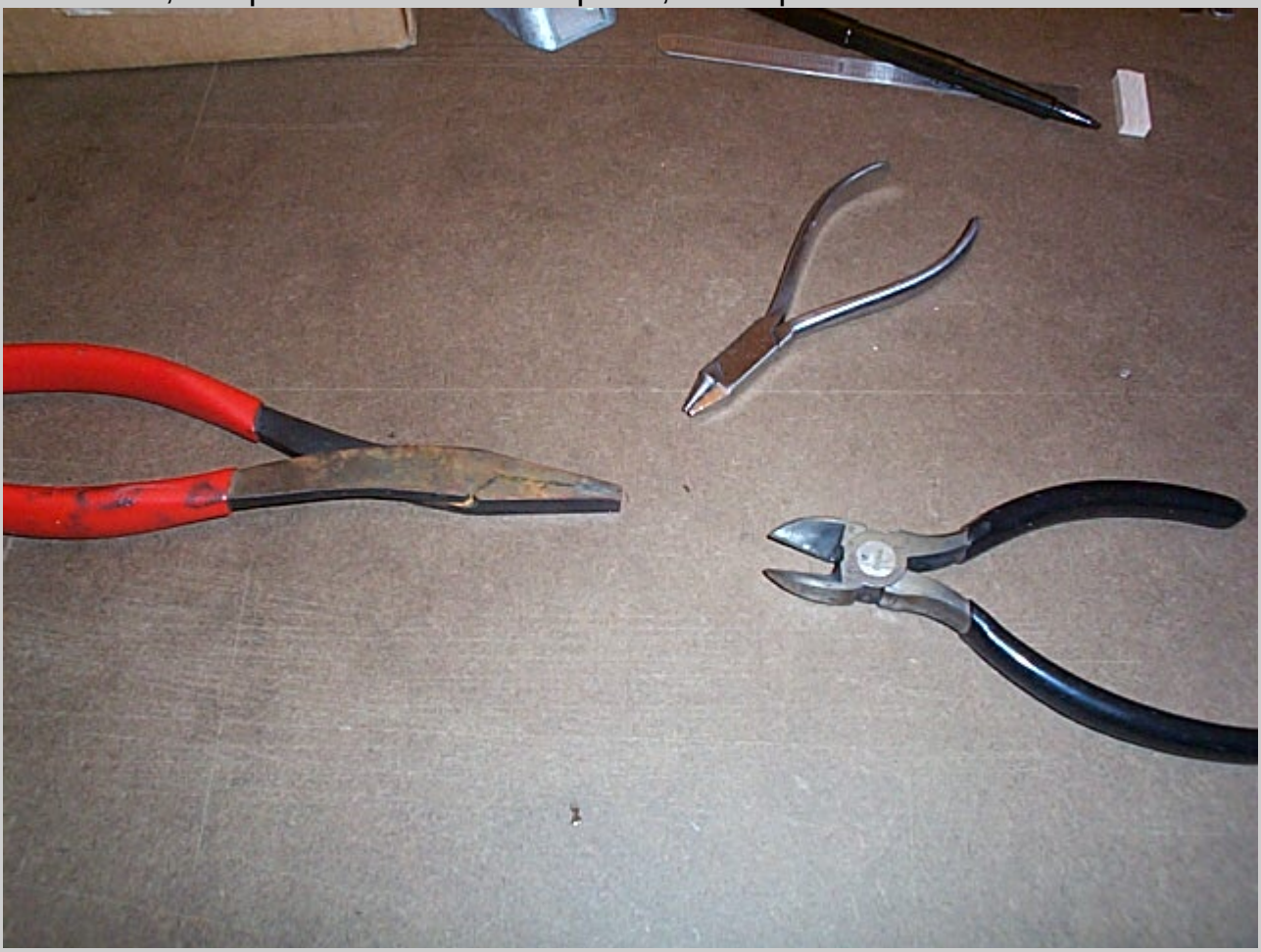
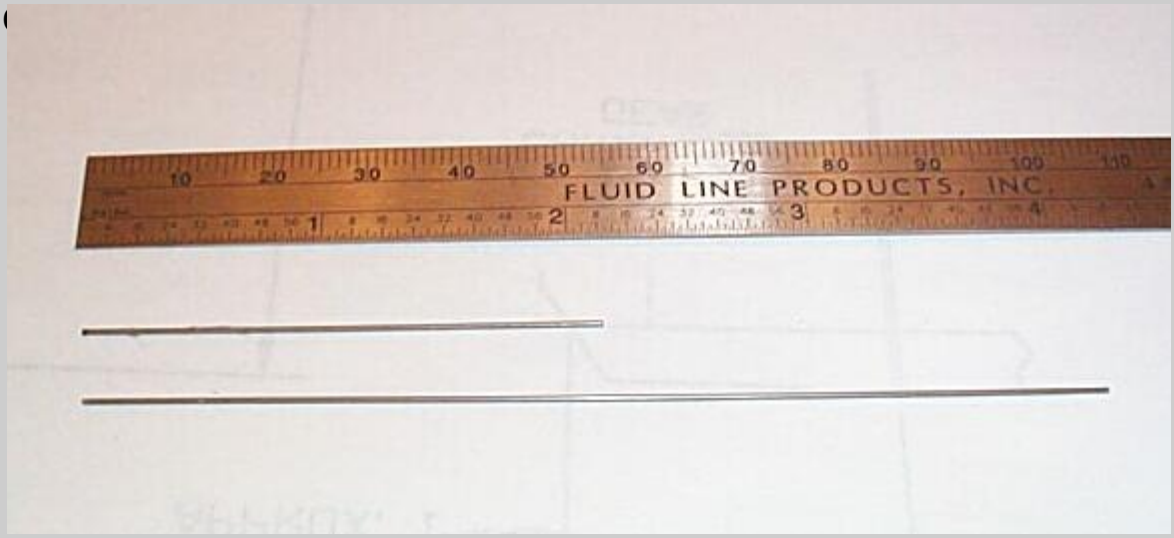
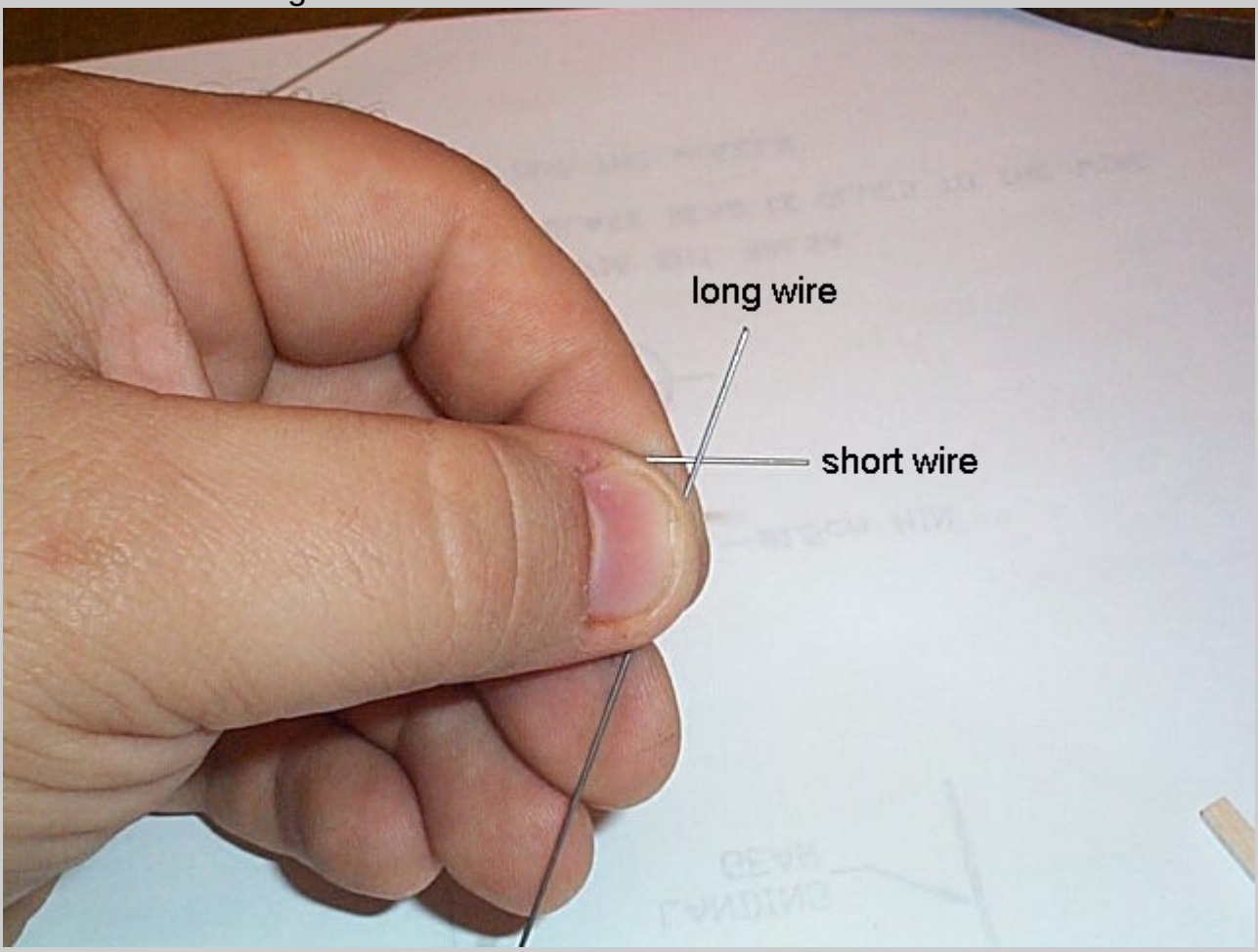
A wire nose bearing is used when you want to save weight on your model and also when you want the ability to change props quickly and easily. They are not that difficult to make and cost very little. You will need some .020" or .025" music wire, two pairs of needle nose pliers, and a pair of wire cutters.

