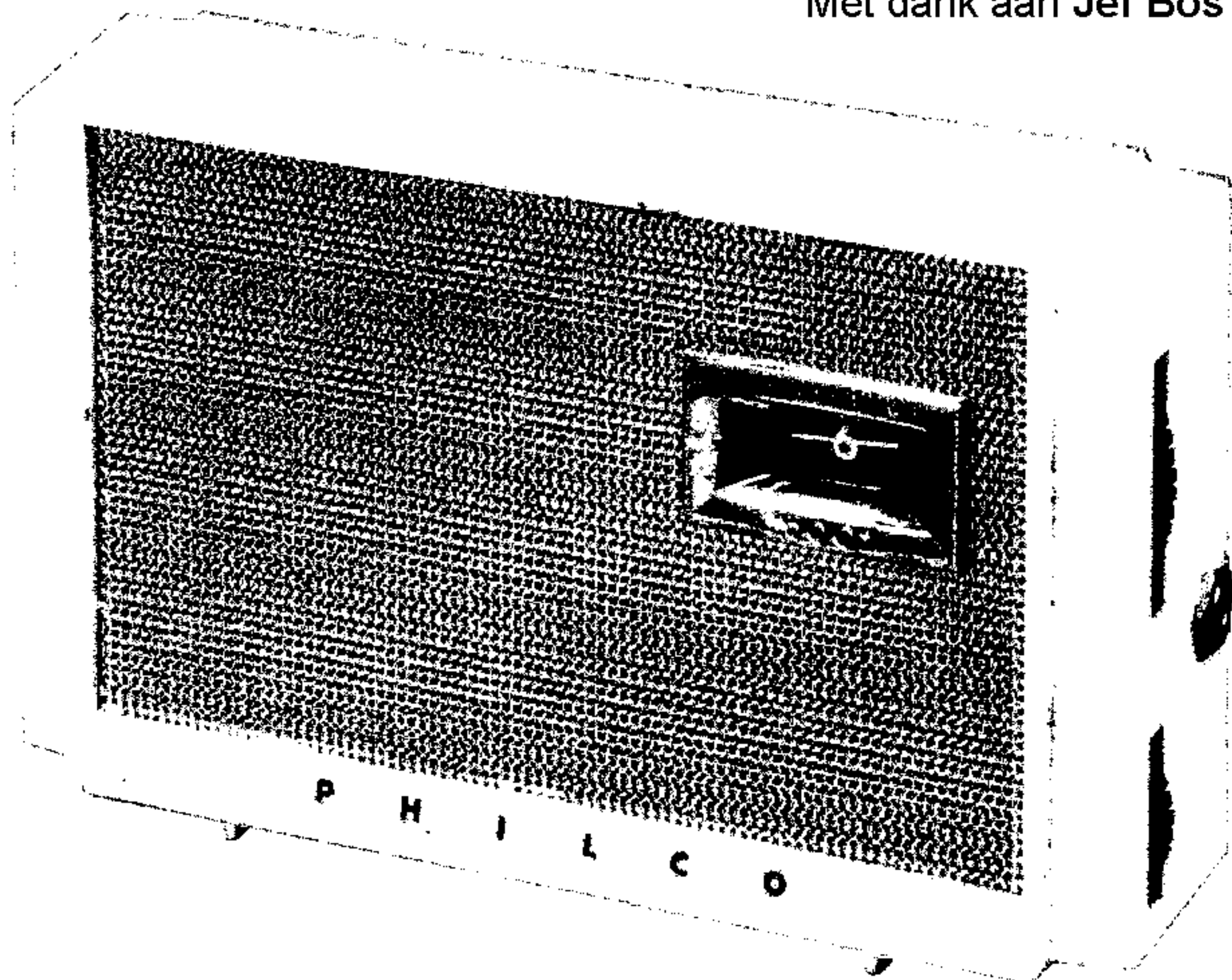




with **CIRCUITRACE\***  
\*TRADE MARK

Met dank aan Jef Bos



Ned. Ver. v. Historie

**TRADE NAME** Philco Models T-5 (Code 124), T-500 (Code 124)  
**MANUFACTURER** Philco Corp., Tioga & "C" Streets, Philadelphia, Pa.  
**TYPE SET** Battery Operated Portable AM Transistorized Receiver

