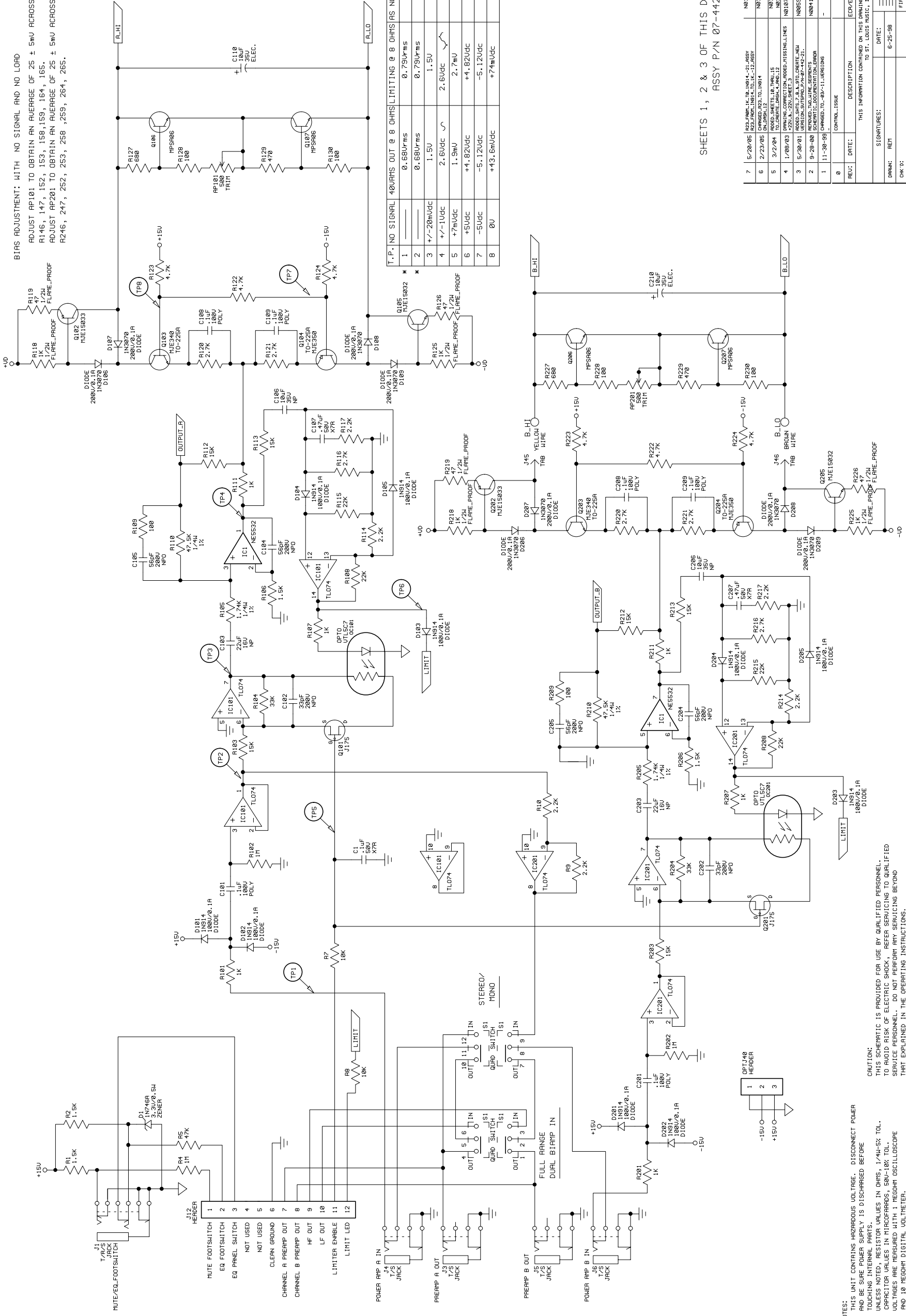


BIAS ADJUSTMENT: WITH NO SIGNAL AND NO LOAD
 ADJUST RP101 TO OBTAIN AN AVERAGE OF $25 \pm 5mV$ ACROSS R139, 140
 R146, 147, 152, 153, 158, 159, 164, 165.
 ADJUST RP201 TO OBTAIN AN AVERAGE OF $25 \pm 5mV$ ACROSS R239, 240
 R246, 247, 252, 253, 258, 259, 264, 265.



T.P. NO. NO. SIGNAL 40uRMS OUT @ 8 OHMS AS NOTED IN REFORM

1	0.68uVrms	0.75uVrms	~
2	0.68uVrms	0.75uVrms	~
3	+/-20mVdc	1.5u	~
4	+/-1uVdc	2.6uVdc	~
5	+7mVdc	1.9m	~
6	+5uVdc	+4.82uVdc	~
7	-5uVdc	-5.12uVdc	~
8	0V	+43.6mVdc	~

SHEETS 1, 2 & 3 OF THIS DRAWING REPRESENT
 ASSY P/N 07-442-03

7	5/20/05	R23 ENH. IN TO ANVA -31.885V	N81800	REM
6	2/23/05	CHANGED R23 TO INH14	N81758	RLB
5	3/27/04	MOVED SHEETS 1A, 11A, 11S TO CREATE ASSEMBLY INH14	N81758	RLB
4	1/08/03	ISSUING COMPLETELY REDESIGNED SHEETS TO CREATE ASSEMBLY INH14	N81875	REM
3	5/28/01	MOVED SHEETS 7, 8, 9 TO CREATE NEW VERSIONS OF SHEETS 7, 8, 9	N86557	REM
2	9-28-00	ISSUING COMPLETELY REDESIGNED SHEETS TO CREATE ASSEMBLY INH14	N86413	RLB
1	11-30-98	CHANGED TO -93/-11.46RDS	-	RLB
0		CONTRACT ISSUE		

REV: DATE: DESCRIPTION: EDP/ECN NO.: CHG D BY: APP D BY: DATE:

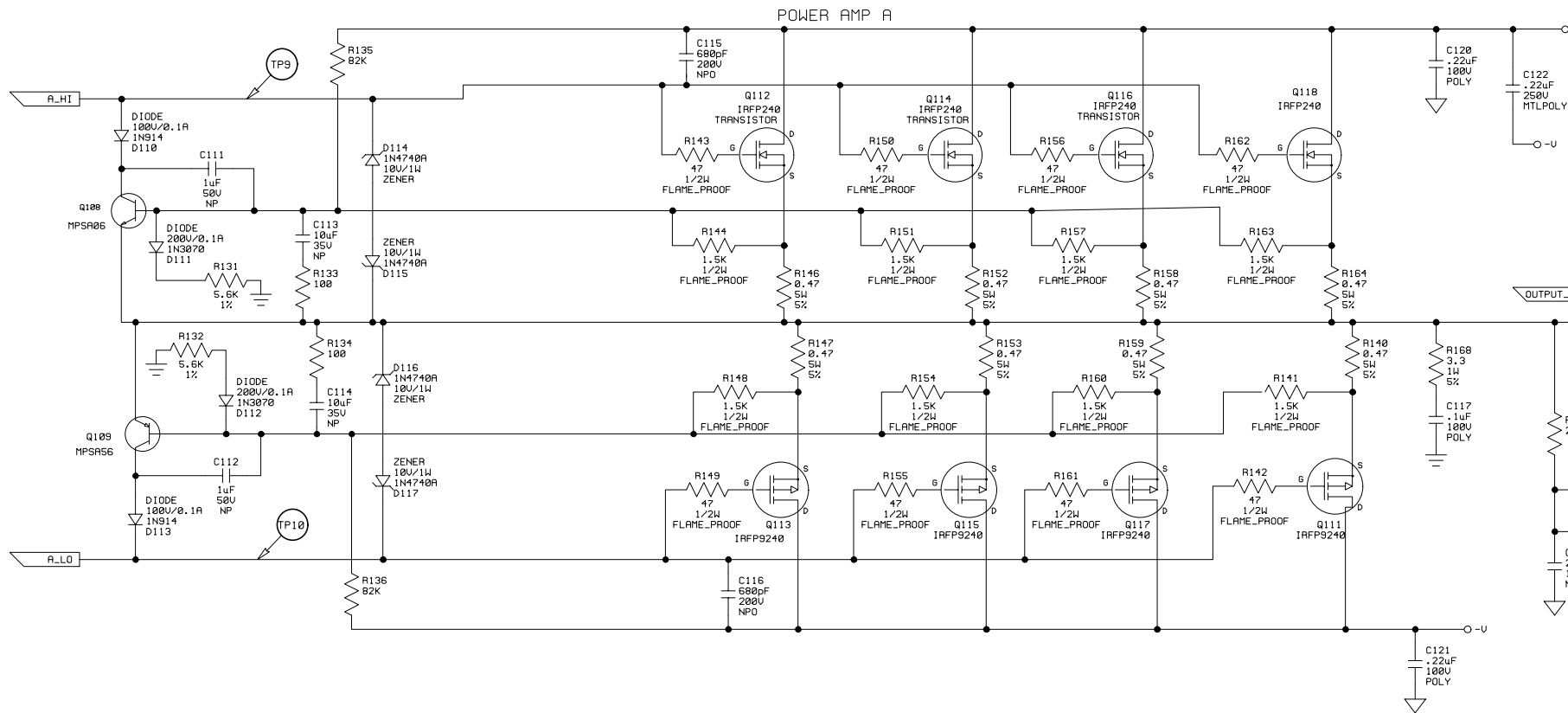
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.

SIGNATURES: DATE: 11/08/05
 DRAWN: REM 6-25-98
 CHK'D: FIRST USED ON: 63146
 RLS'D:

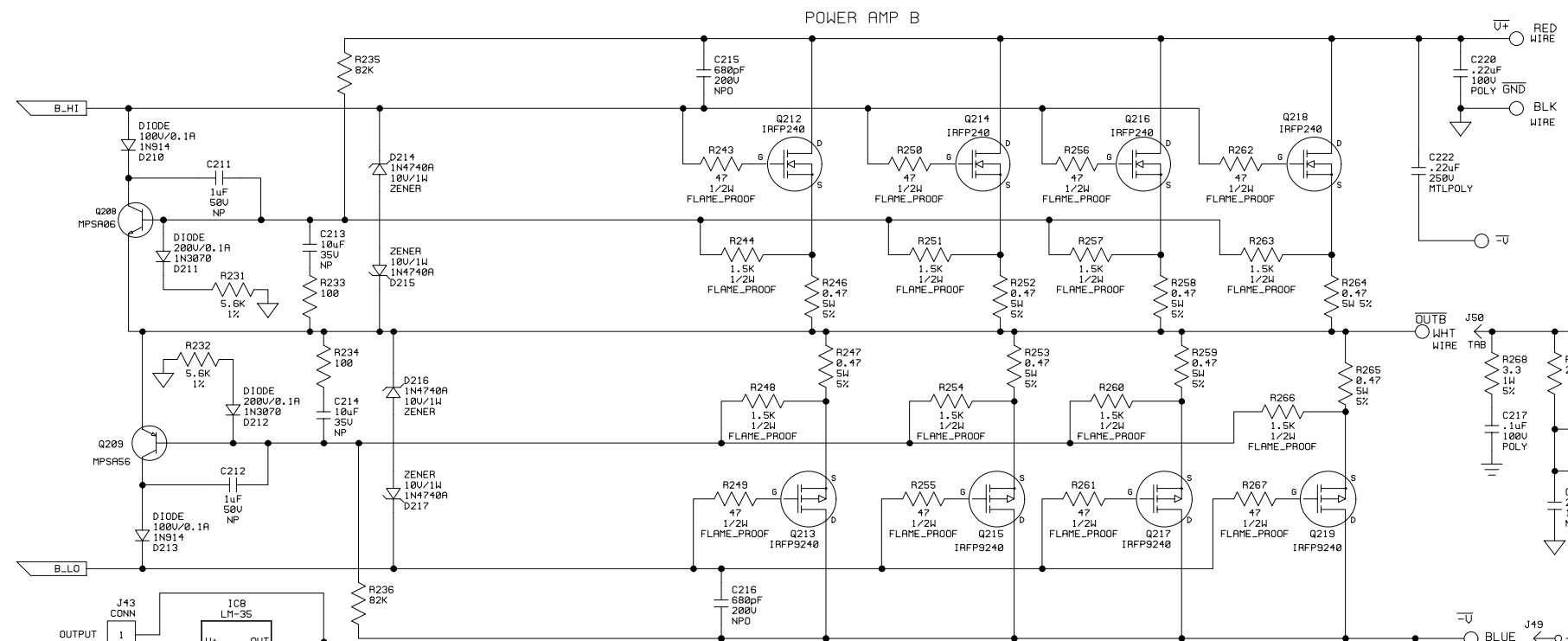
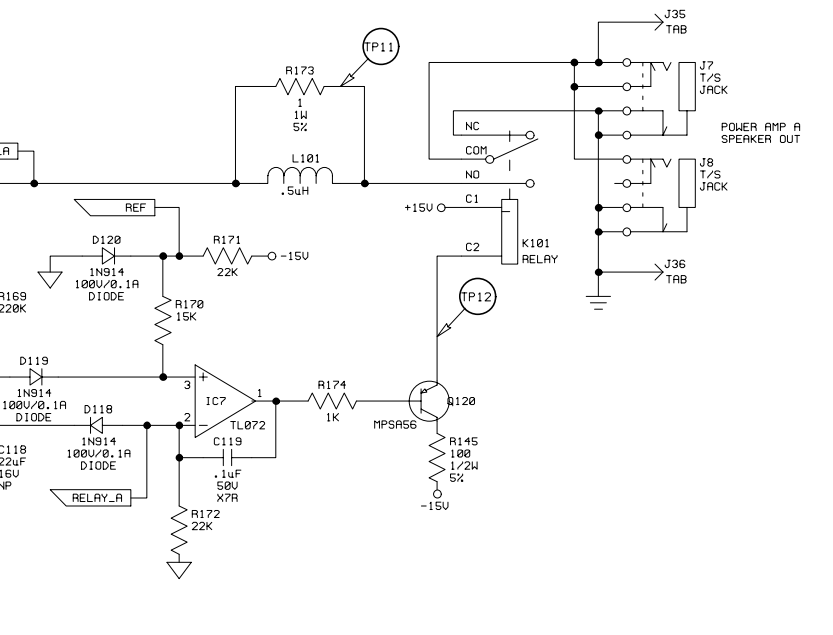
TOLERANCES: DRAWING SIZE: D
 DRAWING TYPE: SCHEMATIC
 CLASS CODE: POWER AMP
 SCALE: NONE SHEET: SHT 1 OF 15
 DRAWING NO.: 07S442-XX

NOTES:
 1) THIS UNIT CONTAINS HIGH-VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5K TOL. VOLTAGES ARE MEASURED WITH A MEGOHM OSCILLOSCOPE THAT EMPLOYED IN THE OPERATING INSTRUCTIONS.
 3) VOLTAGES ARE MEASURED WITH A MEGOHM OSCILLOSCOPE THAT EMPLOYED IN THE OPERATING INSTRUCTIONS.

