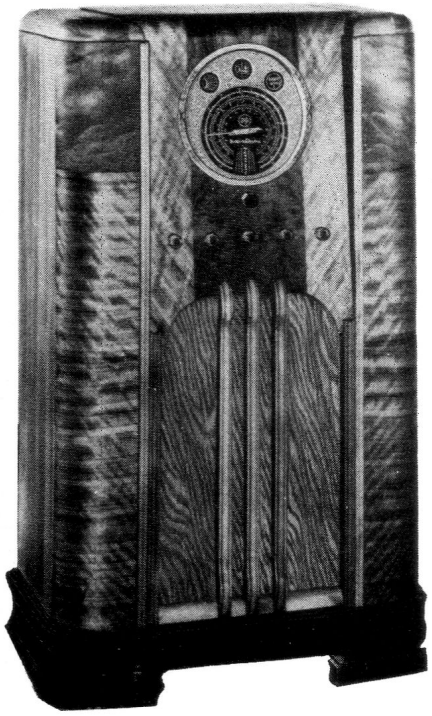
Model 921, 921A

The "Bombay"

Radio Receiver



Specifications

Frequency Range:

Broadcast, White: 535 to 1620 K.C.
Police, Green—1.595 to 4.6 megacycles
Shortwave #1 Yellow—4.5 to 7.25 megacycles
Shortwave #2 Blue—6.7 to 11.05 megacycles
Shortwave #3 Red—10.2 to 17.05 megacycles

I.F.:

470 K.C.

Tubes:

Type	Function
6K7	R.F. Amplifier
6A8	Converter
6K7	I.F. Amplifier
6H6	2nd Detector; A.V.C.
6F5	1st A.F. Amplifier
6C5	2nd A.F. Amplifier
6V6G	Output
6V6G	Output
5Y4G	Rectifier

Power Supply:

105 to 125 volts A.C.

A.V.C.:

On 6K7, R.F. Amplifier, and 6K7, I.F. Amplifier.

Controls:

Left to Right—A.C. switch; tone control; wave change switch; above, tuning control (vernier); fidelity control; volume control.

Loudspeaker:

Ten inch electrodynamic, enclosed in a "Mirrophonic Tone Chamber".

Cabinet:

Console model.

GENERAL:—This is an a-c operated radio receiver in a console cabinet using nine tubes and a superheterodyne circuit. Five tuning bands are provided, of which the Broadcast and Police bands are of the usual range, but the three short-wave bands have "spread-tuning". Variable selectivity is provided by use of the Fidelity Control switch. The tuning indicator is an incandescent lamp that dims when a station is tuned in. This lamp does not light when the fidelity control is in the "high-fidelity" or expanded selectivity position. A variable tone control is provided also. The chassis is of three-unit construction, of which the new style "Centromatic" unit forms the centre part. A special tuning capacitor gang having separate smaller sections for the spread bands is mounted upon this unit on rubber cushions. A split knob is used on the tuning drive to give slow or fast tuning. A large size airplane type dial with an edge-lighted glass scale which has the calibrations printed in different colours is used. The tuning indicator, vernier tuning indicator, and band indicator are located at the top of this dial as shown in figure 1. The ten-inch loudspeaker is enclosed in a special "Mirrophonic Tone Chamber".

The a-c load rating at 115 volts line is 109 watts for the 60 cycle and 114 watts for the 25 cycle models. The model 921 operates on 60 cycles and the model 921-A on frequencies from 25 to 60 cycles.

The wave change switch positions, and band frequency ranges are as follows:

Band	Frequency Range	Dial-Scale Band Color	Wave-Cange Switch Position
Standard Broadcast	535 to 1620 kilocycles	White	Furthest-to-left
Police	1.595 to 4.6 megacycles	Green	Second-from-left
Short-Wave No. 1	4.5 to 7.25 megacycles	Yellow	Mid position
Short-Wave No. 2	6.7 to 11.05 megacycles	Blue	Second-from-right
Short-Wave No. 3	10.2 to 17.05 megacycles	Red	Furthest-to-right

CIRCUIT:—The antenna section, item 1, of the wave-change switch selects the primaries of the antenna transformers. Primary, item 20, of the Police Band transformer is shunted by a resistor ,item 19, to reduce the gain and noise on this band. Switch section, item 2, selects the secondaries and short-circuits all those not in use. Note that trimmers, items 22 and 25, are connected directly across the Police (Green) Band and Broadcast (White) Band secondaries while the other three trimmers connect to ground at the lower end. Switch section, item 3, selects the tuning capacitor section, item 28, for the Broadcast and Police Bands and the smaller section, item 29, for tuning the short-wave bands with band-spreading.

