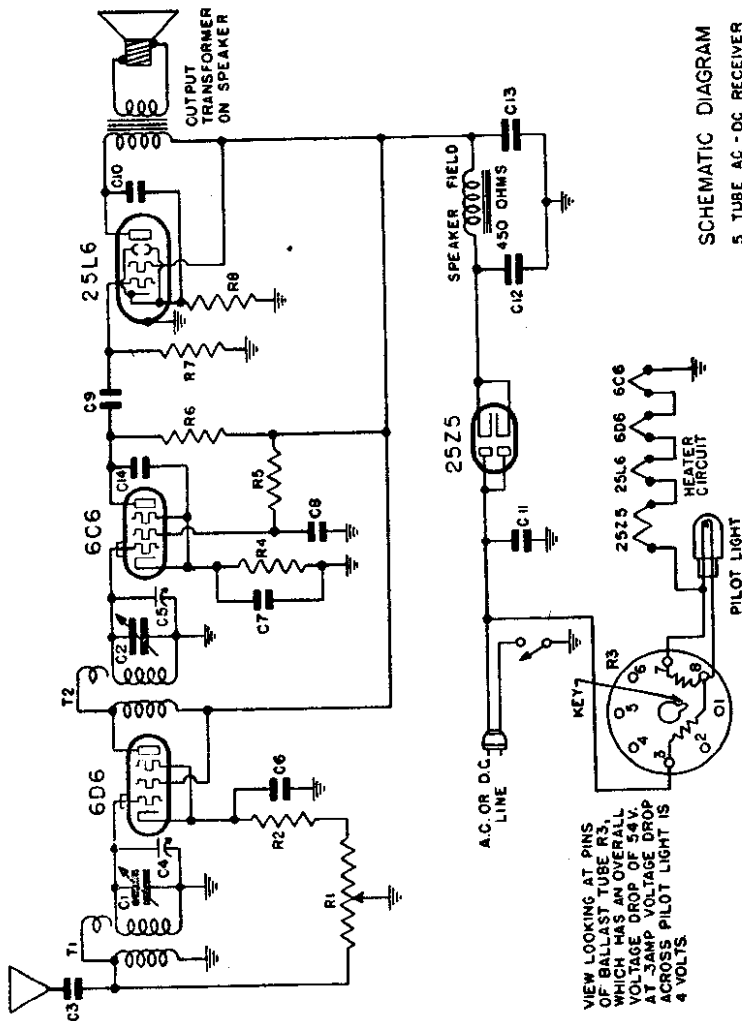


Schematic, Voltage Alignment, Parts

EMERSON RADIO & PHONOGRAPH CORP.

MODELS BA199, BA201 Chassis BA



SCHEMATIC DIAGRAM
5 TUBE A.C. RECEIVER

VOLTAGE ANALYSIS

Readings should be taken with a 1000 ohms-per-volt meter. Voltages listed below are from point indicated to ground (chassis) with volume control turned on full and no signal. The line voltage for these readings was 117.5 volts, 60 cycles, a.c.

Tube	Plate	Screen	Cathode	Fil.
6D6	100	100	2.3	6.3
6C6	30	15	2.1	6.3
25L6G	93	100	6	25.0

Voltage across speaker field—26 volts.
25Z5 cathode to ground—126 volts.

ALIGNMENT PROCEDURE

An oscillator with a frequency of 1400 kc. is required. Use as weak a test signal as possible. An output meter should be used across the voice coil or output transformer for observing maximum response. Rotate variable condenser to the maximum capacity position and set the pointer at the next calibration mark beyond 55. Then rotate the variable condenser until the pointer is at 140 and feed 1400 kc to the antenna through a .0001 mf mica condenser and adjust both trimmer condensers on the variable condenser for maximum response.

The tube complement is as follows:
 1—6D6, r-f amplifier.
 1—6C6, biased detector.
 1—25L6G, beam power output.
 1—25Z5, dual half-wave rectifier.
 1—L55BG, ballast tube.

Voltage rating 105 to 125 volts, a.c. or d.c.
 Power consumption 45 watts
 Frequency range 540 to 1725 kc.

*ITEM	PART NO.	DESCRIPTION	PRICE
T1	5AT-422	Broadcast antenna coil.....	.50
T2	5AT-423	Broadcast detector coil.....	.50
R1	2VR-219D	Volume control—75000 ohms, with line switch.....	1.00
R2	3CR-294	240 ohm, 1/2 watt wire-wound resistor.....	.16
R3	L55-BG	Plug-in ballast tube.....	.55
R4	OR-73U	25000 ohm, 1/4 watt carbon resistor.....	.16
R5	HR-42U	2 megohm, 1/4 watt carbon resistor.....	.16
R6, R7	KR-56U	500,000 ohm, 1/4 watt carbon resistor.....	.16
R8	3QR-297	110 ohm, 1/2 watt wire-wound resistor.....	.16
C1, C2	5AC-376	Two-gang variable condenser.....	2.40
C3	NNC-199	.001 mf, 600 volt tubular condenser.....	.30
†C4, C5		Trimmers, part of variable condenser.....	
C6, C8	AC-6	.1 mf, 200 volt tubular condenser.....	.20
C7	BC-13	.25 mf, 200 volt tubular condenser.....	.20
C9	LC-65	.02 mf, 400 volt tubular condenser.....	.20
C10	LC-64	.05 mf, 400 volt tubular condenser.....	.20
C11	EEC-132	.1 mf, 400 volt tubular condenser.....	.20
C12, C13	4DC-345A	Dual-16 mf, 100 volt dry electrolytic condenser.....	1.20
C14	5AC-384	.0002 mf, 600 volt tubular condenser.....	.20
	3TS-312	5" dynamic speaker.....	4.20
	XL-9	Pilot light, 6.3 volt, 25 amp., Mazda No. 46.....	.20
	5AZ-745	Brass condenser pulley.....	.05
	5AZ-746	Brass condenser pulley.....	.05
	5AZ-747	Dial pointer.....	.05
	3RZ-484	Drive cord.....	.05
	3RZ-519	Drive cord spring.....	.05
	5AZ-792	Dial face.....	.05
	5AZ-779A	Dial crystal for Model BA-199.....	.05
	5AZ-794	Dial crystal for Model BA-201.....	.10

List Price as Effective as of Feb. 15, 1938

PRICES SUBJECT TO CHANGE WITHOUT NOTICE