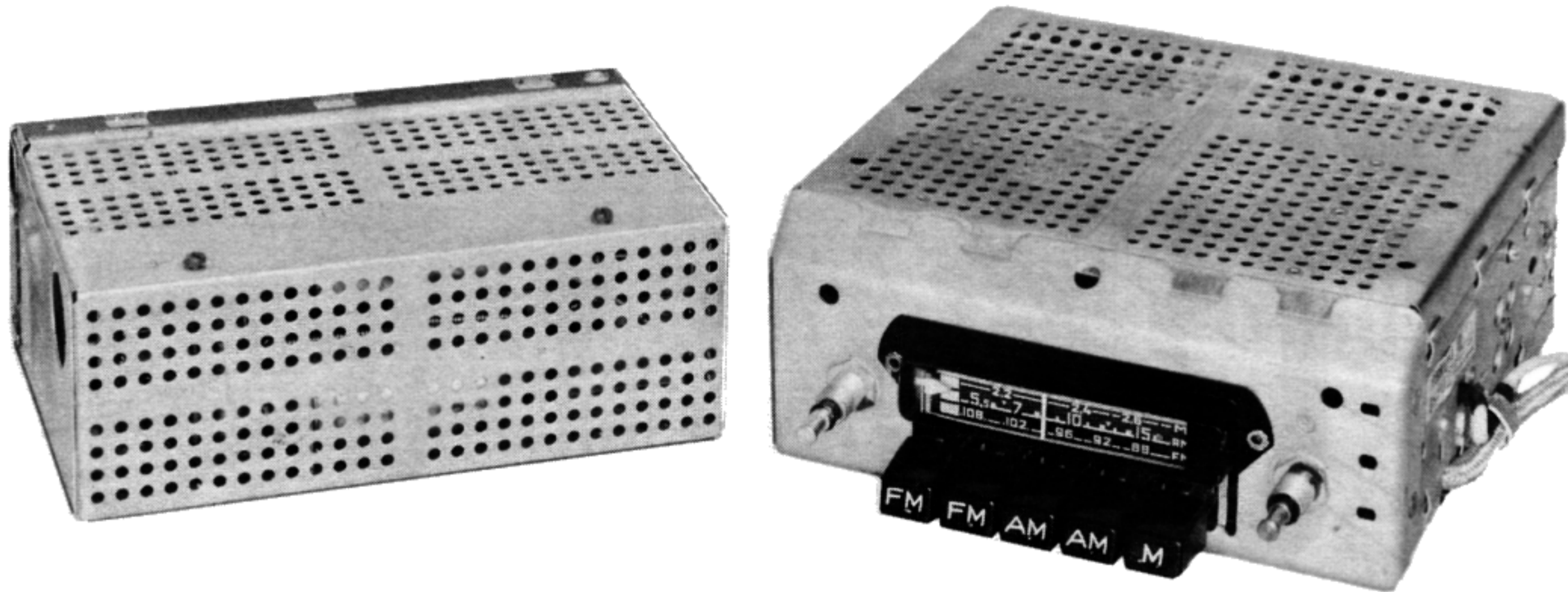




BLAUPUNKT MODEL
Frankfurt Type 9798



BLAUPUNKT MODEL
Frankfurt Type 9798

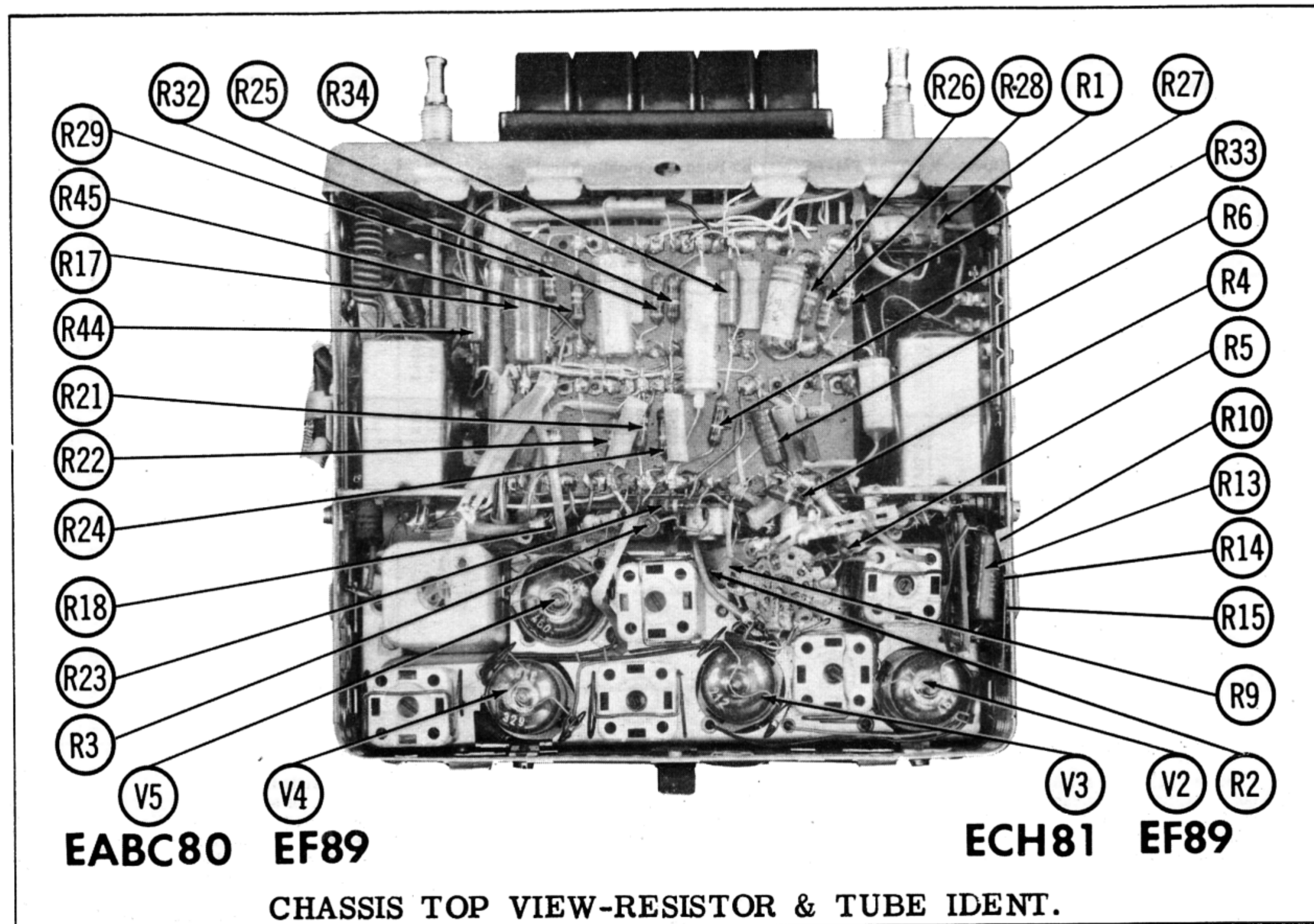
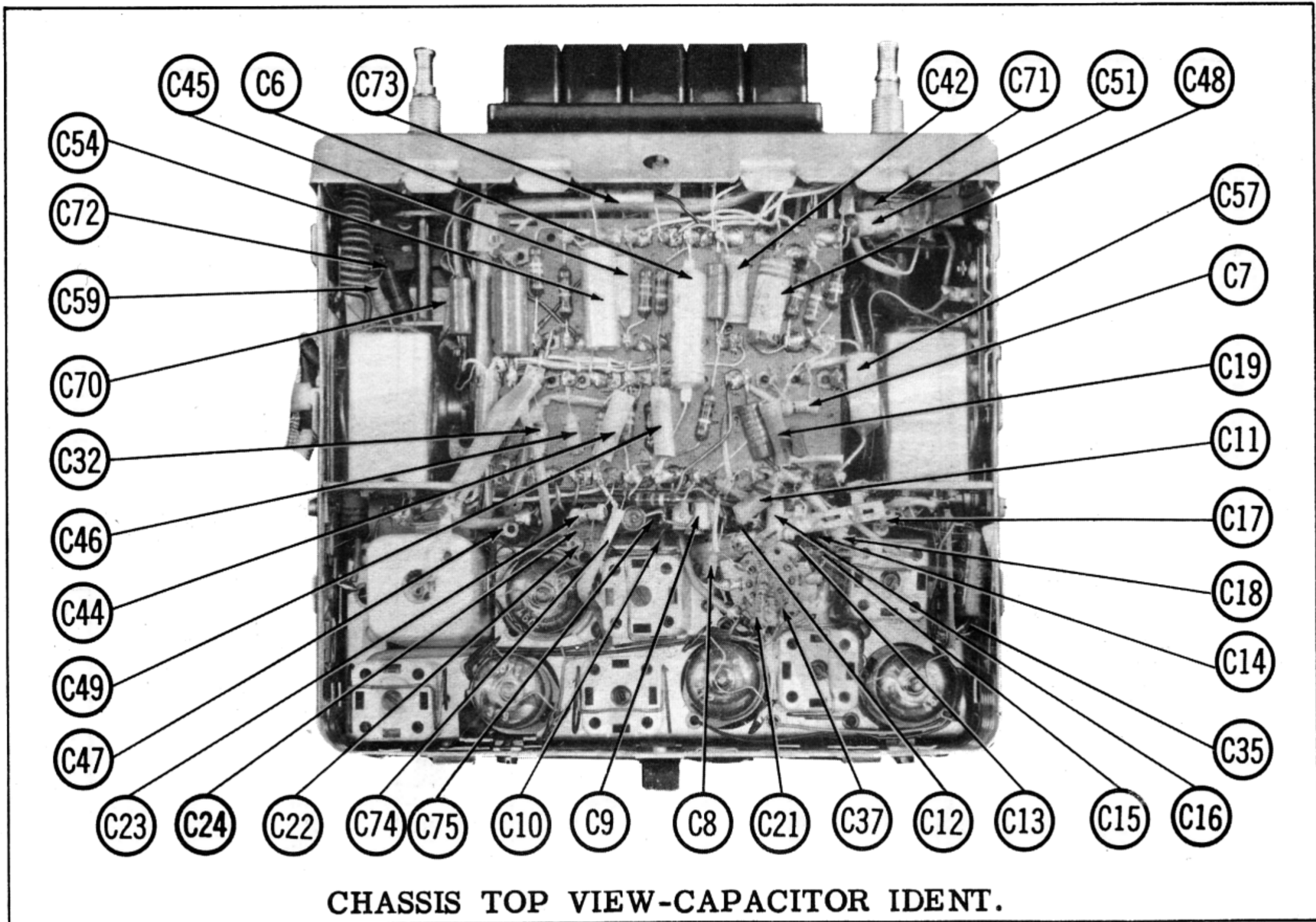
TRADE NAME	Blaupunkt Model Frankfurt Type 9798 (From Serial #890001)				
IMPORTER	Robert Bosch Corp., 40-25 Crescent Street, Long Island City 1, N. Y.				
