

VESSEL BASES AND STANDS



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METHODS & MATERIALS & VIDEO TUTORIALS

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In the following tutorials we will be covering all items which require bases and stands. Basing is a very important part of vessel and game aid construction. This provides all in-game models with a strong foundation and gives them a little extra weight on the table.

Although we generally speak of mounting each base individually in these tutorials, it usually makes the most sense to mount a large group of bases in one shot. The more "assembly line" you make your Wormhole building process the quicker you'll get models onto the table ;)



The first thing you need to consider when building your bases is finding a good material to mount them on. It's important that your bases have a solid foundation. WorldWorksGames recommends black, matt finish foamcore (display board). This typically comes in 20" X 30" sheets and can be found at your local craft or office supply store. If you are unable to find it there you can order it online from many locations (Google "display board" or "office supply").

If that isn't an option for you then a good thick cardboard (from a packing box) or a sheet of high density foam insulation will work in a pinch. Whatever you choose to use it's important to make sure it's easily cut with your utility or hobby knife and accepts glue. Vinyl tiles are also a viable alternative...difficult to cut, but conveniently pre-glued.

Gluing options for your tray base break down into 3 basic techniques; Spraymount, Gluepen & Adhesive Papers. Ultimately it comes down to which technique you are most comfortable with and affords you the best flexibility based on your skill level.

Adhesive Paper: These full 8.1/2"X11" sticky backed sheets of printer paper can be found at most office supply stores or online. Adhesive paper allows you to print your pages, cut them out and then "peal & stick" each tile down with limited fuss.

Upside: This is a very fast and forgiving technique. Each page is guaranteed to have the same "tack" and there is some ability to pull the pages up and reposition them as you are placing them.

Downside: While this is potentially the "easiest" technique the main pitfall is the long term bond of the page. For the most part the pages stick well but depending on how humid it is in your area you may notice the edges of the pages lifting slightly.

Gluepen: By using a low water content gluepen, gluestick, or bottled glue, you apply a zigzag pattern across the back of your page, followed by a bead of glue around the border. The page is then burnished into place (rubbed), being careful to spread the glue to all edges and corners while removing any air bubbles.

Upside: This technique is very forgiving in that you can freely move you page around for some time before the glue sets completely.

Downside: Too much glue can cause warping so it's important that a thin and even bead of glue is used and that it is evenly spread. This technique is also a bit messy with glue typically oozing out from the sides and getting on your fingers.

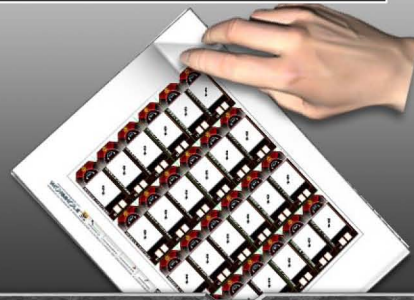
Spraymounting: This technique involves the use of adhesive spray found at your local craft or hardware store. In an adequately ventilated room (or better yet outside) each page is sprayed on the reverse side and left to dry. The mounting surface itself is then given an additional light spray and left to dry. When the two surfaces come into contact there is an instant bond.

Upside: The bond is EXTREMELY strong and will last for the life of your command tray.

Downside: Once your pages are down there is no way to move them around. **WARNING: Spraymount is typically VERY toxic! Read the label!**



OPTION 1: ADHESIVE PRINTER PAPER



OPTION 2: GLUE STICKS, PENS & BOTTLES



OPTION 3: SPRAY ADHESIVE

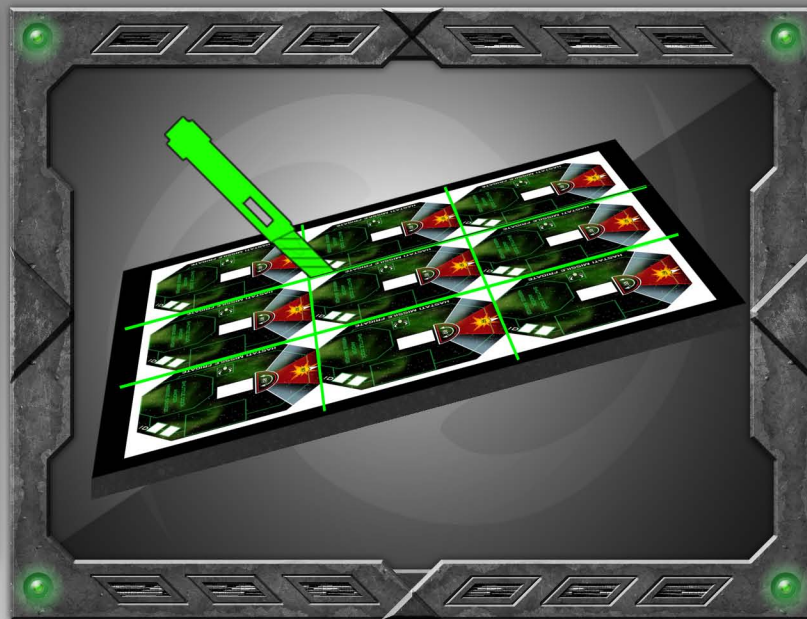


FRIGATE BASES (ALL TYPES)

Up next are the Frigate Bases. There are two variations on the Frigates, and thus two variations on the build instructions. We will deal, initially, with the "simple" variation, designed to allow for quicker builds and getting a big fleet on the table. The build instructions for the base are identical for both the Missile Frigates and the Plasma Frigates (and the free-download Cargo Frigates).

For the sake of speed and clarity we've assumed you've already glued your bases to foam core using one of the previously mentioned methods. (Also See: "Trays" tutorial page 57 for more information on proper foamcore cutting techniques.)

Each base page has been designed for the most efficient cutting pattern possible (shown in green). Once the page has been glued down you'll be able to cut out a number of bases at once.

