

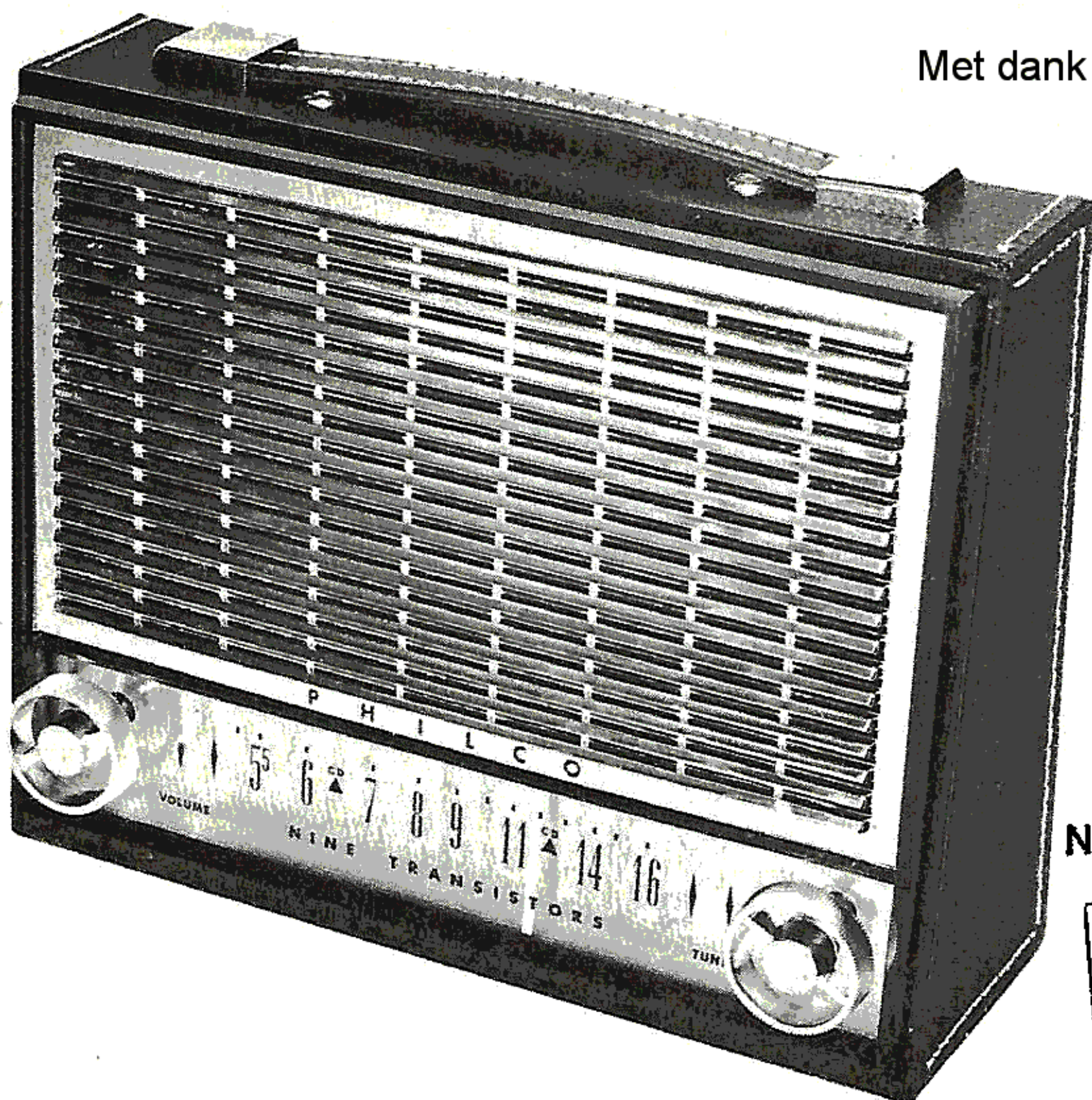
**PHOTOFACT® Folder**

with **CIRCUITRACE®**

**PHILCO MODEL  
T-901BK, T-901BR**



Met dank aan Jef Bos



Ned. Ver. v. Histor



TRADE NAME	Philco Model T-901 (Code 124)		
MANUFACTURER	Philco Corp., Tioga & C Streets, Philadelphia, Pa.		
TYPE SET	Battery Operated Transistorized Portable AM Receiver		
POWER SUPPLY	6 Volts DC	RATING	15MA @6 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	540 — 1600KC		30MA @6 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, A4, A8, A9. GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989  
WALSCO #2515, 2531, 2532  
A5, 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 .1mf to RF stator lug (center section) 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	1620KC	"	"	A5	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
3.	"	1400KC	1400KC	"	A6, A7	"
4.	"	600KC	600KC	"	A8	Adjust for maximum output while rocking tuning gang.
5.	"	"	"	"	A9	Adjust for maximum output. Repeat steps 2, 3, 4 and 5 several times ending with step 3.