TYPE SET	Battery Operated 6 Tube FM-BC-Marine Band Automobile Receiver				
POWER SUPPLY	12 Volt Storage Battery	RATING	3.2 Amp. @12.6 Volts DC		
	6 Volt Storage Battery		6.4 Amp. @6.3 Volts DC		
TUNING RANGE	FREQ. MOD.	88 - 108MC	BROADCAST	519-1640KC	MARINE 2.15 - 2.75MC

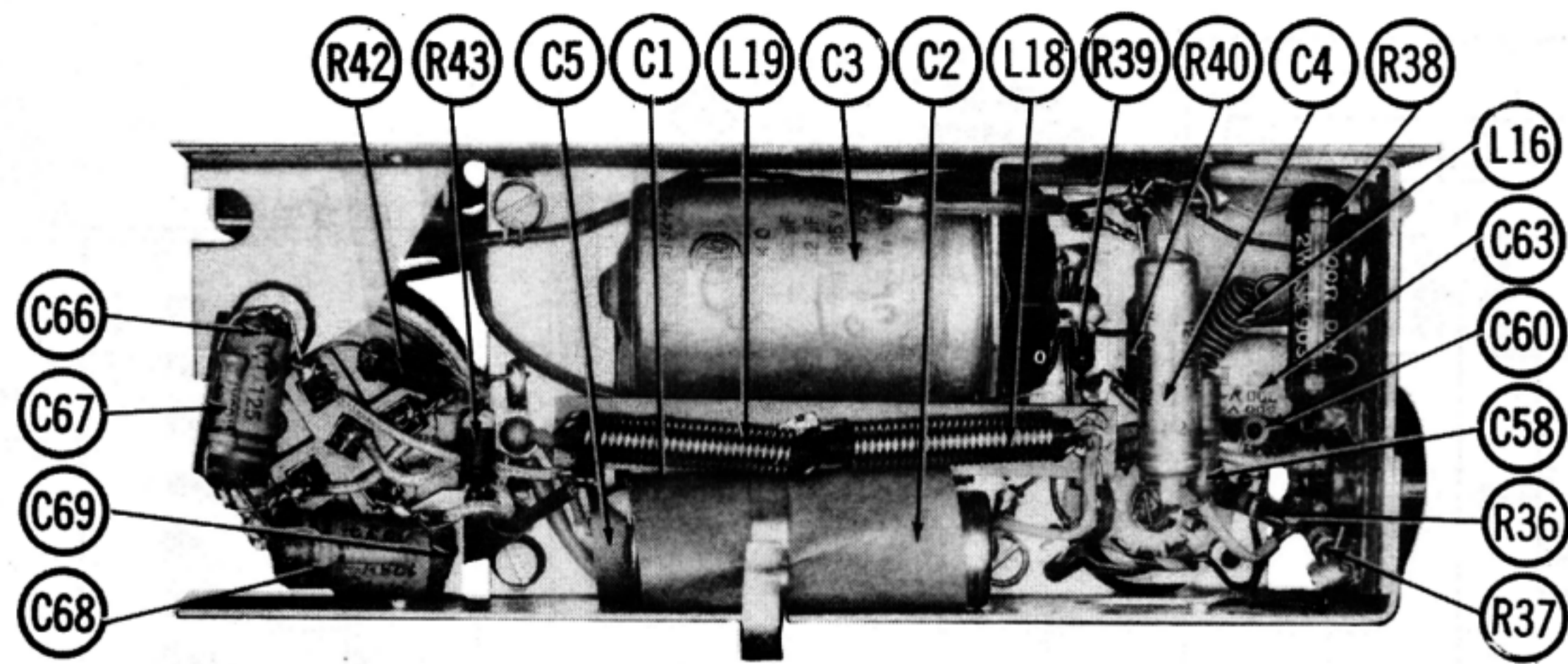
HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana



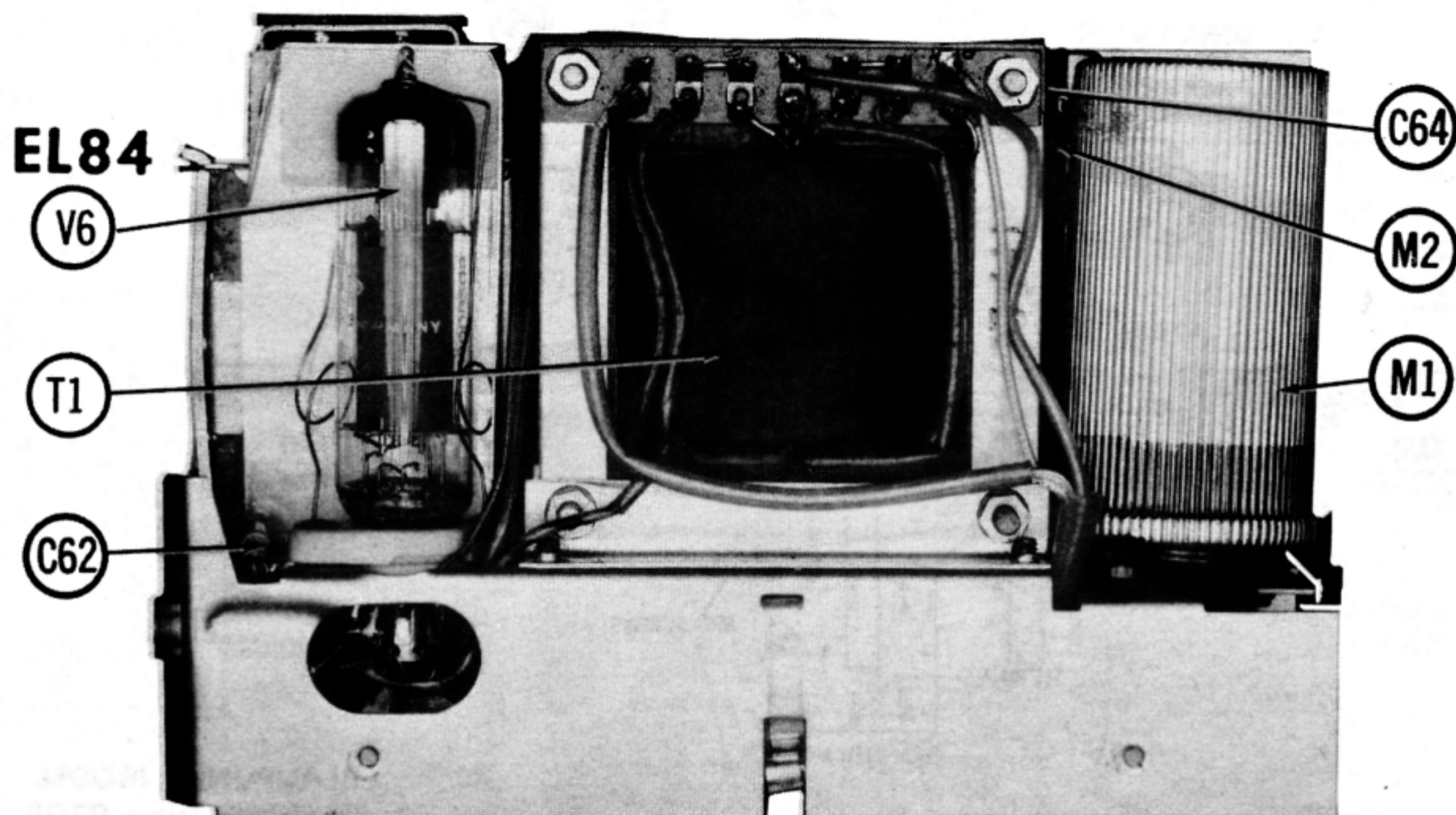
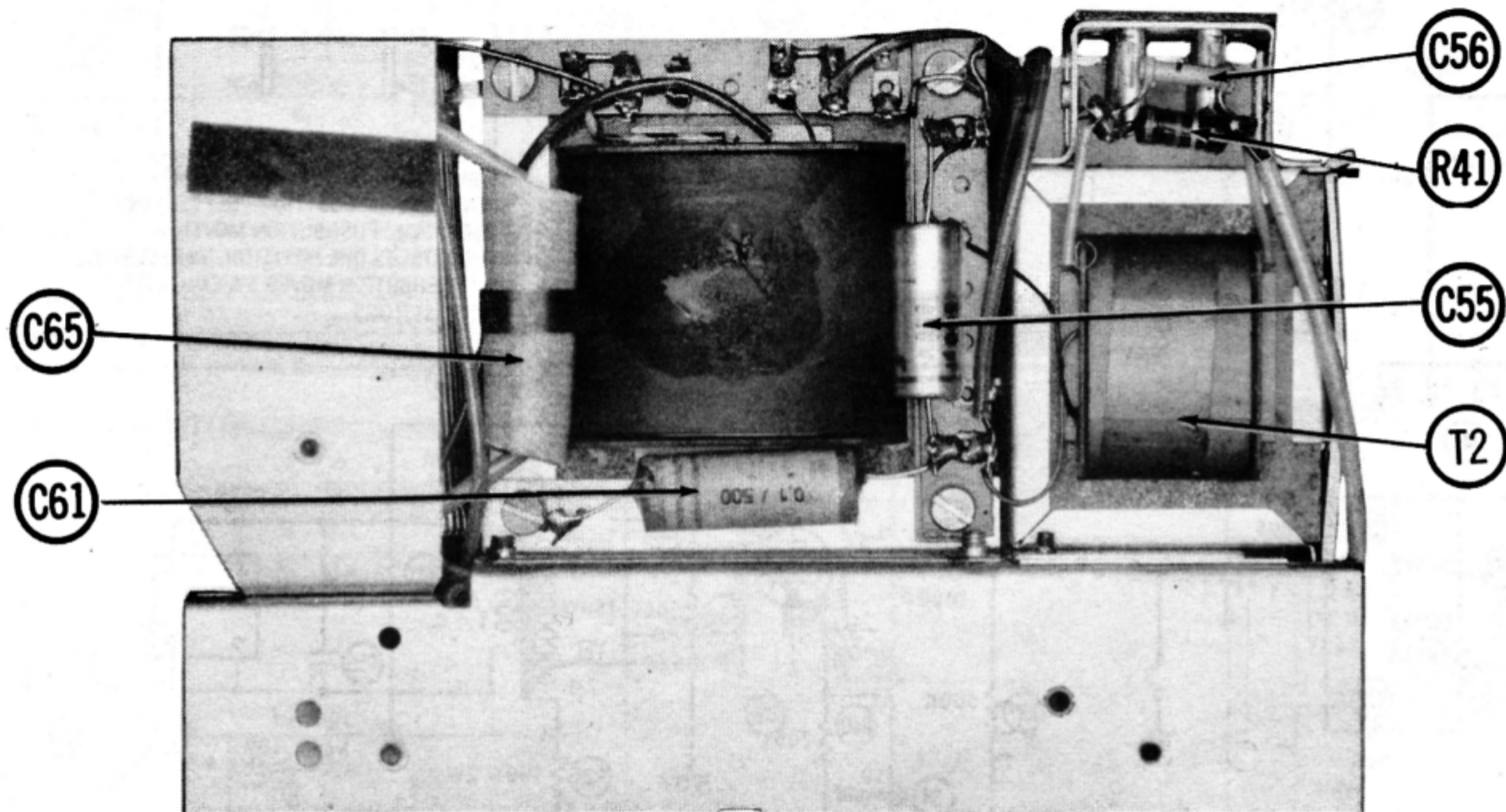
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of KD867

