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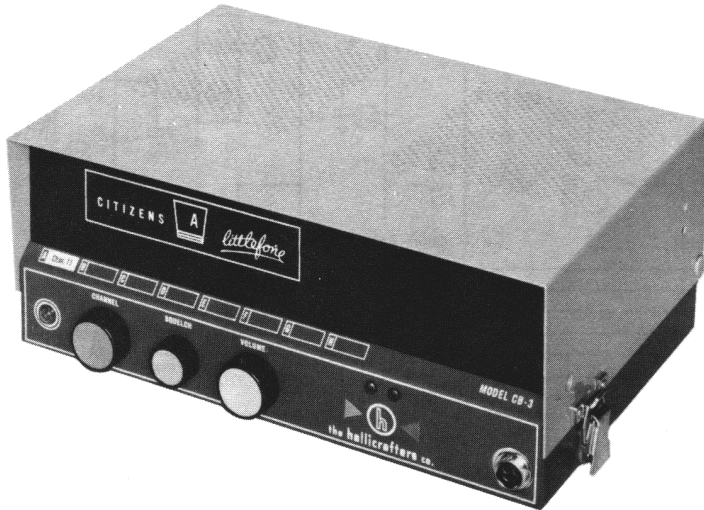
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**HALLICRAFTERS
MODEL CB-3**



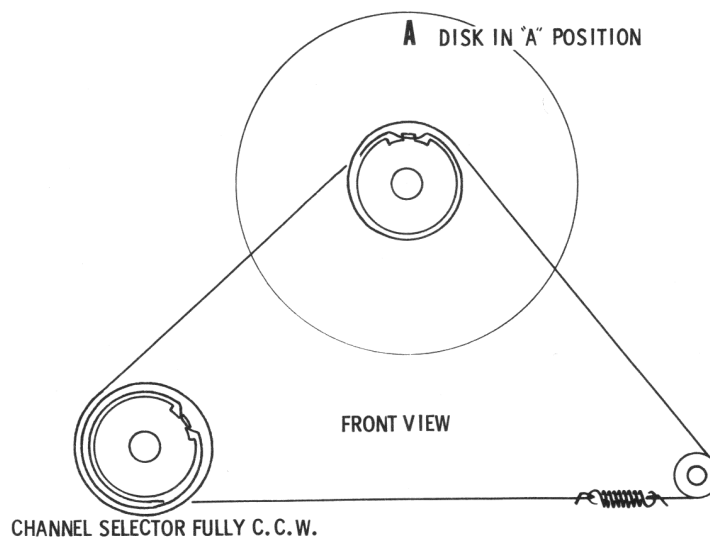
NOTICE

ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES & REGULATIONS PART 19, SUBPART D, SECTION 19.71)

TRADE NAME	Hallicrafters Model CB-3
MANUFACTURER	The Hallicrafters Co., 4400 W. 45th Street, Chicago 32, Illinois
TYPE SET	AC-Battery Operated 7 Tube Citizens Band Transmitter-Receiver
POWER SUPPLY	110 - 120 Volts AC (or) 12 Volt Storage Battery
RATING	48 Watts, .49 Amp. @117 Volts AC (Receive) 52 Watts, .53 Amp. @117 Volts AC (Transmit) 4.2 Amp. @12.6 Volts DC (Receive) 4.3 Amp. @12.6 Volts DC (Transmit)
TUNING RANGE	Any one of eight Citizens Band Channels 2 thru 23

