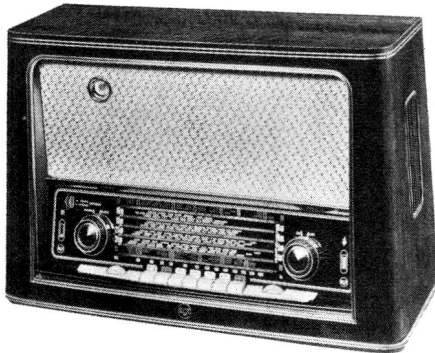




RCA VICTOR



MODEL 67QB43



MODEL 67QR77

MODELS 67QB43, 67QR77 SERVICE DATA

— 1959 No. 3 —

ISSUED BY
SERVICE DIVISION
RCA VICTOR COMPANY, LTD.
MONTREAL, CANADA

ELECTRICAL AND MECHANICAL SPECIFICATIONS

Model 67QB43

TUNING RANGE

Standard Broadcast	515 - 1620 Kcs.
B-Band (Medium Wave)	2.2 - 7 Mcs.
C-Band (Short Wave)	7.0 - 22 Mcs.
Intermediate Frequency	455 Kcs.

TUBE COMPLEMENT

Sym.	Type	Function
V-1	RCA 1L6	Converter
V-2	RCA 1AJ4	1st I.F.
V-3	RCA 1AH5	Audio Detector
V-4	RCA 3C4	Audio Output

Battery ----- RCA - VS022

LOUDSPEAKERS

Type	2 1/4" Tweeter
Type	5" dynamic
Voice Coil Impedance	4.5 ohms

CABINET DIMENSIONS (Overall) - (Plastic)

Height	9 1/4"
Width	14"
Depth	6 1/8"

Model 67QR77

TUNING RANGE

"A" Band	515-1620 Kcs.
"B" Band	2.2-7.1 Mcs.
31m Band	11.7-12 Mcs.
19m Band	15.1-15.5 Mcs.
16m Band	17.7-17.9 Mcs.
"C" Band	6.9-2.2 Mcs.
Intermediate Frequency	455 Kcs.

TUBE COMPLEMENT

Sym.	Type	Function
V-1	RCA 6BA6	RF Amplifier
V-2	6BE6	Converter & 1st IF
V-3	6BA6	2nd IF Amplifier
V-4	6AV6	AM Detector AVC & 1st AF
V-5	6AQ5	Audio Output
V-6	6X4	Rectifier
V-7	EM34	Tuning Eye

POWER OUTPUT

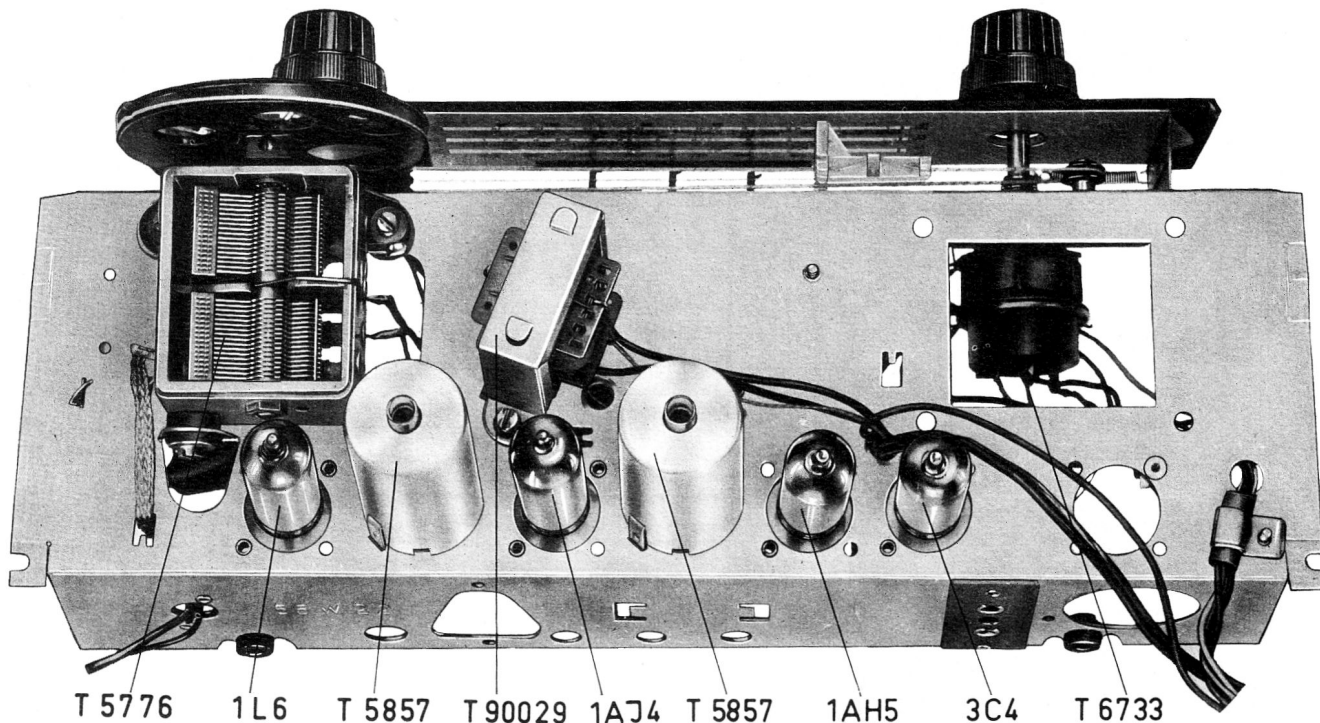
Undistorted	4.5 watts
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LOUDSPEAKER

