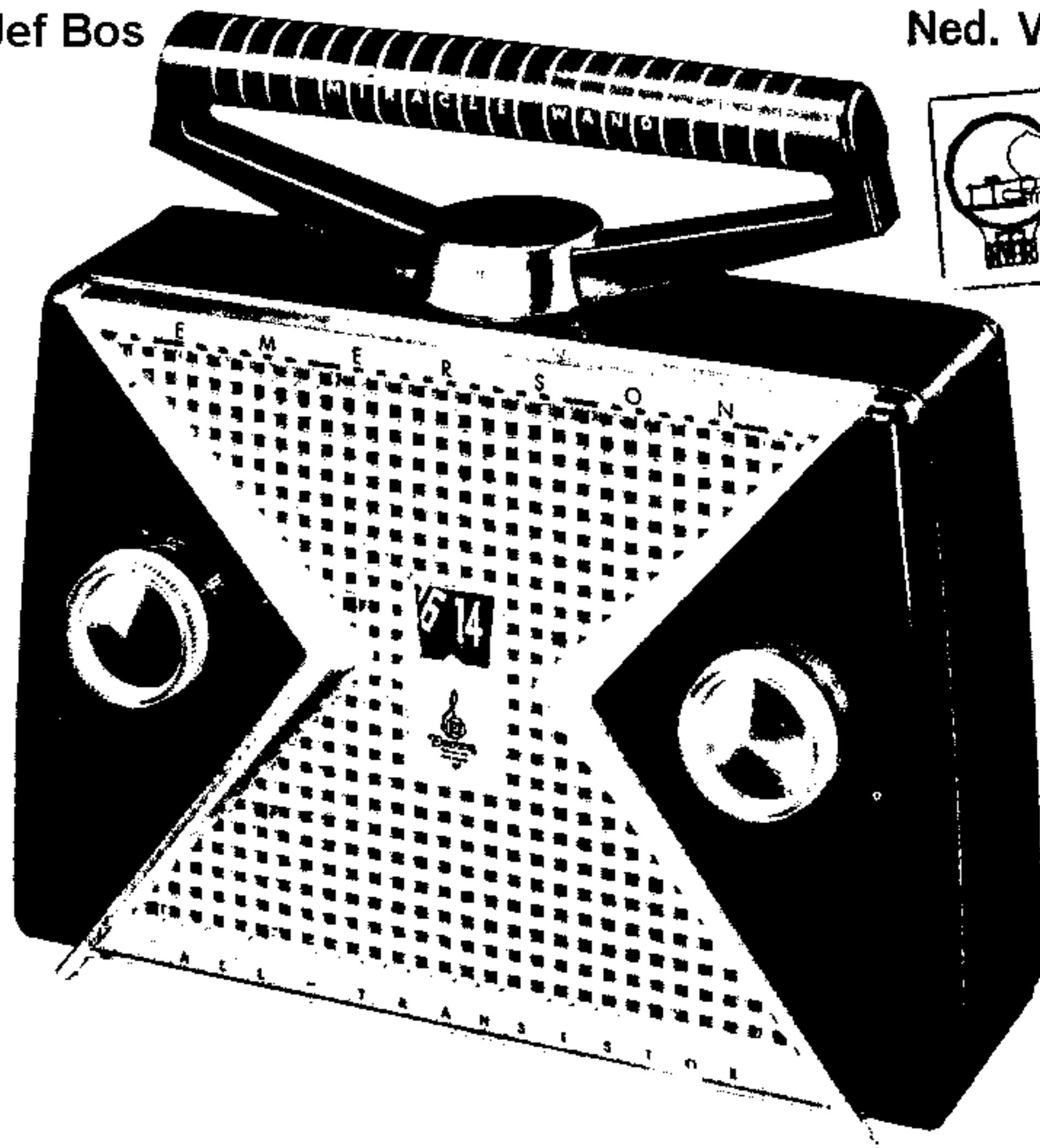
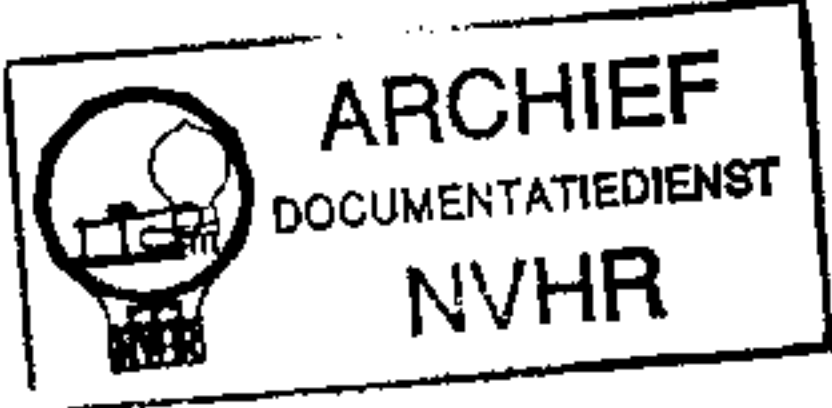