**HALLICRAFTERS
MODEL CB-3**

DIAL CORD STRINGING

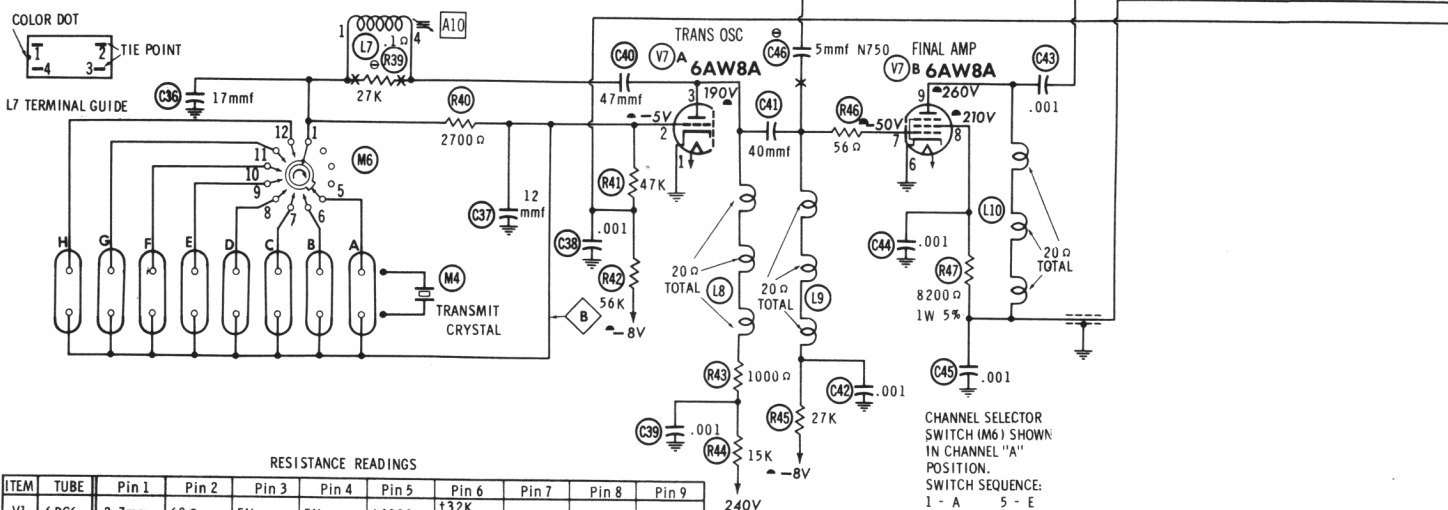
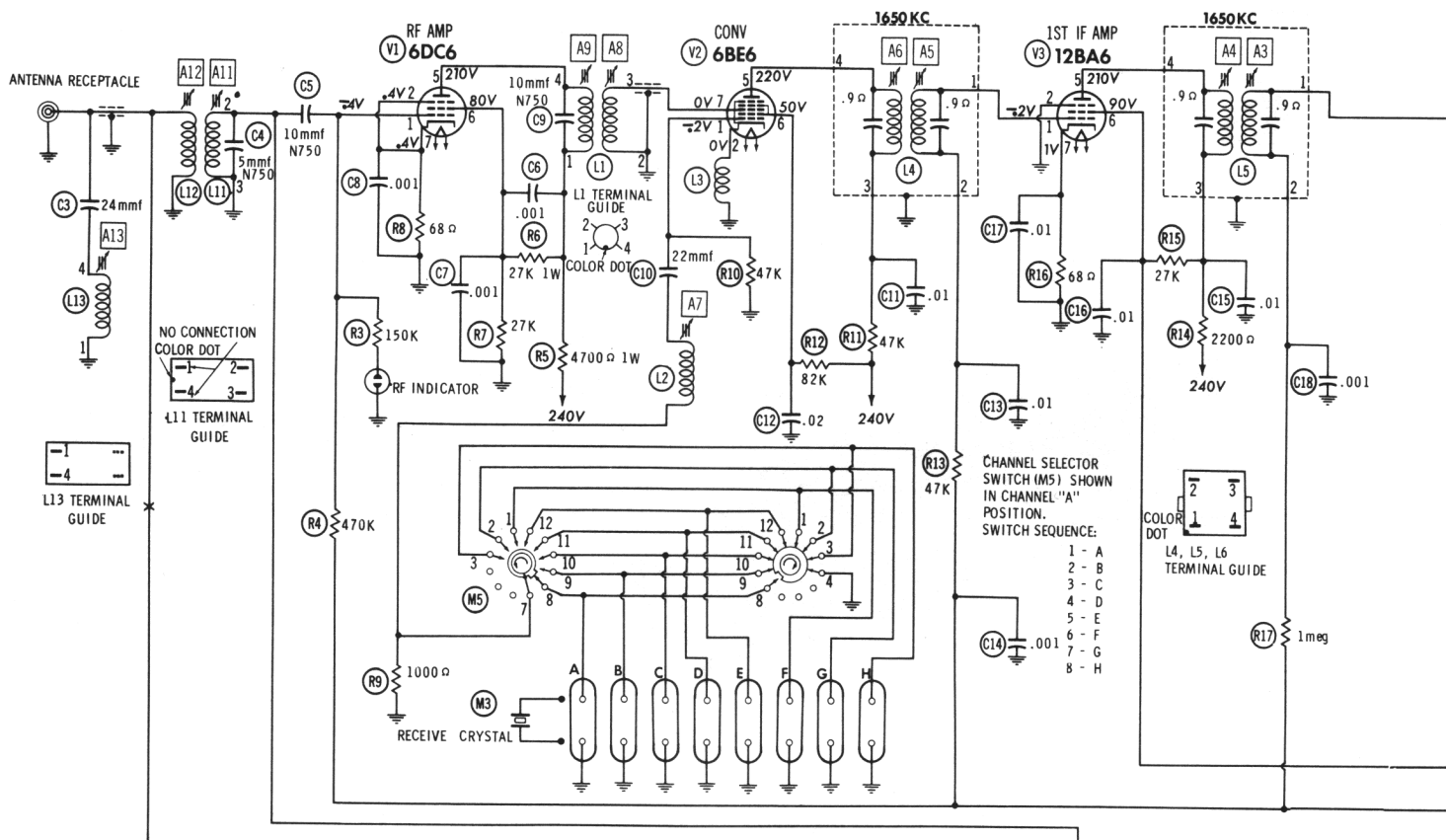


HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana



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 LY442

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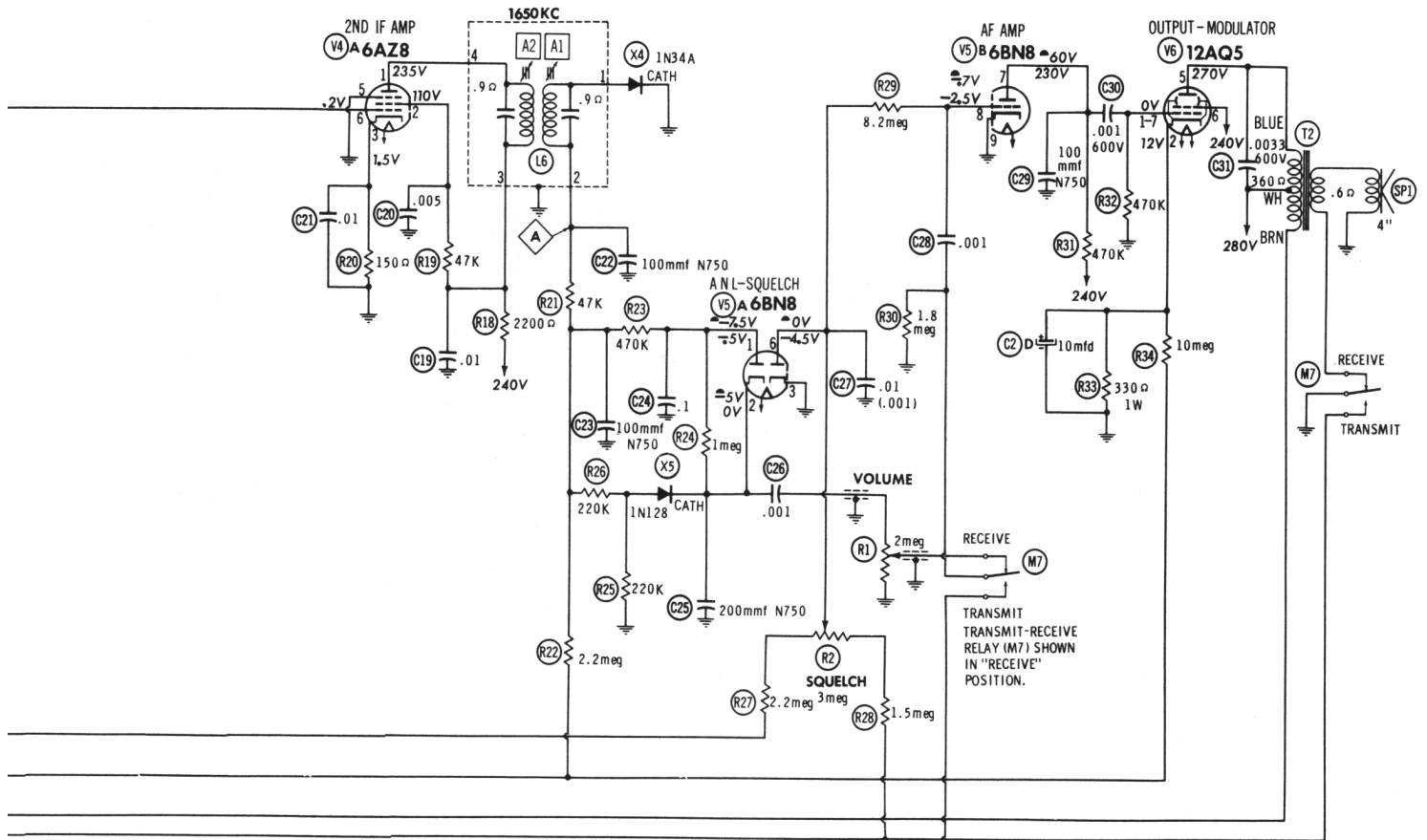
RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	6DC6	2.7meg	68 Ω	FIL	FIL	+4800 Ω	†32K 27K	68 Ω		
V2	6BE6	47K	1 Ω	FIL	FIL	+48K	†83K	0 Ω		
V3	12BA6	2meg	0 Ω	FIL	FIL	†3200 Ω	†30K	68 Ω		
V4	6AZ8	†3200 Ω	†4800 Ω	150 Ω	FIL	FIL	3meg	0 Ω	†157K	2.2meg
V5	6BN8	450K	1.5meg	0 Ω	FIL	FIL	2.5meg +4.2meg	+470K	10.7meg +12.4meg	0 Ω
V6	12AQ5	470K	330 Ω	FIL	FIL	†399 Ω	†1000 Ω	470K		
V7	6AW8A	0 Ω	47K +1.6meg	†17K	FIL	FIL	0 Ω	80K +1.6meg	†8500 Ω	†410 Ω

