



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

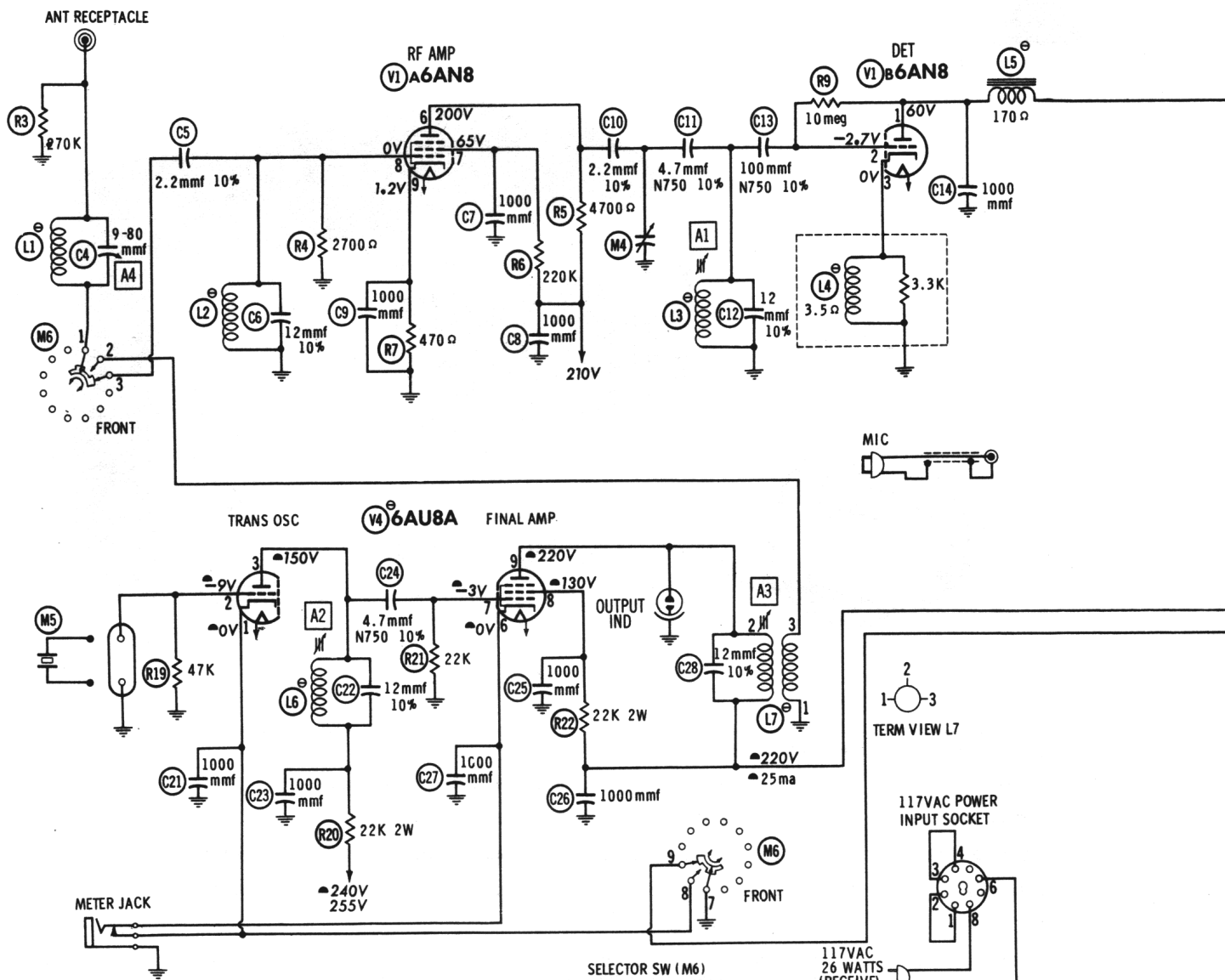
ONLY THOSE PERSONS PROPERLY LICENSED BY FCC ARE PERMITTED TO MAKE CRYSTAL SUBSTITUTION OR EFFECT REPAIRS ON THE TRANSMITTER PORTION OF THIS UNIT.

