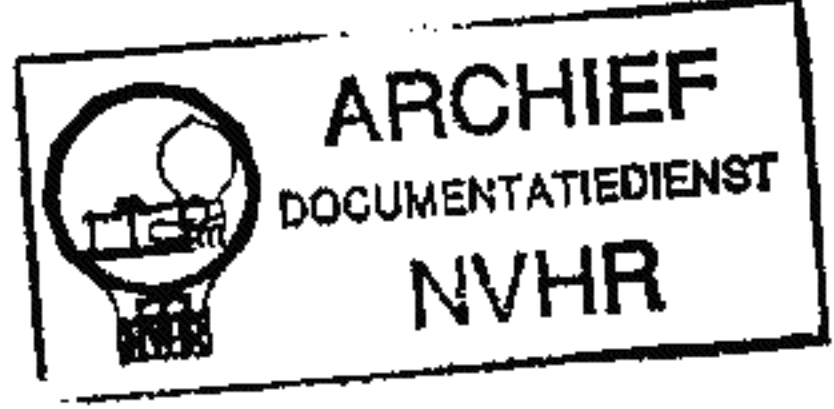




PHOTOFACT®



Met dank aan Jef Bos

TRADE NAME: Motorola Models X49B/E/N, X50B/E/N
Chassis HS-6112

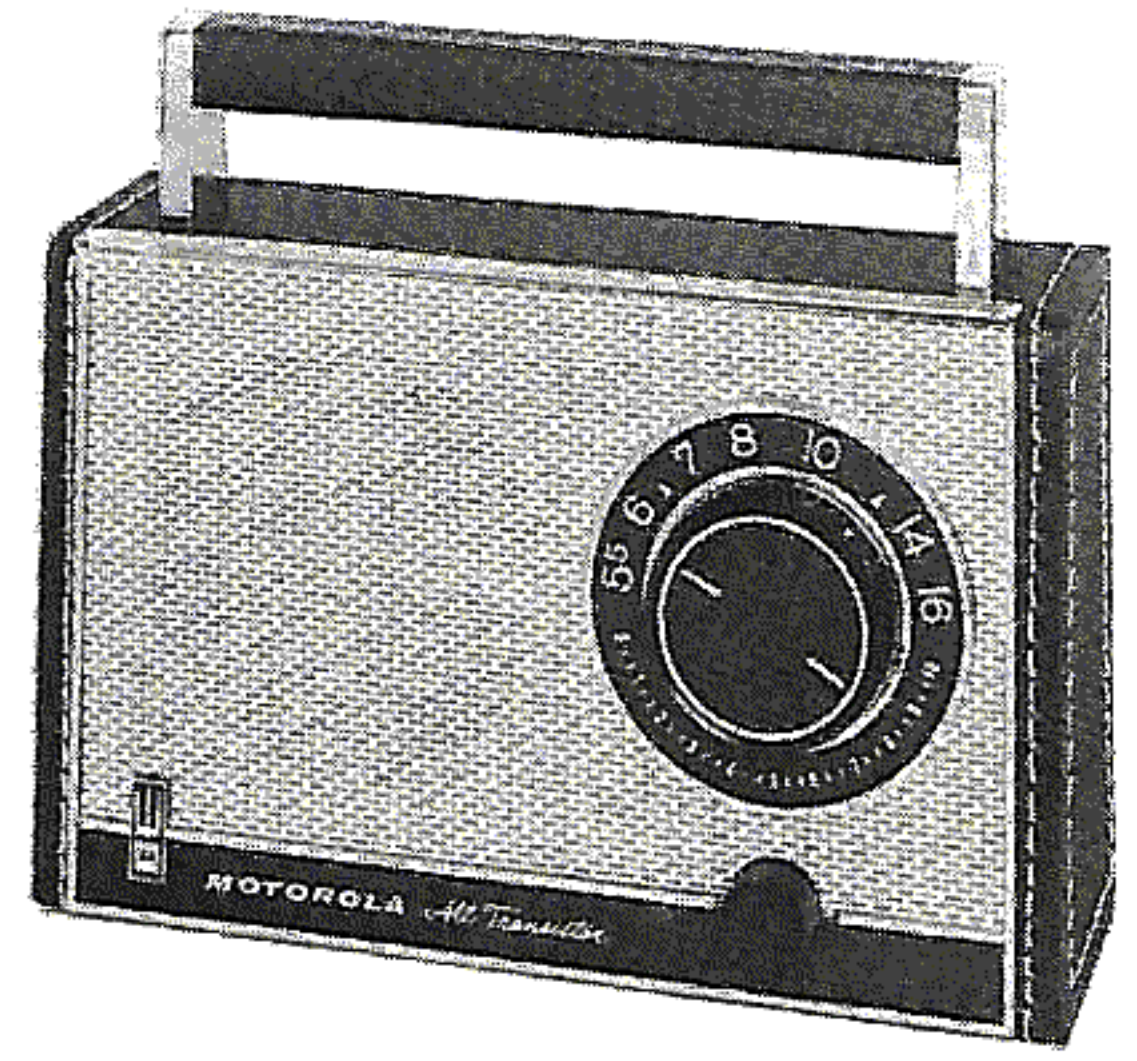
SUPPLIER: Motorola Inc.
9401 W. Grand Ave., Franklin Park, Ill.

