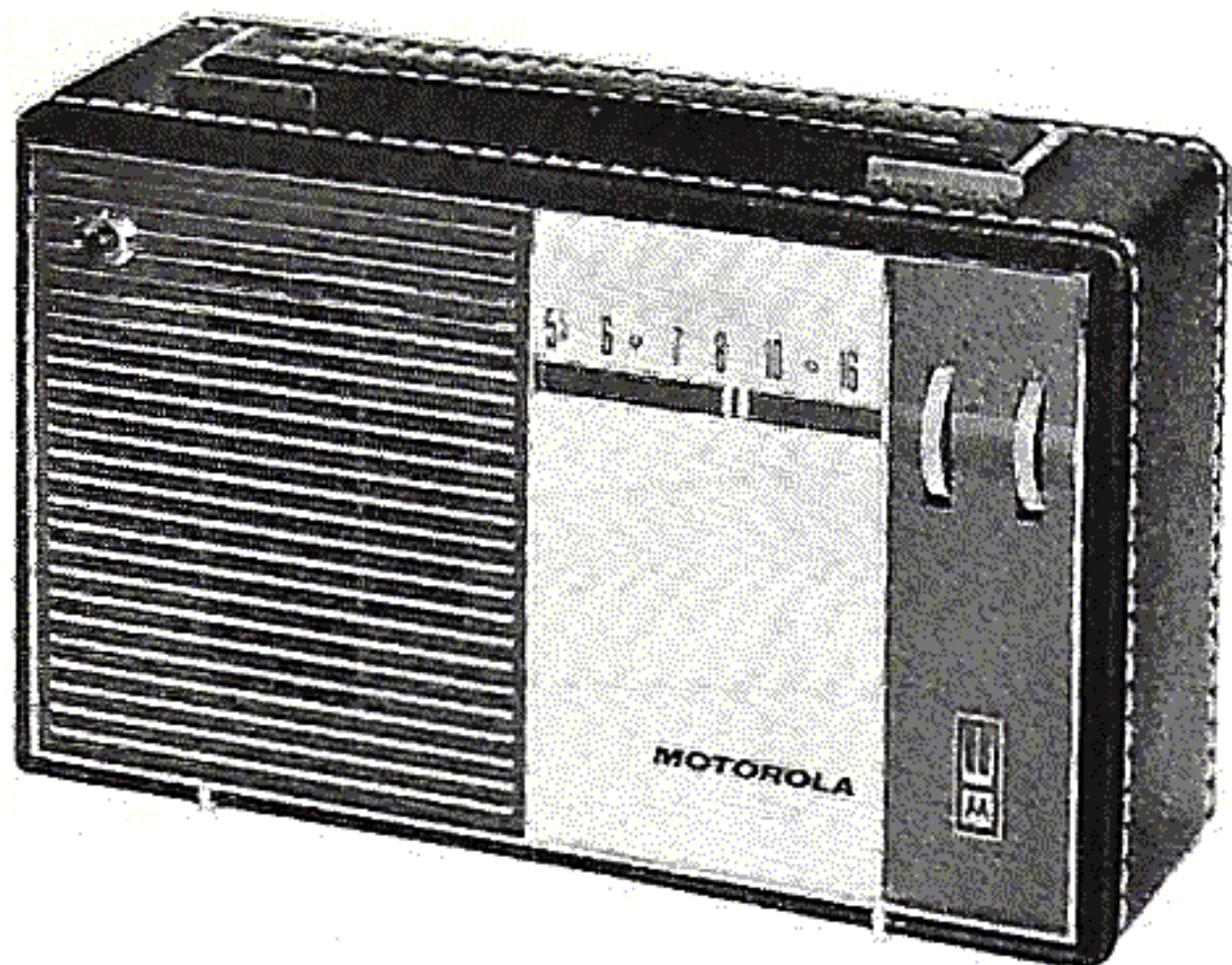




PHOTOFACT[®] with

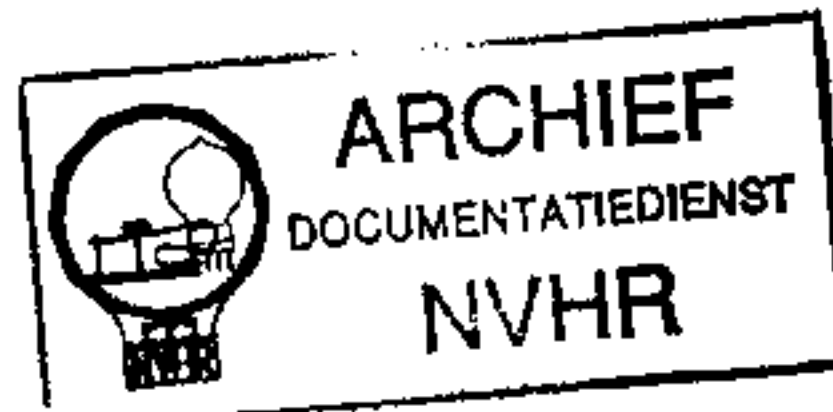
CIRCUITRACE[®]

Met dank aan Jef Bos



TRADE NAME: Motorola Models X41E, X41E-1, X41G, X41G-1, X41N, X41N-1 (CH. HS-1009)
SUPPLIER: Motorola, Inc., 9401 W. Grande Ave., Franklin Park, Ill.
TYPE SET: 8 Transistor AM Receiver
POWER SUPPLY: 6 Volts DC
RATING: 9MA@6 VDC (No Signal, Min. Volume)
 16MA@6 VDC (Signal, Normal Volume)
TUNING RANGE: BROADCAST 535 - 1620KC

Ned. Ver. v. Historie v/



ALIGNMENT INSTRUCTIONS

Check for specified source voltage.

Fashion loop of several turns of wire and connect generator across loop.

