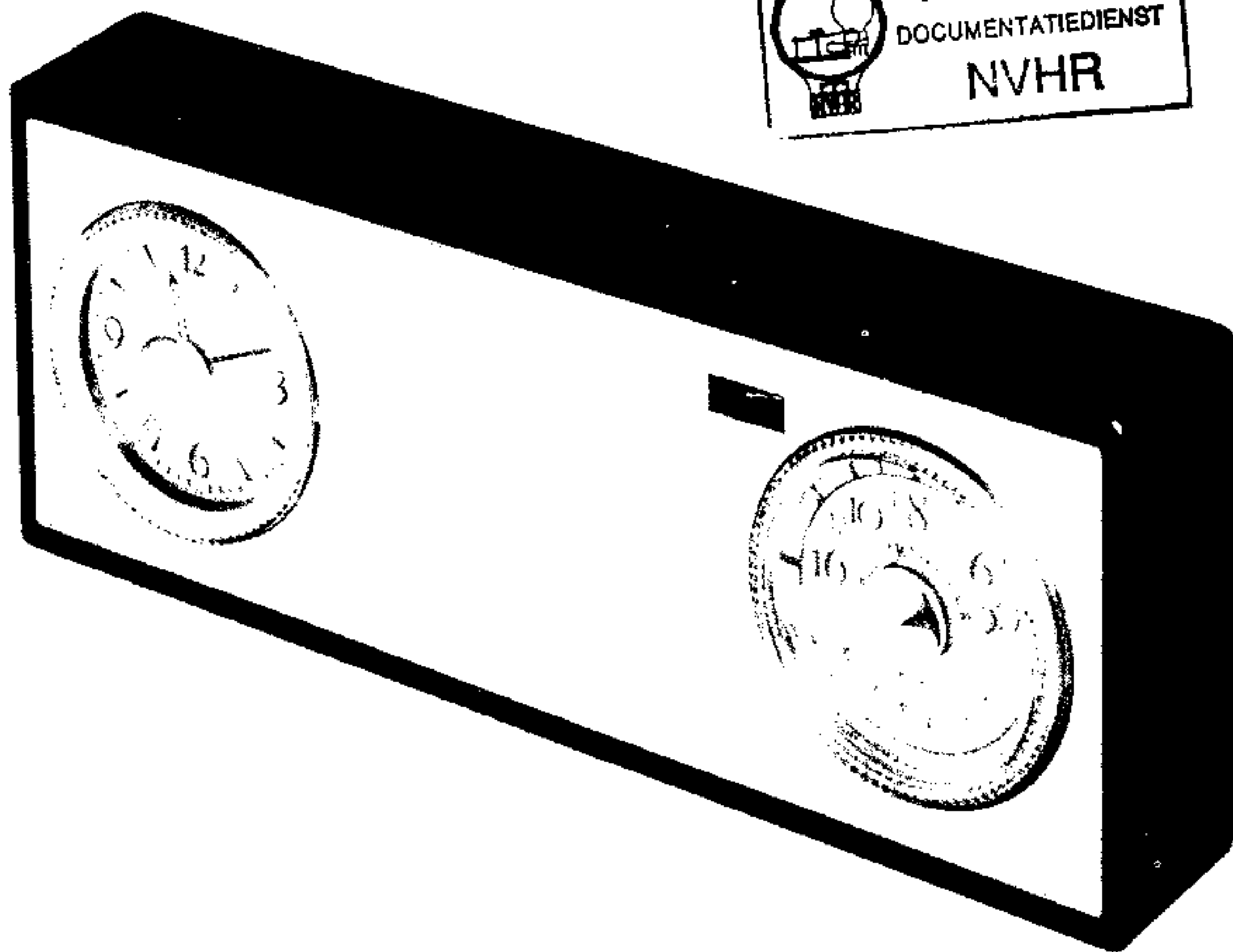
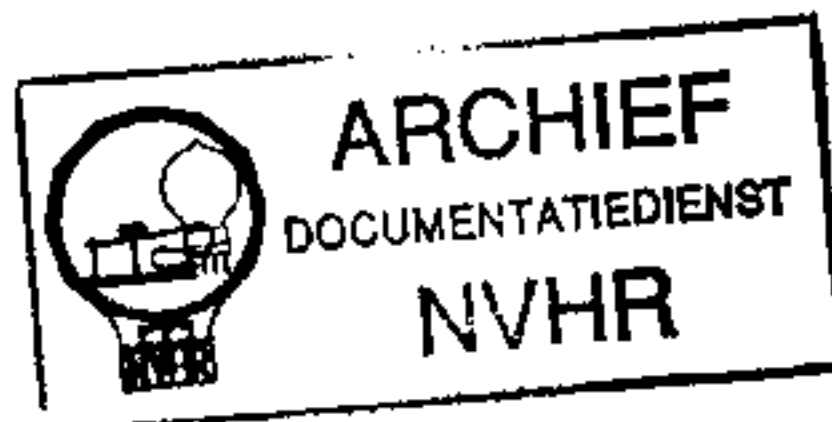




