

Colin Cantwell Y-Wing Build

STEP ONE - clean the resin with lukewarm water and dish soap.

Hot tip - to ensure that you don't lose any small parts, use a large strainer with a plastic bin as the basin, when washing.

Let every thing air dry overnight. And be sure to always ask your mom before using the kitchen strainer!

If you want to be hyper accurate to how the original model was, you can cut an acrylic or styrene main wing, which features four holes (probably so Cantwell could hang the model with fishing line). It is also a hair wider than the included aluminum bar, but will be far weaker, especially with the resin engines. The original model is all styrene, and there is a fair amount of flex in the plastic wing spar.

You will also need to source:

- Plastruct H beam, 90064 3/16" ABS Column
- Plastruct Round Rod, 90860 2.5mm Styrene Round Rod
- Evergreen Square Tube, 3/16" #253
- Plastruct T rod, 90085 3/16" ABS Tee
- K&S Solid Brass Rod #8162 1/16"
- K&S Brass Tube #8127 1/8"
- K&S Brass Tube #8128 5/32"
- K&S Brass Tube #8129 3/16"

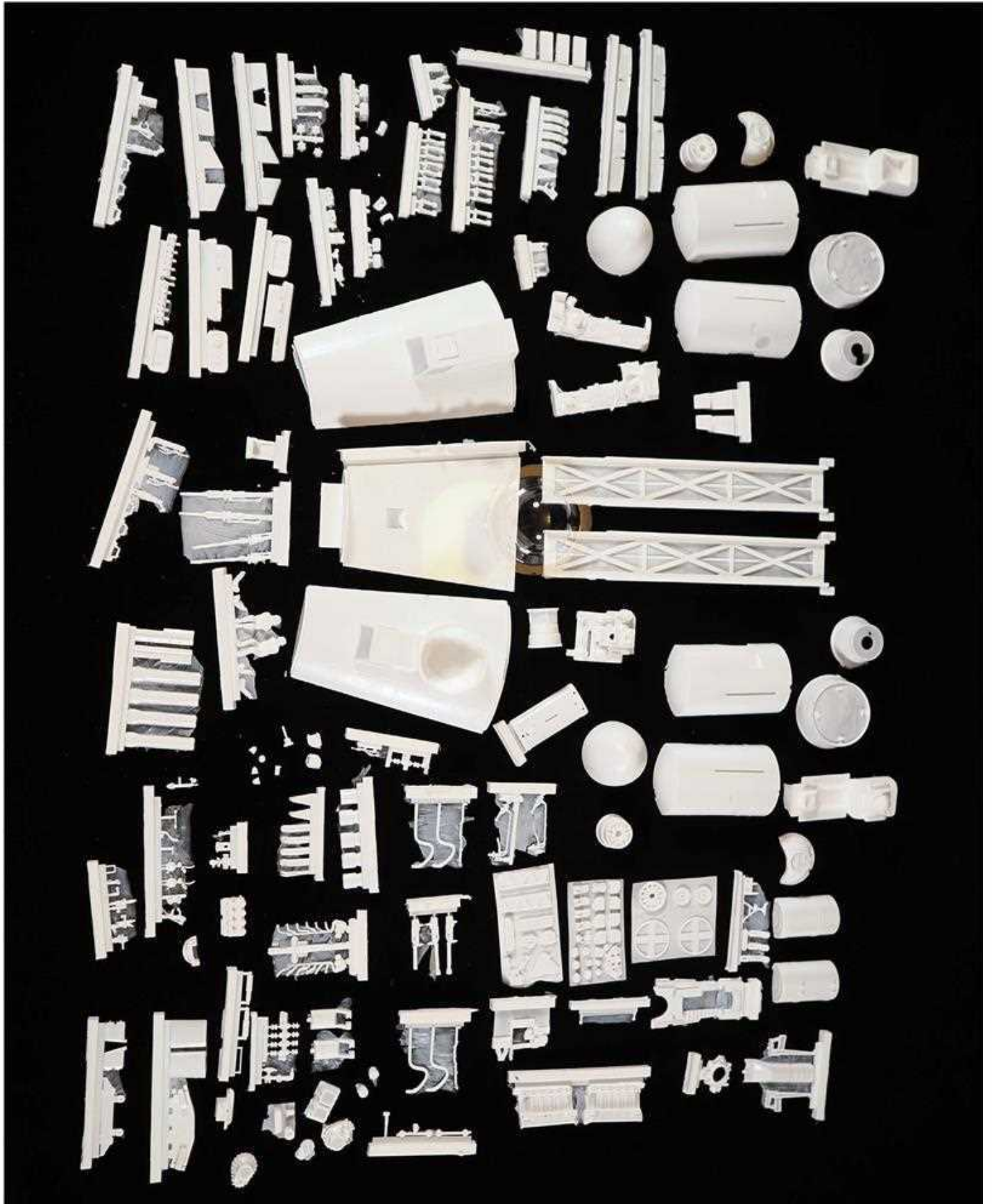
Recommended: Atlas Pier Girder HO scale

Decals: <https://www.etsy.com/listing/1165423620>



PARTS INCLUDED

Pictured is all of your resin, minus the aluminum bar, and then parts grouped by sub-assemblies.







WINGS



UNDERSIDE BODY

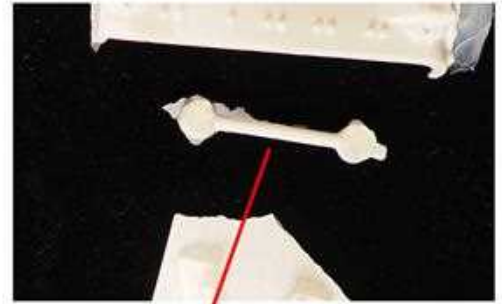
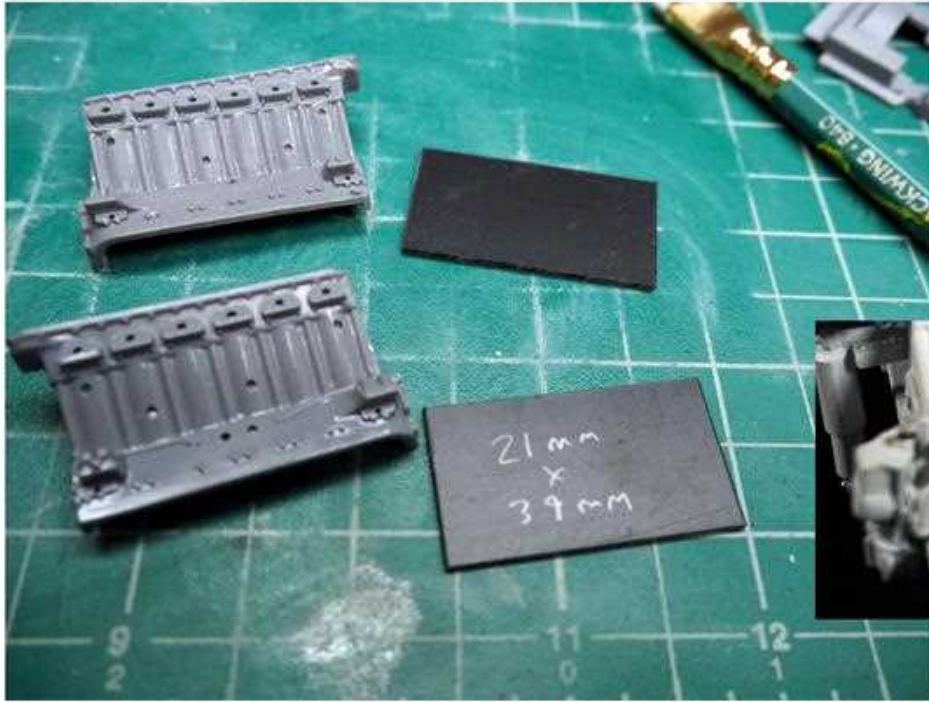


UPPER BODY



STEP THREE

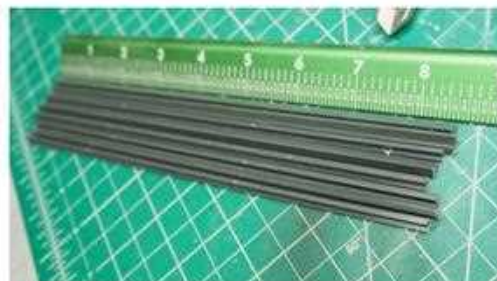
Cut two pieces of .060 styrene into 21mm x 39mm rectangles, and mount this resin to them. Another running change/pick up are the two “barbell” shapes that get mounted to the styrene, inset a little in the hollows.



