

14-11. Continuous-Coverage Tuners

In the cases of the receivers whose realignment have so far been discussed, channel selectors have been used. In a large number of other receivers, continuous coverage is provided; that is, stations are tuned by a continuous motion of a dial, which is adjusted from one channel to another by a method similar to that used for station selection in ordinary AM- and FM-broadcast receivers.

Perhaps the most common and well-known continuous coverage arrangement is the DuMont Inputuner, containing the Mallory-Ware Inductuner. The latter is a combination of several inductors all mounted on a single shaft, as shown in Fig. 14-30. In the older type (above) the coils are helical, and in the newer type (below) they have a spiral shape. In either case, a wiper contact moves along each coil as the shaft is rotated, and shorts out more or less inductance depending upon the direction of rotation. The inductors form the major parts of the inductance in each tuned circuit in the front end, and thus tune and track the latter. The schematic diagram of the DuMont Inputuner is shown in Fig. 14-31. The variable inductors of the Inductuner are labeled *L102A*, *L102B*, *L102C*, and *L102D*. The adjustments for realignment are as follows:

R-f amplifier: Coil *L103* is used for tracking the high channels. It is adjusted for maximum gain on channel 13. Capacitor *C100* is used to track the low channels and is adjusted for maximum gain on channel 6.

Coupling circuit between r-f and mixer Sections: *C110* and *C112* provide low-channel tracking. These are adjusted for band-pass balance on channel 6. *L107* is a small metal strip with one side fastened to the chassis for grounding. Adjustment of its position provides proper band-pass characteristics on channel 13.

Oscillator circuit: The oscillator is tracked on the low channels by adjustment of *C118*, and on the high channels by coil *L110*.

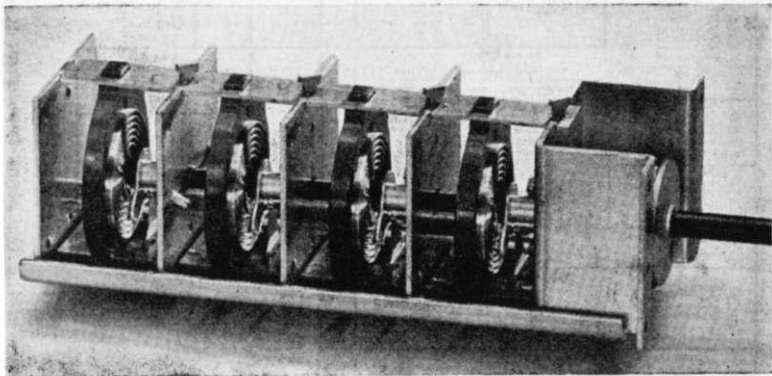
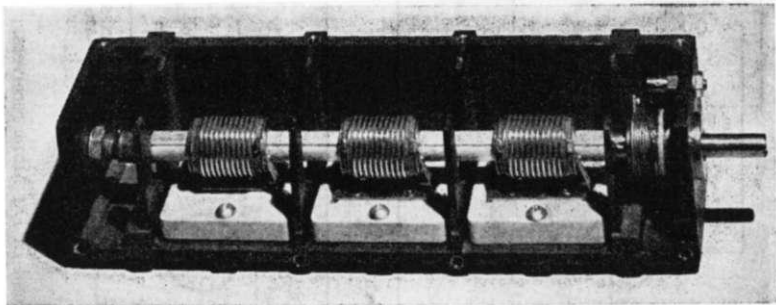


FIG. 14-30 The Mallory-Ware Inductuner, continuous tuning device used in Du Mont receivers. (Above) Original version, employing helical inductances. (Below) Later version, employing spiral inductances.

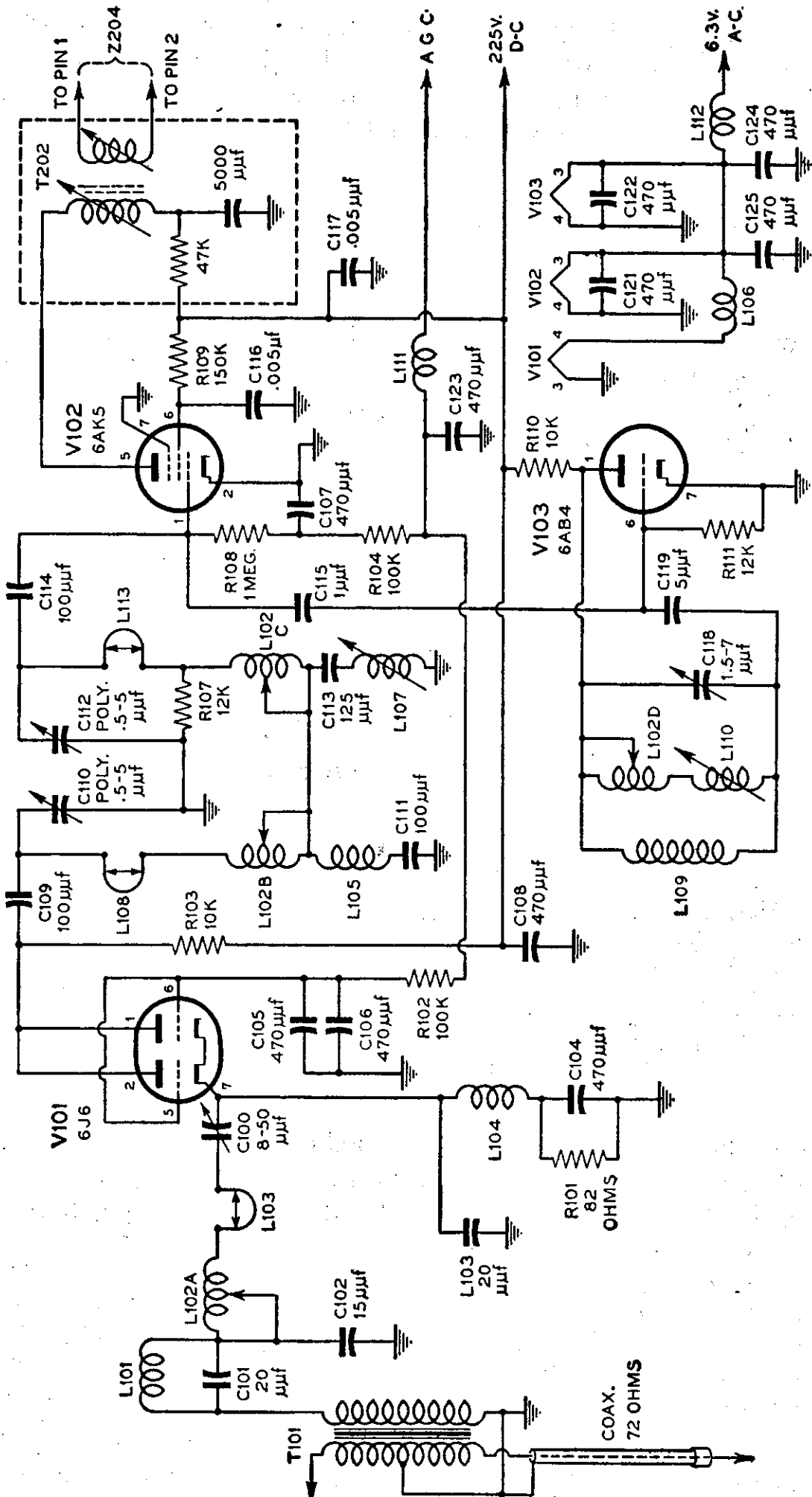


Fig. 14-31 Schematic diagram of the Du Mont Inputuner; front end in Du Mont receivers.