ENGR: B. DESI DATABASE FILE: Z542P.PCB		TITLE: SERVICE DIAGRAM, COMBINED (PCB assy) ACOUSTASONIC SFX 2 MAIN SIZE: <b>D</b> DRAWING NUMBER: <b>0059876000</b> REV. <b>A</b> RELEASE DATE: 22-APR-03    SHEET 3 OF 3	

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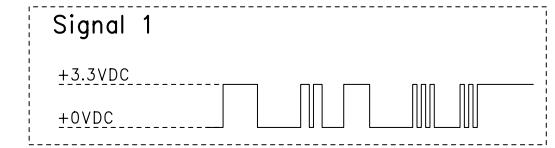
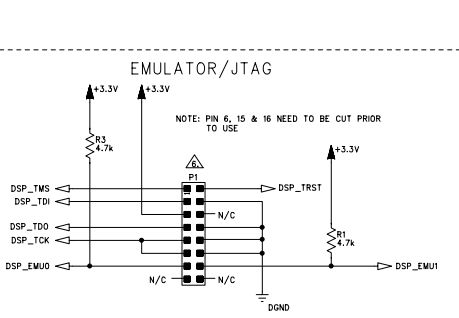
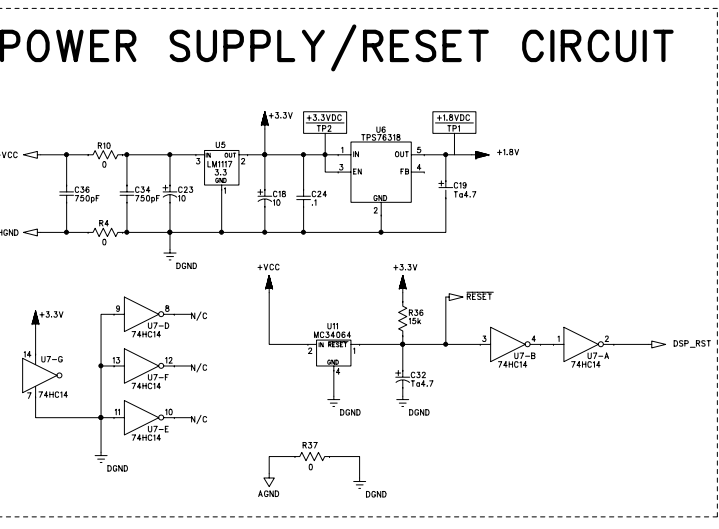
