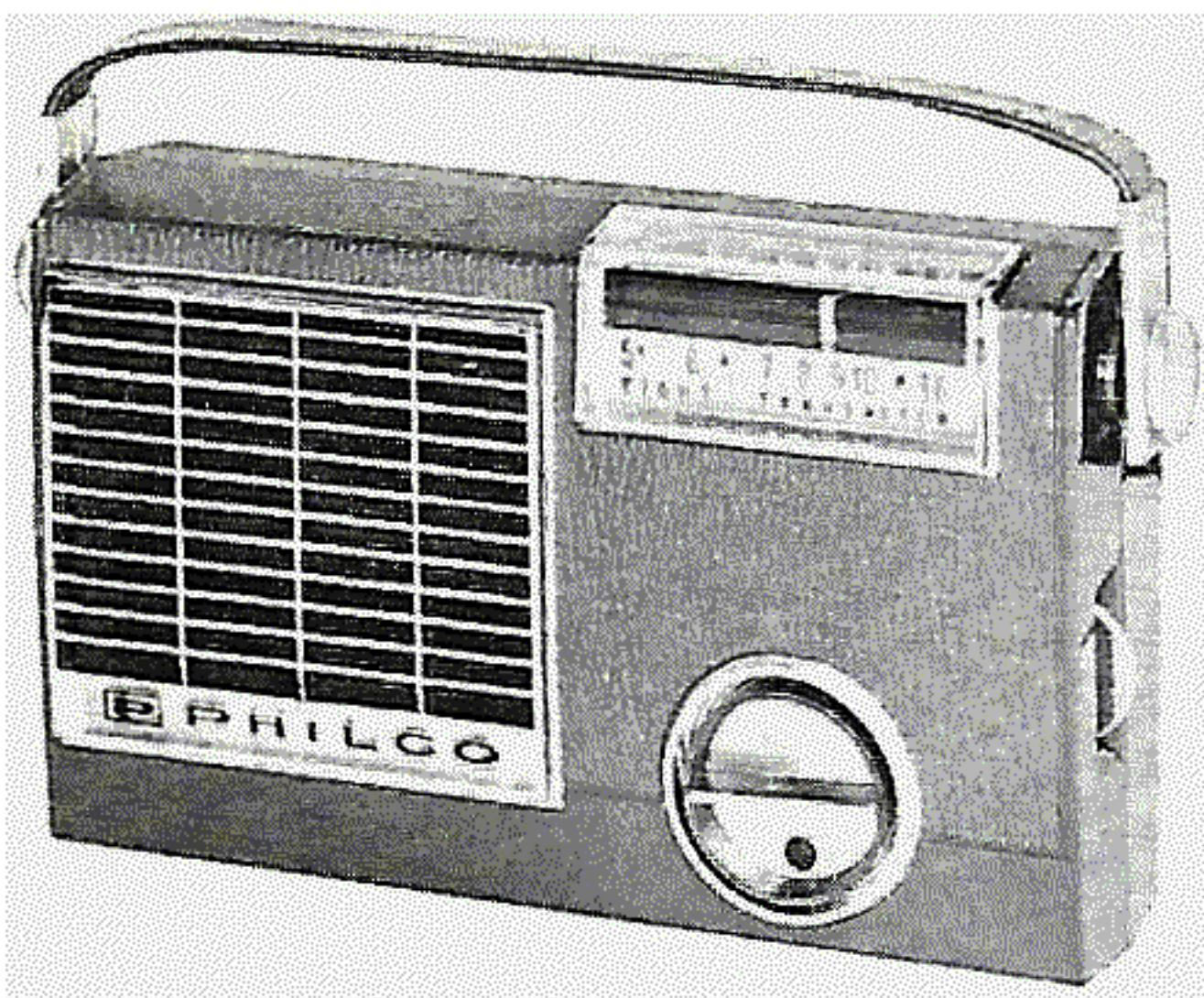


# PHOTOFACT<sup>®</sup> with

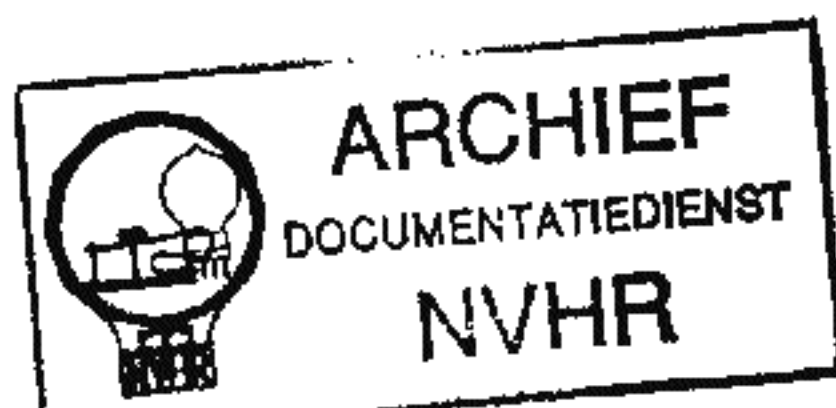
# CIRCUITRACE<sup>®</sup>

Met dank aan Jef Bos



TRADE NAME : Philco Models T-89BK, T-89BR  
 SUPPLIER : Philco Corp., A Subsidiary of Ford Motor Co., Tloga & C Streets, Philadelphia, Pa.  
 TYPE SET : 8 Transistor AM Receiver  
 POWER SUPPLY : 3 Volts DC  
 RATING : 11MA @ 3 VDC (No Signal, Min. Volume)  
 25MA @ 3 VDC (Signal, Normal Volume)  
 TUNING RANGE : BROADCAST 535 - 1620KC

