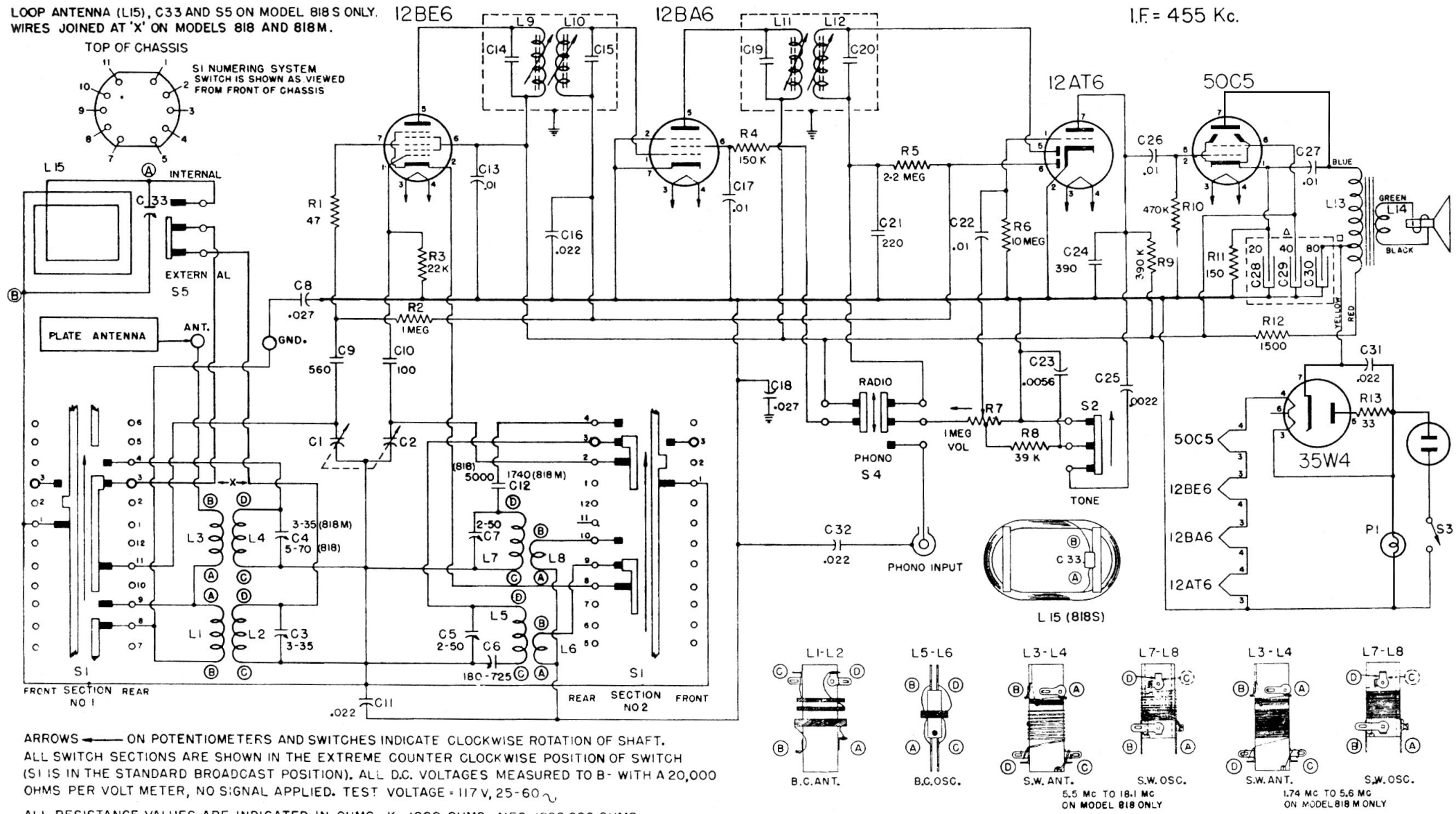


ARROWS ⟵ ON POTENTIOMETERS AND SWITCHES INDICATE CLOCKWISE ROTATION OF SHAFT.
ALL SWITCH SECTIONS ARE SHOWN IN THE EXTREME COUNTER CLOCKWISE POSITION OF SWITCH (S1 IS IN THE STANDARD BROADCAST POSITION). ALL D.C. VOLTAGES MEASURED TO B- WITH A 20,000 OHMS PER VOLT METER, NO SIGNAL APPLIED. TEST VOLTAGE = 117 V, 25-60 ~

ALL RESISTANCE VALUES ARE INDICATED IN OHMS. K = 1000 OHMS, MEG = 1000,000 OHMS..
CAPACITOR VALUES, ⊣⊢, ⊣(, SHOWN IN MICRO-MICRO FARADS, ⊣(, ⊣⊢ SHOWN IN MICRO FARADS.

BAND CHANGE SWITCH

The schematic diagram shows each section of this switch in a straight line form. The short stator contacts are represented as solid squares; the long contacts as solid rectangles; and the rotor contacts as bars. All sections are shown in the extreme counter clockwise standard broadcast (1st) position of the switch. As the switch rotates clockwise the switch contacts move upward to the short wave (2nd) position. The exact location of each stator is shown on a front view drawing of a switch wafer on the schematic diagram.

TO REPLACE LEVERS

1. First determine right and left-hand levers by placing them in the chassis with the shoulder end of lever inserted in slots on chassis. The lever control knob should be pointing down.
2. Turn cabinet upside down.
3. Place levers in knob openings of cabinet with shoulder end inside of cabinet.
4. Replace chassis in cabinet grooves and pass the control shafts through center of levers, also insert the studs of the levers into the slots on the control arm of the chassis.
5. Replace two chassis mounting screws.

