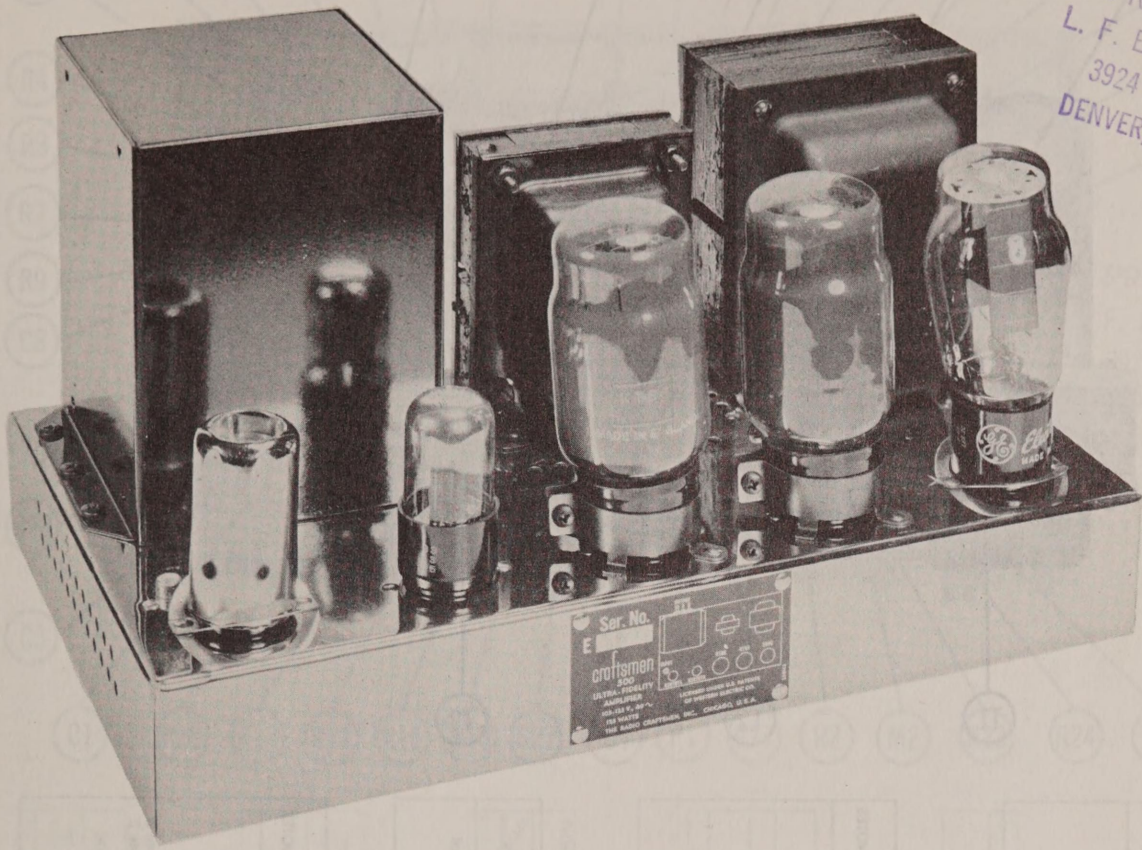




RADIO CRAFTSMEN
MODEL 500A



PROPERTY OF
L. F. BLANKENSHIP
3924 MEADE ST.
DENVER, COLORADO

RADIO CRAFTSMEN
MODEL 500A

TRADE NAME	Radio Craftsmen Model 500A		
MANUFACTURER	Radio Craftsmen, Inc., 4401 N. Ravenswood Ave., Chicago 40, Ill.		
TYPE SET	AC Operated Power Amplifier For Custom Installations		
TUBES (Five)	Types 6SN7GTA AF Amp.-Phase Inverter, 6SN7GTA Driver, (2) KT66 Audio Output, 5U4G Rectifier		
POWER SUPPLY	105-125 Volts AC-60 Cycles	RATING	1.22 Amp. @ 117V

HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

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PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA, GENERAL ELECTRIC, WESTINGHOUSE)

RADIO CRAFTSMEN
MODEL 500A

CHASSIS—TOP VIEW

ITEM No.	USE	REPLACEMENT DATA			NOTES
		CRAFTSMEN PART No.	STANDARD REPLACEMENT	RETMA BASE TYPE	
V1	AF Amplifier	6SN7GTA	6SN7GTA	8BD	For optimum operation, output tubes should be a matched pair.
V2	Phase Inverter Driver	6SN7GTA	6SN7GTA	8BD	
V3	Audio Output	KT66	KT66	7S	
V4	Audio Output	KT66	KT66	7S	
V5	Rectifier	5U4G	5U4G	5T	

CAPACITORS

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

ITEM No.	RATING CAP. VOLT	REPLACEMENT DATA				NOTES
		CRAFTSMEN PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	
C1A	.40	18S033	AFH2-72		C041	
C1B	.40		AFH2-67		BR850	
C1C	.40					
C1D	.40					
C2	.500					
C3	.47	CM20A561J	P488-47		IR5T56	4TM-P47
C4	.47	CP10M4474M	P488-47		CUB4P47	4TM-P47
C5	.1	CP10M4474M	P488-1		CUB4P41	4TM-P1
C6	.1	CP10M4104M	P488-1		CUB4P1	4TM-P1
C7	.22	CP10M2224M	P488-22		CUB4P22	4TM-P22
C8	.68	CM20A680J			22R5Q68	

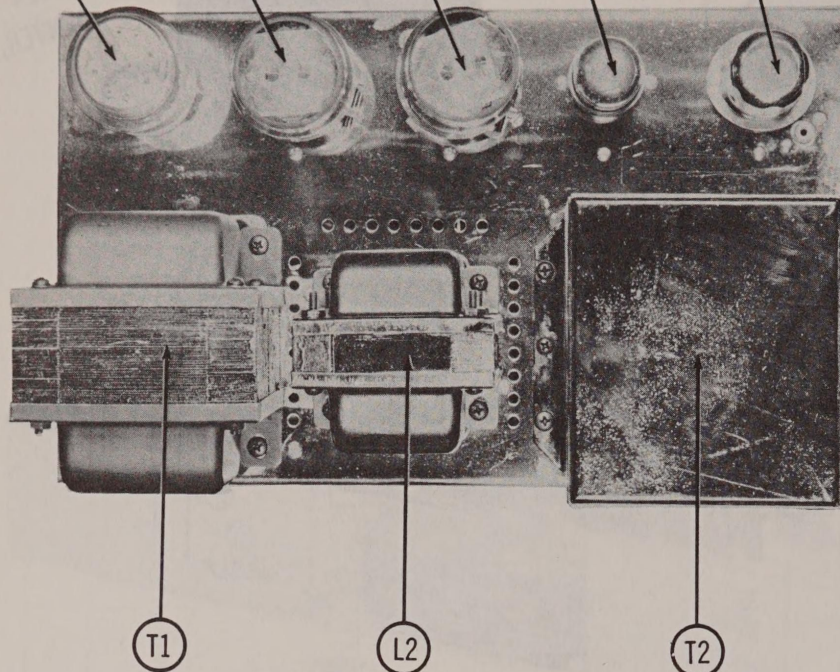
CONTROLS

ITEM No.	RATING RESISTANCE	REPLACEMENT DATA				INSTALLATION NOTES
		CRAFTSMEN PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	
R1A	100Ω	23S801	W-100	A43-100	VK-121	Hum balance - wire wound Attach to R1A Bias Attach to R2A
R2A	100Ω	Not Req.	Not Req.	FKS-1/4	Not Req.	
R3A	100Ω	23S802	W-100	A43-100	VK-121	

