



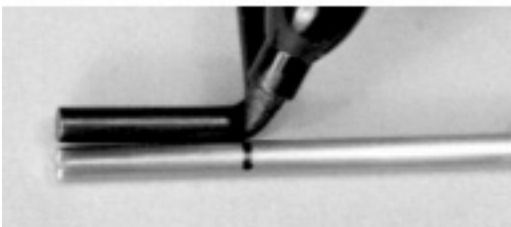
Bending Heavy Landing Gear Wire

Some steel alloys can be heated red hot quenched in oil and reheated to a much lower temperature. The resulting spring tempered material returns to its original shape after a moderate deflection. Modelers often use wire, heat-treated like this, for landing gear. It sells under the name of music wire or piano wire. We market two wire benders – HWB018 and Hwb532 especially designed for these common sizes. The soft black gear in the photo below came in a kit and needs to be replaced. We'll show to make the first bend. The completed job is from our book Harry's Notebook – pages 63 through 65.



Step 1

Use a fine felt marker to mark the $5/32$ " replacement wire where the first bend starts.



Step 2

For $5/32$ " wire make another mark $5/16$ " further away from the bend. For $1/8$ " wire the distance should be $1/4$ ".



Step 3

Place the second mark centered on one pin.



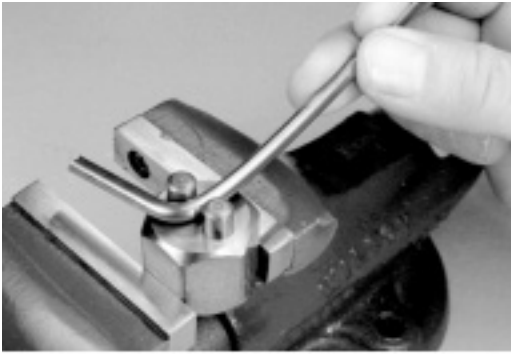
Step 4

Wrap the wire around the other pin. You'll need to go considerably past the bend angle (90degrees in this case.)



Step 5

You'll notice the short wire segment remains straight, but the strut portion has developed an unwanted arc.



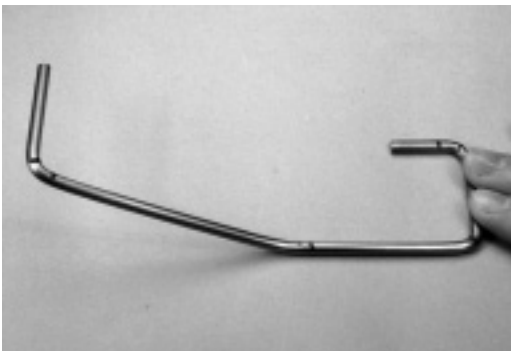
Step 6

These photos show s how our bender removes that unwanted arc.



Step 7

This photo compares the new bend to the original. Ours has a greater radius, which eliminates the fatigue point caused by a sharp bend.



Step 8

The remaining bends are made the same way.



Step 9

Our 3/32" wire bender makes great freehand wire forms like the tail wheel strut.