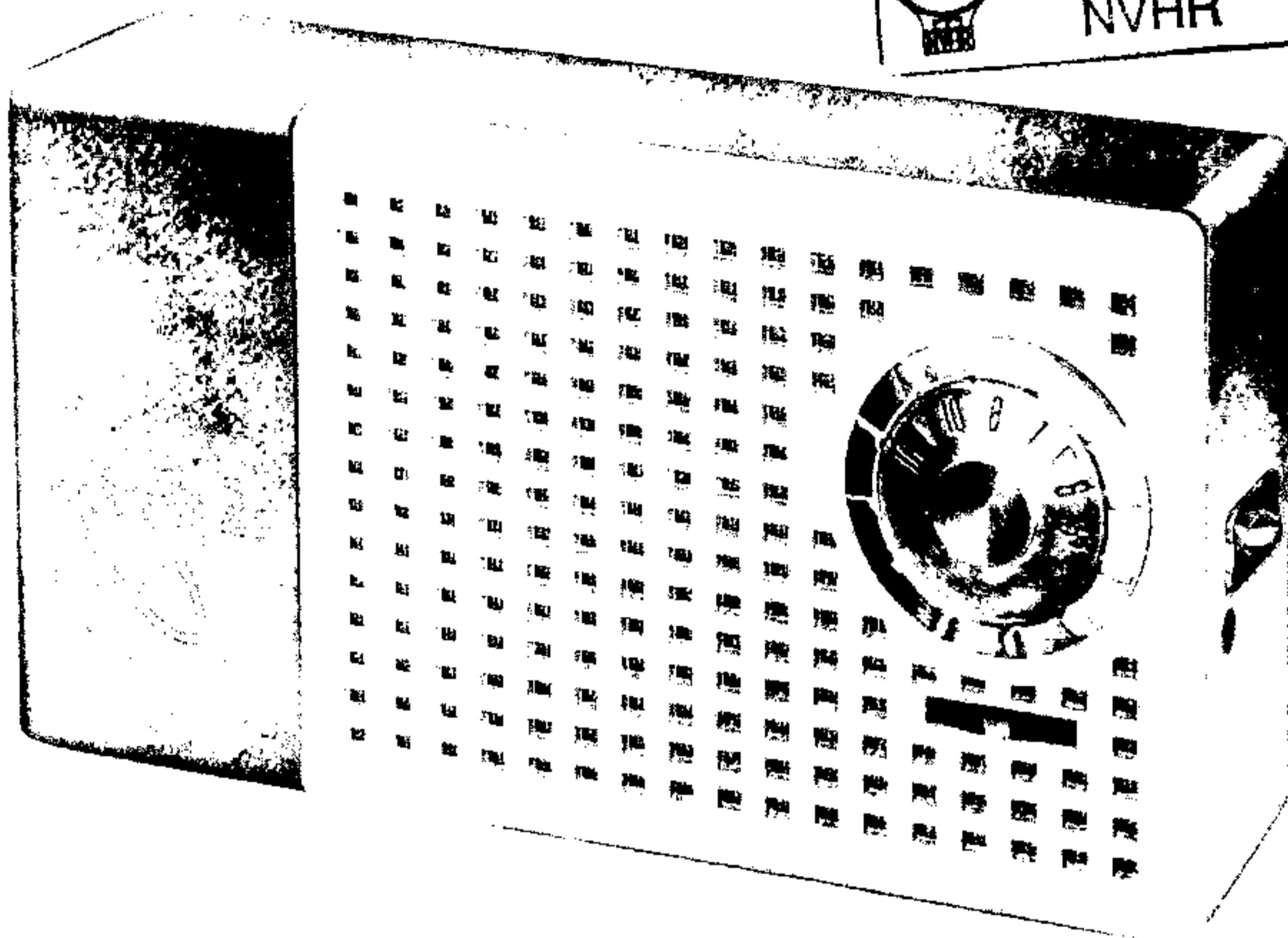
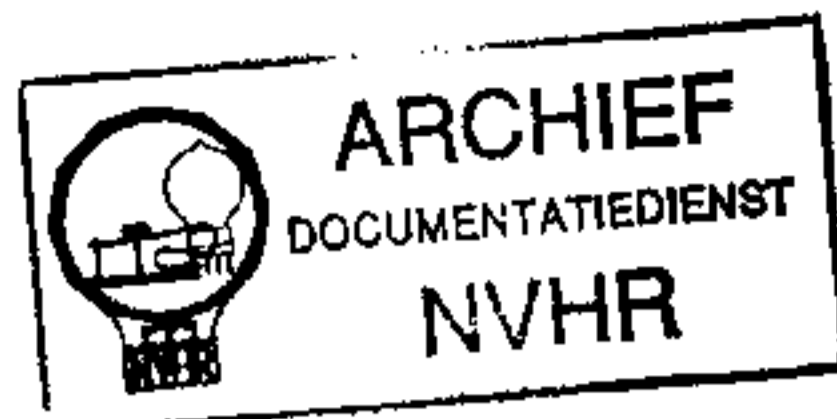