RESISTORS

ITEM No.	RATING OHMS	REPLACEMENT DATA			NOTES
		CRAFTSMEN PART No.	IRC PART No.	WATT	
R3	470KΩ	RC20AE474K	BTS-470K		Note 1
R4	470Ω	RW0471J	BTS-470		
R5	2700Ω	RC20AE272J	BTS-2700		
R6	47KΩ	RC40E473K	ETA-47K		Note 1
R7	22KΩ	RC30AE223KB	ETA-22K		
R8	22KΩ	RC30AE223KB	ETA-22K		
R9	500Ω	RC20AE512J	BTS-500		Note 2
R10	470KΩ	RC20AE474K	BTS-470K		
R11	390Ω	RC20AE391K	BTS-390		
R12	470KΩ	RC20AE474K	BTS-470K		Note 2
R13	100KΩ	RC40AE104KB	ETA-100K		
R14	100KΩ	RC40AE104KB	ETA-100K		
R15	100KΩ	RC40AE104KB	ETA-100K		Note 3
R16	100KΩ	RC40AE104KB	ETA-100K		

Note 1. R7 and R8 are a matched pair ± 1%.
Note 2. R13, R14, R15, and R16 are matched ± 1%.
Note 3. R23 and R24 are a matched pair ± 1%.



PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	CRAFTSMEN PART No.	Stancor PART No.	Triad PART No.	Thordorson PART No.
T1	117VAC 1.22A	1128VCT .150ADC	SEC. 3 6.3VCT 3A	198218	PC-8414 ① ②		T-22R36

① Drill new mounting holes
② Parallel 6.3V windings.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING			REPLACEMENT DATA				NOTES
	IMPEDANCE	CRAFTSMEN PART No.	Stancor PART No.	Triad PART No.	Thordorson PART No.	Triad PART No.	Thordorson PART No.	
T2	8.6KΩ 16Ω CT tap @ 8Ω	198014	A-8054 ①	S-149A ① ②	H4102 ①			① Drill new mounting holes. ② Tape 40 secondary tap.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA			
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (10 CURRENT 1000 Ω)	CRAFTSMEN PART No.	Stancor PART No.	Triad PART No.	Thordorson PART No.
L1	.02A	800Ω	21.5HY	198409	C-1003	C-2987	C5003
L2	.150A	180Ω	14.2HY	198414		C3195 ①	C5034 ①

① Drill new mounting holes.

