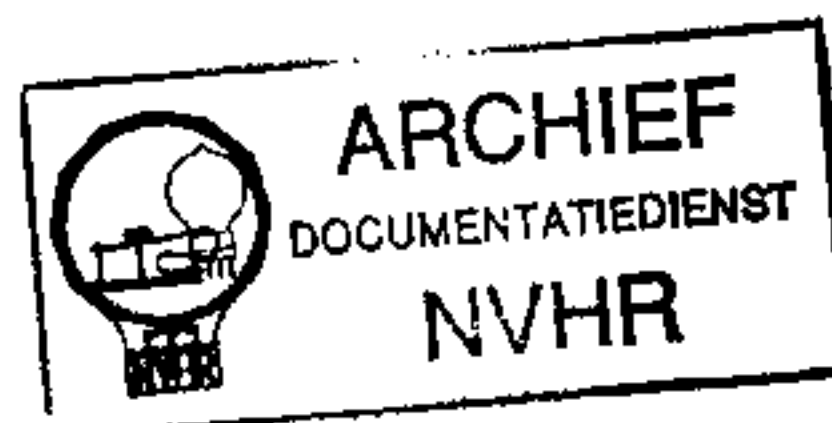
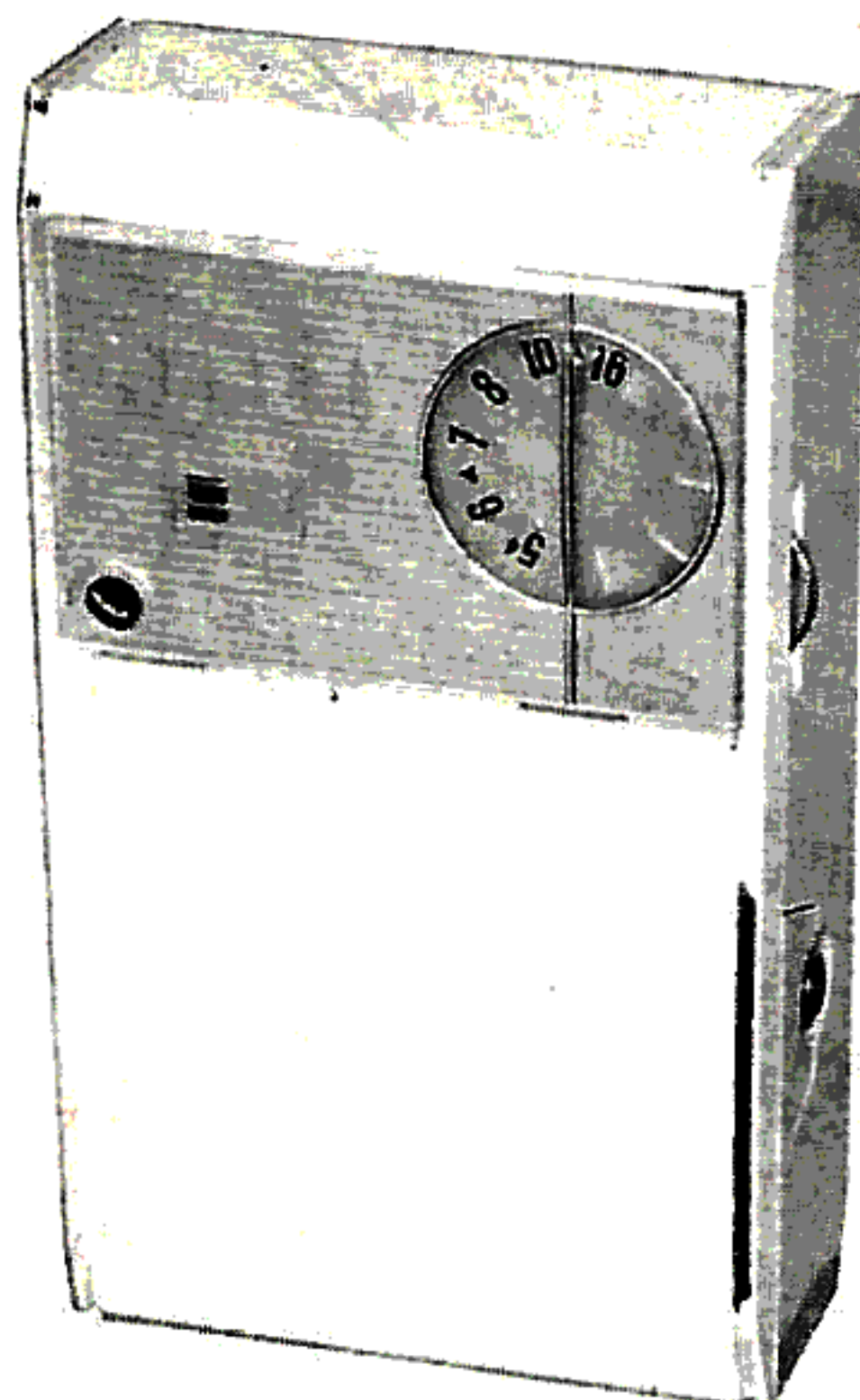