**POWER SUPPLY** 6 Volts DC  
**TUNING RANGE—BROADCAST** 535-1620KC

**RATING** 20ma @ 6 Volts DC



## ALIGNMENT INSTRUCTIONS

### ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

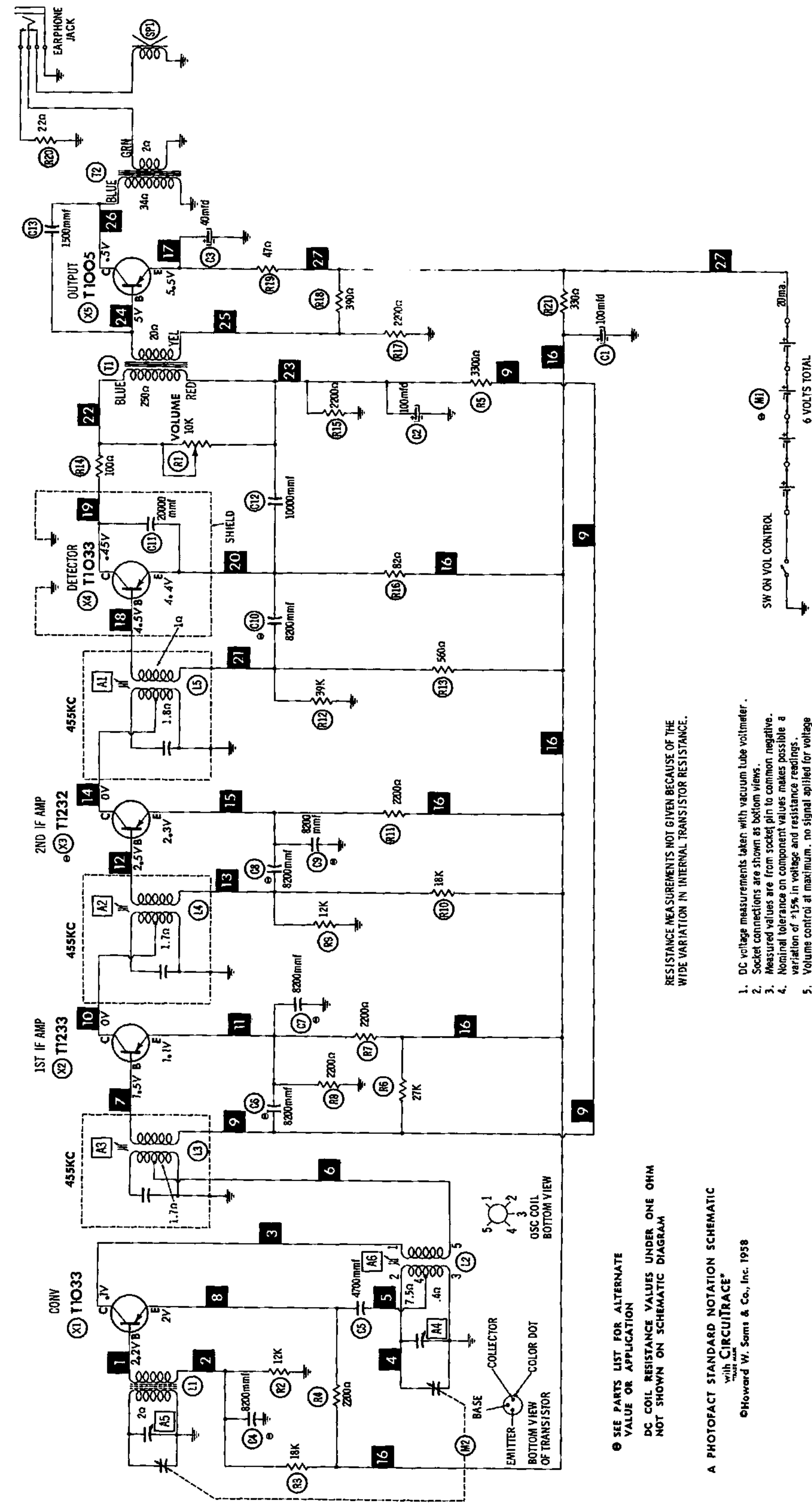
Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. .1mfd	High side to antenna terminal of tuning gang. Low side to chassis.	455KC (400% Mod)	Tuning gang fully open	Across voice coil	A1, A2, A3	Adjust for maximum output.
2.	Loop	1620KC	"	"	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	600KC	"	A6	Mount printed board on cabinet. Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output while rocking tuning gang. Repeat steps 2, 3 and 4.

