A SPOOL-FED RUBBER MOTOR

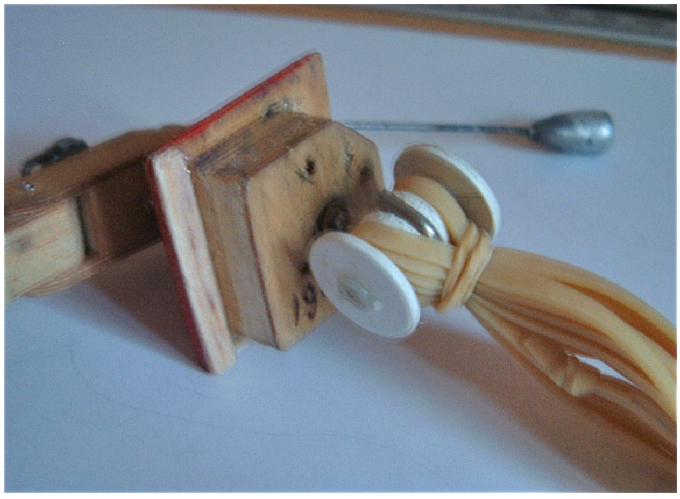
By George White

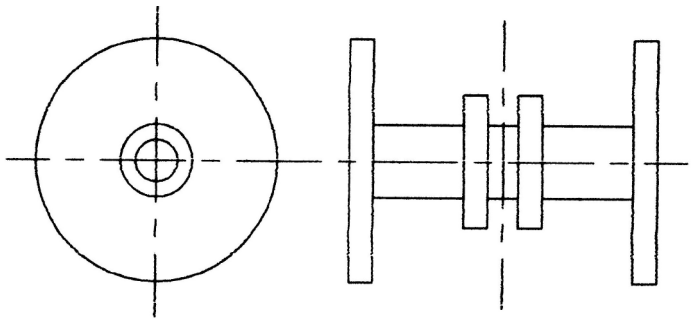
In a recent series of emails from England,John Worsley sent an interesting idea which for the older boys reading this, may be "old hat." However,old, John's twist on the idea may be just the thing for someone who's having trouble with the rubber motor bunching up at the motor peg. The concept of using a bobbin for the front of the motor is an old one, but apparently not popular due to the awkwardness of getting a bobbin onto the prop hook.

John uses the standard flat "shepherd's hook" shaped prop hook which most of us have used for years, and many continue to use whenever the "S" shaped hook is inappropriate. That style hook is notorious for having the motor climb and wrap itself around the prop shaft.

To tame that motor-climbing anomaly, John uses what amounts to a bobbin of sorts which makes it very difficult for the motor to misbehave. In effect, it's the front-end equivalent of the rotating rear motor peg discussed previously in this rag and elsewhere.

Below is a photo and drawing of the scheme John uses, which he made from a 3/16" hard plastic tube and plastic disks. The bobbin allows the motor to wiggle up and down as it unwinds, yet keeps the strands aligned with the hook.





The bobbin can easily be made from either sheet plastic or 1/32 ply disks CA'd or epoxied to a piece of aluminum tubing. The spacing of the inner rings should be equal to the diameter of the prop hook wire, with only enough play to allow the bobbin to rotate. The inner diameter of the "hook" part of the motor hook needs to be small enough to provide only a slightly loose fit around the aluminum tubing. This looks like a great idea for those endurance models with multi-strand motors. Keeping the width of the bobbin to 1/2" or less will allow it to fit nicely in the hook on the "Sidewinder" style winder many of us use.

After sending me the drawing above, John said that it would be wise to make the inner flanges at least equal to the size of the outer flanges. The purpose is to prevent individual strands of large, multi-strand motors from trying to climb over the inside flanges while winding, making the process of hooking the motor to the prop hook difficult. You'll also need to ensure that the dental band gathering the strands together is tight and close to the bobbin.