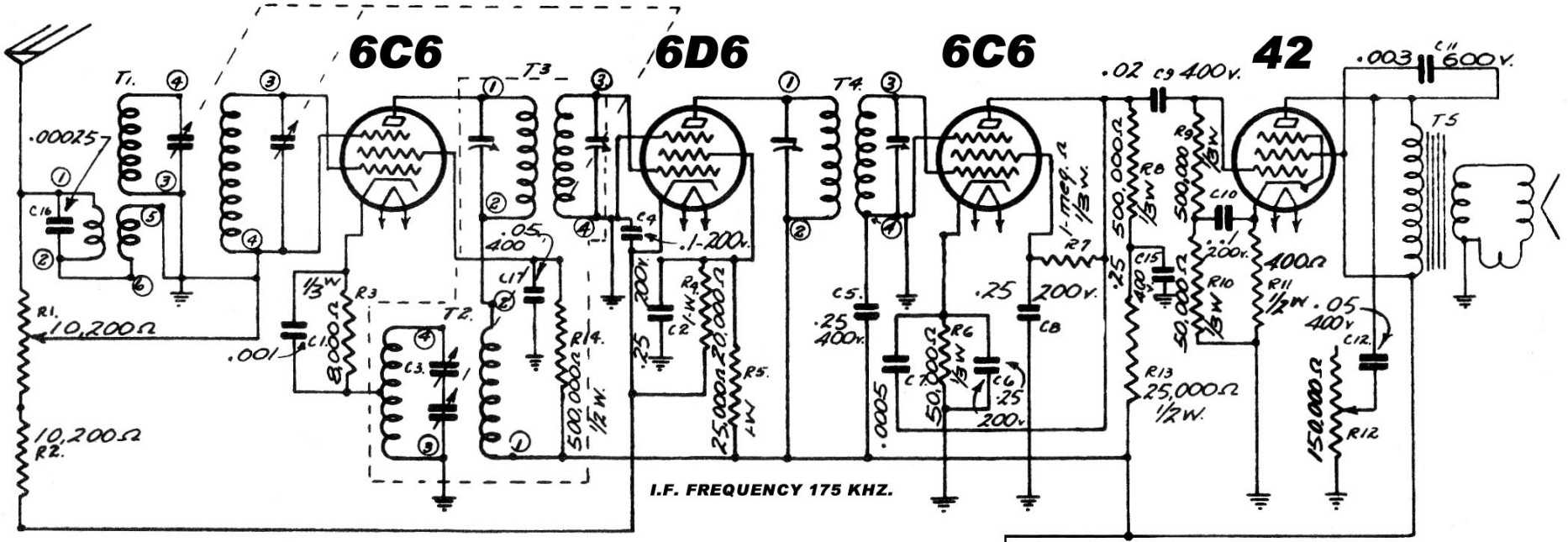

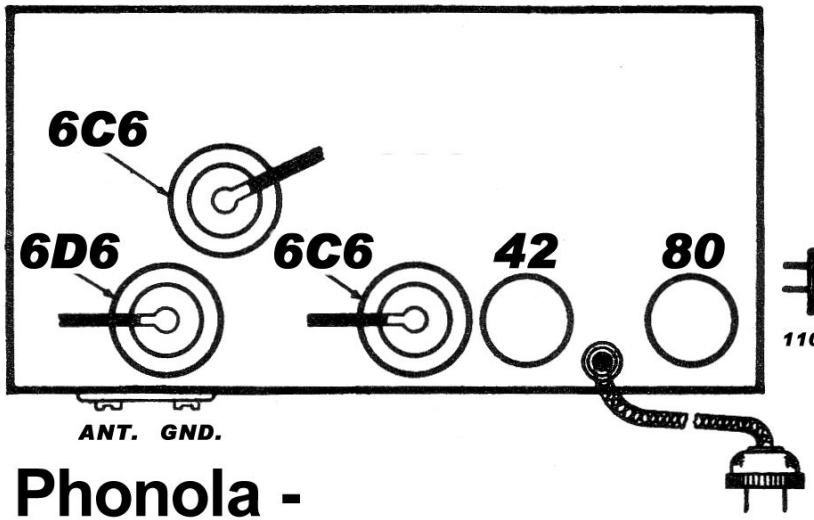

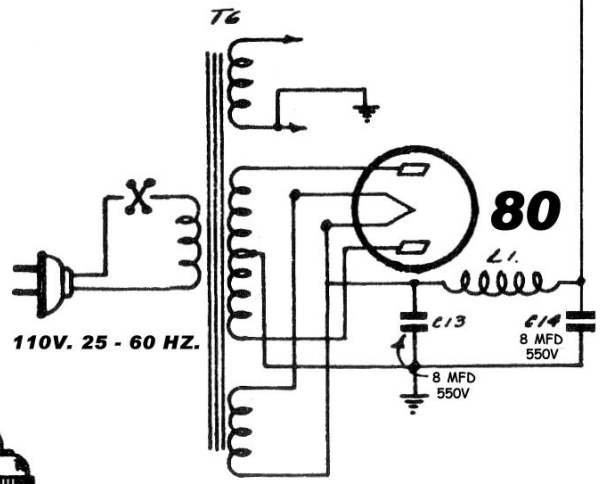

Phonola - Electrohome Series 550

VOLTAGES AT SOCKETS

Voltages are taken from the prongs to chassis.

Line voltage 110 volts. Antenna shorted to ground. Volume control at maximum and the gang wide open.

Type of Tube	Function	Across Filament	Plate	Screen	Cathode	Plate Current M.A.
6C6	1st. Detector & Oscillator	6.3	240	85	3.5	.4
6D6	1st. I.F.	6.3	240	85	3.5	7.5
6C6	2nd Detector	6.3	40	13	3.6	.115
42	Output	6.3	230	250	14.	35.
80	Rectifier	5.1				

Electrohome Series 550

Alignment & Adjustment Information

CONDENSER ALIGNMENT

Misalignment or mistracking of condensers generally manifests itself in broad tuning and lack of volume at portions of all of the broadcast band. The receivers are all properly aligned at the factory with precision instruments and realignment should not be attempted unless all other possible causes of the faulty operation have first been investigated and unless the service technician has the proper equipment. A signal generator that will provide an accurately calibrated signals over the broadcast band, and an output indicating meter are necessary. The procedure is as follows:—

Set the signal generator for 175 K.C. Always use the lowest possible signal input in order to secure sharp tuning. Connect the output lead of the signal generator to the grid of the 1st. detector tube through a .05 mfd. condenser. Turn the tuning condenser rotor until the plates are completely out. The ground lead from the signal generator goes to the ground lead of the receiver. Then adjust the four intermediate frequency condensers for maximum output. The adjusting screws for these condensers are accessible from the rear of the chassis.