Ned. Ver. v. Historie v/d

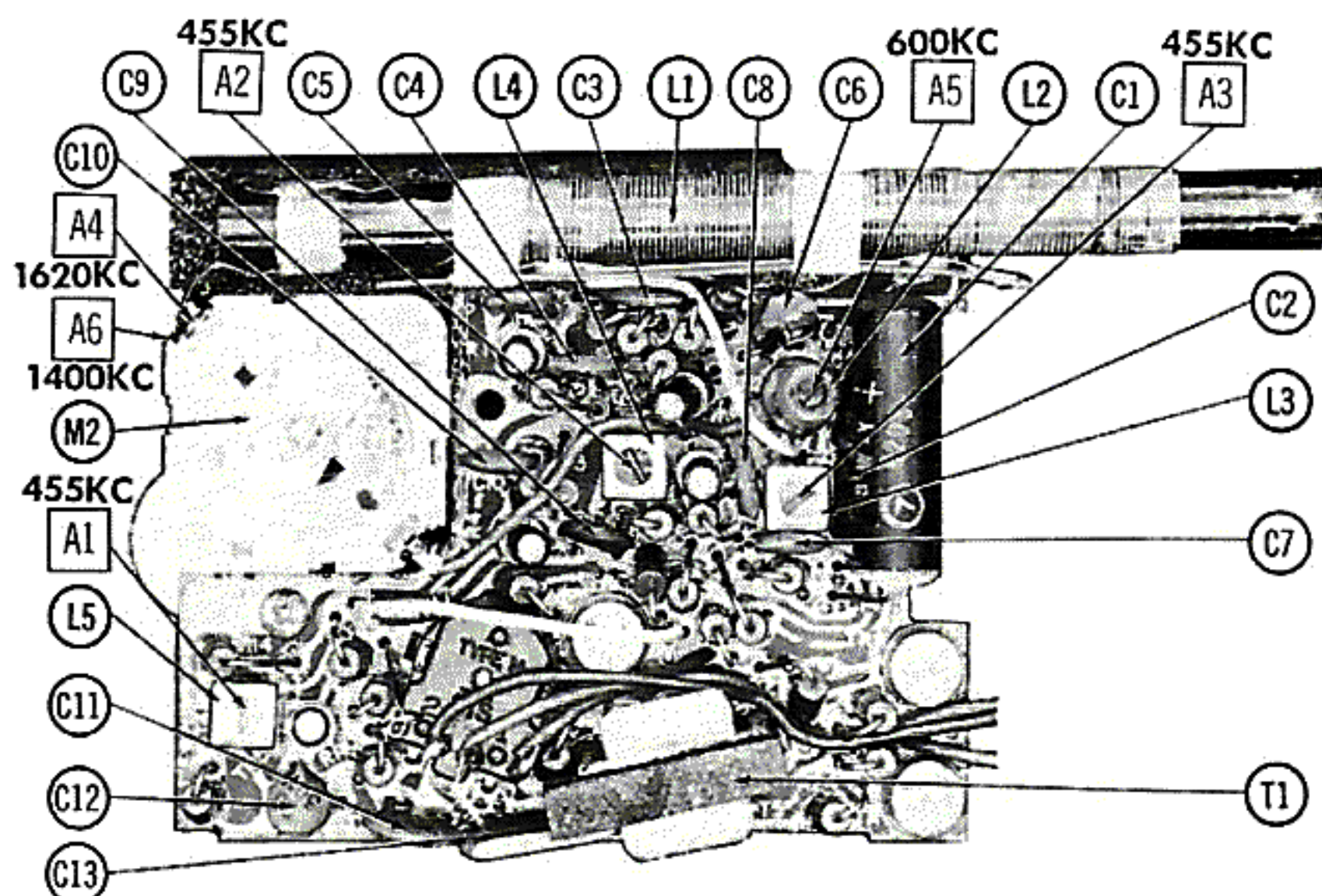


## ALIGNMENT INSTRUCTIONS

Check for specified source voltage.  
 Fashion loop of several turns of wire and connect generator across loop.  
 Adjust output of generator to radiate only enough signal into receiver to obtain a suitable indication.  
 Suggested Alignment Tools:

A1 thru A6..... GENERAL CEMENT #5067, 8282, 8606  
 WALSCO #2526, 2543

	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	455KC (400v Mod.)	Tuning gang fully open.	Output Meter across voice coil.	A1, A2, A3	Adjust for maximum. Repeat as required.
2.	1620KC	"	"	A4	Adjust for maximum.
3.	600KC	Tune to Signal.	"	A5	Rock tuning gang and adjust for maximum. Repeat steps 2 and 3.
4.	1400KC	"	"	A6	Adjust for maximum.



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

## TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X1	T-6028	RF Amp.	DS-25	GE-1		PNP
X2	T-6029	Converter	DS-25	GE-1		PNP
X3	T-6029	1st IF Amp.	DS-25	GE-1		PNP
X4	T-6028	2nd IF Amp.	DS-25	GE-1		PNP
X5	T-6029	Detector	DS-25	GE-1		PNP
X6	HR1	Driver	DS-26	GE-2		PNP
X7	HR2	Output	DS-26	GE-2		PNP
X8	HR2	Output	DS-26	GE-2		PNP

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	PHILCO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	250	3	30-2588-12	PTT15	NLW250-3	MT1-24	TT3X250	MLV250-3	TE-1065
C2	25	6	30-2588-10	PTT26	NLW25-6	MT1-10	TT6X25	MLV25-6	TE-1091

