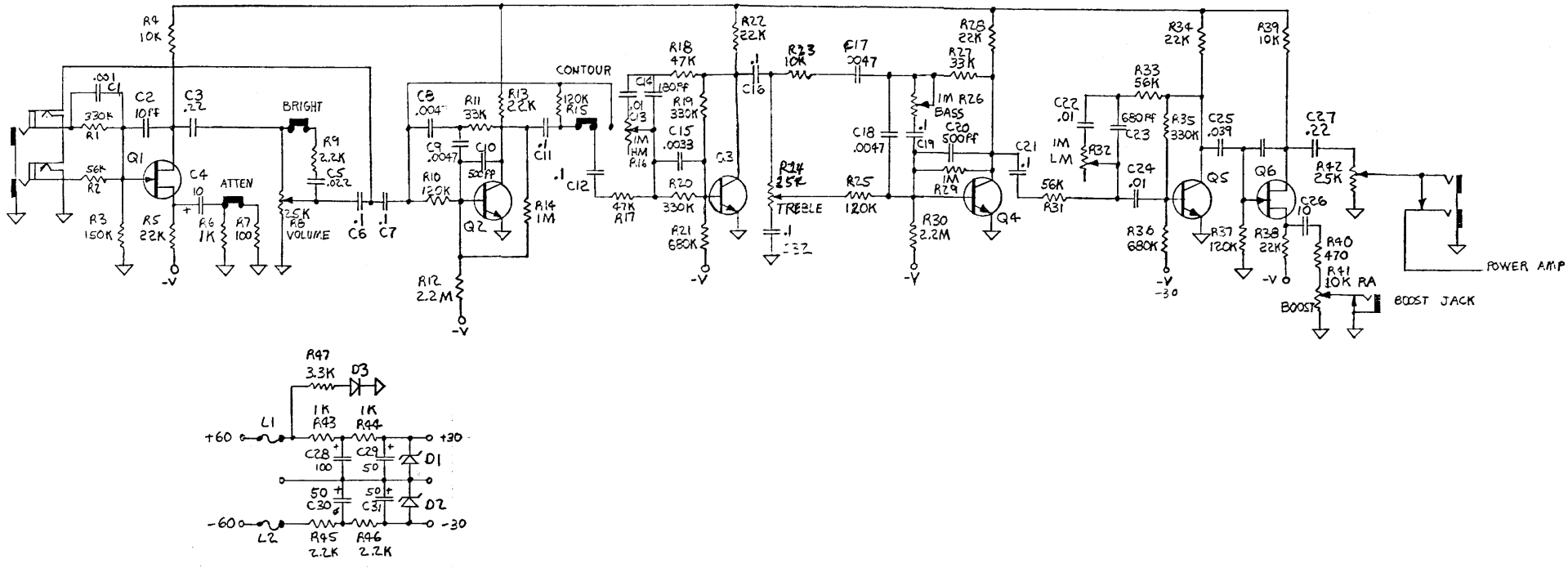
G/K 400B

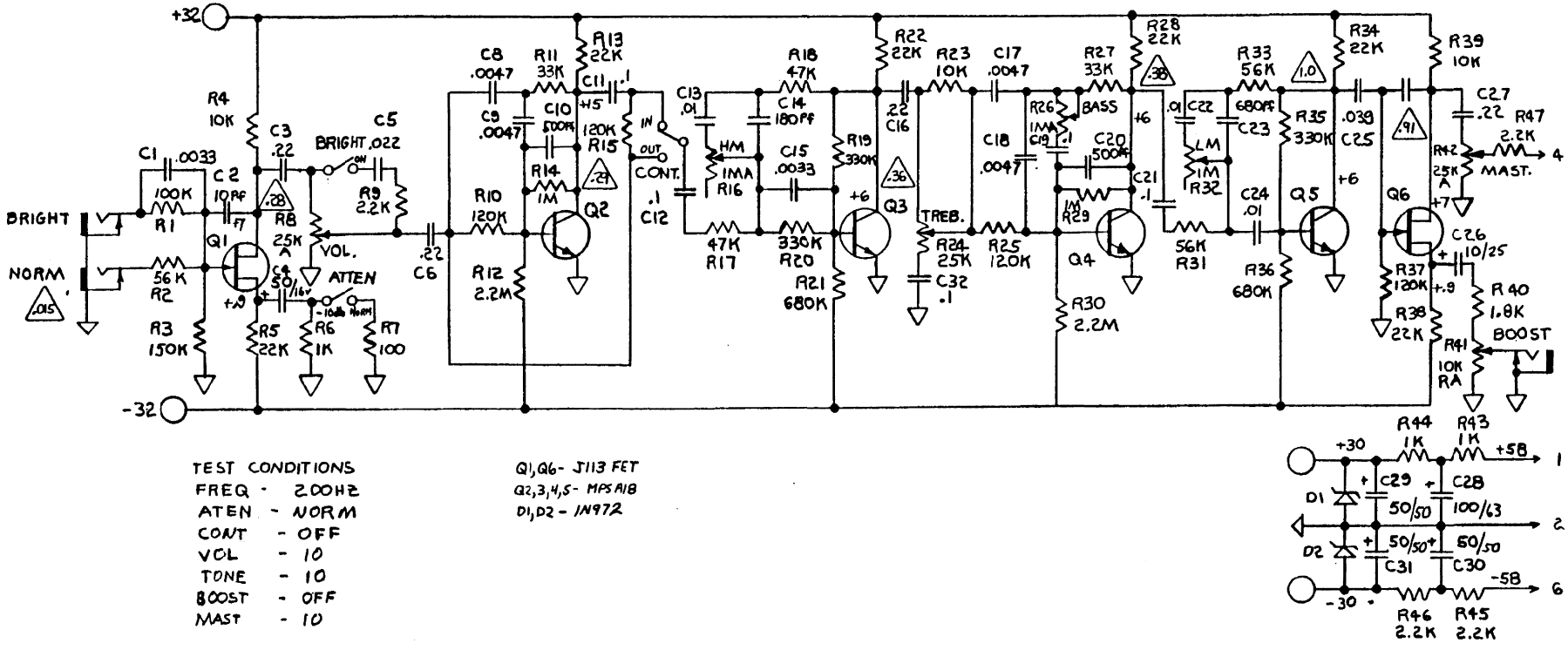
This document contains all five known versions of the 400B power amp and two versions of the 400B preamp.

Known Transistor Subs:

