



In exceptional cases, when the set is being received 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 at an extremely high degree of accuracy is required if the frequency settings of the test-oscillator, as a signal-band dial. The considerable inaccuracy in the spread-band dial. Therefore, frequency settings of the test-oscillator may be checked by one 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 the test-oscillator against short-wave stations of known frequency.
2. Use harmonics of the standard broadcast range of the oscillator, first checking the frequency settings on this range by means of a crystal calibrator (RCA Stock No. 9572), or 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

**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 band requires special procedure since test oscillators used, like the RCA Stock No. 9572 Crystal Calibrator affords a convenient and accurate alignment standard. With a few turns wire around the crystal calibrator and connect one free end to the antenna terminals of the receiver. Using the crystal calibrator to obtain the necessary accuracy, follow the published alignment procedure for the 31Mc., 25Mc., and 13Mc. bands.

For the "B" band, snap crystal calibrator "H.L.O." switch to "H", turn the mouse selector to "B" band, and set receiver dial pointer to 6.0 mc. Adjust oscillator padder C37 for minimum output. "Tuning Tube" opening. Use the peak indicated by the alignment indicator table. Snap "H.L.O." switch to "Lo" and locate 6,100 kc (44.0 mc) first 100 kc harmonic above 6,000 kc by slightly readjusting the selection with the dial pointer set at 6.1 mc. This method insures a selection of correct crystal-calibrator harmonic.

**(RCA. VICTOR  
A.25 A.38)**

ALIGNMENT, LAYOUT  
& PUSHBUTTON DATA  
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