

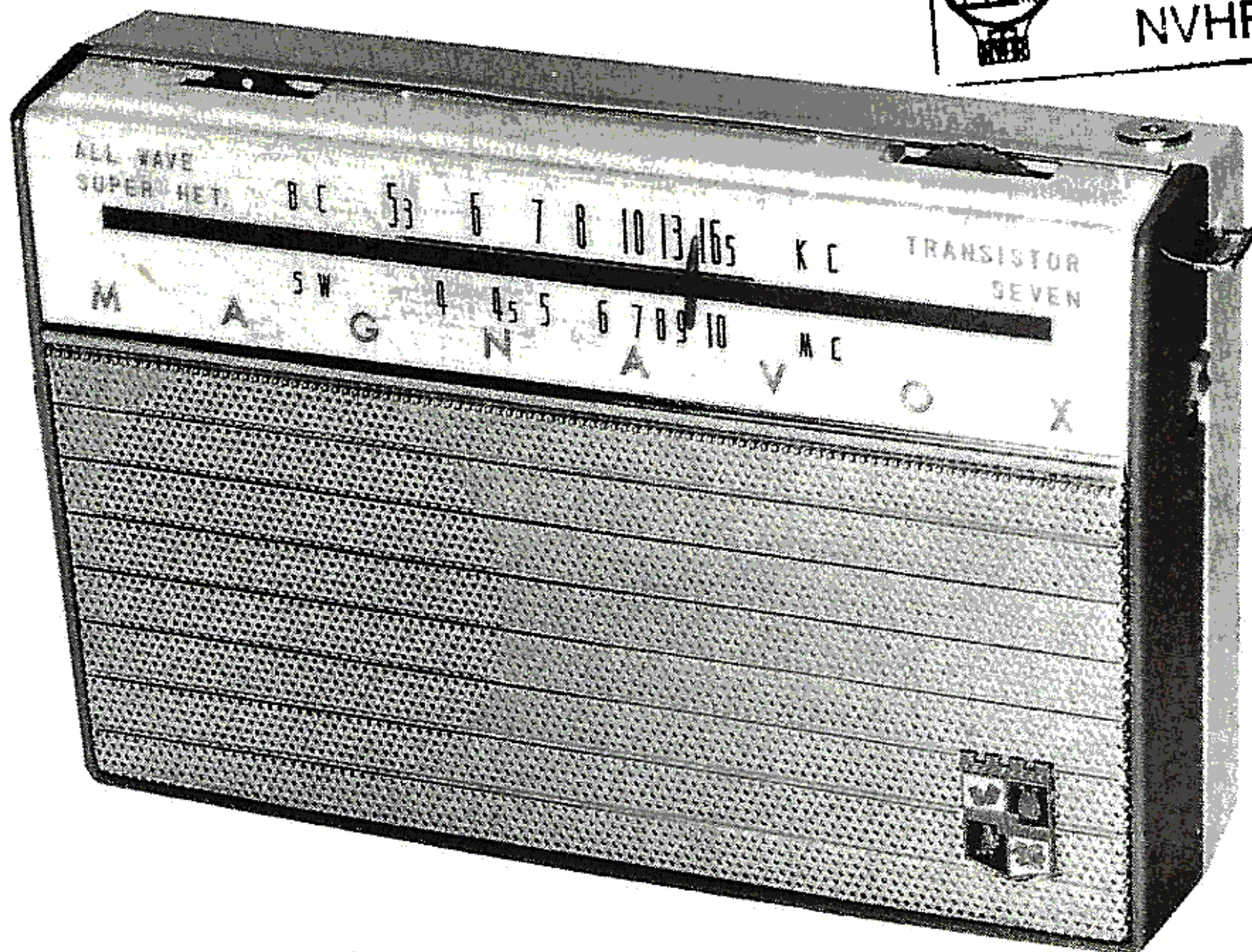
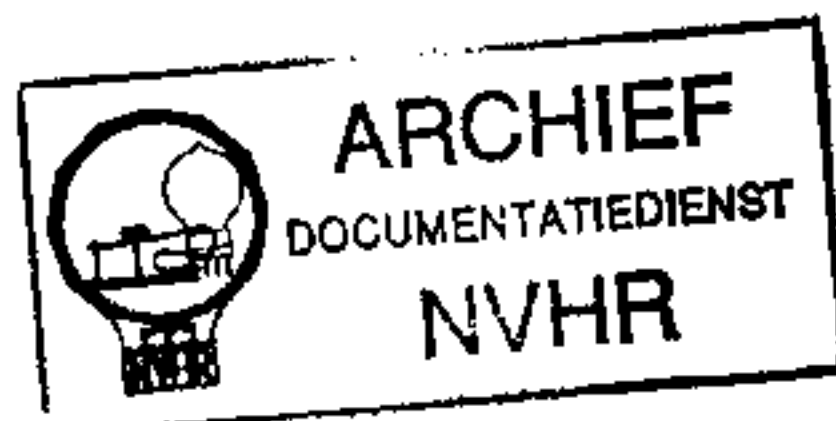
PHOTOFACT® Folder

