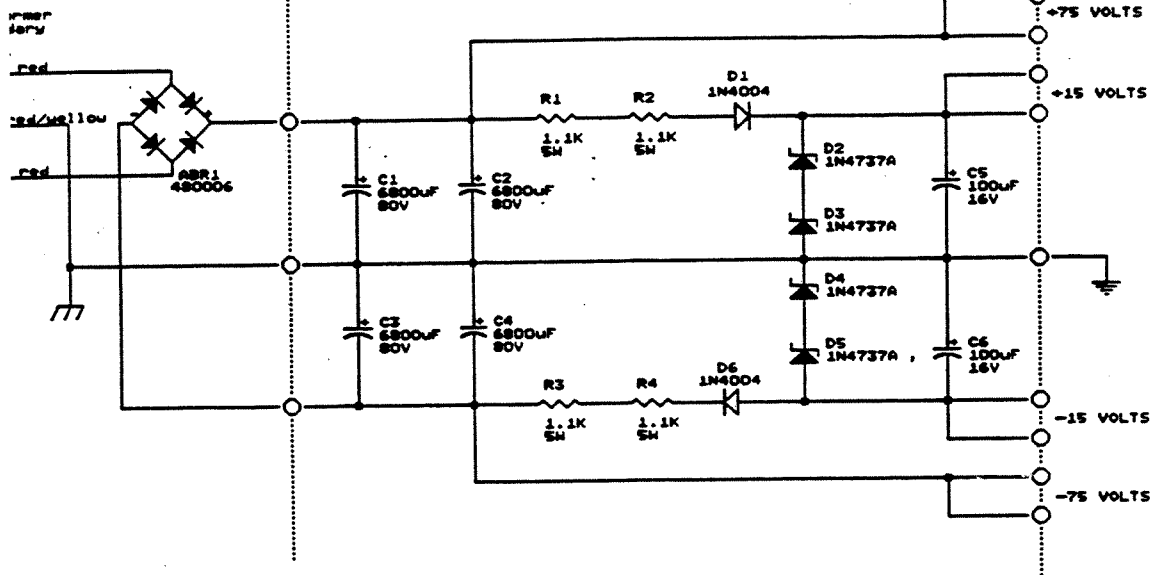


SHR SOUND CORPORATION
 9130 Glenoaks Blvd.
 Sun Valley, CA 91352
 Phone: (818)253-4797 FAX: (818)253-4799
<http://www.shrsound.com>
 Title

