SERNITY Kit Instructions Ver 1.6

Email: ask@interlog.com

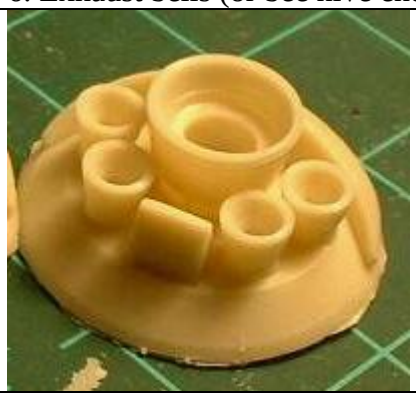
Congratulations on the purchase of this kit. It has been a 2 year trip to getting this done and I hope you enjoy the results. I tried not to skimp on the details so certain parts are quite fragile and some assembly procedures can be tricky.

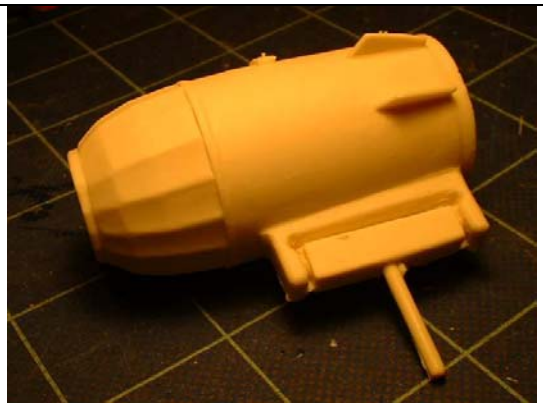
There have been various values quoted for the length of the ship 195ft, 205ft and 269ft. This will give the scales 1:180, 1:189 or 1:249. The choice is yours.

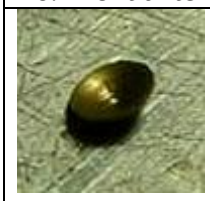
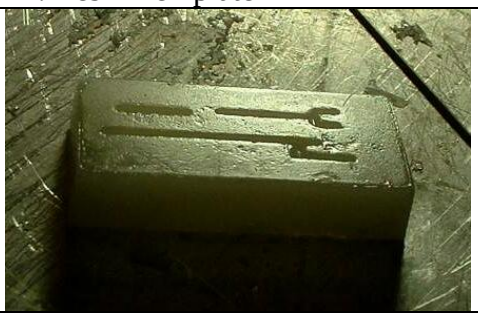
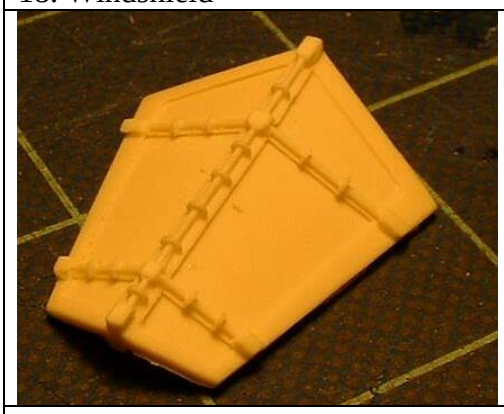
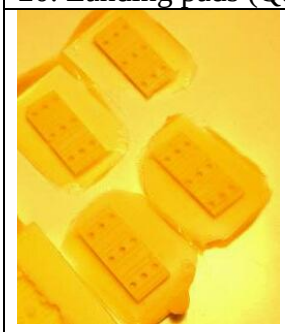
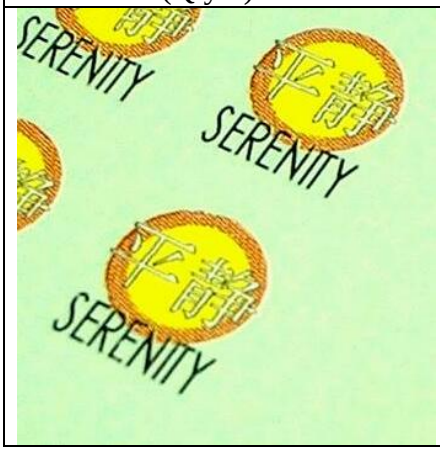
Below is a quick overall shot of all of the parts in the kit (minus the decals and brass disc)

I do not know the exact names for all the parts so I have made up some names.