PMD10K80 / PMD1603 use 2N6284
PMD11K80 / PMD1703 use 2N6287

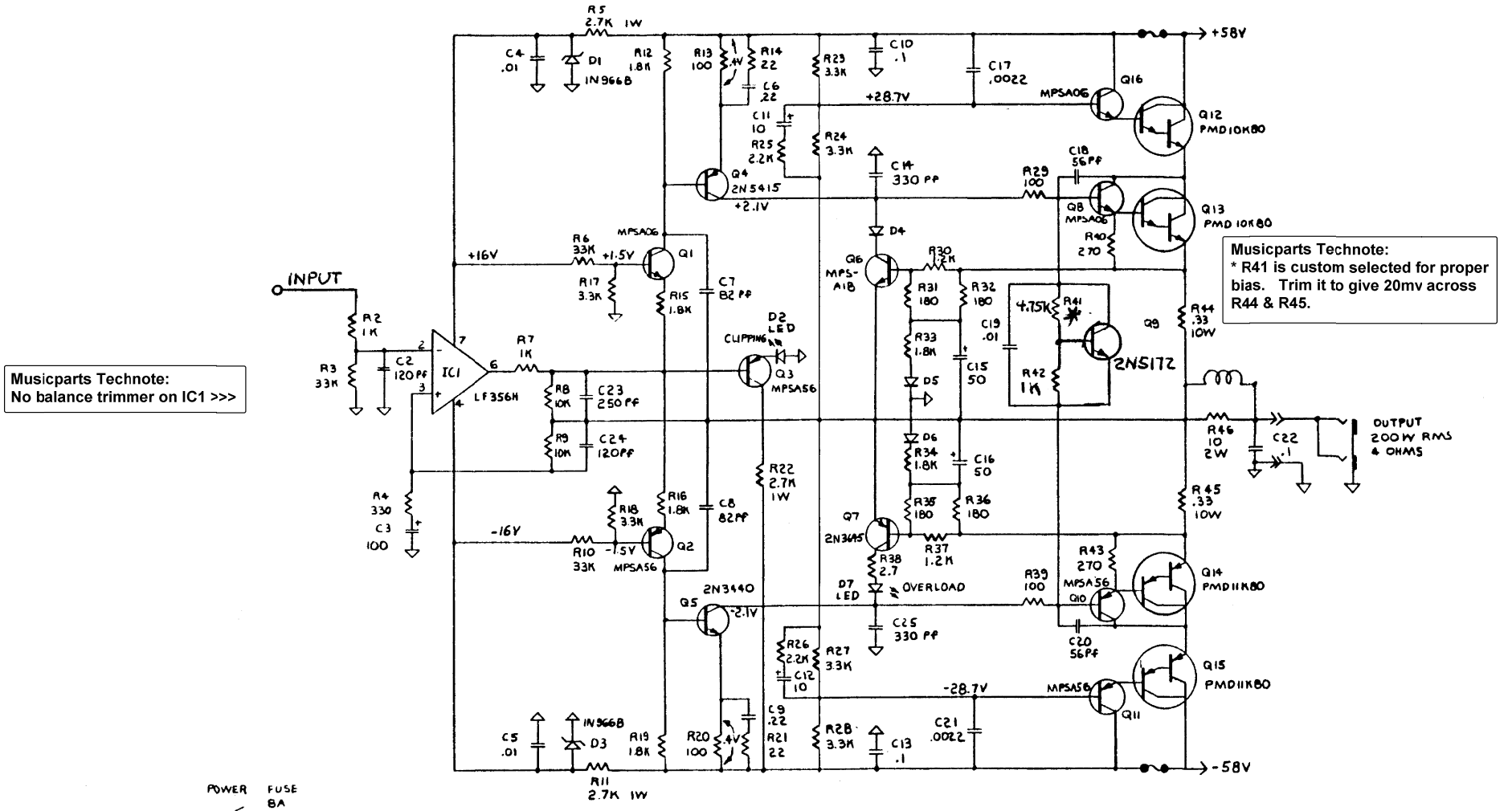


G-K 400B Preamp very old version



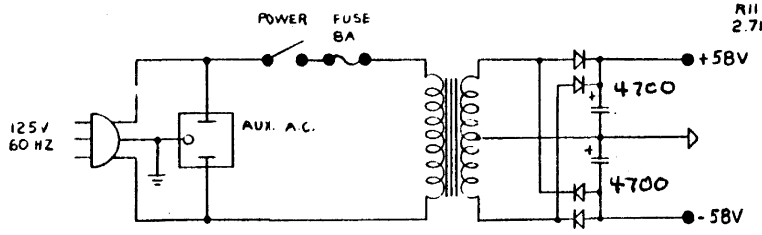
	GALLIEN-KRUEGER	
R.A.G.	400B PREAMP	
SN-6629		60019A