Met dank aan Jef Bos



TRADE NAME	Raytheon Models T-100-1, T-100-2, T-100-3, T-100-4, T-100-5 (Ch. 4RT1)					
MANUFACTURER	Raytheon Mfg. Co., TV & Radio Div., 5921 W. Dickens Ave., Chicago 39, Ill.					
TYPE SET	Battery Operated Portable Transistor AM Superheterodyne Receiver					
POWER SUPPLY	9 Volts "A" Supply					RATING 12MA @ 9 Volts DC
TUNING RANGE—BROADCAST	540KC - 1600KC					
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.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. .5MFD	High side to base of X1. Low side to chassis.	455KC (400% Mod)	Tuning gang fully open.	Across voice coil.	A1, A2	Adjust for maximum output. Repeat for best results.
2. "	"	1620KC	"	"	A3	Adjust for maximum output.
3. "	"	535KC	Tuning gang fully closed.	"	A4	"
4. "	"	1620KC	Tuning gang fully open.	"	A3	"
5.	Loop	1400KC	Tune to 1400KC signal.	"	A5	Adjust for maximum output while rocking tuning gang.

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PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	USE	TYPE	NOTES
X1	Converter	2N112	Note 1
X2	IF Amplifier	2N112	Note 1

ITEM No.	USE	TYPE	NOTES
X3	AF Amplifier	2N132	
X4	Output	2N138	

Note 1: Some versions may use type CK-760 in this application.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	RAYTHEON PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C1	50	10	8C-26454	XPP10V50	EC50-10		ML-50-10		R2278*
C2	6	3	8C-26455	XPP3V6	EC6-3	TAW4A6	ML-6-3		R2280*
C3	6	3	8C-26455	XPP3V6	EC6-3	TAW4A6	ML-6-3		R2280*
C4	50	3	8C-26453	SRE3V50	BBR50-3		ML-50-3		TE-1100
C5	6	3	8C-26455	XPP3V6	EC6-3	TAW4A6	ML-6-3		R2280*

* 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	RAYTHEON PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.		SPRAGUE PART No.
C6	10000		8G-26457	BPD-01	DD-103	K082	811-01	DC511	5HK-S1	Note 1
C7	10000		8G-26457	BPD-01	DD-103	K082	811-01	DC511	5HK-S1	
C8	350		8N1-274							
C9	50000		8G-26459							
C10	15									
C11	50000		8G-26459							
C12	50000		8G-26459							
C13	10000		8G-26457	BPD-01	DD-103	K082	811-01	DC511	5HK-S1	
C14	10000		8G-26457	BPD-01	DD-103	K082	811-01	DC511	5HK-S1	

Note 1: Some versions may use 10MMF in this application (part no. 8L-26471)

