



RCA VICTOR
MODEL 3-BX-671 (Ch. RC-1125)

TREBLE
CONTROL

BASS
CONTROL

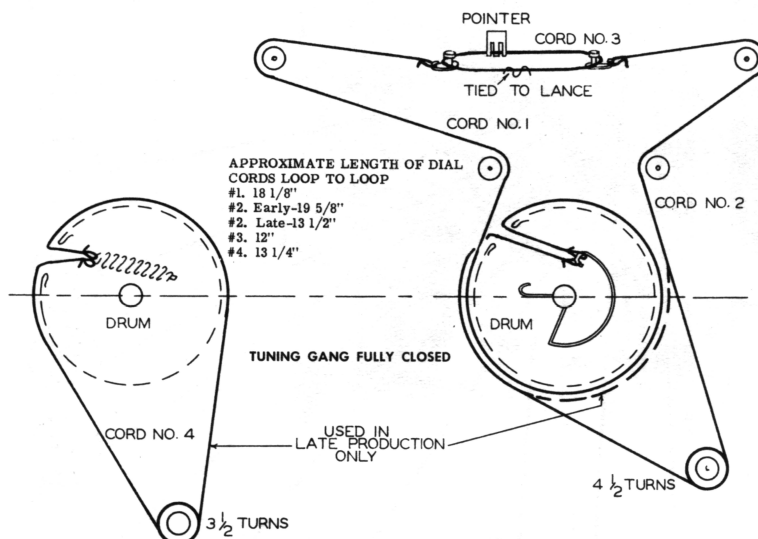
ON-OFF
VOLUME
CONTROL

TUNING
CONTROL

BAND
TUNING
CONTROL

RCA VICTOR
MODEL 3-BX-671 (Ch. RC-1125)

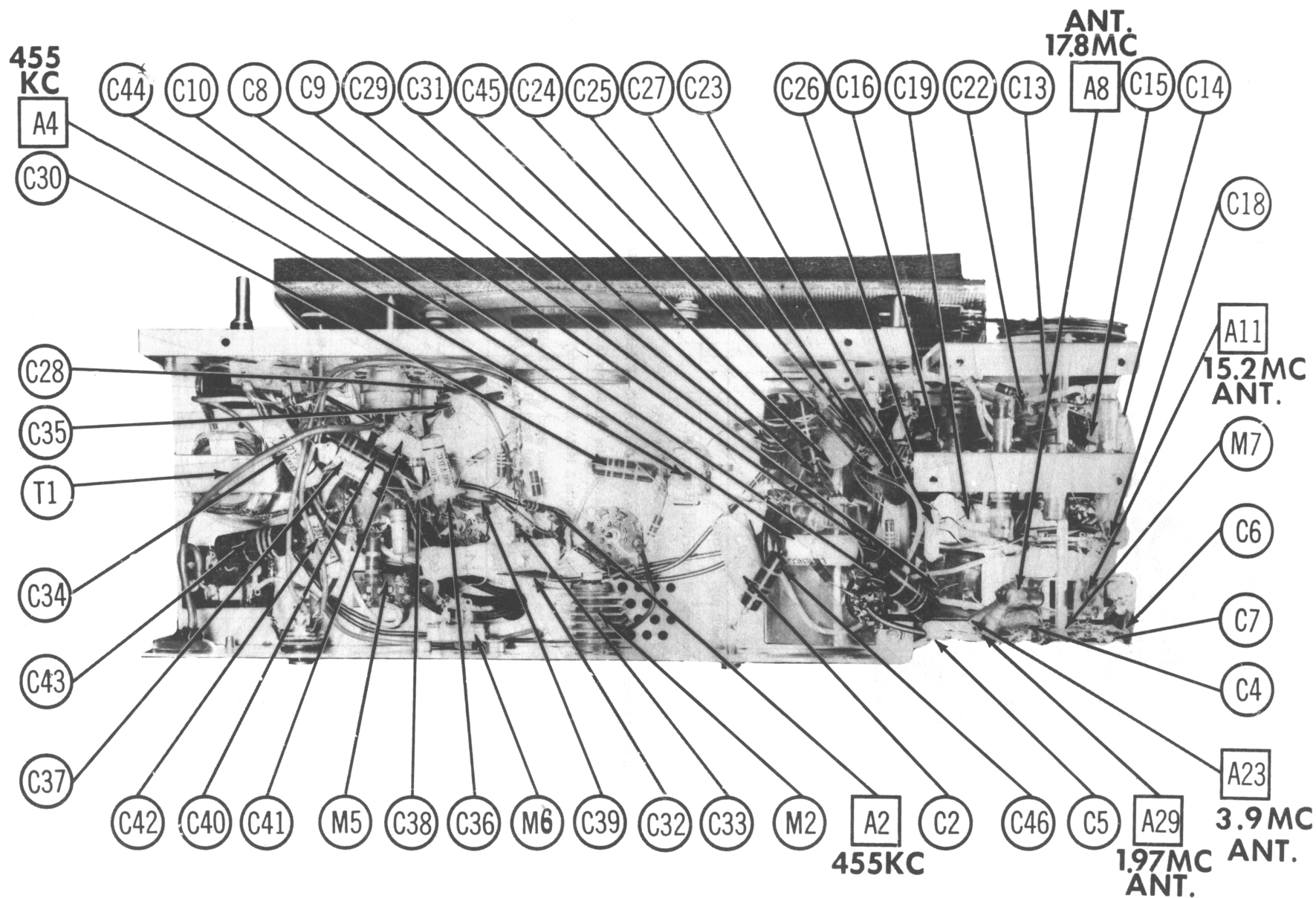
TRADE NAME	RCA Victor Model 3-BX-671 (Ch. RC-1125)		
MANUFACTURER	RCA Victor Div., Radio Corp. of America, Camden, N.J.		
TYPE SET	Three Power Portable 7 Band AM Superheterodyne Receiver		
TUBES (Five)	Types 1U4 RF Amp., 1L6 Conv., 1U4 IF Amp., 1U5 Det.-AVC-AF Amp., 3V4 Audio Output		
POWER SUPPLY	110-120 Volts AC-DC (or) 9 Volts "A" Supply & 90 Volts "B" Supply in Pack Form		
RATING	.110 Amp. @ 117 Volts AC (or) 56MA @ 9 Volts & 14MA @ 90 Volts DC		
TUNING RANGE	"A" Band (540-1600KC)	31 Meter Spread Band (9.45-9.85MC)	
	"B" Band (2.0-4.0MC)	25 Meter Spread Band (11.55-12.05MC)	
	"C" Band (4.0-8.0MC)	19 Meter Spread Band (14.9-15.55MC)	
		16 Meter Spread Band (17.5-18.2MC)	



