



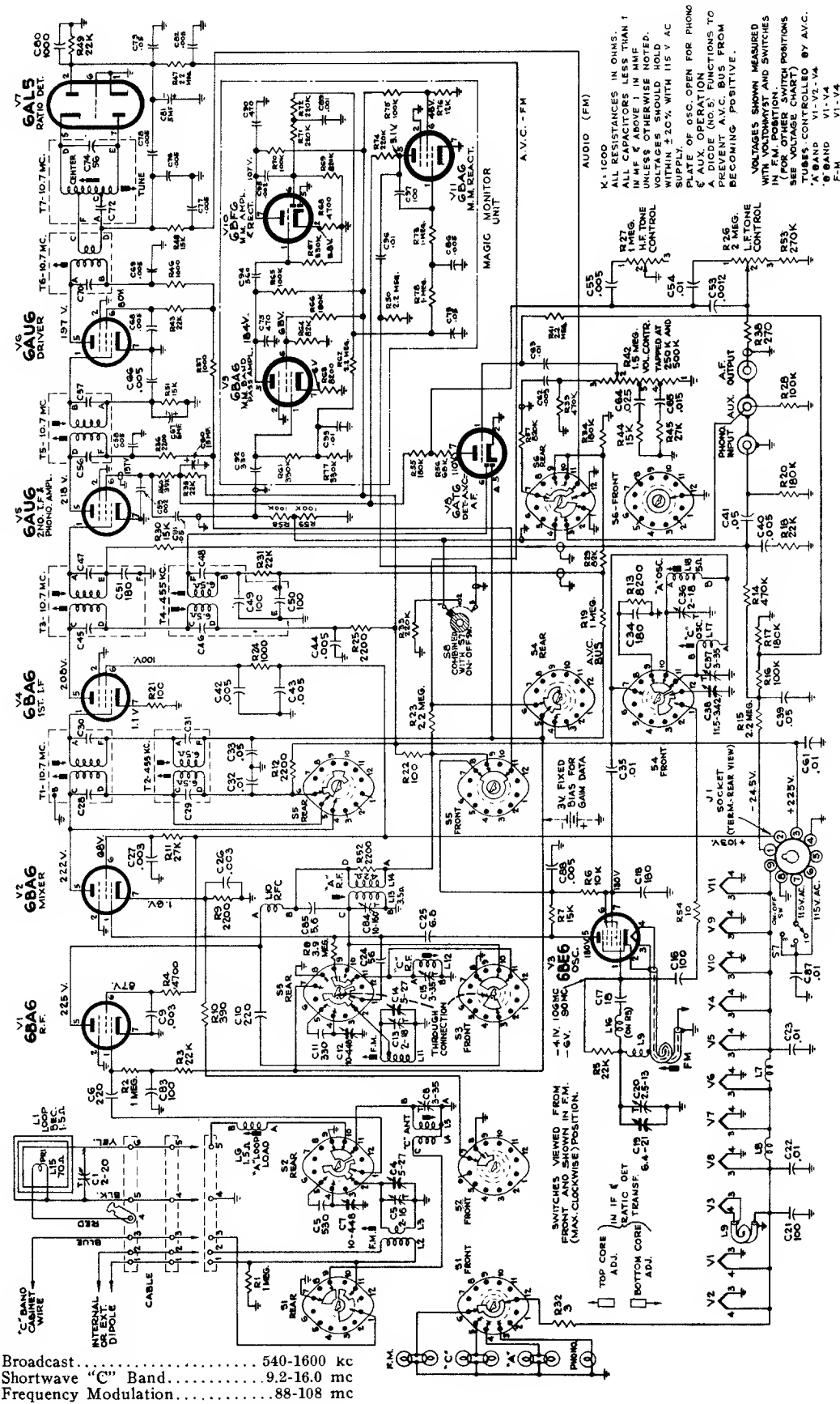
R.C.A. Victor Co., Inc.

	Model: 8V151	Chassis:	Year: Pre 1951
	Power:	Circuit:	IF:
	Tubes:		
	Bands:		

Resources

Beitmans 1949 99
Beitmans 1949 100
Riders 18 (XVIII) RCA 18-25
Riders 18 (XVIII) RCA 18-26
Riders 18 (XVIII) RCA 18-27
Riders 18 (XVIII) RCA 18-28
Riders 18 (XVIII) RCA 18-29
Riders 18 (XVIII) RCA 18-30
Riders 18 (XVIII) RCA 18-31
Riders 18 (XVIII) RCA 18-32
Riders 18 (XVIII) RCA 18-33
Riders 18 (XVIII) RCA 18-34
Riders 18 (XVIII) RCA 18-35
Riders 18 (XVIII) RCA 18-36
Riders 18 (XVIII) RCA 18-37
Riders 18 (XVIII) RCA 18-38
Riders 18 (XVIII) RCA 18-39
Riders 18 (XVIII) RCA 18-40
Riders 20 (XX) CHANGES 20-9

MANUAL OF 1949 MOST-OFTEN-NEEDED RADIO DIAGRAMS



Complete Schematic Diagram RK-121C — Range Switch shown in FM position.

Continued on the next page.

Model 8V151

RK-121C RF-IF Chassis

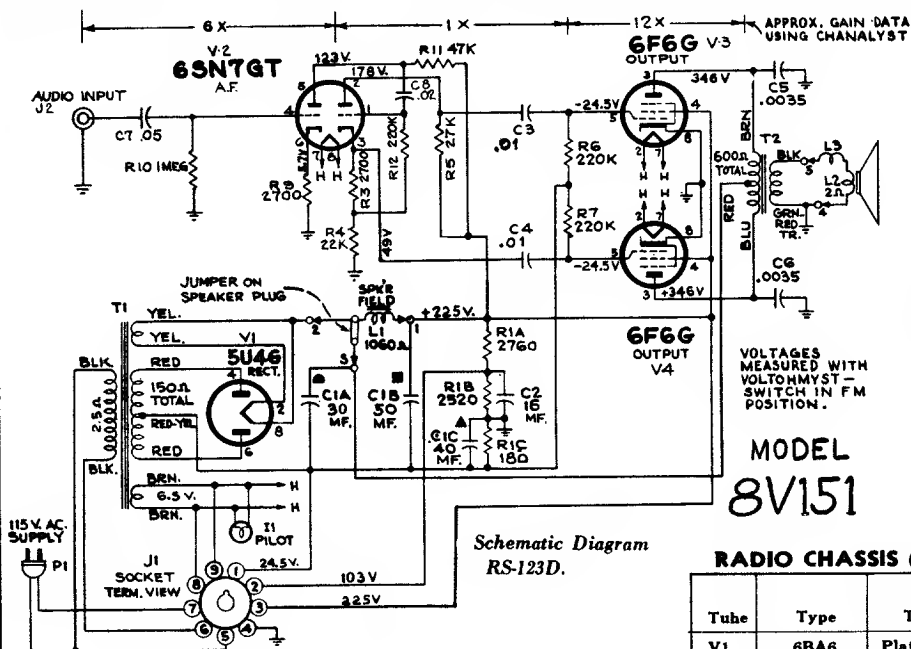
RS-123D Power Supply & AF Chassis



RCA Victor

99

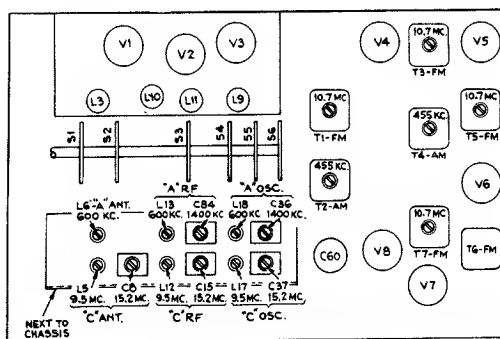
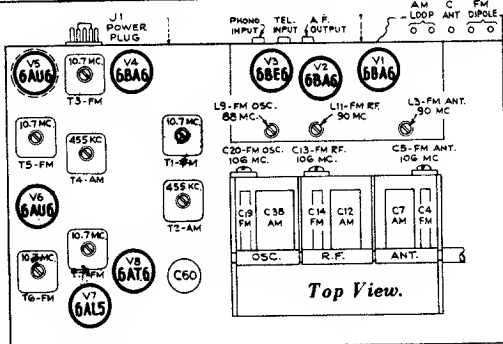
MANUAL OF 1949 MOST-OFTEN-NEEDED RADIO DIAGRAMS



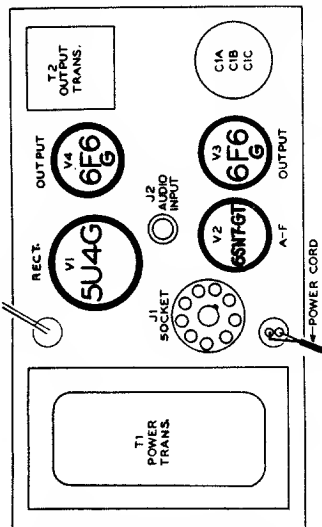
Schematic Diagram
RS-123D.

AMPLIFIER (RS123D) VOLTAGE CHART

Tube	Type	Terminal	Aux or PH	BC or SW	FM
V1	5U4G Rect.	Fil. No. 8	360	355	350
V2	6SN7 A. F. & Ph. Inv.	Plate No. 2 Plate No. 5 Cathode No. 3 Cathode No. 6	201 142 56 6.4	190 134 53 6.1	178 123 49 5.7
V3	6F6G Output	Plate No. 3 Screen No. 4 Grid No. 5	353 268 -24	351 245 -24.1	346 225 -24.5
V4	6F6G Output	Same as V3			



Bottom View.



RADIO CHASSIS (RK-121C) VOLTAGE CHART

Tube	Type	Terminal	Aux or PH	BC	SW	FM
V1	6BA6 R.F.	Plate No. 5 Screen No. 6	260 100	247 96	245 94	225 87
V2	6BA6 Mixer	Plate No. 5 Screen No. 6 Cathode No. 7	260 96 6.1	245 87 7	240 71 1.9	222 68 1.6
V3	6BE6 Osc.	Plate No. 5 Screen No. 6 & 7 Grid No. 1 †Grid No. 1	 -26 -18	160 157 -11 -10.5	157 130 -4.1 -6	130
V4	6BA6 1st I.F.	Plate No. 5 Screen No. 6 Cathode No. 7	240 118 1.2	232 110 1.2	225 108 1.2	208 100 1.1
V5	6AU6 2nd I.F.	Plate No. 5 Screen No. 6	.. 115	.. 112	.. 112	218 137
V6	6AU6 Driver	Plate No. 5 Screen No. 6	.. ..	.. ..	.. ..	197 80
V7	6AL5 R. Det.	..	..	..	..	..
V8	6AT6 Det.-A.F.	Plate No. 7	110	108	108	110
V9	6BA6 M.M. Amp.	Plate No. 5 Screen No. 6 Cathode No. 7	210 70 7	200 68 6.6	200 68 6.6	184 63 6
V10	6BF6 M.M. Amp. & Rect.	Plate No. 7 Cathode No. 2	121 6.6	117 6.4	117 6.4	107 5.8
V11	6BA6 Reactor	Plate No. 5 Screen No. 6	2.6 36	2.6 35	2.6 35	3.1 45

*Tuning condenser at high frequency end.
†Tuning condenser at low frequency end.

