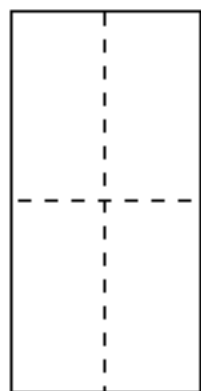
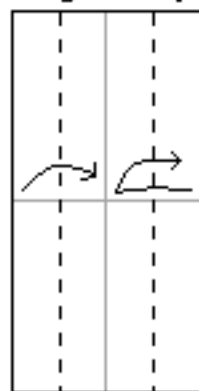


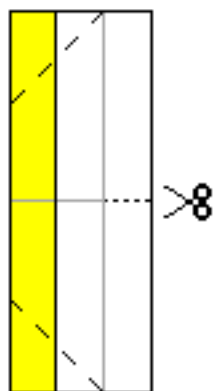
**Note: Footnotes begin on page 4.**



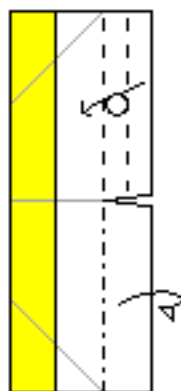
1. Start with a 1x2 rectangle. Crease and unfold both book folds.



2. Do 2 cupboard folds lengthwise. Unfold the right one.



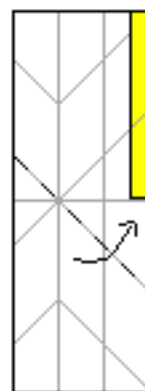
3. Do 2 pre-creases. Snip with scissors along the dotted line.



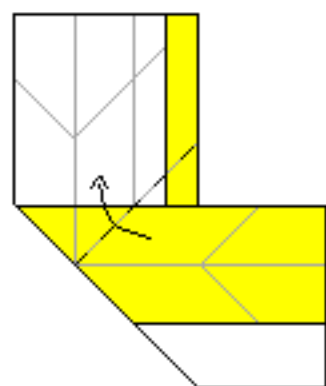
4. Roll-fold the upper cut flap (2 creases). MF the bottom 1.



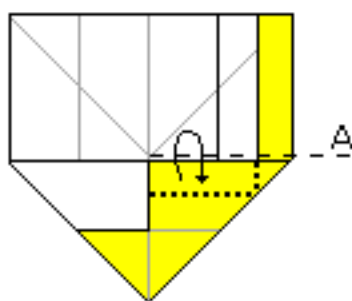
5. Fold the 1/2's of the left edge to the center-line. Then UF all except the right flaps.



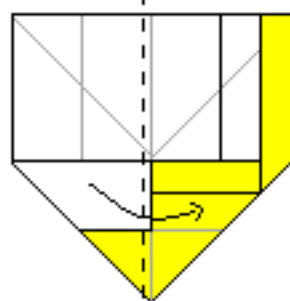
6. Fold along existing crease.



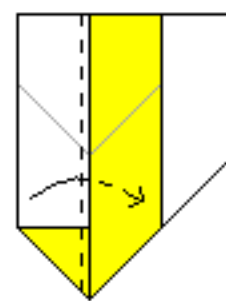
7. Fold along existing crease.



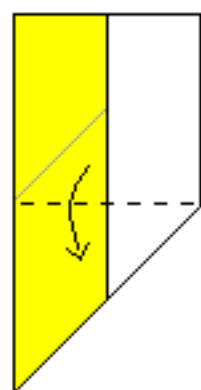
8. Bring the trapped layer in front by reversing its top edge as VF line A shows.



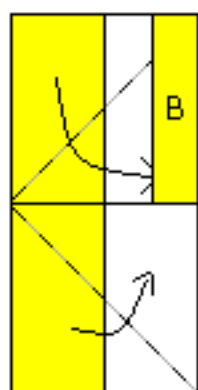
9. Fold the top layer in half.



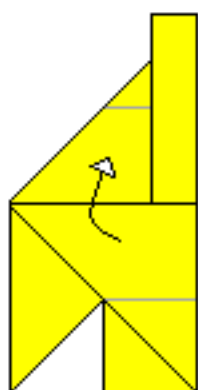
10. Tuck the left flap under the top layer.



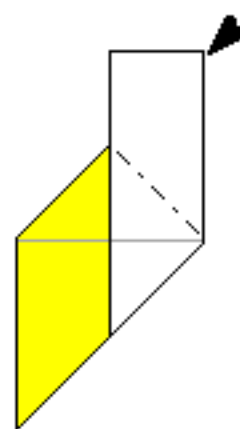
11. Fold the top flap down.