The primaries and secondaries of the r-f transformers are selected by switch sections, items 4 and 5, respectively. Primaries and secondaries of the oscillator coils are selected by switch sections, items 7 and 8, respectively. Switch sections, items 5 and 8, also short-circuit the secondaries of the r-f transformer and oscillator secondaries, respectively, that are not in use. Switch sections, items 6 and 9, act similarly to item 3 in selecting the correct tuning capacitor section for the various bands for the r-f stage and oscillator respectively.

On the r-f amplifier tube (6K7) the suppressor grid is connected to ground to obtain a small negative bias,

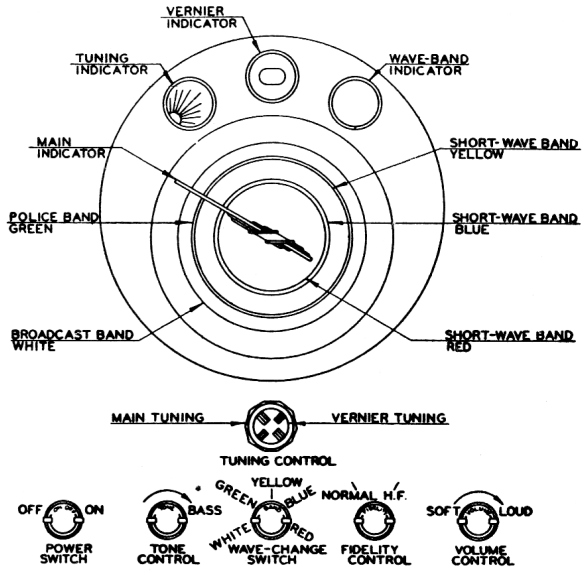


Figure 1—Control Layout

REPLACEMENT PARTS LIST

Item	Description	Part Number
1	Ant. Primary Section-Wave-Change-Switch	K-3200
2	Ant. Secondary Section—Wave-Change-Switch	
3	Ant. Gang Section—Wave-Change-Switch	
4	R.F. Primary Section—Wave-Change-Switch	
5	R.F. Secondary Section—Wave-Change Switch	
6	R.F. Gang Section—Wave-Change-Switch	
7	Osc. Primary Section—Wave-Change-Switch	
8	Osc. Secondary Section—Wave-Change-Switch	
9	Osc. Gang Section—Wave-Change-Switch	
10	SW-3 (Red) Ant. Transformer, Primary	K-3213
11	SW-3 (Red) Ant. Transformer, Secondary	
12	Capacitor, Trim., 3-25 mmf.	K-1458-6
13	SW-2 (Blue) Ant. Transformer, Primary	K-3210
14	SW-2 (Blue) Ant. Transformer, Secondary	
15	Capacitor, Trim., 3-25 mmf.	K-1458-6
16	SW-1 (Yellow) Ant. Transformer, Primary	K-3207
17	SW-1 (Yellow) Ant. Transformer, Secondary	
18	Capacitor, Trim., 3-25 mmf.	K-1458-6
19	Resistor, 4,000 ohms	K-2226-28
20	Police (Green) Ant. Transformer, Primary	K-3204
21	Police (Green) Ant. Transformer, Secondary	
22	Capacitor, Trim., 3-25 mmf.	K-1458-6
23	Broadcast (White) Ant. Transformer, Primary	K-3201
24	Broadcast (White) Ant. Transformer, Secondary	
25	Capacitor, Trim., 3-25 mmf.	K-1458-6
26	Capacitor, 0.05 mf, 175 volts	K-2227-8
27	Resistor, 1/10 meg	K-2226-5
28	Ant. Sect. (B.P.) Tuning (max. cap. 414 mmf)	K-3121
29	Ant. Sect. (S.W.) Tuning (max. cap. 89 mmf)	
30	R.F. Sect. (B.P.) Tuning (max. cap. 414 mmf)	
31	R.F. Sect. (S.W.) Tuning (max. cap. 89 mmf)	
