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PHOTOFACT® Folder



HEATH MODELS
CB-1, W-CB-1



HEATH MODELS
CB-1, W-CB-1

TRADE NAME	Heath Models CB-1 (Kit), W-CB-1 (Wired)
MANUFACTURER	Heath Co., A Subsidiary of Daystrom Inc., Benton Harbor, Michigan
TYPE SET	AC-Battery Operated 4 Tube Citizens Band Transmitter-Receiver
POWER SUPPLY	105 - 125 Volts AC, 50-60 Cycles (or) 6 Volt Storage Battery (or) 12 Volt Storage Battery
RATING	26 Watts, .28 Amp. @117 Volts AC (Receiver); 32 Watts, .34 Amp. @117 Volts AC (Transmit) 1.8 Amp. @6.3 Volts DC .9 Amp. @12.6 Volts DC
TUNING RANGE	Any One of Citizens Band Channels 1 thru 23 (Transmitter is Crystal Controlled, Receiver is Continuously Tuneable)

ALIGNMENT PROCEDURE

If the Tuning Capacitor fails to cover the proper tuning range, adjust A1.
Connect the DC probe of the VTVM to pin 7 (grid) of the Final, Common to chassis. Switch on Transmitter and adjust A2 for maximum deflection. Using a field strength meter, adjust A3 for maximum output from the transmitter.
If the transmitter interferes with TV reception, adjust trap A4 for MINIMUM interference.

NOTICE

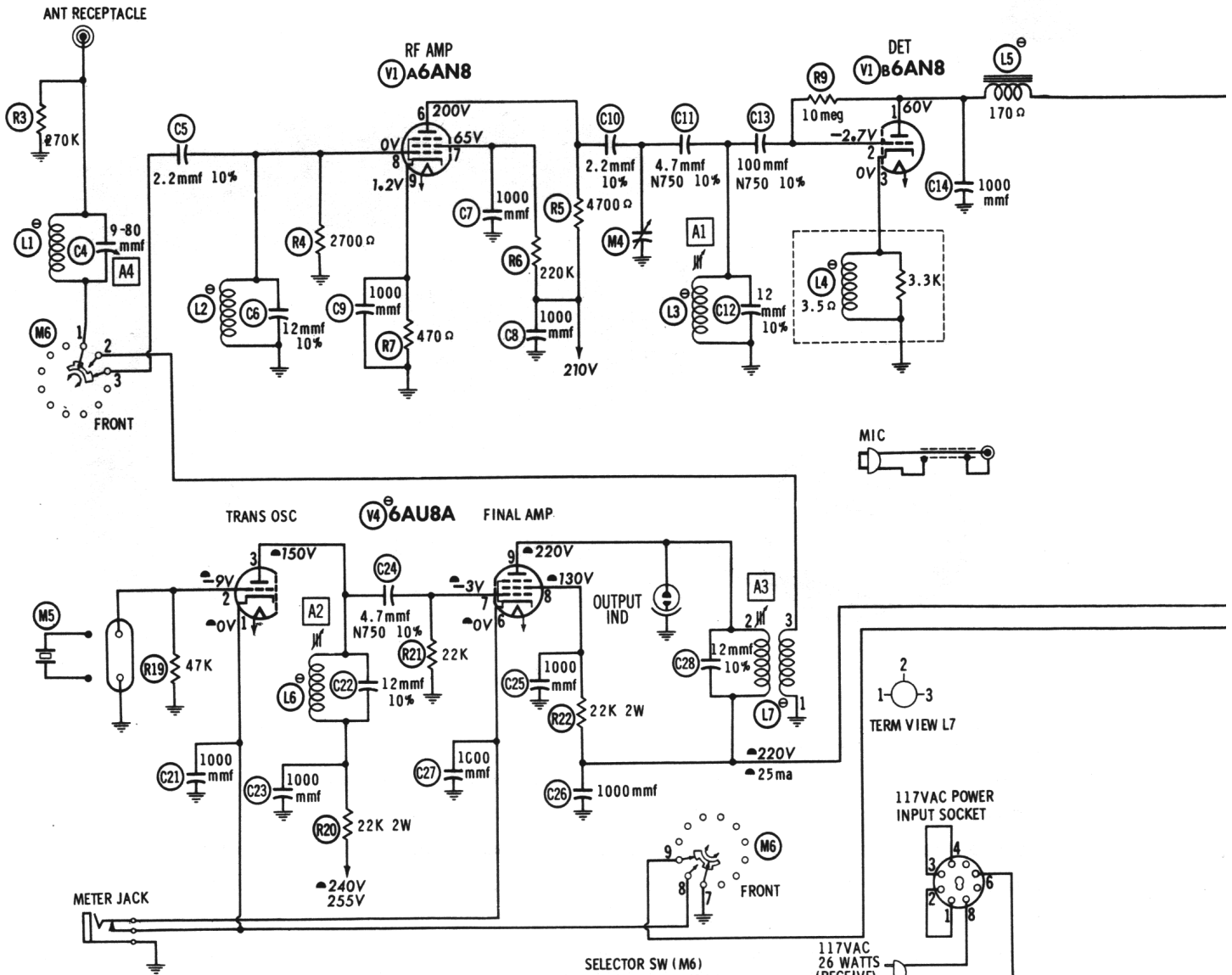
ONLY THOSE PERSONS PROPERLY LICENSED BY FCC ARE PERMITTED TO MAKE CRYSTAL SUBSTITUTION OR EFFECT REPAIRS ON THE TRANSMITTER PORTION OF THIS UNIT.