Met dank aan Jef Bos

Ned. Ver. v. Historie v/d



TRADE NAME	Emerson Models 844 (Ch. 120309), 847 (Ch. 120328)		
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	8MA @ 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. To set pointer, turn tuning capacitor fully closed and set pointer to last reference mark at low frequency end of dial.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	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	"	A6	Adjust for maximum output while rocking tuning gang.

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

"The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed."
"Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. Copyright 1957 by Howard W. Sams & Co., Inc., Indianapolis 5, Indiana, U. S. of America. Copyright under international Copyright Union. All rights reserved under Inter-American Copyright Union (1910) by Howard W. Sams & Co., Inc." Printed in U. S. of America

889

844 (Ch. 120309), 847 (Ch. 120328)

PARTS LIST AND DESCRIPTIONS

TRANSISTORS

EMERSON
MODEL 844 (Chassis)

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

Note #1. 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.
C1A	20	10	925368	PRS150/25V 8020/100					R2362 *
B	80	10							
C	100	10							
C2	5	10	925352	XPP12V5	NL5-15	Tap 50-5	ML5-15	MMT0505	TE1127
C3	20	6	925353	XPP6V20	NL20-6	Tap 10-20	ML20-6	MMT0220	TE1157

* Non Catalog Item.

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		928139	BPD-05	DF-503					
C5	10000		928758	BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C6	10000		928758	BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C7	10000		928758	BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C8	20000		928756	BPD-02	DD-203	BYA6S2	ED-02		5HK-S2	
C9	10000		928758	BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C10	20000		928756	BPD-02	DD-203	BYB6S2	ED-02		5HK-S2	
C11	20000		928756	BPD-02	DD-203	BYB6S2	ED-02		5HK-S2	
C12	1000		928136	BPD-001	DD-102	BYA6D1	ED-001	DC521	5HK-D2	
C13	.04	150	922042	P288N-04		CUB6S4		GEM-414	4TM-S4	

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.		
RLA	4000Ω	1/2	390500	B-11		Q13-114	U14	Volume	Note #1.
B	Shaft			Not Req.		Not Req.	Not Req.		
C	Switch			KB-1		76-1	US-26		

Note #1. Part No. 390509 Used In Chassis 120309.

