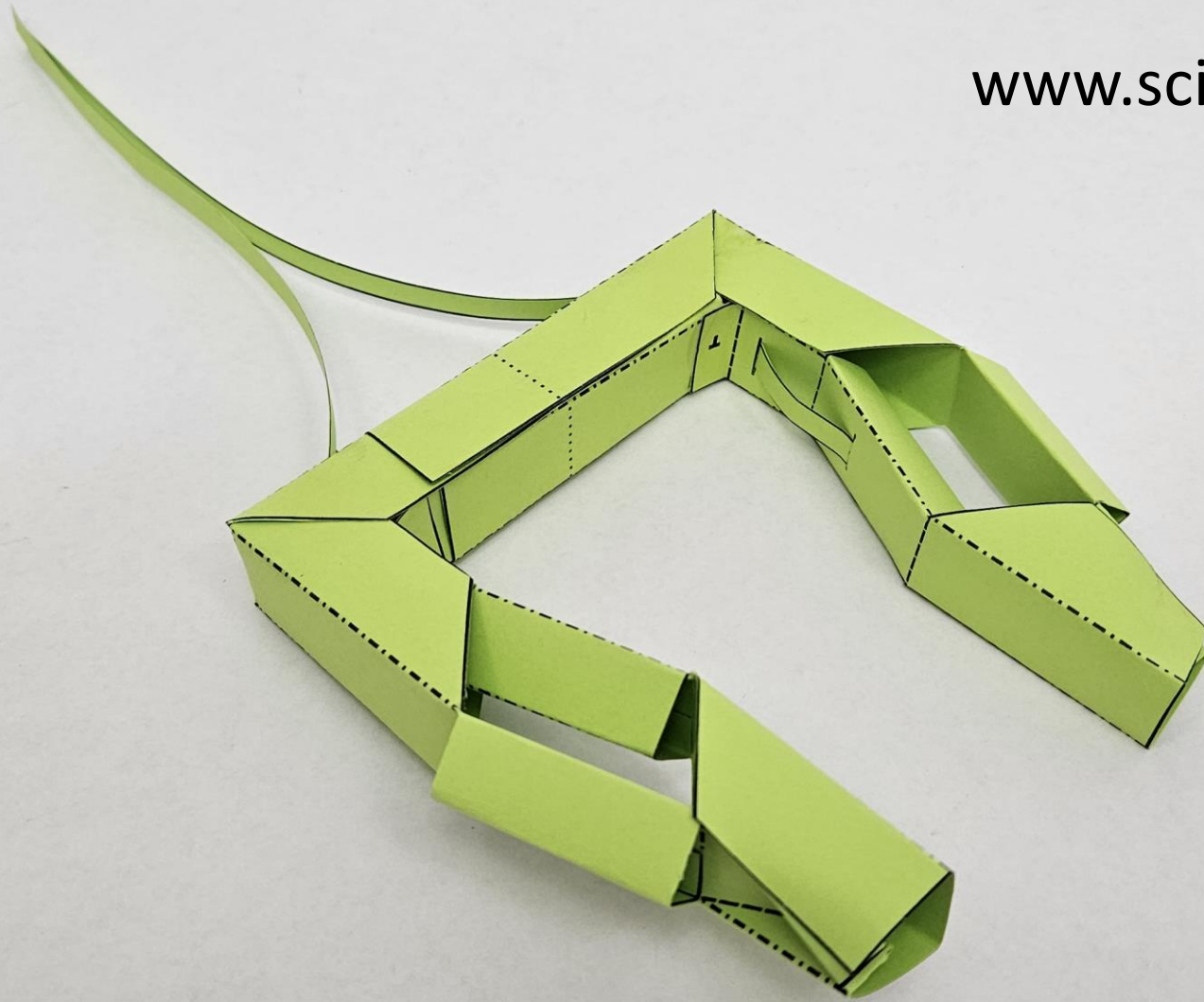
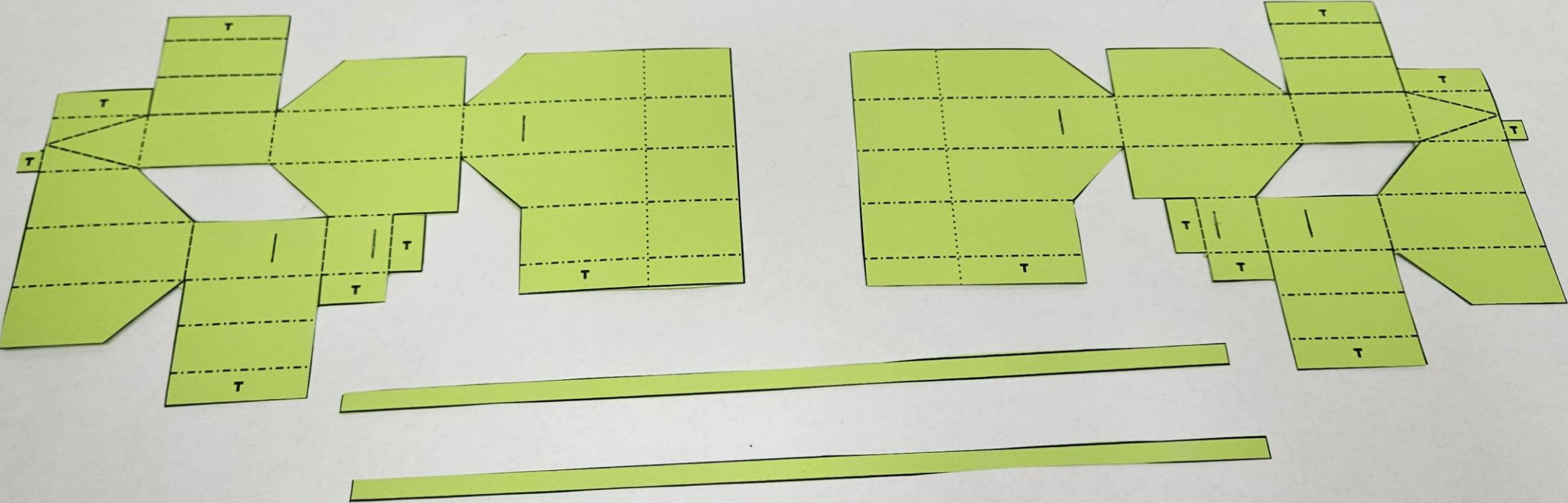