## 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		TTD-01	CK-103	H05S1		TA-110	TG-S10
C4	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C5	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C6	.005		TTD-005	CK-502	H05D5		TA-250	TG-D50
C7	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C8	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C9	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C10	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C11	.05		TTD-05	CK-503	H05S5		TA-150	TG-S50
C12	.025		TTD-025	CK-253	H05S25		TA-125	TG-S25
C13	.47mfd 4.5V			UK10-404	HCC10474Z			HY-330

## CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			PHILCO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	2000Ω	33-5583-25				

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		PHILCO PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	Loopstick Ass'y.	76-10982-7					
L2	Osc.	32-4802-2					
L3	1st IF	32-4800-8					
L4	2nd IF	32-4800-9					
L5	3rd IF	32-4800-10					

## 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	32-8959-3				
		SEC.2						
		1						

# DESCRIPTION

## SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		PHILCO PART No.	QUAM PART No.	
SPI	2 3/4" PM 6-8Ω	36-1664-10	27A06Z12	

## BATTERIES

ITEM No.	VOLTAGE	PHILCO PART No.	REPLACEMENT DATA			NOTES
			BURGESS	EVEREADY	MALLORY	
M1	3		Z (or AL-9)	1015 (or E91, E9)	M-15F (or MN-1500, ZM-9)	2 Required

## MISCELLANEOUS

ITEM No.	PART NAME	PHILCO PART No.	NOTES
M2	Tuning Cap. Tuning Cap.	31-2792-4 31-2792-2	2 Gang, Model T-89BR 2 Gang, Model T-89BK

