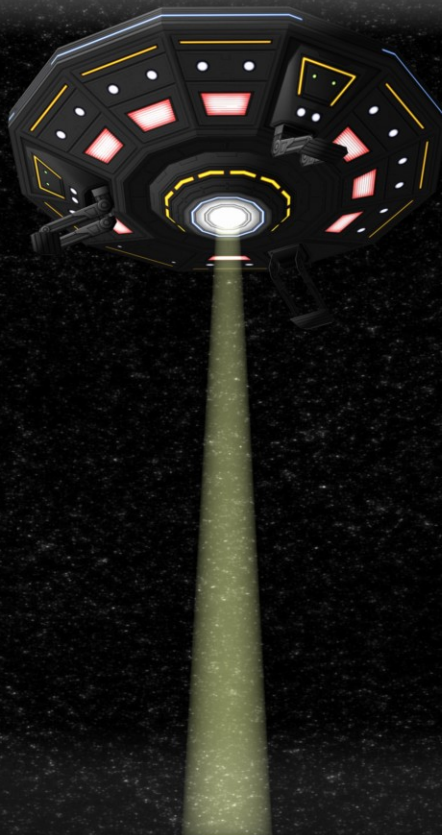


INVADER



A 1:60 SCALE DOWNLOADABLE CARD MODEL KIT

Ebbles Miniatures
<http://www.ebblesminiatures.com>

REFERENCE IMAGES AND NOTES

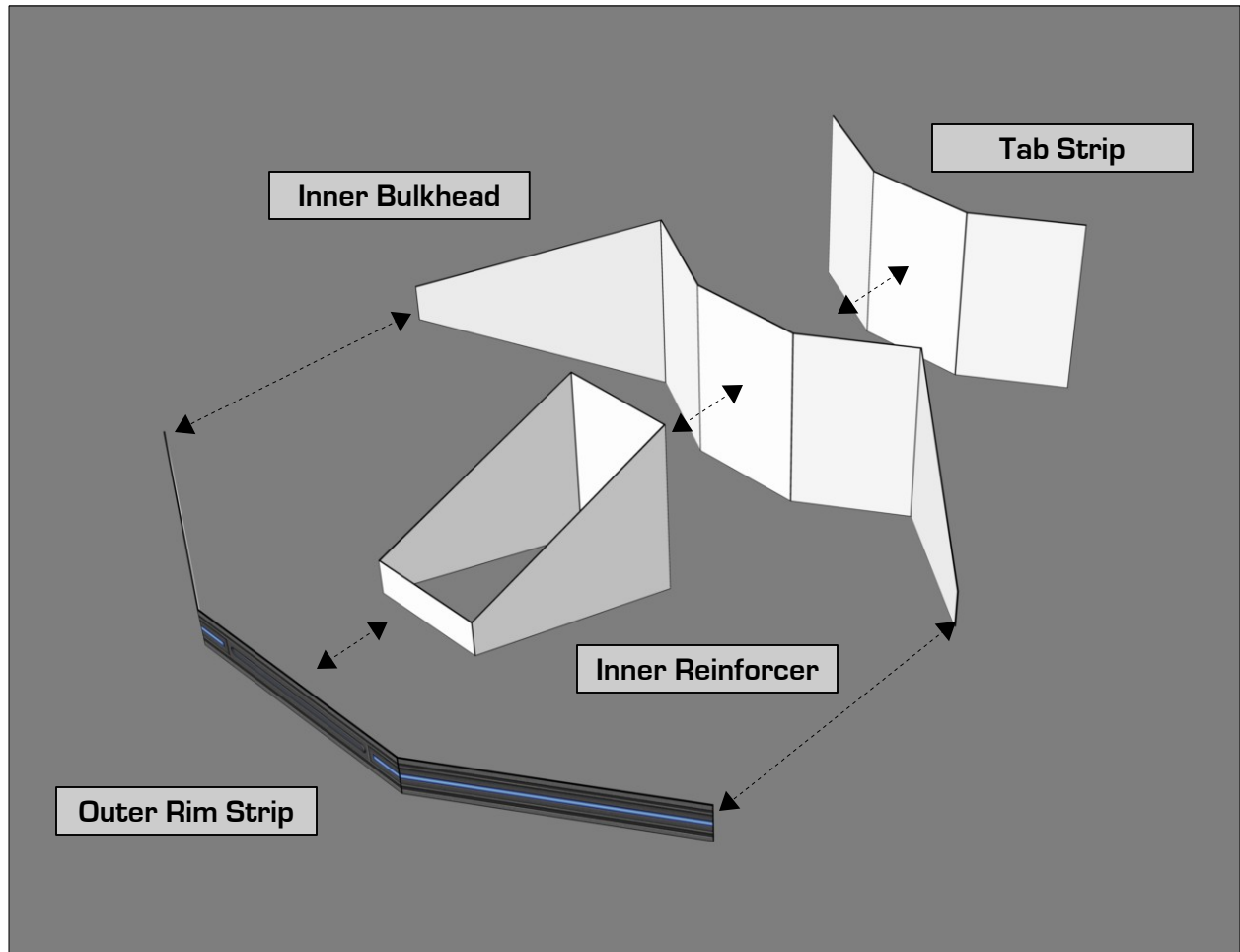
When a customer brought up the topic of flying saucer paper models on the Ebbles Miniatures forum, my wife suggested that I try my hand at designing a flying saucer. A flying saucer seemed like a pretty neat idea for a model, and I had never done anything along those lines before. So, I gave it a whirl, and this model is the result.

The model was designed at 1:60 scale, and measures approximately 10 inches (254mm) in diameter and 3.85 inches (97.79mm) tall.

This model is mainly intended to represent a tabletop objective in games utilizing 28mm miniatures. You could use it as a deployment point marker for squads of short aliens that run around shouting "Ack ack ack!" while randomly disintegrating things, or you could use it as a stylish ride for the spacefaring proctologists from Betelgeuse in this week's gaming session, or to enhance any other scenarios for which a flying saucer is needed.