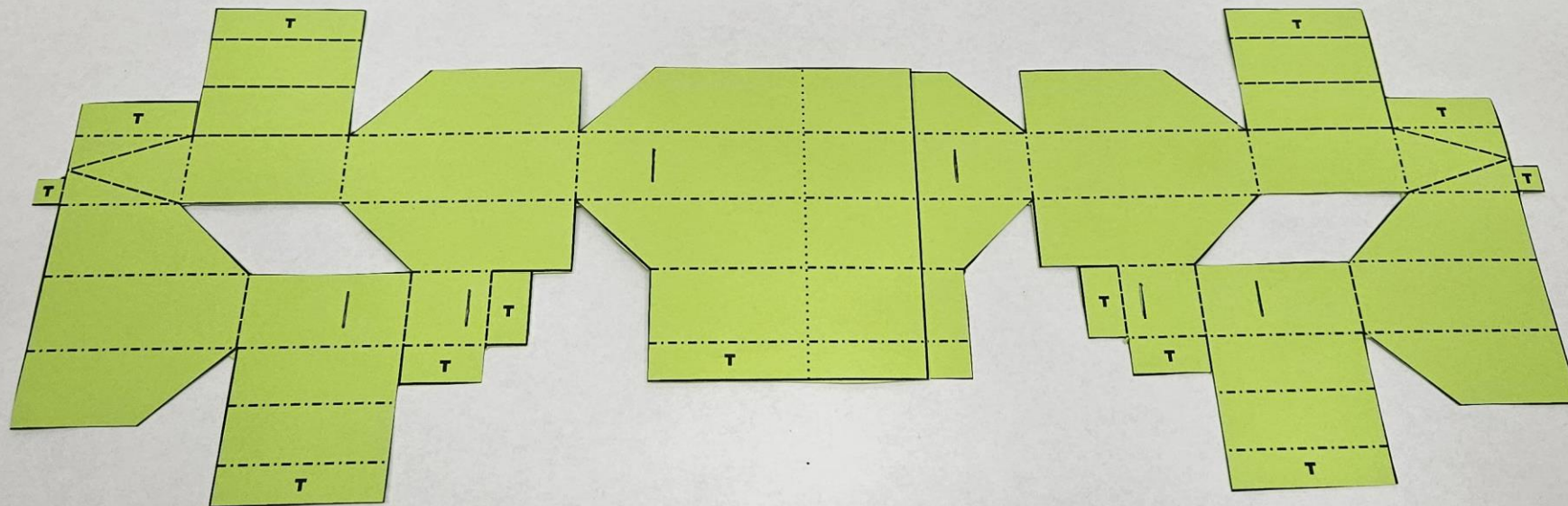
Advanced Foldable Robotic Gripper
Assembly Steps
www.sciencebuddies.org



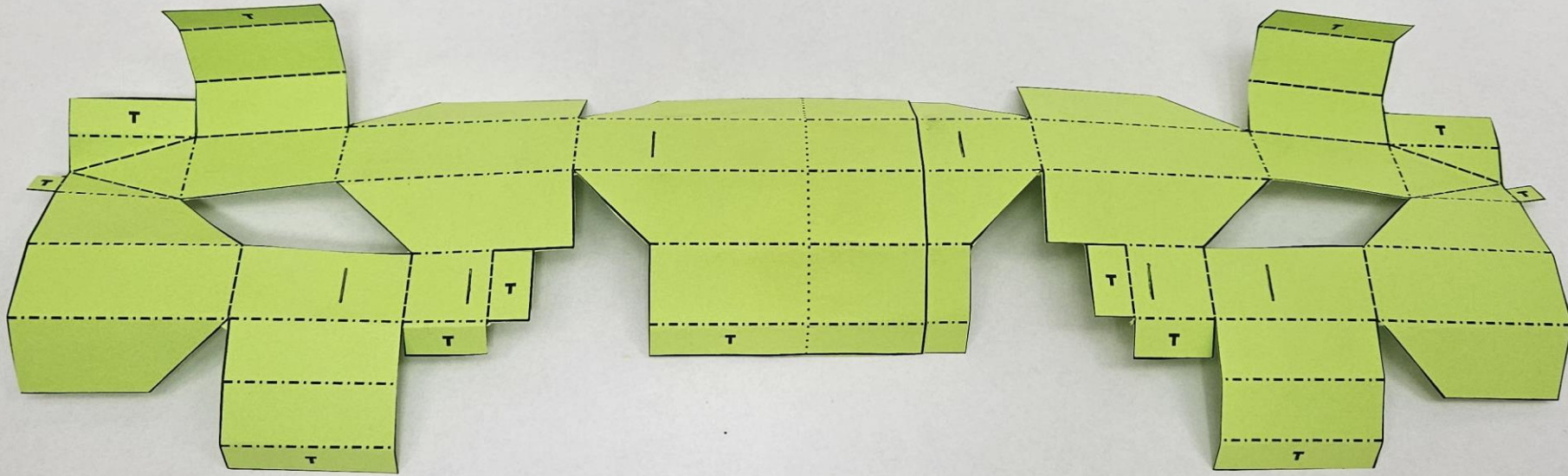
1. Laser-cut the template or print and cut out along all solid lines.



