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PHOTOFACT® Folder



WEBSTER MODEL
FOUR-ELEVEN



WEBSTER MODEL
FOUR-ELEVEN

TRADE NAME	Webster Model FOUR-ELEVEN
MANUFACTURER	Webster Electric Co., 1900 Clark Street, Racine, Wisconsin
TYPE SET	AC-Battery Operated 8 Tube Crystal Controlled Citizens Band Transmitter - Receiver
POWER SUPPLY	110-120 Volts AC, 60 Cycles (or) 12 Volt Storage Battery
RATING	65 Watts, .6 Amp. @ 117 Volts AC (or) 5 Amp. @ 12.6 Volts DC
TUNING RANGE	Any 4 of Citizens Band Channels 1 thru 23

NOTICE

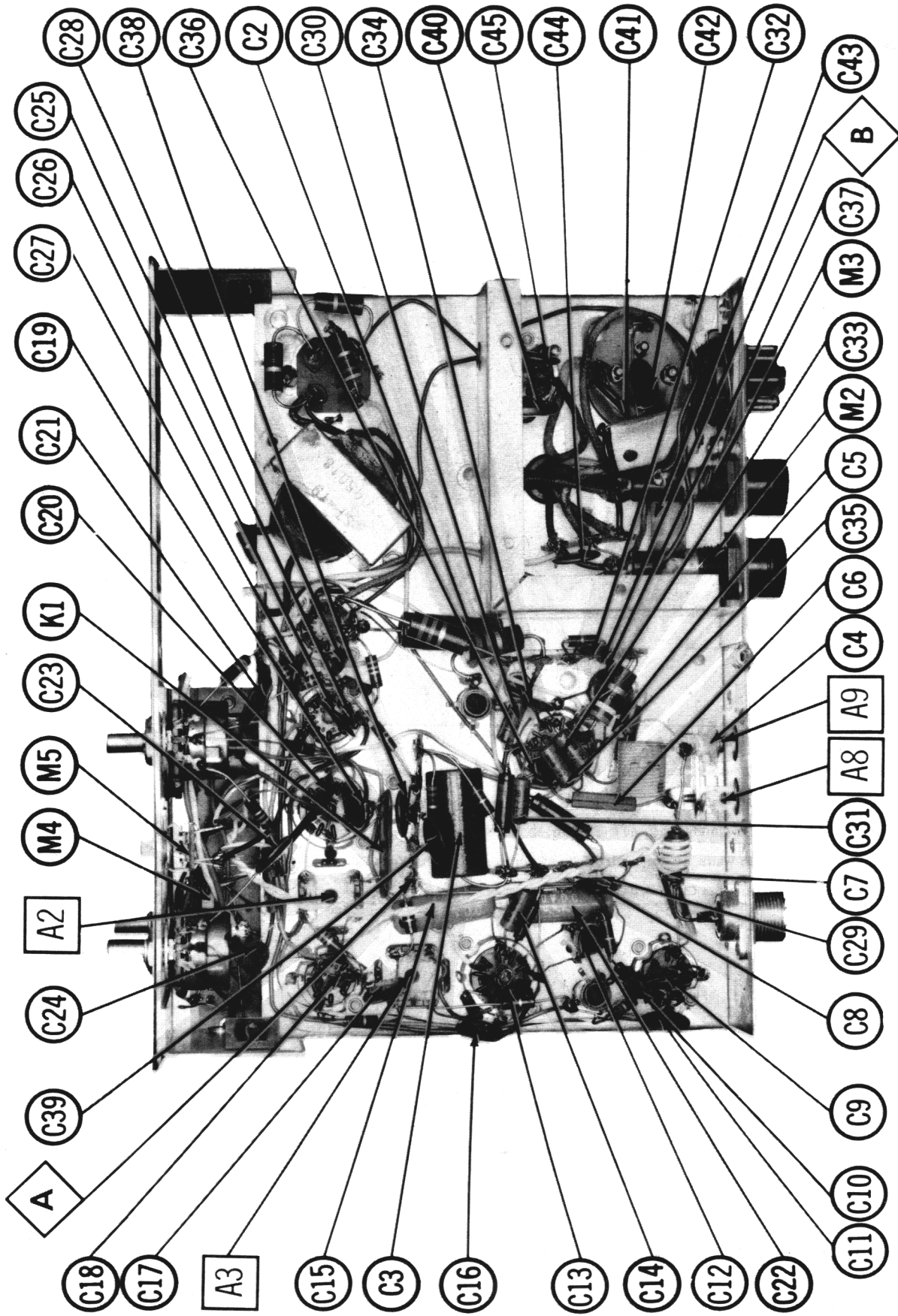
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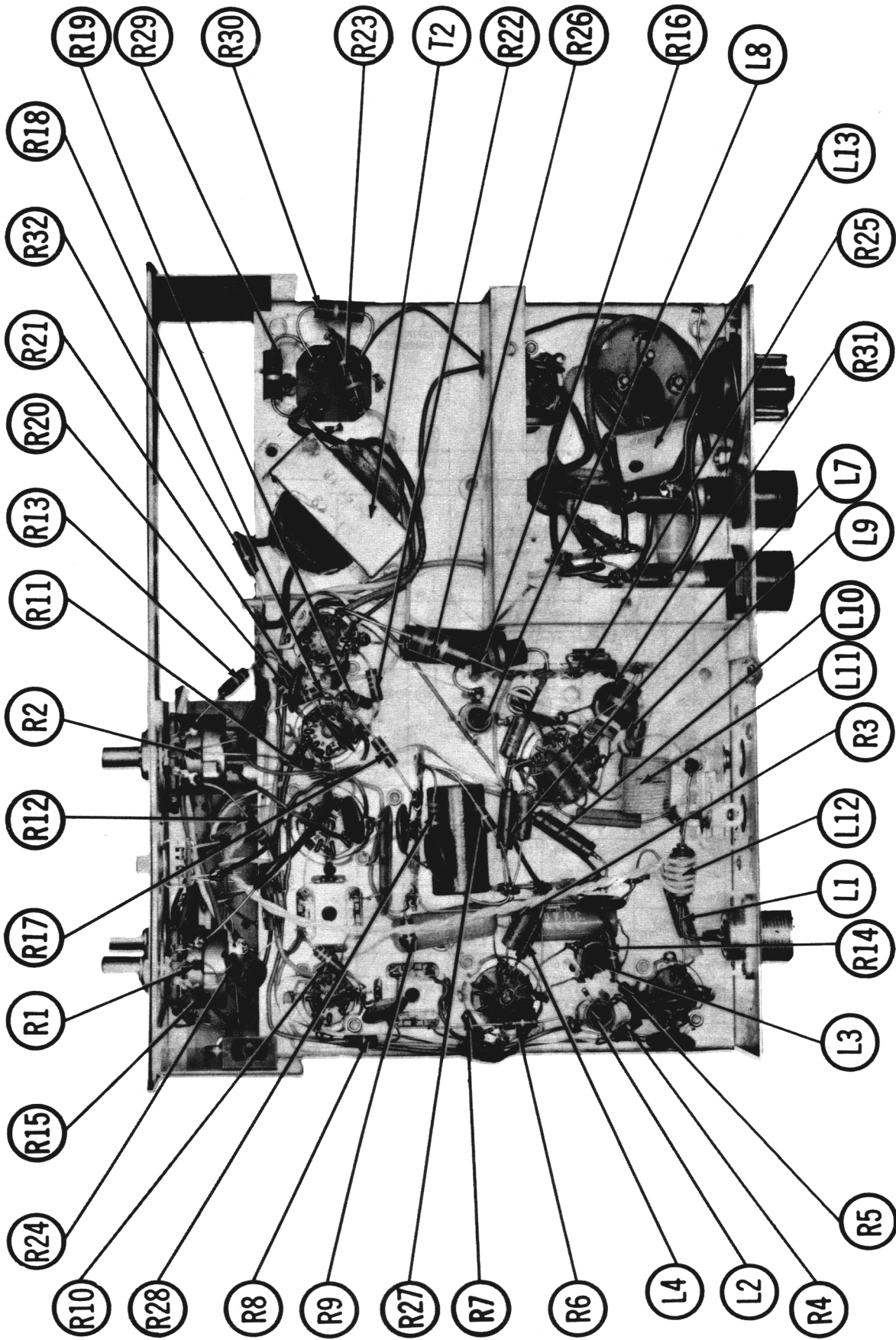


