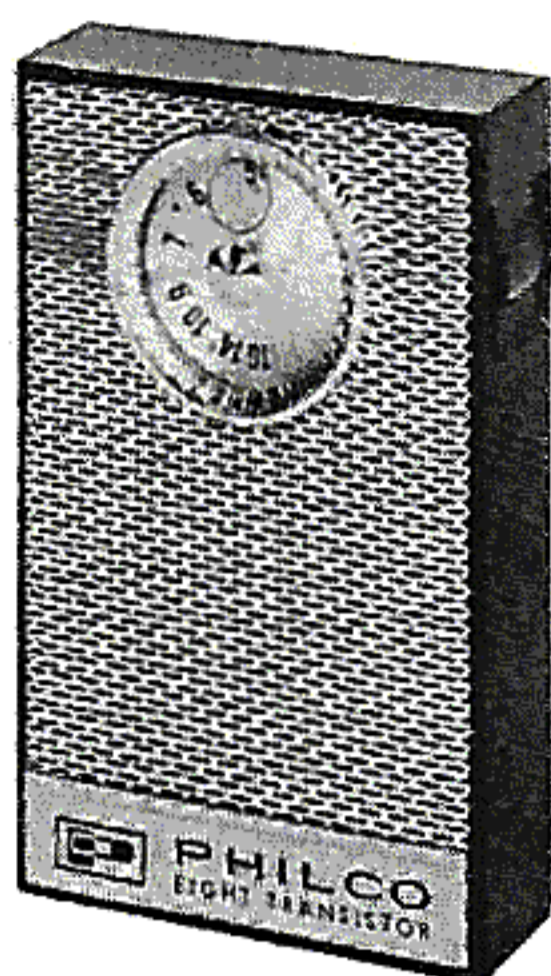


PHOTOFACT[®] with

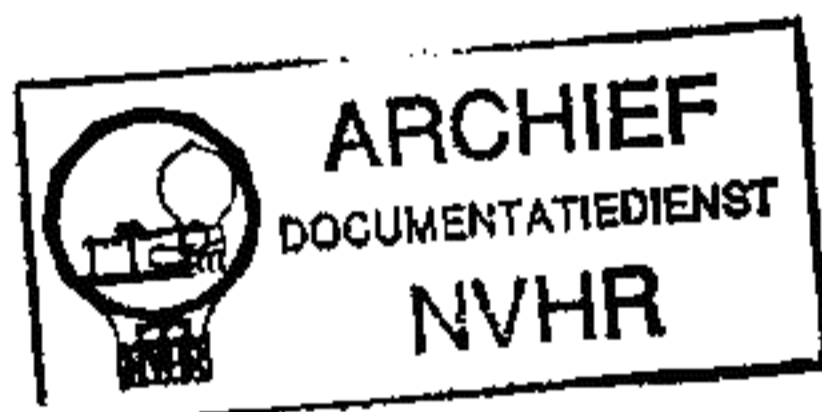
CIRCUITRACE[®]



Met dank aan Jef Bos

TRADE NAME : Philco Models T-81, T-81GP
 SUPPLIER : Philco Corp., Subsidiary of Ford Motor Co.
 Tioga & C Streets, Philadelphia, Pa.
 TYPE SET : 9 Transistor AM Receiver
 POWER SUPPLY : 9 Volts DC
 RATING : 12MA @ 9VDC (No Signal, Min. Volume)
 24MA @ 9VDC (Signal, Normal Volume)
 TUNING RANGE : BROADCAST 520 - 1650KC

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:

