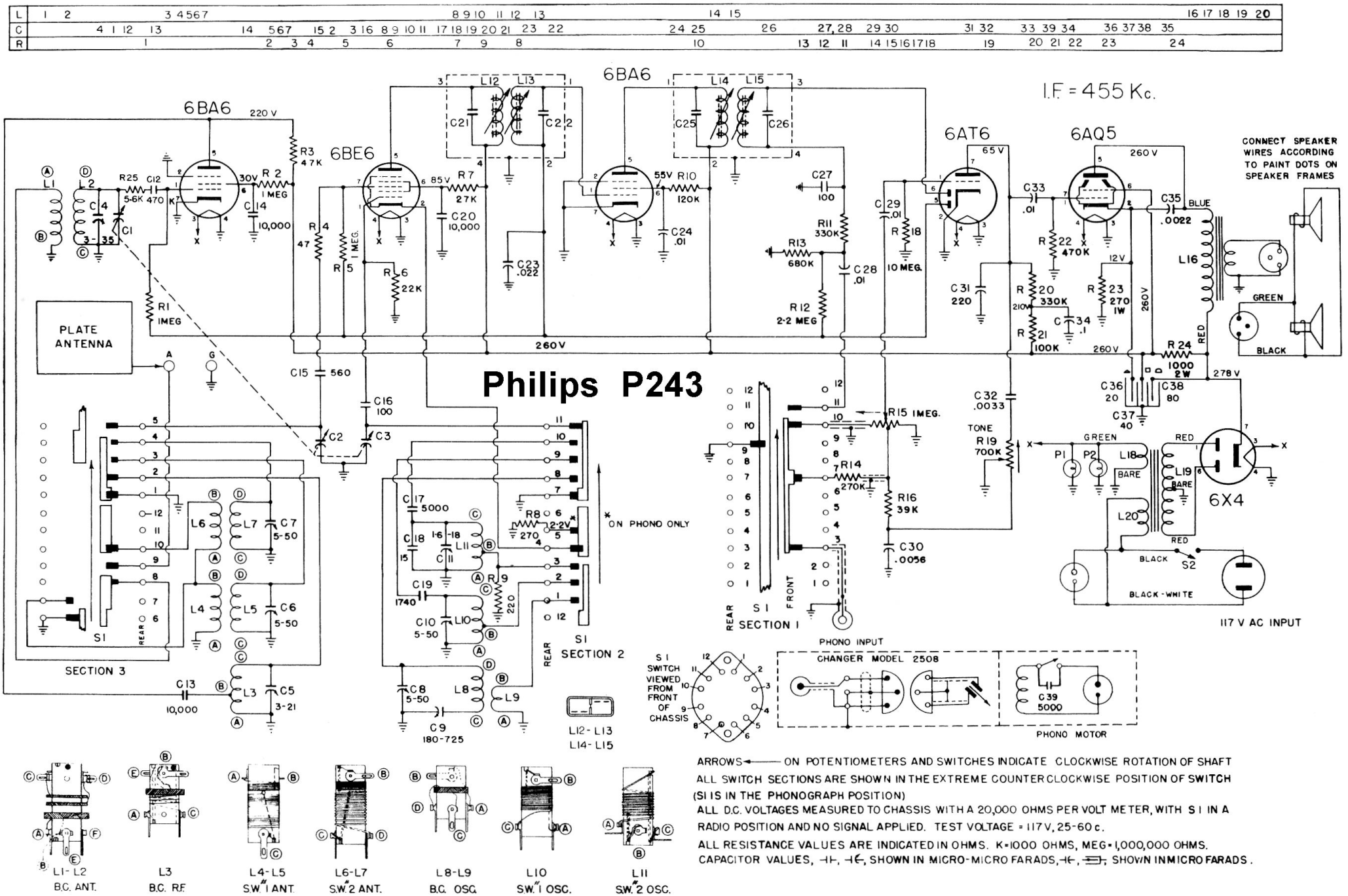


L1- L2
B.C. ANT.

L3
B.C. R.F.

L4- L5
S.W. 1 ANT.

L6- L7
S.W. 2 ANT.

