Panoramic PCA-2 Schematics

There are at least three known schematic drawing versions for the Panoramic PCA-2 Panadaptor plus another for the version sold by Hallicrafters as the SP-44.

Panoramic Dwg # P3-5220

Uses 902 CRT, power transformer with two separate HV windings, center frequency control in 6AC7 cathode circuit.

Panoramic Dwg # P3-5240 - issues as part of a manual revision including the CRT type change. Uses 2AP1 CRT, power transformer with two separate HV windings, center frequency control still in 6AC7 cathode circuit, but R41 deleted.

Panoramic Dwg # unk

Uses 2AP1 CRT, power transformer with one HV winding, having an extra tap and voltage doubler circuit for the negative HV supply, center frequency control sets grid bias (divided from regulated screen supply) for 6AC7 which has a fixed cathode resistor.

(This schematic from BAMA manual file, pca-2.pdf)

Hallicrafters Drawing 89C243A (for SP-44)

This drawing, from a Hallicrafters SP-44 Service Bulletin, was clearly prepared by a lazy draftsman, who added a Hallicrafters drawing number but did not bother to change the caption, identifying the drawing as a PCA-2. This version has minor component value changes and mixed details from the Panoramic drawings above.

Also note that the Ryder's data for the SP-44 includes some recommended shielding additions to the SP-44, which may also be applicable to the PCA-2. (Rider's Vol.18, Hallicrafters Change pages 18-3, 18-4).

