

PHOTOFACT® Folder

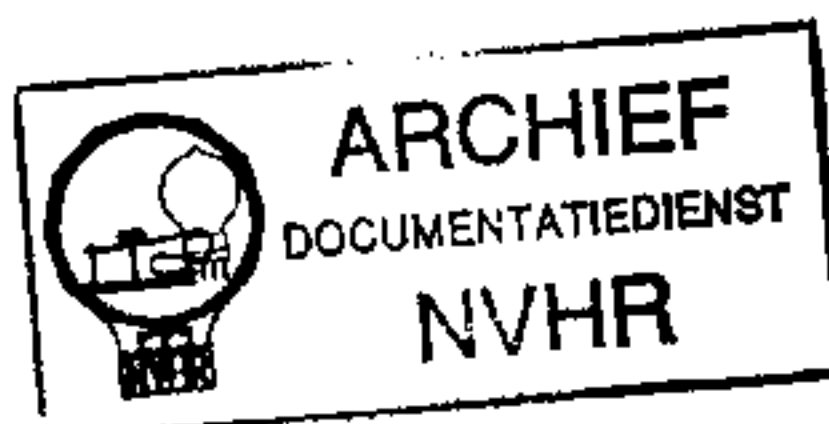
with CIRCUITRACE®

CHANNEL MASTER  
MODELS 6508, 6509



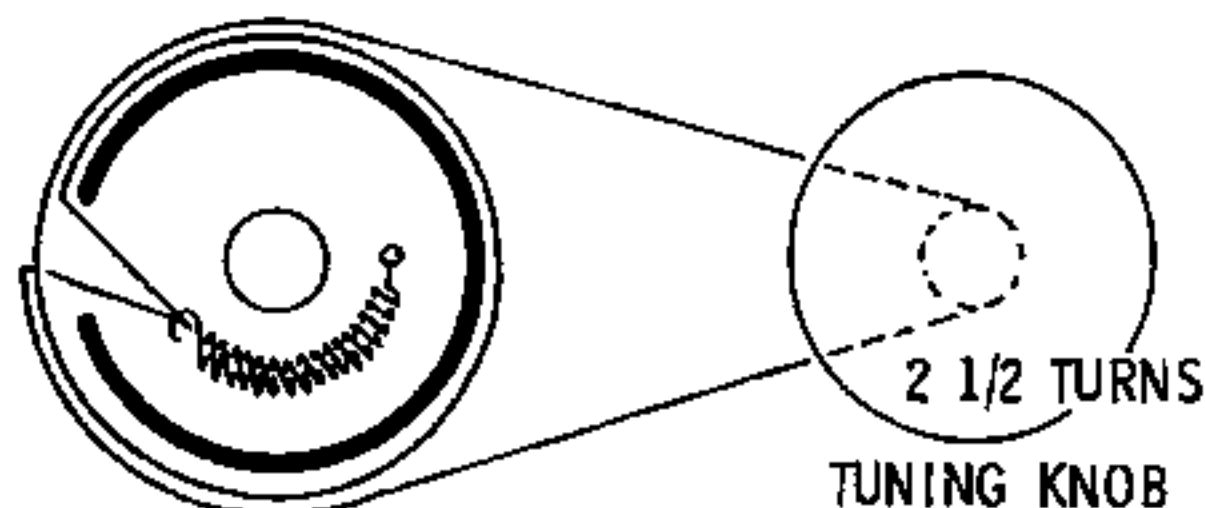
Met dank aan Jef Bos

Ned. Ver. v. Historie v/d Radio



TUNING DRIVE  
CORD STRINGING

TUNING GANG FULLY COUNTER CLOCKWISE



FRONT VIEW



MODEL 6509

TRADE NAME	Channel Master 6508, 6509		
SUPPLIER	Channel Master Corp., Ellenville, N. Y.		
TYPE SET	Battery Operated Transistorized Portable AM Receiver		
POWER SUPPLY	9 Volts DC	RATING	9MA @ 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.

