How not to kill your winder!

Dave Drummer, PASO Flying Event State Supervisor

The most popular K&P (yellow) winder works very well for the Science Olympiad flying events, and will last a long time if you treat it well. I have one that has served me faithfully for more than 20 years, winding motor after motor smoothly. Yet I see (and hear) many students using winders that emit a grinding sound, and are obviously not smooth at all.

These winders have plastic gears so that each turn of the handle puts 10 or 15 turns on the rubber. If you wind with the rubber parallel to the winder shaft, as shown on the left, the action will be nice and smooth.

On the other hand, what I often see is students winding with the shaft at an angle to the rubber, as shown on the right. This puts a lateral load on the gears, which will eventually wear them out, and the winder will start to wind noisily, with a lot of added resistance. Be kind to your winder, and wind with the motor parallel as shown on the left!



