

Most dipoles require a little pruning to reach the desired resonant frequency. Here's a technique to speed the adjustment.

How much to prune: When assembling the antenna, cut the wire 2 to 3% longer than the calculated length and record the length. When the antenna is complete, raise it to the working height and check the SWR at several frequencies. Multiply the frequency of the SWR minimum by the antenna length and divide the result by the desired f_0 . The result is the finished length; trim both ends equally to reach that length and you're done.

Loose ends: Here's another trick, if you use nonconductive end support lines. When assembling the antenna, mount the end insulators in about 5% from the ends. Raise the antenna and let the ends hang free. Figure how much to prune and cut it from the hanging ends. If the pruned ends are very long, wrap them around the insulated line for support.