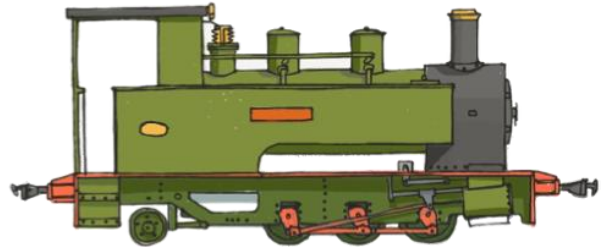


Bowaters

MODELS

specialising in distinctive 16mm models



Bowaters Models – BME-006 Instructions



Requires

- Glazing Material

Required Tools

- Fine Sandpaper/Emery paper or boards
- Small Files
- PVA Glue
- Super Glue
- Sharp Craft Knife

Prototype Information

In the 1970s, South African Railways ordered a fleet of 20 new Diesel locomotives to work the Avontuur Railway in the western cape. These engines were a huge success and while they did end up replacing the steam fleet, are still very much loved around the world. In recent times, a number of these have been sold off and or scrapped however a small growing number have been preserved. These are widely recognised as the biggest 2ft gauge diesels ever built with a huge loading gauge. The entire fleet was build by General Electric to their type UM6B.

About the Kit

The kit is a plastic kit comprising of a set of laser cut MDF or Plywood parts and 3D printed sections.

Chassis Fitting

This kit is designed for a Bowaters Models Chassis which is included as part of your kit. This is assembled as per the instructions. Make sure the chassis works in the way you intend it before fitting to the chassis. Note, this kit is designed for either Manual control using switches (single speed) or using full Radio Control for which space has been left within the model.

Couplings

This kit is designed to make use of the Accucraft Chopper Couplings. These are glued onto the buffer beams using superglue. We strongly recommend using superglue to attach them. Height wise, these should be 25mm from the centre of the coupling plate to the railhead.

Instruction notes

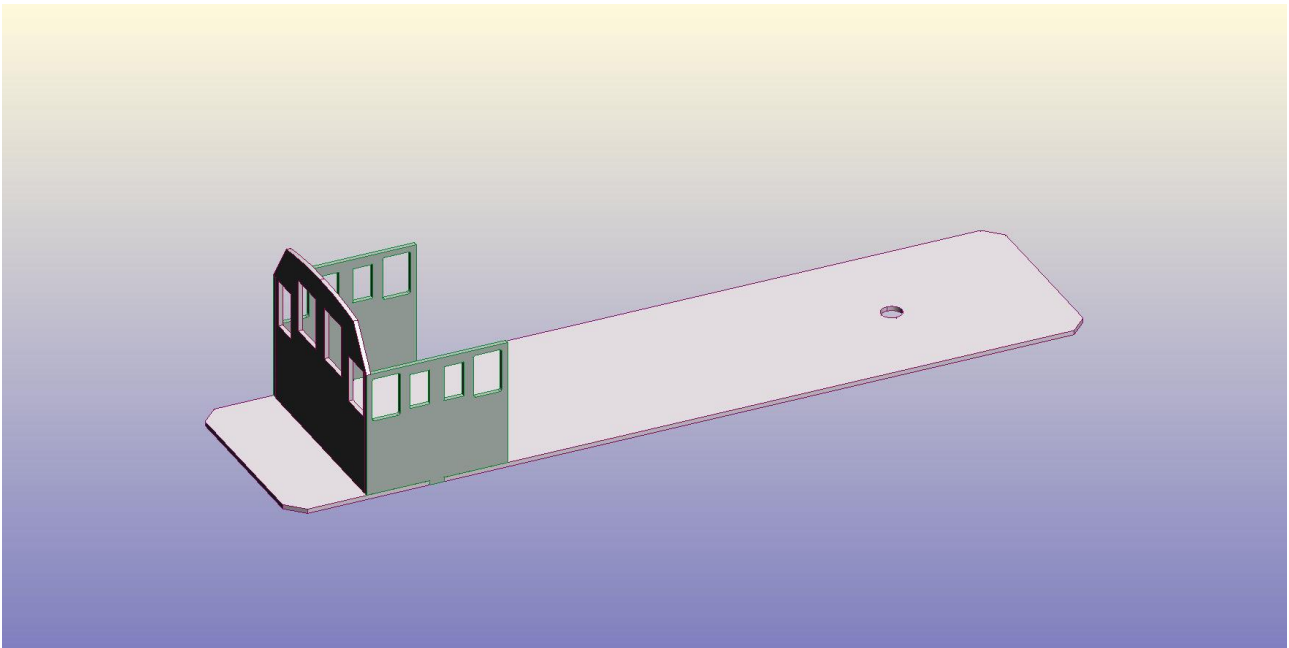
With these instructions, there are images which show various stages of the construction of the kits. They are of the Digital Reference model for BME-006 which isn't representative of the kit you have brought. They are for reference purposes only.