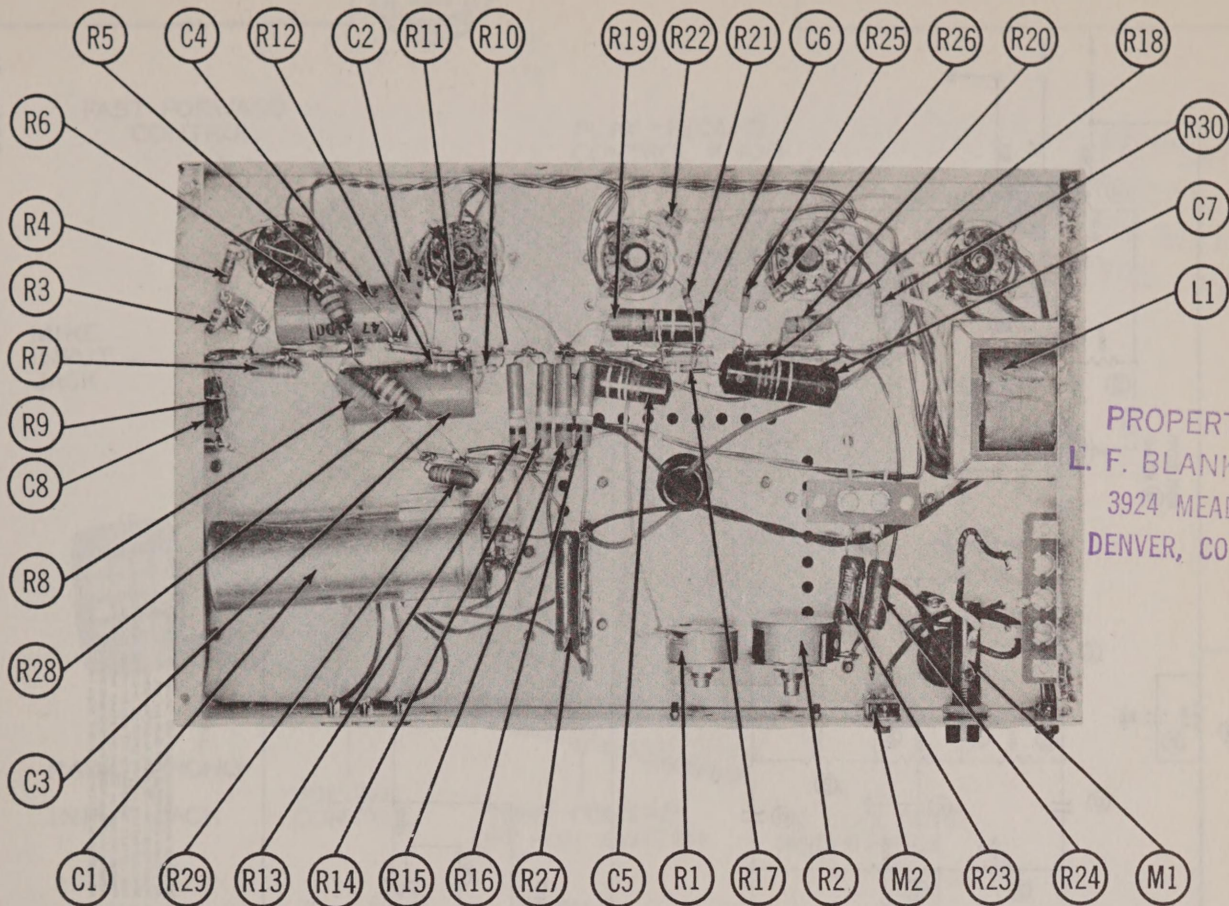
FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA			
			CRAFTSMEN PART No.	FUSE	HOLDER	BUSS PART No.
M1	3AG	3A	34X002	312003 (3AG-3A)	341001	AGC3
M2	Switch					HOLDER