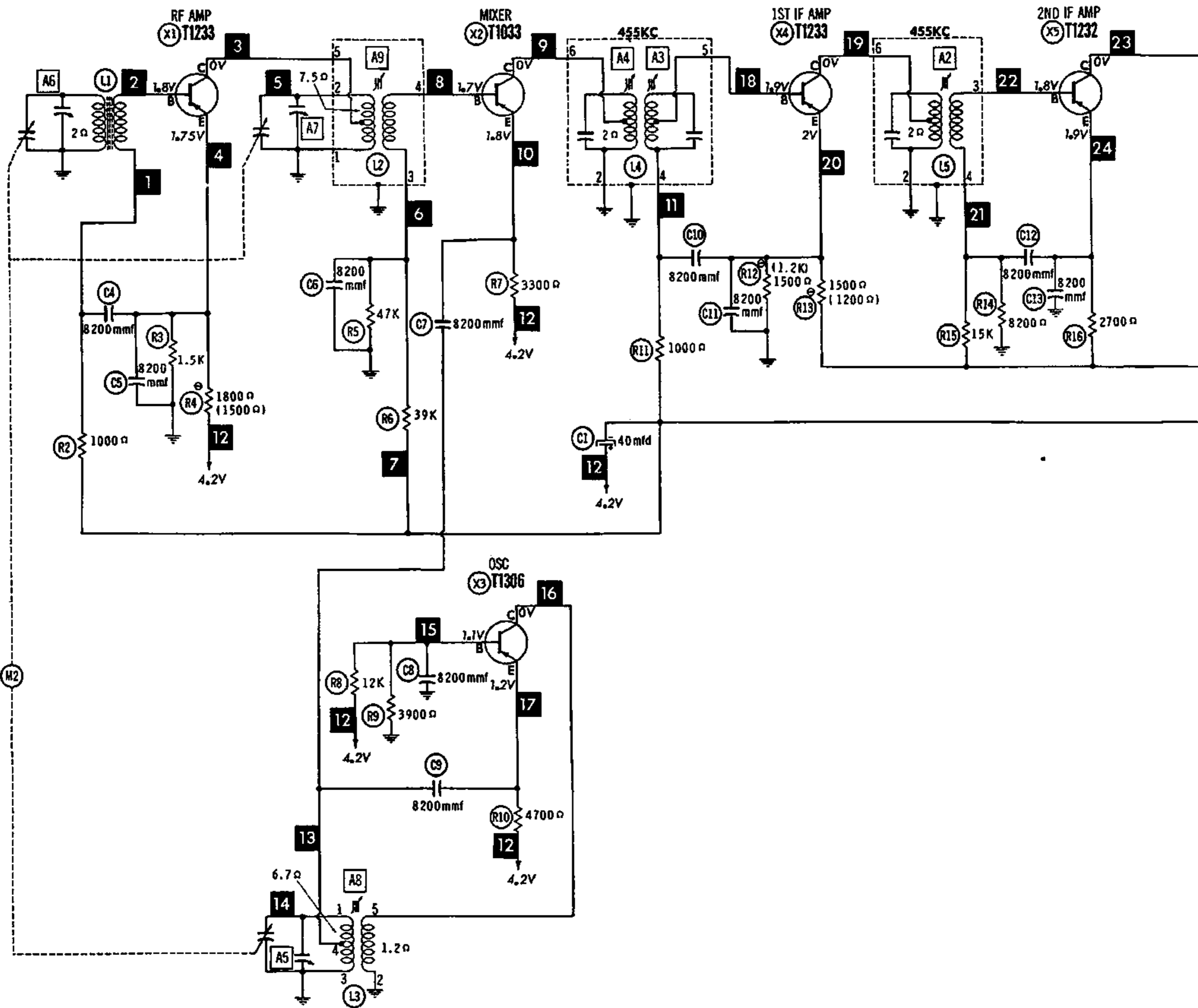
**HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana**

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 KF424

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. © 1961 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America