Painting

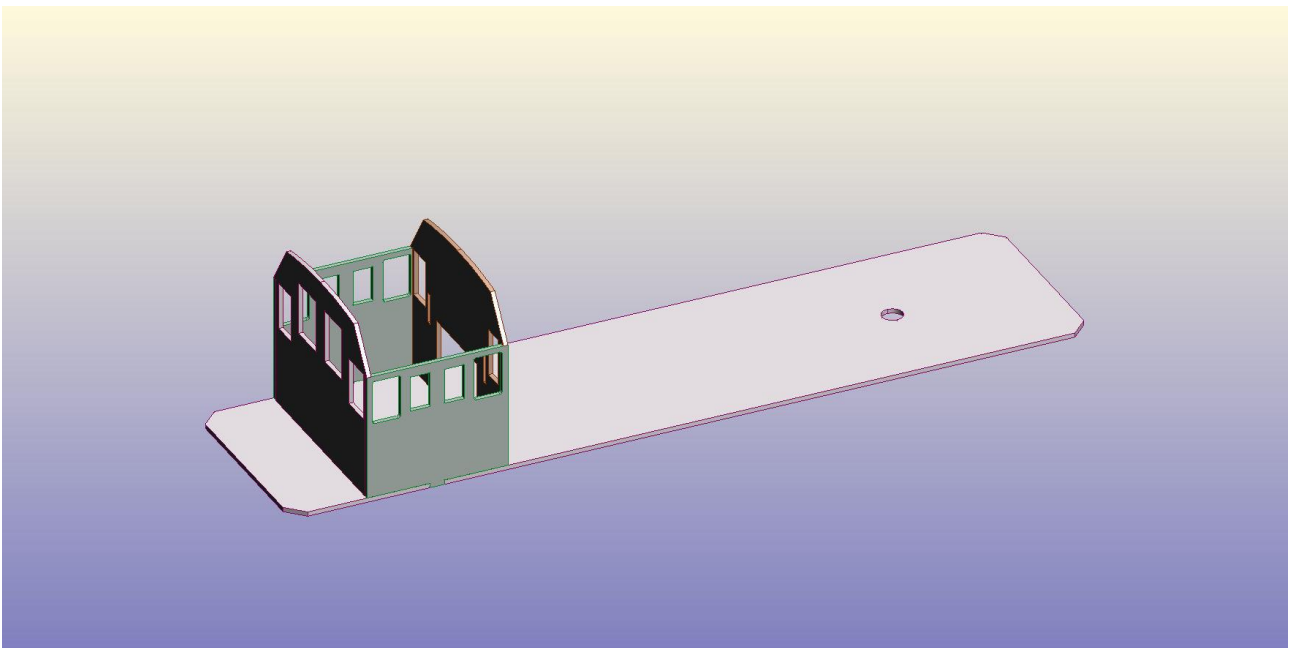
- As built – SAR Gulf Red with Signall red bufferbeams and yellow stripes on the long bonnet sides and a yellow V on each end. They also featured SAR cast number plates on the cab sides.
- 1990s – Spoornet Orange with a Yellow and Blue Chevron pattern on the bufferbeams.
- 2006 – 91-001 only – Spoornot blue with outline numbers on the long bonnet sides.

Please Turn over

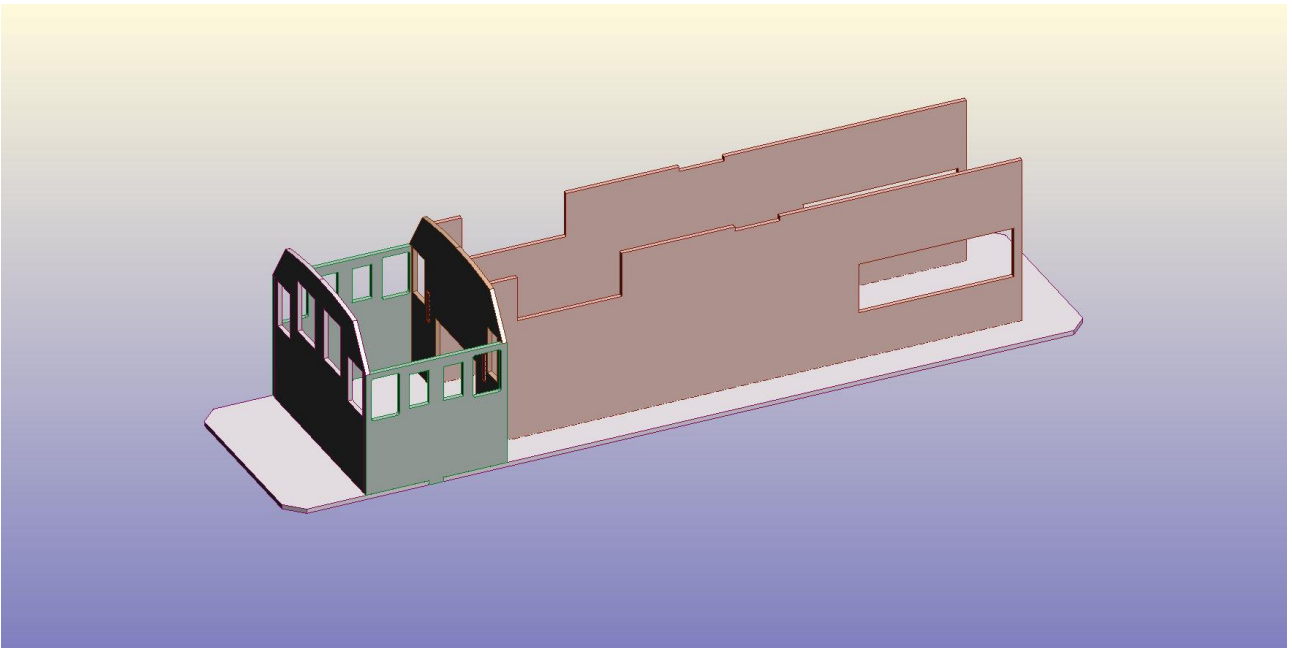
Please read though these instructions before beginning to assemble your
kit