RESISTORS

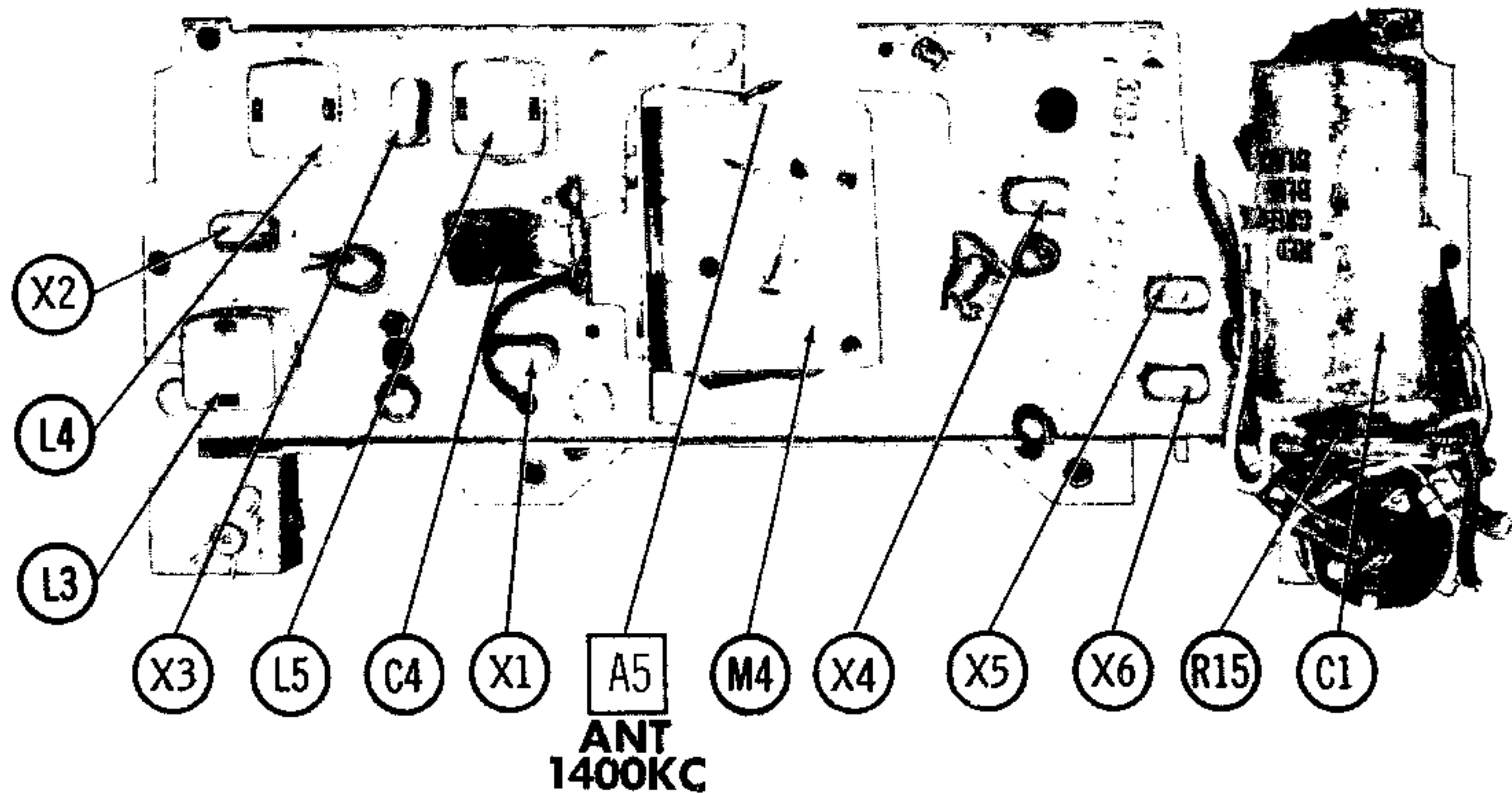
All wattages 1/2 watt, or less, unless otherwise listed.

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	150K		341012	BTS-150K		R12	3300Ω		340612	BTS-3300	
R3	1500Ω		340532	BTS-1500		R13	22K		340812	BTS-22K	
R4	220Ω		350332	BTS-220		R14	2200Ω		340572	BTS-2200	
R5	68K		340932	BTS-68K		R15	220K		351052	BTS-220K	
R6	330Ω		340372	BTS-330		R16	470Ω		340412	BTS-470	
R7	3300Ω		340612	BTS-3300		R17	330Ω		340372	BTS-330	
R8	15K		340772	BTS-15K		R18	68Ω		340212	BTS-68	
R9	2200Ω		340572	BTS-2200		R19	10Ω		340012	BTS-10	
R10	220Ω		350332	BTS-220		R20	4700Ω		340652	BTS-4700	
R11	1000Ω		340492	BTS-1000		R21	100Ω		350252	BTS-100	

TRANSFORMER (INPUT)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	EMERSON PART No.	Halldorson 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.	Haldarson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
T2	355Ω CT	3-4Ω	734129				TR-27	

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	EMERSON PART No.	QUAM PART No.	
SPI	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	700116				
L2	Osc. Coil	716105	14-9014			
L3	1st IF	720249	16-9002		2041	
L4	2nd IF	720249	16-9002		2041	
L5	3rd IF	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 *		D-6 *			276 *				M1603 *

* 2 Required (Connected In Parallel).