Type	(1) 7" x 10" Dynamic
	(2) 2 3/4" x 5" Tweeter
Voice Coil Impedance	4.5 ohms

CABINET DIMENSIONS

Height	15"
Width	23 3/8"
Depth	10 3/8"

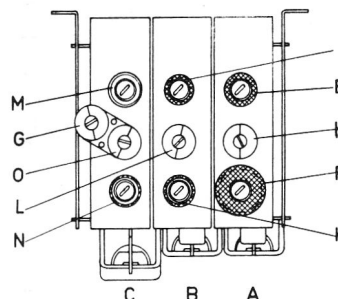


ALIGNMENT PROCEDURE MODEL 67QB43

Do not attempt alignment adjustments before all other possibilities of trouble have been checked.

- 1) Dial pointer should be set to the left hand reference mark of the dial if the gang condenser is in full mesh.
- 2) Connect output meter across jacks for external loudspeaker.
- 3) Turn volume control at maximum and reduce test oscillator output to keep receiver output voltage near .5 volts.
- 4) All adjustments at maximum output.
- 5) Oscillator tracks below signal on C-Band.

ALIGNMENT POINTS 67QB43

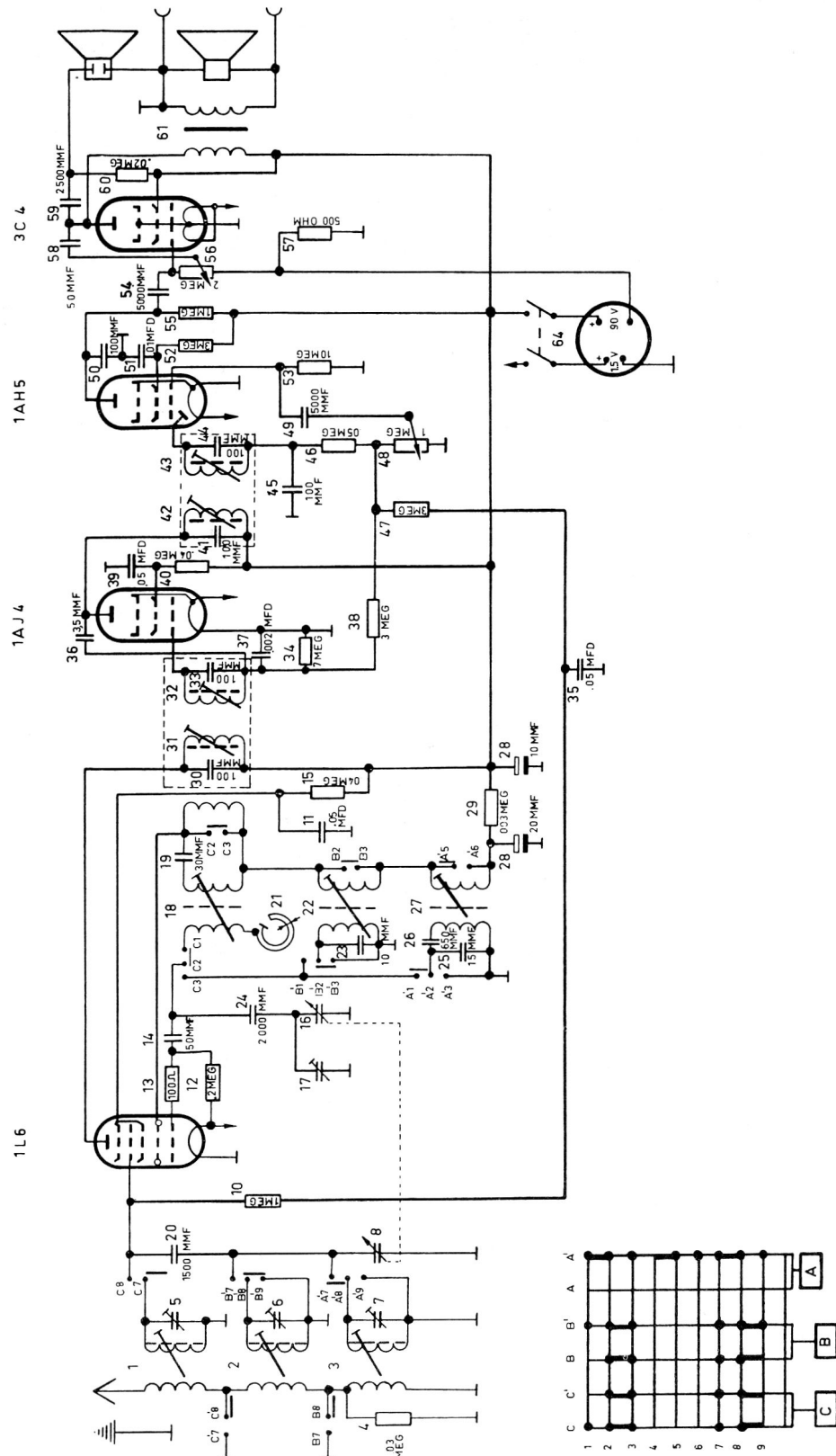


ALIGNMENT PROCEDURE MODEL 67QB43

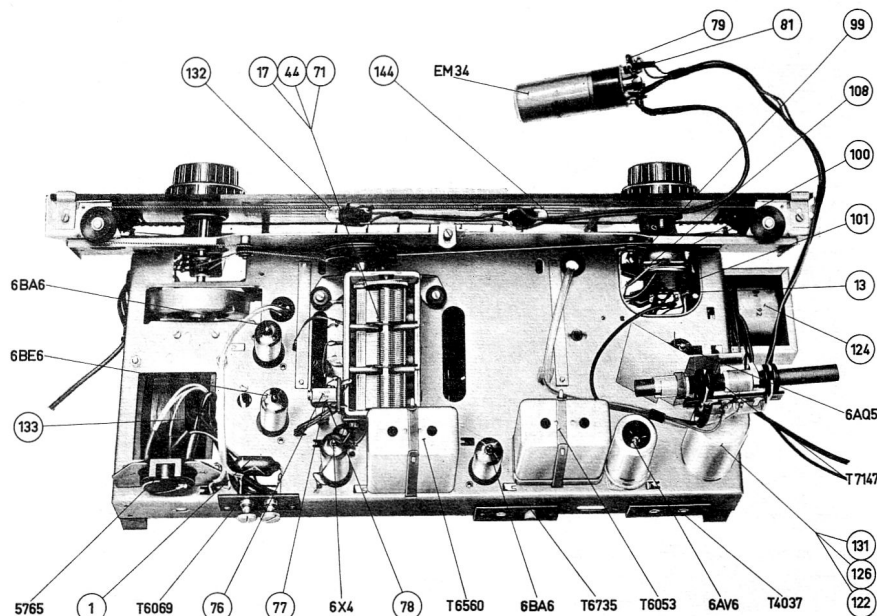
Model	Steps	Connect test oscillator low side to chassis and high side to —	Tune test oscillator to —	Wave switch gang —	Dial pointer to —	Adjust iron core or trimmer