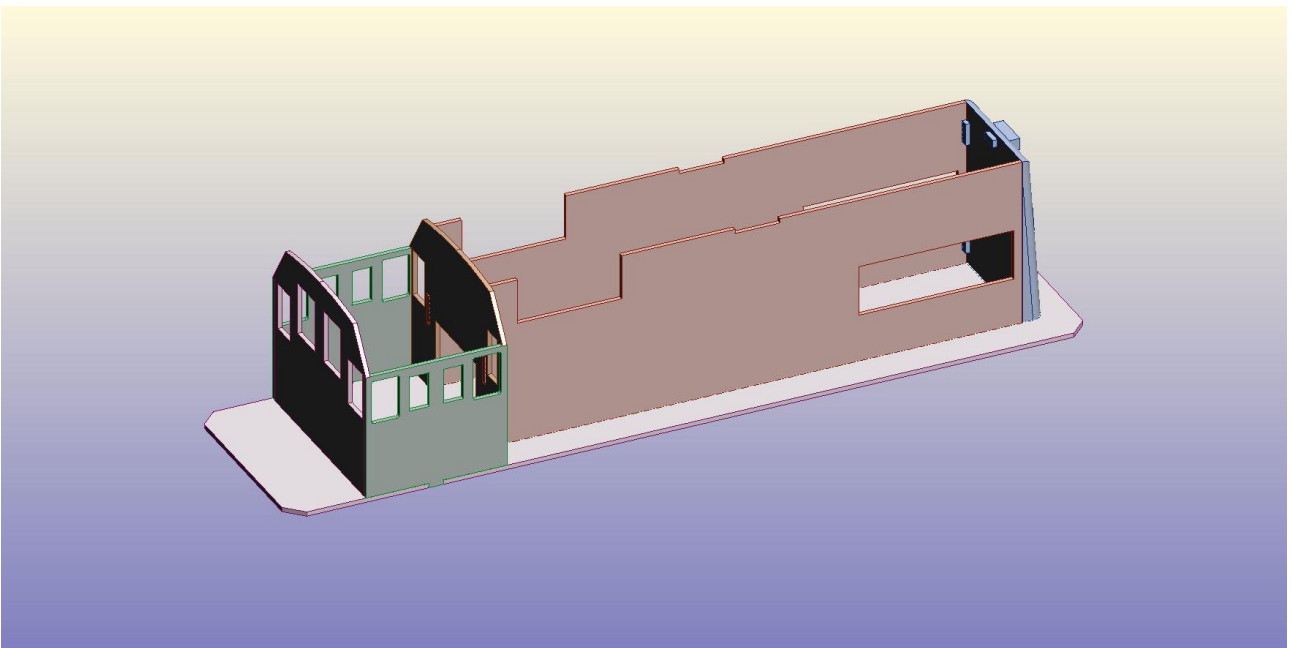
Start by gluing the cab sides and the cab front onto the chassis. The Cab front is the piece with 4 windows.



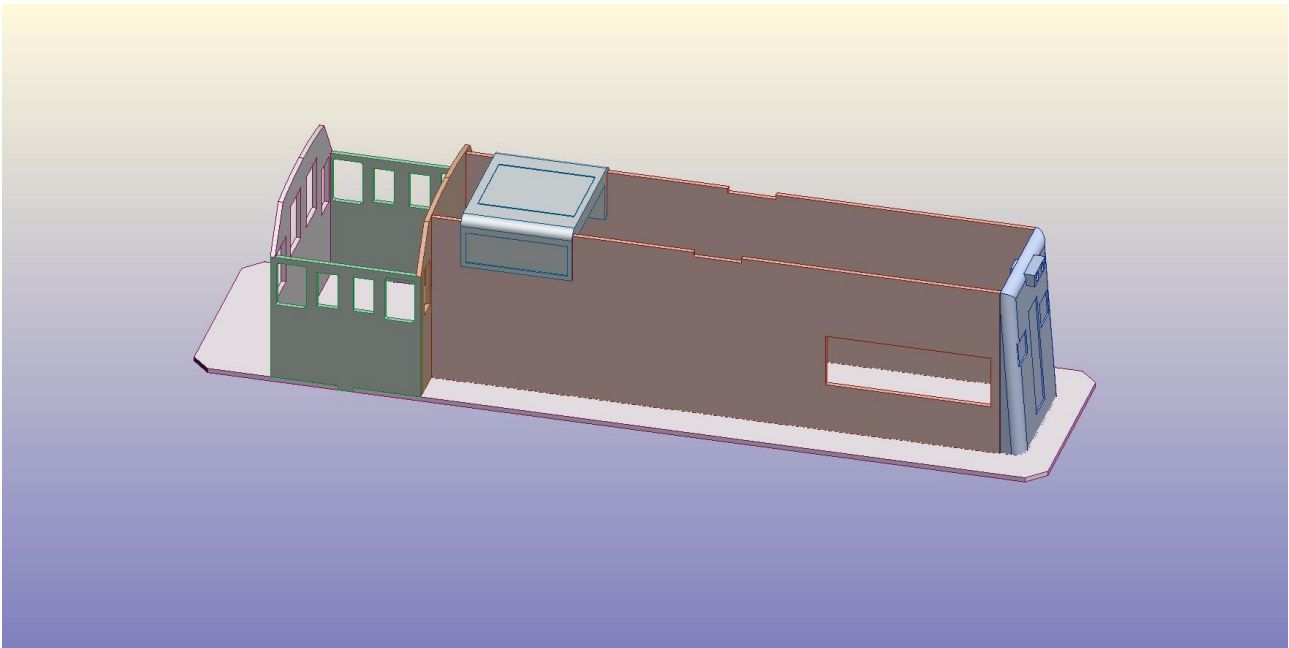
Now glue on the rear of the cab.