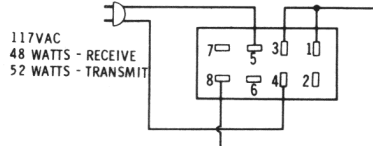
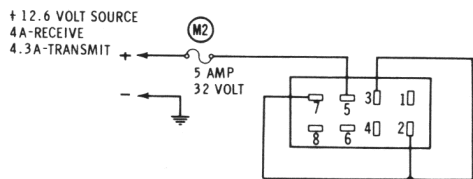
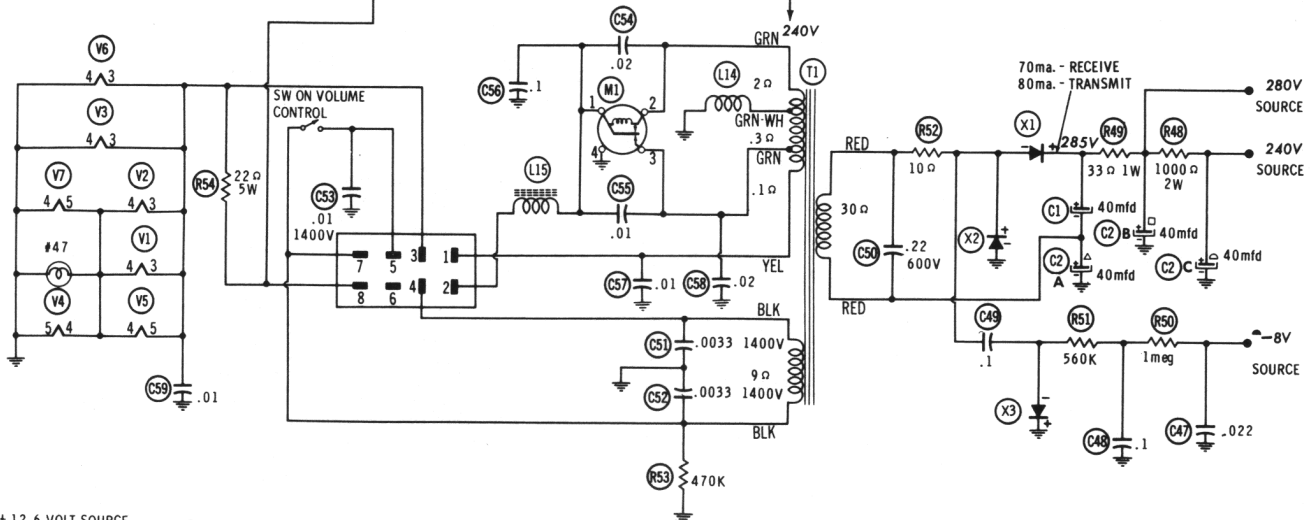
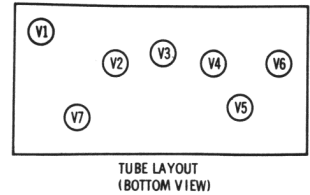
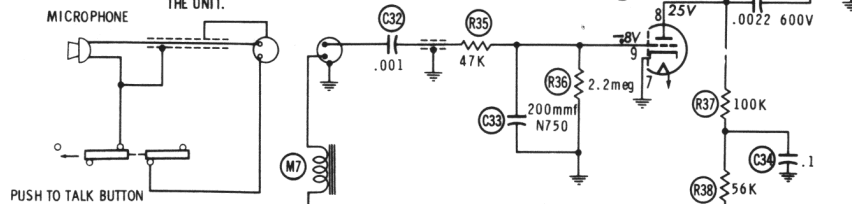
ALL VOLTAGES TAKEN IN "RECEIVE" POSITION UNLESS OTHERWISE DESIGNATED.
 † MEASURED FROM OUTPUT OF X1. † MEASURED FROM OUTPUT OF X3.
 ● MEASURED IN TRANSMIT POSITION.

