

## Tip: Trimming Nylon Bolts Down to Size

Many RC airplanes these days use nylon bolts to hold the wing in place. These are great in that they never seem to vibrate loose and are easy to install in most cases. I've noticed however that a lot of folks at the field spend a lot of time screwing them in because the ones that have been provided with their Airplane are 2-3" long and need only be perhaps 1-1 1/2" long. In addition they can be hard to get started as the ends are often squared off when they are made. Cutting these off, if done incorrectly can result in bolts that are impossible or nearly impossible to install because the threads have been damaged. Here are a couple of tips on how to avoid that problem.

First, get a good quality nut of the correct size to fit the nylon bolt and thread it on. Adjust it to where it will remain on the bolt when you cut off the correct amount. I use the nut as a gauge and only leave the part of the bolt I want to cut off beyond the nut. You can cut the bolt with a lot of different tools, but I prefer a good pair of side-cuts. I slide the side-cuts up against the nut and snip away as shown here:



When you've made the cut, run the nut down the bolt closer to the head of the bolt. Now pull out your handy little hand-spun pencil sharpener (also shown above) and sharpen up the point of the bolt. It doesn't have to be sharp enough to write with, just take the edge off the front end. After you make a couple turns around it with the pencil sharpener try threading the nut out to where it is half off the bolt. If you encounter resistance, go another 1/4 turn or so then back up and run it out again until it comes completely off the bolt without any resistance at all. This will clean up any residual burrs on the threads. Usually, once I am finished with pencil sharpener, the nut comes off cleanly the first time, but it's good insurance to have it on there just in case. Here is the finished product:



Note the bevel on the leading end of the bolt compared to what we started with. Now you have a nylon bolt that is the right length for the job and actually starts a lot easier than before. Give it a try; you might be surprised how well this works.