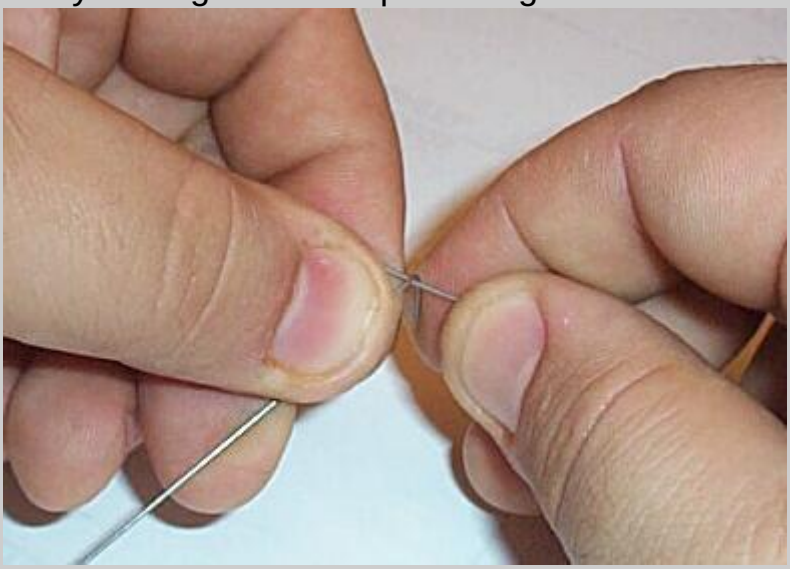




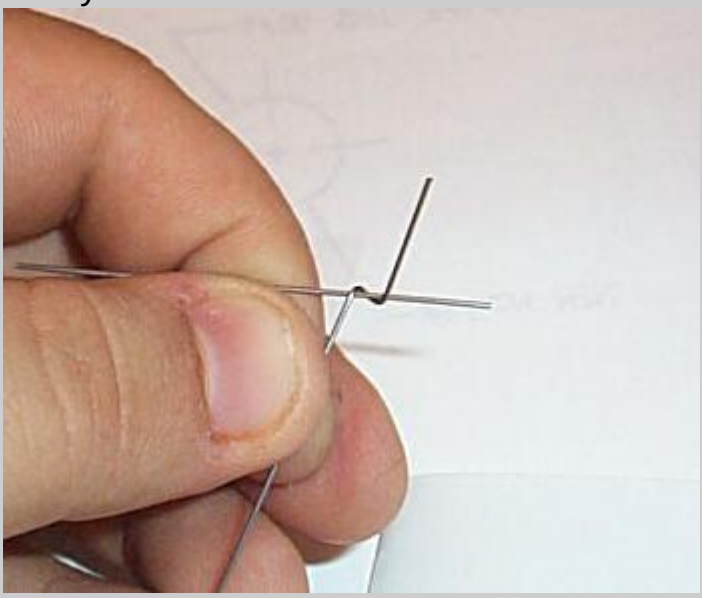
Then cross the longer wire over the shorter wire as shown below.



Use your finger and wrap the longer wire around the shorter wire.



Until you have this.

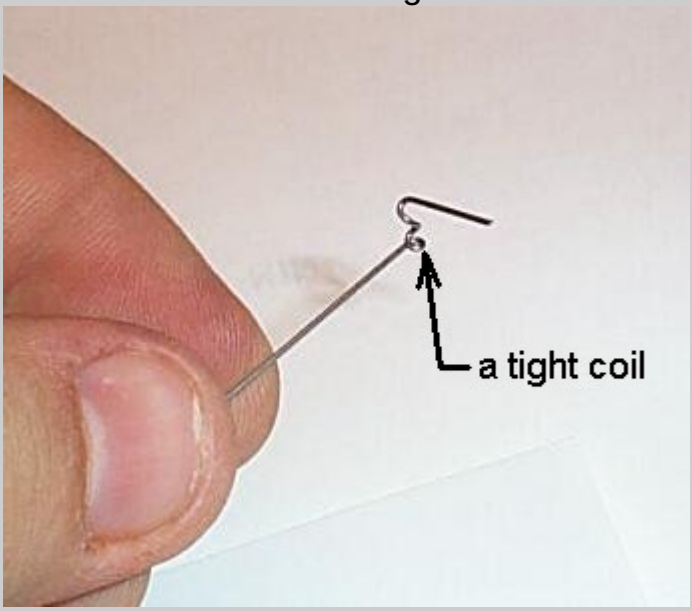


Then hold it with the pliers and wrap the wire around again, but this time you want the wire to make a tight loop when looped around. Meaning that the wire makes a loop around itself kind of like the way a phone cord looks when it is relaxed, the coils touch each other, you do not want the coils to be separated

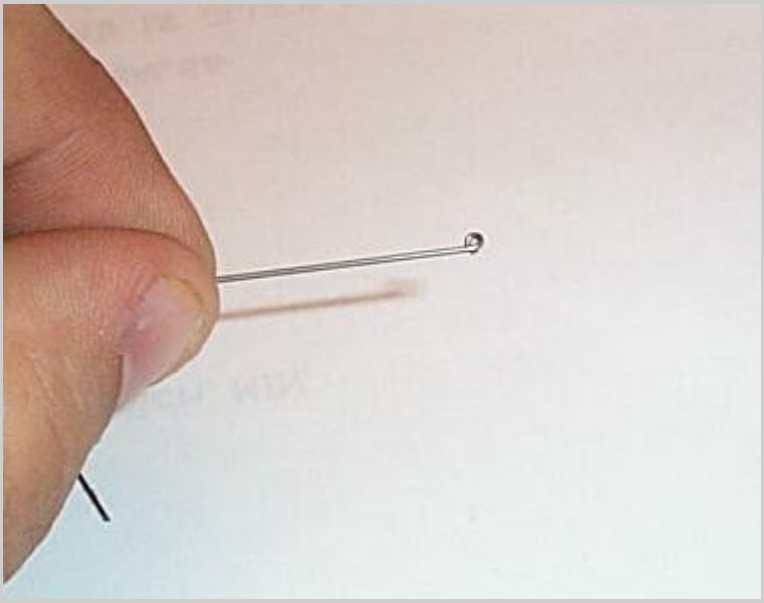
like a phone cord which is stretched out.