Ned. Ver. v. Historie v/d Radio



Met dank aan Jef Bos



MODEL T-66AQ

TRADE NAME	Philco Models T-61BK, T-61IV, T-61TE (Code 124) T-66AQ, T-66CR, T-66IV (Code 124, 126)		
MANUFACTURER	Philco Corp., Tioga & C Streets, Philadelphia, Pa.		
TYPE SET	Battery Operated Transistorized Portable AM Receiver		
POWER SUPPLY	3 Volts DC	RATING	10MA @ 3 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	535 — 1620KC		20MA @ 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, A2, A3...	GENERAL CEMENT #8607, 9291, 9294
	WALSCO #2520, 2522, 2523, 2524, 2534, 2537
A4, A6.....	GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089
	WALSCO #2512, 2525, 2528
A5.....	GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989
	WALSCO #2515, 2531, 2532

	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 B-.	455KC (400% Mod.)	Tuning gang fully open.	Across voice coll.	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.	"	600KC	600KC	"	A5	Adjust for maximum output while rocking tuning gang.
4.	"	1400KC	1400KC	"	A6	Adjust for maximum output. Repeat Steps 2, 3 and 4.

CHASSIS REMOVAL

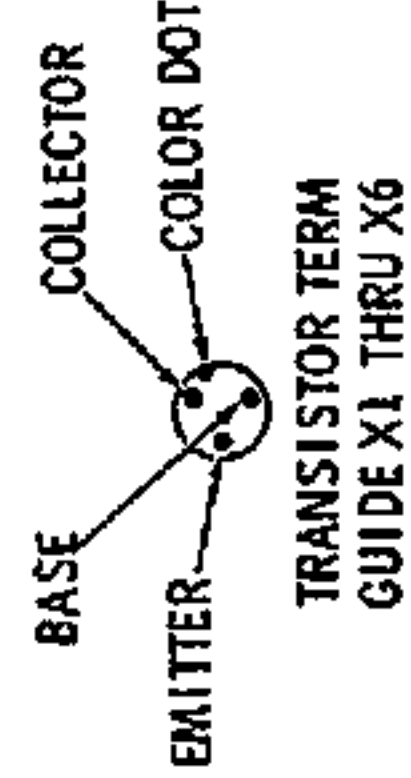
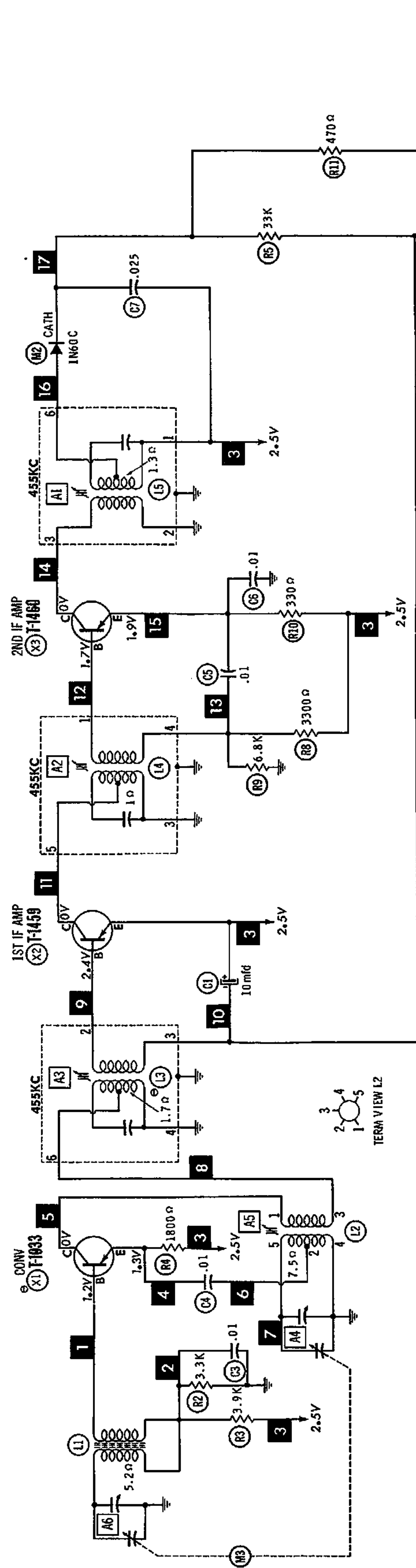
1. Remove screw located near L4(2nd IF).
2. Depress clips on each side of cabinet.
3. Remove printed board.