Glue these to the wing roots as shown.



Glue engine halves together and putty the seams. Cut 8 of the T rods to 8.5”
Skip ahead to step four to make the engine inserts. Now it is easier to glue
The T rod to the engines, equidistant.
Two ride down the seam lines.



STEP FOUR

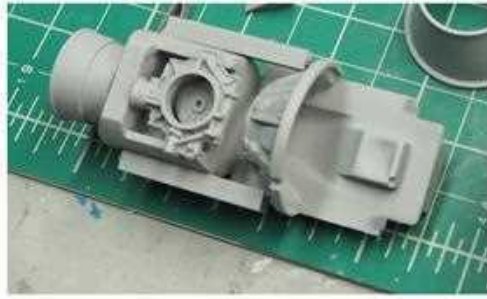
Both engine inserts - add the following parts to both of the engine insert castings. Use the H beam in three places at these lengths.



PLEASE NOTE: They are unique between Port and Starboard.



Port

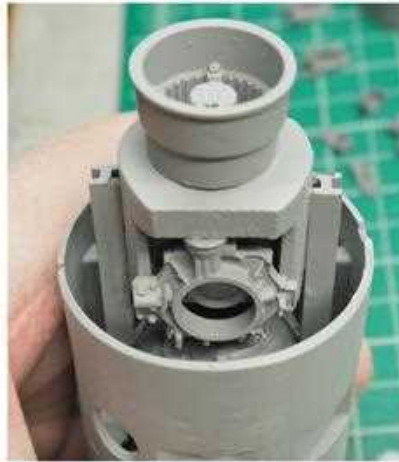
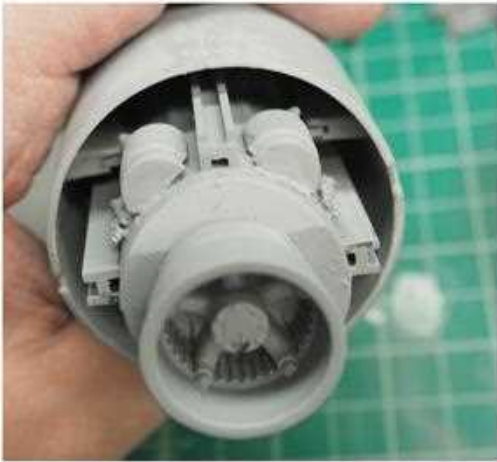


Starboard



Sand each of these down as shown

Each sub assembly slides into the main engine bodies as shown below.



PLEASE NOTE

These two pieces were late additions mid-build, so aren't represented above. Be sure to include two per engine.

STEP FIVE

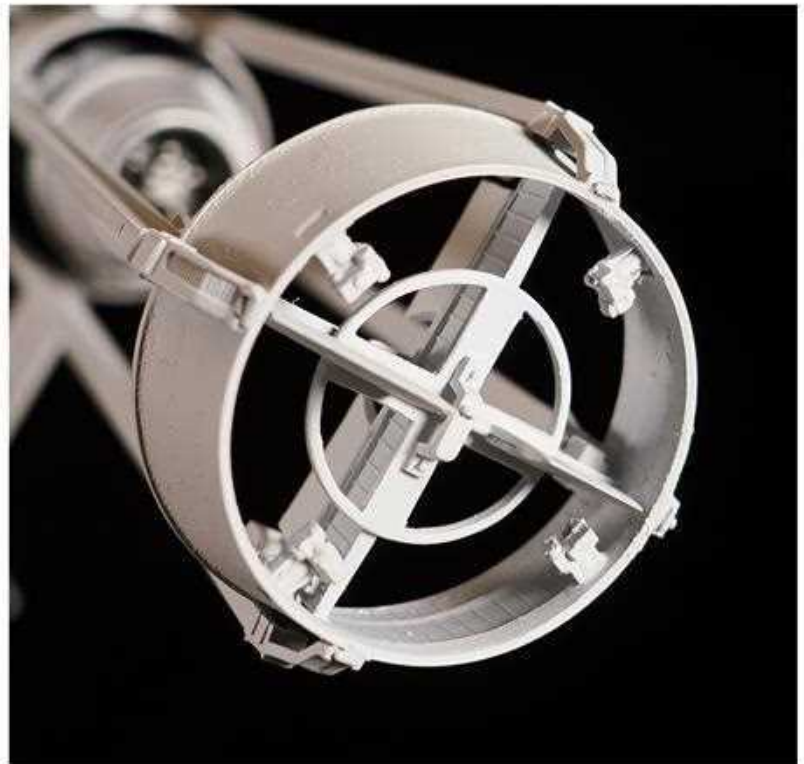
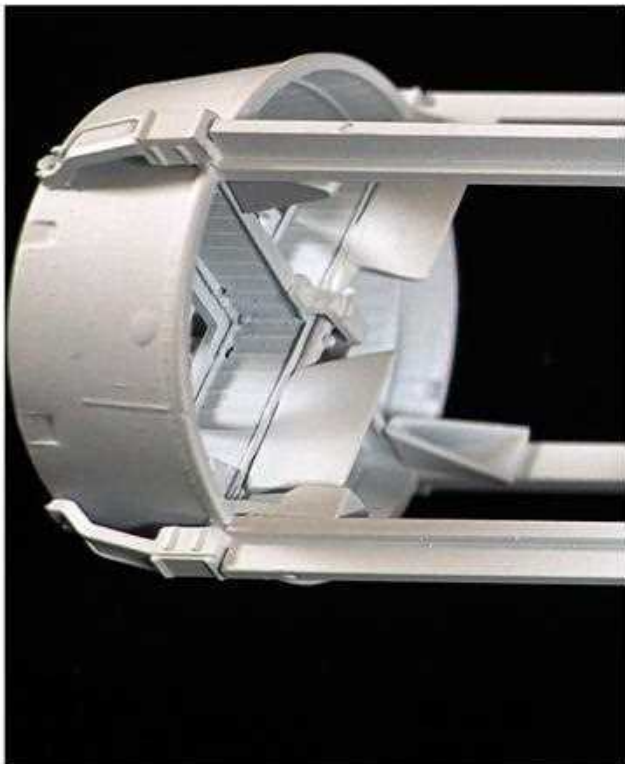
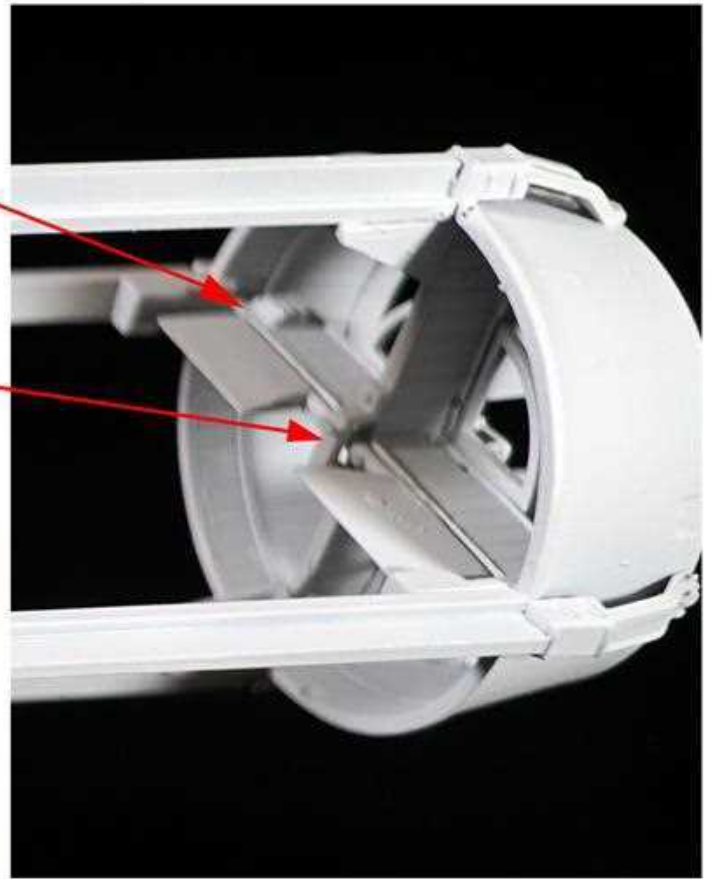
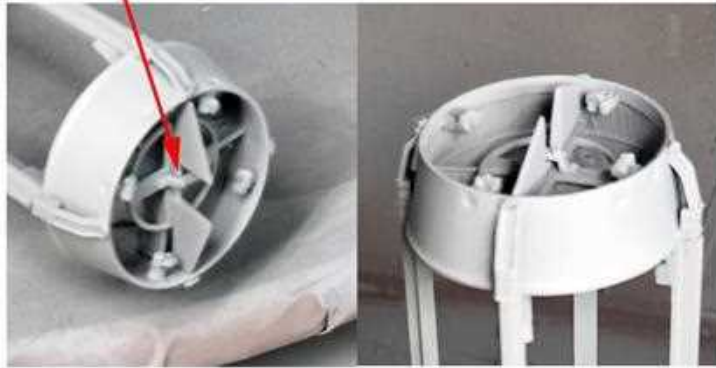
Engines and their landing gear assemblies - Study these photos to see how you use the castings and brass rod to construct the landing gears. Also pay attention to the engines as they are not just mirrored, but have unique pieces. (also refer to the previous “lay of the land” photos for which castings go with the port or starboard engines).



