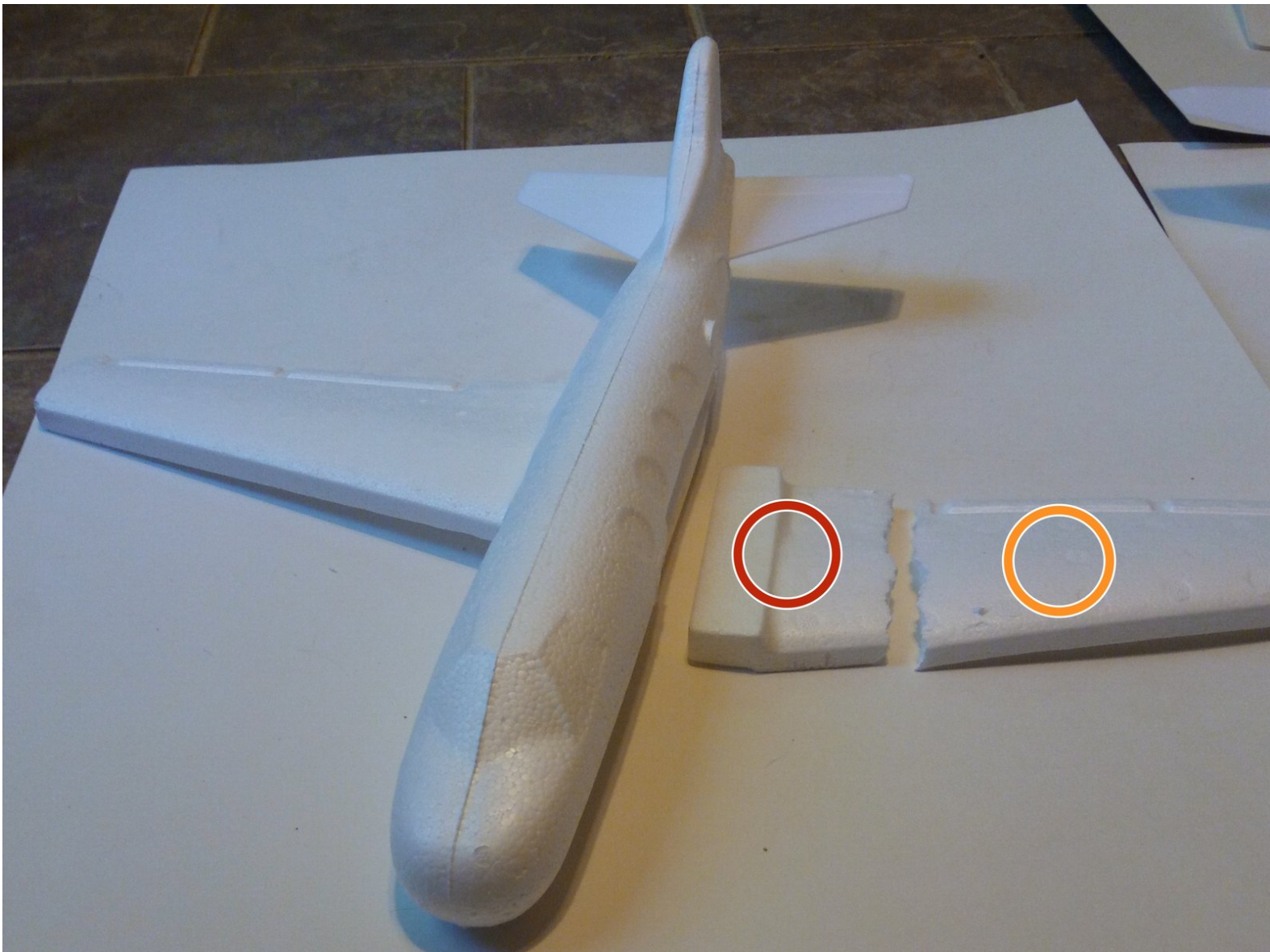




# How to Structurally Repair the Wings of High Flying Foam Gliders

This guide provides a step-by-step methodology for structurally repairing the wings of High Flying Foam Gliders.