TYPE SET: 7 Transistor AM Receiver

POWER SUPPLY: 6 Volts DC

RATING: 10MA @ 6VDC (No Signal, Min. Volume)
20MA @ 6VDC (Signal, Normal Volume)

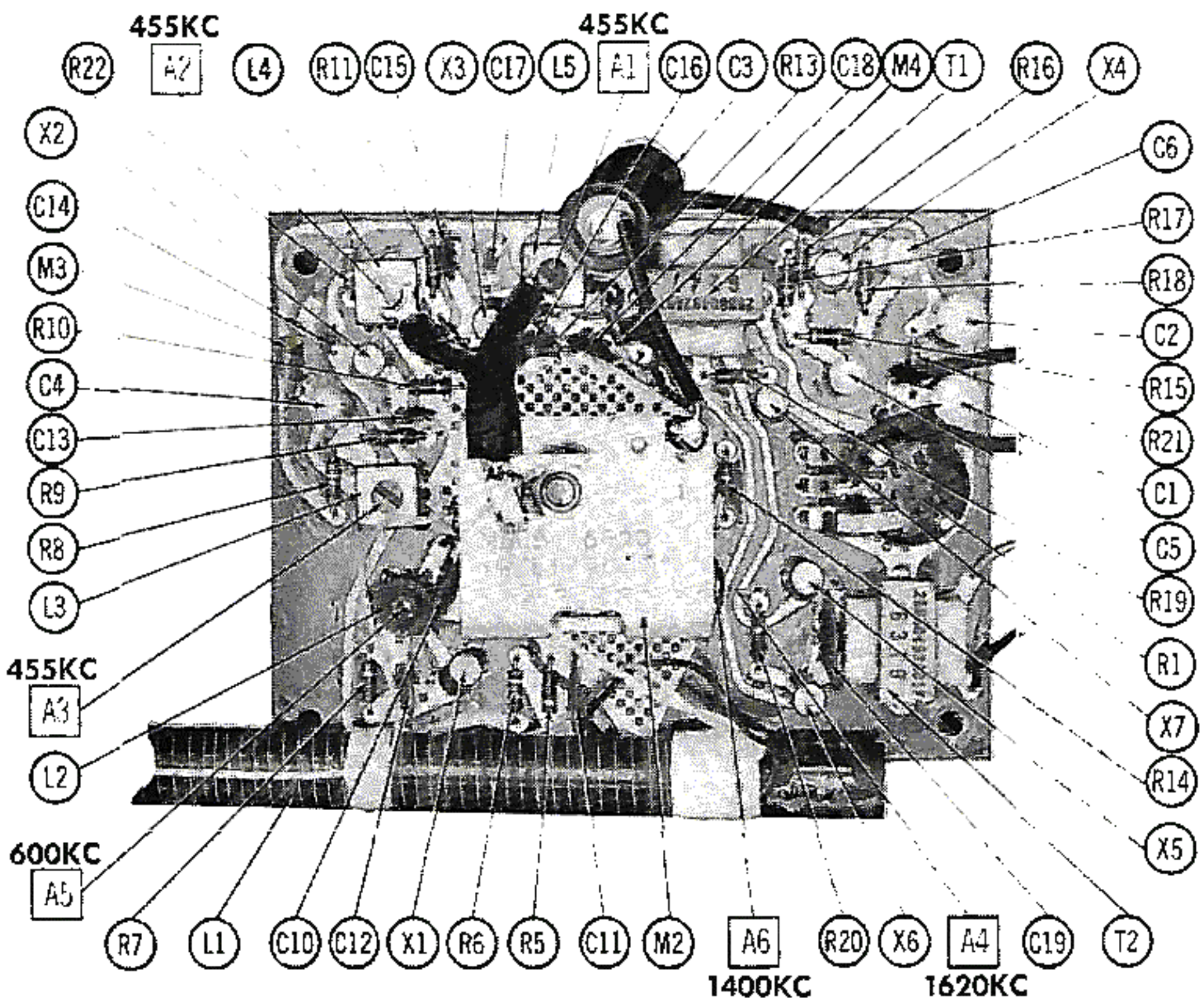
TUNING RANGE: BROADCAST 540-1620KC



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, A4, A6 GENERAL CEMENT #8282, 8606 WALSCO #2526, 2543
A5 GENERAL CEMENT #5000, 5066, 8290 ... WALSCO #2512, 2525, 2528

	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	455KC (400 ν Mpd.)	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	2SA52	Converter	DS-25	GE-1		PNP
X2	2SA53	1st IF Amp.	DS-25	GE-1		PNP
X3	2SA49	2nd IF Amp.	DS-25	GE-1		PNP
X4	2SB54	Driver	DS-26	GE-2	2N406	PNP
X5	2SB56	Output	DS-26	GE-2	2N408	PNP
X6	2SB56	Output	DS-26	GE-2	2N408	PNP
X7	HV15	Bias Reg.			1N2328	PNP

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	MOTOROLA 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	23C80496A04	BCD10050	ECPB415	MT1-16	MLV50-10	PET1575	VL-1134
C2	50	10	23C80496A04	BCD10050	ECPB415	MT1-16	MLV50-10	PET1575	VL-1134
C3	50	10	23K844671	PRS1285	BR50-25	QT1-15	TD-50-25	TC29	TVA1208
C4	30	3	23C80496A02	BCD3025	ECPB412	MT1-13	MLV30-6	PET130	VL-1043
C5	5	6	23C80496A08	BCD6005	ECPB405	MT1-3	MLV5-6	PET1210	VL-1084
