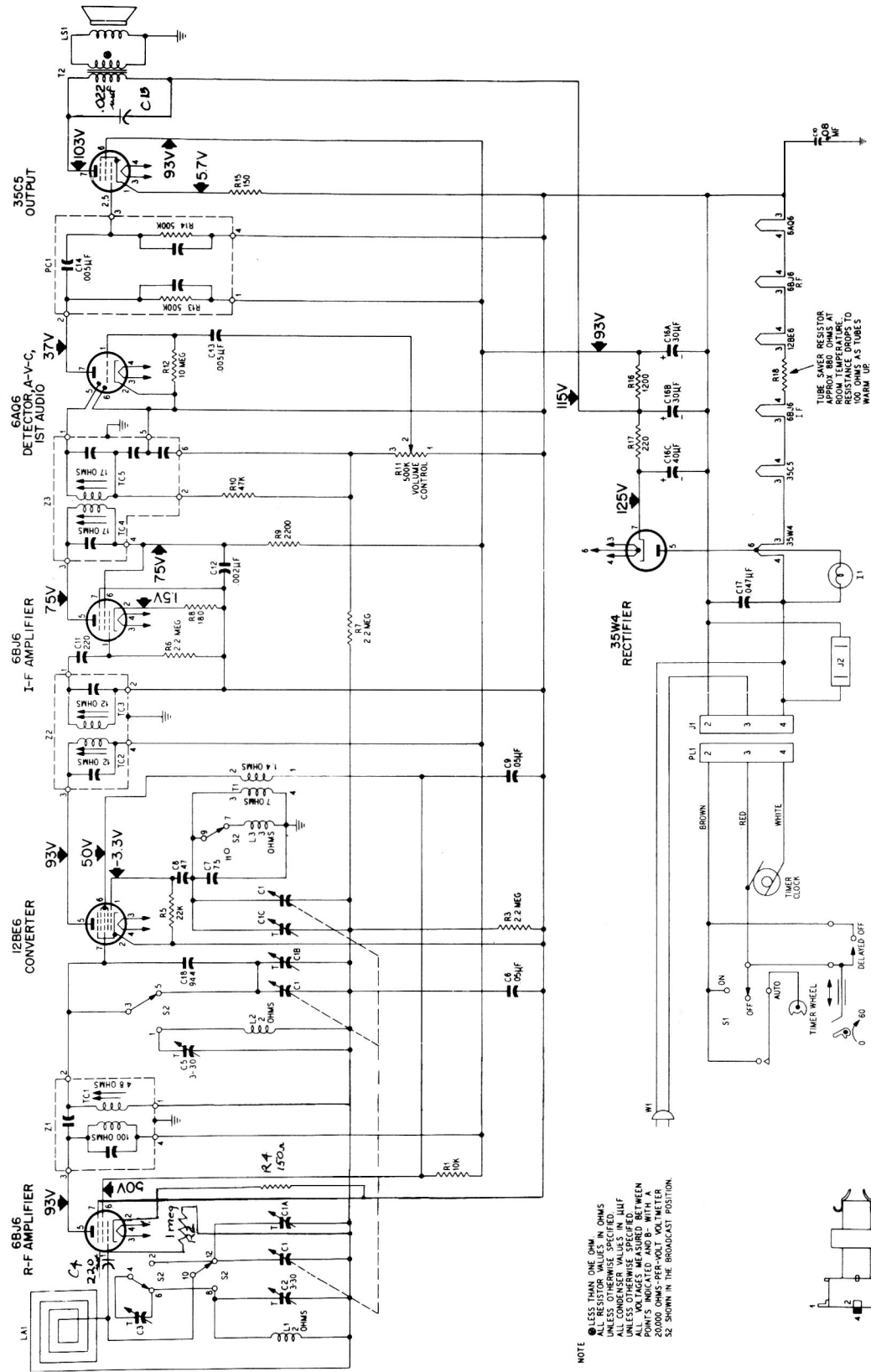




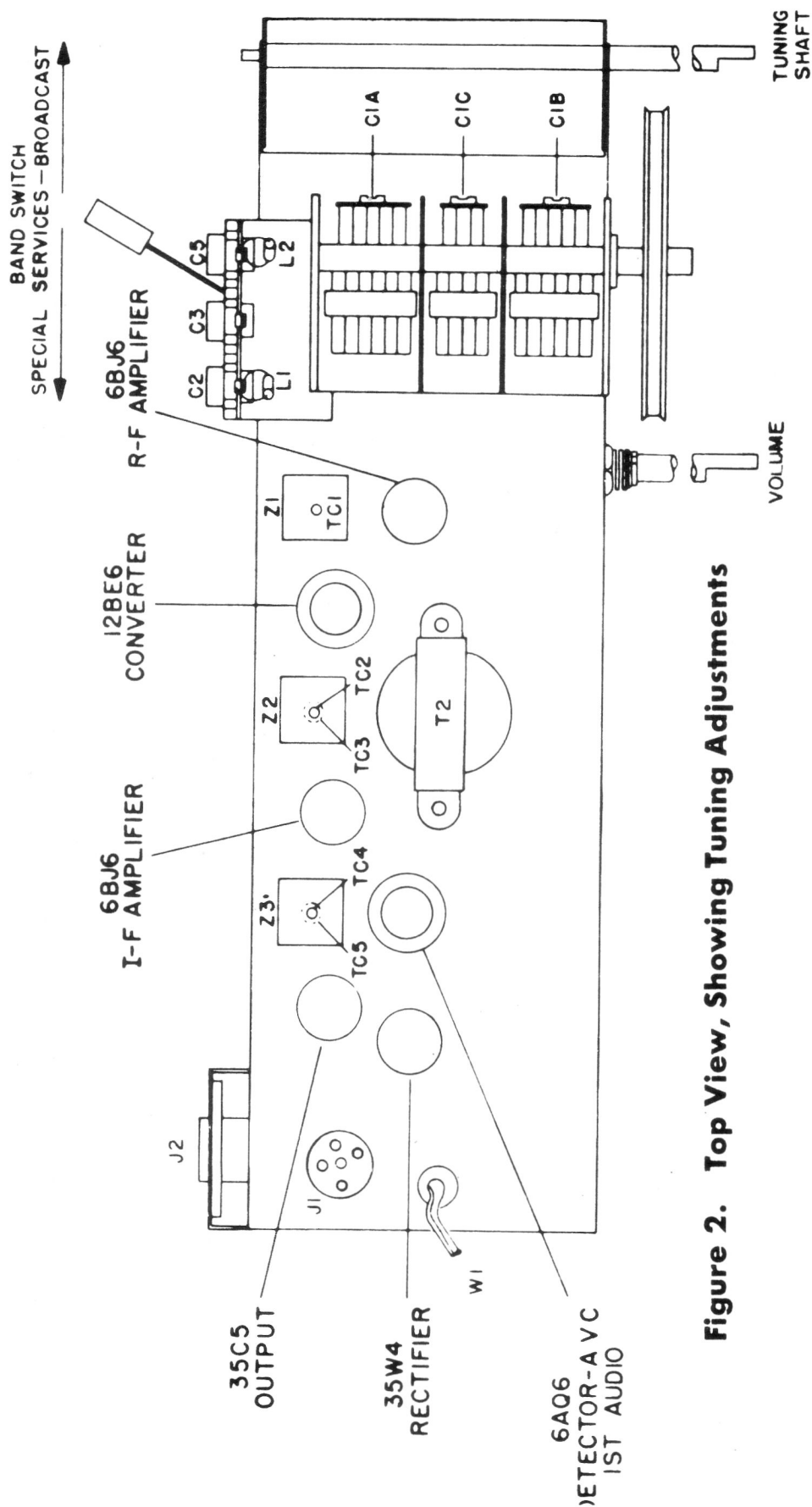


Figure 2. Top View, Showing Tuning Adjustments

FREQUENCY RANGE

Broadcast	540 kc. to 1620 kc.
Special Services	1700 kc. to 3400 kc.

