

Model 841-A

Radio Receiver



Specifications

Frequency Range:

Broadcast—535 to 1715 K.C.
Short Wave—5.7 to 15.6 M.C.

I.F.:

470 K.C.

Tubes:

Type	Position
6SA7	First Detector
6SK7	Int. Freq. Amp.
6H6	2nd Det. & A.V.C.
6SQ7	1st Audio Amp.
6F6G	Output
6J5	Oscillator
6U5	Tuning Eye
5Y4G	Rectifier

Power Supply:

105-125 volts.
25-60 cycles, 55 watts.

A.V.C.:

On 6SA7 1st Det. and 6SK7 I-F Amplifier.

Controls:

Three (not including pushbuttons)
(1) Tuning, (2) Volume, (3) Tone; A-C
Switch mounted on the volume control.

Power Output:

2.5 watts.

No. of Bands:

Two

Pushbuttons:

Eight providing six auto. tuned stations with
7th and 8th buttons used for switching Short
Wave and broadcast.

Loudspeaker:

8" E.D.

Audio:

First A-F portion 6SQ7 resistance-capaci-
tance coupled to 6F6G output.

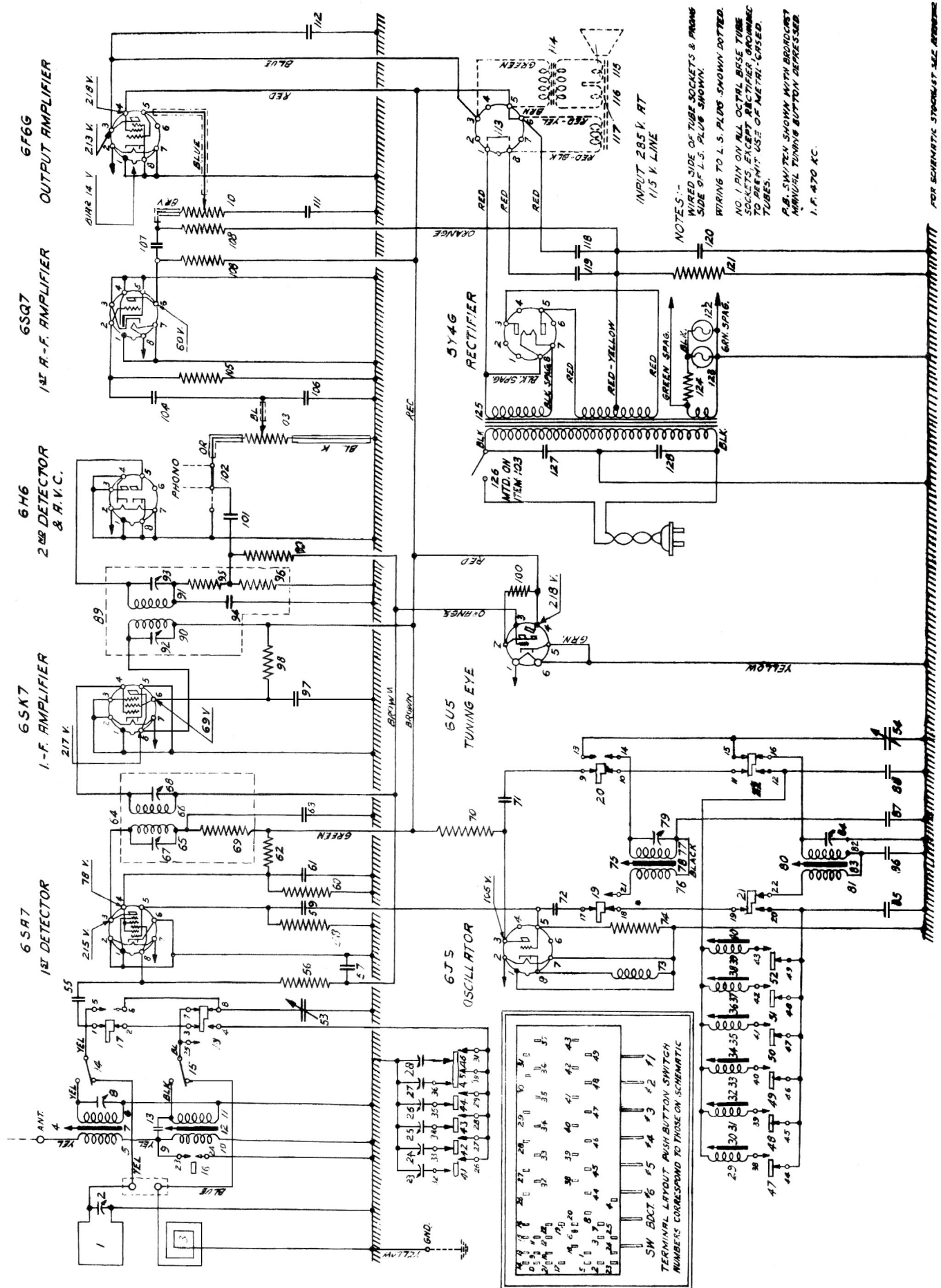
Antennae:

Rotatable loop with connections for external
antenna.