C6	30	3	23C80493A02	BCD3025	ECPB412	MT1-13	MLV30-6	PET130	VL-1043

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	15 NPO		NPO-DI 15	DTZ-15	C10Q15C	CCTO-150	CNO-415	10TCC-Q15
C11	.05		TTD-05	CK-503	H5		TA-150	TG-S50
C12	.01		TTD-01	CK-103	H2		TA-110	TG-S10
C13	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C14	7		NPO-DI 6.8	DTZ-6R8	C10V7C	CCTO-6R8	CNO-568	10TCC-V68
C15	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C16	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C17	7		NPO-DI 6.8	DTZ-6R8	C10V7C	CCTO-6R8	CNO-568	10TCC-V68
C18	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C19	.05		TTD-05	CK-503	H5		TA-150	TG-S50

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	18B61051A01				

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	24B61895A01					
L2	Osc.	24K646879					
L3	1st IF	24K646566	BC-574	2066	RTC-9286		
L4	2nd IF	24K646137	BC-573	2067	RTC-9287		
L5	3rd IF	24K646138	BC-576	2068	RTC-9288		

DESCRIPTION

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	72Ω CT	6-8Ω	25B60493A01					

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MOTOROLA PART No.	QUAM PART No.	
SP1	4" PM 6-8Ω	50C61788A01 (50C61788A02)	4A05Z8	

