

Chassis Identification

Jackson Bell put the service schematic on a paper label placed on the chassis or on the cabinet, as a convenience for service technicians. The artwork is often crude, like a sketch!

If the Schematic is missing, the Drawings and Photographs in the following, sections should help.

The Jackson Bell model 62 circuit had three major revisions, reducing costs while maintaining performance.

The **First Version** of the Jackson Bell 62 did not use Mershon Electrolytic 8uF capacitors. The available capacitors were oil soaked paper and foil types. For a reasonable physical size and cost, a dual "2uF & 4uF filter block" was used in the power supply. The ripple (hum) level at the power supply output is high. To compensate, a choke and capacitor filter was included in the plate circuit of the detector. It was a very effective but expensive way to eliminate hum at the speaker output. The 245-power output tube bias was obtained by a resistor and bypass capacitor in the center-tap return to ground of the filament winding.

The **Second Version** used Mershon Electrolytic 8uF capacitors in place of the filter block to allow removal of the choke and filter capacitor in the detector circuit. Hum in the speaker is acceptable. Presumably, this change reduced costs.

The **Third Version** put the speaker field coil in the power supply ground return; providing a negative voltage with respect to ground. It is used here to bias the 245-power output tube grid. This "improvement" saved parts over previous versions but no functional advantage. A further cost reduction could have been obtained by having a power transformer with a single filament winding. Perhaps JB had a large inventory of Version One, and Two chassis transformers.

Notes:

Alignment is very difficult to achieve. All four sections of the capacitor must track throughout the Broadcast Band. This is achieved by using a Grid-Dip Oscillator and Bending the Capacitor plates. This is something the average technician should not attempt.

If you feel you must attempt alignment, carefully follow the Factory instructions. Listed below.

Whistles and **Regeneration** are a result of poor alignment, bad parts, corrosion or a combination of these faults.

T.R.F. Radios are prone to oscillations. Because of RF from the Later Stages entering the earlier stages or into the Antenna.

When the Volume Control is fully advanced the radio may stop working, or the volume may go way down. This means the set is oscillating.

Make sure the Aluminum shield cans are making good contact. Rotate outside of the cans a little bit a few times to remove corrosion. Then check, or replace the Bypass Capacitors.