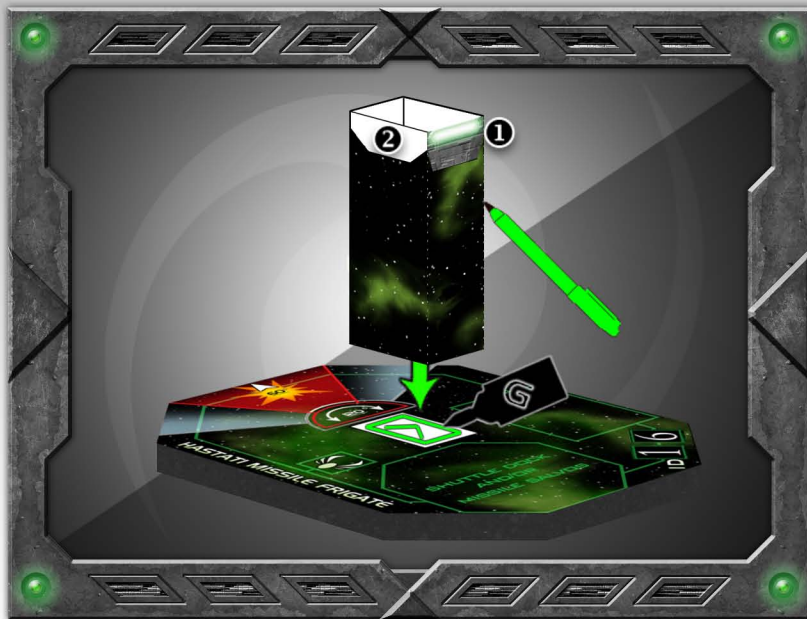
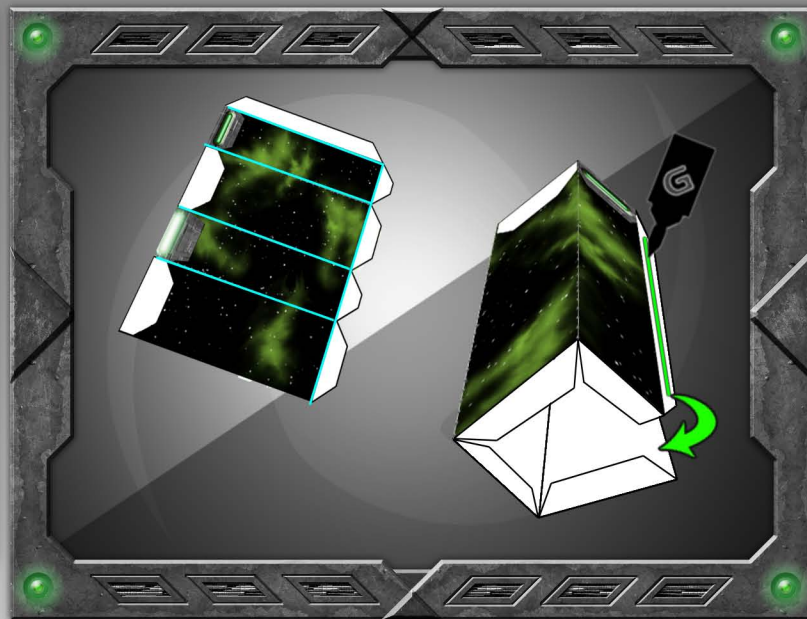


Cut out the rectangular shapes to separate out the individual bases, then cut away the corners.

Once cut free you can edge your base with a black felt marker removing any showing white edge (For more information on Edging please see www.worldworksgames.com "Tutorials"). This is also a good time to assign a number group to your ship base by applying numbers to the back end of the base ("numbers" are located in the "Game Aids" folder).

The stand for the simple frigate bases is simple.

Start by scoring the stand as marked, then fold the four sides around into a rectangular tube, gluing the white flap onto the inside.



Fold the tabs for the bottom under, and glue the four tabs down onto the base. You want to make sure the "brighter" of the two exhaust ports is facing the back of the base (and the white glue-here spots to either side).

The two visible white tabs will be where you glue the lowest part of the Frigate body to the base.

The bases for the Advanced Frigate aren't all that much different. The base itself is identical.

The stand, however, isn't a solid box, it's an open triangle. Start by scoring the base as marked.



Sandwich fold along the long line to create a long, flat, rectangle.

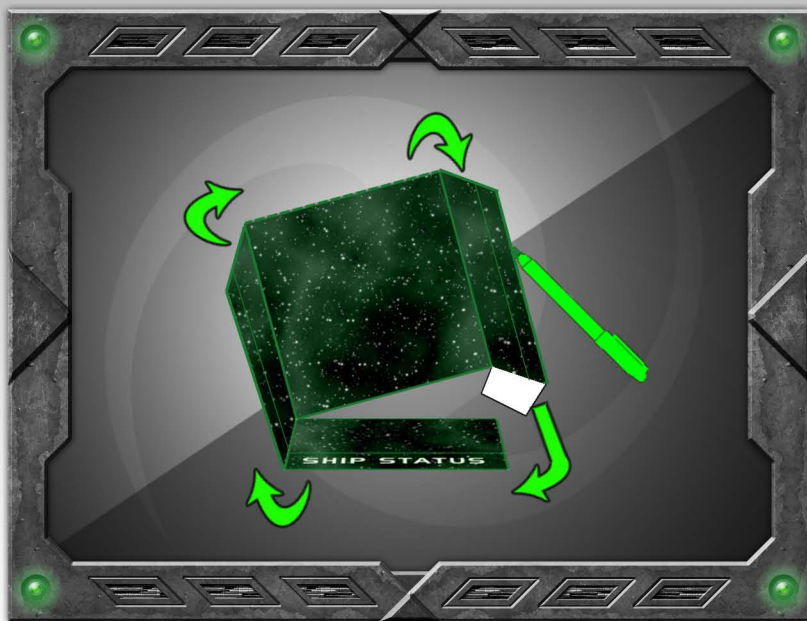
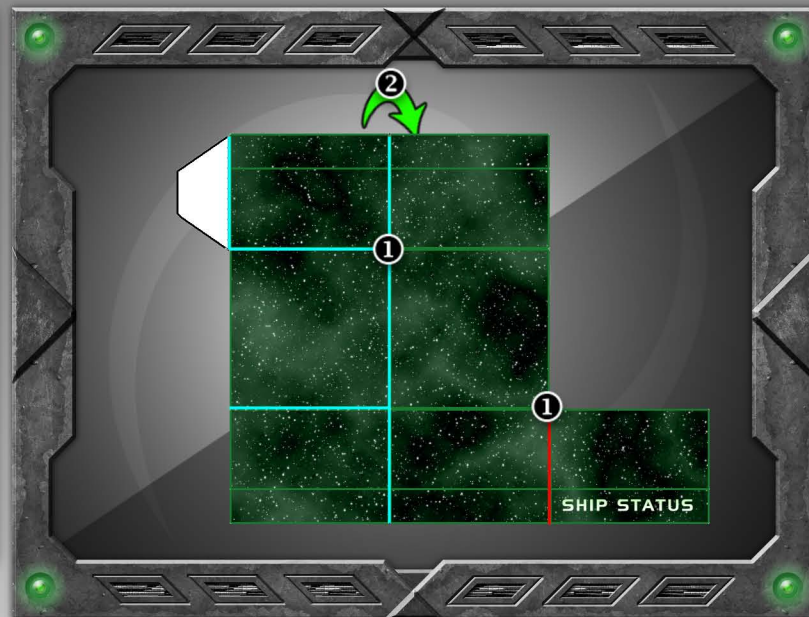
Fold the other scorelines and edge around the stand on all sides with a black marker.

Glue the white rectangle down to the base, being careful to align it as evenly as possible.

The top of the stand folds over, leaving the white tabs exposed at the top...this is where you will later glue down the model itself.

There are optional "data cubby" additions that can be included on the bases of all of the vessels of ship size or greater. They are designed to house the "data cubes", should you choose to use them in your games.