SH-900 "A" PREAMP

Size Document Number 700022-1 REV 8

Date July 16, 1999 Sheet 1 of 1

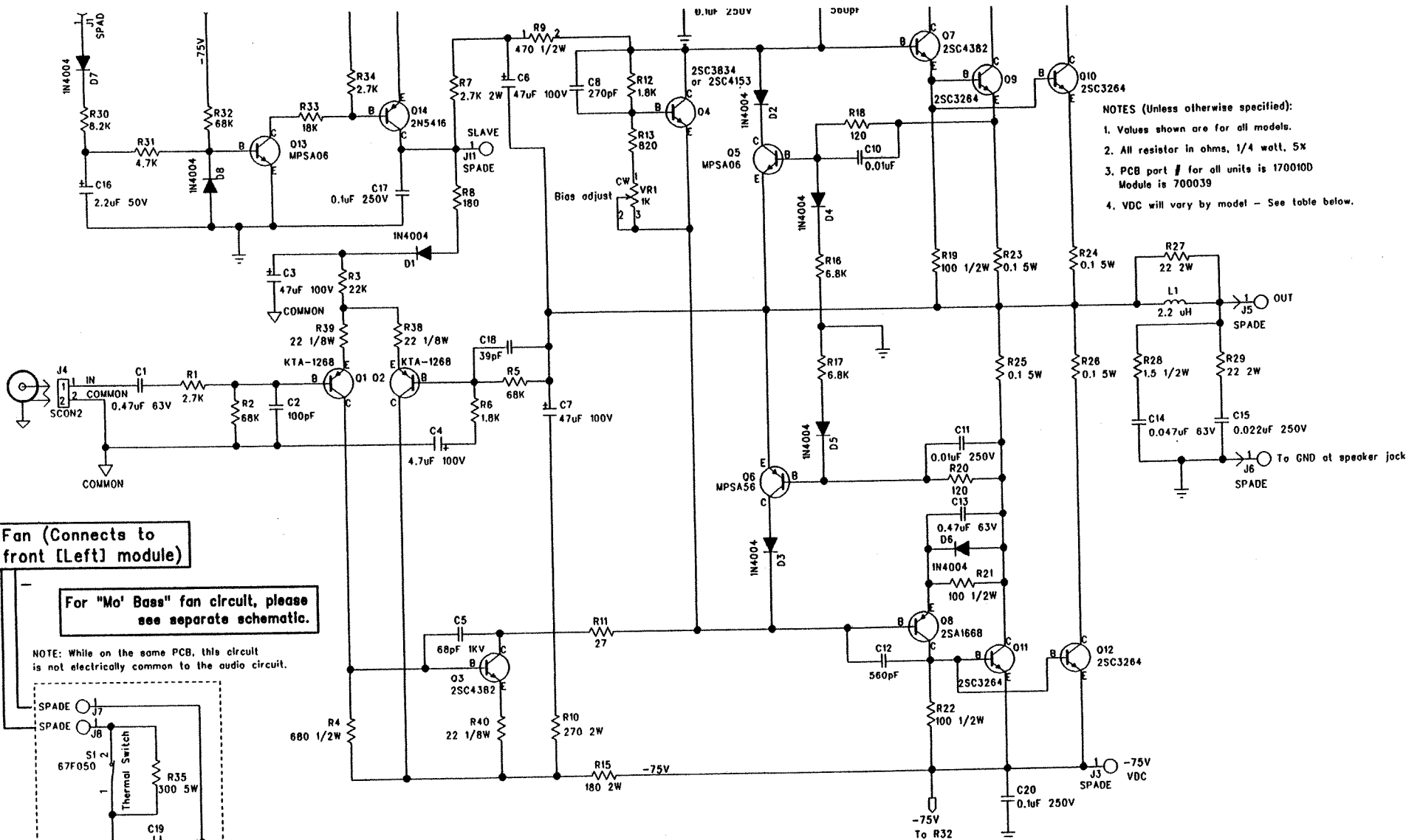


SMR SOUND CORPORATION
 9130 Glenoaks Blvd.
 Sun Valley, CA 91352
 PHONE: (818) 253-4797 FAX: (818) 253-4799
<http://www.sureng.com>

Title
 Power Supply Filter Board - SM-900

Size Document Number
 A 700024 REV
 A

Date: JULY 1, 1999 Sheet 1 of 1



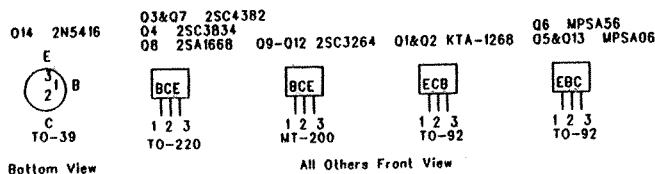
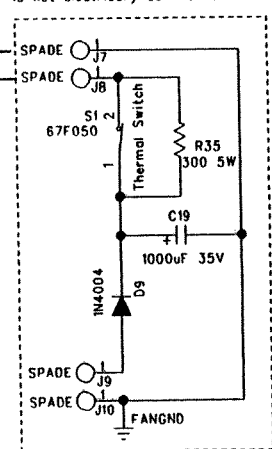
NOTES (Unless otherwise specified):

1. Values shown are for all models.
2. All resistor in ohms, 1/4 watt, 5%
3. PCB part # for all units is 1700100 Module is 700039
4. VDC will vary by model - See table below.

Fan (Connects to front [Left] module)

For "Mo' Bass" fan circuit, please see separate schematic.

NOTE: While on the same PCB, this circuit is not electrically common to the audio circuit.



VDC Table

Model	+ VDC	- VDC
SW-900	78	78
Mo' Bass	78	78
SW-500	59	59
Bass 350/350v	77	77
Super Redhead	77	77
Silverado	77	77
Black Beauty	77	77
WM4004	79	79

SWR Sound Corp.