Text & Chassis Drawings, Richard Gray
Photographs, Mark Thomson

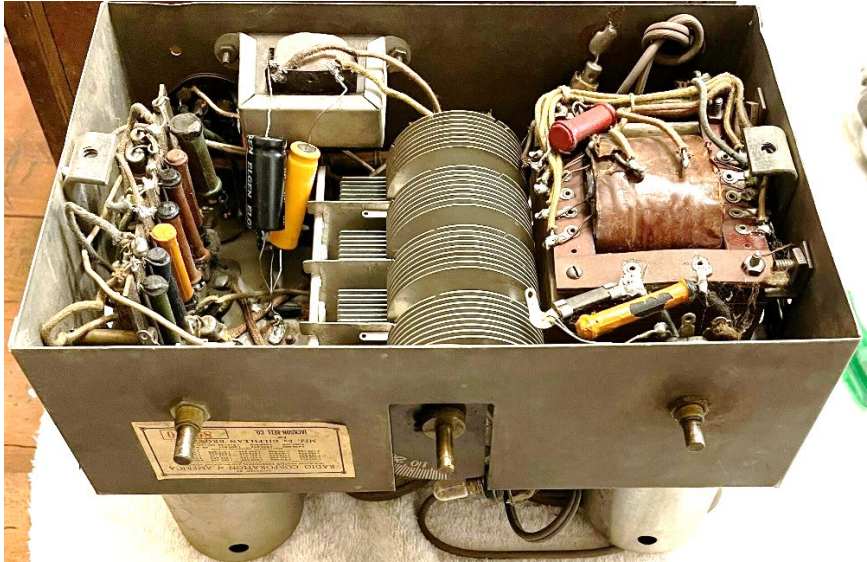