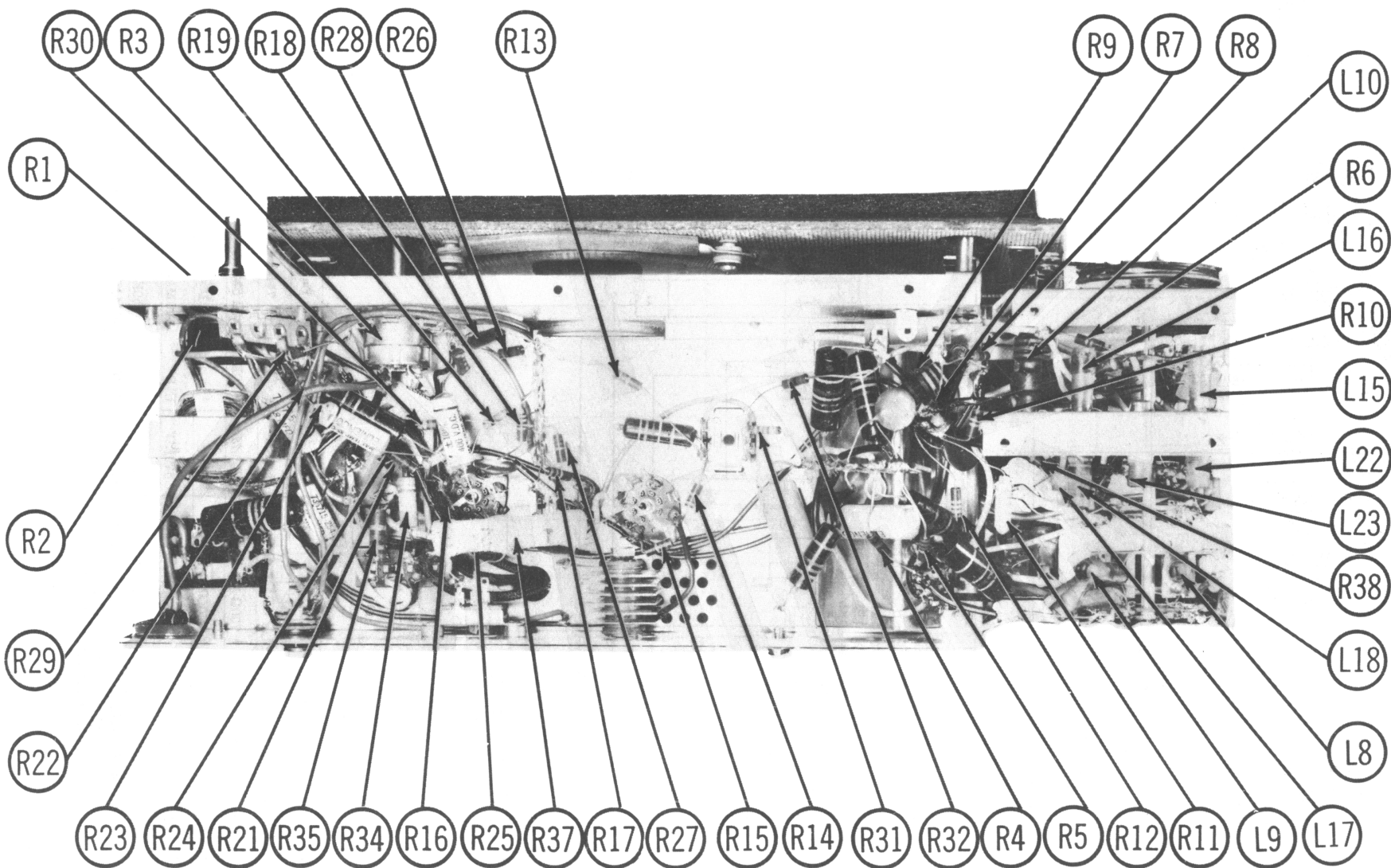
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CHASSIS-BOTTOM VIEW-CAPACITOR IDENTIFICATION



CHASSIS-BOTTOM VIEW-RESISTOR IDENTIFICATION

RCA VICTOR
MODEL 3-BX-671 (Ch. RC-1125)

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Receiver alignment with battery operation is preferable.
Use isolation transformer, if available. If not, connect a .1MF capacitor in series with low side of signal generator and chassis.
Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.
Turn treble tone control fully clockwise and bass tone control fully counter clockwise.
With tuning gang fully closed set pointer at red index mark just below "17.5" on the 16 meter spread band scale.
Attenuate generator to maintain as low an output as possible to avoid AVC action.