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POWER CHASSIS-BOTTOM VIEW



POWER CHASSIS-TOP VIEW

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Use only enough generator output to provide a usable indication. Set Volume Control at maximum position.
 Suggested Alignment Tools:
 A1 thru A4, A9, A12, A21, A22... GENERAL CEMENT #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989, 9291
 WALSCO #2515, 2520, 2522, 2523, 2531, 2532, 2534, 2537, 2538
 A5, A13, A16, A10..... GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989
 WALSCO #2515, 2531, 2532

AM ALIGNMENT — SELECTOR IN AM POSITION

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	High side thru .01mfd to pin 2 (grid) of AM Mixer. Low side to chassis.	460KC (400% 30% AM)	(AM) Tuning gang fully open.	Across voice coil.	A1, A2, A3, A4	Adjust for maximum output.
2.	Antenna receptacle thru dummy (Fig. 1).	"	"	"	A5	Adjust for MINIMUM output.
3.	"	1600KC	1600KC	"	A6, A7	Adjust for maximum output.
4.	"	520KC	520KC	"	A8, A9	"
5.	"	2.3MC	(M) 2.3MC	"	A10, A11	"

FM IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM—SELECTOR IN FM POSITION

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
6.	High side thru .001mfd to pin 2 (grid) of FM Mixer. Low side to chassis.	6.7MC (Unmod.)	(FM) Point of non-interference.	DC probe to point A. Common to chassis.	A12, A13, A14, A15	Adjust for maximum deflection.
7.	"	"	"	DC probe to point B. Common to point C.	A16	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
8.	High side thru .001mfd to pin 2 (grid) of FM Converter. Low side to chassis.	10.7MC	"	DC probe to point A. Common to chassis.	A17, A18, A19	Adjust for maximum deflection.