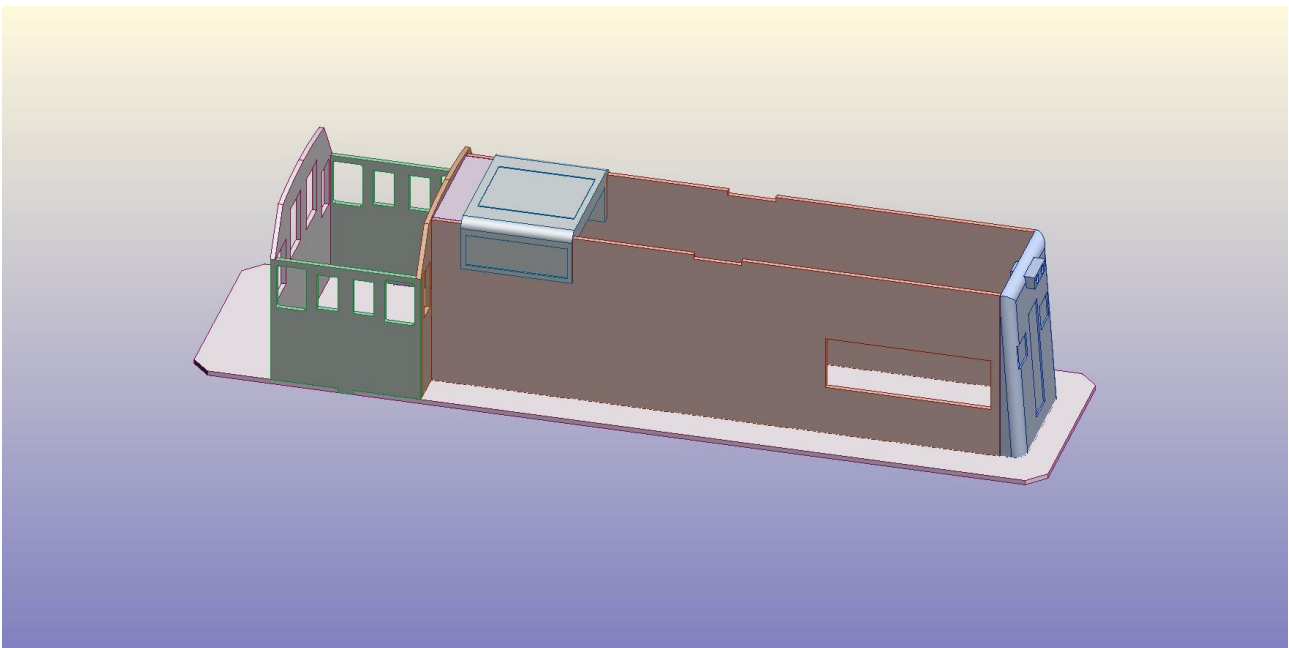
Next glue in the sides of the long bonnet. These are handed with different etched details on each side.



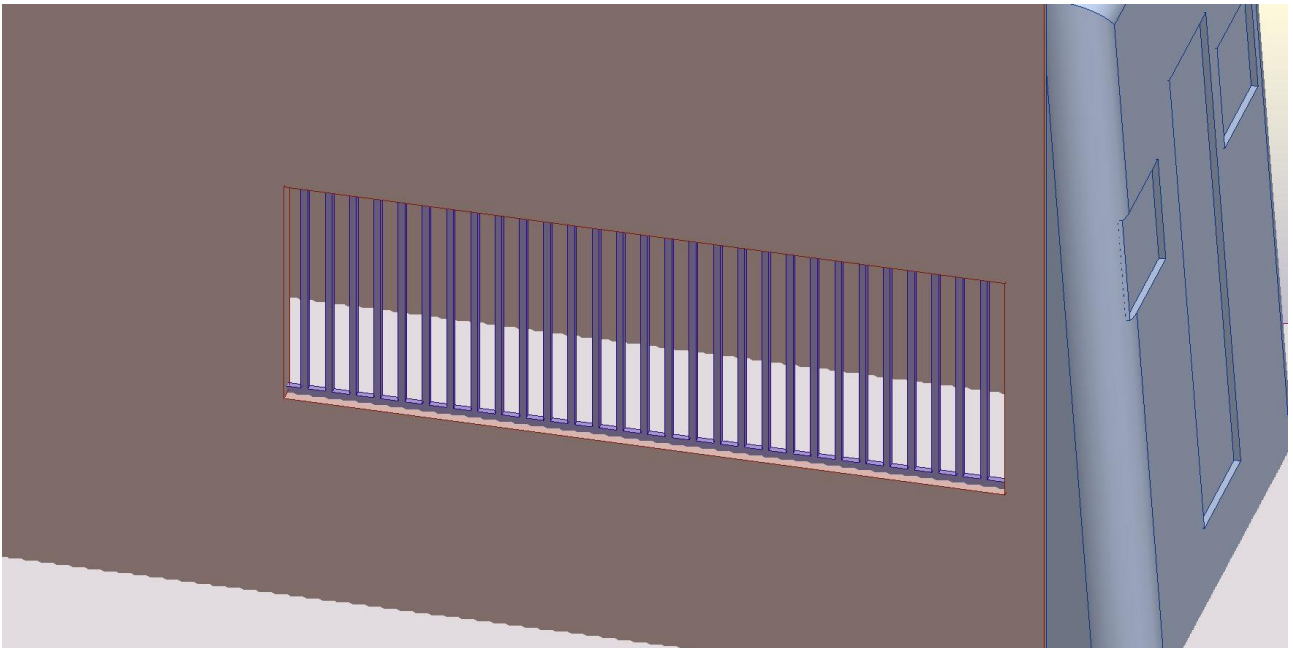
Now glue on the rear of the long bonnet to help keep everything in line.