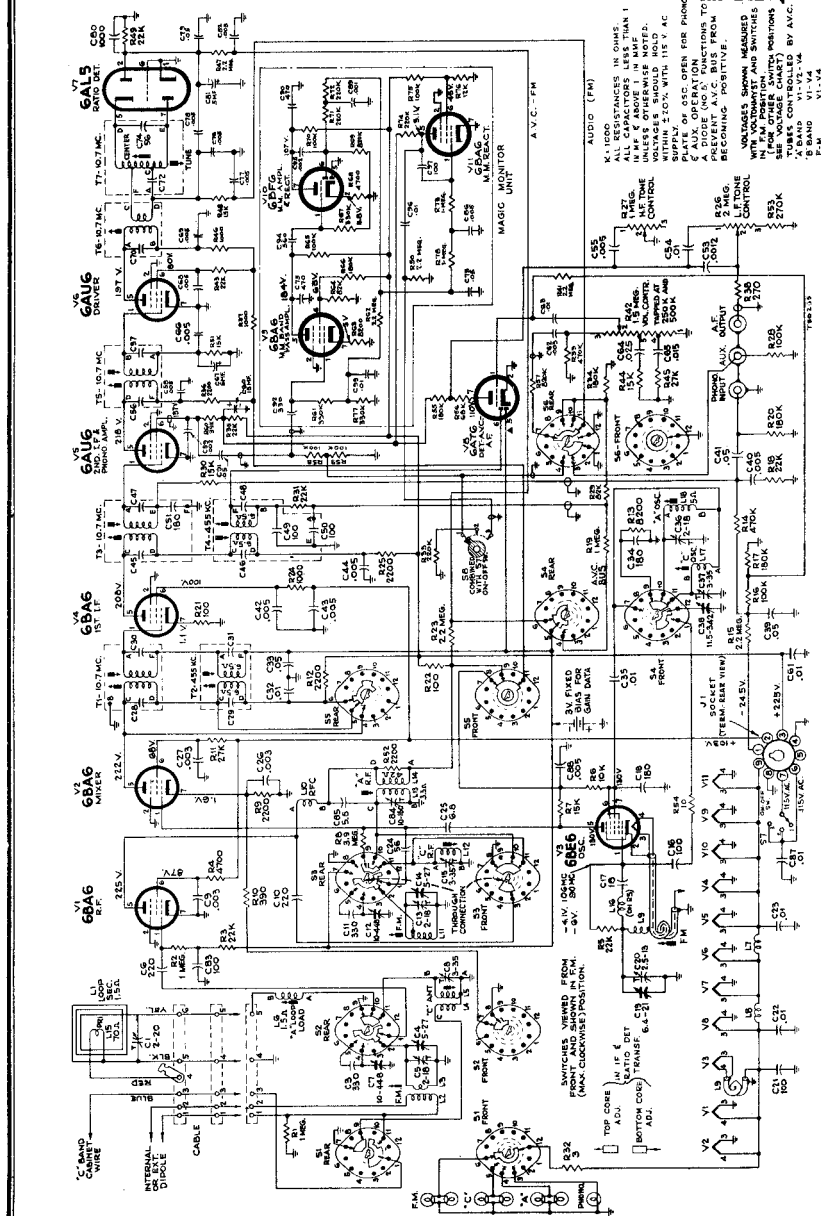
RADIO CHASSIS CATHODE CURRENTS (MA)

V1	6BA6	No. 7	16.9	16.5	16.5	14
V2	6BA6	No. 7	3.1	3.2	3.8	4.9
V3	6BE6	No. 2	0	14.1	14.1	15.8
V4	6BA6	No. 7	14	13.8	13.8	13.2
V5	6AU6	No. 7	1.8	1.8	1.8	3.9
V6	6AU6	No. 7	0	0	0	18.3
V7	6AL5	..	0	0	0	0
V8	6AT6	No. 2	.25	.25	.25	.25
V9	6BA6	No. 7	.9	.9	.9	.88
V10	6BF6	No. 2	1.3	1.3	1.3	1.2
V11	6BA6	No. 7	1.36	1.35	1.35	1.3

Voltages measured with Chanalyst or VoltOhmyet and should hold within $\pm 20\%$ with rated power supply. No signal. Tuning condenser closed except as stated.

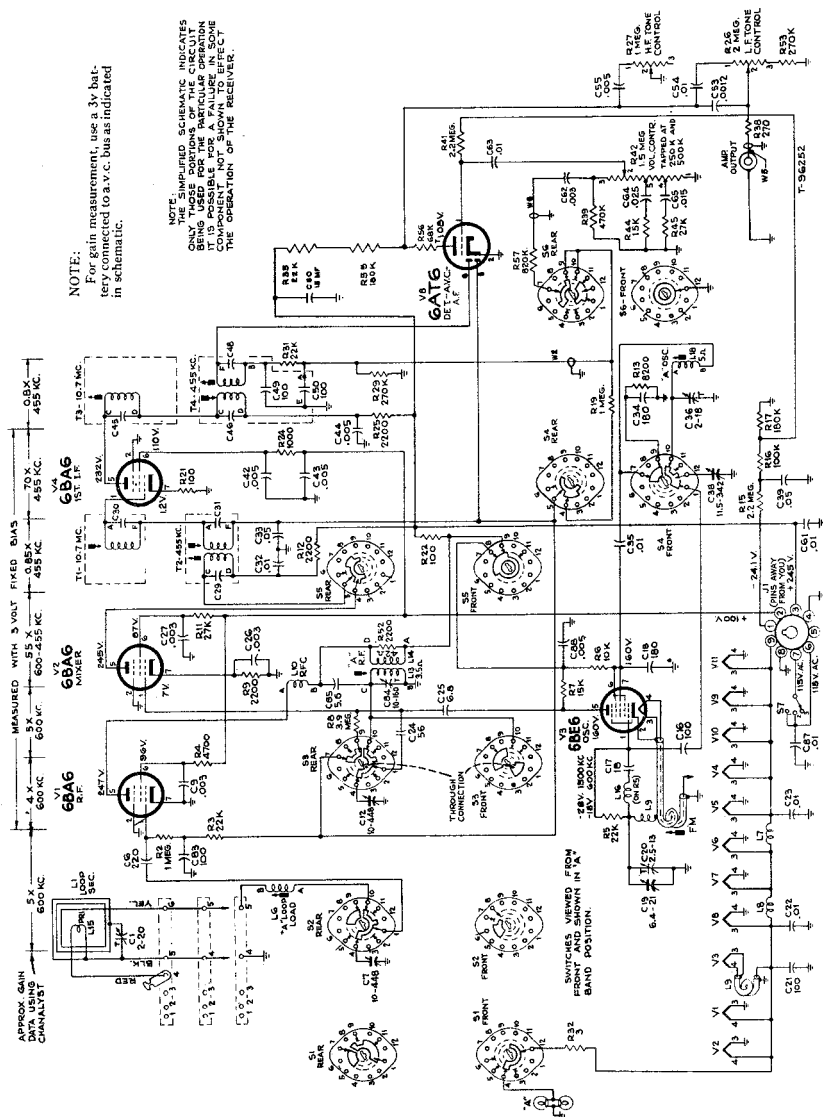
RADIO CORP. OF AMERICA

MODEL 8V151, CHASSIS
RK 121C, RS-123D



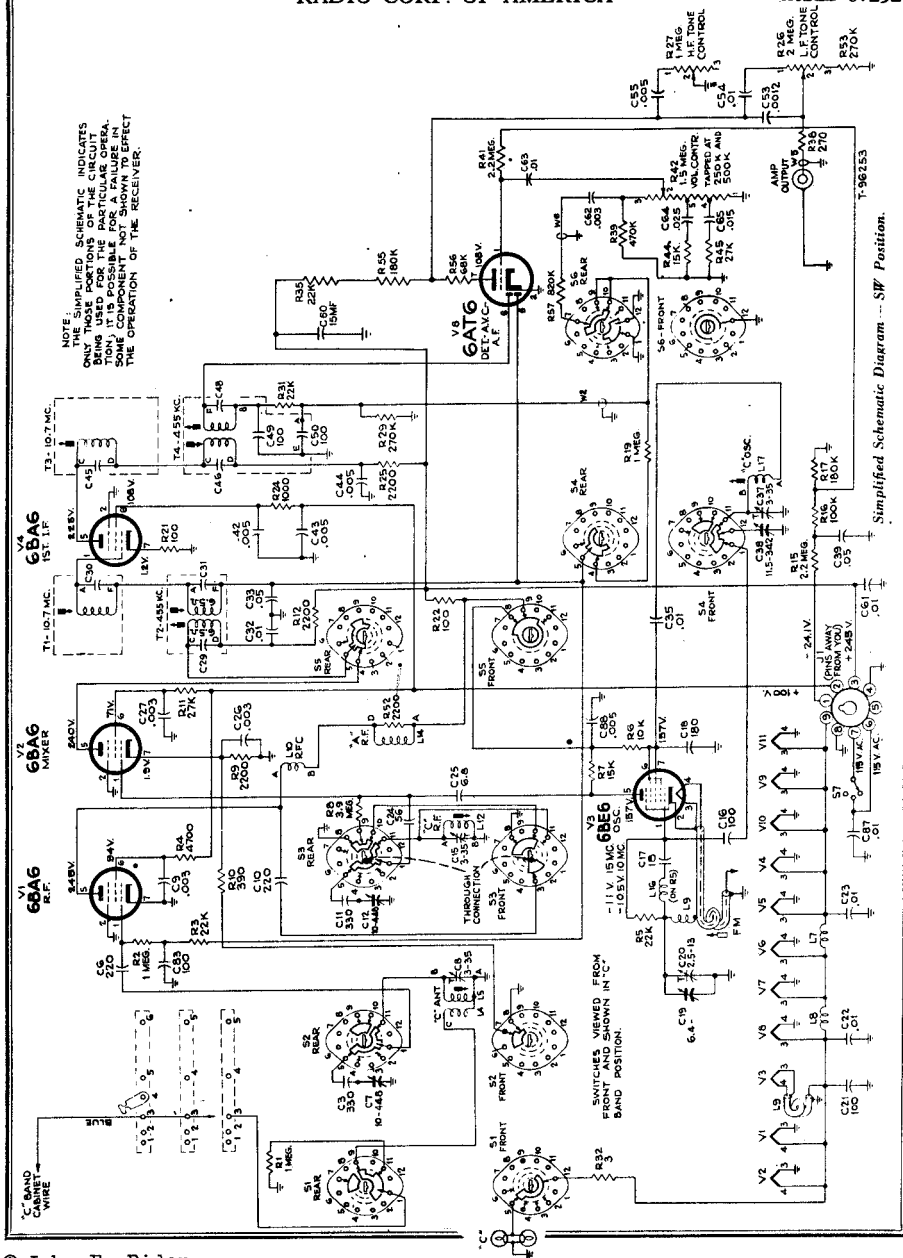
NOTE:
For gain measurement, use a 3v battery connected to a.v.c. bus as indicated in schematic.

