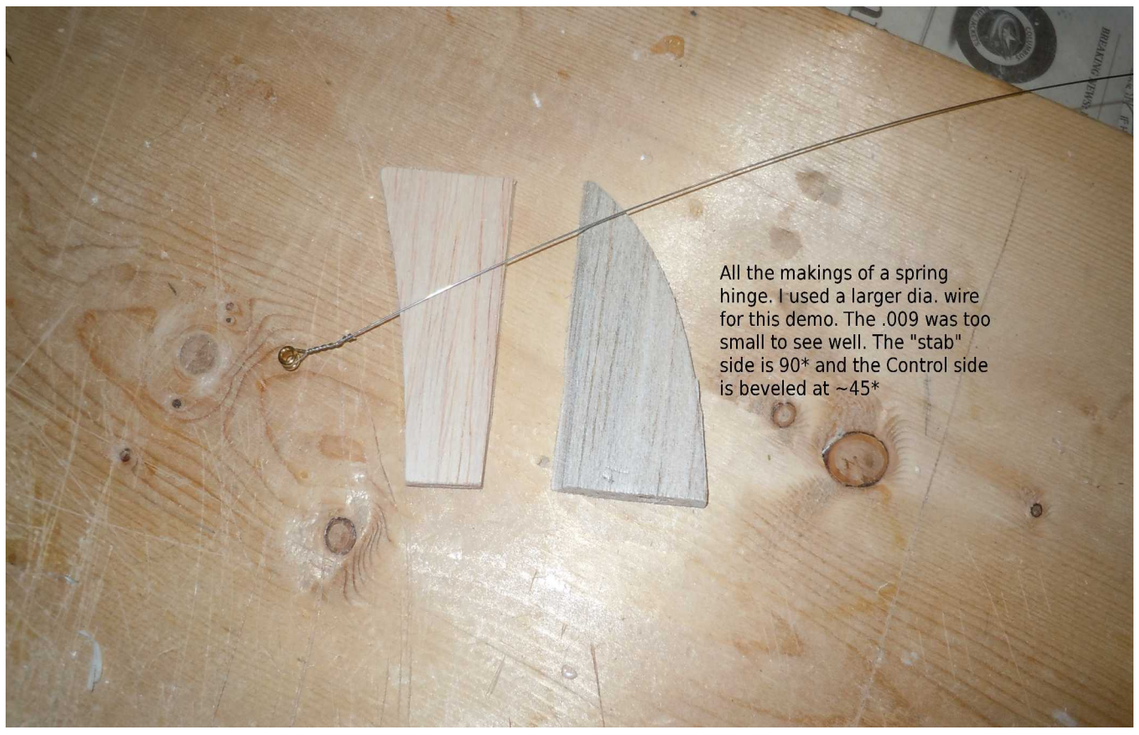
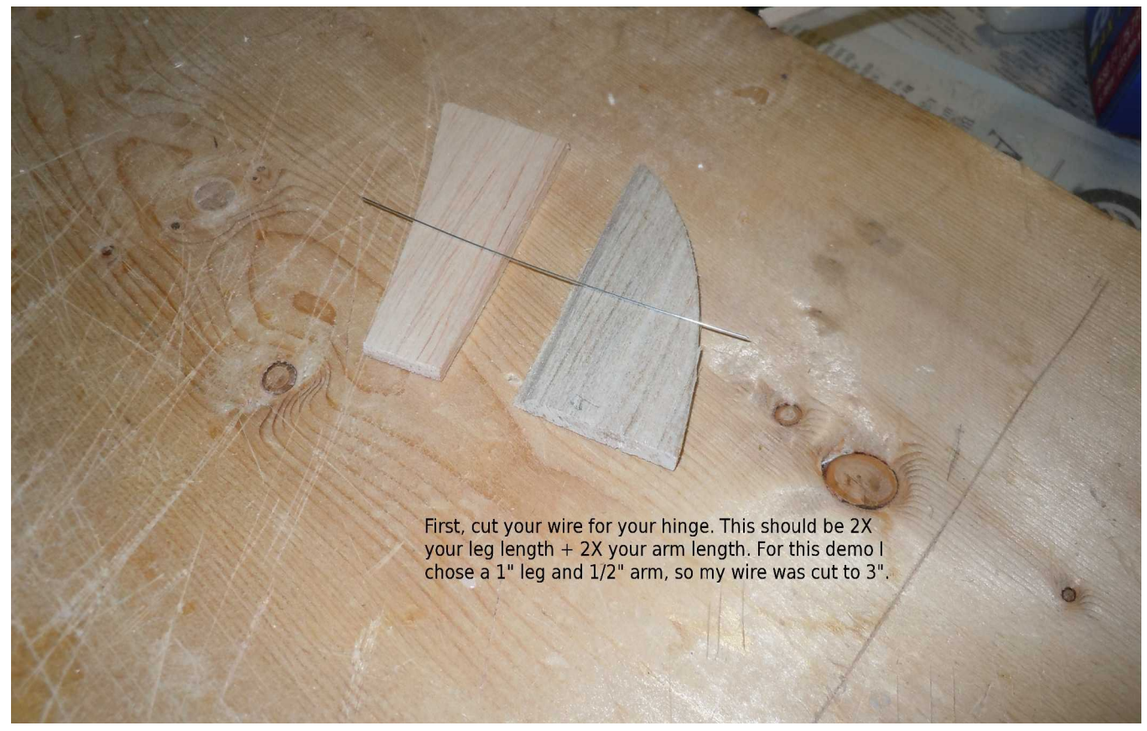
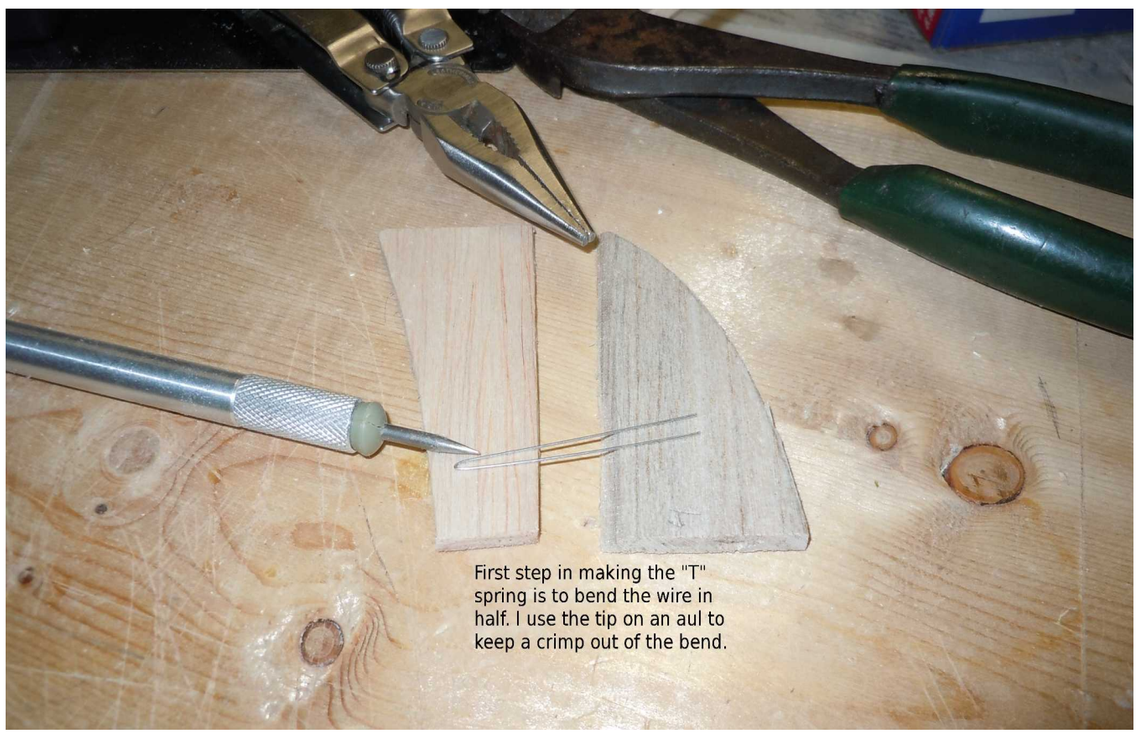