Next set the signal generator for a signal of exactly 1400 K.C. The output lead of the signal generator is, in this instance, connected to the antenna lead of the receiver. Set the dial pointer on the 1400 K.C. mark on the dial scale and adjust the three trimmer condensers on the gang tuning condenser for maximum output, adjusting the oscillator trimmer first.

Next set the signal generator for a signal of 600 K.C. and adjust the oscillator 600 K.C. trimmer. The adjusting screw for this condenser is accessible from the rear right hand side of the chassis.

A non-metallic screw driver is necessary for this adjustment. Turn the tuning condenser rotor until maximum output is obtained. Then turn the rotor slowly back and forth over this setting, at the same time adjusting the 600 K.C. trimmer screw until the highest output is obtained.

Then set the signal generator again for a signal of 1400 K.C. and check the adjustment of the tuning condenser trimmers at this frequency for maximum output.

The output of the signal generator is applied to the antenna post of the receiver through a .00025 condenser for adjustments of the broadcast band.

DISTORTED PRODUCTION

Defective tubes are a very common cause of distortion. Try out a new set of tubes that have been tested O.K. or have been operating satisfactorily in another receiver.

Distortion may be due to the speaker being out of adjustment. Check the speaker and try out a new one if one is available. Another cause of distortion is high or low grid voltages. Check the voltages as given in the voltage chart for this receiver.

Incorrect tuning of the receiver is a very common cause of distorted reproduction. The signal should be carefully tuned to resonance for best reproduction.

SPEAKER

The color coding of the speaker leads is as follows:— Field start—Black. Field finish—Yellow. The voice coil leads are white and maroon. The maroon wire grounds one side of the voice coil and goes to the ground in chassis.