I chose to drill through the life raft castings so the entirety of the engine's weight are resting on the rod/display surface. The original model did not do this. Also note the rod passes through to rest against the engine's body up top.

STEP SIX

The engine's "steering vanes" are built as seen below - both are built the same, port and starboard. Note the placement of these two parts, which form an "X" and nestle into the overall housing.





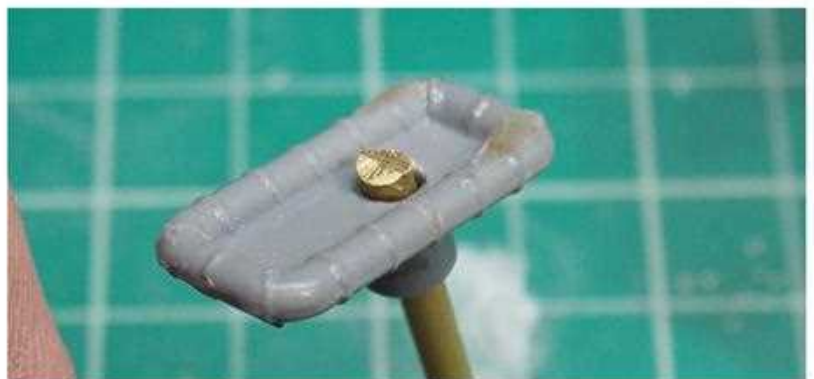
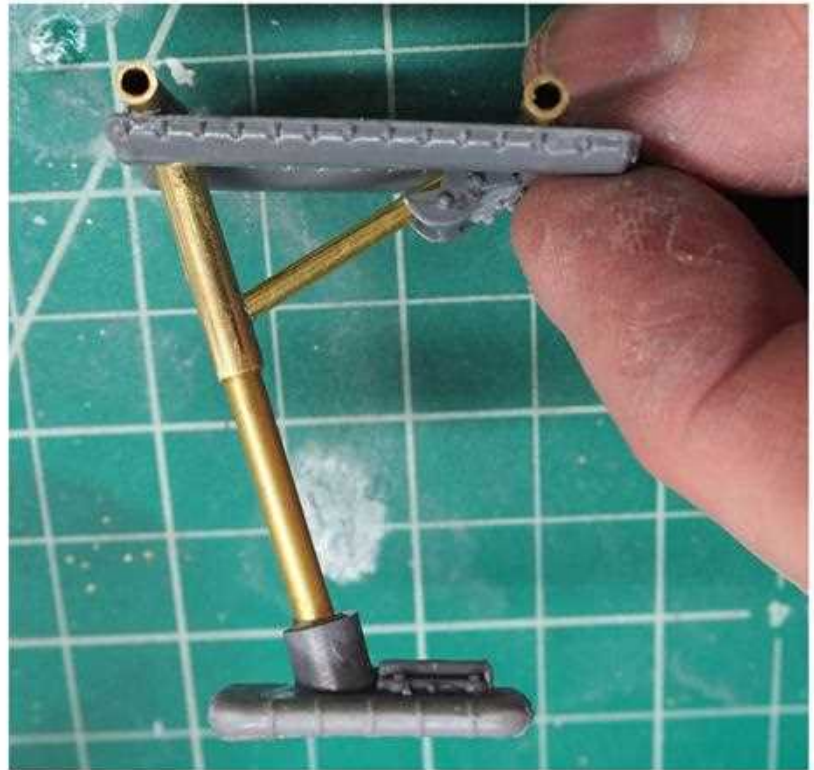


STEP SEVEN

Now we make the center landing gear. This is made from the following brass tube and rod:

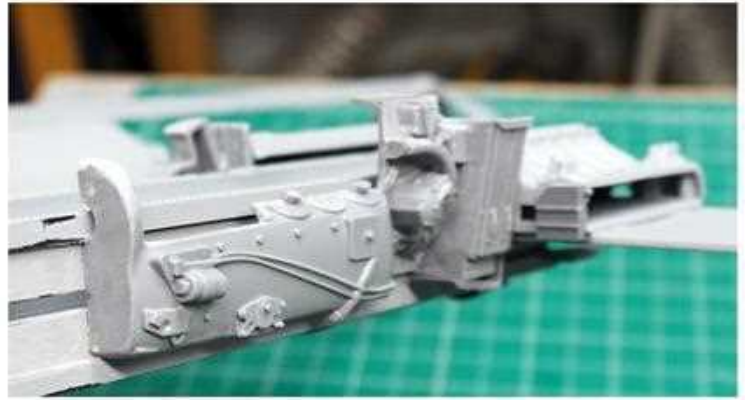
In the picture to the right, from left to right we have two $5/32$ cross bars cut to fit snugly in the Pier Girder. Both will be drilled to accept $1/16$ rods (pictured is only one hole drilled). The spacing of these cross bars is correct against the resin, but do not glue them down yet until you have the angles all worked out, as seen in the photo below.

Then there is a piece of $5/32$ tube with the $1/16$ rod inside and proud, to socket into the cross bar. Then there is a piece of $3/16$ tubing. In this second photo, note an additional $1/8$ piece of tubing running at the more severe angle, which also should have a piece of $1/16$ rod that sits inside, proud at both ends. You will have to drill one more hole, in the $3/16$ tube, to ensure rigidity.