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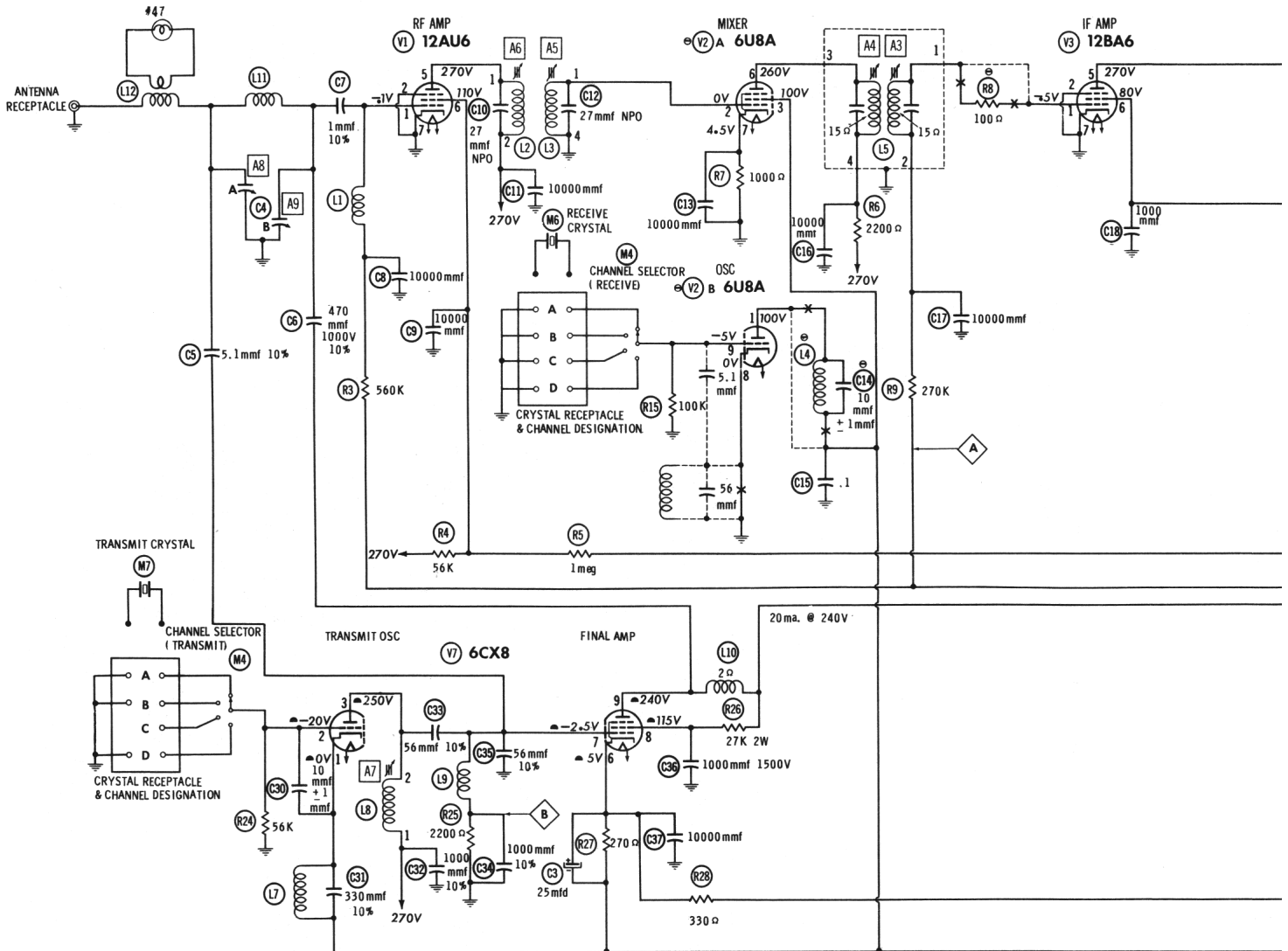
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CHASSIS BOTTOM VIEW-ALIGNMENT, CAPACITOR & MISC. IDENT.