BATTERIES

ITEM No.	VOLTAGE	MOTOROLA PART No.	REPLACEMENT DATA			NOTES
			BURGESS	EVEREADY	MALLORY	
M1	6 V		930 (or AL-9, HG-9)	1016 (or E91, E9)	M-15R (or MN1500, ZM-9)	4 Required

MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M2	Tuning Cap.	19B61796A01	
M3	Overload (1N60)	48K644681	
M4	Detector (1N60)	48K644681	

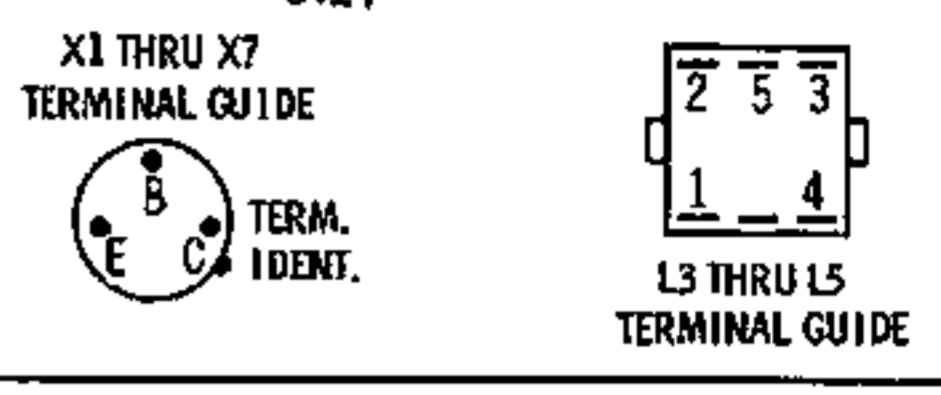
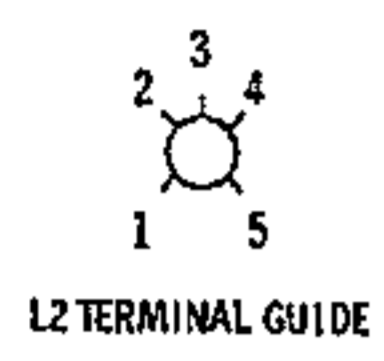
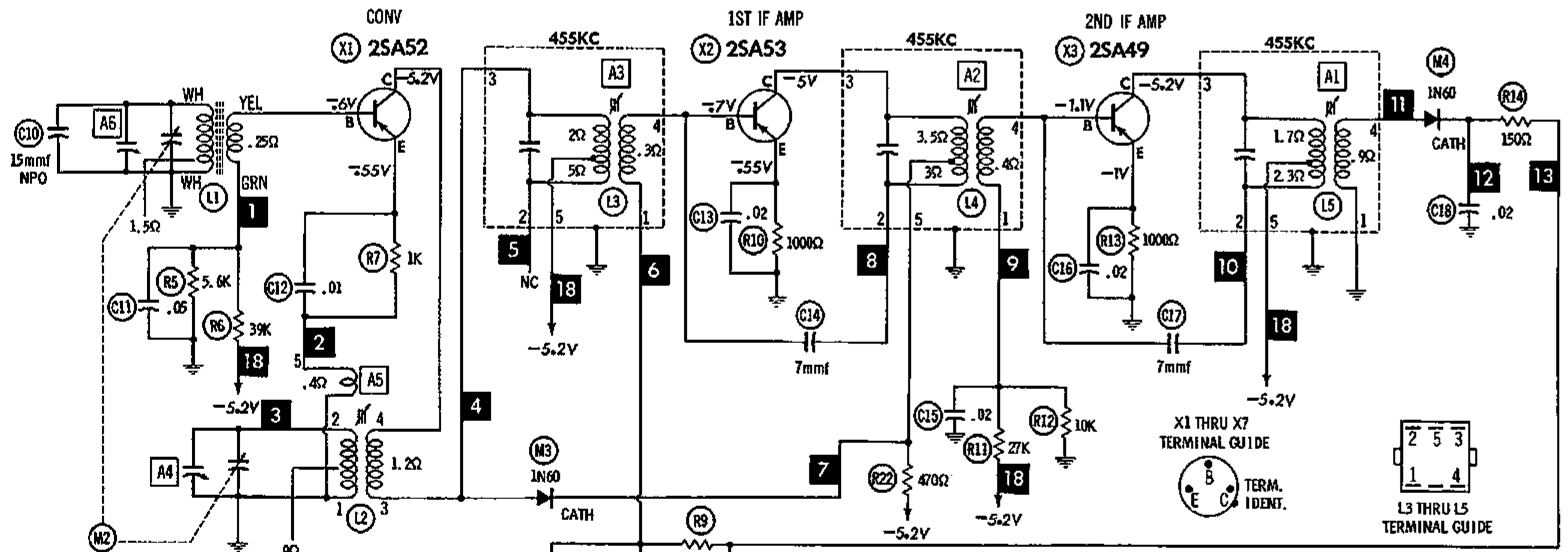
CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