POWER AMP



Musicparts Technote:
No balance trimmer on IC1 >>>

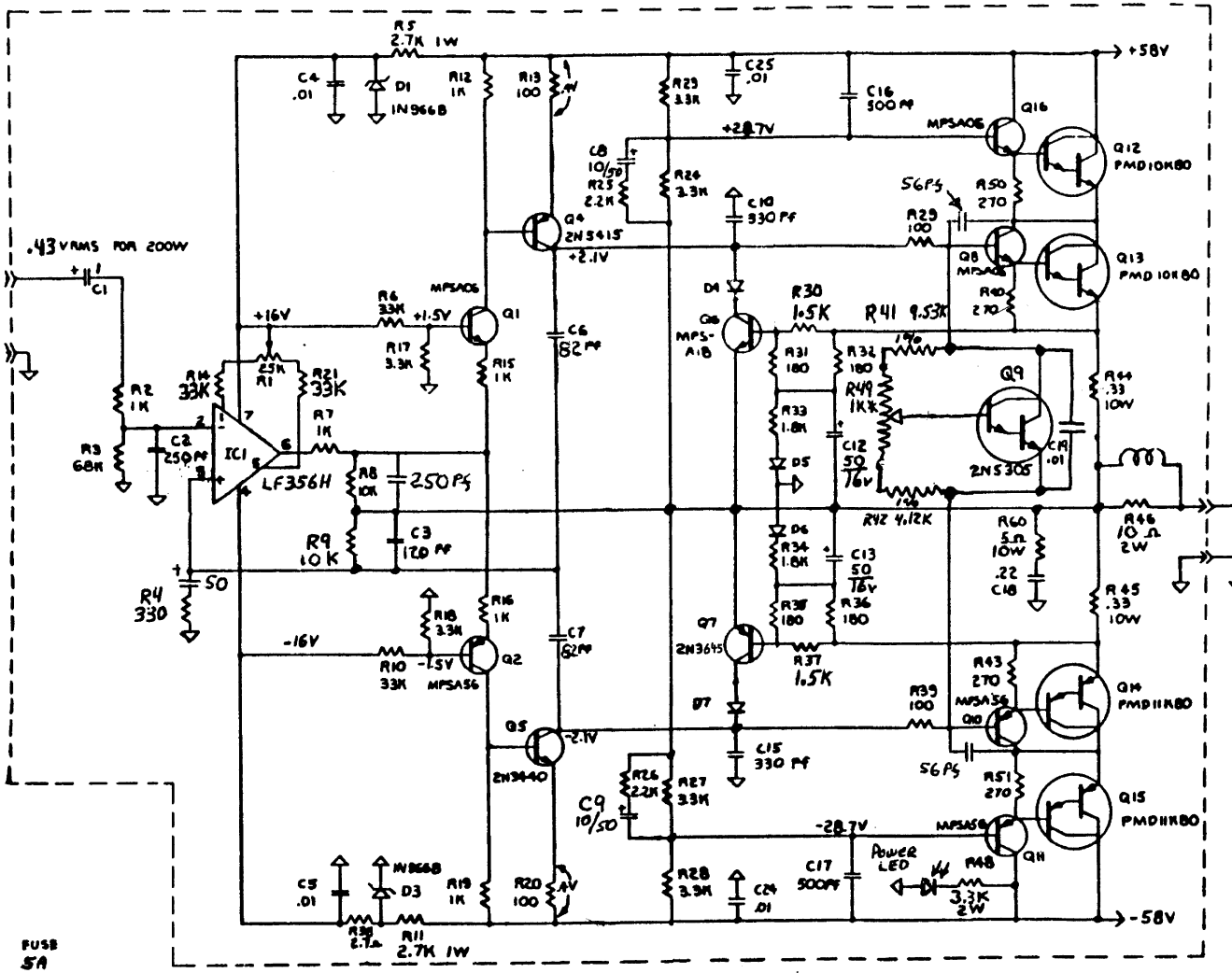
Musicparts Technote:
* R41 is custom selected for proper bias. Trim it to give 20mv across R44 & R45.