--Chuck McGregor N7RHU

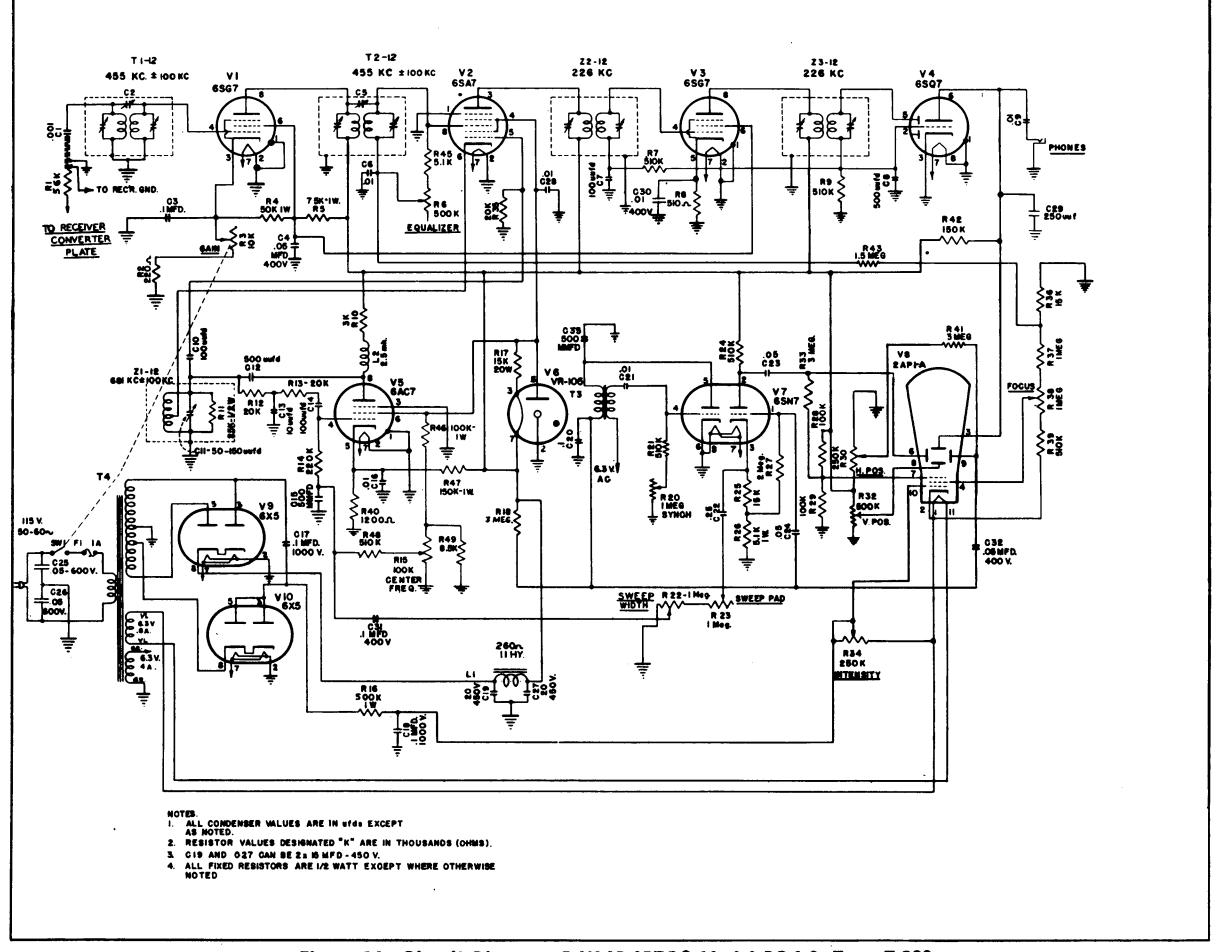


Figure 36. Circuit Diagram, PANADAPTOR Model PCA-2, Type T-200

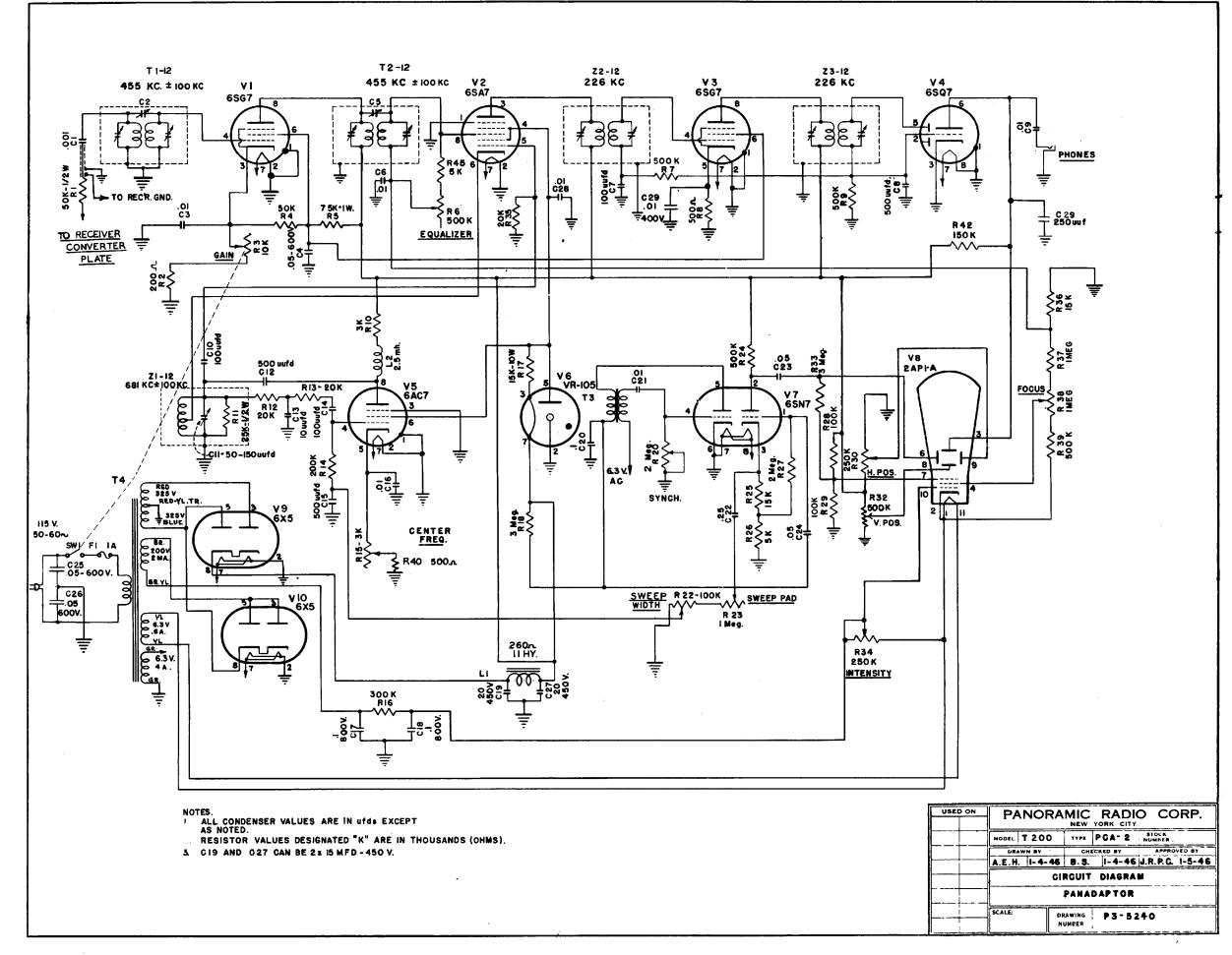


