

Model 642A

A-C Operated Dual Band Six-Tube Receiver



Specifications

Frequency Range:

Broadcast—535 to 1710 K.C.
Short Wave—5.7 to 15.6 M.C.

I.F.:

470 K.C.

Tubes:

Type	Position
6K8	Converter
6K7	I.F.
6H6	2nd det. & AVC.
6F5	1st Audio
6F6G	Output
5Y4G	Power Rect.

Power Supply:

105-125 volts
25-60 cycles, 55 watts

A.V.C.:

Applied to 6K8 Converter and 6K7 I.F.

Controls:

Volume control with A-C Switch; continuous tone control; wave band switch; tuning control.

Loudspeaker:

5" E.D.

Power Output:

2.5 watts

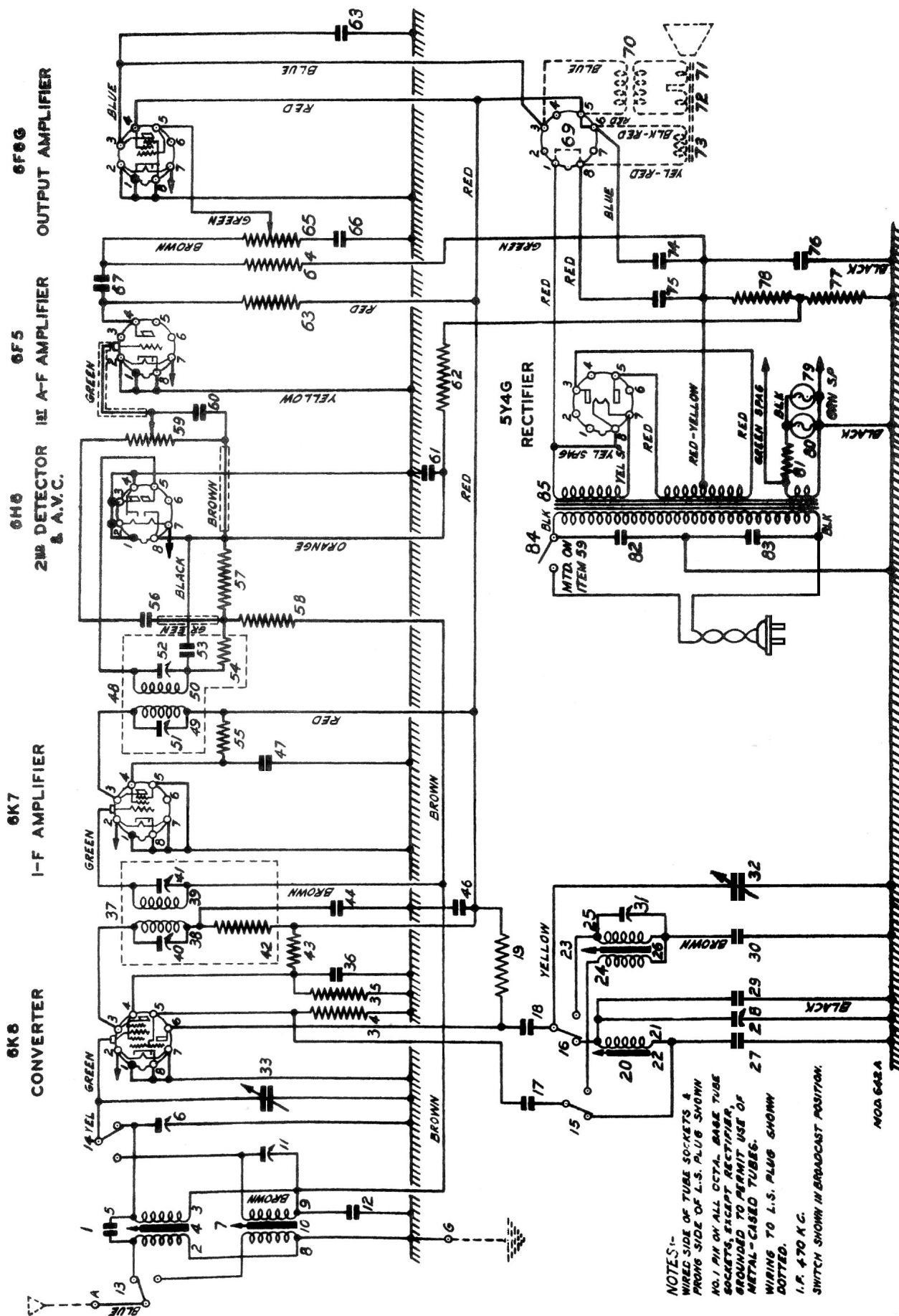
Dial:

Rectangular, glass, with pointer; ceramic-printed red, green, ivory and brown (four colours); edge-lighted.

Cabinet:

Small compact walnut; loudspeaker mounted at the left end.

MODEL 642A RADIO RECEIVER



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REPLACEMENT PARTS LIST

Item	Description	Part No.	Item	Description	Part No.
1-5	B.C.Ant.Trans. (comp.) (2 Pri.; 3 Sec.; 4 core; 5 Cap. 5 mmf.)	K-3831-6	62	Resistor 1/4 meg.	K-2226-4
6	Trimmer 3-25 mmf.	K-1458-6	63	Resistor 1/4 meg.	K-2226-4
7-10	S.W. Ant. Trans. (Comp.) (8 Pri.; 9 Sec.; 10 Core.)	K-4665	64	Resistor 1/4 meg.	K-2226-4
11	Trimmer 3-25 mmf.	K-1458-6	65	Tone Control 1/4 meg.	K-4612-2
12	Cap. .05 mf. 200 V.	K-2227-8	66	Cap. .002 mf. 400 volt	K-2228-2
13-16	Switch (13 Ant.Pri.14 Ant. Sec.; 15-Grid; 16 plate)		67	Cap. .02 mf. 400 V.	K-2228-7
17	Cap. Mica; 100 mmf.	K-1611-2	68	Cap. .003 mf. 400 V.	K-2228-3
18	Cap. Mica; 50 mmf.	K-1611-1	69	Speaker plug	K-2678
19	Resistor, 20,000 ohm	K-2226-8	70	Output transformer	K-3873-3
20-22	B.C. Osc. Coil (complete)	K-4664	71	Voice coil (& diaphragm)	K-4593
23-26	S.W. Osc. Coil (complete)	K-4666	72-73	Hum & field coils (not replaceable)	K-4592-2
27	Cap. 500 mmf. mica	K-1611-7	74-76	Cap; Triple 20-20/450 V. 20/25 V.	K-4470
28	Trimmer 3-25 mmf.	K-1458-6	77	Resistor 30 ohm	K-2226-73
29	Cap. 20 mmf. mica	K-1611-29	78	Resistor 200 ohm	K-1870-26
30	Cap. 3100 mmf. mica	K-1952-23	79-80	Dial lamps 6.3 V.	K-2589-3
31	Trimmer 3-25 mmf.	K-1458-6	81	Resistor 1.3 ohms W/W	K-2252-17
32	Tuning Cap. osc. 530 mmf. }		82-83	Buffer caps dual .025/525 V.	K-3750
33	Tuning Cap. ant. 530 mmf. }	K-4439-2	84	A-C Switch (part of 59)	K-4663
34	Resistor 50,000 ohms	K-2226-6	<u>MISCELLANEOUS</u>		
35	Resistor 30,000 ohms	K-2226-44	Loudspeaker less Output Transformer		
36	Cap. .1 mf. 200 V.	K-2227-9	Socket, Octal		
37-42	1st. I-F Trans. complete (38 Pri.; 39 Sec.K-4610; 40-41 Trimmers 30-130/70-170 mmf.-K-2134-6; 42 Resistor 1000 ohm K-2226-16)	K-4609	A & G Terminal Strip		
43	Resistor 15,000 ohm	K-1870-7	Stand-Off. Ins.		
44	Cap. .05 mf. 400 V.	K-2228-8	Dial Plate		
45	Blank		Indicator		
46	Cap. .1 mf. 400 V.	K-2228-9	Pulley Assembly		
47	Cap. .1 mf. 400 V.	K-2228-9	Spring (for dial cord)		
48-54	2nd. I-F Trans. complete (49 Pri.; 50 Sec-K-4585; 51-52 Trimmers 30-130 mmf. K-2932-1 includes item 53;54 resistor 50,000 ohms K-2226-6)	K-4545	Dial Cord (19" order by ft.)		
55	Resistor 100,000 ohms	K-2226-5	Dial Scale		
56	Cap. .02 mf. 200 V.	K-2227-7	Drive Shaft		
57	Resistor 1/2 meg.	K-2226-3	Lamp sockets		
58	Resistor 2.0 meg.	K-2226-1	Grid clip		
59	Vol. control 2.0 meg.	K-4663	Grid Cap Shield (6F5)		
60	Cap. 100 mmf. mica	K-1611-2	Escutcheon (dial)		
61	Cap. 5.0 mf. 25 V. D.E.	K-3442-1	Knob "tuning"		
			Knob "Volume-Off"		
			Knob "Tone & S.W."		
			Felt Washers		
			Band Indicator		
			Instruction Folder - English		
			Instruction Folder - French		
			Esc. Mtg. Screws #2x1/4 Rec.		
			Chassis Mtg. Screws #8/32 x 1"		