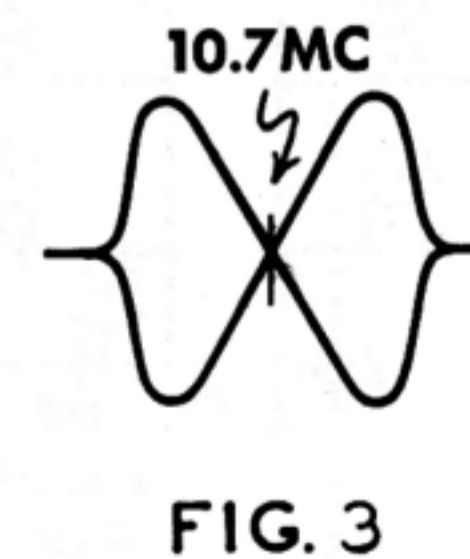
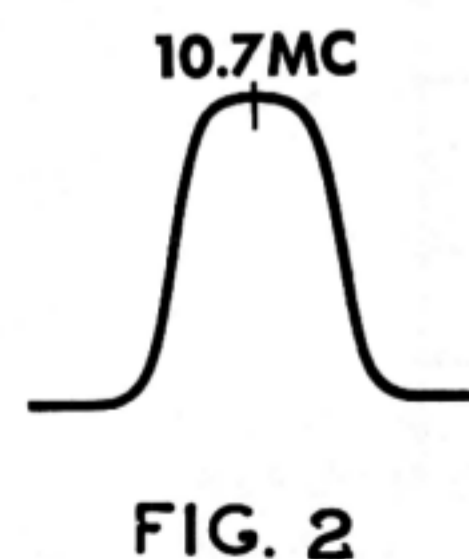
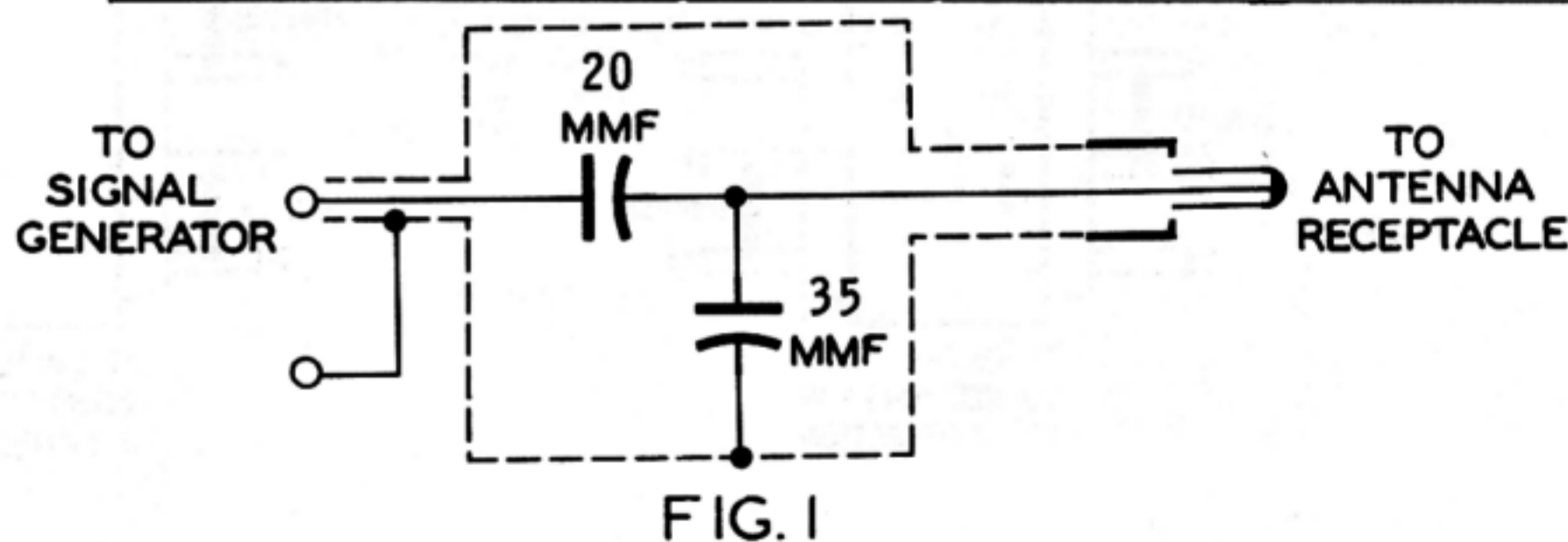
FM IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE—SELECTOR IN FM POSITION

Use frequency modulated signal with 60% modulation and 450KC sweep. Use 120V sawtooth voltage in scope for horizontal deflection.

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT SCOPE	ADJUST	REMARKS
6.	High side thru .001mfd to pin 2 (grid) of FM Mixer. Low side to chassis.	6.7MC (450KC Swp)	FM Point of non-interference.	Vert. amp. to point A. Low side to chassis.	A12, A13, A14, A15	Disconnect stabilizing capacitor C44. Adjust for maximum gain and symmetry of response similar to Fig. 2. with markers as shown. Reconnect C44.
7.	"	"	"	Vert. amp. to point B. Low side to chassis.	A16	Adjust to place marker at the center of crossover lines similar to Fig. 3. SLIGHTLY retouch A12 for maximum amplitude and straightness of crossover lines.
8.	High side thru .001mfd to pin 2 (grid) of FM Converter. Low side to chassis.	10.7MC	"	Vert. amp. to point A. Low side to chassis.	A17, A18, A19	Disconnect C44. Adjust for maximum gain and symmetry of response similar to Fig. 2 with markers as shown. Reconnect C44.