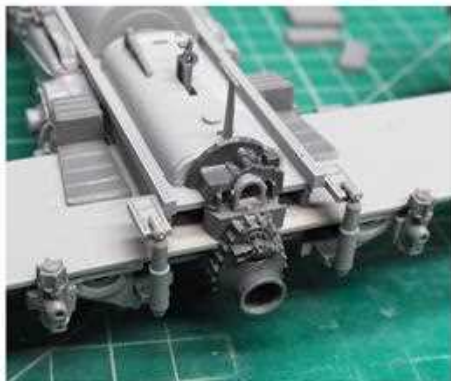
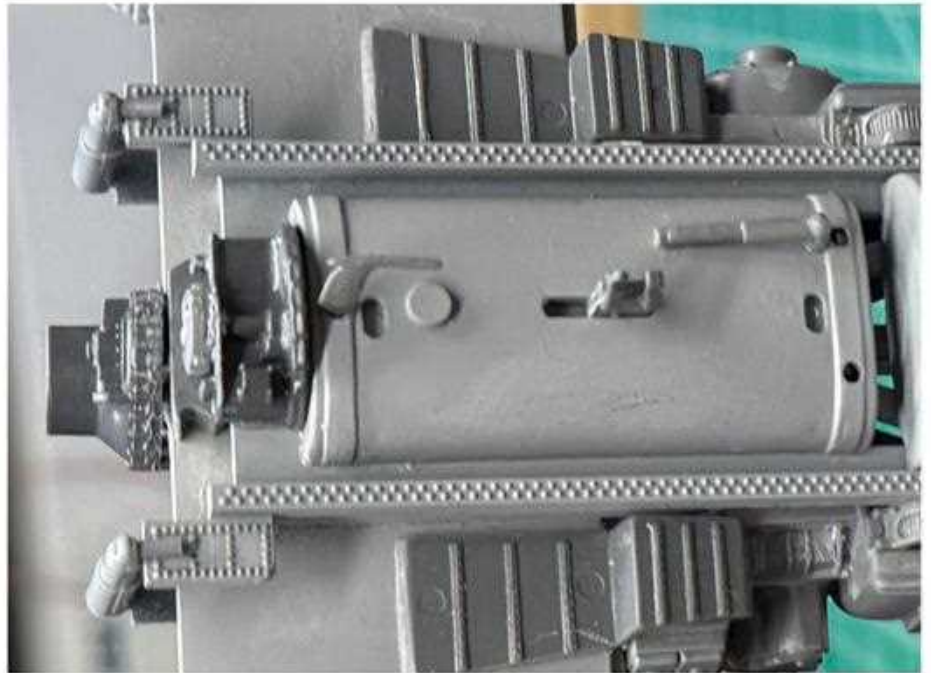


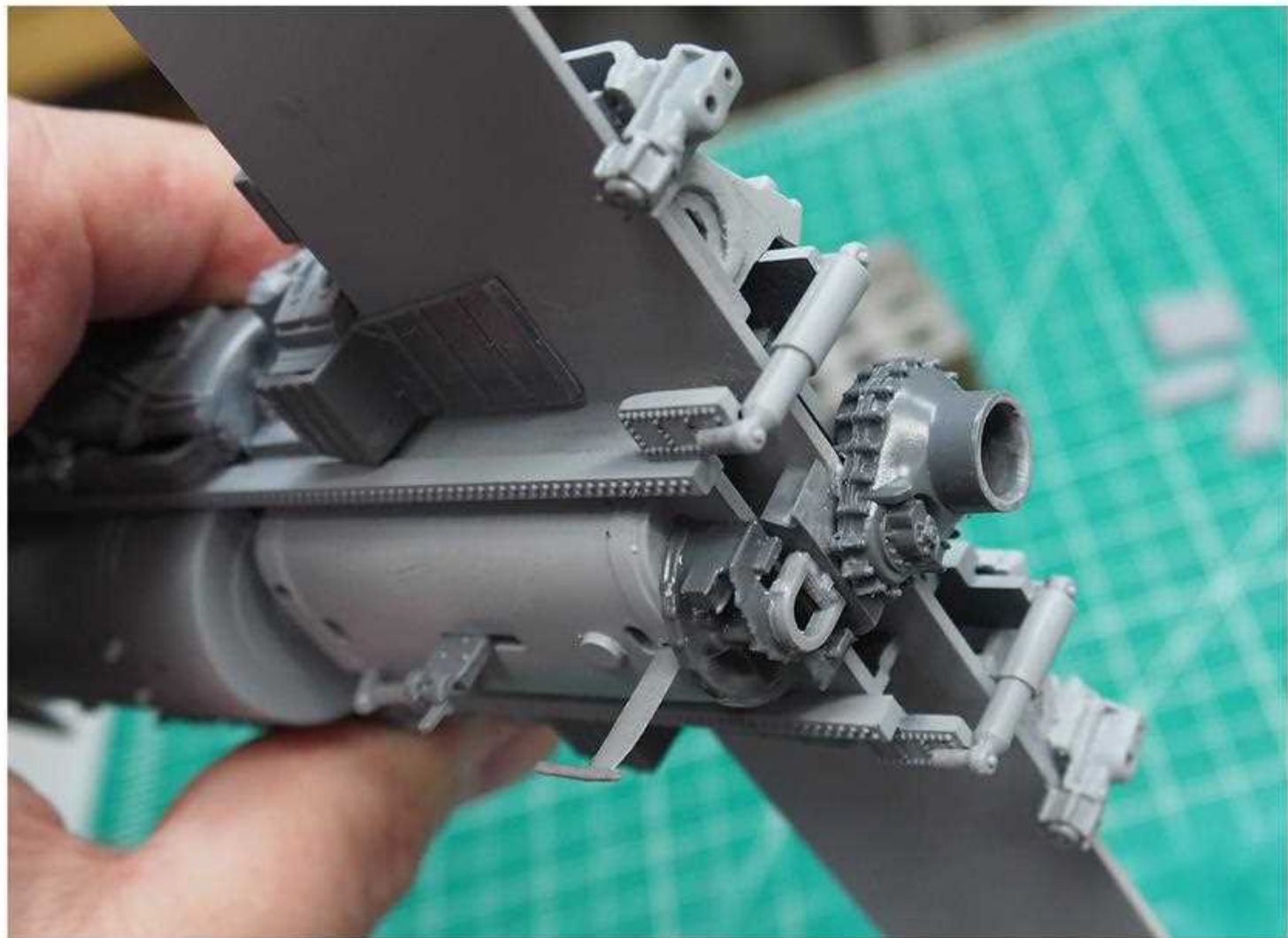
STEP EIGHT

At this point I have glued the engines to the aluminum cross bar, and started using a couple of 123 blocks to keep pressure off the engines, as I built the bottom. Once the bottom is done, the landing gear will provide stability to build the top. Start by gluing these pieces to the sides with the model oriented upright.