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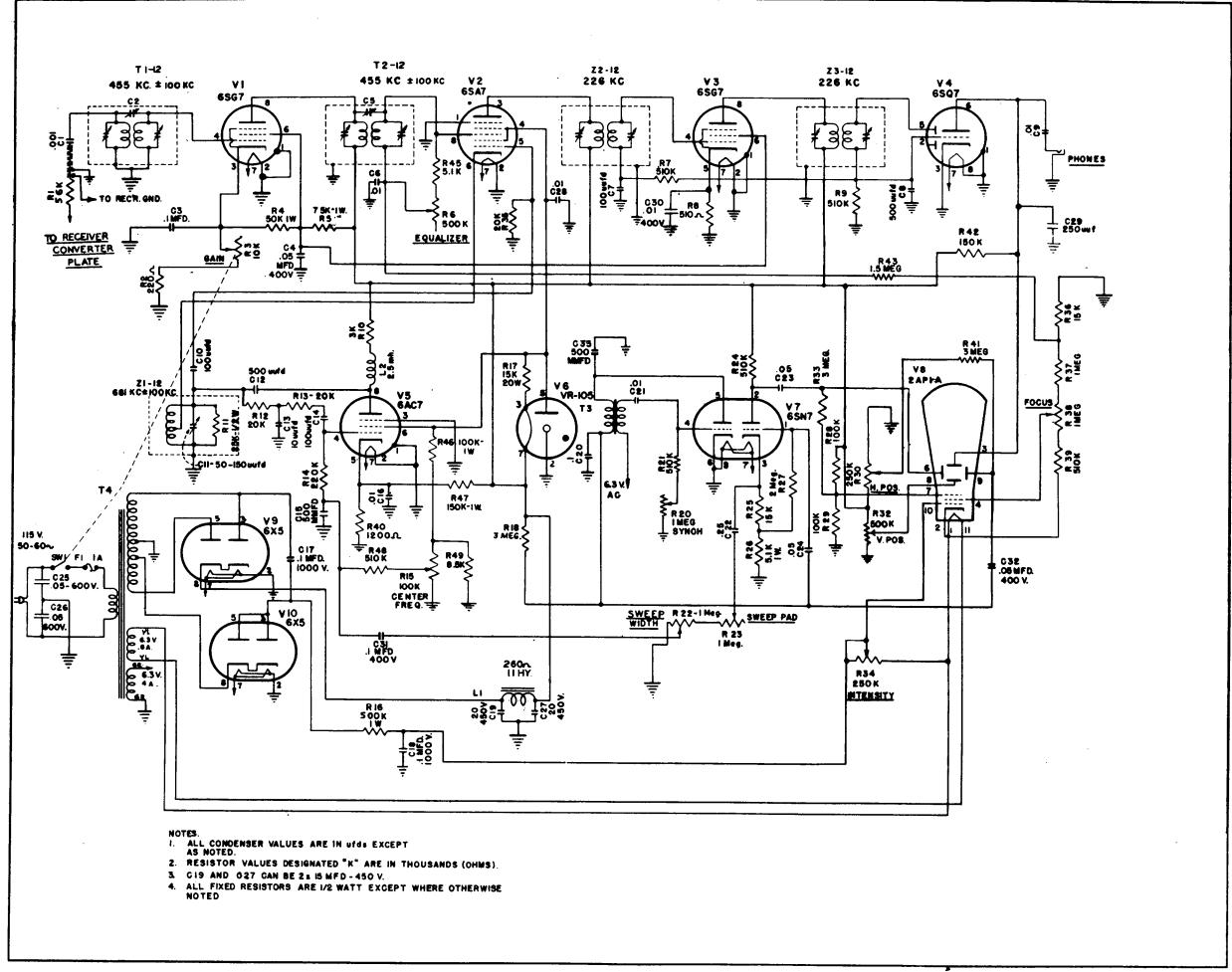
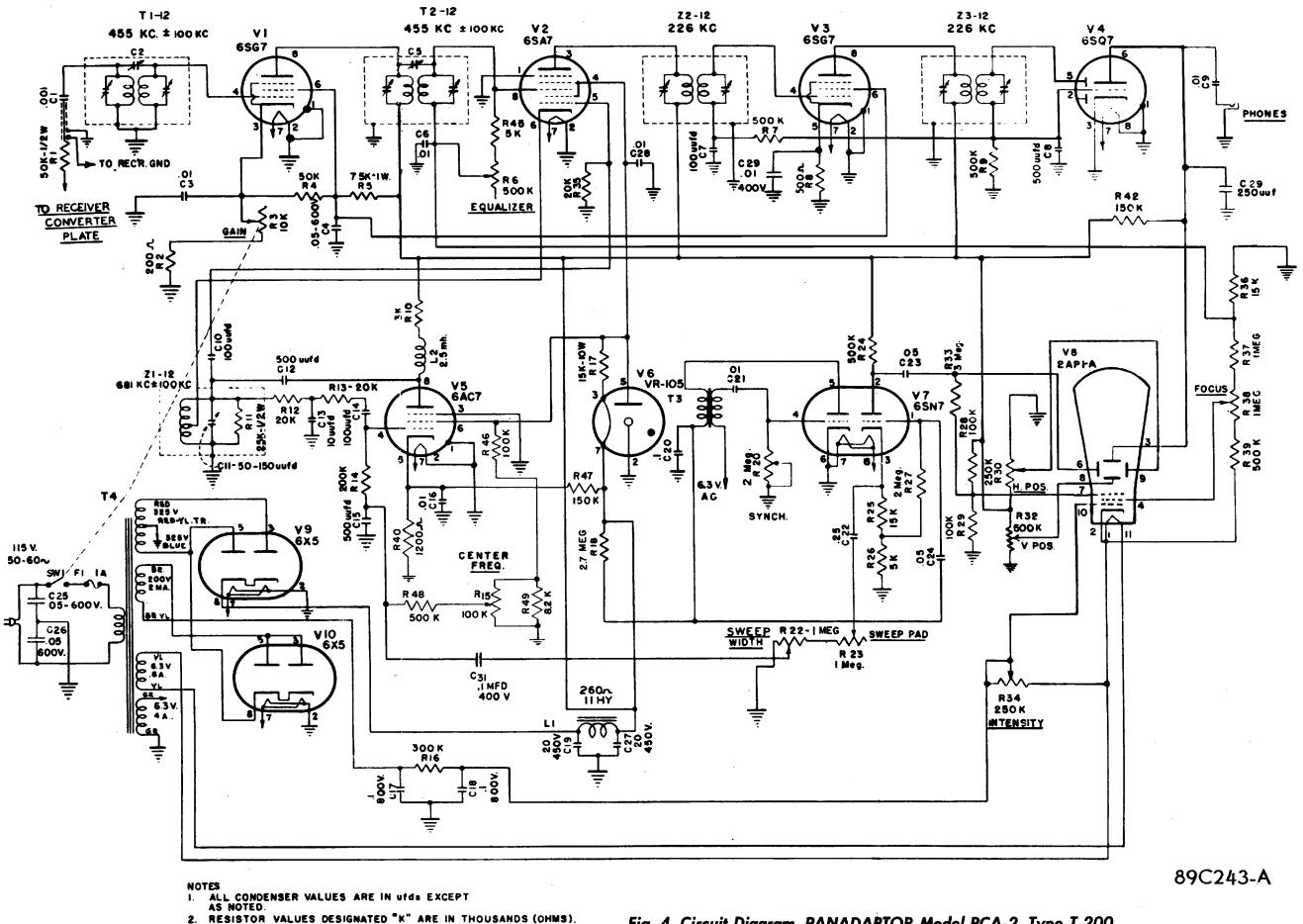


