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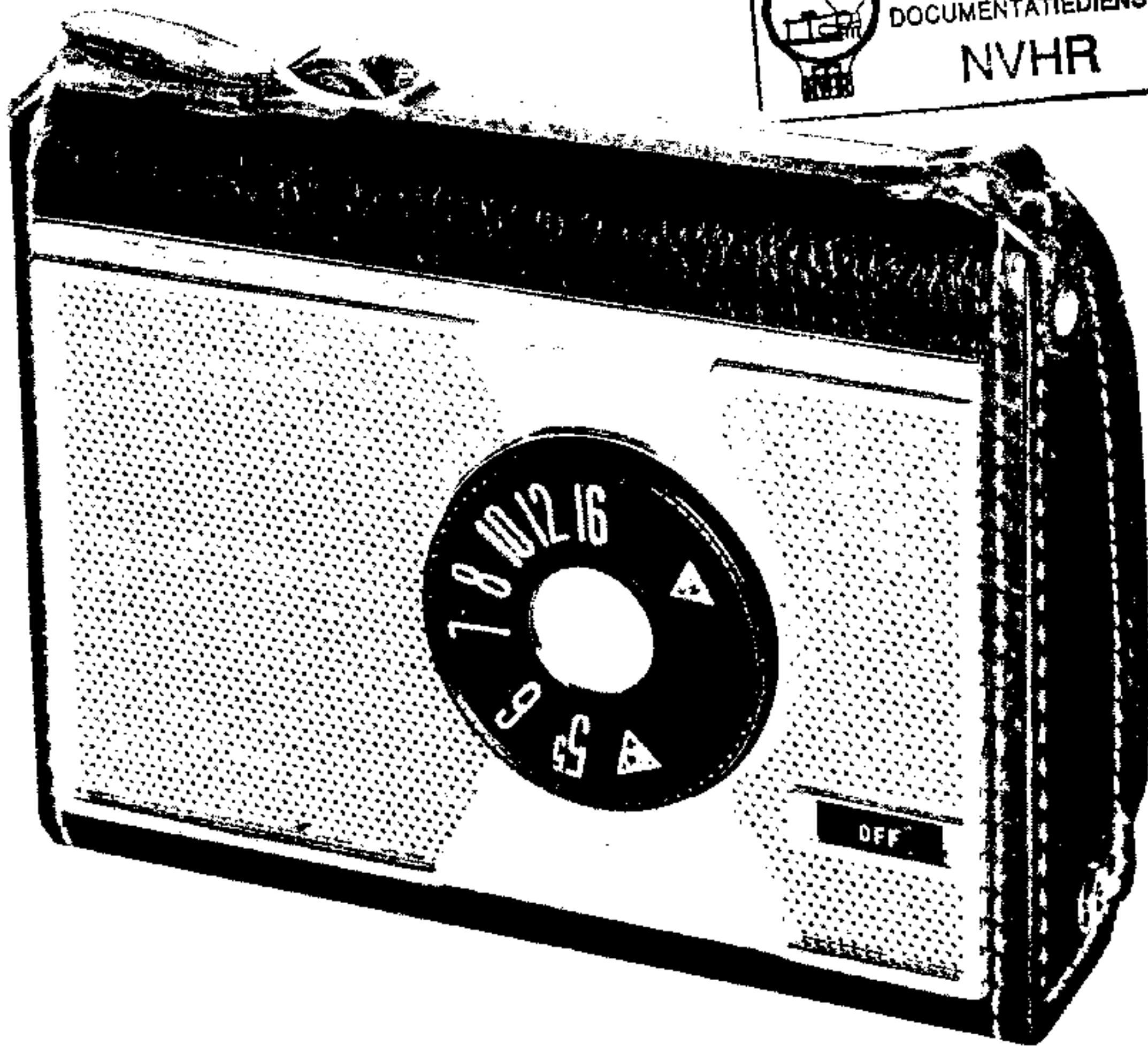
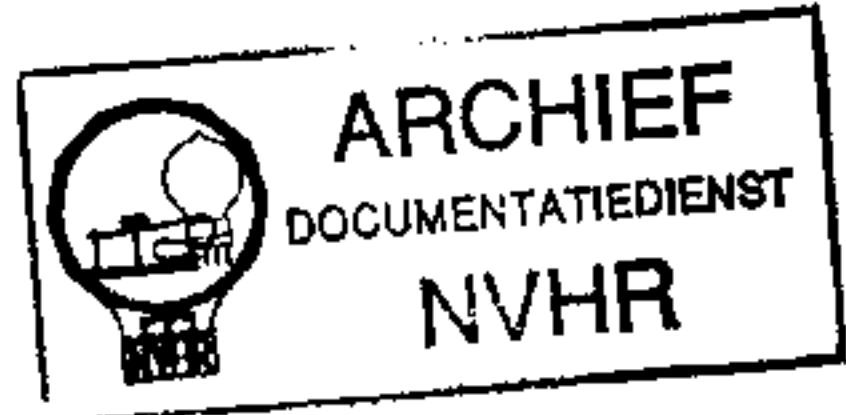
with CIRCUITRACE®