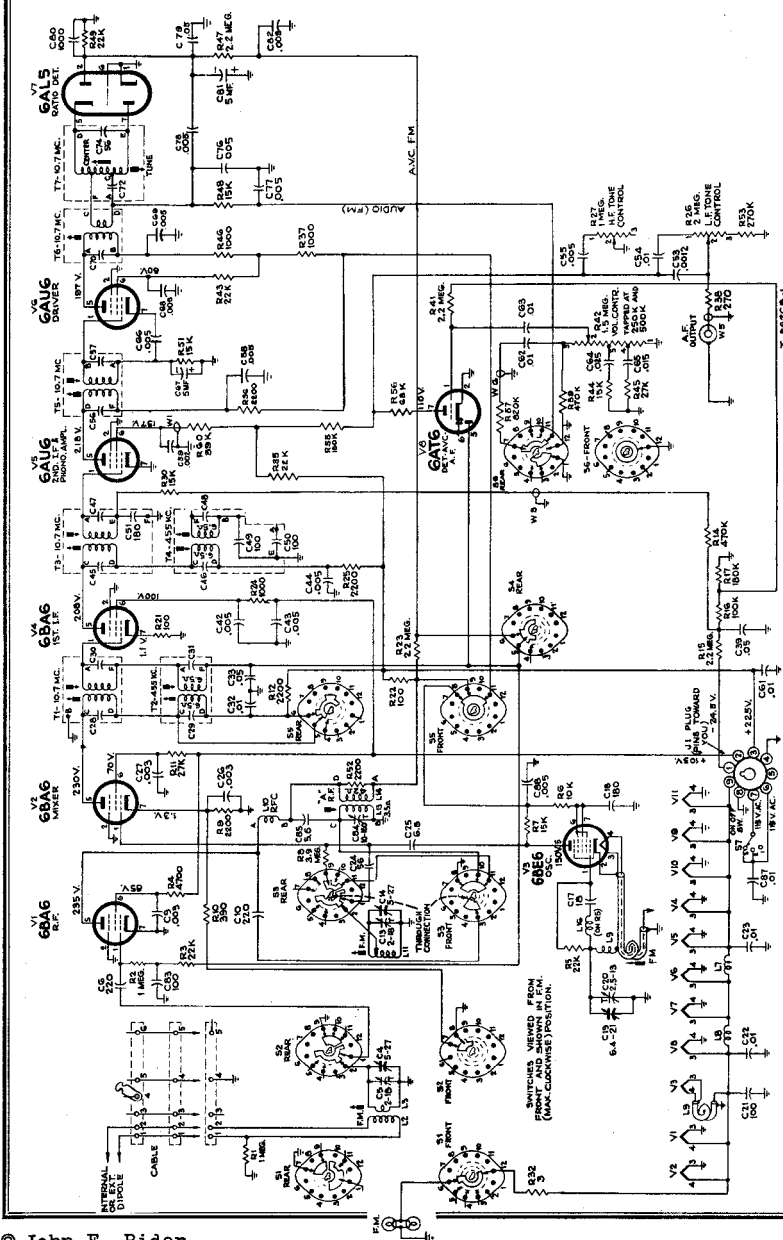
NOTE:
UNSUPPLIED SCHEMATIC INDICATES ONLY THOSE PORTIONS OF THE CIRCUIT BEING SHOWN FOR REFERENCE. OTHERWISE, IT IS POSSIBLE FOR AN INDIVIDUAL COMPONENT NOT SHOWN TO AFFECT THE OPERATION OF THE RECEIVER.



RADIO CORP. OF AMERICA

MODEL 8V151





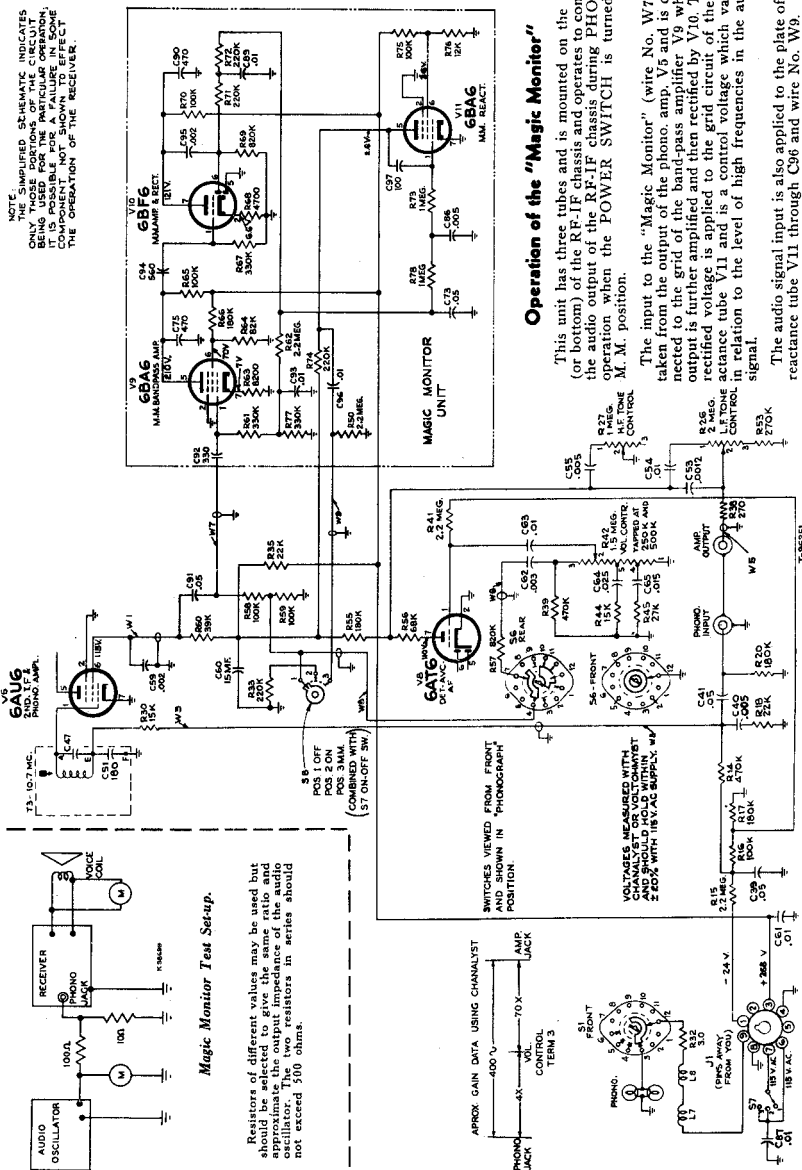
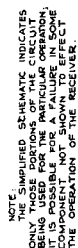
VOLTAGES SHOWN MEASURED
WITH VOLT METER
ACROSS COMPONENTS
FOR OTHER SWITCH POSITIONS
SEE VOLTAGE CHART

Simplified Schematic Diagram - FM Position.

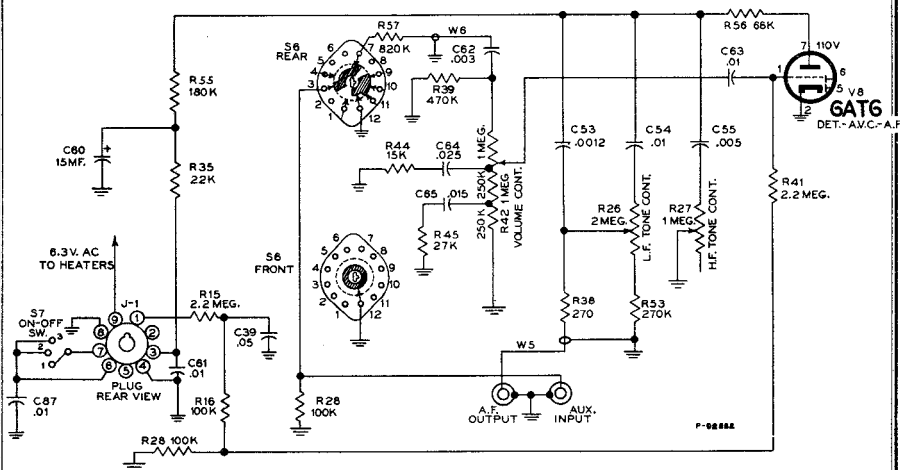
K = 1000
ALL RESISTANCES IN OHMS
ALL CAPACITANCES LESS THAN
100 P.F. UNLESS OTHERWISE NOTED
VOLTAGES SHOULD HOLD
WITHIN 25% WITH 115 V.A.C.
SUPPLY.

RADIO CORP. OF AMERICA

MODEL 8V151



Simplified Schematic Diagram — PH Position.



Simplified Schematic Diagram — • Position. (AUX.).

Testing the Magic Monitor:

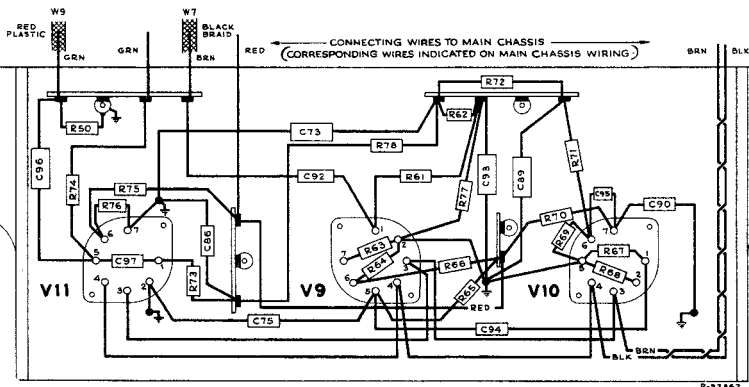
Any serious defects in Magic Monitor operation will be made evident by the following tests. An audio oscillator and an a-c voltmeter flat to 3,000 cycles are needed for the tests.

Procedure:

1. Set up the equipment as shown in Fig. 10. Although two voltmeters are shown, one can be used in both positions.
2. Turn the receiver function switch to PHONO and turn S8 to ON position. Set the audio oscillator to 400 cycles and adjust its output to 0.2 volt (measured across the oscillator output terminals). Adjust the receiver volume control for a reading of 1 volt (measured at the voice coil). There

should be little or no change in receiver output when S8 is turned to "M.M." position.