The photos on this page also display a 28mm tall Copplestone Castings (<http://www.copplestonecastings.co.uk>) miniature from their "Future Wars" range for scale.





STRUCTURAL FRAMEWORK, STEP 1

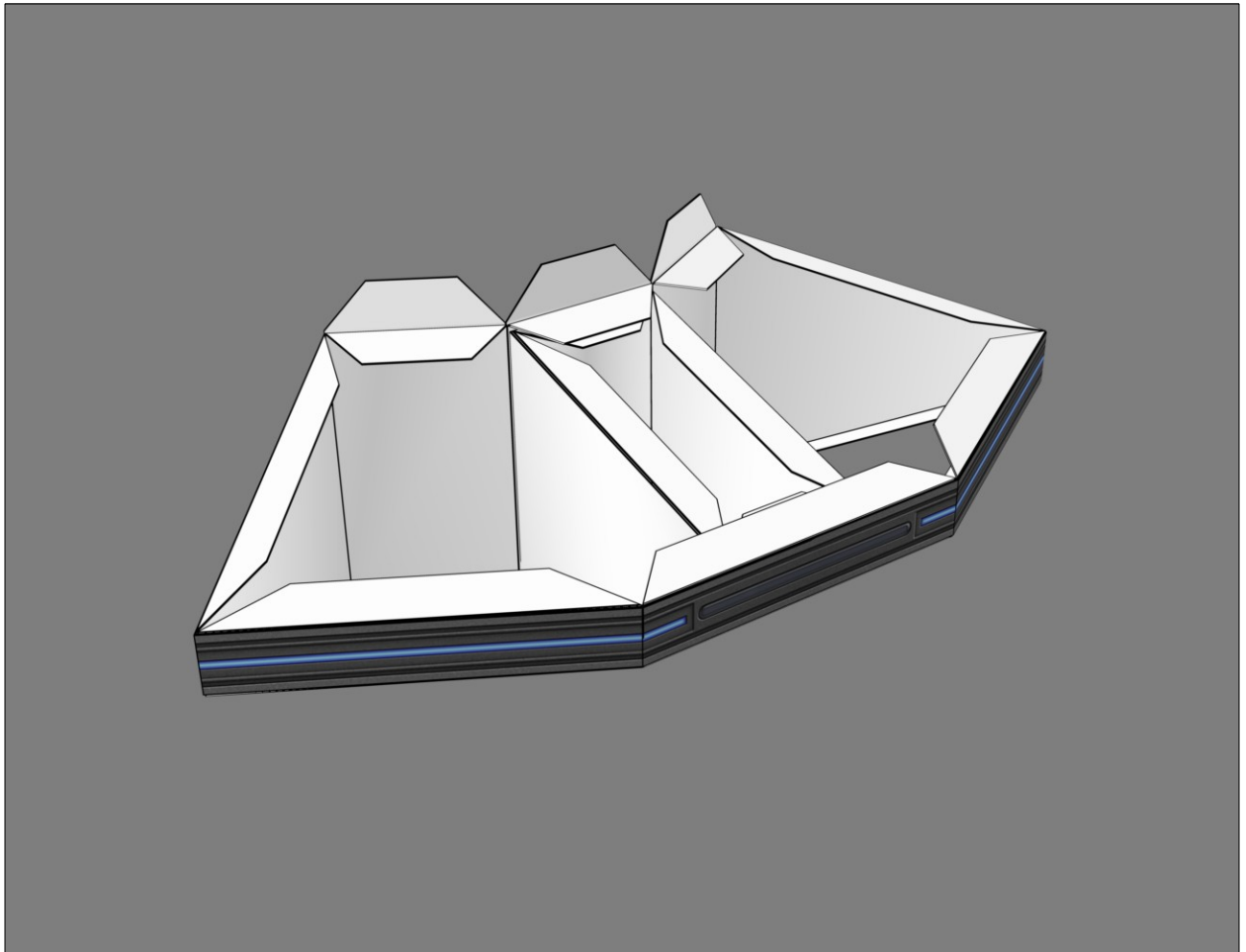
The structural framework of this model is composed of 4 segment modules: the front segment module, a left and right segment module, and a rear segment module.

Each segment module is composed of the following parts: an inner bulkhead, a tab strip, an inner reinforcer, and an outer rim strip. These parts are assembled as shown in the illustration above for each module. (Glue tabs are omitted in the illustrations for the sake of clarity.)

The following table indicates the parts numbers for each module component.

	Inner Bulkhead	Tab Strip	Inner Reinforcer	Outer Rim Strip
Front Segment	Part 38	Part 22	Part 28	Part 18
Left Segment	Part 39	Part 23	Part 34	Part 19
Right Segment	Part 40	Part 24	Part 31	Part 20
Rear Segment	Part 41	Part 25	Part 37	Part 21

