

MANUAL OF 1942 MOST POPULAR SERVICE DIAGRAMS

Emerson Radio

MODELS: EC-296, EC-301, EC-314, EC-315, EC-327, EC-336, EC-347, EC-353, EC-366, EC-242, EC-376 and EC-425

R1	20,000 ohm ¼ watt carbon resistor
R2, R6	15 megohm ¼ watt carbon resistor
R3	140 ohm ½ watt wire-wound resistor
R4	3 megohm ¼ watt carbon resistor
R5	Volume control .5 megohm
R7, R8	500,000 ohm ¼ watt carbon resistor
R11	200,000 ohm ¼ watt carbon resistor
C1, C2	Two-gang variable condenser
C3, C16	0.002 mf, 600 volt tubular condenser
C4, C15	0.0002 mf, 600 volt tubular condenser
C5, C11	Trimmers, part of variable condenser
C6, C7, C8, C9	Trimmers, part of i-f transformers
C10	0.05 mf, 200 volt tubular condenser
C14	0.05 mf, 400 volt tubular condenser
C17, C18	0.02 mf, 400 volt tubular condenser
C26	0.2 mf, 200 volt tubular condenser.

I-f 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.

Note: The grid of the 12SA7 tube is connected to the stator lug of the rear variable condenser section. Connection may be made with a test clip.

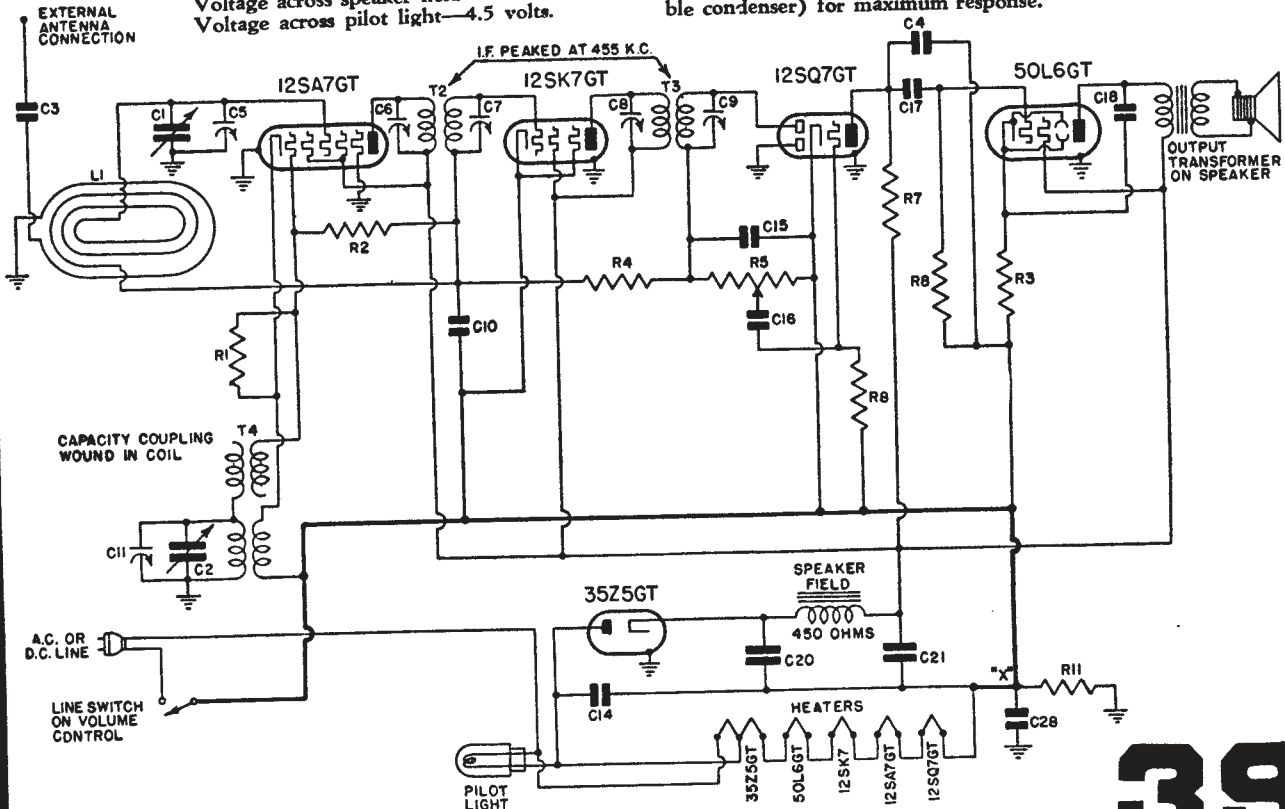
VOLTAGE ANALYSIS

Tube	Plate	Screen	Cathode
12SA7	88	88	0
12SK7	88	88	0
12SQ7	30	—	0
50L6	82	88	5.6

Voltage at 35Z5 cathode—120 volts.
Voltage across speaker field—32 volts.
Voltage across pilot light—4.5 volts.

R-f Alignment

Set the dial pointer at 140. Set the signal generator at 1400 kc and feed its output into a loop of wire about 12 inches in diameter. Hold this radiating loop about 12 inches from and parallel to the receiver loop antenna. Advance the output of the signal generator until deflection is obtained on the output meter. Adjust first the oscillator trimmer (on front section of variable condenser) then the antenna trimmer (on rear section of variable condenser) for maximum response.



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