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	RAYTHEON PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
R1	10K	1/2	B-10A-26389					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	RAYTHEON PART No.	IRC PART No.			OHMS	WATT	RAYTHEON PART No.	IRC PART No.	
R2	33K		9B5-80	BTR-33K		R10	150K		9B5-88	BTR-150K	
R3	18K		9B5-77	BTR-18K		R11	27K			BTR-27K	Note 1
R4	5100Ω	5%	9B5-176	BTR-5100 5%		R12	5100Ω	5%	9B5-176	BTR-5100 5%	Note 2
R5	1000Ω		9B5-62	BTR-1000		R13	1000Ω		9B5-62	BTR-1000	
R6	1000Ω		9B5-62	BTR-1000		R14	12K	5%		BTR-12K 5%	Note 3
R7	1000Ω		9B5-62	BTR-1000		R15	560Ω		9B5-69	BTR-560	
R8	1000Ω		9B5-62	BTR-1000		R16	82Ω		9B1-99	BTR-82	
R9	10K		9B5-74	BTR-10K		R17	470Ω			BTR-470	Note 4

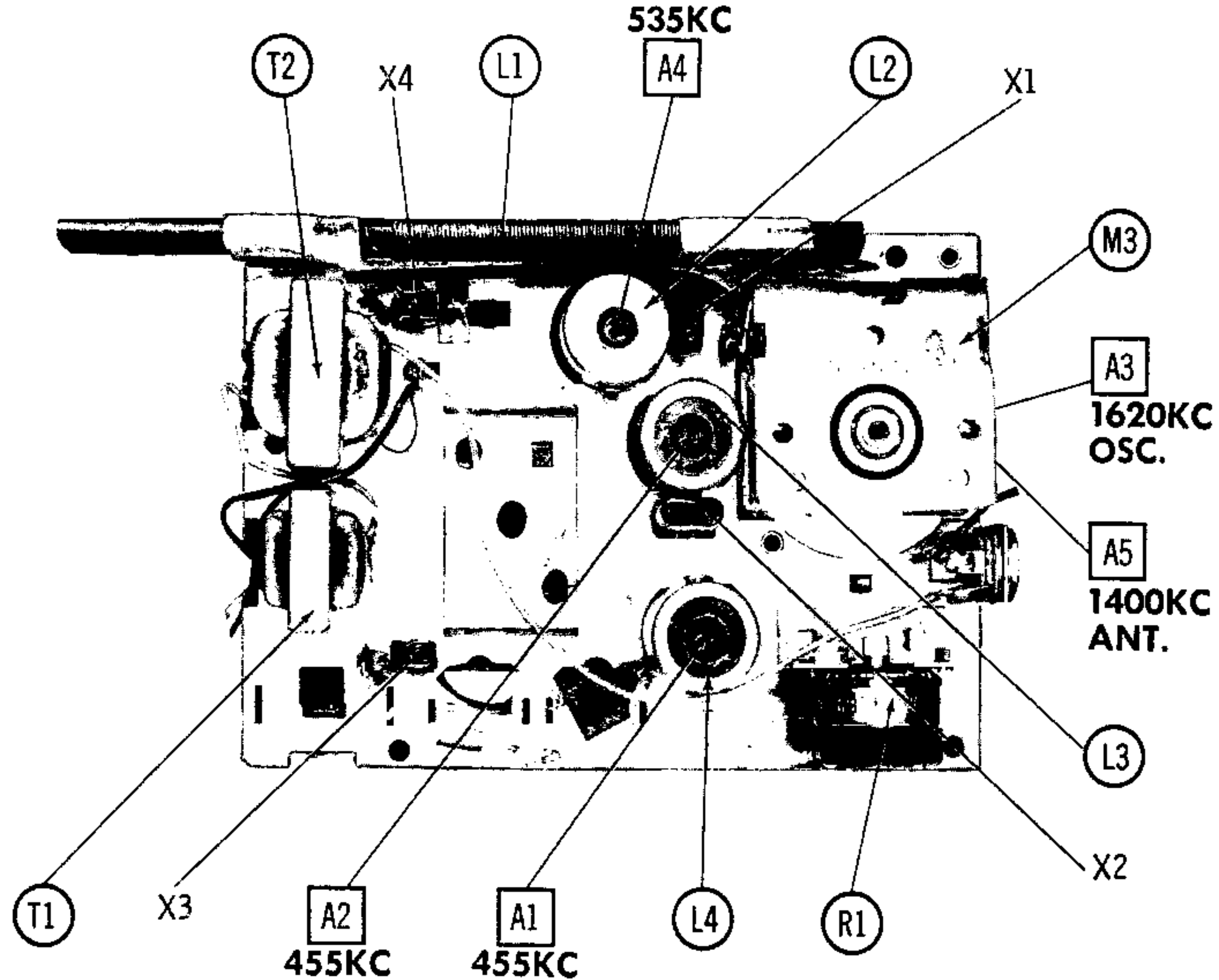
Note 1: Some versions use 6800Ω 5% in this application (part no. 9B5-179).