32	Osc. Sect. (B.P.) Tuning (max. cap. 414 mmf)	
33	Osc. Sect. (S.W.) Tuning (max. cap. 89 mmf)	
34	Resistor, 300 ohms	K-2226-20
35	Resistor, 0.05 mf, 175 volts.	K-2227-8
36	Capacitor, Coupling, 6 mmf.	K-3214
37	SW-3 (Red) R-F Transformer, Primary	
38	SW-3 (Red) R-F Transformer, Secondary	
39	Capacitor, (Red) Trim., 3-25 mmf	K-1458-6
40	SW-2 (Blue) R-F Transformer, Primary	K-3211
41	SW-2 (Blue) R-F Transformer, Secondary	
42	Capacitor (Blue), Trim., 3-25 mmf	K-1458-6
43	SW-1 (Yellow) R-F Transformer, Primary	K-3208
44	SW-1 (Yellow) R-F Transformer, Secondary	
45	Capacitor, Trim., 3-25 mmf.	K-1458-6
46	Police (Green) R-F Transformer, Primary	K-3205
47	Police (Green) R-F Transformer, Secondary	
48	Capacitor, Trim., 3-25 mmf.	K-1458-6
49	Resistor, 30,000 ohms	K-2226-44
50	Broadcast (White) R-F Transformer, Primary	K-3202
51	Broadcast (White) R-F Transformer, Secondary	
52	Capacitor, Trim., 3-25 mmf.	K-1458-6
53	Resistor, 50,000 ohms	K-2226-6
54	Capacitor, 0.05 mf, 350 volts	K-2228-8
55	Resistor, 300 ohms	K-2226-20
56	Capacitor, 0.05 mf, 175 volts	K-2227-8
57	Resistor, 75,000 ohms	K-2226-27
58	Capacitor, mica, 100 mf	K-1611-2
59	Capacitor, 0.1 mf, 350 volts.	K-2228-9
60	Capacitor, 0.0032 mf, plus or minus 5%, 175 volts	K-2227-19
61	Capacitor, 0.0055 mf, 175 volts	K-2227-18
62	Capacitor, Trim., 220-680 mmf	K-3083-6
63	Capacitor, mica, 500 mmf	K-1611-18
64	Capacitor, Trim., 220-680 mmf	K-3083-6
65	Capacitor, Trim., 220-660 mmf	K-3083-6
66	SW-3 (Red) Osc. Coil, Primary	K-3215
67	SW-3 (Red) Osc. Coil, Secondary	
68	Capacitor, Trim., 3-25 mf	K-1458-6
69	Resistor, 100 ohms	K-2226-24
70	Resistor, 10,000 ohms	K-2226-10
71	SW-2(Blue)Osc.Coil,Primary	K-3212
72	SW-2 (Blue) Osc. Coil, Secondary	
73	Capacitor, Trim., 1.5–10 mmf.	K-1458-5
74	SW-1 (Yellow) Osc. Coil, Primary	K-3209
75	SW-1 (Yellow) Osc. Coil, Secondary	
76	Capacitor, Trim., 3-25 mmf.	K-1458-6
77	Resistor, 200 ohms	K-2226-22
78	Resistor, 10,000 ohms	K-2226-10
79	Police (Green) Osc. Coil, Primary	K-3206
80	Police (Green) Osc. Coil, Secondary	
81	Capacitor, Trim., 3-25 mmf.	K-1458-6
82	Broadcast (White) Osc. Coil.	K-3203

REPLACEMENT PARTS LIST—(Continued)

