

ALIGNMENT INSTRUCTIONS MODEL 107

1. INTERMEDIATE FREQUENCY AMPLIFIER.

Set oscillator at 456 K.C. and attach test lead to 6K7 I. F. tube then to the 6A8 converter tube. Grid caps in turn and adjust trimmers C60A, C60B then C59A, C59B, and C59C.

CAUTION—Once the C59 trimmers have been adjusted do not go back and re-adjust the C60 Trimmers.

The output meter may show an increase by doing this, but actually the resonant circuits are thrown out of alignment.

2. BROADCAST BAND ALIGNMENT.

(a) **OSCILLATOR TRIMMER**—Set service oscillator at 1500 K. C. and connect test lead to antenna terminal, adjust trimmer C8 until with signal tuned in dial points to 1500 on white scale.

(b) **OSCILLATOR PADDER**—Set service oscillator at 600 K.C. and adjust padder C11 so that with signal tuned in, dial points to 600 on black scale. (Re-check at 1500 as in section "A" above).

(c) **R. F. TRIMMERS**—With service oscillator set at 1500 K.C. and set tuned to that frequency, adjust trimmers C5 and C2 for maximum output.

3. NUMBER 2 BAND ALIGNMENT.

(a) **OSCILLATOR TRIMMER**—Set service oscillator at 6000 K.C. and with band switch turned to the red position, adjust trimmer C9 until with signal tuned in dial points to 6.0 on the red scale.

(b) **OSCILLATOR PADDER**—Set service oscillator at 2000 K.C. and adjust padder C12 so that with signal tuned in dial points to 2.0 on the red scale. (Re-check at 6000 as above).

(c) **R. F. TRIMMERS**—With the service oscillator at 6000 K.C. and set tuned to that frequency, adjust trimmers C6 and C3 for maximum reading on the output meter.

4. NUMBER 3 BAND ALIGNMENT.

(a) **OSCILLATOR TRIMMER**—Set service oscillator at 15,000 and with band switch turned to the blue position, adjust trimmer C10 until with signal tuned in, dial points to 15 on the blue scale.

(b) **OSCILLATOR PADDER**—Set service oscillator at 6000 K.C. and adjust padder C13 so that with signal tuned in dial points to 6 on the blue scale. (Re-check at 15,000 as above).

(c) **R. F. TRIMMERS**—With the service oscillator at 15,000 K.C. and the set tuned to that frequency adjust trimmers C7 and C4 for maximum reading on output meter.

5. LONG WAVE "X" BAND ALIGNMENT.

(a) **OSCILLATOR TRIMMER**—Set service oscillator at 350 K.C. and with band switch turned to the brown position adjust trimmer C41 until with signal tuned in, dial points to 350 on the brown scale.

(b) **OSCILLATOR PADDER**—Set service oscillator at 150 and adjust padder C42 so that with signal tuned in, dial points to 150 (Re check at 350 as above).

(c) **R. F. TRIMMERS**—With service oscillator at 350 K.C. and set tuned to that frequency, adjust trimmers C40 and C38 for maximum reading on output meter.

CAUTION—With the oscillator set at 15,000 two signals can be heard in the receiver, one at 15,000 K.C. and the other at 14,088 K.C.; do not mistake the latter signal for the former. In aligning the receiver at 15,000 K.C. the signal of higher frequency is the correct one and the set should be adjusted to it. This secondary image is noticeable on all short wave bands and appears at a lower place in frequency than the desired signal by twice the I. F. frequency.

Do not bend selector plates, as this destroys selector alignment.