



FENDER MUSICAL INSTRUMENTS  
1130 Columbia Street  
Brea, California 92621

TECHNICAL SERVICE BULLETIN  
NOVEMBER 18, 1986  
REVISED 4/15/87  
PAGE 1 OF 2

**FIELD CHANGE NOTICE 6-003**

EFFECTIVITY:

SUNN part number 9909971-510 SX6350 and 9909971-520 SX8350 powered mixers, early production.

REASON FOR CHANGE:

To provide better thermal tracking thereby increasing stability and reliability.

MATERIAL REQUIRED:

- (1) 990-22-0067-0 transistor, GE67A with heatsink
- (1) 990-22-5023-0 transistor, Motorola MJ15023
- (1) 990-22-0042-0 transistor, Motorola MPSW42
- (1) 990-22-0092-0 transistor, Motorola MPSW92
- (2) 990-17-0301-0 resistors, 300 ohm, 10W
- (2) 990-13-0052-0 resistors, 5.6 ohm, 1W, 5%
- (1) 990-75-0500-0 wire, 4", 24AWG, red
- (1) 990-75-0501-0 wire, 4", 24AWG, green
- (1) 990-75-0502-0 wire, 4", 24AWG, black
- (4) 990-43-0093-0 washer, nylon shoulder
- (4) 990-43-0018-0 nut, 4/40
- (4) 014174-000 screw, 4/40

PARTS KIT:

Order parts kit KFC 6-003

MODIFICATION PROCEDURE:

Prepare the GE67A transistor for installation by following these two steps: (an RCA SK9143 is an acceptable substitute for GE67A).

1. Increase the mounting hole in its heatsink from 0.140" to 0.156" using a 5/32" drill.
2. Using 4" lengths of 24AWG wire, strip and tin 3/16" from each end. Solder one end of the red wire to the collector, one end of the black wire to the emitter and one end of the green wire to the base. Slide sleeving over the solder joints.



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1130 Columbia Street  
Brea, California 92621

TECHNICAL SERVICE BULLETIN  
NOVEMBER 20, 1986  
REVISED 3/24/87  
PAGE 1 OF 1

FIELD CHANGE NOTICE 6-005

EFFECTIVITY:

SUNN part number 9909971-500 SX4150, 9909971-510 SX6350 and 9909971-520 SX8350 powered mixers operating in a strong radio frequency environment.

REASON FOR CHANGE:

To eliminate or reduce susceptibility to radio frequency interference.

MATERIAL REQUIRED:

(16) capacitors, 100 picofarad, 50V, disc ceramic (part # 069724)  
( 1) wire, 23", 20AWG, black

