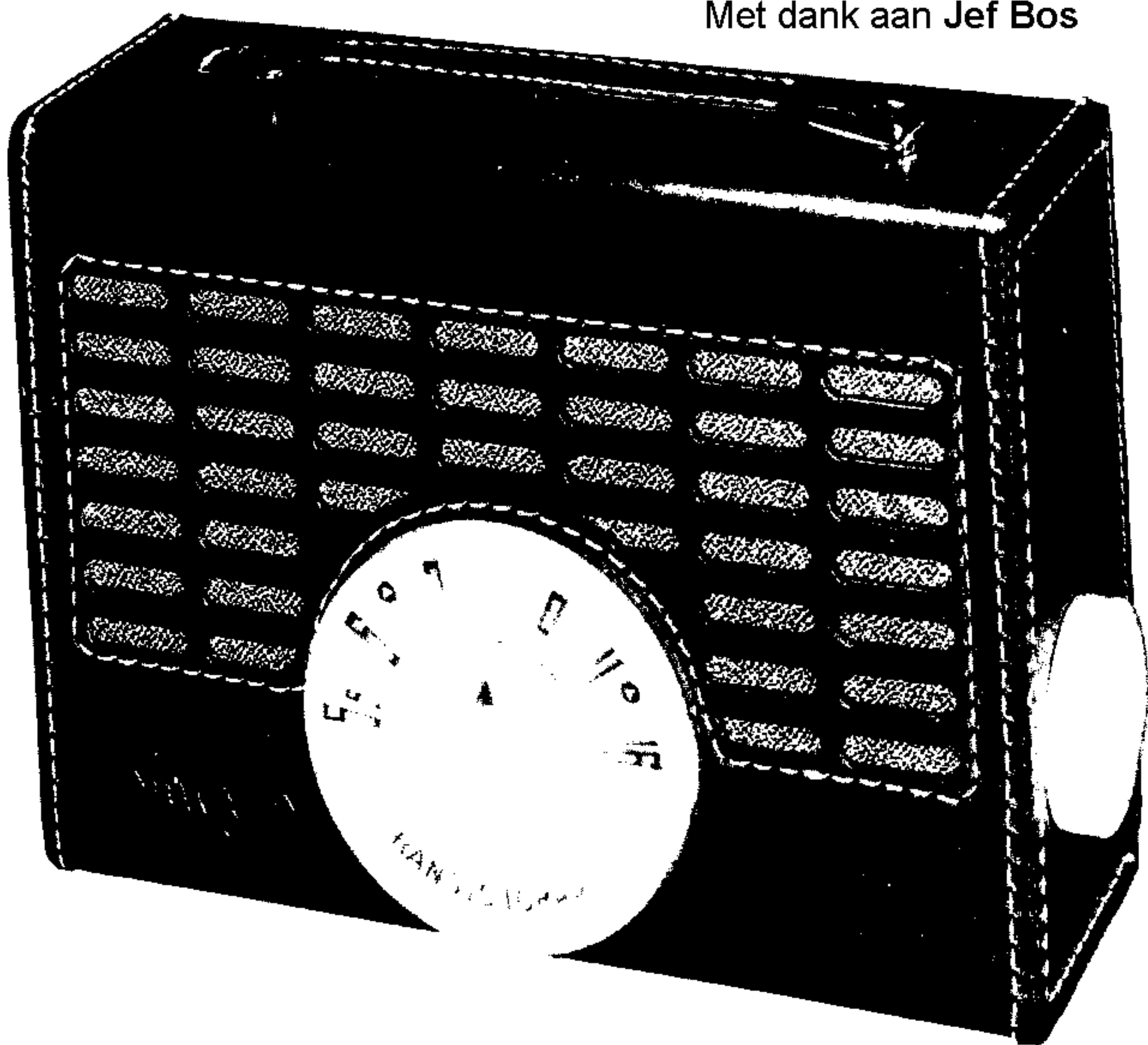


PHOTOFACT* Folder



**DEWALD
MODEL K-702B**

Met dank aan Jef Bos



TRADE NAME Dewald Model K-702B
MANUFACTURER Dewald Radio Mfg. Co., 35-15 37th. Ave., Long Island City 1, N. Y.
TYPE SET Battery Operated Portable Transistorized AM Receiver

POWER SUPPLY 9 Volts
TUNING RANGE—BROADCAST 540KC-1650KC
RATING 7.5 MA @9 Volts DC

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. .1MFD	High side to junction of L1 and C5. Low side to chassis.	455KC (400vMod)	Tuning gang fully open	Across voice coll	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. Repeat steps 2, 3 and 4 until no further improvement is obtained.

