

Alignment Procedure

1640, 2440, 2840, 3240.

Alignment Procedure:—

All the circuits in this receiver are very accurately adjusted at the factory and normally should need no further adjustment. However, if it is definitely known that an adjustment is necessary the circuits can best be properly aligned with the use of a modulated signal generator.

1. Tuning I.F. Amplifier to 456 Kilocycles:—

- (a) Connect the output of the signal generator through a .1 mfd. tubular condenser to the antenna (Red) lead and the ground of the signal generator to the chassis (Black) lead.
- (b) Turn the band switch to the broadcast position (Left).
- (c) Turn the station selector so that the tuning condenser plates are completely in mesh and turn the volume control full on.
- (d) Set signal generator to 456 kilocycles.
- (e) Short out the front (Osc.) section of the gang condenser.
- (f) Adjust both trimmers located on top of the 2nd I.F. transformer for maximum output.
- (g) Adjust both trimmers located on top of the 1st I.F. transformer for maximum output.
- (h) Check operations (f) and (g) for more accurate adjustments.

ALWAYS USE THE LOWEST SIGNAL GENERATOR SETTING THAT WILL GIVE A REASONABLE OUTPUT.

Remove temporary short from front (Osc.) section of gang condenser.

2. Broadcast Band Alignment:—

When aligning the broadcast band use a .00025 mica condenser for the dummy antenna.

- (a) Turn station selector until pointer is in position to receive a 1400 kilocycle signal.
- (b) Set band switch to the broadcast position (Left).
- (c) Set signal generator to 1400 kilocycles.
- (d) Adjust 1400 K.C. B.C. Osc. trimmer to receive the 1400 K.C. signal.
- (e) Adjust 1400 K.C. B.C. Ant. trimmer for maximum output.
- (f) Turn station selector until pointer is in position to receive a 600 kilocycle signal.
- (g) Set signal generator to 600 kilocycles.
- (h) Adjust 600 K.C. padder at rear of chassis for maximum output, rocking the gang condenser slowly back and forth for the greatest output.

3. Short Wave Band Alignment:—

When aligning the short wave band use a 250-ohm carbon resistor for the dummy antenna.

- (a) Turn band switch to the short wave position (Right).
- (b) Turn station selector until pointer is in position to receive a 15 megacycle signal.
- (c) Set signal generator to 15 megacycles.
- (d) Adjust S.W. 15 M.C. Osc. trimmer for the 15 megacycle signal. This signal will be heard at two settings of this trimmer.

ALWAYS use the setting furthest out.

Note:—Be sure that the signal tuned in is 15 megacycles and not the image which should be heard at approximately 14 megacycles.

- (e) Adjust S.W. 15 M.C. trimmer for maximum output. This is accomplished by rocking the gang condenser until the loudest signal is heard. If the image signal at 14 megacycles is louder than the 15 megacycle signal the proper peak on the Ant. trimmer has not been selected. If this is the case, the antenna shunt trimmer should be turned in slightly, then adjust as above by rocking the gang condenser until maximum output is obtained.