Met dank aan Jef Bos

Ned. Ver. v. Historie v/d Radio



TRADE NAME	Norelco Model L2X97T		
SUPPLIER	North American Phillips Co., Inc., 230 Duffy Ave., Hicksville, N. Y.		
TYPE SET	Battery Operated Transistorized AM Receiver with Clock		
POWER SUPPLY	6 Volts DC	RATING	9MA @ 6 Volts DC (No Signal, Min. Volume)
TUNING RANGE	BROADCAST 512-1630KC		15MA @ 6 Volts DC (Signal, Normal Volume)

ALIGNMENT INSTRUCTIONS

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.

Suggested Alignment Tools: A5, A7 ... GENERAL CEMENT #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989, WALSCO #2515, 2520, 2522, 2523, 2531, 2532, 2534, 2537, 2538 9291

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Loop	452KC (400% Mod.)	Tuning gang fully open	Across voice coil	A1, A2, A3	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2.	"	512KC	Tuning gang fully closed	"	A4	"
3.	"	1630KC	Tuning gang fully open	"	A5	Adjust for maximum output. Repeat steps 2 and 3.
4.	"	600KC	600KC signal	"	A6	Adjust for maximum output.
5.	"	1500KC	1500KC signal	"	A7	Adjust for maximum output. Repeat steps 4 and 5.

HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

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PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES
			CBS PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	OC44	Converter				2N412	PNP PNP PNP PNP PNP PNP PNP } Matched Pair
X2	OC45	1st IF Amplifier				2N410	
X3	OC45	2nd IF Amplifier				2N410	
X4	OC71	AF Amplifier		2N406		2N406	
X5	OC71	Driver		2N406		2N406	
X6	OC72	Output		2N408		2N408	
X7	OC72	Output		2N408		2N408	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	NORELCO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	25	6	909/A25	XPP-6025	NLW25-6	TT6X25	ML30-6	TE-1091	
C2	8	6	AC5711/8	XPP-6008	NLW8-6	TT6X8	ML8-6	TE-1086	
C3	8	6	AC5711/8	XPP-6008	NLW8-6	TT6X8	ML8-6	TE-1086	
C4	8	6	AC5711/8	XPP-6008	NLW8-6	TT6X8	ML8-6	TE-1086	
C5	8	6	AC5711/8	XPP-6008	NLW8-6	TT6X8	ML8-6	TE-1086	
C6	80	6	AC5711/80	XPP-6060	NLW100-6	TT6X80	ML75-6	TE-1101.5	
C7	200	6	C426AE/C200	PWE6200	NLW200-6			TE-1104	

