

# BENDING REVERSE 'S' HOOKS

by Tom Arnold

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Probably the most effective and theoretically simple anti-climb prop hook is the well known reverse 'S' Hook. Properly formed, it works like a charm. The problem is in the "properly formed" part, as there is one step in the procedure that is absolutely critical. This is the proper alignment of the shaft so that it points precisely at the transition point of the bends of the top and bottom portions of the reverse 'S' (Refer to accompanying sketches).

I've tried jigs, aligning marks on my workbench, my artist's eye... everything... and I seem to get correct alignment more by luck than good technique (And not very often at that!). When the shaft is out of alignment at that particular point, the end of the motor is not on the shaft axis and the resulting shake and wobble is horrible. Many modelers blame aircraft shake on unbalanced props, but it's more likely a misaligned prop shaft. Props are just not that heavy. After literally years of trial and error, I've come up with this practically fool proof method of getting it right. The finished result may look rather strange, but it works!

The gauge of the wire normally used is .047" diameter. It will not pull out of shape even with three loops of 1/8" rubber. The key is to have the wire touch the "sweet spot", and then make one final 90 degree bend from there. A slight spreading to allow the rubber to slip through and voila... you're there!