Parts breakdown – check to make sure you have everything listed below

1. Main Body	2. Yoke (or swirly thing)
	
3. Engine Part 1	4. Engine Part 2
	
5. Bee hive	6. Exhaust bells (or bee hive end)
	
7. Rear wing	8. Bee Hive Turkey Feathers (Qt y5)
	

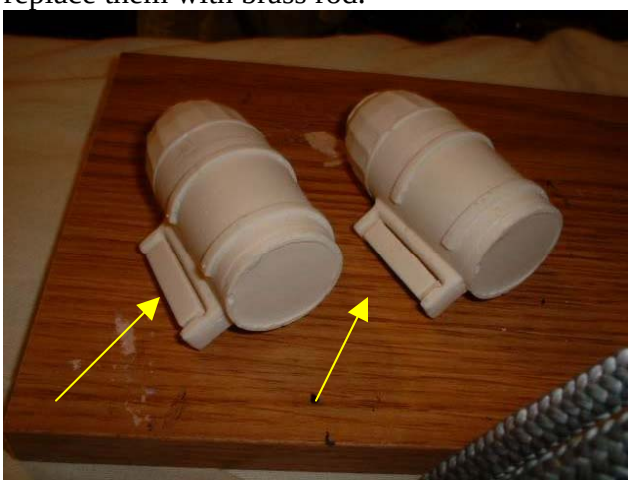
9. Right and Left Side engines	
	
10. Side engine turkey feathers (Qty 2)	11. Shuttles Body (Qty 2)
	
12. Shuttle Nose (Qty 2)	13. Shuttle Wings (Qty 2 sets)
	
14. Cargo area	15. Left and Right front antenna array
	

16. Front antenna array dish (brass)	17. Resin Template
	
18. Windshield	19. Solar Panels (7 unique panels)
	
20. Landing pads (Qty 4)	21. Docking bay arms (Qty 4)
	
22. Decals (Qty 2)	23. Paper template
	

ASSEMBLY

Step 1

Although the side engines come with resin mounting points they are too weak and should be to replace them with brass rod.

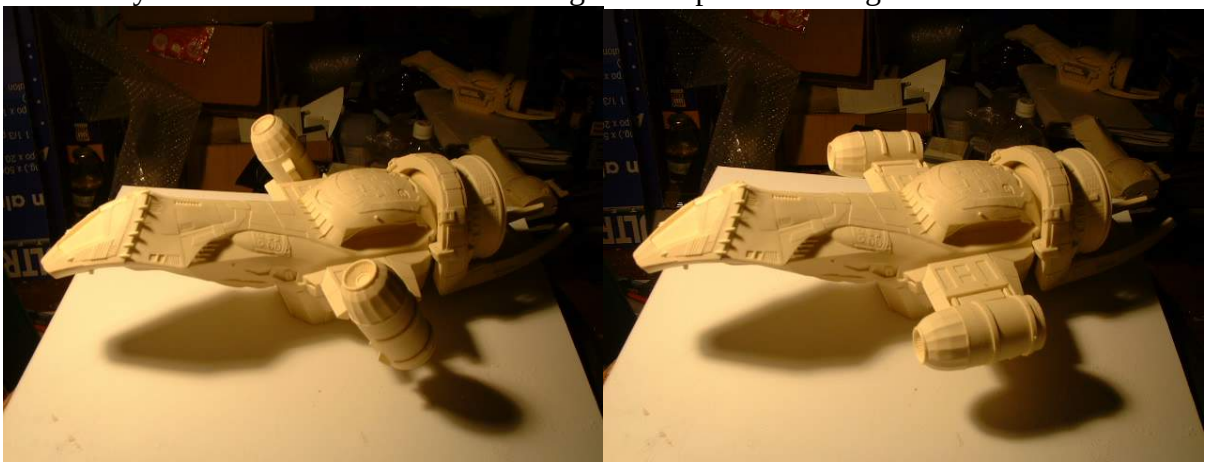


Here the part has been cleaned up and the resin rods have been removed to be replaced later with brass rod. The size of the brass rods to use is up to you. I used 0.125” dia brass rod. The engines are not made to stow in the down position. That modification is up to the individual builder. I worried that the weight of the engines would cause them to droop down over time if they were hinged to drop down.

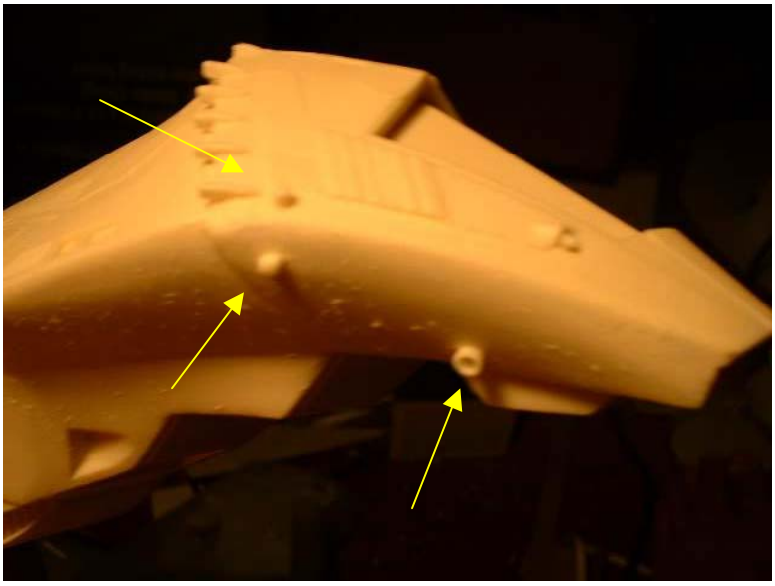
It is recommended that the engine shrouds be installed near the end of model assembly to prevent them from being damaged during handling

Step 2

Main Body: Drill the holes into the side wings to accept the side engines.