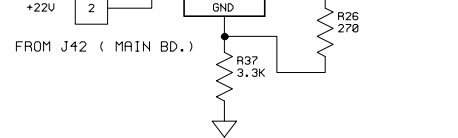
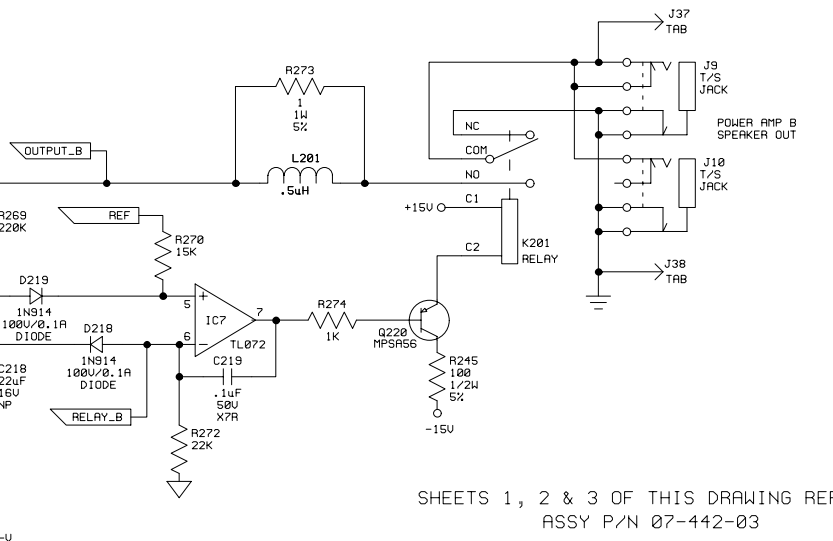
CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. THIS SCHEMATIC IS NOT TO BE USED AS A REFERENCE TO QUALIFIED PERSONNEL. THIS SCHEMATIC IS NOT TO BE USED AS A REFERENCE TO QUALIFIED PERSONNEL. THIS SCHEMATIC IS NOT TO BE USED AS A REFERENCE TO QUALIFIED PERSONNEL.



T.P.	NO SIGNAL	40URMS OUT @ 8 OHMS	LIMITING @ 8 OHMS AS NOTED	WAVEFORM
9	+3.6Udc	40Urms	41Urms	~
10	-3.5Udc	40Urms	41Urms	~
11	7.2mUdc	40Urms	41Urms	~
12	-11.52Udc	-11.8Udc	-11.8Udc	~



BIAS ADJUSTMENT: WITH NO SIGNAL AND NO LOAD
 ADJUST AP101 TO OBTAIN AN AVERAGE OF 25 ± 5mV ACROSS R139, 140, 146, 147, 152, 153, 158, 159, 164, 165.
 ADJUST AP201 TO OBTAIN AN AVERAGE OF 25 ± 5mV ACROSS R239, 240, 246, 247, 252, 253, 258, 259, 264, 265.

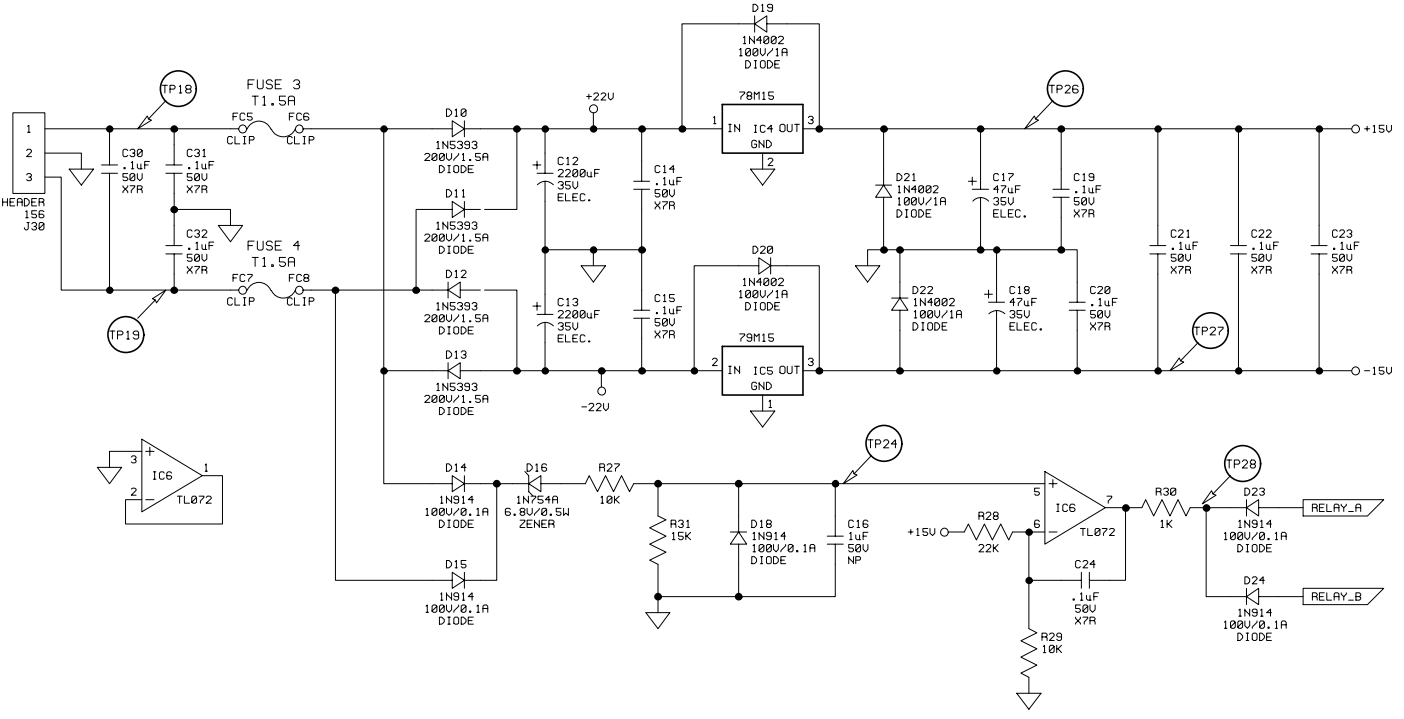
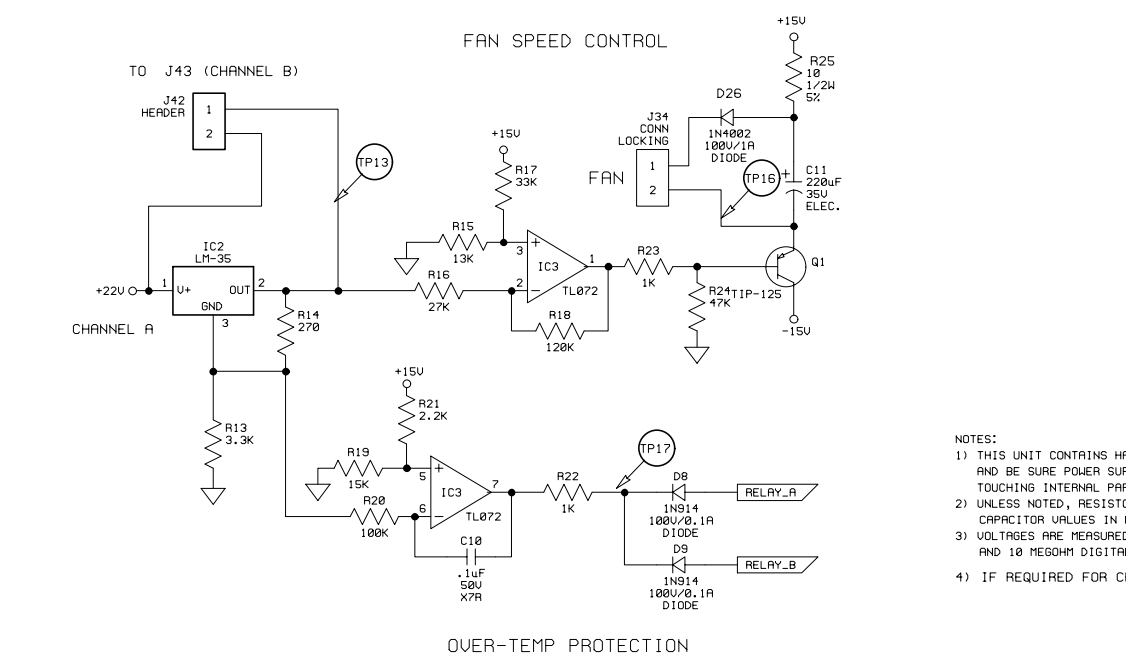
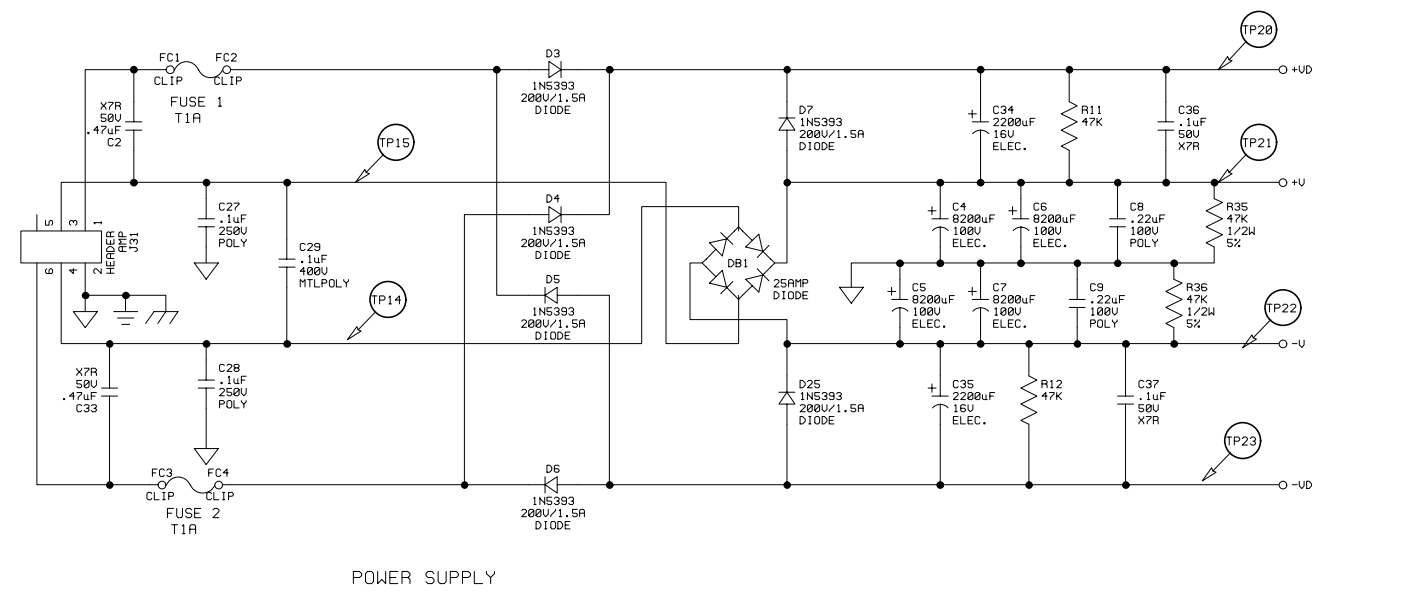
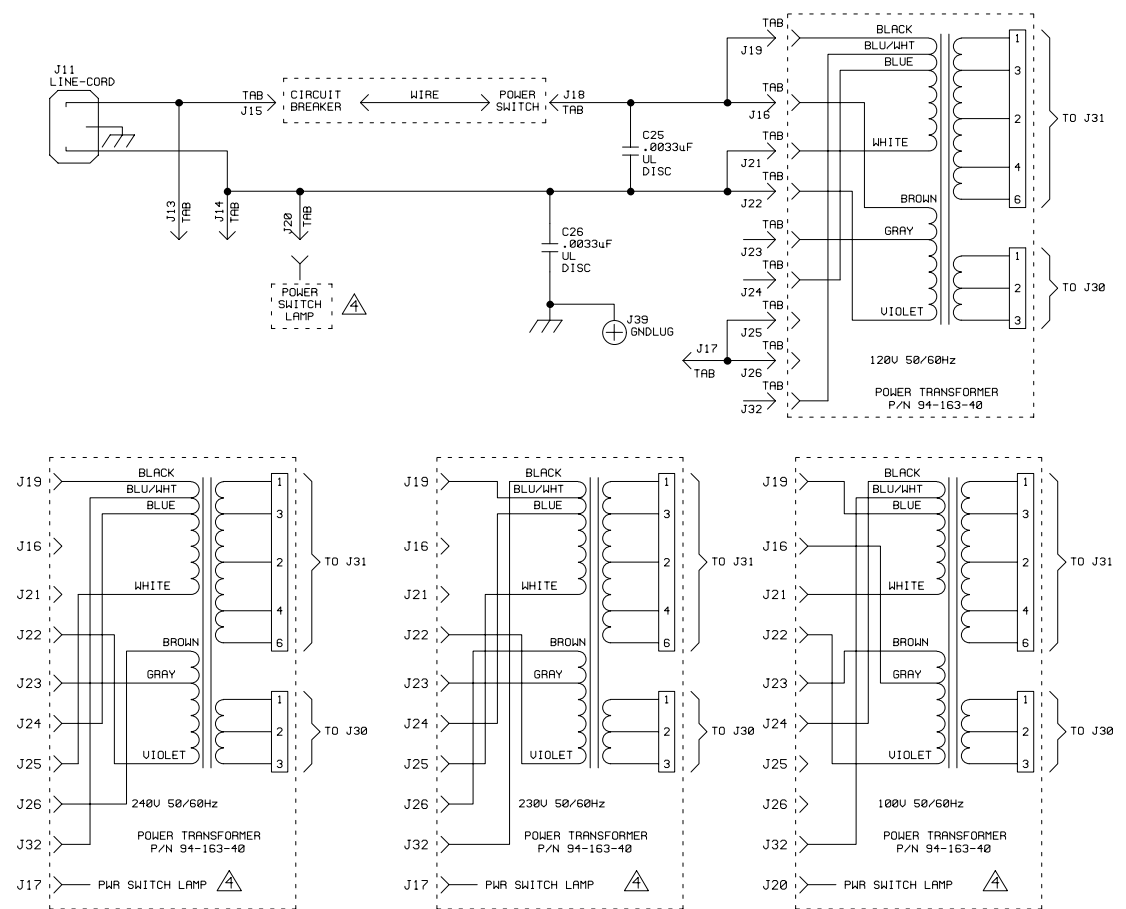


NOTES:
 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.

CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

SHEETS 1, 2 & 3 OF THIS DRAWING REPRESENT ASSY P/N 07-442-03

REV.	DATE:	DESCRIPTION	ECR/ECN NO.:	CHG'D BY:	APP'D BY:	DATE:
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.						
SIGNATURES:		DATE:		11880 Borman Dr. St. Louis, Missouri 63146		
DRAWN: REM		6-25-98		FIRST USED ON:		
CHK'D:						
R/S'D:						
TOLERANCES:		DRAWING SIZE: D		DRAWING TITLE: POWER_AMP		
		DRAWING TYPE: - SCHEMATIC		DRAWING NO.:		
		CLASS CODE:		DRAWING NO.:		
		SCALE: NONE		SHEET: SHT 2 OF 15		
				075442-XX		



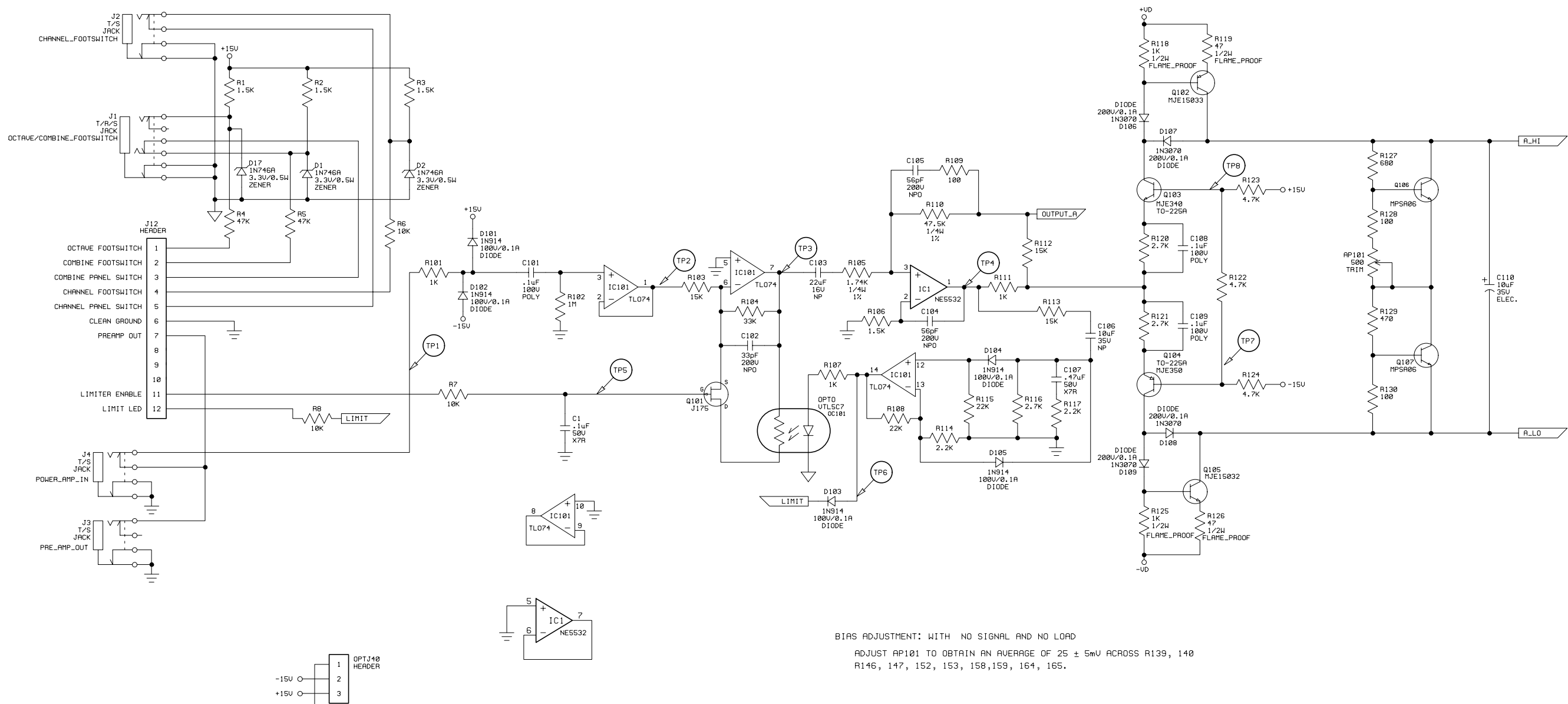
NOTES:
 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
 4) IF REQUIRED FOR CHASSIS ASSY.

CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

TP	NO SIGNAL	40VRMS OUT @ 8 OHMS	LIMITING @ 8 OHMS AS NOTED	WAVEFORM
13	VARIES w/TEMP	Varies w/temp.	Varies w/temp.	—
14	61Vac	51Vac	51Vac	~
15	61Vac	51Vac	51Vac	~
16	+14Vdc	-4.6Vdc	-4.6Vdc	—
17	+14.4Vdc	+14.4Vdc	+14.4Vdc	—
18	20Vac	19Vac	19Vac	~
19	20Vac	19Vac	19Vac	~
20	+71Vdc	+64.5Vdc	+64.5Vdc	~
21	+63Vdc	+59Vdc	+59Vdc	~
22	-63Vdc	-59Vdc	-59Vdc	~
23	-71Vdc	-64.5Vdc	-64.5Vdc	~
24	+6Vdc	+5.73Vdc	+5.73Vdc	—
25	NOT USED	—	—	—
26	+15Vdc	+15Vdc	+15Vdc	—
27	-15Vdc	-15Vdc	-15Vdc	—
28	+14.3Vdc	+14.3Vdc	+14.3Vdc	—

SHEETS 1, 2 & 3 OF THIS DRAWING REPRESENT ASSY P/N 07-442-03

REV:	DATE:	DESCRIPTION:	ECR/ECN NO:	CHG'D BY:	APP'D BY:	DATE:
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.						
SIGNATURES:		DATE:		11880 Borean Dr. St. Louis, Missouri 63146		
DRAWN: REM						
CHK'D:					FIRST USED ON:	
RLS'D:						
DRAWING SIZE: D			DRAWING TITLE: POWER_LAMP			
DRAWING TYPE: SCHEMATIC			DRAWING NO.:			
CLASS CODE:			DRAWING NO.:			
SCALE: NONE			SHEET: SHT 3 OF 15		07S442-XX	



BIAS ADJUSTMENT: WITH NO SIGNAL AND NO LOAD
 ADJUST AP101 TO OBTAIN AN AVERAGE OF 25 ± 5mV ACROSS R139, 140
 R146, 147, 152, 153, 158, 159, 164, 165.

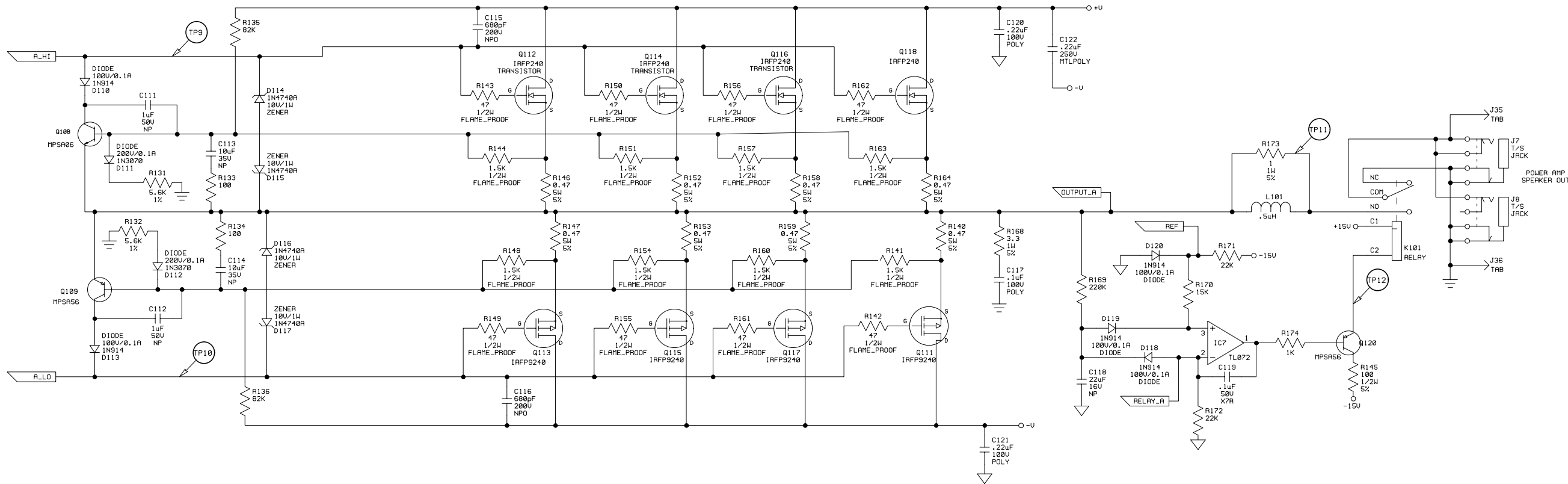
T.P.	NO SIGNAL	40Vrms OUT @ 8 OHMS	LIMITING @ 8 OHMS	AS NOTED	WAVEFORM
* 1	—	0.68Vrms	0.79Vrms	—	~
* 2	—	0.68Vrms	0.79Vrms	—	~
3	+/-20mVdc	1.5V	1.5V	—	~
4	+/-1Vdc	2.6Vdc	2.6Vdc	—	AS SHOWN PER COLUMN
5	+7mVdc	1.9mV	2.7mV	—	—
6	+5Vdc	+4.82Vdc	+4.82Vdc	—	—
7	-5Vdc	-5.12Vdc	-5.12Vdc	—	—
8	0V	+43.6mVdc	+74mVdc	—	~

SHEETS 4, 5 & 6 OF THIS DRAWING REPRESENTS
 ASSY P/N 07-442-11

- NOTES:
- THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 - VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.

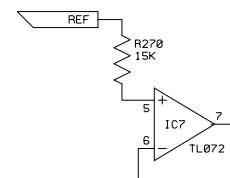
CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

REV#	DATE	DESCRIPTION	ECR/ECN NO.	CHG'D BY	APP'D BY	DATE
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.						
SIGNATURES:		DATE:	11888 Borman Dr. St. Louis, Missouri 1 63146			
DRAWN:	REM	6-25-98	FIRST USED ON:			
CHK'D:			-			
DES'G:			-			
TOLERANCES:	DRAWING SIZE: D SCHEMATIC		DRAWING TITLE: POWER_AMP			
	DRAWING TYPE: -		DRAWING NO.: 07S442-XX			
	CLASS CODE:		SHEET: SHT 4 OF 15			
	SCALE: NONE					



BIAS ADJUSTMENT: WITH NO SIGNAL AND NO LOAD
 ADJUST AP101 TO OBTAIN AN AVERAGE OF $25 \pm 5\text{mV}$ ACROSS R139, 140
 R146, 147, 152, 153, 158, 159, 164, 165.

T.P.	NO SIGNAL	40VRMS OUT @ 8 OHMS	LIMITING @ 8 OHMS AS NOTED	WAVEFORM
9	+3.6Vdc	40Vrms	41Vrms	~
10	-3.5Vdc	40Vrms	41Vrms	~
11	7.2mVdc	40Vrms	41Vrms	~
12	-11.52Vdc	-11.8Vdc	-11.8Vdc	—