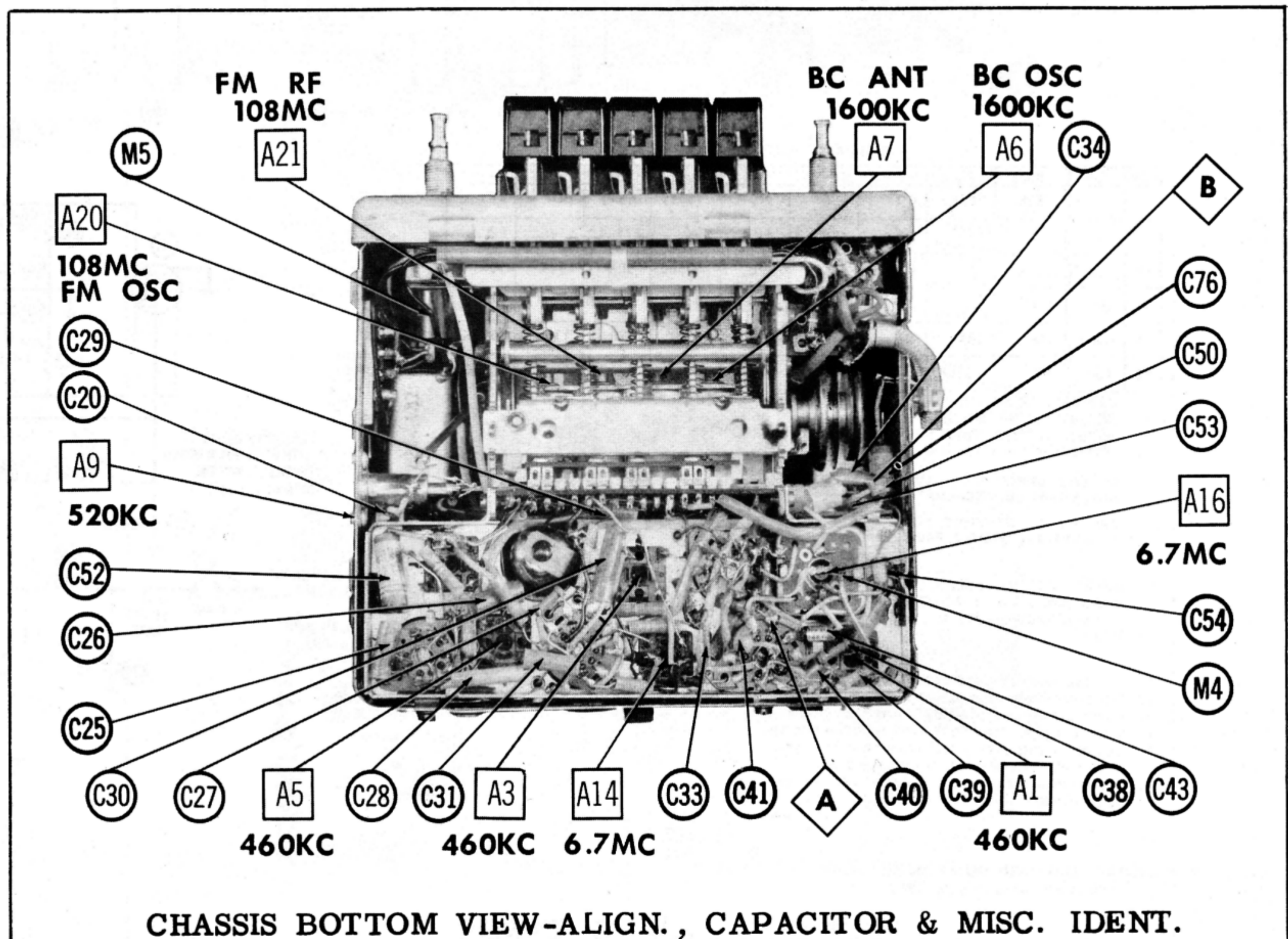
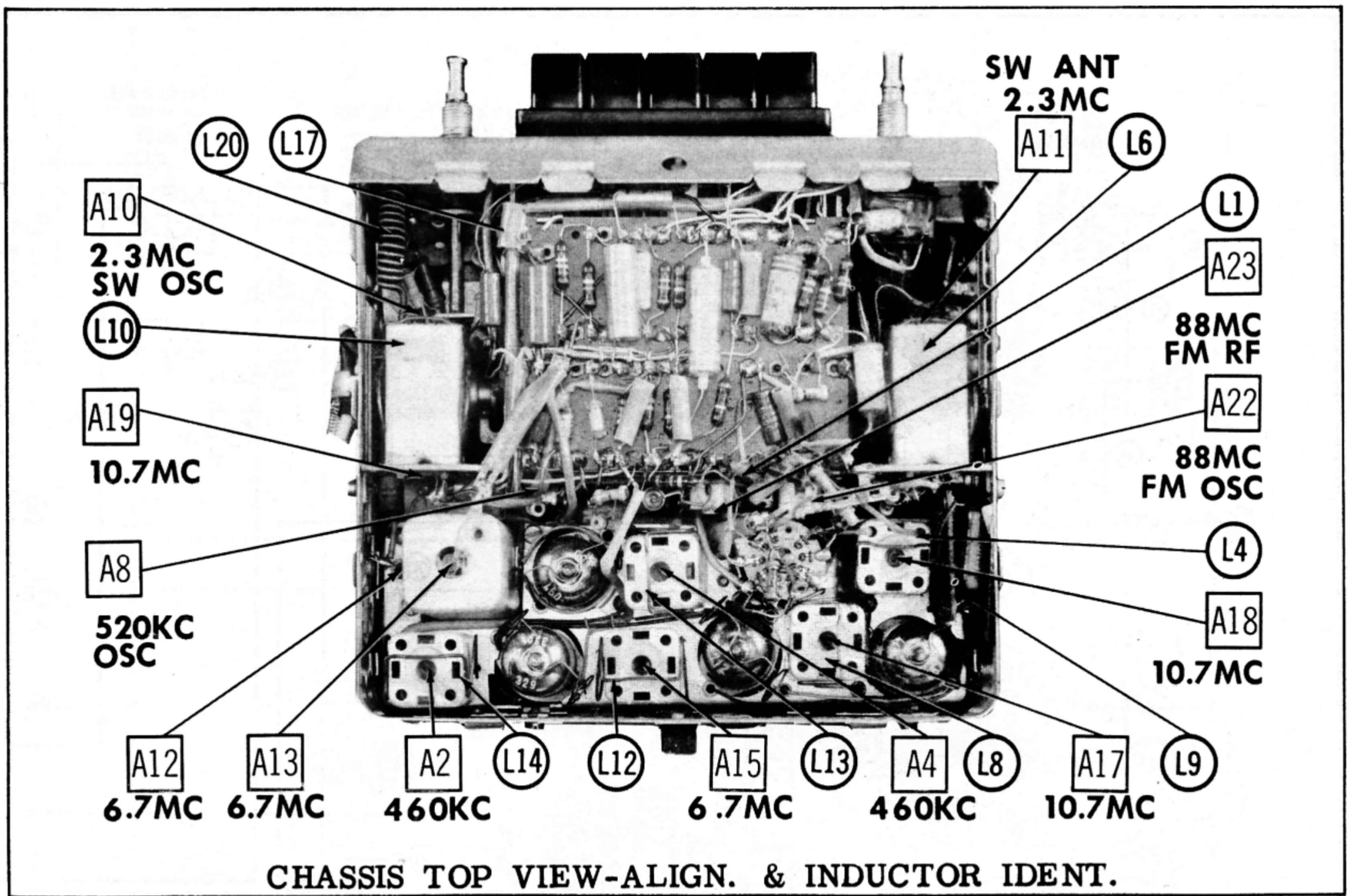
FM RF ALIGNMENT — SELECTOR IN FM POSITION

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
9.	Antenna receptacle thru dummy (Fig. 1)	108MC (Unmod.)	(FM) 108MC	DC probe to point A. Common to chassis.	A20, A21	Adjust for maximum deflection.
10.	"	88MC	88MC	"	A22, A23	"



BLAUPUNKT MODEL
Frankfurt Type 9798

FOLDER 8



PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	TYPE	GENERAL ELECTRIC		RAYTHEON		SYLVANIA	
			ITEM No.	USE	ITEM No.	TYPE		
V1	FM RF Amp. - FM Conv.	ECC85	V4	6.7MC FM IF Amp. - AM IF Amp.	EF89			
V2	10.7MC FM IF Amp. - AM RF Amp.	EF89	V5	Ratio Det. - AM Det. - AF Amplifier	EABC80			
V3	FM-AM Mixer - FM-AM Osc.	ECH81	V6	Output	EL84			

