

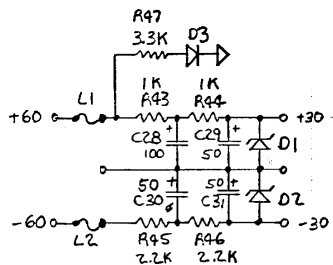
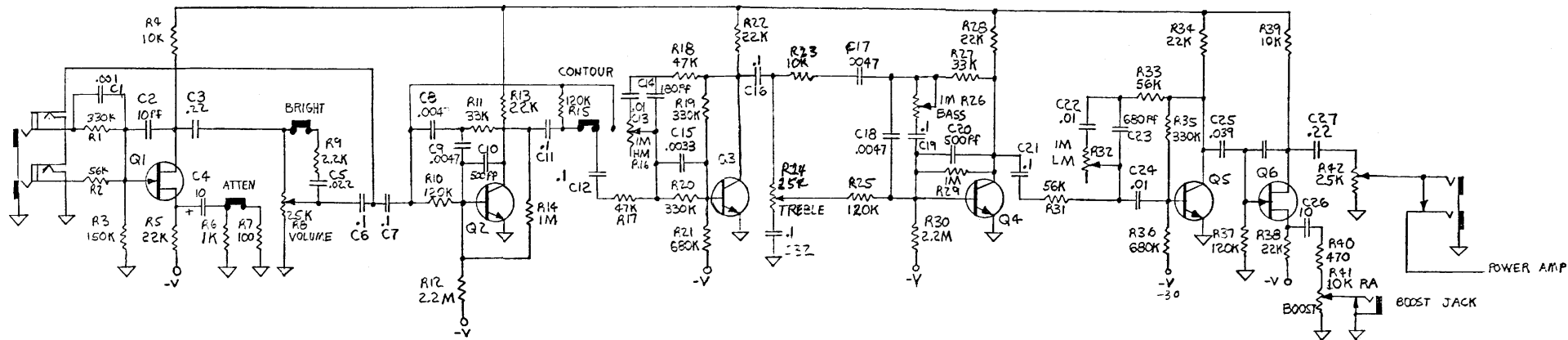
G/K 400B

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

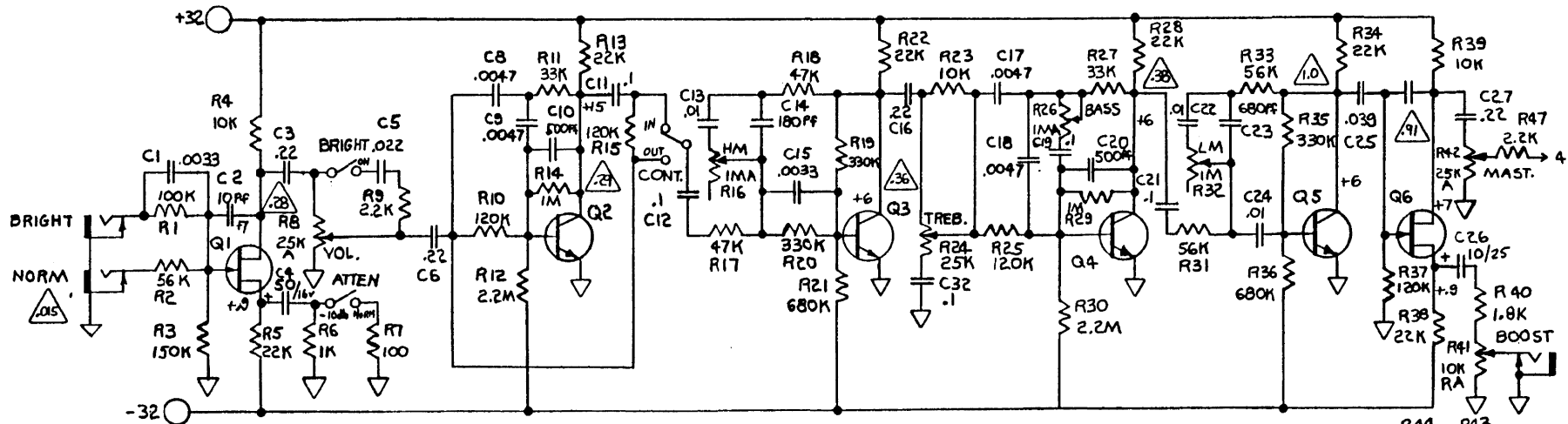
Known Transistor Subs:

PMD10K80 / PMD1603 use 2N6284

PMD11K80 / PMD1703 use 2N6287

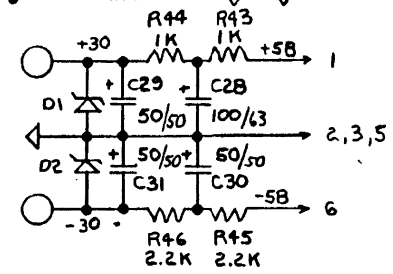


G-K 400B Preamp very old version



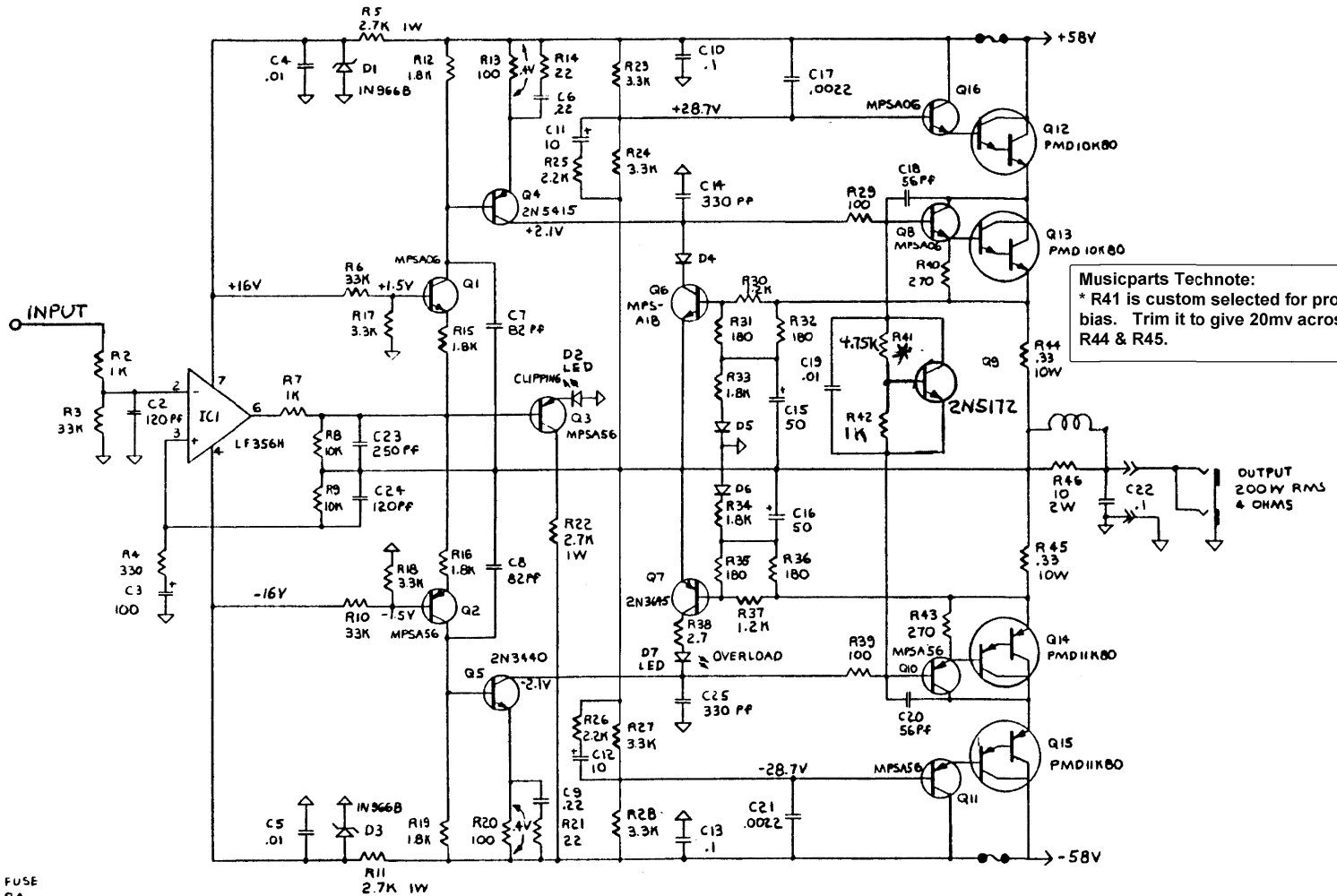
TEST CONDITIONS
 FREQ - 200HZ
 ATEN - NORM
 CONT - OFF
 VOL - 10
 TONE - 10
 BOOST - OFF
 MAST - 10