AUDIO OUTPUT

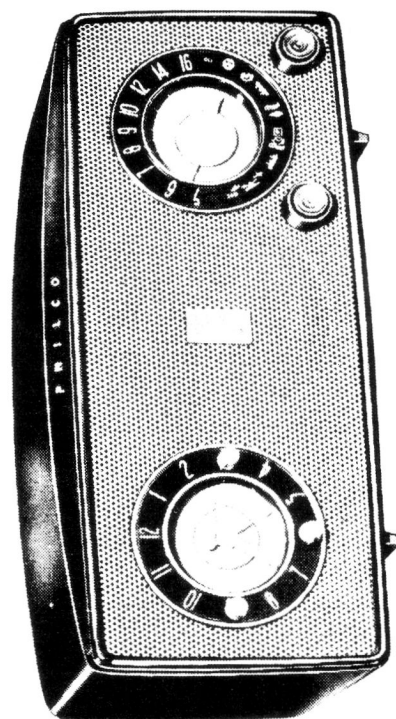
OPERATING VOLTAGE	105—120 volts, a.c.
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POWER CONSUMPTION

ANTENNA	Built-in, high-impedance loop
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INTERMEDIATE FREQUENCY

PHILCO TUBES	6BJ6 i-f ampl.; 12BE6 converter; 6BJ6 i-f ampl.; 6AQ6 detector, a.v.c., 1st audio; 35C5 output; 35W4 rectifier
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ALIGNMENT PROCEDURE

GENERAL

RADIO CONTROLS—Set volume control for maximum output and tuning control as given in the alignment chart. Set band switch to broadcast position for first 5 steps, and to special services position for steps 6 and 7.

OUTPUT INDICATOR—Connect output indicator (either on oscilloscope or a 1000-ohms-per-volt, a-c voltmeter) across voice-coil terminals.

SIGNAL GENERATOR—Use an AM r-f generator, connected as indicated in the alignment chart.

OUTPUT LEVEL—During alignment, attenuate signal-generator output to maintain output indication below 1 volt.

DIAL POINTER—Before the alignment is started, the dial pointer should be set to coincide with the dial scale mark below "55" when the tuning gang is fully meshed.

ALIGNMENT CHART

STEP	SIGNAL GENERATOR		RADIO		ADJUST
	CONNECTION TO RADIO	DIAL SETTING	DIAL SETTING	SPECIAL INSTRUCTIONS	
1	Ground lead to B—. Output lead through a .01- μ f. condenser to pin 7 (mixer grid) of 12BE6, converter.	460 kc.	Tuning gang fully open.	Adjust, in order given in next column, for maximum output.	TC5—2nd i-f sec. TC4—2nd i-f pri. TC3—1st i-f sec. TC2—1st i-f pri.
2	Radiating loop. See Note 1 below.	1620 kc.	1620 kc. See Note 2 below.	Adjust for maximum output.	C1C—osc. trimmer
3	Same as step 2.	1520 kc.	Tune radio to generator signal.	Adjust for maximum output. (High-frequency adjustment)	C1B—mixer-grid trimmer C1A—r-f trimmer
4	Same as step 2.	580 kc.	Same as step 3.	Adjust for maximum output. (Low-frequency adjustment)	TC1—r-f transformer
5	Repeat steps 3 and 4 until no further improvement is obtained.				
6	Same as step 2.	3200 kc.	Same as step 3.	Adjust for maximum output.	C5—special-services mixer-grid trimmer C2—special-services r-f trimmer
7	Same as step 2.	1800 kc.	Same as step 3.	Adjust for maximum output.	C3—special-services r-f padder

NOTE 1: Make up a 6-8 turn, 6-inch-diameter loop from insulated wire; connect to signal-generator leads and place near the radio loop antenna. The loop antenna must be connected to the radio.

NOTE 2: To set the tuning gang to 1620 kc., place a piece of 6-mil flat shim stock beneath the heel of the rotor, and turn the rotor until it holds the shim firmly in place. Then remove the shim.