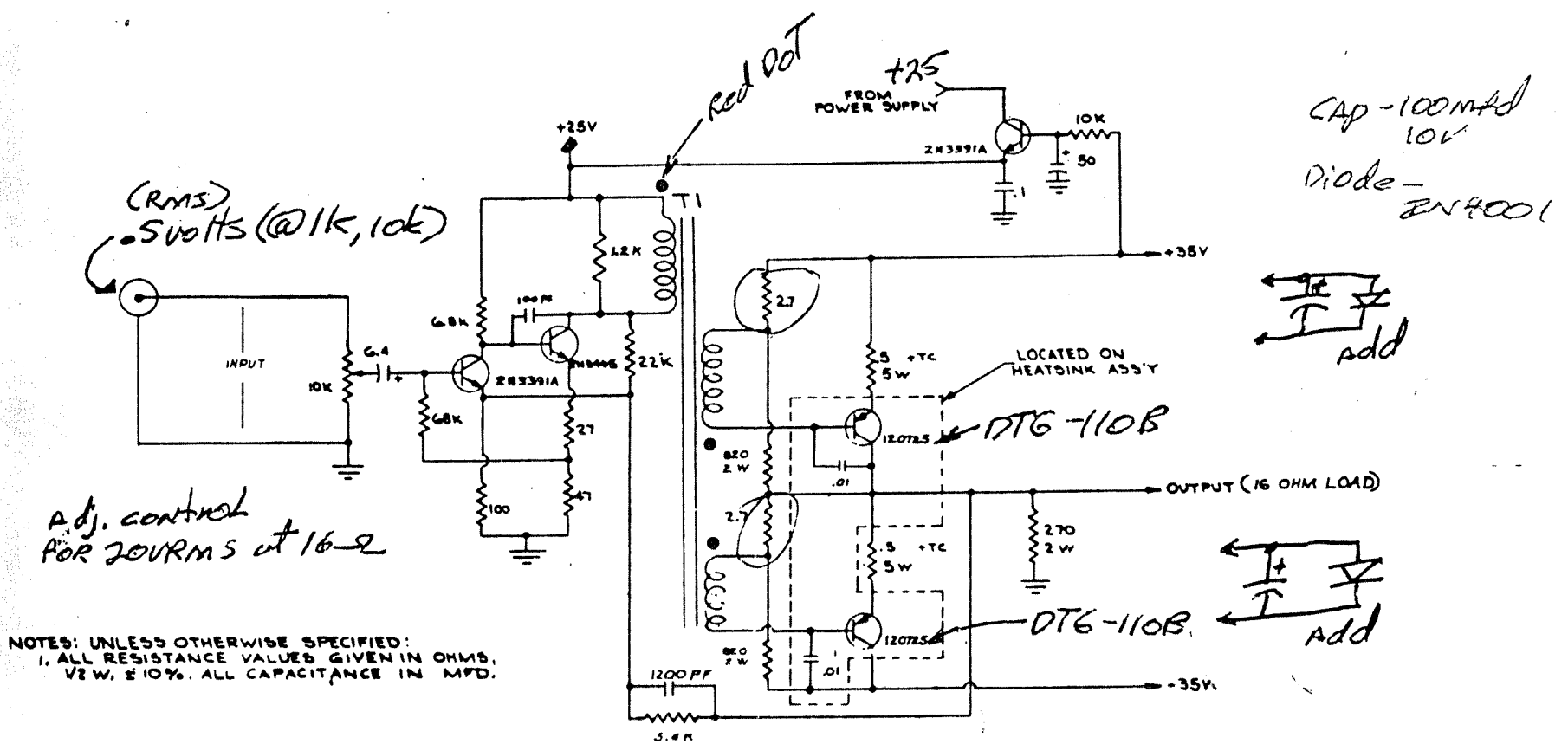
PARTS KIT:

Order parts kit KFC 6-005

MODIFICATION PROCEDURE:

On the preamp board, cut traces to isolate pin 1 of the XLR connector on all input channels except channel 1. Hardwire each XLR pin 1 connection individually to the pin 1 connection on channel 1. **DO NOT DAISY CHAIN THESE CONNECTIONS!** Separate wires must spread out from channel 1, pin 1 in star fashion to pin 1 of each channel but each wire must be kept as short as possible.

Install a 100pf capacitor between pin 1 and pin 2 of each XLR connector. In addition, install a 100pf capacitor between pin 1 and pin 3 of each XLR connector.



NOTES: UNLESS OTHERWISE SPECIFIED:  
 1. ALL RESISTANCE VALUES GIVEN IN OHMS,  
 2W, ± 10%. ALL CAPACITANCE IN MPD.

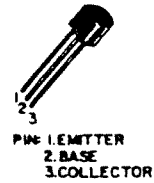
UPDATE: REMOVE 2.7Ω RES., ADD DIODE + CAPACITOR NETWORK IN PLACE OF RESISTOR  
 REMOVE DTG-110B, INSTALL MTS 2955

Figure 11-9. Schematic - Power Module - 80 Watt Suitcase

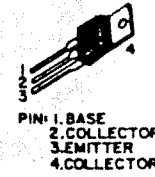
20-01212  
0485

TRANSISTOR PINOUTS:

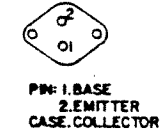
MPS A43  
2N5089  
2N5401  
2N4888  
2N4250  
MPS W42  
MPS W92  
SKM43 or GE67A