Q1, Q6 - J113 FET
 Q2, 3, 4, 5 - MPSA18
 D1, D2 - 1N972



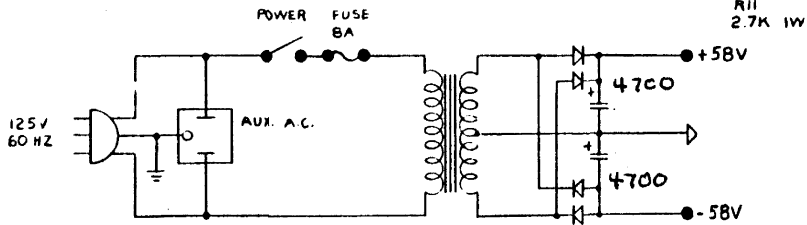
	GALLIEN-KRUEGER	
R.A.G.	400B PREAMP	
SN-6629		60019A

POWER AMP



Musicparts Technote:
No balance trimmer on IC1 >>>

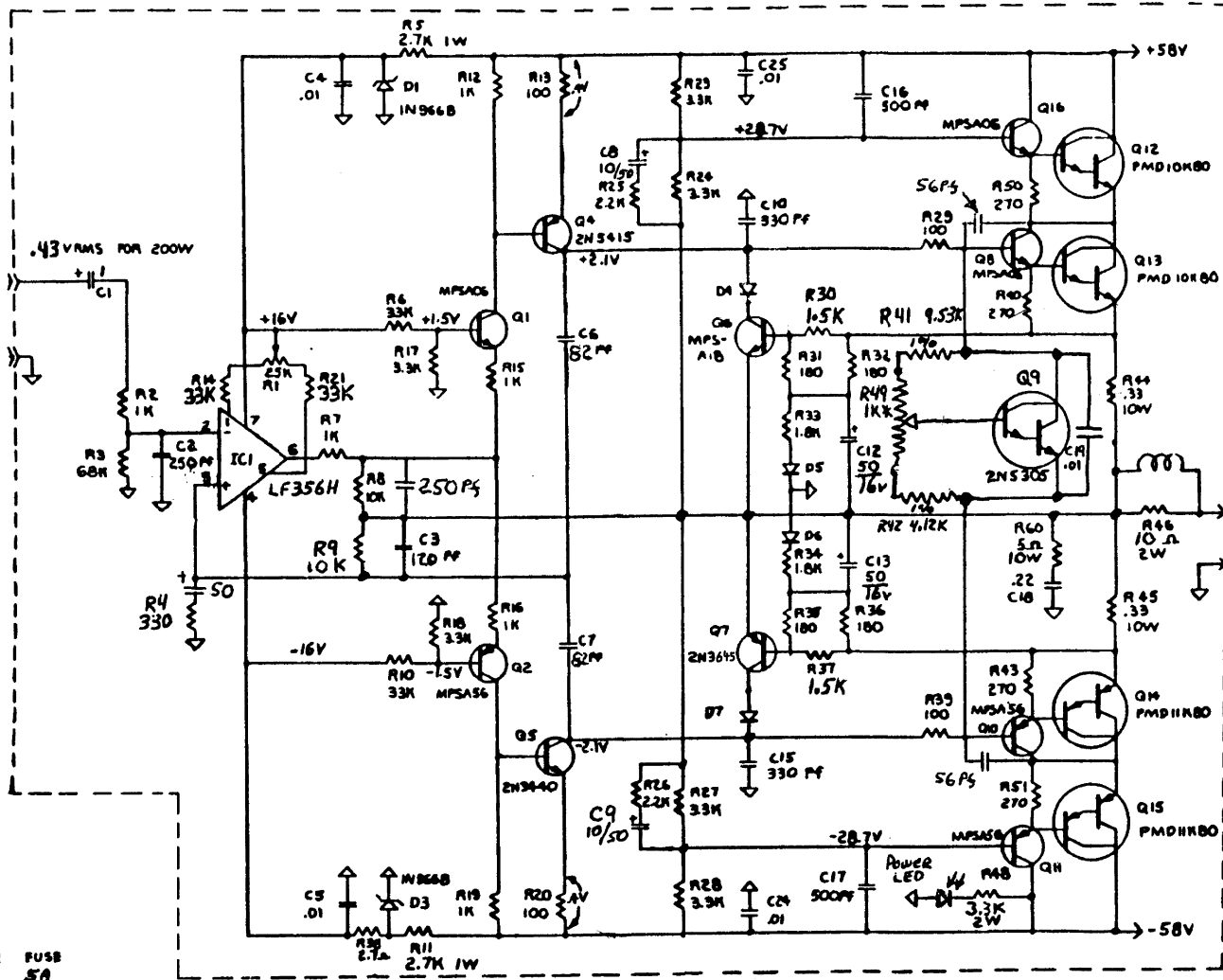
Musicparts Technote:
* R41 is custom selected for proper bias. Trim it to give 20mv across R44 & R45.