PHILCO MODELS

T-76B, BR, T

Ned. Ver. v. Historie v/d Radio

Met dank aan Jef Bos



TRADE NAME Philco Models T-76B, T-76BR, T-76T (Code 124)
 MANUFACTURER Philco Corp., Tioga & C Streets, Philadelphia, Pa.
 TYPE SET Battery Operated Transistorized Portable AM Receiver
 POWER SUPPLY 3 Volts DC RATING 15MA@3 Volts DC (No Signal, Min. Volume)
 TUNING RANGE—BROADCAST 535 - 1620KC 20 MA@3 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.

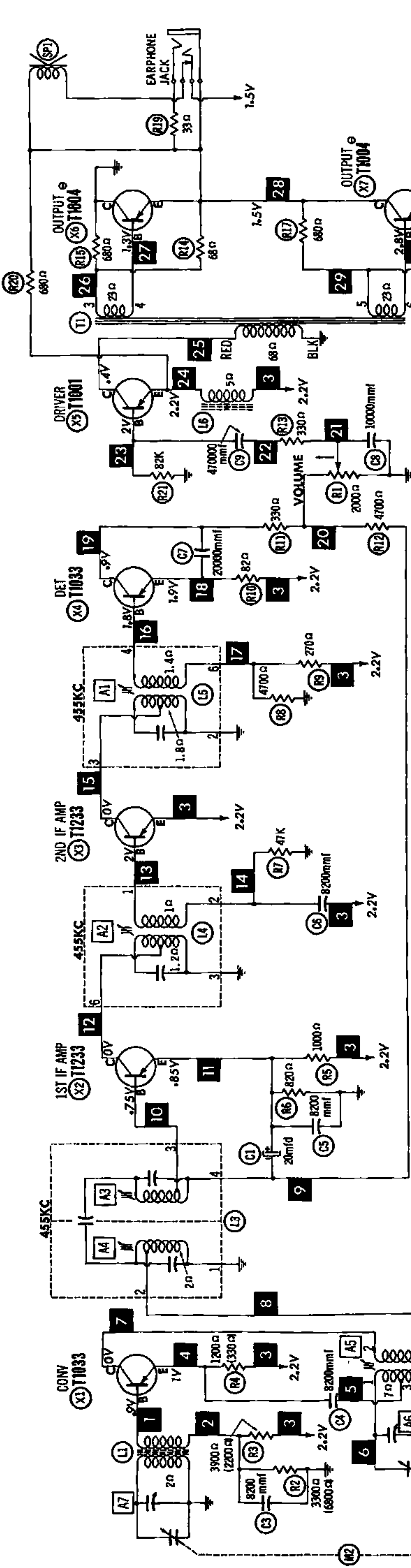
Suggested Alignment Tools: A1 Thru A4... GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989
 WALSCO #2515, 2531, 2532
 A5..... GENERAL CEMENT #8282, 8606, 8606-L, 9295, 9440
 WALSCO #2526, 2543, 2544, 2545
 A6, A7..... GENERAL CEMENT #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989,
 9291
 WALSCO #2515, 2520, 2522, 2523, 2531, 2532, 2534, 2537, 2538

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	High side thru .1mfd to antenna stator lug of tuning gang. Low side to chassis.	455KC (400v Mod.)	Tuning gang fully open.	Across voice coil.	A1, A2, A3, A4	Adjust for maximum output.
2.	Loop	800KC	600KC	"	A5	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output while rocking tuning gang.
3.	"	1620KC	Tuning gang fully open.	"	A6	Adjust for maximum output.
4.	"	1400KC	1400KC Signal.	"	A7	Mount chassis in cabinet and adjust A7 for maximum output.