EQUIPMENT REQUIRED

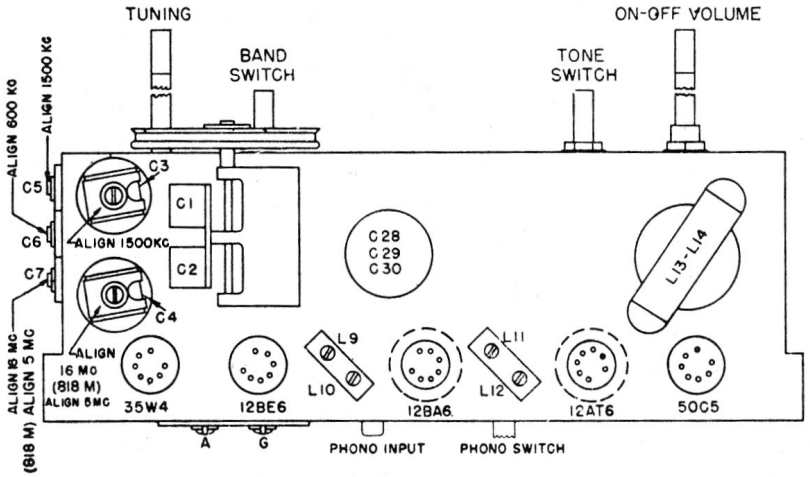
SIGNAL GENERATOR: Capable of supplying modulated frequencies from 450 kc. to 18.5 Mc.
OUTPUT INDICATOR: A power output meter or a high resistance A-C voltmeter.
LINE ISOLATING TRANSFORMER: A 115 volt, 25/60 cycle, 1 to 1 ratio transformer. (Preferred but not essential.)

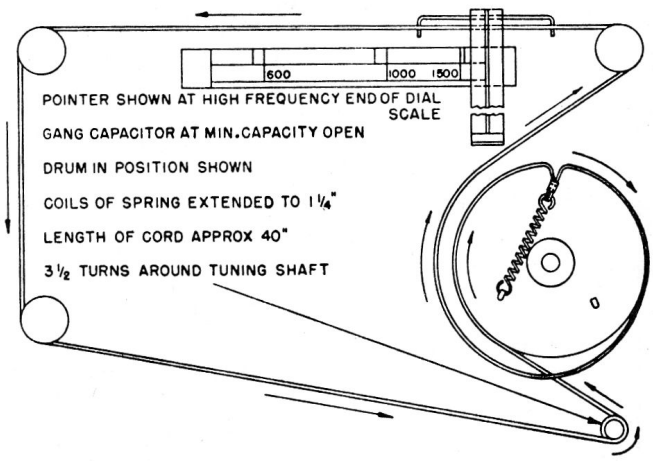
ALIGNMENT PROCEDURE AND EQUIPMENT CONNECTIONS

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 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 B- (center shield of 12BE6) of the receiver through a .05 mf condenser. Do not connect a grounded lead to B-.

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 1.5 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 switch to the center position. With the gang tuning condenser fully **open** adjust the dial pointer to the alignment mark on the high frequency end of the alignment scale.





ALIGNMENT PROCEDURE CHART

OPERATION STEPS	SIGNAL GENERATOR		RECEIVER			
	Output Connections to Receiver	Frequency	Range Switch	Tuning Capacitor	See Notes	Adjust in Stated Order for Maximum Output
1	To 12BA6 Control Grid (1) through .05 mf capacitor	455 kc.	Pos. 1	Min.		2nd I-F Transformer L12, L11
2	To lug "D" of L2 through .05 mf capacitor	455 kc.	Pos. 1	Min.	A	1st I-F Transformer L10, L9
3	To Antenna Terminal through 100 mmf capacitor*	1500 kc.	Pos. 1	1500 kc.	B	B-C Osc. Trimmer C5 B-C Ant. Trimmer C3
4	To Antenna Terminal through 100 mmf capacitor*	600 kc.	Pos. 1	600 kc.	C	B-C Osc. Padder C6
5 (818-818S)	To Antenna Terminal through 100 mmf capacitor*	16 Mc.	Pos. 2	16 Mc.	D	S-W Osc. Trimmer C7 S-W Ant. Trimmer C4
5 (818M)	To Antenna Terminal through 100 mmf capacitor*	5 Mc.	Pos. 2	5 Mc.	D	S-W Osc. Trimmer C7 S-W Ant. Trimmer C4
6 (818S)	To stator of C1 through 5 mmf capacitor	1500 kc.	Pos. 1	1500 kc.	E	B-C Loop Trimmer C33

* 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 L12 and L11.

NOTE B: Antenna switch to be in the anti-clockwise (plate antenna) position for operation 3, 4 and 5.

NOTE C: After operation 4 has been completed, return to 1500 kc. and repeat operation 3, then repeat operation 4.

NOTE D: Unscrew oscillator trimmer approximately 3 turns from tight. Then turn adjustment clockwise until the first output peak is obtained. Make adjustments using this peak. Rock the tuning capacitor back and forth while adjusting antenna trimmer.

NOTE E: Antenna switch to be in the clockwise (loop antenna) position. Upon completion of operation 6 disconnect generator leads from receiver. Radiate a 1500 kc. signal from generator and with receiver assembled in cabinet, realign C33 for maximum signal.