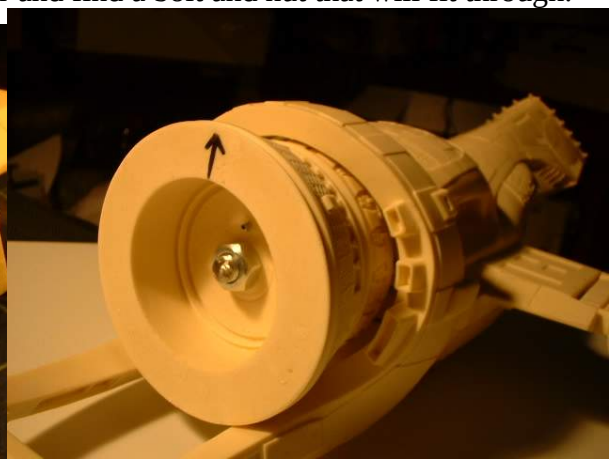
An indent is present for where to drill. This will allow the engines to rotate. Make sure the hole is drilled straight in or the engines may rotate at an odd angle. Since I used 0.125” dia brass rod I used a 0.125” drill bit to drill the hole



Some of the solar panel/antenna array mounting points may not have been fully cast. If that is the case you may have to replace them with a piece of brass rod so the solar panel has something solid to be glued to.

Step 3

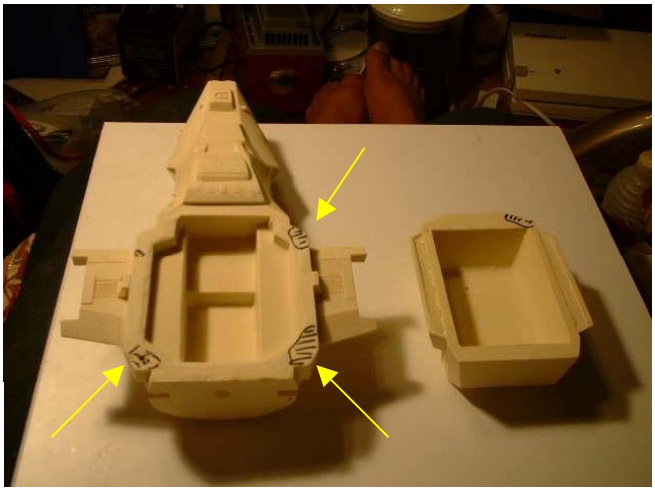
Main Body: Drill through the hole in the rear and find a bolt and nut that will fit through.



This will allow you to assemble and disassemble the engine parts a you build the model.

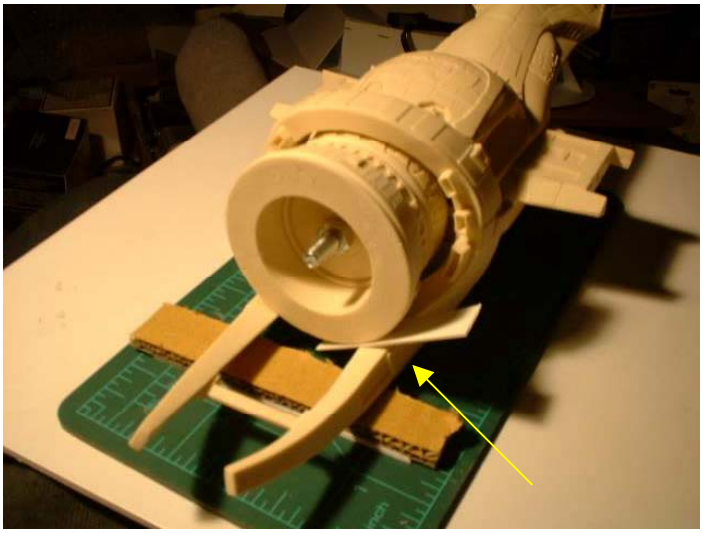
It is also a point I use to hang the model to dry when painting

Warning: There might be a slight fit problem between the body, cargo area and the first engine section. This may require some slight sanding to get the engine section to sit flush.



Step 4

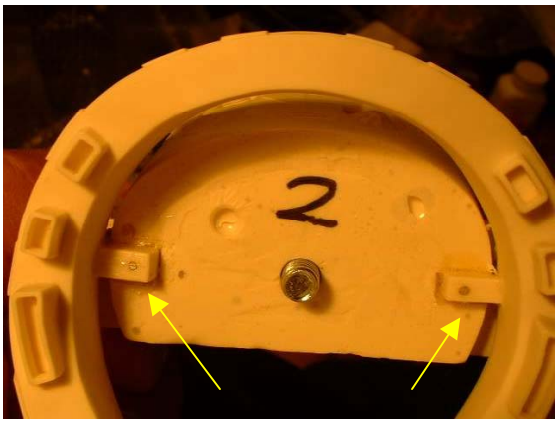
Assemble the main body with the engine sections and test the fit of the cargo area. Some filler may be required to fill some gaps.



Step 5

Test fit the yoke to make sure it fits. Assemble the engine sections and bee hive along with the yoke. Glue the yoke to the main body. The yoke should not touch the engine sections and a spacer can be used to maintain a gap while the glue dries. However if a stronger structure is desired the yoke can be glued to the engine section later.

I have used 5 minute epoxy here as I find it has a stronger bond and has some slight give compared to a CA type glue.



Once the Yoke has been glued to the body I have drilled and pinned the part in for added strength. If you are going to install lights later you may have to grind away some of the mounting bracket.

Step 6

Glue the Exhaust Bells and rear wing to the bee hive.

