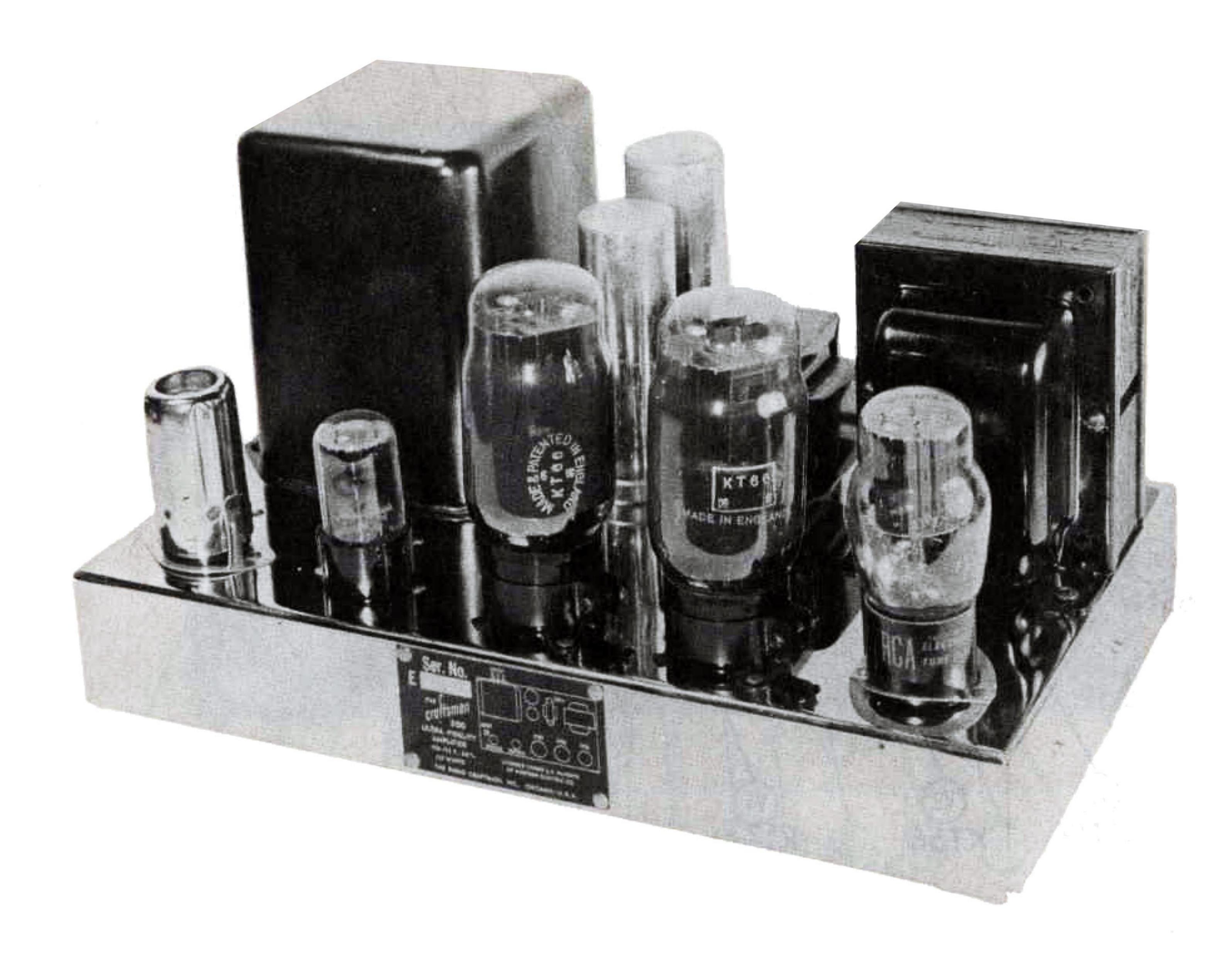
RADIO CRAFTSMEN MODEL 500



TRADE NAME Radio Craftsmen Model 500

MANUFACTURER The Radio Craftsmen, Inc., 4401 N. Ravenswood Ave., Chicago, 40, Ill.