67 QB 43	1	Grid 1 of IF stage thru .01 MFD	455 Kc	A	1.6 Mc	A B
	2	Converter grid thru .01 MFD				C D
	3	Antenna lead thru RETMA dummy antenna	600 Kc		600 Kc	E F
	4		1.45 Mc		1.45 Mc	G H
	5	Repeat steps 3 and 4				
	6	Same as for 3 and 4	2.83 Mc	B	2.83 Mc	I K
	7		6 Mc		6 Mc	L *
	8	Repeat adjustments K and L		C	8 Mc	M ** N
	9	Same as for 3 and 4	8 Mc		18 Mc	O ***
	10		18 Mc			
	11	Repeat adjustments N and O				

Image signal of lesser amplitude should occur at — *5.1 Mc **8.9 Mc ***18.9 Mc

If a RETMA dummy antenna is not available, substitute a 200 MMF capacitor on X and A band and 400 ohm carbon resistor on short wave bands.



SCHEMATIC DIAGRAM FOR MODEL 67QB43



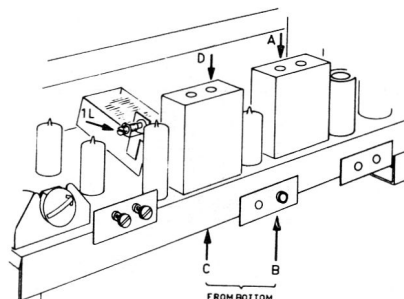
Chassis Layout Model 67QR77

ALIGNMENT PROCEDURE

Do not attempt alignment adjustments before all other possibilities of trouble have been checked.