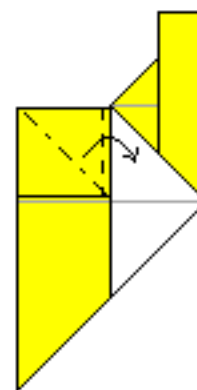
12. Re-fold the creases from step 3, tucking the top flap under layer B.



13. Open the crease from step 11.



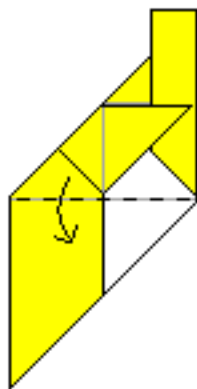
14. Pre-crease and reverse fold.



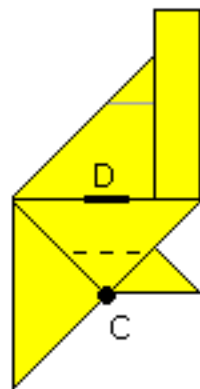
15. Squash fold.

**Turbine  
Cuboctahedron**

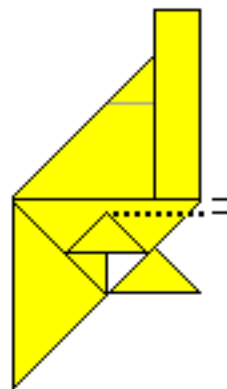
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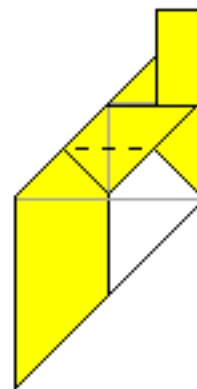
16. Repeat step 11.



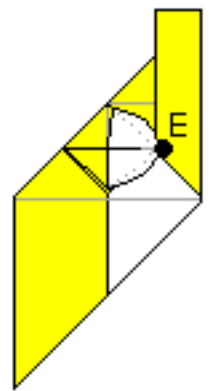
17. Leaving a small gap between point C and edge D, firmly fold C to D.



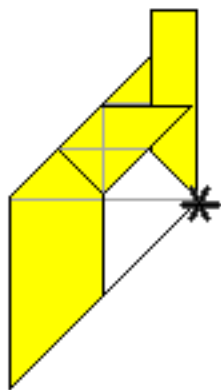
17a. Unfold this and the last step.



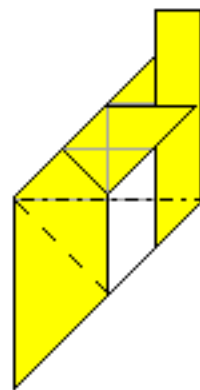
18. Folding the top layer only and making only the shown crease, squash fold. The unit will not lie flat.



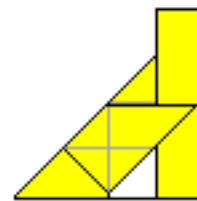
18a. Notice that point E is suspended in the air. Unfold.