Item	Description	Part Number
83	Capacitor, Trim., 3-25 mmf..	K-1458-6
84	2nd I.F. Transformer Assem. (Items 85-90).....	K-3221
85	2nd I.F. Transformer, Primary.....	—
86	2nd I.F. Transformer, Secondary.....	—
87	Capacitor, 98 mmf (not replaceable).....	—
88	Capacitor, 98 mmf (not replaceable).....	—
89	Capacitor, mica, 100 mmf...	K-1611-2
90	Resistor, 50,000 ohms.....	K-2226-6
91	Ant. Ground Phono. Connection Strip.....	K-2986
92	Capacitor, 0.05 mf, 175 volts	K-2227-8
93	1st I.F. Transf. Assy. (Items 94-98).....	K-3220
94	Capacitor, 83 mmf. (not replaceable).....	—
95	Capacitor, 98 mmf (not replaceable).....	—
96	1st I.F. Transformer, Primary	—
97	1st I.F. Transformer, Secondary.....	—
98	1st I.F. Transformer Secondary (Fidelity Control)....	—
99	Resistor, 1/10 meg.....	K-2226-5
100	Capacitor, 0.02 mf, 175 volts	K-2227-7
101	Resistor, 1,000 ohms.....	K-2226-16
102	Capacitor, 0.05 mf, 350 volts	K-2228-8
103	Resistor, 300 ohms.....	K-2226-20
104	Capacitor, 0.05 mf, 175 volts	K-2227-8
105	I.F. Section, Fidelity Control Switch.....	K-3226
106	T. Lamp Section, Fidelity Control Switch.....	
107	Resistor, 50,000 ohms.....	K-2226-6
108	Resistor, 10,000 ohms.....	K-2226-10
109	Capacitor, .005 mf, 350 volts	K-2228-8
110	Capacitor, 0.05 mf, 175 volts	K-2227-8
111	Resistor, 2 meg.....	K-2226-1
112	Resistor, 40,000 ohms.....	K-2363-38
113	Volume Control, ½ meg....	K-3228
114	Capacitor, 0.02 mf, 175 volts	K-2227-7
115	Capacitor, mica, 100 mmf...	K-1611-2
116	Resistor, 1 meg.....	K-2226-2
117	Resistor, 5,000 ohms.....	K-2226-12
118	Capacitor, 0.05 mf, 175 volts	K-2227-8
119	Resistor, ¼ meg.....	K-2226-4
120	Capacitor, 0.02 mf, 350 volts	K-2228-7
121	Resistor, ½ meg.....	K-2226-3
122	Tone Control, ½ meg. var...	K-3227
123	Capacitor, 0.05 mf, 175 volts	K-2227-8
124	Capacitor, 0.001 mf, 350 volts	K-2228-1
125	Resistance Wire (in spag), 0.48 ohms, 11''.....	K-3436-26
126	Resistor, 5,000 ohms.....	K-2226-12
127	Resistor, 40,000 ohms.....	K-2363-38
128	Resistor, 10,000 ohms.....	K-2363-21
129	Lamp, 24 volts (Tuning Indicator).....	K-2643
130	Resistor, 30,000 ohms.....	K-2363-3
131	Resistor, 10,000 ohms	K-2226-10
132	Resistor, ½ meg.....	K-2226-3
133	Resistor, 1,500 ohms.....	K-2226-15
134	Capacitor, 0.05 mf, 175 volts	K-2227-8
135	Capacitor, 0.05 mf, 350 volts	K-2228-8
136	Resistor, 10,000 ohms.....	K-2226-10
137	Resistor, 1/10 meg.....	K-2226-5
138	Resistor, 1/10 meg.....	K-2226-5
139	Resistor, 1/10 meg.....	K-2226-5
140	Capacitor, 0.1 mf, 175 volts.	K-2227-9
141	Capacitor, mica, 100 mmf...	K-1611-2
142	Capacitor, mica, 100 mmf...	K-1611-2
143	Capacitor, 0.001 mf, 350 volts	K-2228-1
144	Capacitor, 0.001 mf, 350 volts	K-2228-1
145	Capacitor, 0.01 mf, 350 volts	K-2228-9
146	Loudspeaker Plug.....	K2678
147	Loudspeaker Cable.....	—
148	Output Transformer.....	K-2718-7
149	Voice Coil and Diaphragm..	K-3138
150	Hum Bucking Coil.....	—
151	Field Coil.....	K-2543-5
152	Capacitor, dry elec., 8 mf, 275 volts.....	K-3241
153	Capacitor, dry elec., 4 mf, 210 volts	
154	Capacitor, dry elec., 8 mf, 250 volts.....	
155	Capacitor, wet elec., 16 mf, 440 volts.....	K-3240
156	Resistor, 150 ohms.....	K-3315-41
157 160	Dial Lamps; 6.3 volts.....	K-2589-3
161	Power Transformer, 60 cycles	K-3242-1
161a	Power Transformer, 25 cycles	K-3242-2
162	Capacitor, 0.025 mf, 520 volts, a.c.....	K-1750
163	Capacitor, 0.025 mf, 520 volts, a.c.....	
164	A.C. Switch.....	K-3238