- 1) Dial pointer should be set to the left hand reference mark of the dial if the gang condenser is in full mesh.
- 2) Connect output meter across jacks for ext. speaker.
- 3) Turn volume control at maximum and reduce test oscillator output to keep receiver output voltage near .5 volts.
- 4) All adjustments at maximum output, except "E".
- 5) Oscillator tracks above signal on all bands.

ALIGNMENT POINTS



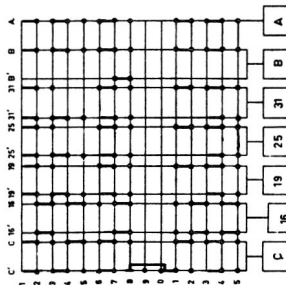
ALIGNMENT CHART MODEL 67QR77

Steps	Connect test oscillator low side to chassis and high side to —	Tune test oscillator to—	Wave switch to band —	Dial pointer to —	Adjust iron core or trimmer
1	Grid 1 of IF stage thru .01 MFD				A B
2	Converter grid thru .01 MFD	455 Kc	A	1.6 Mc	C D
3	Grid of RF stage thru .01 MFD				E
4	Antenna lead thru RETMA dummy antenna	9.5 Mc		9.5 Mc	Minimum 1F, 2F, 3F
5		9.775 Mc	31 m	9.775 Mc	1G, 2G, 3G
6	Repeat steps 4 and 5				
7	Antenna lead thru RETMA dummy antenna	11.8 Mc	25 m	11.8 Mc	1H, 2H, 3H
8		15.3 Mc	19 m	15.3 Mc	1J, 2J, 3J
9		17.7 Mc		17.7 Mc	K
10		17.9 Mc	16 m	17.9 Mc	1L, 2L, 3L
11	Repeat steps 9 and 10				
12	Antenna lead thru RETMA dummy antenna	8 Mc		8 Mc	1M, 2M, 3M
13		21.5 Mc	C	21.5 Mc	1N, 2N, 3N*
14	Repeat steps 12 and 13				
15	Antenna lead thru RETMA dummy antenna	2.83 Mc	B	2.83 Mc	1P, 2P, 3P
16		6.5 Mc		6.5 Mc	1Q, 2Q, 3Q**
17	Repeat steps 15 and 16				
18	Antenna lead thru RETMA dummy antenna	600 Kc	A	600 Kc	1R, 2R, 3R
19		1450 Kc		1450 Kc	1S, 2S, 3S
20	Repeat steps 18 and 19				

On bands of 16, 19, 25 and 31 meters signal generator should be checked with crystal controlled oscillator or by heterodyning with radio station of known frequency. Warm up period should be 20 minutes.

Image signal of lesser amplitude should occur at *20.6 Mc **5.6 Mc

If a RETMA dummy antenna is not available, substitute a 200 MMF capacitor on X and A band and 400 ohm carbon resistor on short wave bands.



CRITICAL LEAD DRESS

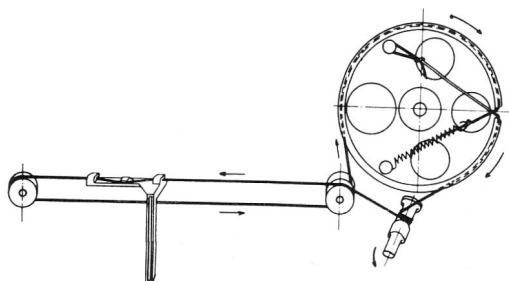
MODEL 67QB43

MODEL 67QR77

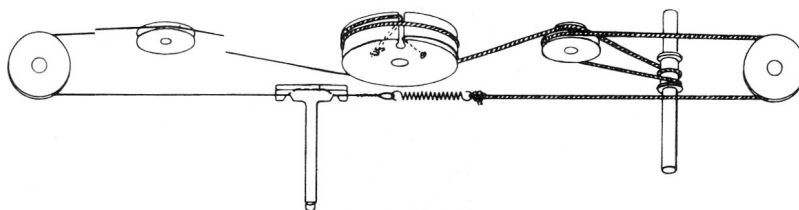
- 1) Capacitors of positions 20 and 24 must be glued firmly to the key assembly.
- 2) Capacitor of position 36 must be soldered on in such a manner that the length of the connecting wire leading to the tube anode 1 AJ 4, will not exceed 6 mm or $\frac{1}{4}$ inch).
- 2) Capacitor of position 36 must be firmly fixed to the stator lead of the gang capacitor.
- 4) Lead from spread band to key assembly must be dressed close to the chassis.
- 5) Anode, grid and diode leads of the IF transformer must be dressed close to chassis.
- 6) The green automatic control volume lead between the two tag strips leading from position 47 to position 10 and 35, must be dressed close to chassis and away from connecting points of positions 38, 46, 47 and 48.

