

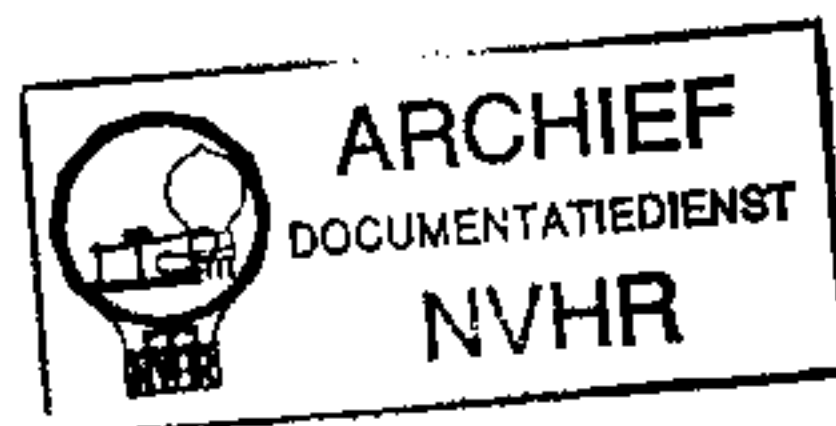
PHOTOFACT® Folder

with CIRCUITRACE™

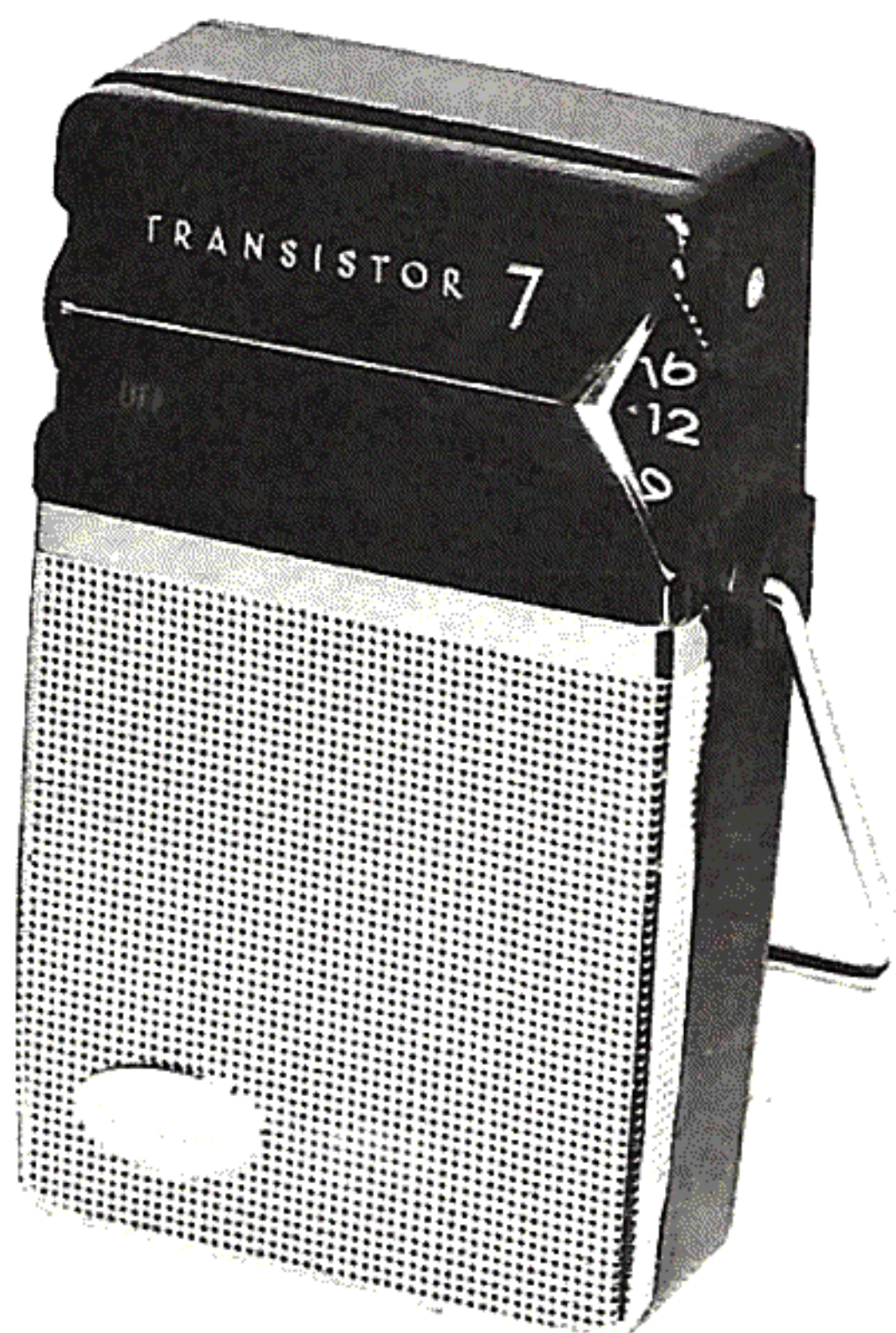
HOFFMAN MODELS BP707, KP707, OP707 (Ch. BP317)