Note 2: Some versions use 1000Ω in this application (part no. 9B5-62).

Note 3: Some versions use 4300Ω 5% in this application (part no. 9B5-174).

Note 4: Some versions use 200Ω 5% in this application (part no. 9B1-142)

CHASSIS—TOP VIEW



T1

T2

X3

X4

A2

455KC

L1

A1

455KC

535KC

A4

L4

L2

R1

X1

M3

A3

1620KC
OSC.

A5

1400KC
ANT.

L3

X2

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (AUDIO INPUT)

ITEM No.	RESISTANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	RAYTHEON PART No.	Haldarson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
T1	880Ω	120Ω	12C26467				TR-13	
	Turns Ratio 4:1							

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	RAYTHEON PART No.	Haldarson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
T2	1.9K	19Ω	12C-26539					

SPEAKER

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	SIZE	FIELD	V. C. IMP.	RAYTHEON PART No.	QUAM PART No.	RCA TYPE No.	
SP1	2 3/4"	PM	19Ω	18A-26389		222S1	

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA				NOTES
		PRI.	SEC.	RAYTHEON PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L1	Loopstick	.1Ω	1.1Ω	13E-26452				*Tapped @ .4Ω ■ Tapped @ .6Ω ▲ Tapped @ 1Ω
L2	Osc. Coll	.7Ω	4.5Ω*	13D-26379				
L3	1st IF Trans.	1.5Ω■	.6Ω	13A-26380				
L4	2nd IF Trans.	1.6Ω▲	2Ω	13B-26382				

BATTERIES

ITEM No.	VOLTAGE	RAYTHEON PART No.	REPLACEMENT DATA						INSTALLATION NOTES
			EVEREADY			BURGESS			
			"A"	"B"	"A-B"	"A"	"B"	"A-B"	
M1	9V "A"	22C-26460	#246			#2N6			