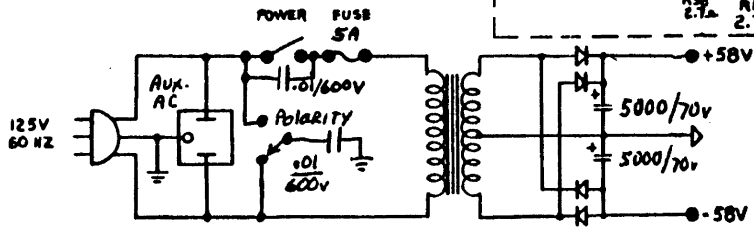
DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE XXX X .XX XXX X .003		SYM	REVISION	BY	DATE
BOB GALLIEN	DATE	POWER AMP	SCALE		
BOB GALLIEN		400B			
ENGINEER		TITLE	FINISH		
RELEASED					
MATERIAL	MATL. PD	GMT GALLIEN-ROBERTS			
					60014
					PRINT NO
					DRAWING NO

Very-Very early version

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



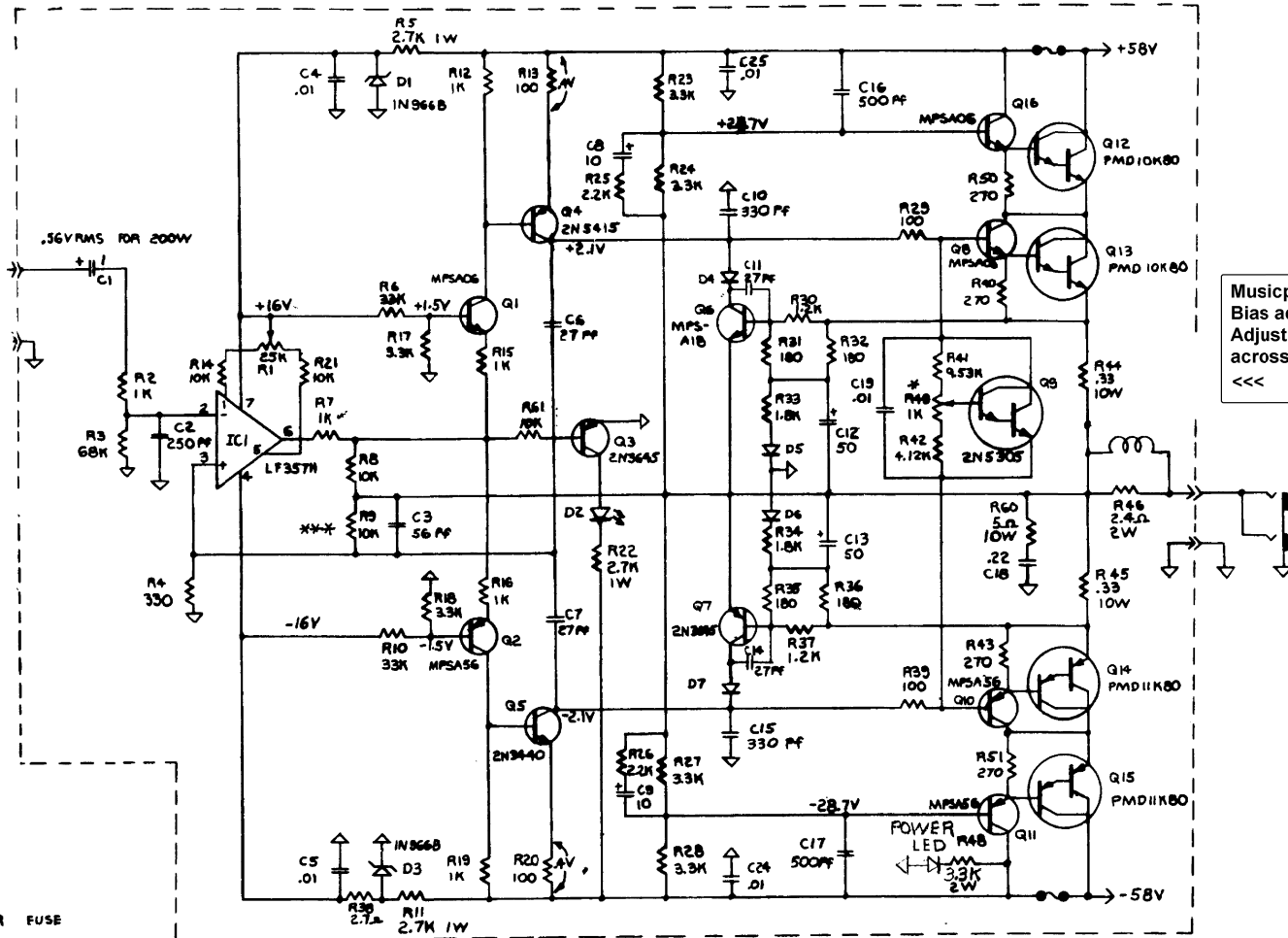
Musicparts Technote:
Bias adjustment...
Adjust R49 for 25mv
across Q13 E - Q14 E
<<<