CHASSIS BOTTOM VIEW-RESISTOR & INDUCTOR IDENT.



RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	12AU6	2.1 meg	0 Ω	0 Ω	.1 Ω	†200 Ω	†56K	0 Ω		
V2	6U8A	†27K	.1 Ω	†27K	.1 Ω	.1 Ω	†2400 Ω	1000 Ω	0 Ω	100K
V3	12BA6	1.5 meg	0 Ω	0 Ω	.1 Ω	†200 Ω	†56K	0 Ω		
V4	6B7	0 Ω	550K	0 Ω	.1 Ω	0 Ω	†2 meg	†1.1 meg	270K	2.6 meg
V5	12CR6	0 Ω	NC	0 Ω	.1 Ω	†270K	†1 meg	2.2 meg		
V6	12AQ5	560K	470 Ω	0 Ω	.1 Ω	†460 Ω	†200 Ω	560K		
V7	6CX8	∞ Ω	56K	∞200 Ω	.1 Ω	.1 Ω	∞270 Ω	2200 Ω	†27K	†460 Ω
V8	12X4	225 Ω	NC	.1 Ω	0 Ω	NC	210 Ω	†		

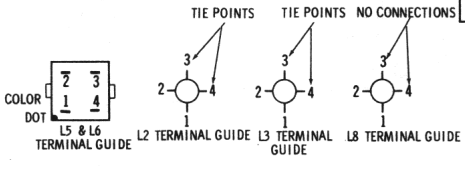
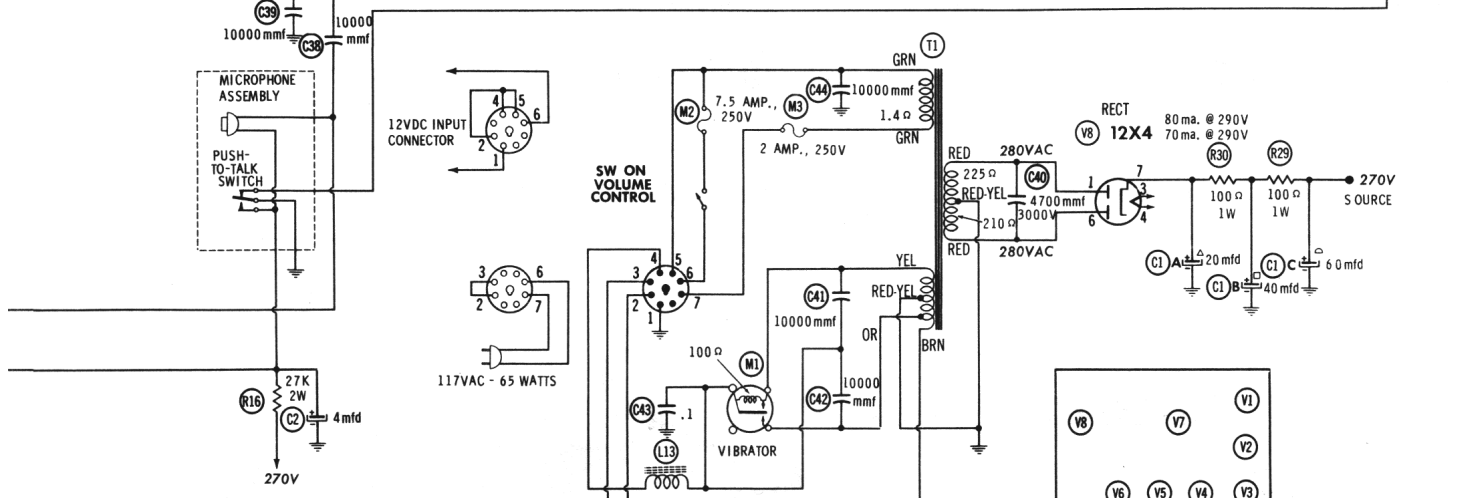
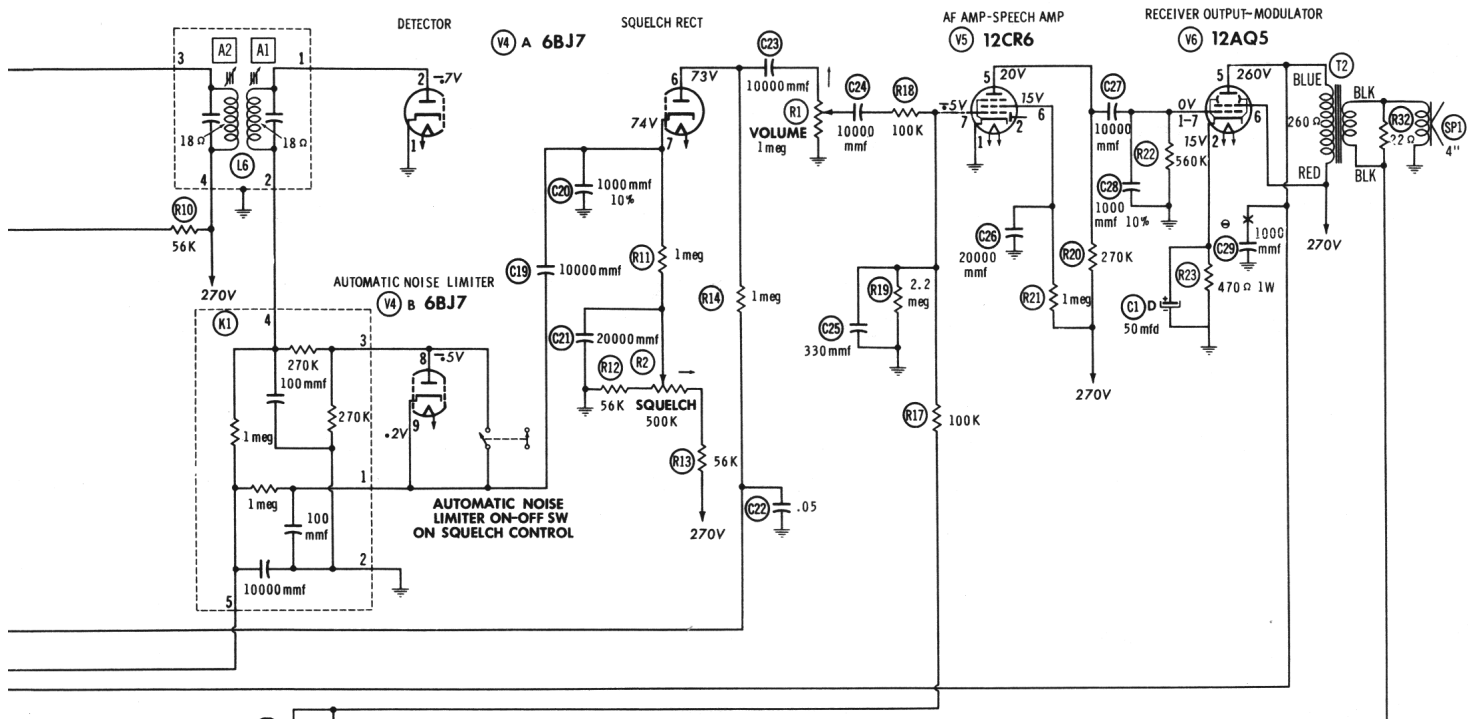
ALL MEASUREMENTS MADE IN "RECEIVE" POSITION UNLESS OTHERWISE DESIGNATED.

∞ MEASURED IN "TRANSMIT" POSITION.

† MEASURED FROM PIN 7 OF V8.