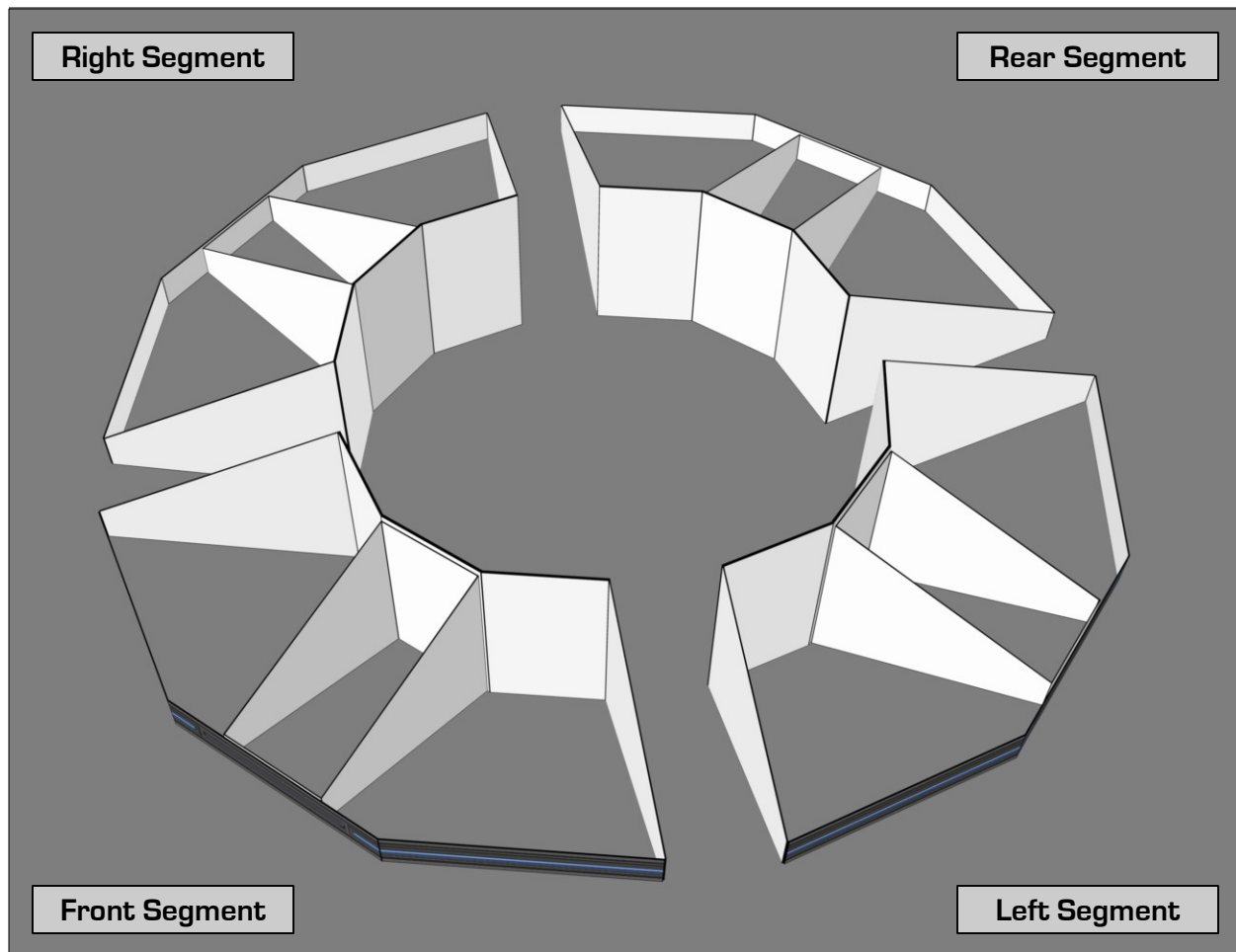
Note: Do not glue the glue tabs on the tab strips to the glue tabs on the inner bulkhead parts. The tab strips are designed to reinforce the rear wall of the inner bulkhead, and the glue tabs on the tab strips are for attaching the upper and lower saucer domes in a later step. Consult the illustration on the next page.



STRUCTURAL FRAMEWORK, CLARIFICATION

The illustration above shows how the glue tabs should appear after building the segment module frame. The configuration is identical for both top and bottom.

After the hull panels are attached in a later step, the tab strip glue tabs on the back of the segment module will be used to secure the upper and lower saucer dome parts.