TYPE SET AC Operated Audio Amplifier

TUBES (FIVE) Types 6SN7GTA lst. AF Amp.-Phase Inv., 6SN7GTA Driver, (2) KT66 Audio Output, 5V4G Rectifier

POWER SUPPLY 110-120 Volts AC RATING 1.25 Amp. @117 Volts AC

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

	USE	REPLACEA	AENT DATA	RMA BASE TYPE	
No.		CRAFTSMEN PART No.	STANDARD REPLACEMENT		NOTES
V1	ist. AF Amplifier	6SN7GTA	68N7GTA	8BD	
V2	Driver	6SN7GTA	6SN7GTA	8BD	
V3	Audio Output	KT66	KT66	7A.C	
V4	Audio Output	KT86	KT66	7AC	
V5	Rectifier	5V4G	5V4G	5L	

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

				R.	EPLACEMENT	DATA			IDENTIFICATION CODES
No.	CAP. VOLT	VOLT	Radio Craft. PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL- DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	AND INSTALLATION NOTES
Cl C2A B C D C3 C4 C5	4 40 40 8 8 560 .47	600 500 500 400 400 400 400	18X310 18S033 CM20A561J CP10M4474M CP10M4474M	GL600/4 AFH2-72 PRS450/8-8 484-5 484-5 P488-1	ſ	KR604 UP4450 BRD8D45 PJ4P5 PJ4P5 PTE4P1		AP-46 TVL-2830 TVA-2720 4TM-P5 4TM-P5 4TM-S1	Filter Filter Decoupling Decoupling Ist. AF Amp. Plate Audio Coupling Audio Coupling Audio Coupling
C6 C7 C8 C9	. 1 . 22 68	400 400 400 500	CP10M4104M CP10M4104M CP10M2224M CM20A680J	P488-1 P488-22 P488-22		PTE4P1 PTE4P22 5R5Q7		4TM-S1 4TM-P22 MS-47	Audio Coupling Fil. Bypass AF Feedback