- 1) Lead to rotor of trimmer pos. 74 and cathode lead of tube 6BE6 must be cemented to fiber board close to trimming pos. 74.
- 2) Lead from keyboard contacts 16-2, 19'-2, 25'-2, and 31'-2 must be bent away from copper band lead near coil support.
- 3) Condenser pos. 68 below trimmer pos. 74 must be cemented to hard paper plate.
- 4) Condenser pos. 69 must be cemented to resistor pos. 54.
- 5) Choke pos. 149 must be bent away from tube socket of 6BE6 and put below condenser pos. 148.
- 6) Coil leads pos. 63 must be bent away from leads to contacts B-2 and 31-2 of keyboard.

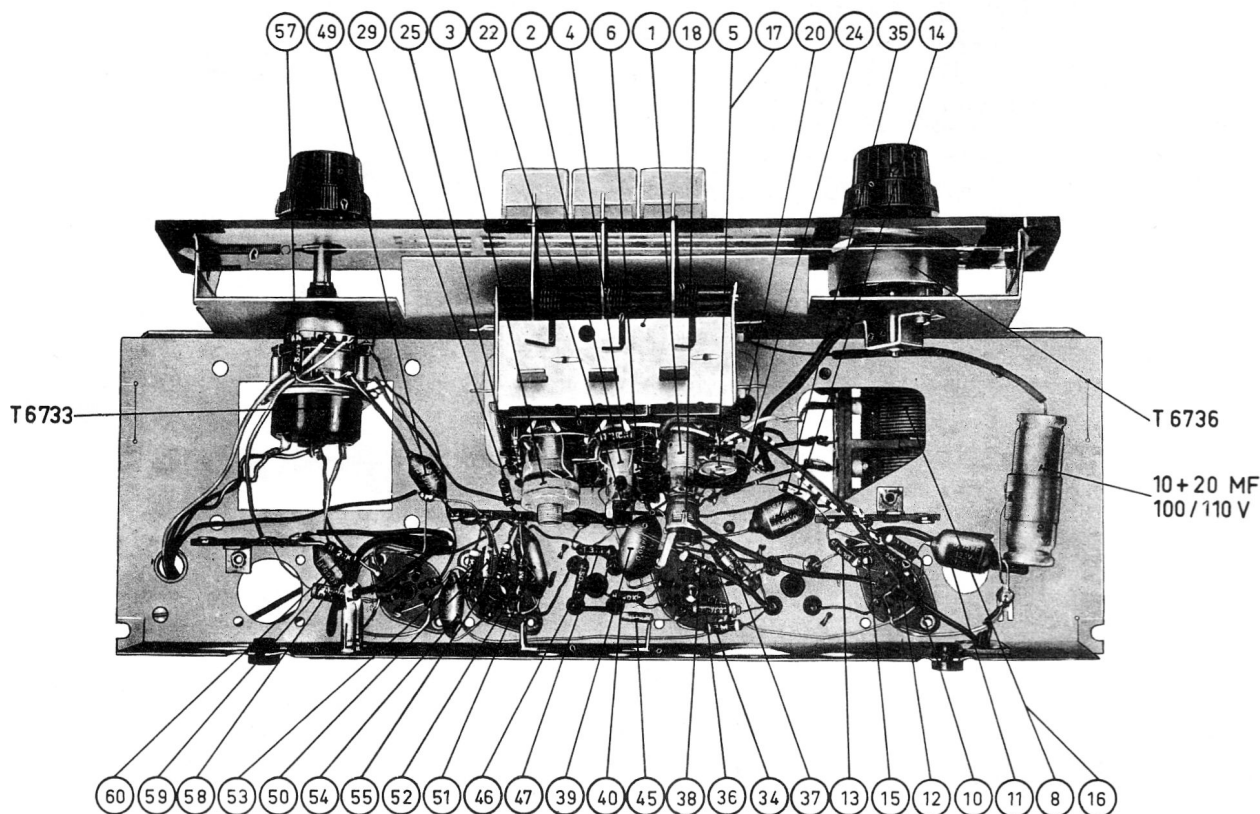
- 7) Double lead of ferrite antenna must be bent away from 6AQ5 and fixed to shielded wire which goes to ferrite antenna.
- 8) Lead from fixed plate of trimmer pos. 76 to contact 16'-3 of keyboard must have a length of exactly 95 mm from soldering point to soldering point.
- 9) Dress anode, grid and diode leads of IF band filters close to chassis.
- 10) Lead from pos. 40 and 29 to primary of coil pos. 39 must be bent to base plate of keyboard.
- 11) Lead from the following contacts must be bent away from the base plate of keyboard C-8, 16-8, 19-8, 25-8, 31-8, C-7, 16'-8, 19'-8, 25'-8, 31'-8, B-8 and A-8.
- 12) The shielding can for the antenna circuits must not touch the metal pieces with which the coil plates are fastened to keyboard.



