

TO THE SERVICE MAN:

Chassis 8C40 features a high gain tuned RF stage ahead of a conventional superheterodyne circuit with band spread tuning on the 49, 31, 25, 19 and 16 meter bands.

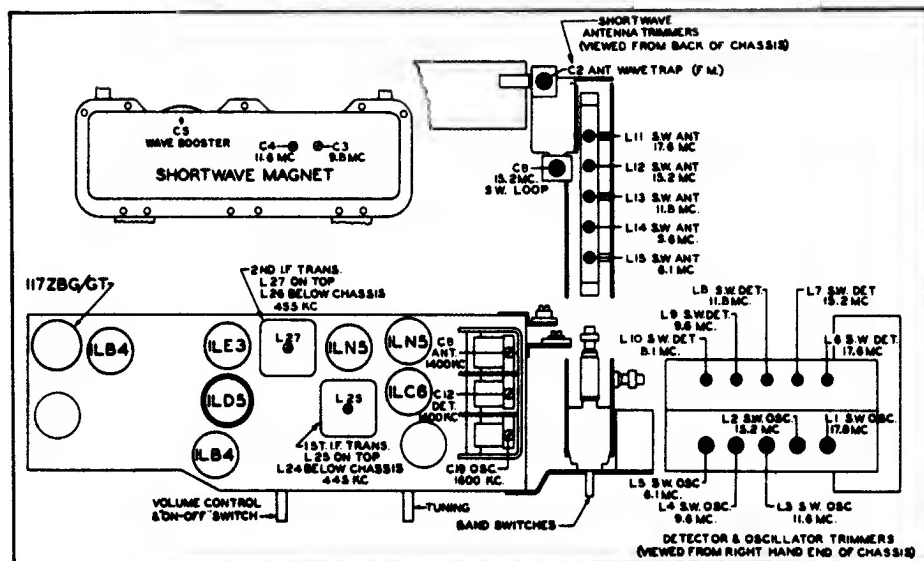
The audio amplifier used in chassis 8C40 features phase inversion and push-pull power output.

If removal of the chassis from the cabinet ever becomes necessary this should be done with care.

The alignment of chassis 8C40 is conventional. However, care must be exercised when making adjustments, and the alignment procedure must be followed exactly. Set the chassis over a metal plate approximately the same distance the battery pack is from the bottom of the chassis when it is in the cabinet. This procedure will introduce the approximate amount of metal in the field of the RF and oscillator coils as when the chassis is in the cabinet. A signal generator of reasonable accuracy and good attenuation must be used. An output meter (AC) of the copper oxide rectifier type with a range of 1 to 30 volts in several steps is necessary to get accurate output readings. Alignment wrenches should be of the non-metallic type, especially when making adjustments at the higher frequencies.

Zenith Radio Corp.

MODEL 8G005
CHASSIS 8C40



TUBE AND TRIMMER LOCATION ALIGNMENT PROCEDURE

| OPERATION | CONNECT OSCILLATOR TO | DUMMY ANTENNA | INPUT SIG. FREQUENCY | BAND | SET DIAL AT | TRIMMERS | PURPOSE |
|-----------|---|---------------|----------------------|---------|-------------|------------------|--|
| 1 | Converter Grid | .1 mfd. | 455 Kc. | BC | 600 Kc. | L-24, 25, 26, 27 | Align I.F. |
| 2 | One Turn Loop Coupled Loosely to Broadcast Wavemagnet | | 1600 Kc. | BC | 1600 Kc. | C-19 | Set Oscillator to Scale |
| 3 | | | 1400 Kc. | BC | 1400 Kc. | C-12 | Alignment of Detector Sec. |
| 4 | | | 1400 Kc. | BC | 1400 Kc. | C-9 | Alignment of B.C. Wavemagnet |
| 5* | 3 Feet of wire Approx. 1 foot from Extended Waverod | | 6.1 Mc. | 49 Met. | 6.1 Mc. | L-5, L-10, L-15 | Alignment of S.W. Antenna, Detector and Oscillator |
| 6* | | | 9.6 Mc. | 31 Met. | 9.6 Mc. | L-4, L-9, L-14 | |
| 7* | | | 11.8 Mc. | 25 Met. | 11.8 Mc. | L-3, L-8, L-13 | |
| 8* | | | 15.2 Mc. | 19 Met. | 15.2 Mc. | L-2, L-7, L-12 | |
| 9* | | | 17.8 Mc. | 16 Met. | 17.8 Mc. | L-1, L-6, L-11 | |
| 10 | One Turn Loop Coupled Loosely to Shortwave Magnet, Waverod Collapsed | | 15.2 Mc. | 19 Met. | 15.2 Mc. | C-5, C-6 | Alignment of Shortwave Magnet |
| 11 | | | 11.8 Mc. | 25 Met. | 11.8 Mc. | C-4 | |
| 12 | | | 9.6 Mc. | 31 Met. | 9.6 Mc. | C-3 | |
| 13 | When Receiving Normal Transmissions On The 49, 31, 25, 19 or 16 Meter Bands, if FM Interference is Experienced Adjust Wave Trap Trimmer C-2 for Minimum Response of The Interfering Signal. | | | | | | |

*Note: Rock Tuning Condenser When Making Alignment Under Operations 5, 6, 7, 8 and 9