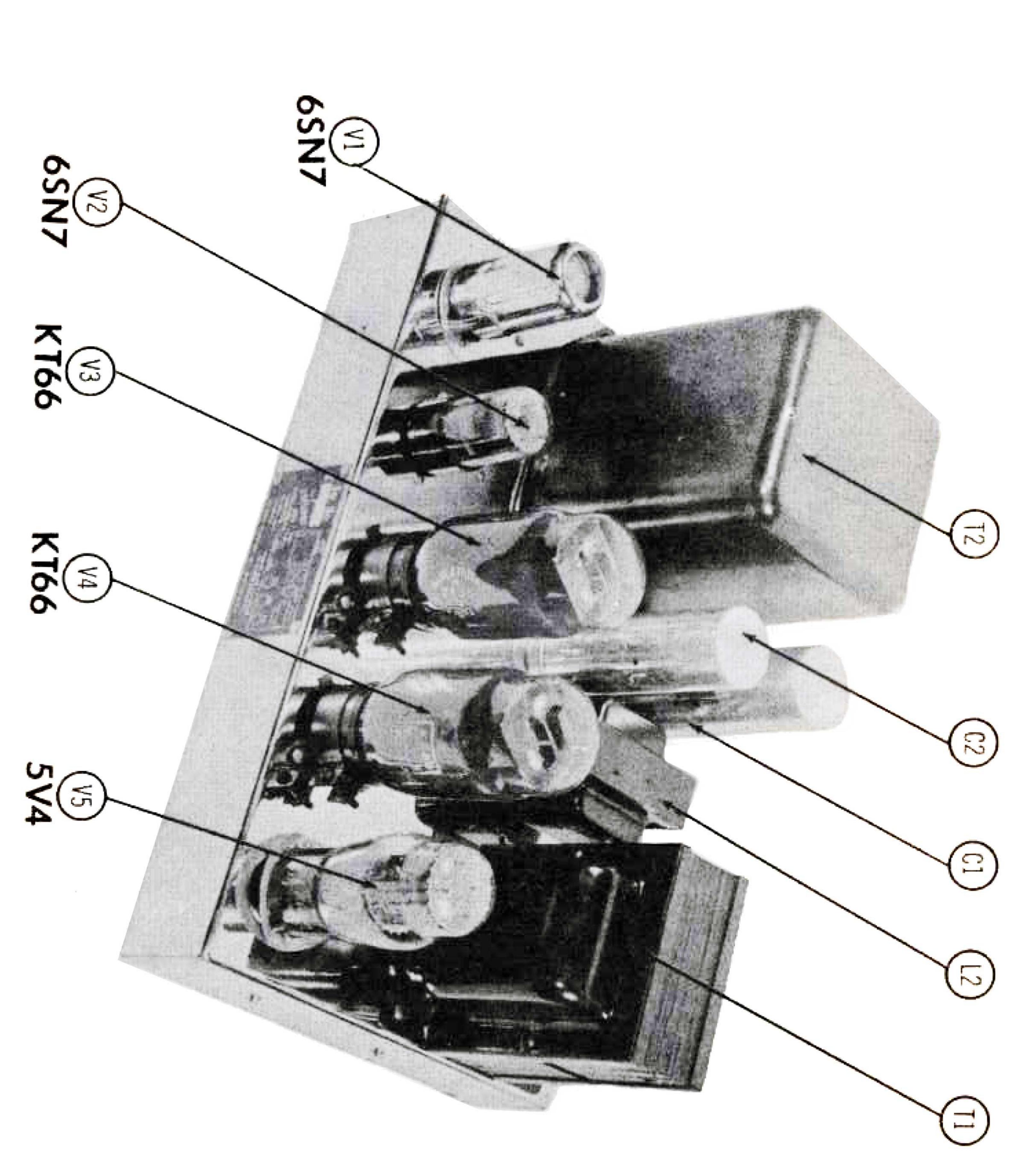
CONTROLS

	RESIST- WATTS		RE	PLACEMENT DA	TA		
No.			Radio Craft. IRC PART No. PART No.		CLAROSTAT PART No.	PART No.	INSTALLATION NOTES
R1 R2	100Ω 100Ω	2 2	238801 238802	W-100 W-100	43-100 43-100	VK-121 VK-121	Balance Control Bias Control