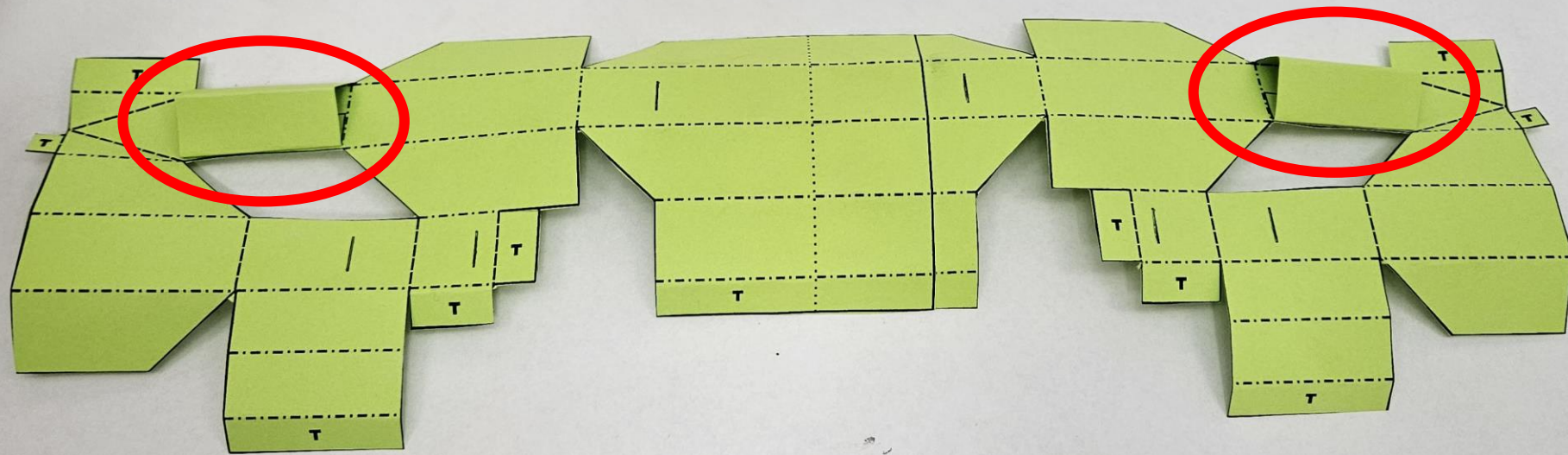
2. Glue the two halves of the template together in the center. The vertical dotted lines on the two halves should line up with each other.



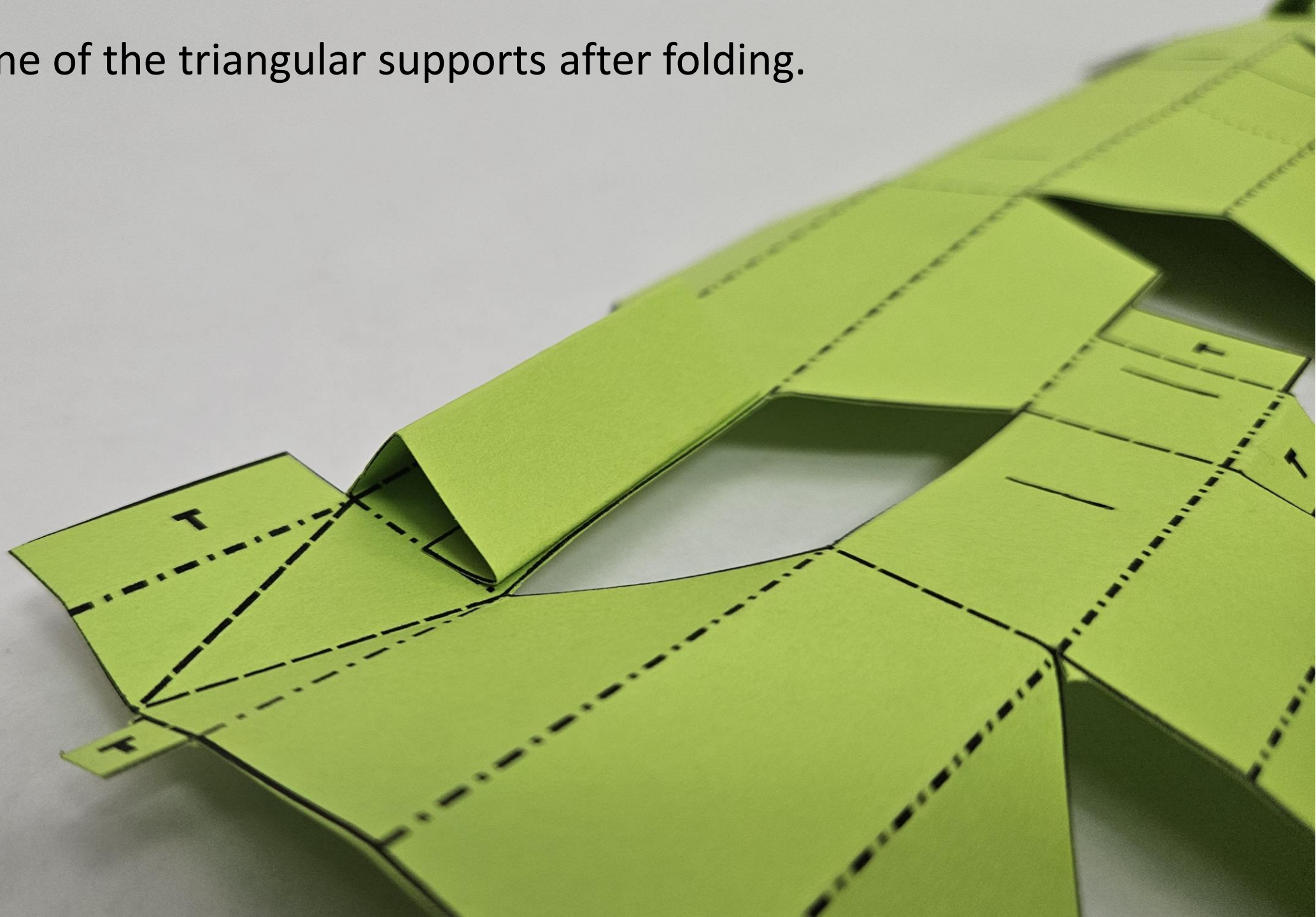
3. Pre-crease all folds. Dashed lines are “valley” folds that fold up (toward you). Dash-dot lines are “mountain” folds that fold down (away from you).