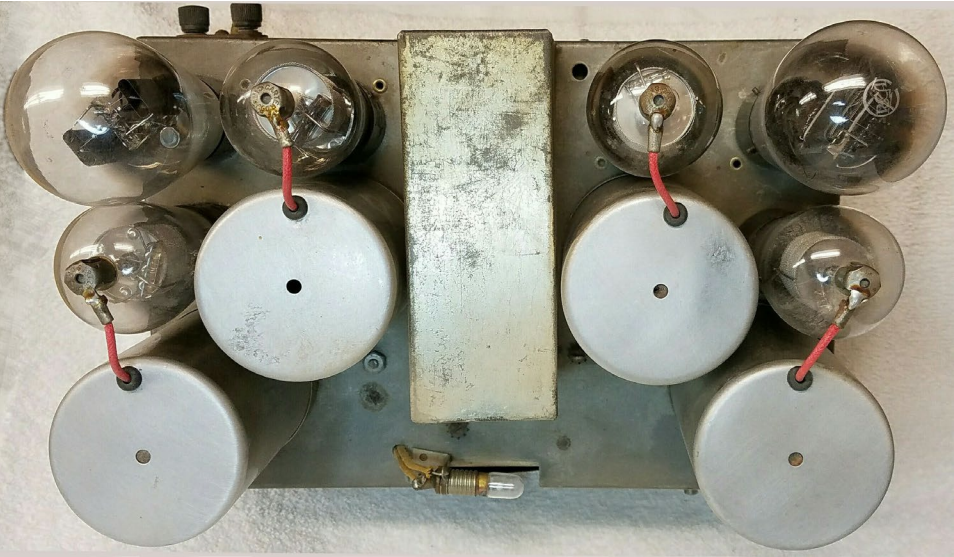
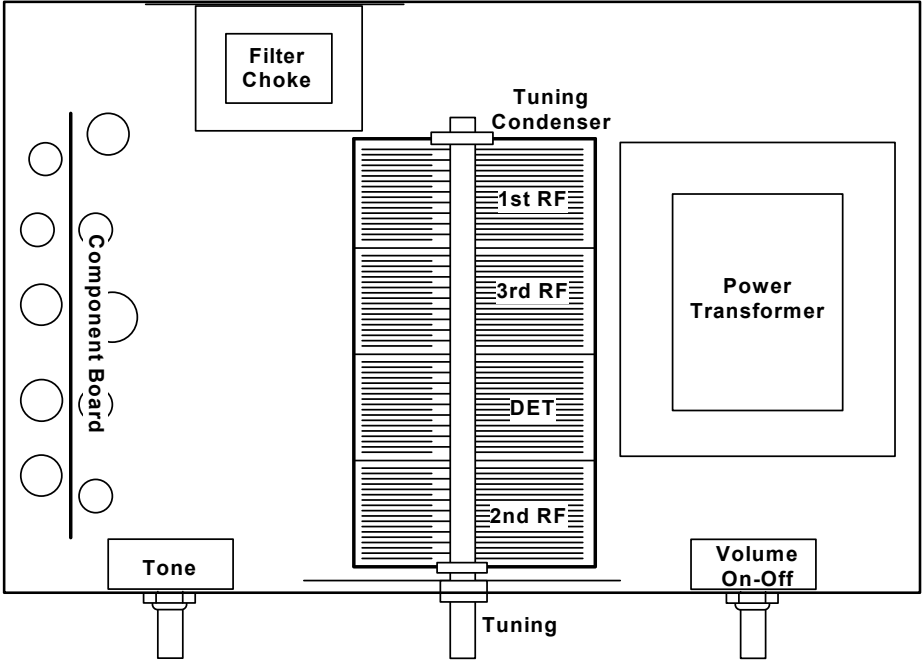
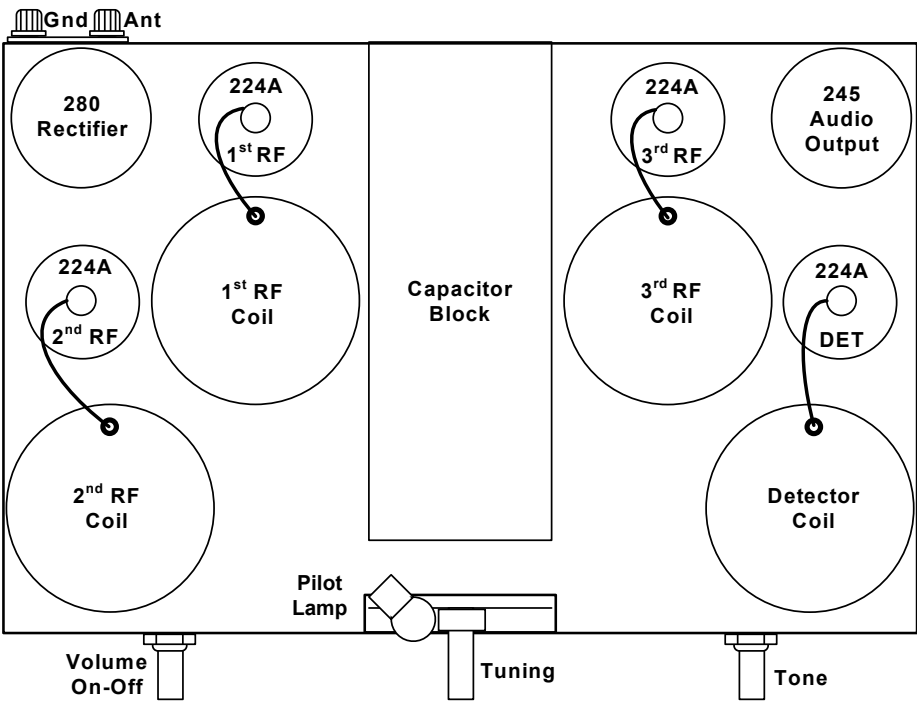
References:

