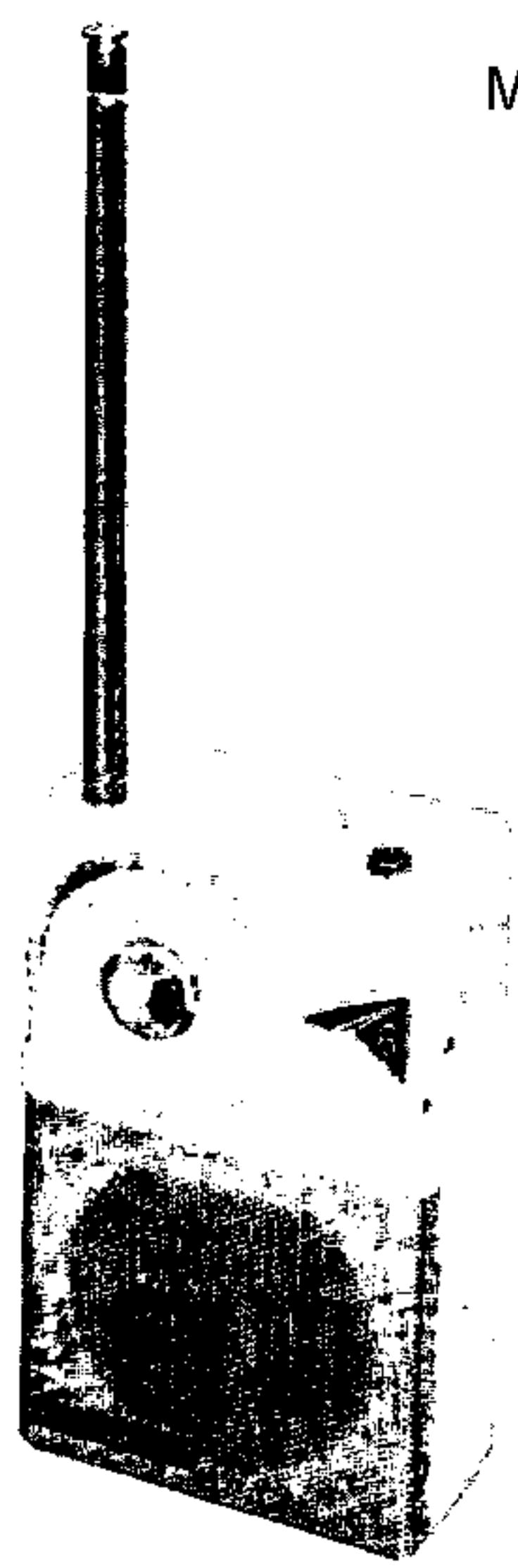
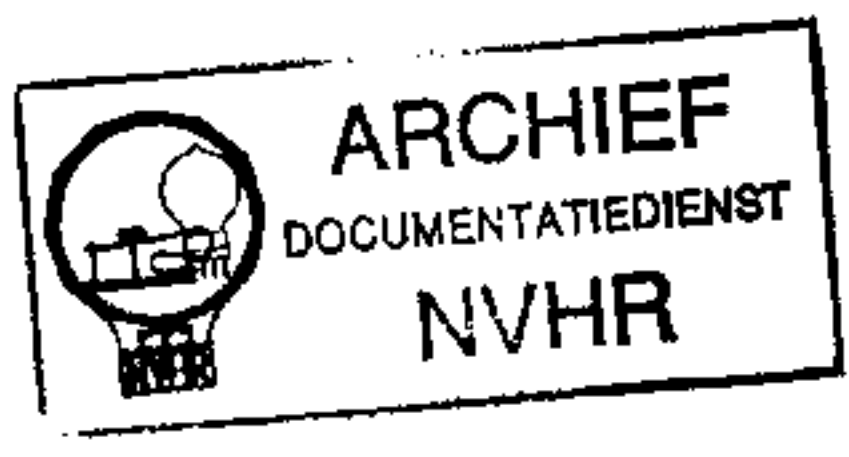




Ned. Ver. v. Historie v/d Radio

Met dank aan Jef Bos



TRADE NAME	Magnavox Model AM-23		
MANUFACTURER	The Magnavox Co., 2131 Bueter Road, Fort Wayne 4, Indiana		
TYPE SET	Battery Operated Transistorized Portable AM Receiver		
POWER SUPPLY	9 Volts DC	RATING	5MA@9 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	540 — 1600KC		15MA@9 Volts DC (Signal, Normal Volume)