SWR2000 - Power Amp Module

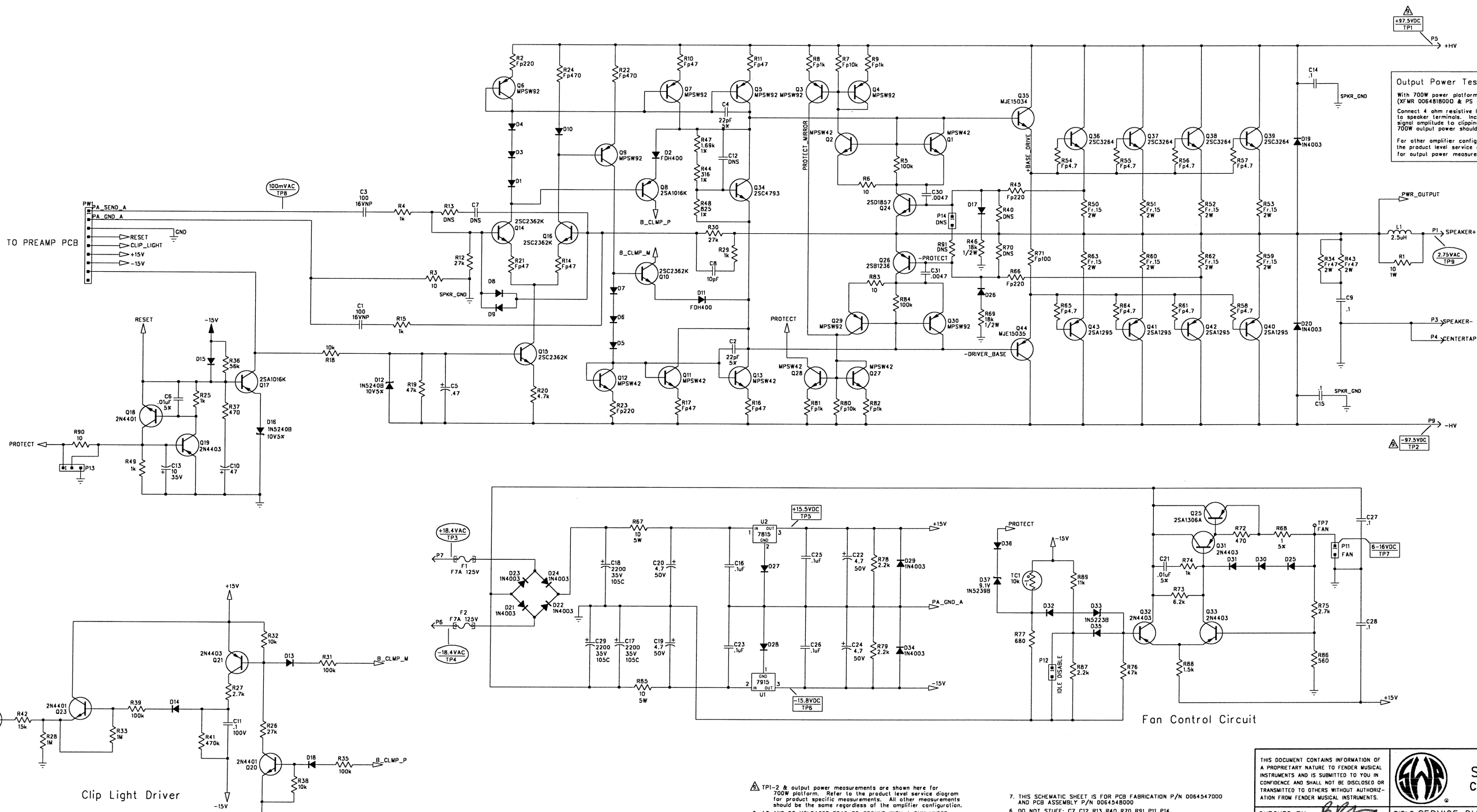
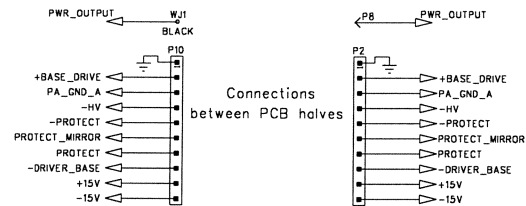
May 2000

Revision D

Page 1 of 1

Last updated: 22 Nov. 2002

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR632	30-JUL-04	B H
B	EC3147	30-SEP-04	S.M.B.
C	EC3174	07-JAN-05	S.M.B.
D	EC3213	14-APR-05	S.M.B.
E	EC3279	11-OCT-05	S.M.B.



Output Power Test:

With 700W power platform connected (KFRM 0064818000 & PS assy 0068893000):
Connect 4 ohm resistive load to speaker terminals. Increase input signal amplitude to clipping @ 1THD. 700W output power should be observed.
For other amplifier configurations, refer to the product level service diagram and test plan for output power measurements.


Fan Control Circuit

TP1-2 & output power measurements are shown here for 700W platform. Refer to the product level service diagram for product specific measurements. All other measurements should be the same regardless of the amplifier configuration.