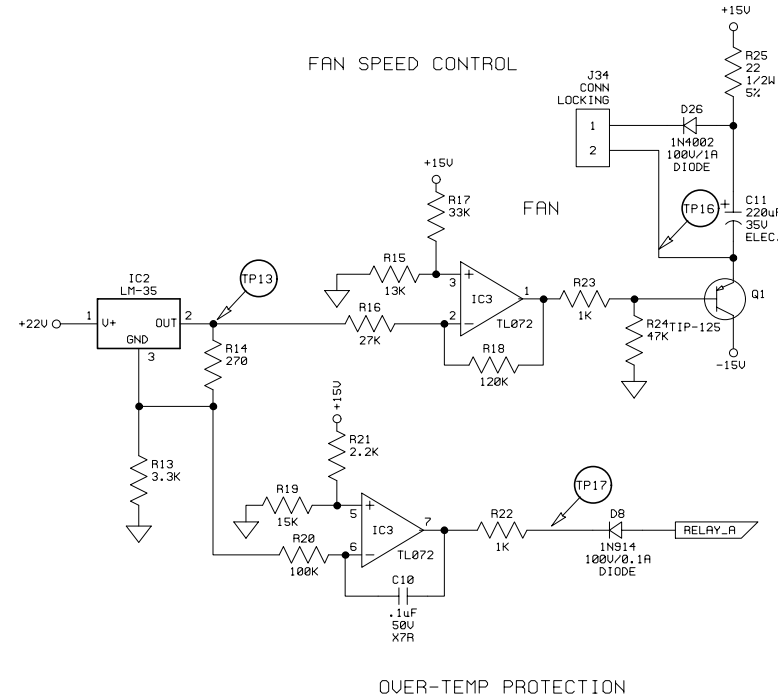
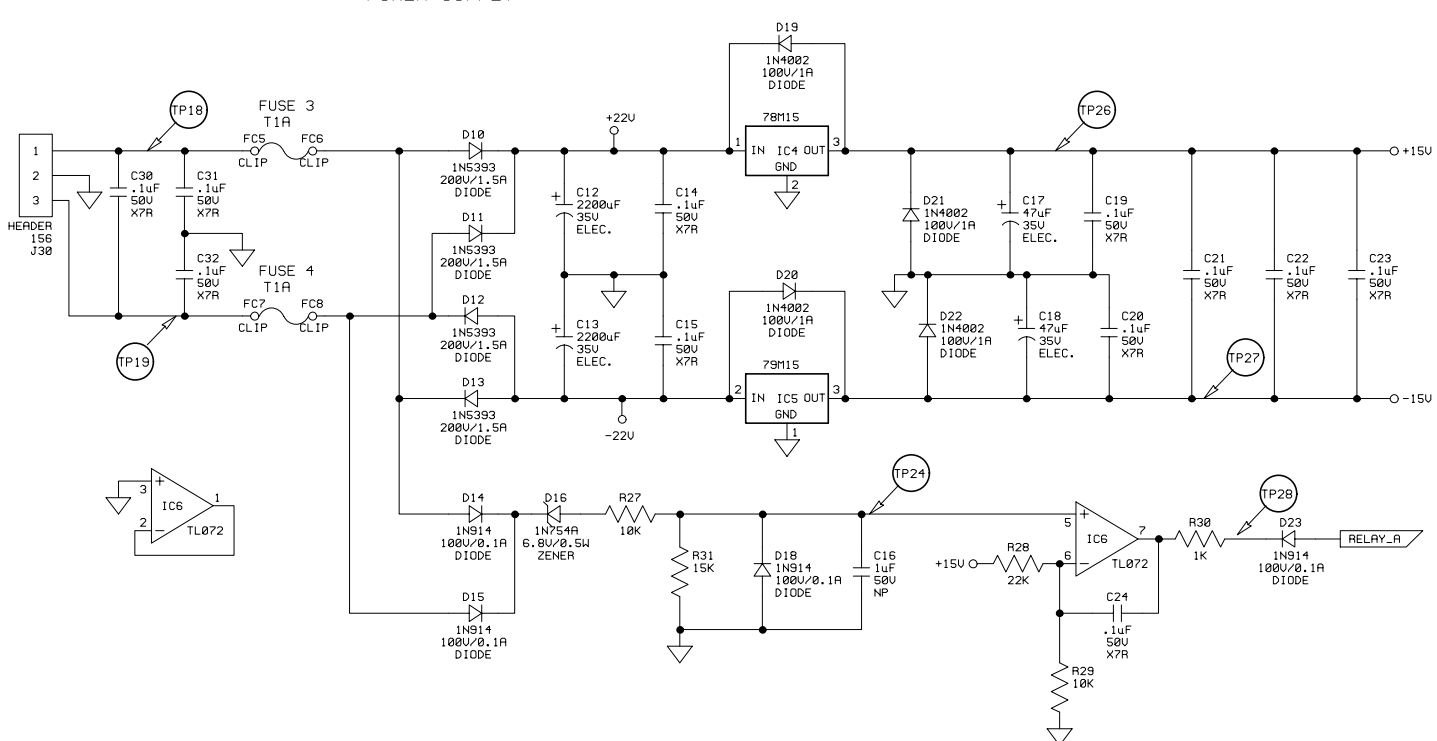
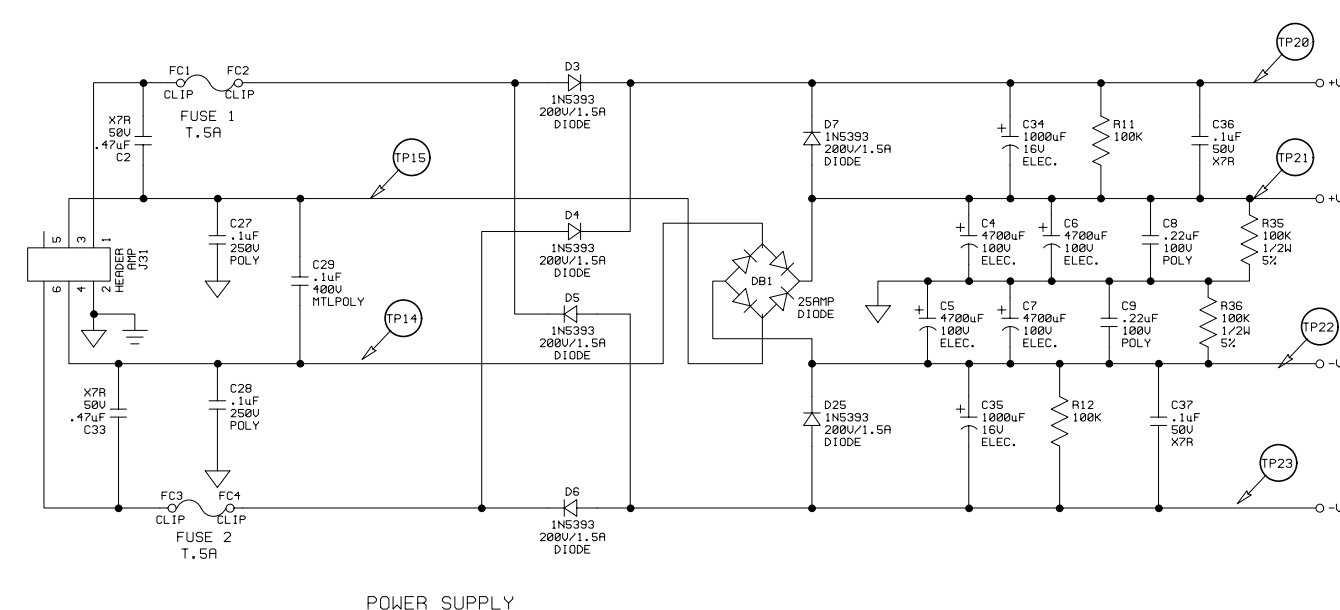
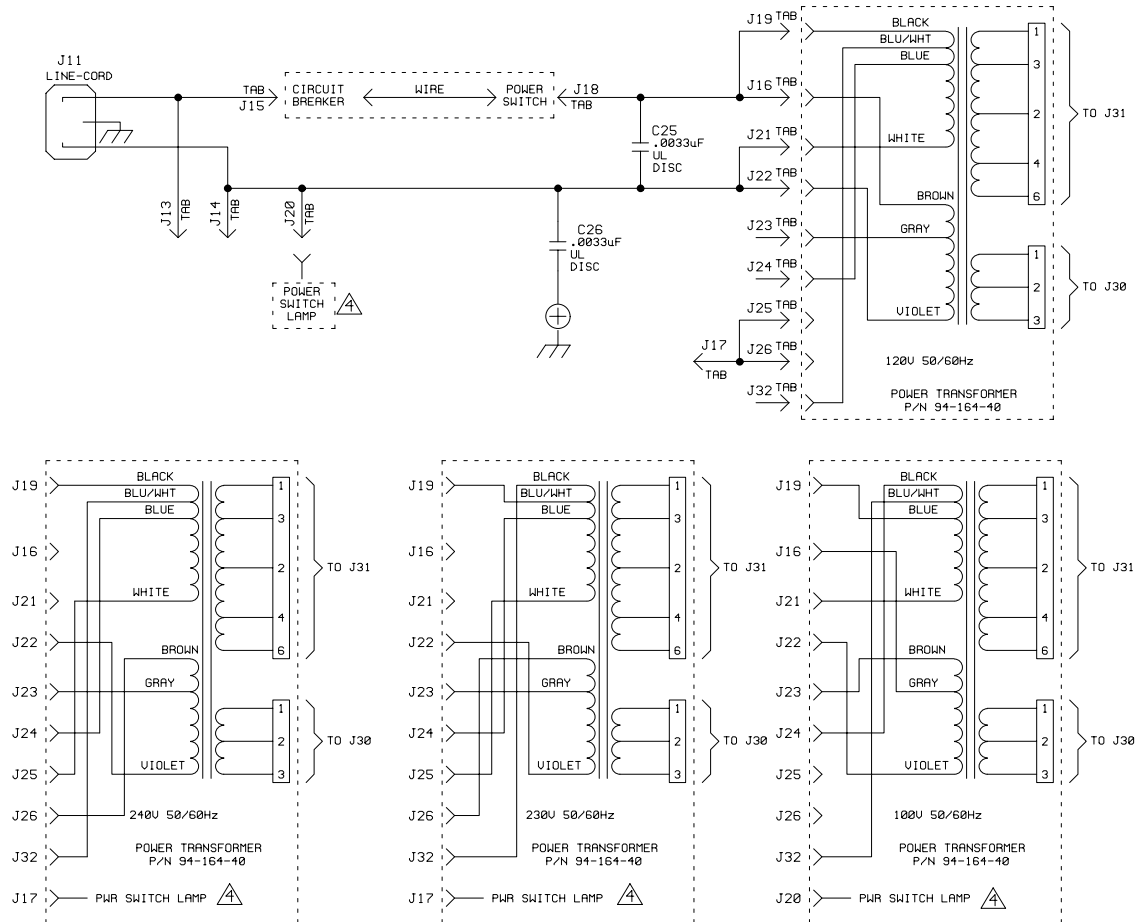


- NOTES:
- THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 - VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.

CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL.
 TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

SHEETS 4, 5 & 6 OF THIS DRAWING REPRESENTS
 ASSY P/N 07-442-11

REV:	DATE:	DESCRIPTION	ECR/ECN NO:	CHG'D BY:	APP'D BY:	DATE:
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.						
SIGNATURES:		DATE:	11880 Bowman Dr. St. Louis, Missouri 63146			
DRAWN: REM		6-25-98				
CHK'D:		FIRST USED ON:				
RLS'D:						
TOLERANCES:	DRAWING SIZE: D	DRAWING TITLE:		POWER_AMP		
	DRAWING TYPE: - SCHEMATIC	DRAWING NO.:		07S442-XX		
	CLASS CODE:	SCALE: NONE		SHEET: 5 OF 15		



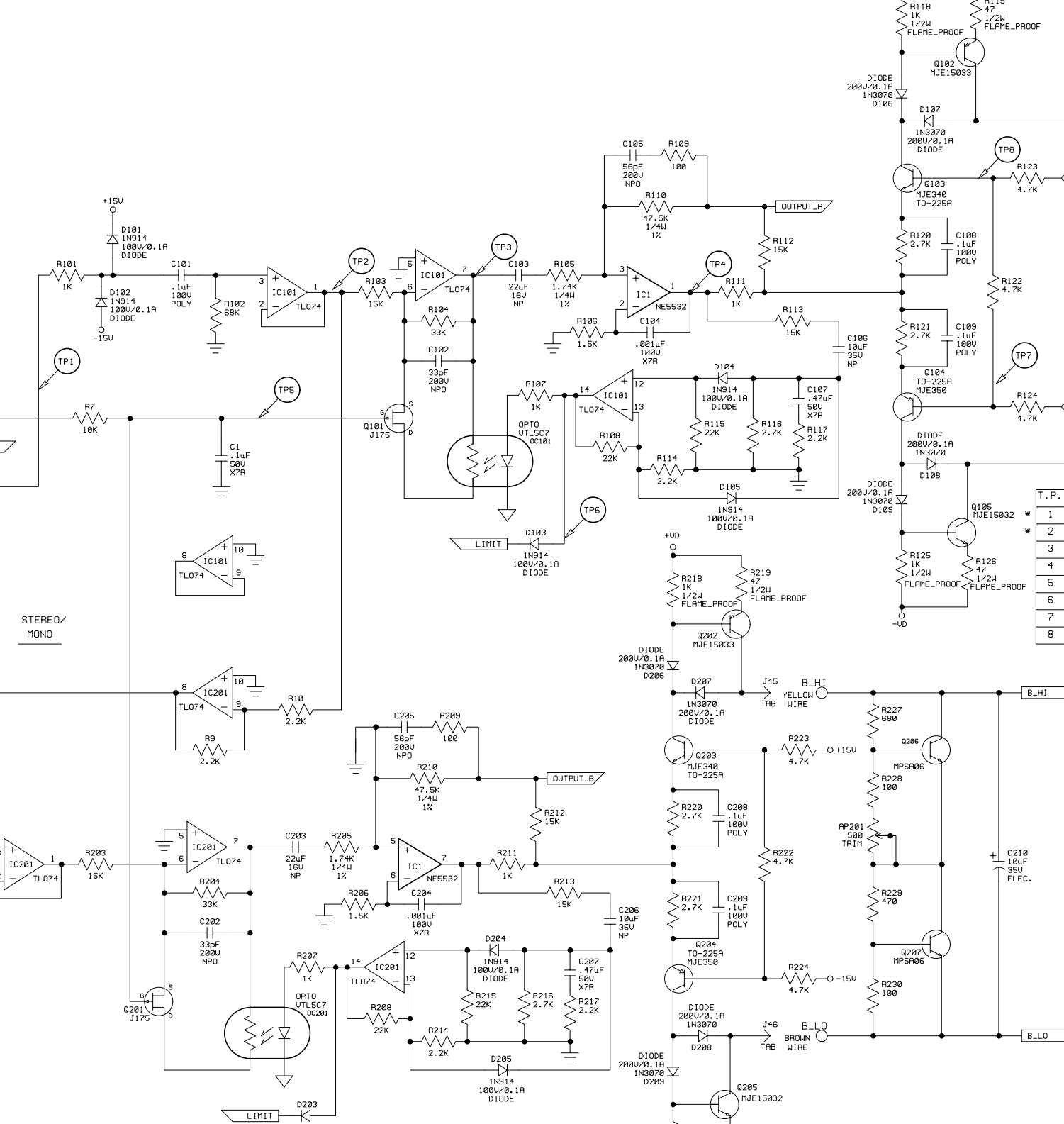
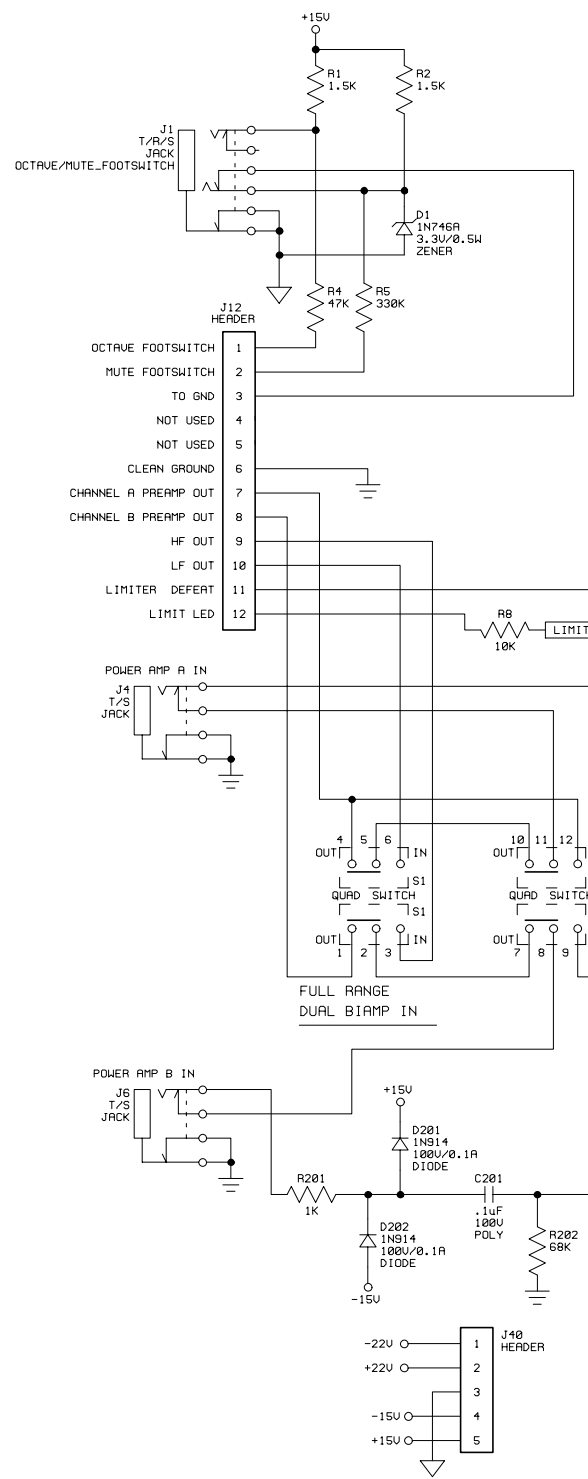
- NOTES:
- 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4"-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 - 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
 - 4) IF REQUIRED FOR CHASSIS ASSY.

CAUTION:
THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

TP	NO SIGNAL	40URMS OUT @ 8 OHMS	LIMITING @ 8 OHMS	AS NOTED	WAVEFORM
13	VARIES w/TEMP	Varies w/temp.	Varies w/temp.		
14	61Vac	51Vac	51Vac		~
15	61Vac	51Vac	51Vac		~
16	+14Vdc	-4.6Vdc	-4.6Vdc		
17	+14.4Vdc	+14.4Vdc	+14.4Vdc		
18	20Vac	19Vac	19Vac		~
19	20Vac	19Vac	19Vac		~
20	+71Vdc	+64.5Vdc	+64.5Vdc		~
21	+63Vdc	+59Vdc	+59Vdc		~
22	-63Vdc	-59Vdc	-59Vdc		~
23	-71Vdc	-64.5Vdc	-64.5Vdc		~
24	+6Vdc	+5.73Vdc	+5.73Vdc		
25	NOT USED				
26	+15Vdc	+15Vdc	+15Vdc		
27	-15Vdc	-15Vdc	-15Vdc		
28	+14.3Vdc	+14.3Vdc	+14.3Vdc		

SHEETS 4, 5 & 6 OF THIS DRAWING REPRESENTS ASSY P/N 07-442-11

REV:	DATE:	DESCRIPTION	ECR/ECN NO:	CHG'D BY:	APP'D BY:	DATE:
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.						
SIGNATURES:		DATE:		11880 Bowman Dr. St. Louis, Missouri 63146		
DRAWN: REM		6-25-98		FIRST USED ON:		
CHK'D:				-		
TOLERANCES:		DRAWING SIZE: D		DRAWING TITLE:		
		DRAWING TYPE: SCHEMATIC		POWER_AMP		
		CLASS CODE:		DRAWING NO.:		
		SCALE: NONE		07S442-XX		
		SHEET: 6 OF 15				



BIAS ADJUSTMENT: WITH NO SIGNAL AND NO LOAD
 ADJUST AP101 TO OBTAIN AN AVERAGE OF 25 ± 5mV ACROSS R139, 140
 R146, 147, 152, 153, 158, 159, 164, 165.
 ADJUST AP201 TO OBTAIN AN AVERAGE OF 25 ± 5mV ACROSS R239, 240
 R246, 247, 252, 253, 258, 259, 264, 265.