DESIGNED AND IN HOUSE LAYOUTS SPECIFIED. TELEPHONE: JOB # 400 - JOHN A. GALT	DATE	VERY EARLY REVISION	BY	DATE
DESIGNED BY BOB GALLIEN	DATE	POWER AMP 400B	SCALE	
CHECKED BY BOB GALLIEN	DATE		PRICE	
RELEASED		GMT	PART NO. 50019B	
MATERIAL	WATER NO.		60024	

Very early version

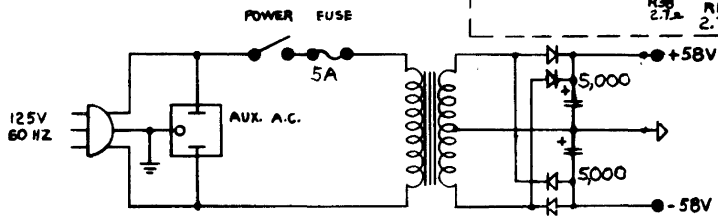
POWER AMP 400B, 400GT



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
<<<

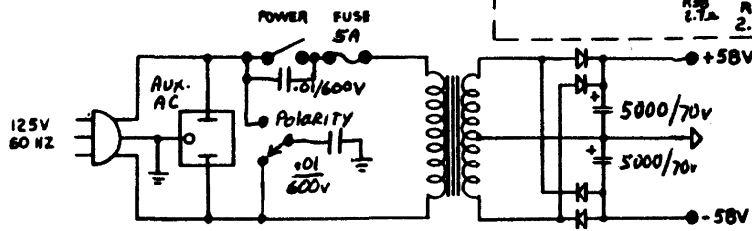
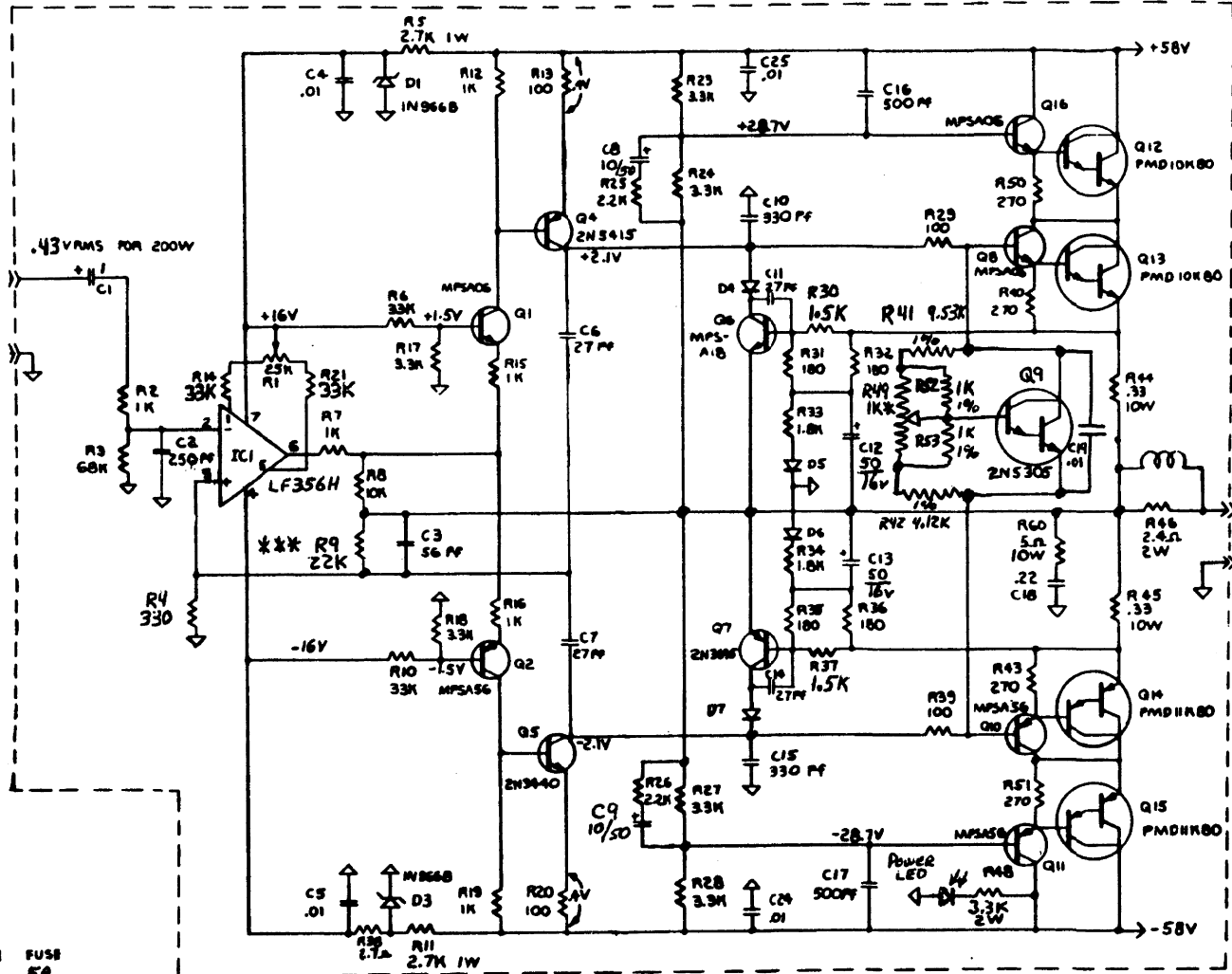


DESIGNED BY BOB GALLIEN	DATE	SERIAL 4500 REVISION	BY KR	DATE 4/1/77
DESIGNED BY BOB GALLIEN	DATE	POWER AMP 400B, 400GT	SCALE	
RELEASED		TITLE	FINISH	50021 50022
MATERIAL	MATL. NO.	GMT	PART NO.	
			ORDRNG. NO.	