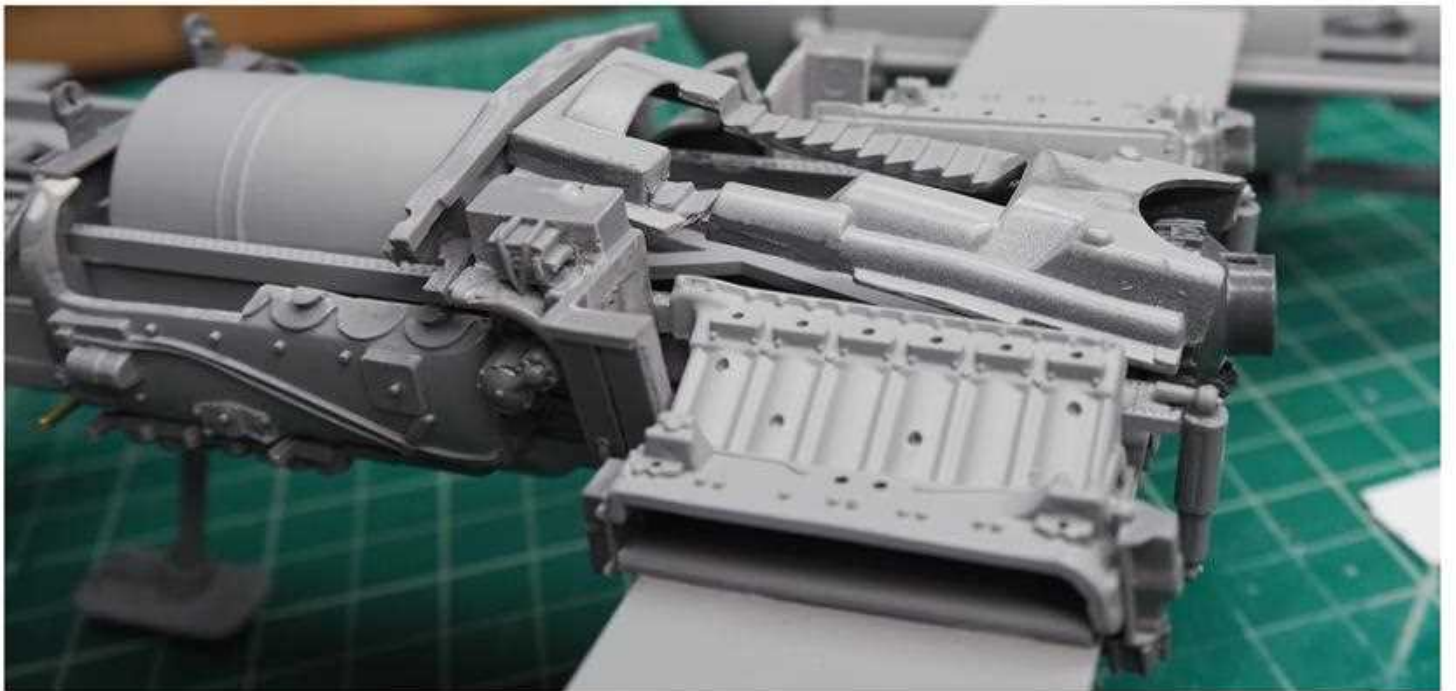
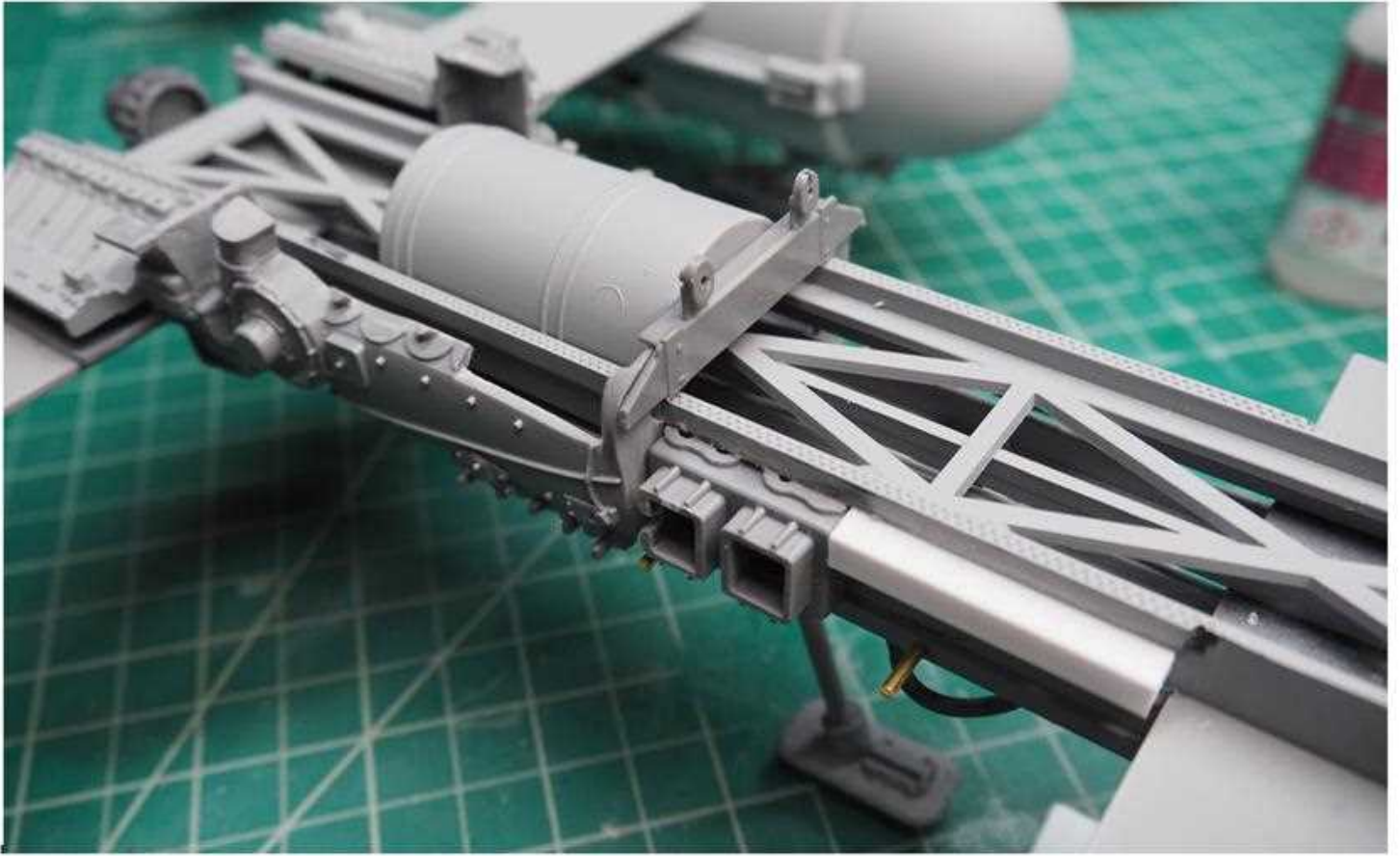
Now glue these down as shown. The landing gear are locked in with the 1/16 rod, drilled through the pier girders.





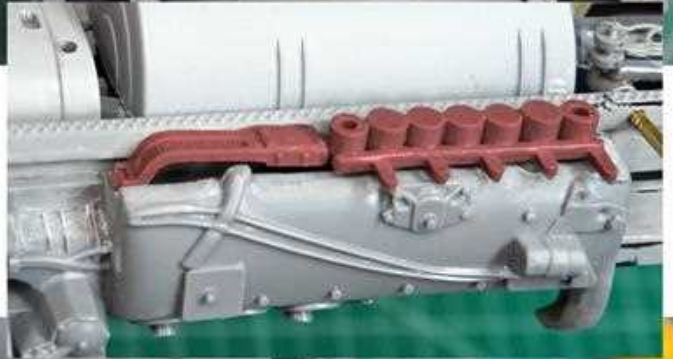
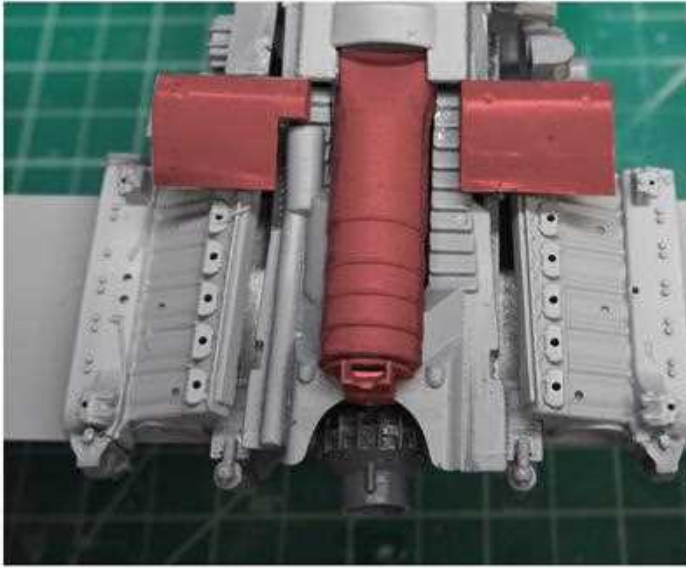
STEP NINE

Flip the model over and glue these pieces down as shown, as well as Evergreen Square Tube that ends at the cockpit bulkhead. Take note of the angle of the piece in the rear, as it does not lay flat against the pier girder.