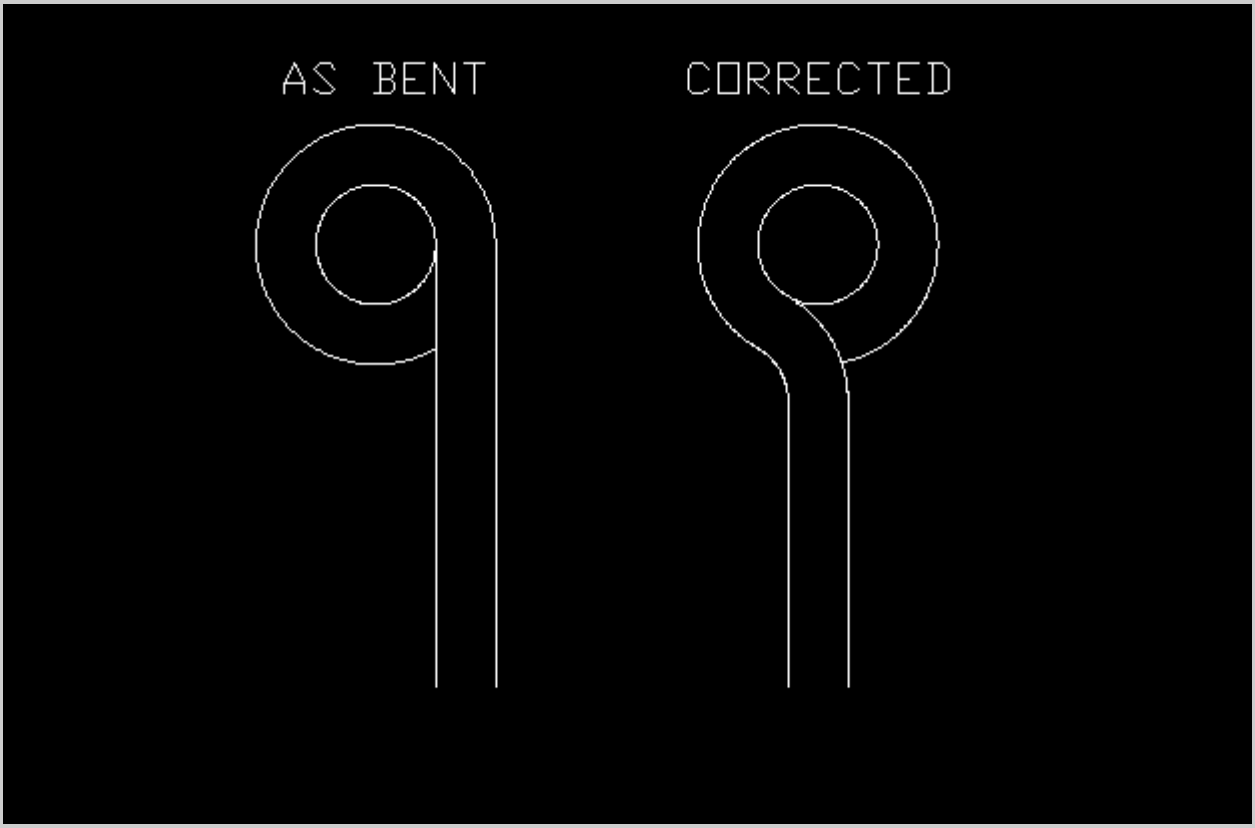
Here it is done with one tight coil.



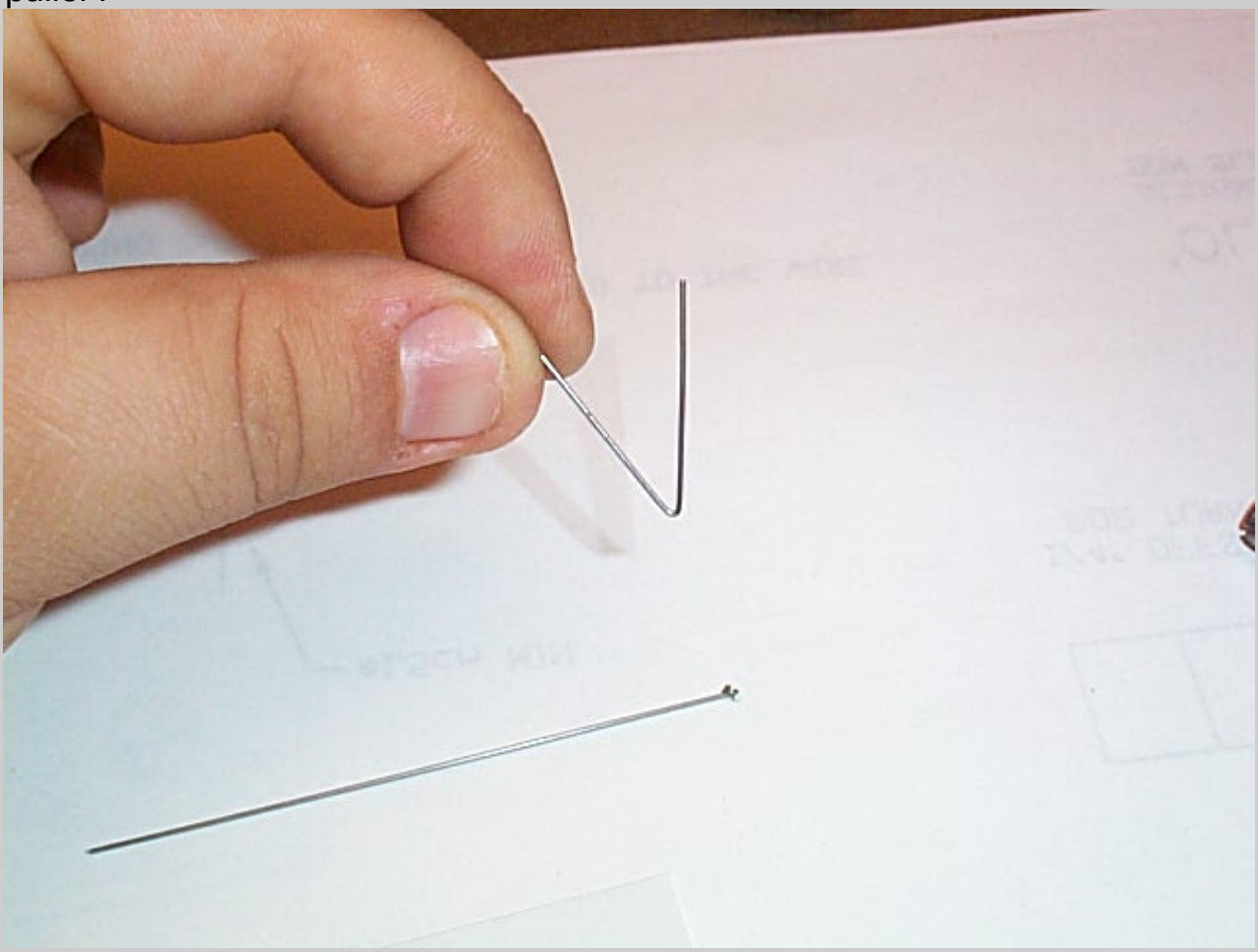
Then use the wire cutters to trim off the excess wire.



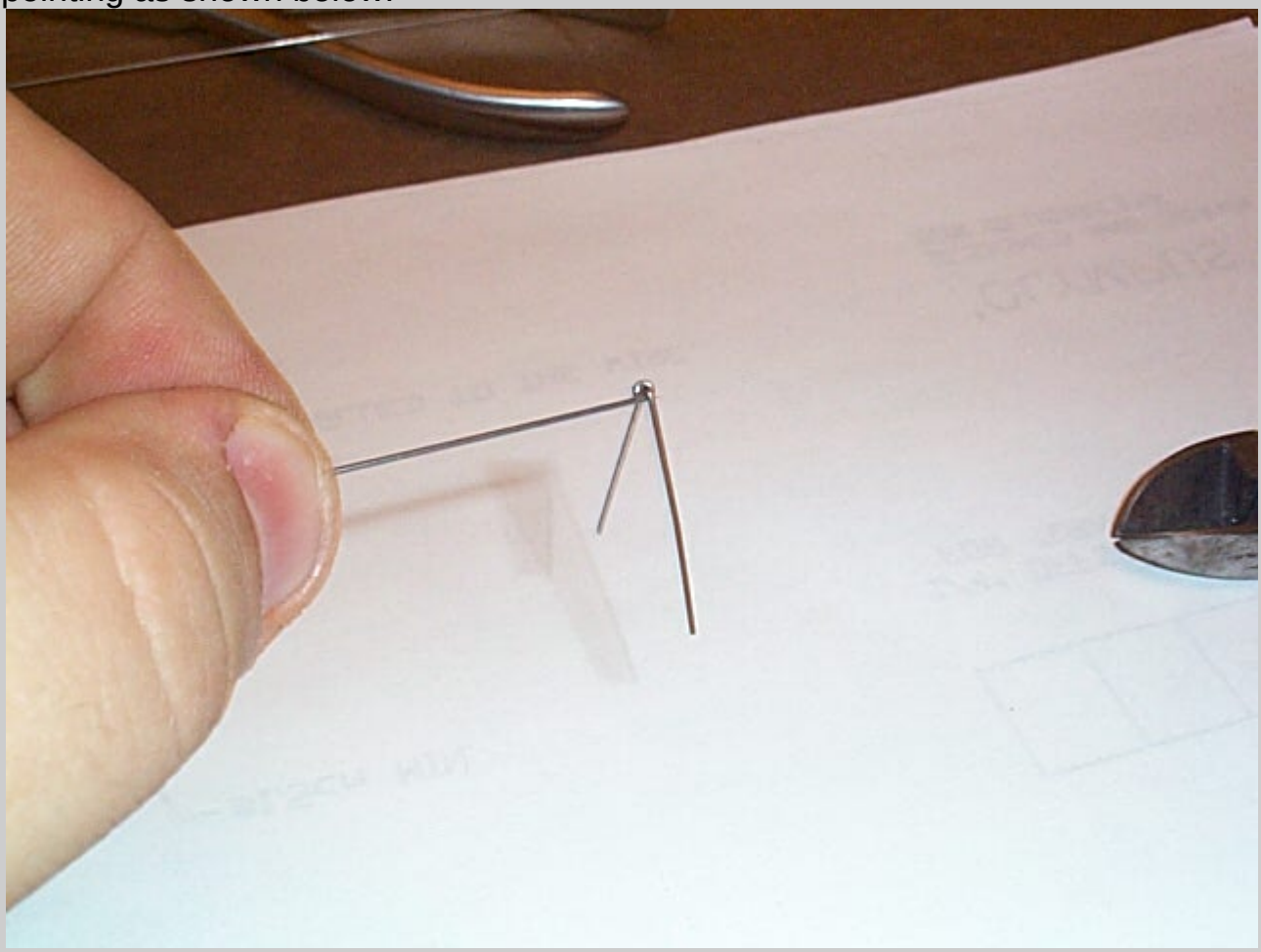
The next thing we need to do is straighten the loop to bring it back into line with the wire.