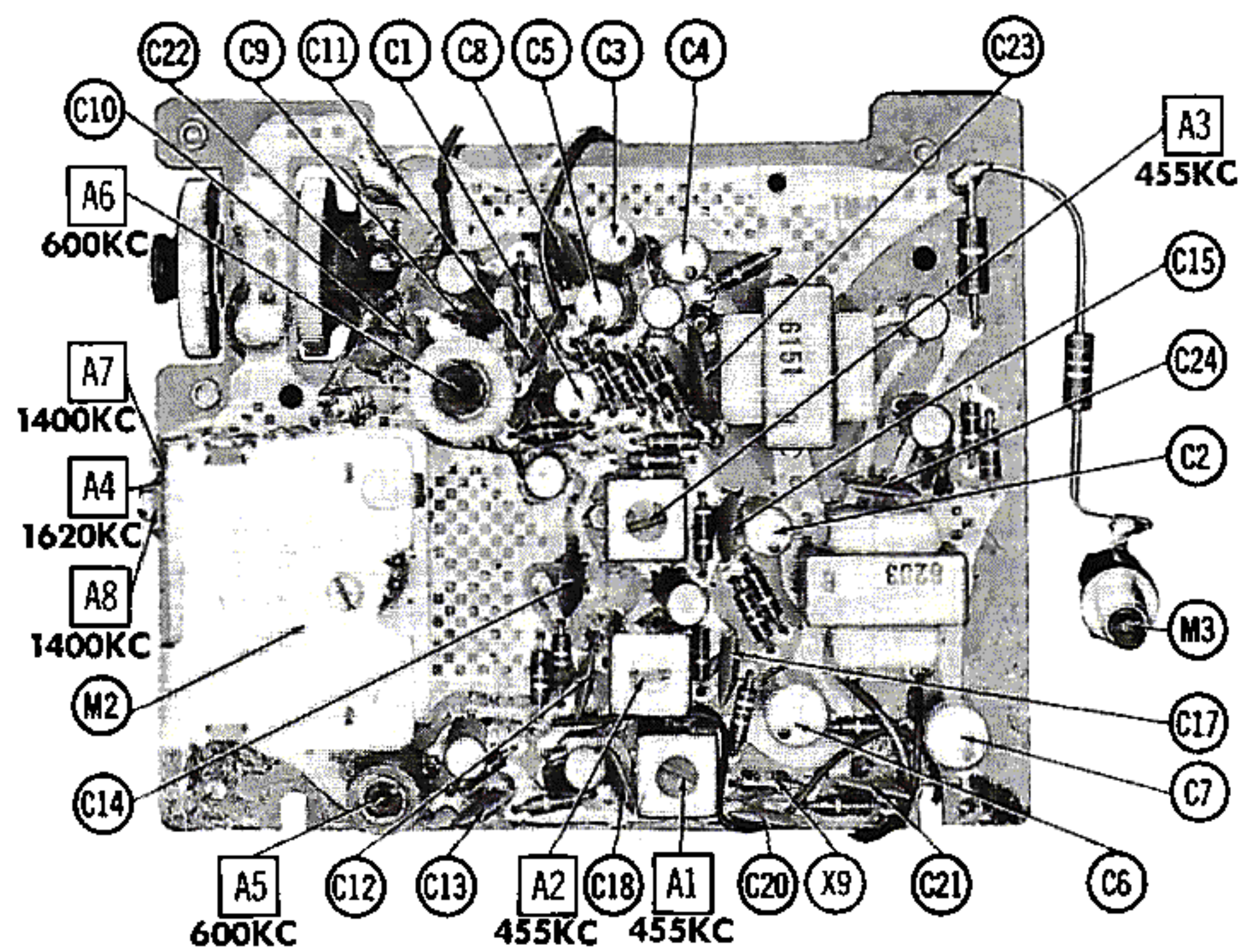
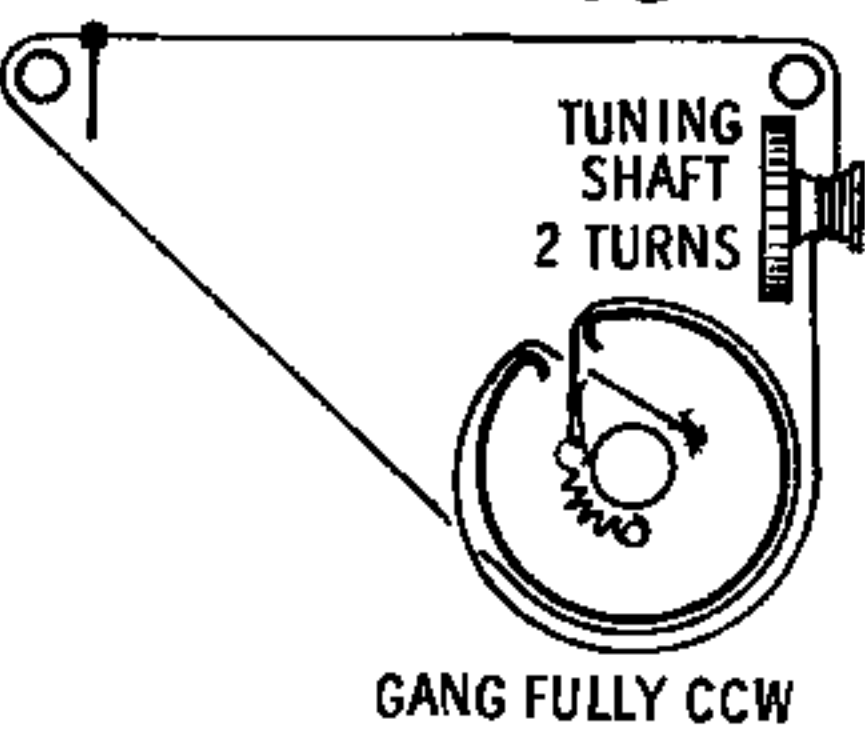
Adjust output of generator to radiate only enough signal into receiver to obtain a suitable indication.

Suggested Alignment Tools:

- A1, A2, A3, A5..... GENERAL CEMENT #5067, 8282, 8606
 WALSCO #2526, 2543
- A4, A6..... GENERAL CEMENT #5000, 5066, 8290
 WALSCO #2525

SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1. 455KC (400% 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.

DIAL CORD STRINGING



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	2SA72	RF Amplifier	DS-25	GE-1		PNP
X2	2SA72	Mixer	DS-25	GE-1		PNP
X3	2SA72	Osc.	DS-25	GE-1		PNP
X4	2SA72	1st IF Amp.	DS-25	GE-1		PNP
X5	2SA72	2nd IF Amp.	DS-25	GE-1		PNP
X6	2SB54	Driver	DS-26	GE-2	2N406	PNP
X7	2SB56	Output	DS-26	GE-2	2N408	PNP
X8	2SB56	Output	DS-26	GE-2	2N408	PNP