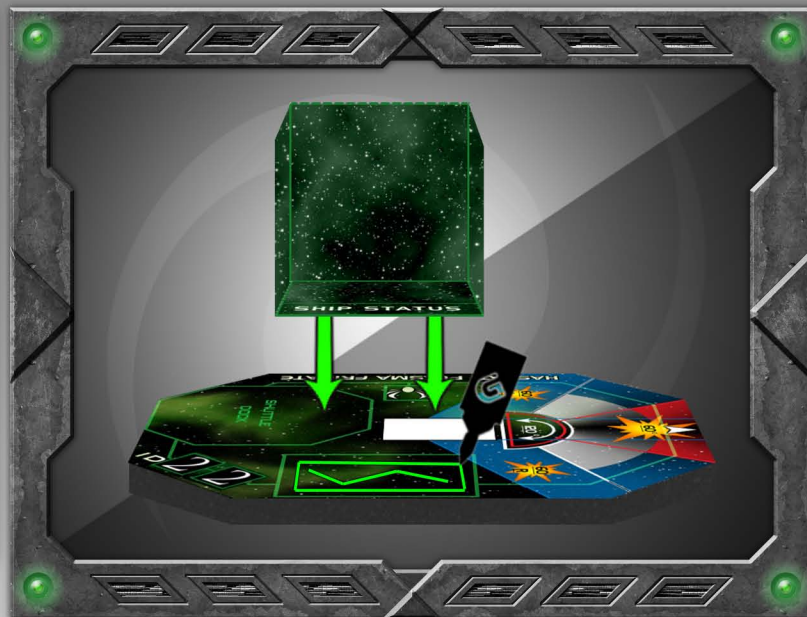
- ① Start off by cutting out and scoring the data cubby (cyan for regular scorelines, red for reverse-scorelines).
- ② The insides and outsides of the cubby are then connected via a sandwich fold along the longest scoreline.



Fold the short scorelines of the insides/outside section, and then fold it over on the reverse-score line into a box shape. The white tab goes underneath the "Ship Status" base.

If available, you might want to edge the data cubby with a colored marker, to match the color of the faction (and the lines already appearing on the model).

Then glue the cubby down onto the base. You'll find a faction-colored square on each base where the cubby is supposed to sit, facing outwards towards the edge of the base.



The data cubes are even simpler.

- ① Score where shown, and sandwich fold along the long scoreline.
- ② Edge in black. You'll want to edge the creases when you fold on the remaining scorelines.
- ③ Fold each of the four scorelines 90 degrees, forming a square ring.
- ④ Glue the tab to the white glue area and you're done!

FRIGATES



PLANET VERUS



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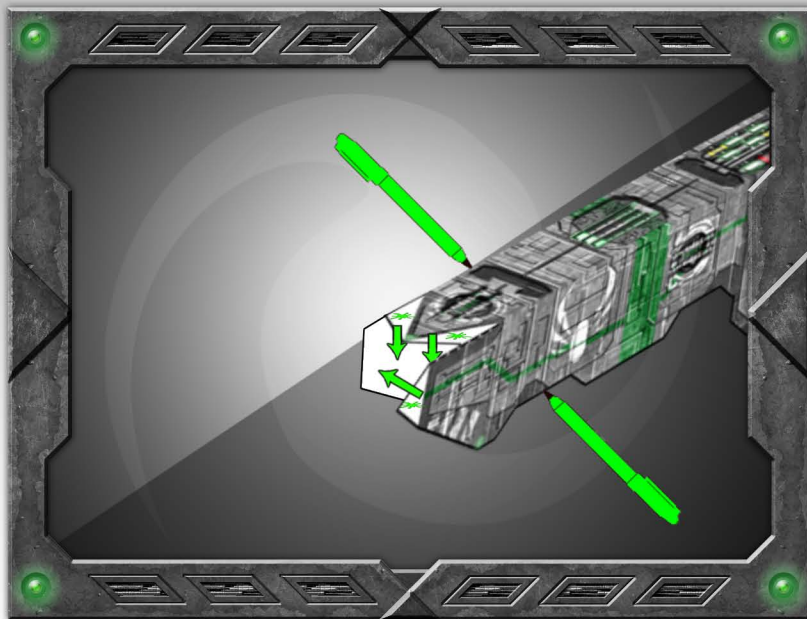
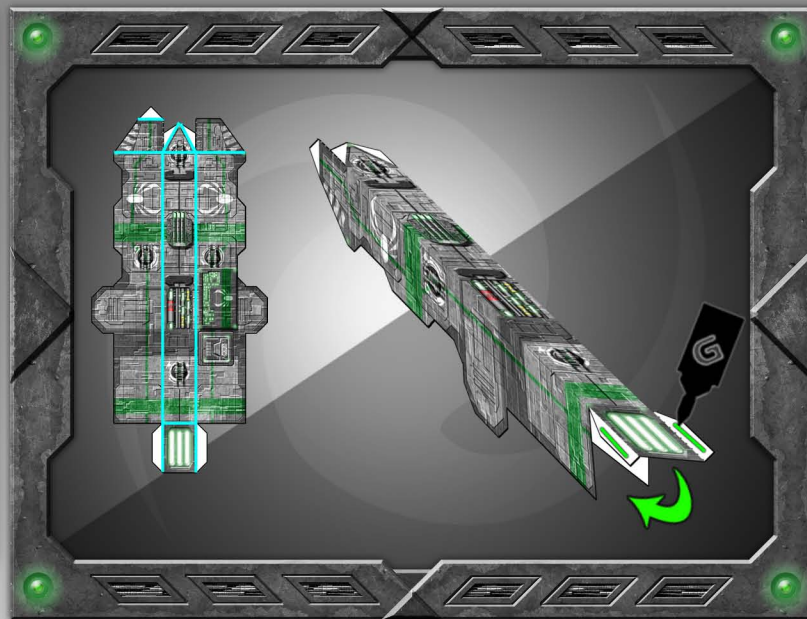


FRIGATES

There are two different sets of instructions for making the Frigates, depending on if you want to use the faster and easier to build "simple" version, or the more complex but more impressive looking "advanced" version. We'll start with the simple version.

The main body of the Frigate is a bottomless box. Fold the two long scorelines shown here 90 degrees (be sure to score all of the other lines as well).

Glue both of the back tabs, and fold the back into place square with the sides.