Serials 4500 up

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

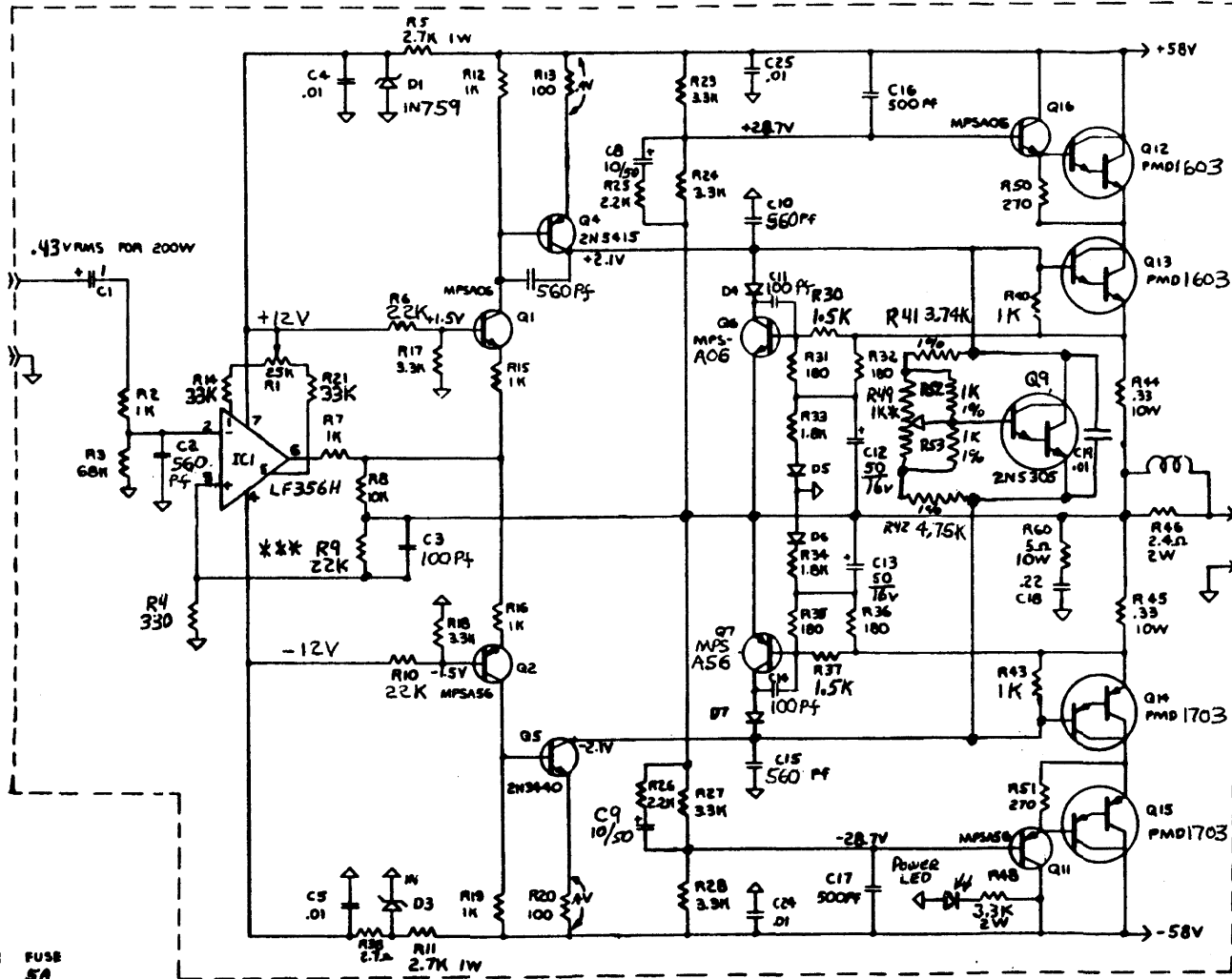
Musicparts Technote:
Bias adjustment...
Adjust R49 for 25mv
across Q13 E - Q14 E
<<<



DESIGNED BY BOB GALLIEN	DATE	SN-6629	REV
DESIGNED BY BOB GALLIEN	DATE	POWER AMP 400B, 400GT	SCALE
DESIGNED BY	DATE		PRICE
RELEASED		GMT	REV. NO. 60024
MATERIAL	MATL. NO.		EARLY

Serials 6629 up

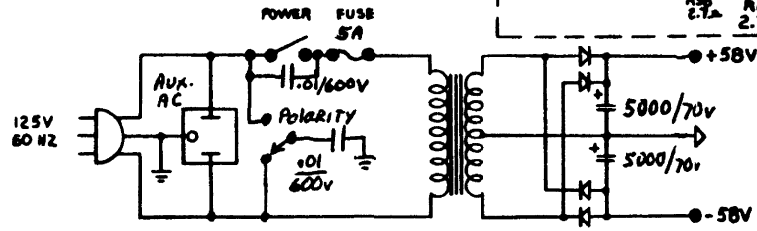
Musicparts Technote:
Adjust R1 for less than 10mv
on output at idle. >>>



Musicparts Technotes:
<<< notice no predriver

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

Musicparts Technotes:
<<< notice no predriver



DESIGNED BY BOB GALLIEN	DATE	SERIAL 9932	BY	DATE
DESIGNED BY BOB GALLIEN	DATE	POWER AMP 400B, 400GT	SCALE	NONE
RELAYED		GMT	PRICE	60024
			REV. NO.	LATE

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 ICl 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

GLUE TRIM POT IN
THIS POSITION *

CUT THIS TRACE