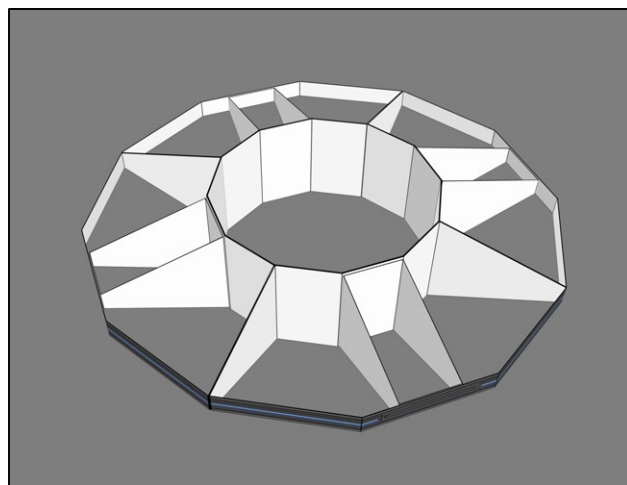
STRUCTURAL FRAMEWORK, STEP 2

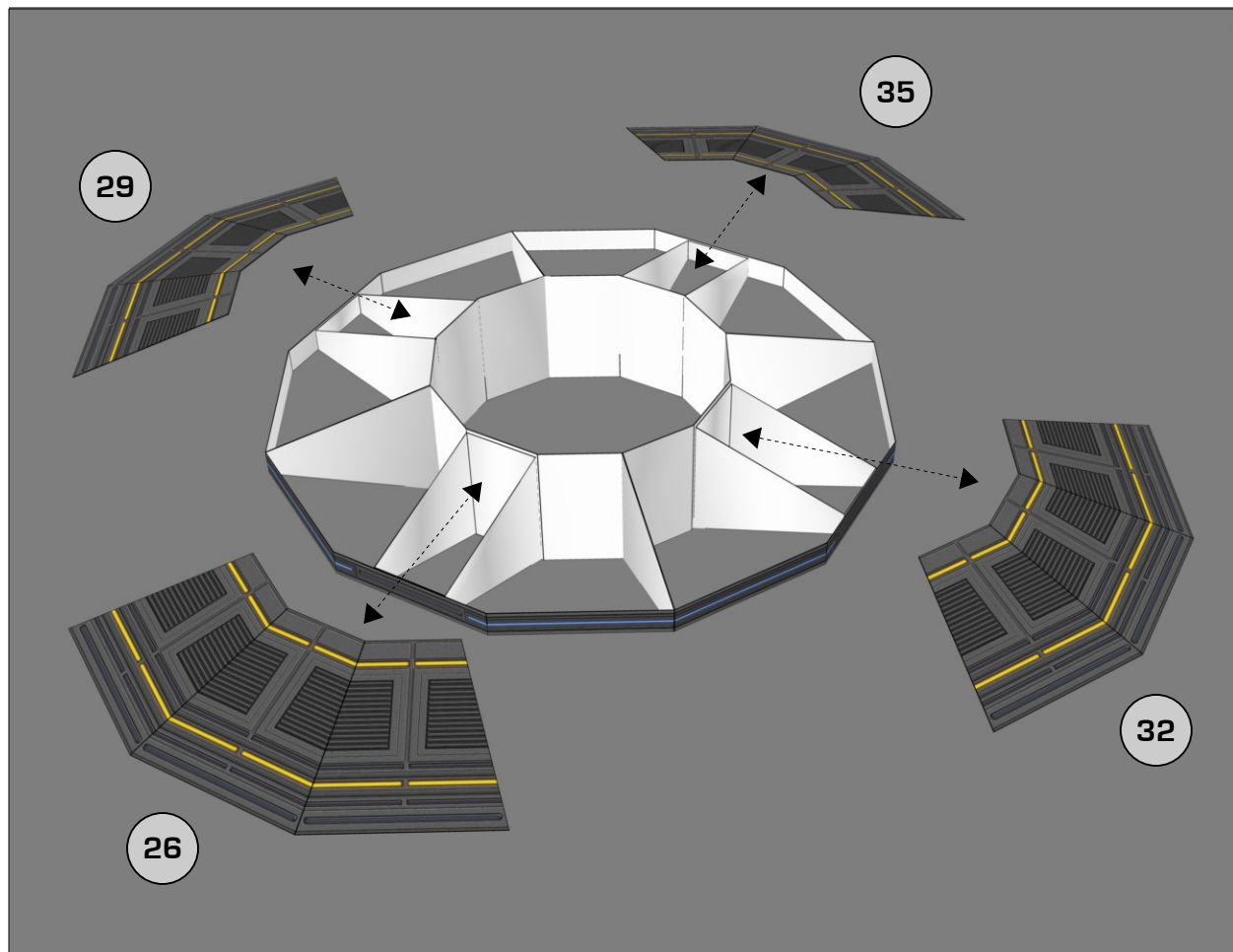
Once all 4 segment module frames have been built, glue them together, one at a time, into the final structural framework configuration as shown in the illustration above.

Assembling the structural framework in this manner ensures the best possible glue bond and alignment before mounting the hull panels in a later step.

As indicated previously, make sure that you test-fit and verify the alignment of each part before applying any glue.

The illustration to the right shows the completed structural framework assembly.