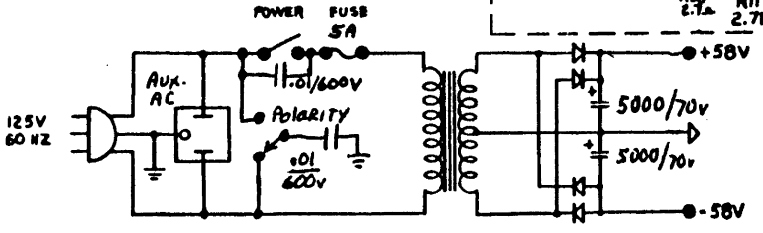
DIMENSIONS ARE IN INCHES UNLESS SPECIFIED TOLERANCE XX ± .02 XXX ± .005	SYM	REVISION	BY	DATE
BOB GALLIEN DRAWN BY	DATE	POWER AMP 400B TITLE	SCALE	
BOB GALLIEN ENGINEER			FINISH	
RELEASED		GMT GALLIEN-KRUEGER	PART NO 60014	
MATERIAL	MATL NO		DRAWING NO	

Very-Very early version

Musicparts Technote:
Adjust R1 for less than 10mv on output at idle. >>>



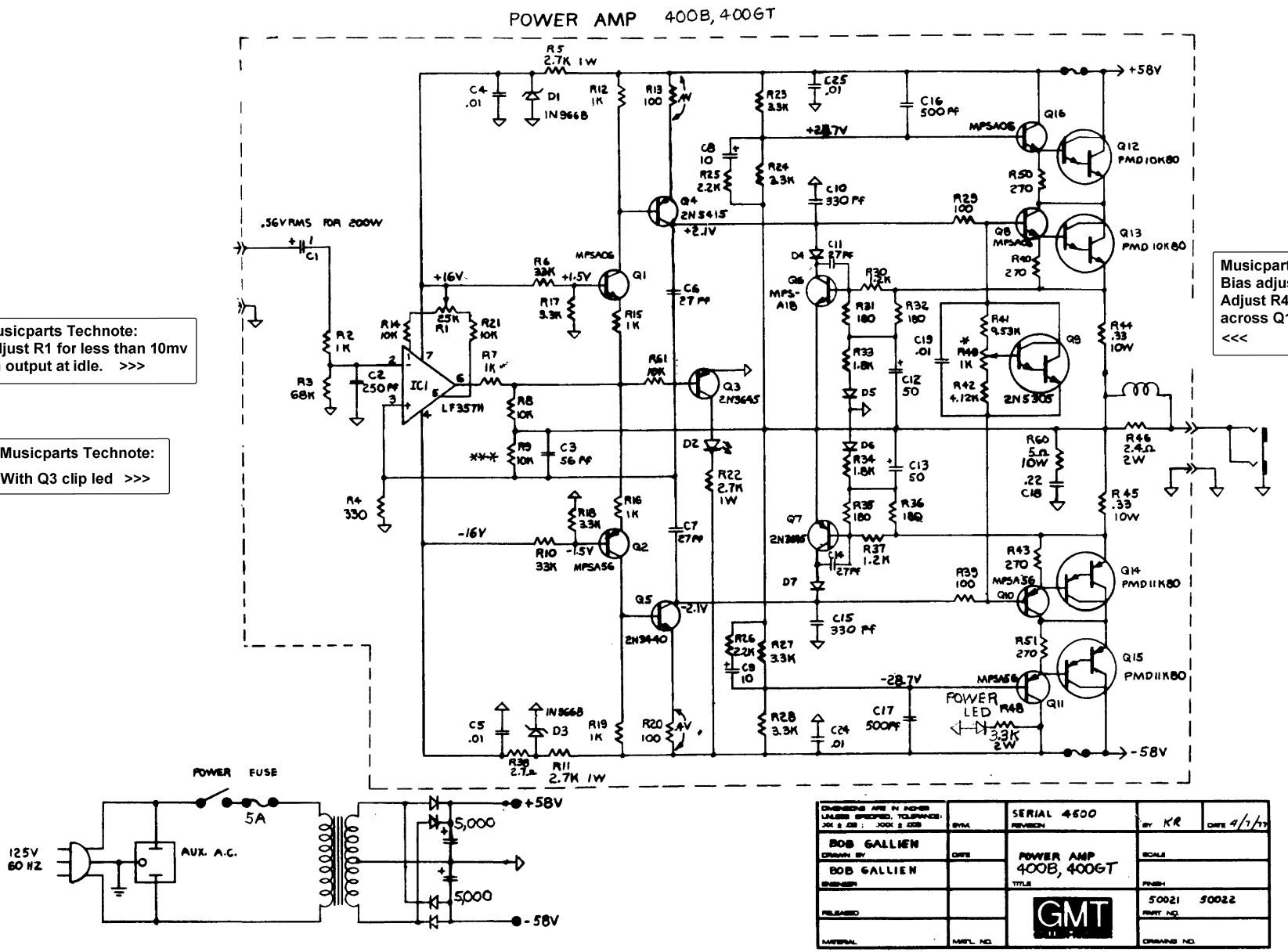
Musicparts Technote:
Bias adjustment...
Adjust R49 for 25mv across Q13 E - Q14 E
<<<