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## INTRODUCTION

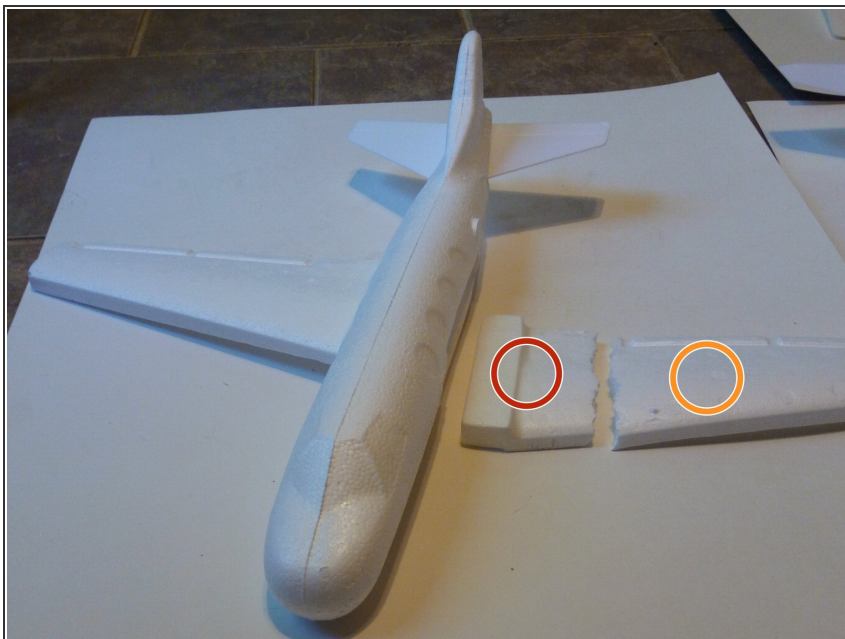
To repair the wing of a foam glider there are 3 things that are required; (1) 3/4 inch wooden dowel, (2) Wood snips, and (3) Gorilla White Gorilla Glue. The wood snips cut the wooden dowel at a length where it can internally stabilize the structure of the wing. Gorilla White Gorilla Glue is an inexpensive adhesive that will glue the dowels to the inside of the wing without eating through the foam. Other glues are known to eat through foam and will not allow your repair to be complete.



### TOOLS:

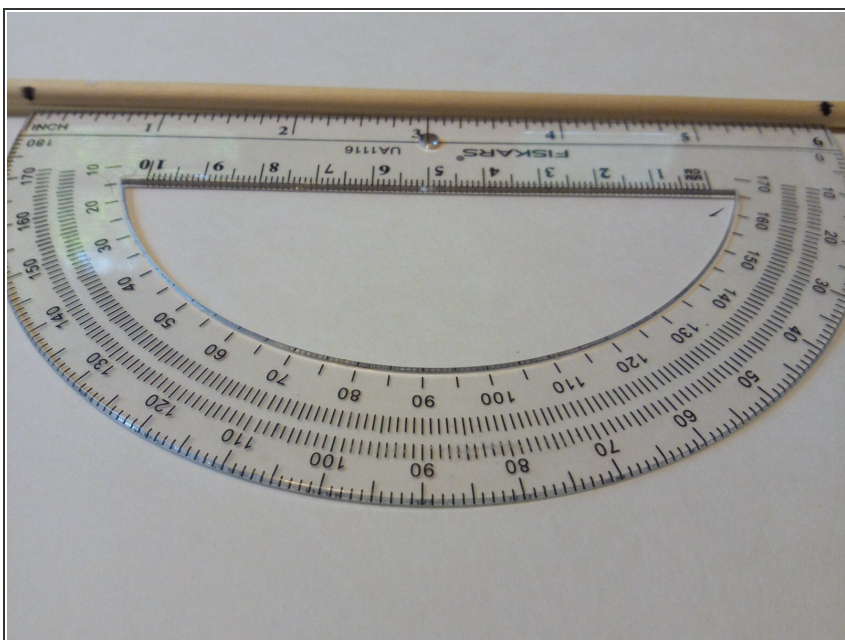
- [Wood Snips](#) (1)
-

## Step 1 — How to Structurally Repair the Wings of High Flying Foam Gliders



- To begin this repair, carefully remove the damaged wing from the body of the plane.
- Interior of the damaged wing
- Exterior of the damaged wing