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

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SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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

A PHOTOFAC STANDARD NOTATION SCHEMATIC  
with CIRCUITRACE<sup>®</sup>  
TRADE MARK

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

# 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	T1033	Converter			2N486		PNP PNP PNP ① PNP PNP
X2	T1233	1st IF Amp.			2N483		
X3	T1232	2nd IF Amp.			2N483		
X4	T1033	Detector			2N362		
X5	T1005	Output			2N631		

① Type T1233 used in Model T-5.

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	PHILCO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	
C1	100	6	30-2588-4	PWE6100	NL100-6	TT6X100	ML100-6	MQ-680	TE-1102
C2	100	3	30-2588-2	PWE3100	NL100-6	TT6X100	ML100-3		TE-1102
C3	40	6	30-2588-3	PWE6040	NL40-6	TT6X40	ML40-6	MQ-650	TE-1095

## 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	PHILCO PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.		SPRAGUE PART No.
C4	8200		30-1262-2	BPD-0047	DD-472	BYA10D47M	UC-5247	5HK-D47	① ① ① ① ① ①
C5	4700								
C6	8200								
C7	8200								
C8	8200								
C9	8200								
C10	8200								
C11	20000		30-1238-5	BPD-02	DD-203	BYB682		5HK-82	
C12	10000		30-1238-1	BPD-01	DD-103	BYA10S1	DC511	5HK-81	
C13	1500		30-1262-6	BPD-0015	DD-152	BYA10D15	DC5215	5HK-D15	

① Some versions may use 8000mmf in this application (Part #30-1262-1).

## CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES	
	RESISTANCE	WATTS	PHILCO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.		MALLORY PART No.
R1	10K	1/2	33-5583-2					Volume and Switch

