

## ALIGNMENT PROCEDURE

Volume Control—Maximum All Adjustments.

Connect Radio Chassis to Ground Post of Signal Generator with a Short Heavy Lead.

Allow Chassis and Signal Generator to "Heat Up" for several minutes.

The following equipment is required for aligning:

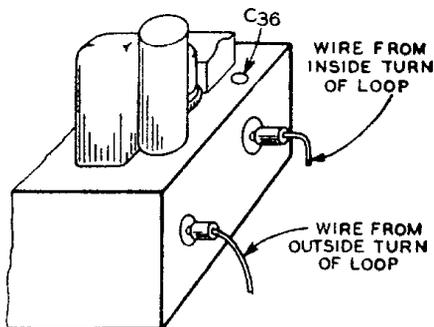
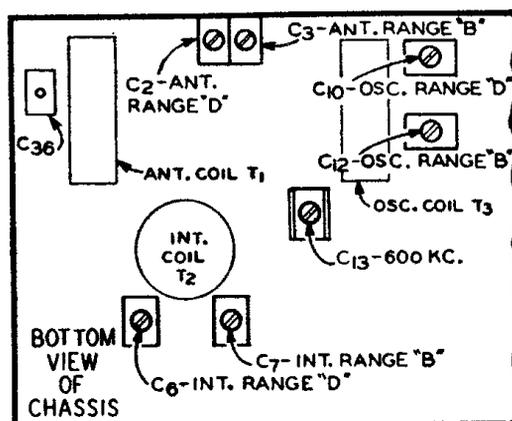
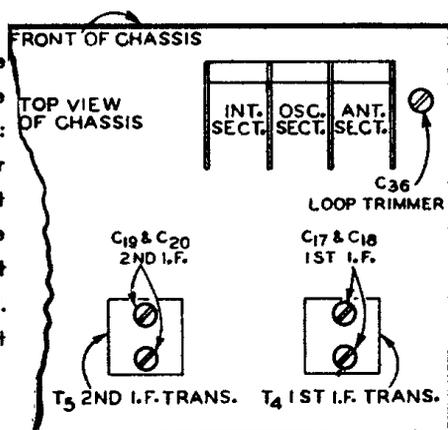
An All Wave Signal Generator which will provide an accurately calibrated signal at the test frequencies as listed.

Output Indicating Meter—Non-Metallic Screwdriver.

Dummy Antennas—.1 mf., 200 mmf., and 400 ohms.

SIGNAL GENERATOR FREQUENCY SETTING	CONNECTION AT RADIO	DUMMY ANTENNA	BAND SWITCH SETTING	CONDENSER SETTING	ADJUST TRIMMERS TO MAXIMUM
<b>I. F.</b>					
456 KC	Grid of 1st Det.	.1 mf.	B Range	Turn Rotor to Full Open	1st I.F. (C17) & (C18) 2nd I.F. (C19) & (C20)
<b>RANGE B</b>					
1730 KC	Antenna Lead	200 mmf.	B Range Ext. Ant.	Turn Rotor to Full Open	Oscillator Range B (C12)
1500 KC	Antenna Lead	200 mmf.	B Range Ext. Ant.	Turn Rotor to Max. Output	Ant. Range B (C3) Int. Range B (C7)
600 KC	Antenna Lead	200 mmf.	B Range Ext. Ant.	Turn Rotor to Max. Output	600 KC (C13) Rock Rotor—See Note A
<b>NGE D</b>					
18,300 KC	Antenna Lead	400 Ohm	D Range	Turn Rotor to Full Open	Oscillator Range D (C10)
18,300 KC	Antenna Lead	400 Ohm	D Range	Keep Rotor at Full Open Position	Ant. Range D (C2) Int. Range D (C6) Rock Rotor—See Note A
<b>LOOP RANGE B</b>					
1500 KC See Note B	None See Note B		Loop	Turn Rotor to Max. Output	See Note C Loop Trimmer (C36)

**CAUTION**—When aligning the short wave band, be sure NOT to adjust at the image frequency. This can be checked as follows: Let us say the signal generator is set for 15,000 KC. The signal will then be heard at 15,000 on the dial of the radio. The image signal, which is much weaker, will be heard at 15,000 less 912 KC, or 14,088 KC on the dial. It may be necessary to increase the input signal to hear the image.



LOOP CONNECTIONS

Attenuate the signal from the signal generator to prevent the leveling-off action of the AVC. After each range is completed, repeat the procedure as a final check.

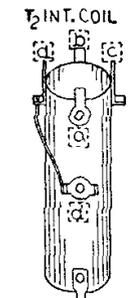
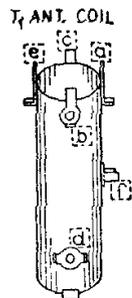
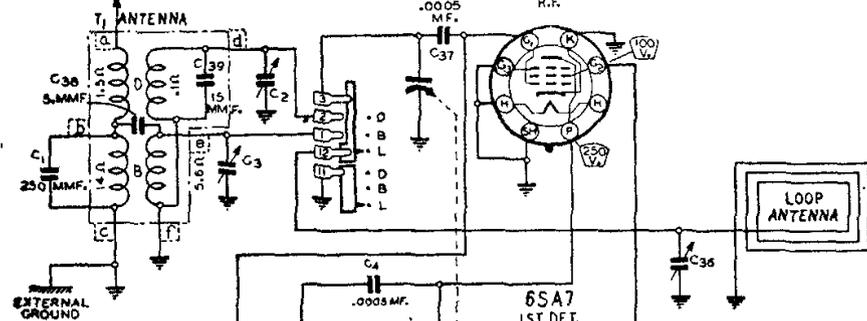
**NOTE A**—Turn the rotor back and forth and adjust the trimmer until the peak of greatest intensity is obtained.