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 K2617

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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)

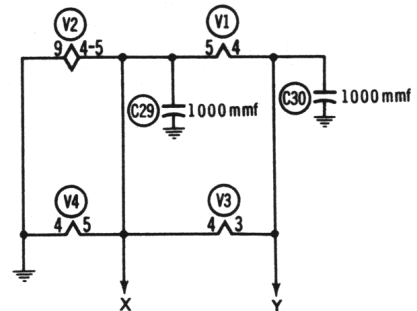
SELECTOR SW (M6) SHOWN IN "RECEIVE" POSITION
 POSITION SW SEQUENCE
 1. TRANSMIT (CCW)
 2. RECEIVE
 3. TRANSMIT
 SPRING RETURN

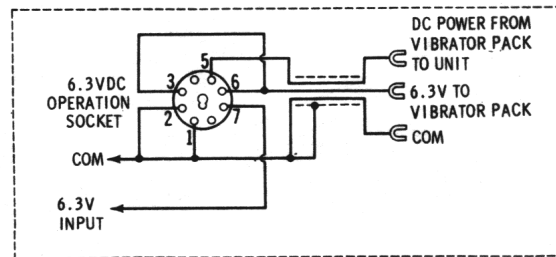
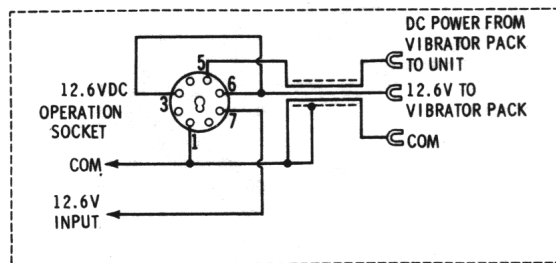
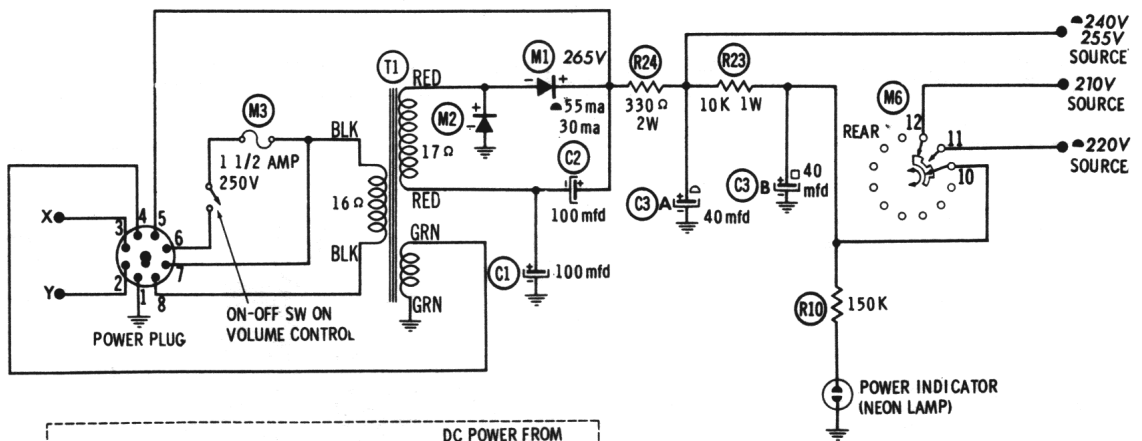
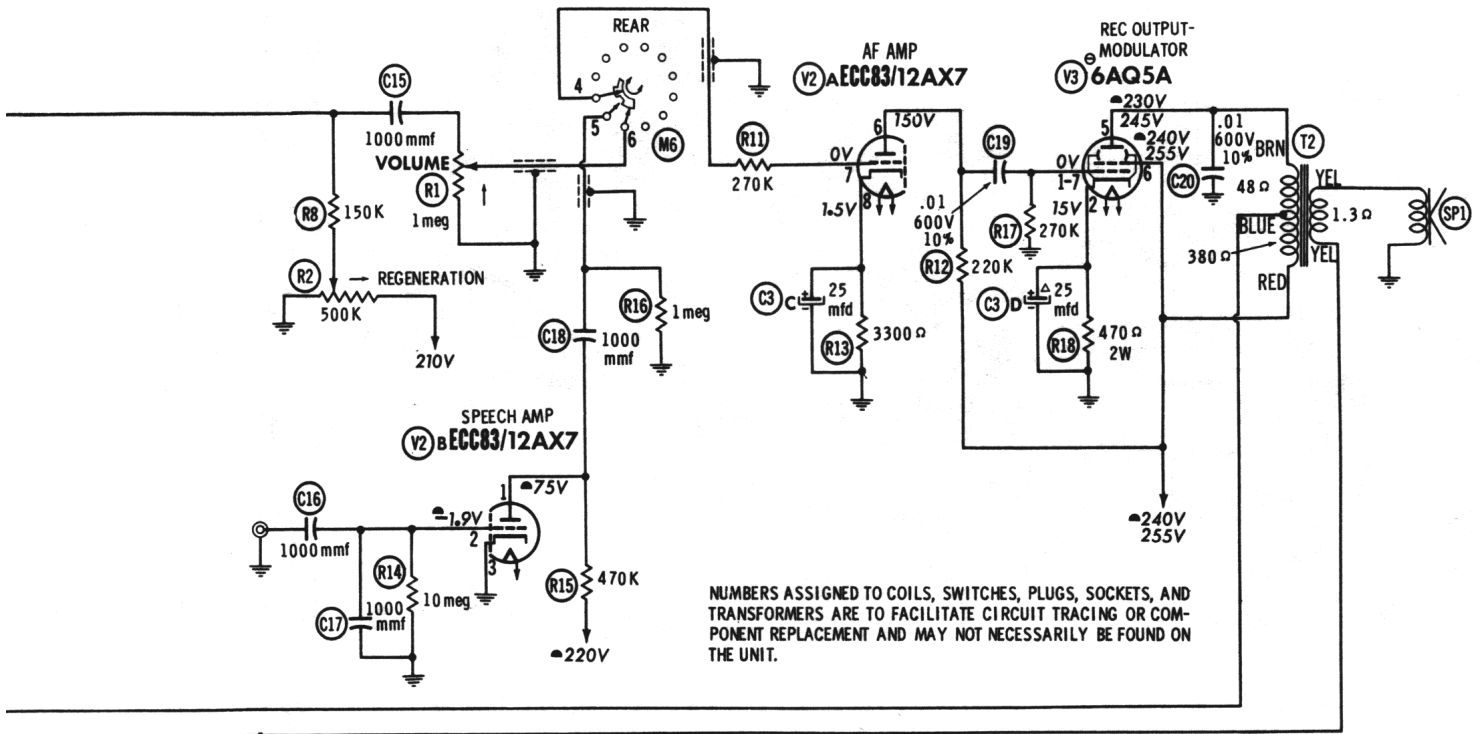
RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	6AN8	†800K	†11 meg	3.5 Ω	FILS	FILS	†15K	†230K	.1 Ω	470 Ω
V2	ECC83 12AX7	†480K	10 meg	0 Ω	FILS	FILS	†220K	270K	3300 Ω	
V3	6A05A	270K	470 Ω	FILS	FILS	†760 Ω	†330 Ω	270K		
V4	6A08A	0 Ω	47K	†22K	FILS	FILS	0 Ω	22K	†22K	†710 Ω

