



Spread-Band Alignment.—The most satisfactory method of aligning or checking the spread-band ranges is on actual reception of short-wave stations of known frequency, by adjusting the magnetite-core oscillator coil for each band so that these stations come in at the correct points on the dial.

In exceptional cases, when the set is being serviced in a location where the noise level is high enough to prevent reception of short-wave stations, a test-oscillator may be used for alignment, but an extremely high degree of accuracy is required in the frequency and phase settings of the test-oscillator, as a slight error will produce considerable inaccuracy on the spread-band dial. The frequency settings of the test-oscillator may be checked by one or both of the following methods:

1. Determine the exact dial settings of the test-oscillator (for frequencies at or close to the specified alignment frequencies) by zero-beating it against the test-oscillator against short-wave stations of known frequency.
2. Use harmonics of the standard-broadcast range of a test-oscillator, first checking the frequency settings on this range by means of a crystal calibrator (RCA Stock No. 9572), or by zero-beating against standard broadcast stations.

When a test oscillator is employed for spread-band alignment, a final check should be made on actual reception of short-wave

stations of known frequency, and the magnetite-core oscillator coil for each band should be re-adjusted so that the stations come in at the correct points on the dial.

NOTE.—Whenever possible spread band adjustments should be made with the chassis fastened in the cabinet, and the pointer accurately aligned to the dial.

Spread-band Adjustments.—Alignment of the spread bands requires special procedure since test oscillators used alone are not ordinarily sufficiently accurate for this purpose. The RCA Stock No. 9572 Crystal Calibrator affords a convenient and accurate alignment standard. Wrap a few turns of wire around the crystal calibrator and connect one free end to the antenna terminal of the receiver. Using the tabulated alignment procedure for the necessary accuracy. Follow the tabulated alignment procedure for the "31M.", "25M.", and "19M." bands.

For the "B" band, snap crystal calibrator "H-Lo" switch to "Hi", turn the range selector to "B" band, and set receiver dial pointer to 6.0 mc. Adjust oscillator inductor C37 for minimum "Tuning Tube" opening. Use the peak indicated by the alignment table. Snap "H-Lo" switch to "Lo" and locate 4,100 kc (the first 100 kc harmonic above 6,000 kc) by slightly readjusting C37 with the dial pointer set at 6.1 mc. This method insures selection of correct crystal-calibrator harmonic.

MODELS
KL-70 KL-76
(RCA VICTOR)
A.25 A.38

ALIGNMENT LAYOUT
& PUSHBUTTON DATA
ON DATA SHEET 73

C. G. F.