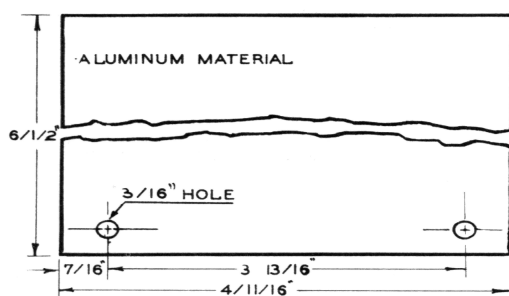
IF ALIGNMENT

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. .01MF	High side to pin 6 (grid) of 1U4 (V3). Low side to chassis.	455KC (400%Mod)	"A"	Quiet point near 1600KC	Across voice coil	A1, A2	Adjust for maximum output. If AC power is used without an isolation transformer, reduce dummy antenna to 200MMF to reduce hum modulation.
2. "	High side to pin 6 (grid) of 1L6 (V2). Low side to chassis.	"	"	"	"	A3, A4	"

OSCILLATOR AND RF ALIGNMENT

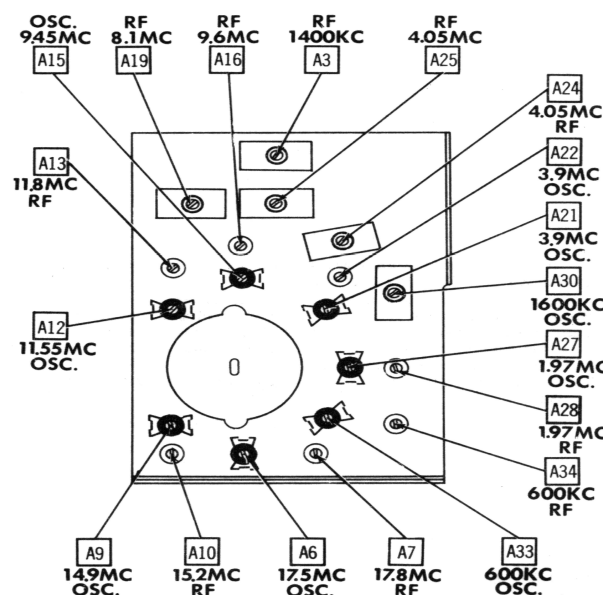
Replace bottom cover.
Secure the alignment fixture (Fig.1) to the tuner side of the chassis to simulate the effect of the case. Temporary use of sheet metal clips and hardware on the dust cover base may be used to mount fixture to chassis. Use of the fixture helps obtain maximum sensitivity during alignment.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
3. 24MMF in series with 22Ω resistor	High side thru dummy to junction of C4 and terminal #9 of M7 section 4. Low side to chassis.	18.25MC (400%Mod)	16 meter band	Tuning gang fully open	Across voice coil	A5	Adjust for maximum output. If AC power is used without an isolation transformer, reduce dummy antenna to 200MMF to reduce hum modulation.
4. "	"	17.5MC	"	Tuning gang fully closed	"	A6	Adjust for maximum deflection.
5. "	"	17.8MC	"	Tune to 17.8MC signal	"	A7, A8	Adjust for maximum deflection while rocking tuning gang thru 17.8MC signal.
6. "	"	14.9MC	19 meter band	Tuning gang fully closed	"	A9	Adjust for maximum deflection.
7. "	"	15.2MC	"	Tune to 15.2MC signal	"	A10, A11	Adjust for maximum deflection while rocking tuning gang thru 15.2MC signal.
8. "	"	11.55MC	25 meter band	Tuning gang fully closed	"	A12	Adjust for maximum deflection.
9. "	"	11.8MC	"	Tune to 11.8MC signal	"	A13, A14	Adjust for maximum deflection while rocking tuning gang thru 11.8MC signal.
10. "	"	9.45MC	31 meter band	Tuning gang fully closed	"	A15	Adjust for maximum deflection.
11. "	"	9.6MC	"	Tune to 9.6MC signal	"	A16, A17	Adjust for maximum deflection while rocking tuning gang thru 9.6MC signal.
12. "	"	8.1MC	"C" band	tuning gang fully open	"	A18, A19, A20	Adjust for maximum deflection in order given. The tuning range and dial calibration of the succeeding bands depend upon the accuracy of the adjustment of A18. Avoid aligning on image.
13. "	"	3.9MC	"	Tuning gang fully closed	"	A21, A22, A23	Adjust for maximum deflection. Repeat steps 12 and 13 until maximum deflection is obtained.
14. "	"	4.05MC	"B" band	Tuning gang fully open	"	A24, A25, A26	Adjust for maximum deflection.
15. "	"	1.97MC	"	Tuning gang fully closed	"	A27, A28, A29	Adjust for maximum deflection. Repeat steps 14 and 15 until maximum deflection is obtained.
16. Remove alignment fixture and install chassis in cabinet. Plug in loop cable.							
17. Short length of wire near receiver	High side to dummy. Low side to chassis.	1620KC	"A" band	Tuning gang fully open	Across voice coil	A30	Adjust for maximum deflection.
18. "	"	1400KC	"	Tune to 1400KC signal	"	A31, A32	Adjust for maximum deflection.
19. "	"	600KC	"	Tune to 600KC signal	"	A33, A34	Adjust for maximum deflection while rocking tuning gang thru 600KC signal. Repeat steps 17, 18 and 19. Replace loop antenna with ferrite rod antenna and extend cable to maximum.
20. "	"	1400KC	"	Tune to 1400KC signal	"	A35	Adjust for maximum deflection.