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 KF253

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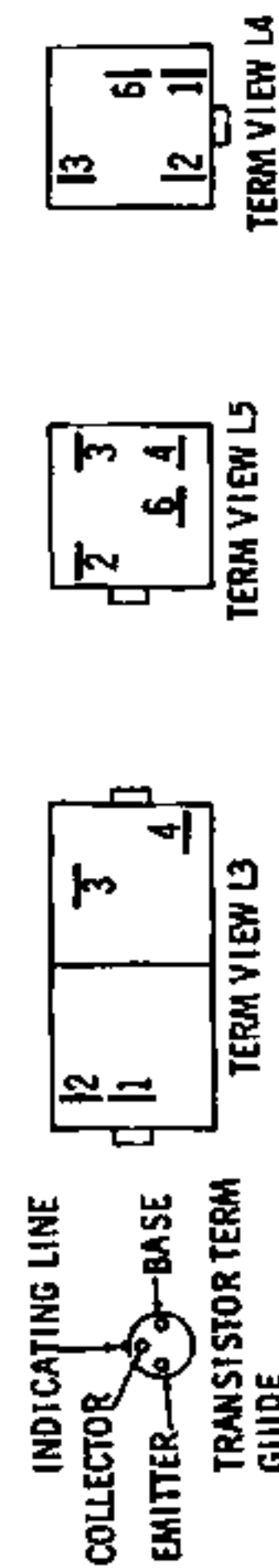


SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

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.