with CIRCUITRACE®

MAGNAVOX
MODEL AW-24

Ned. Ver. v. Historie v/d Radio

Met dank aan Jef Bos



TRADE NAME	Magnavox Model AW-24		
MANUFACTURER	The Magnavox Co., 2131 Bueter Road, Fort Wayne 4, Indiana		
TYPE SET	Battery Operated Transistorized Portable BC-SW Receiver		
POWER SUPPLY	6 Volts DC	RATING	10MA @ 6 Volts DC (No Signal, Min. Volume) 20MA @ 6 Volts DC (Signal, Normal Volume)
TUNING RANGE	BROADCAST 535-1650KC	SHORT WAVE	3.8-10.5MC

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, A6, A7 GENERAL CEMENT #5004, 5008, 5009
WALSCO #2520

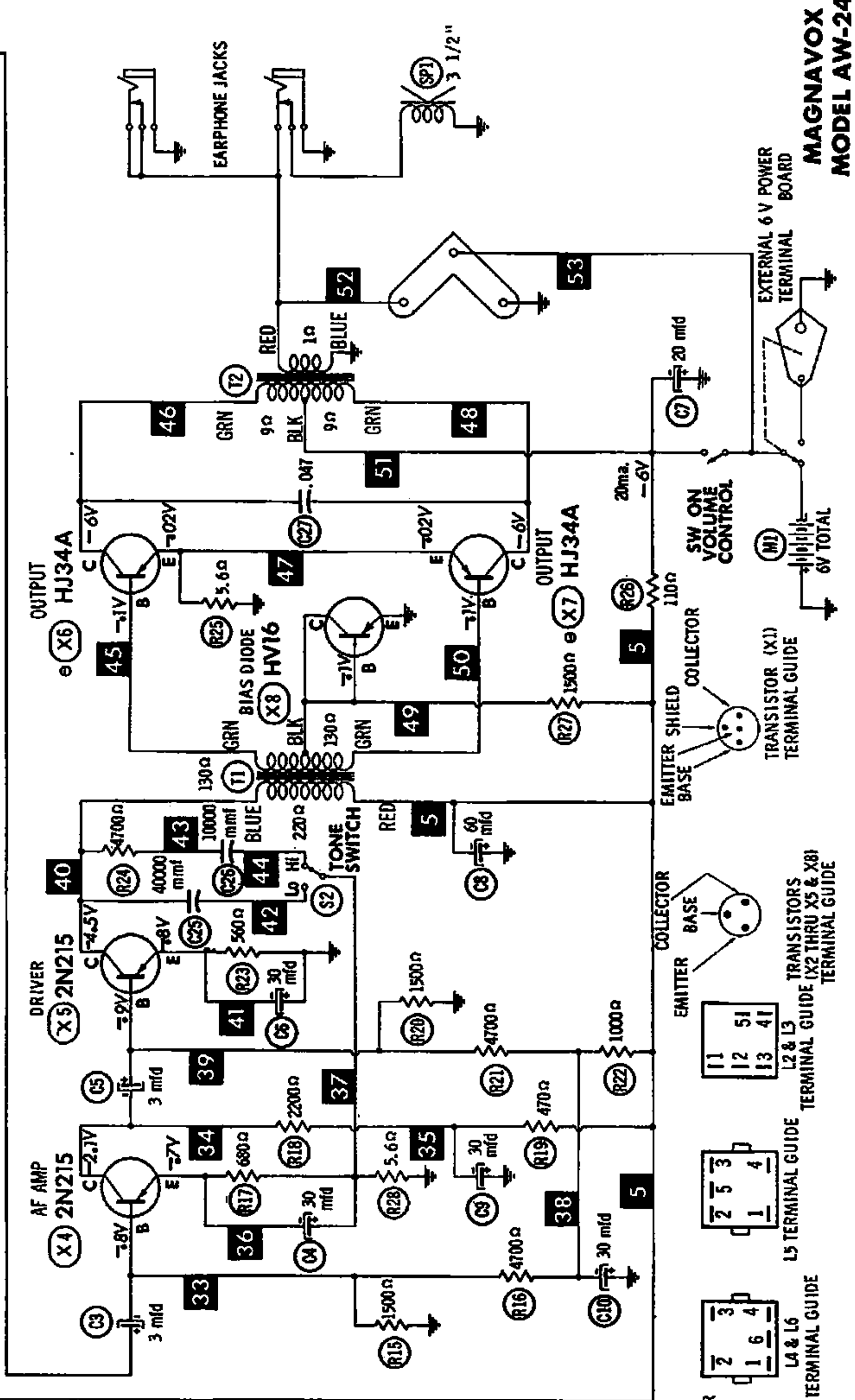
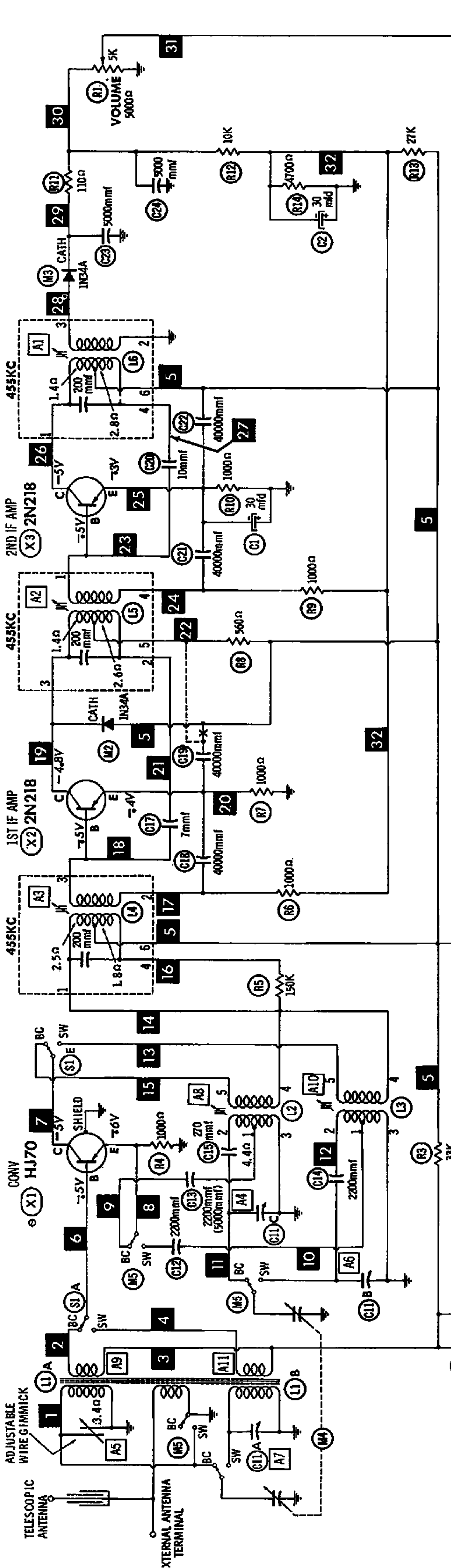
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	High side thru .01mfd to base of Converter. Low side to chassis.	455KC (400% Mod.)	(BC) Tuning gang fully open.	Across Voice Coil	A1, A2, A3	Adjust for maximum output.
2.	High side thru 270Ω to external antenna terminal. Low side to chassis.	1400KC	(BC) 1400KC	"	A4, A5	"
3.	"	9MC	(SW) 9MC	"	A6, A7	"
4.	"	600KC	(BC) 600KC	"	A8, A9	"
5.	"	4.2MC	(SW) 4.2MC	"	A10, A11	Adjust for maximum output. Repeat steps 2 thru 5.