Ned. Ver. v. Historie v/d Radio



Met dank aan Jef Bos  
MODEL KP707



TRADE NAME	Hoffman Models BP707, KP707, OP707 (CH. BP317)		
MANUFACTURER	Hoffman Electronics Corp., Consumer Products Div. 6200 S. Avalon Blvd., Los Angeles 3, Calif.		
TYPE SET	Battery Operated Transistorized Portable AM Receiver		
POWER SUPPLY	9 Volts DC	RATING	10MA @ 9 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	540 — 1600KC		12MA @ 9 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:

A1, A2, A3, A5..... GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989  
 WALSCO #2515, 2531, 2532  
 A4, A6..... GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089  
 WALSCO #2512, 2525, 2528

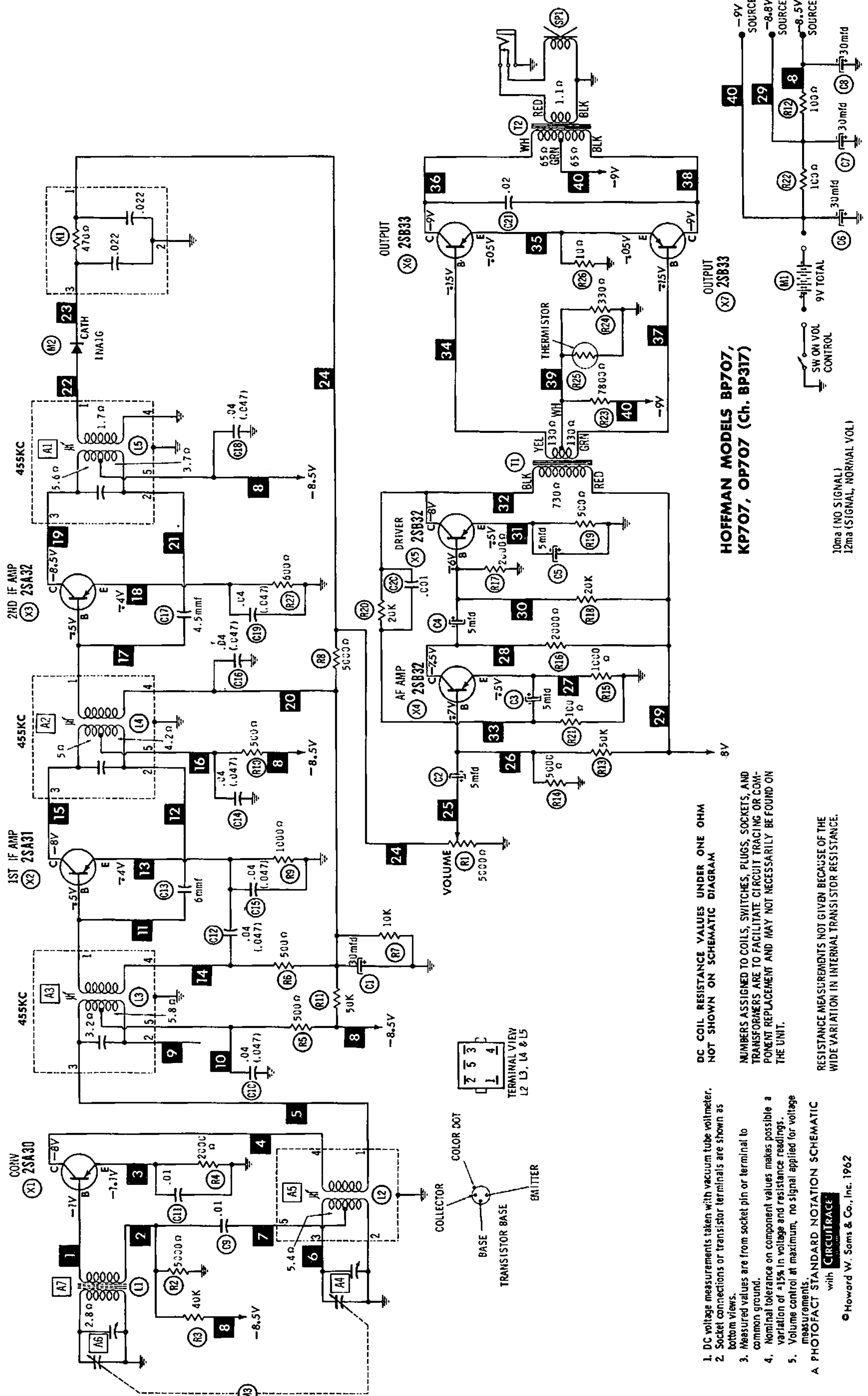
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455KC (400% Mod.)	Tuning gang fully open.	Across voice coil.	A1, A2, A3	Adjust for maximum output.
2.	"	1600KC	1600KC	"	A4	"
3.	"	600KC	600KC	"	A5	"
4.	"	1400KC	1400KC Signal.	"	A6	"
5.	"	800KC	600KC Signal.	"	A7	Adjust for maximum output by moving coil turns along ferrite core. Repeat steps 2 thru 5.