Dimensions:

Chassis: 13-1/8" x 5-7/8" x 2-27/32".
Cabinet: 34-1/2" x 31" x 12".

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REPLACEMENT PARTS LIST

Item	Description	Part No.	Item	Description	Part No.
1	Short-Wave Loop	K-5163-3	108	Resistor: 1/4 meg., 1/2 W.	K-2226-4
2	S.W. Loop Trimmer 16-72 mmf.	K-1458-8	109	Resistor: 1/4 meg., 1/2 W.	K-2226-4
3	Broadcast Loop	K-5146	110	Tone Control, 1/4 meg.	K-4612-4
4-7	S.W. Ant. Coil Assembly	K-4665	111	Capacitor: .002 mf. 400 V.	K-2228-2
8	S.W. Ant. Trimmer	K-1458-6	112	Capacitor: .003 mf. 400 V.	K-2228-3
9-13	Bdcast. Ant. Coil Assembly	K-3831-6	113	Speaker Socket	K-4944
14-15	Loop Switch	K-4029-2	114	Output Transformer	K-2718-14
16-17-19-20	S.W. Man. Switch	K-5048	115	Voice Coil	K-5058
18-21-22			116-117	Field & Hum Coil	Not Replaceable
23-28			118-119	Filters 20 mf., 450 V.	K-4470
29-40			120	Filter 20 mf., 25 volt	K-4470
41-46	P.B. Switches (Ant.)	K-5048	121	Resistor 250 ohms, 2 watt	K-1870-25
47-52			122-123	Dial Lamps	K-2589-3
53			124	Resistor: 1.3 ohm W/W	K-2252-17
54			125	Power Trans. 25-60 cycle	K-3700-13
55	Capacitor, mica 1000 mmf.	K-4439-4	126	Power Switch - Part of	K-4663-3
56	Resistor 2.0 meg. 1/2 Watt	K-1611-23	127-128	Line Filters: .025 mf. (dual)	K-5073
57	Capacitor .05 mf. 200 volt	K-2226-1	MISCELLANEOUS:		
58	Resistor 20,000 ohm 1/2 Watt	K-2227-8	Loudspeaker less Output Trans.		
59	Capacitor 100 mmf. mica	K-2226-8	Sockets (tube)		
60	Resistor 30,000 ohm 1/2 Watt	K-1611-2	Socket (filter cap)		
61	Capacitor .1 mf. 200 volt	K-2226-44	Ant.-Ground-Phono-Radio Term. Strip		
62	Resistor: 12,500 ohm, 2 Watt	K-2227-9	Dial Lamp Sockets		
63	Capacitor: .05 mf. 400 Volt	K-1870-28	Terminal Strip (Loop Lead)		
64	1st I-F Trans. Assembly	K-2228-8	Loop Switch		
65-66	Coils K-4610; 67-68 Trimmers	K-4609-2	Dial Plate Assembly		
69	Resistor: 1000 ohms, 1/2 Watt	K-2134-6	Dial Indicator		
70	Resistor 20,000 ohm, 1/2 Watt	K-2226-16	Dial Wheel Assembly		
71	Capacitor: 50 mmf. mica	K-2226-8	Dial Scale		
72	Capacitor: 100 mmf. mica	K-1611-1	Dial Drive Shaft		
73	R-F Choke	K-1611-2	Drive Shaft Set Screw		
74	Resistor: 50,000 ohm; 1/2 W.	K-3935-2	"C" Washer		
75-78	S.W. Oscillator Coil	K-2226-6	Dial Cable (5') (Order by feet)		
79	Trimmer: 3-25 mmf.	K-5077	Dial Cable Spring		
80-83	Bdcast. Osc. Coil	K-1458-6	Tuning Eye Socket (6 contact)		
84	Trimmer: 3-25 mmf.	K-5075	T.E. Light Shield		
85	Capacitor: 370 mmf. (silv.)	K-1458-6	T.E. Clamp		
86	Capacitor: 500 mmf. mica	K-4144-1	T.E. Thumb Screw		
87	Capacitor: 3100 mmf. mica	K-1611-7	Dial Escutcheon		
88	Capacitor: 300 mmf. (silv.)	K-1952-23	P.B. Escutcheon		
89	2nd. I-F Transformer Assy.	K-4144-6	Knob-tuning		
90-91	Coils K-4585; 92-93 Trimmers	K-4545-2	Knob-volume-off		
94	Capacitor: mica 100 mmf.	K-2932-1	Knob-tone		
95	Part of Resistor, 50,000 ohm, 1/2 W.	K-2932-1	Knob-push buttons		
96	Resistor, 1/2 meg. 1/2 W.	K-2226-6	Station Names		
97	Capacitor: .1 mf. 400 Volt	K-2226-3	Light Shield		
98	Resistor: 65,000 ohm, 1/2 Watt	K-2228-9	Phono-Link		
99	Resistor: 2.0 meg. 1/2 Watt	K-2226-52	Felt Washer		
100	Resistor: 1.0 meg. 1/2 Watt	K-2226-1	Instruction Folder (English)		
101	Capacitor .02 mf. 200 Volt	K-2226-2	Set Screw for Dial Wheel		
102	Phono-Radio Bar	K-2227-7	Chassis Mounting Screws		
103	Vol. Cont. & A.C. Sw. 2.0 meg.	K-3291-1	S-W Loop Assembly		
104	Capacitor .02 mf. 200 Volt	K-4663-3	Double Stand-Off Ins.		
105	Resistor: 10.0 meg., 1/2 W.	K-2227-7	Rotating Loop Assy.		
106	Capacitor: mica 100 mmf.	K-2226-74	P.B. Tuner Coil		
107	Capacitor .02 mf. 400 volt	K-1611-2	P.B. Tuner Coil		
		K-2228-7	P.B. Tuner Coil		