BOB GALLIEN		VERY EARLY	
BOB GALLIEN		POWER AMP 400B	
		GMT	50019B
			60024

Very early version

POWER AMP 400B, 400GT



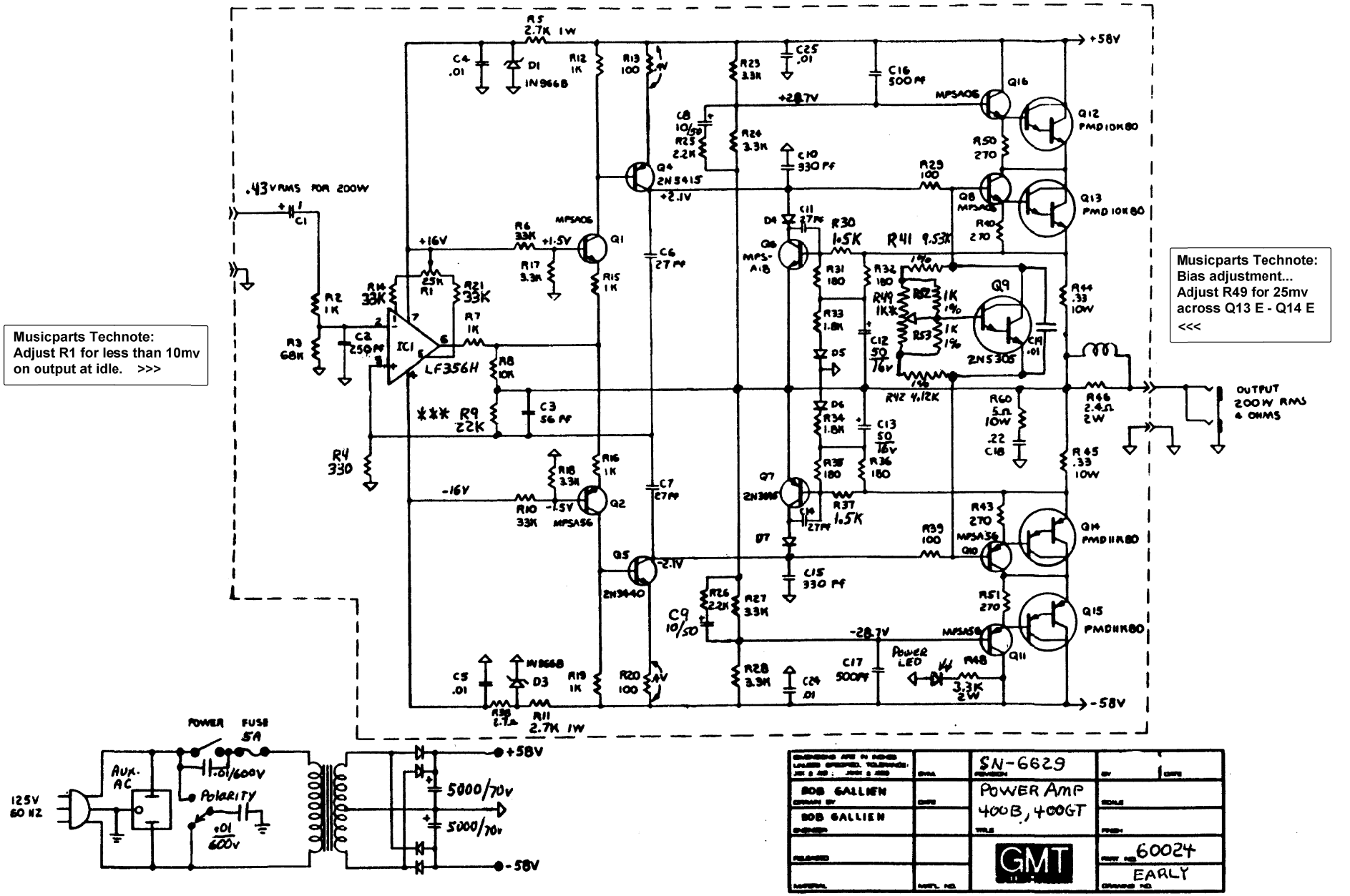
Musicparts Technote:
Adjust R1 for less than 10mv on output at idle. >>>