19. Tuck the point marked with an asterisk below the underlying layer.

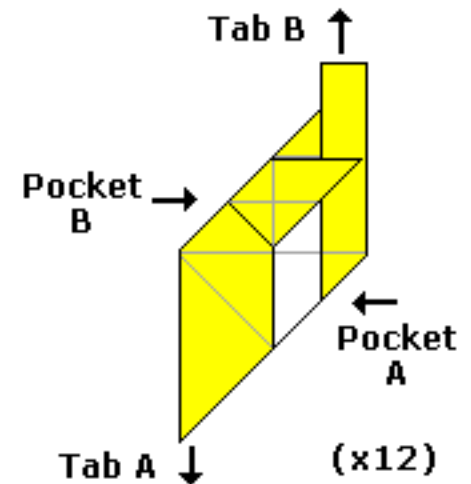


20. Firmly make the indicated creases.



21. Unfold last step.

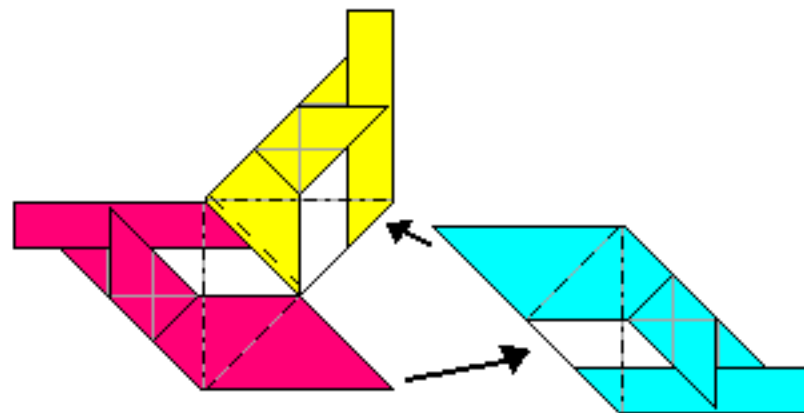
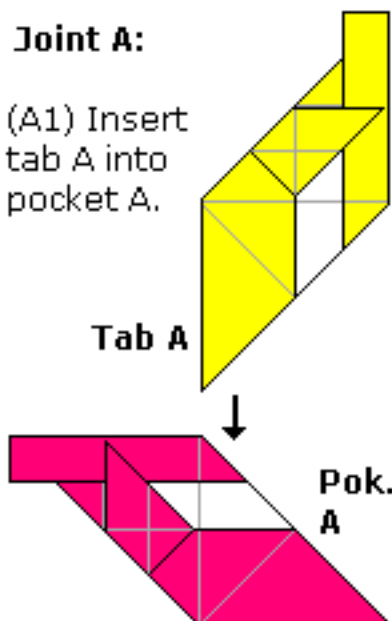
### Finished Unit



### Assembly:

#### Joint A:

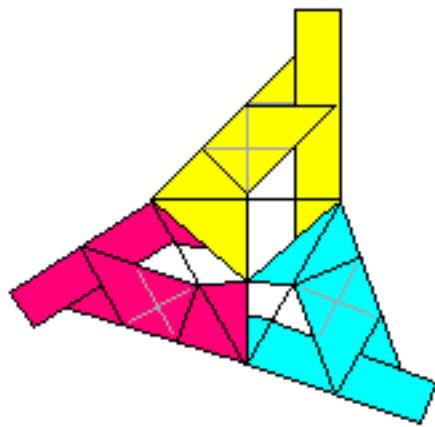
(A1) Insert tab A into pocket A.



(A2) Add a third unit, bending the creases on each unit from step 20. The 3 units will form an (indented) pyramid, locking themselves together.

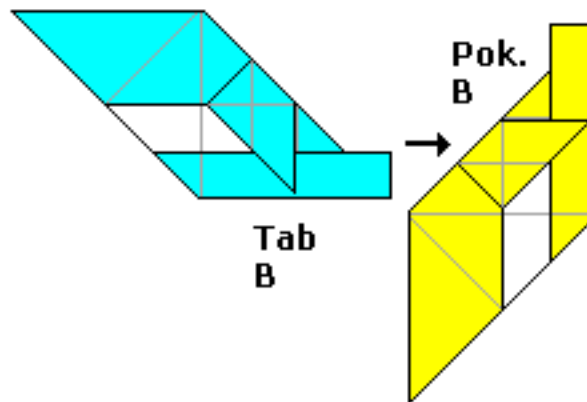
*Turbine  
Cuboctahedron*

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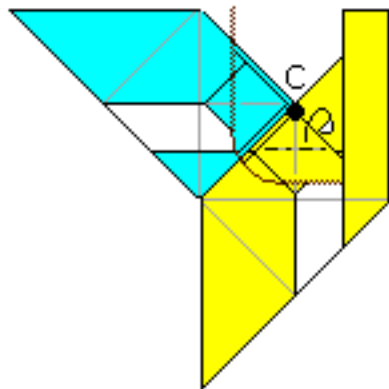


(A3) One sunken triangle complete.