L8- L9
B.C. OSC.

L10
S.W. 1 OSC.

L11
S.W. 2 OSC.

ARROWS ← ON POTENTIOMETERS AND SWITCHES INDICATE CLOCKWISE ROTATION OF SHAFT

ALL SWITCH SECTIONS ARE SHOWN IN THE EXTREME COUNTER CLOCKWISE POSITION OF SWITCH (S1 IS IN THE PHONOGRAPH POSITION)

ALL D.C. VOLTAGES MEASURED TO CHASSIS WITH A 20,000 OHMS PER VOLT METER, WITH S1 IN A RADIO POSITION AND NO SIGNAL APPLIED. TEST VOLTAGE = 117 V, 25-60 c.

ALL RESISTANCE VALUES ARE INDICATED IN OHMS. K=1000 OHMS, MEG=1,000,000 OHMS.

CAPACITOR VALUES, ⊣⊢, ⊣(, SHOWN IN MICRO-MICRO FARADS, ⊣(, ⊣|⊢, SHOWN IN MICRO FARADS.

Philips P243

BAND SWITCH POSITIONS AND TUNING RANGES:

1st	Phonograph Position.
2nd	Standard Broadcast Range from 540 Kc. to 1740 Kc.
3rd	Shortwave Range from 1.73 Mc. to 5.5 Mc.
4th	Shortwave Range from 5.5 Mc. to 18.1 Mc.

INTERMEDIATE FREQUENCY: 455 Kc.

AUDIO OUTPUT: 2.5 Watts undistorted, 5 Watts maximum.

LOUDSPEAKER IMPEDANCE: 4 ohms.

CURRENT DRAIN: .72 ampere.

ALIGNMENT OF RECEIVER

EQUIPMENT REQUIRED:

Signal Generator: Capable of supplying modulated frequencies from 455 Kc. to 18.5 Mc.
Output Indicator: A power output meter or a high resistance A.C. Voltmeter.

ALIGNMENT PROCEDURE AND EQUIPMENT CONNECTIONS:

Signal Generator: Allow a sufficient length of time after the generator has been turned on for it to become thermally stable before making any tests. Always be sure to use the specified capacitor or resistor in series with the signal generator output lead connections, as listed on the alignment procedure chart. Connect the return lead of the signal generator to the ground terminal of the receiver.

Output Indicator: If a power output meter is used adjust it for 4 ohms impedance and connect it across the secondary of the output transformer in place of the speaker voice coil. Do not exceed 500 milliwatts output during alignment. If an A.C. voltmeter is used connect it across the voice coil with the speaker connected and do not exceed 1.4 volts during alignment. As the reading of the test meter increases with alignment, regulate the signal generator attenuator to keep the output below the above limits.

RECEIVER: Turn the volume control to the full on (clockwise) position and the tone control to the clockwise position. With the gang tuning condenser fully open adjust the dial pointer to the alignment mark on high frequency end of the alignment scale on the dial background.