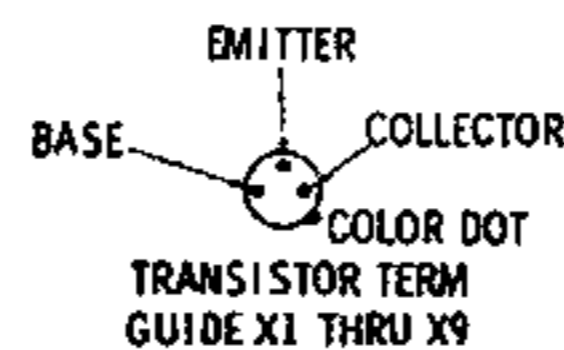
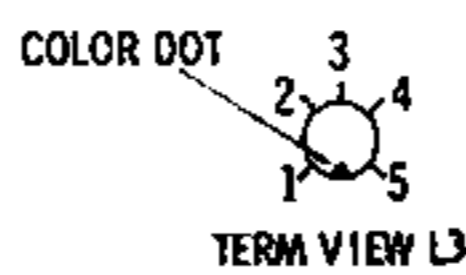
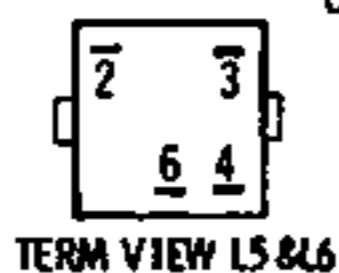
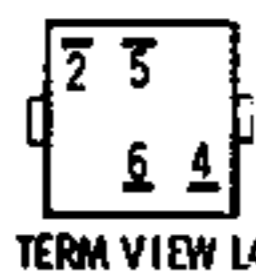
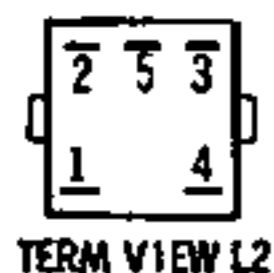
NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

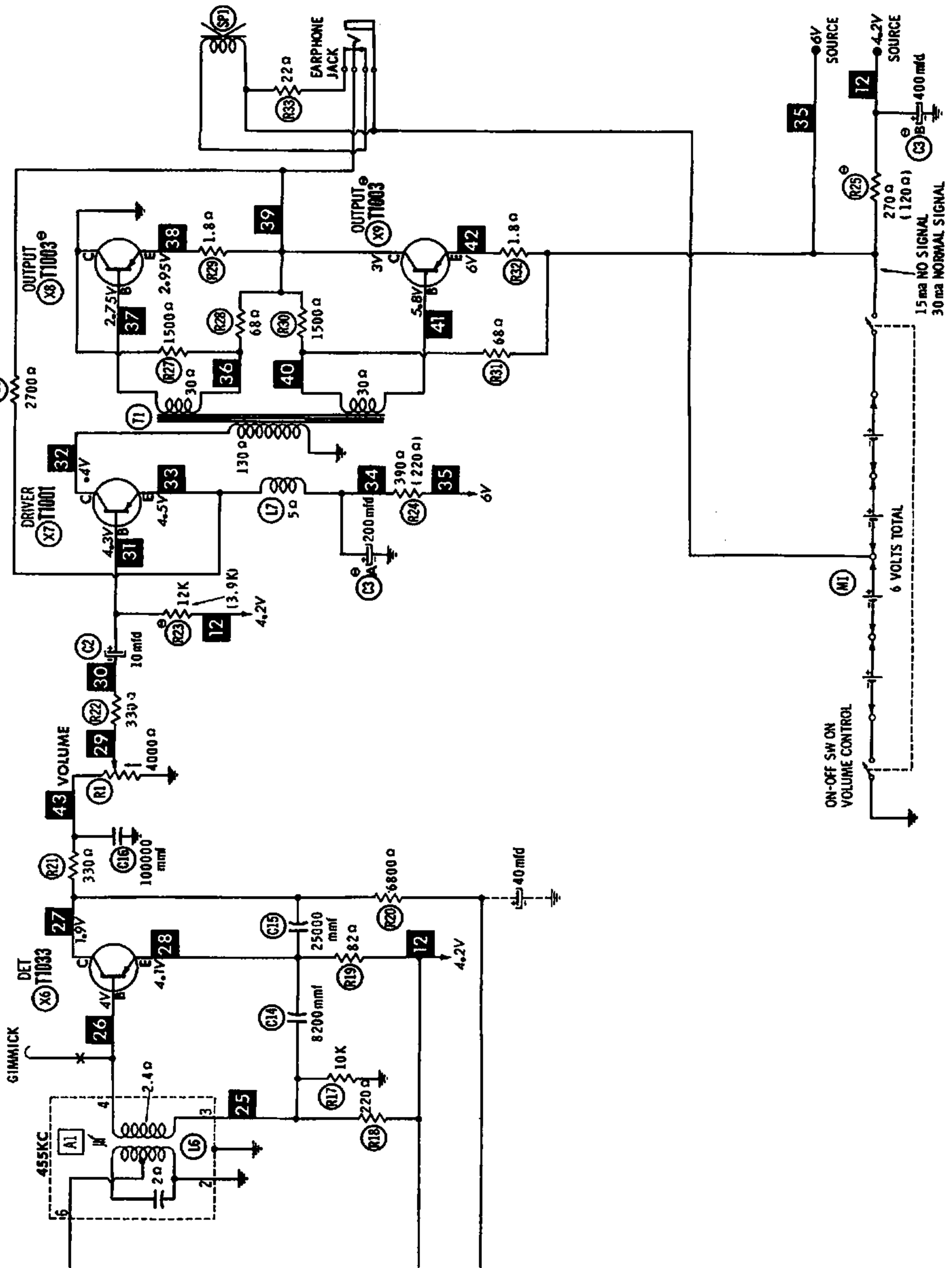
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