RESISTORS

		REPLACEMENT DATA		ENT DATA	
ITEM No.™	RATING		Radio Craft.	IRC PART No.	IDENTIFICATION CODES
	RESISTANCE	WATT5	PART No.		
R3	470KΩ	1	RC20AE474K	BTS-470K	lst. AF Amp. Grid
R4	470Ω	1 3	RW0471J	$BW - \frac{1}{2} - 470$	lst. AF Amp. Cathode - Wire Wound
R5	2700Ω	l l	RC20AE272J	BTS-2700	ist. AF Amp. Plate
R6	33 Κ Ω	i	RC30AE333K	BTA-33K	Ist. AF Amp. Decoupling
R7	47KΩ	1	RC30AE473K	BTA-47K	Phase Inverter Grid
R8	22KΩ	1	RC30AE223KB	BTA-22K	Phase Inverter Cathode
R9	22KΩ	1	RC30AE223KB	BTA-22K	Phase Inverter Plate
R10	22KΩ	1	RC30AE223K	BTA-22K	Phase Inverter Decoupling
RH	470K Ω	3	RC20AE474K	BTS-470K	2nd. AF Amp. Grid
R12	470KΩ	- 	RC20AE474K	BTS-470K	2nd. AF Amp. Grid
R13	390Ω	1/2	RC20AE39IK	BTS-390	2nd. AF Amp. Cathode
R14	47 K Ω	2	RC40AE473KB	BTB-47K	2nd. AF Amp. Plate
R15	47 Κ Ω	2	RC40AE473KB	BTB-47K	2nd. AF Amp. Plate
R16	100Ω	1	RC30AE101K	BTA-100	Bias Network
R17	1 00 Ω	1	RC30AE101K	BTA-100	Bias Network
R18	1000Ω	\$	RC20AE102K		Parasitic Suppressor
R19	1000Ω	1 1/2	RC20AE102K	Į.	Parasitic Suppressor
R20	100Ω	1 1	RC20AE101K		Parasitic Suppressor
R21	100Ω	1	RC20AE101K	l .	Parasitic Suppressor
R 22	100KΩ	\$	RC20AE104K	BTS-100K	Output Grid
R23	100Kt	1	RC20AE104K	BTS-100K	Output Grid
R24	400Ω	5	RW540lGB	1 3/4A-400	Output Cathode - Wire Wound
R25	400Ω	5	RW540lGB	1 3/4A-400	Output Cathode - Wire Wound
R26	4700Ω	‡	RC20AE472J	BTS-4700	Feedback Network
R27	22KΩ	1	RC20AE223K	BTS-22K	Hum Balance

CHASSIS-TOP VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (POWER)

					REPLACEMENT DATA					
ITEM No.		RAT	ING		Radio Craft.	STANCOR	MERIT	CHICAGO		
	PRI.	SEC_ 1	SEC. 2	SEC. 3	PART No.	PART No.	PART No.	PART No.		
Tl	117VAC	840VCT	5VAC	6.3VAC	198212	PC8412 ①	P-3155 (I)	PV-200①		
	117VAC (2)1.25A	840VCT . 145ADC		6.3VAC (a)3.7A		PC8412 ①	P-3155 (I)	_		

① Drill New Mounting Holes

TRANSFORMER (AUDIO OUTPUT)

		DAT	ING			REPLACEM			
No.	IMPED	ANCE		RES.	Radio Craft.	STANCOR	MERIT	CHICAGO PART No.	INSTALLATION NOTES
	PRI.	SEC.	PRI.	SEC.	PART No.	PART No.	PART No.		
T2	8KΩ CT	16Ω 8Ω	340Ω CT	. 9Ω 7Ω	198014	A-8054			

FILTER CHOKE

	RATING5				REPLACEMENT DATA				
No.	TOTAL DIRECT CURRENT	D. C. RESISTANCE	(O CURRENT 1000 ->)	Radio Craft. PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	INSTALLATION NOTES	
Li L2	. 145ADC . 020ADC	140Ω 750Ω	5 Henries 25 Henries	198408A 198409	C-2309 C-1003	C-2994 (2) C-2987	TR-4200(2) R-1230(2)	② Drill One New Mounting Hole	