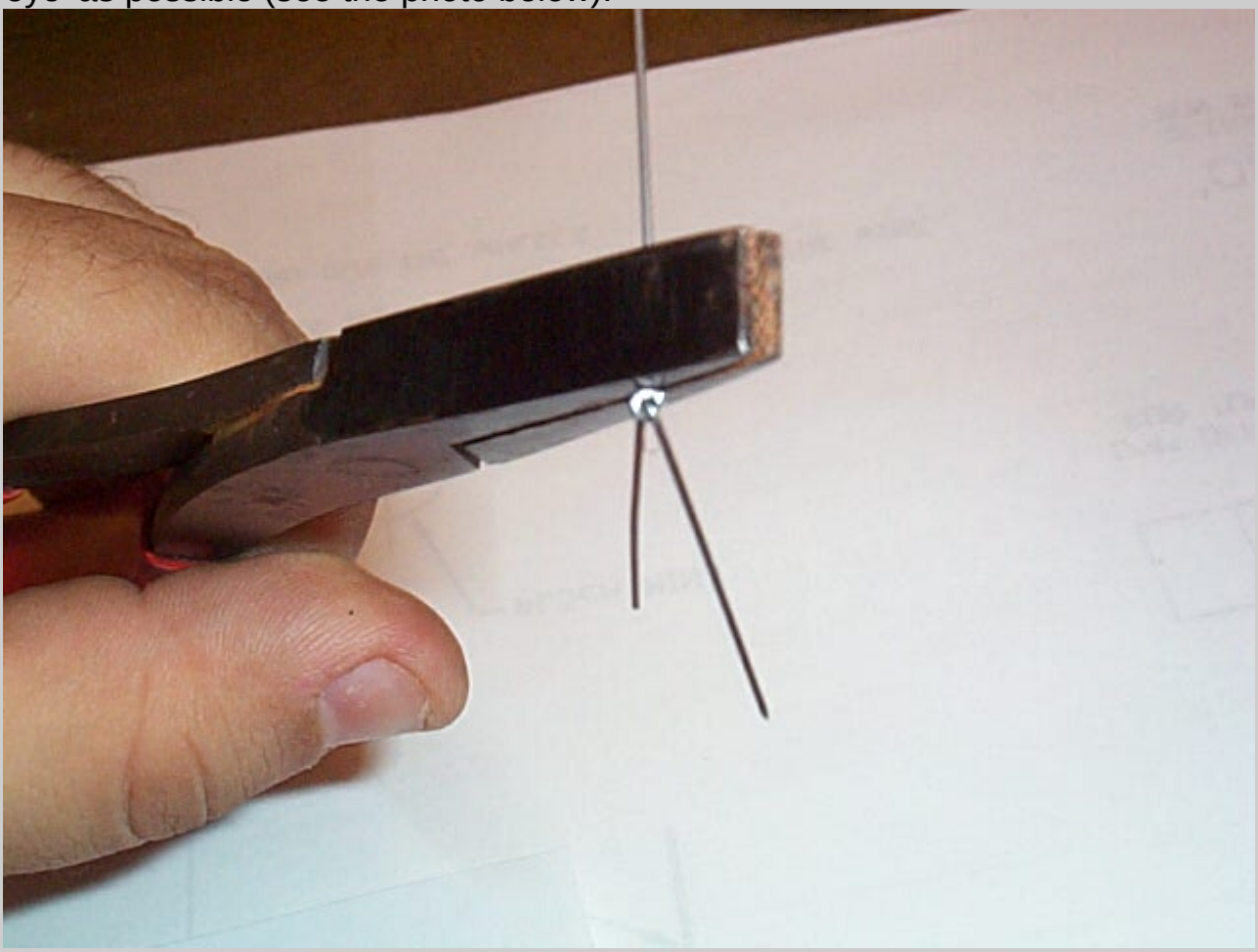
To do this you will need to make a 'V' shaped piece of wire to use as the 'puller'.



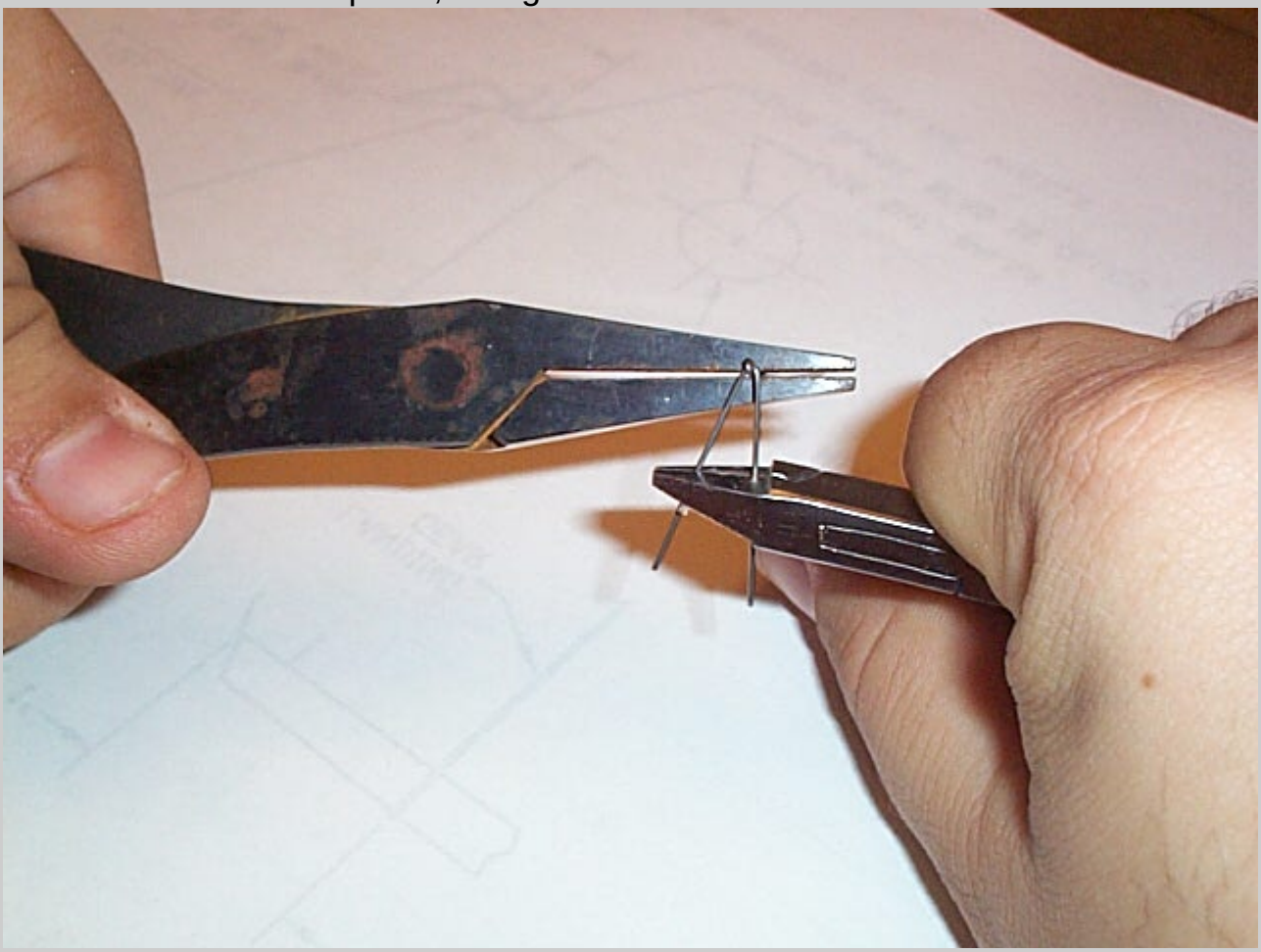
Then insert it into the wire 'eye' with the 'V' hanging down, and the 'eye' pointing as shown below.