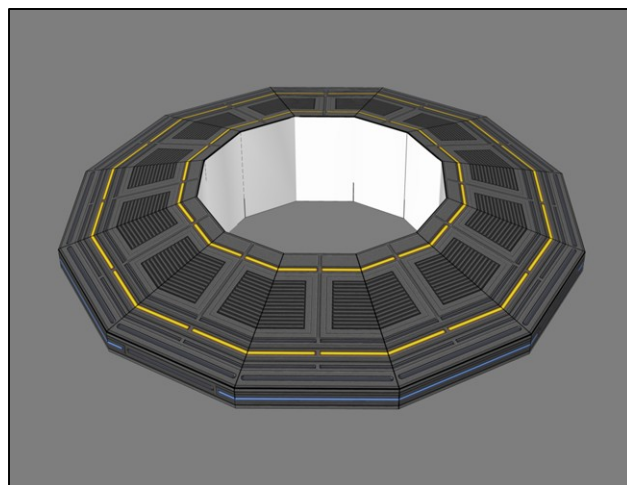


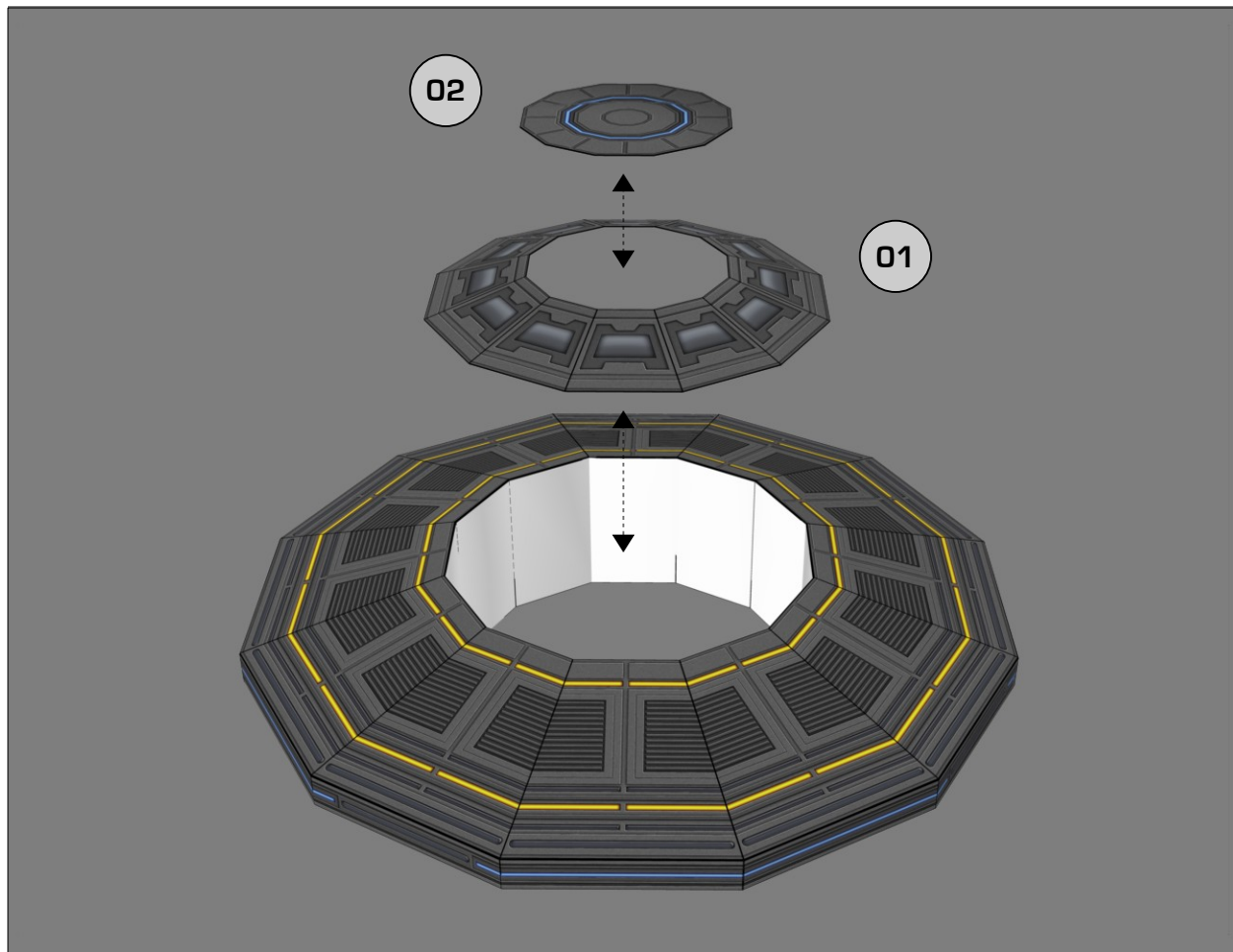
UPPER HULL, STEP 1

Glue the front upper hull plate (Part 26), the upper left hull plate (Part 27), the upper right hull plate (Part 29), and the upper rear hull plate (Part 35) to the structural framework as shown in the above illustration. The glue tabs on the inner bulkheads, inner reinforcers, and outer rim strips are what secure the hull plates in place.

The glue tabs on the tab strips attached to the inner bulkheads should be bent slightly inwards towards the hole in the middle of the structural framework at this step.

The illustration to the right shows the completed results of this assembly step.