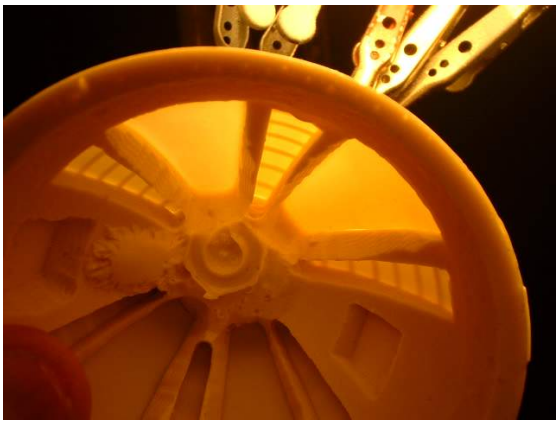
Here I have masked the parts of the beehive that I want to glow later when I add lights

Option1: Glue the bee hive turkey feathers closed. This is much simpler and produces a more robust model

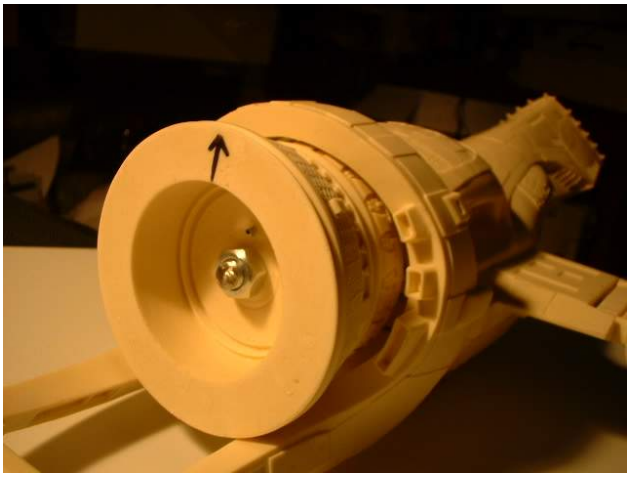
Carefully cut off the mounting arm. This was designed with the idea of making the turkey feathers movable but I never got to that stage. The geometry didn't seem to work.

Option 2: Glue the bee hive turkey feathers open. Super fragile and very easy to break. Cut the arms to the appropriate angle so they can be glued to the bee hive. If you decide to go this route then it is advised to wait until the very end to glue these pieces on.

Note 1: The bee hive turkey feathers are very fragile. You need only 4 but I have included 5



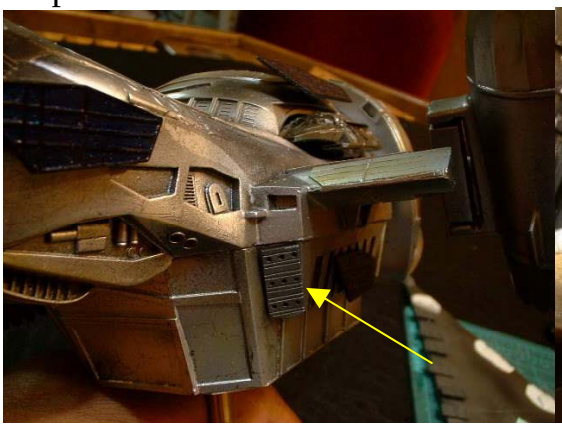
Note 2: The bee hive area has been cast very thin with the intention of lighting the inside. If you decide to do this then all the areas that light up should not be painted and will have to be masked off as seen in the previous photo