**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 LF022

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





**HOFFMAN MODELS BP707,  
KP707, OP707 (Ch. BP317)**

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

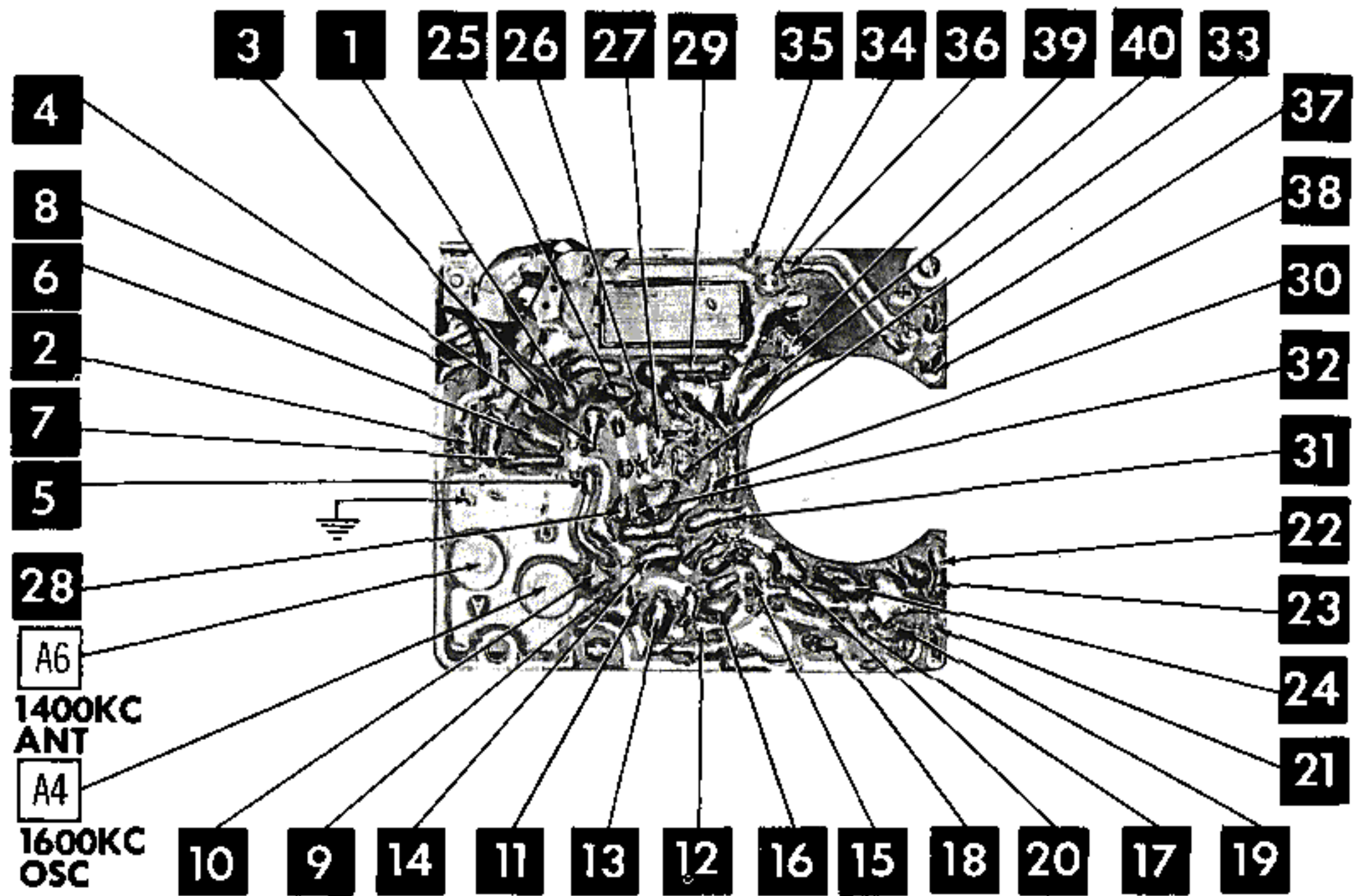
NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