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			REMARKS	REPLACEMENT DATA					
					AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C8	.047	125V	10%	Note 1	V84C2S47-10%		WMF2S47E			2WF-S47
C9	3300		5%					CM-20B-332J		
C10	.047	125V	10%		V84C2S47-10%		WMF2S47E			2WF-S47
C11	54		5%			TCZ-56	C10Q56C	CCTO-580	CNO-456	10TCC-Q56
C12	.047	125V			V84C2S47	DD-503	WMF2S47E			2WF-S47
C13	.047	125V	10%		V84C2S47-10%		WMF2S47E			2WF-S47
C14	18		5%			TCZ-18	C10Q18C	CCTO-180	CNO-180	10TCC-Q18
C15	.047	125V			V84C2S47	DD-503	WMF2S47E			2WF-S47
C16	.047	125V			V84C2S47	DD-503	WMF2S47E			2WF-S47
C17	4700				SI 4700	DD-472	BYA10D47M	CCD-472	GP247	10TS-D47
C18	.047	125V			V84C2S47	DD-503	WMF2S47E			2WF-S47
C19	150	N750	10%		N750-SI 150	TCN-150	C10T15U	CCTN-151	CN7-315	10TCU-T15

Note 1. Not used in some versions.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	NORELCO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1	10K	1/4						Volume and Switch

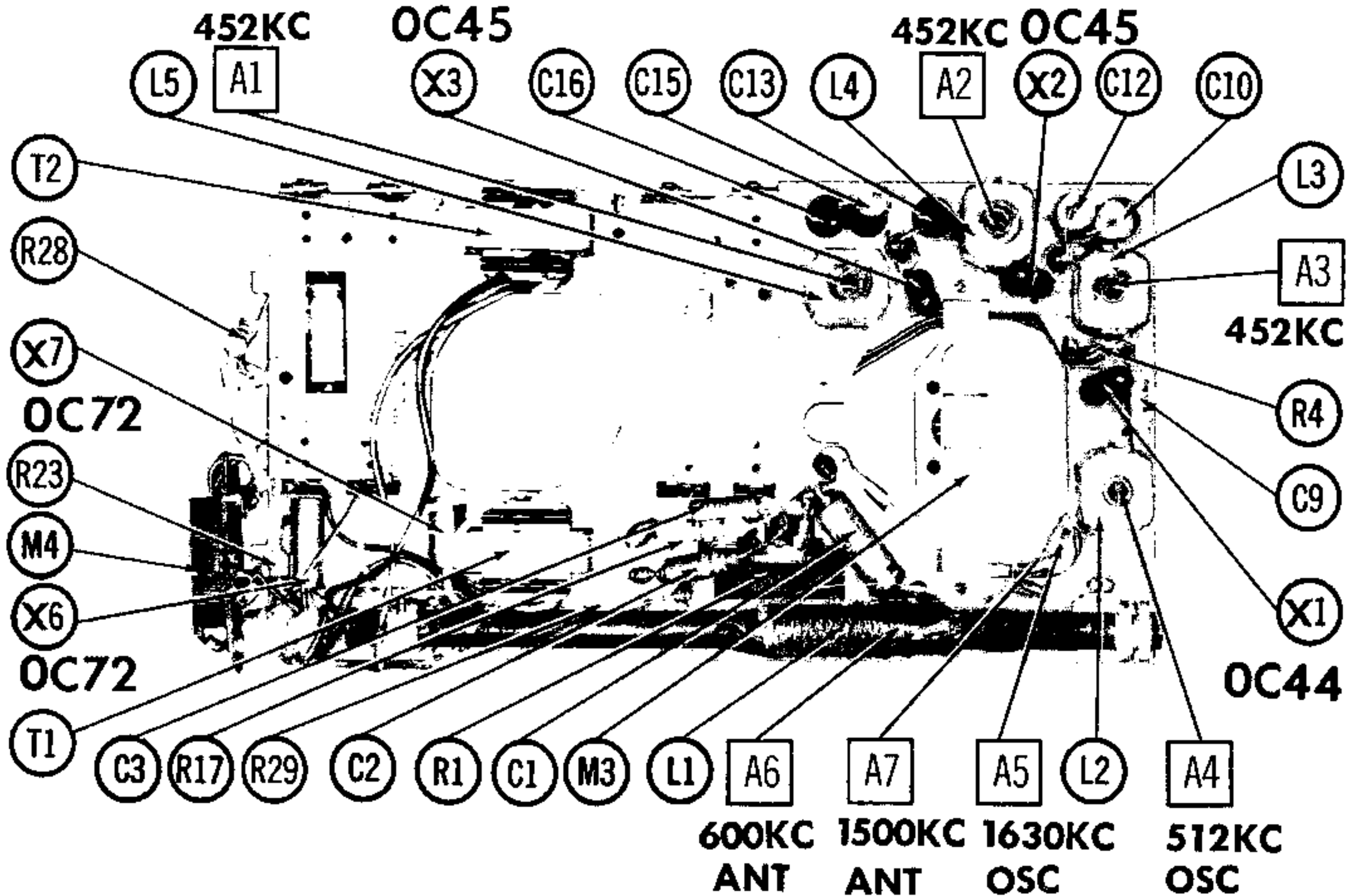
RESISTORS (IRC or EQUIVALENT)