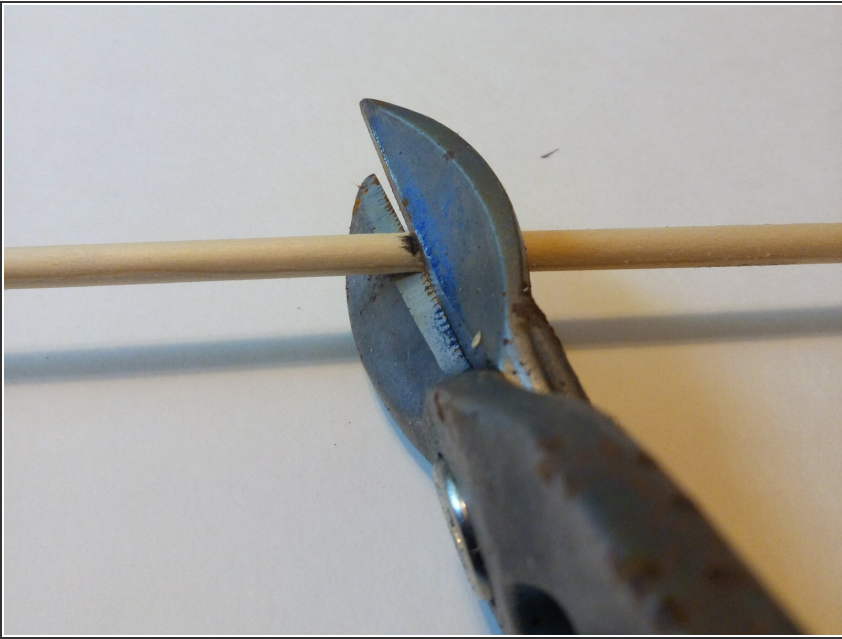
## Step 2



- Use a ruler to make a mark on the wooden dowel at 6 inches.

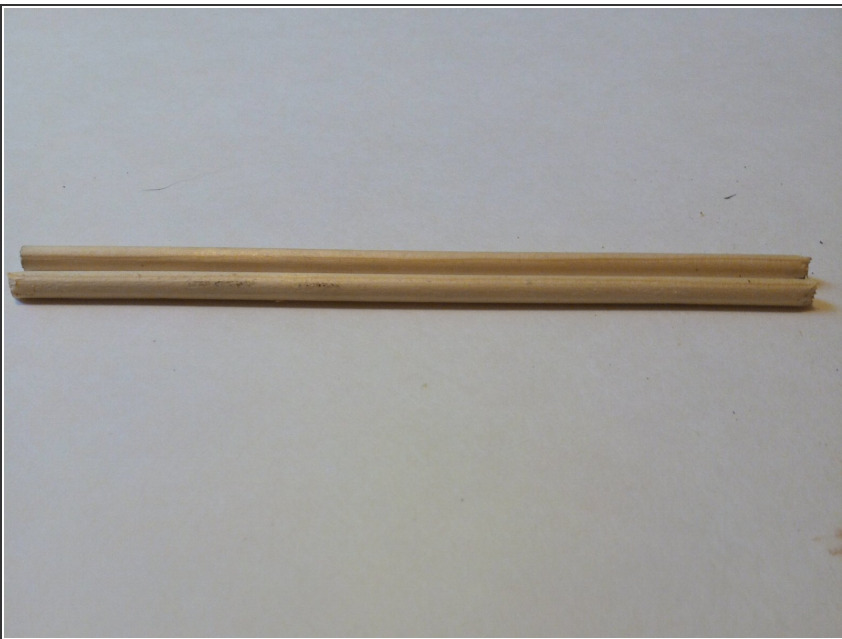


### Step 3



- After you have made your 6 inch mark, use a pair of wood snips to cut the dowel cleanly at 6 inches.

### Step 4



- Repeat steps 2 and 3 to craft another 6 inch piece of wooden dowel.

## Step 5



- Push the dowel piece about 2 to 3 inches into the inside the interior part of the damaged wing (see step 1).
- ⓘ When inserting the dowel do so with care. It helps prevent further cracking or splitting the foam wing.

## Step 6



- Once the the dowel piece has been pushed into the interior part of the wing, make a mark where the wood and foam meet.

## Step 7



- Measure and mark 1 inch away from the mark that was made in step 6.

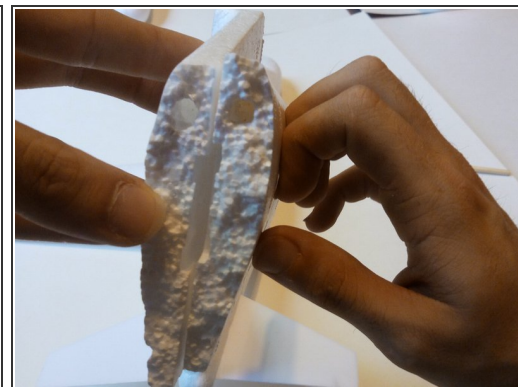
## Step 8



- Using wood snips again make a cut at the mark made in step 7.