ALIGNMENT FIXTURE

FIG. 1



PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA, GENERAL ELECTRIC or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RTMA BASE TYPE	NOTES
		RCA Victor PART No.	STANDARD REPLACEMENT		
V1	RF Amplifier	1U4	1U4	6AR	
V2	Converter	1L6	1L6	7DC	
V3	IF Amplifier	1U4	1U4	6AR	
V4	Det-AVC-AF Amp.	1U5	1U5	6BW	
V5	Audio Output	3V4	3V4	6BX	

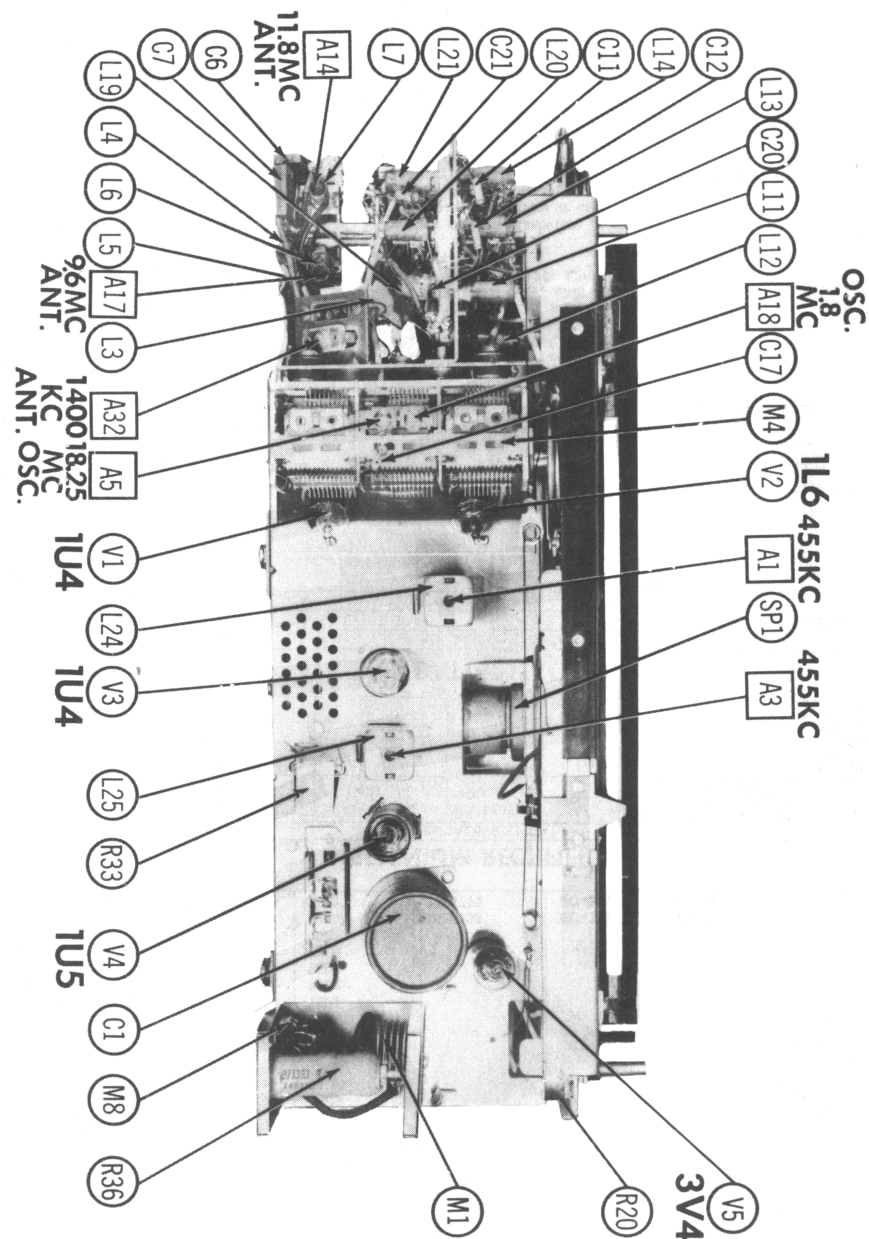
CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING		REPLACEMENT DATA							NOTES
	CAP.	VOLT	RCA Victor PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL- DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C1A	.60	350	78095						R1443	
B	.30	150								
C	.60	150								
D	180	25								
C2	10	150	78145	PR8150/12		BR1015		TC42	TVA-1406	
C3	.01									
C4	470	500	76992		MD-121					
C5	120		78142							
C6	820	500	78143							
C7	1100	500	78144							
C8	.047	200	73558	P288-.047	DF-503	PTE4S47	811-01	PT4147	2TM-S47	
C9	10000		73960	BPD-.01	DD-1032	TM5S1		DC-511	5HK-S1	
C10	.047	400	73553	P488-.047	DF-503	PTE4S47		PT4147	4TM-S47	
C11	27		78141		MD-270					
C12	33		78140		MD-330					
C13	18		78138		MD-180					
C14	1000	500	39652	1469-005		5R5T1		MCE235	MS-31	
C15	820	500	78143							
C16	180		78139		MD-181					
C17	22		33101	SI22N750	TCN-22				5TCU-Q22	
C18	590	500	74929							
C19	470	500	39644							
C20	22		33101	SI22N750	TCN-22				5TCU-Q22	
C21	27		72570							
C22	180		78142							
C23	82		*78146	*SI82	*D6-820		*GPIK-820			
C24	.51		78137							
C25	.047	200	73558	P288-.047	DF-503	PTE4S47		PT4147	2TM-S47	
C26	.047	200	73558	P288-.047	DF-503	PTE4S47		PT4147	2TM-S47	
C27	10000		73960	BPD-.01	DD-1032	TM5S1	811-01	DC-511	5HK-S1	
C28	10000		73960	BPD-.01	DD-1032	TM5S1	811-01	DC-511	5HK-S1	
C29	.047	400	73553	P488-.047	DF-503	PTE4S47		PT4147	4TM-S47	
C30	.0033	600	73795							
C31	.047	200	73558	P288-.047	DF-503	PTE4S47	811-01	PT4147	2TM-S47	
C32	10000		73960	BPD-.01	DD-1032	TM5S1		DC-511	5HK-S1	
C33	120		78142		MD-121					
C34	.018	400	58476							
C35	180		78139		MD-181					
C36	.01	400	73561							
C37	.001	600	75643	P688-001	D6-102	PTE6D1	GP2L-102	PT621	6TM-D1	
C38	120		78142		MD-121					
C39	10000		73960	BPD-.01	DD-1032	TM5S1	811-01	DC-511	5HK-S1	
C40	.047	200	73558							
C41	.001	600	75643	P688-001	D6-102	PTE6D1	GP2L-102	PT621	6TM-D1	
C42	.0018	1600	73851							
C43	.047	600	73592	P688-.047	DF-503	PTE6S47		PT6147	6TM-S47	
C44	.033	400	73552	P688-033		PTE4S33		PT4133	4TM-S33	
C45	10000		73960	BPD-.01	DD-1032	TM5S1	811-01	DC-511	5HK-S1	
C46	.0047	600	73920	P688-0047	D6-472	PTE6D47	GP2-333-472	PT6247	6TM-D47	

* Includes C23 and R11 in one unit.