Drive Cord Stringing Model 67QB43



Drive Cord Stringing Model 67QR77



Chassis Bottom View Model 67QB43

REPLACEMENT PARTS LIST

Insist on Genuine Factory Tested Parts, which are readily identified and may be purchased from Authorized Dealers.

SYMBOL	STOCK NO.	DESCRIPTION	SYMBOL	STOCK NO.	DESCRIPTION
REPLACEMENT PARTS MODEL 67QB43					
1	*S-23243+	Coil-Antenna-"C" Band	46		Resistor-.05 megohm 10%
2	*S-22951+	Coil-Antenna-"B" Band	47		Resistor-3 megohm 10%
3	*S-23242+	Coil-Antenna-"A" Band	48	*S-23253+	Control-Volume control & switch
4		Resistor-.03 megohm, 10%	49		Capacitor-5,000 mmf 20% 125V
5		Trimmer-	50		Capacitor-100 mmf 20% 125V
6		Trimmer-	51		Capacitor-.01 mfd 20% 125V
7		Trimmer-	52		Resistor-3 megohm, 10%
8	*S-21261+	Condenser-Variable gang	53		Resistor-10 megohm, 10%
9			54		Capacitor-5,000 mmf 20% 125V
10		Resistor-1 megohm, 10%	55		Resistor-1 megohm, 10%
11			56		Resistor-2 megohm, 10%
12		Resistor-.2 megohm, 10%	57		Resistor-500 ohms, 10%
13		Resistor-100 ohms, 10%	58		Capacitor-50 mmf 10% 125V
14		Capacitor-50 mmf, 10%, 125V	59		Capacitor-2,500 mmf 20% 500V
15		Resistor-.04 megohm, 10%	60		Resistor-.02 megohm 10%
16		Part of number 5	61	*S-23252+	Transformer-Audio output transformer
17		Trimmer-		*S-23241+	Assembly-Push button tuner ass'y
18	*S-23246+	Coil-Oscillator "C" Band	SPEAKER ASSEMBLY		
19		Capacitor-30 mmf 2.5% 125V			
20		Capacitor-1,500 mmf 5% 125V			
21			*S-23254+		Speaker-5" PM Speaker
22	*S-23245+	Coil-Oscillator "B" Band	*S-23255+		Speaker-2 3/4" tweeter speaker
23		Capacitor-10 mmf/1 mmf 125V	MISCELLANEOUS ASSEMBLY		
24		Capacitor-2,000 mmf 5% 125V			
25		Capacitor-15 mmf - 1 mmf 125V			
26		Capacitor-650 mmf 2.5% 125V	*S-23233§		Baffle-Speaker baffle
27	*S-23244+	Coil-Oscillator "A" Band	*S-23240§		Brake-Core brake
28	*S-23248+	Capacitor-Electrolytic 10-20 mfd 100, 100V	*S-23239§		Core-Aligning core
29		Resistor-.003 megohm, 10%	*S-23231§		Cabinet-Plastic cabinet
30		Capacitor-100 mmf, 2.5% 125V	*S-23234§		Cloth-Grille cloth
31			S-4313 §		Cord-Dial cord
32	S-21115+	Transformer-1st IF transformer	S-20869§		Emblem-RCA emblem
33		Capacitor-100 mmf 2.5% 125V	*S-23236§		Knob assembly-Tuning control knob
34		Resistor-7 megohm 10%	S-21086§		Knob assembly-V volume control knob