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS			NOTES
			MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.	
X9		48K64468i				Detector (1N60)

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	MOTOROLA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	30	3	23C60496A02	BCD3025	ECPB412	MT1-10	PET-130	MLV30-6	VL-1043
C2	30	3	23C60496A02	BCD3025	ECPB412	MT1-10	PET-130	MLV30-6	VL-1043
C3	5	6	23C60496A03	BCD6005	ECPB405	MT1-3	TT6X5	MLV5-6	VL-1084
C4	30	3	23C60496A02	BCD3025	ECPB412	MT1-10	PET-130	MLV30-6	VL-1043
C5	30	3	23C60496A02	BCD3025	ECPB412	MT1-10	PET-130	MLV30-6	VL-1043
C6	50	10	23C60496A04	BCD10050	ECPB415	MT1-16	PET-1575	MLV50-10	VL-1134
C7	50	10	23C60496A04	BCD10050	ECPB415	MT1-16	PET-1575	MLV50-10	VL-1134

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.
C8	.02		TTD-02	CK-203	H05S2		TA-120	TG-S20
C9	100		DI-100	DD-101	L10T1	CCD-101	GP310	10TS-T10
C10	2.4 NPO		NPO-DI 2, 2	TCZ-2R2	C10V22C	CCTO-2R2	CNO-522	10TCC-V22
C11	.05		TTD-05	CK-503	H05S5			TG-S50
C12	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C13	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C14	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C15	.02		TTD-02	CK-203	H05S2		TA-120	TG-S20
C16	3		DI-3, 3	DD-3R3	C10V3C	CCTO-3R3	CNO-533	10TCC-V33
C17	.05		TTD-05	CK-503	H05S5			TG-S50
C18	.02		TTD-02	CK-203	H05S2		TA-120	TG-S20
C19	3		DI-3, 3	DD-3R3	C10V3C	CCTO-3R3	CNO-533	10TS-V33
C20	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C21	.05		TTD-05	CK-503	H05S5			TG-S50
C22	.02	(.01) †	TTD-02	CK-203	H05S2		TA-120	TG-S20
C23	.002		DI-2000	DD-202	L10D2	CCD-202	GP220	10TS-D20
C24	.05		TTD-05	CK-503	H05S5			TG-S50

† Alternate Value.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA					
			MOTOROLA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1	Volume & Switch	5000Ω	18B60512A01 (Note 1)	B16-214 (Note 2)				

Note 1. Replace with Part #18B60812A01.

Note 2. Use Original Knob.

DESCRIPTION

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	REMARKS			IRC PART No.	WORKMAN PART No.	REMARKS
R25	150Ω Cold			#6B60519A01					

Motorola Part Number.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		MOTOROLA PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	Loopstick	24B60712A04					
L2	RF	24B61302H01					
L3	Osc.	24C60741A04					
L4	1st IF	24K646566	BC-574				
L5	2nd IF	24K646137	BC-575				
L6	3rd IF	24K646138	BC-576				

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T1	1.2	1	25B60492A01					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			MOTOROLA PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.						
T2	100Ω CT	6-8Ω	25B60493A01					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				MOTOROLA PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	3"	PM	6-8Ω	50B61163A01		

BATTERIES

ITEM No.	VOLTAGE	MOTOROLA PART No.	REPLACEMENT DATA			NOTES
			BURGESS	EVEREADY	MALLORY	
M1	1½V		930	1015	M-15R	4 Used

MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M2	Tuning Cap.	19B61108A01	2 Gang Battery Life Indicator Less All Components
M3	Switch	40K647229	
	Printed Board	1V60050A09	

