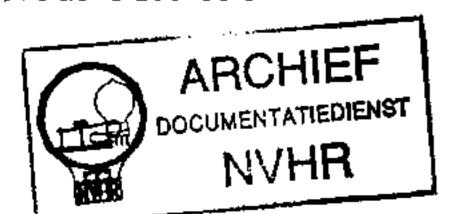
EMERSON RADIO AND PHONOGRAPH CORPORATION

Ned. Ver. v. Historie v/d Radio

MODELS 415,416 Schematic Layout Voltage

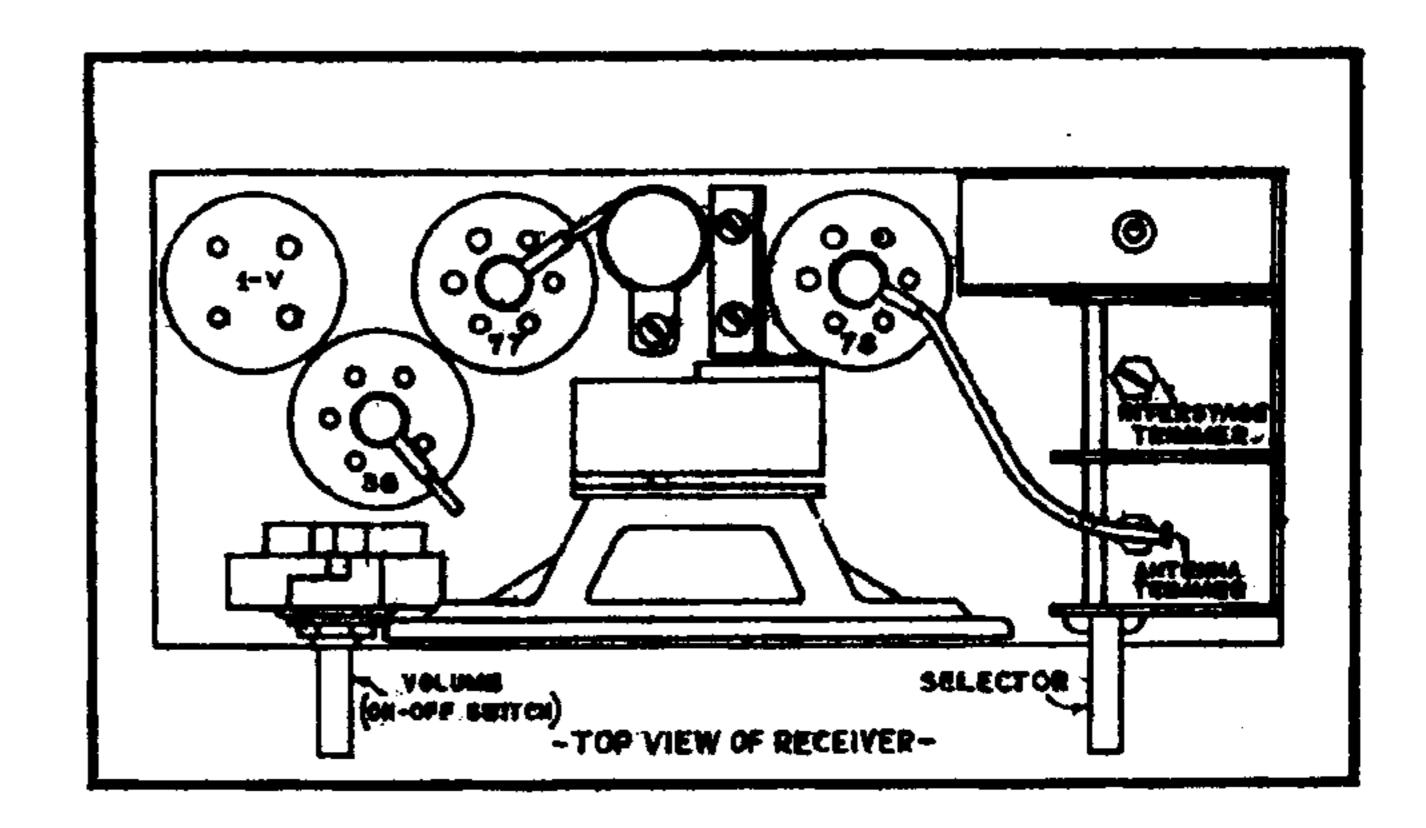


Universal Compact

Operates on either AC or DC

110-120 Volts, 25-60 Cycles

Adaptable for 220-Volt Current with use of 220-Volt Resistor



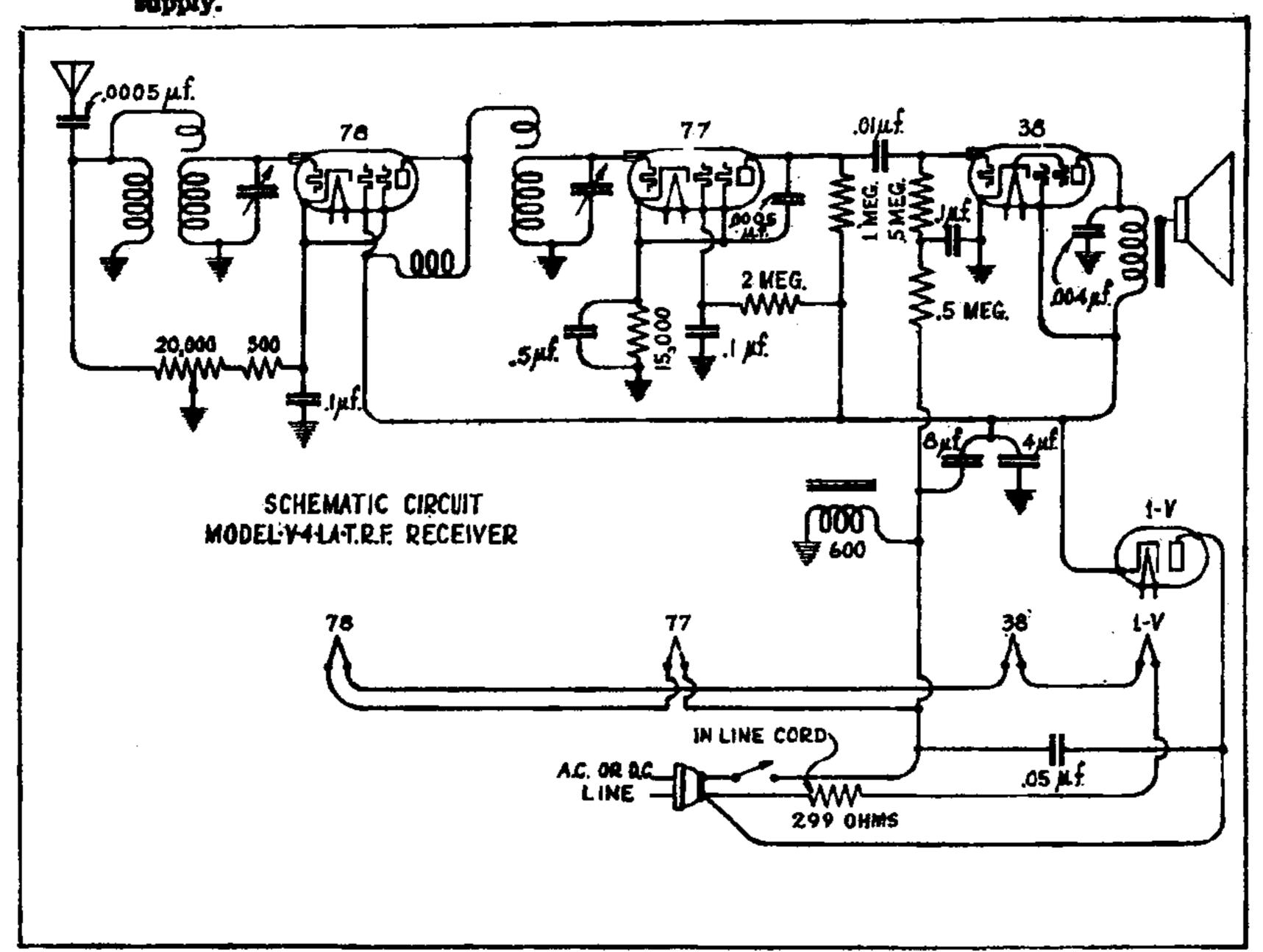
Voltage Readings:

Readings should be taken with Volume Control fully on, Tuning Control set for 550 KC., and antenna outside of set. Use a D. C. voltmeter having a resistance of 1000 ohms per volt.

Chassis	To- Plate	Screen	Cathode
77—Detector	10- 15	9- 12	1- 2
78-R.F. Amplifier	105-115	105-115	2-3
38-Output Pentode	105-115	105-115	

Voltage across filter choke is "C" bias for 38 Tube=10v.

Readings will not change materially regardless of type of power supply.



