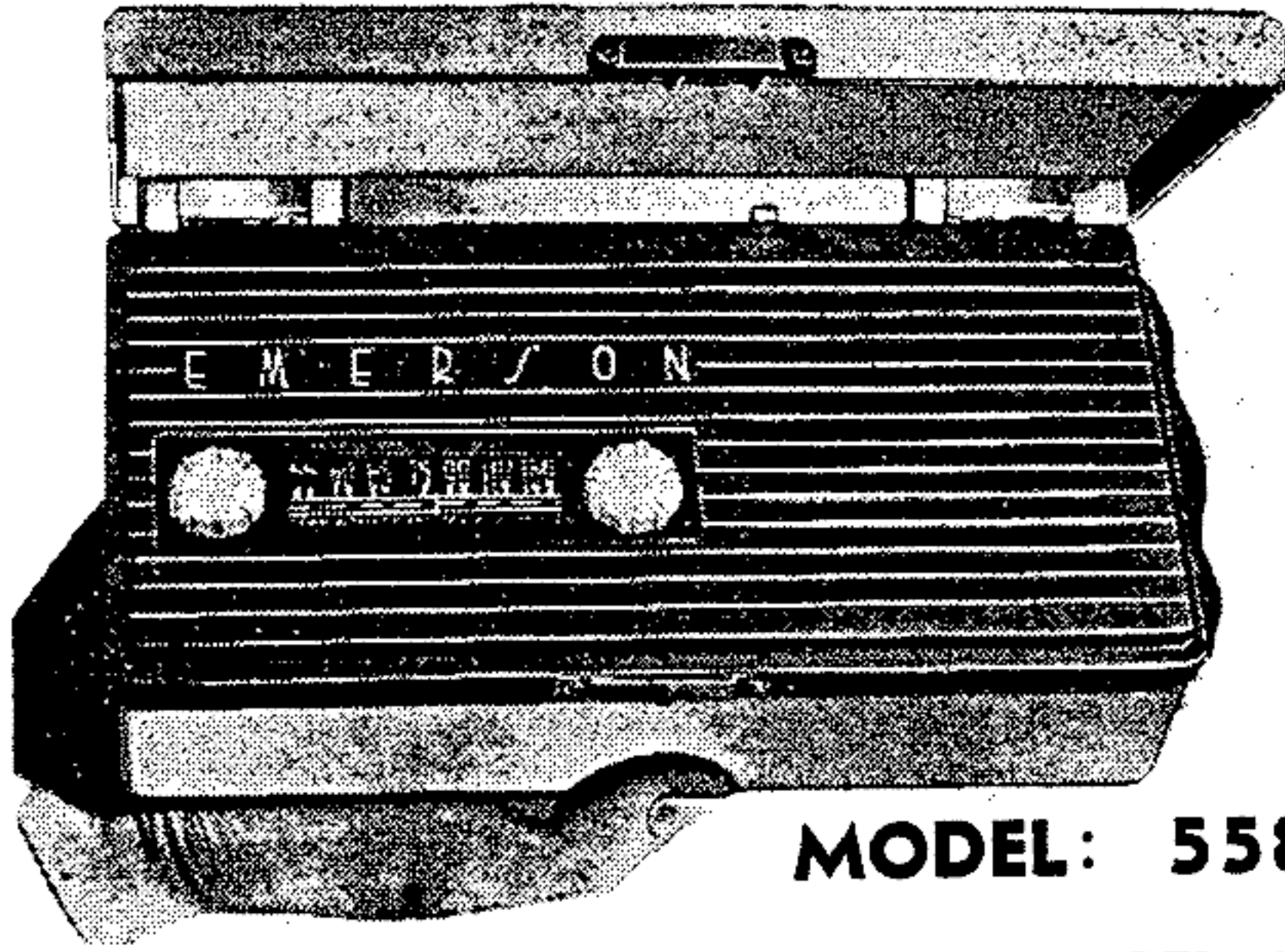


# MANUAL OF 1948 MOST-OFTEN-NEEDED RADIO DIAGRAMS



**MODEL: 558**

CHASSIS MODEL: 120058

Schematic Symbol	Part No.	DESCRIPTION
C1, C2	900022	Two-gang variable condenser
*C3, C4		Trimmers, part of variable condenser
*C5, C6		Trimmers, part of first i-f transformer
*C7, C8		Trimmers, part of second i-f transformer
C9, C14	928013	100 mmfd., ceramic condenser
C10, C13	920495	0.001 mfd., 200 volt condenser
C11	920496	0.005 mfd., 200 volt condenser
C12	928104	212 mmfd., ceramic condenser
C15	920494	0.05 mfd., 200 volt condenser
C16	920120	0.02 mfd., 100 volt condenser
C17	925063	16 mfd., 100 volt electrolytic condenser
C18	920485	0.01 mfd., 100 volt condenser
L1	700008	Loop antenna
R1	350970	100,000 ohms, 1/2 watt resistor
R2	340470	820 ohms, 1/2 watt resistor
R3	390025	1 meg., volume control
R4	351450	10 meg., 1/2 watt resistor
R5, R9	351330	3.3 meg., 1/2 watt resistor
R6	351130	470,000 ohms, 1/2 watt resistor
R7	351250	1.5 meg., 1/2 watt resistor
R8	340730	10,000 ohms, 1/2 watt resistor
SP1	180029	Speaker, 3-inch P.M.
T1	720028	First i-f transformer, or
T1	720034	First i-f transformer
T2	720028	Second i-f transformer, or
T2	720035	Second i-f transformer
T3	734011	Output transformer
T4	716011	Oscillator coil

The first i-f transformer is located next to the 1R5 tube. The trimmers are accessible through holes in the top of the can.

The second i-f transformer is located between the 1T4 and 1S5 tubes. The single trimming core screw extends from the end of the can. Trimmers are accessible through holes in the top of the can.

The oscillator coil is located behind the on-off switch. The trimmer for the oscillator is located on the smaller variable condenser section. The 600 kc oscillator core adjustment is the brass screw protruding from the end of the oscillator coil.

## I-f Alignment

1. Rotate the variable condenser to the minimum capacity position.
2. Feed 455 kc to the grid (pin 6) of the 1R5 tube through a 0.01 mfd. condenser.
3. Adjust the four i-f trimmer screws for maximum response. (Clip the test signal lead to the stator of the larger capacity section of the variable condenser.)

## R-f Alignment

1. Connect the test oscillator to a coil composed of three or four turns of wire wound in a circle approximately 12 inches in diameter. This coil should be placed parallel to and in line with the receiver loop at a distance of approximately 15 to 20 inches.
2. Radiate a signal at 1620 kc, rotate the variable condenser to minimum capacity, and adjust the oscillator trimmer, on the smaller section of the variable condenser, for maximum response.
3. Radiate a signal at 1420 kc, tune in the 1420 kc signal, and adjust the antenna trimmer, on the larger section of the variable condenser, for maximum response.
4. Radiate a signal at 600 kc, set the dial indicator to 60, and adjust the oscillator coil core trimmer while rocking the variable condenser for maximum response.
5. Return to 1620 kc and check alignment. If readjustment is necessary, repeat Steps 2 to 4 until no further improvement is noted.