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESIST-ANCE	WATTS	RCA Victor PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	MALLORY PART No.	
R1A	1Meg		78093	Q13-137	AG-63-Z	B-70	U53	Treble
B	Shaft		Not Req.	Not Req.	FS-3	Not Req.	Not Req.	Attach to R1A
R2A	2Meg		78094	Q11-139	AG-83-S	B-75	U56	Bass
R3A	1Meg		78092	Q13-137X	AK-98	BT-72-S	UT440	Volume
B	Shaft		Not Req.	Not Req.	FS-3	Not Req.	Not Req.	Attach to R3A
C	Switch		Not Req.	76-2	SWB-2	Not Req.	US-27	Attach to R3A

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		NOTES	ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	RCA Victor PART No.	IRC PART No.			OHMS	WATT	RCA Victor PART No.	IRC PART No.	
R4	1Meg		503510	BTS-1Meg	Note 1	R25	10Meg		503610	BTS-10Meg	
R5	150Ω		503115	BTS-150		R26	10Meg		503610	BTS-10Meg	
R6	15KΩ		503315	BTS-15K		R27	2.2Meg		503522	BTS-2.2Meg	
R7	1Meg		503510	BTS-1Meg		R28	1Meg		503510	BTS-1Meg	
R8	2.2Meg		503522	BTS-2.2Meg		R29	22KΩ		503322	BTS-22K	
R9	100Ω		503110	BTS-100		R30	10Meg		503610	BTS-10Meg	
R10	100KΩ		503410	BTS-100K		R31	3300Ω		503233	BTS-3300	
R11	12Ω		78146	BTS-12		R32	1000Ω		503210	BTS-1000	
R12	56KΩ		503356	BTS-56K		R33A	620Ω	20			
R13	5.6Meg		503556	BTS-5.6Meg		B	1050Ω	20			
R14	4.7Meg		503547	BTS-4.7Meg		R34	15KΩ	1	503315	BTA-15K	
R15	120Ω		503112	BTS-120		R35	560Ω	1	513156	BTA-560	
R16	1000Ω		503210	BTS-1000		R36A	55Ω	5	78136		
R17	68KΩ		503368	BTS-68K		B	75Ω	5			
R18	3.9Meg		503539	BTS-3.9Meg		R37A	950Ω	3½	78102		
R19	1Meg		503510	BTS-1Meg		B	950Ω	3½			
R20	470KΩ		503447	BTS-470K		R38	27Ω	½	503027	BTS-27	
R21	1Meg		503510	BTS-1Meg							
R22	270Ω		503127	BTS-270							
R23	1000Ω		503210	BTS-1000							
R24	15KΩ		503315	BTS-15K							

Note 1. Items R11, C23 are combined in one unit.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA					NOTES
	IMPEDANCE		DC RES.		RCA Victor PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	TRIAD PART No.	
	PRI.	SEC.	PRI.	SEC.						
T1	10KΩ	3. 3Ω	500Ω	. 5Ω	78100	A-3879 ①	A-2932 ①	RO-16 ①	S-11X ①	① Bend mounting tabs down, file out slots. Mount on original mounting bracket

SPEAKER

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	SIZE	FIELD	V. C. IMP.	RCA Victor PART No.	JENSEN PART No.	QUAM PART No.	
SP1	5 1/4"	PM	3.3Ω	78147	ST-803 Mod P525	52A1	

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA				NOTES
		PRI.	SEC.	RCA Victor PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L1	BC Loop Ant.	1Ω		78187				Includes .01MFD cap. and Lid.
L2	BC Ant. Coil	.6Ω		78196				
L3	Ant. Loading Coil	1Ω		78129	19-3125	TV-181	6153	115 Microhenries
L4	SW Ant. Coil	.4Ω		78123				"B" band (2-4MC)
L5	SW Ant. Coil	.3Ω		78124				"C" band (4-8MC)
L6	SW Ant. Coil	.3Ω		78125				31 Meter band
L7	SW Ant. Coil	.3Ω		78126				25 Meter band
L8	SW Ant. Coil	.1Ω		78127				19 Meter band
L9	SW Ant. Coil	.1Ω		78128				16 Meter band
L10	BC RF Coil	33Ω	6Ω	78116				"A" band

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA				NOTES
		PRI.	SEC.	PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L11	SW RF Coil	.4Ω		78117				"B" band
L12	SW RF Coil	.2Ω		78118				"C" band
L13	SW RF Coil	.2Ω		78119				31 Meter band
L14	SW RF Coil	.2Ω		78120				25 Meter band
L15	SW RF Coil	0Ω		78121				19 Meter band
L16	SW RF Coil	0Ω		78122				16 Meter band
L17	BC Osc. Coil	1.3Ω	5.5Ω	78109				"A" band
L18	SW Osc. Coil	.2Ω	.3Ω	78110				"B" band
L19	SW Osc. Coil	.2Ω	.2Ω	78111				"C" band
L20	SW Osc. Coil	.1Ω	.2Ω	78112				31 Meter band
L21	SW Osc. Coil	.1Ω	.2Ω	78113				25 Meter band
L22	SW Osc. Coil	.1Ω	.1Ω	78114				19 Meter band
L23	SW Osc. Coil	.1Ω	.1Ω	78115				16 Meter band
L24	Input IF	12Ω	12Ω	74918	16-6758	BC-352	12-C1	
L25	Output IF	15Ω	16Ω	73037	16-6770	BC-355	12-C6	