## CABINETS & CABINET PARTS

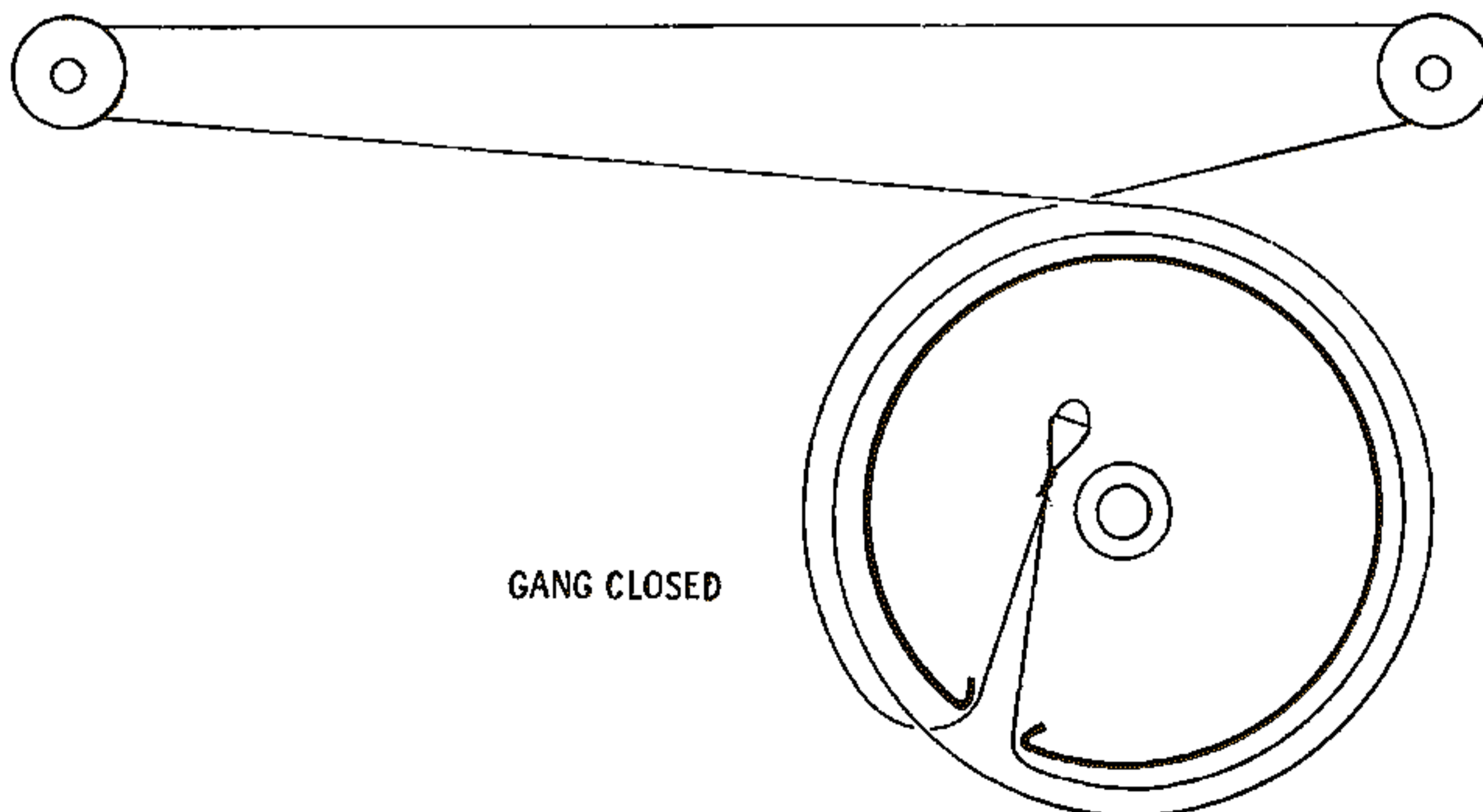
(When Ordering Specify Model, Chassis & Color)