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

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I-011E, I-00AQ, I-00CR, I-00IV



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.

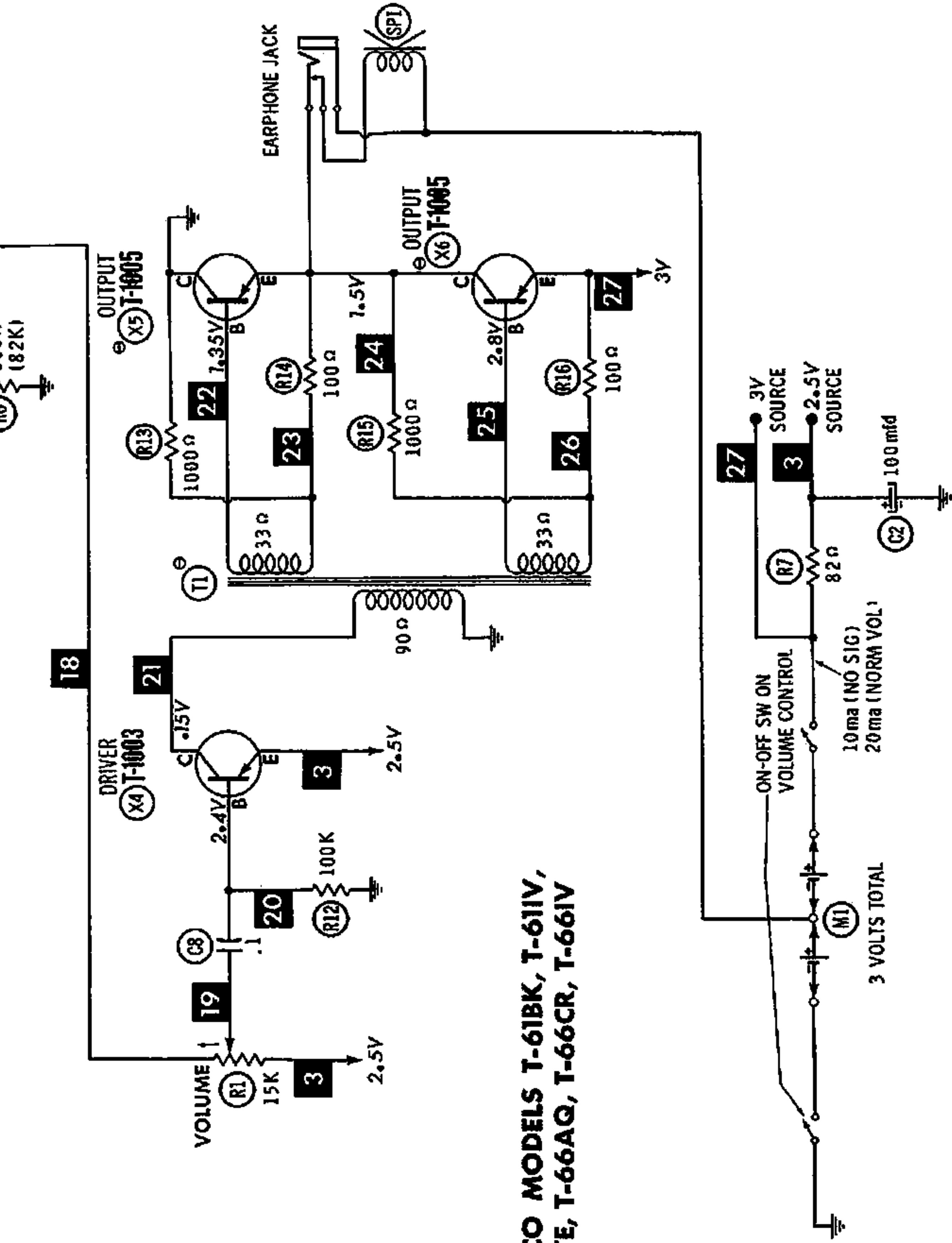
1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections or transistor terminals are shown as bottom views.
3. Measured values are from socket pin or terminal to common ground.
4. Nominal tolerance on component values makes possible a variation of +15% in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.