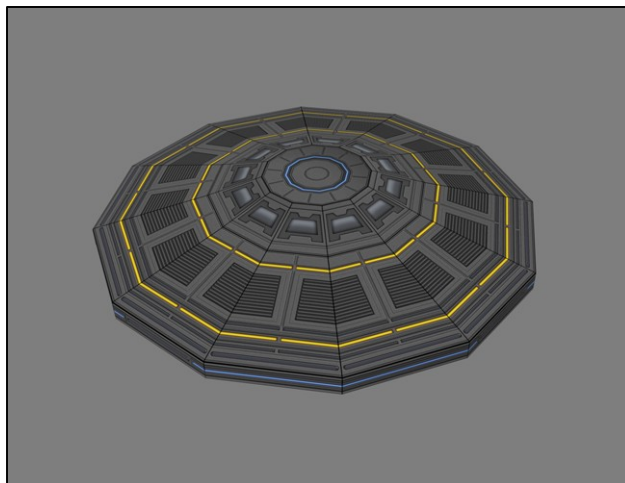


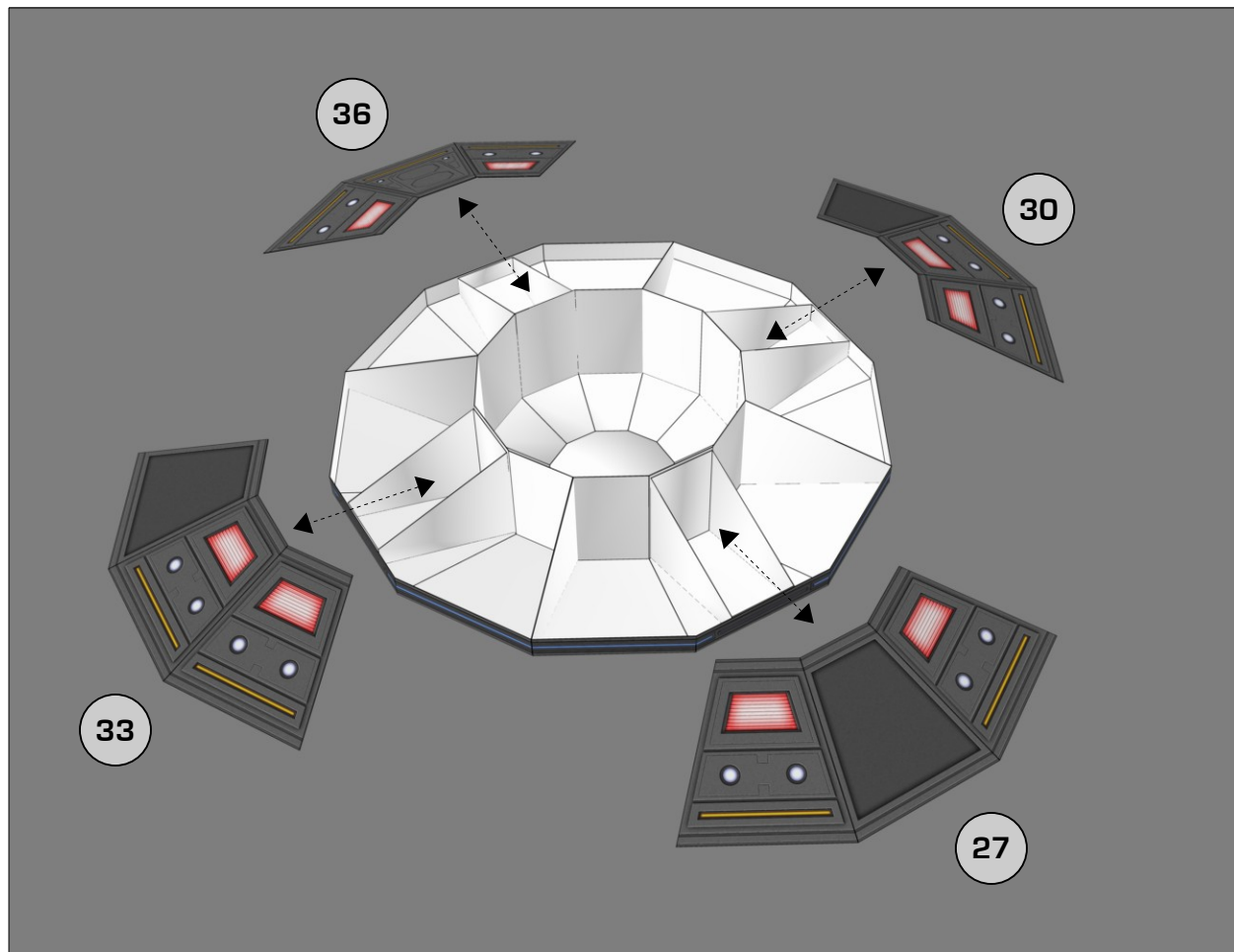


UPPER HULL, STEP 2

Glue the top of the upper dome (Part 02) to the upper dome ring (Part 01), and then glue the completed upper dome to the model as shown in the illustration above. The tab strips along the back of each segment module are what secures the top dome in place.

The illustration to the right shows the completed upper hull after this step.

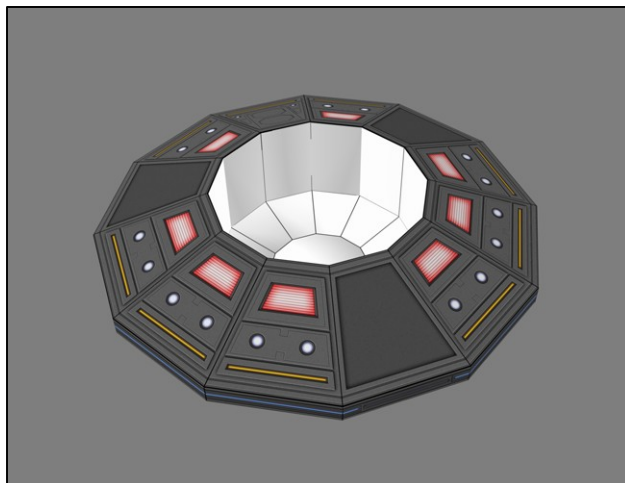


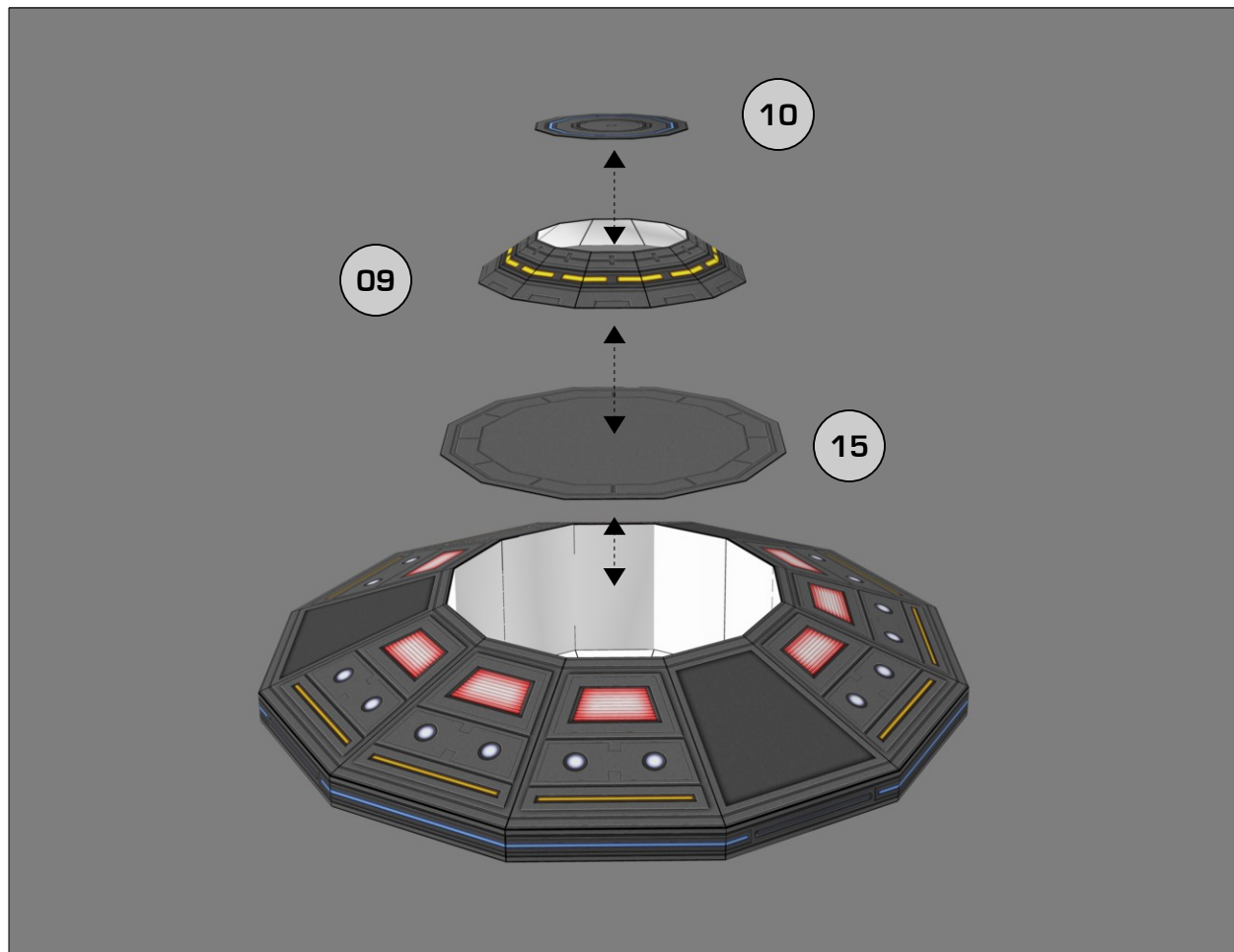


LOWER HULL, STEP 1

Glue the lower front hull plate (Part 27), the lower right hull plate (Part 30), the lower left hull plate (Part 33), and the lower rear hull plate (Part 36) to the underside of the model as shown in the illustration above.