SELENIUM RECTIFIER

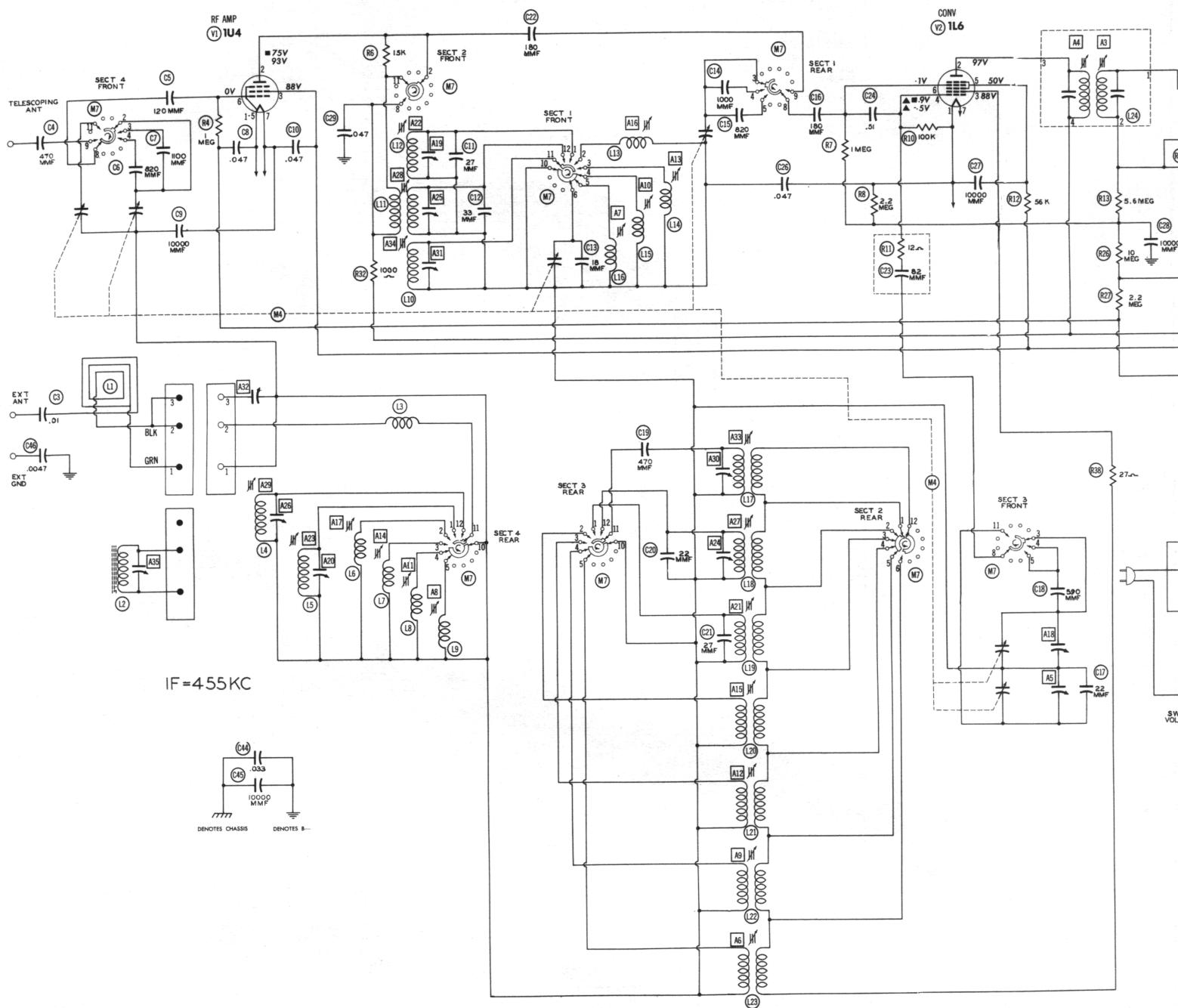
ITEM No.	RATING		REPLACEMENT DATA				NOTES
	CURRENT		RCA Victor PART No.	SELETRON PART No.	FEDERAL PART No.	MALLORY PART No.	
M1	.065A		78101	5M4	1003	6S75	75
M2			77958 ①	5M4	1002	6S75	75

BATTERIES

ITEM No.	VOLTAGE	RCA Victor PART No.	REPLACEMENT DATA						INSTALLATION NOTES
			EVEREADY			BURGESS			
			"A"	"B"	"A-B"	"A"	"B"	"A-B"	
M3	9V "A" 90V "B"	V3047			752			G6B60	

MISCELLANEOUS

ITEM No.	PART NAME	RCA Victor PART No.	NOTES
M4	Tuning Cap.	78108	21-457MMF, 21-457MMF, 34-425MMF - A, B & C bands
M5	Switch	71039	10-14MMF, 10-14MMF, 12-16MMF - 31M, 25M, 19M, & 16M bands
M6	Switch	78096	Power Selector - DPDT slide
M7	Switch	78106	Low line voltage
M8	Switch		Function selector, 7 pos. 4 deck
	Trimmer Cap.	75967	AC/DC (Converter unit RK-186)
	Trimmer Cap.	78130	4-20MMF, BC Ant. Coil Adj. (A35)
	Trimmer Cap.	78131	4-20MMF (4 used) (A19, A25, A31, A32)
	Trimmer Cap.	78132	4-20MMF (2 used) (A24, A30)
	Back Cover	78184	20-50MMF (2 used) (A20, A26)
	Antenna	78157	Case back complete
	Button	78166	Telescope
	Cap	78165	Telescopic antenna pushbutton
	Case	78190	Telescopic antenna screw or cap
	Case	78153	For ferrite rod antenna
	Cover	78195	Less sides, handle, links, feet front and back cover
	Cup	78191	Bottom cover for ferrite rod antenna
	Dial Scale	78181	Suction - for ferrite rod antenna case
	Escutcheon	78182	Less escutcheon
	Foot	78169	Dial scale
	Handle	78173	Rubber foot
	Knob	78148	Tuning - Off/On/Volume (2 used)
	Knob	78149	Bass tone
	Knob	78150	Treble tone
	Knob	78151	Function Selector
	Map	78414	Includes time Chart
	Case side	77974	Left hand with leather belting
	Case side	77975	Right hand with leather belting