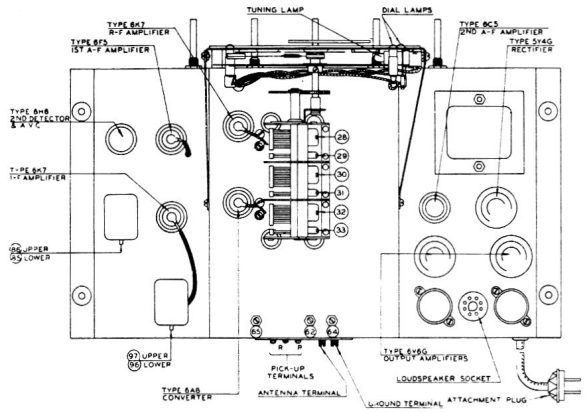
MISCELLANEOUS:

"Ant-Phono" Terminal Strip.....	K-2986
Sockets, Octal Base.....	K-1924-3
Shield (Ant. Lead).....	K-3196
Grid Clips.....	K-1821
Insulation Strip.....	K-2594
Insulation Strip.....	K-3355
Tuning Light Scale.....	K-3236
Tuning Indicator.....	K-2654-3
Band Indicator Scale.....	K-3256
Vernier Indicator Scale.....	K-3311
Drive Disc. Assy.....	K-3293
Reduction Drive Assy.....	K-3443
Dial Scale Assy. (with facing)....	K-3596
Drive Belt.....	K-3255
Bronze cable (32'' long).....	K-1694
Cord Spring.....	103164
Insulation Strip (3 plus 1; outboard).....	K-3278
Insulation Strip (single 6).....	K-1888-1
Cover for A.C. Switch.....	K-3143
Phono Link.....	K-3291
Tee Nuts.....	K-3282

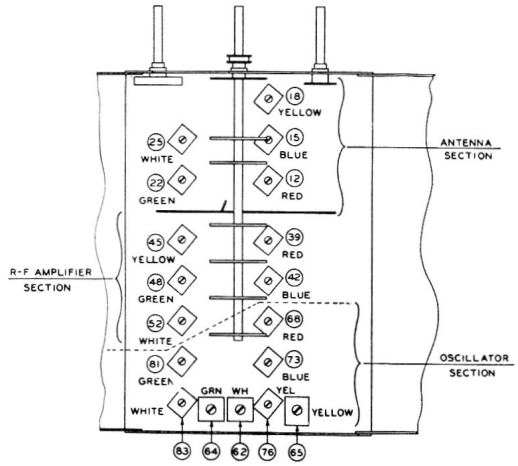
REPLACEMENT PARTS LIST—(Continued)

Description	Part Number
MISCELLANEOUS—(Continued)	
Chassis Mounting Screws (¼"-20-1-¼")	K-1109-10doz.
Rubber Grommets (chassis mounting)	K-2498-3 doz.
Knob—"Tuning" (Vernier)	K-3356-1
Knob—"On-Off"	K-2765-7
Knob—"Tone"	K-2765-8
Knob—"Fidelity"	K-2765-10
Knob—"Band"	K-2765-9
Knob—"Volume"	K-2765-3
Knob—"Tuning" (main)	K-2830-5
Felt Washers for Knobs (small)	K-2491-4
Felt Washers for Main Tuning Knob (large)	K-2491-1

Description	Part Number
Escutcheon, complete	K-3245
Escutcheon Crystal	K-3246
Escutcheon Retaining Ring	K-3249
Tuning Lamp Socket	K-3123
Insulating Shell for T.L	K-3124
Dial Lamp Sockets	K-2835
Screen (Cabinet Rear Top)	K-3167
Loudspeaker, O.T. & Plug Assy	K-3137-1
Loudspeaker, only (10")	K-3097-1
No. 8 Auto Washer (Tone Chamber Cover)	K-3353-2
Tone Chamber Cover Screw	K-3354-12
Tuning Wrenches (all models)	K-836



Chassis Layout Showing Top Aligning Positions.



Underside Aligning Positions

SPECIAL TROUBLE NOTES

PHONOGRAPH CONNECTIONS:

On earlier production of this receiver model, connection of the brown and the green wires on the "Radio-Phono" terminal strip at the rear of the chassis would prevent use of a phonograph pick-up if connected as shown on label. Reversing the brown and the green wires going to the terminal trip will remedy the defect. Sets with the correct wiring can be distinguished by the letter "M" stamped on the connection strip.

HUM FROM 6H6 TUBES:

If a severe hum occurs on any set of this model after it has been in use for some time and is affected by changing the type 6H6 tube, check to see whether the wiring to this tube is as shown on the schematic. Under Circuit Description above mention was made of the fact that some sets in the early production were made with the diodes paralleled and the cathodes connected to the type 6C5 tube. This connection can be checked at the tube socket using a volt-ohmmeter.