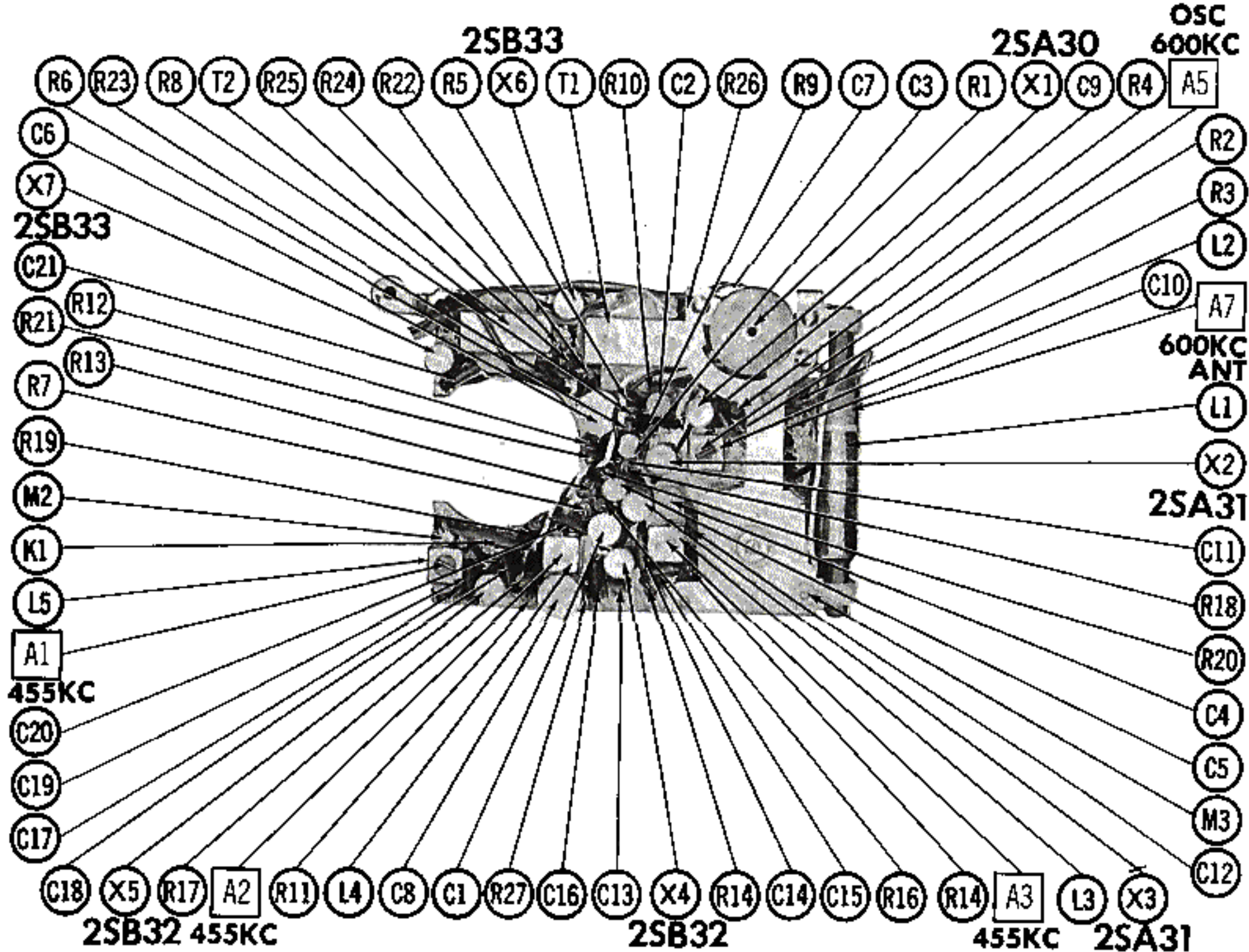
RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

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 ±15% in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.

A PHOTOFACT STANDARD NOTATION SCHEMATIC with **CIRCUITRACE**

10ma (NO SIGNAL)  
12ma (SIGNAL, NORMAL VOL)





# PARTS LIST A

## TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA		NOTES
			RCA PART No.	RAYTHEON PART No.	
X1	2SA30	Converter	2N412		PNP
X2	2SA31	1st IF Amplifier	2N410		PNP
X3	2SA31	2nd IF Amplifier	2N410		PNP
X4	2SB32	AF Amplifier	2N408		PNP
X5	2SB32	Driver	2N408		PNP
X6	2SB33	Output	2N408		PNP
X7	2SB33	Output	2N408		PNP

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	HOFFMAN PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	30	3	856031		NLW30-6	MT1-13	TT6X30	MLV30-6	TE-1092
C2	5	3	856028		NLW5-15	MT1-3	TT6X5	MLV5-3	TE-1052.2
C3	5	3	856028		NLW5-15	MT1-3	TT6X5	MLV5-3	TE-1052.2
C4	5	10	856033	BCD12005	NLW5-15	MT1-3	TT12X5	MLV5-12	TE-1127
C5	5	3	856028		NLW5-15	MT1-3	TT6X5	MLV5-3	TE-1052.2
C6	30	10	856032		NLW30-15		TT15X30	MLV25-10	TE-1118
C7	30	10	856032		NLW30-15		TT15X30	MLV25-10	TE-1118
C8	30	10	856032		NLW30-15		TT15X30	MLV25-10	TE-1118