BAND SWITCH SHOWN IN "A" BAND POSITION
BAND SWITCH SEQUENCE:

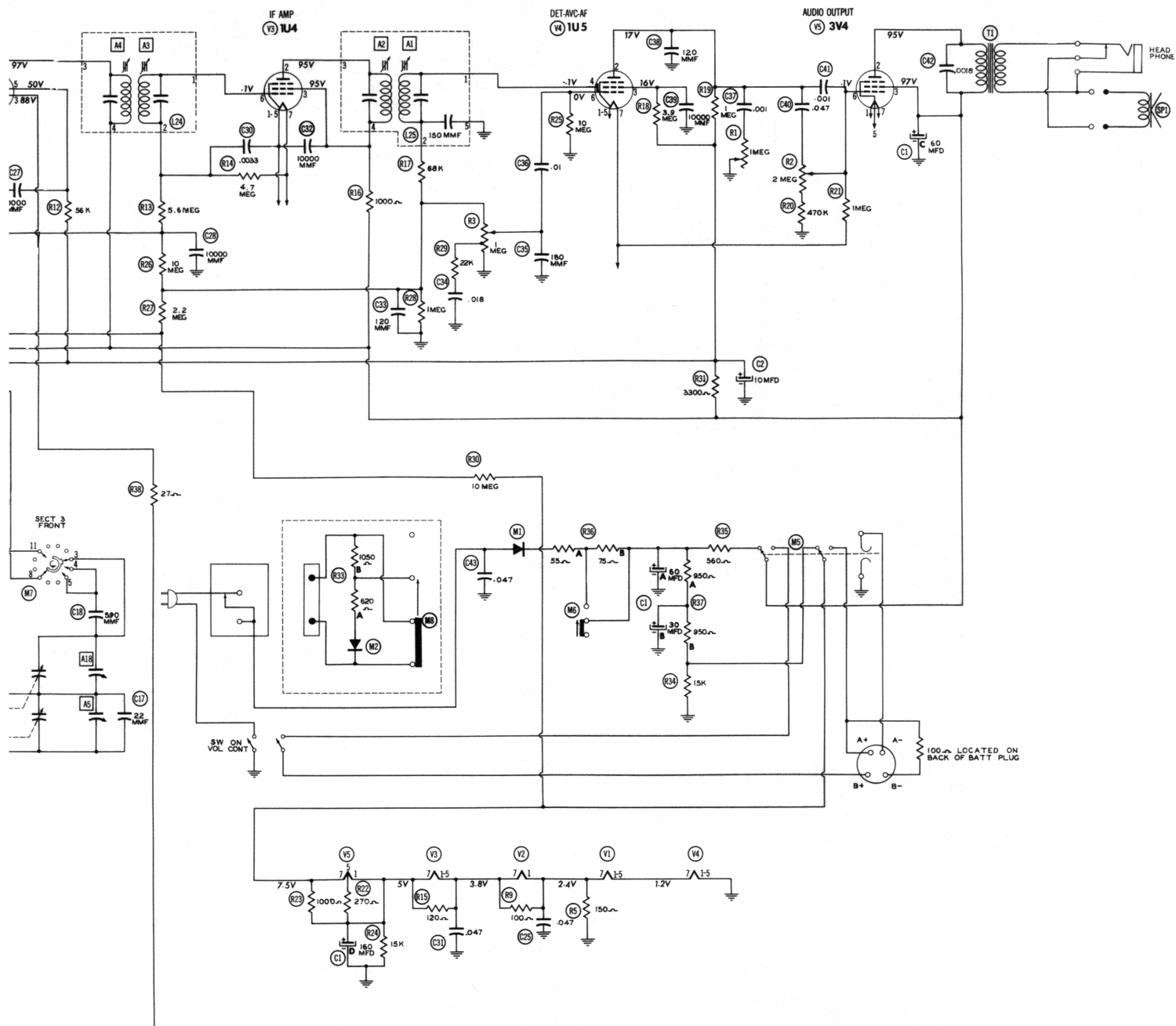
1. "A" BAND
2. "B" BAND
3. "C" BAND
4. 31 METER
5. 25 METER
6. 19 METER
7. 16 METER

NOTE:

SWITCH SHOE OF SECTION 1 FRONT IS INNER-CONNECTED TO THE SMALL SHOE OF SECTION 1 REAR

SWITCH SHOE OF SECTION 3 FRONT IS INNER-CONNECTED TO THE SMALL SHOE OF SECTION 3 REAR

SWITCH SHOE OF SECTION 4 FRONT IS INNER-CONNECTED TO THE SMALL SHOE OF SECTION 4 REAR



RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V 1	1U4	*	† 17KΩ † 1.7KΩ	† 4KΩ	† 4KΩ	*	3.7Meg	*
V 2	1L6	*	† 700Ω	† 4KΩ	13.8Meg	† 60KΩ	11.5Meg	*
V 3	1U4	*	† 1.7KΩ	† 1.7KΩ	INF	*	3 Meg	*
V 4	1U5	0Ω	† 1 Meg	† 3.9Meg	570KΩ	INF	10Meg	*
V 5	3V4	*	† 1.2KΩ	† 700Ω	INF	*	750KΩ	*

■ READING IN SHORT WAVE POSITIONS-ALL OTHERS ON STANDARD BC.