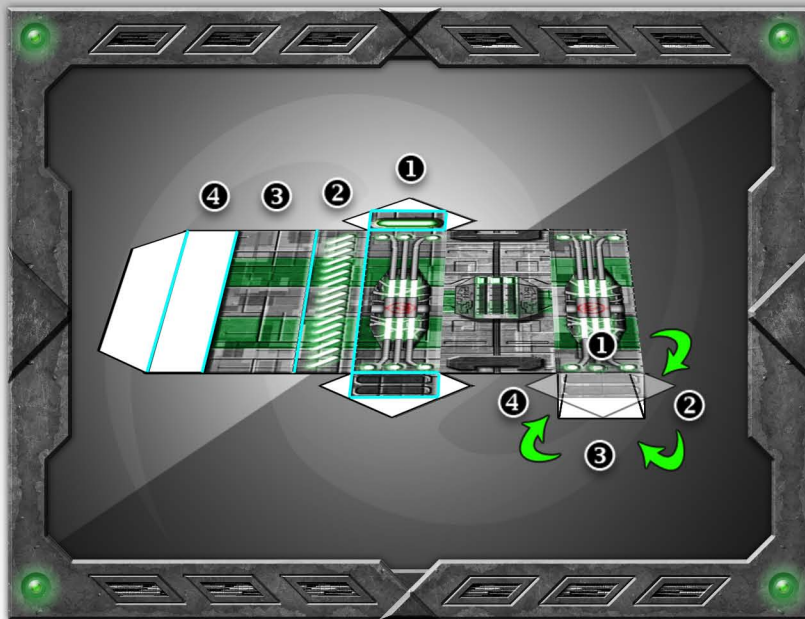
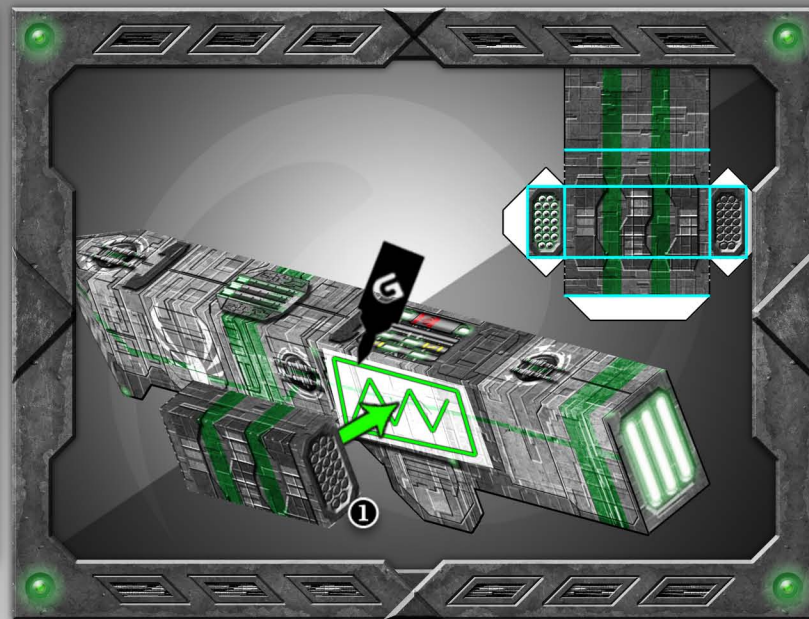
In the front, you'll want to glue the two small tabs on either side of the triangular front "point" of the Frigate, then bend them down.

Add a dot of glue to the tab to connect the two sides where they meet at the point, and fold the tab over to join them together. Since there is no bottom to the model, it is easy to access these glue points from underneath to hold them together while the glue dries.

Edge all of the exposed white foldlines with a grey (if available) felt-tip marker. If you don't have grey, you can use black or a faction-appropriate color. If desired, you can also grey-in the bottom quarter-inch or so of the under-inside, though that area rarely shows during play.

The next step depends on whether you're building a Missile Frigate or a Plasma Frigate. The missile frigate is rather easy...just assemble the missile pod itself (a simple box), and glue the white tab onto the side of the Frigate.

You'll want to center the pod on the lowest part of the Frigate (where it glues to the base) on the left-hand side of the model, and be sure to have the heads of the missiles (the white and green circles) facing forward, and thus the plain grey circles facing back ❶



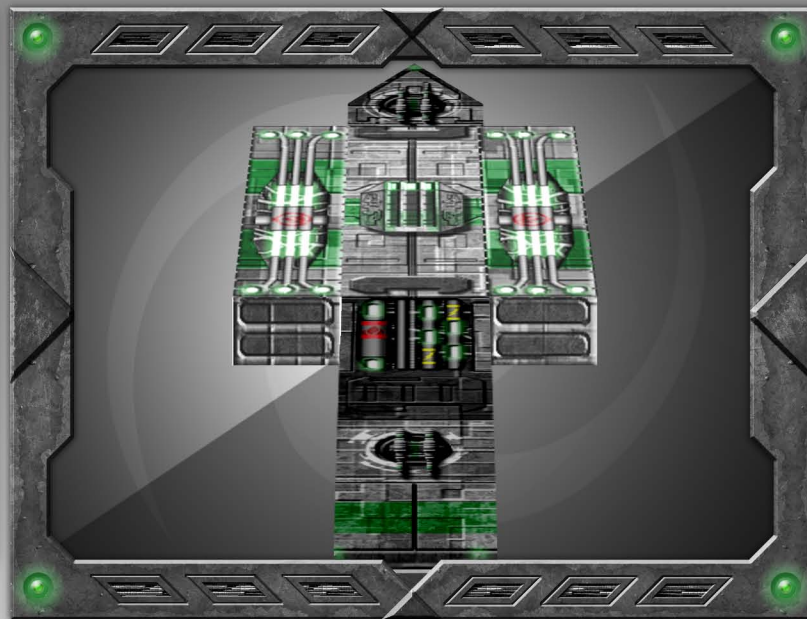
The Light Plasma Launchers are a bit more complex. Essentially, they're two different box-fold pieces attached together. Score all of the lines as marked. Then roll each side up into a box (❶ top, ❷ outer side, ❸ bottom and ❹ inner side). The tabs at the end glue to the underside of the top ❶ sections.



Also included in the package is a "cargo" variant on the Frigate. The cargo pods are built and applied in the same manner as the light plasma launchers.

Apply a small dot of glue to each of the tabs on the plasma launchers, and tuck the ends into the tubes on either side to complete the piece. The whole thing is then glued to the top of the Frigate itself.

Pay close attention to the texture on the top of the plasma launcher...it matches that of the top of the Frigate, so if you are careful, you can align the piece to fit in exactly the right spot (the glowy part goes in front, and it should line up very close to the front of the model).