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

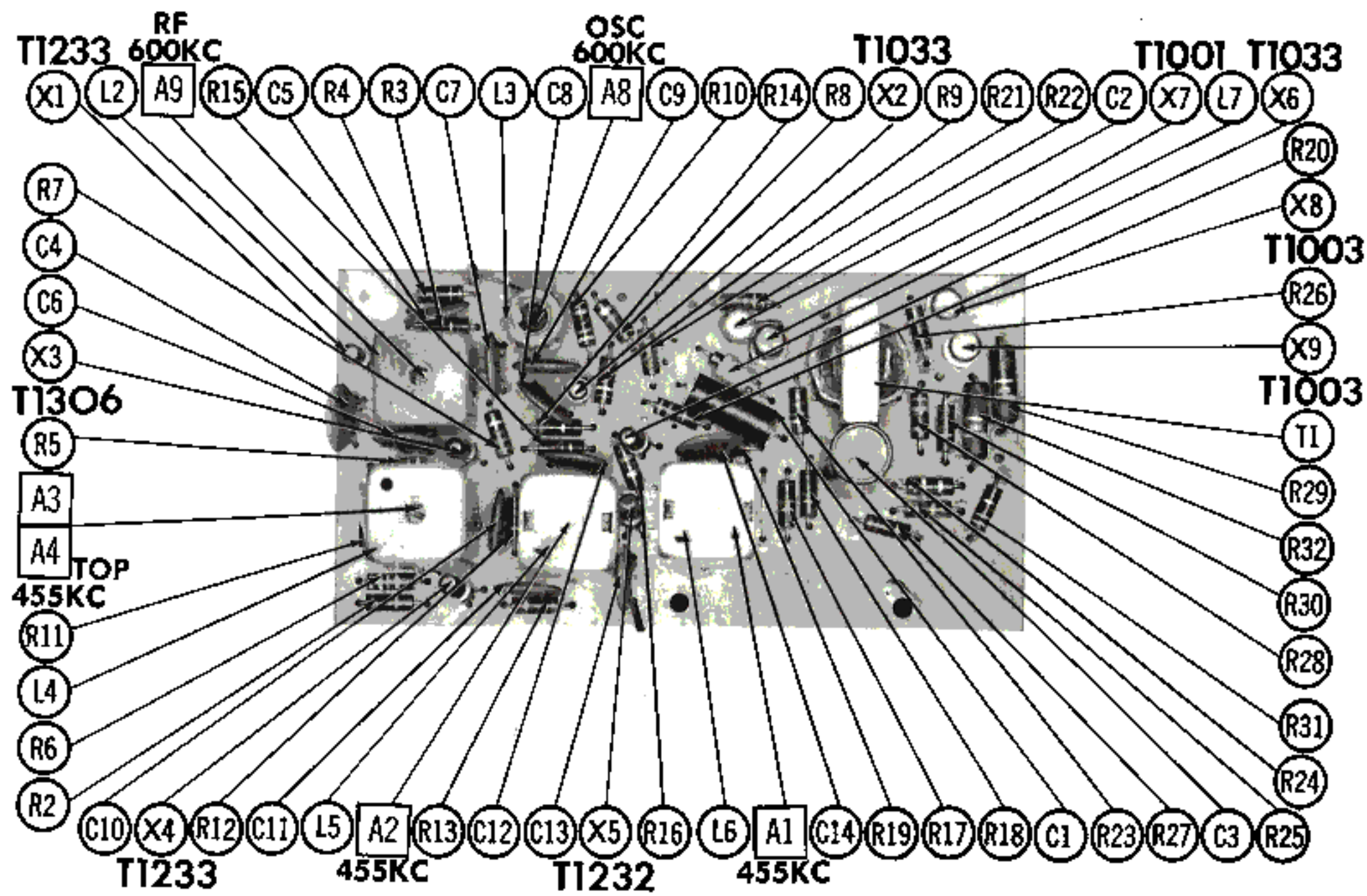
RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.