## RESISTORS

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

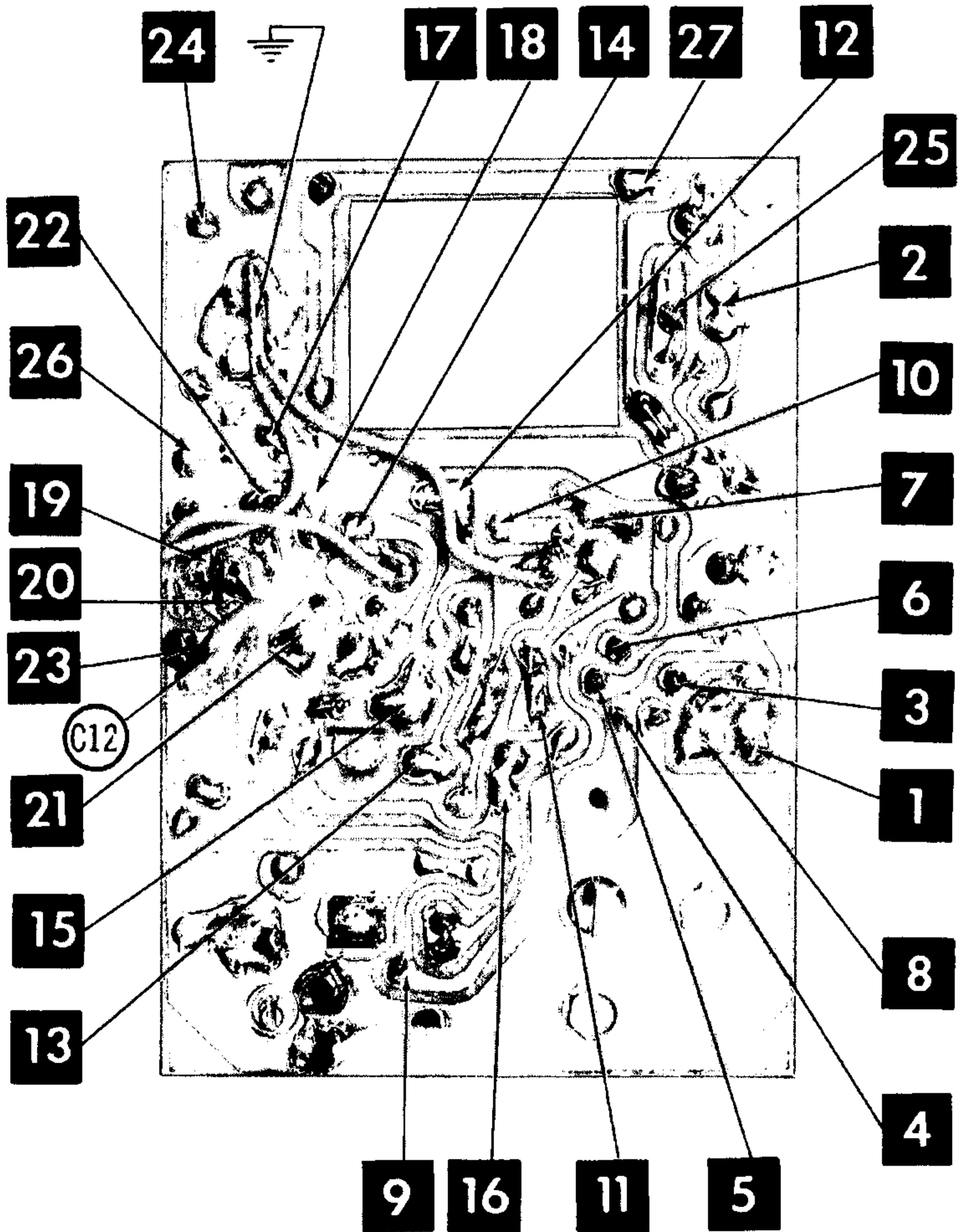
ITEM No.	RATING		PHILCO PART No.	NOTES	ITEM No.	RATING		PHILCO PART No.	NOTES
	OHMS	WATT				OHMS	WATT		
R2	12K		66-3128340		R12	39K		66-3398340	
R3	18K		66-3188340		R13	560Ω		66-1568340	
R4	2200Ω		66-2228340		R14	100Ω		66-1108340	
R5	3300Ω		66-2338340		R15	2200Ω		66-2228340	
R6	27K		66-3278340		R16	82Ω		66-0828340	
R7	2200Ω		66-2228340		R17	2200Ω		66-2228340	
R8	2200Ω		66-2228340		R18	390Ω		66-1398340	
R9	12K		66-3128340		R19	47Ω		66-0478340	
R10	18K		66-3188340		R20	22Ω		66-0228340	
R11	2200Ω		66-2228340		R21	330Ω		66-1338340	

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		PHILCO PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Ram PART No.	
L1	Loop Stick	76-10204	14-9008				
L2	Osc. Coil	32-4689-3					
L3	1st IF	32-4708-7					
L4	2nd IF	32-4708-7					
L5	3rd IF	32-4708-8					

# PRINTED BOARD

A Howard W. Sams **CIRCUITRACE\*** Photo  
\*TRADE MARK



# PARTS LIST AND DESCRIPTIONS (Continued)

## TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			PHILCO PART No.	Halldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.						
T1	3.2	1	32-8820					

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA						NOTES	
			PHILCO PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.		Triad PART No.
	PRI.	SEC.								
T2	265Ω	14-16Ω	32-8819						TY-57X ①	① Use original channel frame.

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				PHILCO PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	2 3/4"	PM	14-16Ω	36-1664-3		

## BATTERIES

ITEM No.	VOLTAGE	PHILCO PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	6V			Z ①		915 ① E9 ①②		M-15R ① ZM-9 ①②	① 4 Used ② Mercury

## MISCELLANEOUS

ITEM No.	PART NAME	PHILCO PART No.	NOTES
M2	Tuning Cap. Printed Board	31-2788 54-8447	2 Gang (Ant. 11-135mmf)

## CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Bezel	28-11973	
Knob	54-8486-1	Tuning
Knob	54-8487-1	On-Off-Volume
Cabinet	11268	Ivory & Black
Cabinet	11268-1	Pink & Black
Back	54-8485-1	Cabinet
Earphone	328-8006	

## WIRING DATA

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

# CHASSIS—TOP VIEW