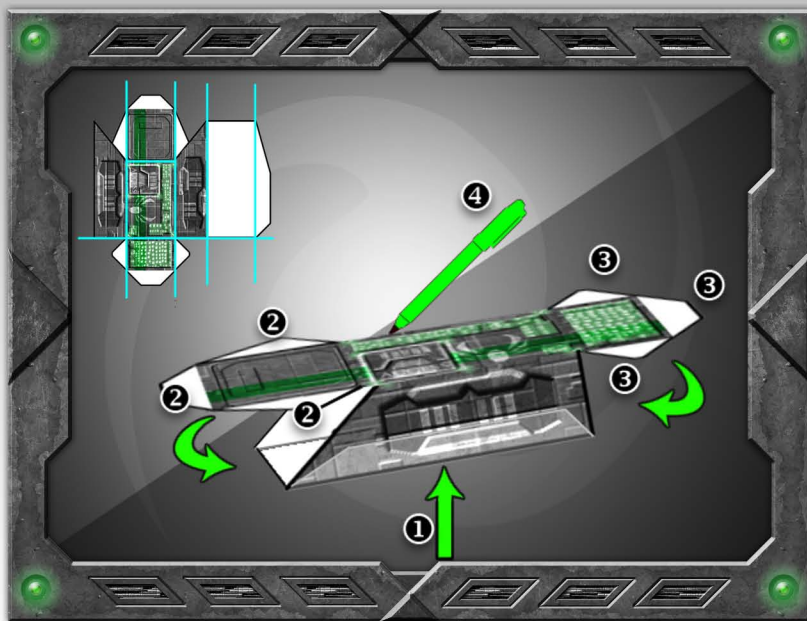
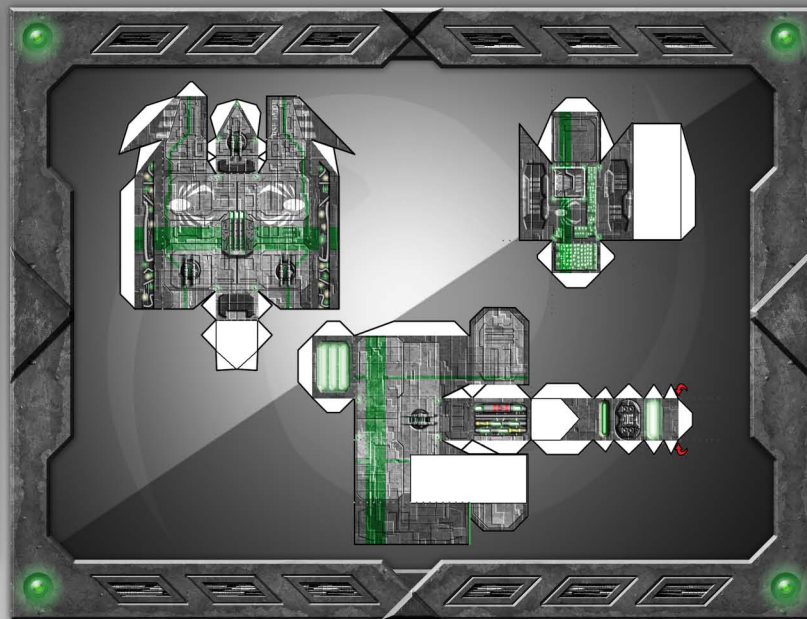
Either way you went, all that remains is to mount it to the proper type of Frigate base (see the "bases" instructions document for how to build them). The bottom-most part of the Frigate matches up with the two white tabs on either side of the stand on the base, so apply a bit of glue to the inside of these two tabs, and pinch it down on either side around the top of the stand structure itself.

Be sure that the front of the Frigate **1** is lined up with the front of the base. **2**

ADVANCED FRIGATES

The advanced version of the Frigate involves more parts, and a more complex geometry, but the end result is a more complex and detailed model. If you want to put the additional time and effort in, you can produce a very impressive result for a ship-class vessel. Be warned, there are a LOT of little tabs to deal with in this version.

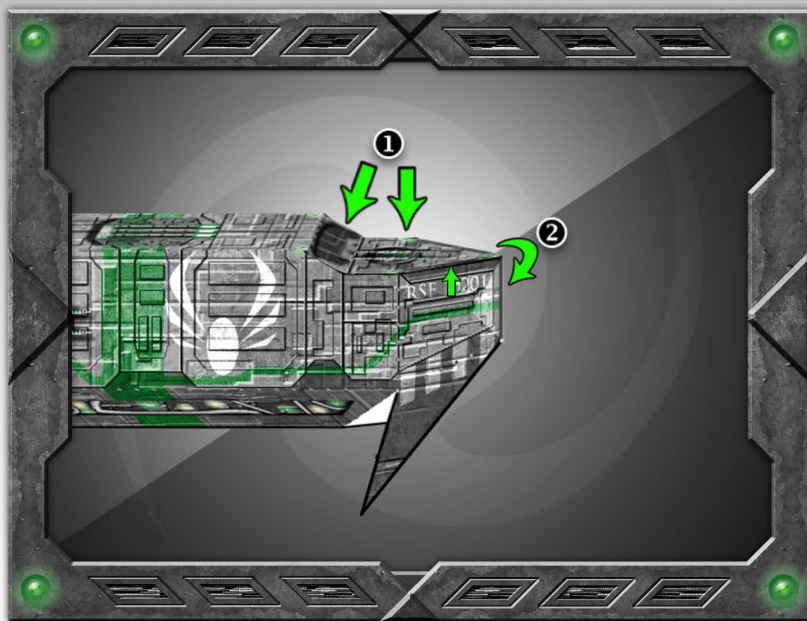
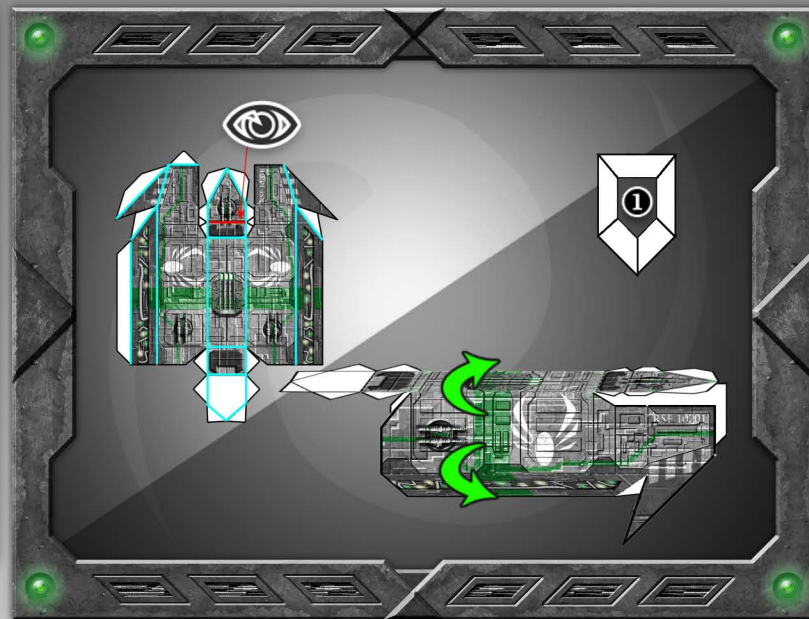
The main body of the Advanced Frigate consists of three separate pieces instead of just one...the bow section, the stern section, and a separate attached crew pod.



Just to get things started, we'll start off with the crew pod. It's basically just a box, albeit with a sloped back side. Score as indicated, fold 90 degrees everywhere except for the angled back of the box.

Glue the long, narrow tab to form the main body first **1**, then glue and tuck the back's three tabs into place to form the back **2**. Glue and tuck in the front three tabs last **3**. Don't forget to edge with a grey (preferred), black, or faction-colored marker. **4**