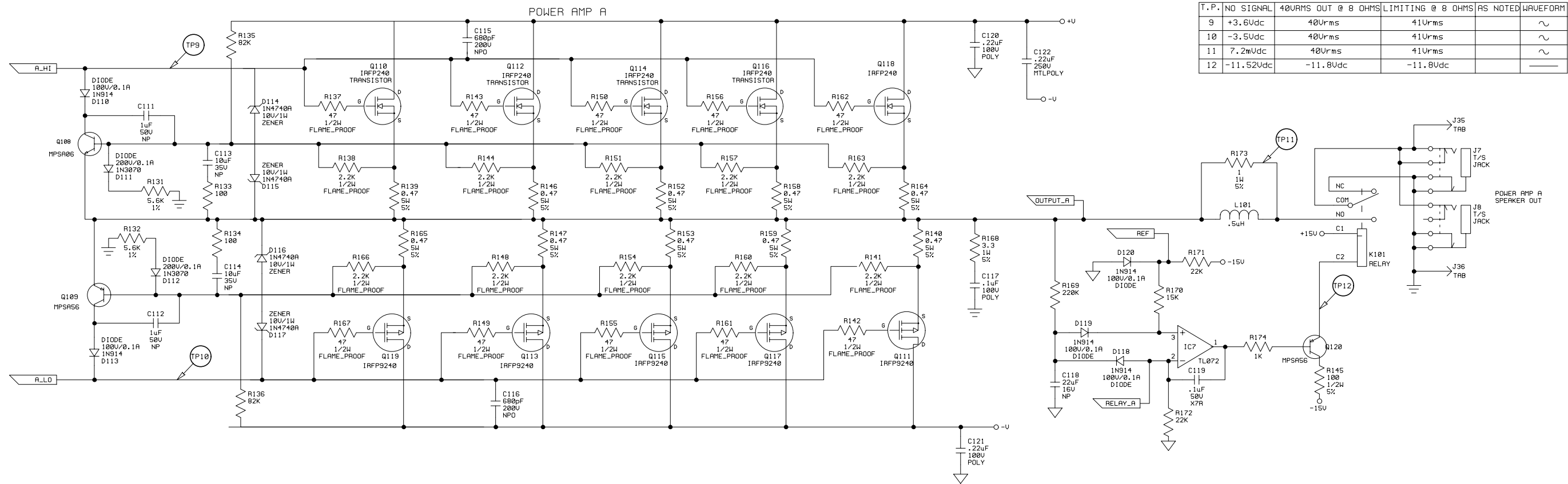
T.P.	NO SIGNAL	40Vrms OUT @ 8 OHMS	LIMITING @ 8 OHMS AS NOTED	WAVEFORM
1		0.68Vrms	0.79Vrms	~
2		0.68Vrms	0.79Vrms	~
3	+/-20mVdc	1.5V	1.5V	~
4	+/-1Vdc	2.6Vdc	2.6Vdc	AS SHOWN PER COLUMN
5	+7mVdc	1.9mV	2.7mV	~
6	+5Vdc	+4.82Vdc	+4.82Vdc	~
7	-5Vdc	-5.12Vdc	-5.12Vdc	~
8	0V	+43.6mVdc	+74mVdc	~

NOTES:
 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.

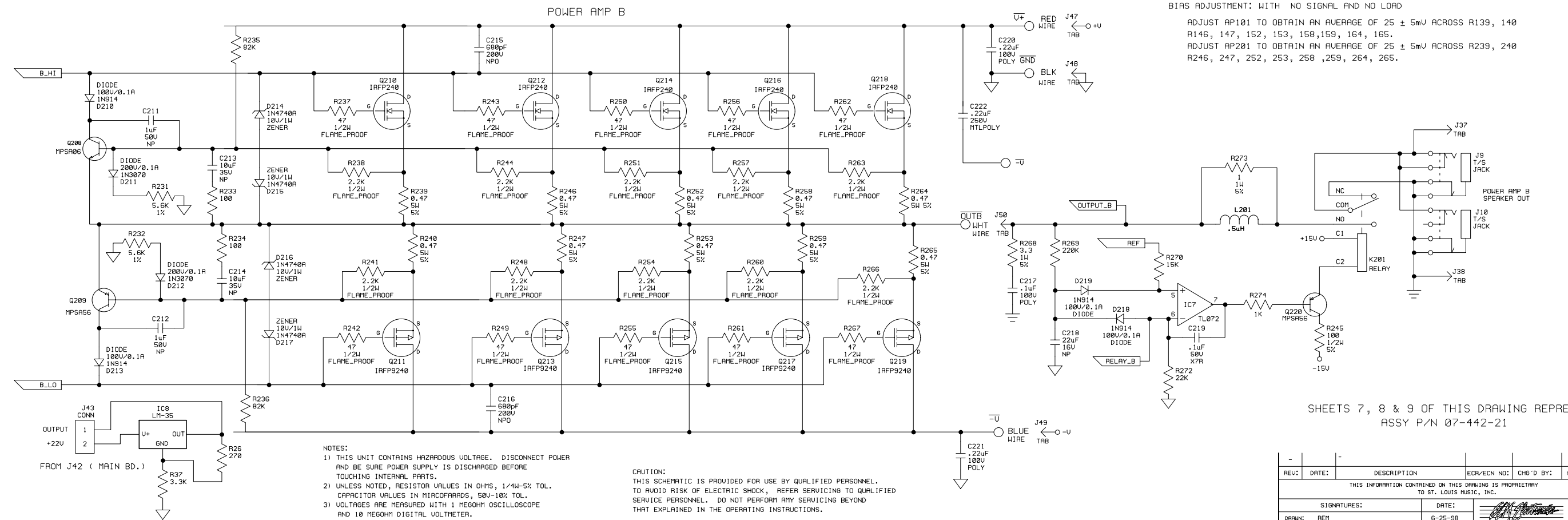
CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

SHEETS 7, 8 & 9 OF THIS DRAWING REPRESENT ASSY P/N 07-442-21

REV:	DATE:	DESCRIPTION:	ECR/ECN NO.:	CHK'D BY:	APP'D BY:	DATE:
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.						
SIGNATURES:		DATE:		11888 Borman Dr. St. Louis, Missouri 63146		
DRAWN: REM	DATE: 6-25-98	F: FIRST USED ON:				
CHK'D:	-					
RLS'D:	-					
DRAWING SIZE: D		DRAWING TITLE: POWER_AMP				
DRAWING TYPE: SCHEMATIC		DRAWING NO.:				
CLASS CODE:		DRAWING NO.: 07S442-XX				
SCALE: NONE		SHEET: SHT 7 OF 15				



T.P.	NO SIGNAL	40Urms OUT @ 8 OHMS	LIMITING @ 8 OHMS AS NOTED	WAVEFORM
9	+3.5Vdc	40Urms	41Urms	~
10	-3.5Vdc	40Urms	41Urms	~
11	7.2mVdc	40Urms	41Urms	~
12	-11.52Vdc	-11.8Vdc	-11.8Vdc	—



BIAS ADJUSTMENT: WITH NO SIGNAL AND NO LOAD

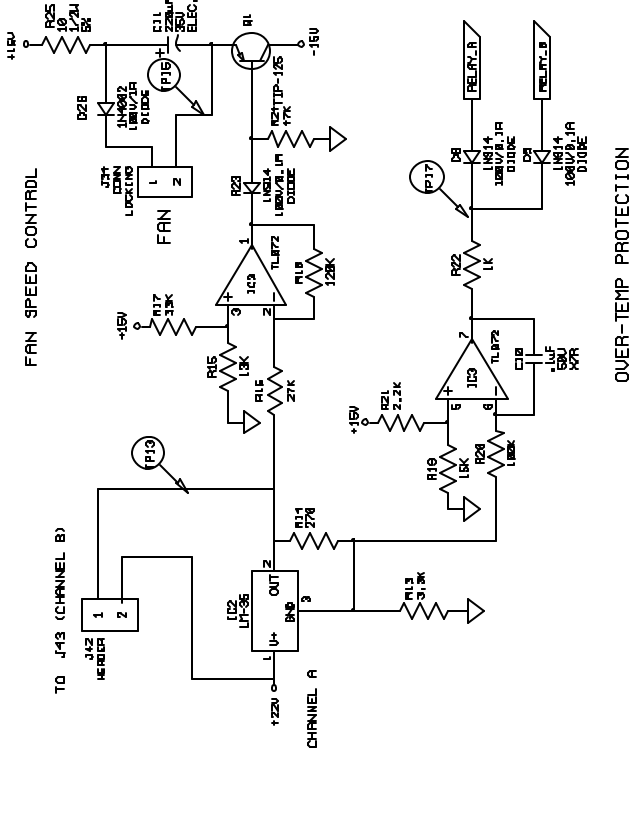
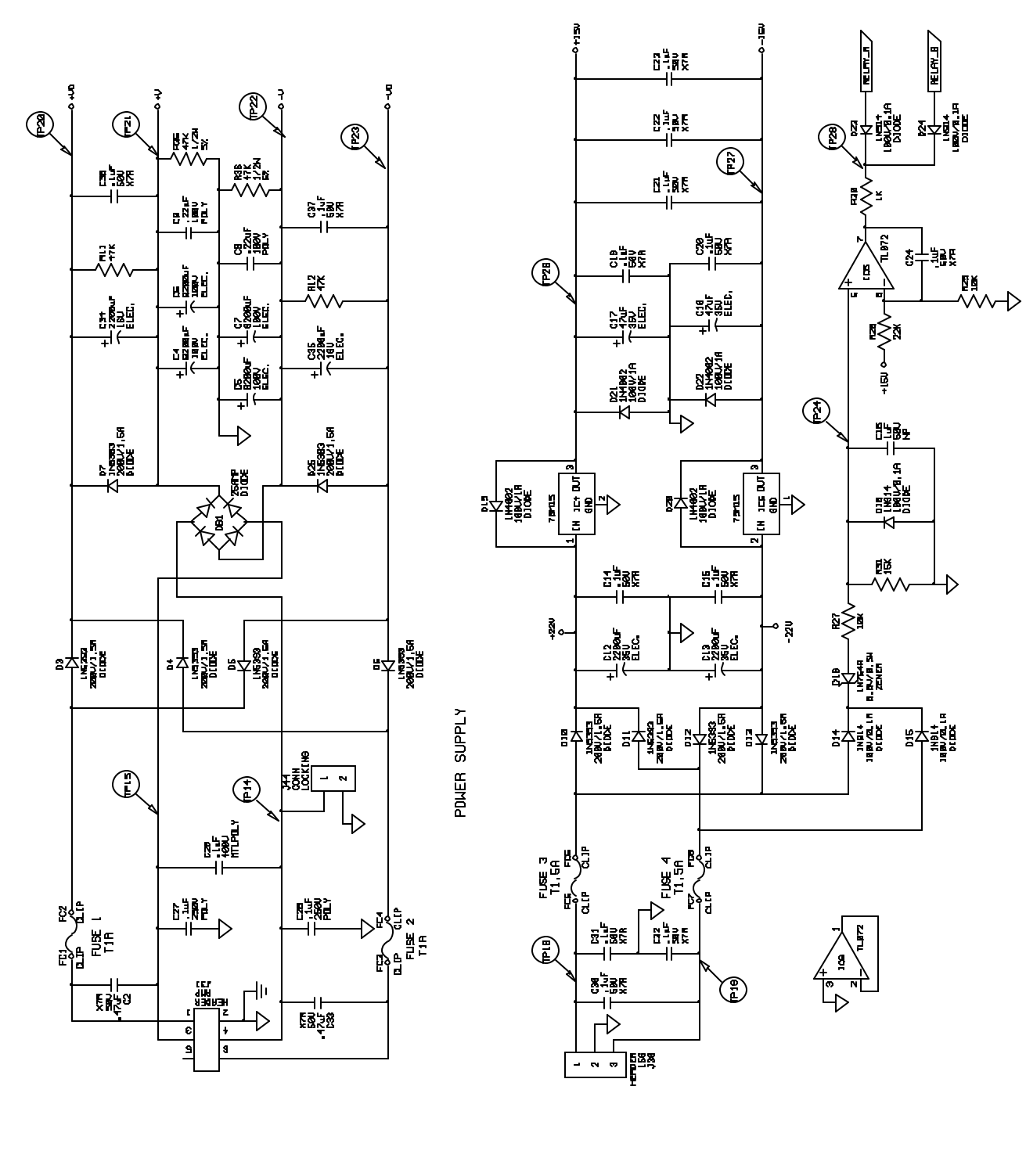
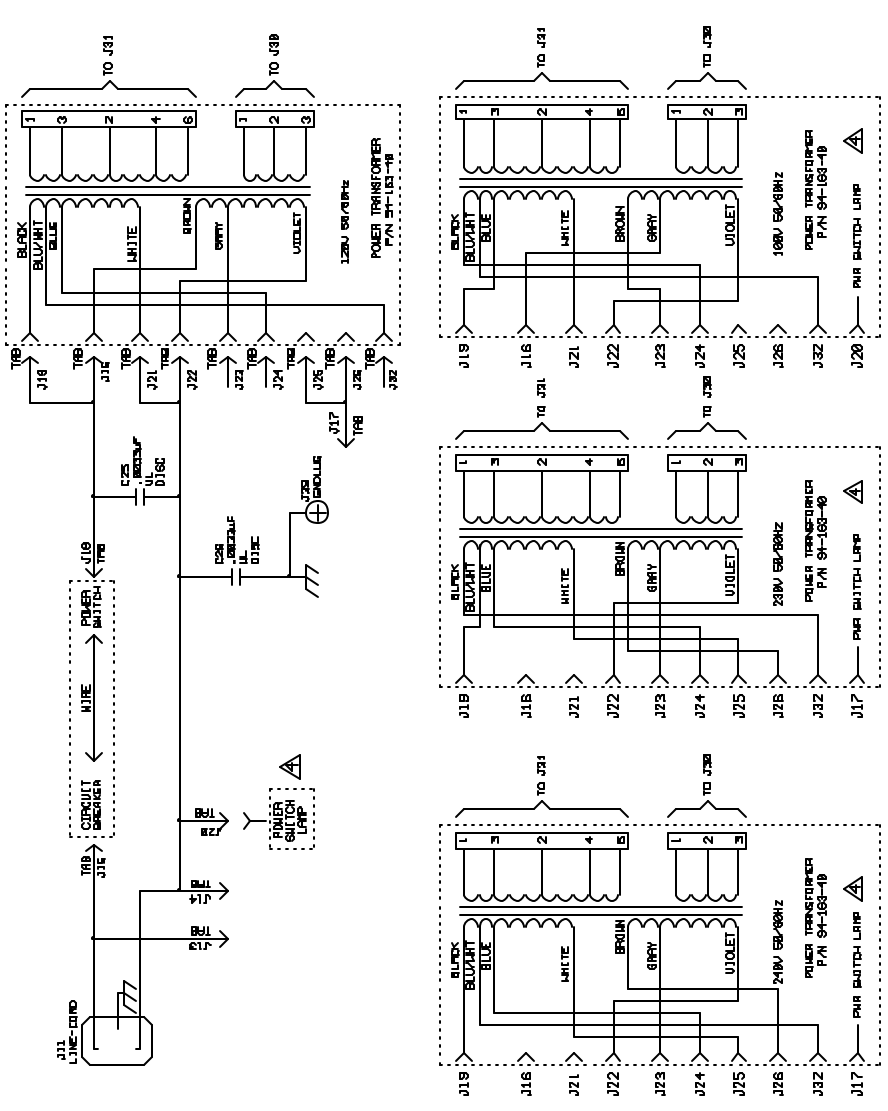
ADJUST AP101 TO OBTAIN AN AVERAGE OF 25 ± 5mV ACROSS R139, 140, R146, 147, 152, 153, 158, 159, 164, 165.
 ADJUST AP201 TO OBTAIN AN AVERAGE OF 25 ± 5mV ACROSS R239, 240, R246, 247, 252, 253, 258, 259, 264, 265.