Jackson-Bell Model 62 Introduction
Jackson-Bell Model 62 Factory Documentation
Jackson-Bell Model 62 Technical Information

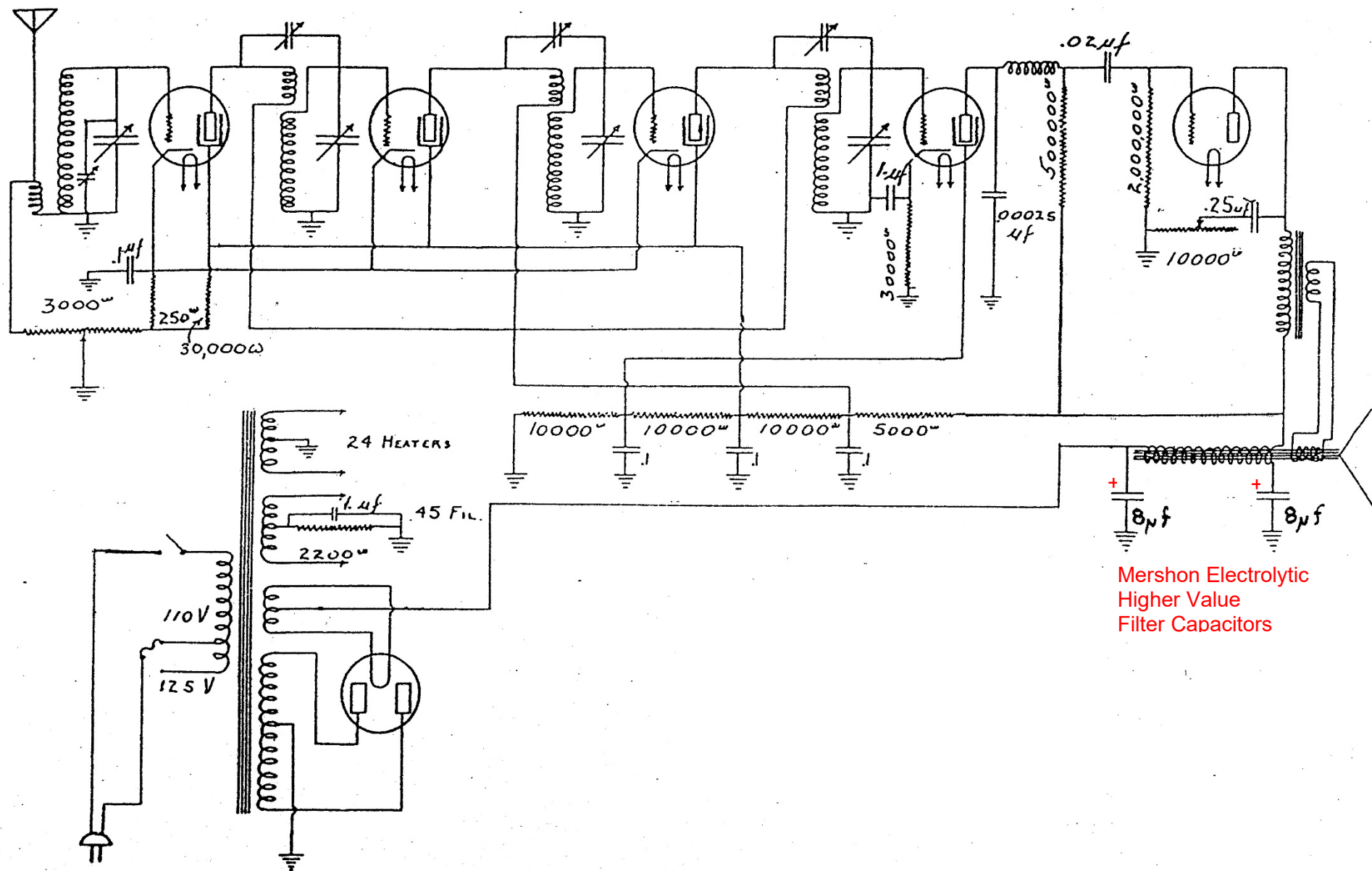
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Low Value Filter Capacitors
Field Coil in Series with "B+"
The rest of the Radios Power