## 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.

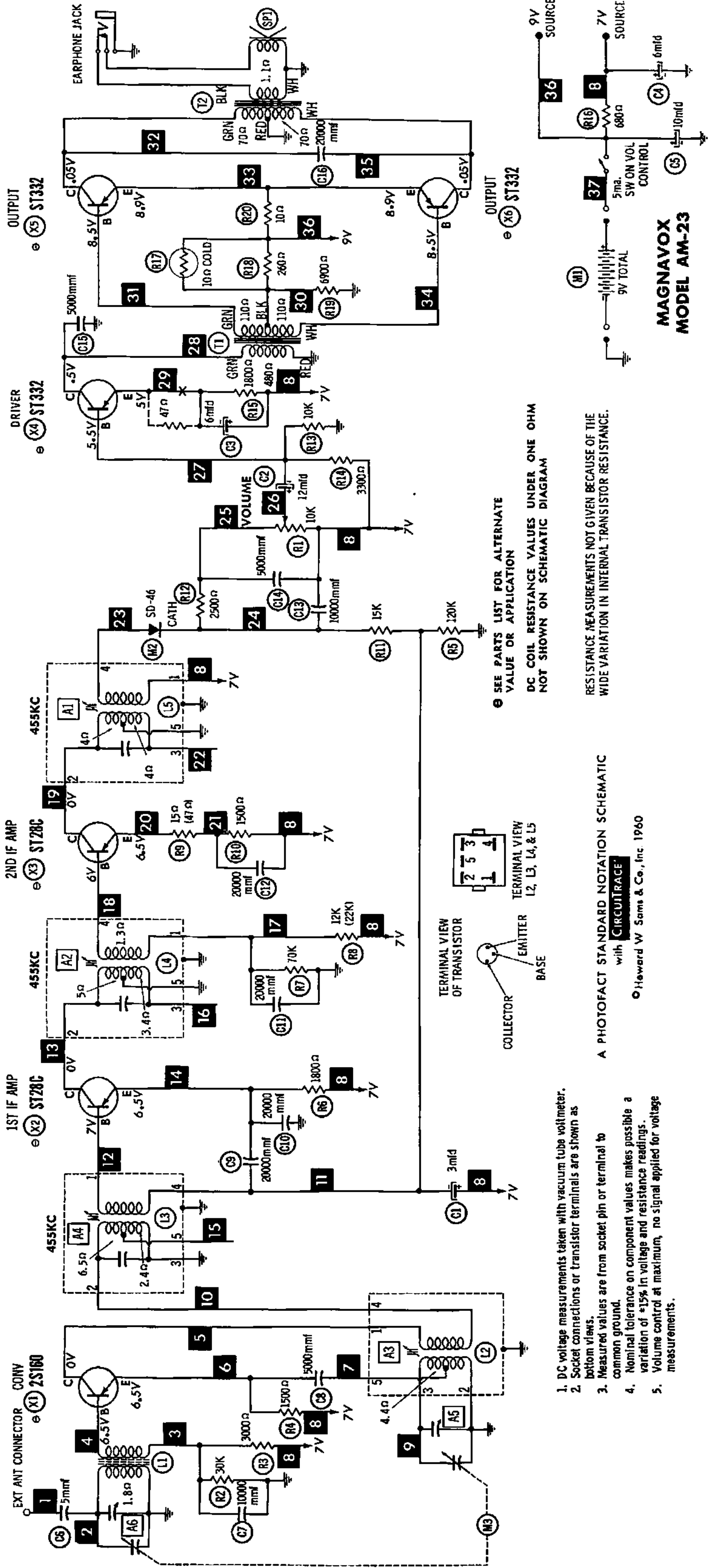
Suggested Alignment Tools: A1, A2, A3, A4... GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989  
 WALSCO #2515, 2531, 2532  
 A5, A6.....GENERAL CEMENT #5000, 5003, 5066, 8271, 8272, 8276, 8277, 8290, 8609,  
 8722, 9150, 9298  
 WALSCO #2515, 2516, 2518, 2519, 2525, 2541

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Loop	455KC (400% Mod.)	Tuning gang fully open.	Across voice coll.	A1, A2	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2.	"	535KC	Tuning gang fully closed.	"	A3, A4	"
3.	"	1600KC	1600KC	"	A5, A6	Adjust for maximum output. Repeat Step 2.