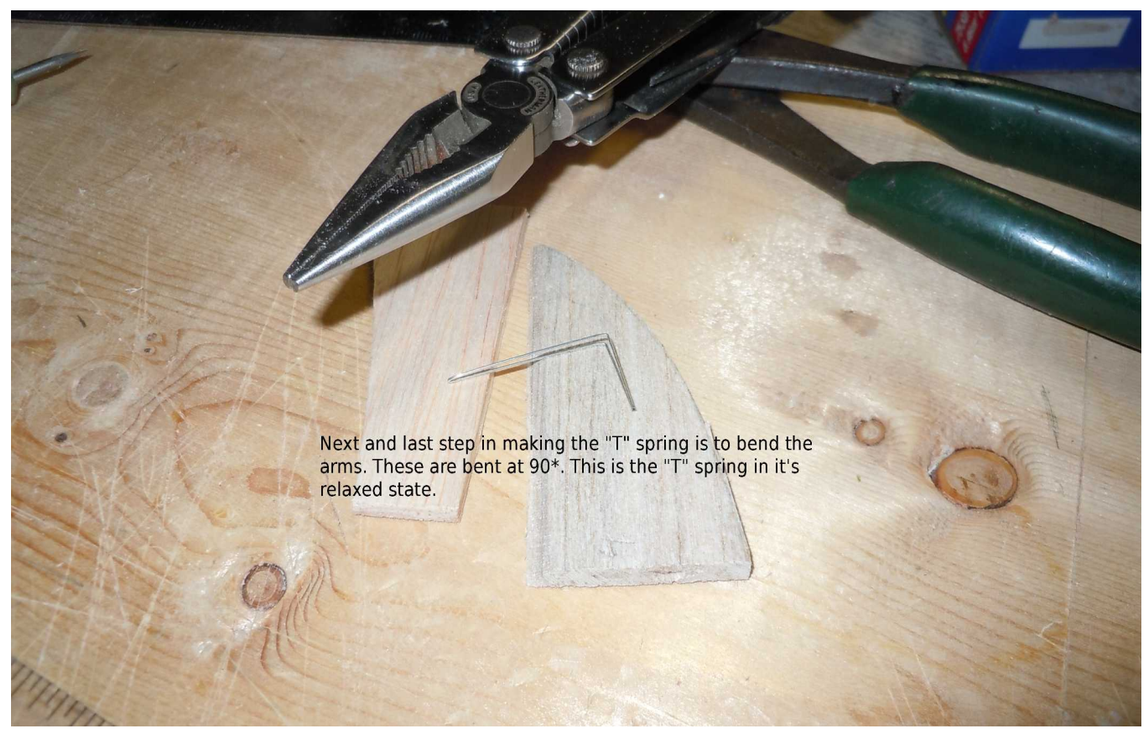
All the makings of a spring hinge. I used a larger dia. wire for this demo. The .009 was too small to see well. The "stab" side is 90* and the Control side is beveled at ~45*