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

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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.

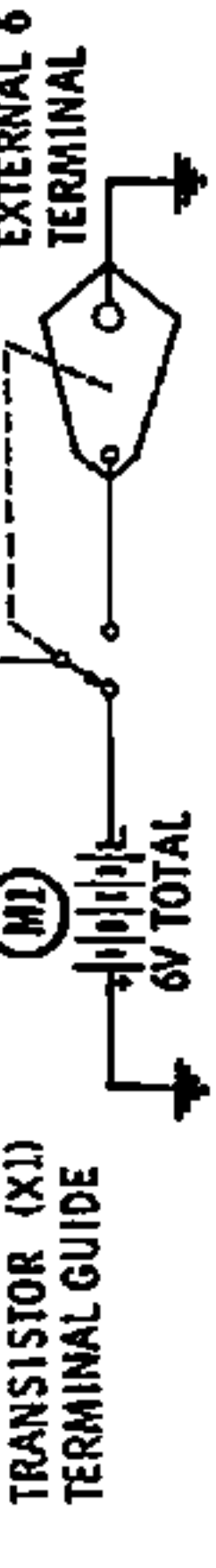
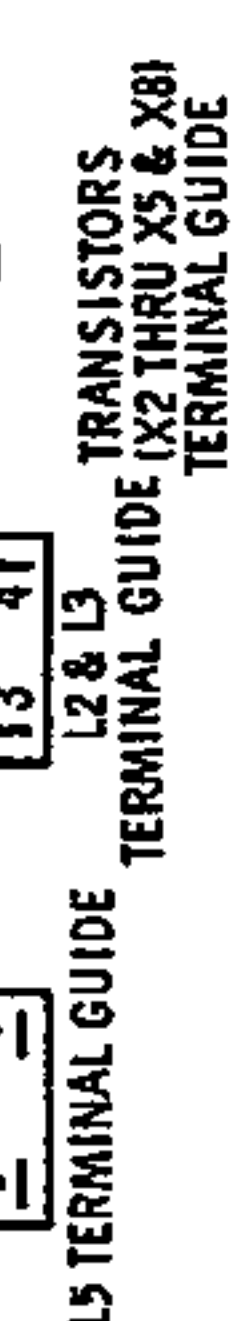
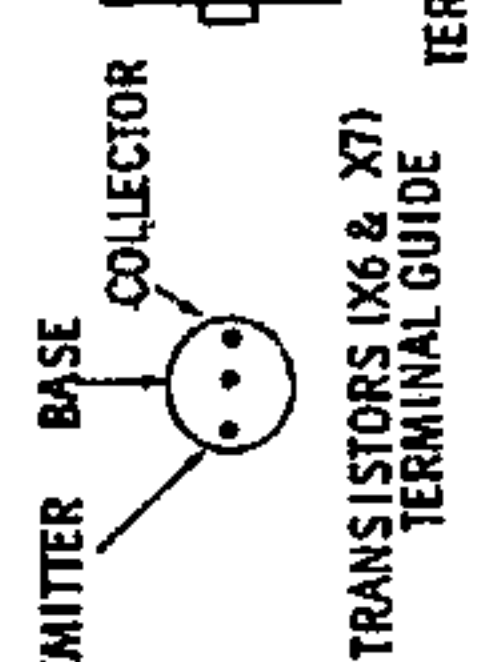
NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