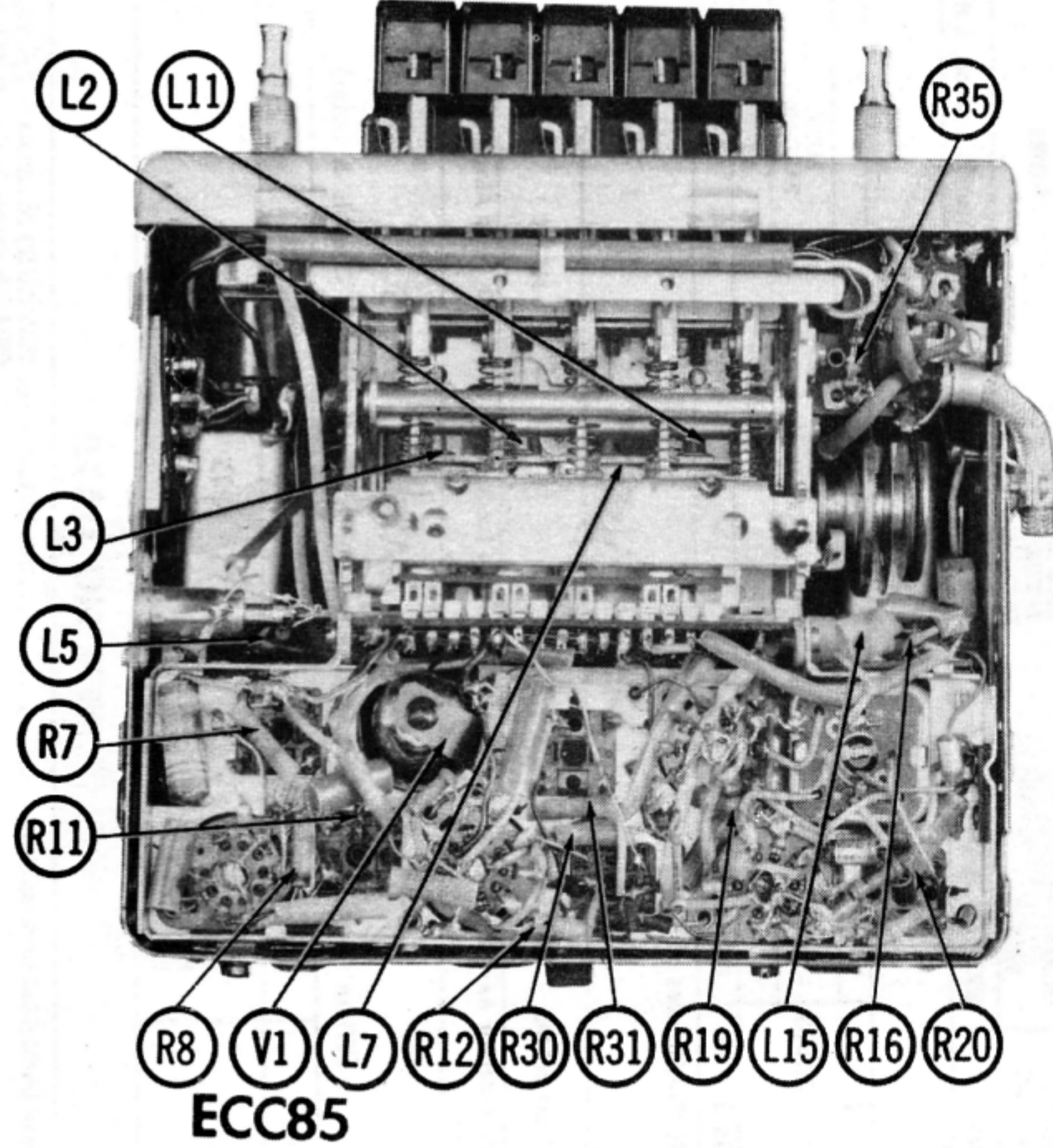
ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	BLAUPUNKT PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	200	15	K0749/3In	BCD20200	NLW200-15	MTI-23	TT15X50	MLV50-15	TE-1164
C2	50	15	K0742/9n	P7T72	NLW50-15	MTI-16			TE-1160
C3A	32	350	K0761/24x	PRS2420					
C4	50	12	K0748/9n	P7T59	NLW50-15	MTI-16	TT15X50	MLV50-12	TE-1133
C5	8	350	K0756/3n	PRS1610	BR835	QT1-4	TC61	TD-8-350	TVA-1603
C6	50	15	K0749/9n	P7T72	NLW50-15	MTI-16	TT15X50	MLV50-15	TE-1160

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA						
			AEROVOX PART No.	CORNELL-DUBILIER PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C7	20 N150 5%	#K0842/57n	DI-500	BYA10T5	DD-501	BYA10T5	* CCD-501	B-350	10TCP-Q22
C8	500	#TK707/3x	DI-500	BYA10T5	DD-501	BYA10T5	CCD-501	B-350	10TS-T50
C9	2-10								
C10	500								
C11	15 N150 2%	#K0842/14n							
C12	10 N150 2%	#K0844/12n							
C13	10 N150 2%	#K0844/12n							
C14	15 N150 5%	#K0844/55n							
C15	20 N150 2%	#K0846/52n							
C16	2-10	#TK707/3x							
C17	25 N150 2%								
C18	200 N750 5%	#TK5/15x	SI 5000	C10T2U	TCN-200	BYA10D5	CCTN-201	CN7-320	10TCU-T20
C19	.005	#K0844/12n			D6-502		CCD-502	B-250	5HK-D50
C20	10-60								
C21	10 N150 5%	#K0844/12n							
C22	10 N150 5%	#K0844/12n							
C23	70 N150 2%	#K0844/65n							
C24	.05 250V								
C25	.005		P488N-05	CUB4S5	DD-503	CUB4S5	4DP-3-503	GEM-415	4TM-S50
C26	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C27	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C28	100 N150 5%	#K0842/29n	SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	10TCP-T10
C29	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C30	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C31	.001		SI 1000	BYA10D1	D6-102	BYA10D1	CCD-102	B-210	5HK-D10
C32	360 2.5%	#K0809/71n	SI 10000	BYA10S1	D6-103	BYA10S1	CM-15E-361G		
C33	.01		DI-500	BYA10T5	DD-501	BYA10T5	CCD-103	B-110	5HK-S10
C34	500		SI 10000	BYA10S1	D6-501	BYA10S1	CCD-501	B-350	10TS-T50
C35	.01		SI 5000	BYA10D5	D6-103	BYA10D5	CCD-103	B-110	5HK-S10
C36	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C37	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C38	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C39	90 N750		SI 5000	BYA10D5	TCN-91	C10Q91U	CCTN-101	CN7-310	10TCU-Q90
C40	50 N750		N750-SI 91	C10Q91U	TCN-50	C10Q91U	CCTN-470	CN7-447	10TCU-Q47
C41	2 N150	#K0844/4n	N750-SI 50		TCN-50				
C42	300 2.5%								
C43	300 2.5%								
C44	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	MCE241	5HK-D50
C45	500		DI-500	BYA10T5	DD-501	BYA10T5	CCD-501	B-250	10TS-T50
C46	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C47	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C48	.05 250V		P488N-05	CUB4S5	DD-502	CUB4S5	4DP-3-503	GEM-415	4TM-S50
C49	50 N150 10%	#K0845/51n							10TCP-Q47
C50	.005 600V		P688N-005	CUB6D5	D6-502	CUB6D5	6DP-1-502	GEM-625	6TM-D50
C51	.025 250V		P488N-025	DPMS6S25			4DP-2-253	GEM-4125	4TM-S25