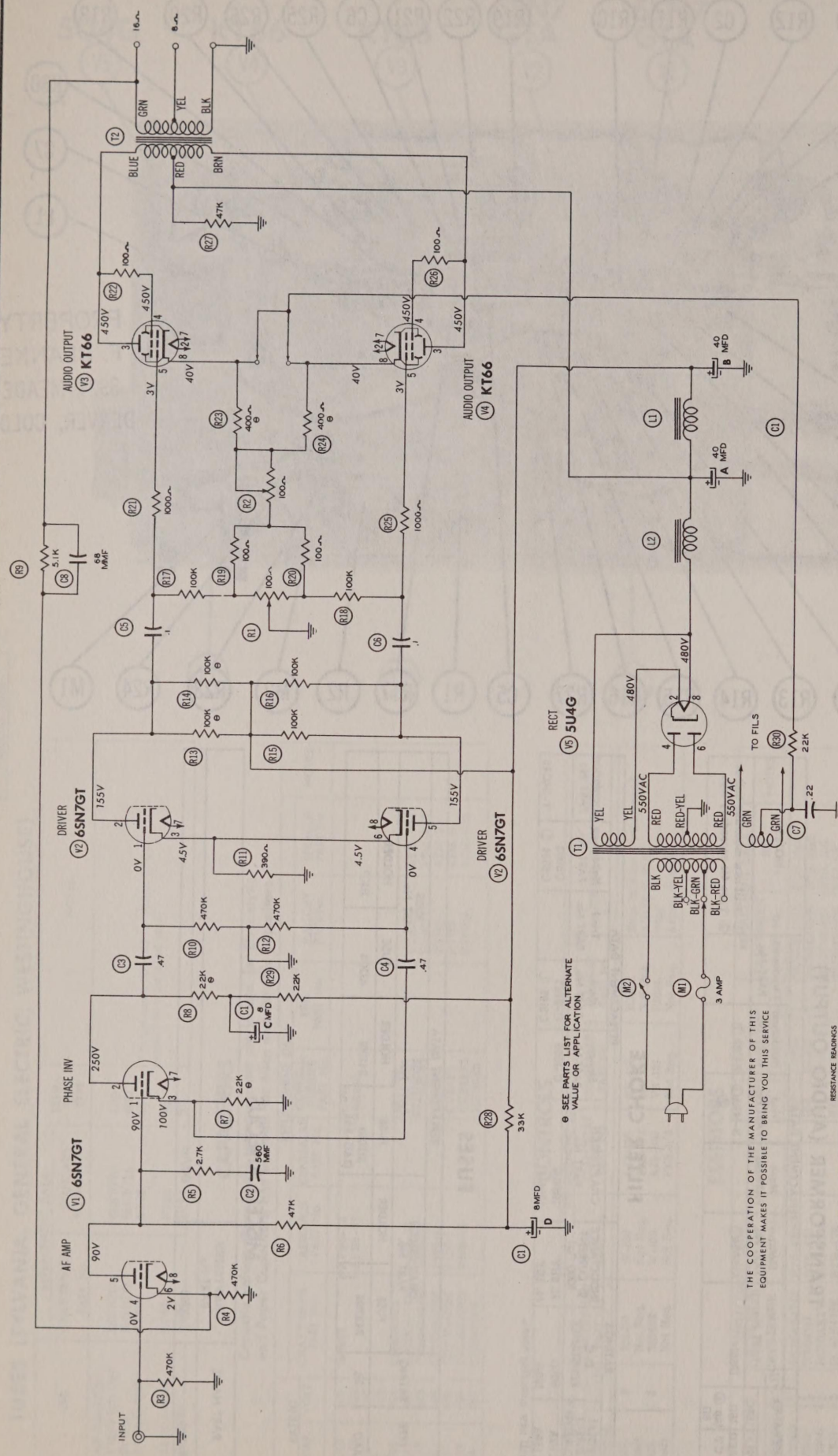
MISCELLANEOUS

ITEM No.	PART NAME	CRAFTSMEN PART No.	NOTES
M2	Switch	4X010	Off/on

CHASSIS—BOTTOM VIEW



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1. DC voltage measurements taken with vacuum tube voltmeter;
2. Voltages measured at 1000 ohms per volt.
3. Socket values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Measured values are from socket pin to common negative.
6. Variation of $\pm 15\%$ in voltage and resistance makes possible a variation of $\pm 15\%$ in voltage and resistance.
7. All controls at minimum, proper output load connected.

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
V 1	6SN7GT	160KΩ	145KΩ	22KΩ	470KΩ	180KΩ	420Ω	325Ω	325Ω
V 2	6SN7GT	470KΩ	150KΩ	390Ω	150KΩ	390Ω	325Ω	325Ω	325Ω
V 3	KT66	0Ω	325Ω	1150Ω	1250Ω	100KΩ	INF	325Ω	325Ω
V 4	KT66	0Ω	325Ω	1170Ω	1270Ω	100KΩ	INF	325Ω	325Ω
V 5	5U4G	INF	30KΩ	70Ω	INF	90Ω	INF	30KΩ	30KΩ

† MEASURED FROM PIN 6 OF V1.

THE COOPERATION OF THE MANUFACTURER OF THIS EQUIPMENT MAKES IT POSSIBLE TO BRING YOU THIS SERVICE