## Step 9



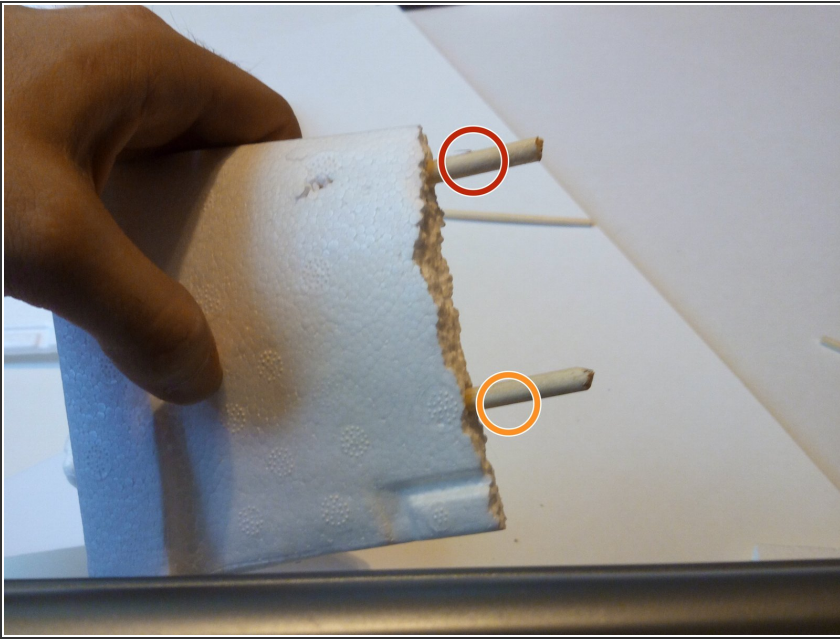
- Slide the exterior part of the wing towards the interior part of the wing and dowel, creating a hole in both parts of the wing.

## Step 10



- Repeat steps 5 through 7 to insert the second dowel piece into the lower half of the wing.

## Step 11



- Make the same cut that was made in step 8 to your second dowel.
  - First dowel
  - Second dowel

## Step 12



- Follow the same method as step 9 and create a hole in the exterior section of the damaged wing.

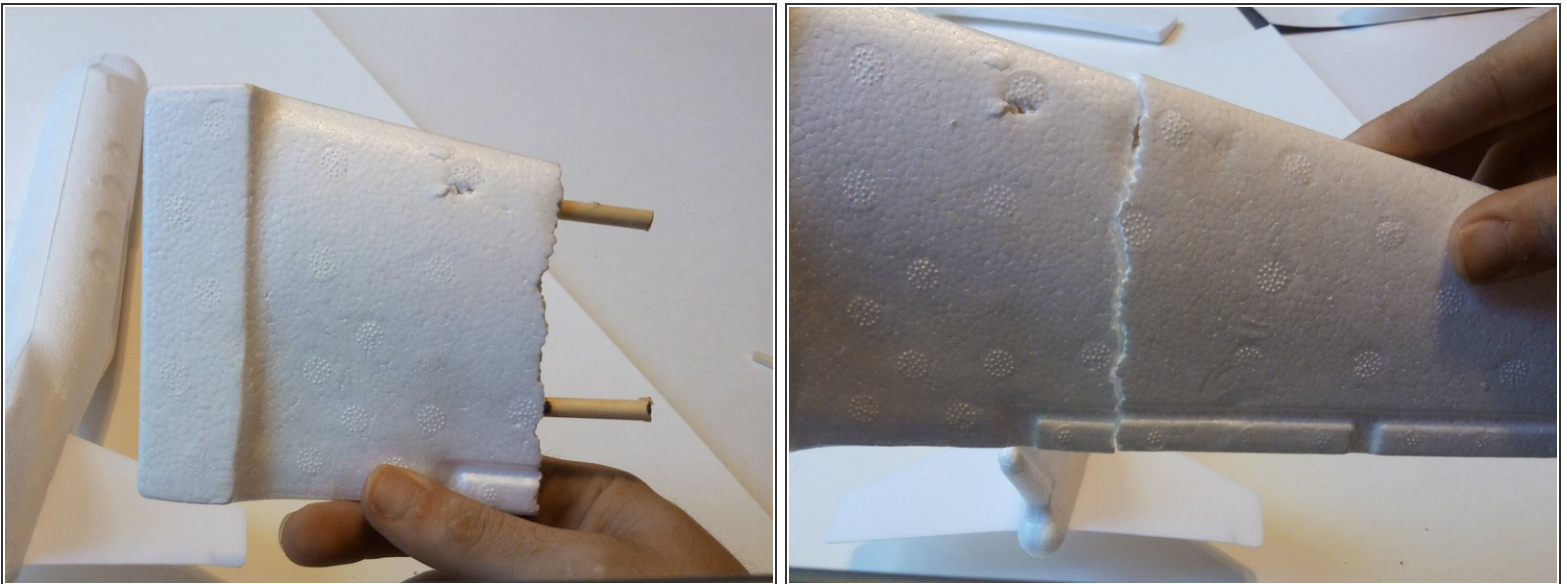


## Step 13



- Remove the dowels from the wing.
- Apply a Gorilla White Gorilla Glue pen to the inside of the holes and the area in-between them.

## Step 14



- Insert the dowels back into the holes and bring both parts of the wing back together.

## Step 15



- Set the wing outside and allow to air dry for 5 minutes.

## Step 16



- Insert the wing back into the body of the plane.

## Step 17



- Go outside and fly your plane to test your repair. If it flies, you have a structurally repaired wing!

To reassemble your device, follow these instructions in reverse order.