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



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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)

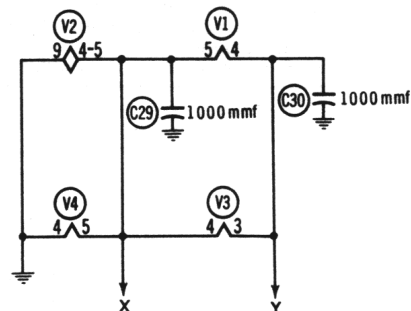
SELECTOR SW (M6) SHOWN IN "RECEIVE" POSITION
SW SEQUENCE
1. TRANSMIT (CCW)
2. RECEIVE
3. TRANSMIT
SPRING RETURN

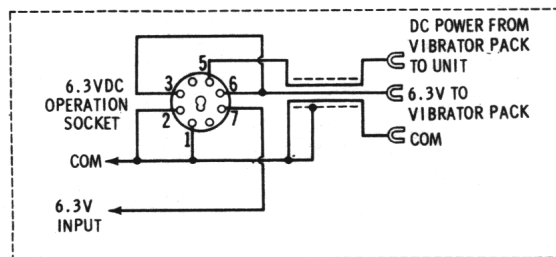
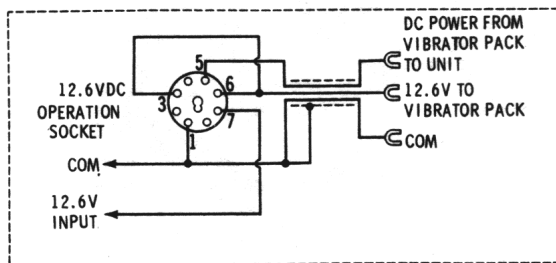
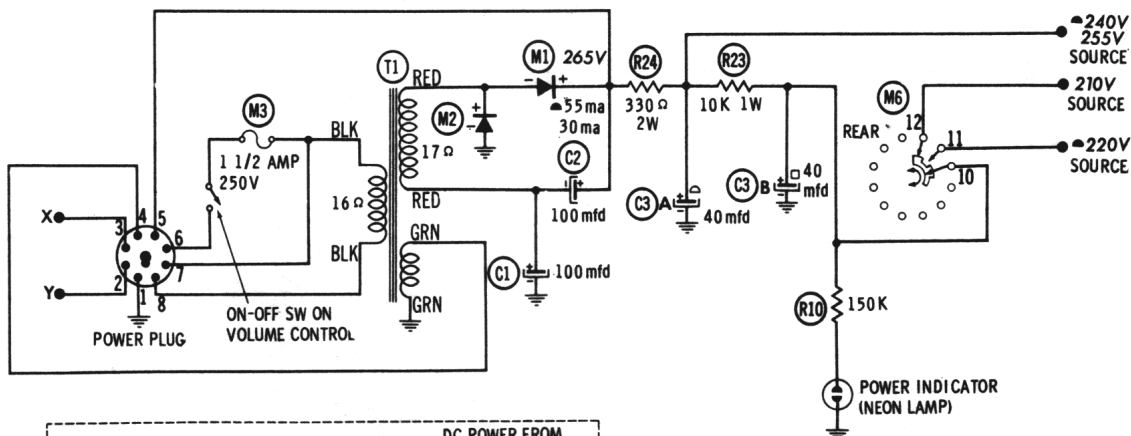
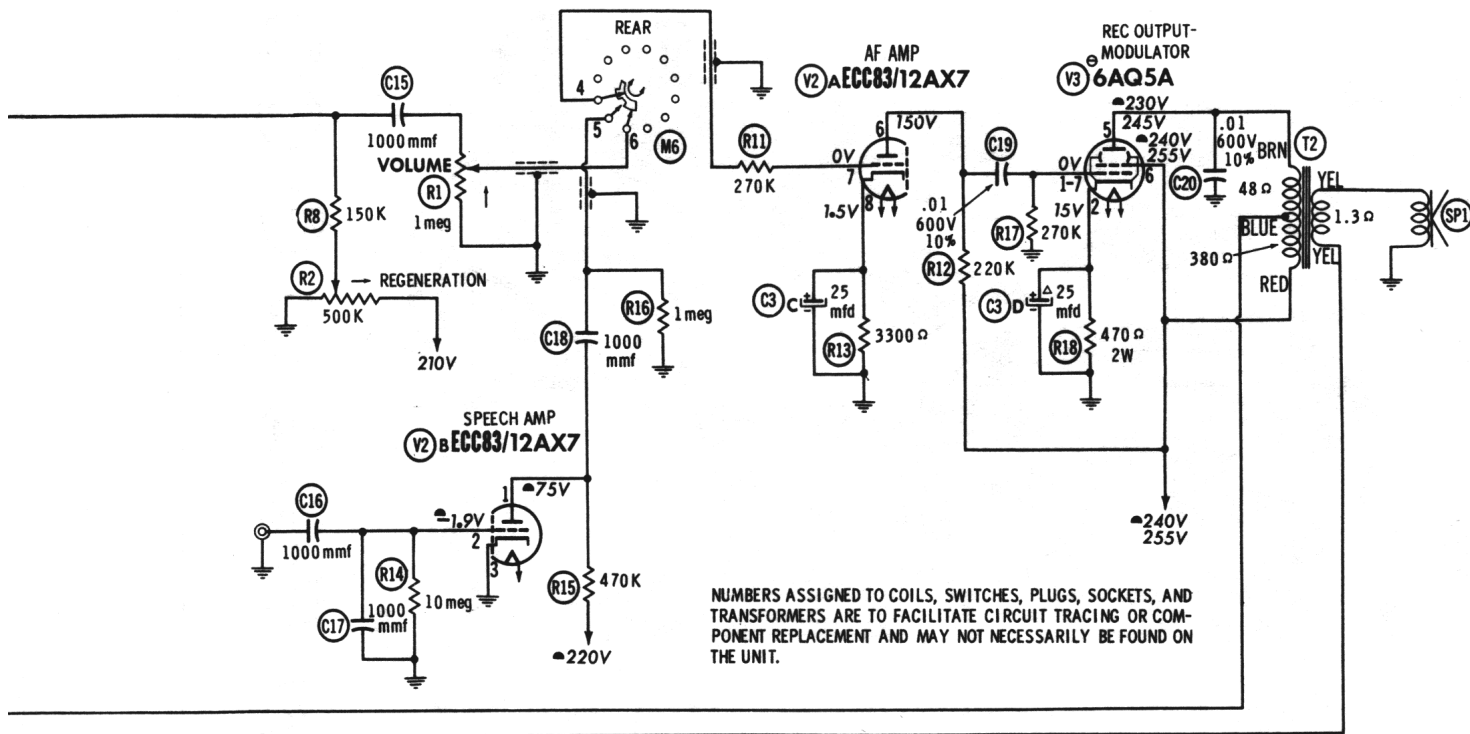
RESISTANCE READINGS