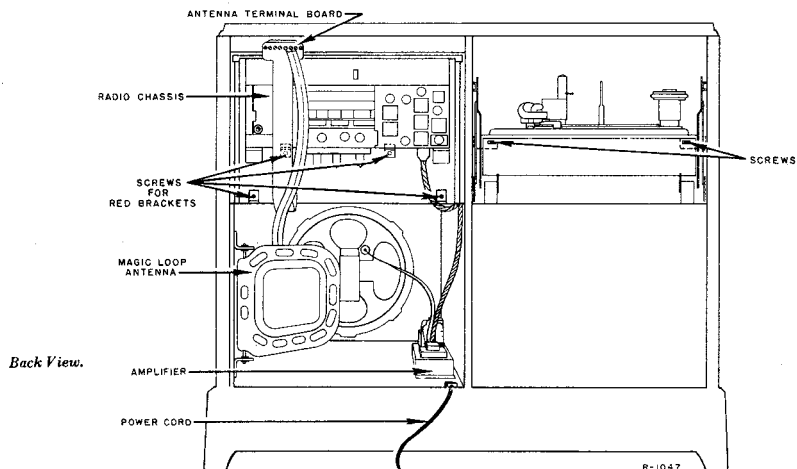
3. Repeat Step 2 except using oscillator output of 1 volt, 400 cycles. There should be little or no change in receiver output when S8 is turned to "M.M." position.
4. Repeat Step 2 except using oscillator output of 1 volt, 3,000 cycles. There should be little or no change in receiver output when S8 is turned to "M.M." position.
5. Repeat Step 2 except using oscillator output of 0.2 volt, 3,000 cycles. When S8 is turned to "M.M." position the output should decrease to approximately 1/5 of that obtained with S8 in ON position.



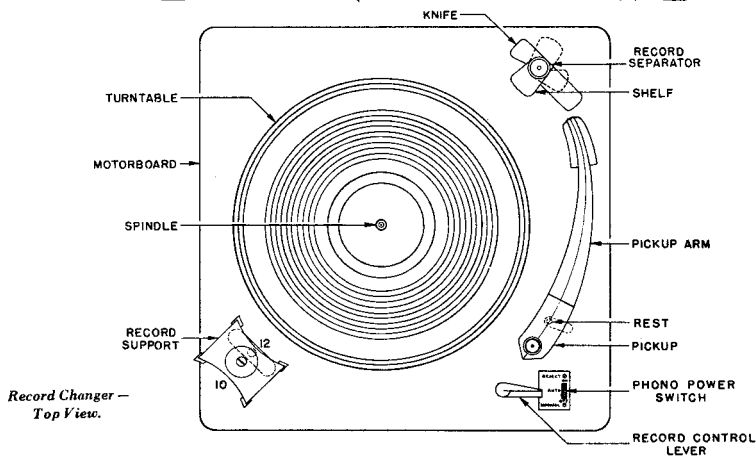
Wiring Diagram — Magic Monitor Unit.



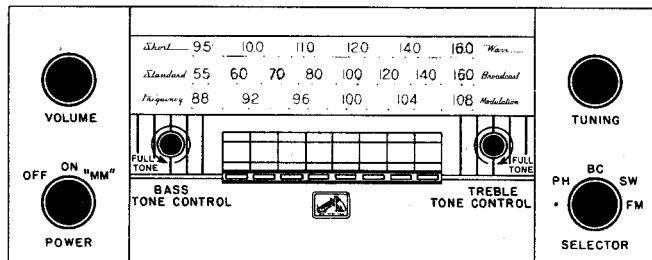
Copyright © 1989-2025 Nostalgia Air



Back View.



Record Changer -
Top View.



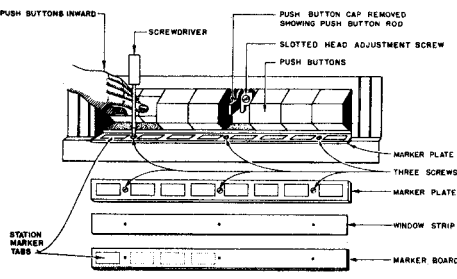
Control Panel.

Push-Button Adjustment

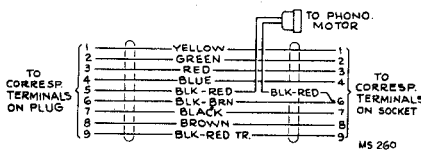
The push-buttons should be adjusted for eight favorite stations after the receiver is operating, and has had a 5 or 10 minute warm-up period.

Any standard broadcast or frequency modulation stations may be chosen. The preferable arrangement is to adjust for stations in the order of frequency, from low to high. Proceed as follows:

1. Remove the first PUSH-BUTTON (Just pull) and note the adjustment screw beneath.
2. Loosen the adjustment screw.
3. Manually tune very accurately for the desired station.
4. Push the PUSH-BUTTON rod in till it is against stop.
5. Tighten adjustment screw.
6. Make adjustment for the other buttons, setting up and checking each for the chosen station in a similar manner.
7. Recheck all PUSH-BUTTONS and reset if found necessary.

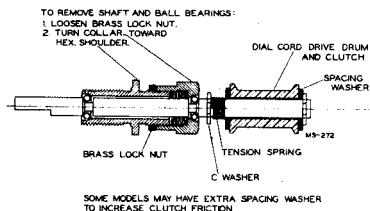


Push-Button set-up

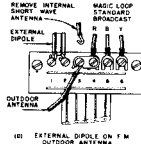
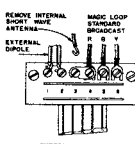
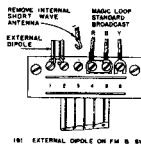
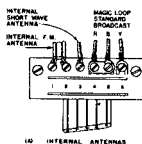


Power Cable.

Some may not have the color code indicated.



Tuning Shaft and Clutch Assembly.



MS 259

Antenna Terminal Board Connections

EXTERNAL ANTENNAS—If reception is not satisfactory on one or more of the three bands, using the built-in cabinet antennas, an external antenna may be used. The Magic Loop Antenna will usually provide sufficient pickup on the Standard Broadcast band, but if an external dipole is installed to improve reception on Frequency Modulation it may be used for Standard Broadcast and Short Wave as well. Connections are made to the antenna terminal board in the back of the cabinet. External antennas may be erected indoors or outdoors and should be oriented in direction for requirements of best reception. RCA Television Antenna, Stock No. 225 or 226, or the equivalent with 300-ohm transmission line is recommended for an external antenna.

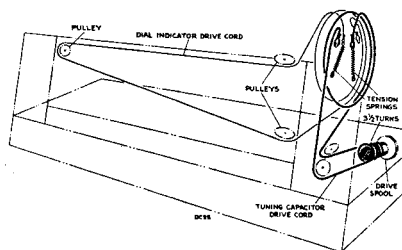
Figure 21 (A) shows the Antenna Terminal Board with connections for internal cabinet antennas.

Figure 21 (B) shows connections for the RCA Television Antenna replacing those for the internal FM antenna on terminals 1 and 2, and the internal SW antenna disconnected

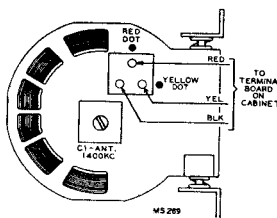
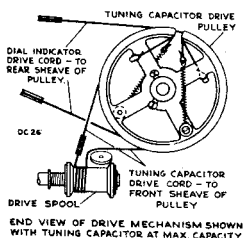
at terminal 3. The external dipole antenna is now the antenna for FM and SW bands.

Figure 21 (C) shows the additional change for connecting the Standard Broadcast band to make use of the external RCA Television Antenna. The link across terminals 4 and 5 is changed to terminals 4 and 3. The external antenna is now effective on all bands. Tighten terminals and be sure that the red, black and yellow leads (R.B.Y.) to terminals 4, 5 and 6 are still in place and securely connected.

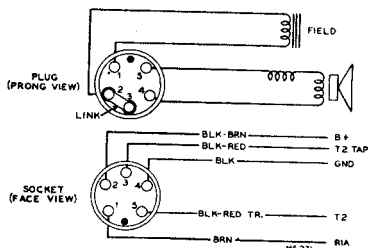
Figure 21 (D) shows connections for a separate outdoor antenna on SW and SB reception, and the external dipole on FM. This outdoor antenna should consist of a wire 30 to 60 feet or so in length mounted in a convenient location as high as possible. Connect lead-in from the antenna to terminal 3 on the antenna terminal board. This outdoor antenna is effective on SB and SW bands. If this connection makes the SB signal too strong, causing overload and distortion, replace the link across terminals 4 and 5 as in Figure 21 (A) and (B). This outdoor antenna is now effective on SW only



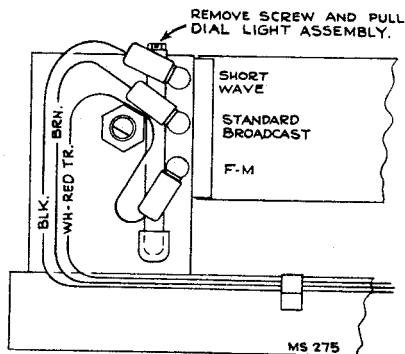
Dial Cord Assembly.



Loop Antenna.



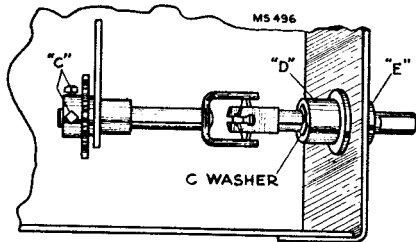
Speaker Connections.



Dial Lamp Assembly.

Removal of Dial Lamps

1. Remove the six control knobs.
2. Remove the four "T" bushings which hold the escutcheon to the control shafts—remove escutcheon.
3. Remove the screw which holds the dial light assembly to the chassis (accessible from back with radio compartment closed)—pull the assembly out of its retaining slot. (See Fig. 25.)



Range Switch Coupling Shaft.

To Remove Shaft: Loosen square head set screws "C" in collar of gear. Remove nut "E" (on front apron of chassis) from bushing "D." Push shaft and bushing to the rear so that shaft and bushing are clear of the chassis apron. Flex the shaft and pull forward.

To Remove Bushing from Shaft: Remove "C" washer from shaft at inside end of bushing, push shaft through bushing to permit removal of "C" washer normally recessed inside bushing. Pull shaft through bushing to inside of chassis.