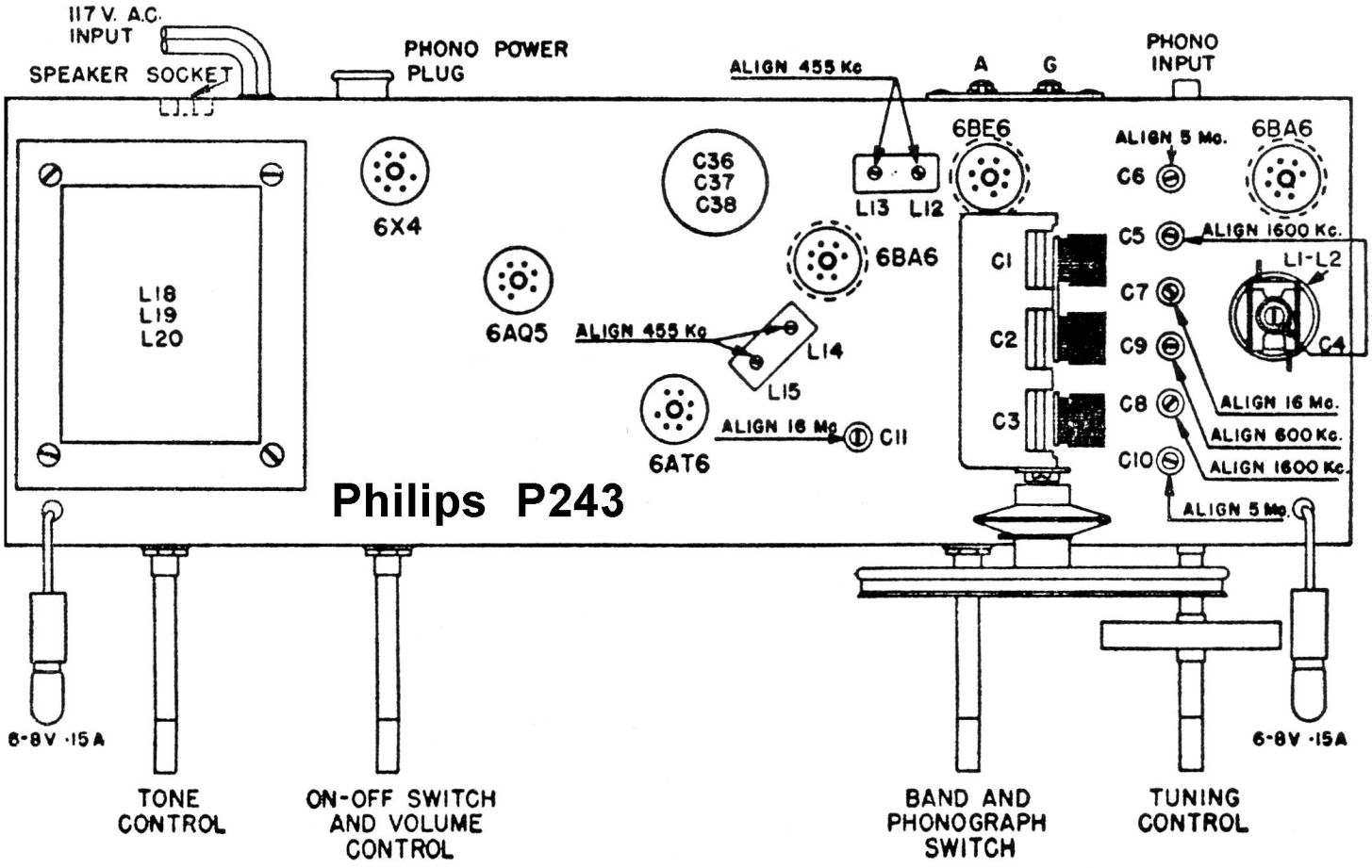
ALIGNMENT PROCEDURE

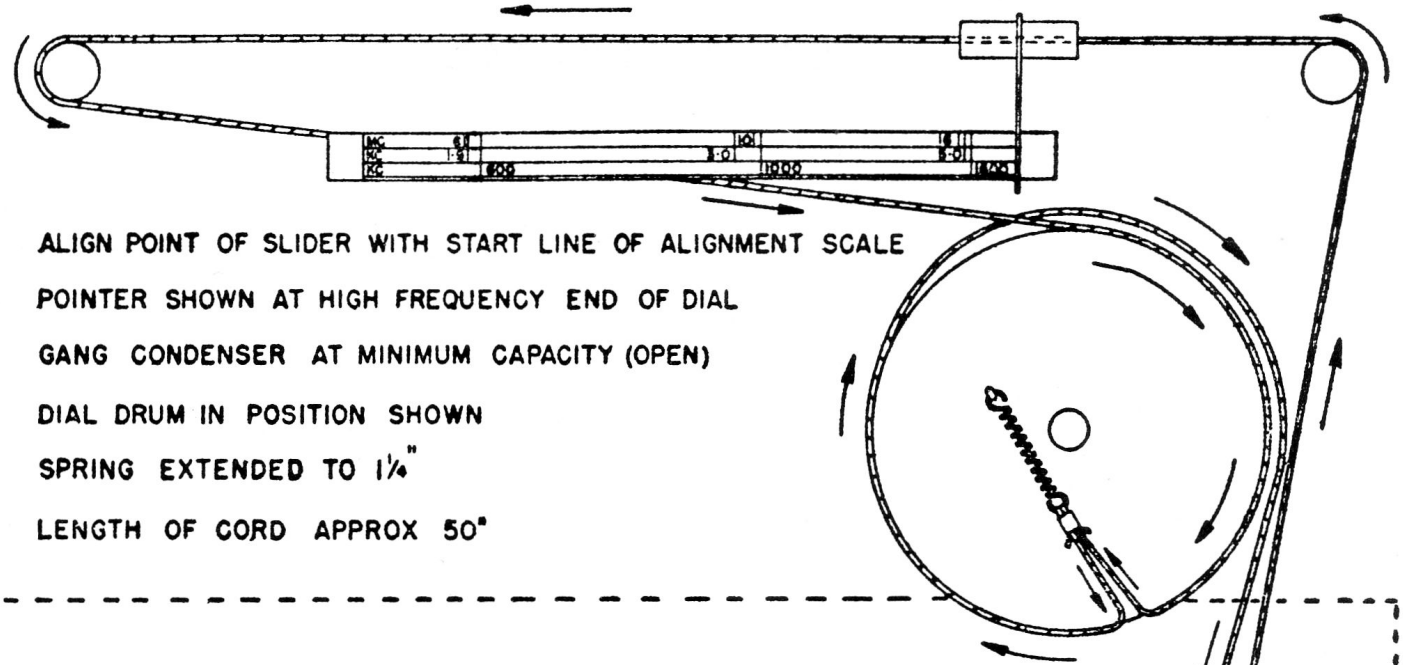
Operation Steps	SIGNAL GENERATOR		RECEIVER			
	Output Connections to Receiver	Frequency	Band Switch	Tuning Capacitor	See Notes	Adjust in stated order for Maximum Output
1	To 6BA6 Control Grid (1) through .05 mf capacitor	455 kc.	Pos. 2	Min.		2nd I.F. Transformer L15, L14
2	To lug 5 of SW1, Section 3 through .05 mf capacitor	455 kc.	Pos. 2	Min.	A	1st I.F. Transformer L13, L12
3	To Antenna Terminal through 100 mmf capacitor*	1600 kc.	Pos. 2	1600 kc.	B	B.C. Osc. Trimmer C8 B.C. R.F. Trimmer C5 B.C. Ant. Trimmer C4
4	To Antenna Terminal through 100 mmf capacitor*	600 kc.	Pos. 2	600 kc.	C	B.C. Osc. Padder C9
5	To Antenna Terminal through 100 mmf capacitor*	5 Mc.	Pos. 3	5 Mc.	D	S.W. Osc. Trimmer C10 S.W. Ant. Trimmer C6
6	To antenna Terminal through 100 mmf capacitor*	16 Mc.	Pos. 4	16 Mc.	D	S.W. Osc. Trimmer C11 S.W. Ant. Trimmer C7

* or a standard dummy antenna with a 200 mmf capacitor in series.

ALIGNMENT NOTES

Note A — After operation 2 has been completed, do not make any further adjustments to L15 and L14.
Note B — The metal base plate of the chassis must be in position for operation 3, 4, 5 and 6.
Note C — After operation 4 has been completed, return to 1600 Kc. and repeat operation 3, then repeat operation 4.
Note D — Unscrew oscillator trimmers approximately 3 turns from tight. Then turn adjustment clockwise until first output peak is obtained. Make adjustments using this peak. Rock the tuning capacitor slowly back and forth while adjusting antenna trimmers.





ALIGN POINT OF SLIDER WITH START LINE OF ALIGNMENT SCALE

POINTER SHOWN AT HIGH FREQUENCY END OF DIAL

GANG CONDENSER AT MINIMUM CAPACITY (OPEN)

DIAL DRUM IN POSITION SHOWN

SPRING EXTENDED TO 1¼"

LENGTH OF CORD APPROX 50"

3½ TURNS AROUND TUNING SHAFT