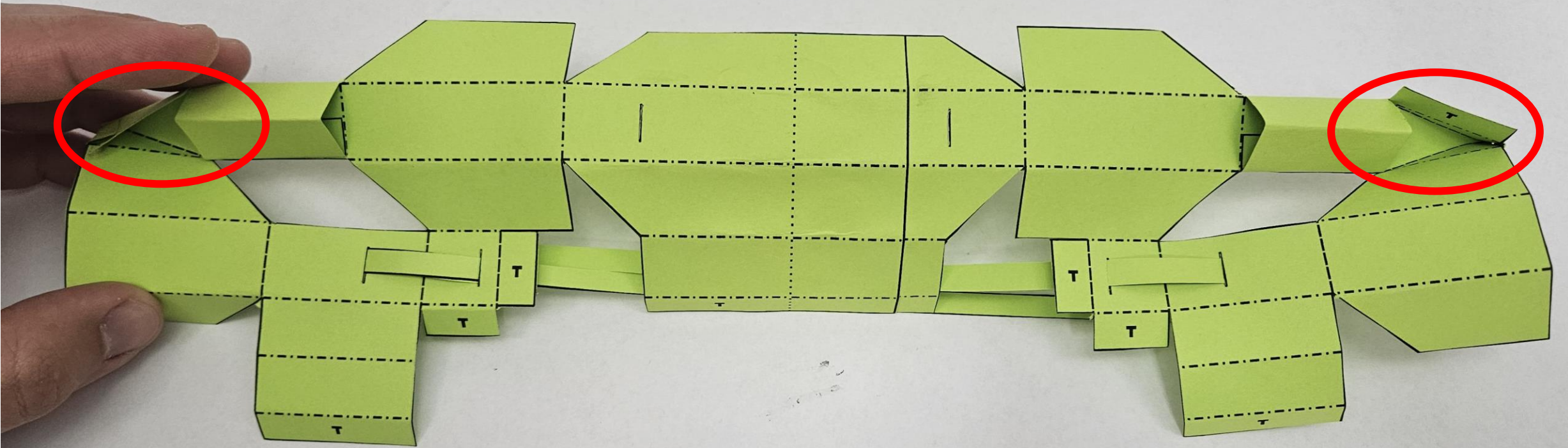
4. Fold and glue the two triangular supports as pictured. Parts labeled "T" are tabs to apply glue.



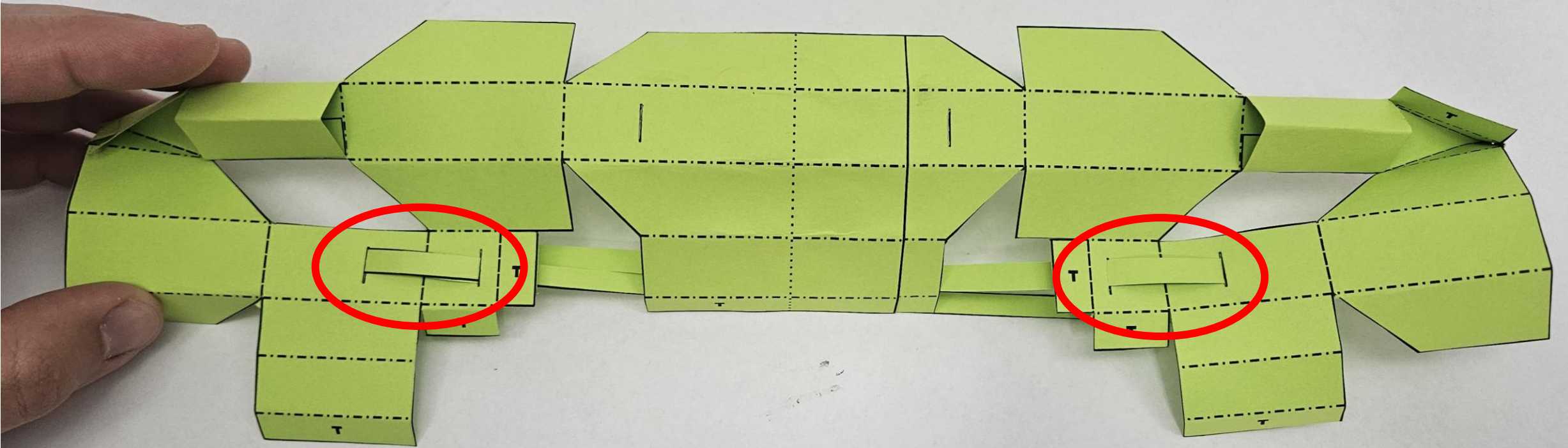
Side view of one of the triangular supports after folding.



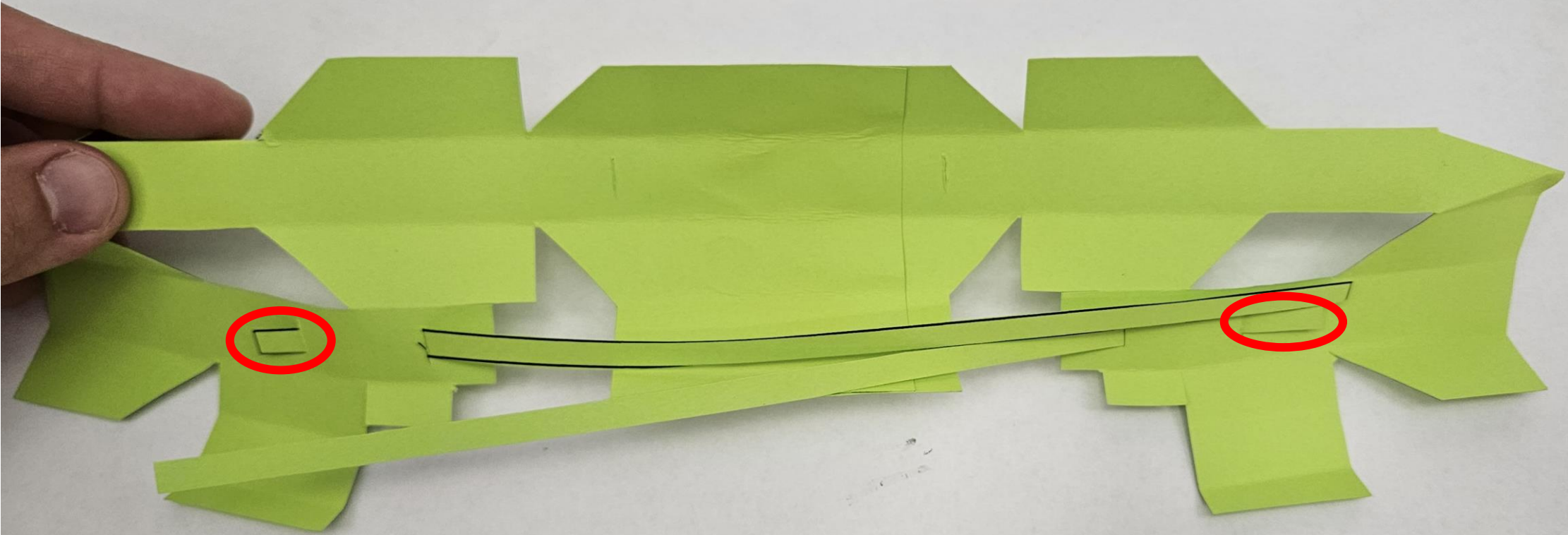
5. Fold and glue the triangular tips as pictured.