8. AC AND DC VOLTAGES READ TO GROUND WITH A DVM UNDER THE FOLLOWING CONDITIONS (VOLTAGES MAY VARY +/-20%):

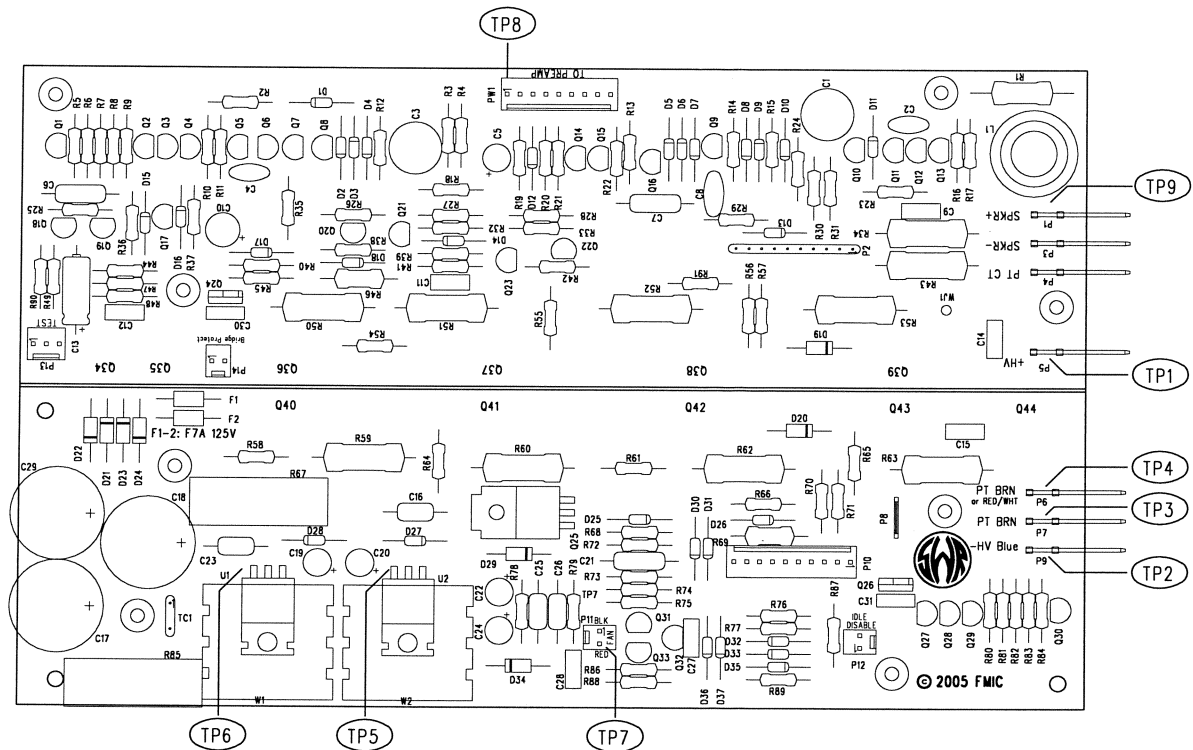
- POWER SUPPLY CONNECTED AS APPROPRIATE FOR THE INTENDED PRODUCT USAGE. (SEE NOTE #9)
- DC SUPPLY TO BE OPERATING AT RATED LINE VOLTAGE
- TEST POINTS TP1-6 MEASURED WITH NO INPUT SIGNAL
- TEST POINT 7 VARIES WITHIN THE SPECIFIED RANGE DEPENDING ON THE TEMPERATURE OF THE HEATSINK
- TEST POINTS TP8-9 MEASURED WITH 100W, 1kHz SINEWAVE AT PW1 PIN 1, SIGNAL GND AT PIN 2
- 4 OHM RESISTIVE LOAD BETWEEN P1-P3

7. THIS SCHEMATIC SHEET IS FOR PCB FABRICATION P/N 0064547000 AND PCB ASSEMBLY P/N 0064548000
6. DO NOT STUFF: C7 C12 R13 R40 R70 R91 P11 P14
5. FOR SWR500 MODULE, DELETE Q39 & Q43
4. ALL DIODES IN444B.
3. ALL POLARIZED CAPACITORS IN uF, 20K; 50V MINIMUM.
2. ALL UNPOLARIZED CAPACITORS IN uF, 10X OR BETTER; 50V MINIMUM. (POWER SUPPLY BYPASS CAPACITORS ARE 20X).
1. ALL RESISTORS IN OHMS, 5K; 1/4W.
- NOTES: (UNLESS OTHERWISE NOTED)