SHEETS 7, 8 & 9 OF THIS DRAWING REPRESENT ASSY P/N 07-442-21

- NOTES:
- 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 - 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.

CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

REV:	DATE:	DESCRIPTION	ECR/ECN NO:	CHK'D BY:	APP'D BY:	DATE:
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.						
SIGNATURES:		DATE:	11800 Borman Dr. St. Louis, Missouri 63140			
DRAWN:	REM	6-25-98	FIRST USED ON:			
CHK'D:	DRAWING TITLE: POWER_AMP					
RLS'D:	DRAWING NO.: 07S442-XX					
TOLERANCES:	DRAWING SIZE: D	DRAWING TITLE: POWER_AMP				
DRAWING TYPE: - SCHEMATIC		DRAWING NO.: 07S442-XX				
CLASS CODE:	DRAWING NO.: 07S442-XX					
SCALE: NONE	SHEET: SH 8 OF 15					



TYP	NO	SIGNAL	VOLTS OUT @ 0 OHMS	AS NOTED	WAVEFORM
13	VARIES	W/TBP	Varies w/Temp.	Varies w/Temp.	~
14	6.1VDC	51VDC	51VDC	51VDC	~
15	6.1VDC	51VDC	51VDC	51VDC	~
16	+14.1VDC	-4.5VDC	-4.5VDC	-4.5VDC	~
17	+14.1VDC	+14.1VDC	+14.1VDC	+14.1VDC	~
18	20VDC	19VDC	19VDC	19VDC	~
19	20VDC	19VDC	19VDC	19VDC	~
20	+71.0VDC	+54.5VDC	+54.5VDC	+54.5VDC	~
21	+63.0VDC	+58.0VDC	+58.0VDC	+58.0VDC	~
22	-63.0VDC	-58.0VDC	-58.0VDC	-58.0VDC	~
23	-71.0VDC	-54.5VDC	-54.5VDC	-54.5VDC	~
24	+8.0VDC	+5.73VDC	+5.73VDC	+5.73VDC	~
25	NIT USED				
26	+15.0VDC	+15.0VDC	+15.0VDC	+15.0VDC	~
27	-15.0VDC	-15.0VDC	-15.0VDC	-15.0VDC	~
28	+14.3VDC	+14.3VDC	+14.3VDC	+14.3VDC	~

NOTES:
 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND THE SIGNAL POWER SUPPLY IS DISCONNECTED.
 2) TYPICAL VOLTAGE MEASUREMENTS IN CHANNEL A, CHANNEL B, AND CHANNEL C ARE MEASURED WITH A HIGH IMPEDANCE OSCILLOSCOPE.
 3) ALL VOLTAGES ARE MEASURED WITH A HIGH IMPEDANCE OSCILLOSCOPE.
 4) JF REQUIRED FOR CHANNELS A AND B.

CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER TO THE OPERATING INSTRUCTIONS BEFORE REPAIRING. DO NOT PERFORM ANY REPAIRS BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

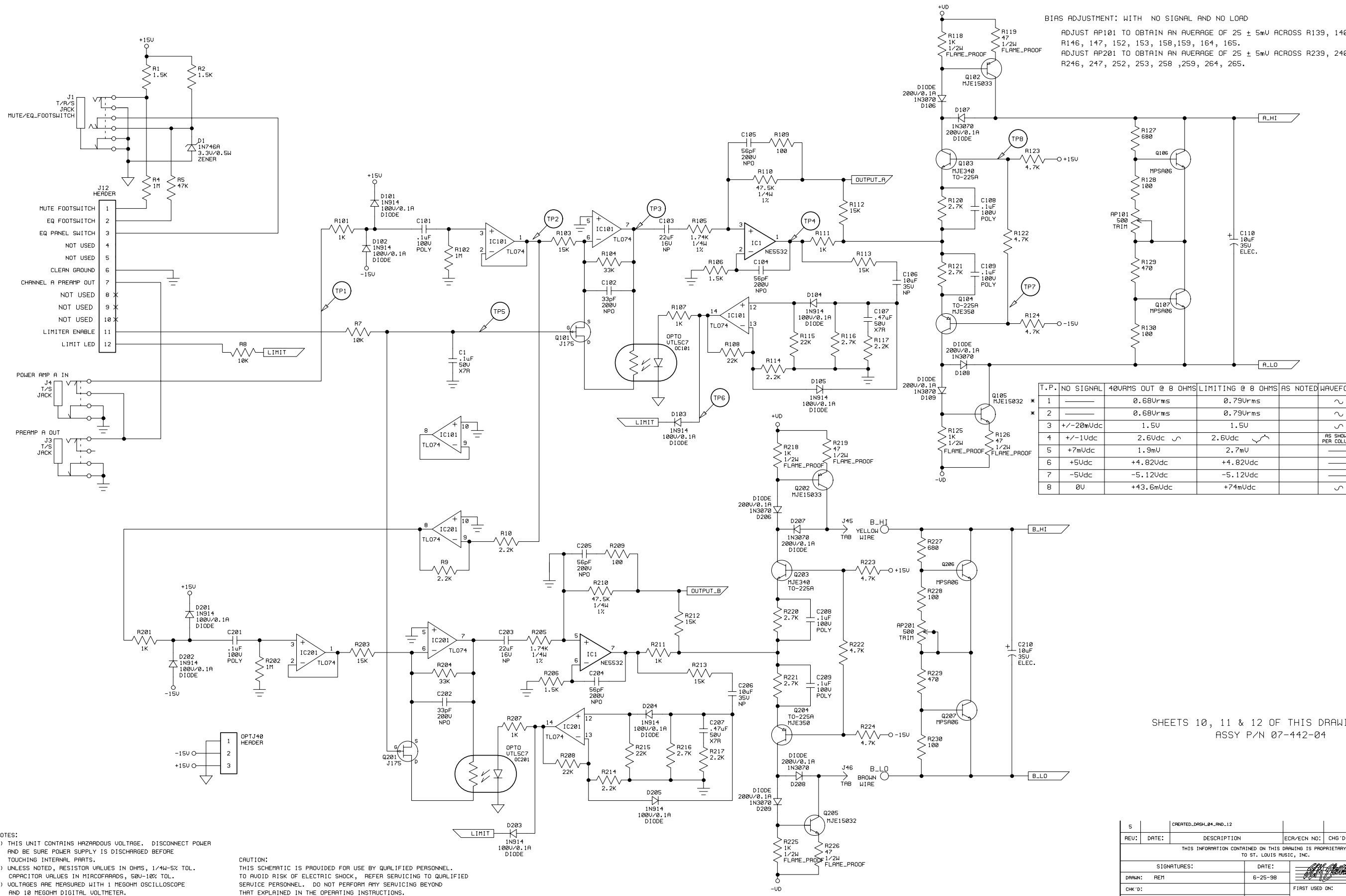
SHEETS 7, 8 & 9 OF THIS DRAWING REPRESENT ASSY P/N 07-442-21

REV	DATE	DESCRIPTION	DESIGNED BY	CHK'D BY	DATE
1		THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS, MO, IBM.			

REV	DATE	DESCRIPTION	DESIGNED BY	CHK'D BY	DATE
1		THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS, MO, IBM.			

REV	DATE	DESCRIPTION	DESIGNED BY	CHK'D BY	DATE
1		THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS, MO, IBM.			

REV	DATE	DESCRIPTION	DESIGNED BY	CHK'D BY	DATE
1		THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS, MO, IBM.			

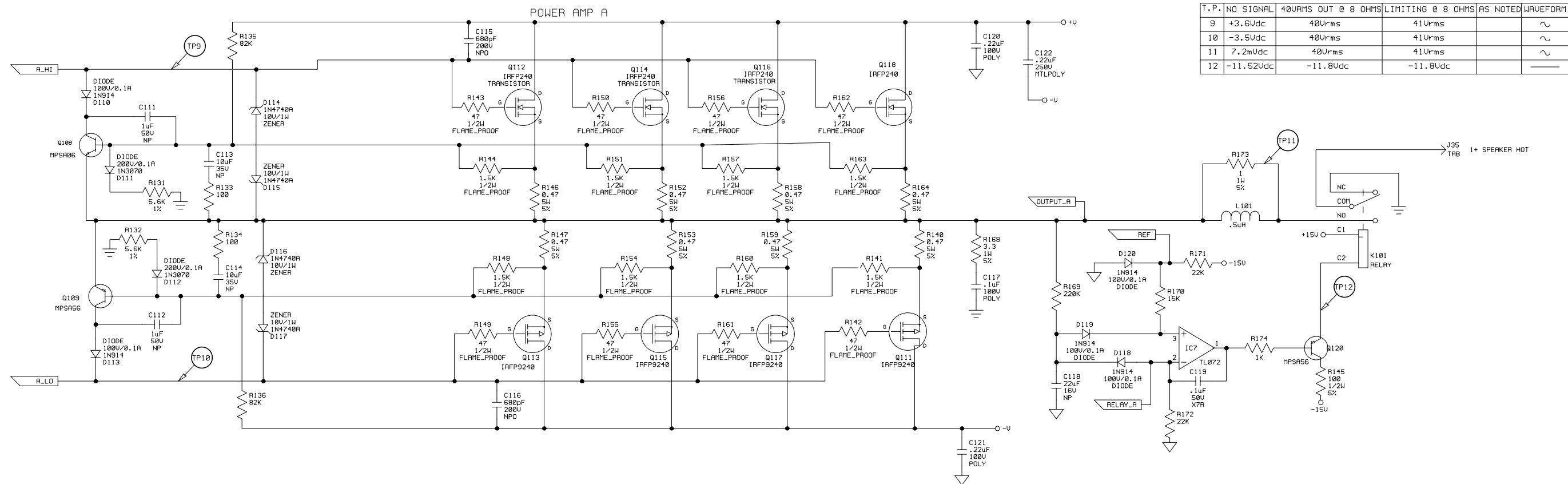


NOTES:
 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.

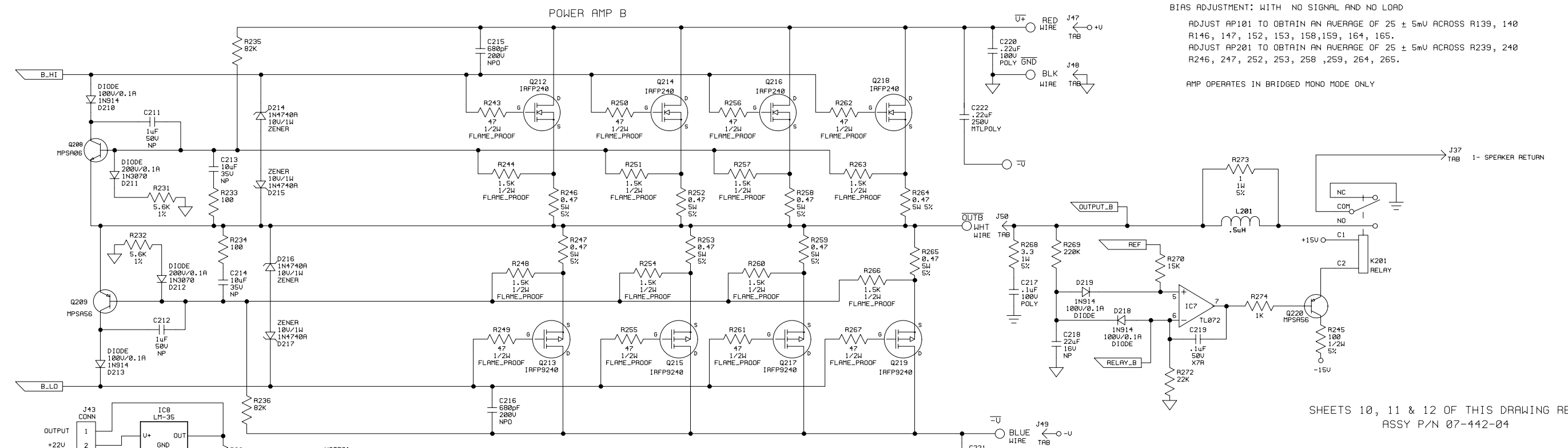
CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

SHEETS 10, 11 & 12 OF THIS DRAWING REPRESENT ASSY P/N 07-442-04

5	CREATED: 07-25-98	REV: 1	DATE: 6-25-98	DESCRIPTION: POWER AMP	ECR/ECN NO: -	CHG'D BY: REM	APP'D BY: REM	DATE: 6-25-98
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.								
SIGNATURES:			DATE:		11800 Borman Dr., St. Louis, Missouri 63146			
DRAWN: REM			DATE: 6-25-98		FIRST USED ON: -			
CHK'D: -			DATE: -		DRAWING TITLE: POWER AMP			
ALS'D: -			DATE: -		DRAWING NO.: 07S442-XX			
TOLERANCES:			DRAWING SIZE: D		DRAWING TITLE: POWER AMP			
SCALE: NONE			DRAWING TYPE: SCHEMATIC		DRAWING NO.: 07S442-XX			
SHEET: 10 of 15			CLASS CODE: -		DRAWING NO.: 07S442-XX			

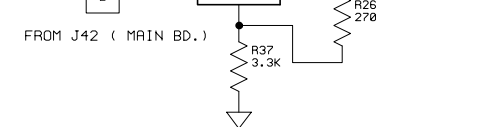


T.P.	NO SIGNAL	40VRMS OUT @ 8 OHMS	LIMITING @ 8 OHMS AS NOTED	WAVEFORM
9	+3.5Vdc	40Urms	41Urms	~
10	-3.5Vdc	40Urms	41Urms	~
11	7.2mVdc	40Urms	41Urms	~
12	-11.52Vdc	-11.8Vdc	-11.8Vdc	—



BIAS ADJUSTMENT: WITH NO SIGNAL AND NO LOAD
 ADJUST AP101 TO OBTAIN AN AVERAGE OF 25 ± 5mV ACROSS R139, 140, 146, 147, 152, 153, 158, 159, 164, 165.
 ADJUST AP201 TO OBTAIN AN AVERAGE OF 25 ± 5mV ACROSS R239, 240, 246, 247, 252, 253, 258, 259, 264, 265.