RADIO CORP. OF AMERICA

Specifications

Tuning Ranges

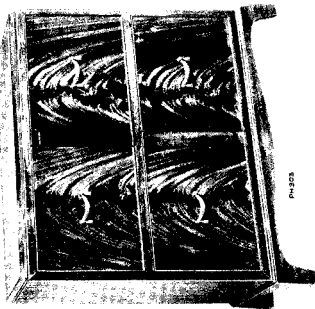
Broadcast	540-1600 kc
Shortwave "C" Band	9.2-16.0 mc
Frequency Modulation	88-108 mc
Intermediate Frequency AM	455 kc
Intermediate Frequency FM	10.7 mc

Tube Complement of RK-121C

1. RCA-6BA6	RF Amplifier
2. RCA-6BA6	Mixer
3. RCA-6BE6	Oscillator
4. RCA-6BA6	1st IF
5. RCA-6AU6	2nd IF and Phono
7. RCA-6AL5	Ratio Detector
8. RCA-6AT6	AM-DET-AVC-AF
9. RCA-6BA6	M. M. Band-Pass Amp.
10. RCA-6BF6	M. M. Amp. and Rect.
11. RCA-6BA6	M. M. Reactor

Tube Complement of RS-123D

1. RCA-3U4G	Rectifier
2. RCA-6BE6	Amp. and Phase Inverter
3. RCA-6BE6	Output
4. RCA-6F6G	Output



RCA 8V151

Circuit Description

Built-in antennas are provided for Standard Broadcast ("A" Band), Short Wave ("C" Band) and Frequency Modulation ("FM"); connected through the range switch to the antenna input jack. The detector circuit consists of an amplifier and the oscillator (V3) is fed into the grid of the mixer tube (V2). The intermediate frequency output of the mixer is coupled through transformers T1 (10.7 mc.) and T2 (455 kc.) (series connected) to the 1st I.F. amplifier tube. The output of the I.F. amplifier is coupled through trans. T3 (10.7 mc.) and T4 (455 kc.) whose secondaries are connected to the grid of V5 (2nd I.F.) and the detector diode of V8 (AM Det.) respectively. The 10.7 mc. output of V5 is coupled through trans. T5 to the grid of the driver tube (V7) whose output is coupled through trans. T6 to the ratio detector tube (V7).

Simple A.V.C. is used on "A" and "C" bands, delayed A.V.C. is used on FM.

The audio voltages developed in the detector circuits of V7 (FM) and V8 (AM) are coupled through the range switch and volume control to V8 (AF amp.)

When the range switch is turned to PHONO position the input from the PHONO input jack is fed into the

grid of V5 (this tube serves as 2nd I.F. on FM); the output of V5 (as phono. amp) is the screen grid (pin No. 6) and is coupled through the range switch and volume control to the "Magic Monitor" (AF amp.) and also to the "Magic Monitor" which varies the audio output. The audio output of V8 is coupled to the AMP output jack.

When the selector switch is turned to max. counter-clockwise position this instrument may be used as an audio amplifier. The audio input for this purpose is connected to the U.S. Jack and the ear (or speaker) to the bottom of the chassis. The put from this jack is controlled through the range switch and volume control to the grid of V8.

Note: Plate voltage supplied to V5 (2nd I.F.) on FM only. Plate and screen voltages supplied to V6 (driver) on FM only. Plate and screen voltages supplied to V3 (osc.) on FM, A and C bands only.

The circuit of the A.F. amplifier chassis is conventional consisting of a 6SN7GT which serves as audio amplifier and phase inverter feeding into two 6F6G tubes connected in push-pull. A 5U4G rectifier supplies B+ voltage for both chassis (RK-121C and RS-123D).

Record Changer (RP-177B)	78 r.p.m.
Turntable Speed	Ten 12" or twelve 10" records
Record Capacity	10 watts
Undistorted Power Output	12 inch Electrodynamic Type
Maximum Power Output	2.2 ohms at 400 cycles
Loudspeaker (92567-2)	Type No. 51, 6-8 volts, 0.2 amp.
Voice Coil Impedance	Type No. 44, 6-8 volts, 0.25 amp.
Dial Lamps (6)	Type No. 51, 6-8 volts, 0.2 amp.
Victoria Indicator Lamp	Type No. 51, 6-8 volts, 0.2 amp.
Jewel Lamp	Height.....367% Width.....40% Depth.....17% 1/2"
Cabinet Dimensions	Tuning Drive Ratio.....18.4:1 (4.6 turns of knob)
Power Supply Rating	115 volts, 60 cycles, 180 watts

MODEL 8V151

RADIO CORP. OF AMERICA

RADIO CHASSIS (RK-121C) VOLTAGE CHART

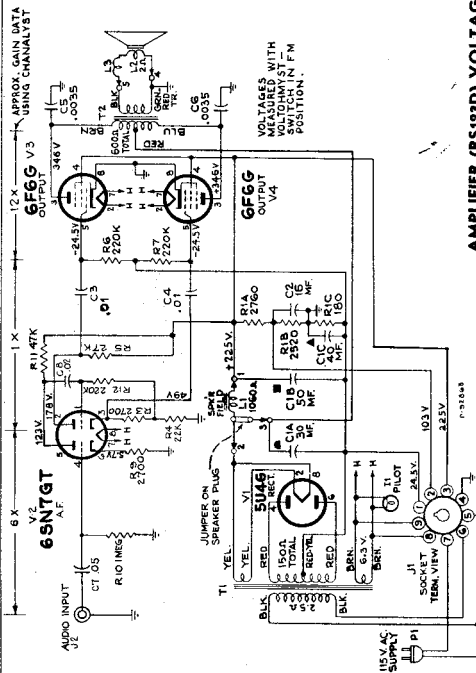
Tube	Type	Terminal	Aux or PH	BC	SW	FM
V1	6BA6 R.F.	Plate No. 5 Screen No. 6	260 100	245 96	225 94	225 87
V2	6BA6 Mixer	Plate No. 5 Screen No. 6 Cathode No. 7	260 96 0.1	240 87 1.3	222 71 1.8	222 68 1.8
V3	6BE6 Osc.	Plate No. 5 Screen No. 6 & 7 *Grid No. 1 †Grid No. 1	160 160 -28 -11	157 157 -18 -10.5	130 130 -4.1 -6	130 130 -4.1 -6
V4	6BA6 1st I.F.	Plate No. 5 Screen No. 6 Cathode No. 7	240 232 1.2	225 225 1.2	208 208 1.2	208 208 1.2
V5	6AU6 2nd I.F.	Plate No. 8	115	112	112	112
V6	6AU6 Driver	Plate No. 8	115	112	112	112
V7	6AL5 A. Det.	.....	.....	.....	.....	.....
V8	6AT6 Det.-AF.	Plate No. 7	110	108	108	110
V9	6BA6 3rd I.F.	Plate No. 5 Screen No. 6 Cathode No. 7	210 200 7	200 185 6.8	184 165 6.8	184 165 6.8
V10	6BF6 A.M.	Plate No. 7 Cathode No. 2	126 6.6	117 6.4	117 6.4	107 5.8
V11	6BA6 Reactor	Plate No. 5 Screen No. 6	2.6 36	2.6 35	2.6 35	3.1 35

*Tuning condenser at high frequency end.

†Tuning condenser at low frequency end.

RADIO CHASSIS CATHODE CURRENTS (MA)

Tube	Type	Terminal	Aux or PH	BC	SW	FM
V1	6BA6	No. 7	16.9	16.5	16.5	14
V2	6BA6	No. 7	3.1	3.2	3.8	4.9
V3	6BE6	No. 2	0	14.1	14.1	15.8
V4	6BA6	No. 7	14	13.8	13.8	13.2
V5	6AU6	No. 7	1.8	1.8	1.8	3.9
V6	6AU6	No. 7	0	0	0	18.3
V7	6AL5	.....	0	0	0	0
V8	6AT6	No. 2	25	25	25	25
V9	6BA6	No. 7	9	9	9	88
V10	6BF6	No. 2	1.3	1.3	1.3	1.2
V11	6BA6	No. 7	1.36	1.36	1.35	1.3

Voltages measured with Chanalyst or VoltOhmyst and should hold within $\pm 20\%$ with rated power supply. No signal. Tuning condenser closed except as stated.

AMPLIFIER (RS123D) VOLTAGE CHART

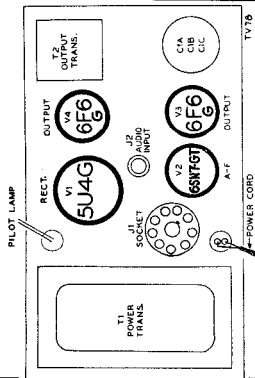
Tube	Type	Terminal	Aux or PH	BC	SW	FM
V1	6SN7 Rect.	Fil. No. 8	360	355	350	350
V2	6SN7 A.F. & Ph. Inv.	Plate No. 2 Plate No. 3 Cathode No. 6	291 142 56	190 137 53	175 123 49	175 123 49
V3	6F6G Output	Plate No. 3 Screen No. 4 Grid No. 5	353 269 -24	351 245 -24.1	346 225 -24.5	346 225 -24.5
V4	6F6G Output	.....	.....	.....	.....	.....

Same as V3

AMPLIFIER CATHODE CURRENTS (MA)

Tube	Type	Terminal	Aux or PH	BC	SW	FM
V1	6SN7	No. 3	2.1	2.0	1.9	1.9
V2	6SN7	No. 6	2.3	2.2	2.0	2.0
V3	6F6G	No. 8	23	19	13.5	13.5
V4	6F6G	No. 8	23	19	13.5	13.5

†Measured at No. 2 terminal of speaker plug.

Schematic Diagram
RS-123D.

Top View RS-123D.

RADIO CORP. OF AMERICA

MODEL 8V151

ALIGNMENT PROCEDURE

Before aligning set, completely mesh the gang and set the dial pointer on the mechanical maximum calibration point at the extreme left hand end of the dial.

When making a complete alignment follow in proper sequence the tabulated form below.

If only a portion of the circuit is to be aligned select the portion required, followed by the remaining steps in the chart. Any adjustments made on the FM 10.7 mc. IF's make it necessary to realign the AM 455 kc. IF's.

For "A" and "C" band alignment use output meter across voice coil keeping Test Oscillator output as low as possible to prevent AVC action.

CRITICAL LEAD DRESS

(Make lead dress before alignment)

1. Lead from pin 5, tube V2, to terminal "C" on transformer T1 should be dressed close to chassis.
2. Leads to terminals "C" and "D" on transformer T2 should be dressed close together.
3. The following capacitors must be dressed close to the chassis with leads kept as short as possible: C32, C33, C66, C69, C79, and C80.
4. All FM coil connections must be soldered in exact place as the original. (One-sixteenth inch difference in length may be excessive).
5. Lead from pin 7, tube V8, must be dressed away from lead to terminal "D" of transformer T7.
6. ALL wiring in the receiver is critical as to length and placement. It is therefore important when servicing, that extreme care should be taken so as not to disturb more of the wiring than absolutely necessary.

Note: Keep tuning capacitor rotor grounding brushes clean and making good contact.