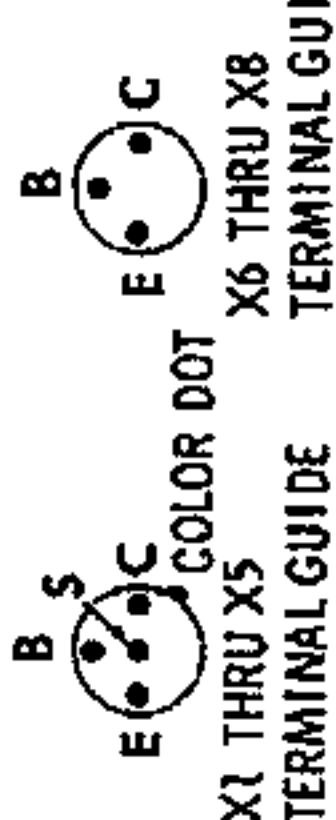
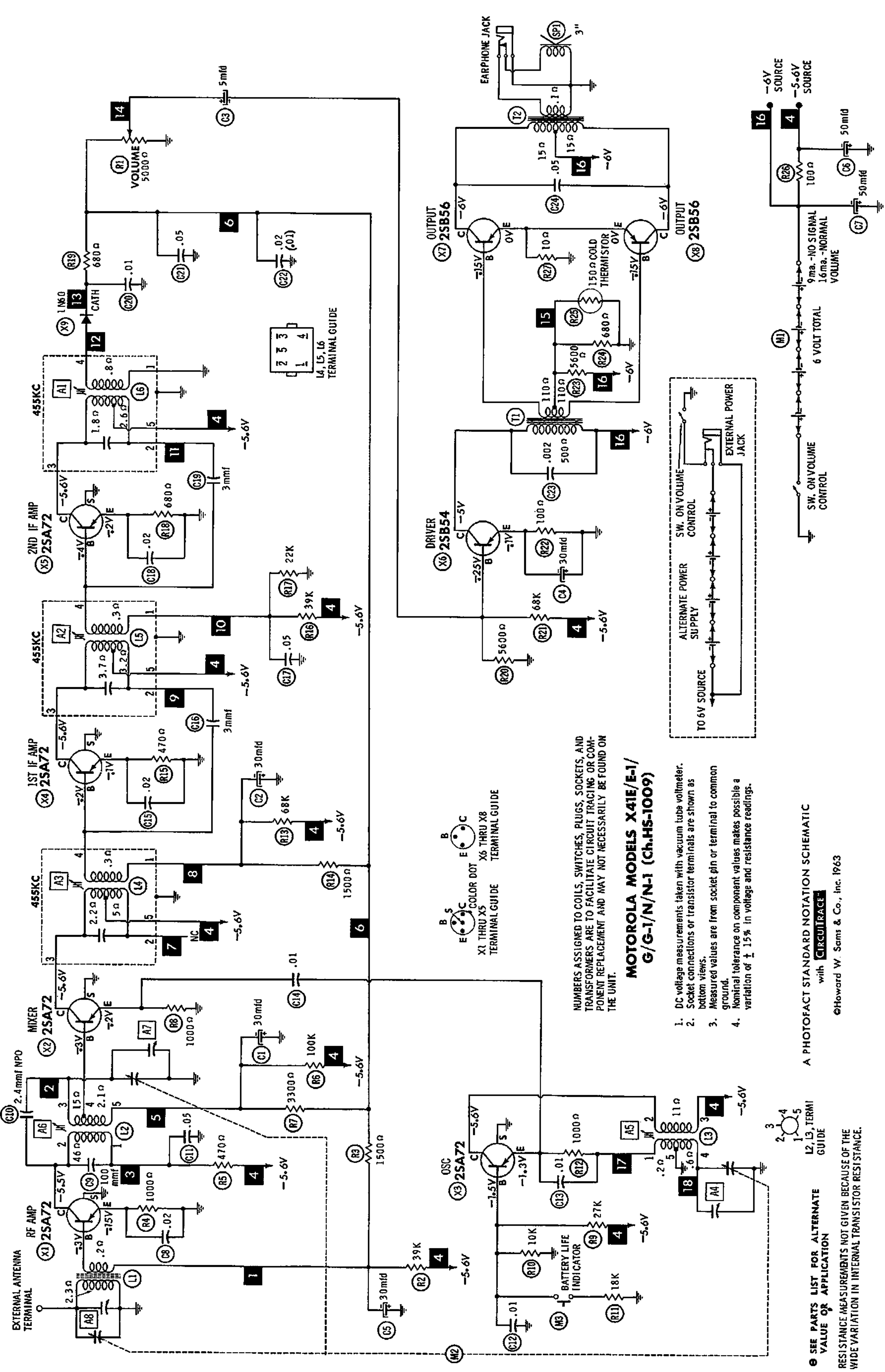
CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Dial Pointer	52B60608A01	Cabinet	Black, Model X41E-1
Dial Crystal	61A61168A01	Cabinet	Green, Model X41G
Knob	36B60578A02	Cabinet	Green, Model X41G-1
Knob	36B60583A02	Cabinet	Brown, Model X41N
Escutcheon	1V60050A11	Cabinet	Brown, Model X41N-1
Cabinet	1V60050A12		

WIRING DATA

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



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.

