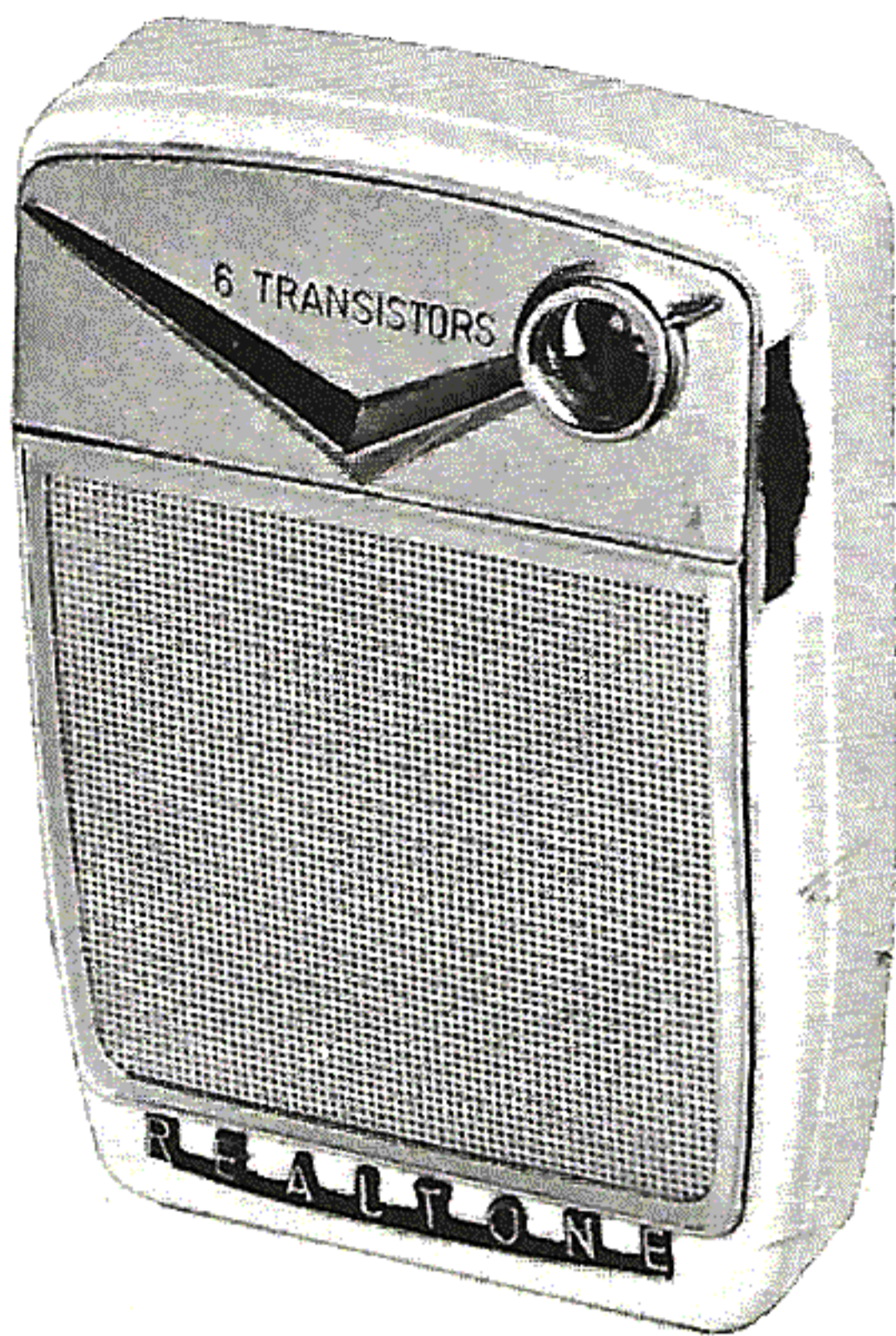


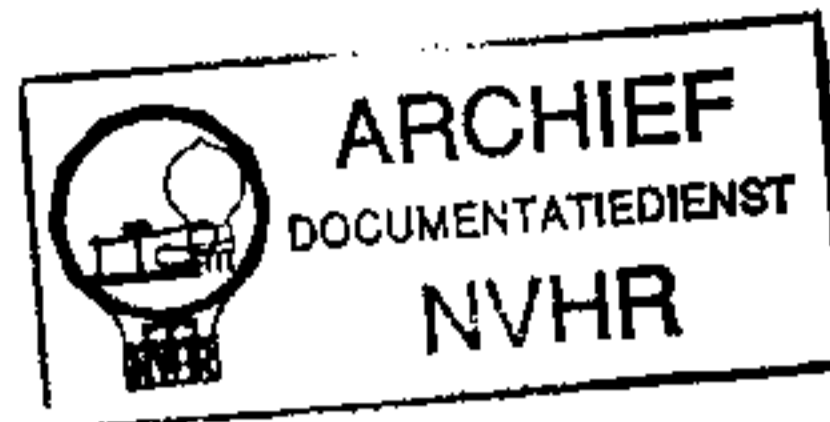
PHOTOFACT® Folder

with CIRCUITRACE™

REALTONE  
MODEL TR-861-1



Ned. Ver. v. Historie v/d Radio



Met dank aan Jef Bos

TRADE NAME	Realtone Model TR-861-1		
IMPORTER	Realtone Electronics, 71 Fifth Ave., New York 3, N. Y.		
TYPE SET	Battery Operated 6 Transistor Portable AM Receiver		
POWER SUPPLY	9 Volts DC	RATING	6MA @ 9 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	535—1605KC		10MA @ 9 Volts DC (Signal, Normal Volume)

