

# Emerson Radio

## I-f and Wave-trap Alignment

Swing the variable condenser to the minimum capacity position. Feed 455 kc to the grid of the 12SA7 tube through a .01 mf condenser and adjust the four i-f trimmers for maximum response.

Feed 455 kc to the external antenna lead and adjust the wave-trap for minimum response.

Note: The grid of the 12SA7 tube is the No. 8 pin.

|                   |   |
|-------------------|---|
| R1, R7, R18, R19  | 1 megohm ¼ watt carbon resistor.....  |
| R2                | 20,000 ohm ¼ watt carbon resistor.....  |
| R3                | 140 ohm ½ watt wire wound resistor  |
| R4                | 3 megohm ¼ watt carbon resistor.....  |
| R5                | Volume control 2.5 meg.....   |
| R6                | 10 megohm ¼ watt carbon resistor.....   |
| R8, R16, R17, R20 | 500,000 ohm ¼ watt carbon resistor..  |
| R9, R10, R24      | 50,000 ohm ¼ watt carbon resistor.....  |
| R11               | 175 ohm 1 watt carbon resistor.....   |
| R12               | 750 ohm 1 watt wire-wound resistor.   |
| R13               | 10,000 ohm ¼ watt carbon resistor....   |
| R14               | 25,000 ohm ¼ watt carbon resistor....   |
| R15, R23          | 100,000 ohm ¼ watt carbon resistor.   |
| R21, R22          | 100,000 ohm ¼ watt carbon resistor.   |
| R25               | 30,000 ohm ¼ watt carbon resistor....   |
| R26, R27, R28     | Ballast resistor: R26—233 ohm, 6 watt; R27—190 ohm, 5 watt; R28—250 ohm, 3 watt |
| C1, C2            | Two-gang variable condenser.....  |
| C3, C16           | 0.002 mf, 600 volt tubular condenser..  |
| C4                | 0.0004 mf, 600 volt tubular condenser..   |
| C5                | Trimmer, part of loop assembly.   |
| C6, C7, C8, C9    | Trimmers, part of variable condenser.   |
| C11               | Trimmer, part of variable condenser.  |
| C10               | 0.1 mf, 200 volt tubular condenser.....   |
| C12               | 0.0006 mf, 600 volt tubular condenser.  |
| C13               | 0.0015 mf, 600 volt tubular condenser   |
| C14               | 0.05 mf, 400 volt tubular condenser....   |
| C15               | 0.0002 mf, 600 volt tubular condenser   |
| C17               | 0.02 mf, 400 volt tubular condenser....   |
| C18               | 0.00011 mf, mica condenser.....   |
| C19               | 0.005 mf, 400 volt tubular condenser  |
| C20, C21, C22     | Multiple dry electrolytic condenser: 150 volt; C20—20 mf; C21—80 mf; C22—40 mf  |
| C23               | 0.00025 mf, mica condenser.....   |
| C24, C27, C30     | 0.05 mf, 200 volt tubular condenser..   |
| C31, C32          | 0.000026 mf, mica condenser.....  |
| C25               | 0.001 mf, 600 volt tubular condenser  |
| C26               | 0.00022 mf, mica condenser.....   |
| C28               | 0.00022 mf, mica condenser.....   |
| C29               | 0.0003 mf, mica condenser.....  |

## VOLTAGE ANALYSIS

| Tube   | Plate | Screen | Cathode |
|--------|-------|--------|---------|
| 12SA7  | 88    | 88     | 0       |
| 12SK7  | 48    | 46     | 0       |
| 12SF7  | 89    | 89     | 0       |
| 12SJ7  | 8     | 14     | —       |
| 50L6GT | 108   | 89     | 5.1     |

**MODEL: GH-437, GH-447**  
**CHASSIS MODEL: GH**  
**MODEL: GH2-447**  
**CHASSIS MODEL: GH2**