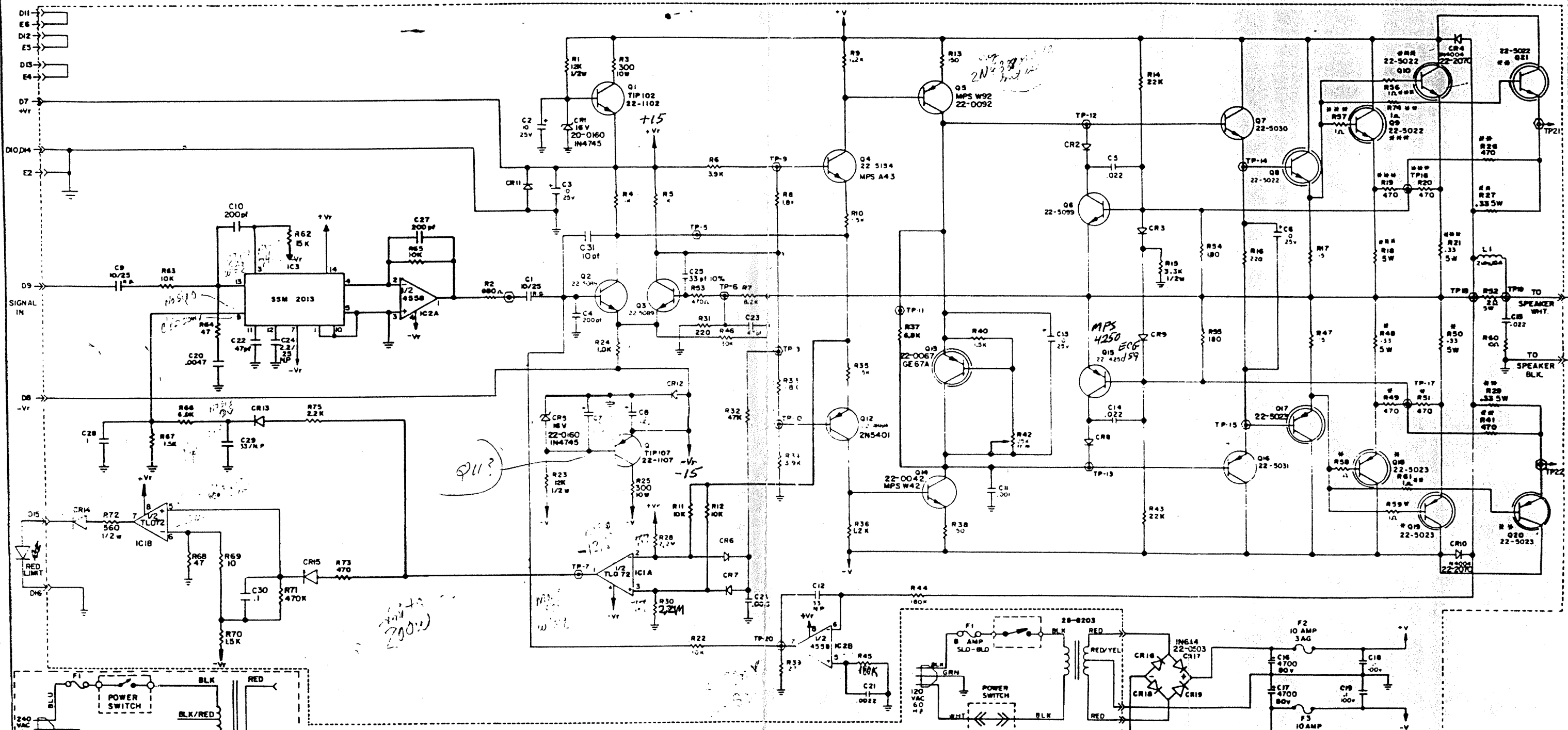
TIP 02  
TIP 07  
MJE 15030  
MJE 15031



MJ 15022  
MJ 15023



REVISIONS			
LT#	DESCRIPTION	DATE	APPROVAL
A	DATE SUBMITTIC	07/18/64	SMITH

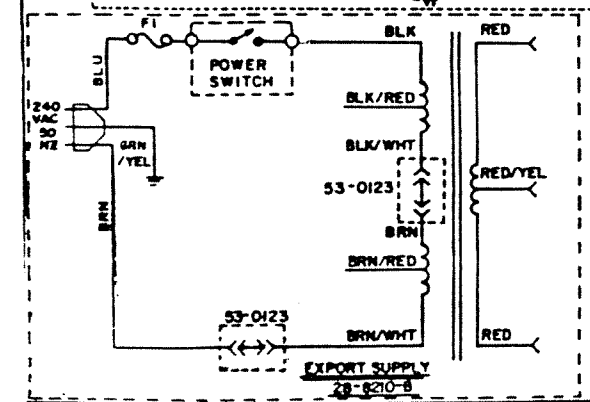
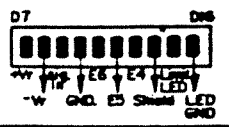


UNLESS OTHERWISE NOTED:

- All Resistors are 1/4 watt 5%, unless otherwise noted.
- All Capacitor values are given in microfarads/voltage.
- All Diodes are IN4148.

NOTES:

- BIAS SETTING:**  
Turn BIAS Pot fully CCW. Connect a 4 ohm load across the output. Inject a 1KHz sine wave and set output to 1/3 of rated power (117 watts at 4 ohms = 21.6v RMS) after 30 seconds, disconnect input signal and load and set BIAS pot for an indication of 15 mVdc ± 5mV across TP21 and TP22.
- Components marked with (1) are located on Output Module 1.
- Components marked with (2) are located on Output Module 2.
- Components marked with (3) are located on Output Module 3.



§X6350 & §X8350

**SUNNO**  
SCHEMATIC, REV. A  
POWER AMPLIFIER

PRODUCT OF:  
MUSICAL INSTRUMENTS  
BREA, CALIFORNIA  
MADE IN THE U.S.A.

APPROVAL	DATE
DATE	7/17/64

SCALE: FULL D SHEET NO. 19/1

DO NOT SCALE DRAWING

TRANSISTOR PINOUTS:

MPS A43  
2N5089  
2N5401  
2N4868  
2N4250  
MPS W42  
MPS W92  
SK9143 or GE67A

PIN: 1.EMITTER  
2.BASE  
3.COLLECTOR

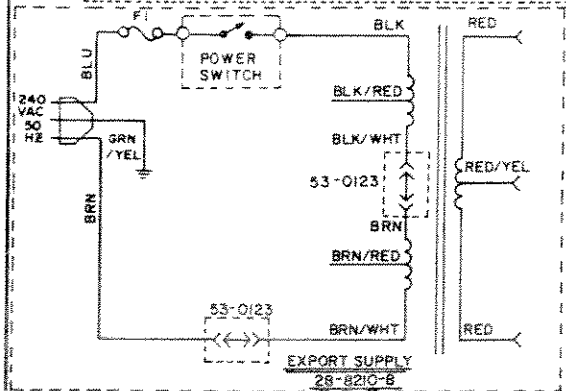
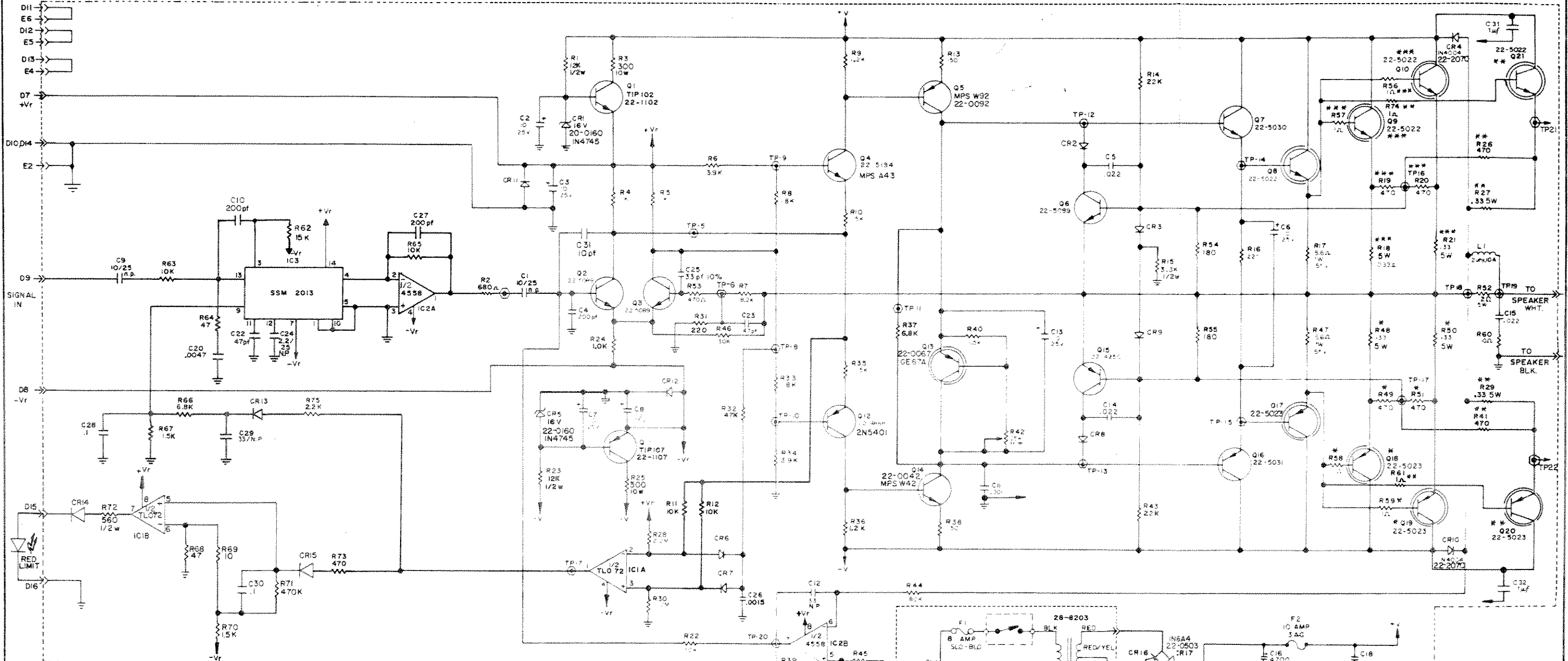
TIP102  
TIP107  
MJE 15030  
MJE 15031

PIN: 1.BASE  
2.COLLECTOR  
3.EMITTER  
4.COLLECTOR

MJ 15022  
MJ 15023

PIN: 1.BASE  
2.EMITTER  
CASE: COLLECTOR

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	FEELTS SUB. AT C	9/18/64	Spk
B	ADD 2.5K & C32 TO 201094	12/1/64	Spk

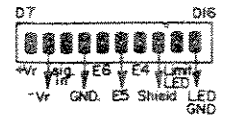


UNLESS OTHERWISE NOTED:

- All Resistors are 1/4 watt 5%, values in ohms.
- All Capacitor values are given in microfarads/voltage.
- All Diodes are IN4148.