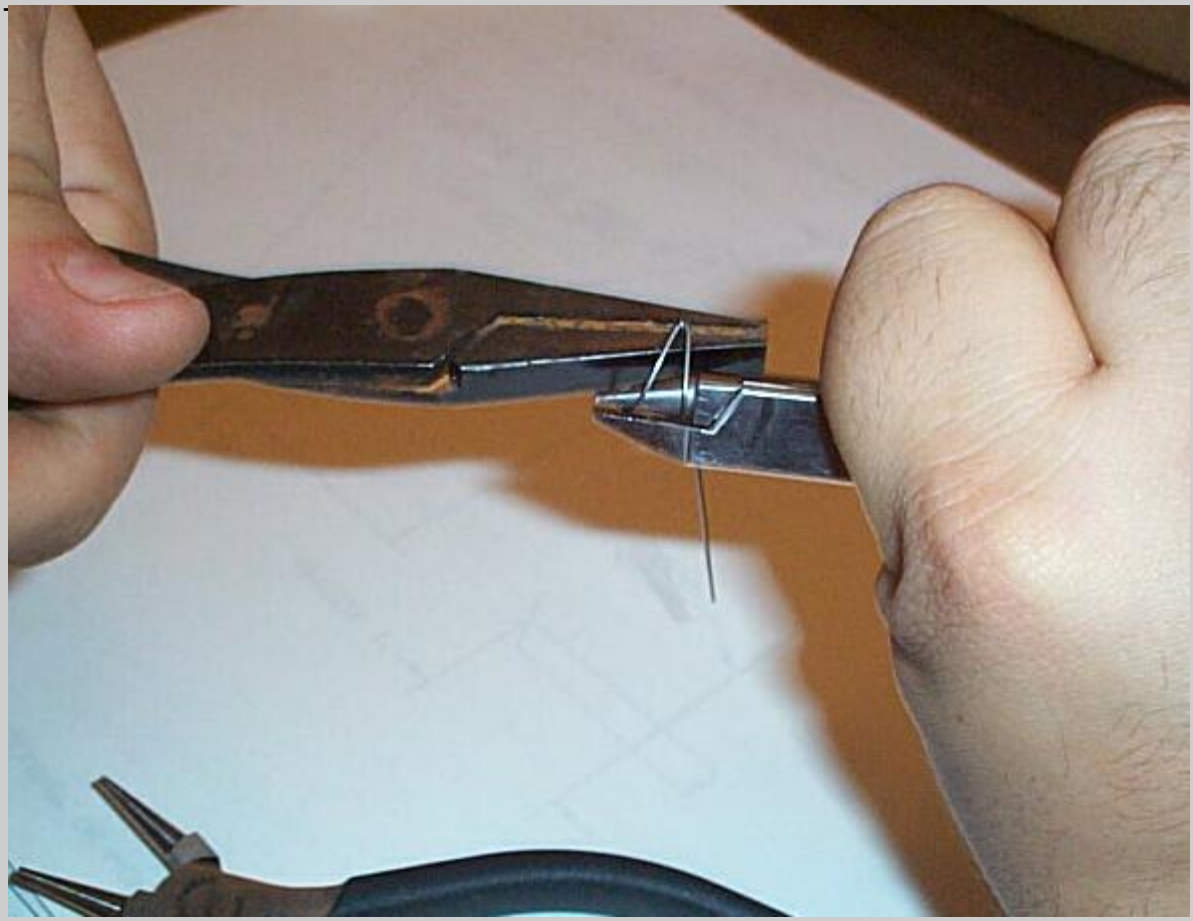


Use the needle nose pliers and hold the wire with the 'eye' as close to the 'eye' as possible (see the photo below).

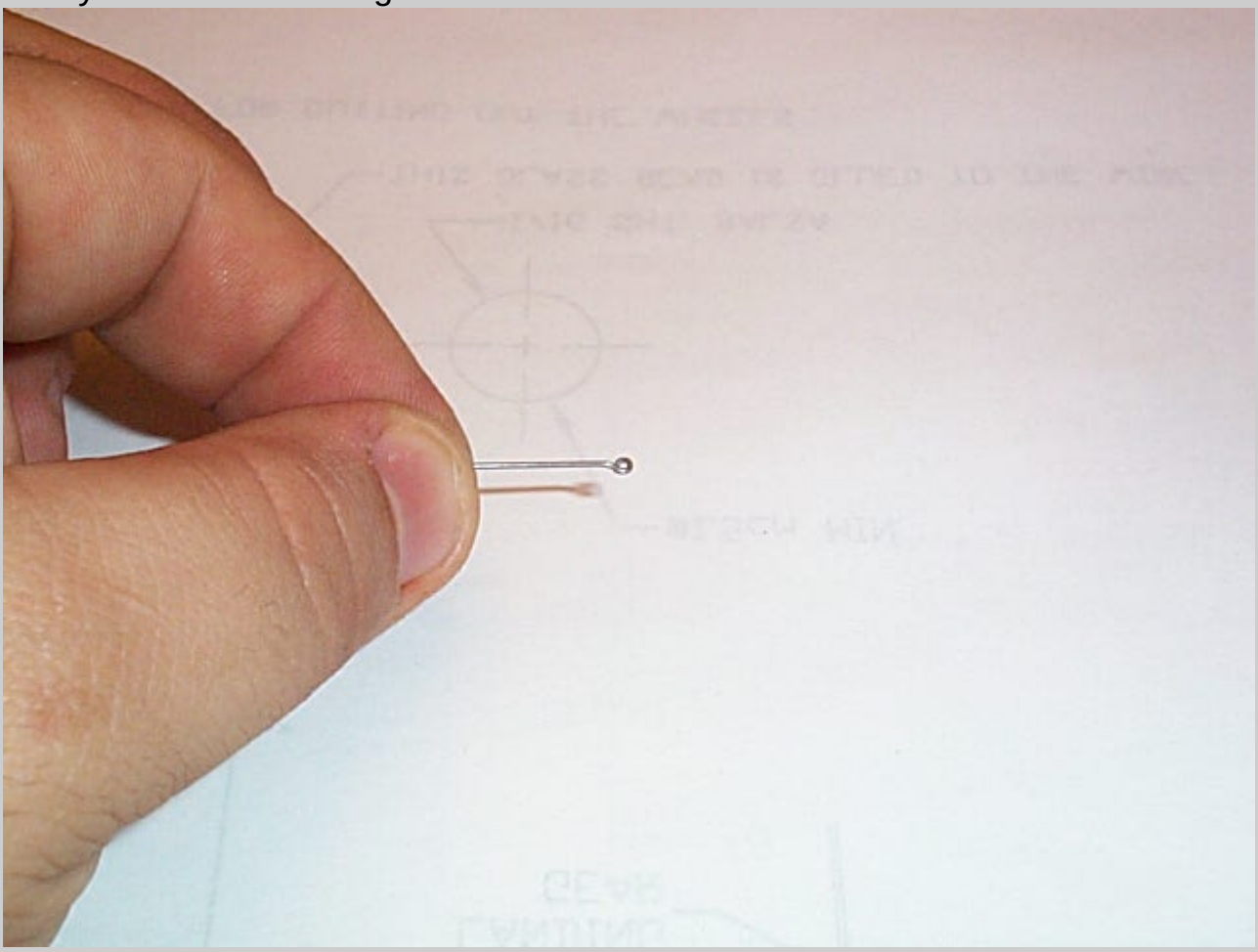


Use the second set of pliers, and grab the ends of the 'V'.