FUSES

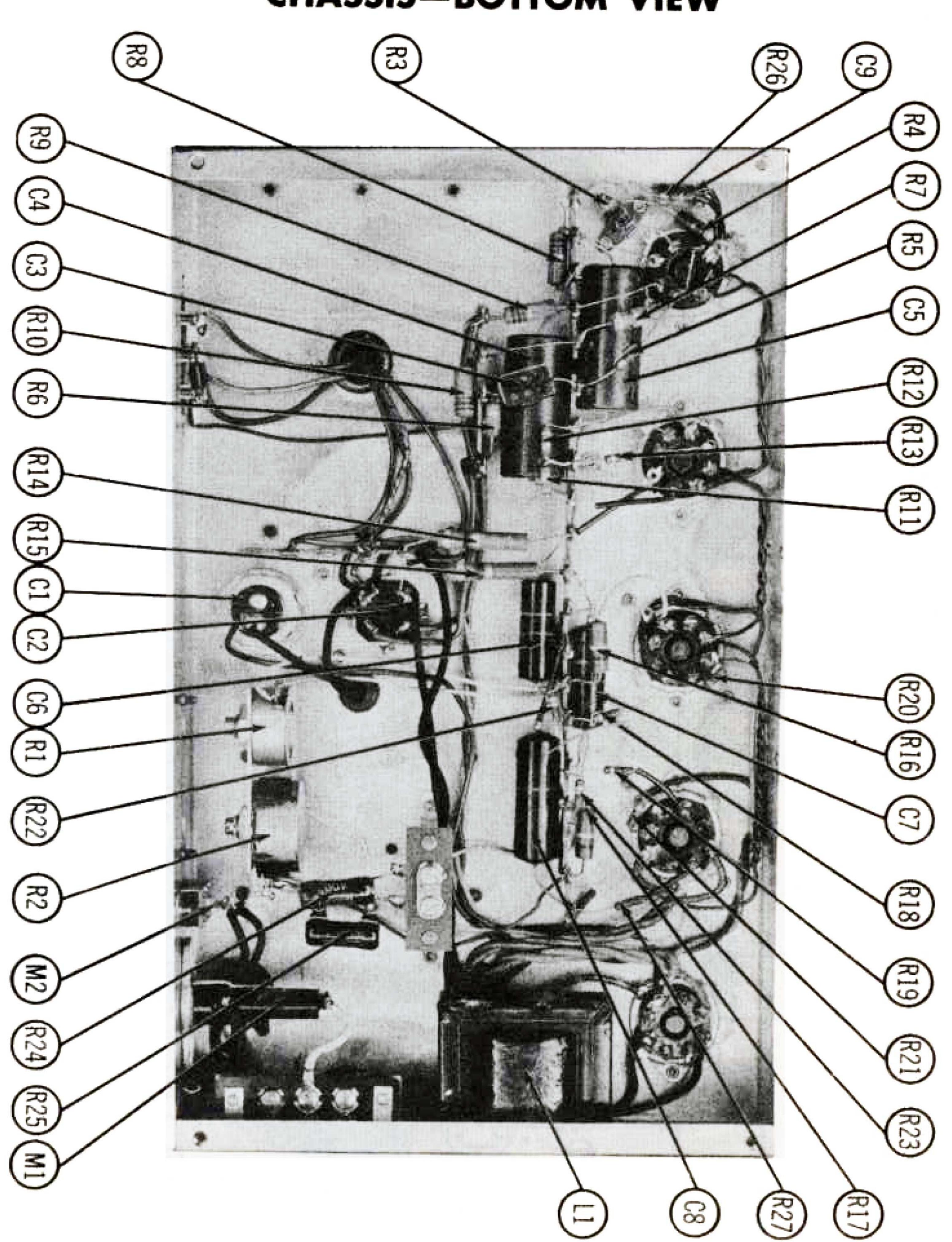
ITEM No.	TYPE			REPLACE	MENT DATA		
		RATING	Radio Craft. PART No.			ELFUSE T No.	REMARKS
				FUSE	HOLDER	FUSE	HOLDER
MI	3AG	2A. 250V.			312002	341001	

