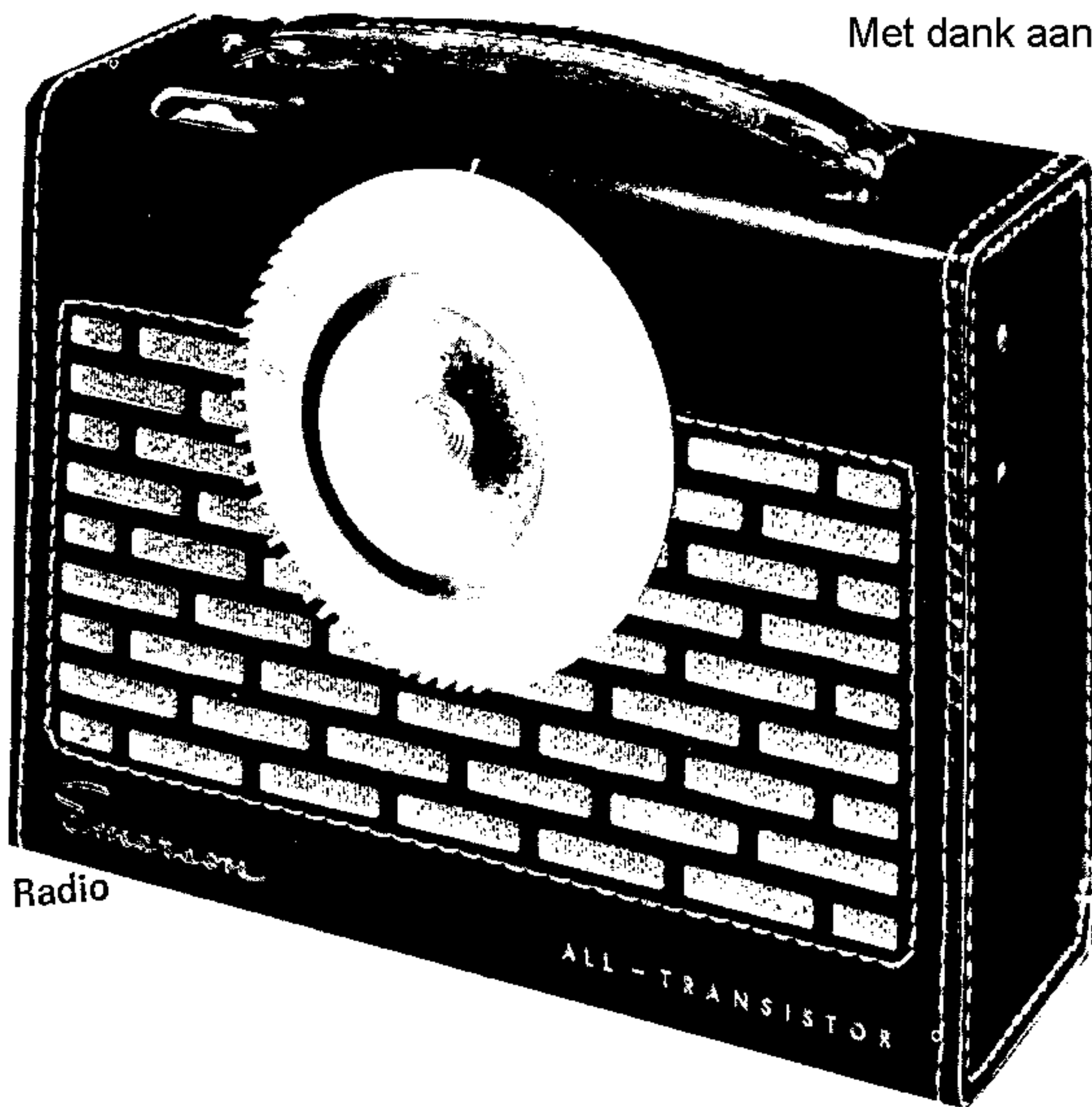




Met dank aan Jef Bos



Historie v/d Radio

ARCHIEF
DOCUMENTATIEDIENST
NVHR

TRADE NAME	Emerson Model 855 (Ch. 120314)					
MANUFACTURER	Emerson Radio & Phono Corp., 14th & Coles Sts., Jersey City 2, N. J.					
TYPE SET	Battery Operated Portable AM Transistorized Receiver					
POWER SUPPLY	9 Volts DC					RATING 7 MA @ 9 Volts DC
TUNING RANGE--BROADCAST	540KC - 1650KC					
ALIGNMENT INSTRUCTIONS--READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.						
Loop should be maintained in same relative position to chassis as when receiver is in cabinet.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. .1MFD	High side to ant. stator lug on tuning gang. Low side to chassis.	455KC (400% Mod)	Tuning gang fully open.	Across voice coil.	A1, A2, A3	Adjust for maximum output.
2.	Loop	1650KC	"	"	A4	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
3.	"	1400KC	Tune to 1400KC signal.	"	A5	"
4.	"	600KC	Tune to 600KC signal.	"	A6	Adjust for maximum output while rocking tuning gang.