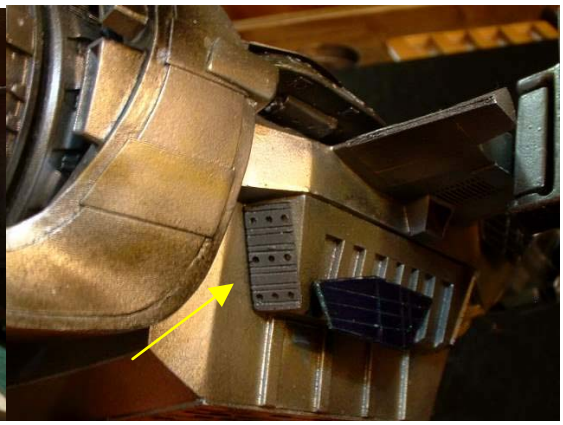


Step 7

Bolt or glue the rear engine pieces to the main body

Step 8



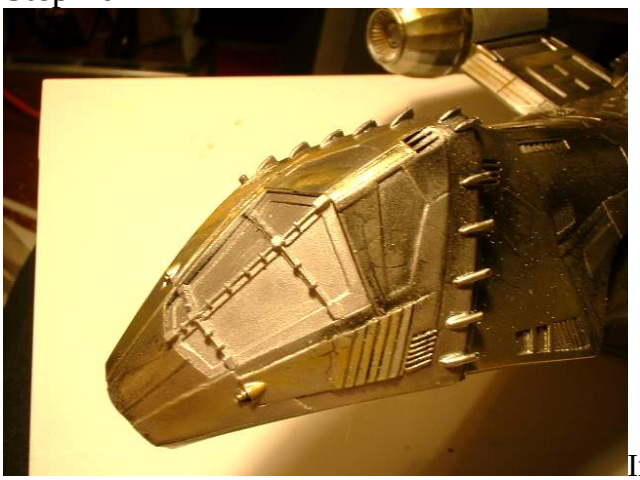


Glue the landing pads to the cargo area

Step 9

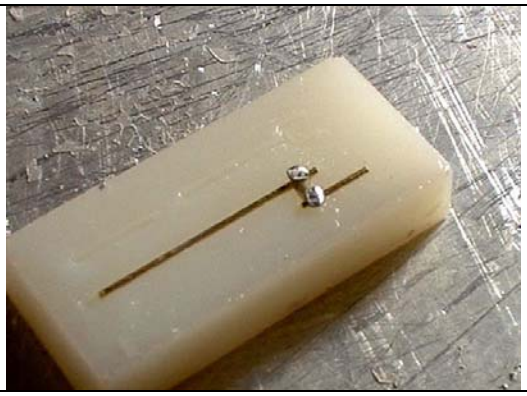
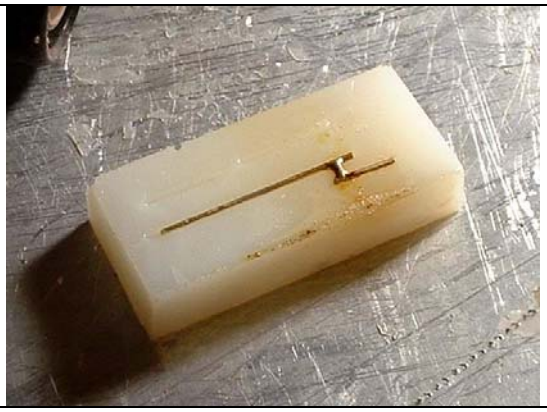
Glue the cargo area to the main body

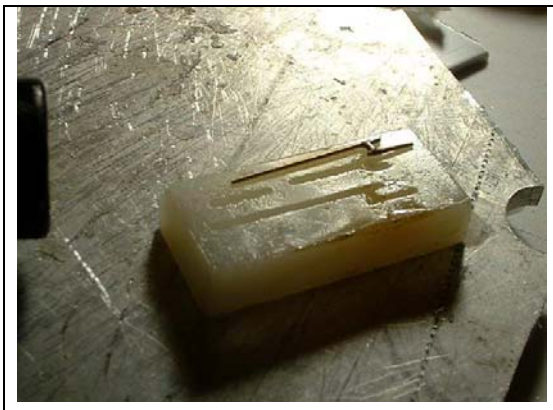
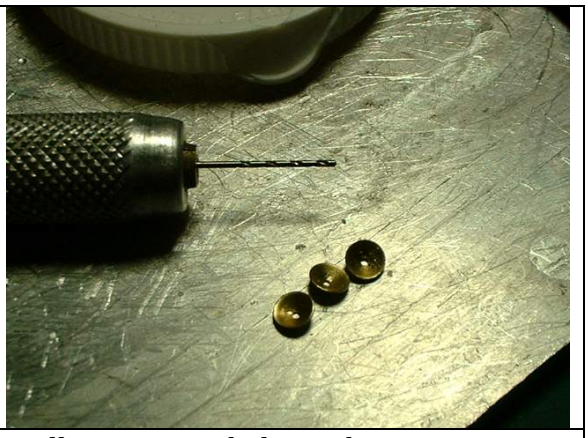
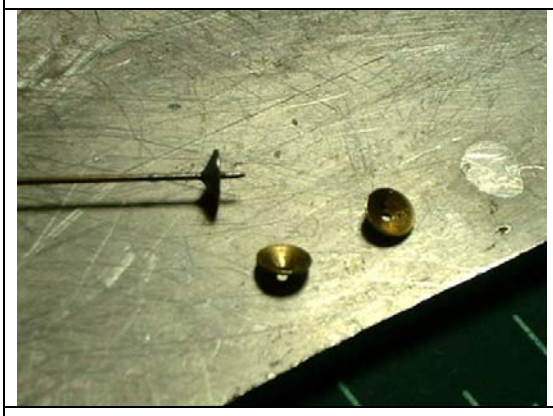
Step 10

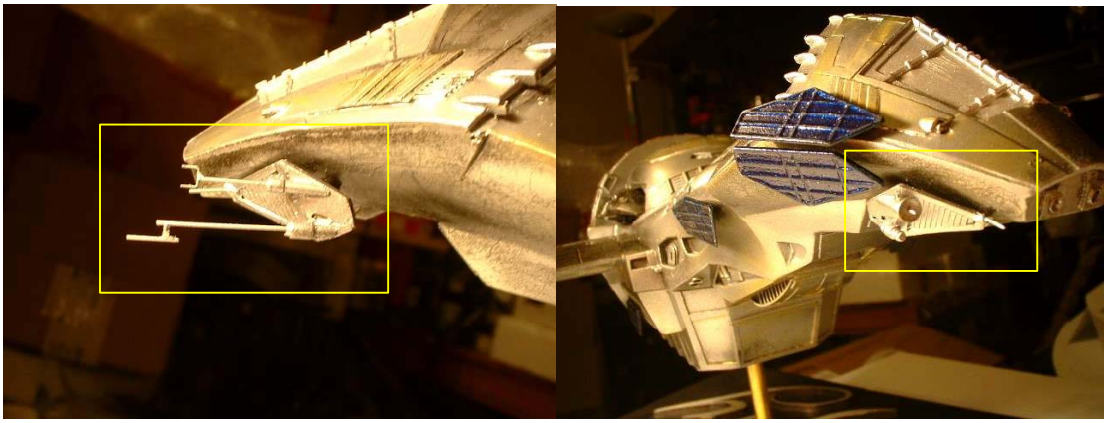


Install the windshield

Step 11
Front antenna arrays
Option 1: Harder

Using the resin template make up some antennas using brass rod and solder	Cut short lengths of brass rod that will fit into the template. Flux the joints.
	