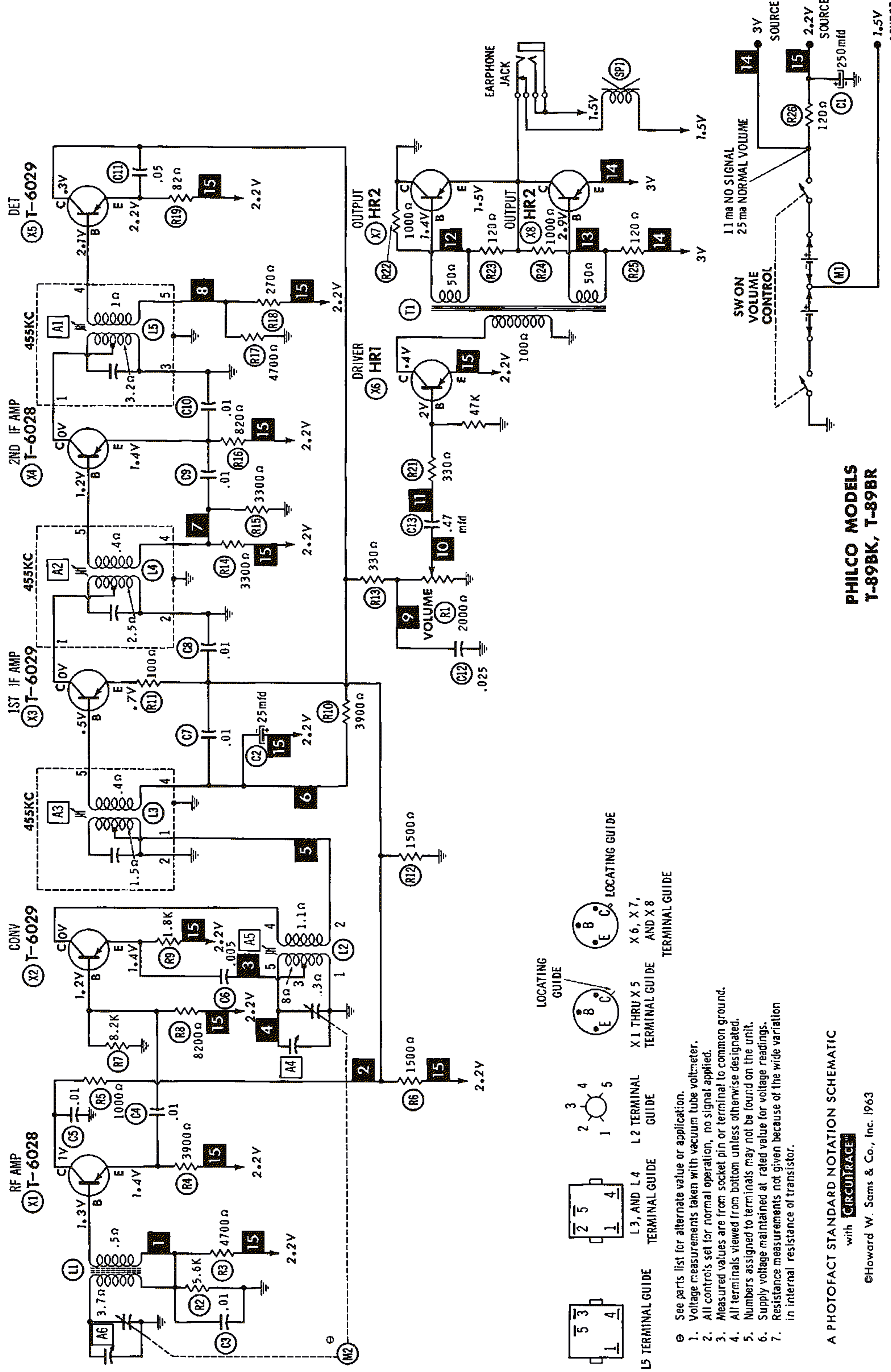
ITEM	PART No.	ITEM	PART No.
Knob, Volume - Model T-89BR	27-10014-2	Cabinet, Front - Model T-89BK	27-10003-2
Knob, Volume - Model T-89BK	27-10014-1	Cabinet, Back - Model T-89BR	27-10002-1
Cabinet, Front - Model T-89BR	27-10002-2	Cabinet, Back - T-89BK	27-10003-1

## WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid 22AWG) Available in 12 Colors  
 8524 (Stranded 22AWG)  
 8570 (Stranded 26AWG)