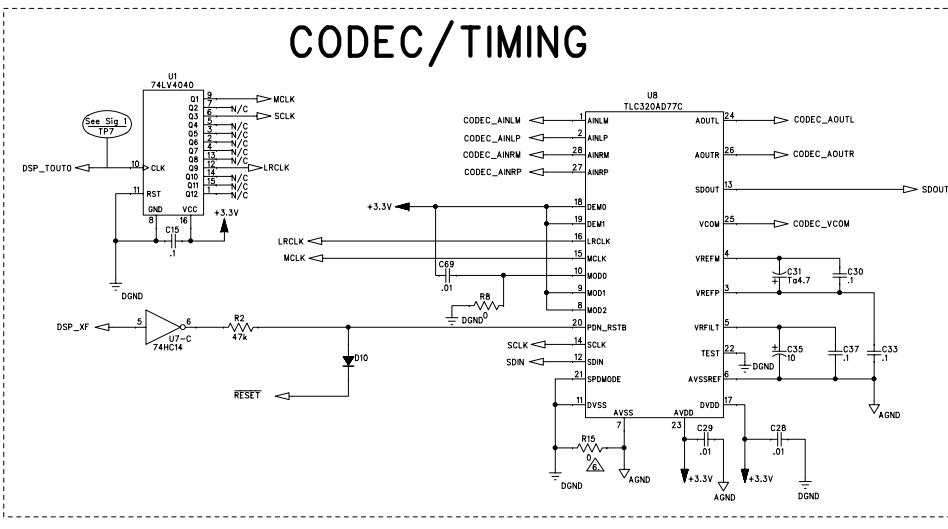
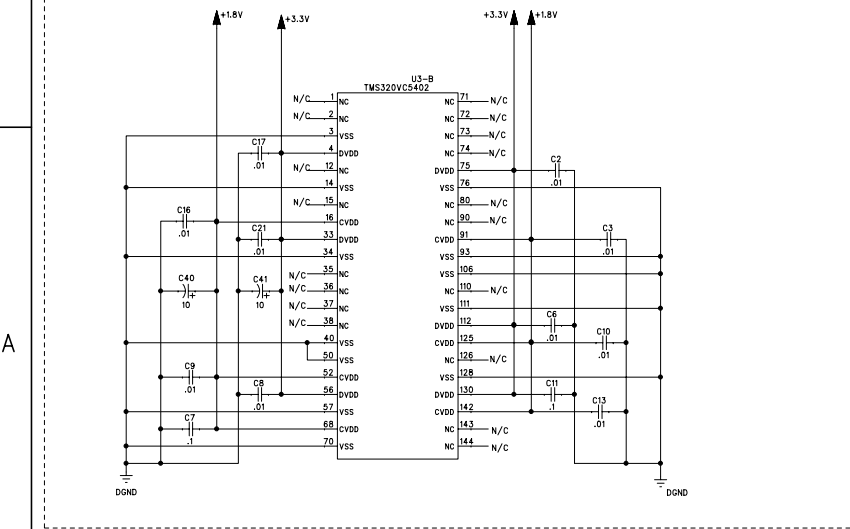
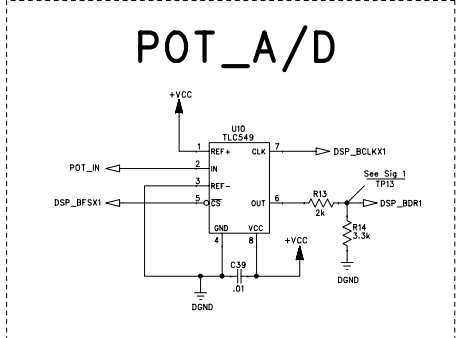
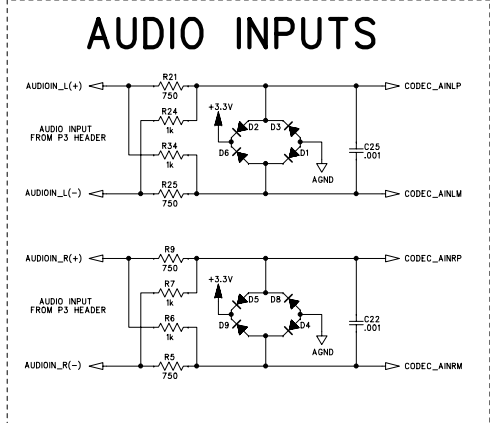
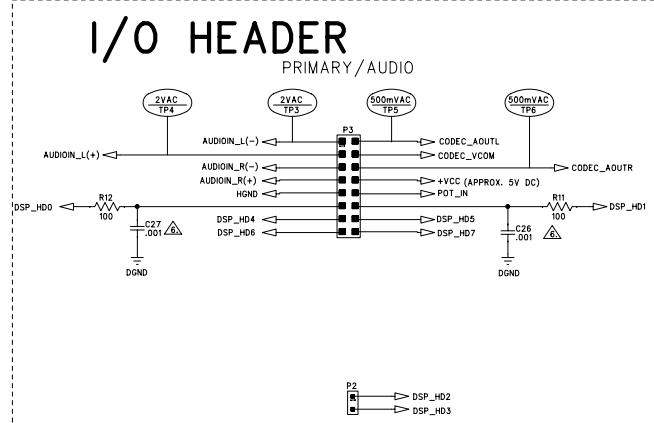
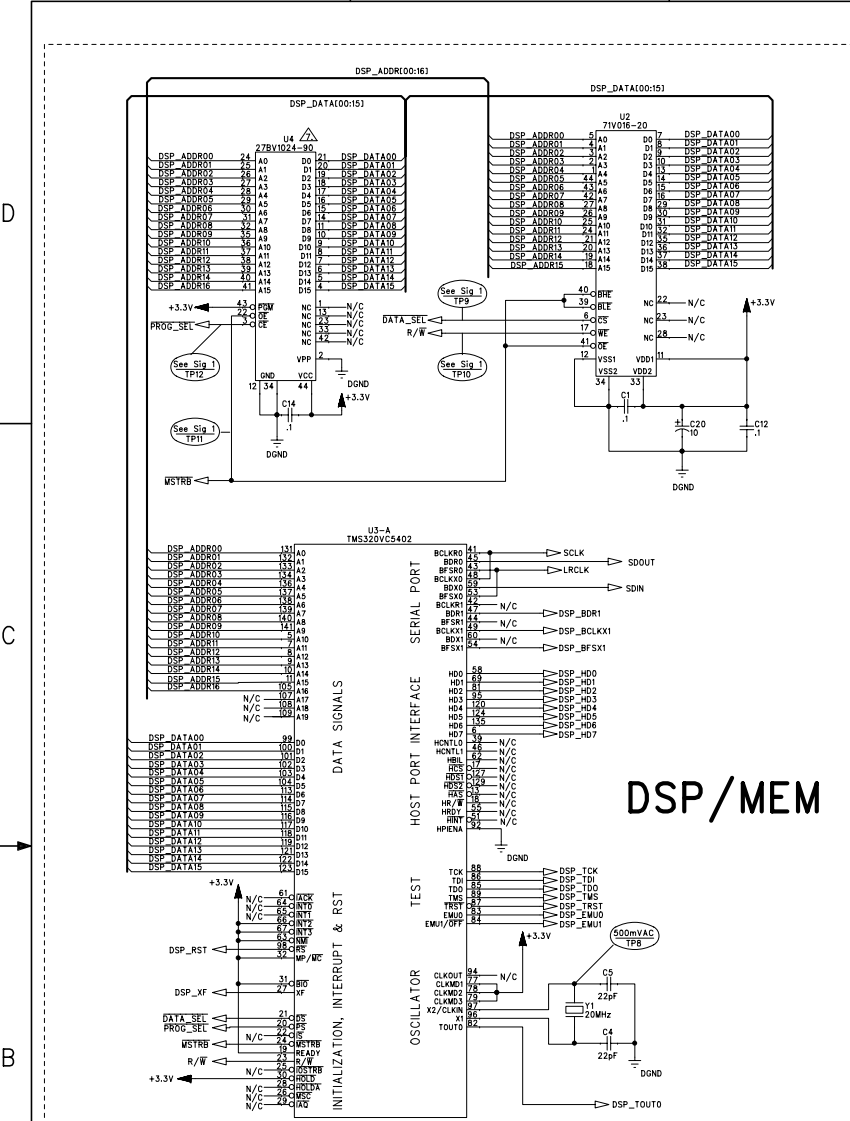
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR480	29-NOV-01	J T L
B	EC 2743	07-MAR-02	J T L
C	EC 2789	10-JUN-02	J C S
D	PR542	25-APR-03	R J D