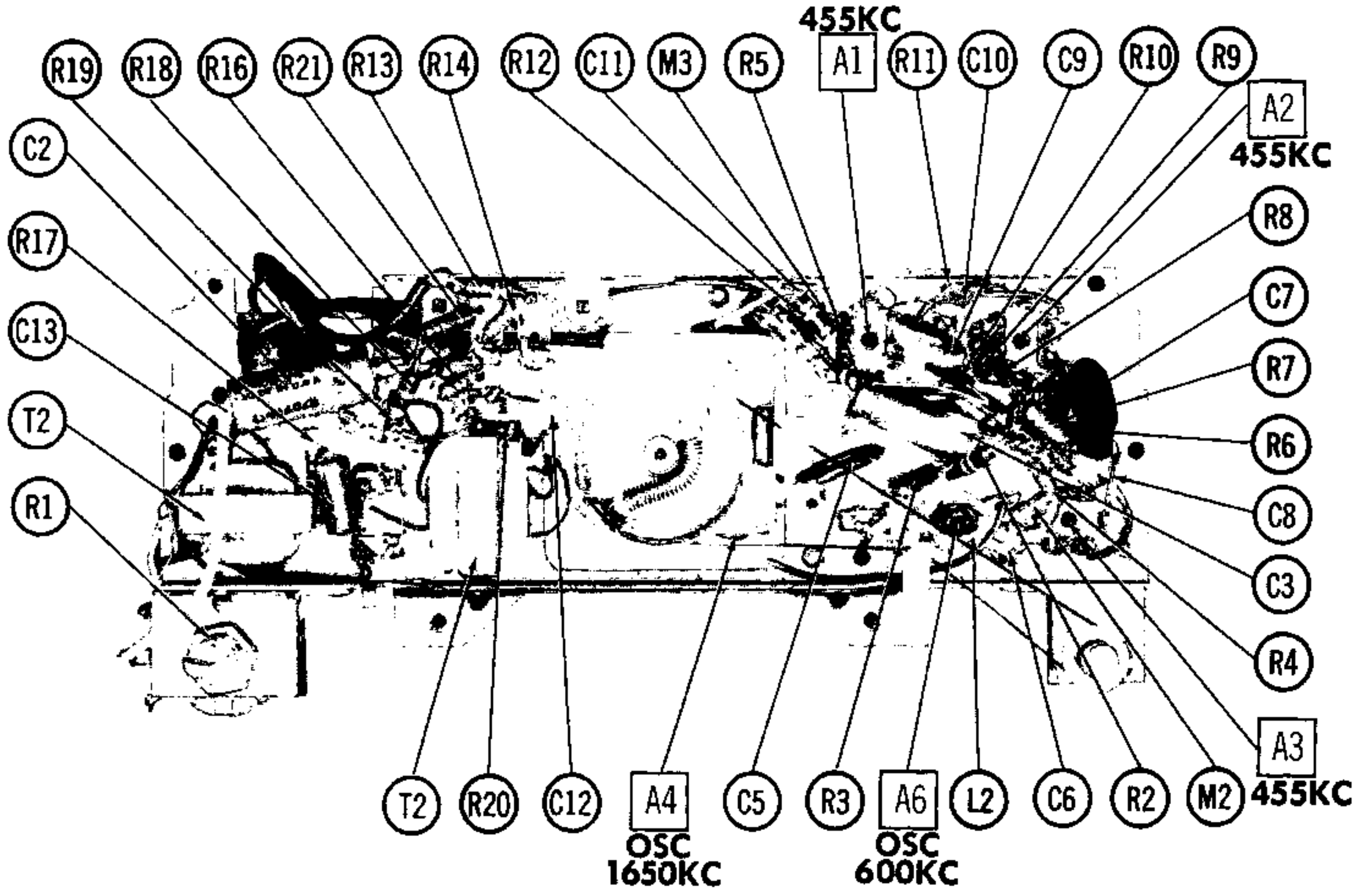
CRYSTAL DIODES

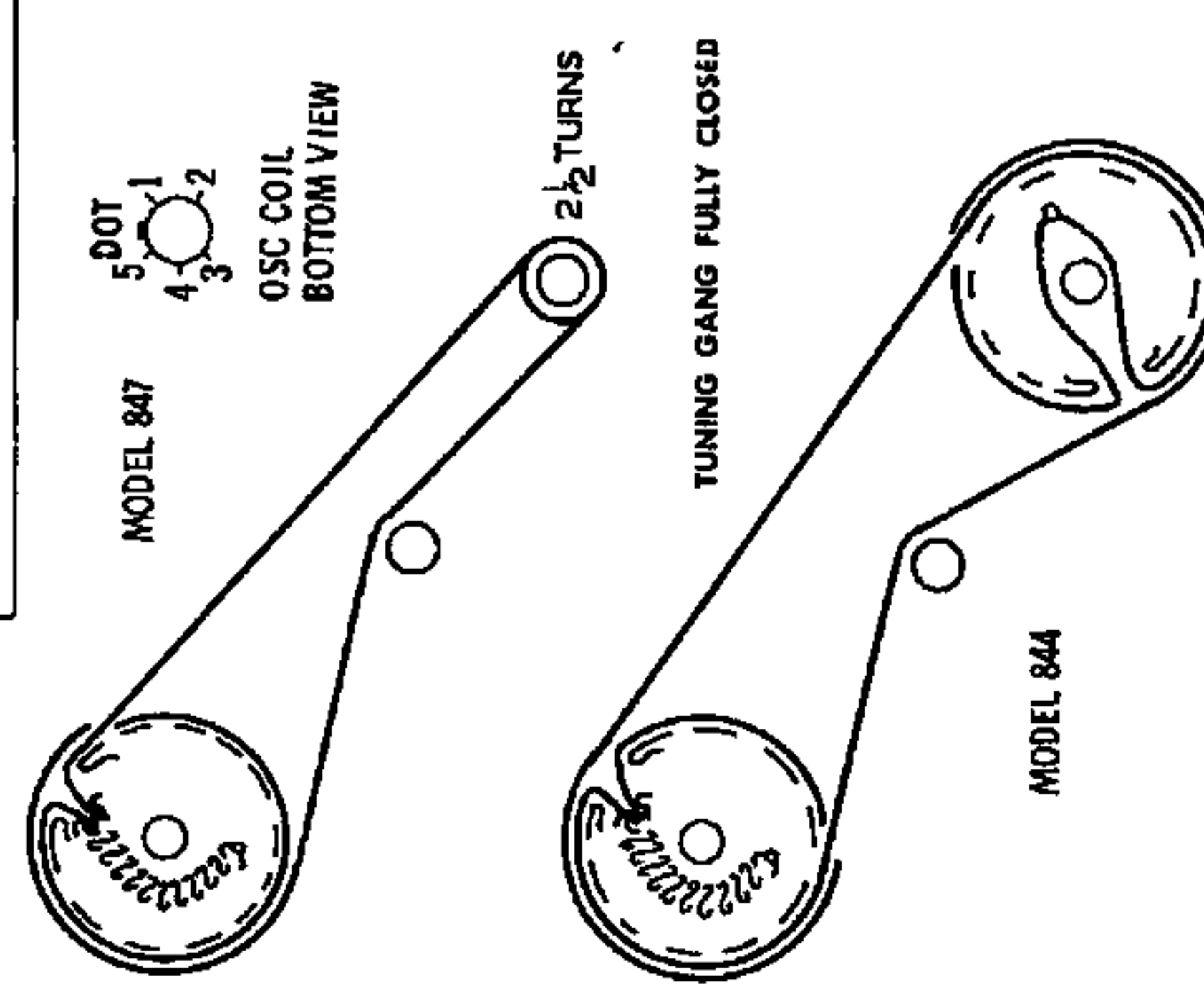