6. Thread the tendons through the slots as pictured. Do not apply glue yet



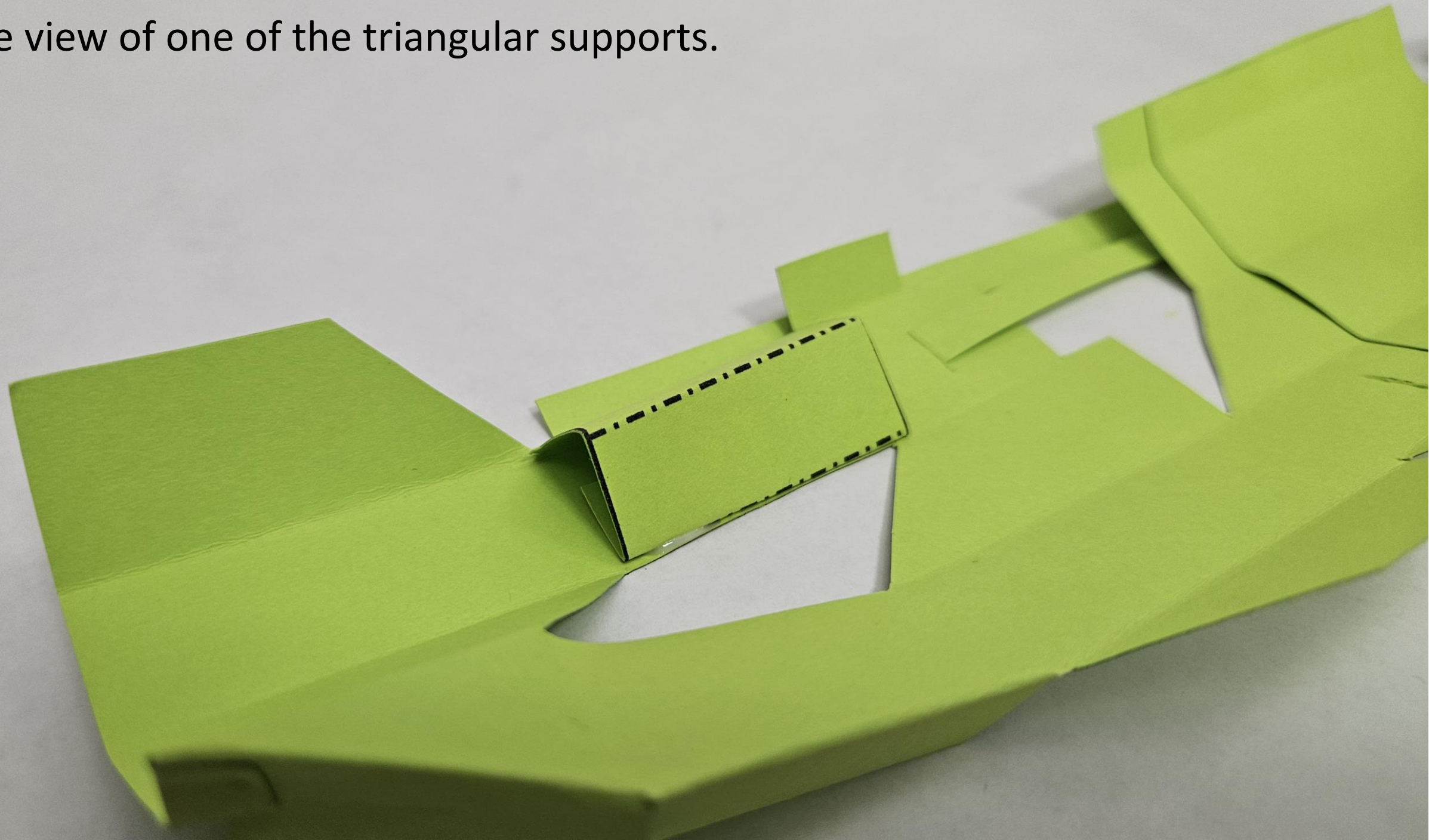
7. Flip the template over. Glue the circled sections of the tendons to the **back** of the template (the non-printed side).



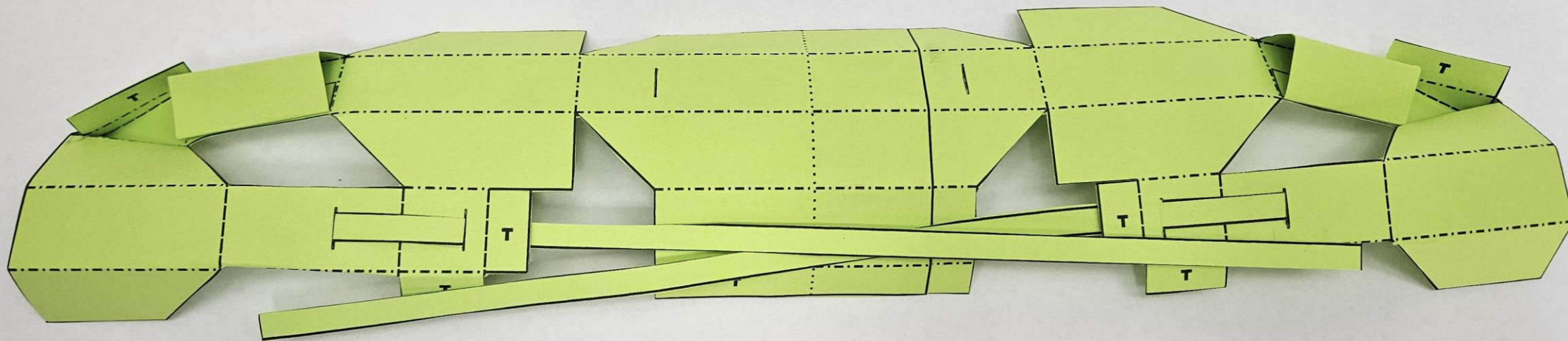
8. Fold and glue the next set of triangular supports.