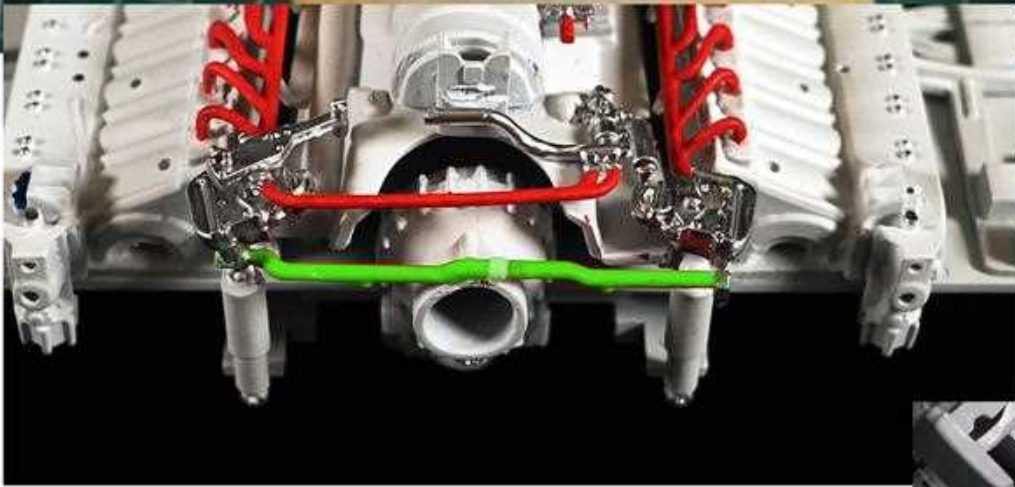
STEP TEN

Glue these fellas down now, noting that you need to notch the piece on the left. New parts are highlighted in red as things are getting busy! Last three pics are of the underside.

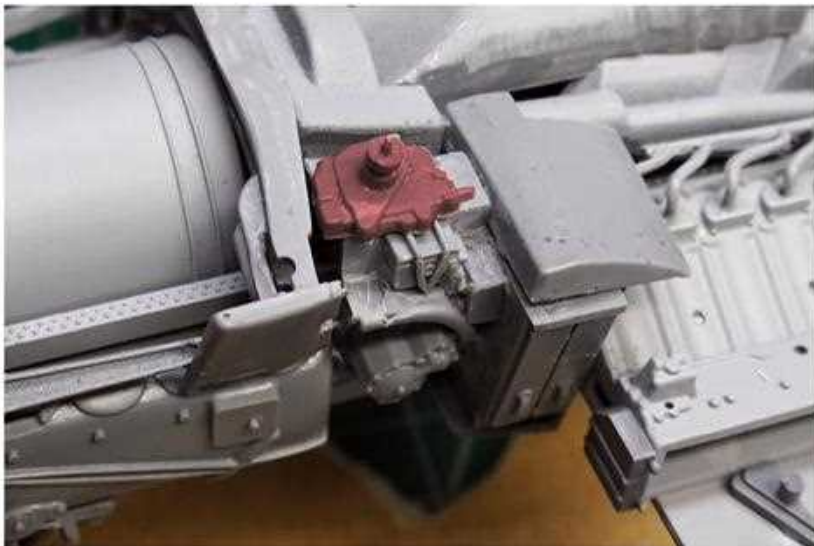


STEP ELEVEN

Finish the wings and back end... there's one more piece on the very back I didn't manage to capture in the build, so refer to the finished pic below for the placement (green highlighted).

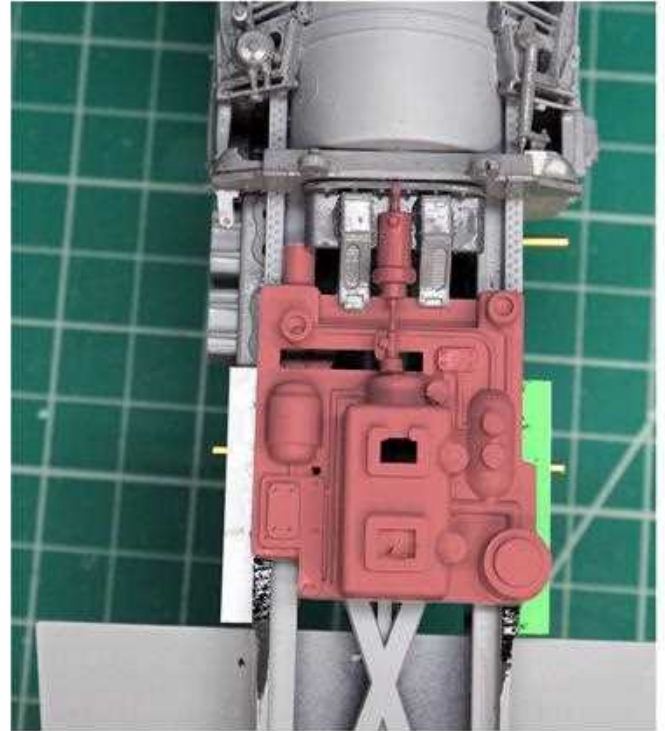
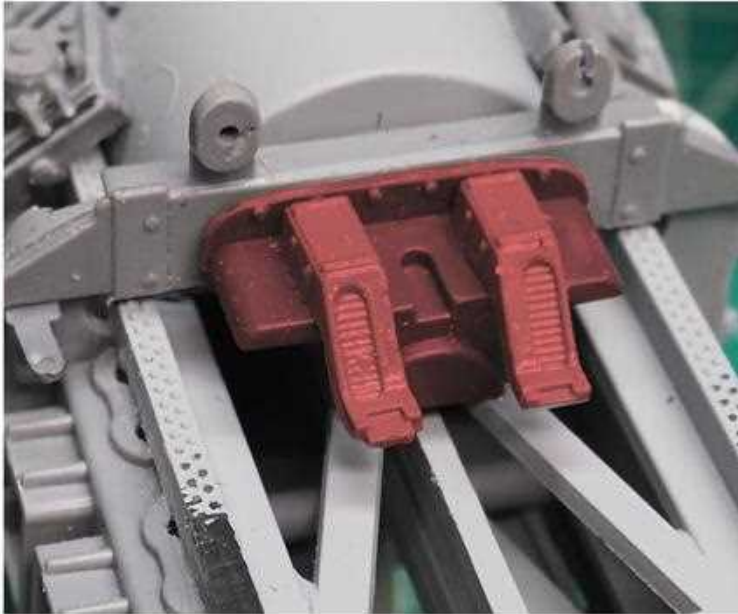


Here's a few more "pick ups" in the area we've just constructed!