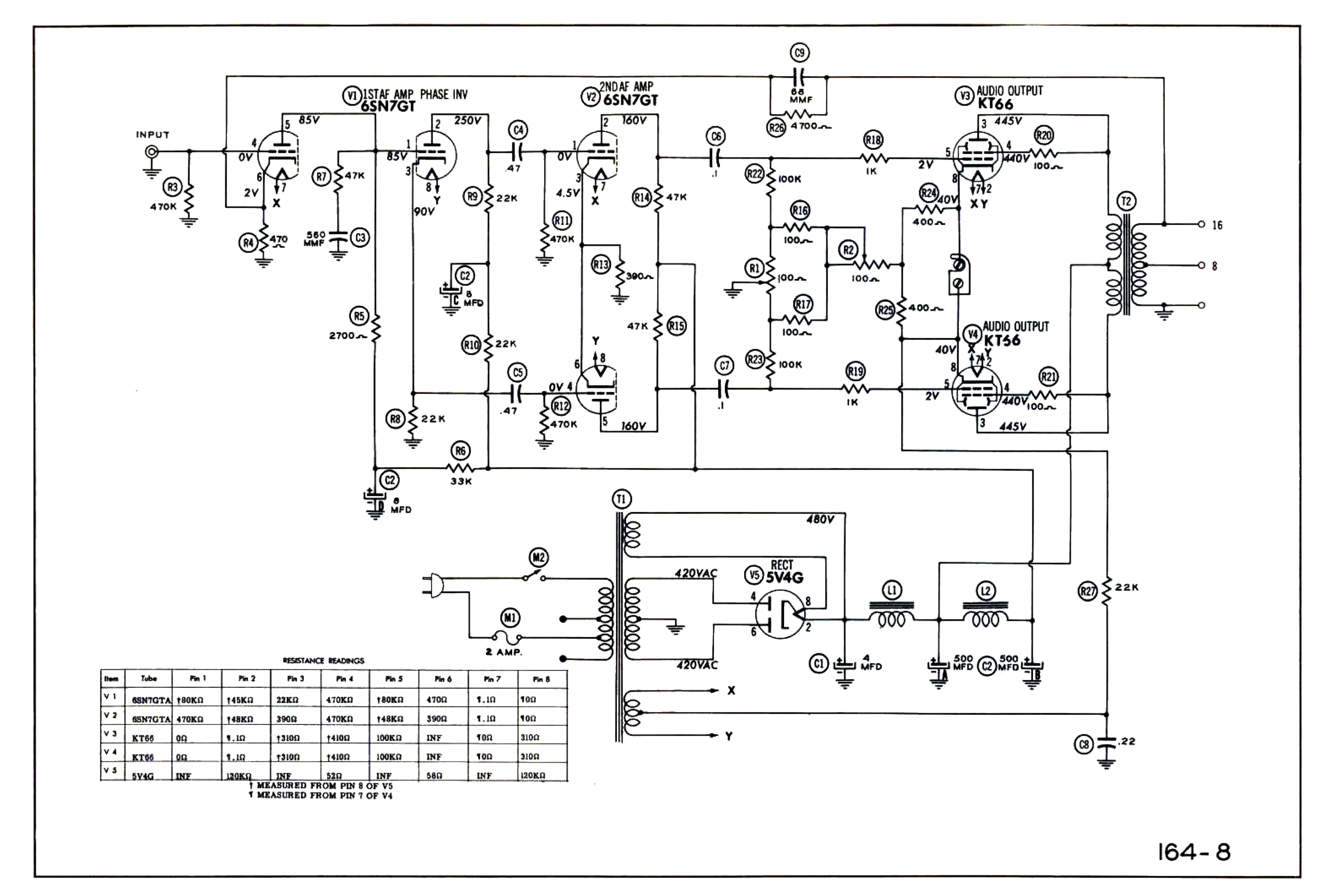
MISCELLANEOUS

No.	PART NAME	Radio Craft. PART No.	NOTES			
M2	Switch Plug	4X010 13X602	On-Off Audio			

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CHASSIS-BOTTOM VIEW





^{1 -} DC Voltage measurements are at 20,000 ohms per volt, AC Voltages measured at 1000 ohms per volt.

^{2 -} Socket connections are shown as bottom views.

^{3 -} Measured values are from socket pin to common negative.

^{4 -} Line voltage maintained at 117 volts for voltage readings.

^{5 -} Nominal tolerance on component values makes possible a variation of ± 15% in voltage and resistance readings.

^{6 -} All controls at minimum, proper output load connected.