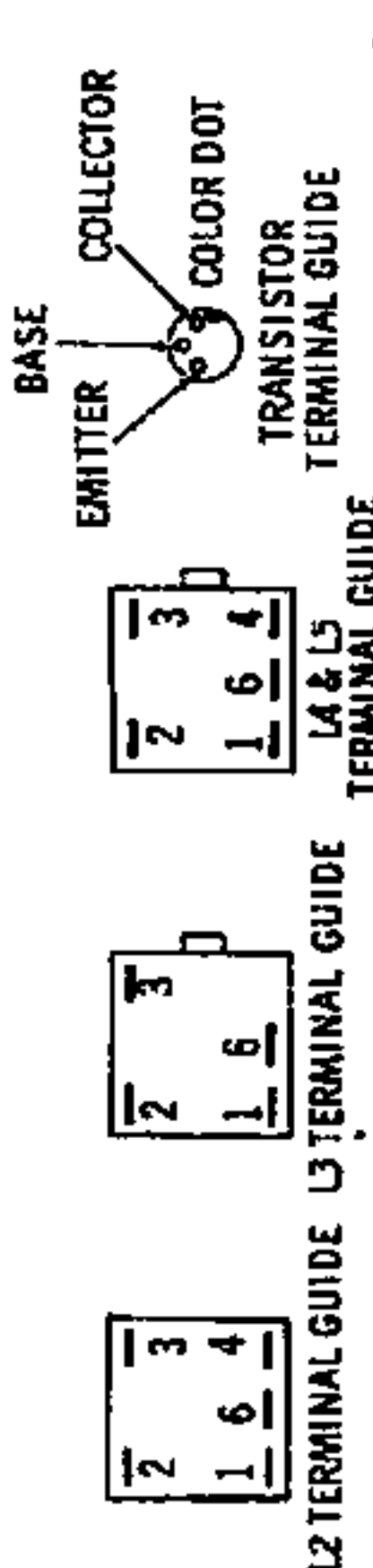
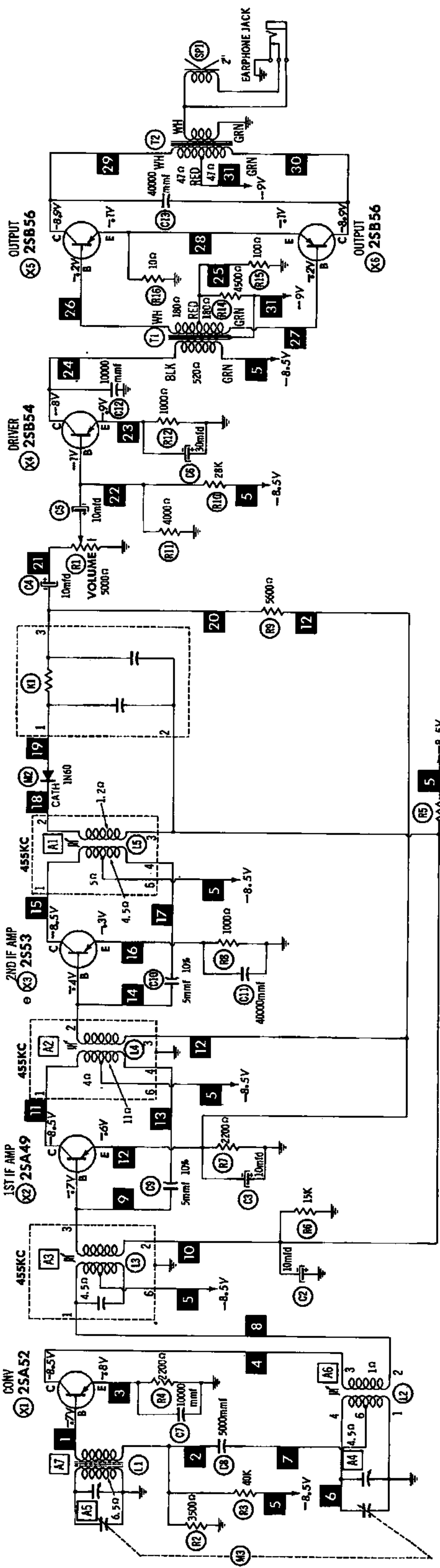
Suggested Alignment Tools: A4, A5... GENERAL CEMENT #5000, 5003, 5066, 8271, 8272, 8276, 8277, 8290, 8609, 8722, 9150, 9298  
WALSCO #2515, 2516, 2518, 2519, 2525, 2541

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Loop	455KC (400v Mod.)	1600KC	Across voice coil.	A1, A2, A3	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2.	"	1400KC	1400KC Signal.	"	A4, A5	"
3.	"	600KC	600KC	"	A6, A7	Adjust for maximum output. Repeat Steps 2 and 3.