ALL MEASUREMENTS TAKEN IN "RECEIVE" POSITION UNLESS OTHERWISE INDICATED

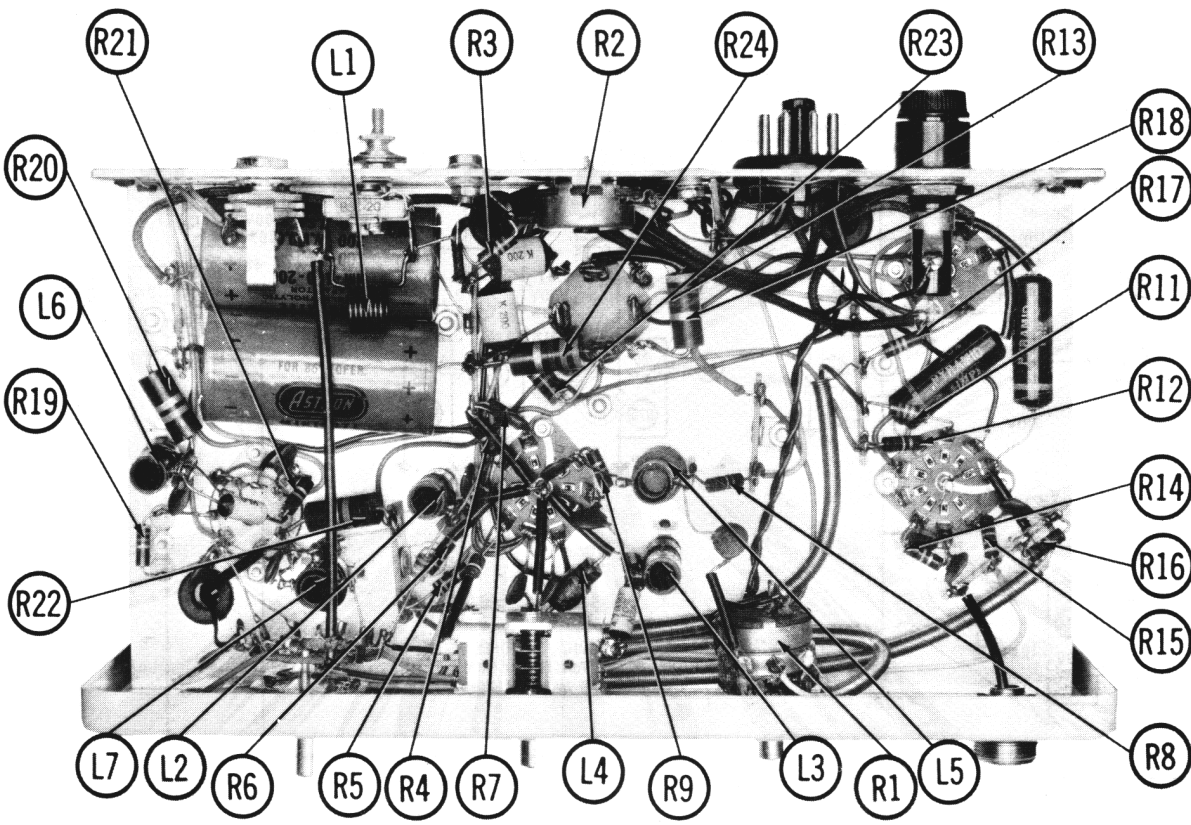
† MEASURED FROM OUTPUT OF M1
 • MEASURED IN "TRANSMIT" POSITION



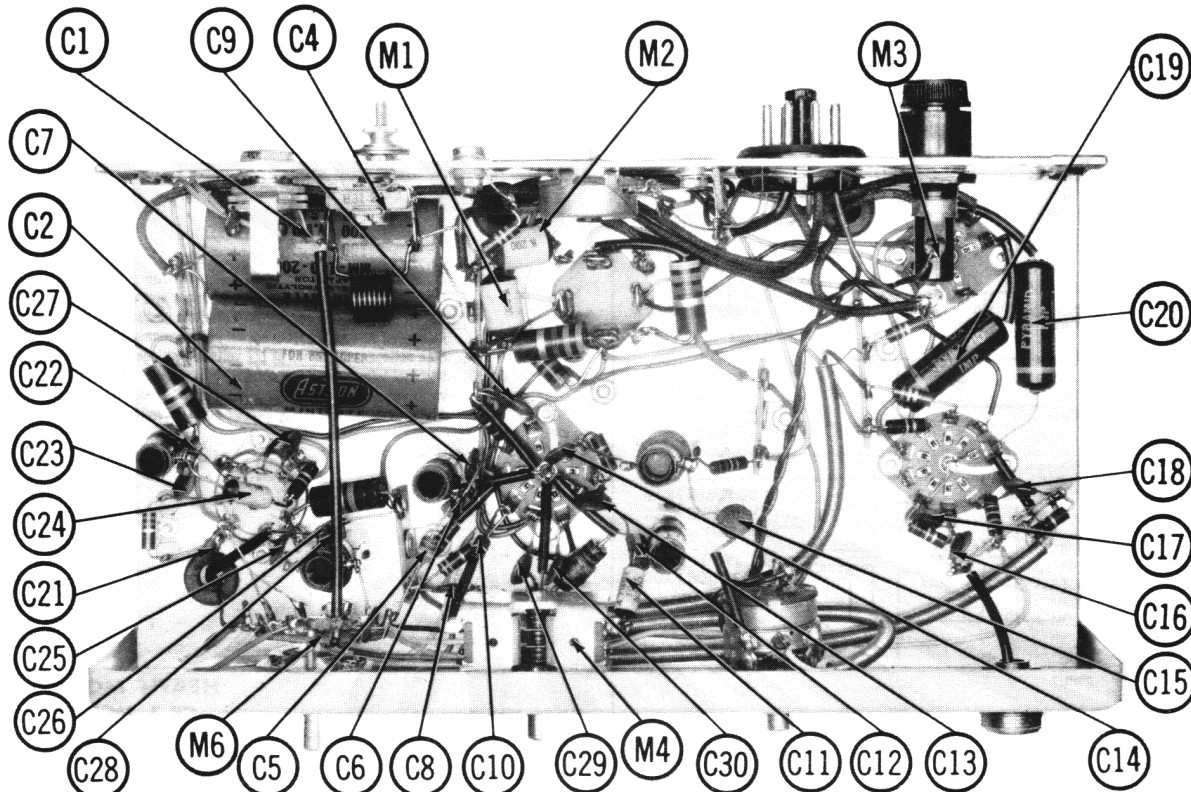


1. DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured with 1000 ohm per volt voltmeter.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common ground.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance of component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
6. All controls at minimum, proper output load connected.

**HEATH MODELS
CB-1, W-CB-1**



CHASSIS BOTTOM VIEW - RESISTOR & INDUCTOR IDENT.



CHASSIS BOTTOM VIEW - CAPACITOR & MISC. IDENT.

PARTS LIST AND DESCRIPTIONS (Continued)

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA						
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.	
C27	1000		BFD-001	DD-102	BYA10D1	CCD-102	B-210	B-210	SHK-D10
C28	12 10%		1489-000012	TCZ-12	22R6Q12	CM-19B-120K	CNO-412	MS-412	SHK-D10
C29	1000		BFD-001	DD-102	BYA10D1	CCD-102	B-210	B-210	SHK-D10
C30	1000		BFD-001	DD-102	BYA10D1	CCD-102	B-210	B-210	SHK-D10

* Heath Part Number.