AMP OPERATES IN BRIDGED MONO MODE ONLY

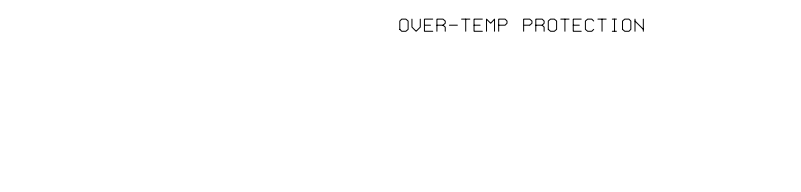
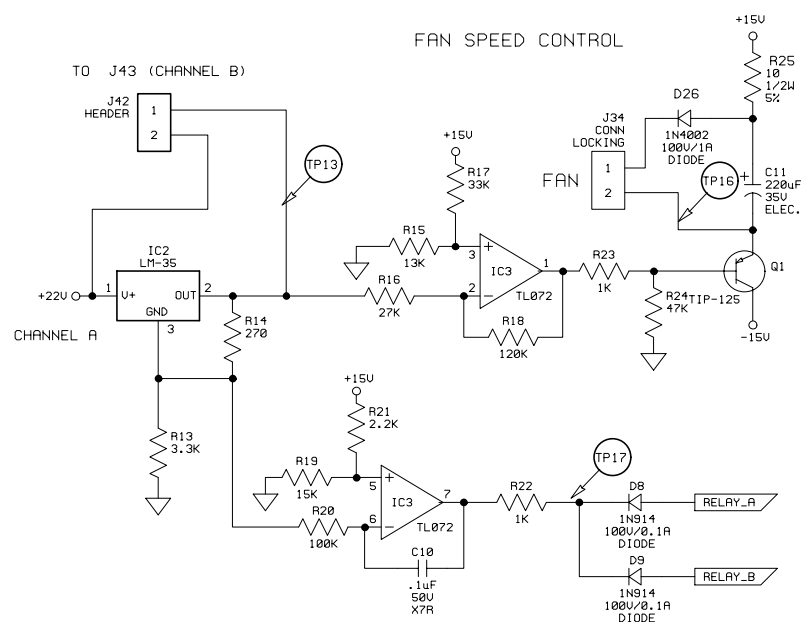
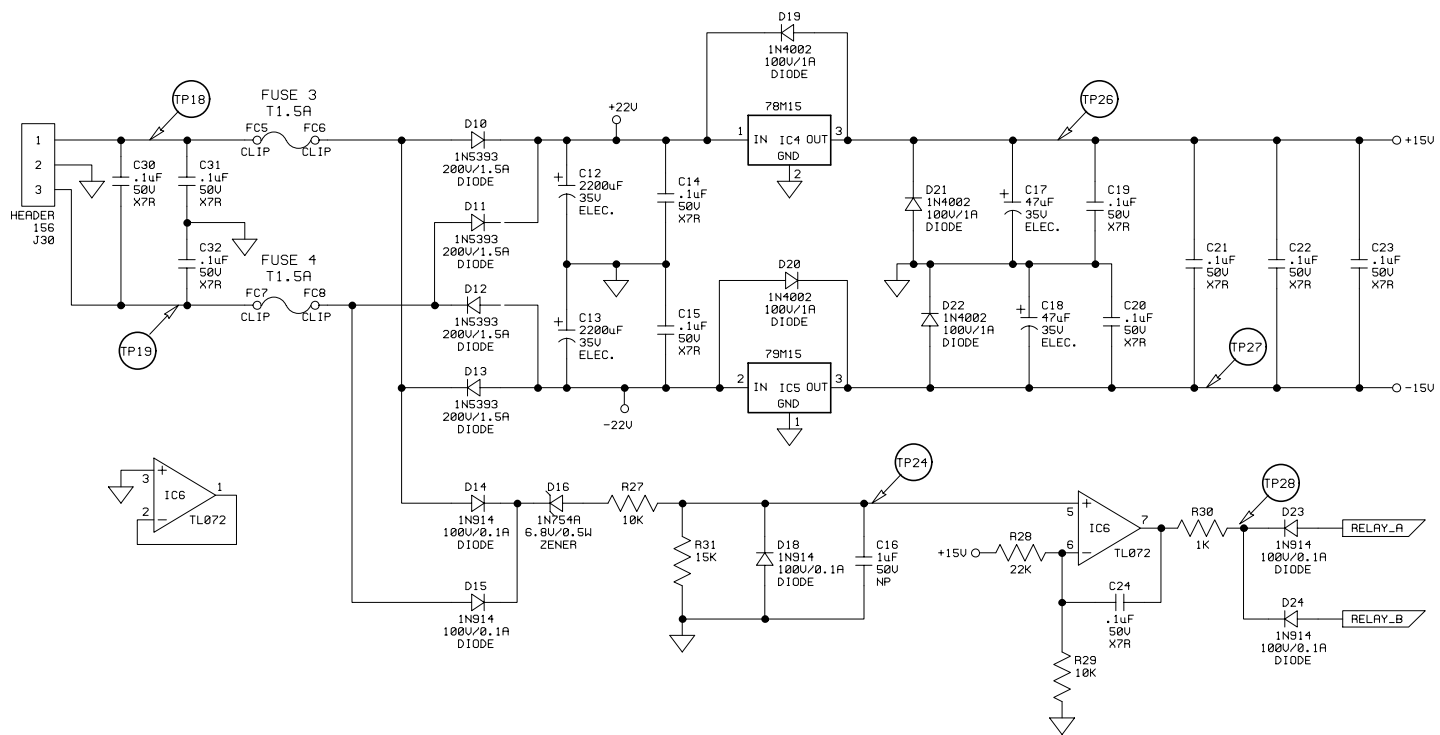
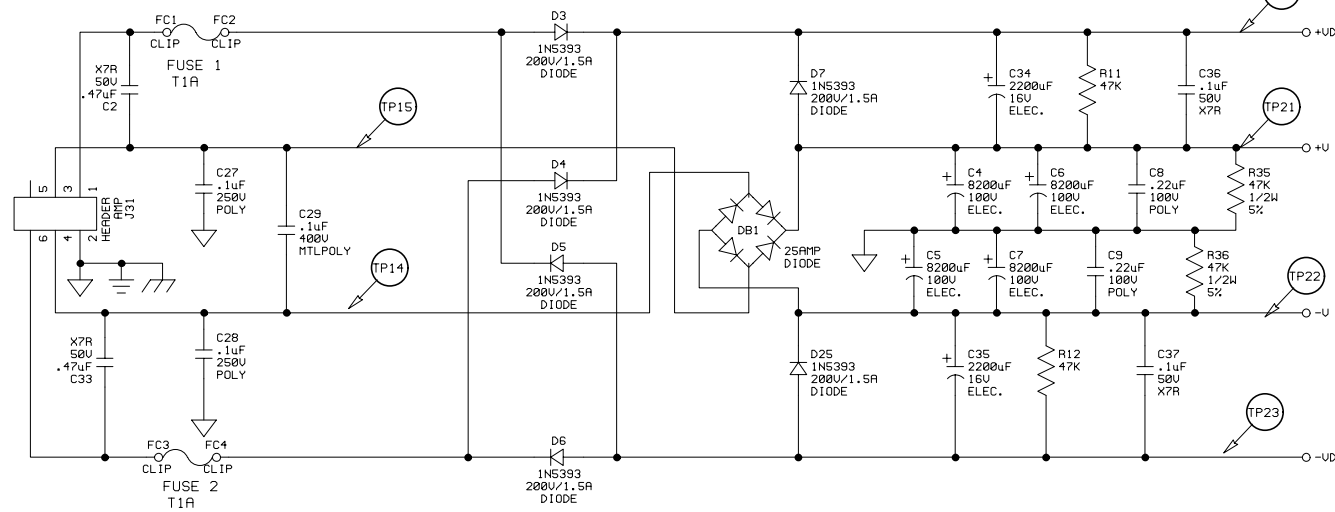
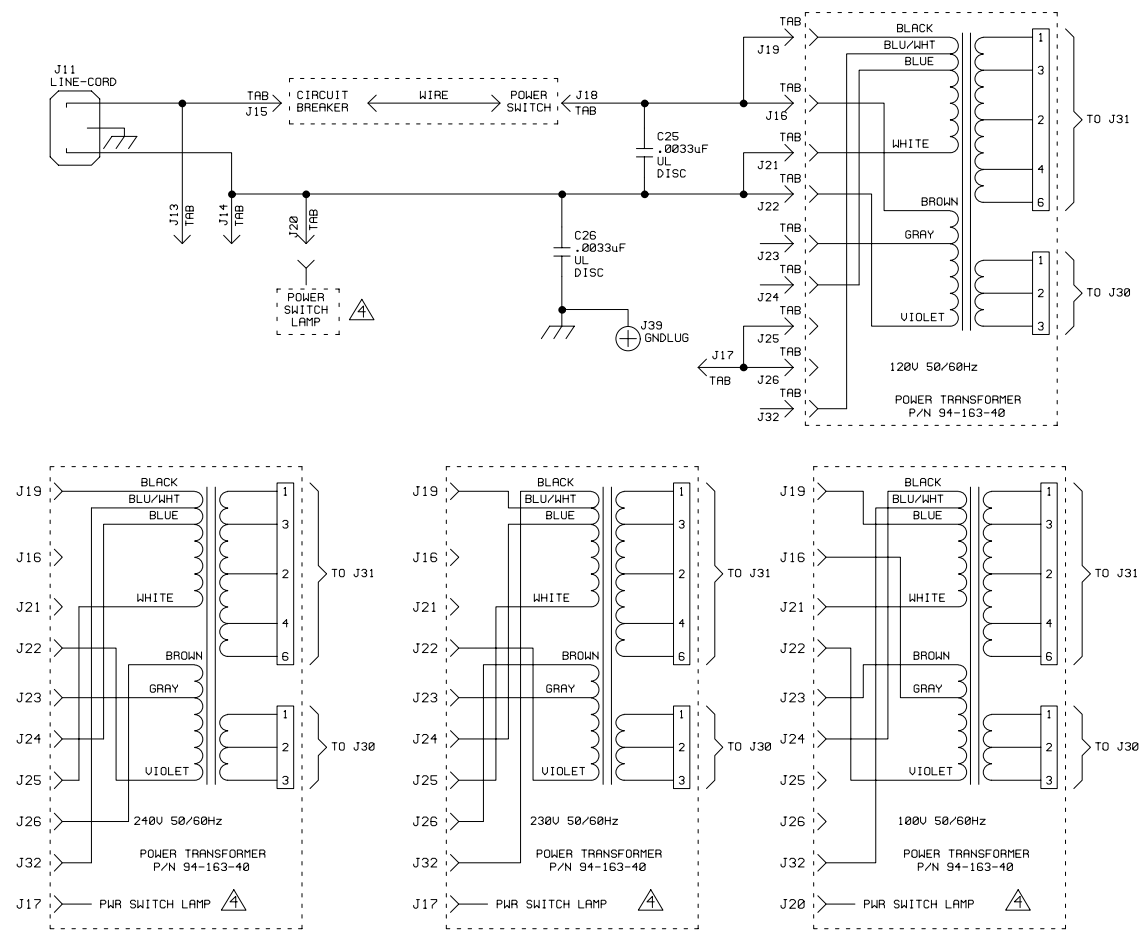


- NOTES:
- 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 - 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.

CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

SHEETS 10, 11 & 12 OF THIS DRAWING REPRESENT ASSY P/N 07-442-04

REV:	DATE:	DESCRIPTION:	ECR/ECN NO.:	CHG'D BY:	APP'D BY:	DATE:
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.						
SIGNATURES:		DATE:		11888 Borman Dr. St. Louis, Missouri 63146		
DRAWN:	REM	6-25-98		FIRST USED ON:		
CHK'D:				-		
ALS'D:				-		
DRAWING SIZE: D		DRAWING TITLE: POWER_AMP				
DRAWING TYPE: - SCHEMATIC		DRAWING NO.:		07S442-XX		
CLASS CODE:		SHEET: SHT 11 OF 15				
SCALE: NONE						



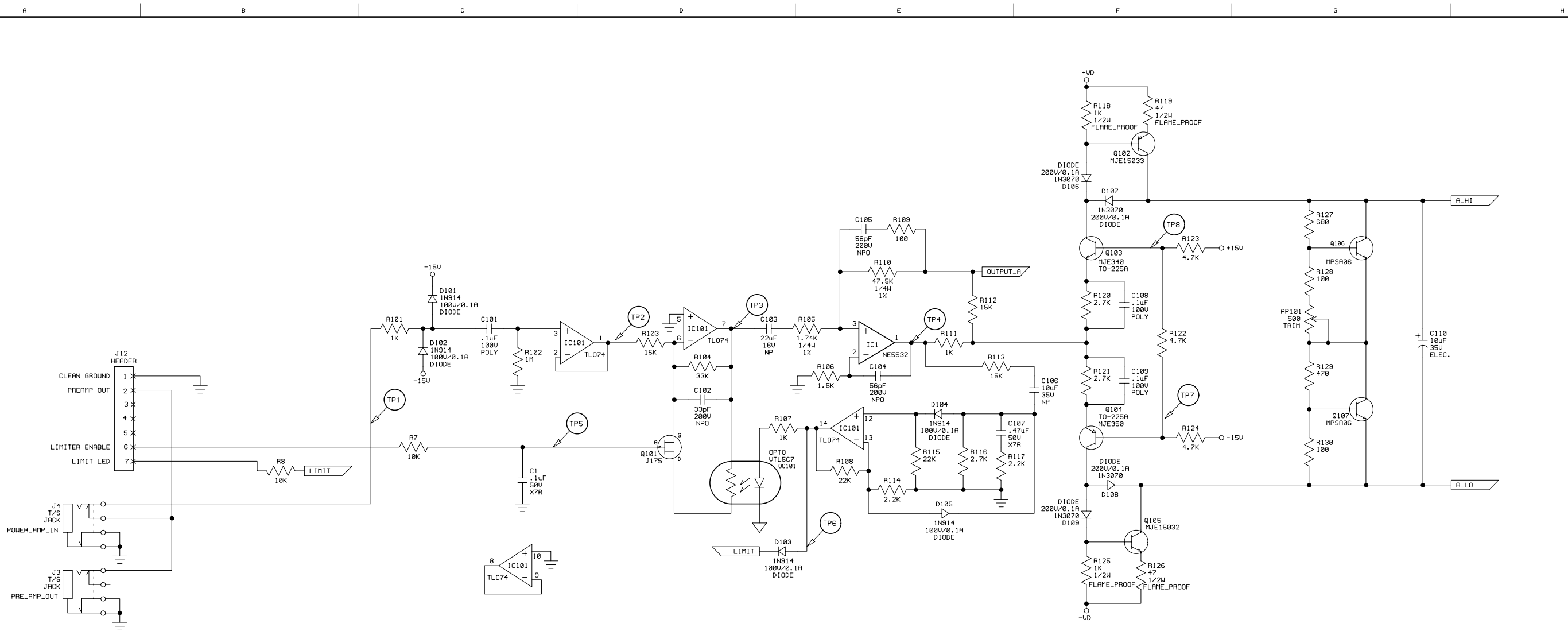
- NOTES:
- 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 - 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLT-METER.
 - 4) IF REQUIRED FOR CHASSIS ASSY.