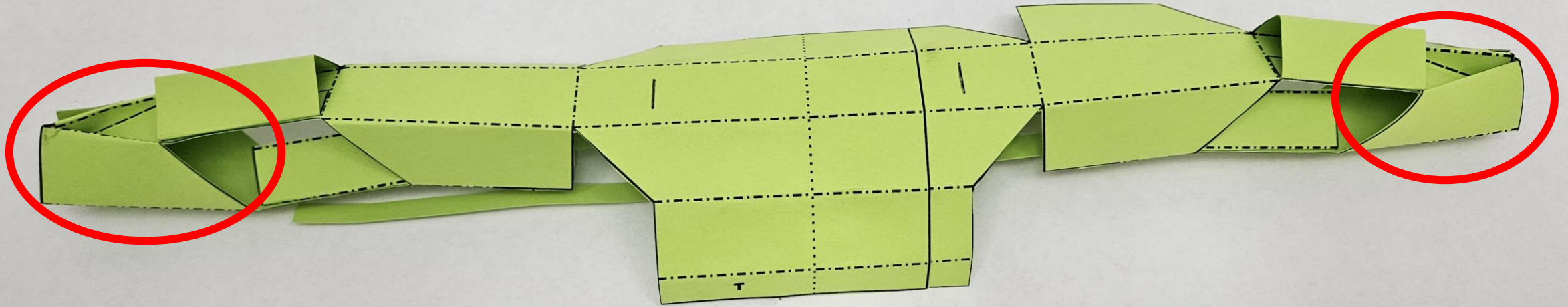
Side view of one of the triangular supports.



Top view of the gripper at this stage.



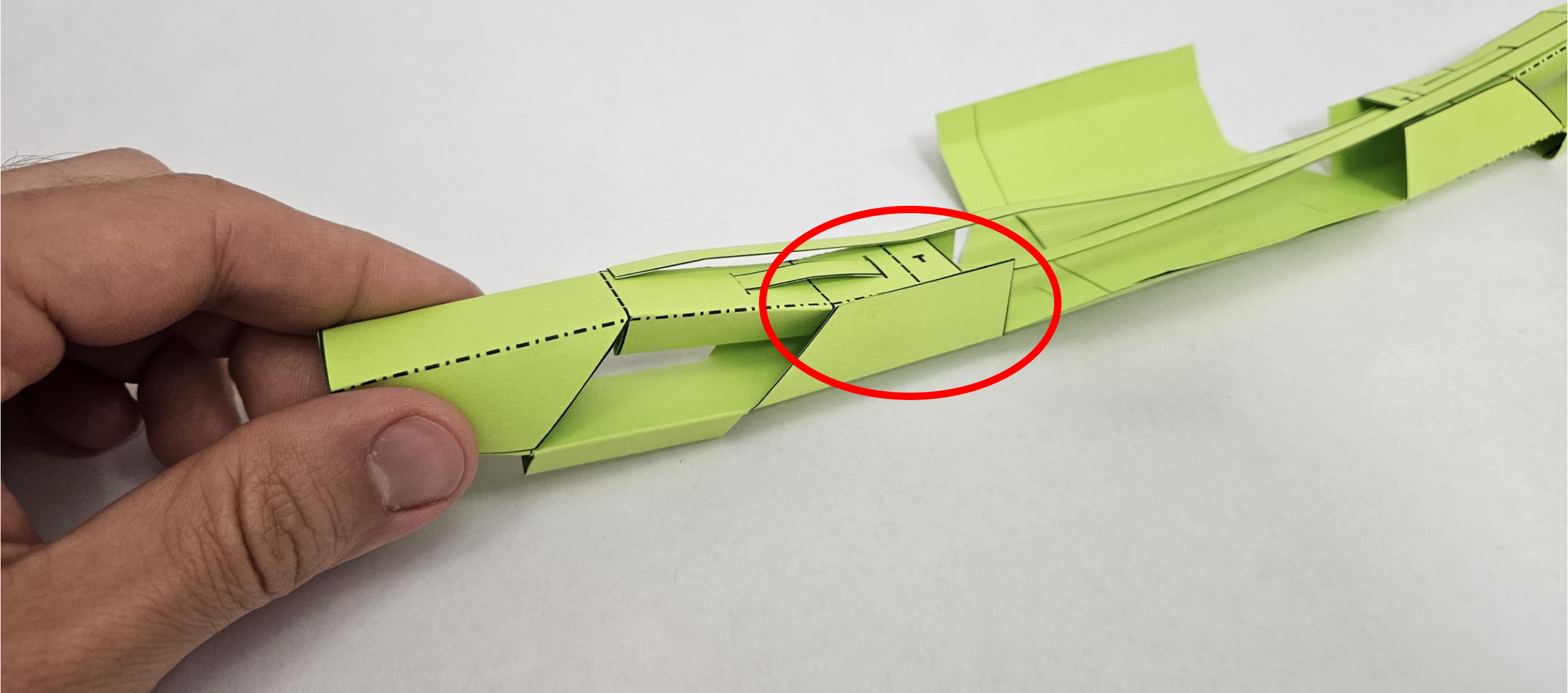
9. Fold and glue the ends of the gripper.