FM RATIO DETECTOR ALIGNMENT

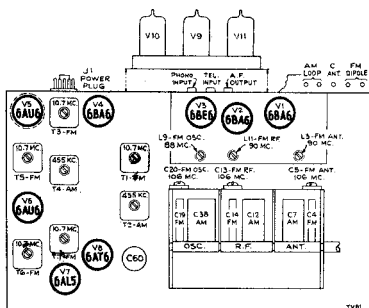
SET RANGE SWITCH TO FM POSITION

Steps	Connect High Side of Test Osc. To—	Tune the Osc. To—	Turn Vol. Cont. To—	Adjust
1.	Connect a 680 ohm resistor between lugs D and E of the ratio detector transformer T7. Connect DC probe of a voltmeter to the negative lead of the 5 mfd. electrolytic capacitor C81. The common lead of the meter to chassis.			
2.	Driver grid pin 1, of 6AV6 (V6) in series with a .01 MFD capacitor.	10.7 MC. 30% Mod. 400 Cycles AM	Maximum Volume	Driver transformer T6 for maximum DC voltage across C-81
3.	Remove Meter Leads and disconnect the 680 ohm resistor from D and E on T7. Connect two 68,000 ohm resistors (within 1% of each other) in series, across C81. Connect the common lead of the Voltmeter to the center point of the 68,000 ohm resistors and the DC probe to contact No. 1 on rear of Switch wafer S6. Use the 50 volt scale.			
4.	Same as Step 2	Same as Step 2	Volume Control Maximum	T7 Bottom core for Zero DC Balance on Voltmeter T7 Top core for minimum audio output. (Output meter across voice coil)
5.	Reconnect voltmeter as in step 1, omitting the 680 ohm resistor.			
6.	Repeat step 2 omitting 680 ohms.			
7.	Remove all connections.			

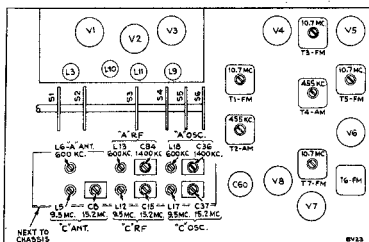
†Near the correct core position the zero point is approached rapidly and continued adjustment causes the indicated polarity to reverse. A slow approach to the zero point is an indication of severe detuning, and the bottom core should be turned in the opposite direction.

†The zero DC balance and the minimum AF output should occur at the same point; if such is not the case, the two cores should be adjusted until both occur with no further adjustment of either core. It may be advantageous to adjust both cores simultaneously, watching the voltmeter, and an output meter connected across the voice coil for the point at which both zero DC and minimum output occurs.

Note:—Two or more points may be found which will satisfy the condition required in step 4. T7 top core should be correctly adjusted when approximately 1/2 inch of threads extend above the can, therefore, it is desirable to start adjustment with the top core in its "furthest in" position and turn out, while adjusting the bottom core, until the first point of minimum AF and minimum DC is reached.



Tube and Trimmer Locations—Top View.



Tube and Trimmer Locations—Bottom View.

ANT.—RF.—IF. ALIGNMENT

Steps	Connect the High Side of the Test Osc. to—	Connect Ground Side of the Test Osc.	Tune the Osc. To—	Radio Dial Tuned to—	Adjust
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"FM" IF Alignment

1.	Connect the DC probe of a voltmeter to the negative lead of the 5 MFD electrolytic capacitor C 81, and the common lead of the meter to chassis ground				
2.	Mixer grid pin #1 of 6BA6, (V2) in series with a .01 MFD capacitor (Adjust test osc. output for 6-10 volts developed across C81) (Range switch in FM position) (Use very short lead)	To RF Tube shell ground near mixer tube (use very short leads)	10.7 MC 30% modulated at 400 cycles AM.	Max. cap. (Fully meshed)	*T5, T3, T1 top and bottom cores alternately loading primary & secondary of each transformer with 680 ohms while the opposite side of the same transformer is being adjusted. Adjust all transformers for maximum voltage across C81.

*This method is known as alternate loading which involves the use of a 680 ohm resistor to load the plate winding while the grid winding of the same transformer is being peaked. Then the grid winding is loaded with 680 ohm resistor while the plate winding is being peaked.

When the windings are loaded, it is necessary to increase the 10.7 MC input since the gain will decrease and the voltage across C81 will be less.

MODEL 8V151

RADIO CORP. OF AMERICA

ANT—RF—IF—ALIGNMENT (Continued)

Steps	Connect the High Side of the Test Osc. to—	Connect Ground Side of the Test Osc.	Tune the Osc. To—	Radio Dial Tuned to—	Adjust
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"AM" IF Alignment

3.	Mixer grid pin #1 of (V2) in series with a .01 MFD Capacitor. (Turn band switch to "A" or "C" band)	To chassis ground	455 KC	High Freq. end of Dial	**Top and bottom Cores of T2 and T4. (For maximum voltage across voice coil)
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"C" Band OSC.—RF.—ANT. Alignment

4.	"C" Band Ant. Terminal #3		15.5 MC	15.5 MC	Osc.—C37*** RF.—C15 Ant.—C8 (For maximum voltage across voice coil)
5.	Through a dummy Ant. comprising a 150 ohm resistor in series with a 25 to 30 mmf capacitor	To Chassis ground	9.5 MC	9.5 MC	Osc.—L17*** RF.—L12 Ant.—L5 (For maximum voltage across voice coil)
6.	Repeat steps 4 and 5 for accurate alignment				

"A" Band OSC.—RF.—ANT.

7.	High Side (Red Lead) of Loop Primary with link open through a Dummy Ant. comprising a 200 mmf. Capacitor		1400 KC	1400 KC	Osc.—C36 RF.—C84 Ant.—C1 (For maximum voltage across voice coil)
8.		To Chassis ground	600 KC	600 KC	Osc.—L18 RF.—L13 Ant.—L6 (For maximum voltage across voice coil)
9.	Repeat steps 7 and 8 for Max. output.				

***It is necessary to alternately load the primary and secondary of each 455 KC L.F. transformer with 10,000 ohms while the opposite side of the same transformer is being adjusted.

***To guard against the possibility of alignment of L17 and C37 to image frequencies, tune the test oscillator to 15.5 MC and turn the radio dial to 15.5 MC. Then adjust the test oscillator to 16.41 MC (image frequency). By increasing the test oscillator output, a signal should be heard.

Tune the test oscillator to 9.5 MC and turn the radio dial to 9.5 MC. Then adjust the test oscillator to 10.41 MC (image frequency). By increasing the test oscillator output, a signal should be heard. (If these image frequencies cannot be heard, the set is incorrectly aligned, therefore repeat steps 4 and 5).

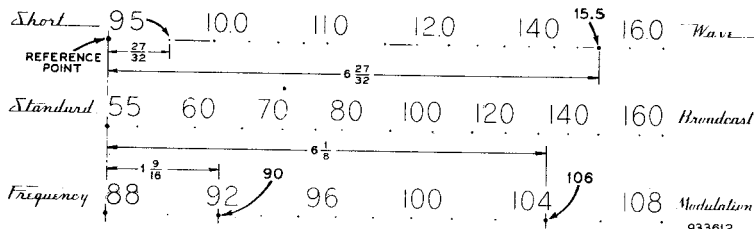
Steps	Connect the High Side of the Test Osc. to—	Connect Ground Side of the Test Osc.	Tune the Osc. To—	Radio Dial Tuned to—	Adjust
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"FM" Band OSC.—RF.—ANT. Alignment

10.	FM antenna terminal #1 in series with a 120 ohm resistor	To FM antenna terminal #2 in series with a 120 ohm resistor	106 MC	106 MC	Osc.—C20 for maximum voltage across C81.
11.			88 MC	88 MC	**** Osc.—L9 for maximum voltage across C81.
12.	Repeat steps 10 and 11 for exact calibration.				
13.	Remove or turn test oscillator off.		106 MC No Carrier		**** RF, C13 for maximum voltage across C81 (Noise Voltage)
14.			90 MC No Carrier		**** RF, L11 for maximum voltage across C81. (Noise Voltage)
15.	Repeat steps 13 and 14 for maximum output.				
16.	Same as step 10	Same as step 10	106 MC	106 MC	Ant. C5 for maximum voltage across C81.
17.	Same as step 10	Same as step 10	90 MC	90 MC	Ant. L3 for maximum voltage across C81.
18.	Repeat steps 16 and 17 for maximum output.				
19.	Disconnect dummy antenna and adjust Ant. trimmer C1 on loop when set is installed in cabinet.				

****Two points may be found to fulfill the requirements. Use the one with the longest threaded end extending out of the transformer.

*****Two points can be found having the greatest noise voltage developed Use the one with the greater capacity (tighter adjustment).



Dial Scale Drawing.