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REALIGNING DETAILS

I.F.:-

With 1 mf. capacitor in generator lead, set to 470 kc., connect to 6K8 converter grid, and adjust I-F trimmers items 40, 41, 51 and 52.

R.F.(B.C.):-

Close gang; top of pointer should be in line with bottom of dial scale calibration. With 100 mmf. capacitor in generator lead, connect to antenna terminal. At 1600 kc. adjust oscillator trimmer item 28. Rock tuning gang while adjusting antenna trimmer item 6. Set generator and receiver to 600 kc., adjust variable iron core item 22. Adjust antenna variable iron core item 4.

R.F.(S.W.):-

With 400 ohm carbon resistor in generator lead, set generator and receiver to 15mc. and adjust oscillator trimmer item 31. Rock gang and adjust antenna trimmer item 11. Set generator and receiver to 6.0 mc. and adjust oscillator variable iron core item 26. Adjust antenna variable iron core item 10.

SOCKET VOLTAGES (at 115 V. Line)

Heaters	6.3	I-F Screen	85
Rect. Fil.	5.0	Audio Plate 6F5	110
Screen 6F6G	225	Bias 6F6G	14.0
Oscillator Anode (6K8)	135	Bias 6F5	1.8
I-F Plate	225	Rect. Input	260
Plate 6F6G	205		

D.C. RESISTANCE OF COILS (OHMS)

<u>Item</u>	<u>Description</u>	<u>Resistance</u>
2	B.C. Antenna Primary	21.5
3	B.C. Antenna Secondary	2.0
8	S.W. Antenna Primary	Below 0.5
9	S.W. Antenna Secondary	Below 0.5
21	B.C. Oscillator Plate	3.0
24	S.W. Oscillator Grid	Below 0.5
25	S.W. Oscillator Plate	Below 0.5
38	1st I-F Transformer Primary	16.0
39	1st I-F Transformer Secondary	12-0
49	2nd I-F Transformer Primary	16.0
50	2nd I-F Transformer Secondary	16.0
70	Output Transformer Primary	500.0
	Output Transformer Secondary	Below 0.5
71	Voice Coil	3.3
73	Field Coil	1000.0
85	Power Transformer - Primary	12.5
	Power Transformer - H.V.Sec.	700.0
	Power Transformer Rect. Fil.	Below 0.5
	Power Transformer Heater	Below 0.5