If the wiring does not agree with the schematic, proceed to modify it as follows:

1. Cut off the strap between diode terminals No. 3 and No. 5 on the 6H6 socket.
2. Disconnect the No. 8 terminal (cathode) end of the jumper between the cathode terminals No. 4 and No. 8 of the 6H6 socket.
3. Using the above lead, strap the cathode terminal No. 4 to the diode terminal No. 3, and ground both to the chassis.
4. On the 6F5 tube socket disconnect the No. 8 (cathode) terminal end of jumper between this terminal and the No. 8 (cathode) terminal of the 6H6 tube socket.
5. Using the above lead, ground the cathode terminal No. 8 of the 6H6 to the chassis.
6. Remove the electrolytic capacitor from terminal No. 8 (cathode) of the 6H6 tube socket and connect it to the terminal No. 8 (cathode) of the 6F5 tube socket.

NOTE:—The orange lead from the volume control remains on the cathode terminal No. 8 of the 6H6 tube socket. The paper capacitor on terminal No. 4 (cathode) of the 6H6 tube socket may be removed if desired, but has no effect if left connected.

REALIGNING INSTRUCTIONS

I.F. ALIGNMENT:

(*a*) Set the wave-change switch in the Broadcast position, the tuning capacitor gang in the closed position, and the Fidelity Control in the "normal" (contracted-selectivity) position. Accuracy in setting the signal generator to the required frequency of 470 K.C. is essential to ensure good tracking of the I-F and R-F circuits. Couple the output of the generator through a 0.1 mf. capacitor to the grid cap of the converter (6A8) tube.

(*b*) In the contracted-selectivity position the first i-f transformer has a single sharp response. The second transformer tunes somewhat more broadly. Re-alignment can be carried out in the usual fashion by adjusting the trimmer screws that move the iron cores and regulate the inductance of the coils, items 96, 97, 85 and 86 for maximum response.

(*c*) Reduce the output from the signal generator to as low a value as will give an output reading and check the adjustments. All trimmers should peak properly.

(*d*) Set the Fidelity Control in "high-fidelity" (expanded selectivity) position. If the previous adjustments have been made correctly, as the generator frequency is varied a few kilocycles on either side of 470 k.c. the output from the receiver should remain nearly constant, due to the flat-top, band-pass response, and should drop off fairly abruptly and symmetrically for frequencies further above and below.

R.F. ALIGNMENT:—Broadcast (White) Band:

(*a*) Connect the output of the signal generator through a 100 mmf. capacitor to the antenna terminal. Ground the ground terminal of the set.

(*b*) With the gang all in check that the indicator pointer is centered over the end of the blue and red calibrations. The pointer can be turned slightly if required.

(*c*) Set the signal generator and set at 1600 kilocycles. Adjust trimmer, item 83, to bring in the signal. Then adjust trimmer capacitors, items 52 and 25, for maximum sensitivity.

(*d*) Set the generator at 600 K.C. and tune the receiver to it. Adjust trimmer, item 62, while rocking the main capacitor gang, for maximum sensitivity.

(*e*) Recheck at 1600 K.C.

R.F. ALIGNMENT:—Police (Green Band:

(*a*) Use the same connections from the generator as for the Broadcast alignment.

(*b*) Turn the wave-change switch to the correct position, and set generator and receiver to 4.2 megacycles. Adjust trimmer, item 81, to bring in the signal. (The oscillator is operated above the signal on all bands so that the image will be tuned in with the generator set at a frequency 940 K.C. higher than the wanted signal. Check that the set is not tuned to the image at a higher frequency on the generator.)

(*c*) Adjust trimmers, items 48 and 22, for maximum output.

(*d*) Set the generator at 1.8 m.c. and tune the receiver to it. Adjust trimmer, item 64, for maximum sensitivity while rocking the gang.

(*e*) Recheck at 4.2 m.c.

R.F. ALIGNMENT:—Short Wave No.1. (Yellow) Band·

(*a*) Substitute a 400-ohm resistor in place of the capacitor in the lead from the signal generator.

(*b*) Turn the Wave-Change switch to the correct band position. Set generator and receiver to 7.2. m.c. Adjust trimmer, item 76, to bring in the signal. (Check that the set is not tuned to the image.)

(*c*) Adjust trimmers, items 45 and 18, for maximum output.

