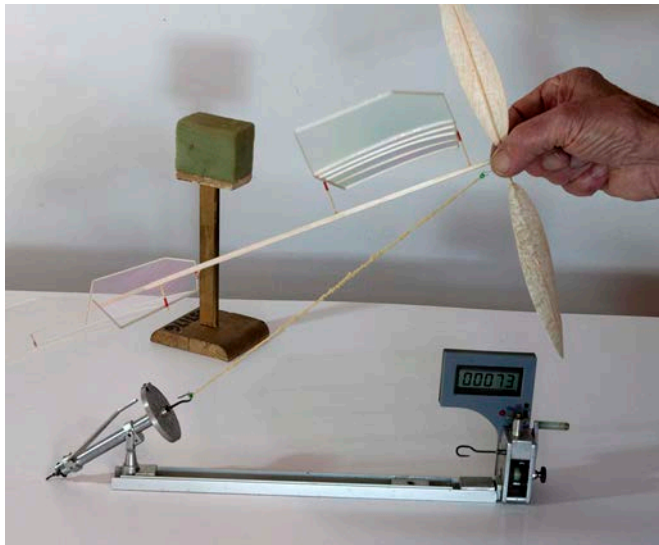


Torque Indicator

easily made

In his articles Clive urged indoor modellers to wind off the model and using a torque meter or, strictly speaking, a torque indicator as it is uncalibrated.



from Clive's series: Inside Indoors

This torque indicator isn't the latest word in design but is simple and easy to make.

It consists of a tube, a wire running down the middle and a scale with pointer. You'll need to mount it and it helps if it can *articulate* in some way as you move around while winding.

A 230mm CF tube of od 5mm does for the tube though that does finish up rather long overall [but helps with sensitivity]. If you go to Cornwell Model Boats you can pick up a plastic universal joint and some coupling inserts:

- MA 5000BLK universal joint
- MA 5580 5mm insert
- MA 5585 6mm insert
- MA 5560 2.3mm insert

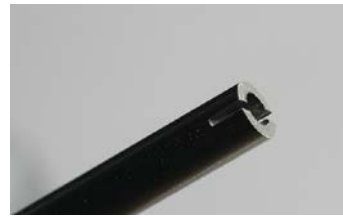


these bits will set you back a tenner

The wire running down the centre needs to be held in some way at the back and for this you should saw a small slot.

The wire can later be bent over and held with heat shrink. It will then slip neatly under the 6mm insert and locate in the universal joint.

I tapped the 2.3mm insert for an M2.5 bolt to fix it, but there's more than one way of skinning a cat . . .



slot or sawcut



wire held with heat shrink



The 6mm insert slips over the heat shrink



It helps to file a slot a slot where the wire bulges a bit

I drew up a dial, had it laminated and have spares if you want one.

Epoxy the dial to some ply and drill a hole for the 5mm insert – you might want to shorten it a bit.



leave enough to support the dial

Epoxy the dial onto the insert. The grub screw neatly lets you set/reset zero by rotating the dial. Even better, replace the grub screw with a slot head nylon bolt – much kinder on the CF tube.

Bend up a pointer. It can be attached with heat shrink when you're ready and a plastic nose button from SAMS completes the construction.



Choice of wire: well, for sensitivity, I used 210mm of .012" and soldered it to something a bit thicker at each end.

If push comes to shove it's easy enough to take the thing apart and try a different wire.

Bryan Gostlow