35		Capacitor-.05 mfd 20%, 125V	*S-23236§		Knob assembly-Switch knob
36		Capacitor-Ceramic-5.5 mmf $\pm$.25 mmf 500V	*S-23237§		Knob assembly-Micro tuning knob
37		Capacitor-2,000 mmf 5% 125V	*S-23232§		Mask-Cabinet mask
38		Resistor-3 megohm, 10%	*S-23230§		Pointer-Dial pointer
39		Capacitor-.05 mfd, 20% 125V	*S-23227§		Push button-Key "A" pushbutton
40		Resistor-.04 megohm 10%	*S-23228§		Push button-Key "B" pushbutton
41		Capacitor-100 mmf 2.5% 125V	*S-23229§		Push button-Key "C" pushbutton
42			*S-23226§		Scale-Dial scale
43	S-21115+	Transformer-2nd IF transformer	S-20881§		Socket-Tube socket
44		Capacitor-100 mmf 2.5% 125V	*S-23238§		Spring-Pull back spring for polymide cord
45		Capacitor-100 mmf 20% 125V	*S-23235§		Strips-Middle brass strips
REPLACEMENT PARTS MODEL 67QR77					
1		Capacitor-.005 mfd 500V	24		Resistor-.06 megohm 1w
2		Capacitor- 50 mfd 125V	25		Capacitor-55 mmf 2.5% 500V
3		Capacitor-.005 mfd 500V	26	*S-22970+	Coil-IF wave trap
4	*S-22946+	Coil-Antenna "C" coil	27		Capacitor-.05 mfd 500V
5	*S-22947+	Coil-Antenna SW-16M Band	28		Resistor-500 ohm 1/2w
6	*S-22948+	Coil-Antenna SW 19M Band	29		Capacitor-5,000 mmf 500V
7	*S-22949+	Coil-Antenna SW 25M Band	30		Resistor-500 ohm 1/2w
8	*S-22950+	Coil-Antenna SW 31M Band	31		Capacitor-1,000 mmf, 5% 125V
9	*S-22951+	Coil-Antenna "B" antenna coil	32		Capacitor-400 mmf 2.5% 125V
10	*S-22952+	Coil-Antenna "A" antenna coil	33	*S-22955+	Coil-RF "C" band coil
11	*S-22953+	Rod-Ferrite rod MW	34	*S-22956+	Coil-RF SW 16M coil
12	*S-22954+	Rod-Ferrite rod LW	35	*S-22957+	Coil-RF SW 19M coil
13		Capacitor-200 mmf 125V	36	*S-22958+	Coil-RF SW 25M coil
14		Trimmer-Ceramic 6 - 30 mmf	37	*S-22959+	Coil-RF SW 31M coil
15		Trimmer-Ceramic 6 - 30 mmf	38	*S-22960+	Coil-RF "B" band coil
16		Trimmer-Ceramic 3 - 15 mmf	39	*S-22961+	Coil-RF "A" band coil
17	*S-22969+	Condenser-Variable gang capacitor	40		Resistor-.002 megohm 1/3w
18		Trimmer-Variable 4-20 mmf	41		Trimmer-ceramic 4-20 mmf
19		Capacitor-35 mmf/1mmf 125V	42		Trimmer-ceramic 6-30 mmf
20		Capacitor-300 mmf 125V	43		Trimmer-ceramic 4-20 mmf
21		Capacitor-650 mmf 2.5% 125V	44		Trimmer-ceramic
22		Capacitor-400 mmf 2.5% 125V	45		Trimmer-ceramic 3-15 mmf
23		Resistor-1 megohm 1/2w	46		Capacitor-35 mmf/1mmf 125V