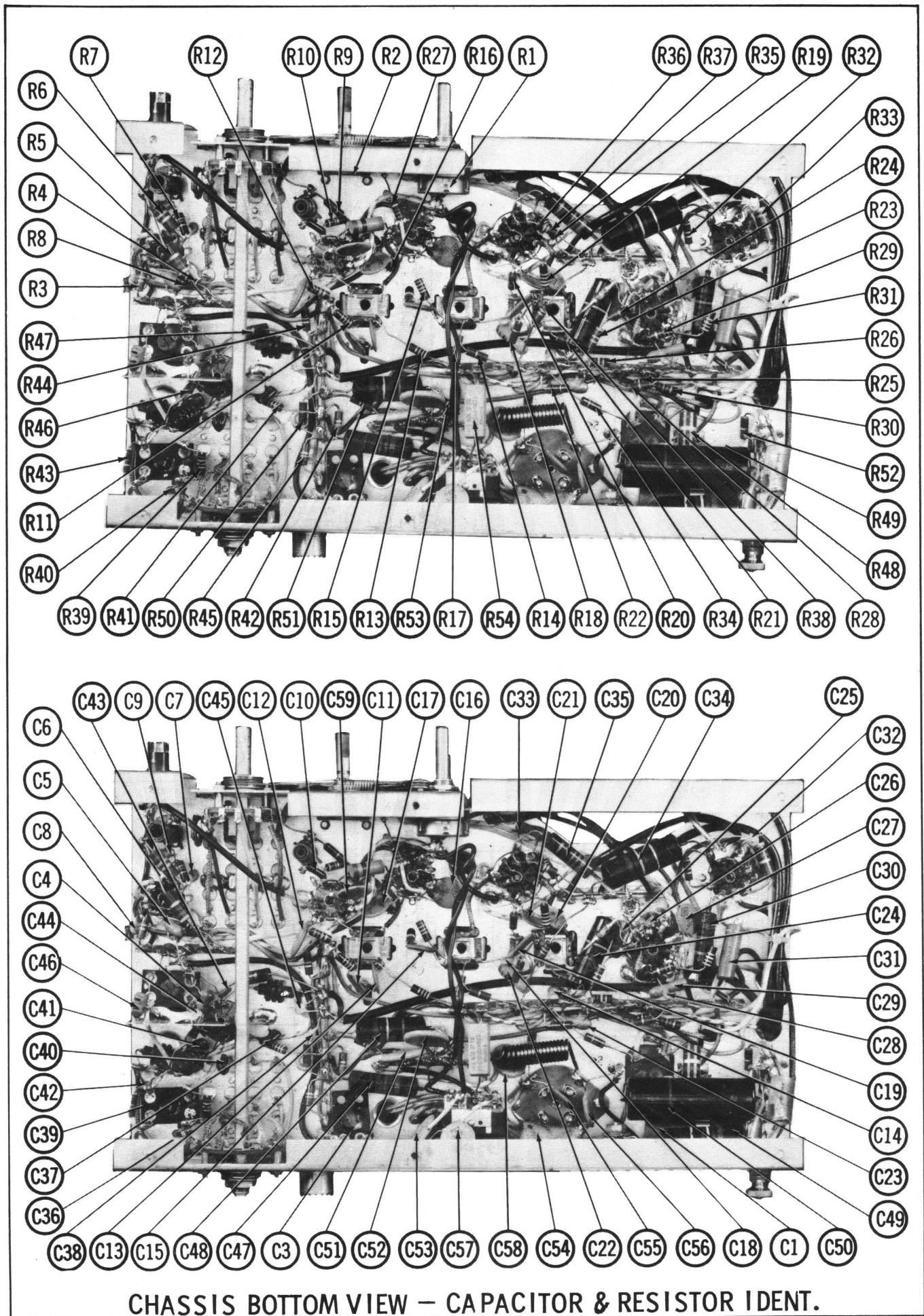
● SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections shown as bottom views.
3. Measured values are from socket pin to common ground.
4. Battery voltage maintained at 12.6 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings.
6. 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.





CHASSIS BOTTOM VIEW – CAPACITOR & RESISTOR IDENT.

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Use only enough generator output to provide a usable indication.
Best results will be obtained when adjusting A11 and A12, if the unit is connected to the antenna normally used and the unit is as nearly in the cabinet as possible.

Suggested Alignment Tools:

- A1 thru A6..... GENERAL CEMENT #8607, 9291, 9294
WALSCO #2520, 2522, 2523, 2524, 2534, 2537, 2538
A7, A8, A9..... GENERAL CEMENT #8282, 8606, 8606-L, 9295, 9440
WALSCO #2526, 2543, 2544, 2545
A10 thru A13..... GENERAL CEMENT #8282, 8606, 8606-L, 9091
WALSCO #2526, 2541, 2542, 2543, 2544

RECEIVER ALIGNMENT

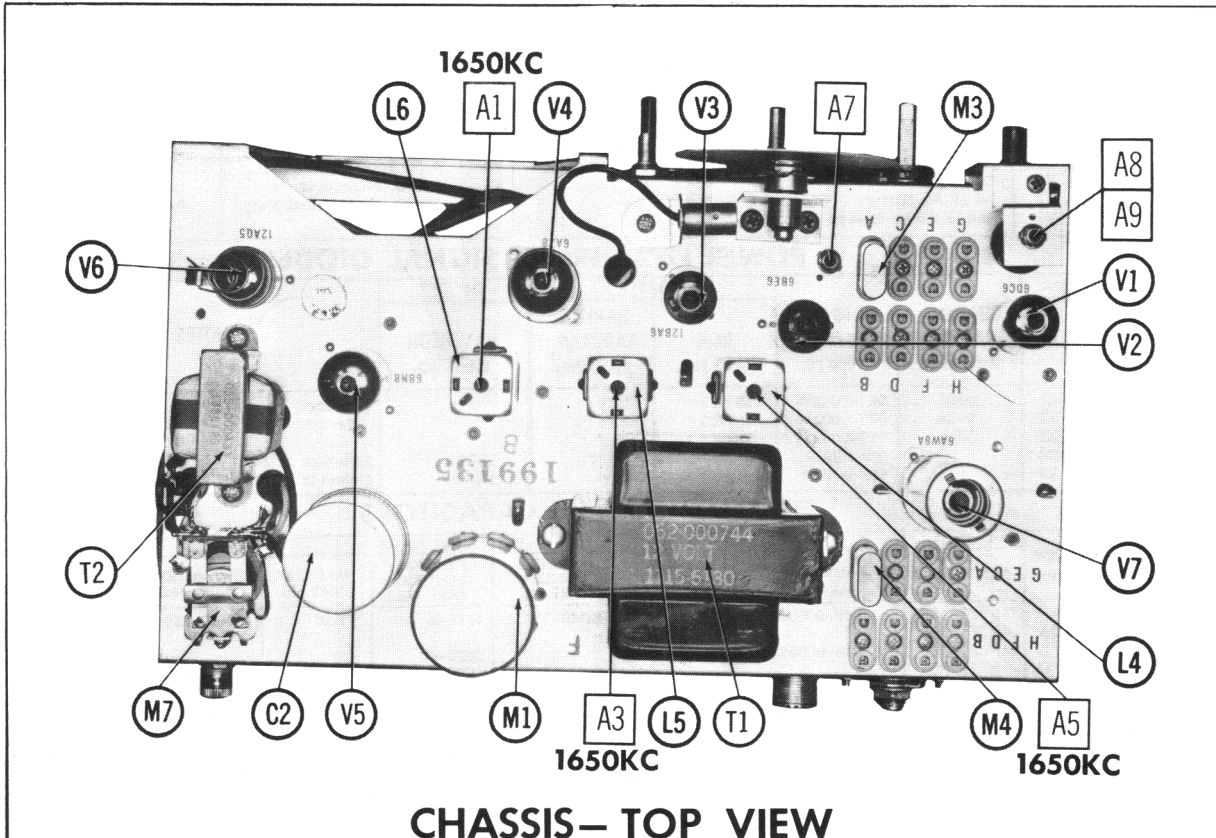
Connect DC probe to \diamond common to ground.

	SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
1.	Tune to 1650KC (Unmod.). High side thru .01mfd to pin 7 (grid) of Converter, low side to ground.	Any	A1, A2, A3, A4, A5, A6	Remove Receiver crystal. Adjust for maximum deflection. Reinsert crystal.
2.	Tune to crystal frequency. High side to antenna receptacle, low side to ground.	Highest Channel Used	A7	Adjust for maximum deflection.
3.	"	"	A8, A9	Adjust for maximum on first peak from maximum CCW position.

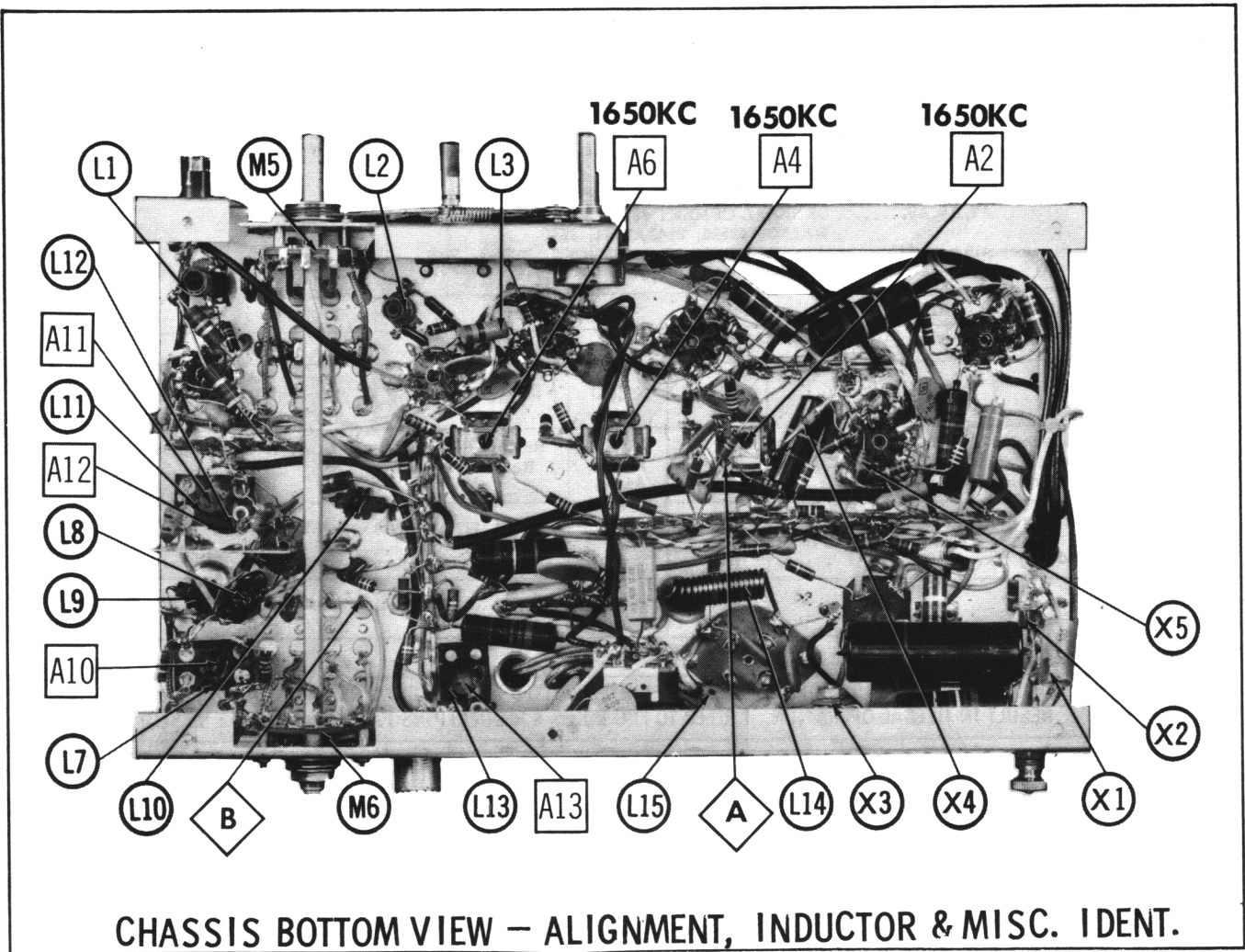
TRANSMITTER ALIGNMENT

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	SPECIAL INSTRUCTIONS	INDICATOR	ADJUST	REMARKS
4.	Connect suitable load to antenna receptacle.	DC VTVM between \diamond and ground.	A10	Key Transmitter. Adjust for maximum deflection. Rock A10 to each side of peak and note rate of dropoff. Adjust to point just below peak on side of gradual dropoff.
5.	"	RF Wattmeter or field strength meter.	A11, A12,	Adjust for maximum output. Repeat several times.
6.	A13 is adjusted for MINIMUM Transmitter interference on local TV Receivers tuned to Channel 2.			



CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS

TUBES

◆ AMPEREX ◆		◆ GENERAL ELECTRIC ◆		◆ RCA ◆		◆ RAYTHEON ◆		◆ SYLVANIA ◆	
ITEM No.	USE	TYPE		ITEM No.	USE	TYPE			
V1	RF Amplifier	6DC6		V5	ANL-Squelch-AF Amp.	6BN8			
V2	Converter	6BE6		V6	Output-Modulator	12AQ5			
V3	1st IF Amplifier	12BA6		V7	Trans. Osc. -Final Amp.	6AW8A			
V4	2nd IF Amp. -Speech Amp.	6AZ8							

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	CURRENT RATING (Measured)	ORIGINAL Part or Type No.	RECTIFIERS		DIODES	NOTES
			RCA PART No.	SARKES TARZIAN PART No.	RAYTHEON PART No.	
X1	.080A	027-000296 †	1N1763 †	2F4 †	IN34A IN128	† Silicon * Selenium Detector (IN34A) Detector (IN128)
X2	.080A	027-000296 †	1N1763 †	2F4 †		
X3	.001A	027-000284 *	1N1763 †	10 *		
X4		019-101918				
X5		019-002718				

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	Hallcrafters PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	40	200	045-000633	PRSI580	BR40-250	QT1-14	TC48	TD-40-250	TVA-1511
C2A	40	350							
B	40	350				XC3-40			
C	40	200				QT1-15			
D	10	50							

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOPART No.	MALLORY PART No.	SPRAGUE PART No.
C3	24 2%				22R5Q24	CM-15E-240G	MCE220	
C4	5 N750			DTN-5	C10V5U	CCTN-050	CN7-550	10TCU-V50

PARTS LIST AND DESCRIPTIONS (Continued)

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.
C5	10 N750			DTN-10	C10Q1U	CCTN-100	CN7-410	10TCU-Q10
C6	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C7	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C8	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C9	10 N750			DTN-10	C10Q1U	CCTN-100	CN7-410	10TCU-Q10
C10	22 2%				22R5Q22	CM-15E-220G		