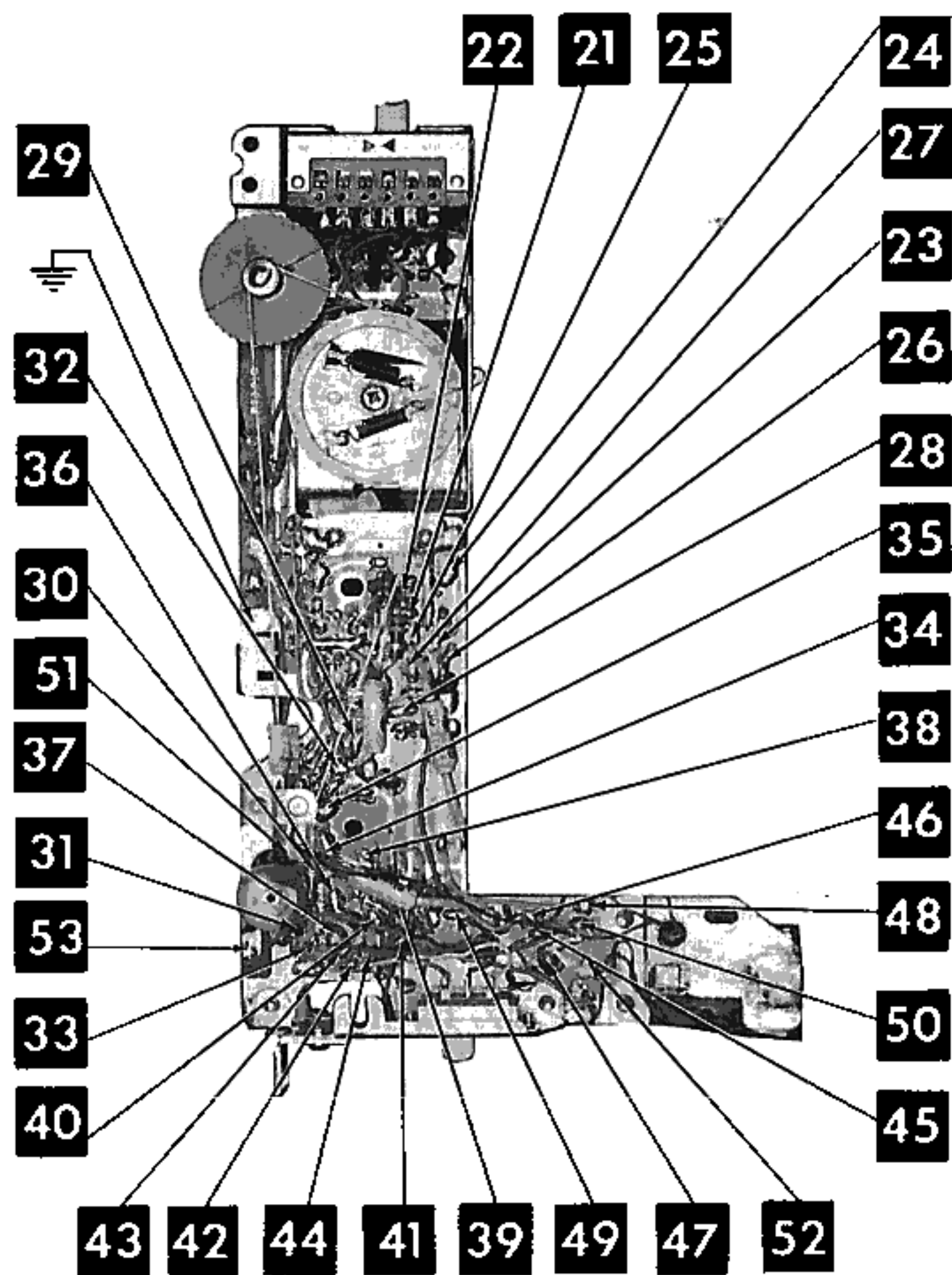
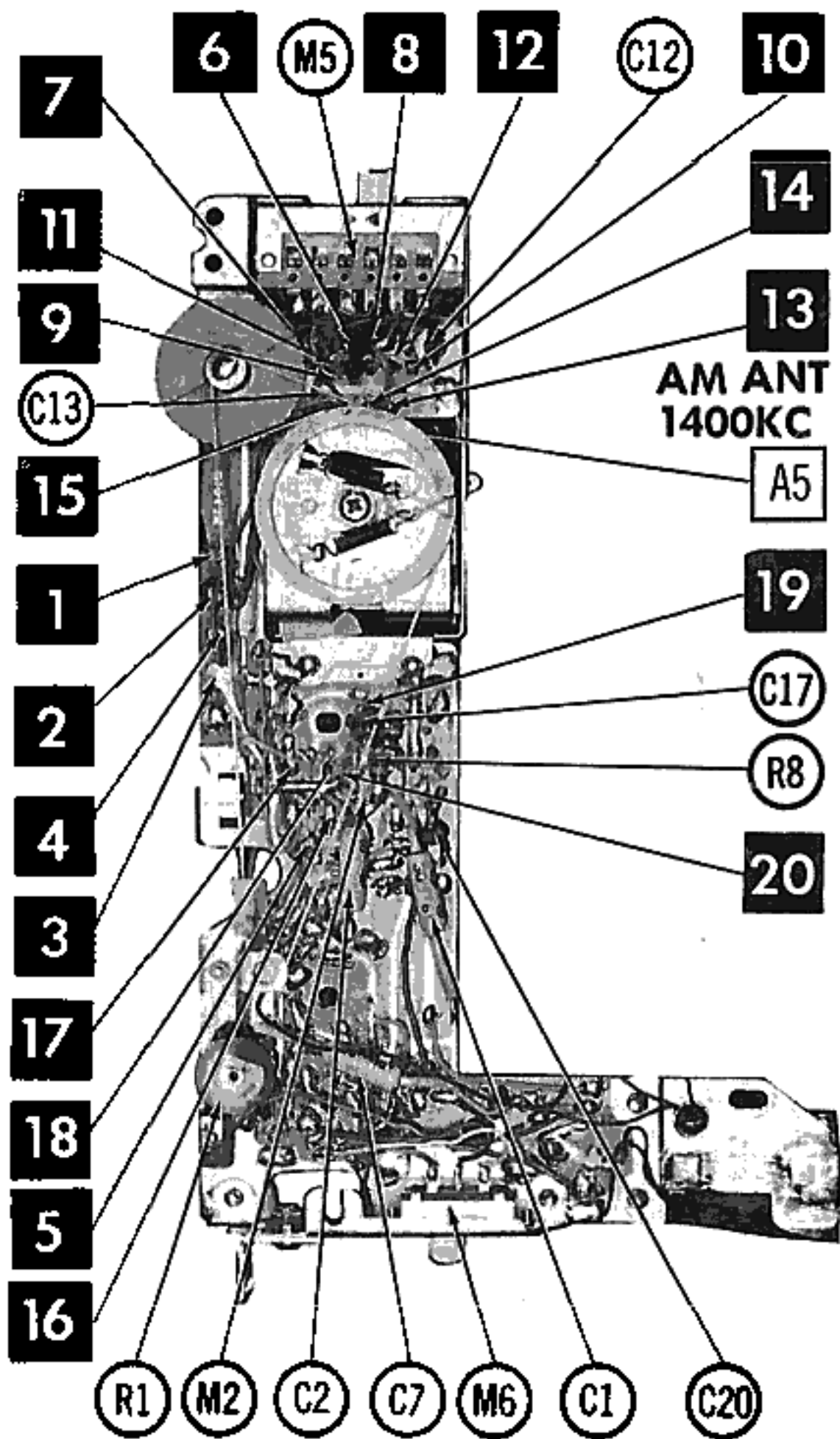
SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