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

The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of KF160

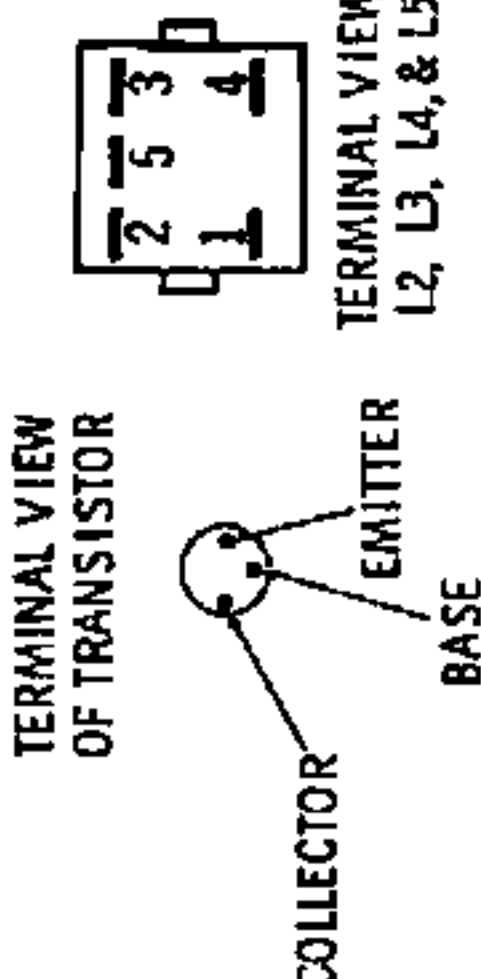
the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1960 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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

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



1. DC voltage measurements taken with vacuum tube voltimeter.
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.

A PHOTOFACT STANDARD NOTATION SCHEMATIC with CIRCUITRACE

Howard W Sams & Co., Inc. 1960

# MAGNAVOX MODEL AM-23

# PARTS LIST AND DESCRIPTIONS

## WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid) Available in Ten Colors  
8524 (Stranded) Available in Ten Colors

### TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2S160 ①	Converter		2N485	2N140	PNP
X2	ST28C ②	1st IF Amplifier		2N483	2N139	PNP
X3	ST28C ②	2nd IF Amplifier		2N483	2N139	PNP
X4	ST332 ③	Driver	2N406	2N362	2N109	PNP
X5	ST332 ③	Output	2N408	2N633	2N109	PNP
X6	ST332 ③	Output	2N408	2N633	2N109	PNP } Matched Pair

① Alternate Type 2N252 may be used.

② Alternate Type 2N308 may be used.

③ Alternate Type 2N77 may be used.

### 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	10	3	270049-1	XPP-3010	NLW10-3	TT3X10	ML10-6	TE-1053	
C2	2	12	270051-1	XPP-12002	NLW5-15	TT12X2	ML2-15	TE-1121	
C3	30	6	270054-1	PWE6030	NLW30-6	TT6X30	ML30-6	TE-1092	
C4	30	6	270054-1	PWE6030	NLW30-6	TT6X30	ML30-6	TE-1092	
C5	20	10		XPP-10020	NLW20-15	TT15X20	ML20-15	TE-1130	①

① Some versions may use 30mfd, 6V in this application (Part #270054-1).

### 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.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C6	5		NPO-SI 5.0	TCZ-4R7	C10V5C	CCTO-050	CNO-547	10TCC-V50
C7	10000		C80V103AM	DDM-103	H-05S1		TA-110	TG-S10
C8	5000		C80V502AM	DDM-502	H-05D5	CCD-502	TA-250	TG-D50
C9	20000		C80V203AM	DDM-203	H-05S2		TA-120	TG-S20
C10	20000		C80V203AM	DDM-203	H-05S2		TA-120	TG-S20
C11	20000		C80V203AM	DDM-203	H-05S2		TG-120	TG-S20
C12	20000		C80V203AM	DDM-203	H-05S2		TA-120	TG-S20
C13	10000		C80V103AM	DDM-103	H-05S1		TA-110	TG-S10
C14	5000		C80V502AM	DDM-502	H-05D5	CCD-502	TA-250	TG-D50
C15	5000		C80V502AM	DDM-502	H-05D5	CCD-502	TA-250	TG-D50
C16	20000		C80V203AM	DDM-203	H-05S2		TA-120	TG-S20