CHASSIS - BOTTOM VIEW



FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA						
			AEROVOX PART No.	CORNELL-DUBILIER PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C52	.05 500V	#K0848/64n	P688N-05	CUB6S5	DD-503	CUB6S5	6DP-3-503	GEM-615	6TM-S50
C53	.005 500V		P688N-005	CUB6D5	D6-502	CUB6D5	6DP-1-502	GEM-625	6TM-D50
C54	.005 500V		P688N-005	CUB6D5	D6-502	CUB6D5	6DP-1-502	GEM-625	6TM-D50
C55	.0025 600V		P688N-0022	DPMS6D25	D6-252	DPMS6D25	6DP-1-252	GEM-6225	6TM-D25
C56	100 N750 10%		N750-SI 100	C10T1U	TCN-100	C10T1U	CCTN-101	CN7-310	10TCU-T10
C57	.05 500V		P688N-05	CUB6S5	DD-503	CUB6S5	6DP-3-503	GEM-615	6TM-S50
C58	.005		N750-SI 91	C10Q91U	TCN-91	C10Q91U	CCTN-101	CN7-310	10TCU-T10
C59	90 N750		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C60	.005		P688N-1	C10T1U	DF-104	C10T1U	CCTN-101	GEM-601	6TM-P10
C61	.1 500V		N750-SI 100	C10T1U	TCN-100	C10T1U	CCTN-101	CN7-310	10TCU-T10
C62	100 N750 10%		P688N-5	CUB6P5	TCN-100	CUB6P5	6DP-6-504	GEM-605	6TM-P50
C63	.5 500V		N750-SI 100	C10T1U	TCN-100	C10T1U	16DP-5-253	GEM-10122	10TCU-T10
C64	100 N750 10%		P1088N-025	C10T1U	TCN-100	C10T1U	2DP-3-104	CN7-310	10TCU-T10
C65	.025 1000V		N750-SI 100	C10T1U	TCN-100	C10T1U	2DP-3-104	CN7-310	10TCU-T10
C66	100 N750 10%		P288N-1	C10T1U	DF-104	C10T1U	CCTN-101	GEM-201	2TM-P10
C67	.1 125V		N750-SI 100	C10T1U	TCN-100	C10T1U	2DP-3-104	CN7-310	10TCU-T10
C68	100 N750 10%		P288N-1	C10T1U	DF-104	C10T1U	2DP-3-104	GEM-201	2TM-P10
C69	.1 125V		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C70	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C71	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C72	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C73	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C74	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C75	.005		SI 5000	BYA10D5	D6-502	BYA10D5	CCD-502	B-250	5HK-D50
C76	.05 250V		P488N-05	CUB4S5	DD-503	CUB4S5	4DP-3-503	GEM-415	4TM-S50

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (POWER)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	BLAUPUNKT PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
T1	12.6 VCT ② 2.8A or 6.3 VCT@5.6A	150V ③ .100A .75A AC (12V only)	TF722/11z				

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
	PRI.	SEC.	BLAUPUNKT PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
T2	4500Ω Tap ③ 1.5%	3-4Ω	TF27/56z				

VIBRATOR

ITEM No.	TYPE	INPUT VOLTS	FREQUENCY	REPLACEMENT DATA				NOTES
				BLAUPUNKT PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	RADIART PART No.	
M1	Interrupter	12.6 6.3	115% 115%	SM702/2z SM702/1z				

POWER RECTIFIERS

ITEM No.	RATING CURRENT (Measured)	REPLACEMENT DATA		NOTES
		BLAUPUNKT PART No.	RCA PART No.	
M2	.060A	XZ761/lx ①	LN1764 ②	① Bridge Type Selenium ② Silicon, 4 Required

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA			
			BLAUPUNKT PART No.	HOLDER	FUSE	HOLDER
M3	Cartridge	4A	SG 704-3n ①			

① Part #SG704/ln used for 6 volt versions.

MISCELLANEOUS

ITEM No.	PART NAME	BLAUPUNKT PART No.	NOTES
M4 M5	Ratio Detector Ass'y. Switch	GS718/10z EY756/15z	Includes Diodes Part #XZ778/2n, and Associated Components.

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Dial Pointer	SZ2186/3x	
Band Pointer	SZ2157/4x	AM, Brown
Pushbutton	KF813/33x	M, Brown
Pushbutton	KF813/31x	

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors		
Shielded Hook-up Wire Use BELDEN No. 8524 (Stranded) Available in Ten Colors		
Bonding Strap Use BELDEN No. 8885		
..... Use BELDEN No. 8661		

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA			INSTALLATION NOTES
	RESISTANCE	WATTS	BLAUPUNKT PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	
R1A	2meg	1/2	W12185/4x			Tone Volume Power Off-On
B	1.3meg	1/2				
C	280K Tap Switch					

RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA		REPLACEMENT DATA	
		IRC PART No.	WORKMAN TV PART No.	IRC PART No.	WORKMAN TV PART No.
R24	2meg				
R25	5meg				
R26	10K				
R27	10meg				
R28	25meg				
R29	250K				
R30	50K				
R31	50K				
R32	60K				
R33	10Ω				
R34	200Ω 1W				
R35	500Ω				
R36	1000Ω				
R37	500K				
R38	500Ω 2W				
R39	5000Ω				
R40	200Ω				
R41	100Ω				
R42	200Ω 1W				
R43	200Ω 1W				
R44	50Ω 1W				
R45	50K				

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		BLAUPUNKT PART No.	Merit PART No.	Stancor PART No.	Workman TV PART No.	
L1	FM Ant.	WC2277/2z				
L2	FM RF	WC2278/8z				
L3	1st FM Osc.	WC2372/6z				
L4	1st 10.7MC FM IF	ZF722/1z				
L5	RF Choke	WC2199/2z				
L6	LW Ant.	ZF723/16z				
L7	BC Ant.	WC2204/2z				
L8A	2nd 10.7MC FM IF	ZF723/18z				
L8B	460KC IF Trap					
L9	RF Choke	WC2272/1x				
L10A	2nd FM Osc.	ZF723/17z				
L10B	LW Osc.					
L11	BC Osc.	WC2205/2z				
L12	6.7MC FM IF	ZF722/8z				
L13	1st AM IF	ZF721/9z				
L14	2nd AM IF	ZF721/1z				
L15	RF Choke	WC2036/3z				
L16	RF Choke	WC2036/3z				
L17	F1. Choke	WC2115/1z				
L18	Hash Choke	ED706/1z				
L19	Hash Choke	ED706/1z				
L20	"A" Lead Choke	WC2334/1x				

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