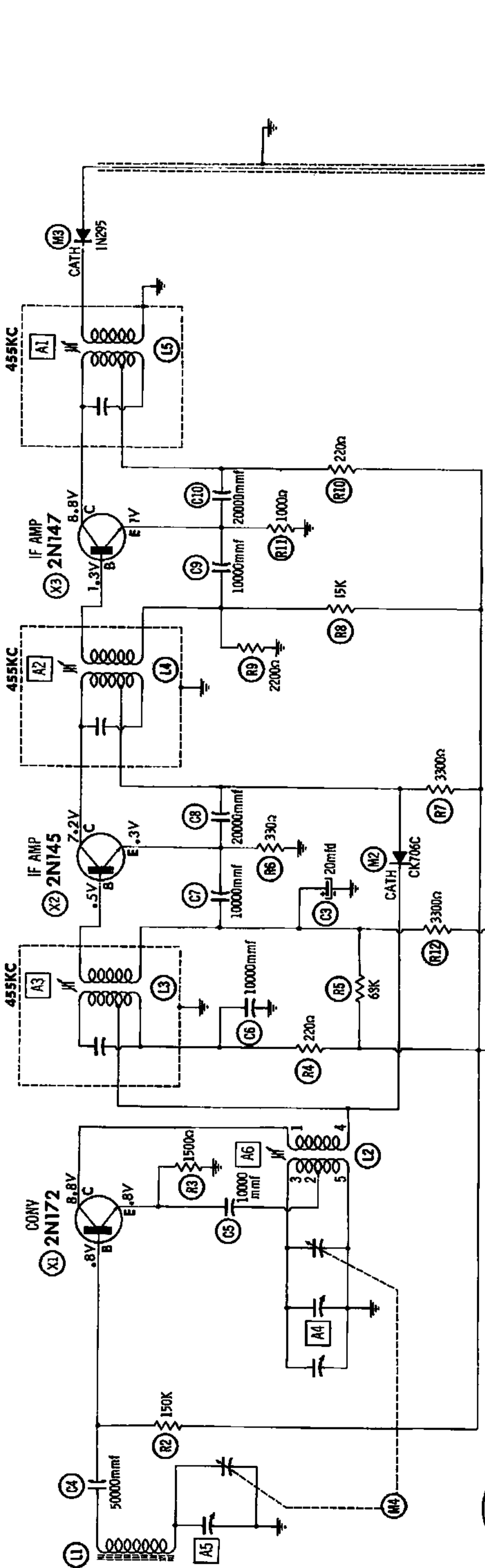
ITEM No.	ORIG. TYPE	REPLACEMENT DATA		NOTES
		EMERSON PART No.	SYLVANIA PART No.	
M2	CK708C	817051	1N60	Auxiliary AGC (Pigtail)
M3	1N295	817038	1N60	Audio Detector (Pigtail)