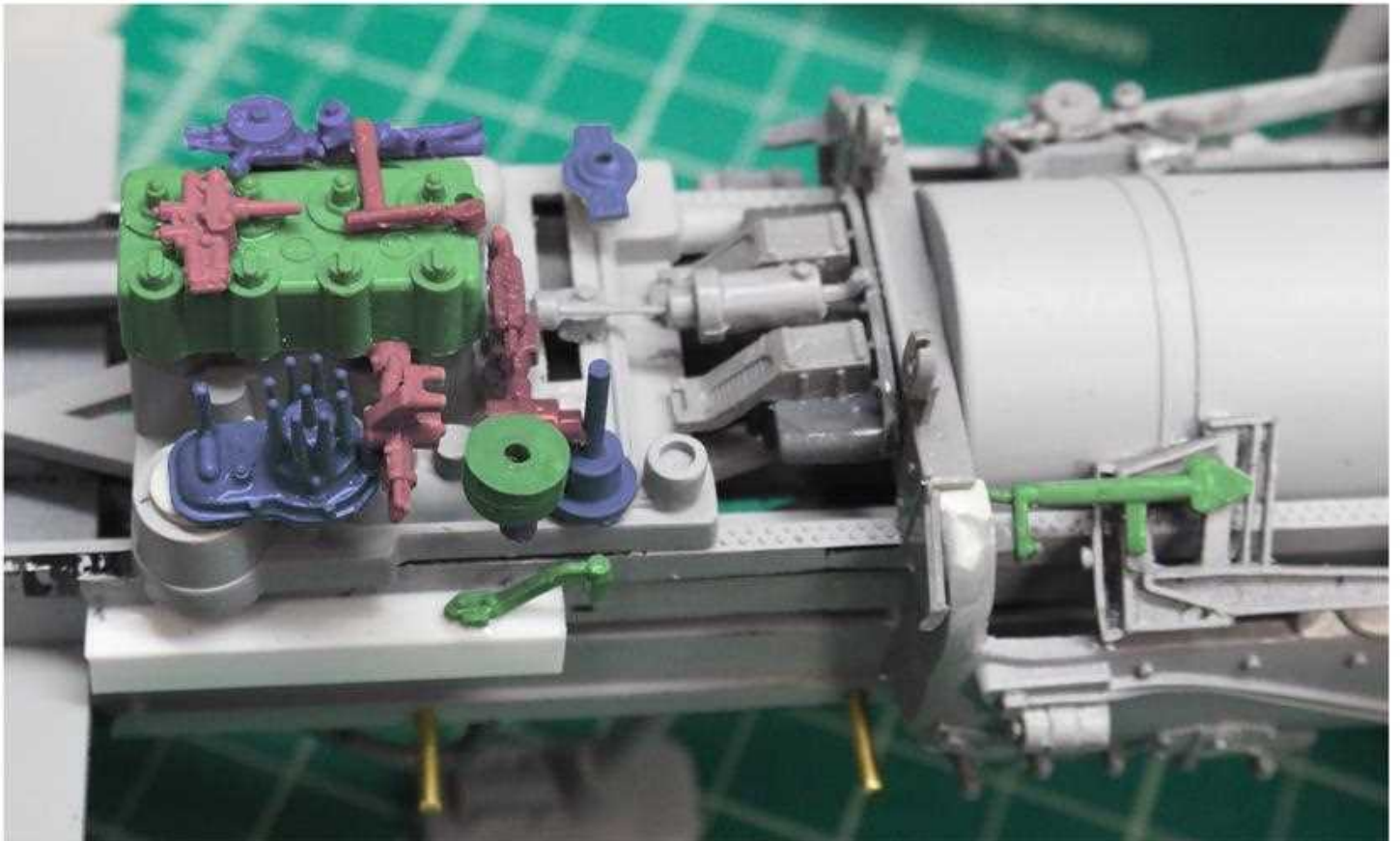


STEP TWELVE

Now we are about to hit the rest of the body, and we've saved the best for last! Note the other piece of square tubing highlighted in green.

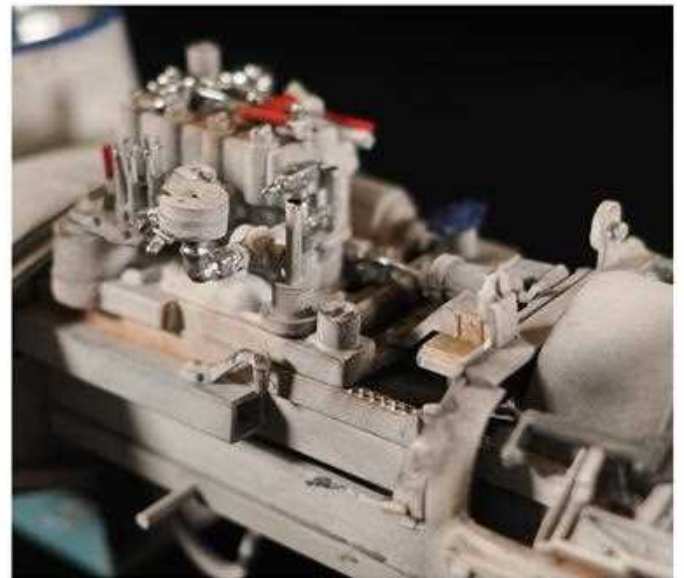
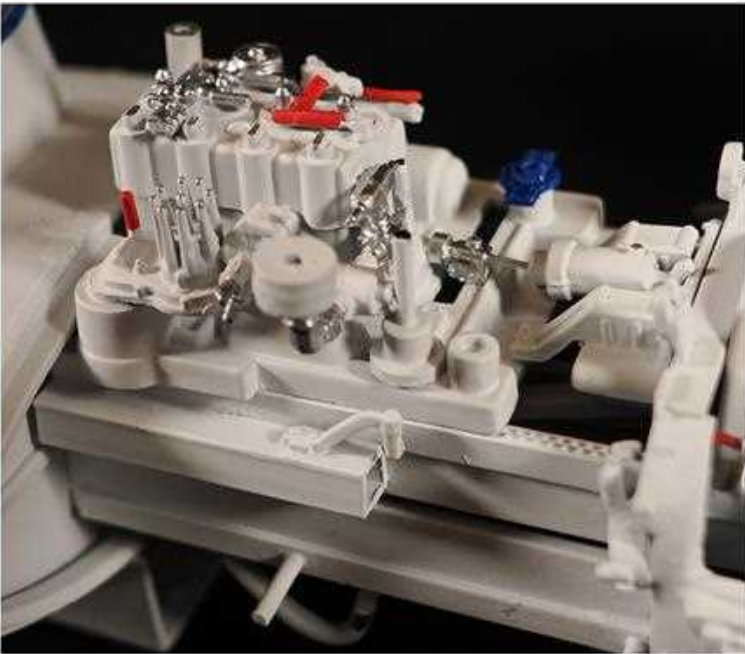
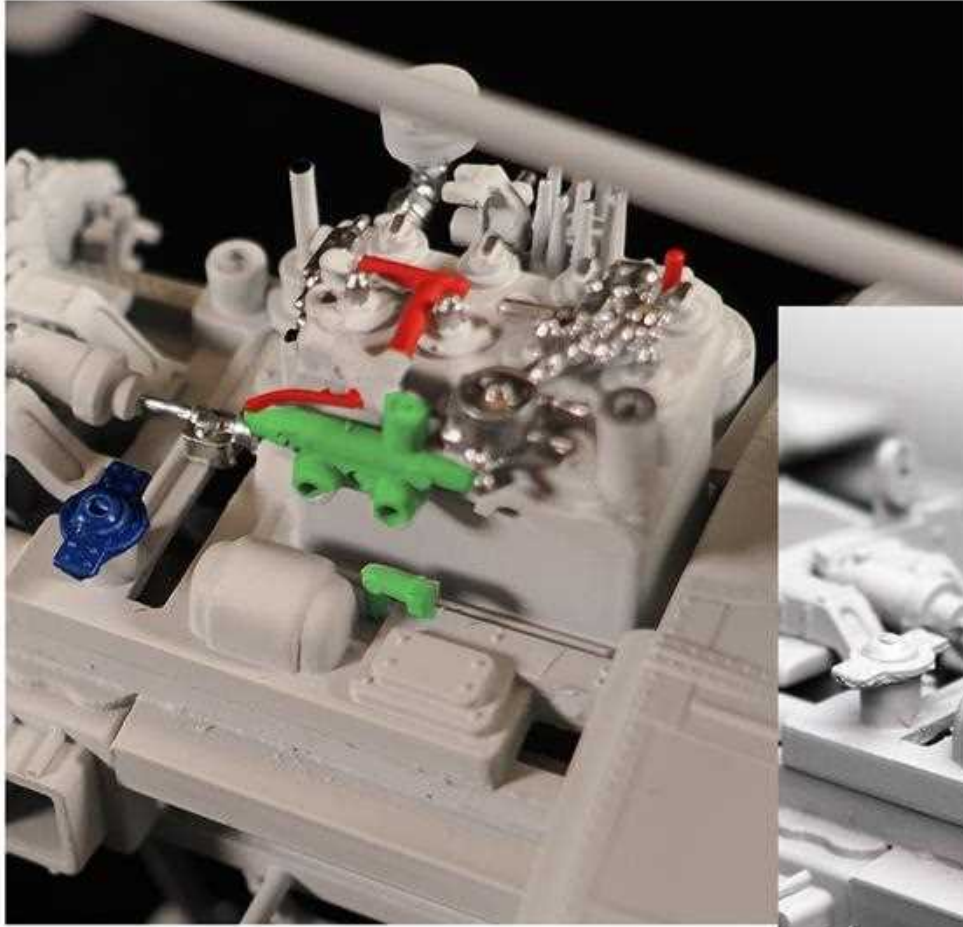


More parts (multiple colors to help differentiate).