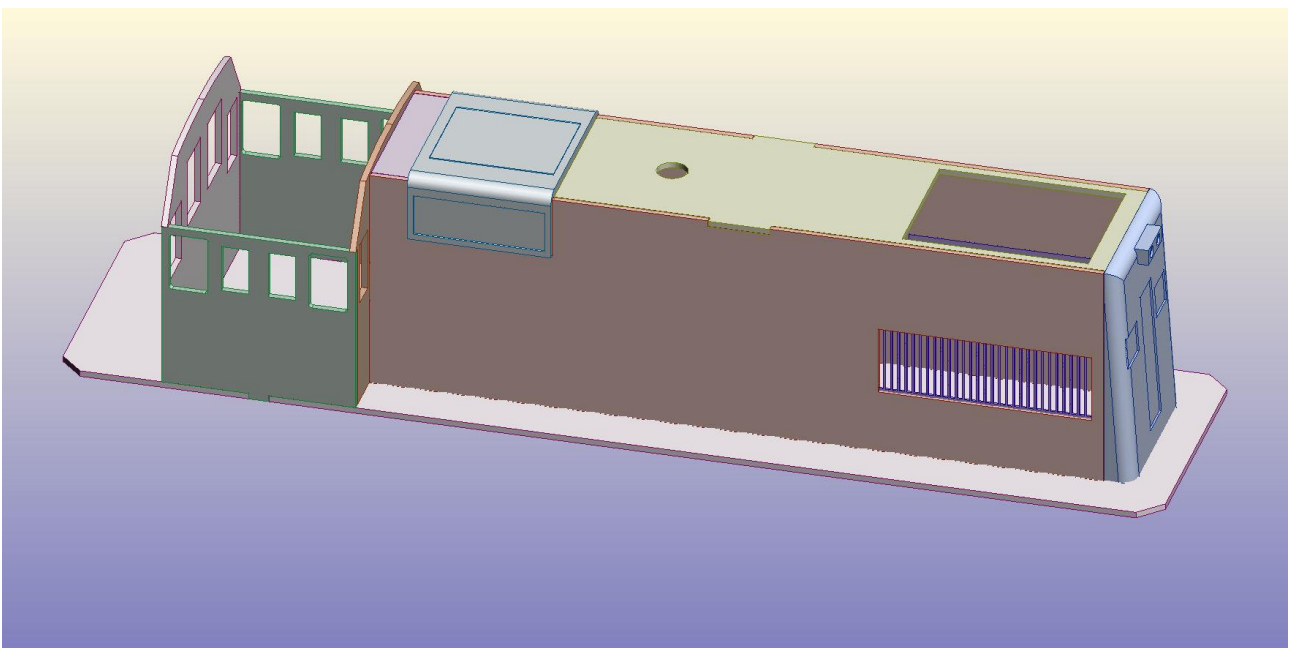
Now we start on the top of the long bonnet. First glue in the air filter which sits in the notch on the tops of the sides.



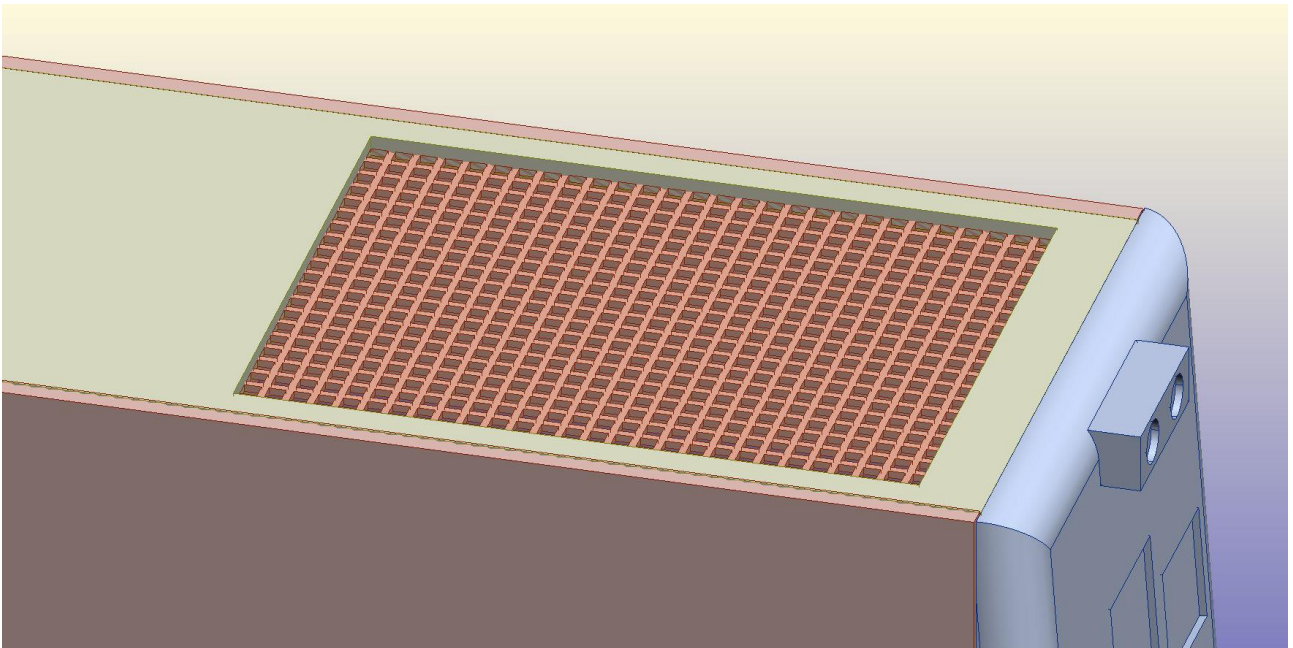
Then glue on the small section of roof which goes between the air filter and rear of the cab.