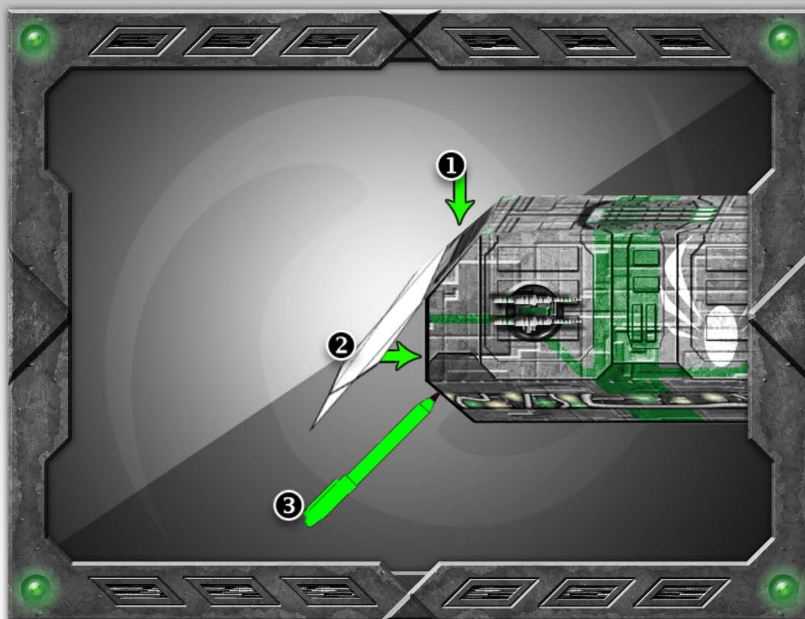
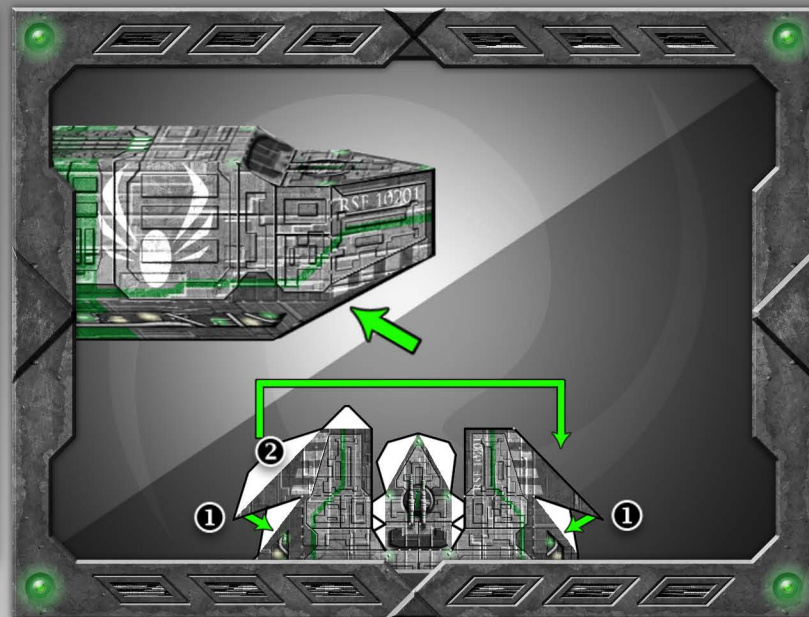
The bow section is a more complex shape, but the same general principle remains. After scoring all of the lines, start by gluing the longest tab and attaching it to the opposite side. This should form a roughly pentagon-shaped tube with a flat top and a pointed bottom. ❶



Apply a tiny dot of glue to the four small tabs around the top of the front "point" of the vessel, angle the front down slightly and then back out to flat (NOTE: The reverse-score here is crucial), and glue the two sides into place to hold the shape. ❶

Then apply glue to the front-most tab, and the two tabs on either side of the point, and bring the two sides together at the point, forming the front-most part of the vessel. ❷

The front-most part of the bow section is completed by gluing tabs to connect the angled bottom-front sections to the angled bottom ①, and to connect these two angled sections themselves together. ②



The back part of the bow section works similarly. Start by gluing the top two tabs to angle the back panel down towards the back of the vessel. ①

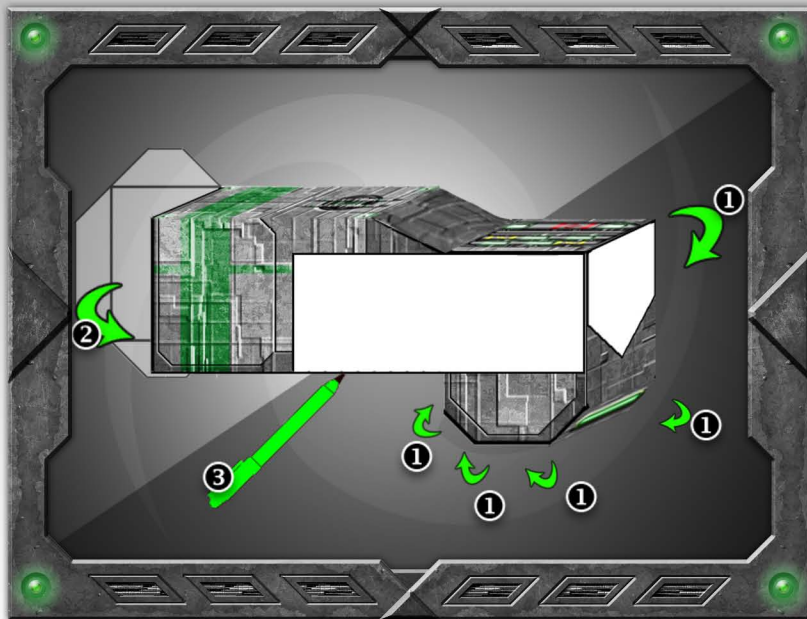
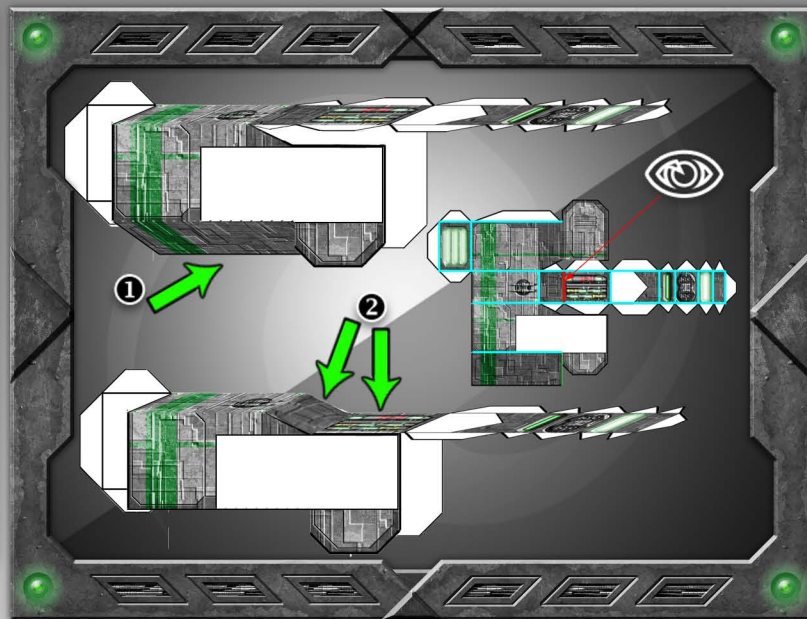
The pentagon-shaped back of the bow is the glue tab to connect the bow and stern sections. Glue all four remaining tabs, and tuck them into place to close the box and complete the bow section. ②

The bow section can now be edged with a grey (preferred), black, or faction-colored marker. ③

There are similar techniques employed in building the stern section. Please note the reverse-score folds!