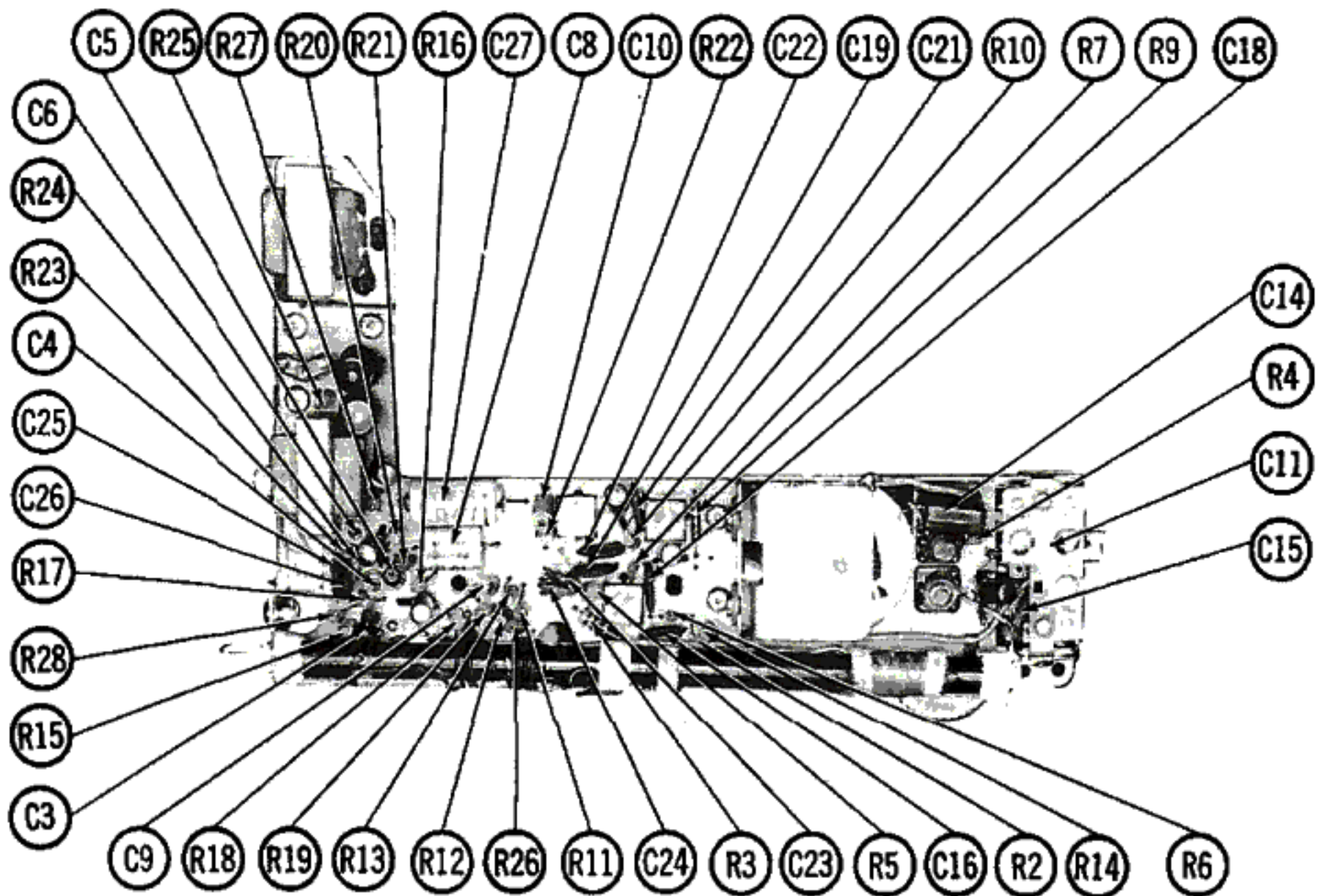
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