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.



**PHILCO MODEL  
T-901BK, T-901BR**



CHASSIS TOP VIEW

# PARTS LIST AND DESCRIPTIONS

## TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	T1233	RF Amplifier	2N1632			PNP
X2	T1033	Mixer	2N412			PNP
X3	T1308	Oscillator	2N412	2N486		PNP
X4	T1233	1st IF Amplifier	2N410			PNP
X5	T1232	2nd IF Amplifier	2N410	2N483		PNP
X6	T1033	Detector	2N406	2N486		PNP
X7	T1001	Driver	2N406	2N362	2N408	PNP
X8	T1003 *	Output	2N408			PNP } Matched Pair
X9	T1003 *	Output	2N408			PNP }

\* Alternate Type T 1007

## 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	40	6	30-2588-3	PTT-6040	NLW40-6	TT6X40	MLV40-6	TE-1095	①
C2	10	6	30-2591-9	PTT-6010	NLW10-6	TT6X10	MLV10-6	TE-1087	
C3A	200	6	30-2603-3						
C3B	400	6							

① Some versions may use 200-100mfd (Part #30-2602-2) or 300-400mfd (Part #30-2602-3) in this application.

## 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.
C4	8200		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C5	8200		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C6	8200		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C7	8200		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C8	8200		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C9	8200		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C10	8200		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C11	8200		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C12	8200		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C13	8200		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C14	8200		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C15	25000		BPD-01	DD-822	BYA10S1	CCD-822	B-282	5HK-S10
C16	100000		C80V104AM	UK10-104	H-05S25 H-05P1	IDP-1-253 IDP-2-104	TA-125 TA-010	TG-S25 TG-P10