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)

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



PHILCO MODELS T-61BK, T-61V, T-61TE, T-66AQ, T-66CR, T-66IV

A PHOTOFAC STANDARD NOTATION SCHEMATIC with **CIRCUITRACE**
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PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	T-1033 ①	Converter		2N486		PNP PNP PNP PNP PNP } Matched PNP } Pair PNP }
X2	T-1459	1st IF Amplifier		2N483		
X3	T-1460	2nd IF Amplifier				
X4	T-1003	Driver				
X5	T-1005	Output	2N408	2N631	2N408	
X6	T-1009 ② T-1005 T-1009 ②	Output Output Output	2N408	2N631	2N408	

① T-66 Series Code 126 and T-61 Series use T-1877 in this application.

② Alternate.

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	10	6	30-2591-3	PTT23	NLW10-6	TT6X10	MLV10-6	TE-1087	
C2	100	3	30-2588-2	PTT13	NLW100-3	TT6X100	MLV100-3	TE-1059.5	

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.
C3	.01		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C4	.01		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C5	.01		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C6	.01		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C7	.025				H-05S25		TA-125	TG-S25
C8	.1 10V		C80V104AM	UK10-104	H-05P1		TA-010	HY-320

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	15K	1/4	33-5583-20					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				R10	330Ω			
R3	3900Ω				R11	470Ω			
R4	1800Ω				R12	100K			
R5	33K				R13	1000Ω			
R6	100K			(82K) *	R14	100Ω			
R7	82Ω				R15	1000Ω			
R8	3300Ω				R16	100Ω			
R9	6800Ω								