A PHOTOFAC STANDARD NOTATION SCHEMATIC with CIRCUITTRACE

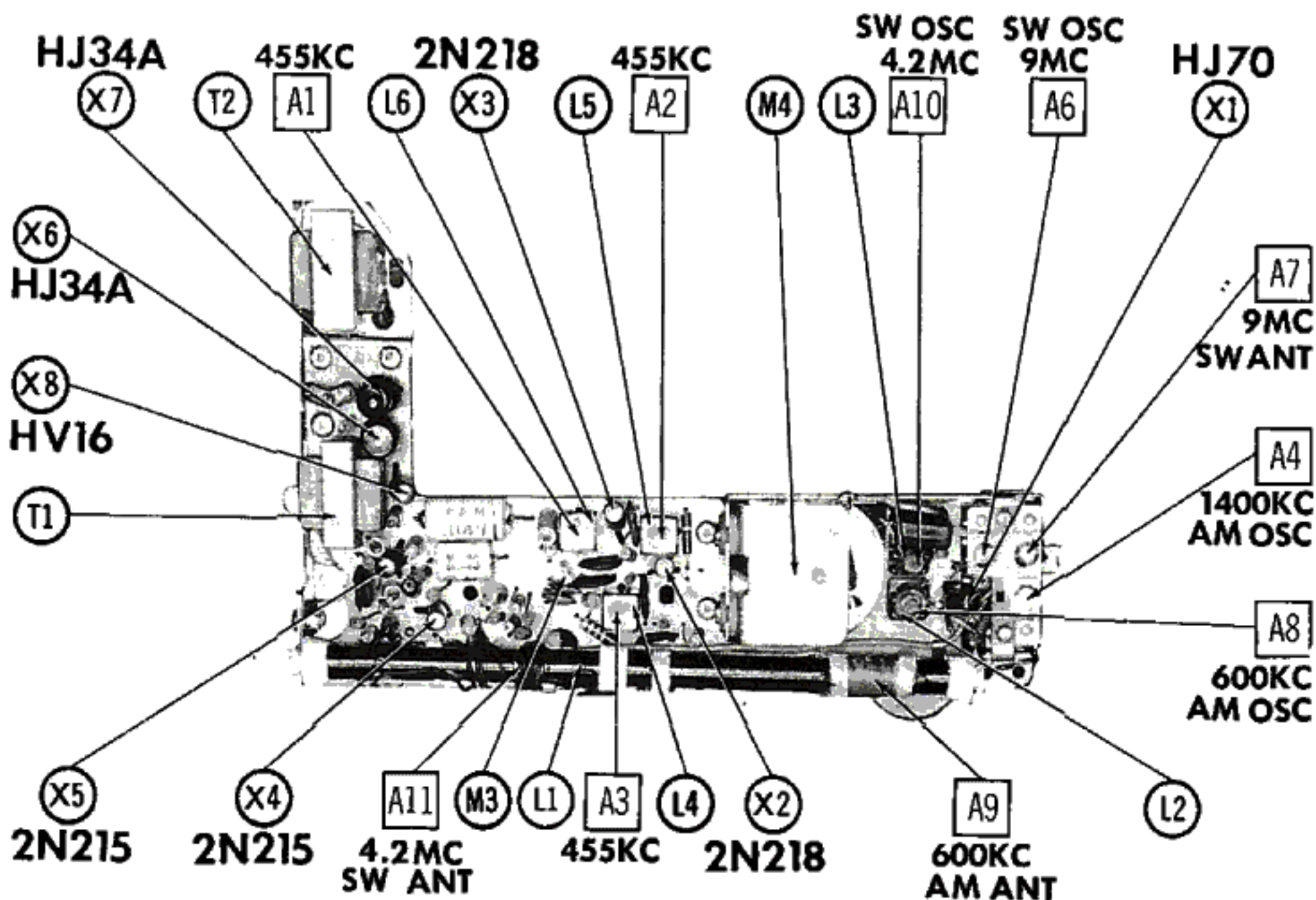
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CHASSIS TOP VIEW



CHASSIS TOP VIEW

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	HJ-70 *	Converter	2N370		2N370	PNP
X2	2N218	1st IF Amplifier	2N218	2N483	2N218	PNP
X3	2N218	2nd IF Amplifier	2N218	2N483	2N218	PNP
X4	2N215	AF Amplifier	2N407	2N362	2N104	PNP
X5	2N215	Driver	2N407	2N362	2N104	PNP
X6	HJ-34A †	Output	2N270	2N361	2N270	PNP
X7	HJ-34A †	Output	2N270	2N361	2N270	PNP
X8	HV-16	Bias Diode	1N2326	CK879		

* Alternate Type 2N370.