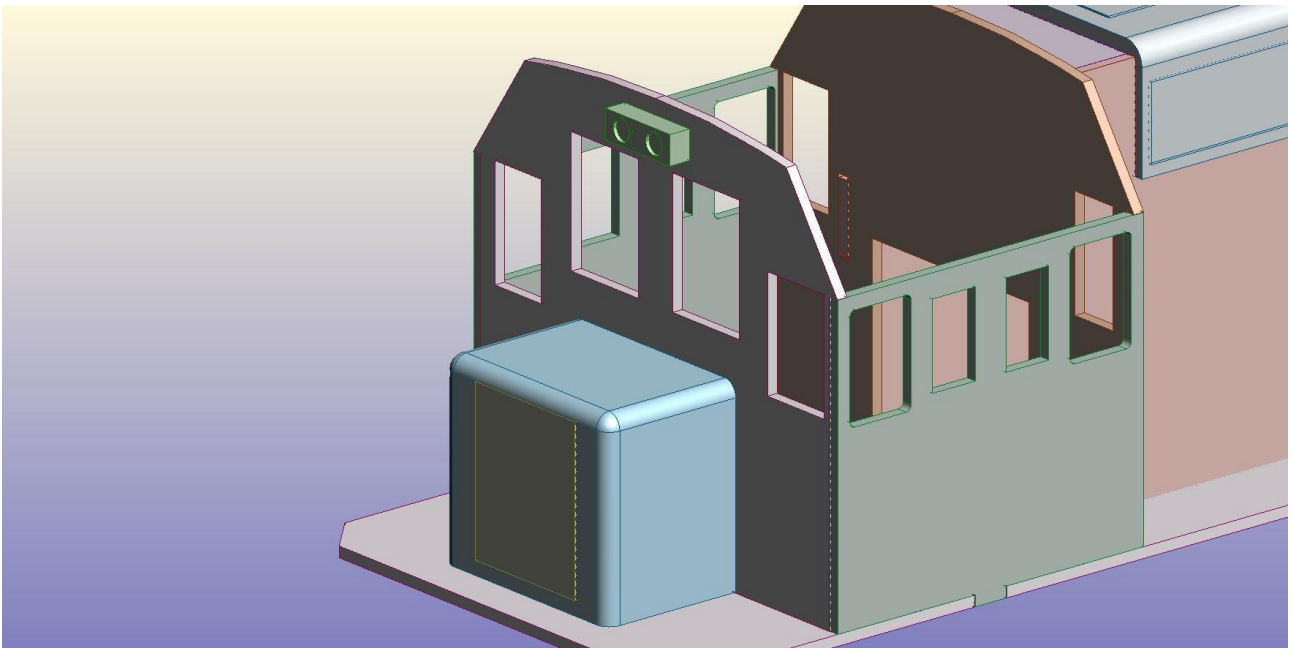
Now is a good time to glue in the grills on the model. There are two on the sides of the bonnet and then one of the top.



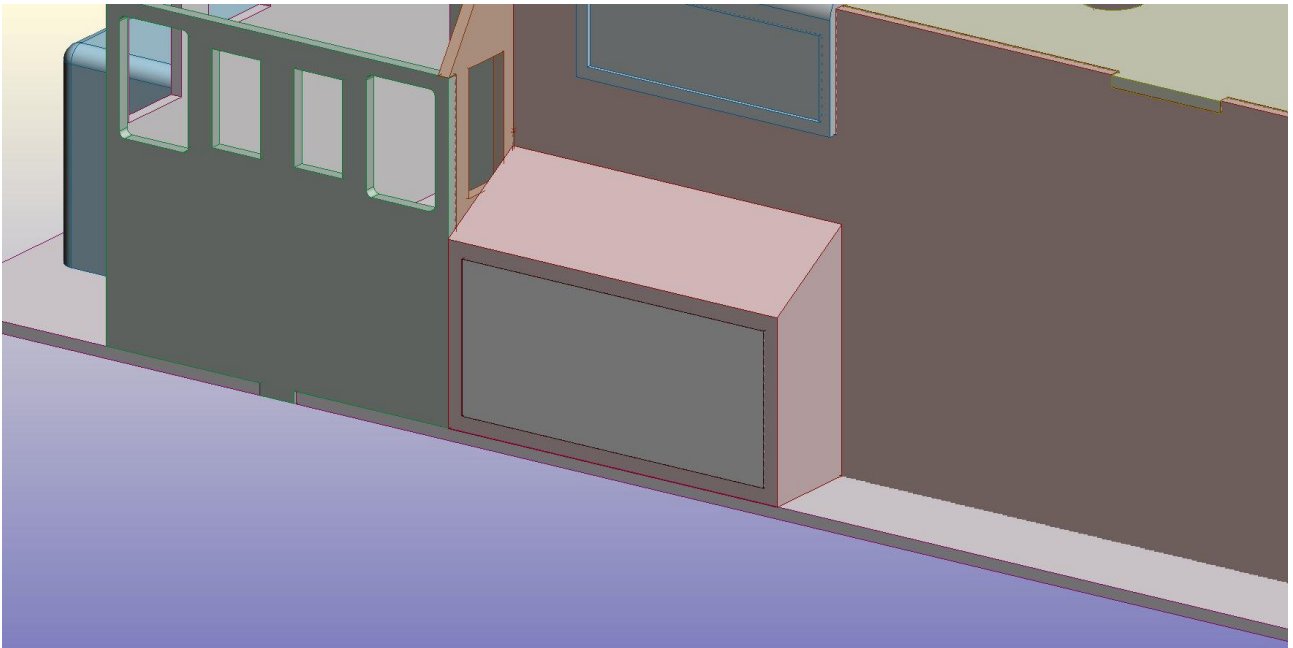
Next place on the top section of the bonnet in place. We recommend you don't glue this in as it gives access to the interior for batteries and RC control equipment.



