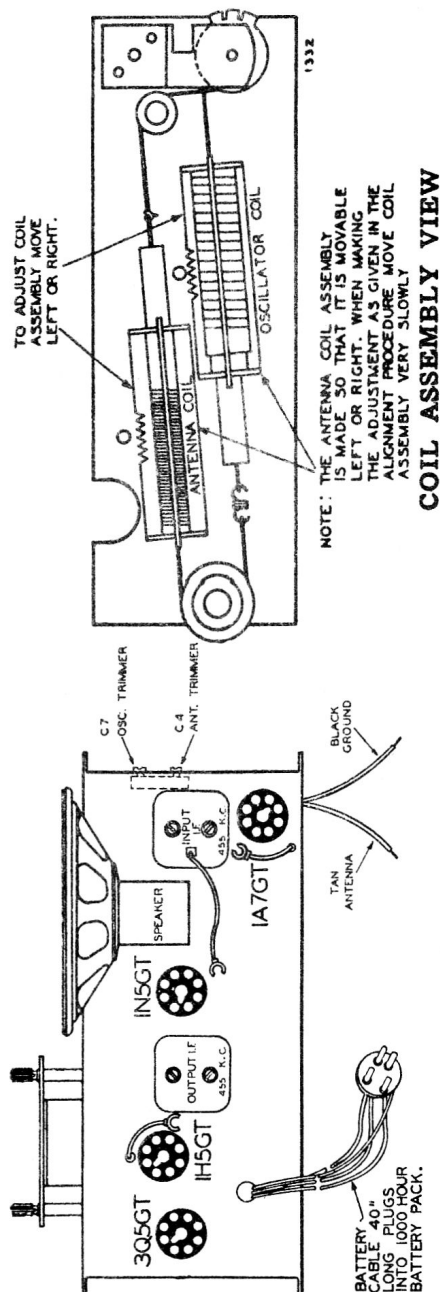
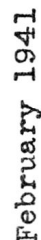


C4 and C7 are in same unit.

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# ALIGNMENT PROCEDURE

## MODEL 4BA1

## TECHNICAL DATA

Power Consumption - - - A—250 Amp. B .014 Amps. Sensitivity for 50 Milliwatt Output: 45 Microvolts Average  
Power Output - - - - - 160 Milliwatts Undistorted Selectivity - 48 KC at 1000 Times Signal at 1000 KC  
Tuning Frequency Range - - - - - 540 to 1700 KC

| BAND                   | SIGNAL GENERATOR<br>Frequency<br>Setting | Dummy<br>Antenna | Connection<br>to Radio     | Position of Iron<br>Cores (Dial Setting) | Trimmers Adjusted<br>(in Order Shown)                       | Trimmer<br>Function        | Adjustment                           |
|------------------------|------------------------------------------|------------------|----------------------------|------------------------------------------|-------------------------------------------------------------|----------------------------|--------------------------------------|
| 455 Kc.<br>I. F.       | 455 Kc.                                  | .1 MFD.          | Connect to<br>Grid of 1A7  | Iron Cores<br>All the way out            | Two trimmers on top<br>of output I. F. can                  | Output<br>I. F.            | maximum output                       |
|                        | 455 Kc.                                  | .1 MFD.          | Connect to<br>Grid of 1A7  | Iron Cores<br>All the way out            | Two trimmers on top<br>of input I. F. can                   | Input<br>I. F.             | maximum output                       |
|                        | 1700 Kc.                                 | .1 MFD.          | Connect to<br>Grid of 1A7  | Iron Cores<br>All the way out            | Trimmer (C7)<br>(See chassis view)                          | Oscillator                 | maximum output                       |
|                        | 1700 Kc.                                 | 200 MMF.         | Connect to<br>Antenna Clip | Iron Cores<br>All the way out            | Trimmer (C4)<br>(See chassis view)                          | Antenna                    | maximum output                       |
| BROAD-<br>CAST<br>BAND | 1400 Kc.                                 | 200 MMF.         | Connect to<br>Antenna Clip | Turn Dial to<br>1400 Kc.                 | Adjust position of antenna coil<br>(See coil assembly view) | Antenna Coil<br>Adjustment | maximum output<br>(See Note "A")     |
|                        | 1700 Kc.                                 | 200 MMF.         | Connect to<br>Antenna Clip | Turn Dial to<br>1700 Kc.                 | Adjust trimmer (C4)<br>(See chassis view)                   | Check for tracking         | Check for tracking<br>(See Note "B") |
|                        |                                          |                  |                            |                                          |                                                             | Antenna                    |                                      |

NOTE "A"—The antenna coil assembly is made so that it is movable. When making the adjustment as given in the alignment procedure move the coil assembly very slowly. It can be moved by hand or by pivoting one edge of the blade of a screwdriver in the hole and engaging the blade in the gear teeth of the coil form.

NOTE "B"—After the antenna coil has been tracked at 1400 Kc. it is necessary to check the antenna trimmer (C4) adjustment again at 1700 Kc. If no appreciable change in trimmer adjustment is made the coil is in track, if the trimmer requires considerable change it will be necessary to again adjust the position of the antenna coil at 1400 Kc. These two adjustments should be tried several times until no change of trimmer adjustment is required at 1700 Kc.