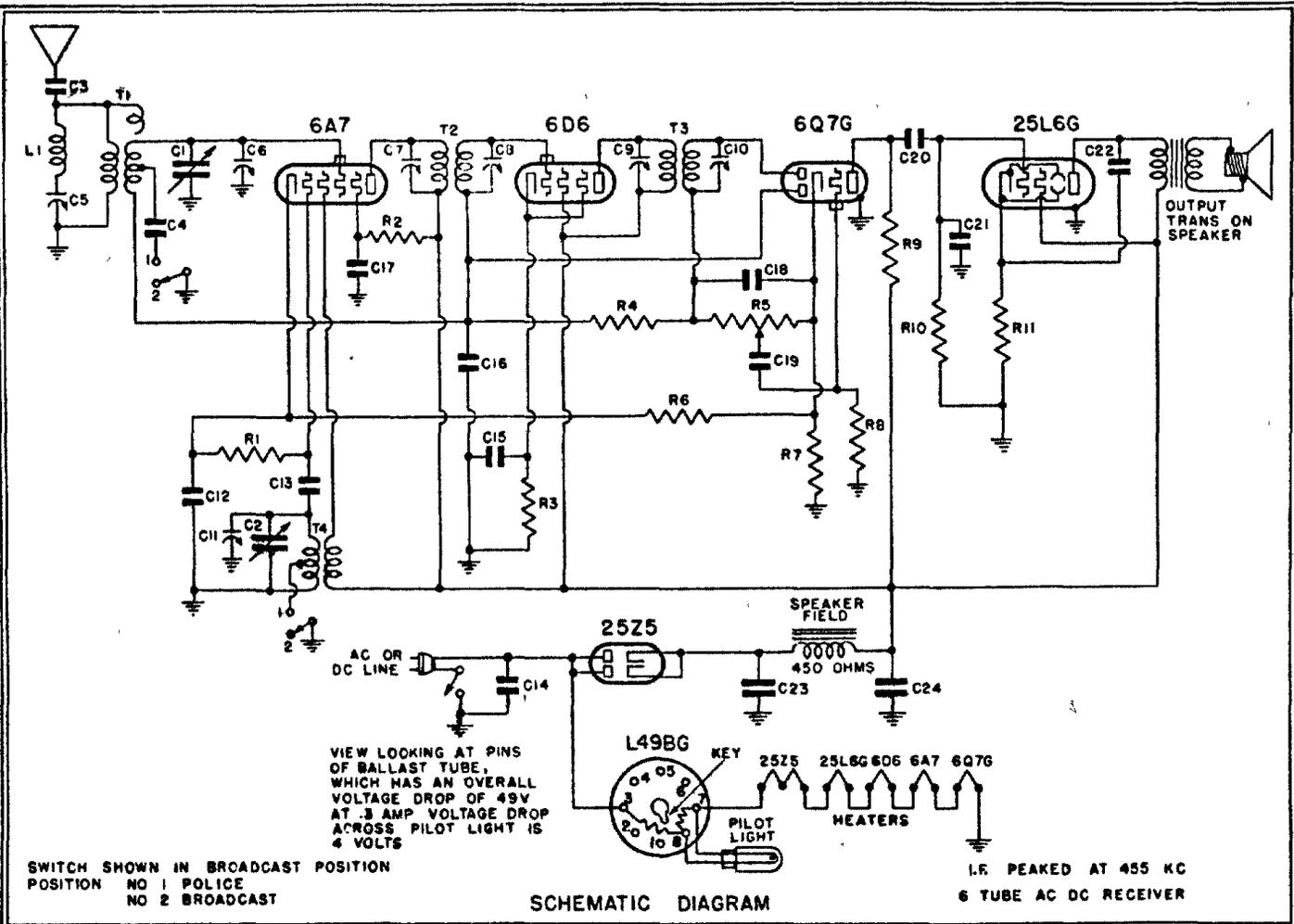


EMERSON RADIO & PHONOGRAPH CORP.

MODELS BJ200, BJ210, 5J214

Voltage rating 105 to 125 volts, a.c. or d.c.
 Power consumption 43 watts.
 Frequency ranges 540 to 1580 kc and 1580 to 4200 kc.



VIEW LOOKING AT PINS OF BALLAST TUBE, WHICH HAS AN OVERALL VOLTAGE DROP OF 49V AT .3 AMP VOLTAGE DROP ACROSS PILOT LIGHT IS 4 VOLTS

SWITCH SHOWN IN BROADCAST POSITION
 POSITION NO 1 POLICE
 POSITION NO 2 BROADCAST

SCHEMATIC DIAGRAM

I.F. PEAKED AT 455 KC

Readings should be taken with a 1000 ohms-per-volt meter. Voltages listed below are from point indicated to ground (chassis) with the volume control turned on full and no signal. Line voltage for these readings was 117.5 volts, 60 cycles, a.c. All readings except cathodes and heaters were taken on 250 volt scale.

VOLTAGE ANALYSIS	Tube	Plate	Screen	Cathode	Osc. Plate	Fil.
	6A7	100	50	2.8	100	6.8
	6D6	100	100	3.5	—	6.8
	6Q7G	48	—	1.2	—	6.8
	25L6G	92	100	6.6	—	25.0

Voltage at 25Z5 cathode—180 volts.
 Voltage across speaker field—28 volts.
 Voltage drop across ballast tube (pins Nos. 3, 7)—49 volts.
 Voltage drop across pilot light section of ballast tube (pins Nos. 8 and 7)—4 volts.

GENERAL NOTES

- If replacements are made or the wiring disturbed in the r-f portion of the circuit, the receiver should be carefully re-aligned.
- One side of the power line is directly grounded to the chassis base. Under no circumstances, therefore, should a ground wire be permitted to come in contact with any metal part of the receiver.
- The filament dropping resistor (L-49BG on schematic) is in a special tube at the rear of the chassis. This tube will become quite hot under normal operating conditions. For voltage drop specifications, see below.
- When operating the receiver on d.c. it may be necessary to reverse the line plug to obtain the correct polarity.
- The two i-f transformers are held to the chassis by snap-on fasteners. To remove an i-f, unsolder all its leads under the chassis, pinch together the prongs of the snap-on fastener and lift the i-f can from the chassis.
- The color coding of the i-f transformer leads is as follows:
 Grid—green
 Grid return—black
 Plate—blue
 B plus—red
- The receiver is shipped with an attached antenna wire. In some locations near powerful local stations the addition of a very large antenna may be detrimental to reception because of the resulting interference. The Emerson Flexible Mast Antenna, Model W-82, has been especially designed for Emerson receivers, featuring compactness and portability while at the same time retaining a high efficiency from the standpoint of performance. Since it functions as an outside antenna the Flexible Mast will substantially improve the receiver performance. Where the Flexible Mast is installed permanently, it is urgently recommended that the receiver antenna wire be cut. Leave just enough of this wire to reach from the receiver to the window strip connector. Instructions for the installation of this compact and efficient outside antenna are supplied with each kit.
- The wave-trap has been adjusted for maximum signal rejection at 455 kc. If, however, persistent interference is experienced from some particular telegraphic station, readjust the wave-trap trimmer until the response from the interfering station is at a minimum.

CHASSIS MODEL BJ
 MODELS BJ-200, BJ-210, and BJ-214