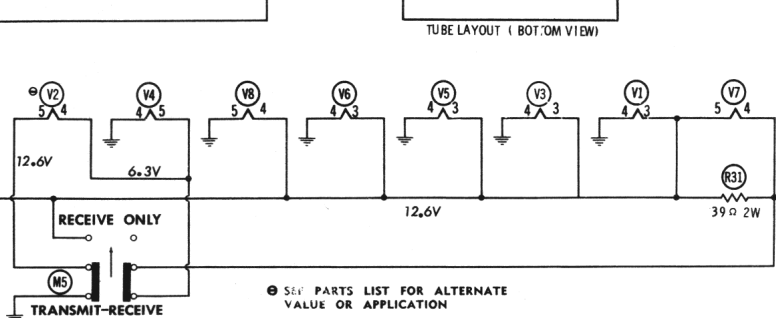
NC NO CONNECTION

† THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELEC TROLYTIC IN THE CIRCUIT.



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.

- DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured with 1000 ohm per volt voltmeter.
- Socket connections are shown as bottom views.
- Measured values are from socket pin to common ground.
- Line voltage maintained at 117 volts for voltage readings.
- Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
- 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)

WEBSTER MODEL FOUR-ELEVEN

ALIGNMENT INSTRUCTIONS

RECEIVER

1. Connect DC probe of VTVM to point $\diamond A$, common to chassis.

Turn squelch control to off position, (maximum counter clockwise).

Connect high side of Signal Generator (455KC, 400 ν mod.), thru .1mfd to pin 2 of V2A, Low side to chassis. Adjust A1, A2, A3, and A4 for maximum deflection.

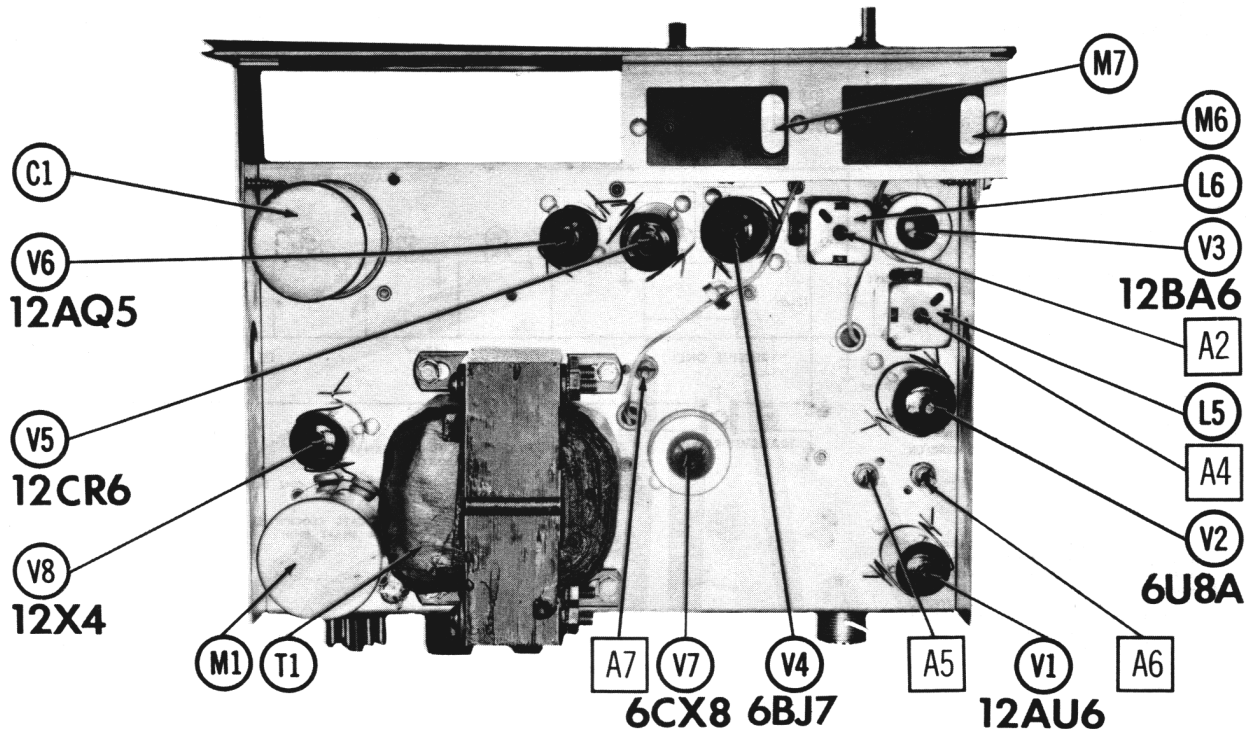
2. Connect high side of Signal Generator, set at proper channel frequency (400 ν mod.) to antenna socket. Adjust A5 and A6 for maximum deflection on VTVM.