THIS DOCUMENT CONTAINS INFORMATION OF A PROPRIETARY NATURE TO FENDER MUSICAL INSTRUMENTS AND IS SUBMITTED TO YOU IN CONFIDENCE AND SHALL NOT BE DISCLOSED OR TRANSMITTED TO OTHERS WITHOUT AUTHORIZATION FROM FENDER MUSICAL INSTRUMENTS.		 SWR Corona, CA U.S.A.	
CHECKED BY: <i>B.H.</i> DATE: <i>11-01-05</i>		TITLE: SERVICE DIAGRAM, COMBINED (schematic) SWR 500/1000 POWER AMP	
APPROVED BY: <i>S. Hughes</i> DATE: <i>11-01-05</i>		SIZE: D DRAWING NUMBER: 0064549000	
DRAWN: W. HUGHES ENGR: W. HUGHES DATABASE FILE: s632s5.sch		RELEASE DATE: 29-JUL-04 SHEET: 1 OF 2	


8 7 6 5 4 3 2 1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PR632	30-JUL-04	S.M.B.
B	EC3147	30-SEP-04	S.M.B.
C	EC3174	07-JAN-05	S.M.B.
D	EC3213	14-APR-05	S.M.B.
E	EC3279	11-OCT-05	S.M.B.



FILM/DWG: SERVICE DIAGRAM
DATABASE: z632p5.PCB DATE: 14-APR-05

1. SEE SHEET 1 FOR TEST CONDITIONS & TEST POINT VALUES
NOTES: (UNLESS OTHERWISE NOTED)

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CHECKED BY: <i>[Signature]</i> DATE: 11-06-05		TITLE: SERVICE DIAGRAM, COMBINED (PCB assy) SWR 500/1000 POWER AMP	
APPROVED BY: <i>[Signature]</i> DATE: 11-06-05		SIZE C	DRAWING NUMBER 0064549000
DRAWN: R.MURRAY ENGR: B.HUGHES DATABASE FILE: z632p5.PCB		RELEASE DATE: 30-JUL-04	REV. E
		SHEET 2 OF 2	

8 7 6 5 4 3 2 1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	EC3184	10-JUN-05	G A R

