



# ROGERS MAJESTIC R190



POINTER AT LOW FREQUENCY END OF DIAL

DIAL DRUM IN POSITION SHOWN

COILS OF SPRINGS EXTENDED TO 1½"

GANG CONDENSER AT MAXIMUM CAPACITY (CLOSED)

3 TURNS AROUND TUNING SHAFT

ON-OFF SWITCH  
VOLUME CONTROL

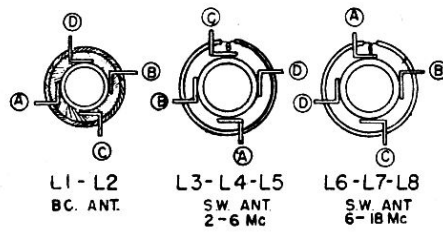
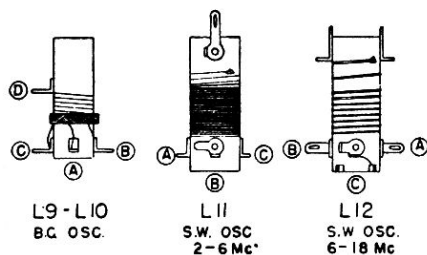
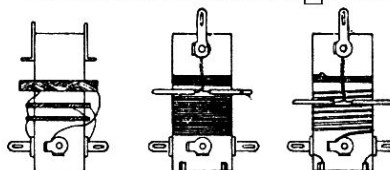
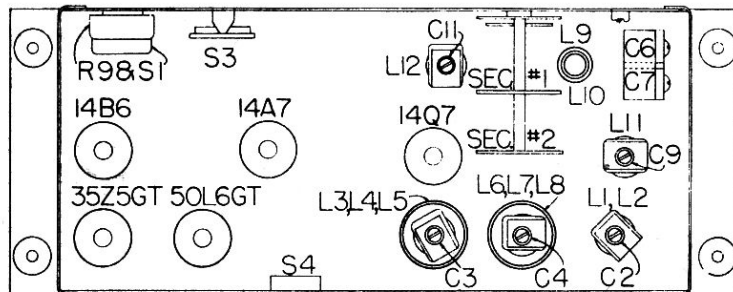
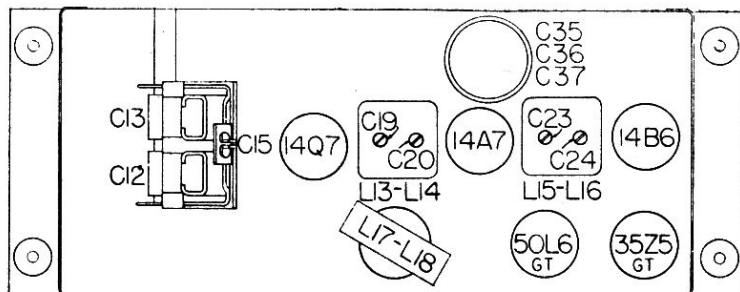
tone SWITCH

WAVE RANGE  
SWITCH

TUNING  
CONTROL

## ADJUSTMENT OF DIAL POINTER

1. Set the tuning condenser in the fully closed position.
2. Loosen the screw securing the cord to the top drum.
3. Hold the tuning condenser closed and adjust the top drum until the screw is in the position shown on the diagram, then tighten the screw.
4. Loosen the Allen head set screw securing the top drum to the pointer bushing.
5. Hold the top drum in the above position (3) and rotate the rear end of the pointer and bushing until the center of the pointer is in line with the alignment mark at the low frequency end of the dial.
6. Tighten the Allen head set screw.



# ALIGNMENT OF RECEIVER

## EQUIPMENT REQUIRED

**Signal Generator:** Capable of supplying modulated frequencies from 450 kc. to 20 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.

## 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 output lead connections as listed in the alignment procedure chart. Connect the return lead of the signal generator to the B— lead of the receiver through a .05 mf. condenser. The B— connection is to be made to Terminal No. 5 of the 14Q7 tube socket. **Do not connect a grounded lead to B— unless a line isolating transformer is used.**

**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 (speaker connected) and do not exceed 1.3 volts during alignment. As the reading on the test meter increases with alignment, regulate the signal generator attenuator to keep the output within the limits specified above.

**Receiver:** With the Radio-Phono Switch in the radio position turn the volume control to the maximum (full clockwise) position. Set the tone switch to position No. 2 with the gang tuning condenser fully closed, adjust the dial pointer to the alignment mark at the low frequency end of the dial scale.

## ALIGNMENT PROCEDURE

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 14A7 control grid (6) through .05 mfd. capacitor	455 kc.	Pos. 1	Min.		2nd I.F. Trimmers C24, C23
2	To stator of C12 through .05 mfd. capacitor	455 kc.	Pos. 1	Min.	A	1st I.F. Trimmers C20, C19
3	To antenna contact through 100 mmf. capacitor*	1600 kc.	Pos. 1	1600 kc.		B.C. Osc. Trimmer C7 B.C. Ant. Trimmer C2
4	To antenna contact through 100 mmf. capacitor*	600 kc.	Pos. 1	600 kc.	B	B.C. Osc. Padder C6
5	To antenna contact through 400 ohms resistor*	5 Mc.	Pos. 2	5 Mc.	C	S.W. Osc. Trimmer C9 S.W. Ant. Trimmer C3
6	To antenna contact through 400 ohms resistor*	2.4 Mc.	Pos. 2	2.4 Mc. approx.	D	Loop L5 on S.W. Ant. Coil (adjust loop position)
7	To antenna contact through 400 ohms resistor*	17 Mc.	Pos. 3	17 Mc.	C	S.W. Osc. Trimmer C11 S.W. Ant. Trimmer C4
8	To antenna contact through 400 ohms resistor	6 Mc.	Pos. 3	6 Mc. approx.	D	Loop L8 on S.W. Ant. Coil (adjust loop position)

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

## ALIGNMENT NOTES

NOTE A—After completing operation 2, leave signal generator on C12 and carefully readjust C24 and C23.

NOTE B—After completing operation, return to 1600 kc. and repeat operation 3, then repeat operation 4.

NOTE C—Unscrew Oscillator trimmer 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 trimmer.

NOTE D—Adjust position of loop with non-metallic rod. Return to previous operation and carefully adjust antenna trimmer.