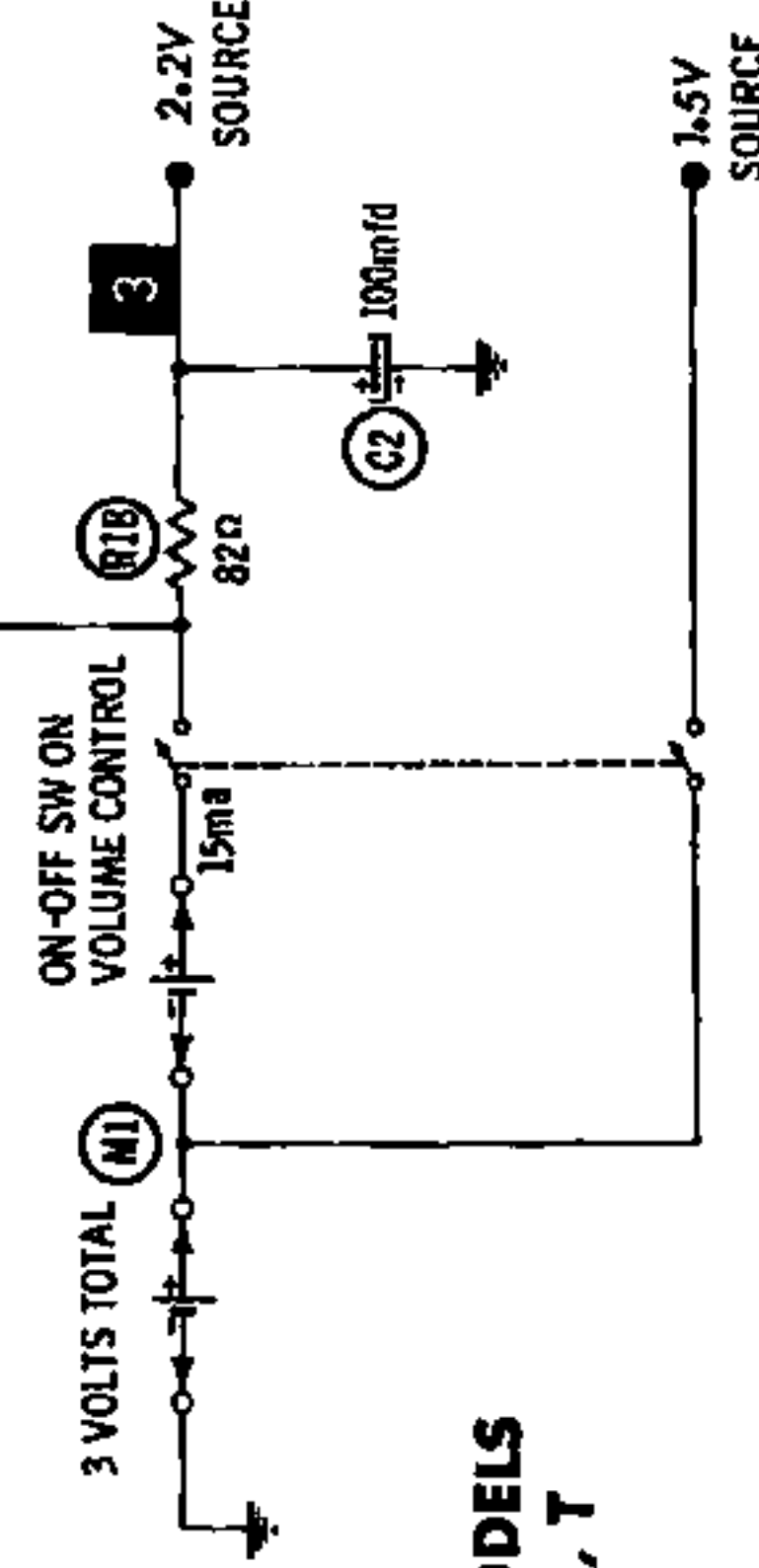


A PHOTOFAC T STANDARD NOTATION SCHEMATIC with CIRCUITTRACE

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

PHILCO MODELS T-76B, BR, T



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.

PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	T1033	Converter 1st IF Amplifier 2nd IF Amplifier Detector Driver Output Output				PNP PNP PNP PNP PNP PNP } Matched PNP } Pair
X2	T1233					
X3	T1233					
X4	T1033					
X5	T1001		2N406		2N406	
X6	T1004 *		2N270			
X7	T1004 *		2N270			

* Alternate Type T-1008.

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.	SPRAGUE PART No.	
C1	20	6	30-2588-1	PTT6020	NLW20-6	TT15X20	MLV20-12	TE-1090	
C2	100	3	30-2588-2	PTT3100	NLW100-6	TT8X100	ML100-3	TE-1059.5	

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.
C3	8200			DD-822		CCD-822	B-282	
C4	8200			DD-822		CCD-822	B-282	
C5	8200			DD-822		CCD-822	B-282	
C6	8200			DD-822		CCD-822	B-282	
C7	20000		C80V203AM	DA-203	H-05S2	CCD-203	TA-120	TG-S20
C8	10000		C80V103AM	DM-103	H-05S1	CCD-103	TA-110	TG-S10
C9	470000	#30-1279-4		UK10-474				

Philco Part Number.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	PHILCO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1	2000Ω	1/4	33-5583-3					Volume & Switch