D

C

B

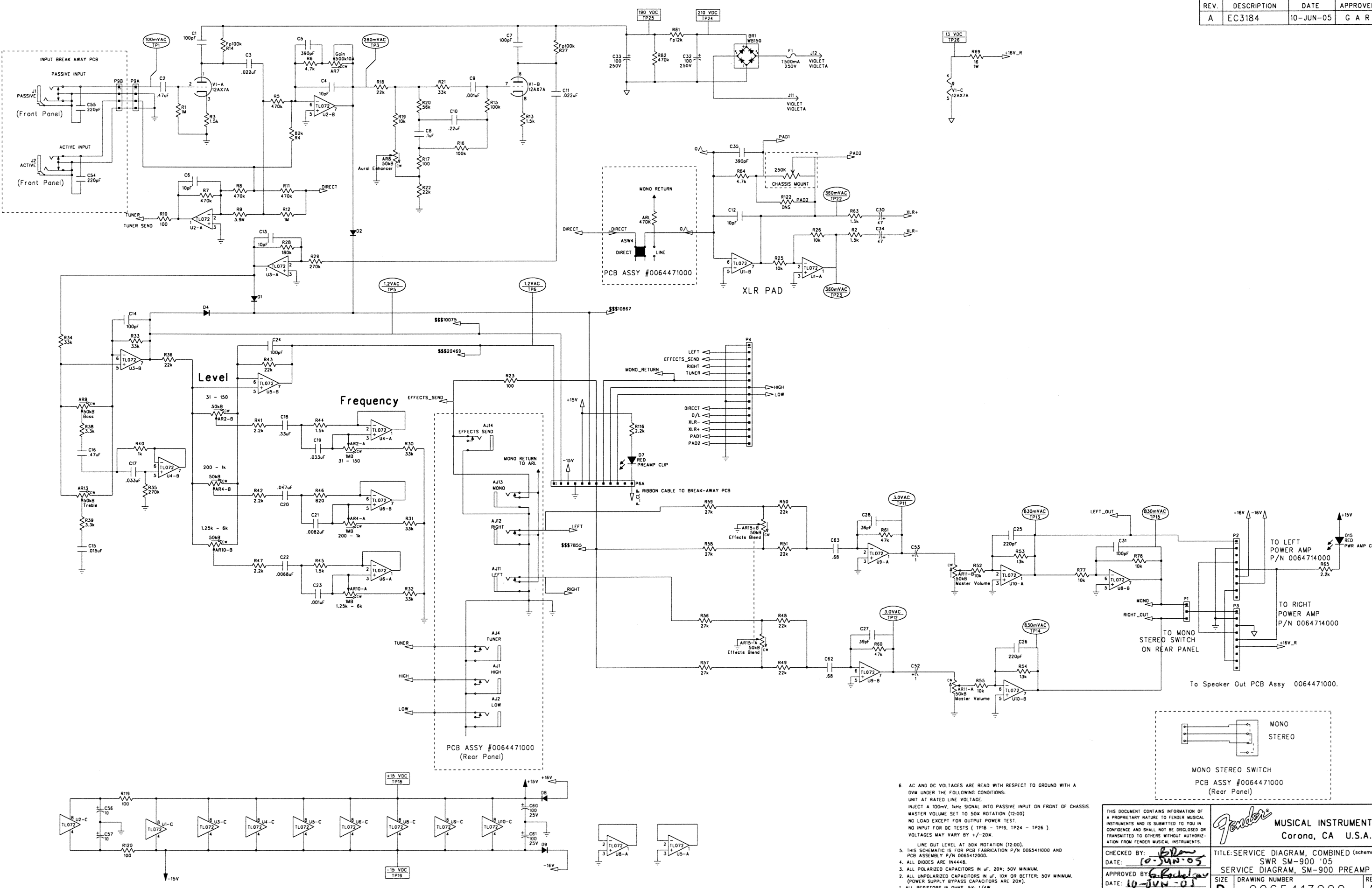
A

D

C

B

A



6. AC AND DC VOLTAGES ARE READ WITH RESPECT TO GROUND WITH A DVM UNDER THE FOLLOWING CONDITIONS:
UNIT AT RATED LINE VOLTAGE.
INJECT A 100mV, 1kHz SIGNAL INTO PASSIVE INPUT ON FRONT OF CHASSIS.
MASTER VOLUME SET TO 50% ROTATION (12:00)
NO LOAD EXCEPT FOR OUTPUT POWER TEST.
NO INPUT FOR DC TESTS (TP18 - TP19, TP24 - TP26).
VOLTAGES MAY VARY BY +/-20%.

LINE OUT LEVEL AT 50% ROTATION (12:00).
5. THIS SCHEMATIC IS FOR PCB FABRICATION P/N 006541000 AND PCB ASSEMBLY P/N 0065412000.
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, SK, 1/4W.

NOTES: (UNLESS OTHERWISE NOTED)

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CHECKED BY: *[Signature]*
DATE: *10-10-05*

APPROVED BY: *[Signature]*
DATE: *10-10-05*

DRAWN: G Rocheleau ENGR: G Rocheleau
DATABASE FILE: Z63051.SCH

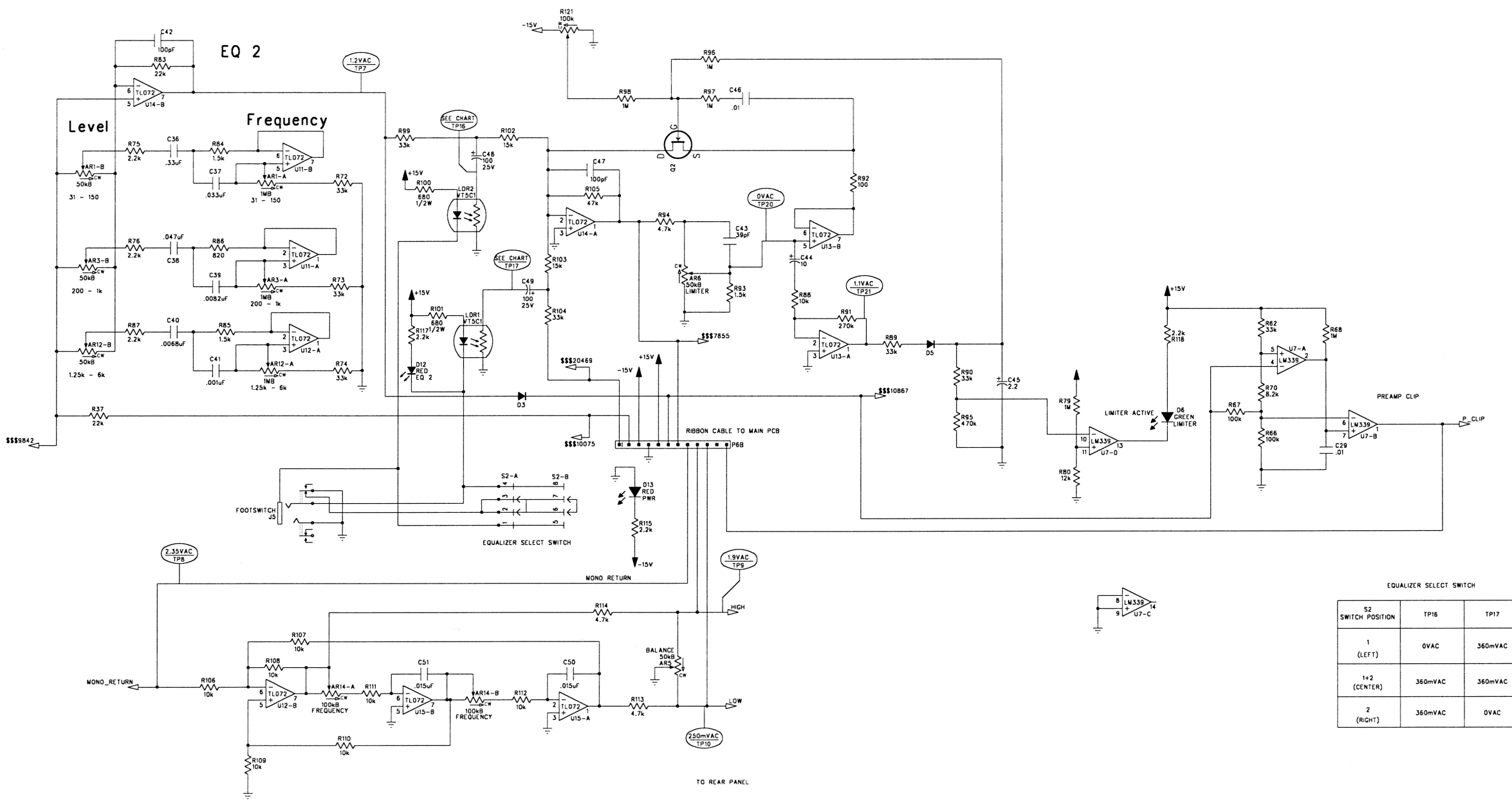
Fender MUSICAL INSTRUMENTS
Corona, CA U.S.A.