Historie v/d Radio

**CHIEF
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VHR**

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PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	USE	TYPE	NOTES
X1	Converter	2N112	
X2	1st. IF Amplifier	2N112-A	
X3	2nd. IF Amplifier	2N112-A	

ITEM No.	USE	TYPE	NOTES
X4	AF Amplifier	2N132	
X5	Output	2N138	
X6	Output	2N138	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	DEWALD PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C1	10	5	E-215-3	SRE25V10	BBR10-25		TD-10-25	MMT-0210	TE-1087
C2	2	10	E-218-1	PRS50V2	EC2-50		ML-2-15	MMT-4501	TVA-1201
C3	50	3	E-215-4	XPP3V50	BBR50-3		TD-50-6	MMT-350	TE-1100
C4	100	15	E-216-1	SRE15V100	BBR100-15	TC2501	TD-100-15	MTH-1510	TVA-1160

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	DEWALD PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C5	10000			BPD-01	DD-103	K082	ED-01	DC-511	5HK-S1	Note 1
C6	10000			BPD-01	DD-103	K082	ED-01	DC-511	5HK-S1	
C7	10000			BPD-01	DD-103	K082	ED-01	DC-511	5HK-S1	
C8	10000			BPD-01	DD-103	K082	ED-01	DC-511	5HK-S1	
C9	5.6									
C10	10000			BPD-01	DD-103	K082	ED-01	DC-511	5HK-S1	Note 1
C11	10000			BPD-01	DD-103	K082	ED-01	DC-511	5HK-S1	
C12	2.7									
C13	10000			BPD-01	DD-103	K082	ED-01	DC-511	5HK-S1	
C14	10000			BPD-01	DD-103	K082	ED-01	DC-511	5HK-S1	
C15	5000			BPD-005	DD-502	K080	ED-005	DC-525	5HK-D5	
C16	.05	200		BPD-05	DF-503	CUB2S5		PT415	2TM-S5	

Note 1. Not used in some versions.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	DEWALD PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
RIA	5000Ω	1/2	V910-1	AB-11		Q13-114	U12	Volume Attach to RIA Attach to RIA
B	Shaft			AK-4		Not Req.	Not Req.	
C	Switch			KB-1		76-1	US-26	

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	DEWALD PART No.	IRC PART No.			OHMS	WATT	DEWALD PART No.	IRC PART No.	
R2	33K			BTS-33K	Note 1	R12	100K			BTS-100K	Note 3
R3	6800Ω			BTS-6800		R13	4700Ω			BTS-4700	
R4	2200Ω			BTS-2200		R14	33K			BTS-33K	
R5	3900Ω			BTS-3900		R15	6800Ω			BTS-6800	
R6	4700Ω			BTS-4700	R16	1000Ω			BTS-1000	Note 4	
R7	330Ω			BTS-330	R17	6800Ω			BTS-6800		
R8	47K			BTS-47K	R18	82Ω			BTS-82		
R9	12K			BTS-12K	R19	15K			BTS-15K		
R10	2200Ω			BTS-2200	R20	15K			BTS-15K	Note 4	
R11	2200Ω			BTS-2200	R21	10Ω			BTS-10	Note 4	