TRANSMITTER (REFER TO NOTICE ON FRONT PAGE)

1. Connect 50 ohm dummy load to antenna socket.

Connect DC probe of VTVM to point $\diamond B$, common to chassis. Adjust A7 for maximum deflection.

Adjust A8 and A9 for maximum brilliance of indicator lamp.



CHASSIS TOP VIEW

PARTS LIST AND DESCRIPTIONS

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			MALLORY PART No.	SPRAGUE PART No.
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.		
C42	10000		BPD-01	DD-103	BYA10S1	B-110	5HK-S10
C43	.1 200V		P288N-1	DF-104	CUB2P1	B-110	2TM-P10
C44	10000		BPD-01	DD-103	BYA10S1	B-110	5HK-S10
C45	10000		BPD-01	DD-103	BYA10S1	B-110	5HK-S10

Webster Part Number

Note 1. Not used in some versions.

CONTROLS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			MALLORY PART No.	INSTALLATION NOTES
			WEBSTER PART No.	CENTRALAB PART No.	CLAROSTAT PART No.		
RIA	Imeg Shaft		G-45	B-70-S Not Req.	A47-Imeg-S FS-3 SWE-12	U53	Volume
B	Switch			Not Req.	SWE-12	Not Req.	Power Off-On
C	500K Shaft		VF-45	B-59 Not Req.	A47-500K-S FS-3 SWE-20	U50	Squelch
R2A	500K Shaft			Not Req.	FS-3	Not Req.	
B	Switch			KR-2		US-27	ANL Off-On

RESISTORS

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA		ITEM No.	RATING	REMARKS	REPLACEMENT DATA	
			IRC PART No.	WORKMAN TV PART No.				IRC PART No.	WORKMAN TV PART No.
R3	560K				R18	100K			
R4	56K				R19	2.2meg			
R5	Imeg				R20	270K			
R6	22000				R21	Imeg			
R7	10000				R22	560K			
R8	1000				R23	4700 1W			
R9	270K				R24	56K			
R10	56K				R25	22000			
R11	Imeg				R26	27K 2W			
R12	56K				R27	2700			
R13	56K				R28	3300 1W			
R14	Imeg				R29	1000 1W			
R15	100K				R30	1000 1W			
R16	27K 2W				R31	392 2W			
R17	100K				R32	220			

Note 1. Not used in some versions.

COILS (RF-IF)

ITEM No.	USE	REMARKS	REPLACEMENT DATA			ITEM No.	RATING	REMARKS	REPLACEMENT DATA		
			WEBSTER PART No.	Merit PART No.	Miller PART No.				Stoncor PART No.	Workman TV PART No.	Notes
L1	RF Choke (5, 6uh)		TL-70	SW-431	4809	R18	100K				
L2	RF Pi		TL-81	TV-118	6171-A	R19	2.2meg				
L3	RF Sec		TL-68	TV-118	6171-A	R20	270K				
L4	RF Choke (1.5uh)		TL-84	BC-862	4604	R21	Imeg				
L5	Input IF		TL-85	BC-352	12-C1	R22	560K				
L6	Output IF		TL-85	BC-352	12-C2	R23	4700 1W				
L7	RF Choke (5, 6uh)		TL-70	SW-431	4609	R24	56K				
L8	Osc. Plate		TL-91	SW-431	6171-A	R25	22000				
L9	RF Choke (5, 6uh)		TL-70	SW-431	4609	R26	27K 2W				
L10	RF Choke (15uh)		TL-69	SW-631	4624	R27	2700				
L11	Final Plate		TL-82			R28	3300 1W				
L12	Ant. Loading		TL-82			R29	1000 1W				
L13	Hash Choke (46uh)		TL-72		7825-8	R30	1000 1W				