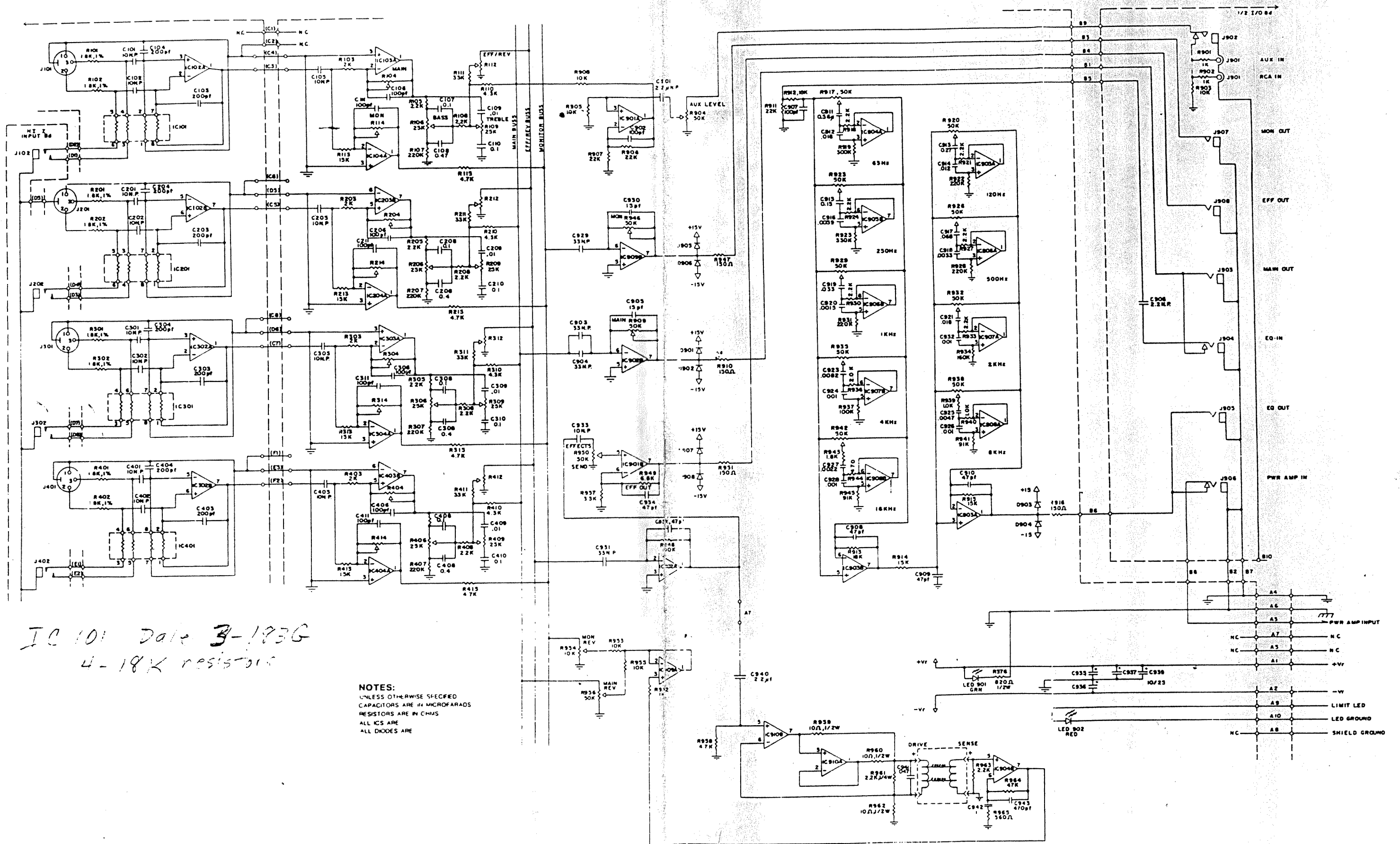
NOTES:

- BIAS SETTING:**  
Turn BIAS Pot fully CCW. Adjust bias voltage pot for 30mV  $\pm$  0.20mV either resistor R17 or R47 after one minute of warm up. From a cold start.
- Components marked with (1)\* are located on Output Module 1.
- Components marked with (2)\* are located on Output Module 2.
- Components marked with (3)\* are located on Output Module 3.



SX6350 & SX8350

TOLERANCES UNLESS OTHERWISE SPECIFIED		FRACTIONS DEC ANGLES	
APPROVALS	DATE	SCALE	DRAWING NO.
DESIGNED BY	9/1/64	FULL D	32-2220
CHECKED		SIZE	32-2220
A PRODUCT OF: Sunno MUSICAL INSTRUMENTS BREA, CALIFORNIA MADE IN THE U.S.A.		DO NOT SCALE DRAWING SHEET 1 of 1	



IC 101 Date 3-193G  
 4-18K resistors

NOTES:  
 UNLESS OTHERWISE SPECIFIED  
 CAPACITORS ARE IN MICROFARADS  
 RESISTORS ARE IN OHMS  
 ALL ICs ARE  
 ALL DIODES ARE

SX 6350/8350 PREAMP