## ALIGNMENT INSTRUCTIONS

### ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Use only enough generator output to provide a usable indication.

Suggested Alignment Tools:

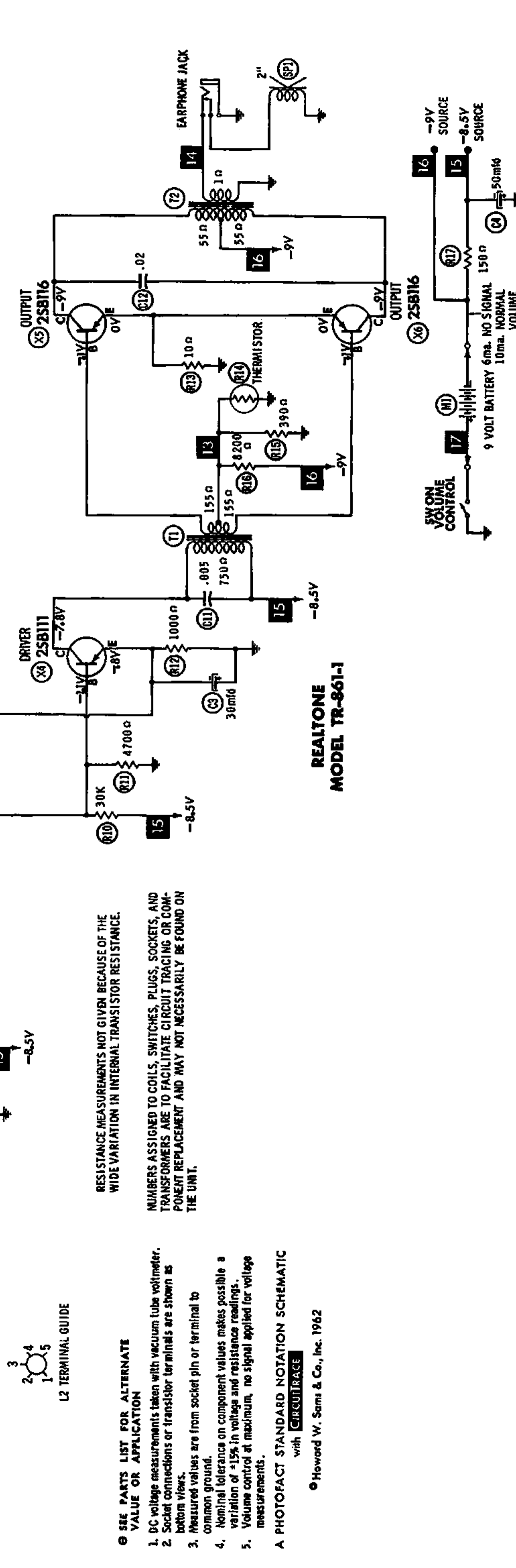
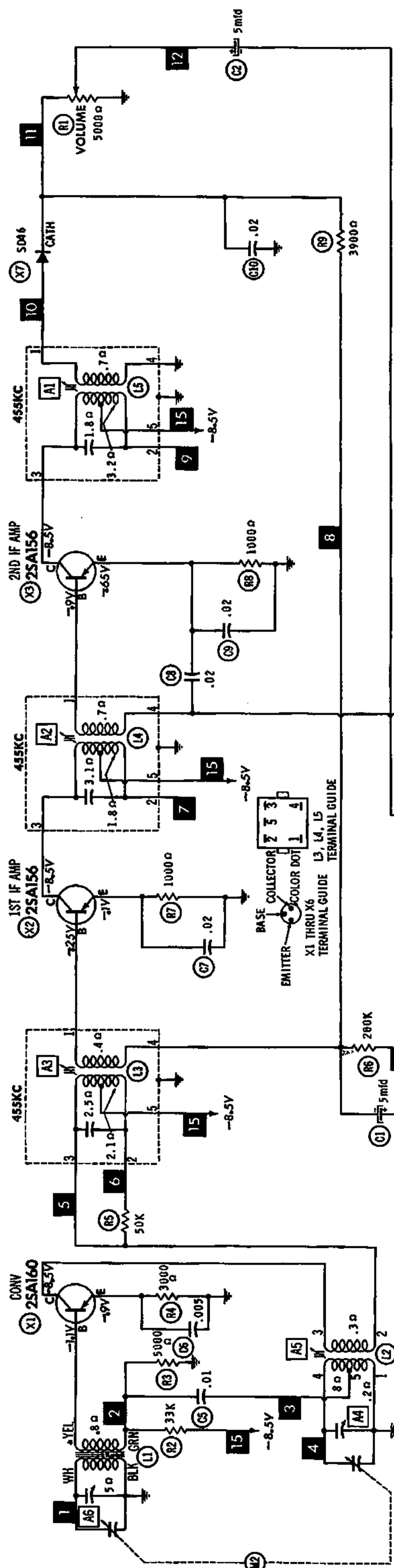
A1, A2, A3..... GENERAL CEMENT #8607, 9291, 9294  
 WALSCO #2520, 2522, 2523, 2524, 2534, 2537  
 A4, A5, A6..... GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089  
 WALSCO #2512, 2525, 2528

