



Rogers 15-86A, 15-86AL Majestic 4186A, 4186AL De Forest A68-41, AL68-41 (Chassis 10RA861, 10RA862)

INTERMEDIATE FREQUENCY & BROADCAST BAND A961, A1061

Set Set Opera-Connect Vol. Dummy Generator Adjust Receiver Remarks tion Generator Antenna Cont. Tuning Tuning C10, C11, C12, 1 To Grid Cap of To peak I.F. 456 kcs. 700-.1 mfd. Max. 6J8M Tube 800 kcs. C13, C14 C8 C6 $\frac{2}{3}$ To antenna 1600 kcs. 1600 kcs. .0002 mfd. Max. To peak Osc. 1600 kcs. .0002 mfd. To antenna 1600 kcs. Max. To peak I.S. C4 T5 C8, C6, C4 4 To antenna 1600 kcs. 1600 kcs. .0002 mfd. Max. To peak Ant. .0002 mfd. 5* To antenna 600 kcs. 600 kcs. Max. To track Osc. .0002 mfd. To antenna 1600 kcs. Max. To recheck adjust. 1600 kcs.

A862

A861.

| Opera- tion | Connect Generator | Set Generator Tuning | Set Receiver Tuning | Dummy Antenna | Vol. Cont. | Adjust | Remarks |
|----------------|----------------------------------|------------------------------------|------------------------------------|----------------------------------------|----------------------|----------------------------|-------------------------------------------------|
| 1 | To Grid Cap of 6J8M Tube | 456 kcs. | 700 800 kcs. | .1 mfd. | Max. | C10, C11, C12, C13, C14 | To peak I.F. |
| 2 3 | See note † See note † | 1500 kcs. 1500 kcs. | 1500 kcs. 1500 kcs. | .0002 mfd. .0002 mfd. | Max. Max. | C8 C6 | To peak Osc. To peak I.S. |
| 5* 6 | See note † See note † See note † | 1500 kcs. 600 kcs. 1500 kcs. | 1500 kcs. 600 kcs. 1500 kcs. | .0002 mfd. .0002 mfd. .0002 mfd. | Max. Max. Max. | C4 T5 C8, C6, C4 | To peak Ant. To peak Osc. To recheck adju |

[†] Arrange generator leads in proximity to loop antenna in cabinet, being careful the position of the loop and leads does not vary, otherwise there will be a variation on the output meter. As an alternative, the generator may be connected to post number 1, through a dummy antenna of a 200 mmfd. mica condenser and the ground connected to terminal number 3.

† When the receiver is moderately well aligned, adjust the generator attenuator to zero. If a signal is still heard, the position of the signal generator should be turned at an angle until the minimum pick-up is obtained.

*Rock tuning control during this adjustment.

A861, A862, A961, A1061 SHORT-WAVE SPREAD-BAND

The most satisfactory method of aligning and checking the spread-band ranges is through the use of actual shortwave stations of known frequencies, which are tuned in on a specific receiver band and deviations from calibration noted.

When using a signal generator allow it to operate until it stops drifting. Check its calibration against known stations at or near the aligning frequencies shown.

| Opera- tion | Connect Generator | Generator Tuning | Receiver Tuning | Dummy Antenna | Adjust | Lineal Deviation |
|----------------|----------------------|----------------------------------------------------------|--------------------|------------------|-----------|---------------------|
| 1 | Antenna | 17.8 mcs. | 17.8 mcs. | 400 ohms | C9 | + 1/8" |
| 2 | Antenna | 6.1 mcs. | 6.1 mcs. | 400 ohms | T6 | + ½" + ½" |
| 3 | Antenna | 9.6 mcs. | 9.6 mcs. | 400 ohms | T7 | + 1/8" |
| 4 | Antenna | 11.8 mcs. | 11.8 mcs. | 400 ohms | T8 | + 1/8" |
| 5 | Antenna | 15.2 mcs. | 15.2 mcs. | 400 ohms | T9 | + ½" + ½" |
| 6 | Antenna | 17.8 mcs. | 17.8 mcs. | 400 ohms | T10 | + 1/8" |
| 7 | Antenna | For maximum sensitivity in the middle of the 18 mc. band | | 400 ohms | C7 | |
| 8 | Antenna | | | 400 ohms | C5 | |

NOTE: Use only a visual output indicator during alignment. Keep the generator output low—only sufficient to give a readable indication.

The dummy antenna must be non-inductive, preferably that using isolantite sleeve and metal ends.