RESISTORS

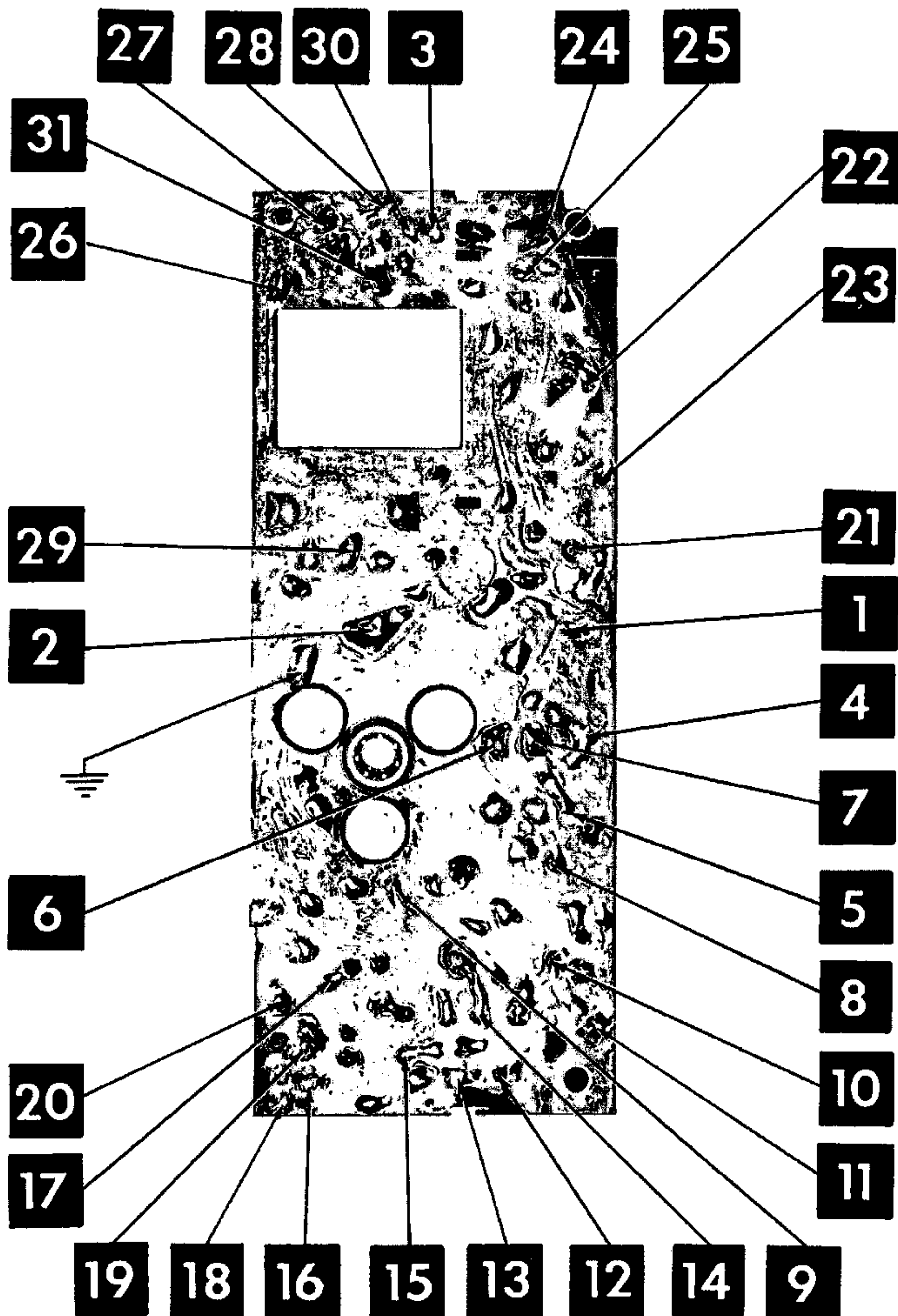
All wattages 1/2 watt, or less, unless otherwise listed.

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	3300Ω			(6800Ω) *	R12	4700Ω			
R3	3900Ω			(2200Ω) *	R13	330Ω			
R4	1200Ω			(330Ω) *	R14	68Ω			
R5	1000Ω				R15	680Ω			
R6	820Ω				R16	68Ω			
R7	47K				R17	680Ω			
R8	4700Ω				R18	82Ω			
R9	270Ω				R19	33Ω			
R10	82Ω				R20	680Ω			
R11	330Ω				R21	82K			

* Used in early production versions.

PRINTED BOARD

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PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		PHILCO PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	
L1	Loopstick	32-4668-7				
L2	Osc.	32-4669-4				
L3	1st IF	32-4608-9				
L4	2nd IF	32-4708-10				
L5	3rd IF	32-4708-11				
L6	RF Choke (400uh)	32-4685-1	TV-202	6136		

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.1	PHILCO PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	2	1	32-8838-1					
		SEC. 2						
		1						

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	PHILCO PART No.	QUAM PART No.	
SPI	2 3/4"	PM	6-8Ω	36-1664-4	27A08Z8	

BATTERIES

ITEM No.	VOLTAGE	PHILCO PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1.5V	P-920 *		230 *		A100 *		M-13R *	* 2 Required

MISCELLANEOUS

ITEM No.	PART NAME	PHILCO PART No.	NOTES
M2	Tuning Cap. Printed Board	31-2782 54-6603-2	2 Gang (Ant. 12-137mmf, Osc. 19-90mmf)

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob	424-8093	Tuning, Model T-76B
Knob	424-8092	Tuning, Models T-76BR, T-76T
Knob	54-6859-1	Volume, Models T-76BR, T-76T
Knob	54-6859-2	Volume, Model T-76B
Cabinet	424-8107	Model T-76B
Cabinet	424-8115	Model T-76BR
Cabinet	424-8109	Model T-76T

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