The stern is a "square" tube instead of a pentagonal one, so it's somewhat easier in that regard. Start by gluing the long tab and bringing it 'round to match up with the bottom of the vessel. ❶

Once that's solidly in place, glue the first four tabs of the long front part, and tuck them into place to form the completed top of the stern section. As with the front of the bow, the front of the stern angles down slightly, then back to flat again. ❷



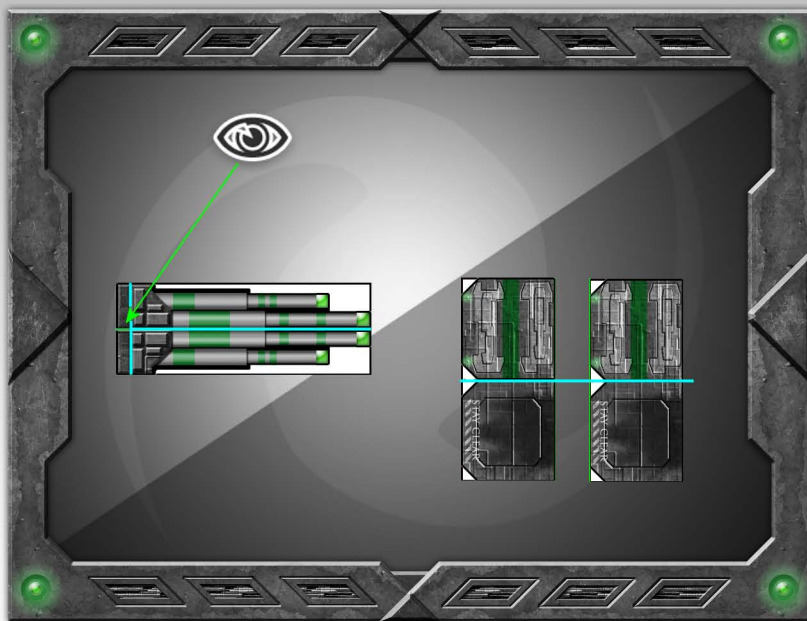
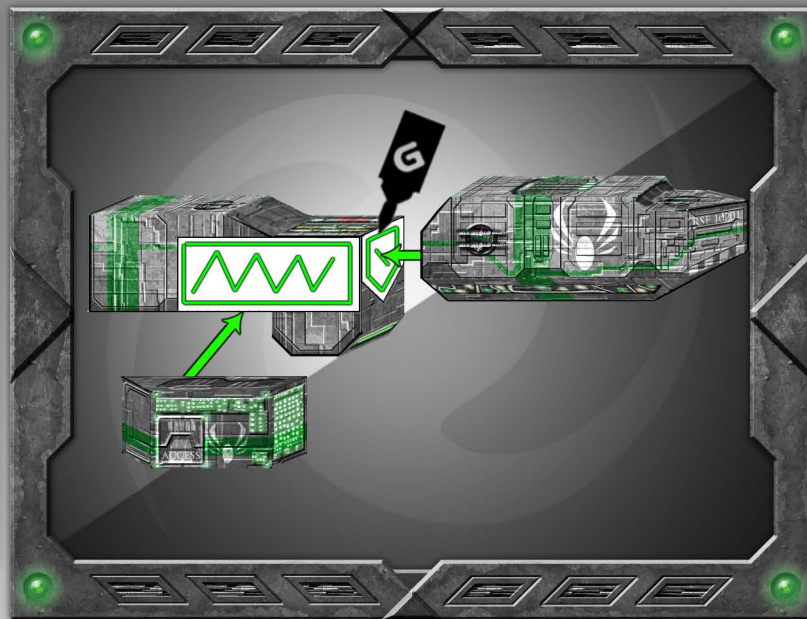
The rest of this tab covers the front, and the bottom of the low-hanging tabbed part, of the stern section. Just apply glue to each pair of tabs in turn, fold and hold in place. By leaving the back of the stern section for last, you leave yourself a means of accessing the interior of the stern section, and a long pair of tweezers can really help in gluing down that last tab to the interior. ❶

Of course, that leaves the last step of gluing the back of the stern (the engine itself) into place...just close up the back of the box. ❷

The stern section can now be edged with a grey (preferred), black, or faction-colored marker. ❸

Our last step in completing the main body is to assemble the three parts together. The bow and the stern are pretty easy to figure out...just apply glue to the pentagonal shaped contact point and hold the two halves gently together.

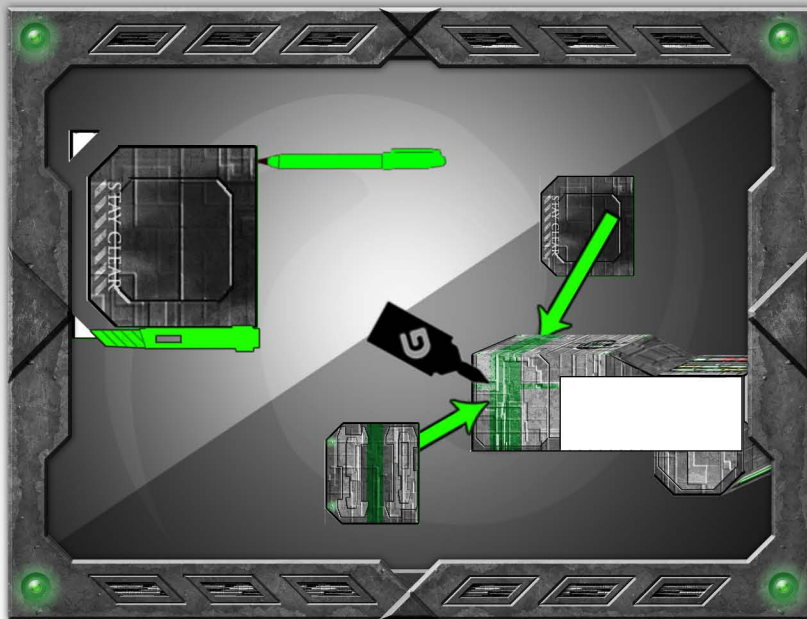
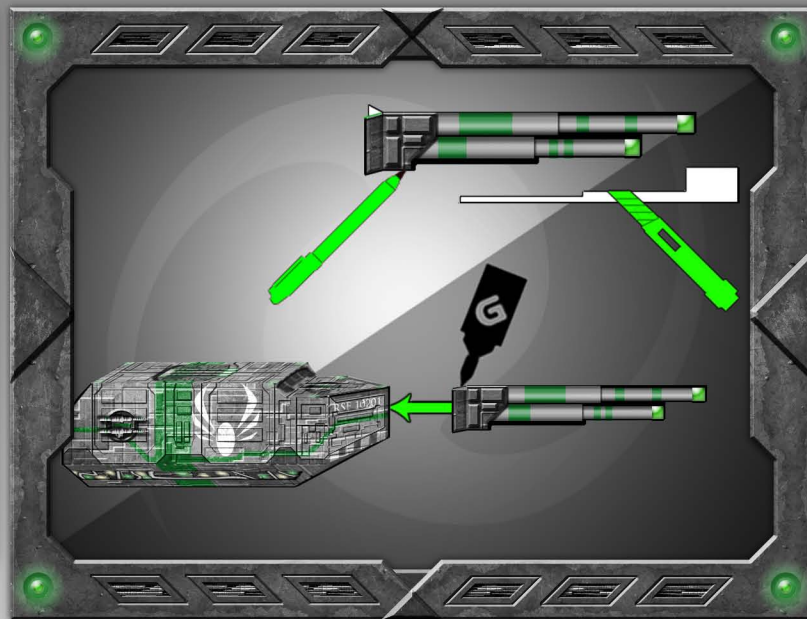
The crew pod is then glued on its white tab, matched up with the white tab on the side of the stern section, and glued into place. Note: The angled section faces the rear (engine) of the frigate, and the flat part is actually pointed towards the front, where the bow and stern meet



Which brings us, now, to the additional "detail" pieces of the frigate. For each advanced frigate, you'll need a sensor array and two engine guards. Score and fold as noted, taking note of the small green line on the sensor array where you need to cut it to separate the two tabs.