Cut slivers of solder and place these on the joints.	
	
Using a small torch apply heat to the assembly until the solder melts.	
	
	Drill a hole in the middle of the brass dish

	
solder a short length of brass rod to it,	Drill appropriate holes in the resin antenna arrays and glue the brass parts in.
	
	



Glue these completed assemblies to the model

Option 2: Easier
Glue the resin assemblies to the model and forget about adding the brass antennas

Step 12

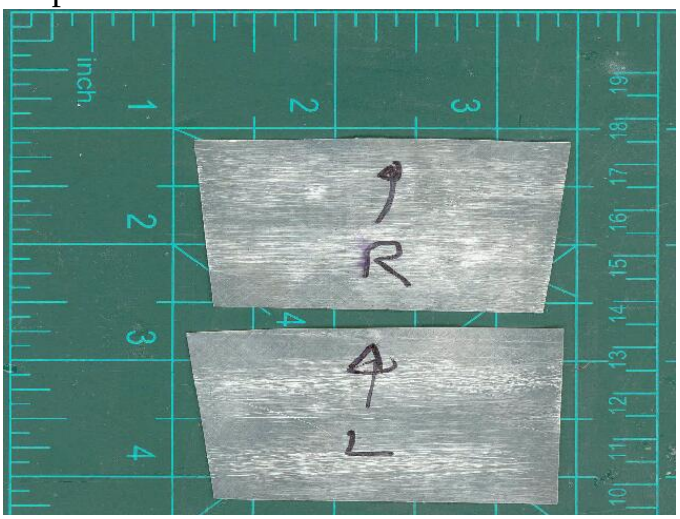
Take the model and fly it around making swooshing noises. Get it out of your system because after the next few steps there will be very few places you can hold onto the model without breaking something off

Step 13

The wings for the shuttles are provided separately to allow you to pose them open or closed. You can install both or none of the shuttles into the docking bay. If you are installing the shuttles into the docking bay you can glue the docking bay arms to the bottom of the shuttle.

There are no positive keys or tabs for locating the wings or nose to the main body. Please check references for the exact location of these items

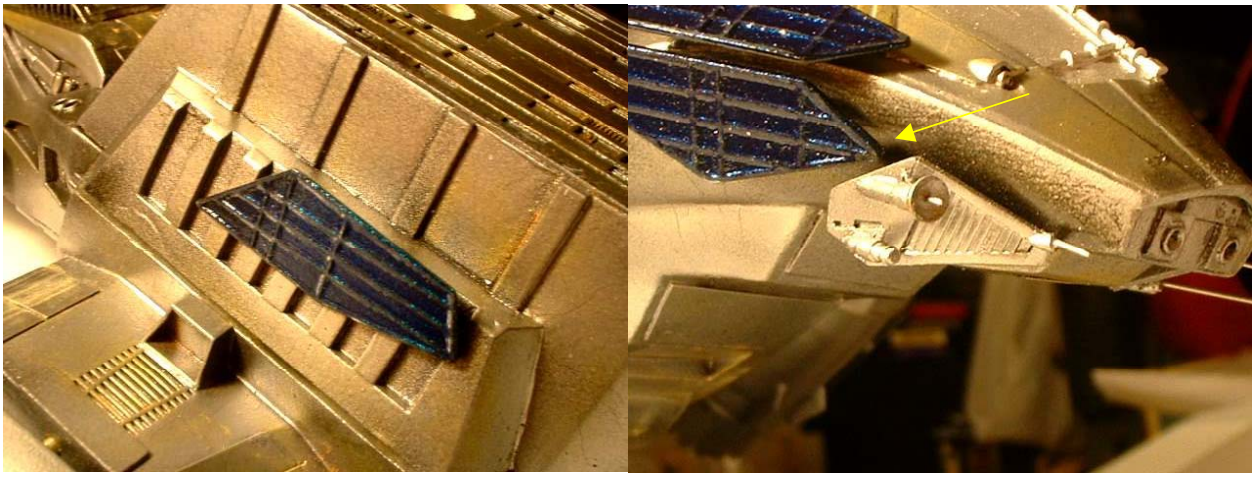
Step 14



Paper templates are provided to cut engine shrouds. It is advisable to use brass or aluminum as styrene does not hold its shape as well. I use aluminum from pop cans with all the colour sanded off

Step 15

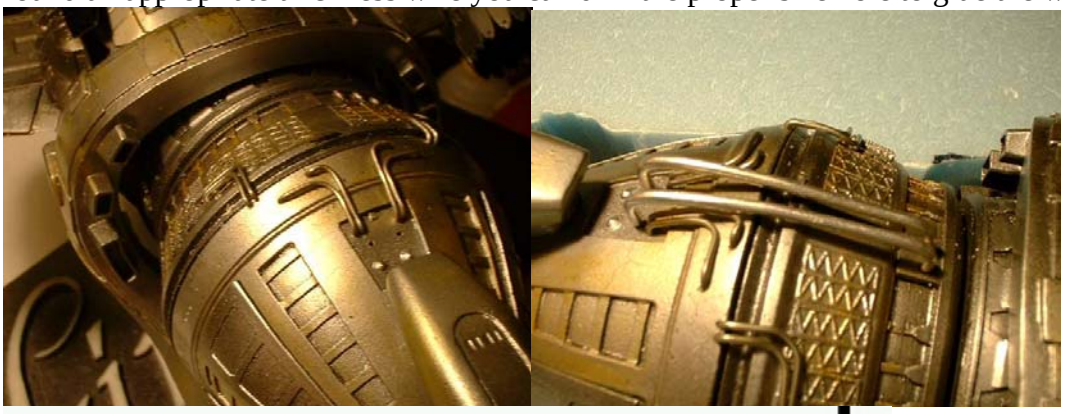
There are 7 Solar panels. They all have unique mounting points on the back side that correspond to a specific location on the body. Check references to understand where each one goes before gluing them on.