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

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G830

PARTS LIST AND DESCRIPTIONS

EMERSON
MODEL 855 (

TRANSISTORS

ITEM No.	USE	EMERSON PART NO.	NOTES	ITEM No.	USE	EMERSON PART NO.	NOTES
X1	Converter (2N172)	815009		X4	Driver	815013	
X2	1st IF Amp. (2N145)	815010	Note 1	X5	Output (2N185)	815014	Note 2
X3	2nd IF Amp. (2N147)	815010	Note 1	X6	Output (2N185)	815014	Note 2

Note 1: Part #815010 used for types 2N145, 2N146 or 2N147. Replacement from Mfr. will be type 2N146.
Note 2: X5 and X6 must be a matched pair.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	EMERSON PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
CLA	20	10	925351	PRS150/25V 8020/100					
B	80	10							
C	100	10							
C2	20	8	925353	SRE6V25	NL20-6	TAP10-20	ML20-6	MMT-625	TE-1091
C3	5	10	925352	SRE25V5	NL5-15	TC30	ML5-15	MMT-0505	TE-1127

FIXED CAPACITORS

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

ITEM No.	RATING		REPLACEMENT DATA						NOTES	
	CAP.	VOLT	EMERSON PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.		SPRAGUE PART No.
C4	50000		982139	BPD-05	DF-503					
C5	10000		928758	BPD-01	DD-103	BYA6S1	GP-10000	DC511	5HK-S1	
C6	10000		928758	BPD-01	DD-103	BYA6S1	GP-10000	DC511	5HK-S1	
C7	20000		928756	BPD-02	DD-203	BYA6S2	ED-02		5HK-S2	
C8	10000		928758	BPD-01	DD-103	BYA6S1	GP-10000	DC511	5HK-S1	
C9	20000		928756	BPD-02	DD-203	BYA6S2	ED-02		5HK-S2	
C10	10000		928758	BPD-01	DD-103	BYA6S1	GP-10000	DC511	5HK-S1	
C11	10000		928758	BPD-01	DD-103	BYA6S1	GP-10000	DC511	5HK-S1	
C12	3300		928757	BPD-0033	D6-332	BYA10D33	GP-3300	UC-5233	5HK-D33	
C13	.04	150	922042		DF-403					

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	EMERSON PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
R1	4000Ω	1/2	390423					Volume & Switch