(*d*) Set generator at 4.7 m.c. and tune the set to it. Adjust trimmer, item 65, for maximum sensitivity, while rocking the gang.

(*e*) Recheck at 7.2 m.c.

R.F. ALIGNMENT:—Short-Wave No. 2 (Blue) Band:

(*a*) Turn the wave-change switch to the correct position. Set the generator (with the same connections as for the short-wave No. 1 band) at 10.8 m.c. and the receiver at the same setting. Adjust trimmer, item 73, to bring in the signal. (Check that the set is not tuned to the image).

(*b*) Adjust the R-F trimmer, item 42, for maximum output while rocking the gang. If necessary, readjust the oscillator trimmer to bring the dial back to the correct setting. Adjust the antenna trimmer, item 15, "max-maxing" as above if this improves the sensitivity.

NOTE:—If oscillation occurs on this band when attempting to trim it, the reason is that the correct relative adjustments of the oscillator and r-f trimmers have not been made. This balance can be found by setting the generator and receiver at 7.2 m.c. and adjusting oscillator and r-f trimmers there. Then return to 10.8 m.c., recheck adjustments and complete alignment of the antenna stage.

(*e*) Check alignment at 7.2 m.c. (the lag capacitor is fixed).

R.F. ALIGNMENT:—Short-Wave No. 3 (Red) Band:

(a) With the wave-change switch in the correct position, set receiver and generator to 16.8 m.c. Adjust trimmer, item 68, to bring in the signal. (Check that the set is not tuned to the image frequency).

(*b*) Adjust the R-F trimmer, item 39, for maximum output, while rocking the gang. Proceed similarly with the antenna trimmer, item 12.

(*c*) Check alignment at 11.0 m.c. (The lag capacitor is fixed).

NOTE:—For the R-F alignment of all bands the Fidelity Control switch should be in the "normal" (contracted-selectivity) position.

