

**2.1033 (12) (9)** Tune-up procedure over the power range, or at specific operating power levels.

Acceptance limit used within the production of the intentional radiator are:

1. Center Frequency of  $433.5\text{Mhz} \pm 15\text{Khz}$
2. Deviation no greater than  $\pm 90\text{Khz}$  and no less than  $\pm 70\text{Khz}$

While feeding the transmitter a square wave at 9600 Hz (19.2K Baud), the limits are measured using a calibrated spectrum analyzer on all transceivers during the production process. If a limit is exceeded, the follow corrective actions are taken.

1. If the deviation was greater than  $\pm 90\text{Khz}$ , then the value of C45 would be reduced to lower the deviation swing. It is known that a change of this type would increase the center frequency and that step #4 may be needed after re-measurement.
2. If the deviation was less than  $\pm 70\text{Khz}$ , then the value of C45 would be increased to increase the deviation swing. It is known that a change of this type would decrease the center frequency and that step #3 may be needed after re-measurement.
3. If the center frequency was less than 433.485, then value of C44 would be reduced to increase the center frequency. It is known that a change of this type will also reduce the overall deviation and that step #2 may be needed after re-measurement.
4. If the center frequency was greater than 433.515, then value of C44 would be increased to lower the center frequency. It is known that a change of this type will also increase the deviation and that step #1 may need be needed after re-measurement.

If the limits are not then met – the unit will be scrapped.