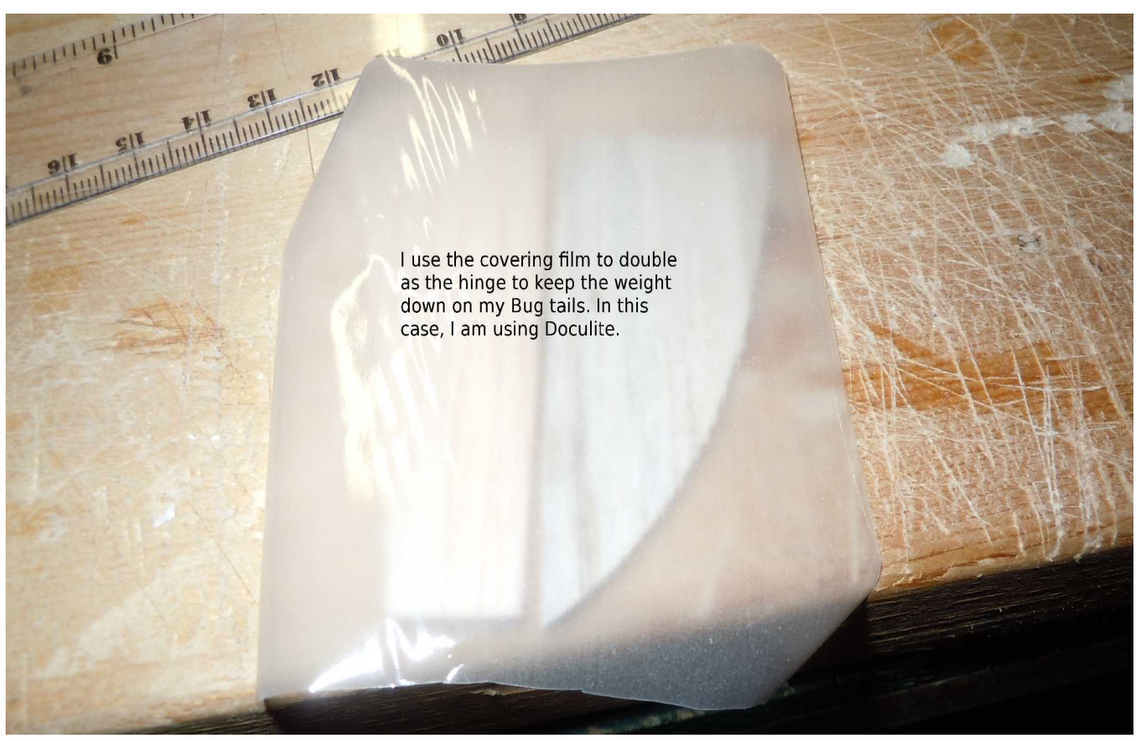
First, cut your wire for your hinge. This should be 2X your leg length + 2X your arm length. For this demo I chose a 1" leg and 1/2" arm, so my wire was cut to 3".



First step in making the "T" spring is to bend the wire in half. I use the tip on an aul to keep a crimp out of the bend.



Next and last step in making the "T" spring is to bend the arms. These are bent at 90*. This is the "T" spring in it's relaxed state.



I use the covering film to double as the hinge to keep the weight down on my Bug tails. In this case, I am using Doculite.

Cover the unbeveled side first. Make sure to leave a small gap for the hinge to move freely. This one is a bit sloppy but is only scrap for the demo.

Now fold the 2 parts all the way back (180*) and insert the spring. One arm into the stab, the other into the control surface. Make sure you get the arms stuck straight in. You should now wet the wood around the arm holes with some thin CA to harden the wood. Do not glue the legs. They need to be able to move freely. Now cover this side with the 2 parts still folded. Spring should be covered and inside of hinge should have your covering attached.

The "T" hinge places the stress points straight across from each other and can be placed right along side the boom and control horn (GREEN stress line, boom and horn in blue). A "Z" spring, (PINK) places the stress at different points (RED) and wants to twist the hinge line.