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
1.	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455KC (Unmod.)	Tuning gang fully open.	Across volume control.	A1, A2, A3	Adjust for maximum deflection.
2.	"	1605KC	"	"	A4	"
3.	"	535KC	Tuning gang fully closed.	"	A5	"
4.	"	1400KC	1400KC	"	A6	Adjust for maximum deflection. Repeat Steps 2, 3 & 4

**HOWARD W. SAMS & CO., INC.** Indianapolis 6, 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 LF477

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. ©1962 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



**REALTONE  
MODEL TR-861-I**

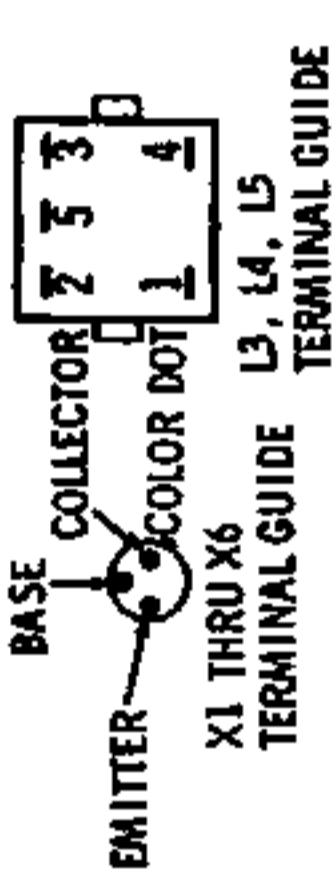
- SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION
- DC voltage measurements taken with vacuum tube voltmeter.
  - Socket connections or transistor terminals are shown as bottom views.
  - Measured values are from socket pin or terminal to common ground.
  - Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings.
  - Volume control at maximum, no signal applied for voltage measurements.
- A PHOTOFACT STANDARD NOTATION SCHEMATIC with CIRCUITRACE

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

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.

L2 TERMINAL GUIDE



# PARTS LIST AND DESCRIPTIONS

## TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA		NOTES
			RCA PART No.	RAYTHEON PART No.	
X1	2SA160	Converter	2N412		PNP
X2	2SA156	1st IF Amp.	2N410		PNP
X3	2SA156	2nd IF Amp.	2N410		PNP
X4	2SB111	Driver	2N408		PNP
X5	2SB116	Output	2N408		PNP
X6	2SB116	Output	2N408		PNP

## POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	CURRENT RATING (Measured)	ORIGINAL Part or Type No.	RECTIFIERS		DIODES	NOTES
			RCA PART No.	SARKES TARZIAN PART No.	RAYTHEON PART No.	
X7		5D46			1N60	Detector

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	REALTONE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	5	6							
C2	5	6							
C3	30	6							
C4	50	10							

## FIXED 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.
C5	.01		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C6	.005		C80V502AM	DM-502	H-05D5		TA-250	TG-D50
C7	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C8	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C9	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C10	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C11	.005		C80V502AM	DM-602	H-05D5		TA-250	TG-D50
C12	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20

## CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			REALTONE PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	5000Ω					