* Indicates new stock items.

+ Indicates parts to be stocked at Branches.

§ Indicates parts stocked at Cote de Liesse only.

Order on demand.

Only items listed under stock numbers are available as Replacement Parts.

All parts subject to change or withdrawal without notice.

REPLACEMENT PARTS LIST

Insist on Genuine Factory Tested Parts, which are readily identified and may be purchased from Authorized Dealers.

SYMBOL	STOCK NO.	DESCRIPTION	SYMBOL	STOCK NO.	DESCRIPTION
47		Capacitor-300 mmf, 125V	116		Resistor-.001 megohm, 1/3w
48		Capacitor-650 mmf, 2.5% 125V	117		Capacitor-5,000 mmf, 500V
49		Capacitor-300 mmf, 2.5% 125V	118		Capacitor-.01 mfd, 500V
50		Resistor-1 megohm 1/3w	119	*S-22980+	Capacitor-Electrolytic-50 mfd 30/35 volts
51		Resistor-.1 megohm 1/3w	120		Resistor-350 ohms, 1w
52		Capacitor-.01 mfd 500V	121		Capacitor-.025 mfd, 125V
53		Resistor-.02 meg. 1/3w	122	*S-22981+	Capacitor-Electrolytic - 4 mfd
54		Resistor-500 ohms, 1/2w	123		Resistor-.0025 megohm, 1/2w
55		Resistor-.001 megohm, 1/3w	124	*S-22945+	Transformer-Audio output transformer
56		Resistor-	125		Resistor-500 ohms WIREWOUND 2w
57		Resistor-50 ohm 1/3w	126	*S-22981+	Capacitor-Electrolytic-50 mfd pt. of Symbol 122, 131
58	*S-22962+	Coil-Oscillator "C" band coil	127	S-20923	Speaker-Tweeter
59	*S-22963+	Coil-Oscillator SW 16M band coil	128	*S-23259	Capacitor-16 mfd, 30/35V
60	*S-22964+	Coil-Oscillator SW 19M band coil	129	*S-22975+	Speaker-Treble speaker
61	*S-22965+	Coil-Oscillator SW 25M band coil	130	*S-22975+	Speaker-Treble speaker
62	*S-22966+	Coil-Oscillator SW 31M band coil	131	*S-22981+	Capacitor-Electrolytic-50 mfd
63	*S-22967+	Coil-Oscillator "B" band coil	132	*S-22976	Lamp-Dial lamp-7 volt 0.3 amps
64	*S-22968+	Coil-Oscillator "A" band coil	133	S-20915	Transformer-Power transformer
65		Trimmer-ceramic 4-20 mmf	134	*S-23256	Switch-Voltage selector switch
66		Trimmer-ceramic 6-30 mmf	135	*S-22977	Fuse-110-127 volts - 1 amp
67		Trimmer-ceramic 10-45 mmf	136	*S-22996+	Power switch-DPST switch
68		Capacitor-6,000 mmf, 10% 125V	137		Capacitor-500 mmf, 500V
69		Capacitor-2,000 mmf, 5% 125V	138	*S-22975+	Speaker-Treble speaker
70		Capacitor-300 mmf 125V	139	*S-22975+	Speaker-Treble speaker
71		Trimmer-Part of gang	140	*S-22997+	Switch-DPDT switch
72		Capacitor-520 mmf, 2.5% 125V	141		Capacitor-300 mmf, 125V
73		Resistor-.03 megohm 2W	142		Capacitor-300 mmf, 2.5%, 125V
74		Trimmer-ceramic 3-15 mmf	143		Capacitor-300 mmf
75	*S-22979+	Capacitor-35 mmf 2%	144	*S-22976+	Lamp-Dial lamp-7 volt, 0.3 amp
76		Trimmer	145		Resistor-.5 megohm, 1/3w
77		Capacitor-285 mmf, 2.5% 125V	146		Resistor-200 ohms, 1/3w
78		Capacitor-225 mmf, 2.5% 125V	147		Resistor-5,000 ohms, 1/3w
79		Resistor-1 megohm, 1/3w	148		Capacitor-5,000 mmf 500V
80		Capacitor-160 mmf, 2.5% 125V	149	*S-22978+	Coil-Filament choke coil
81		Resistor-1 megohm, 1/2w			
82 }	*S-22971+	Transformer-1st IF transformer			
83 }					
84		Capacitor-5,000 mmf, 500V			
85		Capacitor-160 mmf 2.5% 125V			
86		Resistor-.05 megohm 125V			
87		Resistor-.1 megohm 1/3w			
88		Capacitor-.05 mfd 500V			
89		Resistor-.25 megohm 1/2w			
90		Resistor-2.5 megohm 1/3w			
91		Capacitor-160 mmf 2.5% 125V			
92 }	*S-22971+	Transformer-2nd IF transformer			
93 }					
94		Capacitor-160 mmf 2.5% 125V	*S-22987§		Bezel-Bezel for Magic Eye
95		Resistor-1 megohm 1/3w	*S-22986§		Cloth-Grille cloth
96		Capacitor-100 mmf 125V	S-22995§		Cover-Back cover
97		Resistor-.4 megohm, 1/3w	*S-22989§		Dial-Dial scale
98		Resistor-10 megohm, 1/3w	S-20868§		Grille-for tweeters
99		Capacitor-.01 mfd, 500V	S-21081§		Emblem-RCA emblem
100	*S-22973+	Control-Volume control	*S-22993§		Frame-Keyboard frame
101		Capacitor-5,000 mmf, 500V	*S-22982§		Frame-Brass frame-horizontal
102		Resistor-.5 megohm, 1/3w	*S-22983§		Frame-Brass frame-vertical
103		Resistor-.1 megohm, 1/3w	*S-23257§		Indicator-Tone and treble indicator
104		Capacitor-5,000 mmf, 500V	*S-22994+		Knob ass'y-Push button knobs
105		Capacitor-.025 mfd. 500V	S-20878		Knob ass'y-Bass & treble knobs
106		Capacitor-.1 mfd 500V	*S-22991+		Knob ass'y-Tuning knob
107	*S-22972+	Control-Tremble control	*S-22992+		Knob ass'y-Volume control
108		Capacitor-50 mmf 125V	*S-22990§		Pointer-Dial pointer
109		Resistor-.5 megohm, 1/3w	*S-22988		Ring-Holding ring for magic eye
110		Resistor-.06 megohm, 1/3w	S-20880		Socket-Tube socket-Octal
111		Resistor-.04 megohm, 1/3w	S-21087+		Socket-Tube socket-Miniature
112		Capacitor-250 mmf 125V	*S-23258+		Socket-Dial Light socket ass'y
113	*S-22974+	Control-Base control			
114		Resistor-1 megohm, 1/3w	*S-22984§		Strip-Brass strip-middle
115		Resistor-100,000 ohms 1/3w	*S-22985§		Strip-Brass strip-lower

MISCELLANEOUS ASSEMBLY

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