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REALIGNING DETAILS

I.F.:

(a) With .1 mf. capacitor in signal generator lead and generator set to 470 K.C., connect to type 6SA7 first detector grid. Adjust trimmers, items 67,68,92,93, for maximum output.

WITH CHASSIS OUT OF CABINET AND LOOPS DISCONNECTED:-

R-F MANUAL BROADCAST:

(a) Close gang; dial pointer should cover line etched on to dial frame at extreme left. Place loop switch in "External" position. With 100 mmf. capacitor in generator lead,*set generator and receiver to 600 K.C. (Pointer should then be at second etched line to left on dial frame). Press broadcast-manual tuning button (second from right). Adjust antenna transformer iron core, item 12 and oscillator iron core, item 83. (* Connect lead to antenna terminal).

(b) Set generator and receiver to 1600 K.C. (Pointer should then be at fourth etched line on dial frame at bottom). Adjust trimmer on broadcast oscillator coil, item 84.

(c) Recheck items 12 and 83 on 600 K.C.

R-F MANUAL SHORTWAVE:

(a) With 400-ohm carbon resistor in generator lead, connect to antenna terminal. Press short-wave manual tuning button (extreme right). Set generator and receiver to 6.0 M.C. (Pointer should be over second etched mark from left on dial frame top bar for this 6.0 M.C. position). Adjust oscillator coil iron core, item 78, then antenna transformer iron core, item 7.

(b) Set generator and receiver to 15.0 M.C. (Pointer should be over fourth etched mark from left on top bar). Adjust trimmer, item 79 on S-W oscillator coil. Adjust trimmer, item 8, on antenna coil, slowly rocking gang while doing so.

(c) Recheck items 78 and 7 on 6.0 M.C.

WITH CHASSIS IN CABINET AND LOOPS CONNECTED:-

R-F MANUAL BROADCAST:

(a) Place loop switch at "Loop" position (down) and press in broadcast-manual button, (second button from right). Locate generator leads close to receiver but do not attach. Set generator at 800 K.C. and control output until signal can be heard. Disconnect brown insulated flexible lead from loop (located near fifth turn). Attach a clip to this lead and contact loop wires at opposite side from diagonal wire running from centre of loop through upper section. Run clip around turns of loop until pass through peak. Wherever peak is found, make permanent connection of lead to that point by soldering.

R-F MANUAL SHORTWAVE:

(a) Still with loop switch down (at "loop" position) and with generator leads radiating to receiver but not directly connected, set generator and receiver to 15.0 M.C. Press in S.W. Manual button (extreme right). Adjust trimmer, item 2 on left side of S-W loop, located at top side of cabinet. Rock gang while doing this.

(b) Check for image by swinging generator to 15.94 M.C.

PUSHBUTTON ADJUSTMENTS: Refer to Instruction Folder accompanying receiver

D.C. RESISTANCE OF COILS (OHMS)

<u>Item</u>	<u>Description</u>	<u>Resistance</u>	<u>Item</u>	<u>Description</u>	<u>Resistance</u>
10	B.C.Antenna Primary	24.0	65	1st I-F Primary	16.0
11	B.C.Antenna Secondary	2.3	66	1st I-F Secondary	11.5
5	S.W.Antenna Primary	Below 0.5	90	2nd I-F Primary	16.0
6	S.W.Antenna Secondary	Below 0.5	91	2nd I-F Secondary	16.0
81	B.C.Oscillator Grid	3.5	117	Loudspeaker Field	1000.0
82	B.C.Oscillator Plate	0.5	115	Loudspeaker Voice Coil	5.0
76	S.W.Oscillator Grid	Below 0.5	114	Output Transformer Primary	225.0
77	S.W.Oscillator Plate	Below 0.5	114	Output Transformer Secondary	Below 0.5
73	R-F Choke	Below 0.5	125	Power Transformer, Primary	12.5
-	P.B.Coils (K-4980-1)	1.75	-	Power Transformer, H.V.Secondary	700.0
-	P.B.Coils (K-4980-2)	2.25	-	Power Transformer Rect. Fil	Below 0.5
-	P.B.Coils (K-4980-3)	3.5	-	Power Transformer Heater	Below 0.5