CONTROLS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				INSTALLATION NOTES
			CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
RIA	Imeg	A-19-27	E-70-8	A47-1meg-Z	Q13-137	U83	Volume
B	Shaft		Not Req.	PS-3	Not Req.	UR-28	Power Off-On
C	Switch	E-10-40	Not Req.	SWE-12	76-1	TA55L	Regeneration
R2A	500K		Not Req.	B47-500K-S	BU-133	Not Req.	
B	Shaft		Not Req.	TT-59	T M4	Not Req.	

RESISTORS

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA		
			WORKMAN TV PART No.	IRC PART No.	RATING
R3	270K				10meg
R4	27000				470K
R5	47000				1meg
R6	220K				270K
R7	470K				470K 2W
R8	150K				47K
R9	10meg				22K 2W
R10	150K				22K 2W
R11	270K				22K 2W
R12	270K				10K 1W
R13	3300K				330K 2W

COILS (RF-IF)

ITEM No.	USE	REMARKS	REPLACEMENT DATA			NOTES
			HEATH PART No.	Miller PART No.	Stancor PART No.	
L1	RF Trap		D-45-49 *		Stancor	Workman TV
L2	Ant.		V-40-186 *			
L3	Osc.		V-40-186 *			
L4	RF Choke		45-28 * ①			
L5	RF Choke (75MH)		45-48 *			
L6	Osc. Plate		V-40-186 *			
L7	Final Plate		V-40-187 *			

* L1 thru L7 may be ordered as a set (Part # 141-1).
① Wound on 3300Ω

TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA				NOTES
		HEATH PART No.	Merit PART No.	Stancor PART No.	Thoradison PART No.	
		SEC. 1	SEC. 2			
T1	117V @ .94A		6.3V @ 1.9A	54-87		

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA				NOTES
		HEATH PART No.	Merit PART No.	Stancor PART No.	Thoradison PART No.	
		PRI.	SEC.			
T2	6700Ω Tap @ 12%	51-43		A-3817		

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		HEATH PART No.	QUAM PART No.	
SP1	3 1/2" PM	401-21	3A07	

POWER RECTIFIERS

ITEM No.	RATING	CURRENT (Measured)	REPLACEMENT DATA				NOTES
			HEATH PART No.	PCA PART No.	SARKIES TAZSIAN PART No.	SYLVANIA PART No.	
M1	.065A		57-23	1N1763	2F4	SR200	
M2	.065A		57-23	1N1763	2F4	SR200	

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA			
			HEATH PART No.	HOLDER	FUSE	BUSS PART No.
M3	3AG	1 1/4 250V			3120L 5 (3AG 1 1/4 250V)	

MISCELLANEOUS

ITEM No.	PART NAME	HEATH PART No.	REPLACEMENT DATA			
			HEATH PART No.	HOLDER	FUSE	BUSS PART No.
M4	Tuning Cap.	25-56				
M5	Crystal	404-14	Receiver Channel 1			
	Crystal	404-15	Channel 2			
	Crystal	404-16	Channel 3			
	Crystal	404-17	Channel 4			
	Crystal	404-18	Channel 5			
	Crystal	404-19	Channel 6			
	Crystal	404-20	Channel 7			
	Crystal	404-21	Channel 8			
	Crystal	404-22	Channel 9			
	Crystal	404-23	Channel 10			
	Crystal	404-24	Channel 11			
	Crystal	404-25	Channel 12			
	Crystal	404-26	Channel 13			
	Crystal	404-27	Channel 14			
	Crystal	404-28	Channel 15			
	Crystal	404-29	Channel 16			
	Crystal	404-30	Channel 17			
	Crystal	404-31	Channel 18			
	Crystal	404-32	Channel 19			
	Crystal	404-33	Channel 20			
	Crystal	404-34	Channel 21			
	Crystal	404-35	Channel 22			
	Crystal	404-36	Channel 23			
M6	Microphone	6S-210	Function (Rotary Type)			

CABINETS & CABINET PARTS

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

NAME	PART No.	DESCRIPTION
Knob	462-86	Function Selector
Handle	211-16	Plastic
Cabinet	90-111	

WIRING DATA

General-use Unshielded Hook-up Wire		Use BELDEN No. 6530 (Solid) Available in Ten Colors
		8524 (Stranded) Available in Ten Colors
Power Cord		Use BELDEN No. 1765-B (6 Ft. Length)
		1765-K (7 1/2 Ft. Length)