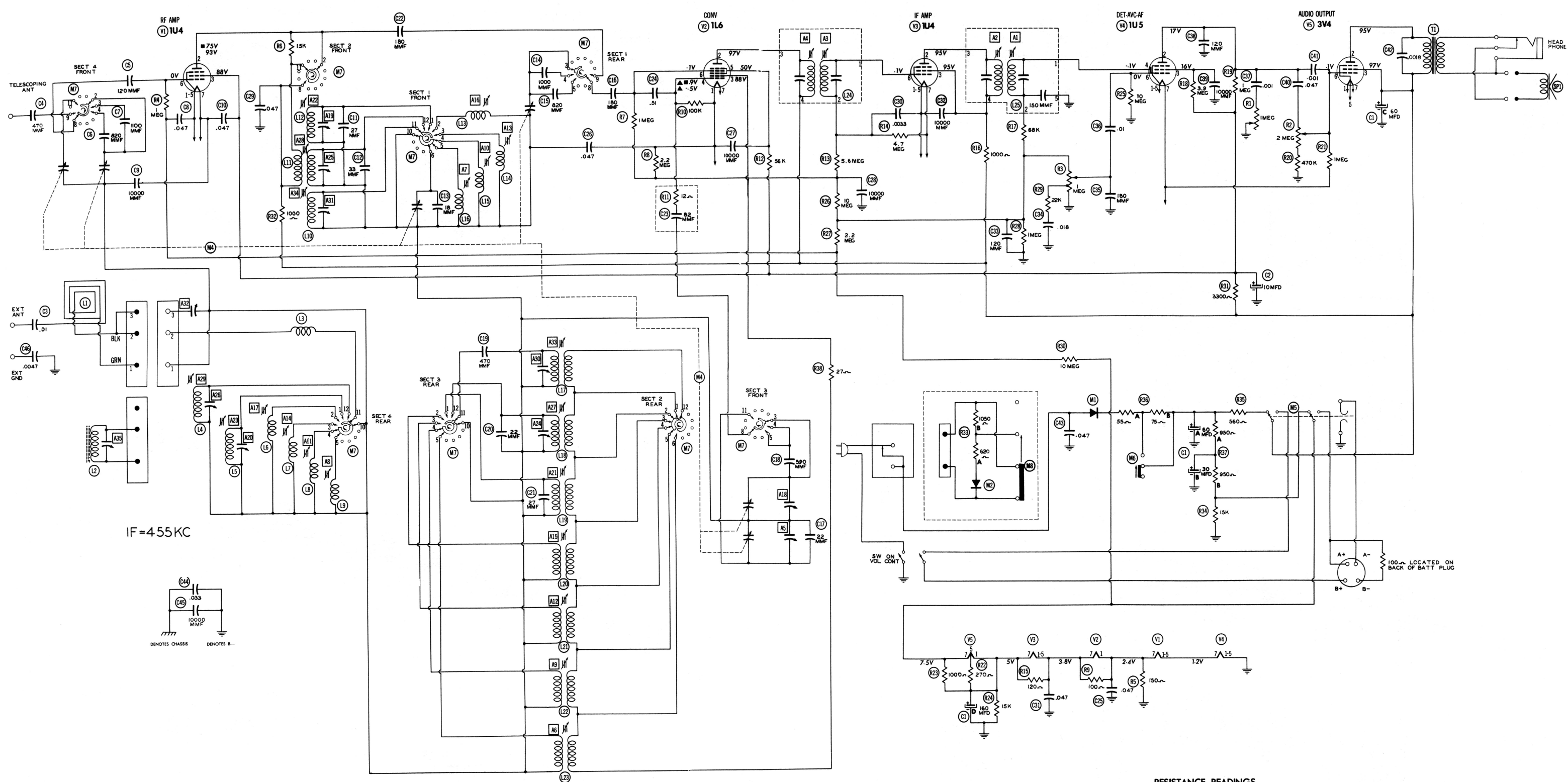
* TAKEN WITH VACUUM TUBE VOLTMETER

† MEASURED FROM OUTPUT OF M1.

R-CONNECTED TO THE

R-CONNECTED TO THE

R-CONNECTED TO THE



- 1- DC voltage measurements are at 20,000 ohms per volt, AC voltages measured at 1000 ohms per volt.
- 2- Socket connections are shown as bottom views.
- 3- Measured values are from socket pin to common negative.
- 4- Line voltage maintained at 117 volts for voltage readings.
- 5- Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
- 6- Volume control at maximum, no signal applied for voltage measurements.

BAND SWITCH SHOWN IN "A" BAND POSITION
BAND SWITCH SEQUENCE:

1. "A" BAND
2. "B" BAND
3. "C" BAND
4. 31 METER
5. 25 METER
6. 19 METER
7. 16 METER

NOTE:

SWITCH SHOE OF SECTION 1 FRONT IS INNR-CONNECTED TO THE SMALL SHOE OF SECTION 1 REAR

SWITCH SHOE OF SECTION 3 FRONT IS INNR-CONNECTED TO THE SMALL SHOE OF SECTION 3 REAR

SWITCH SHOE OF SECTION 4 FRONT IS INNR-CONNECTED TO THE SMALL SHOE OF SECTION 4 REAR

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V 1	1U4	*	† 1.7K Ω	† 4K Ω	† 4K Ω	*	3.7Meg	*
V 2	1L6	*	† 700 Ω	† 4K Ω	13.8Meg	† 60K Ω	11.5Meg	*
V 3	1U4	*	† 1.7K Ω	† 1.7K Ω	INF	*	3 Meg	*
V 4	1U5	0 Ω	† 1 Meg	† 3.9Meg	570K Ω	INF	10Meg	*
V 5	3V4	*	† 1.2K Ω	† 700 Ω	INF	*	750K Ω	*

■ READING IN SHORT WAVE POSITIONS-ALL OTHERS ON STANDARD BC.

* TAKEN WITH VACUUM TUBE VOLTMETER

† MEASURED FROM OUTPUT OF M1.