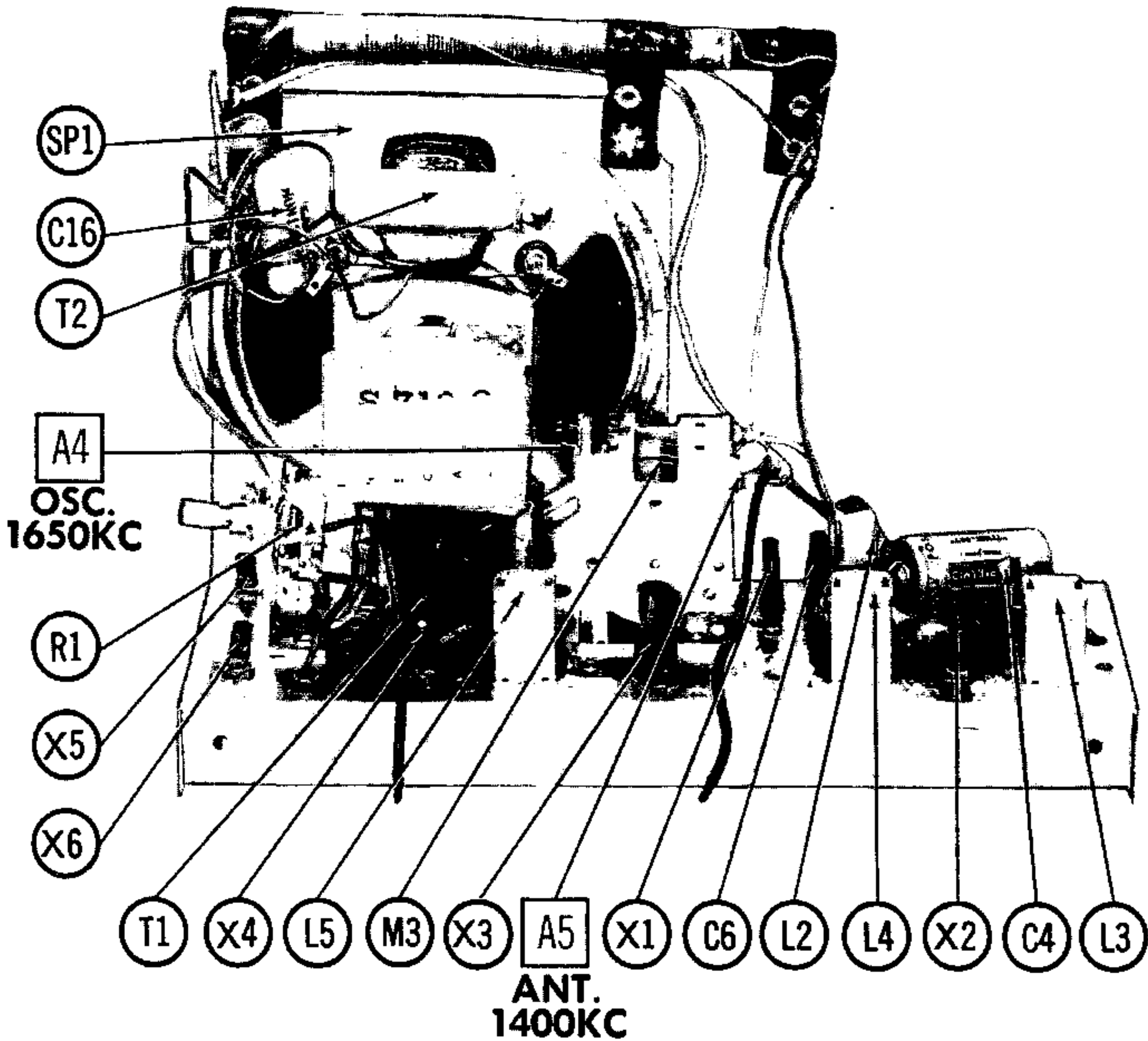
Note 1. Some versions use 18K in this application.

Note 2. Some versions use 33K in this application.

Note 3. Some versions use 2200Ω in this application.

Note 4. Not used in some versions.

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (DRIVER)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			DEWALD PART No.	Halldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.						
T1	315Ω	184Ω CT					TR-6	

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			DEWALD PART No.	Halldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.						
T2	820Ω	3-4Ω					TR-29	

SPEAKER

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	SIZE	FIELD	V. C. IMP.	DEWALD PART No.	QUAM PART No.	RCA TYPE No.	
SP1	4"	PM	3-4Ω	S-710-2	4A07	223S1	

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA				NOTES
		PRI.	SEC.	DEWALD PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L1	Loop Stick	.8Ω	2Ω	L-130C				
L2	Osc. Coil	2Ω	5.7Ω *	O-133B-4			2022	* Tapped @1.1Ω
L3	1st. IF Trans.	10Ω ■	.8Ω	1-131-1	16-9012	BC-358	2041	■ Tapped @5.5Ω
L4	2nd. IF Trans.	10Ω ▲	.5Ω	1-131-1	16-9013	BC-359	2041	▲ Tapped @2.8Ω
L5	3rd. IF Trans.	10Ω ♦	.7Ω	1-131-2	16-9014	BC-359	2042	♦ Tapped @1.6Ω

BATTERIES

ITEM No.	VOLTAGE	DEWALD PART No.	REPLACEMENT DATA						INSTALLATION NOTES
			EVEREADY			BURGESS			
			"A"	"B"	"A-B"	"A"	"B"	"A-B"	
M1	9V		276			D6			Connect 2 in parallel

