

Sparton Model 99 Alignment Data

* 1. I.F. ALIGNMENT—

Set the service oscillator at 456 K.C. and connect the lead to the grid cap of the converter tube (6K8). Adjust trimmers C8P, C8S, C9P, C9S, to obtain maximum output as indicated by either an output meter or the Viso-glo tube.

While making the I.F. adjustments the set should be tuned to 1500 K.C. on the B.C. band and the A.F.C. switch should be in the off position (full right).

The above adjustments are all that are necessary for the I.F. alignment and Automatic Frequency Control circuit.

2. B.C. OSCILLATOR TRIMMER—

Turn the pointer to 1500 K.C. on the B.C. band. Feed a 1500 K.C. signal in through the antenna terminal from the service oscillator and adjust trimmer C2C until signal is tuned in.

3. B.C. OSCILLATOR PADDER—

With the service oscillator set at 600 K.C. and the pointer tuned to 600 on the B.C. band, adjust trimmer C4 until signal is tuned in. Recheck as in section 2 above.

4. B.C. R.F. TRIMMERS—

With the set tuned to 1500 K.C. and the oscillator set at the same frequency adjust trimmers C2A and C2B for maximum output.

5. 6 MEGACYCLE BAND TRIMMERS—

Tune the set to 6.10 megacycles on the first S.W. band and apply a 6100 K.C. signal to the antenna. Adjust the oscillator trimmer C7A for maximum output. Adjust R.F. and Ant. trimmers C6A and C5A for maximum output.

6. 9 MEGACYCLE BAND TRIMMERS—

Tune the set to 9.60 megacycles on the second S.W. band and apply a 9600 K.C. signal to the antenna. Adjust the oscillator trimmer C7B for maximum output. Adjust R.F. and Ant. trimmers C6B and C5B for maximum output.

7. 12 MEGACYCLE BAND TRIMMERS—

Tune the set to 11.85 megacycles on the third S.W. band and apply a 11,850 K.C. signal to the antenna. Adjust the oscillator trimmer C7C for maximum output. Adjust R.F. and Ant. trimmers C6C and C5C for maximum output.

8. 15 MEGACYCLE BAND TRIMMERS—

Tune the set to 15.30 megacycles on the fourth S.W. band and apply a 15,300 K.C. signal to the antenna. Adjust the oscillator trimmer C7D for maximum output. Adjust R.F. and Ant. trimmers C6D and C5D for maximum output.

9. I.F. REJECTOR TRIMMER—

The I.F. rejector circuit is in use only while the set is being operated on automatic tuning. For this reason switch to automatic tuning position, depress a selectronne button tuned to 900 K.C. or higher and adjust trimmer C3 for minimum signal when a 456 K.C. signal is fed into the antenna terminal.

10. SELECTRONNE TRIMMERS—

There are two trimmers only for each of the six buttons on the selectronne unit. When using automatic tuning two tuned stages and one untuned stage of R.F. are in use. On manual tuning there are three tuned stages in use.

To set up a station on the buttons first remove the discriminator tube (6H6G) being sure the tube removed is the discriminator tube as indicated on the top chassis view. Tune the desired station in manually, then switch to automatic tuning, push in the button you wish and locate the same station with the oscillator trimmer (oscillator trimmers are the top row) back of the depressed button. Repeat procedure for other five buttons.

11. SPECIAL NOTE FOR S.W. ALIGNMENT—

Should the set be badly out of alignment it may be difficult to locate the signal with the oscillator trimmer. To overcome this apply oscillator signals to the grid of the converter tube (6K8), turn the oscillator trimmer in tight, then unscrew it until the first signal is heard which is the correct one for the 12 and 15 M.C. bands. The second signal out is the correct one for the 6 and 9 M.C. bands.

Note—Extreme care must be taken on the above adjustments, as it is quite possible to miss hearing these signals or get the wrong one, as these oscillator trimmers are very critical in adjustment.