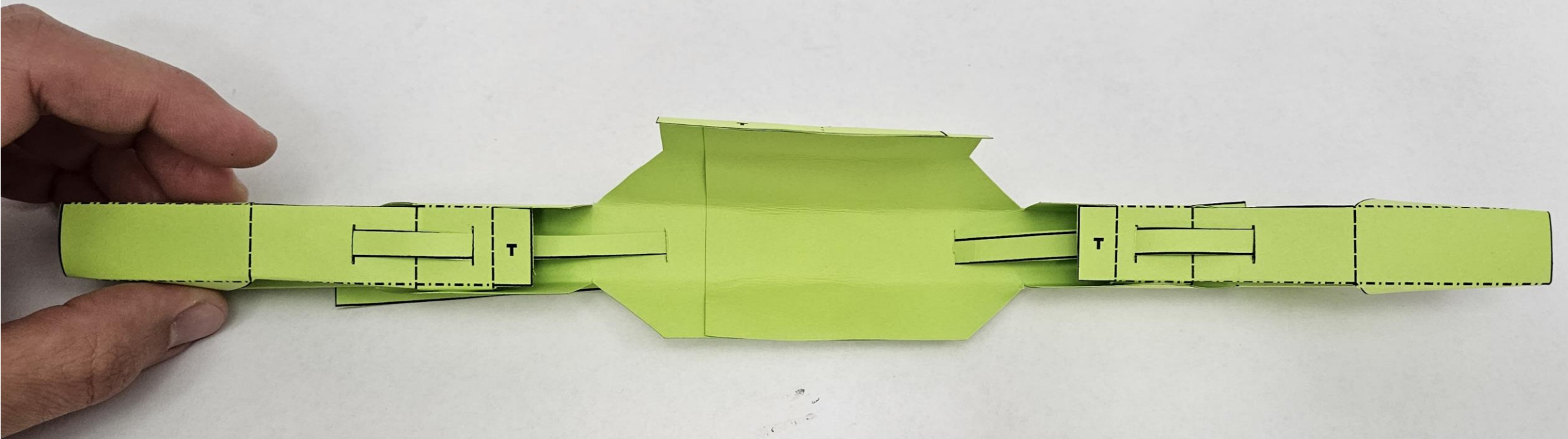


Side view of the end of the gripper after folding.

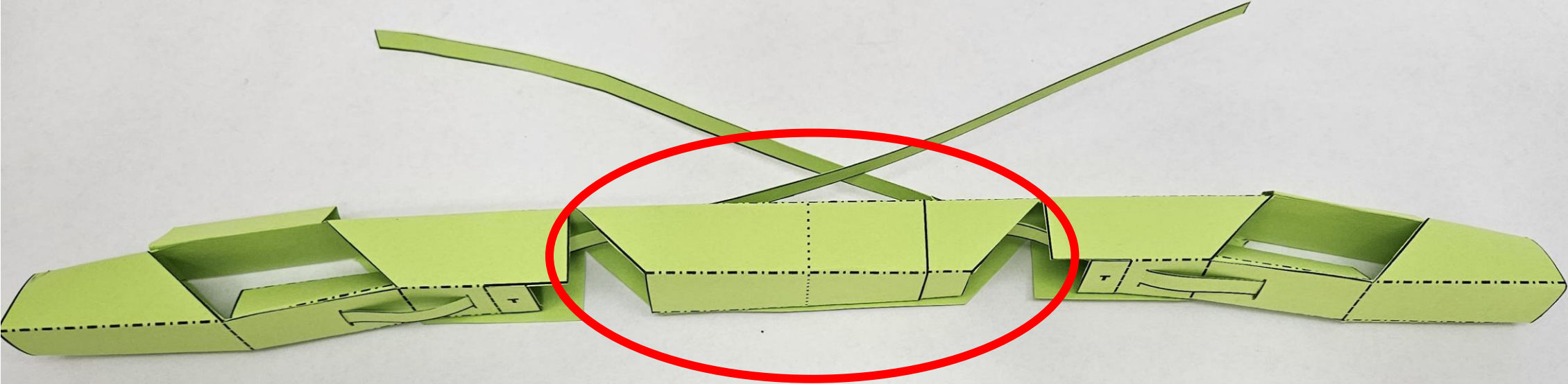
10. Fold and glue part circled in this picture (repeat on other side).