MISCELLANEOUS

ITEM No.	PART NAME	EMERSON PART No.	NOTES
M4	Tuning Cap	900154	Two Gang, (13-228, 22-128MMF), Used In Chassis #120328, Part #900155 Used In Chassis 120309
	Station Ind. Disc	412540	
	Knob	460773	On-Off-Volume (Clear) Model 847
	Knob	460774	Tuning (Clear) Model 847
	Knob	460778	On-Off-Volume (Blond) Model 844
	Knob	460777	Tuning (Blond) Model 844
	Handle	961826	Specify Color

CHASSIS—BOTTOM VIEW

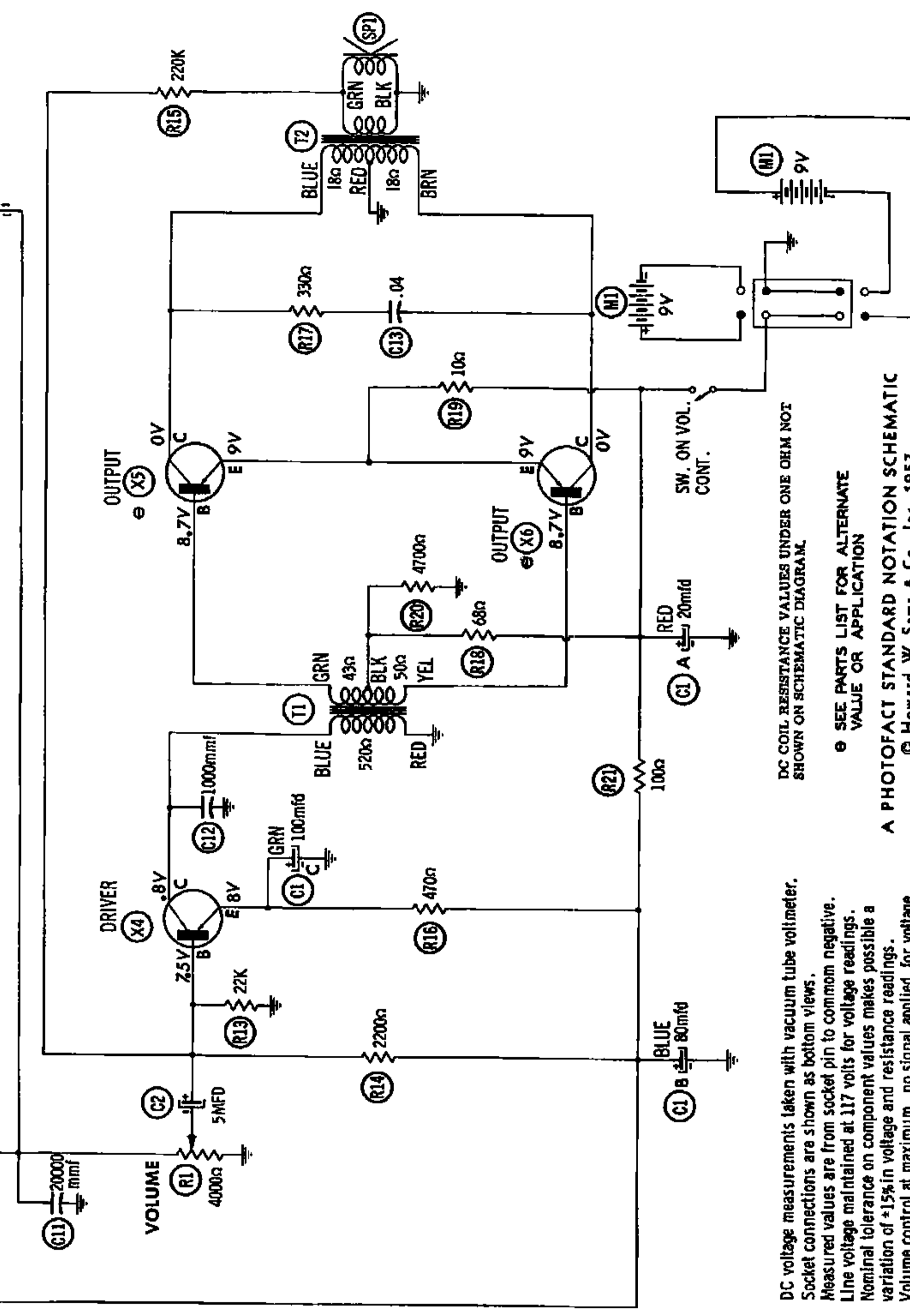




DIAL CORD STRINGING

ITEM	TYPE	BASE	EMITTER	COLLECTOR
X1	2N172	† 150K	1500Ω	† 320Ω
X2	2N145	6000Ω	330Ω	† 3400Ω
X3	2N147	2000Ω	1000Ω	† 320Ω
X4		† 2300Ω	† 570Ω	520Ω
X5		† 110Ω	† 10Ω	18Ω
X6		† 120Ω	† 10Ω	18Ω

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



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. 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. Volume control at maximum, no signal applied for voltage measurements.

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM.
 † SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION
 A PHOTOFACT STANDARD NOTATION SCHEMATIC
 © Howard W. Sams & Co., Inc. 1957