CAUTION:
THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

TP	NO SIGNAL	40VRMS OUT @ 8 OHMS	LIMITING @ 8 OHMS AS NOTED	WAVEFORM
13	VARIABLES w/TEMP	VARIES w/TEMP.	VARIES w/TEMP.	~
14	61Vac	51Vac	51Vac	~
15	61Vac	51Vac	51Vac	~
16	+14Vdc	-4.6Vdc	-4.6Vdc	~
17	+14.4Vdc	+14.4Vdc	+14.4Vdc	~
18	20Vac	19Vac	19Vac	~
19	20Vac	19Vac	19Vac	~
20	+71Vdc	+64.5Vdc	+64.5Vdc	~
21	+63Vdc	+59Vdc	+59Vdc	~
22	-63Vdc	-59Vdc	-59Vdc	~
23	-71Vdc	-64.5Vdc	-64.5Vdc	~
24	+6Vdc	+5.73Vdc	+5.73Vdc	~
25	NOT USED			
26	+15Vdc	+15Vdc	+15Vdc	~
27	-15Vdc	-15Vdc	-15Vdc	~
28	+14.3Vdc	+14.3Vdc	+14.3Vdc	~

SHEETS 10, 11 & 12 OF THIS DRAWING REPRESENT
ASSY P/N 07-442-04

5	CREATED: DRSHL04_RND_12				
REV:	DATE:	DESCRIPTION	ECR/ECN NO:	CHG'D BY:	APP'D BY:
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.					
SIGNATURES:		DATE:			
DRAWN: REM		6-25-98	11888 Borman Dr. St. Louis, Missouri 1 63146		
CHK'D:			FIRST USED ON:		
DES'D:					
TOLEANCES:	DRAWING SIZE: D	DRAWING TITLE: POWER_AMP			
	DRAWING TYPE: - SCHEMATIC	DRAWING NO.: 07S442-XX			
	CLASS CODE:				
	SCALE: NONE	SHEET: SH12 OF 15			



BIAS ADJUSTMENT: WITH NO SIGNAL AND NO LOAD
 ADJUST AP101 TO OBTAIN AN AVERAGE OF 25 ± 5mV ACROSS R139, 140, R146, 147, 152, 153, 158, 159, 164, 165.

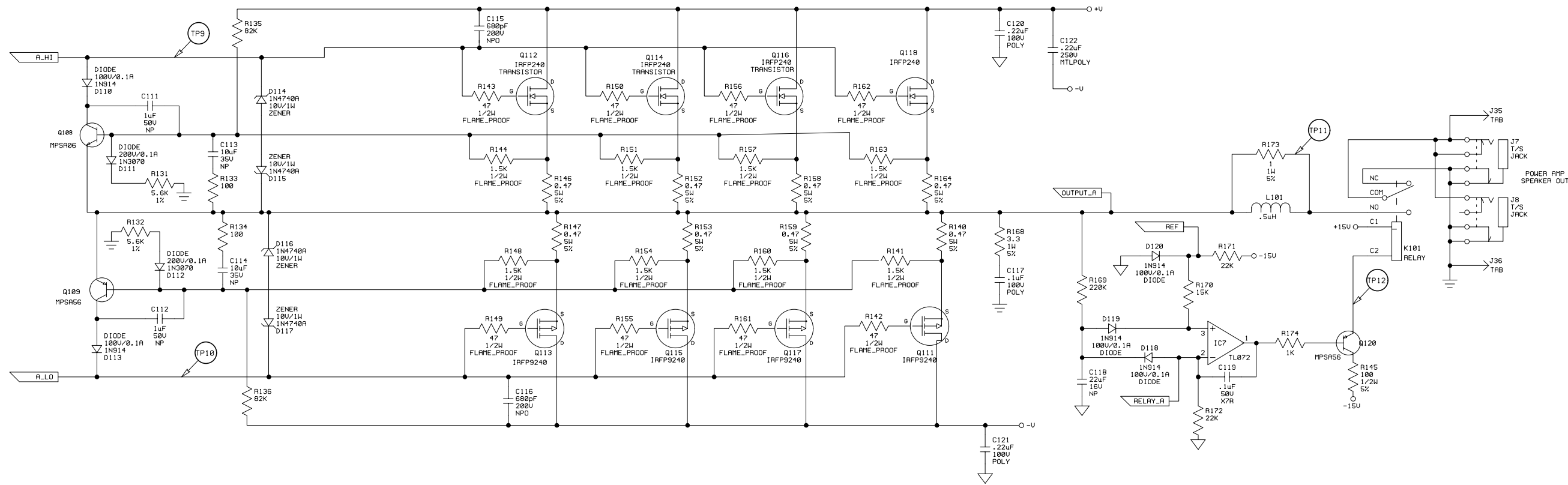
T.P.	NO SIGNAL	40URMS OUT @ 8 OHMS	LIMITING @ 8 OHMS AS NOTED	WAVEFORM
* 1	---	0.68Urms	0.79Urms	~
* 2	---	0.68Urms	0.79Urms	~
3	+/-20mVdc	1.5V	1.5V	~
4	+/-1Vdc	2.6Vdc	2.6Vdc	AS SHOWN PER COLUMN
5	+7mVdc	1.9mV	2.7mV	---
6	+5Vdc	+4.82Vdc	+4.82Vdc	---
7	-5Vdc	-5.12Vdc	-5.12Vdc	---
8	0V	+43.6mVdc	+74mVdc	~

- NOTES:
- THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
 - VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.

CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

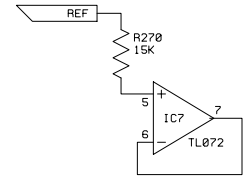
SHEETS 13, 14 & 15 OF THIS DRAWING REPRESENTS
 ASSY P/N 07-442-12

5	CREATED: DASHL04.RNO.12				
REV:	DATE:	DESCRIPTION:	ECR/ECN NO:	CHG'D BY:	APP'D BY:
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.					
SIGNATURES:		DATE:	11880 Borman Dr. St. Louis, Missouri 63146		
DRAWN: REM		6-25-98			
CHK'D:			FIRST USED ON:		
ALS'D:					
TOLERANCES:	DRAWING SIZE: D SCHEMATIC	DRAWING TITLE: POWER_AMP			
	CLASS CODE:	DRAWING NO.: 07S442-XX			
	SCALE: NONE	SHEET: SHT 13 OF 15			



BIAS ADJUSTMENT: WITH NO SIGNAL AND NO LOAD
 ADJUST AP101 TO OBTAIN AN AVERAGE OF 25 ± 5mV ACROSS R139, 140
 R146, 147, 152, 153, 158, 159, 164, 165.

T.P.	NO SIGNAL	40VRMS OUT @ 8 OHMS	LIMITING @ 8 OHMS	AS NOTED	WAVEFORM
9	+3.6Vdc	40Urms	41Urms		~
10	-3.5Vdc	40Urms	41Urms		~
11	7.2mVdc	40Urms	41Urms		~
12	-11.52Vdc	-11.8Vdc	-11.8Vdc		—

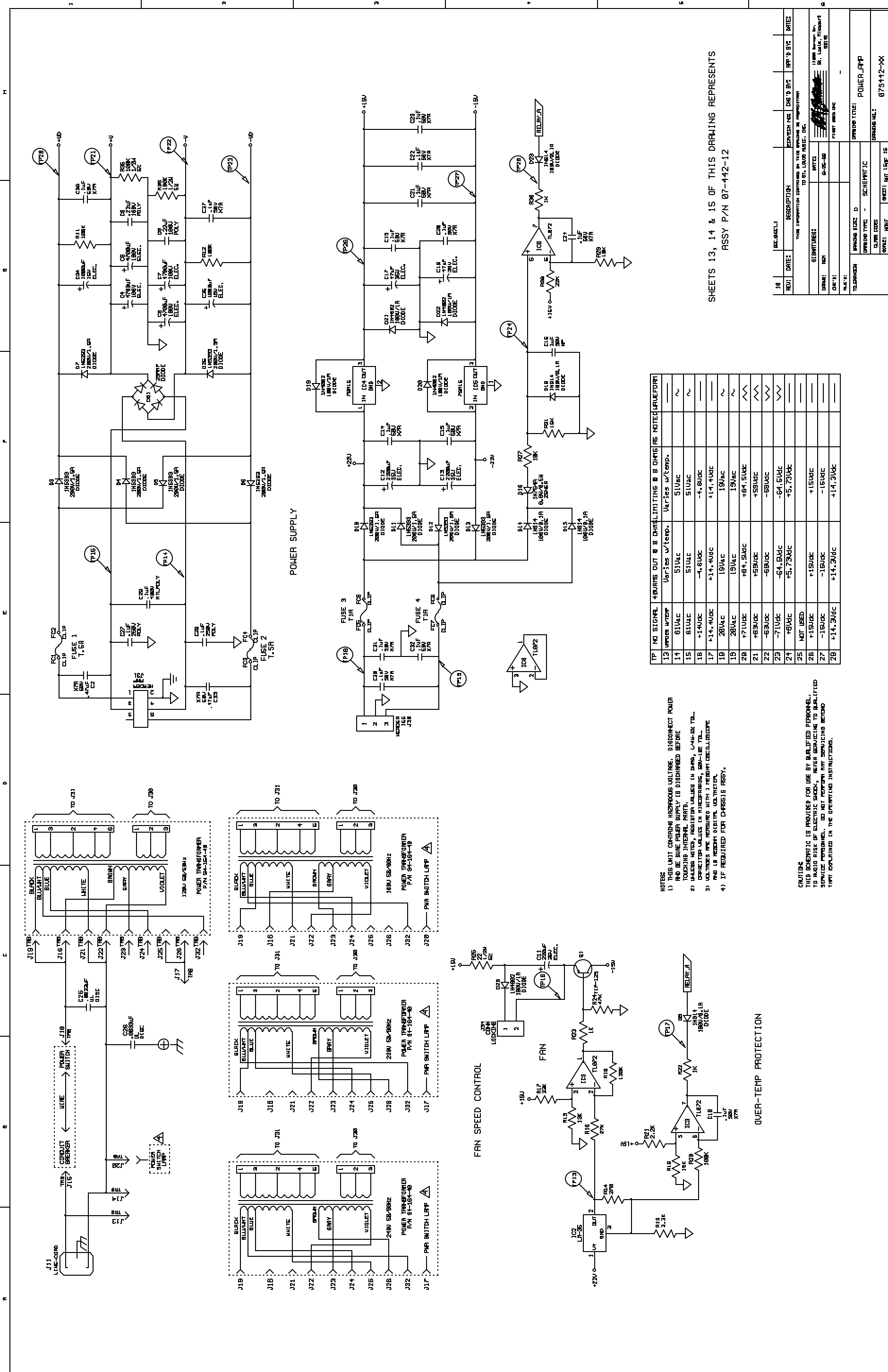


- NOTES:
- 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50U-10% TOL.
 - 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.

CAUTION:
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

SHEETS 13, 14 & 15 OF THIS DRAWING REPRESENTS
 ASSY P/N 07-442-12

5	CREATED_DASHL01_RND.12				
REV:	DATE:	DESCRIPTION	ECR/ECN NO:	CHG'D BY:	APP'D BY:
THIS INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.					
SIGNATURES:		DATE:	11880 Borman Dr. St. Louis, Missouri 63146		
DRAWN:	REF	6-25-98	FIRST USED ON:		
CHK'D:			-		
RLS'D:			-		
TOLERANCES:	DRAWING SIZE: D	DRAWING TITLE: POWER_AMP		DRAWING NO.:	
	DRAWING TYPE: - SCHEMATIC			07S442-XX	
	CLASS CODE:				
	SCALE: NONE	SHEET: SHT 14 OF 15			



POWER SUPPLY

TP	NO	SIGNAL	REMARKS	OUT	IN	RES	NOTED
13	VARIES	W/TEMP	VARIES	W/TEMP.			
14	61Vdc		51Vdc				
15	61Vdc		51Vdc				
16	+14.4Vdc		-1.6Vdc				
17	+14.4Vdc		+14.4Vdc				
18	20Vdc		19Vdc				
19	20Vdc		19Vdc				
20	+7.1Vdc		+6.5Vdc				
21	+6.3Vdc		+5.9Vdc				
22	-6.3Vdc		-6.0Vdc				
23	-7.1Vdc		-6.4Vdc				
24	+6Vdc		+5.73Vdc				
25	NOT USED						
26	+15Vdc		+15Vdc				
27	-15Vdc		-15Vdc				
28	+14.3Vdc		+14.3Vdc				

- NOTES:
- 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
 - 2) VOLTAGE VALUES, RESISTOR VALUES IN OHMS, L-VALUE TOL., CAPACITOR VALUES IN MICROFARADS, 100-100 TOL., VALUES ARE MEASURED WITH 1 PERCENT ACCURACY AND IS MEASURED FOR CHASSIS IS ASSY.
 - 3) IF REQUIRED FOR CHASSIS IS ASSY.

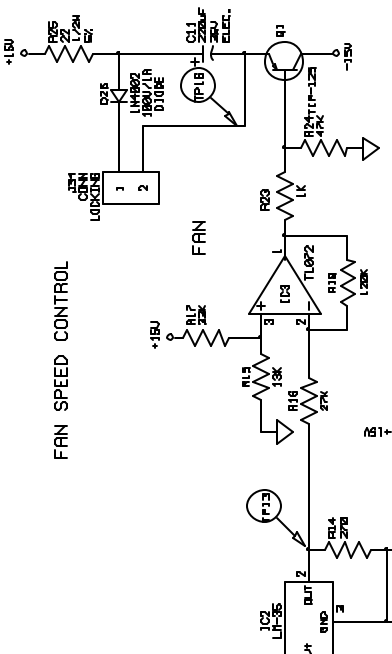
CAUTION:
THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER TO THE SERVICE MANUAL FOR SAFETY PRECAUTIONS. DO NOT REPAIR OR SERVICE BEYOND THAT SPECIFIED IN THE OPERATING INSTRUCTIONS.

SHEETS 13, 14 & 15 OF THIS DRAWING REPRESENTS
ASSY P/N 07-442-12

REV	DATE	DESCRIPTION	CHK'D BY	APP'D BY	DATE
1		THIS SCHEMATIC CONTAINS THE DATA FOR THE POWER SUPPLY UNIT.			
2		REVISED TO ST. LOUIS MODEL, D.G.			

REV	DATE	DESCRIPTION	CHK'D BY	APP'D BY	DATE
1		THIS SCHEMATIC CONTAINS THE DATA FOR THE POWER SUPPLY UNIT.			
2		REVISED TO ST. LOUIS MODEL, D.G.			

FAN SPEED CONTROL



OVER-TEMP PROTECTION