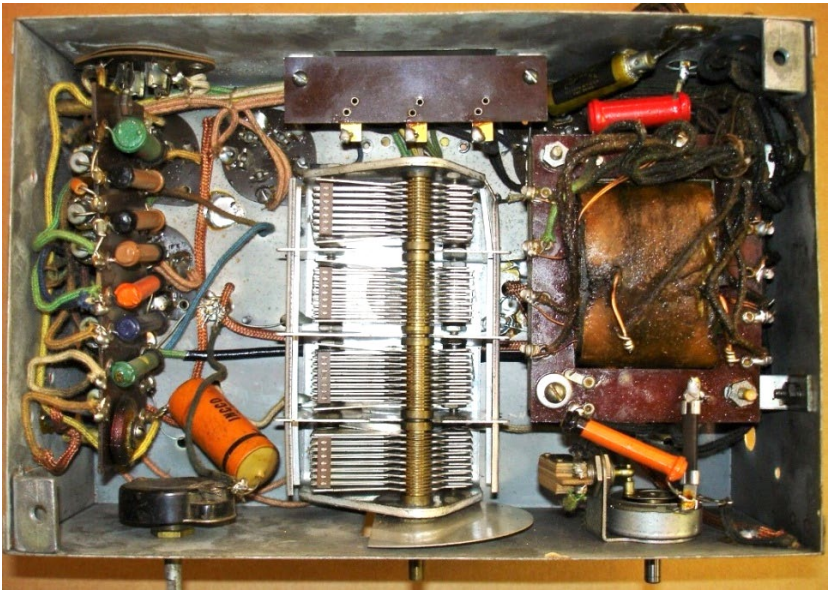
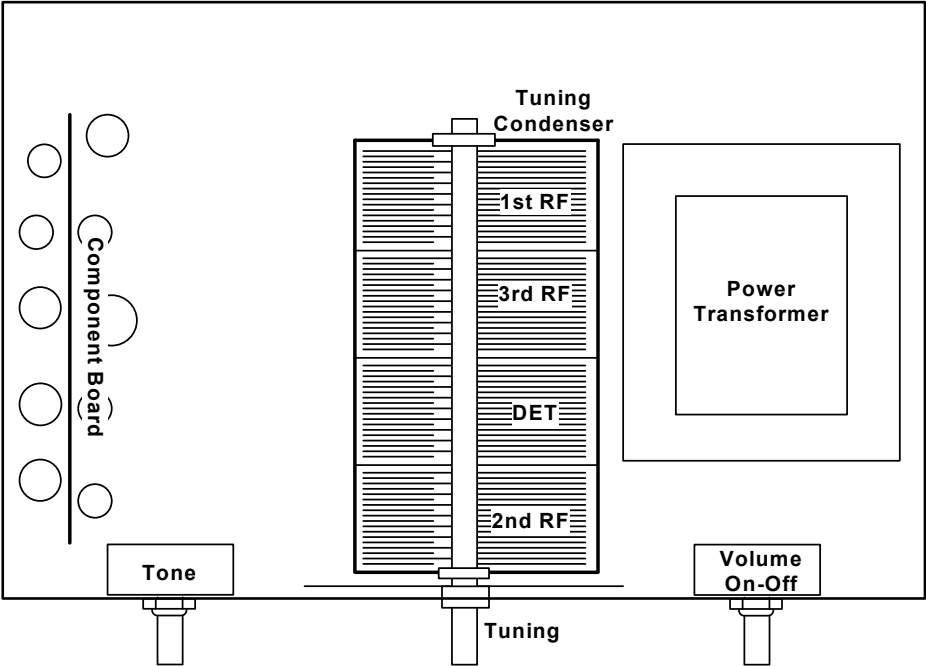
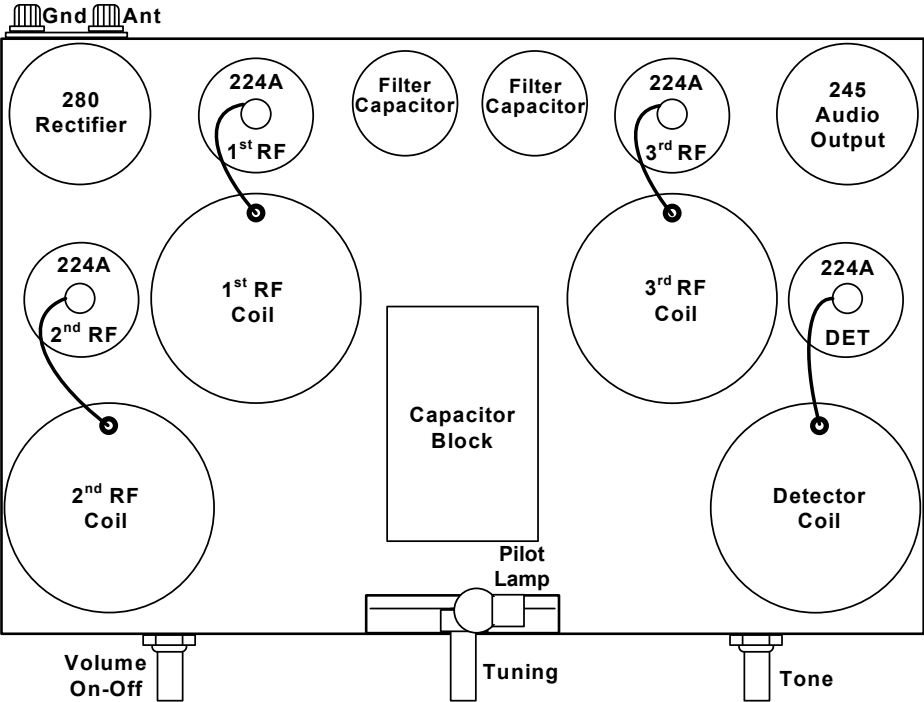
Version 1 Chassis