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 KF393

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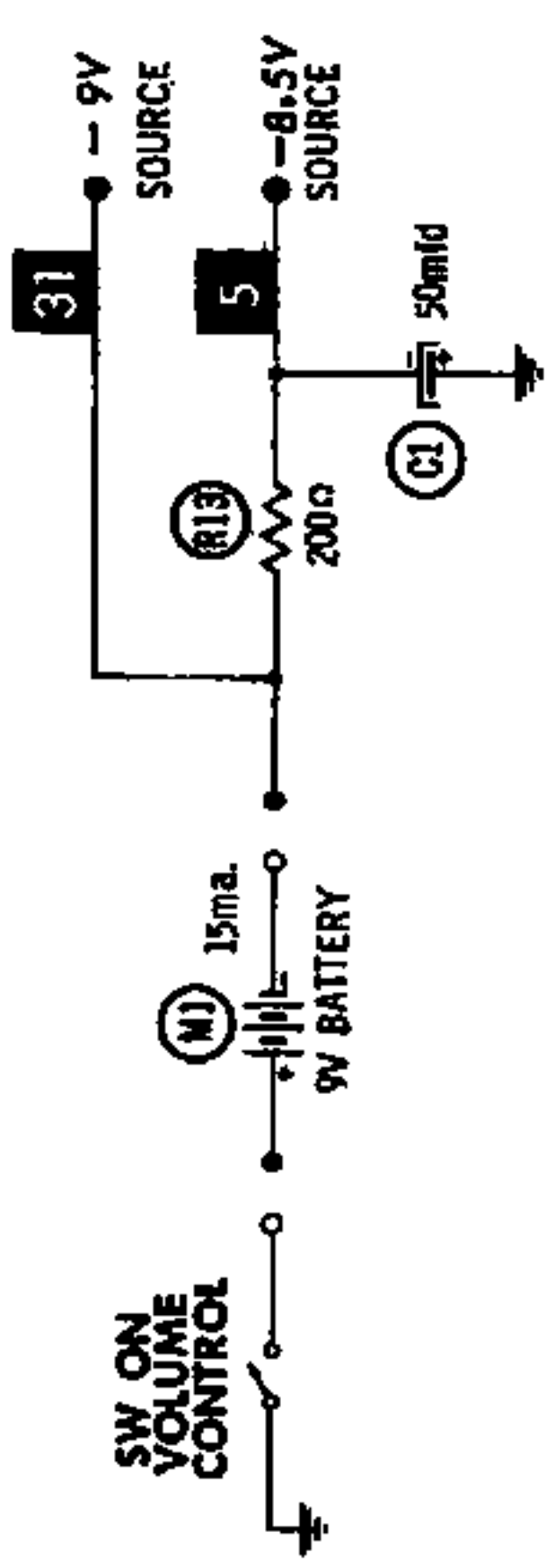
1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections or transistor terminals are shown as bottom views.
3. Measured values are from socket pin or terminal to common ground.
4. Nominal tolerance on component values makes possible a variation of  $\pm 15\%$  in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION  
 DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM  
 ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

A PHOTOFACT STANDARD NOTATION SCHEMATIC with CIRCUITRACE  
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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.

**CHANNEL MASTER  
 MODELS 6508, 6509**



# PARTS LIST AND DESCRIPTIONS

## TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2SA52	Converter				PNP
X2	2SA49	1st IF Amplifier				PNP
X3	2S53 *	2nd IF Amplifier				PNP
X4	2SB54	Driver	2N406			PNP
X5	2SB56	Output	2N408			PNP
X6	2SB56	Output	2N408			PNP

\* Alternate Type 2SA53

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		Channel Master PART No.	REPLACEMENT DATA					NOTES
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	50	9	A031						
C2	10	3	A03B		NLW10-3	TT3X10			
C3	10	3	A03B		NLW10-3	TT3X10			
C4	10	3	A03B		NLW10-3	TT3X10			
C5	10	3	A03B		NLW10-3	TT3X10			
C6	30	3	A046		NLW30-6				

## 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.
C7	10000		C80V103AM		H-05S1		TA-110	TG-S10
C8	5000		C80V502AM		H-05D5		TA-250	TG-D50
C9	5 10%		NPO-DI 5	DTZ-4R7	C10V5C	CCTO-050	CNO-547	10TS-V50
C10	5 10%		NPO-DI 5	DTZ-4R7	C10V5C	CCTO-050	CNO-547	10TS-V50
C11	40000	#A043						
C12	10000							
C13	40000	#A043	C80V103AM		H-05S1		TA-110	TG-S10

# Channel Master Part Number.

## CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES	
	RESISTANCE	WATTS	Channel Master PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.		MALLORY PART No.
R1	5000Ω	1/10	E022					Volume & Switch