MODEL 415, 416 Revised

EMERSON RADIO AND PHONOGRAPH CORPORATION

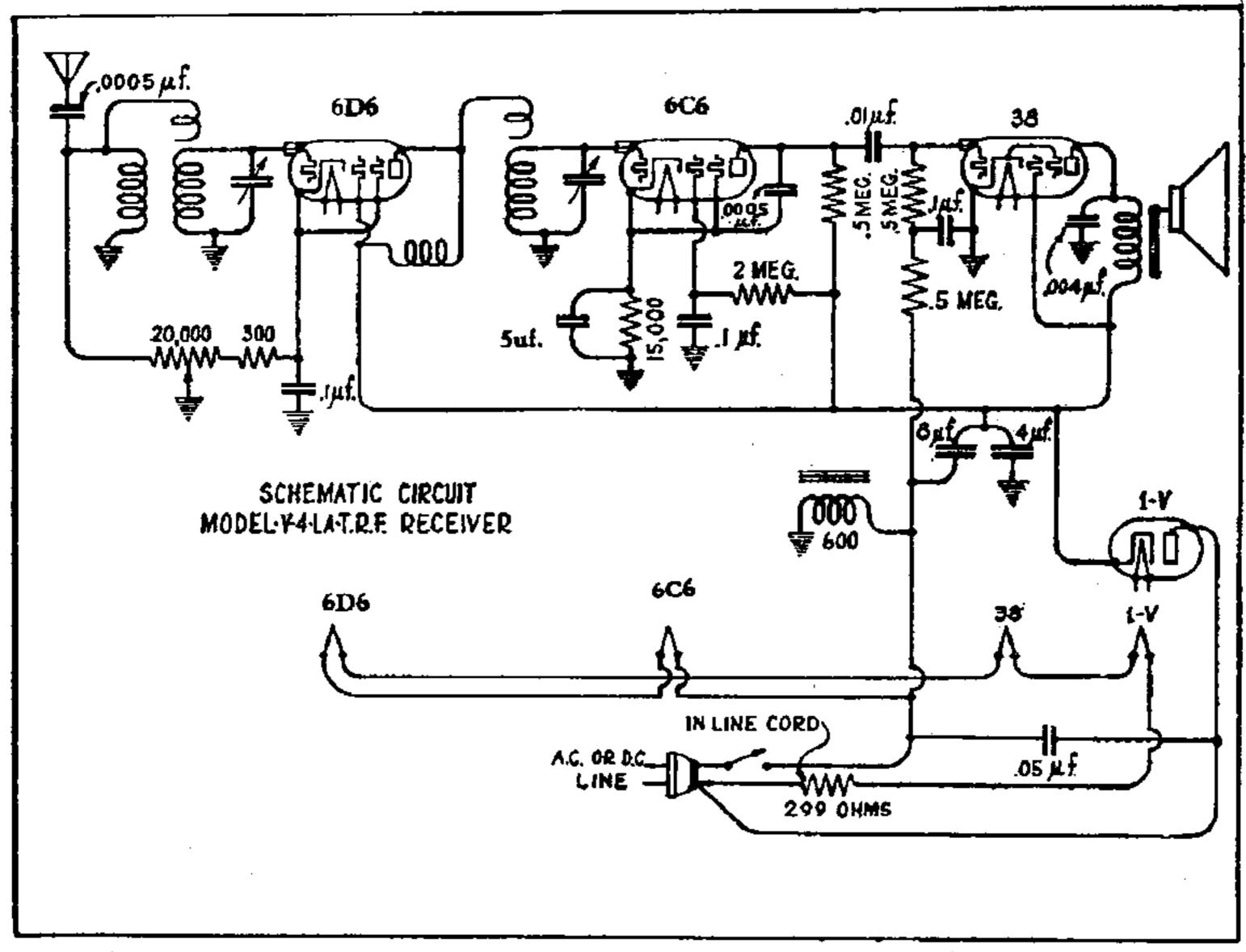
Voltage, Schematic CO Voltage Readings:

Readings should be taken with Volume Control fully on, Tuning Control set for 550 KC, and antenna outside of set. Use a D. C. voltmeter having a resistance of 1000 ohms per volt.

Chassis	To- Plate	Screen	Cathode
6C6—Detector	10- 15	9- 12	1- 2
6D6-R.F. Amplifier	105-115	105-115	2- 3
38-Output Pentode	105-115	105-115	

Voltage across filter choke is "C" bias for 38 Tube=10v.

Readings will not change materially regardless of type of power supply.



Notes:

Due to the compact construction of this Model, in order to keep the heat out of the cabinet, the filament dropping resistor has been placed in the cord, thus dissipating the heat along a greater area. The cord will, therefore, become warm under normal operating conditions, without impairing the performance and without damage to the set. Allowing the heat to be radiated by the cord instead of in the set, assures more efficient operation of the set. The total heat and current drain is about the same as a 30 watt electric bulb. To insure normal heating of the cord during operation, stretch out to its full length.

Do not attempt to shorten cord by cutting out a section, as this will ruin the cord.

The antenna can be replaced in its compartment by winding the wire in a small coil. Start the winding close to the set so that the loose end of the wire forms the last coil. If the coil is begun with the end away from the set the wire will twist and kink as it is wound.

Tubes may be replaced by removing the back of the cabinet.

Instructions for Replacing Shielded Tubes:

- 1. Remove lead at top of tube.
- Take firm hold of tube and shield and remove both (at the same time) from socket.
- 3. Slip off ring toward base of tube.
- 4. TO REPLACE SHIELD REVERSE ABOVE PROCEDURE.