RESISTORS

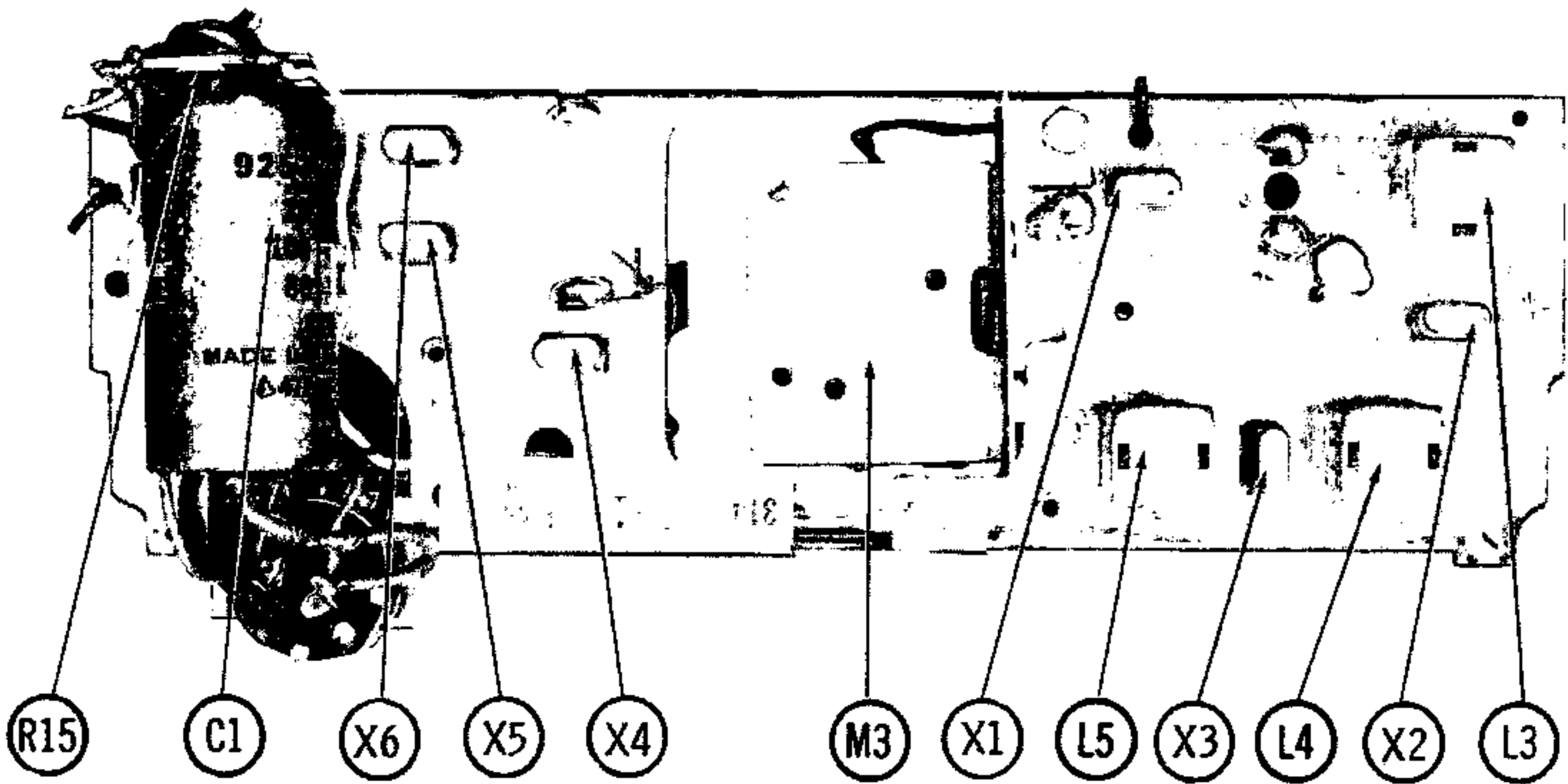
All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING		REPLACEMENT DATA		NOTES	ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	EMERSON PART No.	IRC PART No.			OHMS	WATT	EMERSON PART No.	IRC PART No.	
R2	1500Ω		340532	BTS-1500		R12	3300Ω		340612	BTS-3300	
R3	150K		341012	BTS-150K		R13	22K		340812	BTS-22K	
R4	220Ω		350332	BTS-220		R14	2200Ω		340672	BTS-2200	
R5	68K		340932	BTS-68K		R15	220K		351052	BTS-220K	
R6	330Ω		340372	BTS-330		R16	470Ω		340412	BTS-470	
R7	1500Ω		350532	BTS-1500		R17	4700Ω		340652	BTS-4700	
R8	2200Ω		340572	BTS-2200		R18	68Ω		340212	BTS-68	
R9	15K		340772	BTS-15K		R19	10Ω		340012	BTS-10	
R10	1000Ω		340492	BTS-1000		R20	330Ω		340372	BTS-330	
R11	220Ω		350332	BTS-220		R21	100Ω		350252	BTS-100	

TRANSFORMER (INPUT)

ITEM No.	Turns Ratio		REPLACEMENT DATA					NOTES
	PRI.	SEC.	EMERSON PART No.	Holderson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
T1	2	1	734128				TR-6	

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	EMERSON PART No.	Halldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
T2	355Ω CT	3-4Ω	734128				TR-27	

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	EMERSON PART No.	QUAM PART No.	
SP1	4"	PM	3-4Ω	180144	4A07	

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		EMERSON PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L1	Loop Stick	70014				
L2	Osc. Coil	716105				
L3	1st IF Trans.	720249	16-9002		2041	
L4	2nd IF Trans.	720249	16-9002		2041	
L5	3rd IF Trans.	720248	16-9002		2042	