TUBES

GENERAL ELECTRIC • RAYTHEON • PENNSYLVANIA •

ITEM No.	USE	TYPE	REMARKS	REPLACEMENT DATA		TYPE
				CORNELL-DUBILIER PART No.	MALLORY PART No.	
V1	RF Amplifier	12AU6			12CR8	
V2	Mixer - Osc.	6UB8 (6U8) *			12AQ5	
V3	IF Amplifier	12BA6			6CX8	
V4	Det., ANL-Squelch Rect.	6BM7			12X4	

* Alternate

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			MALLORY PART No.	SPRAGUE PART No.	
			WEBSTER PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.			ELMENCO PART No.
CLA	.20 300			AFH4-46	D0380	FP418-7	TMQ-4140	TVL-4681
B	40 300							
C	60 300							
D	50 25							
C2	4 150							
C3	25 50							

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			MALLORY PART No.	SPRAGUE PART No.
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.		
C4A	5.1 10%				TCZ-4R7	C10V5C	10TCC-V50
C6	470 1000V 10%						
C7	1.0%						
C8	10000						
C9	10000						
C10	27 NPO						
C11	10000						
C12	27 NPO						
C13	10000						
C14	10 + 1mmf						
C15	.1 200V						
C16	10000						
C17	10000						
C18	10000						
C19	10000						
C20	1000 10%						
C21	20000						
C22	.05 200V						
C23	10000						
C24	10000						
C25	330						
C26	20000						
C27	10000						
C28	1000 10%						
C29	1000						
C30	10 + 1mmf						
C31	330 10%						
C32	1000 10%						
C33	56 10%						
C34	1000 10%						
C35	56 10%						
C36	1000 1500V						
C37	10000						
C38	10000						
C39	4700						
C40	10000						

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (POWER)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
			WEBSTER PART No.	Merit PART No.	Slancor PART No.	Thordarson PART No.	
	PRI	SEC. 1	SEC. 2				
T1	117V @ -0A(AC) 12.6VCT @ 3A(DC)	560VCT @ .080A 1.6A (AC)	ST-102				

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
			WEBSTER PART No.	Merit PART No.	Slancor PART No.	Thordarson PART No.	
	PRI	SEC.					
T2	6200Ω	3-4Ω	ST-19		24S05	S-63X	

SPEAKER

ITEM No.	TYPE		REPLACEMENT DATA		NOTES
			WEBSTER PART No.	QUJAM PART No.	
	SIZE	V. C. IMP.			
SP1	4"	PM	3-4Ω	P4VA-NW 4A1	

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	WEBSTER PART No.	REPLACEMENT DATA
K1		ANL-Squelch Network (2) 100mmf, 10000mmf, (2) 270K, (2) 1meg	59-4719	

VIBRATOR

ITEM No.	TYPE	INPUT VOLTS	FRE- QUENCY	REPLACEMENT DATA				NOTES
				WEBSTER PART No.	CORNELL- DUBILIER PART No.	MALLORY PART No.	RADIART PART No.	
M1	Interrupter	12.6	115 ^o	G-1801 G-1801	6301	G1801	6301	

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA							
			WEBSTER PART No.		LITTELFUSE PART No.		BUSS PART No.			
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER		
M2	3AG	7.5A 250V	AGC 7½		31207.5 (3AG 7½A 250V)	342001		AGC 7½		HKP
M3	3AG	2A 250V	AGC 2		312003 (3AG 2A 250V)	342001		AGC 2		HKP

MISCELLANEOUS

ITEM No.	PART NAME	WEBSTER PART No.	NOTES
M4	Switch	F-49	Channel Selector (Rotary Wafer) Receive-Transmit (DPDT Slide Type) Receive Transmit
M5	Switch	SW-726	
M6	Crystal		
M7	Crystal		

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Lens Knob	147-10	Clear Lucite
Knob	101B270	Channel Selector
	105P-T3270	Volume, Squelch

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
8524 (Stranded) Available in Ten Colors
Power Cord Use BELDEN No. 1785-B (6 Ft. Length)
1725-K (7½ Ft. Length)