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

ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R2	3300Ω	Note 1	R12	1000Ω		R22	1000Ω	Note 1 (100Ω) *
R3	12K		R13	15K		R23	3000Ω	
R4	18Ω		R14	680Ω		R24	100Ω	
R5	3300Ω		R15	3300Ω		R25	10Ω	
R6	180K		R16	47K		R26	270Ω	
R7	560Ω		R17	1500Ω		R27	330K	
R8	1000Ω		R18	4700Ω		R28	220Ω	
R9	15K		R19	3300Ω		R29	47K	
R10	4700Ω		R20	12K				
R11	1000Ω		R21	220Ω				

Note 1. Not used in some versions.
* Alternate Value.

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		NORELCO PART No.	Merit PART No.	Miller PART No.	Ram PART No.	
L1	Loopstick	A380362				
L2	Osc. Coil	A312865				
L3	1st IF Trans.	A312866				
L4	2nd IF Trans.	A312866				
L5	3rd IF Trans.	A312867				

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			NORELCO PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.						
T1	1	1	T329					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			NORELCO PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.						
T2	1000Ω CT	4-6Ω	T349					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				NORELCO PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
BPI	2 1/2"	PM	4-6Ω	AD2200Z	25A0724.8	

BATTERIES

ITEM No.	VOLTAGE	NORELCO PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1.5V			930 *		1015 *		M-15R *	* Four required

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		NORELCO PART No.	CBS PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	OA95	OA95	1N60	1N60	1N60	Detector

MISCELLANEOUS

ITEM No.	PART NAME	NORELCO PART No.	NOTES
M3	Tuning Cap.	4900222	2 Gang (3 Position Rotary) Off, Radio-Buzzer
M4	Switch	A318757	
M5	Clock	A387199	