CRYSTAL DIODES

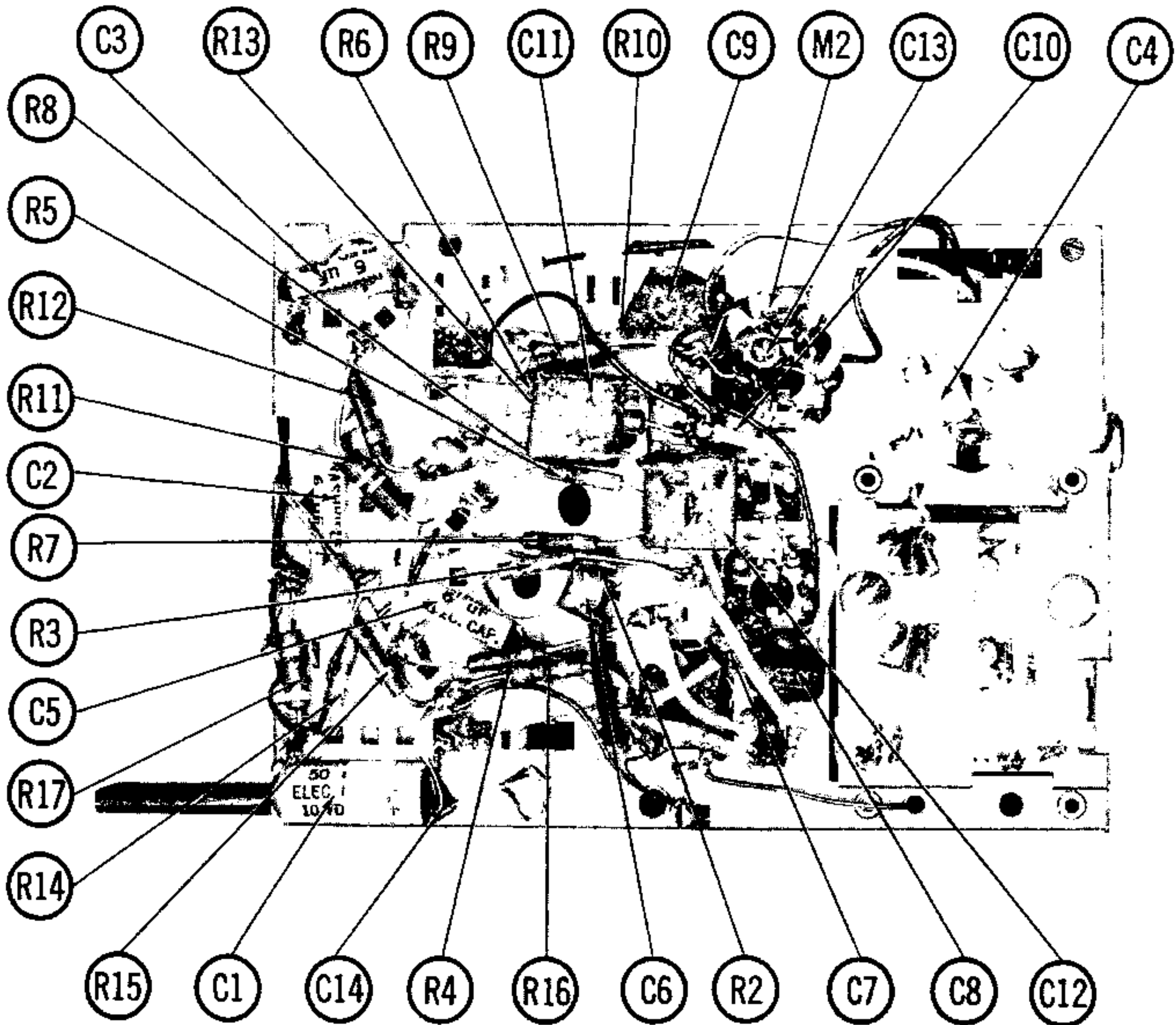
ITEM No.	ORIG. TYPE	REPLACEMENT DATA		NOTES
		RAYTHEON PART No.	SYLVANIA PART No.	
M2	1N295*	1N295 or CK-706A	1N60	Audio Det. (Pigtail)