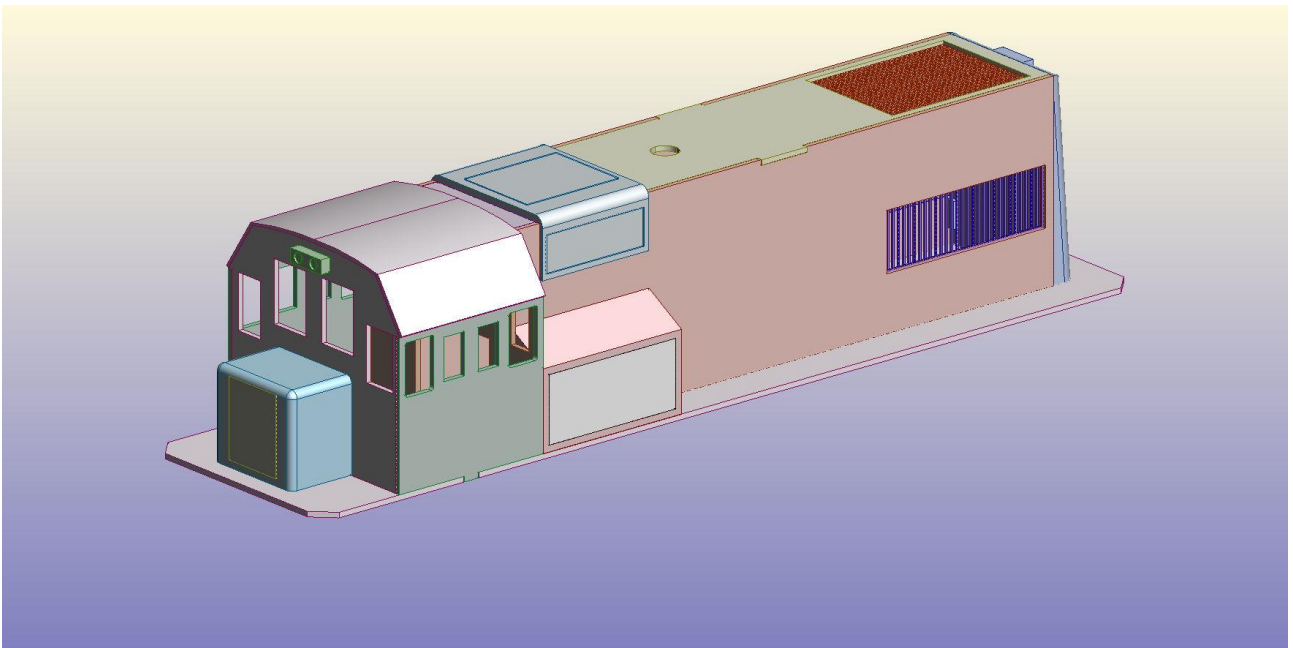
See the top grill in the removable section of the long bonnet.



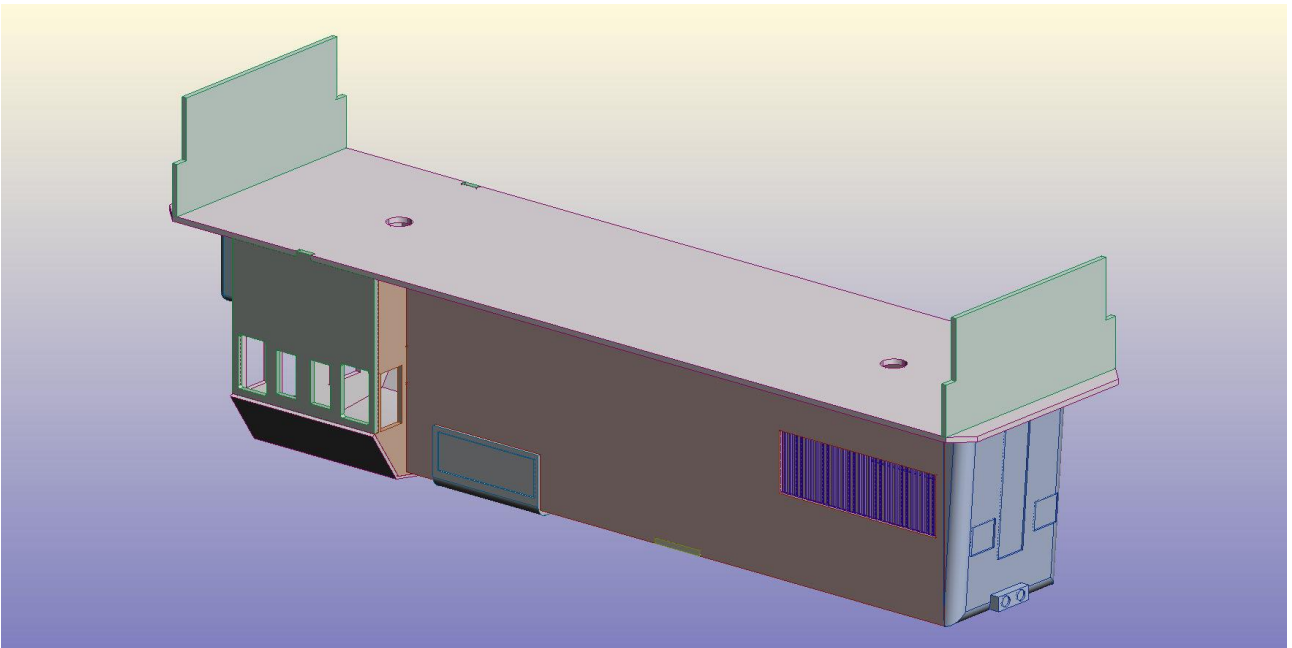
Time to glue in the short or nose bonnet. These sits in the middle of the front of the model. There is a laser cut section that slots into the front of the 3D printed section. There are two to choose from depending on when the engine you are modelling/representing is modelled as this was a section that was rebuilt by Spornet. Now is also the time to glue on the 3D printed headlight that sits on top of the cab.



