

# Crosley B140 & B440 Battery Operated Radio Alignment Information

# 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.

## Connecting Output Meter:-

Connect the output meter across the "P" and "S" terminals of the 1Q5G output tube. Be certain that the meter is protected from D.C. by connecting a condenser (.1 mfd. or larger—not electrolytic) in series with one of the leads.

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

- (a) Connect the output of the signal generator through a .02 mfd. condenser to the top cap of the 1B7G tube, leaving the tube's grid clip in place. Connect the ground lead from the signal generator to the ground terminal of the chassis. Keep the generator leads as far as possible from the grid leads of the other screen grid tubes.
- (b) Set the station selector so that the tuning condenser plates are completely in mesh and turn the volume control knob on full.
- (c) Set the signal generator to 456 kilocycles.
- (d) Adjust both 2nd I.F. trimmers for maximum output.
- (e) Adjust both trimmers on the 1st I.F. transformer for maximum output.
- (f) Check operations (d) and (e) for more accurate adjustments.

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

## 2. Short Wave Alignment:—

- (a) Set band switch in the short wave position (Right) and set dial pointer to 17 megacycles.
- (b) Connect the signal generator output lead through a dummy antenna (400-ohm carbon resistor) to the antenna terminal of the chassis.
- (c) Set signal generator to 17 megacycles.
- (d) Adjust the S.W. "Osc." trimmer condenser for the 17 megacycle signal. This signal will be heard at two settings on this trimmer.

**ALWAYS** use the setting furthest out.

- Note:—Be sure that the signal tuned in is 17 megacycles and not the image which should be heard at approximately 16 megacycles.
- (e) Adjust S.W. Ant. trimmer for maximum output. This is accomplished by rocking the gang condenser until the loudest signal is heard. If the image signal at approximately 16 megacycles is louder than the fundamental at 17 megacycles 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.

### 3. 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 kilocycles 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.

Note:—No adjustment is necessary at the low frequency end of the broadcast

band as this chassis uses a fixed 600 K.C. padder.