- NOTES: (UNLESS OTHERWISE NOTED)
- INSTALL IC IN SOCKET. FENDER P/N 0056585005
  - DO NOT STUFF C26-27, P1, R15.
  - THIS SCHEMATIC IS FOR PCB FABRICATION P/N 0057284000 AND PCB ASSEMBLY P/N 0057285000.
  - ALL DIODES ARE 1N4448.
  - ALL UNPOLARIZED CAPACITORS IN uF, 20% OR BETTER; 16V MINIMUM. (POWER SUPPLY BYPASS CAPACITORS ARE 20%).
  - ALL RESISTORS IN OHMS, 5% 1/10W.

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

CHECKED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

DRAWN: J. Jimenez ENGR: J. Lamb  
DATABASE FILE: Z4815.SCH

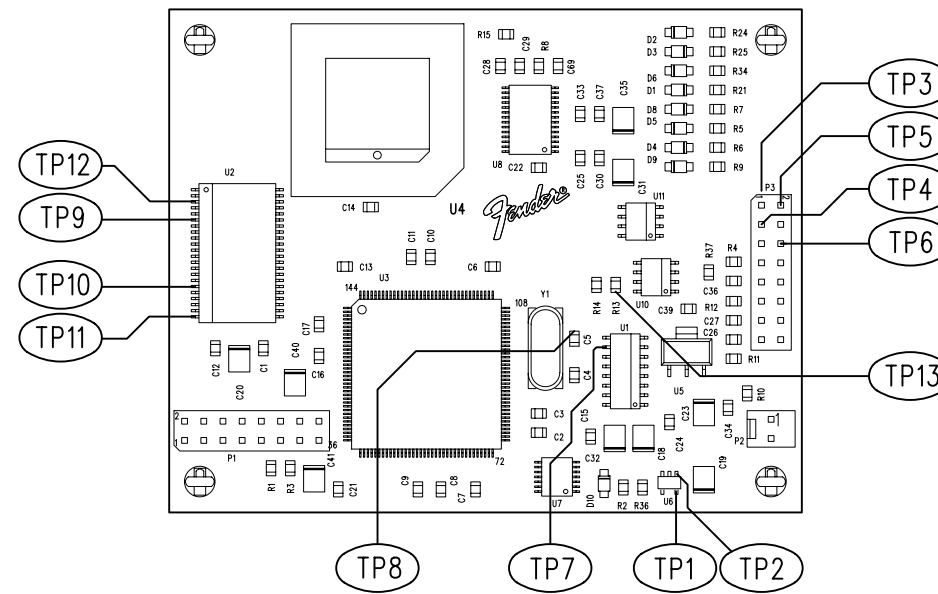
TITLE: SERVICE DIAGRAM, COMBINED (schematic) MICRO DSP

SIZE: **D** DRAWING NUMBER: **0057283000** REV. **D**

RELEASE DATE: 29-NOV-01 SHEET: 1 OF 2

REVISIONS


REV.	DESCRIPTION	DATE	APPROVED
A	PR480	30-NOV-01	J T L
B	EC 2743	07-MAR-02	J T L
C	EC 2789	10-JUN-02	J C S
D	PR542	25-APR-03	R J D



FILM/DWG: SERVICE DIAGRAM  
 DATABASE: Z481P.PCB DATE: 25-APR-03

1. SEE SHEET 1 FOR TEST CONDITIONS AND TEST POINT VALUES.

NOTES: (UNLESS OTHERWISE NOTED)

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CHECKED BY: _____ DATE: _____		TITLE: SERVICE DIAGRAM, COMBINED (PCB assy) uDSP SERIES	
APPROVED BY: _____ DATE: _____		SIZE <b>B</b>	DRAWING NUMBER 0057283000
DRAWN: J. Jimenez	ENGR: J. Lamb	REV. D	
DATABASE FILE: Z481P.PCB		RELEASE DATE: 30-NOV-01	SHEET 2 OF 2