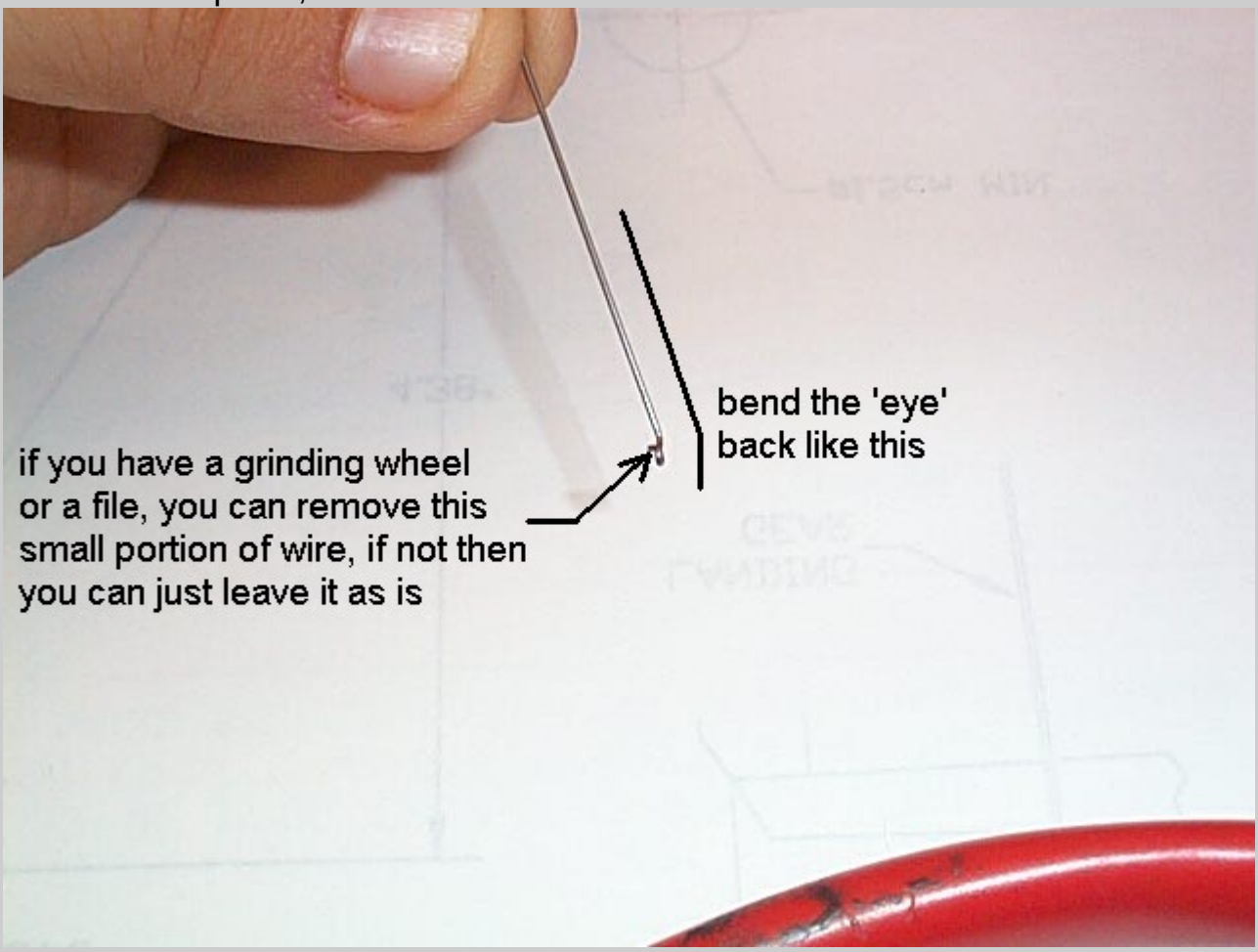




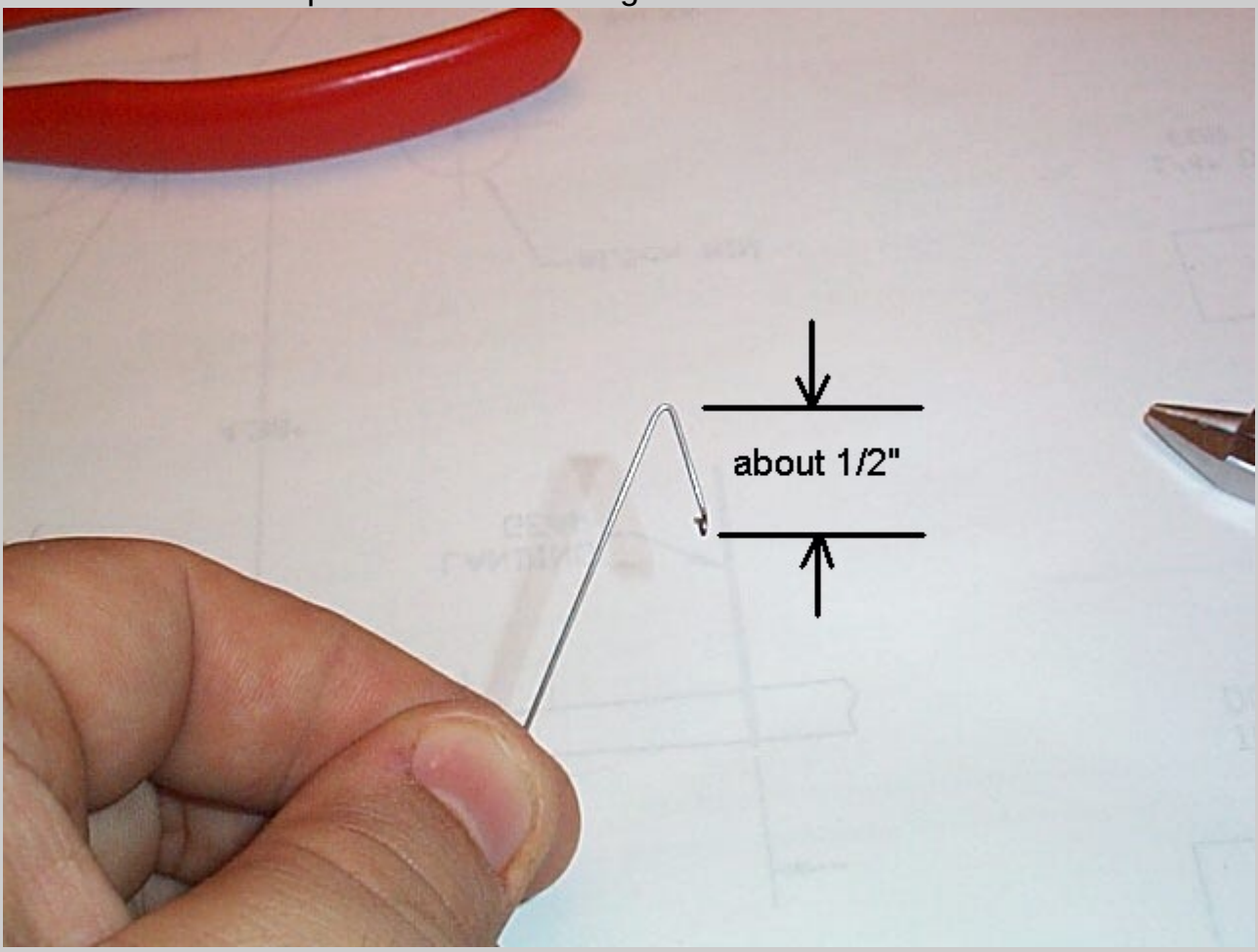
Until you have something like this.



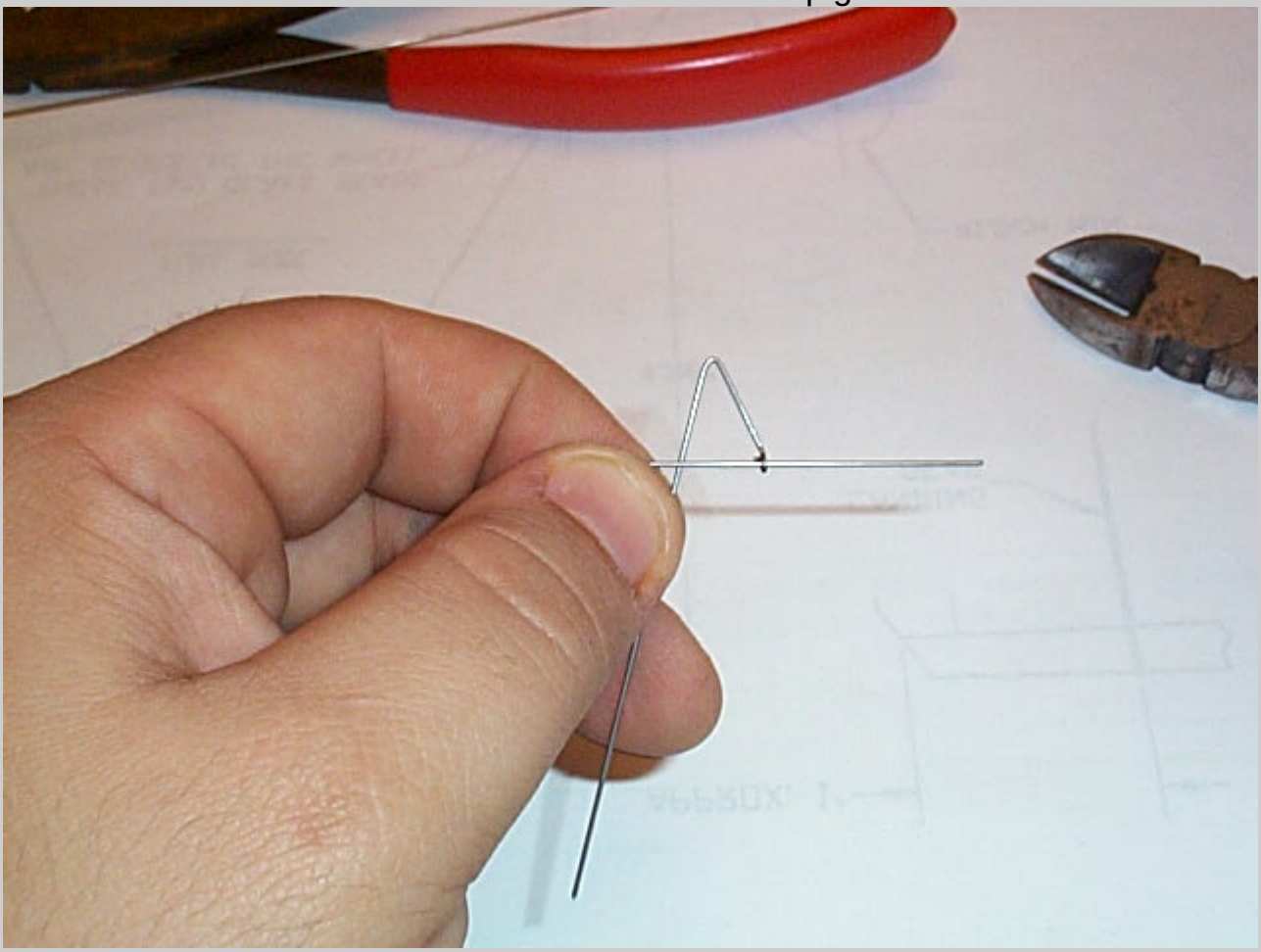
Then use the pliers, and bend the wire as shown.