## 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.
C9	.01			DM-103	H-05S1		TA-110	TG-S10
C10	.04	(.047) †		DA-503	H-05S5		TA-150	TG-S50
C11	.01			DM-103	H-05S1		TA-110	TG-S10
C12	.04	(.047) †		DA-503	H-05S5		TA-150	TG-S50
C13	8		NPO-DI 6, 8	DD-060	C10V6C	CCTO-6R8	CNO-568	10TS-V60
C14	.04	(.047) †		DA-503	H-05S5		TA-150	TG-S50
C15	.04	(.047) †		DA-503	H-05S5		TA-150	TG-S50
C16	.04	(.047) †		DA-503	H-05S5		TA-150	TG-S50
C17	4.5		NPO-DI 4, 7	DTZ-4R7	C10V47C	CCTO-4R7	CNO-547	10TCC-V47
C18	.04	(.047) †		DA-503	H-05S5		TA-150	TG-S50
C19	.04	(.047) †		DA-503	H-05S5		TA-150	TG-S50
C20	.001		BPD-001	DM-102	H-05D1	CCD-102	GP-210	10TS-D10
C21	.02			DA-203	H-05S2		TA-120	TG-S20

† Alternate Value.

# ND DESCRIPTIONS

## CONTROLS

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

ITEM No.	USE	RESIST-ANCE	REPLACEMENT DATA				
			HOFFMAN PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	5000Ω	800102				

## 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 TV PART No.	REMARKS			IRC PART No.	WORKMAN TV PART No.	REMARKS
R2	5000Ω				R15	1000Ω			
R3	40K				R16	2000Ω			
R4	2000Ω				R17	2000Ω			
R5	500Ω				R18	20K			
R6	500Ω				R19	500Ω			
R7	10K				R20	20K			
R8	5000Ω				R21	100Ω			
R9	1000Ω				R22	100Ω			
R10	500Ω				R23	7800Ω			
R11	50K				R24	330Ω			
R12	100Ω				R25	Thermistor			Pt. #834004
R13	50K				R26	10Ω			
R14	5000Ω				R27	600Ω			

## COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	HOFFMAN PART No.	REPLACEMENT DATA
K1	Diode Filter	.022mfd, .022mfd, 470Ω	986012	

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		HOFFMAN PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman TV PART No.	
L1	Loopstick	924007					
L2	Osc.	768024					
L3	1st IF	760027					
L4	2nd IF	760028					
L5	3rd IF	760029					

# PARTS LIST AND DE

## TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	HOFFMAN PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	1.4	1	726009		TA-31	TR-3		

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	HOFFMAN PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	1500Ω CT	10-12Ω	724046					

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	HOFFMAN PART No.	QUAM PART No.	
SP1	2 1/4"	PM	10-12Ω	708024		

## BATTERIES

ITEM No.	VOLTAGE	HOFFMAN PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	9V			2U8		216		M-1604	

## SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		HOFFMAN PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	
M2	1NA1G	742005		1N80	Detector

## MISCELLANEOUS

ITEM No.	PART NAME	HOFFMAN PART No.	NOTES
M3	Tuning Cap. Earphone	872020 968008	2 Gang

# DESCRIPTIONS (Continued)

## CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob	512033	Tuning
Knob	512034	Volume
Handle	288018	Gold
Handle	288019	Silver
Cabinet Back	371095	Model BP707
Cabinet Front	363050	Model BP707
Cabinet Back	371092	Model KP707
Cabinet Front	363048	Model KP707
Cabinet Back	371094	Model OP707
Cabinet Front	363049	Model OP707
Leather Case	426037	Radio, Black
Leather Case	426038	Radio, Brown
Leather Case	426039	Earphone, Black
Leather Case	426040	Earphone, Brown

## WIRING DATA

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