Musicparts Technote:
With Q3 clip led >>>

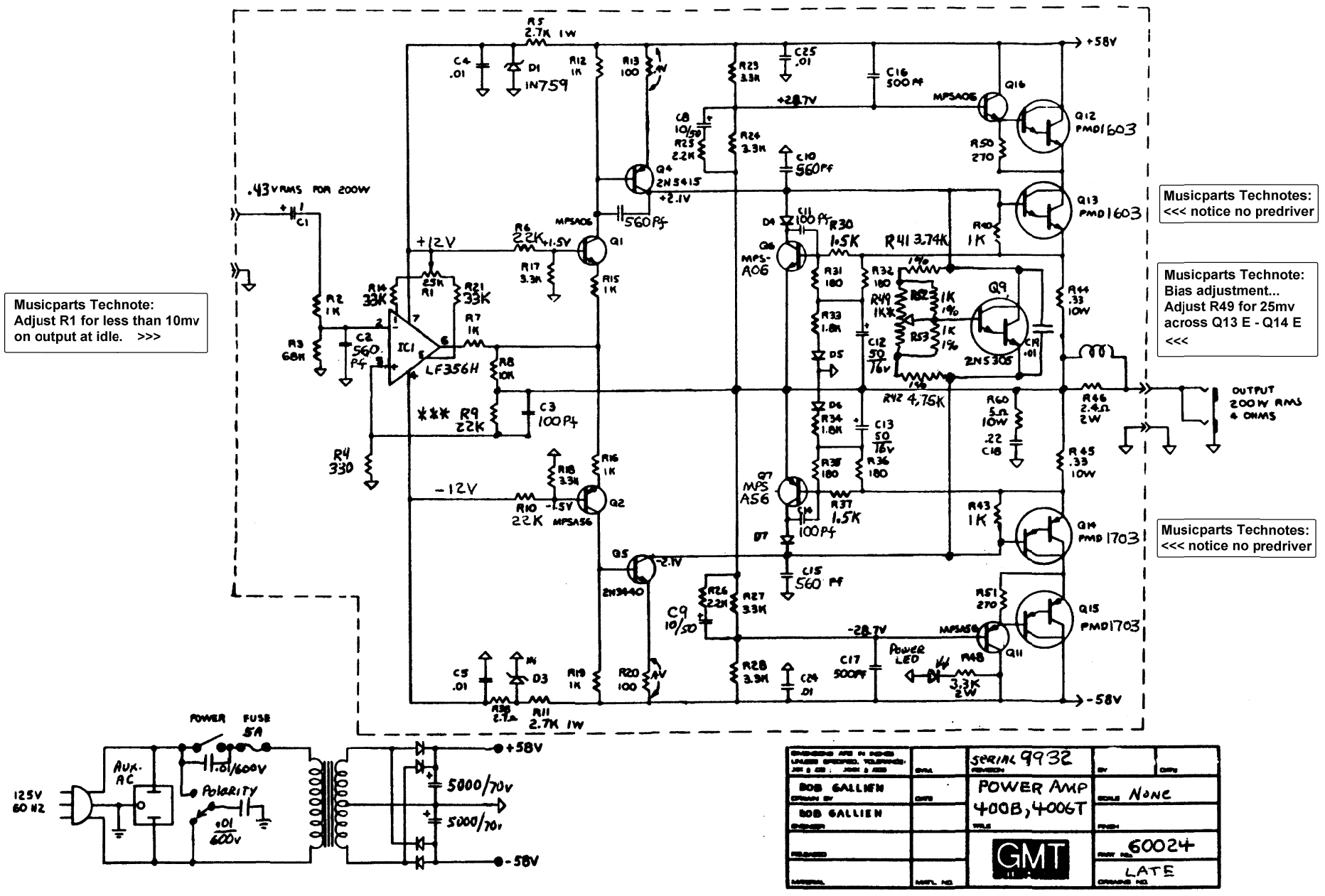
Musicparts Technote:
Bias adjustment...
Adjust R49 for 25mv across Q13 E - Q14 E
<<<