The illustration to the right shows the completed result of this assembly step.

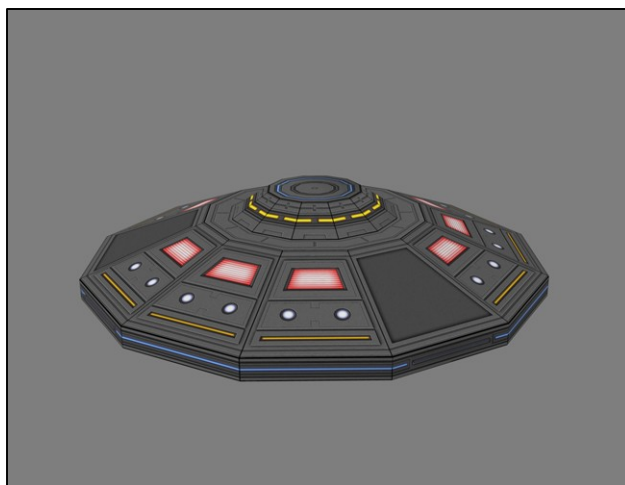


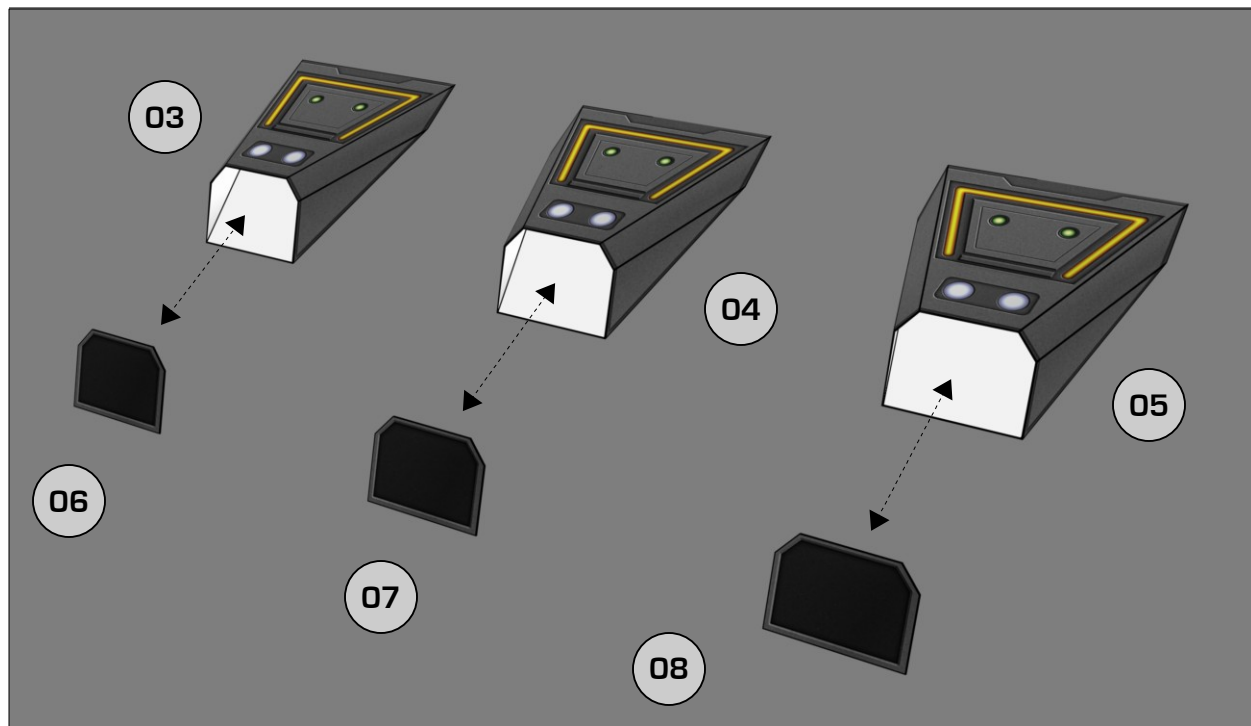


LOWER HULL, STEP 2

Glue the bottom of the lower dome (Part 10) to the lower dome ring (Part 09), and then glue the completed lower dome to the lower hull bottom plate (Part 15). Next, glue the completed assembly to the bottom of the model as shown in the illustration above.

The illustration to the right shows the completed results of this assembly step.