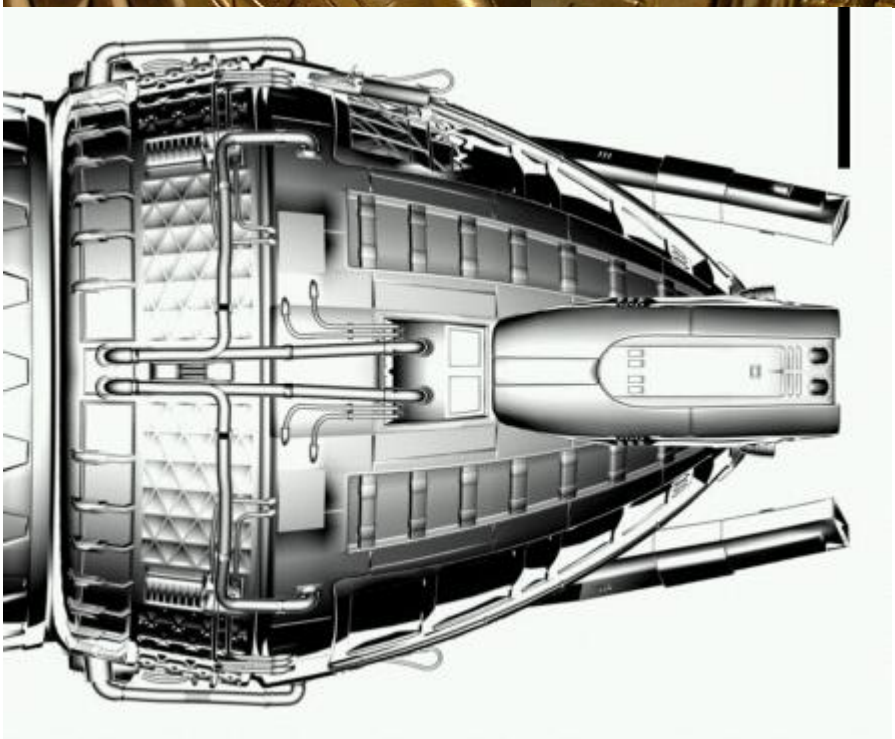


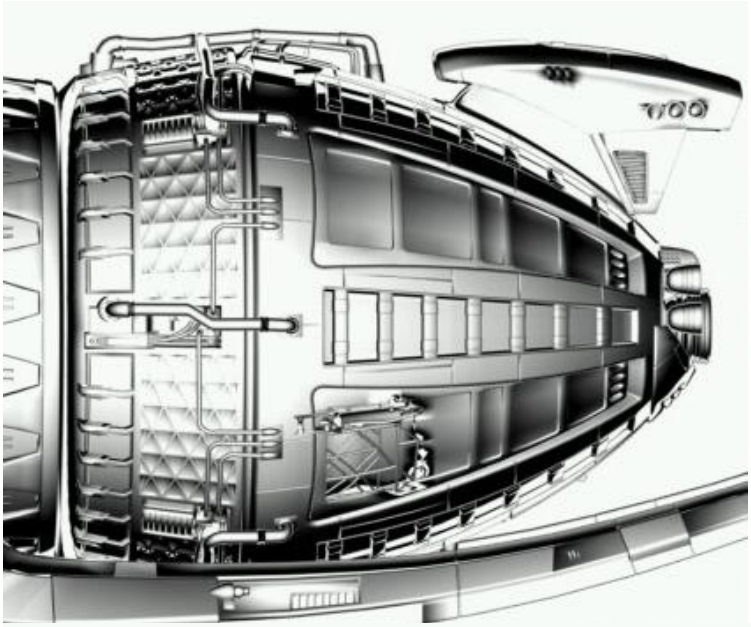
Error: Only after final assembly with all the solar panels and front antenna arrays installed did I notice that the two front right side solar panels are located too far forward. It is up to the modeler if they want to reposition them to a more accurate location.