RADIO CORP. OF AMERICA

MODEL 8V151

Replacement Parts

Stock No.	DESCRIPTION	Stock No.	DESCRIPTION
	HEAD END UNIT RK 121C		
71964	Arm—Push arm and cam for tuning capacitor	11891	Lamp—Pilot lamp—Mazda 44
71651	Ball—Steel ball (3/32" dia.) for manual tuning shaft	71968	Pinion—Pinion and shaft for tuning capacitor
71658	Ball—Steel ball (3/32" dia.) for tuning capacitor	71963	Plate—Bearing plate for tuning capacitor pinion
10705	Ball—Steel ball (3/32" dia.) for tuning capacitor	72984	Plate—Connecting plate for selector switch extension shaft
71638	Board—5 contact terminal board for antenna lead-in	71644	Plate—Dial back plate only, less dial window, dials, supports, indicator slide, indicator and pulleys
71811	Bracket—Pilot bracket less pulley	71648	Pulley—Idler pulley (2 required) or indicator cord pulleys
71642	Bracket—Dial plate support bracket R.H.	71650	Pulley—Manual tuning shaft cord pulley
71643	Bracket—Dial plate support bracket L.H.	71636	Receptacle—9 prong male plug for power cable (J1)
72986	Bushing—Threaded bushing for knob end of switch coupling shaft	71637	Receptacle—AMP-AUX-PHONO jacks
		72323	Resistor—Wire wound, 3 ohms, 1/4 watt (R32)
71809	Capacitor—Adjustable, 1.6-18 mmf. (C36)		Resistor—Fixed, composition, 10 ohms, $\pm 20\%$, 1/2 watt (R54)
71804	Capacitor—Adjustable, 1.6-18 mmf. (C5, C13)		Resistor—Fixed, composition, 100 ohms, $\pm 10\%$, 1/2 watt (R21, R22)
71803	Capacitor—Adjustable, 2.5-13 mmf. (C20)		Resistor—Fixed, composition, 270 ohms, $\pm 10\%$, 1/2 watt (R38)
71808	Capacitor—Adjustable, 3-35 mmf. (C37, C84)		Resistor—Fixed, composition, 390 ohms, $\pm 10\%$, 1/2 watt (R10)
71930	Capacitor—Ceramic, 5.6 mmf. (C85)		Resistor—Fixed, composition, 1,000 ohms, $\pm 20\%$, 1/2 watt (R24, R37, R46)
39043	Capacitor—Ceramic, 6.8 mmf. (C25)		Resistor—Fixed, composition, 2,200 ohms, $\pm 10\%$, 1/2 watt (R12, R25, R36)
71807	Capacitor—Adjustable, 10-160 mmf. (C8, C15)		Resistor—Fixed, composition, 2,200 ohms, $\pm 10\%$, 1/2 watt (R9, R52)
71924	Capacitor—Ceramic, 56 mmf. (C24)		Resistor—Fixed, composition, 4,700 ohms, $\pm 20\%$, 1/2 watt (R4, R68)
39396	Capacitor—Ceramic, 100 mmf. (C16, C21, C83, C97)		Resistor—Fixed, composition, 8,200 ohms, $\pm 10\%$, 1/2 watt (R13, R63)
71922	Capacitor—Ceramic, 180 mmf. (C34)		Resistor—Fixed, composition, 10,000 ohms, $\pm 10\%$, 1 watt (R6)
71933	Capacitor—Mica, 180 mmf. (C18)		Resistor—Fixed, composition, 12,000 ohms, $\pm 10\%$, 1/2 watt (R76)
71920	Capacitor—Ceramic, 220 mmf. (C6, C10)		Resistor—Fixed, composition, 15,000 ohms, $\pm 20\%$, 1/2 watt (R30, R51)
71919	Capacitor—Ceramic, 330 mmf. (C3, C11)		Resistor—Fixed, composition, 15,000 ohms, $\pm 10\%$, 1/2 watt (R44, R48)
39640	Capacitor—Mica, 330 mmf. (C92)		Resistor—Fixed, composition, 15,000 ohms, $\pm 10\%$, 1 watt (R7)
39644	Capacitor—Mica, 470 mmf. (C75, C90)		Resistor—Fixed, composition, 22,000 ohms, $\pm 20\%$, 1/2 watt (R3, R32, R35, R40)
39646	Capacitor—Mica, 560 mmf. (C94)		Resistor—Fixed, composition, 22,000 ohms, $\pm 10\%$, 1/2 watt (R18)
71929	Capacitor—Ceramic, 1000 mmf. (C80)		Resistor—Fixed, composition, 22,000 ohms, $\pm 20\%$, 1/2 watt (R4)
72117	Capacitor—Tubular, .0012 mfd., 400 v. (C53)		Resistor—Fixed, composition, 27,000 ohms, $\pm 10\%$, 1/2 watt (R11, R45)
71927	Capacitor—Tubular, .002 mfd., 400 v. (C59, C95)		Resistor—Fixed, composition, 39,000 ohms, $\pm 10\%$, 1/2 watt (R60)
71921	Capacitor—Tubular, .003 mfd., 200 v. (C9, C26, C27, C62, C82)		Resistor—Fixed, composition, 68,000 ohms, $\pm 20\%$, 1/2 watt (R56)
71926	Capacitor—Tubular, .005 mfd., 200 v. (C40, C42, C43, C66, C76, C77, C78)		Resistor—Fixed, composition, 82,000 ohms, $\pm 10\%$, 1/2 watt (R29, R64)
72791	Capacitor—Tubular, .005 mfd., 400 v. (C44, C55, C58, C68, C89, C88, C91)		Resistor—Fixed, composition, 100,000 ohms, $\pm 20\%$, 1/2 watt (R2, R26, R58, R59, R65, R70)
72120	Capacitor—Tubular, .015 mfd., 200 v. (C65)		Resistor—Fixed, composition, 100,000 ohms, $\pm 10\%$, 1/2 watt (R16)
70812	Capacitor—Tubular, .025 mfd., 200 v. (C64)		Resistor—Fixed, composition, 180,000 ohms, $\pm 10\%$, 1/2 watt (R17, R20, R34, R55, R66)
71923	Capacitor—Tubular, .01 mfd., 200 v. (C22, C23, C63, C93)		Resistor—Fixed, composition, 220,000 ohms, $\pm 20\%$, 1/2 watt (R33, R71, R72, R74)
72827	Capacitor—Tubular, .01 mfd., 400 v. (C32, C35, C54, C59, C96)		Resistor—Fixed, composition, 270,000 ohms, $\pm 10\%$, 1/2 watt (R5)
70631	Capacitor—Tubular, .01 mfd., 600 v. (C81)		Resistor—Fixed, composition, 330,000 ohms, $\pm 20\%$, 1/2 watt (R81, R87)
71588	Capacitor—Moulded paper, .01 mfd., 600 v. (C87)		Resistor—Fixed, composition, 330,000 ohms, $\pm 10\%$, 1/2 watt (R7)
72596	Capacitor—Tubular, .05 mfd., 200 v. (C33, C39, C41, C73, C79)		Resistor—Fixed, composition, 470,000 ohms, $\pm 20\%$, 1/2 watt (R14, R39)
72121	Capacitor—Electrolytic, 5 mfd., 50 v. (C67, C81)		Resistor—Fixed, composition, 820,000 ohms, $\pm 10\%$, 1/2 watt (R57, R59)
32223	Capacitor—Electrolytic, 15 mfd., 300 v. (C60)		Resistor—Fixed, composition, 1 megohm, $\pm 20\%$, 1/2 watt (R1, R2, R19, R73, R78)
71646	Clamp—Dial clamp (2 required)		Resistor—Fixed, composition, 2.2 megohm, $\pm 10\%$, 1/2 watt (R15, R41, R47, R50, R62)
71940	Coil—Antenna coil—F.M.—Complete with adjustable core and stud (L2, L3)		Resistor—Fixed, composition, 3.9 megohm, $\pm 10\%$, 1/2 watt (R8)
71856	Coil—Antenna coil—"C" band—Complete with adjustable core and stud (L4, L5)		Resistor—Fixed, composition, 22 megohm, $\pm 20\%$, 1/2 watt (R23)
71942	Coil—Filament choke coil (L7, L8)		
71855	Coil—Load coil—"A" band—Complete with adjustable core and stud (L6)	71798	Screw—No. 8—32 x 5/32" set screw
71937	Coil—Oscillator coil—F.M.—Complete with adjustable core and stud (L9)	71965	Screw—Push arm locking screw
71853	Coil—Oscillator coil—"C" band—Complete with adjustable core and stud (L17)	71812	Shaft—Manual tuning shaft less spring and pulley
71852	Coil—Oscillator coil—"A" band—Complete with adjustable core and stud (L18)	73726	Shaft—Selector switch coupling shaft—switch end
71854	Coil—R. F. coil—"C" band—Complete with adjustable core and stud (L12)	73727	Shaft—Selector switch coupling shaft—knob end—less threaded bushing
71939	Coil—R. F. choke coil (L10)	72951	Shield—Lead tube shield
71857	Coil—R. F. coil—"A" band—Complete with adjustable core and stud (L13, L14)	71833	Socket—Dial lamp socket—R.H.
71938	Coil—R. F. coil—F.M.—Complete with adjustable core and stud (L11)	71834	Socket—Dial lamp socket—L.H.
34045	Control—Tone control—H.F. (R27)	71850	Socket—Pilot lamp socket
38401	Control—Tone control—L.F. (R26)	71851	Socket—Tubular lamp socket
71596	Control—Volume control—(R42)	73117	Socket—Tube socket
72987	Cord—Manual drive cord (approx. 42" overall required) or indicator drive cord (approx. 30" overall required)	72516	Socket—Tube socket, miniature
		71649	Spring—Coil spring for manual tuning shaft
71941	Coupling—F.M. coupling unit (L16, L17, R5)		
71654	Dial—Glass dial scale—F.M.		
71653	Dial—Glass dial scale—Standard Broadcast		
71652	Dial—Glass dial scale—Short Wave		
71805	Drum—Tuning condenser drive drum		
71800	Gear—12 tooth gear fastened to selector switch coupling shaft		
71801	Gear—18 tooth gear fastened to selector switch shaft		
35844	Gear—Scissor gear for tuning capacitor		
71799	Grommet—Rubber grommet to mount R.F. unit cradle (8 required)		
70429	Grommet—Rubber grommet to mount tube socket (4 required)		
72674	Grommet—Rubber grommet for chassis front mounting (2 required)		
72069	Grommet—Rubber grommet for chassis rear mounting (2 required)		
71647	Guide—Indicator slide guide		
71832	Indicator—Station selector indicator		
71765	Lamp—Dial lamp—Mazda 51		

Replacement Parts (Continued)