† Alternate Type 2N270.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	MAGNAVOX PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	30	6	270044-1	XPP-6030	NLW30-6	TT6X30	ML30-6	TE-1092	
C2	30	6	270044-1	XPP-6030	NLW30-6	TT6X30	ML30-6	TE-1092	
C3	3	6	270045-1	XPP-6003	NLW3-6	TT6X3	ML4-6	TE-1082	
C4	30	6	270044-1	XPP-6030	NLW30-6	TT6X30	ML30-6	TE-1092	
C5	3	6	270045-1	XPP-6003	NLW3-6	TT6X3	ML4-6	TE-1082	
C6	30	6	270044-1	XPP-6030	NLW30-6	TT6X30	ML30-6	TE-1092	
C7	20	10	270047-1	XPP-10020	NLW20-15	TT15X20	ML20-15	TE-1130	
C8	60	10	270046-1	XPP-10050	NLW50-10	TT10X60	ML50-15	TE-1133	
C9	30	6	270044-1	XPP-6030	NLW30-6	TT6X30	ML30-6	TE-1092	
C10	30	6	270044-1	XPP-6030	NLW30-6	TT6X30	ML30-6	TE-1092	

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.	
C1A B C		} #260156-1 (5000) † #280341-1							
C12	2200		BPD-0022	DD-222	BYA10D22	CCD-222	GP222	10TS-D22	
C13	2200		BPD-0022	DD-222	BYA10D22	CCD-222	GP222	10TS-D22	
C14	2200		1467-0022		1W5D22	CM-20D-222M	MCE459	1FM-222	
C15	270		SI 270		L10T27	CCD-271	GP327	10TS-T27	
C16	40000				DD-403	BYB6S4	GP140	10TS-S40	
C17	7			NPO-SI 6.8	TCZ-6R8	L10V68	CCTO-6R8	GP568	10TS-V68
C18	40000				DD-403	BYB6S4	GP140	10TS-S40	
C19	40000				DD-403	BYB6S4	GP140	10TS-S40	
C20	10			SI 10	D6-100	L10Q1	CCD-100	GP410	10TS-Q10
C21	40000				DD-403	BYB6S4		GP140	10TS-S40

ND DESCRIPTIONS

FIXED CAPACITORS (cont)

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.
C22	40000			DD-403	BYB6S4		GP140	10TS-S40
C23	5000		BPD-005	DD-502	BYA10D5	CCD-502	GP250	10TS-D50
C24	5000		BPD-005	DD-502	BYA10D5	CCD-502	GP250	10TS-D50
C25	40000			DD-403	BYB6S4		GP140	10TS-S40
C26	10000		BPD-01	DD-103	BYA10S1	CCD-103	GP110	10TS-S10
C27	.047 400V		V84C4S47	DD-503	WMF4S47E	4DP-3-473	GEM-4147	4TM-S47

† Alternate Value.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES	
	RESISTANCE	WATTS	MAGNAVOX PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.		MALLORY PART No.
R1	5000Ω	1/10	220160-1					Volume and Switch.

RESISTORS (IRC or EQUIVALENT)

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

ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R2	4700Ω		R11	110Ω		R20	1500Ω	
R3	33K		R12	10K		R21	4700Ω	
R4	1000Ω		R13	27K		R22	1000Ω	
R5	150K		R14	4700Ω		R23	560Ω	
R6	1000Ω		R15	1500Ω		R24	4700Ω	
R7	1000Ω		R16	4700Ω		R25	5.6Ω	
R8	560Ω		R17	680Ω		R26	110Ω	
R9	1000Ω		R18	2200Ω		R27	1500Ω	
R10	1000Ω		R19	470Ω		R28	5.6Ω	

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			NOTES
		MAGNAVOX PART No.	Merit PART No.	Miller PART No.	
L1A B	BC Loopstick SW Loopstick	360822-1			
L2	BC Osc. Coil	360824-1			
L3	SW Osc. Coil	360823-1			
L4	1st IF Trans.	360819-1			
L5	2nd IF Trans.	360820-1			
L6	3rd IF Trans.	360821-1			

PARTS LIST AND DESCRIPTIONS

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			MAGNAVOX PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.						
T1	2	1	320086-1					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			MAGNAVOX PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.						
T2	340Ω CT	8-10Ω	320087-1					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				MAGNAVOX PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	3½"	PM	8-10Ω	680061-1	3A07Z9	

BATTERIES

ITEM No.	VOLTAGE	MAGNAVOX PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1½V			230 *		A100 *		M-13R *	* 4 Required

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		MAGNAVOX PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2 M3	1N34A 1N34A		1N34A 1N34A	1N34A 1N34A	Overload & AVC (Pigtail) Detector (Pigtail)

MISCELLANEOUS

ITEM No.	PART NAME	MAGNAVOX PART No.	NOTES
M4 M5 M6	Tuning Cap. Switch Switch Antenna Printed Board	260155-1 160329-1 160330-1 700851-1 210082-1	2 Gang Band Selector (Slide Type) Tone (DPDT Slide Type) Telescoping Less All Components

DESCRIPTIONS (Continued)

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Dial Scale	140385-1	
Knob	140383-1	Tuning
Knob	140384-1	Volume
Cabinet	140386-1	With Back
Back	140407-1	Cabinet
Case	400300-1	Leather, Carrying

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

TUNING GANG CLOSED