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	3.5Ω	FILS	FILS	†15K	†230K	.1Ω	470Ω
V2	ECC83 12AX7	†480K	10 meg	0Ω	FILS	FILS	†220K	270K	3300Ω	
V3	6AO5A	270K	470Ω	FILS	FILS	†760Ω	†330Ω	270K		
V4	6AU8A	0Ω	47K	†22K	FILS	FILS	0Ω	22K	†22K	†710Ω

ALL MEASUREMENTS TAKEN IN "RECEIVE" POSITION UNLESS OTHERWISE INDICATED

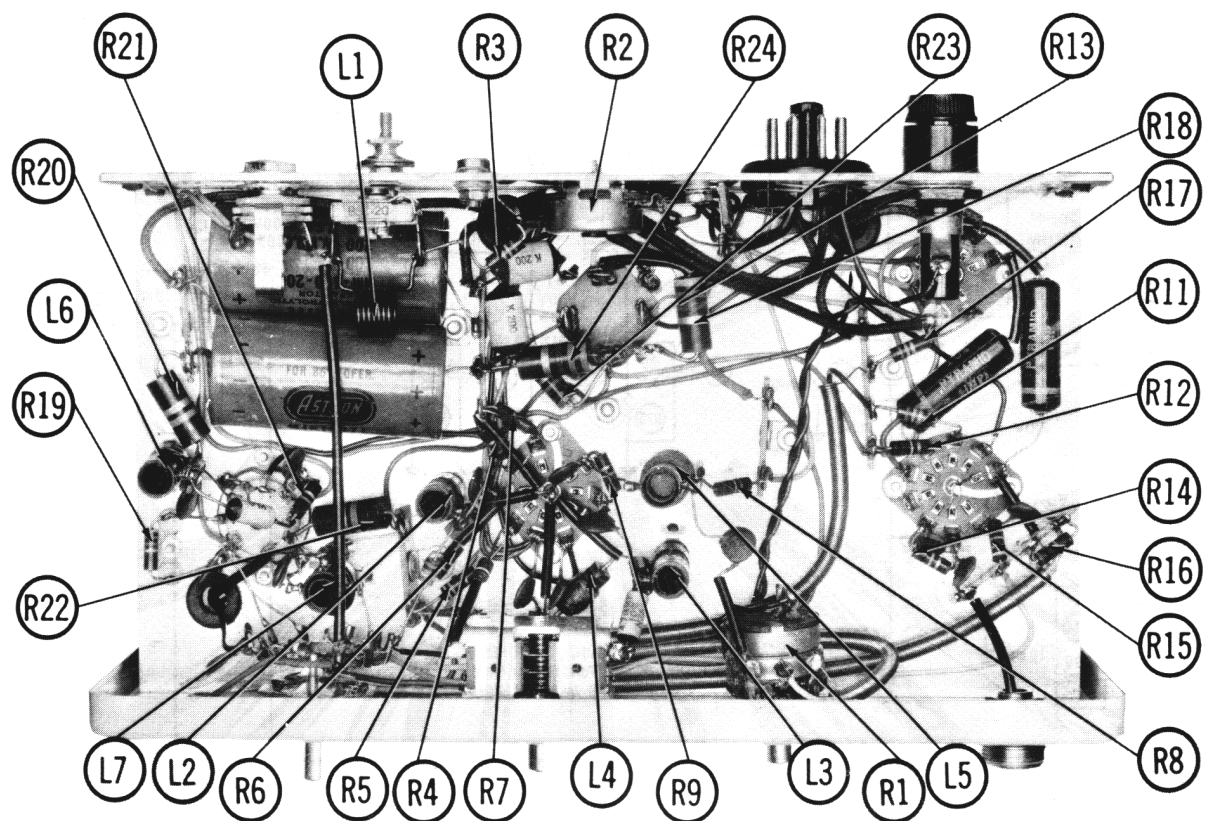
† MEASURED FROM OUTPUT OF M1
▲ MEASURED IN "TRANSMIT" POSITION



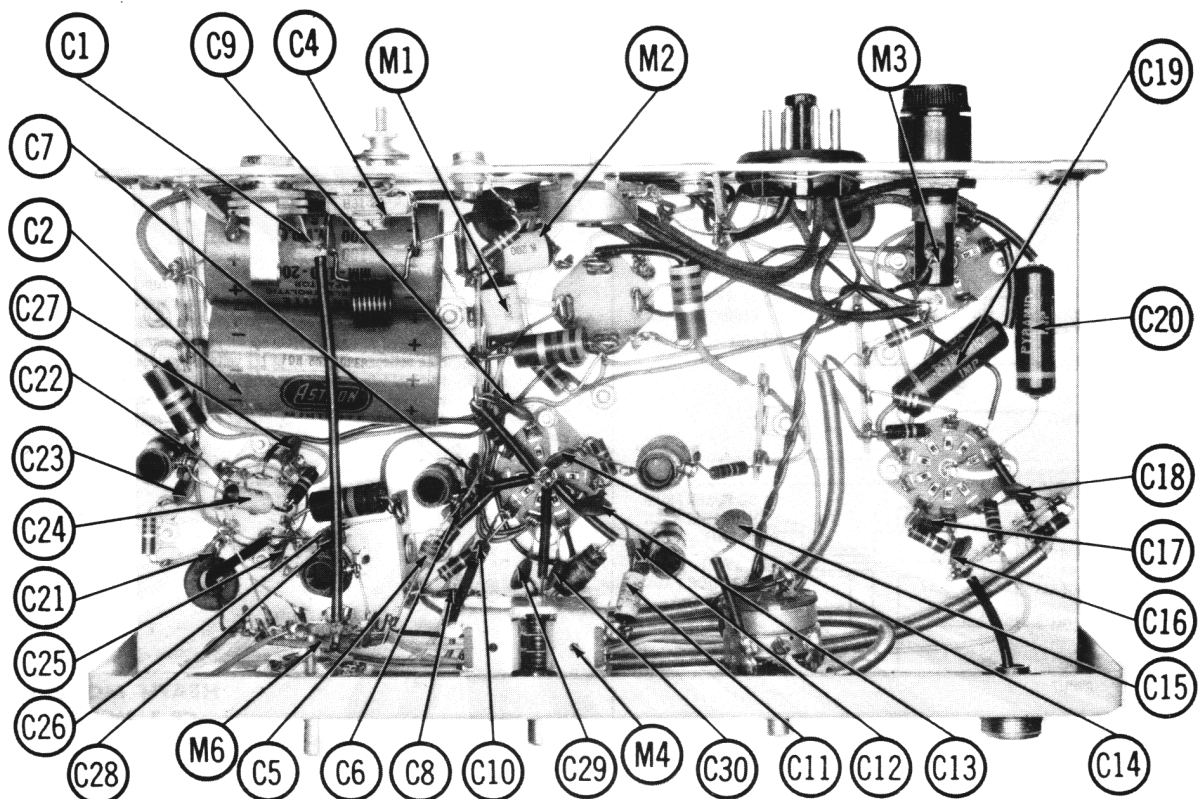


1. DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured with 1000 ohm per volt voltmeter.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common ground.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance 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-DUBILLET PART No.	ELWENCO PART No.
C37	1000		BPD-001	DD-102	BYA10D1	CCD-102
C38	12 10 μ		1489-000012	TC2-12	22R6Q12	CM-19B-120K
C39	1000		BPD-001	DD-102	BYA10D1	CCD-102
C30	1000		BPD-001	DD-102	BYA10D1	CCD-102

Heath Part Number.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES
	RESIST-ANCE	WATTS	HEATH PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	
R1A	Imeg	$\frac{1}{2}$	A-19-27	B-70-8	A47-Imeg-Z	Q13-137	Volume
R1B	Shaft			Not Req.	7R-3	Not Req.	
R1C	Switch			Not Req.	SWF-12	7R-1	Power Off-On
R2A	500K	$\frac{1}{2}$	E-10-40	TT-59	547-500K-S	BU1-133	Regeneration
R2B	Shaft			Not Req.	Not Req.	T M4	

RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA		REMARKS
		IRC PART No.	WORKMAN TV PART No.			IRC PART No.	WORKMAN TV PART No.	
R3	270K			R14	10meg			
R4	2700K			R15	470K			
R5	47000			R16	Imeg			
R6	220K			R17	270K			
R7	470K			R18	470K 2W			
R8	150K			R19	47K			
R9	10meg			R20	22K 2W			
R10	150K			R21	22K			
R11	270K			R22	22K 2W			
R12	270K			R23	10K 1W			