**MOTOROLA MODELS X41E/E-1/
G/G-1/N/N-1 (Ch.HS-1009)**

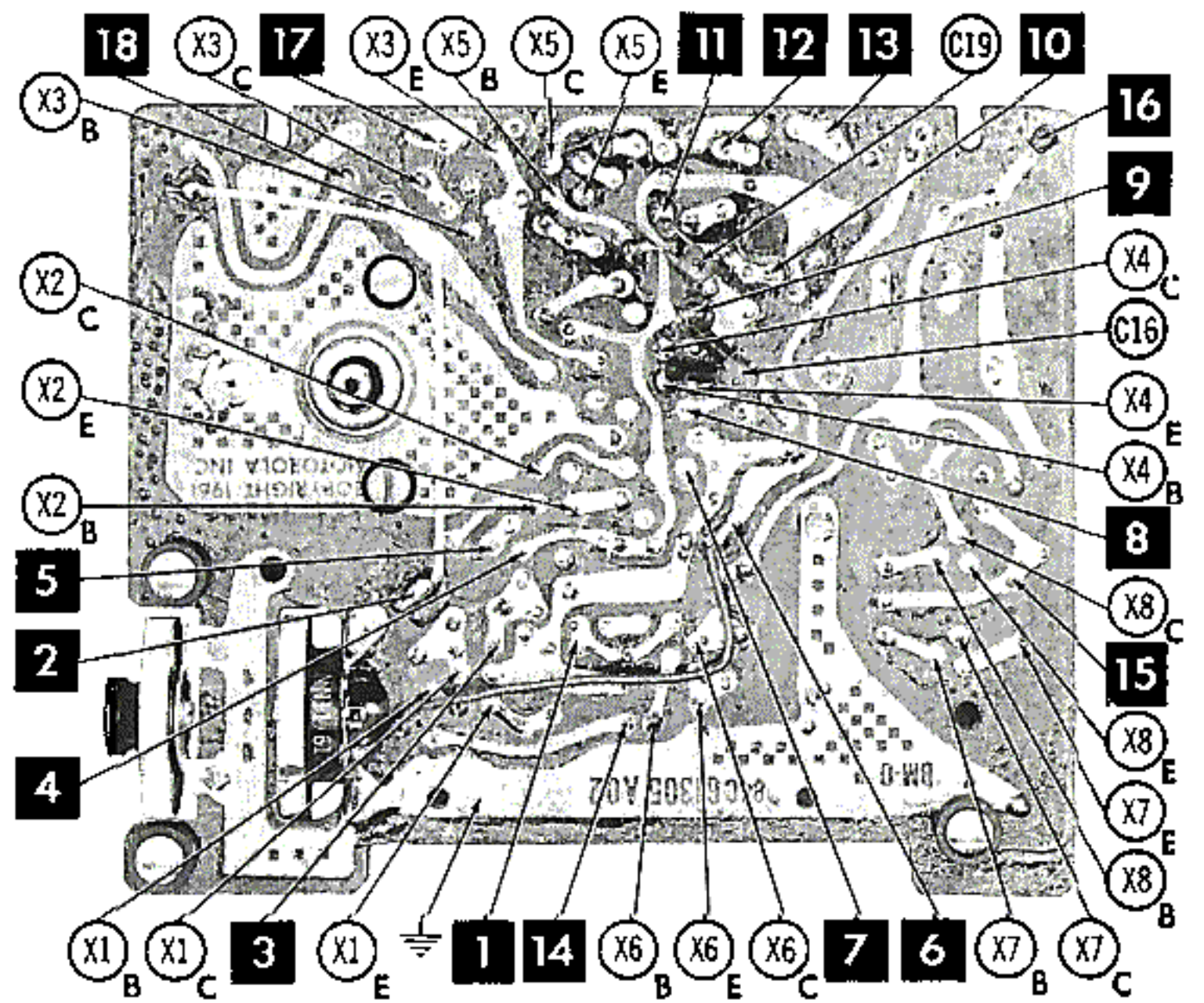
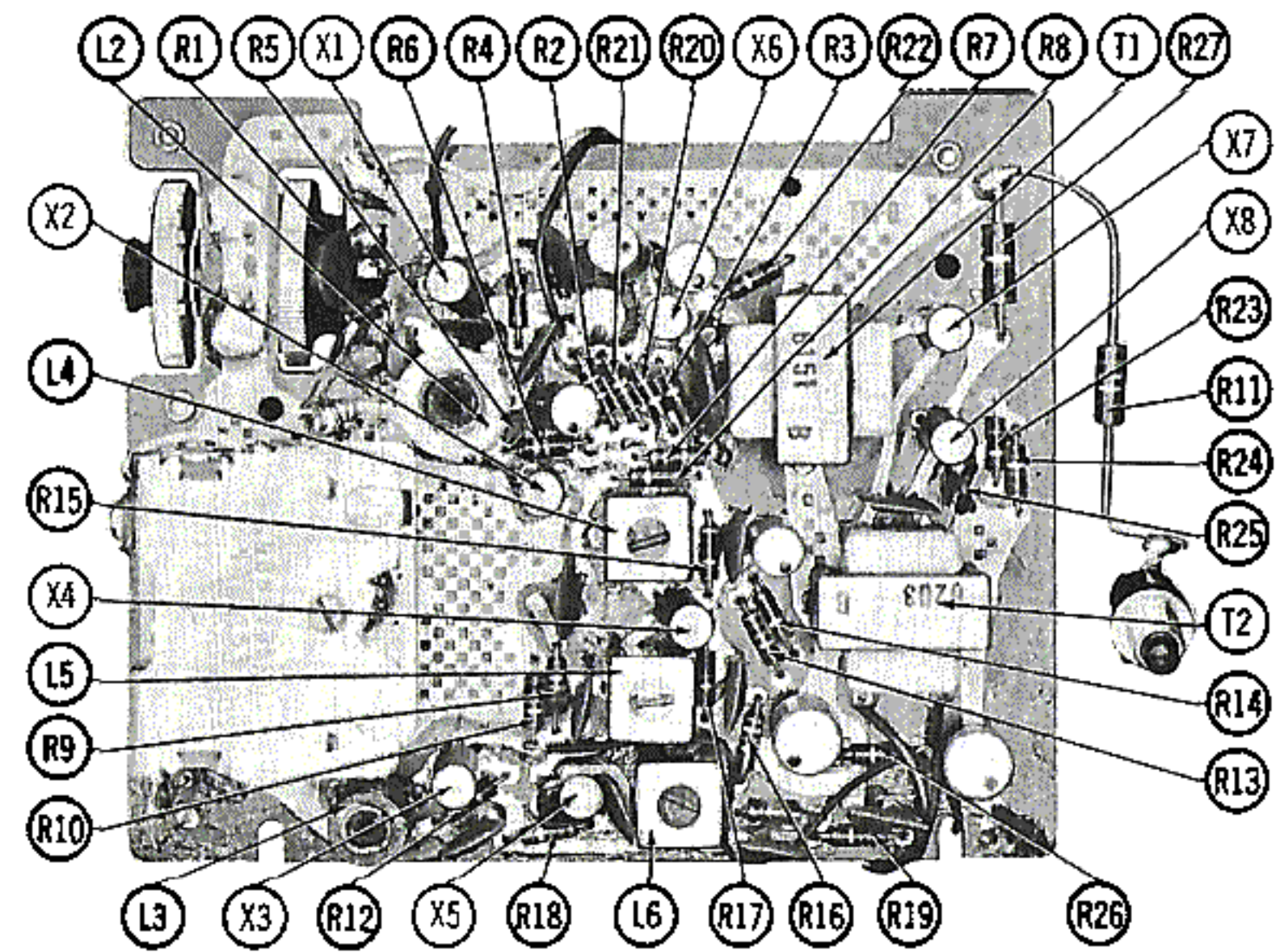
1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections or transistor terminals are shown as bottom views.
3. Measured values are from socket pin or terminal to common ground.
4. Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.

A PHOTOFACT STANDARD NOTATION SCHEMATIC with **CIRCUITACE**

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SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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



E-EMITTER B-BASE C-COLLECTOR