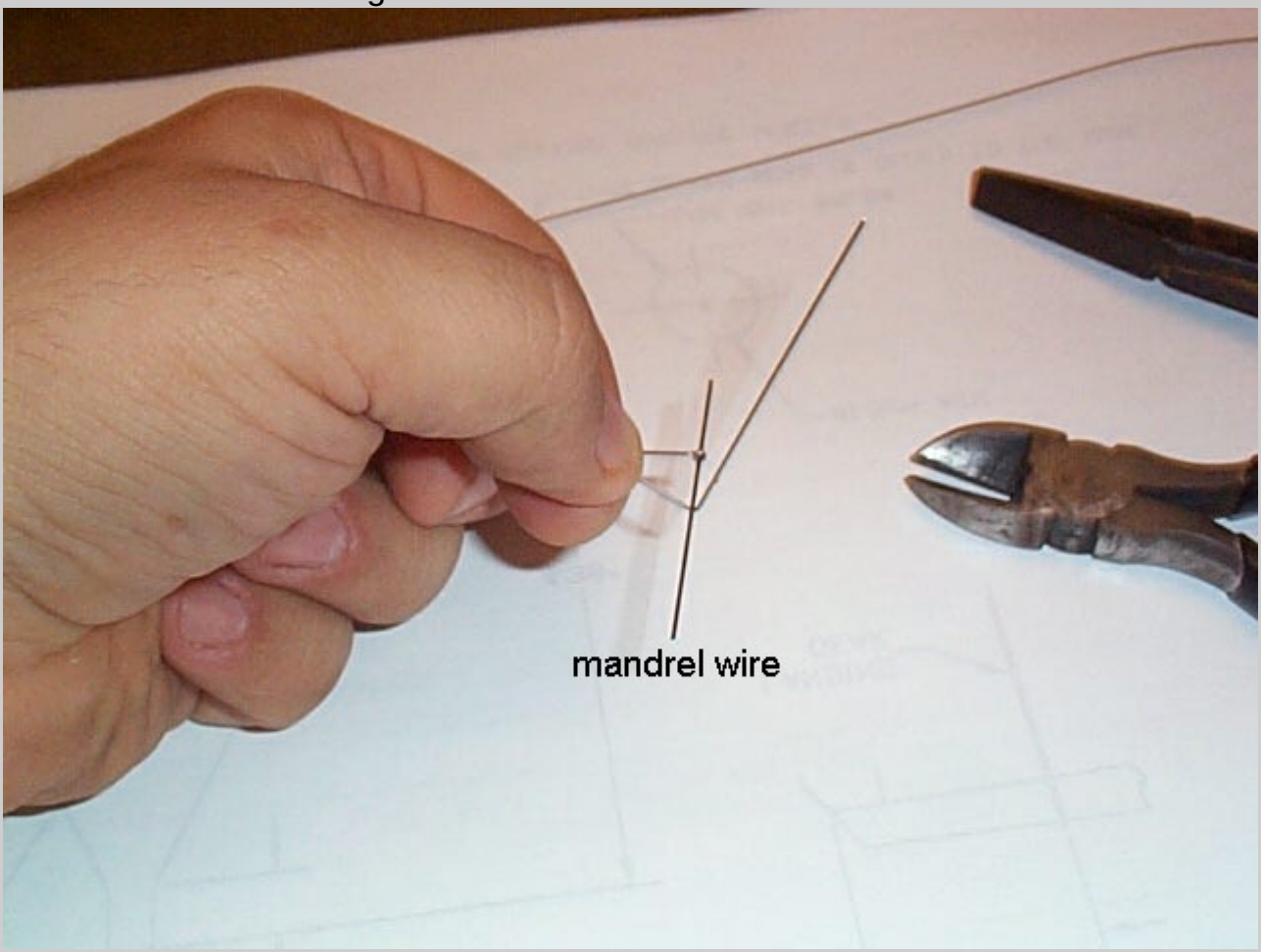
Then bend the rear portion of the bearing as shown below.



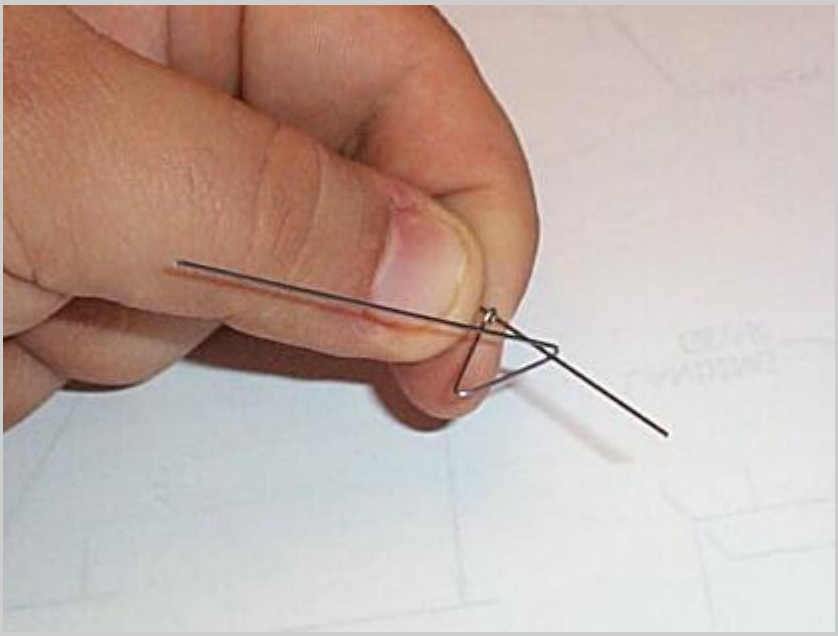
Place the short 2" piece of wire into the front loop of the bearing as shown. Where the wire crosses is the location of where the pigtail will be formed.



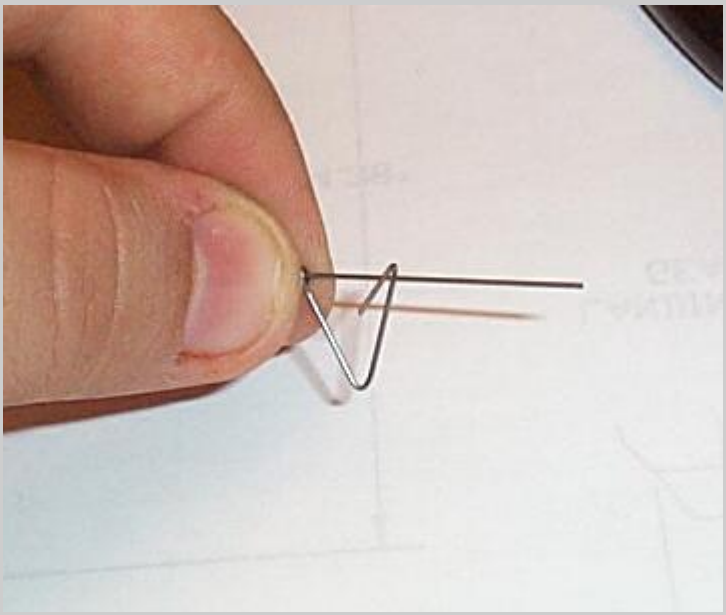
Start to bend the bearing wire around the mandrel wire as shown below.