## RESISTORS

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

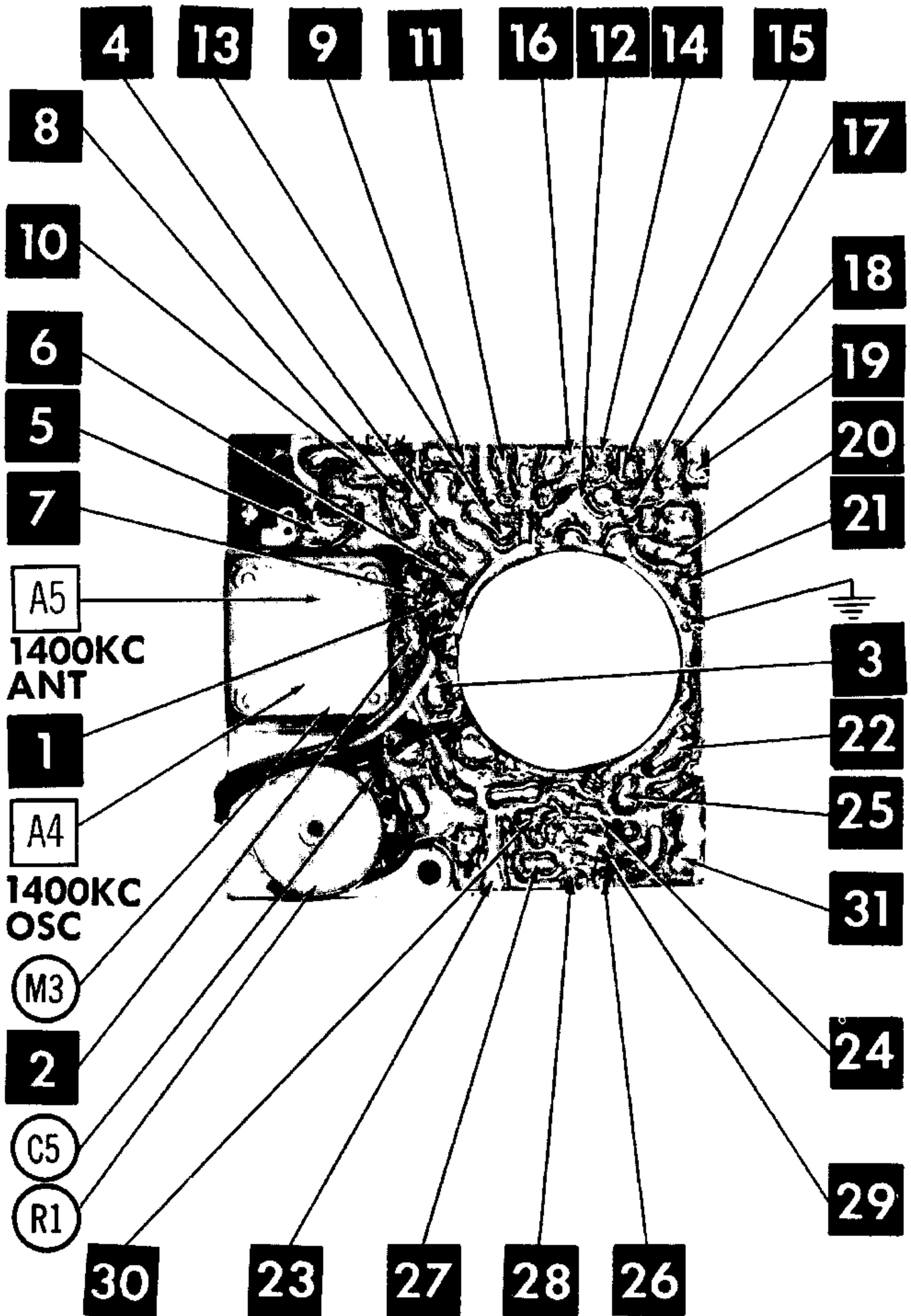
ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN TV PART No.	REMARKS			IRC PART No.	WORKMAN TV PART No.	REMARKS
R2	3500Ω				R10	28K			
R3	40K				R11	4000Ω			
R4	2200Ω				R12	1000Ω			
R5	90K				R13	200Ω			
R6	15K				R14	4500Ω			
R7	2200Ω				R15	100Ω			
R8	1000Ω				R16	10Ω			
R9	5600Ω								

## COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	Channel Master PART No.	REPLACEMENT DATA
K1	Diode RF Filter		A047	

# PRINTED BOARD

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# PARTS LIST AND DESCRIPTIONS (Continued)

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		Channel Master PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	
L1	Loopstick	E023				
L2	Osc.	F186				
L3	1st IF	C028				
L4	2nd IF	C029				
L5	3rd IF	C030				

## TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA				NOTES
			Channel Master PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.					
T1	1.5	1	C026				

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
			Channel Master PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.					
T2	320Ω CT	6-8Ω	C027				

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				Channel Master PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	2"	PM	6-8Ω	G094		

## BATTERIES

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

## SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		Channel Master PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	1N60	F174		1N60	1N60	Detector (Pligtall)

## MISCELLANEOUS

ITEM No.	PART NAME	Channel Master PART No.	NOTES
M3	Tuning Cap. Earphone	A044 E002	2 Gang

## CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob	F021	Tuning
Knob	F022	Volume
Cabinet	G013	Black
Cabinet	G014	Red
Case	F071	Leather, Radio

## WIRING DATA

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

**CHASSIS—TOP VIEW**