Figure 36. Circuit Diagram, PANADAPTOR Model PCA-2, Type T-200



- RESISTOR VALUES DESIGNATED "K" ARE IN THOUSANDS (OHMS).
- 3. G19 AND G27 CAN BE 2x 15 MFD 450 V.

Fig. 4. Circuit Diagram, PANADAPTOR Model PCA-2, Type T-200

Hallicrafters SP-44 AND SX-42

These models appear on pages 17-1 to 17-5 and 17-6 to 17-16 respectively of Rider's Volume XVII. When the SX-42 is used with the SP-44 Panadaptor on the low-frequency band, it appears to motor boat. To correct this condition, do the following.

The connecting cable between the SP-44 and the SX-42 is shielded and the shield is connected to the SX-42 ground. Disconnect the shield from the SX-42 ground and place a 50-\(\mu\mu\) f capacitor between the shield and the SX-42 chassis. Be sure that the SX-42 chassis is well grounded. A shielded antenna lead, or a balanced antenna, on the SX-42 may also help.

The following modifications should be made on the SP-44 unit. A strip of bonding braid, 3% inch wide, may

be connected to the No. 1 grounded pin of the 6AC7 tube, going around the choke coil and connecting to the right side of the chassis. The braid should he insulated with a piece of spaghetti and should lie parallel to the front panel. Two pieces of braid $\frac{1}{4}$ inch wide, or a copper strap may also be used.

A piece of copper or steel sheet about 2½ inches wide may be screwed or soldered across the bottom so that it is attached to both edges of the chassis. This plate should be centered over the bottom of the 6AC7 tube.