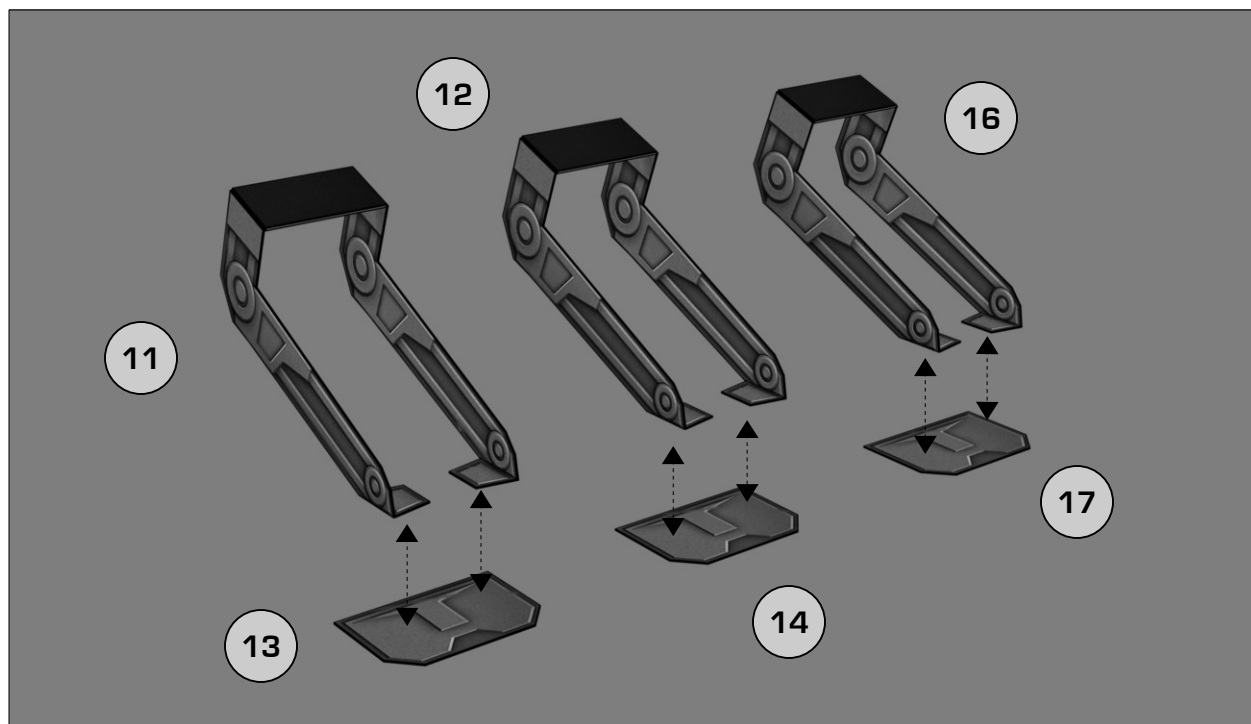


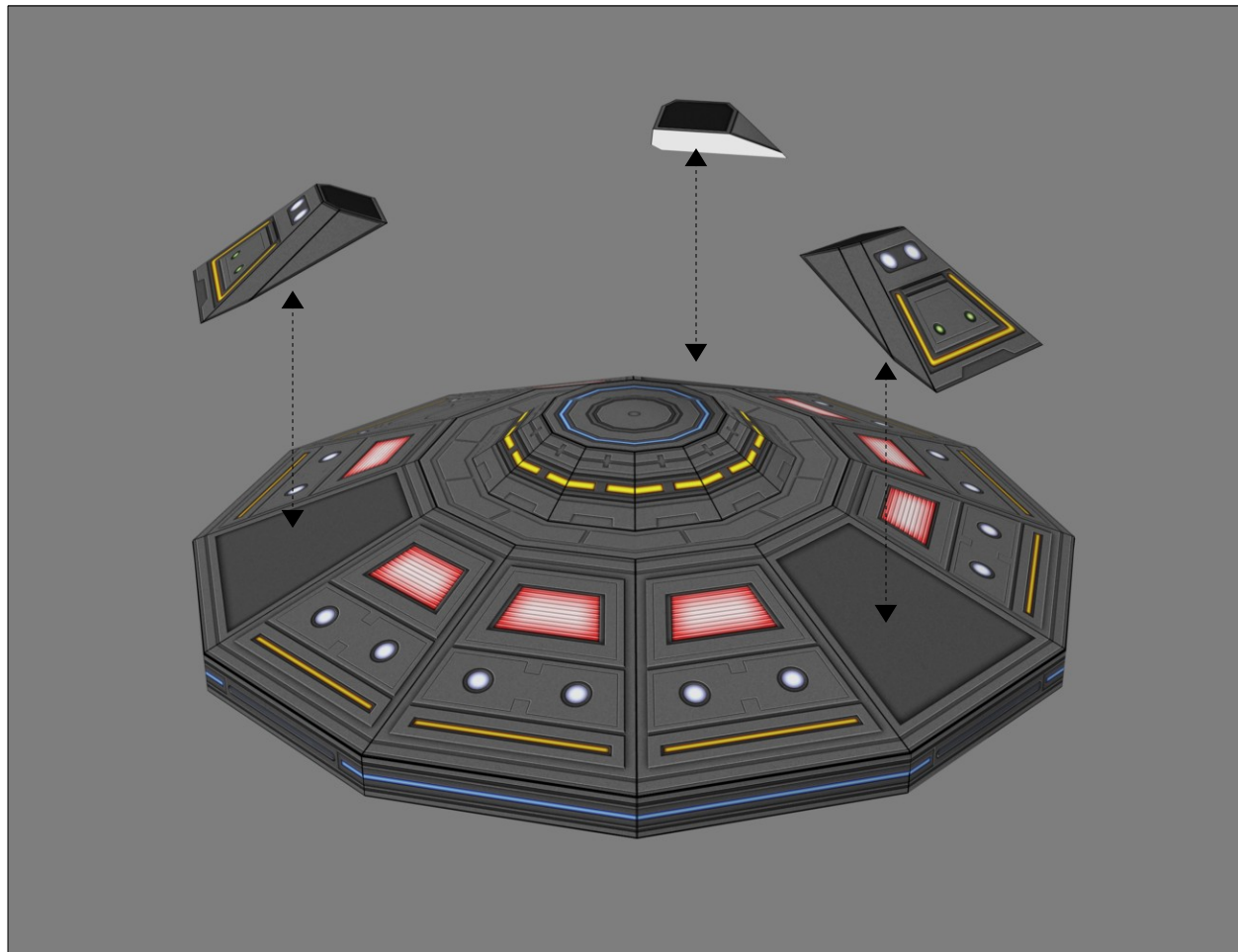


LANDING GEAR, STEP 1

Glue the landing gear pod bottoms [Parts 06, 07, and 08] to the landing gear pods [Parts 03, 04, and 05.], as shown above.

Next, glue the landing gear footpads [Parts 13, 14, and 17] to the landing gear struts [Parts 11, 12, and 16], as shown below.





LANDING GEAR, STEP 2

Glue the landing gear pods to the underside of the model as shown above.

The illustration to the right shows the completed results of this assembly step.





LANDING GEAR, STEP 3

Glue the assembled struts to the bottom of the landing gear pods as shown above.

The model is now complete.