## DIAL CORD STRINGING

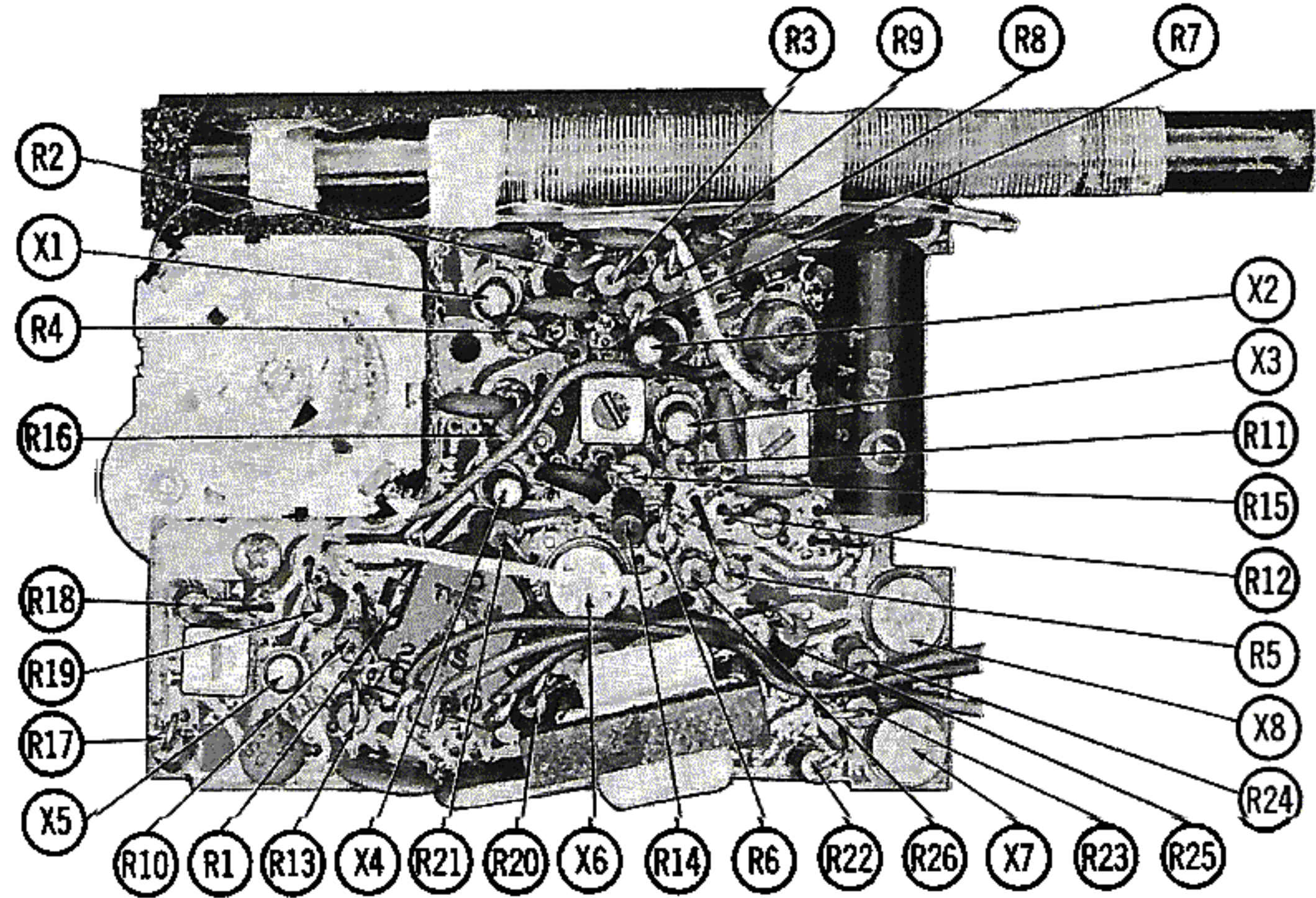




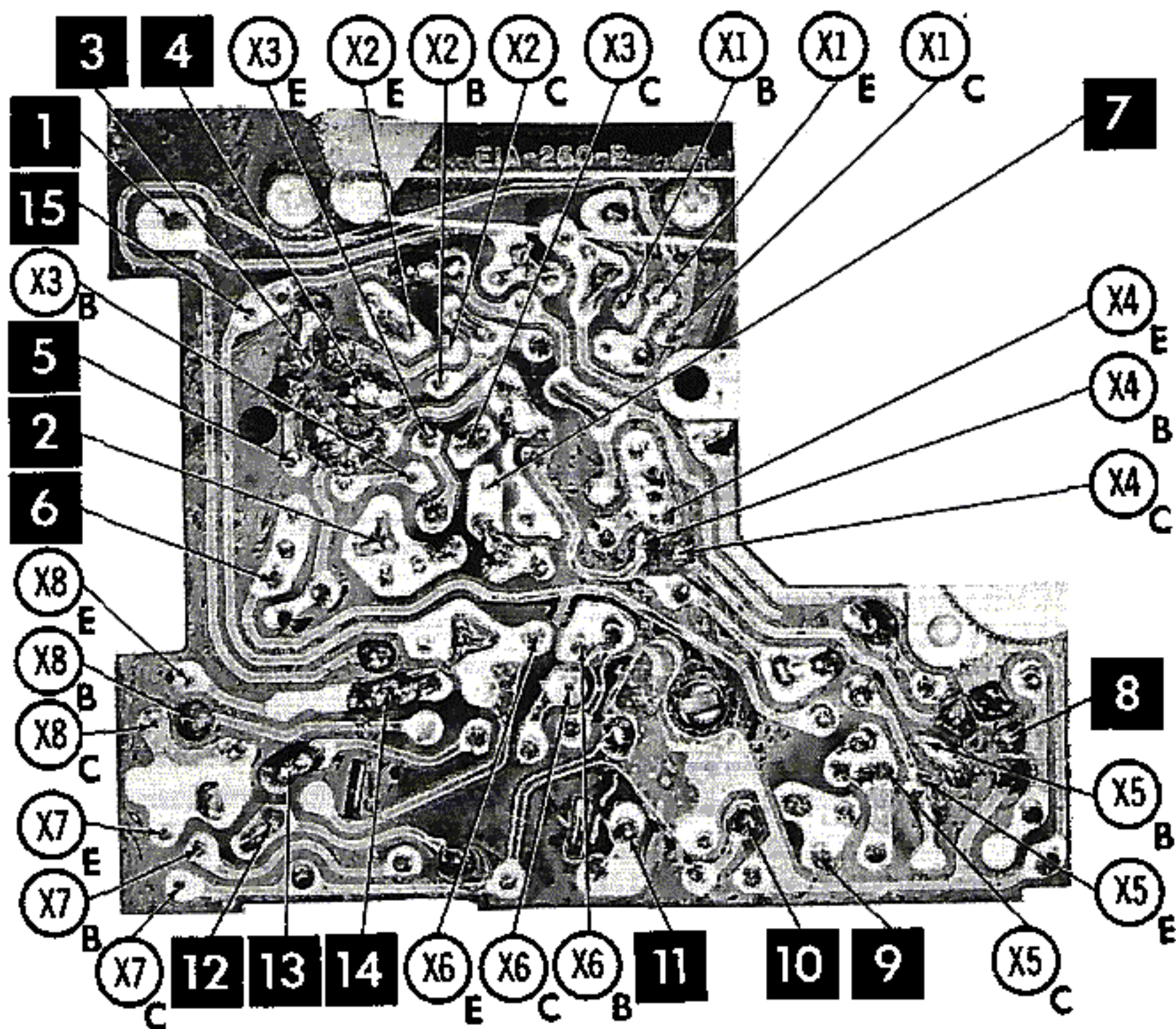
- ⊙ See parts list for alternate value or application.
- 1. Voltage measurements taken with vacuum tube voltmeter.
- 2. All controls set for normal operation, no signal applied.
- 3. Measured values are from socket pin or terminal to common ground.
- 4. All terminals viewed from bottom unless otherwise designated.
- 5. Numbers assigned to terminals may not be found on the unit.
- 6. Supply voltage maintained at rated value for voltage readings.
- 7. Resistance measurements not given because of the wide variation in internal resistance of transistor.

A PHOTOFAC STANDARD NOTATION SCHEMATIC  
with **CIRCUITRAGE**  
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**PHILCO MODELS  
T-89BK, T-89BR**



**CHASSIS TOP VIEW - RESISTOR & TRANSISTOR IDENT.**



**E-EMITTER B-BASE C-COLLECTOR**