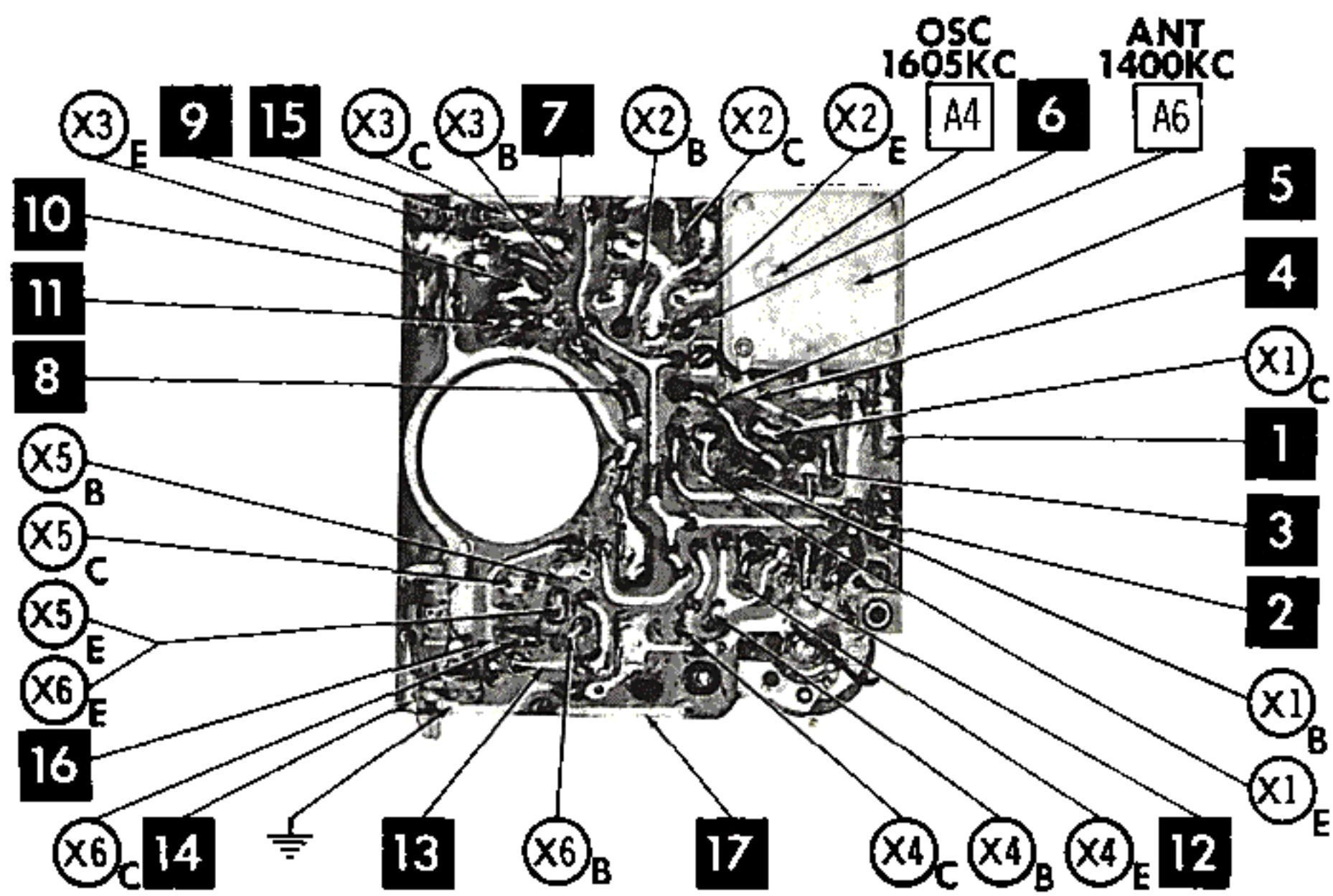
## RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	REMARKS			IRC PART No.	WORKMAN PART No.	REMARKS
R2	39K				R10	30K			
R3	5000Ω				R11	4700Ω			
R4	3000Ω				R12	1000Ω			
R5	50K				R13	10Ω			
R6	200K				R14	Thermistor			
R7	1000Ω				R15	390Ω			
R8	1000Ω				R16	8200Ω			
R9	3900Ω				R17	150Ω			

# PRINTED BOARD

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# PARTS LIST AND DESCRIPTIONS (Continued)

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		REALTONE PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman PART No.	
L1 L2 L3 L4 L5	Loopstick Osc. 1st IF 2nd IF 3rd IF						

## TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	REALTONE PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	1.5	1	LI-008					

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	REALTONE PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	200Ω CT	8-8Ω	LO-008					

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	REALTONE PART No.	QUAM PART No.	
SP1	2"	PM	8-8Ω			

## BATTERIES

ITEM No.	VOLTAGE	REALTONE PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	9V			2U8		218		M-1804	

## MISCELLANEOUS

ITEM No.	PART NAME	REALTONE PART No.	NOTES
M2	Tuning Capacitor		2 Gang

## WIRING DATA

General-use Unshielded Hook-up Wire .....	Use BELDEN No. 8530 (Solid 22AWG)	Available
	8524 (Stranded 22AWG)	in
	8570 (Stranded 26AWG)	12 Colors