TITLE: SERVICE DIAGRAM, COMBINED (schematic)
SWR SM-900 '05
SERVICE DIAGRAM, SM-900 PREAMP

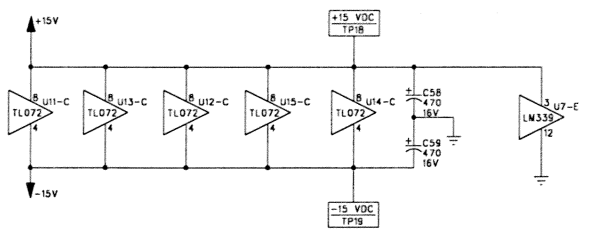
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RELEASE DATE: 27-MAY-05 SHEET: 1 OF 3

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	EC3184	10-JUN-05	G A R



EQUALIZER SELECT SWITCH		
SWITCH POSITION	TP16	TP17
1 (LEFT)	0VAC	360mVAC
1+2 (CENTER)	360mVAC	360mVAC
2 (RIGHT)	360mVAC	0VAC



- NOTES: (UNLESS OTHERWISE NOTED)
- THIS SCHEMATIC IS FOR PCB FABRICATION P/N 006541000 AND PCB ASSEMBLY P/N 0065412000.
 - ALL DIODES ARE 1N4448.
 - ALL POLARIZED CAPACITORS IN μ F, 20% 50V MINIMUM.
 - ALL UNPOLARIZED CAPACITORS IN μ F, 10% OR BETTER, 50V MINIMUM. (POWER SUPPLY BYPASS CAPACITORS ARE 20X).
 - ALL RESISTORS IN OHMS, 5% 1/4W.