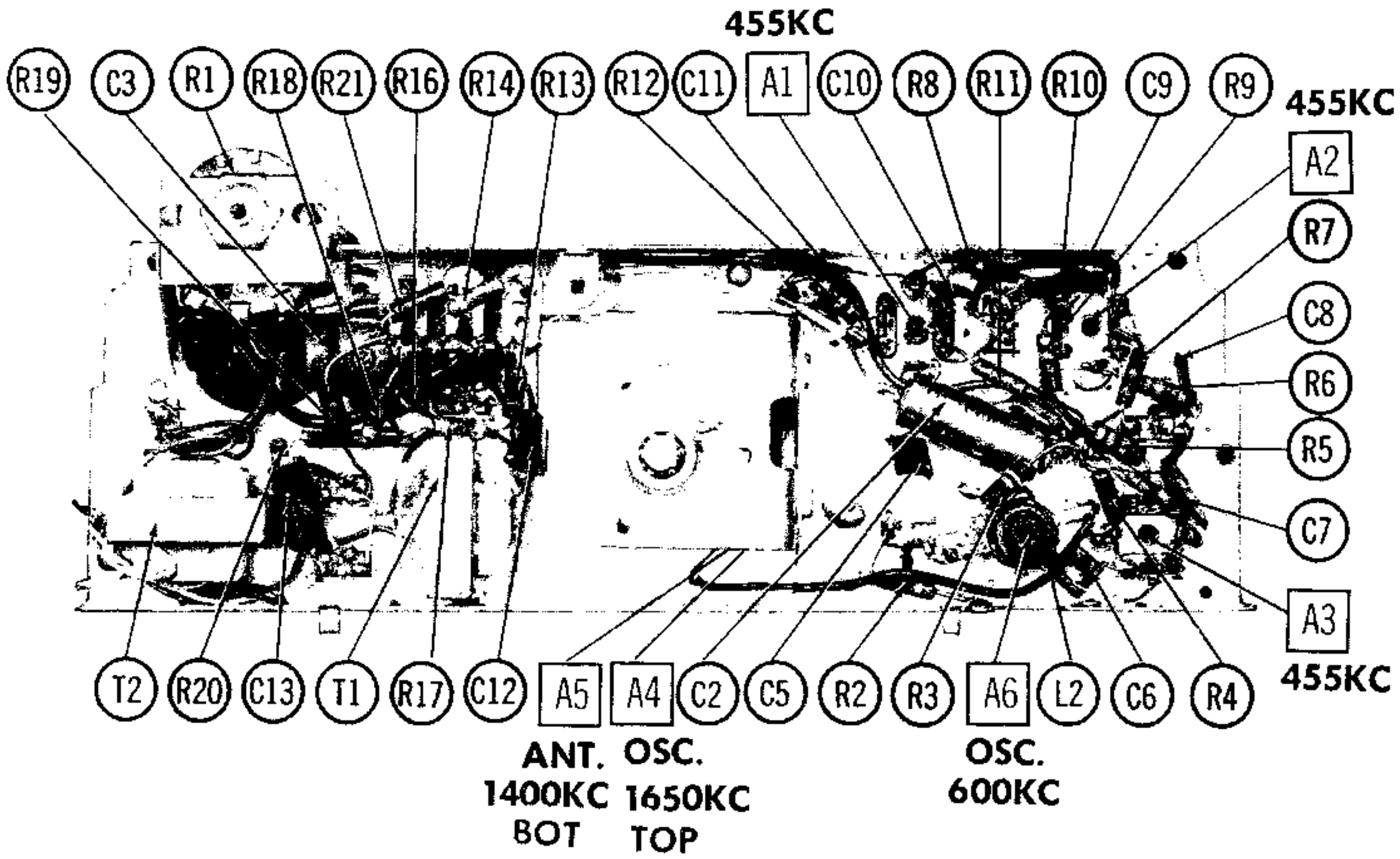
BATTERIES

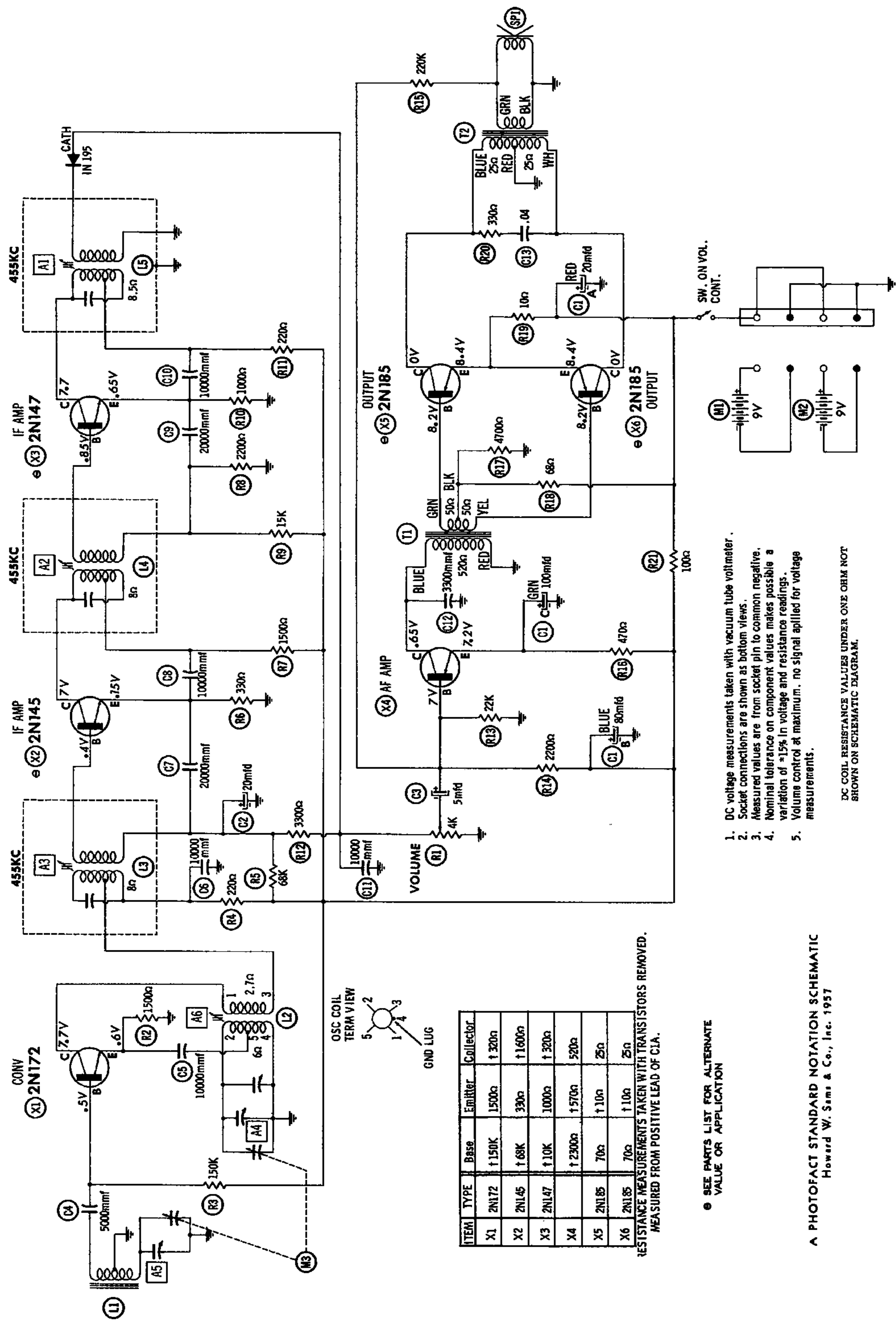
ITEM No.	VOLTAGE	EMERSON PART No.	REPLACEMENT DATA								
			BURGESS			EVEREADY			MALLORY		
			"A"	"B"	"A-B"	"A"	"B"	"A-B"	"A"	"B"	"A-B"
M1	9V	818116		276			D6			M1603	
M2	9V	818116		276			D6			M1603	

MISCELLANEOUS

ITEM No.	PART NAME	EMERSON PART No.	NOTES
M3	Tuning Cap.	800146	Two Gang (21-145MMF, 25-128MMF)
	Knob	460746	Tuning
	Knob	460705B	On-Off-Volume
	Cabinet	140761	Red, Leather
	Cabinet	140761A	Blue, Leather
	Cabinet	140761B	Champagne, Leather
	Cabinet	140761C	Cinnamon, Leather
	Cabinet	140761D	Cordovan, Leather

CHASSIS—BOTTOM VIEW





CONV
X1 2N172

IF AMP
X2 2N145

IF AMP
X3 2N147

IF AMP
X4 2N185

AF AMP
X5 2N185

ITEM	TYPE	Base	Emitter	Collector
X1	2N172	↑150K	1500Ω	↑320Ω
X2	2N145	↑68K	330Ω	↑1600Ω
X3	2N147	↑10K	1000Ω	↑320Ω
X4		↑2300Ω	↑570Ω	520Ω
X5	2N185	70Ω	↑10Ω	25Ω
X6	2N185	70Ω	↑10Ω	25Ω

RESISTANCE MEASUREMENTS TAKEN WITH TRANSISTORS REMOVED.
MEASURED FROM POSITIVE LEAD OF CIA.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Nominal values on component values makes possible a variation of ~15% in voltage and resistance readings.
5. Volume control at maximum. no signal applied for voltage measurements.

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM.

A PHOTOFAC STANDARD NOTATION SCHEMATIC
Howard W. Sams & Co., Inc. 1957