The sensor array is sandwich-folded (be sure not to glue your tabs together), and the excess white is cut away. Edge around it with a black marker.

The two small tabs then have glue applied, and are attached to either side of the front "point" of the vessel, with the longest of the sensor array tubes at the top.



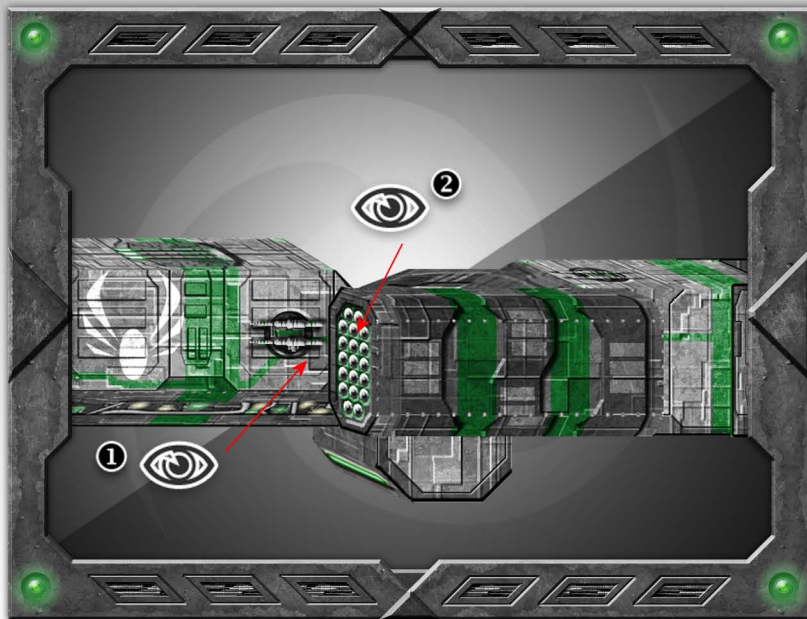
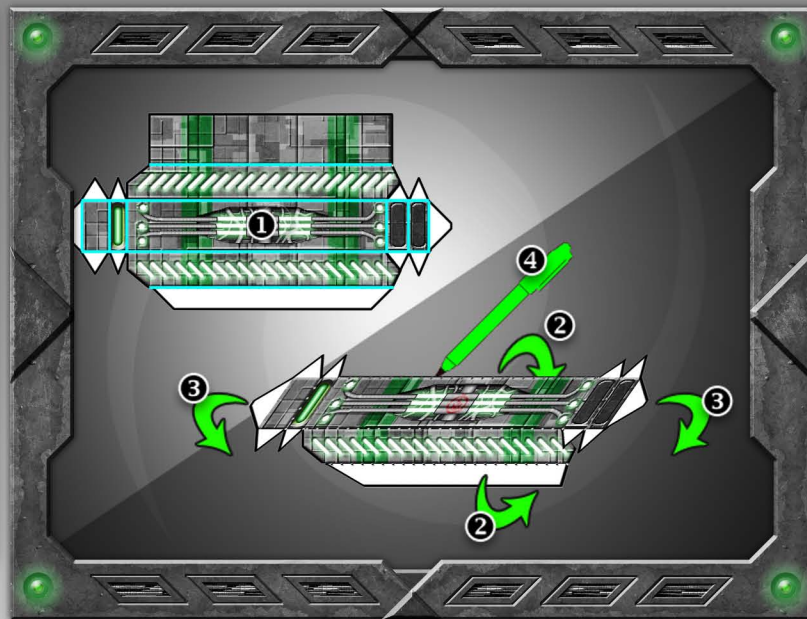
The engine guards are also sandwich-folded, trimmed, and edged.

These are glued to either side of the engine at the very back of the stern section. Overlap the sides of the vessel itself by about a third of the width of the engine guard, and be sure to have the dull black and grey side (with the "stay clear" text) facing inwards towards the engine and the two angled corners facing towards the back.

All that's left is to determine which set of armaments you plan on giving the vessel. The overall build approach is identical. For each frigate, you'll either need one missile pod or two pilum light plasma launchers (or two cargo pods, if you go that route).

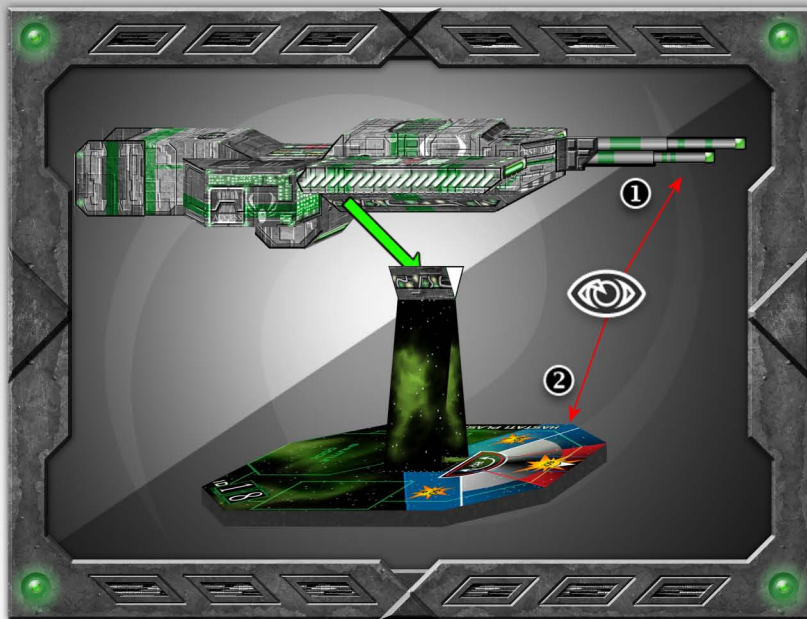
Regardless of the approach, the build is similar.

- ❶ Score and fold all the lines.
- ❷ Glue the long tab into place to make the "narrow tube" first.
- ❸ Then glue and carefully tuck in the little tabs all along the front and back of the piece you're working on.
- ❹ Last, but not to be forgotten...edge the piece with a marker.



The missile pod is mounted on the port side (opposite the crew pod), with the top of the missile pod even with the "upper" top part of the frigate, and the front of the missile pod just behind the guns on the stern section. ❶

The color-and-white "tips" of the missiles should be facing forward ❷, and the grey "exhaust ports" should be facing back.



Be sure that the front of the Frigate ❶ is lined up with the front of the base. ❷