### 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	10K	1/4	220161-1	B16-216				Volume & Switch

### RESISTORS (IRC or EQUIVALENT)

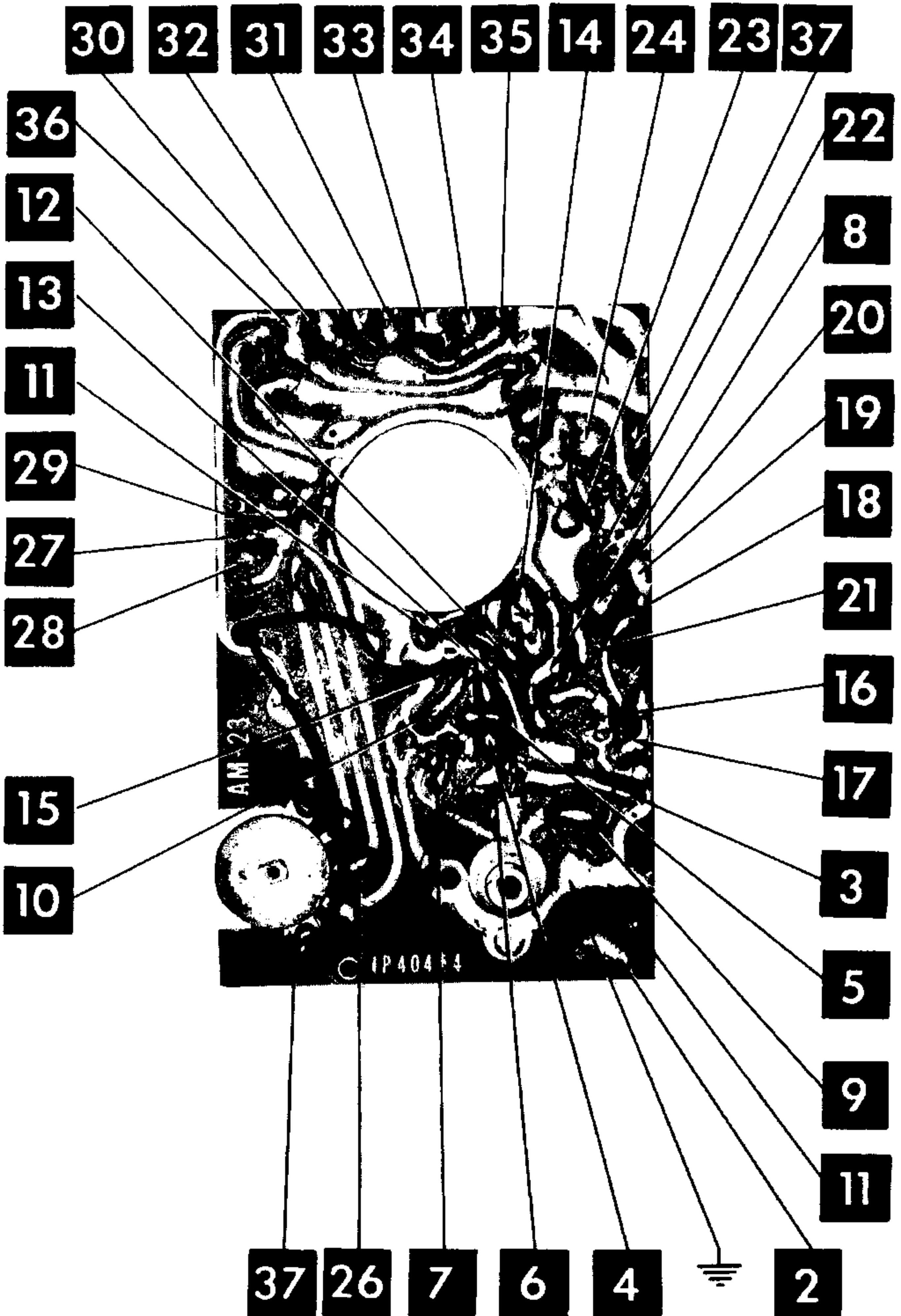
All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R2	30K		R9	15Ω	(47Ω) *	R16	680Ω	
R3	3000Ω		R10	1500Ω		R17	10Ω Cold	Pt. #230132-1
R4	1500Ω		R11	15K		R18	280Ω	
R5	120K		R12	2500Ω		R19	6900Ω	
R6	1800Ω		R13	10K		R20	10Ω	
R7	70K		R14	3300Ω				
R8	12K	(22K) *	R15	1800Ω				

\* Alternate Value.

# PRINTED BOARD

A Howard W. Sams **CIRCUITRACE** Photo



# PARTS LIST AND DESCRIPTIONS (Continued)

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		MAGNAVOX PART No.	Merit PART No.	Miller PART No.	Ram PART No.	Stancor PART No.	
L1	Loopstick	360828-1					
L2	Osc. Coil	360829-1					
L3	1st IF Trans.	360836-1					
L4	2nd IF Trans.	360836-2					
L5	3rd IF Trans.	360836-3					

## 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	1, 2	1	360830-1					

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			MAGNAVOX PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.						
T2	800Ω CT	6-8Ω	320291-1					

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				MAGNAVOX PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SPI	2 1/4"	PM	6-8Ω	580064-1		

## BATTERIES

ITEM No.	VOLTAGE	MAGNAVOX PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	9V			2U6		216		M-1604	

## CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		MAGNAVOX PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	SD-46		1N60	1N60	Detector (Pigtail)

## MISCELLANEOUS

ITEM No.	PART NAME	MAGNAVOX PART No.	NOTES
M3	Tuning Cap. Printed Board Antenna	260157-1 210061-1 700856-1	2 Gang  Telescoping

## CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob	140395-1	Tuning
Knob	140396-1	Volume
Cabinet	140394-1	Blue, Includes Back
Cabinet	140394-2	Ivory, Includes Back
Cabinet Back	140403-1	Blue
Cabinet Back	140403-2	Ivory
Carrying Case	400208-1	Leather

**CHASSIS—TOP VIEW**