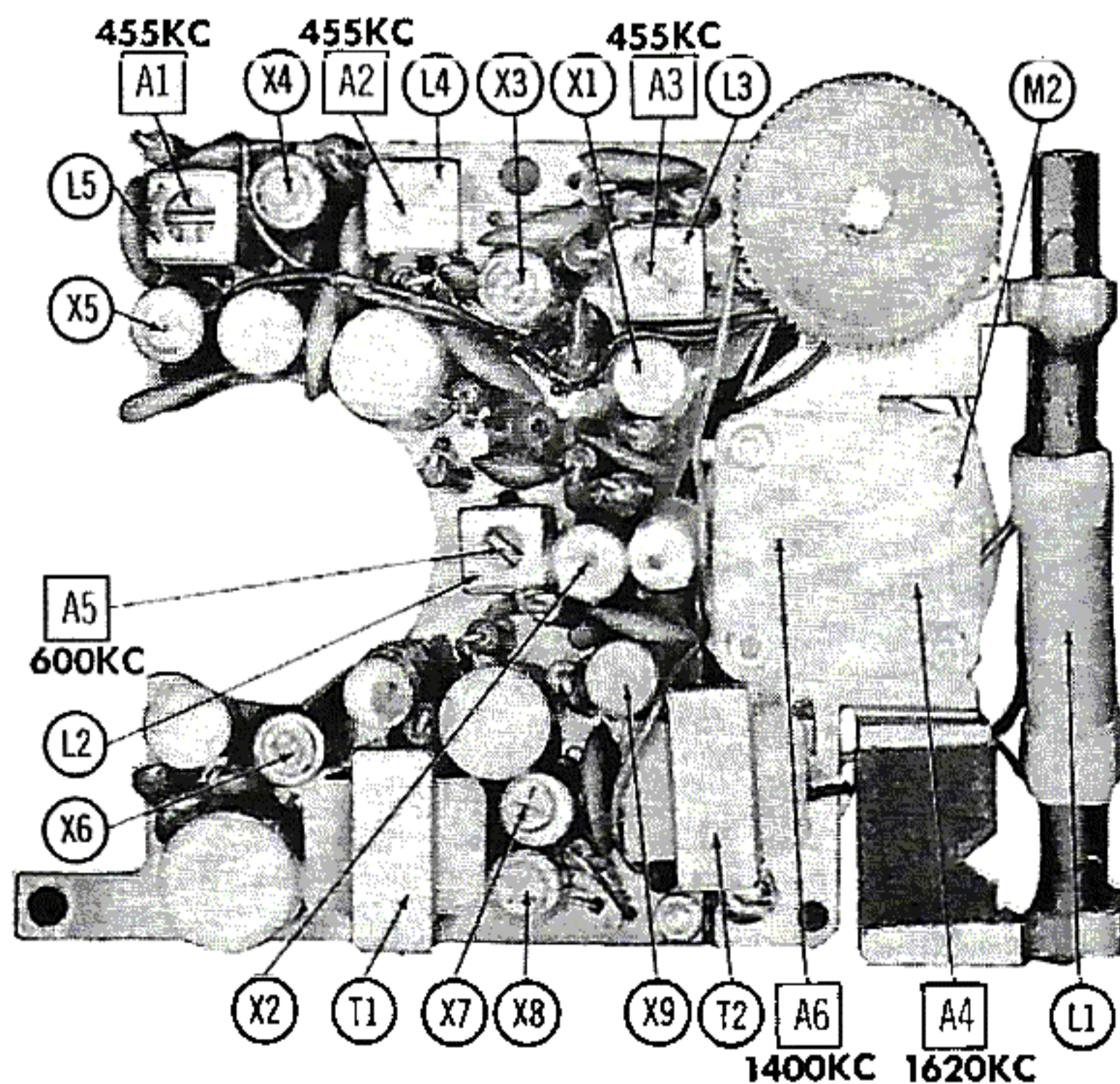
A1, A2, A3, A5.....GENERAL CEMENT #8282, 8606

WALSCO #2526, 2543

A4, A6.....GENERAL CEMENT #5000, 5066, 8290

WALSCO #2512, 2525, 2528

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. 1650KC	"	"	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

WIRING DATA

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

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X1	28A269	Mixer	DS-25	GE-9		PNP
X2	28A297	Osc.	DS-25	GE-9		PNP
X3	28A298	1st IF Amp.	DS-25	GE-9		PNP
X4	28A296	2nd IF Amp.	DS-25	GE-9		PNP
X5	28A298	Detector - AVC	DS-25	GE-9		PNP
X6	28B266	Driver				PNP
X7	28B267	Output				PNP
X8	28B267	Output				PNP
X9	YV-1	Bias Reg.			1N2326	PNP

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	PHILCO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	GENERAL INSTRUMENT PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	50	10	320-0095						
C2	100	10	320-0134						
C3	30	10	320-0058						
C4	30	6	320-0094						
C5	5	6	320-0132						
C6	30	6	320-0094						

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.
C10	.02	(.04) †	TTD-02	CK-203	H3		TA-120	TG-S20
C11	.01		TTD-01	CK-103	H2		TA-110	TG-S10
C12	.04	(.02) †	TTD-05	CK-503	H5		TA-150	TG-S50
C13	140							
C14	.04		TTD-05	CK-503	H5		TA-150	TG-S50
C15	5		NPO-DI 5.0	DTZ-4R7	C10V47C	CCTO-050	CNO-547	10TCC-V50
C16	.04		TTD-05	CK-503	H5		TA-150	TG-S50
C17	.04		TTD-05	CK-503	H5		TA-150	TG-S50
C18	5		NPO-DI 5.0	DTZ-4R7	C10V47C	CCTO-050	CNO-547	10TCC-V50
C19	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C20	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C21	.04		TTD-05	CK-503	H5		TA-150	TG-S50
C22	.005		TTD-005	CK-502	H1		TA-250	TG-D50
C23	.04		TTD-05	CK-503	H5		TA-150	TG-S50
C24	.04		TTD-05	CK-503	H5		TA-150	TG-S50
C25	.04		TTD-05	CK-503	H5		TA-150	TG-S50
C26	.001			DM-102				
C27	.04		TTD-05	CK-503	H5		TA-150	TG-S50

† Alternate Value.