STEP TWELVE

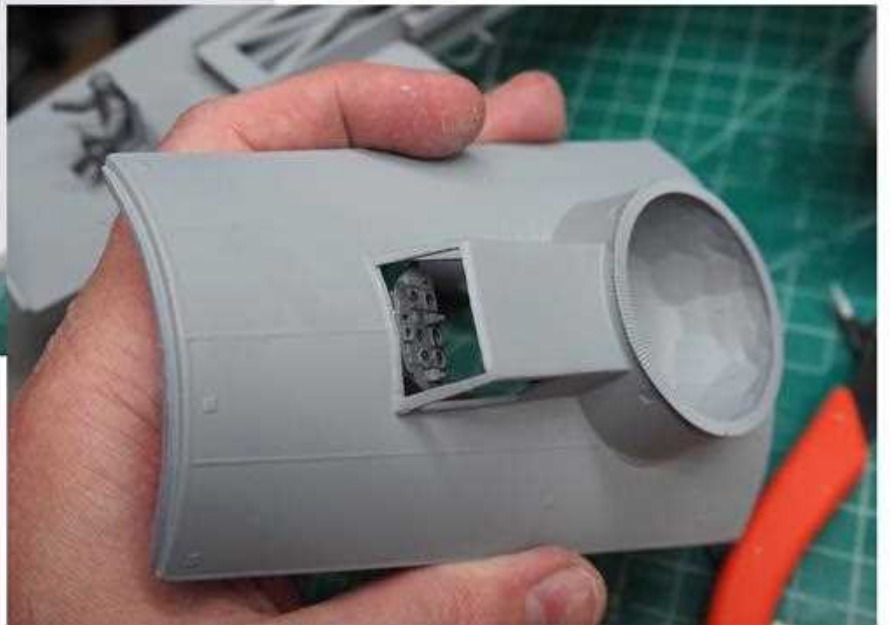
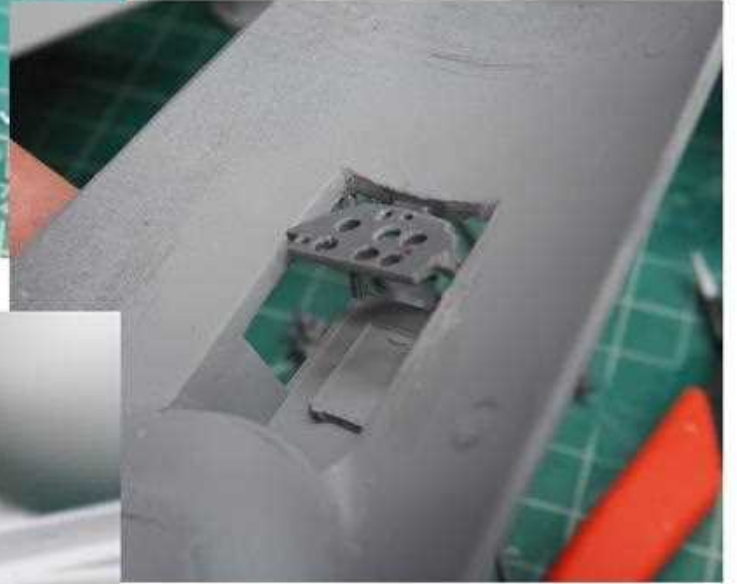
Continued... green again, to highlight the parts added.



STEP THIRTEEN

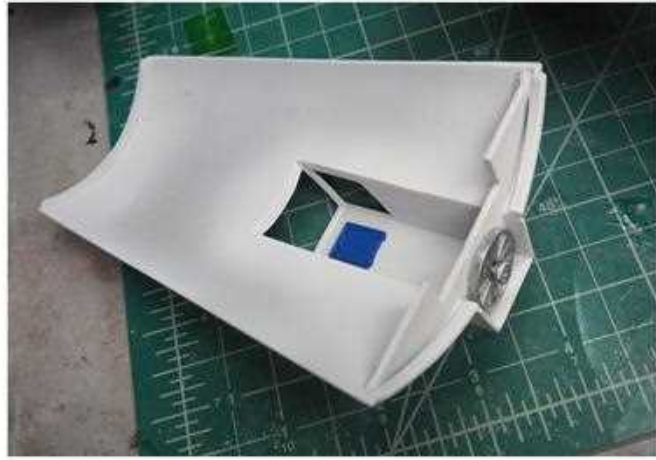
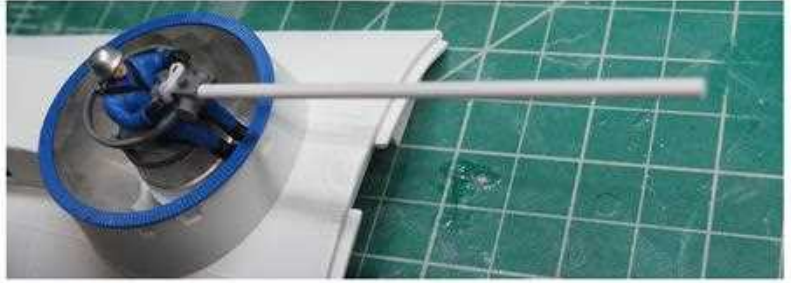
The home stretch! The bottom cockpit shell gets these two pieces and the top gets the dash.

Give the wee pilot his arms!

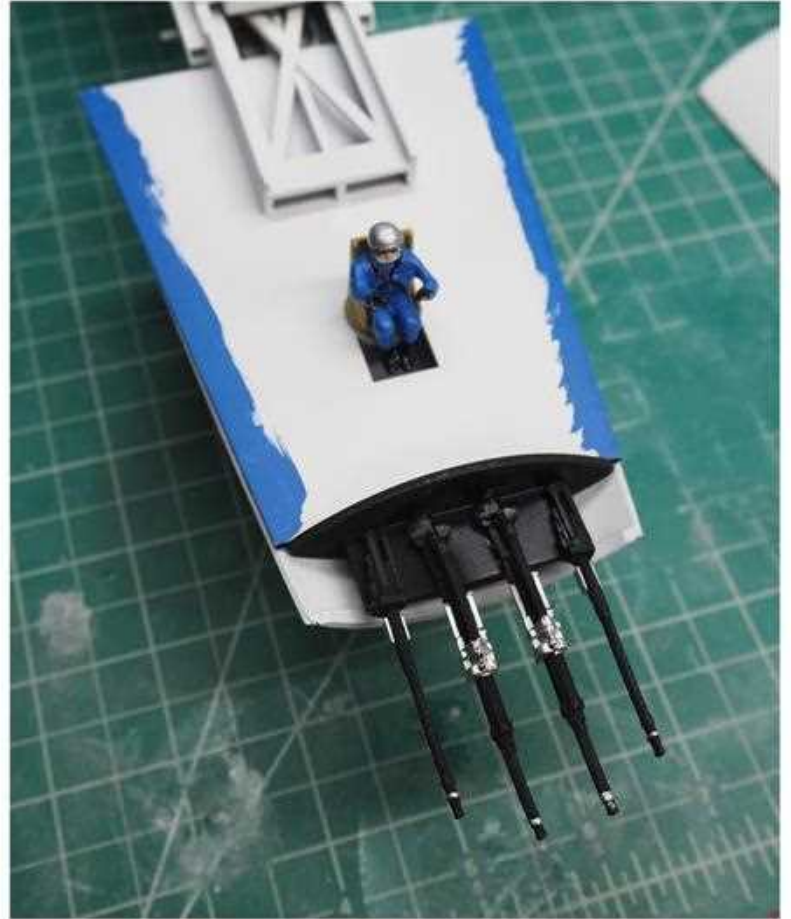


STEP FOURTEEN

Let's make the pilot's little buddy, his seat, and the guns. Now paint the cockpit assembly. Note that the sides of the cockpit's main plate are blue, as are a couple details - feel free to deviate from what Cantwell did. You will make the laser barrel from Plastruct Round Rod, 90860 2.5mm.



Now take a deep breath and trim the vacformed bubble canopy. Now take a shot of bourbon and cut the slot for the barrel.



HOORAY YOU DID IT!

All that's left is paint work, and adding that red piece to the transition between gun barrel and bubble canopy. Visit jasoneatonstudio.com for more reference photos on how it was painted.