**NOTE B**—Reinstall set in cabinet. Connect a loop approximately one foot in diameter across the antenna and ground posts of the signal generator. Place signal generator so that this loop is between 3 and 10 feet from loop in cabinet.

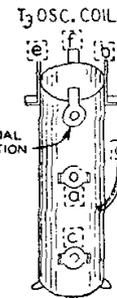
**NOTE C (CONSOLE MODELS)**—Turn knob of loop until output is maximum.

**CALIBRATION**—Chassis should be in cabinet. If it is necessary to recalibrate the radio, loosen the set screw on the dial hub near the volume control drum. Tune in a signal of known frequency. Hold the tuning control drum stationary and at the same time turn the dial drum the necessary amount in the required direction. If the radio detunes as the dial drum is turned, loosen the set screw a slight additional amount and recalibrate. Retighten the set screw.

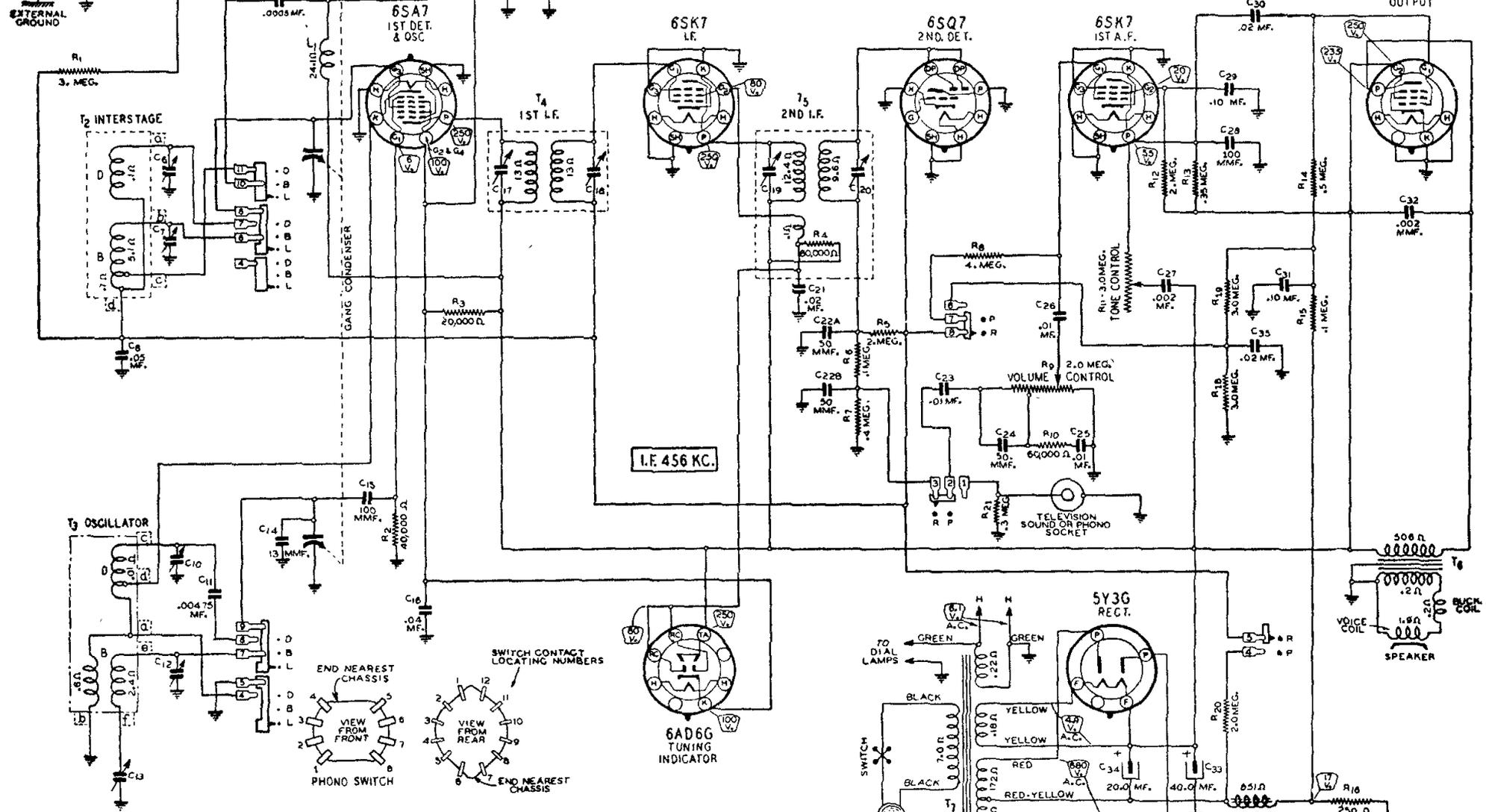
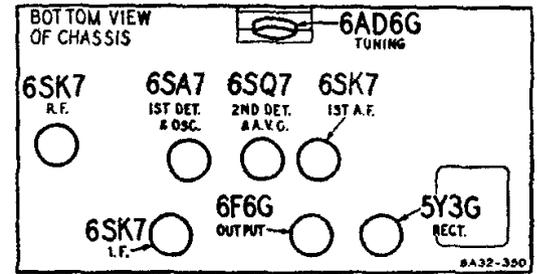
TO EXTERNAL OR COUNTERPOISE  
FOR ANTENNA



COIL TERMINALS



8A38-486



RANGE 'B' 528-1730 KILOCYCLES  
RANGE 'O' 5.75-18.3 MEGACYCLES

Montgomery Ward Model 93WG-800