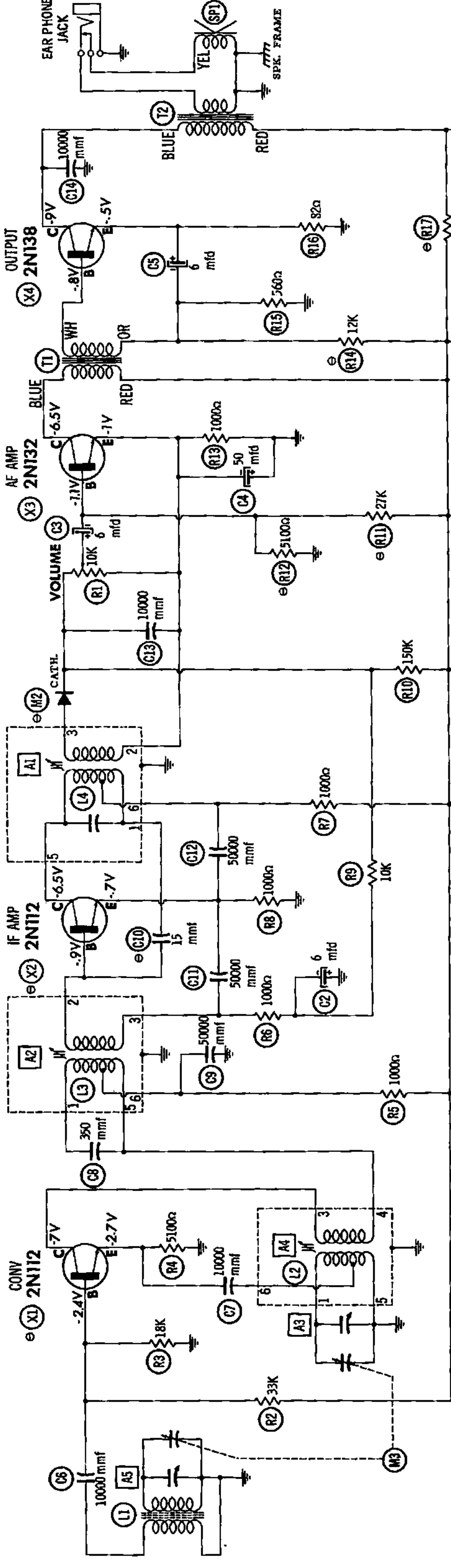
* Some versions may use crystal diode type CK-706A in this application.

MISCELLANEOUS

ITEM No.	PART NAME	RAYTHEON PART No.	NOTES
M3	Tuning Cap.	8A-26384	2 Gang (17-190MMF, 14-120MMF)
	Case	5C-26542-A206	Models T-100-1, -2.
	Case	5C-26542-A207	Models T-100-3, -4.
	Case	5C-26542-A209	Model T-100-5.
	Case Cover	200-26448	Models T-100-1, -3.
	Case Cover	200-26448-1	Models T-100-2, -4, -5.
	Battery Cover Assy	200-26449	Models T-100-1, -2.
	Battery Cover Assy	200-26449-1	Models T-100-3, -4.
	Battery Cover Assy	200-26449-2	Model T-100-5.
	Knob	200-26408	Tuning
	Knob	5B-26356-A206	On-Off-Volume, Models T-100-1, -2.
	Knob	5B-26356-A207	On-Off-Volume, Models T-100-3, -4.
	Knob	5B-26356-A209	On-Off-Volume, Model T-100-5.

CHASSIS—BOTTOM VIEW





ITEM	TUBE	Base	Emitter	Collector
X1	2N112	2800Ω	5K	1300Ω
X2	2N112	11K	1500Ω	1300Ω
X3	2N132	1700Ω	1000Ω	1300Ω
X4	2N138	20K	700Ω	1300Ω
		1200Ω	1000Ω	1200Ω
		4K	700Ω	1200Ω
		500Ω	82Ω	2200Ω

MEASURED FROM JUNCTION OF R17 AND ON-OFF SWITCH.
DUAL READINGS INDICATE REVERSAL OF METER LEADS.

1. DC voltage measurements taken with vacuum tube voltmeter; 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. Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.

IF = 455KC

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION



A PHOTOFACT STANDARD NOTATION SCHEMATIC
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OSC. & IF COILS
(BOTTOM VIEW)

2N132-2N138
SOCKET
(BOTTOM VIEW)

2N112 SOCKET
(BOTTOM VIEW)

SW. ON VOL.
CONT.