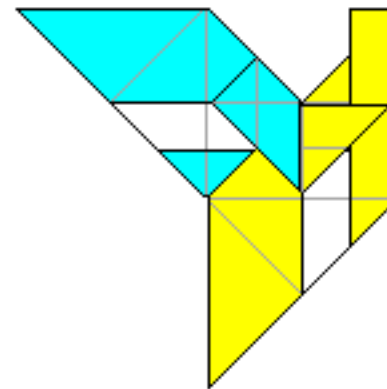
**Joint B:**



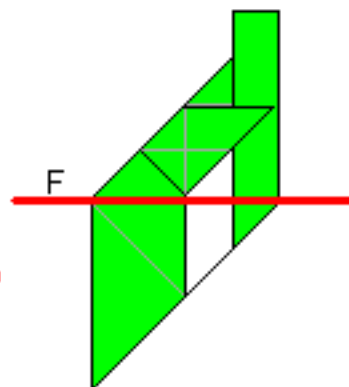
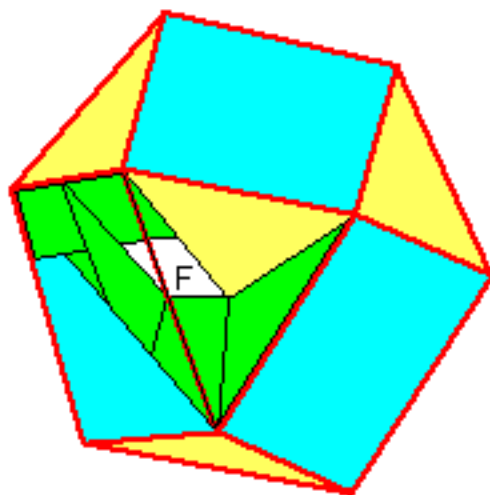
(B1) Insert tab B into pocket B. Tab B goes between the two lowest layers.



(B2) (Layers above point C partially shown.) Re-mountain fold existing crease from step 17, wrapping point C around the layer underneath. Two units locked.



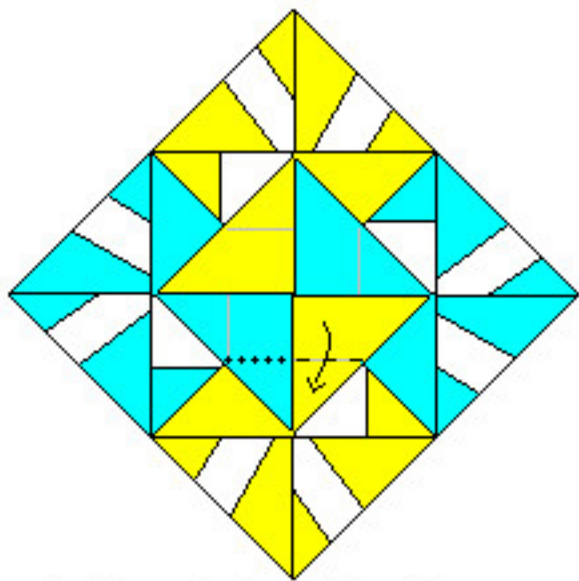
(B3) (Layers above point C shown again.) Repeat steps B1-B2 twice to add the last two units of the square.<sup>1</sup> You can see a complete square in page 4, in step <1>.



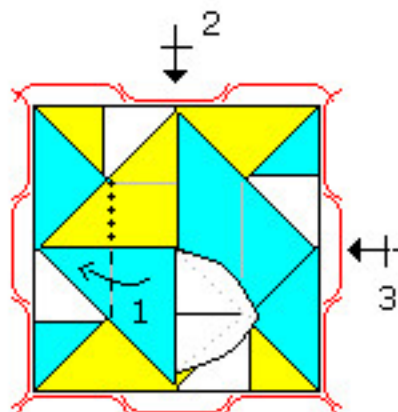
**To assemble:** Join the units so that the line F on each unit becomes one edge of a cuboctahedron (highlighted in red). For each of the 6 square faces, use the upper halves of 4 units. For each of the 8 triangular faces, use the lower halves of 3 units. Note that each line F serves as 1 edge for 1 square and for 1 triangle.

(See next page/website for photographs of the complete assembly.)

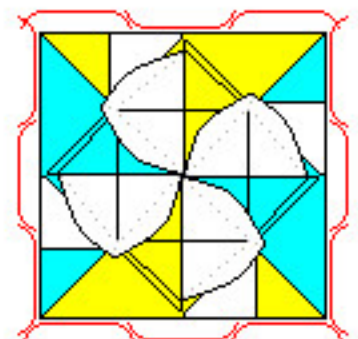
*Turbine  
Cuboctahedron*



<1> Repeat step 18 on the lowest unit; you have to fold the top layer despite the fact that it is trapped.



<2> (Extremities of the model not shown.) Moving to each next unit on the left, repeat step 18 on that unit.



<3> Completed decoration of one square face. Repeat steps <1>-<2> 5 times.



#### Footnotes:

1: As an alternative you can slide all four units together and then do step B2 to each unit to lock them.

*Turbine  
Cuboctahedron*

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