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DATE: 10-20-05

APPROVED BY: *[Signature]*
DATE: 10-20-05

DRAWN: G Rocheleau ENGR: G Rocheleau
DATABASE FILE: 263051.SCH

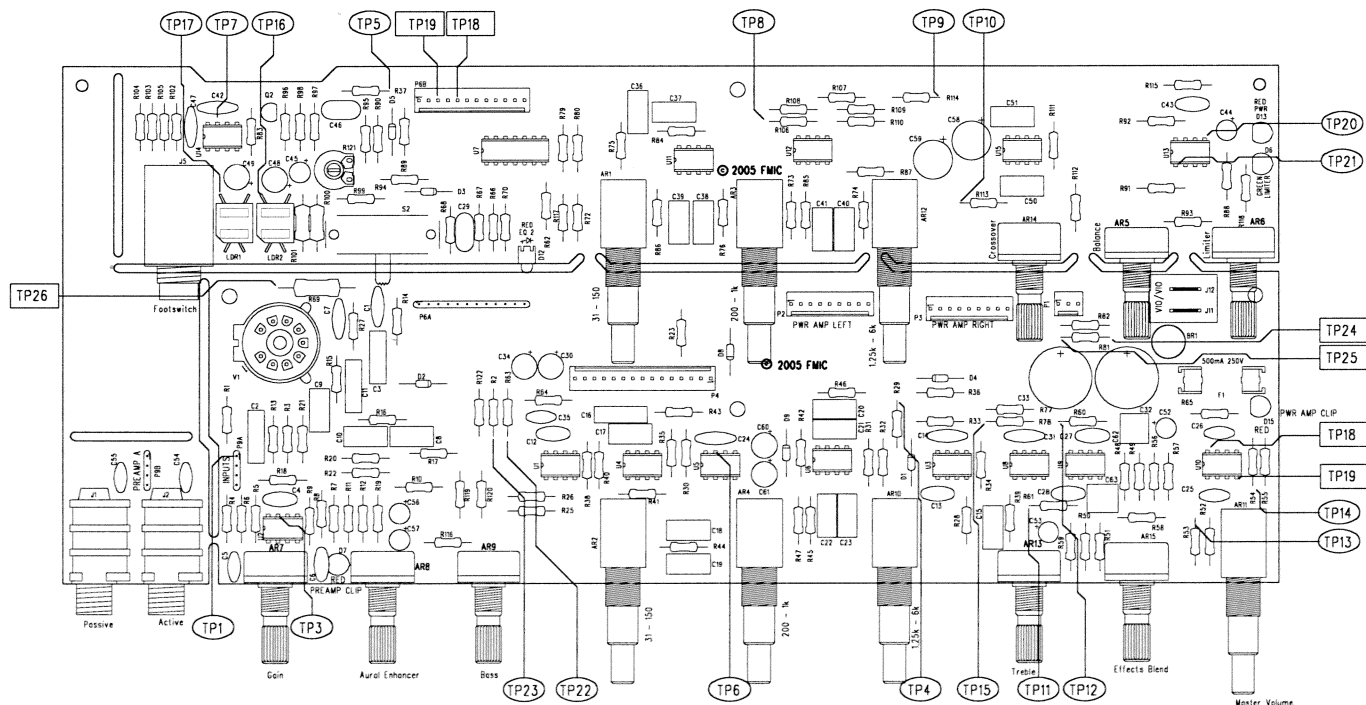
Fender MUSICAL INSTRUMENTS
Corona, CA U.S.A.

TITLE: SERVICE DIAGRAM, COMBINED (schematic)
SWR SM-900 '05
SERVICE DIAGRAM, SM-900 PREAMP

SIZE: D
DRAWING NUMBER: 0065413000
REV. A

RELEASE DATE: 27-MAY-05
SHEET: 2 OF 3

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	EC 3184	27-May-05	G A R



FLW/DWC: SERVICE DIAGRAM
DATABASE: Z630P1PCB DATE: 18-MAY-05

Limiter test & adjustment

This amplifier has an adjustable limiter circuit that needs to be set before final sound testing of the unit. Use the following procedure to test and set the limiter circuit.



Test Conditions:

1. Amplifier running at rated line voltage. While operating the amp at full power, make sure there is not excessive voltage "sag" at the power outlet.
2. Limiter control at "MAX"
3. GAIN control and MASTER control fully clockwise to their maximum position.
4. All other controls should be set to center detent or 50% rotation.
5. Four Ohm load to each channel.
6. Begin with the limiter control (R121) in the clockwise position.
7. Monitor the amplifier output with an oscilloscope.

Test Procedure:

1. Apply a 1kHz, 100mV sine wave at the passive input. This will create a full power square-wave condition at the output.
2. Adjust R121 until there is no amplifier clipping observed on the oscilloscope.
3. Verify that the green Limiter Active LED is illuminated.
4. Turn the limiter control to "OFF", and verify that the Limiter Active LED turns off, and the PREAMP CLIP LED turns on.
5. Use caution and perform this test quickly, since the amplifier will be operating at full power & will heat up quickly.
6. The limiter adjustment, R121, on the SM-900 should be somewhere near 60% rotation.

3. PCB SHOWN AS FABRICATED BEFORE BREAKAWAYS ARE INSTALLED IN CHASSIS.
2. WIRES NOT SHOWN FOR CLARITY.
1. SEE SHEET 1 FOR PRIMARY WIRING, TEST CONDITIONS, AND TEST POINT VALUES
NOTES: (UNLESS OTHERWISE NOTED)

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CHECKED BY:  DATE: 10 JUN 05	TITLE: SERVICE DIAGRAM, COMBINED (PCB assy) SM-900 '05 PREAMP PCB		
APPROVED BY: _____ DATE: _____	SIZE: D	DRAWING NUMBER: 0065413000	REV. A
DRAWN: Rochelleau DATABASE FILE: Z630P1PCB	ENGR: Rochelleau	RELEASE DATE: 3-JUN-05	SHEET 3 OF 3