C11	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C12	.02		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C13	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C14	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C15	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C16	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C17	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C18	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C19	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C20	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C21	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C22	100 N750			DTN-100	C10T1U	CCTN-101	CN7-310	10TCU-T10
C23	100 N750			DTN-100	C10T1U	CCTN-101	CN7-310	10TCU-T10
C24	.1 200V		P288N-1	DF-104	CUB2P1	2DP-3-104	GEM-201	2TM-P10
C25	200 N750			DTN-200	C10T2U	CCTN-202	CN7-320	10TCU-T20
C26	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C27	.01	(.001) †	BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C28	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C29	100 N750			DTN-100	C10T1U	CCTN-101	CN7-310	10TCU-T10
C30	.001 600V		P688N-001	DD-102	CUB6D1	6DP-1-102	GEM-621	6TM-D10
C31	.0033 600V		P688N-0033	DD-332	CUB6D33	6DP-1-332	GEM-6233	6TM-D33
C32	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C33	200 N750			DTN-200	C10T2U	CCTN-202	CN7-320	10TCU-T20
C34	.1 400V		P488N-1	DF-104	CUB4P1	4DP-3-104	GEM-401	4TM-P10
C35	.0022 600V		P688N-0022	DD-222	CUB6D22	6DP-1-222	GEM-6222	6TM-D22
C36	17 2%				22R5Q18	CM-15E-180G		
C37	12 2%				22R5Q12	CM-15E-120G		
C38	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C39	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C40	47 2%				22R5Q47	CM-15E-470G		
C41	40 2%				22R5Q4	CM-15E-390G	MCE223	
C42	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C43	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C44	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C45	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C46	5 N750			DTN-5	C10V5U	CCTN-050	CN7-550	10TCU-V50
C47	.022 200V		P288N-022	DD-203	CUB4S22	4DP-2-223	GEM-4122	2TM-S22
C48	.1 200V		P288N-1	DF-104	CUB2P1	2DP-1-104	GEM-201	2TM-P10
C49	.1 400V		P488N-1	DF-104	CUB4P1	4DP-3-104	GEM-401	4TM-P10
C50	.22 600V		P688N-22		CUB6P22	6DP-5-224	GEM-6022	6TM-P22
C51	.0033 1400V		DAC-6	DD16-302	HVE16D3	UAC-233	BL-D30	
C52	.0033 1400V		DAC-6	DD16-302	HVE16D3	UAC-233	BL-D30	
C53	.01 1400V		DAC-27	DD16-103	HVE16S1	UAC-110	BL-S10	
C54	.02		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C55	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C56	.1 50V			DDA-104	H-05P1		TA-010	TG-P10
C57	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C58	.02		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C59	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10