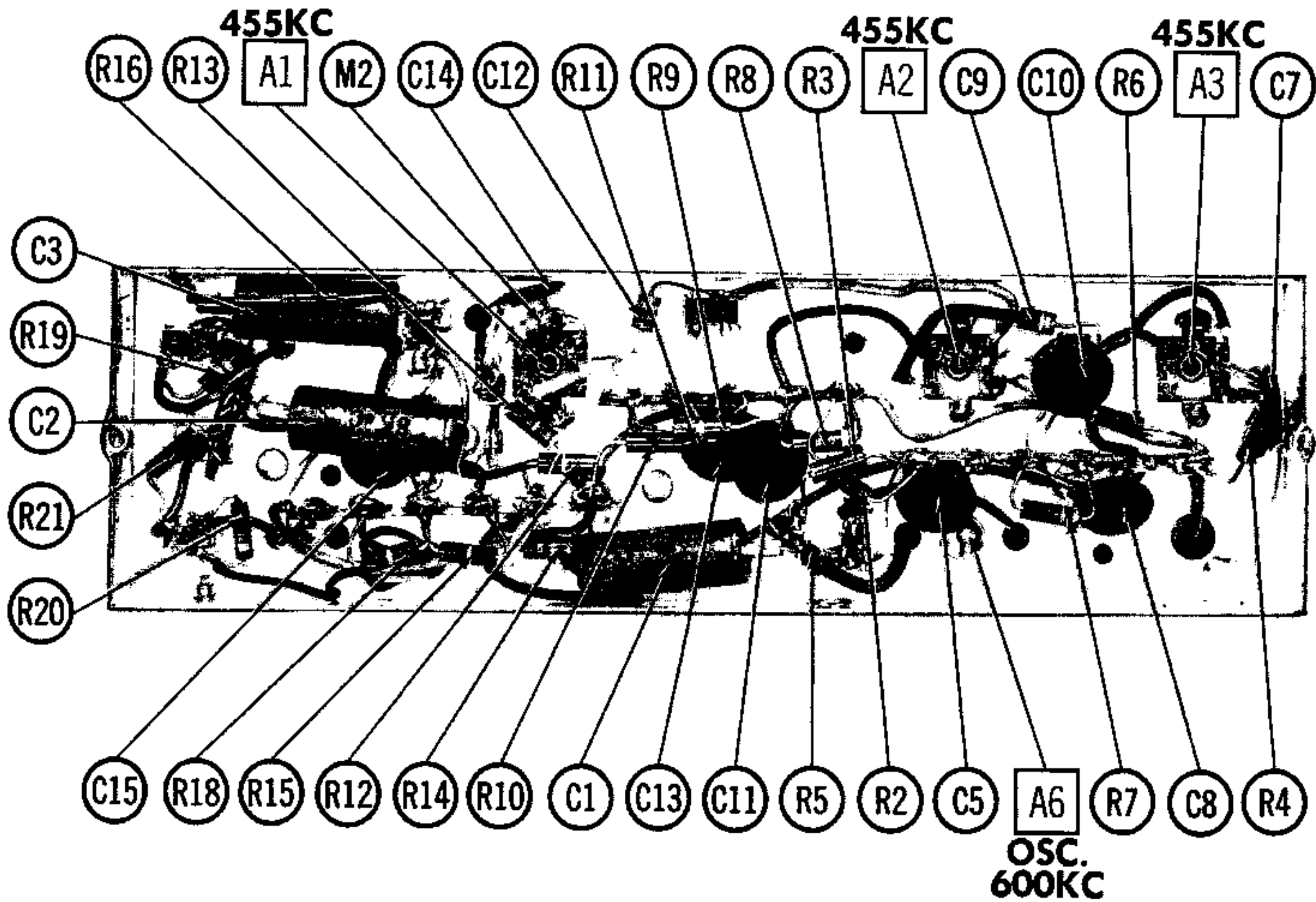
CRYSTAL DIODE

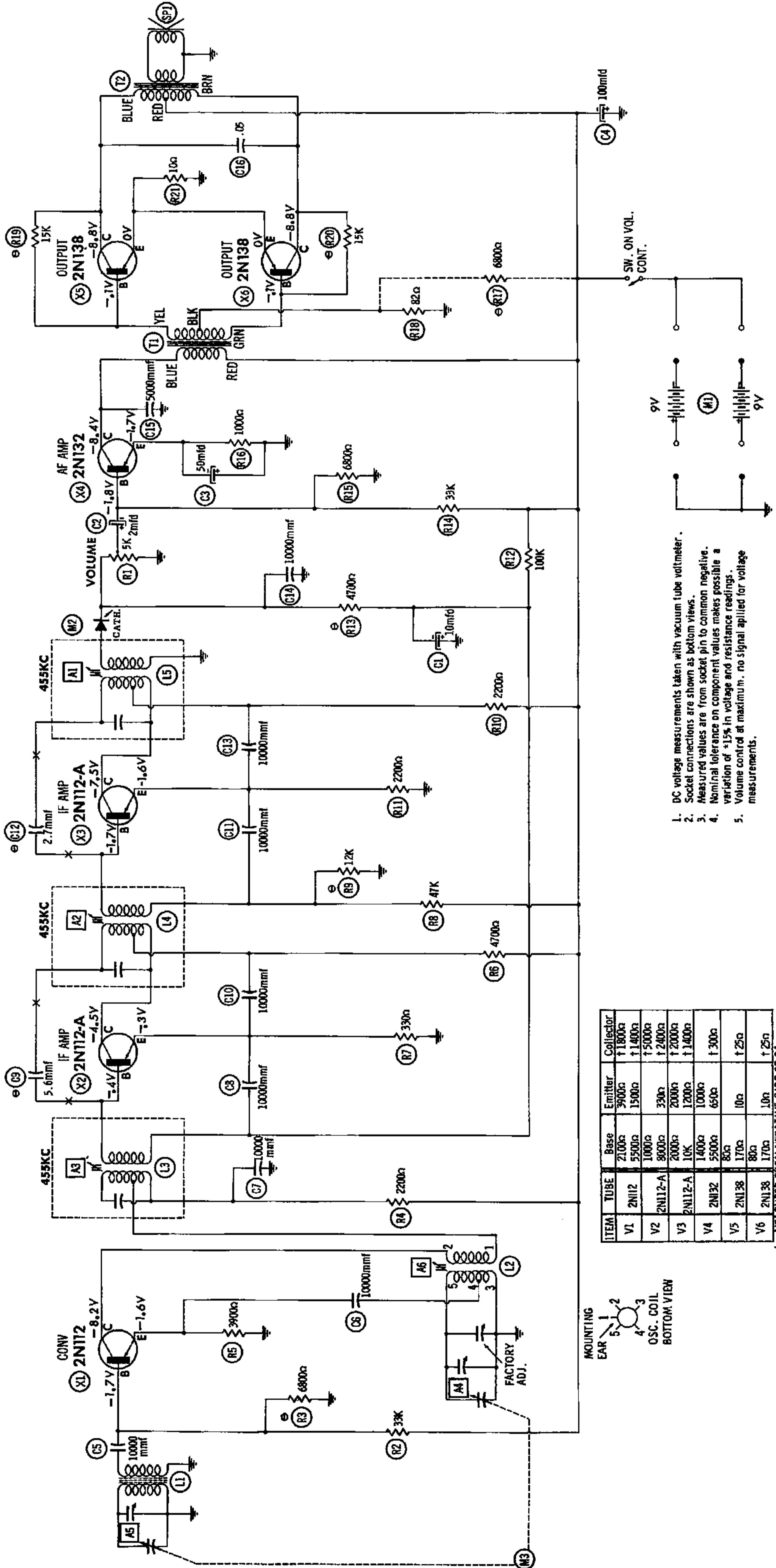
ITEM No.	ORIG. TYPE	REPLACEMENT DATA		NOTES
		DEWALD PART No.	SYLVANIA PART No.	
M2	1N295	1N295	1N60	Audio Det. (Pigtall)

MISCELLANEOUS

ITEM No.	PART NAME	DEWALD PART No.	NOTES
M3	Tuning Cap. Cabinet Knob Knob	V-214-1 C-444 4229D-6 4228D-3	2 Gang (16-220MMF, 22-120MMF) Tuning On-off-volume

CHASSIS—BOTTOM VIEW





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 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.

A PHOTOFACT STANDARD NOTATION SCHEMATIC
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ITEM	TUBE	Base	Emitter	Collector
V1	2N112	2100 Ω	3900 Ω	11800 Ω
V2	2N112	5500 Ω	1500 Ω	11400 Ω
V3	2N112-A	1000 Ω	330 Ω	15000 Ω
V4	2N112-A	2000 Ω	2000 Ω	12000 Ω
V5	2N138	1400 Ω	1000 Ω	1300 Ω
V6	2N138	5500 Ω	650 Ω	1250 Ω

† MEASURED FROM NEGATIVE SIDE OF C4.
 DUAL READING INDICATES REVERSAL OF METER LEADS.

⊖ SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