Continue to bend the wire around the mandrel until you have something like this.

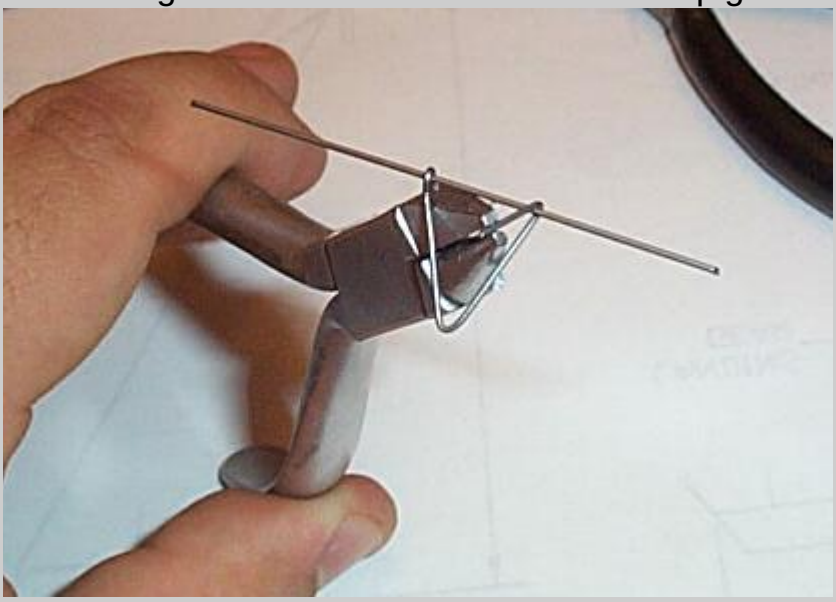


Cut off all but about the last 3/8" of wire.

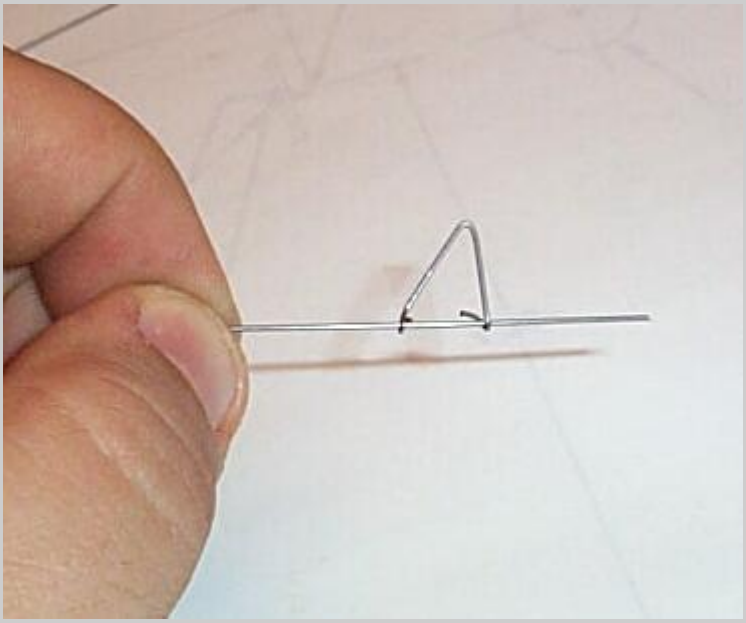


Then use the needle nose pliers and grab the wire by going through the center of the bearing as shown below. Once you grab the wire, then pull the

wire through the center which will make the pigtail.

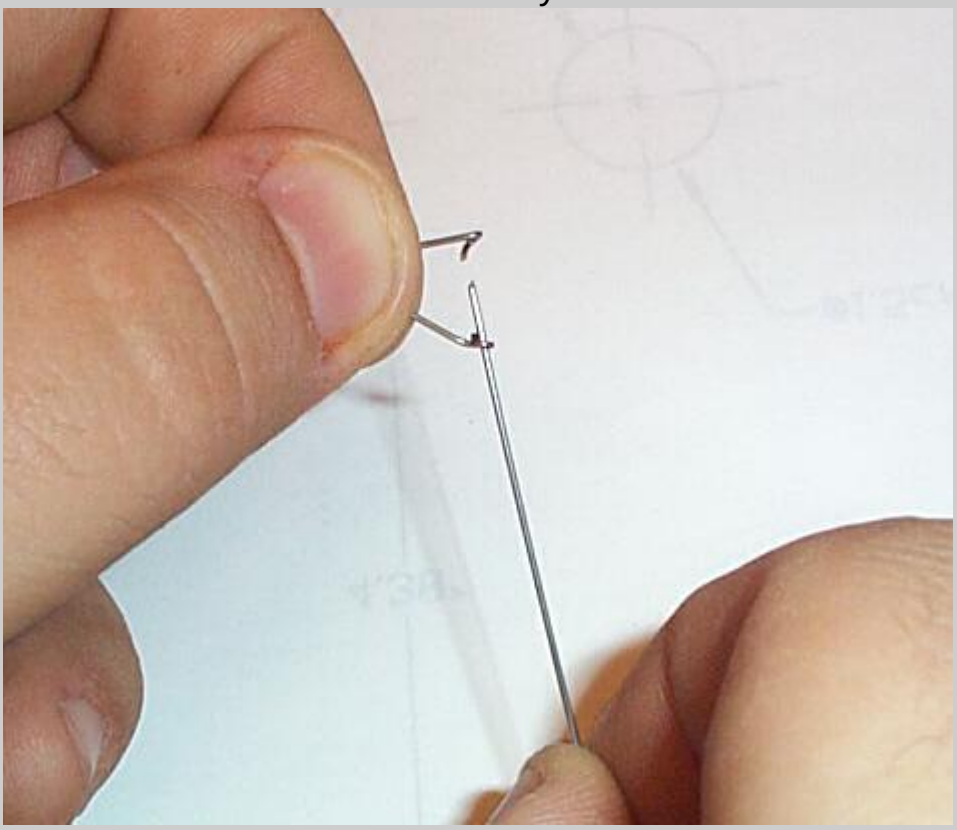


This is what it will look like when completed and the excess wire is trimmed off.



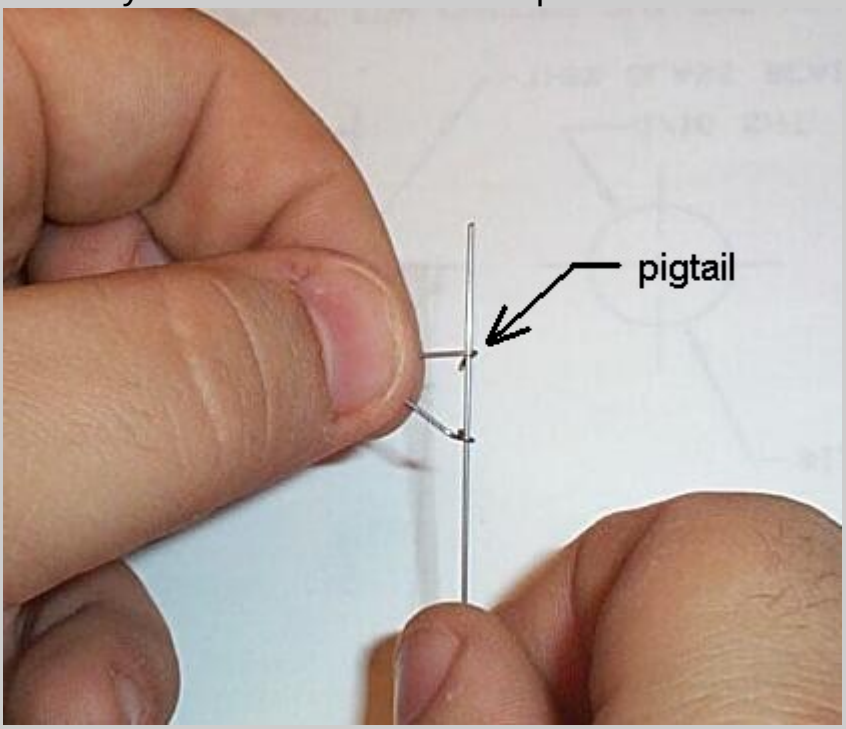
Now check to make sure the bearing holes are lined properly. To do that take a piece of wire and insert it into the first hole in the bearing. Move it in and out

to check to see that it moves easily and does not bind.



Then slide the wire into the pigtail portion of the bearing and make sure that the wire can rotate and move freely in the bearing. It is very important that the wire does not bind when in the bearing. If it does, then the power of the rubber band will be used up by friction of the binding wire and slow the prop down.

You may need to fine bend some portions of the bearing to achieve this.



Here is the final product.