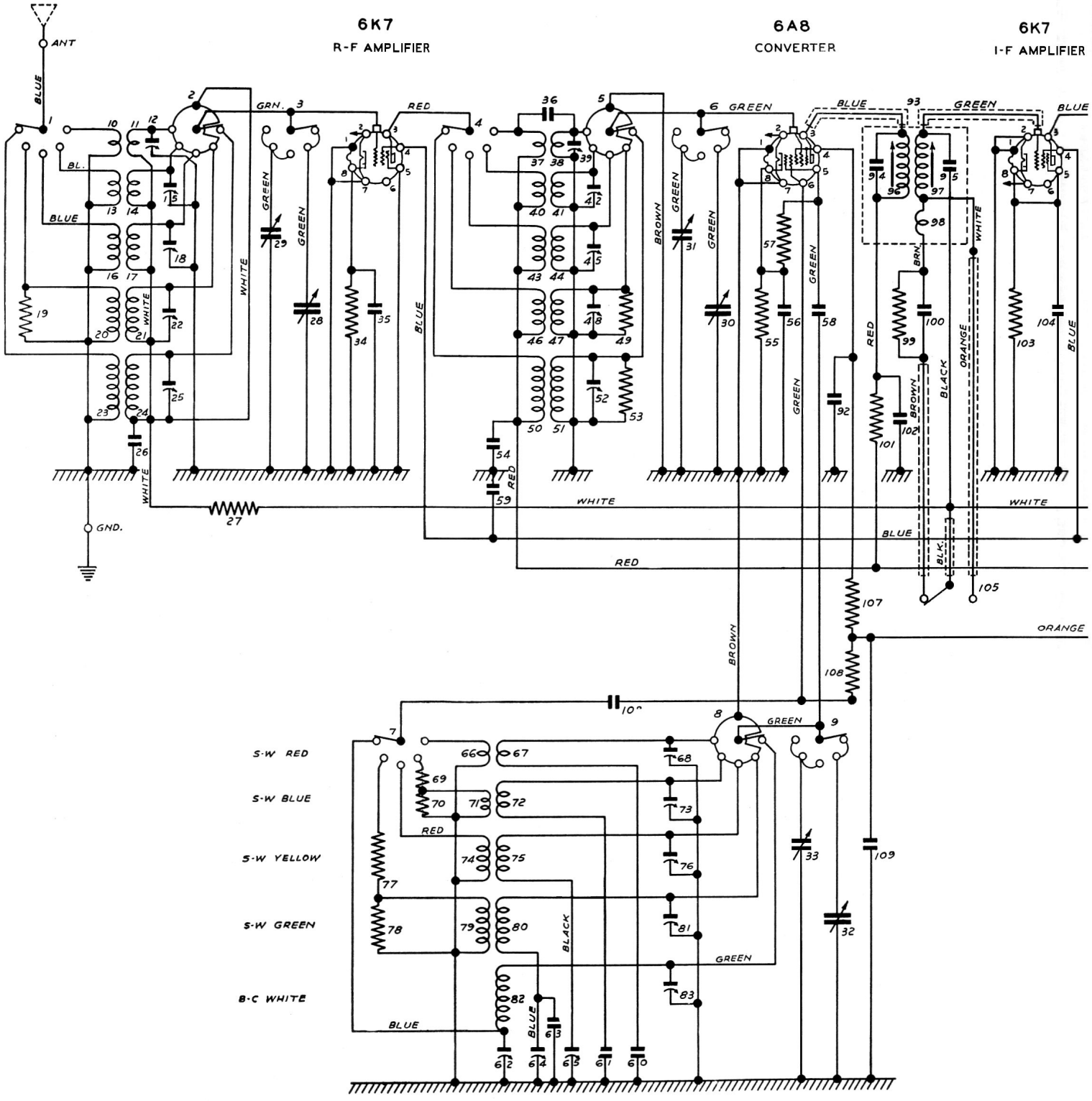
SOCKET VOLTAGE READINGS

TUBE TYPE	VOLTAGES				CURRENTS—M.A.		
					Screen	PLATE	
	Heater (A-C)	Plate	Screen	Cathode		Normal Bias	Bias red. 4½ Volts
6K7 (R.F.)	6.4	240	85	2.2	2.0	6.0	8.0
6A8	6.4	235 ①	85	3.0	2.2	4.0 ②	7.5
6K7 (I.F.)	6.4	235	85	2.4	2.0	6.5	8.5
6H6	6.4	—	—	—	—	—	—
6F5	6.5	90	—	.75	—	.11	.16
6C5	6.5	165	—	32 ③	—	2.7	3.9
6V6G	6.5	240	255	0 ④	3.5	33	40
6V6G	6.5	240	255	0 ④	3.5	33	40
5Y4G	5.0	—	—	410	Plate No. 2 52	52	—

① Oscillator Plate Voltage = 180
② Oscillator Plate Current = 4.0 ma.
③ 6C5 Grid = 4.3 volts
④ Grid Bias 16 volts

SOCKET RESISTANCES TO GROUND — OHMS

TUBE	Top Cap Cont. Grid.	Pin No. 1 Shell	Pin No. 2 Heater	Pin No. 3 Plate	Pin No. 4 Screen	Pin No. 5	Pin No. 6	Pin No. 7 Heater	Pin No. 8 Cathode
Type 6K7 R-F Amplifier	2.6 meg.	0	below 0.5	40,000	85,000	(suppressor) 0	—	0	300
Type 6A8 Converter	2.2	0	below 0.5	41,000	121,000	(osc-grid) 75,300	(anode-grid) 81,000	0	300
Type 6K7 I-F Amplifier	2.6 meg.	0	0	40,000	85,000	(suppressor) 300	—	below 0.5	300
Type 6H6 2nd Det. & A.V.C.	—	0	0	(Diode Plate) 0	(Cathode) 0	(Diode Plate) 550,000	—	below 0.5	0
Type 6F5 1st A.F. Amplifier	1 meg.	0	0	—	(Plate) 295,000		—	below 0.5	5000
Type 6C5 2nd A-F Amplifier	—	0	0	55,000	—	1-½ meg.	—	below 0.5	11,500
Type 6V6G Output	—	—	0	40,400	40,000	200,000	—	below 0.5	0
Type 6V6G Output	—	—	0	40,400	40,000	200,000	—	below 0.5	0
Type 5Y4G Rectifier	—	—	—	350 (60 cy) 400 (25 cy)	—	Plate 350 400	—	41,000	41,000



Schematic Diagram—Model 921 Receiver

NOTE;- WIRED SIDE OF TUBE SOCKETS AND PRONG SIDE OF L.S. PLUG SHOWN.

WAVE CHANGE SWITCH SHOWN IN BROADCAST POSITION AND FIDELITY SWITCH IN NORMAL POSITION.

I.F. = 470 K.C.

MODEL 921 RADIO RECEIVER