CABINETS & CABINET PARTS

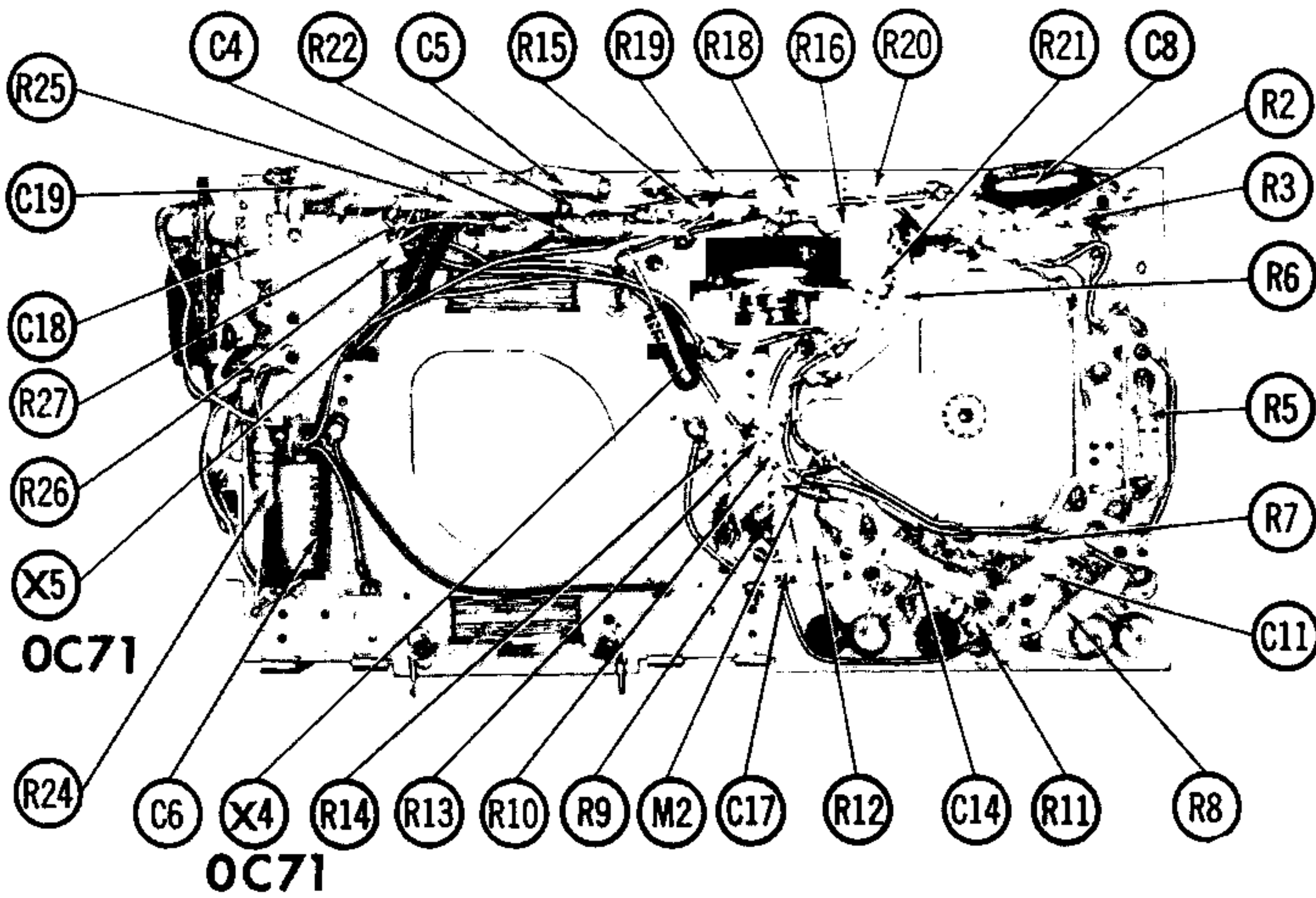
(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