## CONTROLS

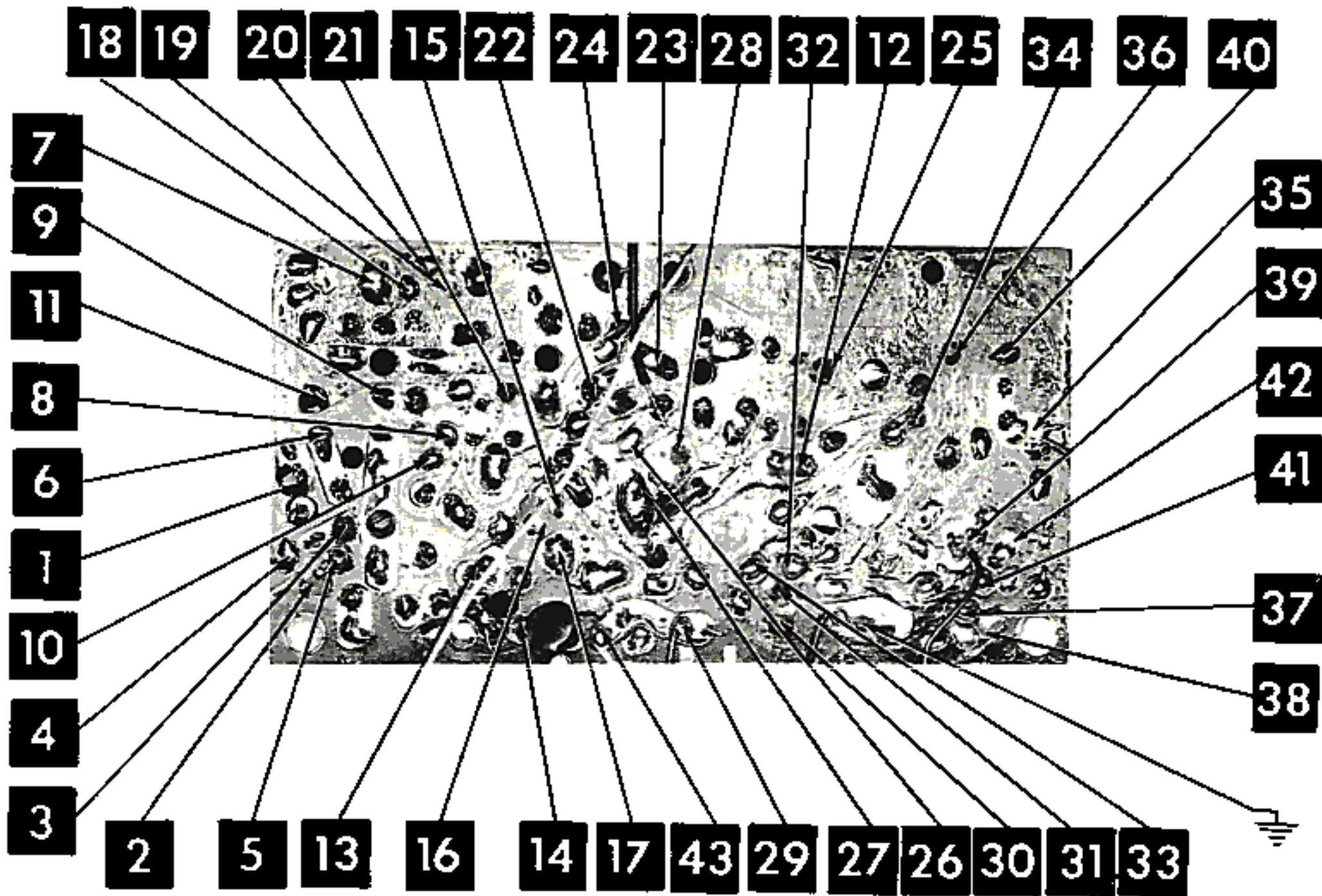
ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	PHILCO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
RLA B	4000Ω Switch	½	33-5598-15	B-11 KR-2				Volume Power Off-On

## 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	1000Ω				R9	3900Ω			
R3	1500Ω				R10	4700Ω			
R4	1800Ω				R11	1000Ω			
R5	47K			(1500Ω) *	R12	1500Ω			(1200Ω) *
R6	39K				R13	1500Ω			(1200Ω) *
R7	3300Ω				R14	8200Ω			
R8	12K				R15	15K			





# PARTS LIST AND DESC

## RESISTORS (cont)

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
R16	2700Ω				R25	270Ω			(120Ω) *
R17	10K				R26	2700Ω			
R18	220Ω				R27	1500Ω			
R19	82Ω				R28	68Ω			
R20	6800Ω				R29	1.8Ω			
R21	390Ω				R30	1500Ω			
R22	330Ω				R31	68Ω			
R23	12K			(3900Ω) *	R32	1.8Ω			
R24	390Ω			(220Ω) †	R33	22Ω			

\* Value used in Run 1 versions.

† Alternate Value.

## 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	32-4668-12		2003		T525	
L2	RF	32-4793-1					
L3	Osc.	32-4669-8					
L4	1st IF	32-4738-1					
L5	2nd IF	32-4738-11					
L6	3rd IF	32-4738-12					
L7	RF Choke (400uh)	32-4685-1	TV-202	4648	RTC-9172	T870	

## 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	3	1	32-8946-1					
		SEC.2						
		1						

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	PHILCO PART No.	QUAM PART No.	
SP1	4"	PM	10-12Ω	36-1675-13	4A1212	

## BATTERIES

ITEM No.	VOLTAGE	PHILCO PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1.5V			230 *		A-100 *		M-13R*	* 4 Required

# DESCRIPTIONS (Continued)

## MISCELLANEOUS

ITEM No.	PART NAME	PHILCO PART No.	NOTES
M2	Tuning Cap. Printed Board	31-2791-1 54-5751-1	2 Gang

## CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Dial Scale	54-5747-1	
Dial Pointer	28-9739-12	
Knob	28-11588-1	Model T-901BK
Knob	28-11588-6	Model T-901BR
Cabinet Front	54-5746-1	Model T-901BK
Cabinet Front	54-5746-2	Model T-901BR
Cabinet Back	51-0135-3	Model T-901BK
Cabinet Back	51-0135-2	Model T-901BR

## WIRING DATA

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

## DIAL CORD STRINGING