DIMENSIONS ARE IN INCHES UNLESS SPECIFIED. TOLERANCE: XX ± .03 ; XXX ± .005	SYM.	SERIAL 4500 REVISION	BY KR DATE 4/1/77
BOB GALLIEN DRAWN BY	DATE	POWER AMP 400B, 400GT TITLE	SCALE
BOB GALLIEN ENGINEER			FINISH
RELEASED		GMT	50021 50022 PART NO.
MATERIAL	MATL. NO.		DRAWING NO.

Serials 4500 up



Serials 6629 up



Serials 9932 up

OUTPUT BIAS UPDATE

This change provides for a more accurate means of setting the idle current in the output stage, as well as better tracking over temperature.

1. Remove thermal bias transistor Q9 from heat sink and replace with transistor in kit.

2. Cut the circuit trace as shown on diagram. This trace connects R41 and R42. R41 and R42 are the bias set resistors and are the 1% resistors located near the thermal bias transistor. Replace these resistors as follows:

3. R41 will be either a 4.99K 1% or a 4.75K 1% resistor. Remove it and install the 9.53K 1% resistor in its place.

4. R42 is a 1K 1% resistor. Remove it and replace it with the 4.75K 1% resistor supplied with the kit.

5. Glue the trim pot supplied to the circuit side of the board shown on the diagram. Solder pins as shown for each board.

INPUT BIAS UPDATE

This change lowers the supply voltage to the input integrated circuit reducing its power dissipation.

1. Remove D1 (1N968B). Replace with 1N966B supplied with kit.

2. Remove D3 (1N968B). Replace with 1N966B supplied with kit.

3. Remove R17 (2.7K). Replace with 3.3K supplied with kit.

4. Remove R18 (2.7K). Replace with 3.3K supplied with kit.

5. Install heatsink on IC1 case.

This completes all alterations. Set the bias as follows:

1. Using DVM connected from Q13E to Q14E adjust the trim pot to give 25mv + 5mv. Let the amp run for five minutes and readjust.

POWER AMP 400B CIRCUIT SIDE

*PINS 1 & 2 TO R42
PIN 3 TO R41