

NOTES

1. Voltages taken with VTVM from socket terminals to common ground (not chassis). Tuning capacitor set to minimum.
2. Capacitor values less than one are microfarads and values greater than one are micro-microfarads, unless otherwise indicated.
3. Resistors are $\frac{1}{2}W$, 10% unless otherwise indicated. $K=X1,000$; $M=X1,000,000$.
4. When using AC operated test equipment connect an isolation transformer between the receiver and the power line.

RESISTANCE READINGS

Sym.	Type	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V1	12BE6	22K	1	24	12	*2.2K	*2.2K	4.8M
V2	12BA6	3.8M	0	24	36	*2.2K	*2.2K	150
V3	12AV6	4.7M	0	0	12	.5M	.5M	*.5M
V4	50C5	150	.5M	36	80	.5M	*2.2K	*250
V5	35W4	*33	*33	80	105	105	95	*0

Resistances in Ohms, K=X1,000; M=X1,000,000.
*Measured from socket terminals to cathode, pin 7, 35W4. All other readings to B-.

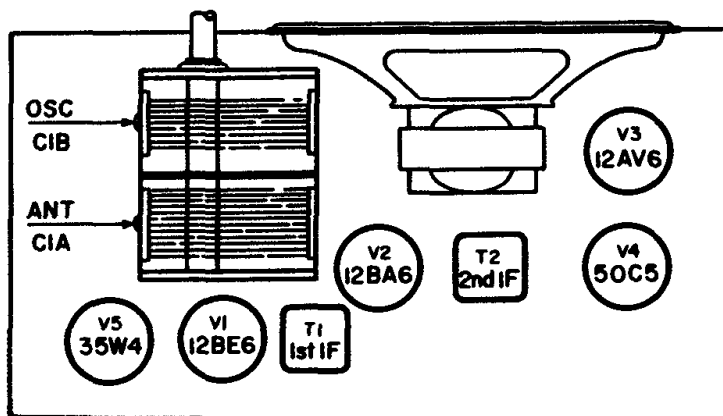
CBS-COLUMBIA - A Division of the Columbia Broadcasting System

CBS Model 5440, Clock Radio Chassis 5C4

Alignment

Set volume control to maximum. To prevent overloading use lowest range available on output meter and adjust output of signal generator to the minimum level necessary for satisfactory indication. Use an insulated alignment tool for all adjustments.

B— is connected directly to one side of the power line. When using AC operated test equipment connect an isolation transformer between the receiver and the power line. If an isolation transformer is not available connect a .1 mf capacitor in series with the signal generator ground lead and B—. Do not connect a ground lead directly to B—.



Tube and Trimmer Locations

Step	Signal Generator		Receiver Tuning	Output Meter Connection	Adjust
	Freq.	Connect to			
1	455KC MOD.	Pin 1 of V2, 12BA6, thru .05 mf	Minimum capacity	Across voice coil	T2, top and bottom slugs, for maximum indication.
2	As above	Pin 7 of V1, 12BE6, thru .05 mf	As above	As above	T1, top and bottom slugs, for maximum indication.
3	1620KC MOD.	As above	As above	As above	C1B, oscillator trimmer, for maximum indication.
4	1400KC MOD.	External antenna connection of loop antenna	For maximum signal	As above	C1A, antenna trimmer, for maximum indication.

Parts List

Capacitors

Symbol	Part No.	Description
C1A, B	24 000 221	Variable
C2	22 011 740	Paper, .05 mfd, 400V, 20%
C3	23 001 660	Cer., 220 mmfd, 500V, 20%
C4	22 011 660	Paper, .01 mfd, 400V, 20%
C5	22 011 700	Paper, .02 mfd, 400V, 20%
C6	22 026 280	Paper, .1 mfd, 400V, 20%
C7	22 011 740	Paper, .05 mfd, 400V, 20%
C8A, B	21 001 091	Elec., 70-40 mfd, 150V
C12	23 002 660	Cer., 220 mmfd, 500V, 20%

Resistors

R1	30 223 230	Carbon, 22K, ½W, 10%
R2	30 151 230	Carbon, 150 ohm, ½W, 10%
R3	30 335 230	Carbon, 3.3 Meg., ½W, 10%
R4	36 000 282	Volume Control, 500K
R5	30 475 230	Carbon, 4.7 Meg., ½W, 10%
R6	30 151 230	Carbon, 150 ohm, ½W, 10%
R7	30 222 250	Carbon, 2200 ohm, 2W, 10%
R10	30 330 230	Carbon, 33 ohm, ½W, 10%
R11	30 105 230	Carbon, 1 Meg., ½W, 10%

Miscellaneous

Symbol	Part No.	Description
L1	79 000 041	Loop Antenna & Back
L2	15 000 092	Oscillator Coil
T1, T2	12 000 281	Transformers, I.F.
	53 071 190	I.F. Trans. Mounting Clip
V1	61 000 461	Tube 12BE6
V2	61 000 291	Tube 12BA6
V3	61 000 471	Tube 12AV6
V4	61 000 491	Tube 50C5
V5	61 000 481	Tube 35W4
	73 000 102	Speaker, 4" PM, w/Trans. (T3)
	80 000 315	Line Cord, 6 ft. (#16 AWG)
	44 001 720	Appliance Outlet
	82 000 041	Couplate
	70 002 381	Cabinet, Ebony
	70 002 382	Cabinet, Maroon
	70 002 383	Cabinet, Sand
	70 002 384	Cabinet, Ivory
	76 000 694	Knob, Volume
	76 003 651	Knob, Tuning
	76 003 641	Clock
	74 000 491	Dial Plate