R13	3300K			R24	330K 2W			

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			NOTES
		HEATH PART No.	Merit PART No.	Stancor PART No.	
L1	RF Trap	D-45-49 *			* L1 thru L7 may be ordered as a set (Part # 141-1). ① Wound on 3300 Ω .
L2	Ant. Osc.	V-40-186 *			
L3	RF Choke	45-28 * ①			
L4	RF Choke (75MH)	45-48 *			
L5	Osc. Plate	V-40-186 *			
L6	Final Plate	V-40-187 *			
L7					

TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA			NOTES
		HEATH PART No.	Merit PART No.	Stancor PART No.	
T1	117V @ .34A SEC. 1 100V @ .200A SEC. 2 6.3V @ 1.9A AC	54-87			

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA			NOTES
		HEATH PART No.	Merit PART No.	Stancor PART No.	
T2	6700 Ω 12 $\%$ PRI. 3-4 Ω SEC.	51-43		A-3817	

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		HEATH PART No.	QUAM PART No.	
SP1	3 $\frac{1}{2}$ " PM	3-4 Ω	3A07	

POWER RECTIFIERS

ITEM No.	RATING	REPLACEMENT DATA				NOTES
		CURRENT (Measured)	HEATH PART No.	RCA PART No.	SARKES TAZIAN PART No.	
M1	.055A		57-23	1N1763	SR200	
M2	.055A		57-23	1N1763	2F4	

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA				BUSS PART No.
			HEATH PART No.	HOLDER	FUSE	HOLDER	
M3	3AG	1 $\frac{1}{2}$ A 250V			3120L 5 (3AG 1 $\frac{1}{2}$ A 250V)		AGC 1 $\frac{1}{2}$ HKP

MISCELLANEOUS

ITEM No.	PART NAME	HEATH PART No.	NOTES
M4	Tuning Cap.	25-56	Receiver
M5	Crystal	404-14	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 Switch	63-210	Function (Rotary Type)
		480-8	

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob	462-85	Volume, Tuning
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
 6524 (Stranded) Available in Ten Colors
 Power Cord Use BELDEN No. 1765-B (6 Ft. Length)
 1725-K (7 $\frac{1}{2}$ Ft. Length)