† Alternate Value

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			Halicrafters PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	2meg	025-002048	B-76, KR-1, or (AB-76, KR-1 AK-7)	A47-2meg-Z, FS-3	Q13-139, 76-1, or (BUI, CF27, SSI, GC)*	U56, US-26, or (UA26L, US-41, SL-3500)
R2	Squelch	3meg	025-002047	B-84, or (AB-84, AK-7)	A47-3meg-S, FS-3	Q11-140, or (BUI, CF21, SSI, DC)*	U59, or (UA36L, SL-3500)

* "SNAPTROL"

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 PART No.	REMARKS			IRC PART No.	WORKMAN PART No.	REMARKS
R3	150K				R29	8.2meg			
R4	470K				R30	1.8meg			
R5	4700Ω 1W				R31	470K			
R6	27K 1W				R32	470K			
R7	27K				R33	330Ω 1W			
R8	68Ω				R34	10meg			
R9	1000Ω				R35	47K			
R10	47K				R36	2.2meg			
R11	47K				R37	100K			
R12	82K				R38	56K			
R13	47K				R39	27K			
R14	2200Ω				R40	2700Ω			
R15	27K				R41	47K			
R16	68Ω				R42	56K			
R17	1meg				R43	1000Ω			
R18	2200Ω				R44	15K			
R19	47K				R45	27K			
R20	150Ω				R46	56Ω			
R21	47K				R47	8200Ω 5% 1W			
R22	2.2meg				R48	1000Ω 2W			
R23	470K				R49	33Ω 1W			
R24	1meg				R50	1meg			
R25	220K				R51	560K			
R26	220K				R52	10Ω			
R27	2.2meg				R53	470K			
R28	1.5meg				R54	22Ω 5W		5W-SQ-22.5	

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		Hallicrafters PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman PART No.	
L1	RF Receiver Osc.	051-002791					
L2	RF (27uh)	051-003319		72F275AP			
L3	1st IF	053-000647					
L4	2nd IF	050-000751					
L5	3rd IF	050-000751					
L6	Transmit. Osc.	051-003312					
L7	RF Choke (500uh)	053-000537					
L8	RF Choke (500uh)	053-000537					
L9	RF Choke (500uh)	053-000537					
L10	Final Pri.	051-003324					
L11	Final Sec.	051-002770					
L12	54MC Trap	053-000564					
L13	Hash Suppressor	051-002785					
L14	Hash Filter	051-002740					

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	SEC. 2	Hallicrafters PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	117VAC @ .53A or 12.6VDC @ 4.3A	110VAC @ .30A	12.6V @ 1.6A	052-000744					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	Hallicrafters PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	18K	3-4Ω	055-000433					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	Hallicrafters PART No.	QUAM PART No.	
SP1	4"	PM	3-4Ω	085-000206	4A07	

VIBRATOR

ITEM No.	TYPE	INPUT VOLTS	FRE-QUENCY	REPLACEMENT DATA				NOTES
				Hallicrafters PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	RADIART PART No.	
M1	Interruptor	12V	115v	027-000282	G8801	G1601	G8801	

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			Hallicrafters PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
M2	3AG	5A 32V	039-100322	006-000883	311005. (3AG 5A 32V)	155020	AGC 5	HHJ-B

MISCELLANEOUS

ITEM No.	PART NAME	Hallicrafters PART No.	NOTES
M3	Crystal	019-002819	Receive When ordering crystals specify desired channel, Transmit model, and serial number. Receive Receive Transmit Receive-Transmit (DPDT, 12VAC Coil)
M4	Crystal	019-002820	
M5	Switch	062-000194	
M6	Switch	062-000193	
M7	Relay	021-000511	
	Microphone	081-000111	
	RF Indicator Lamp	039-000680	

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Dial Scale	083-000943	Volume Squelch Channel Selector
Knob	015-001680	
Knob	015-001678	
Knob	015-001683	
Cabinet	150-003385	

WIRING DATA

General-use Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Shielded Antenna Lead	Use BELDEN No. 8214 Lowest Loss (RG-8/U Type) 8237 Low Loss (RG-8/U) 8240 (Solid) Miniature (RG-58/U) 8259 (Stranded) Miniature (RG-58A/U)
Coiled Microphone Cable	Use BELDEN No. 8497 3 Conductor- 1 Shielded for Press-to-Talk (Neoprene) 8498 3 Conductor- 1 Shielded for Press-to-Talk (Vinyl)
Ignition Noise Suppression	Use BELDEN No. 7300-Series Spark-Plug Sets
Bonding Strap	Use BELDEN No. 8661 (3/8 In.)