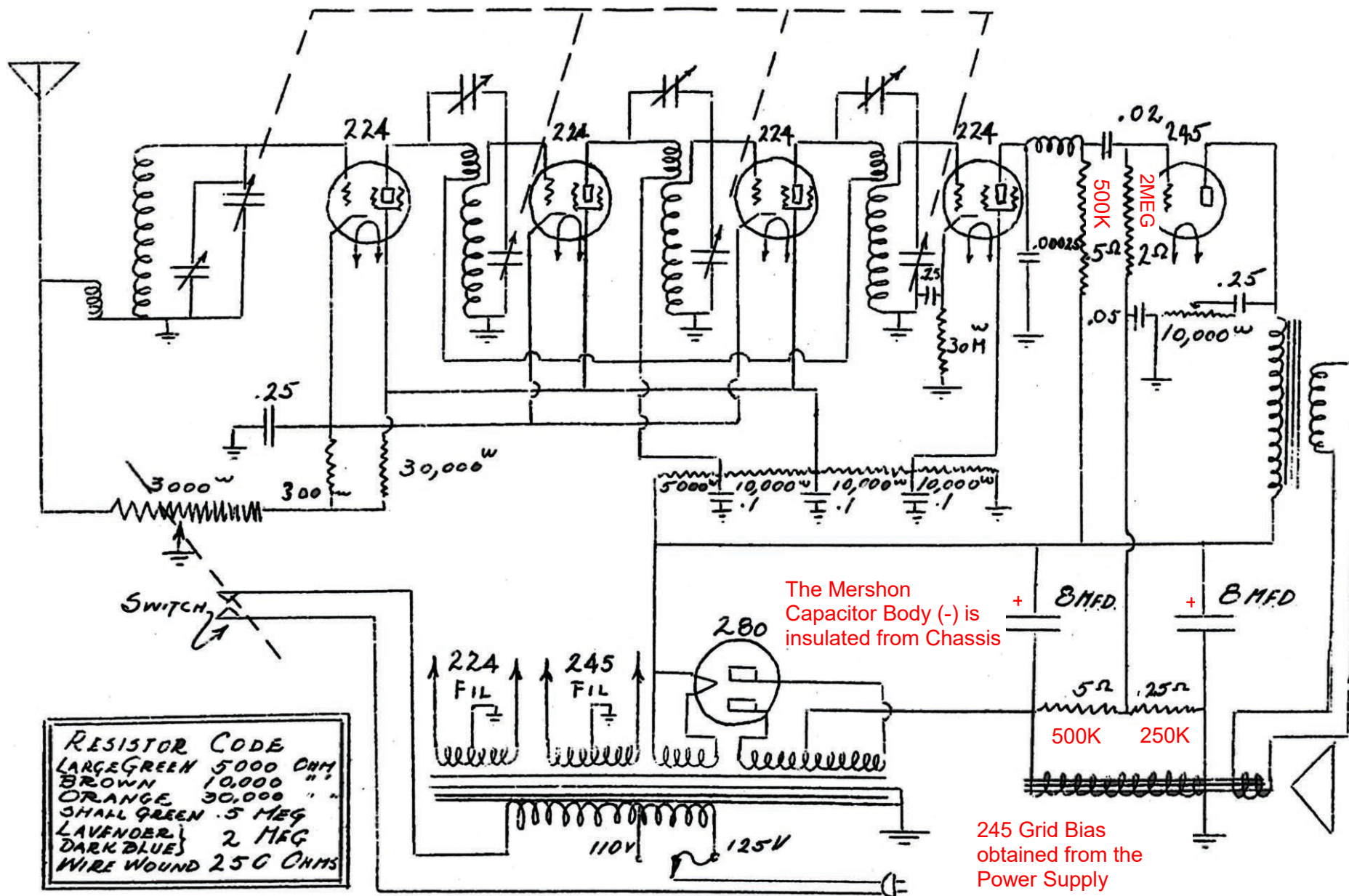
Version 2 Chassis



Version 2 Chassis



Version 3 Chassis



MODEL-62
 IMPROVED 1-22-31

Version 3 Chassis