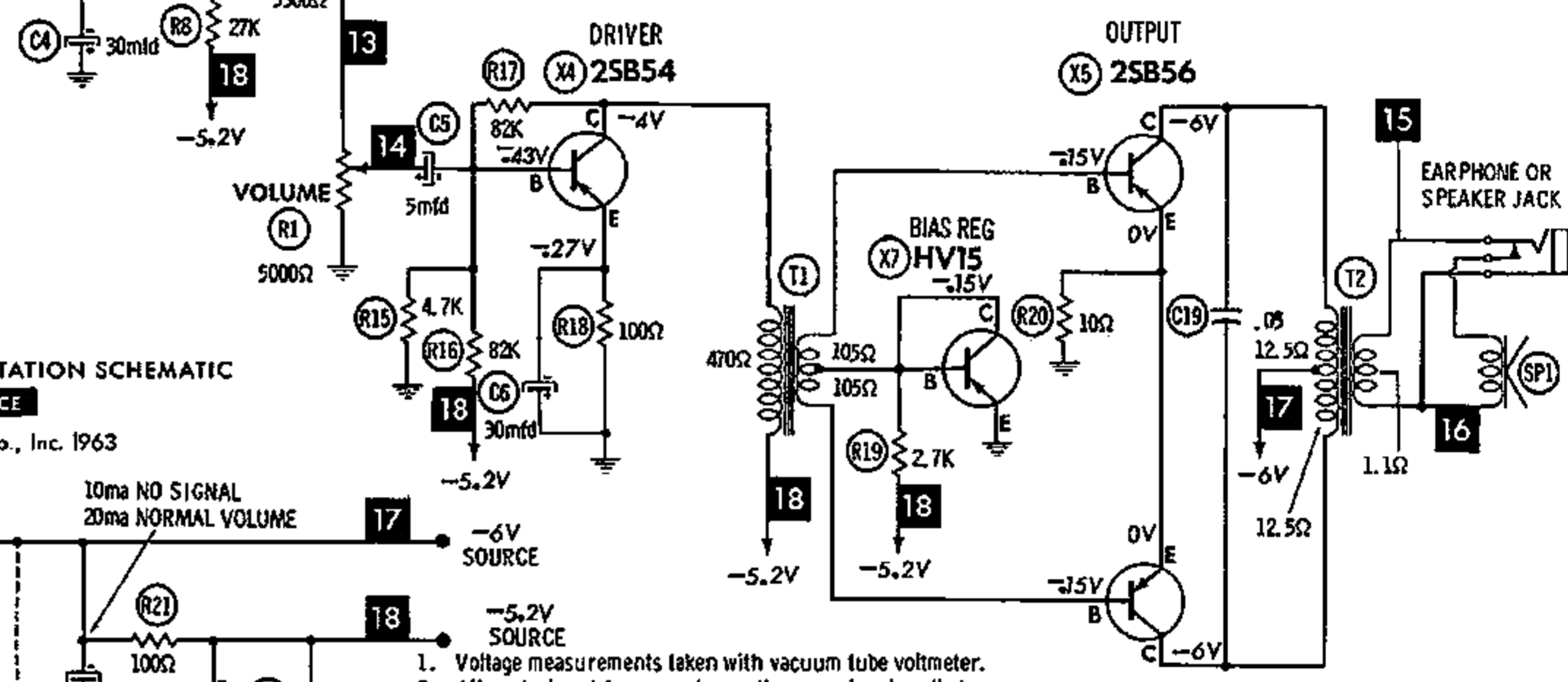
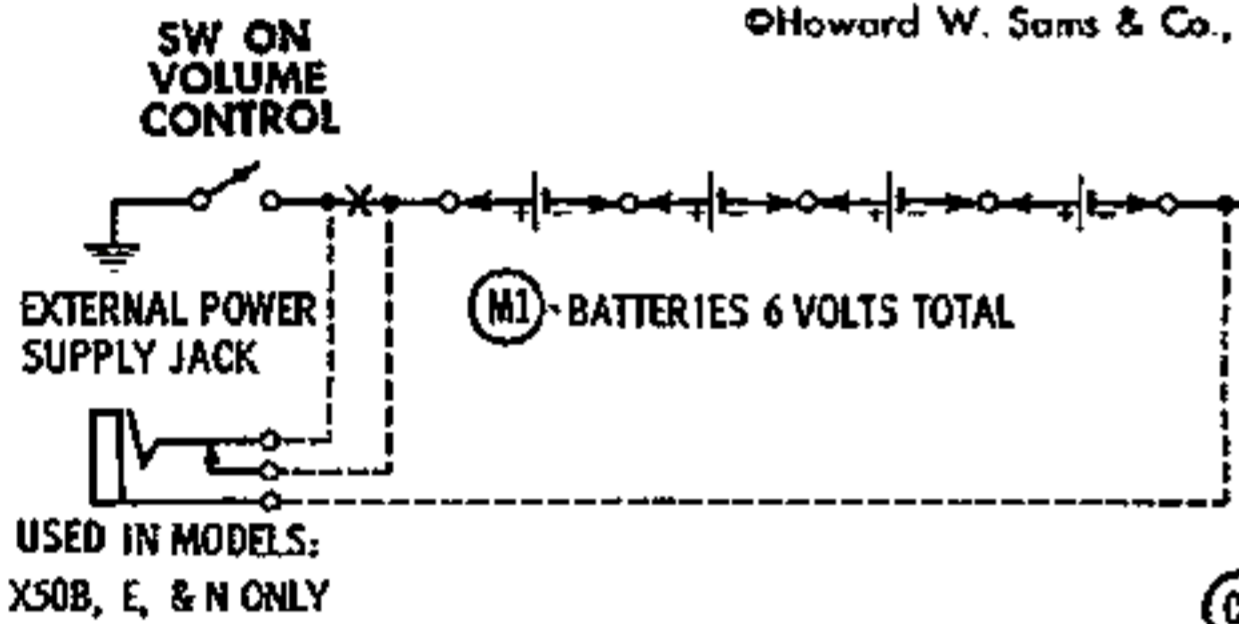
ITEM	PART No.	ITEM	PART No.
KNOB, Tuning, Models X49N, X50N	36C61786A01	CABINET, Blue, Model X49B	16D61788A03
Tuning, Models X49B, X50B	36C61786A02	Blue, Model X50B	16D61788A05
Tuning, Models X49E, X50E	36C61786A03	Black, Model X49E	16D61788A04
Volume, Models X49N, X50N	36B61783A01	Black, Model X50E	16D61788A06
Volume, Models X49B, X50B	36B61783A02	ESCUTCHEON, Brown, Models X49N, X50N	13D61787A01
Volume, Models X49E, X50E	36B61783A03	Blue, Models X49B, X50B	13D61787A02
CABINET, Brown, Model X49N	16D61788A01	Black, Models X49E, X50E	13D61787A03
Brown, Model X50N	16D61788A02	POWER SUPPLY, External, Model X50	1V60069A09
		Series only	

WIRING DATA

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



A PHOTOFACIT STANDARD NOTATION SCHEMATIC
with CIRCUITRACE
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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.

MOTOROLA (Ch. HS-6112)
MODELS X49B/E/N, X50B/E/N