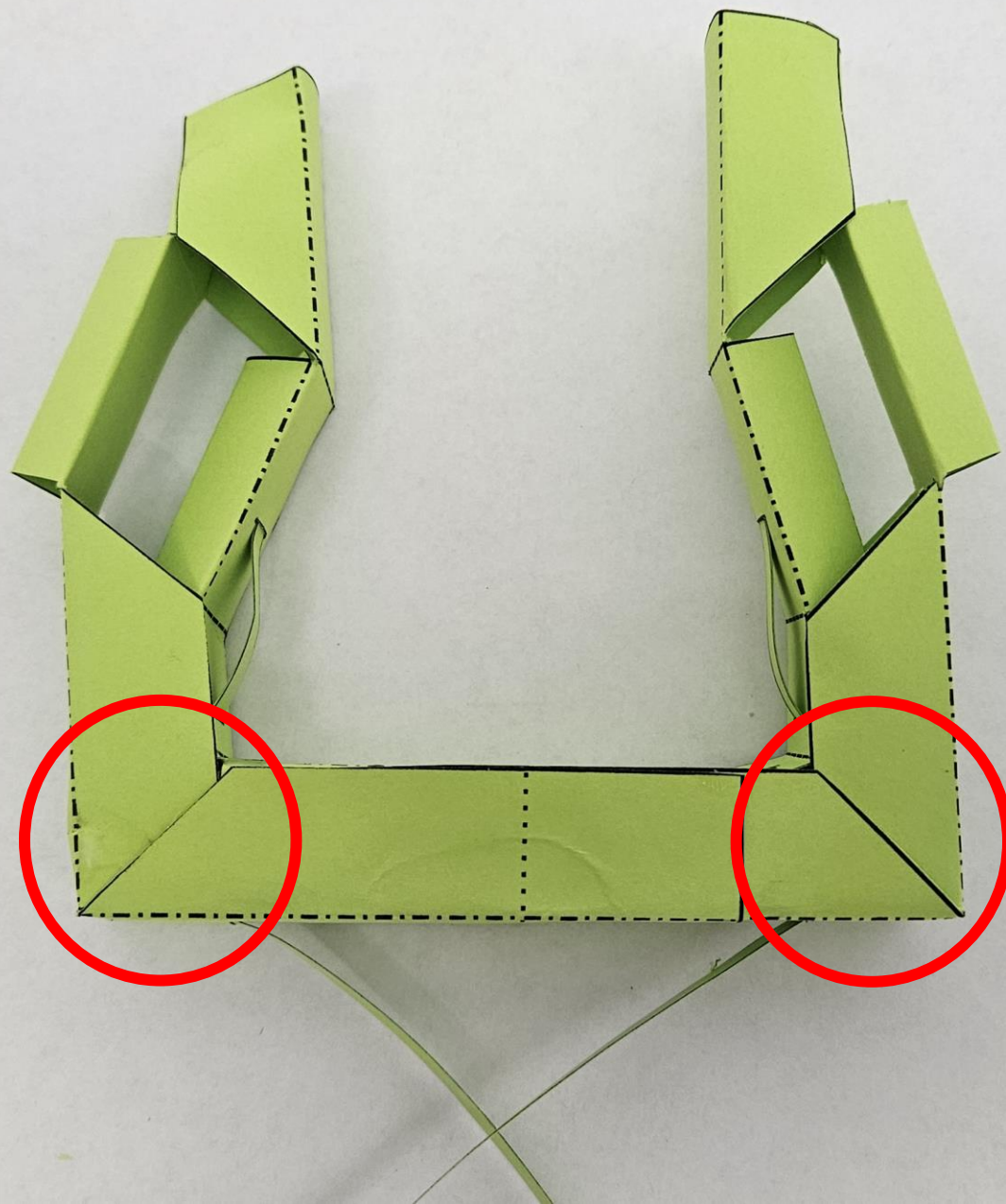
Top view of the gripper at this stage.



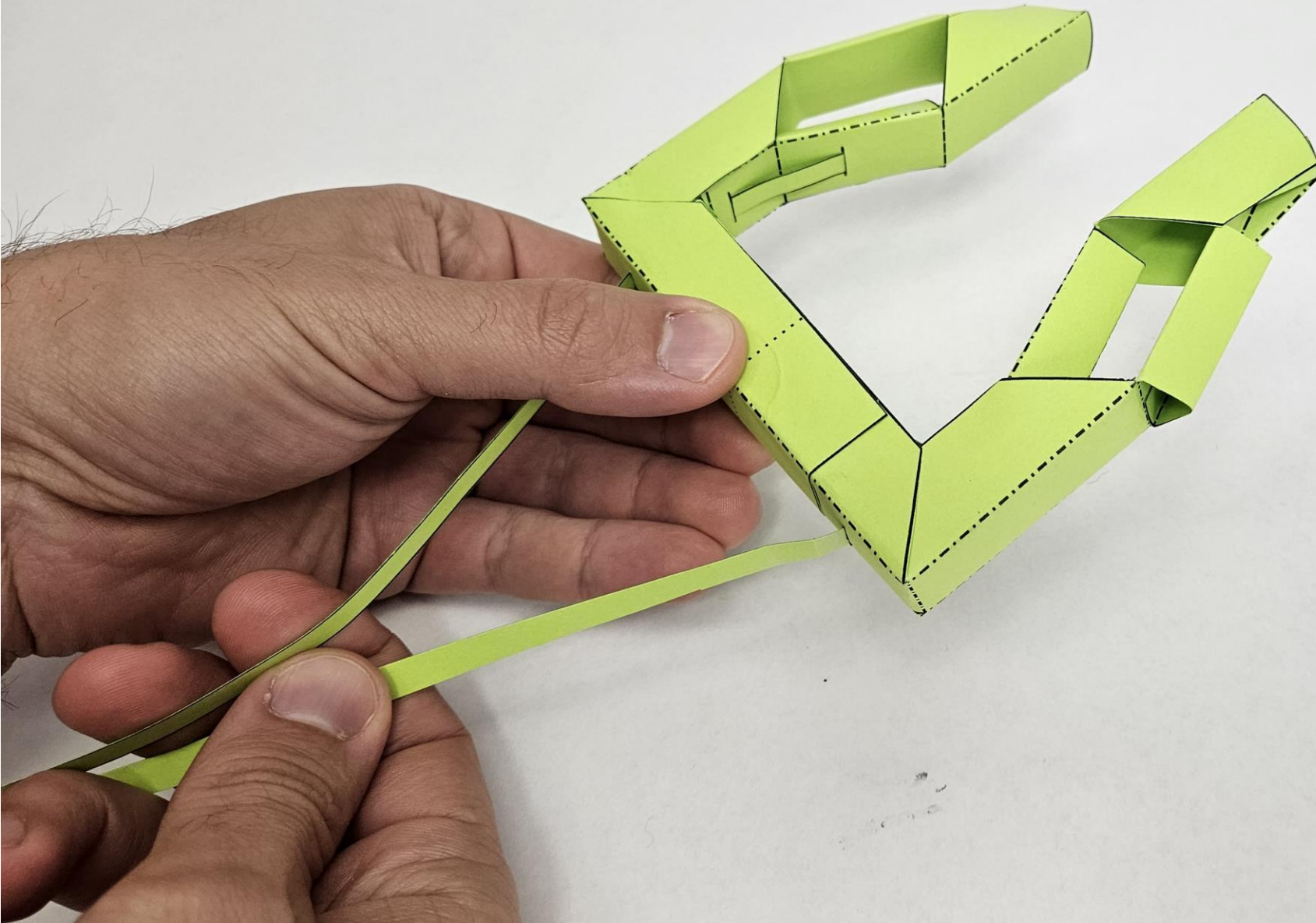
11. Fold and glue the center of the gripper.



12. Fold each side of the gripper up by 90 degrees and glue to the center.



13. Hold the gripper in the center.



14. Pull on the tendons to pinch the fingers together and try grasping objects.

