

Trap Tuning

Accurate tuning is made possible by the wide range of tuning flexibility designed into our verticals. Not only can you use the normal adjustable tubing to change resonance, but the traps themselves can be field tuned. This flexibility will enable you to achieve a good SWR even if your installation is not ideal. The trap adjustment is only used when you have exhausted the extending or collapsing of the tubing. Trap adjustment is not a substitution for a poor or no radial system.

The trap consist of three major components, Core tube, Trap can, Weather cap.

Adjusting the trap consist of moving the trap can up or down the core tubing.

Moving the trap can down the core tube raises the resonate frequency and moving trap up the core tube will lowers the resonate frequency. There is a silicone seal on the inside of weathercap so you may need to twist the trap can and remove silicone to move weather cap and trap can

1. Determine if the antenna is looking long or short
2. Collapse all 10 meter tubing
 - a. Is 28 Mhz SWR the lowest in the band – Long antenna
 - b. Is 29.7 Mhz SWR the lowest in the band – Short antenna
3. 10 meter needs to be tune to the center of the band 28 Mhz and 29.7 Mhz must be equal SWR reading with resonates being close to the center of the band
4. If the antenna is long remove trap from antenna
5. Make a reference line on the core tube below the trap can and clamp
6. Make two more lines $\frac{1}{4}$ inch down from reference lines
7. Loosen clamp and lower trap can to first mark (this will raise the resonate frequency of trap)
8. Place trap back into Antenna
9. Check SWR 28 Mhz and 29.7 Mhz must be equal SWR reading with resonates being close to the center of the band.
10. If the Band edges are not equal
11. Remove trap from antenna
12. Loosen clamp and lower trap can to second mark
13. Repeat steps 9, 10, 11 until band edges are equal (expanding tubing will fine adjust SWR)
14. After trap tuning is complete pull up black weather cap on core tube remove silicone and reapply silicone and slide weather cap back on to trap can
15. If the antenna is short use the same steps except move the trap can up the core tube (place tubing in normal installation position for testing)

This procedure is used on all traps

15 meter reference lines are only $\frac{1}{16}$ inch

20 meter reference lines are only $\frac{1}{8}$ inch

30 meter reference lines are only $\frac{1}{16}$ inch