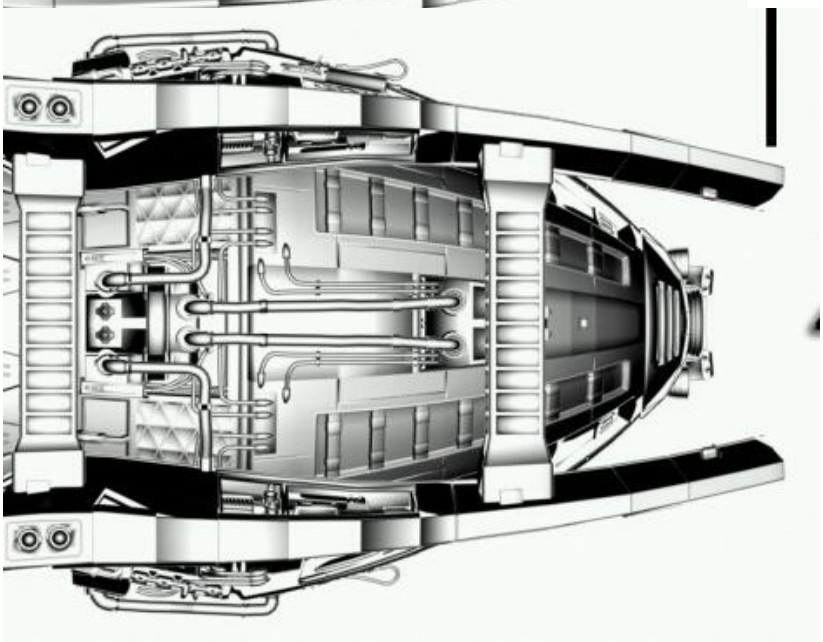
Step 16

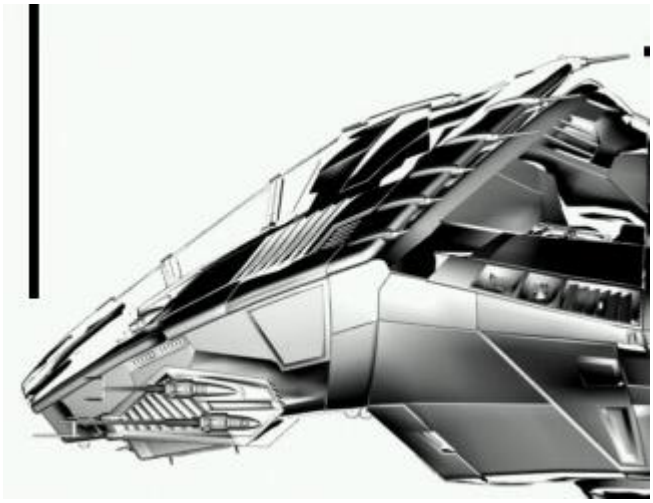
Piping: At the time I have not provided the piping material for the rear engine section. However every pipe exit point has been provided in the kit as a small indent in the resin. Once you have found an appropriate thickness wire you can drill the proper size hole to glue the wire in.











Step 18

Horns. The rear of the head has these pointed spikes. They are sharp and can be easily broken off. I think small brass rods shaped to the correct profile is the best method to install these. Drill a corresponding hole into the spike base before installing the brass rod. This is very tricky as the spike base is a fairly small area and if you are slightly off with your drill bit you could ruin the area. Also this location appears to have quite a few air bubbles so the spike base may need repairs before a hole can be drilled into it.

Step 19

Handles: There are various handles all over the ship. These were not included in the casting as it would have made the moulding process even harder. For those who want to add these handles please check the references for the locations. No indents have been provided for handle locations.

Step 20

Decals: 2 Serenity logo decal are provided for the sides of the ship. You will have to trim away any clear film from the decal before applying

Final Notes

Mounting to a base

It is up to the builder if they want to mount the model to a base. This model is heavy so I decided to mount the model level with the horizon instead of banked. It turns out the center of gravity of the model is right were the underside cargo bay door is.

I also found that it is not simple to handle the model as there are too many part that can be broken off the model so a base will preserve them.

I put a brass rod right through the cargo area until it hit the underside of the main body. This way all the weight of the main body rests on the brass rod.

Painting

Paint choices and weathering techniques are up to the individual modeler. I used Alcald II White Aluminum as a base colour for the body before the weathering. Alclad recommends an enamel gloss black paint for a base but I use automotive gloss black lacquer paints as it dries quicker and harder. I find Alclad more durable compared to other metalizer paints such as Testors

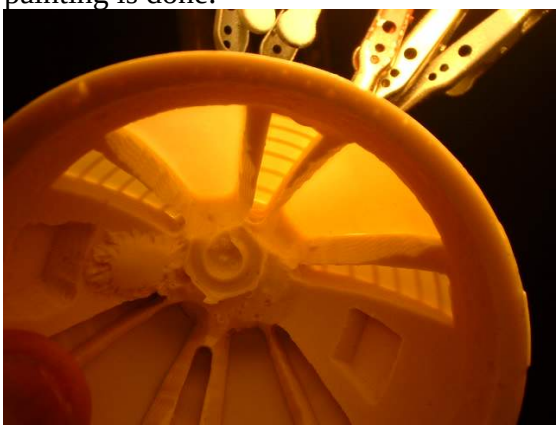
When I build I paint all the individual parts before assembling. Others assembly everything before painting. Again this is all personal preference.

I tried various weathering powders but they did not seem to work well on top of the Alclad paint.

Lighting

Well this is an entirely new area.

The bee hive was constructed with a thin shell where it is normally lit on the ship. This will make lighting it from the inside much easier. Just make sure these areas are masked off before any painting is done.



The side engine turkey feathers are separate items and can be thinned from behind to show the engine exhaust. This will require you to hollow out the side engine body and also run wires from he side engines to the main body.

The rotating engine area has a gap where LEDs can be installed. The cargo area and main body has a cavity where electrics can be installed

Since the main body is a solid chunk of resin the cockpit would be a fairly hard area to light up as a channel would have to be cut through the neck for wiring.