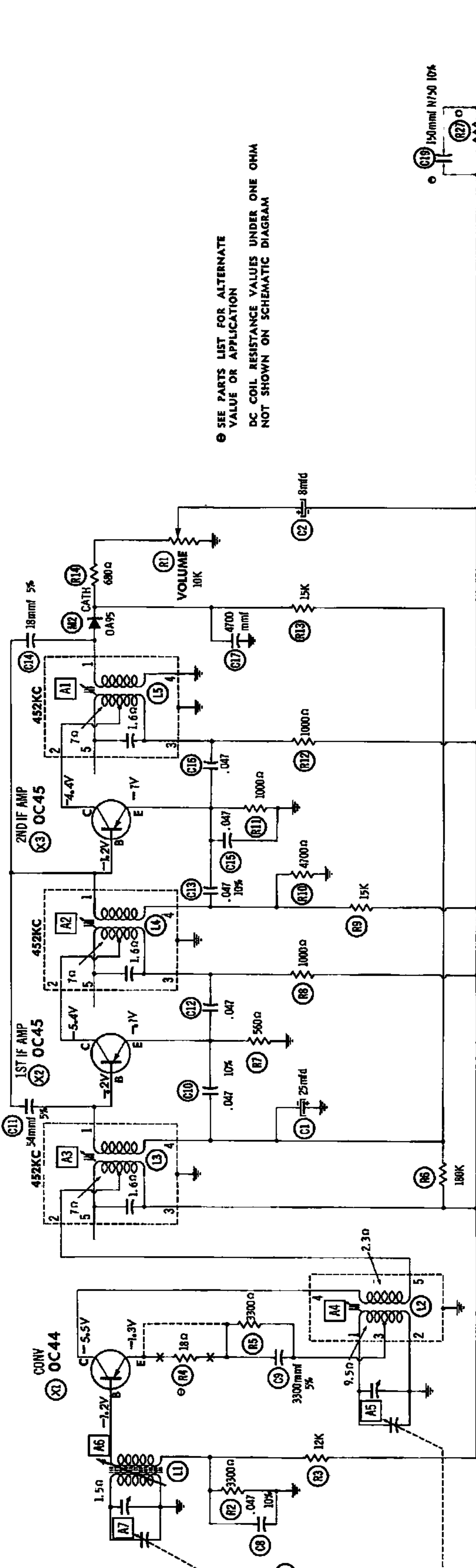
NAME	PART NO.	DESCRIPTION
Knob	A377261	Tuning
Knob	A378336	Volume
Dial	A392569	Overseas
Dial	A392574	South
Dial	A383573	Clock
Window	A376283	Clock
Cabinet	P525003/350	
Cabinet Front	A330895	

WIRING DATA

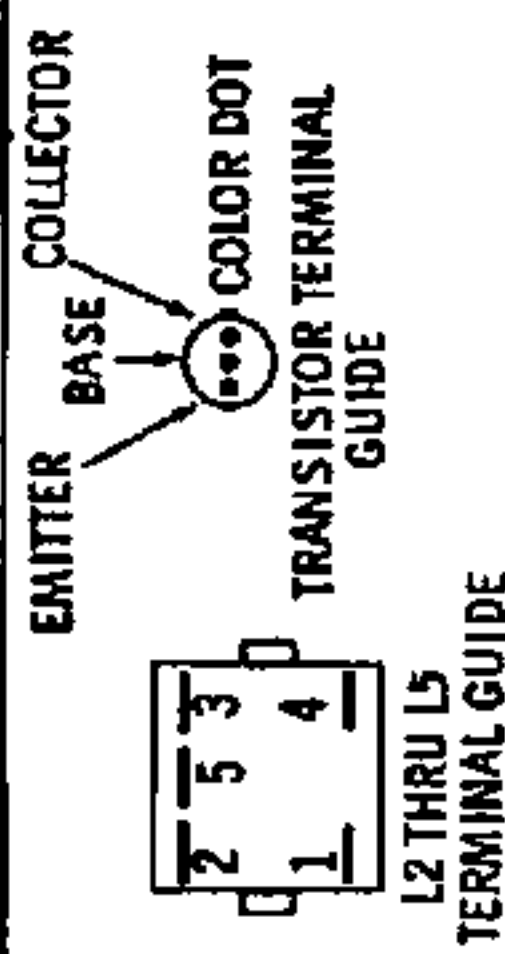
General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
8524 (Stranded) Available in Ten Colors

CHASSIS — BOTTOM VIEW





SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION
 DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM



1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections or transistor terminals are shown as bottom views.
3. Measured values are from socket pin or terminal to common ground.
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.

NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

A PHOTOFACT STANDARD NOTATION SCHEMATIC

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**NORELCO
 MODEL L2X97T**