

Foam Aircraft Repair Instructions

Hot Glue Gun (repairs all foam except hinges)

Step 1: Allow the hot glue gun to warm up for at least 2 minutes, 3 in colder environments.

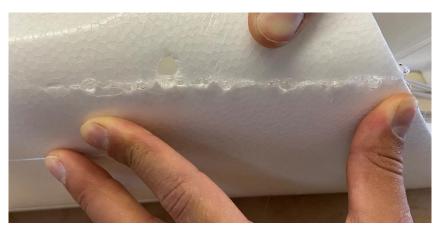
Step 2: Consider if you will need additional help to glue and clamp the foam back together. Additional hands can be helpful

Step 3: Load a glue stick into the gun and keep extras within reach so that longer cracks that require more than one stick can be filled rapidly.

Step 4: Glue the parts together. For cracks, push the nozzle deep into the foam and pull the trigger every half inch so the whole seam is covered effectively. For complete breaks, apply glue to the whole surface as quickly as possible so that it doesn't cool before clamping.



Step 5: Clamp and clean up. Use a wetted finger to smooth flat any glue that squeezes out. Apply constant pressure and keep the seam together for at least 2 minutes after gluing.



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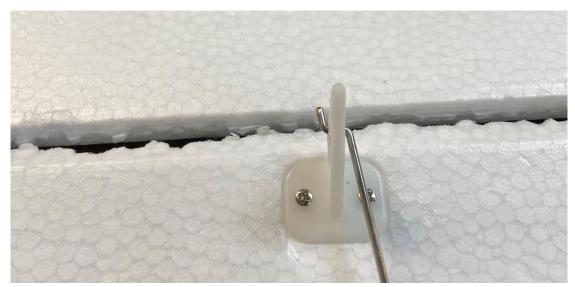
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Other notes: Attempt to bend bent pieces of the airframe back to their original state before gluing as shown here:



White Tape (repairs hinges)

Using pieces of tape place on the top and bottom of torn hinges can reinforce a weak hinge or even reattach a totally torn hinge. Follow the steps on the next page to repair a hinge.



Example: Image of an elevator hinge that was torn during a hard landing

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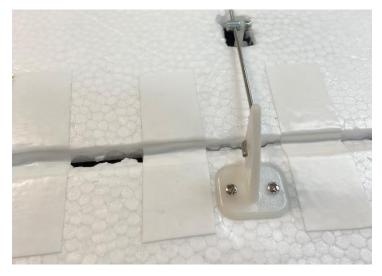
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Step 1: Determine how long the tear is in inches. Round up to the nearest even number and cut that many pieces of tape.

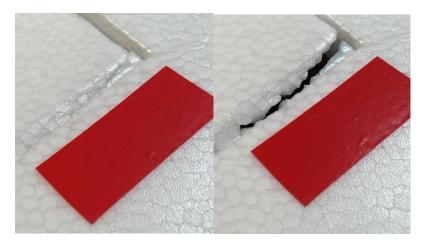
Step 2: Apply the tape as show below to the top and bottom of the hinge spaced about 1.5-2 inches apart, directly in line with the piece on the opposite side of the hinge. IMPORTANT: Follow the contours of the hinge. The entire area of the tape should be in contact with foam. There should not be a gap under the tape at any point.



Example: Six pieces of tape were applied to this hinge to repair it:

Red Tape (marking damage)

Anytime wear or damage is noticed on an airframe, it is important to mark it so that it is not forgotten or missed prior to the next flight. Red tape can be used to mark damage that is hard to see or requires attention. Below is a torn hinge. Only when the hinge is flexed away can the tear be seen, so red tape is used to indicate the issue.



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