CONTROLS

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

ITEM No.	USE	RESIST-ANCE	REPLACEMENT DATA				
			PHILCO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	5000Ω	323-0117				

DESCRIPTION

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	322-0214					
L2	Osc.	322-0215					
L3	1st IF	322-0216					
L4	2nd IF	322-0217					
L5	3rd IF	322-0218					

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	PHILCO PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	2	1	322-0219					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	PHILCO PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	2000 CT	6-8Ω	322-0220					

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		PHILCO PART No.	QUAM PART No.	
SP1	2 1/4" PM 6-8Ω	326-0021	22A06Z8	

BATTERIES

ITEM No.	VOLTAGE	PHILCO PART No.	REPLACEMENT DATA			NOTES
			BURGESS	EVEREADY	MALLORY	
M1	9V		2U6 (or H146)	216 (or E146)	MN1604 (or M-1604, TR-146)	

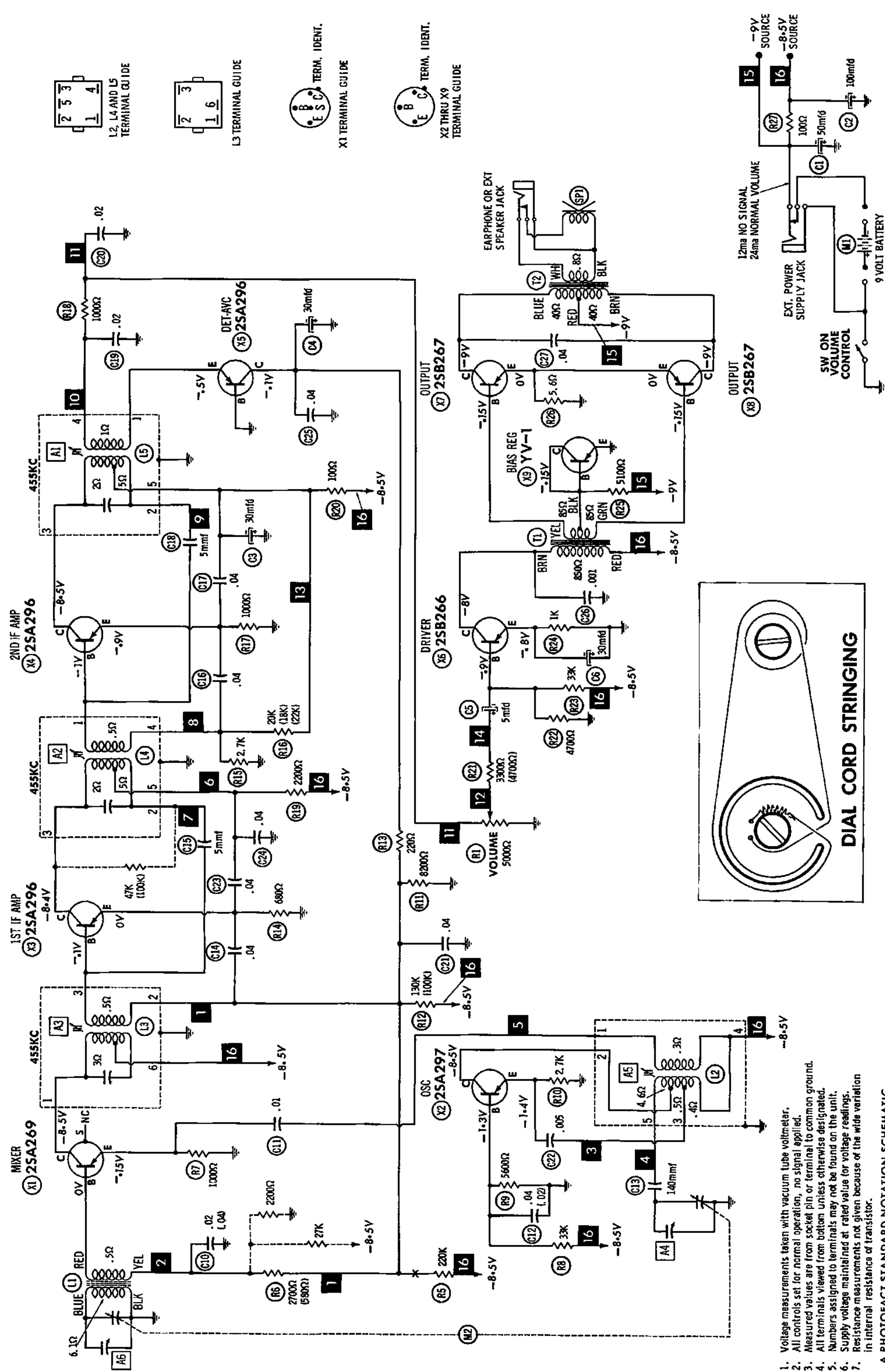
MISCELLANEOUS

ITEM No.	PART NAME	PHILCO PART No.	NOTES
M2	Tuning Cap.	321-0007	

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Dial Scale	228-0234	Cabinet Front	424-0053
Knob - Tuning	227-0167	Cabinet Rear	424-0054
Knob - Volume	227-0166		



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 **CIRCUITACE**