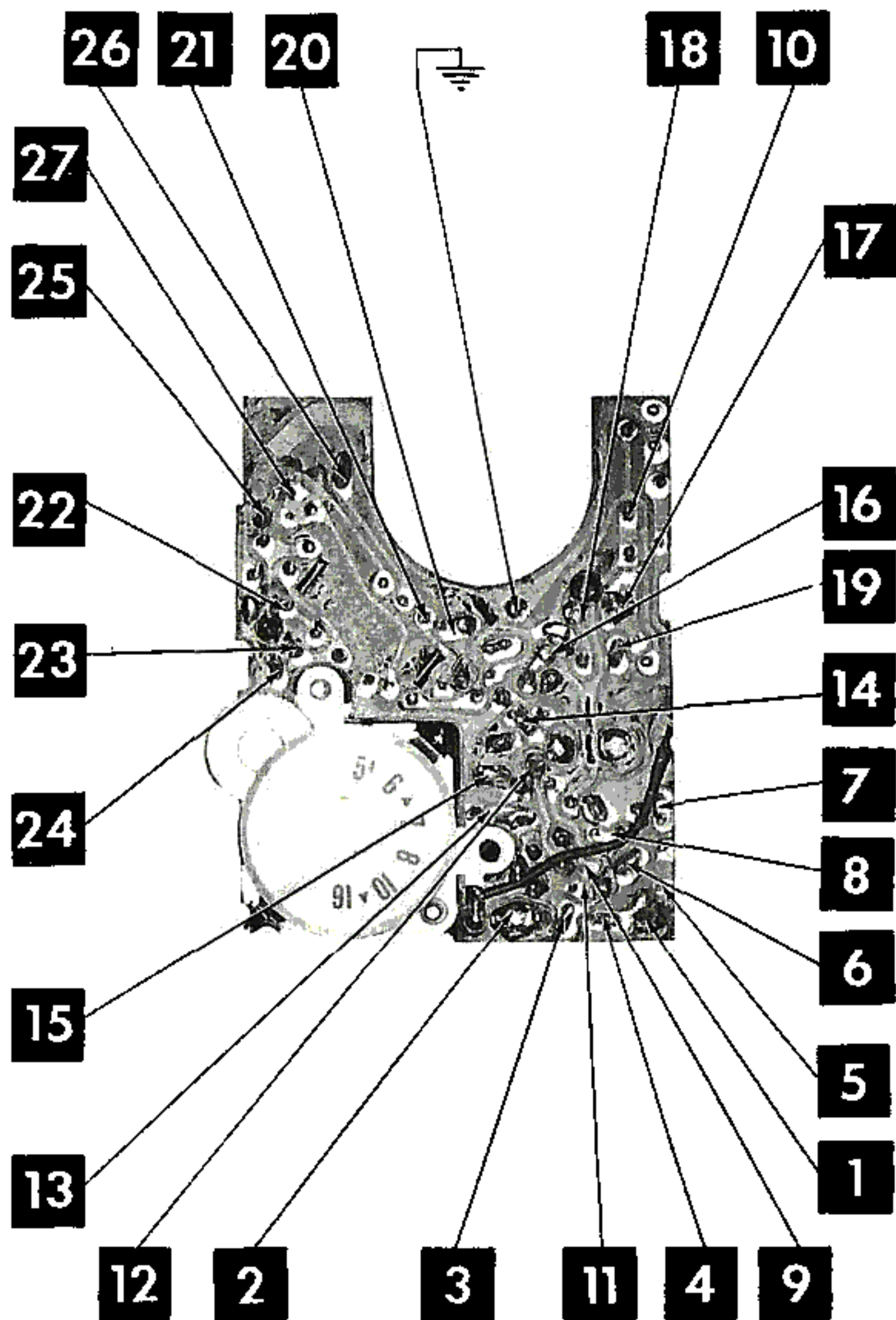
* Used in T-61 Series.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		PHILCO PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman TV PART No.	
L1	Loopstick	76-10982-2					① Part #32-4800-2 used in Code 126. Part #32-4800-4 used in Models T-61.
L2	Osc.	32-4802-1					
L3	1st IF	32-4800-1 ①					
L4	2nd IF	32-4800-2					
L5	3rd IF	32-4800-3					

PRINTED BOARD

A Howard W. Sams **CIRCUITRACE** Photo



PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA				NOTES
			PHILCO PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
T1	1.7	1	32-8959-1 ①				① Part #32-8959-3 used in Models T-61
		SEC. 2					
		1					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				PHILCO PART No.	QUAM PART No.	
SPI	2"	PM	6-8Ω	36-1690-1		

BATTERIES

ITEM No.	VOLTAGE	PHILCO PART No.	REPLACEMENT DATA				NOTES		
			BURGESS		EVEREADY			MALLORY	
			"A"	"B"	"A"	"B"		"A"	"B"
M1	1.5V	P-15		930		1015		M-15R	2 Required

SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		PHILCO PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	1N60C	34-8022-5		1N60	1N60	Detector (Pigtail)

MISCELLANEOUS

ITEM No.	PART NAME	PHILCO PART No.	NOTES
M3	Tuning Cap. Printed Board Printed Board	31-2792-1 54-5852-1 54-5852-3	2 Gang Series T-66 Series T-61

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Window	54-5844-1	Models T-66 Series
Dial	28-13543-1	Models T-66 Series
Dial	424-8233	Includes Mounting Pad, Model T-61 Series
Knob	28-13500-1	Volume, Models T-66 Series
Knob	28-13500-4	Volume, Model T-61 Series
Cabinet Back	54-5843-1	Model T-66CR
Cabinet Back	54-5843-2	Models T-61IV, T-66IV
Cabinet Back	54-5843-3	Model T-66AQ
Cabinet Back	54-5843-4	Model T-61BK
Cabinet Back	54-5843-5	Model T-61TE
Cabinet Front	424-8144	Model T-66CR
Cabinet Front	424-8148	Model T-66IV
Cabinet Front	424-8149	Model T-66AQ
Cabinet	424-8204	Includes Window Assembly, Model T-61BK
Cabinet	424-8206	Includes Window Assembly, Model T-61IV
Cabinet	424-8205	Includes Window Assembly, Model T-61TE
Case	51-0168-2	Carrying, Model T-66 Series

WIRING DATA

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