Stock No.	DESCRIPTION	Stock No.	DESCRIPTION
71936	Spring—Drive cord spring	*73715	Back—Cabinet back—tan—for blonde instruments
53622	Spring—Push button arm return spring	71599	Bracket—Jewel lamp bracket
*73658	Switch—"Music Monitor" and power switch (S7, S8)	71874	Bushing—Bushing and washer for large knobs
71802	Switch—Selector switch (S1, S2, S3, S4, S5, S6)	*73626	Bumper—Rubber bumper for record changer carriage actuating link
71845	Support—Glass support (rubber) (2 required)	71884	Button—Push button
71846	Transformer—First I.F. transformer—F.M. (T1) (C28, C30)	71863	Cable—3 wire moulded lead-in cable
71846	Transformer—First I.F. transformer—A.M. (T2) (C29, C31)	72583	Cable—Shielded pickup cable complete with pin plug
71847	Transformer—Second I.F. transformer—F.M. (T3) (C45, C47, C51)	71910	Cap—Pilot lamp jewel
71848	Transformer—Second I.F. transformer—A.M. (T4) (C46, C48, C49, C50)	38684	Capacitor—Mica trimmer, 2-20 mfd. (C1)
71849	Transformer—Third I.F. transformer—F.M. (T5) (C56, C57)	*73695	Carriage—Record changer mounting carriage complete with runners
71935	Transformer—Driver transformer (T6) (C70)	71892	Catch—Bullet catch and strike for lower doors
71934	Transformer—Ratio detector transformer (T7) (C72, C74)	72434	Check—Radio compartment door check
37435	Washer—"C" washer for holding threaded bushing to selector switch shaft	X1666	Cloth—Grille cloth for mahogany or walnut instruments
31608	Washer—Spring washer for drive cord pulleys or idler pulley	71966	Cloth—Grille cloth for blonde instruments
71875	Washer—Spring washer for chassis front mounting	71966	Decal—Trade mark decal (Victrola)
2917	Washer—Spring washer for selector switch coupling shaft and bushing (knob-end) or manual tuning shaft	71910	Decal—Trade mark decal (RCA-Victor)
71810	Window—Dial window (clear glass)	*73716	Escutcheon—Escutcheon only less window, screen and marker strips for mahogany instruments
AMPLIFIER ASSEMBLIES			
	KS 1231	*73717	Escutcheon—Escutcheon only less window, screen and marker strips for mahogany instruments
70646	Capacitor—Tubular, .0035 mfd., 1,000 volts (C5, C6)	*73718	Escutcheon—Escutcheon only less window, screen and marker strips for blonde instruments
70631	Capacitor—Tubular, .01 mfd., 600 volts (C3, C4)	*73712	Gasket—Rubber gasket—tan—for under escutcheon for blonde instruments
70532	Capacitor—Tubular, .02 mfd., 600 volts (C8)	*73713	Gasket—Rubber gasket—black—for under escutcheon for mahogany or walnut instruments
72396	Capacitor—Tubular, .05 mfd., 200 volts (C7)	*73870	Grille—Metal grille for mahogany or walnut instruments
31323	Capacitor—Electrolytic, 16 mfd., 150 volts (C2)	*73873	Grille—Metal grille for blonde instruments
72955	Capacitor—Electrolytic, comprising 1 section of 30 mfd., 450 volts; 1 section of 50 mfd., 400 volts; and 1 section of 40 mfd., 35 volts (C1A, C1B, C1C)	*73699	Grommet—Rubber grommet for mounting record changer (4 required)
11765	Lamp—Jewel lamp—Mazda 51	*73702	Grommet—Rubber grommet for loop mounting (2 required)
18469	Plate—Mounting plate (bakelite) for electrolytic capacitor	16058	Grommet—Rubber grommet for speaker mounting (3 required)
12493	Plug—5 contact female plug for speaker cable	*73871	Hinge—Speaker compartment door or record storage compartment door hinge (2 required for each door)
	Resistor—Fixed, composition, 2,700 ohms, $\pm 10\%$, $\frac{1}{2}$ watt (R3, R4)	73735	Hinge—L.H. hinge for phone compartment door or R.H. hinge for radio compartment door
	Resistor—Fixed, composition, 22,000 ohms, $\pm 10\%$, $\frac{1}{2}$ watt (R4)	*73751	Hinge—R.H. hinge for phone compartment door or L.H. hinge for radio compartment door
	Resistor—Fixed, composition, 27,000 ohms, $\pm 10\%$, $\frac{1}{2}$ watt (R5)	*73711	Knob—Selector switch or power switch knob—brown—for blonde instruments
	Resistor—Fixed, composition, 47,000 ohms, $\pm 20\%$, $\frac{1}{2}$ watt (R11)	71822	Knob—Selector switch or power switch knob—maroon—for mahogany or walnut instruments
	Resistor—Fixed, composition, 220,000 ohms, $\pm 20\%$, $\frac{1}{2}$ watt (R6, R7, R12)	72761	Knob—Tone control knob—brown—for blonde instruments
71660	Resistor—Voltage divider, comprising 1 section of 180 ohms, 3.5 watts, 1 section of 2,520 ohms, 3.97 watts, and 1 section of 2,760 ohms, 9.3 watts (R1A, R1B, R1C)	71883	Knob—Tone control knob—maroon—for mahogany or walnut instruments
	Resistor—Fixed, composition, 1 megohm, $\pm 20\%$, $\frac{1}{2}$ watt (R10)	72118	Knob—Volume control or tuning knob—brown—for blonde instruments
35787	Socket—Audio input socket	71821	Knob—Volume control or tuning knob—maroon—for mahogany or walnut instruments
71659	Socket—6 prong power socket (J1)	*73616	Link—Actuating link assembly for record changer carriage—R.H.
31364	Socket—Jewel lamp socket	*73617	Link—Actuating link assembly for record changer carriage—L.H.
31319	Socket—Tube socket	71862	Loop—Antenna loop complete (L1, L15, C1)
37048	Transformer—Power transformer, 115 volts, 60 cycle (T1)	71969	Marker—Station markers
71661	Transformer—Output transformer (T2)	72765	Nut—Speed nut to fasten transparent screen to escutcheon (2 required)
SPEAKER ASSEMBLIES			
	82567-2W RL 70R1	71879	Plate—Backing plate for transparent screen
13867	Cap—Dust cap	71881	Plate—Call letter marker plate
71147	Clamp—Clamp to hold metal cone suspension (2 required)	71819	Plate—Radio compartment door check mounting plate
71146	Coil—Field coil—1,000 ohms	30868	Plug—2 contact female plug for power cable
11460	Coil—Neutritizing coil	30870	Plug—2 prong male plug for power cable
36145	Cone—Cone complete with voice coil	32641	Plug—3 prong male plug for loop cable
71539	Plug—5 prong male plug for speaker	31048	Plug—Pin plug for shielded pickup cable
71144	Speaker—12 EM speaker complete with cone and voice coil less plug	*73872	Pull—Door pull
71145	Suspension—Metal cone suspension	71878	Screen—Transparent screen (Victrola indicator)
NOTE: If stamping on speaker in instrument does not agree with above speaker number, order replacement parts by referring to model number of instrument, number stamped on speaker and full description of part required.			
MISCELLANEOUS			
72555	Antenna—Dipole antenna	36422	Socket—3 contact socket for loop cable
*73714	Back—Cabinet back—burgundy—for mahogany or walnut instruments	*73616	Spring—Connecting spring between link and record changer carriage
		*73697	Spring—Conical spring for mounting record changer
		71813	Spring—Radio compartment door check spring
		30990	Spring—Retaining spring for knobs
		71867	Spring—Retaining spring for push button
		73185	Stop—Metal stop for record changer carriage
		72936	Stop—Stop for lower doors
		70164	Stop—Stop for phone compartment door
		71880	Strip—Backing strip for call letter marker plate
		*73612	Track—Record changer carriage mechanism track complete with mounting plate (2 required)
		71814	Washer—Rubber washer for radio compartment door check
		71882	Window—Window for call letter markers

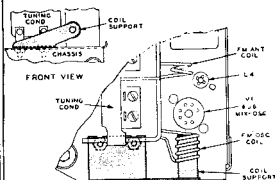
*Stock No. 72987 is a spool containing 150 feet of cord.

*This is the first time that this Stock No. has appeared in Service Data.

RCA 8R71, 8R72, 8R74, 8R75, 8R76, 8V90, 8V91

Models 8R71, 8R72, 8R74, 8R75, and 8R76 appear in *Rider's Manual Volume XIX* on pages 19-10 through 19-15 and Models 8V90 and 8V91 appear in the same Volume on pages 19-16 through 19-25.

To insure greater oscillator stability a support has been added for the f-m oscillator coil as illustrated in the accompanying diagram. Adjustment of the coil is



Coil Support

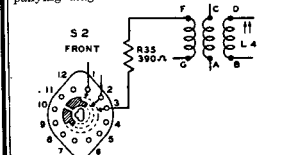
A support has been added to insure greater oscillator stability for the f-m oscillator coil for the RCA Models 8R71, 8R72, 8R74, 8R75, 8R76, 8V90, 8V91.

made as described in the Service Data. After adjustment the coil is cemented to the coil support.

The following is added to the parts list: 74202 Support—Polystyrene coil support complete with mounting bracket.

RCA 8V112, Chassis RC-616

This model appears on pages 18-17 through 18-24 of *Rider's Volume XVIII*. To minimize the possibility of "A" band oscillation and to reduce interference, a resistor (R35) has been added in the mixer grid circuit as shown in the accompanying diagram.



A 390-ohm resistor has been added in the mixer grid circuit of the RCA 8V112 to reduce interference.

In late production sets C42 has been changed from 22 μ f to 15 μ f and R18 has been changed from 22,000 ohms to 18,000 ohms. This change was made to prevent oscillation at the high end of the f-m band.

Add the following to the parts list: Resistor — fixed composition, 390 ohms, $\pm 10\%$, $\frac{1}{2}$ watt (R35)

RCA 8V112, Chassis RC-616, RC-616F

The schematic diagram for this model, which is contained in pages 18-17 through 18-24 of *Rider's Volume XVIII*, is in error in showing the connection of R22. It should be shown connected to C18A instead of to the RED lead of the output transformer.

In order to provide adequate lead length, resistor R10 (56,000 ohms) has been changed from $\frac{1}{2}$ watt to 1 watt.

Chassis RC-616F, used in the second production of these instruments, is very similar to Chassis RC-616 except for the following:

First Production RC-616

{Four position selector switch

{M.M.—PHONO—AM—FM

Aux. input jack is not used

Second Production RC-616F

{Five position selector switch

{AUX.—M.M.—PHONO—AM—FM

Aux. input jack is used

Except for the following replacement parts, all parts are identical.

74163 Selector switch is used in place of 73608 (switch S1, S2)

74164 Control panel decal for mahogany or walnut instruments is used in place of 73764 decal

74354 Control panel decal for blonde instruments is used in place of 73765 decal

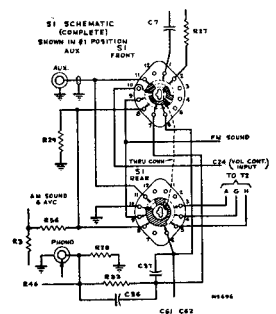
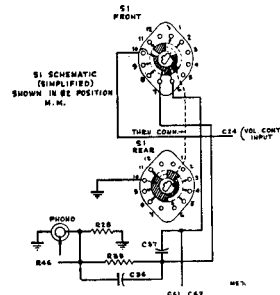


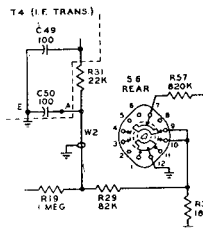
Fig. 1. (Above) shows the selector switch used in RCA Chassis RC-616F. Fig. 2. (Below) The simplified circuit of the selector switch in the #2 position.



Figs. 1 and 2 show the selector switch S1 used in Chassis No. RC-616F. The connections to S2 are identical in both chassis. Note that position #2 (M.M.) of RC-616F corresponds to position #1 (M.M.) of RC-616. No connections are made through S2 in AUX. position.

RCA 8V151, Ch. RK-121C

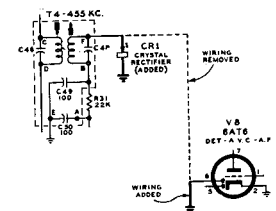
This model appears on pages 18-26 through 18-40 of *Rider's Manual Volume XVII*. In the diode load circuit, R29 (270,000) should be deleted—R20 (82,000)—and R34 (180,000) should be added, as shown in the accompanying diagram.



Diode Load Circuit for RK-121C.

The wiring diagram is incorrect in the wiring of the range switch. The illustration below shows the changes which should be made.

Late production models of Chassis No. RK-121C use a crystal rectifier for a-m detection instead of the diode plate (pin 6 of V8) of 6AT6 as shown.

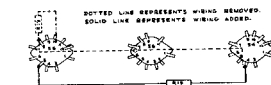


Crystal Rectifier for RK-121C.

Service Caution: (1) Maintain a minimum lead length of $\frac{1}{4}$ inch on the crystal leads. Excess heat from a soldering iron will damage the crystal, (2) the normal voltage existing in this circuit should never be exceeded when testing or trouble shooting, and (3) maintain polarity of crystal.

The following change has been made in the parts list.

Add: 54374 Rectifier—crystal rectifier (CR1)



Change in Wiring of RCA 8V151.

An addition to the Parts List under Miscellaneous is: 74312 Ornament — Wood fibre ornament for front of cabinet.