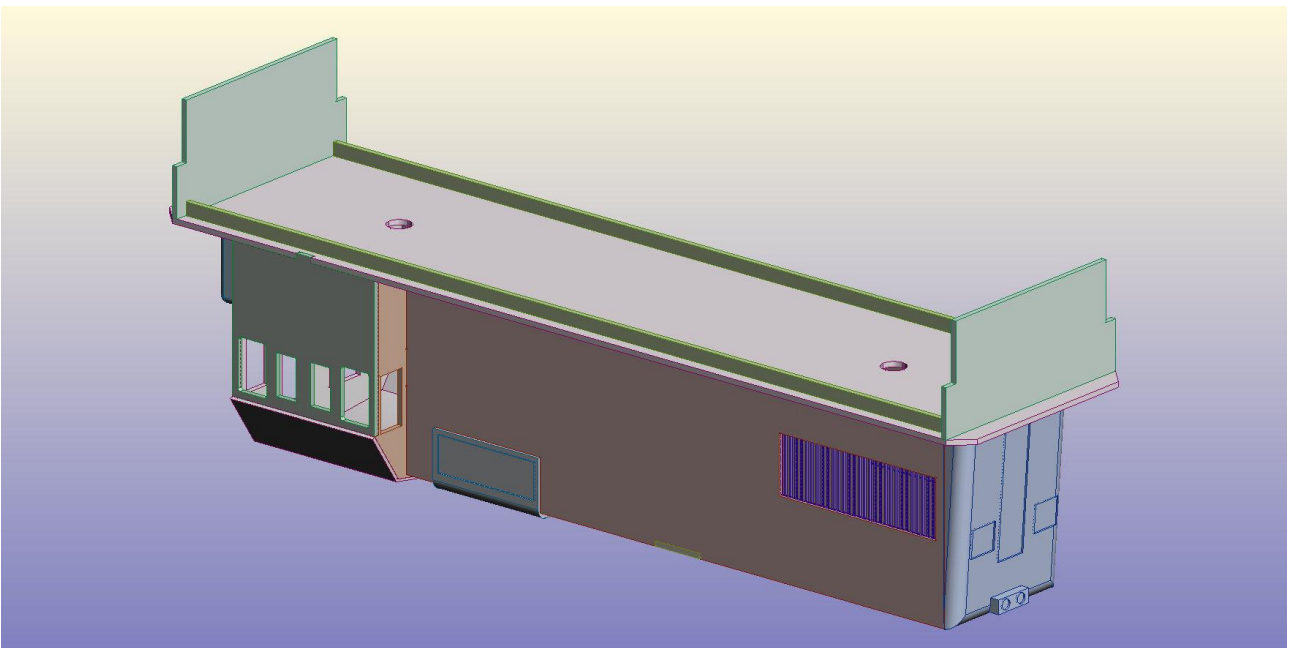
Now glue on the side equipment cover and again fill in the printed inset with a laser cut section.



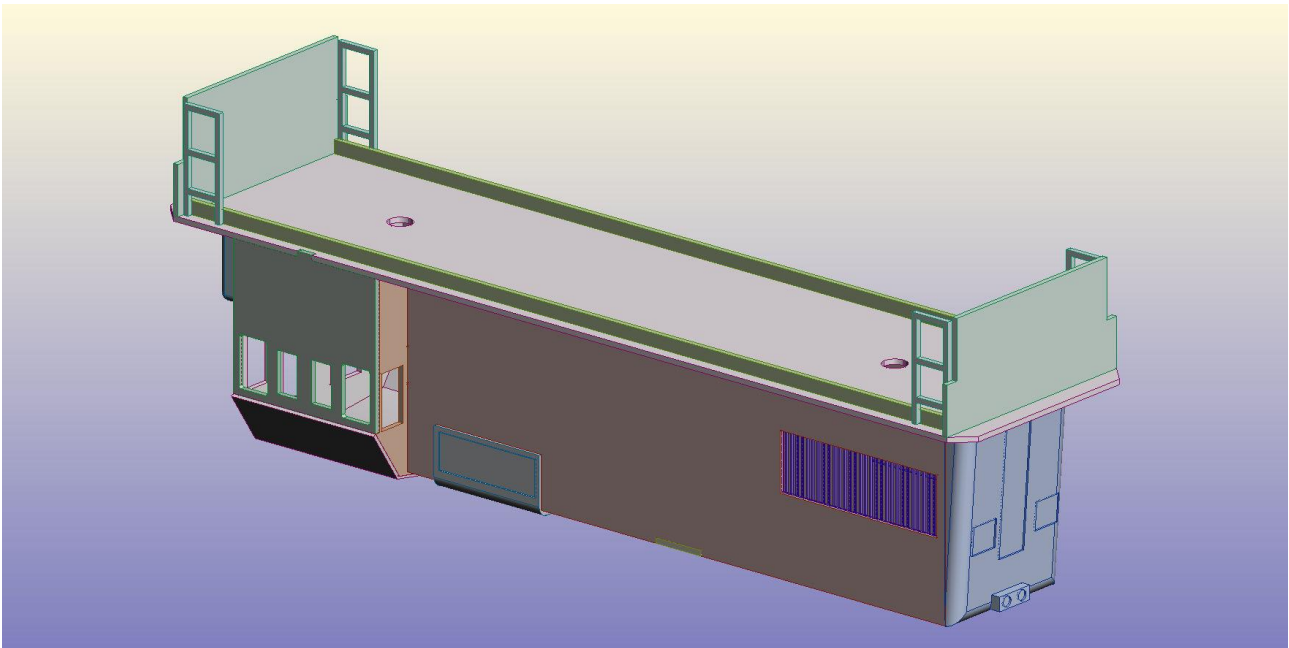
Now glue on the cab roof. This completes the body. Now it is time to work on the underneath.



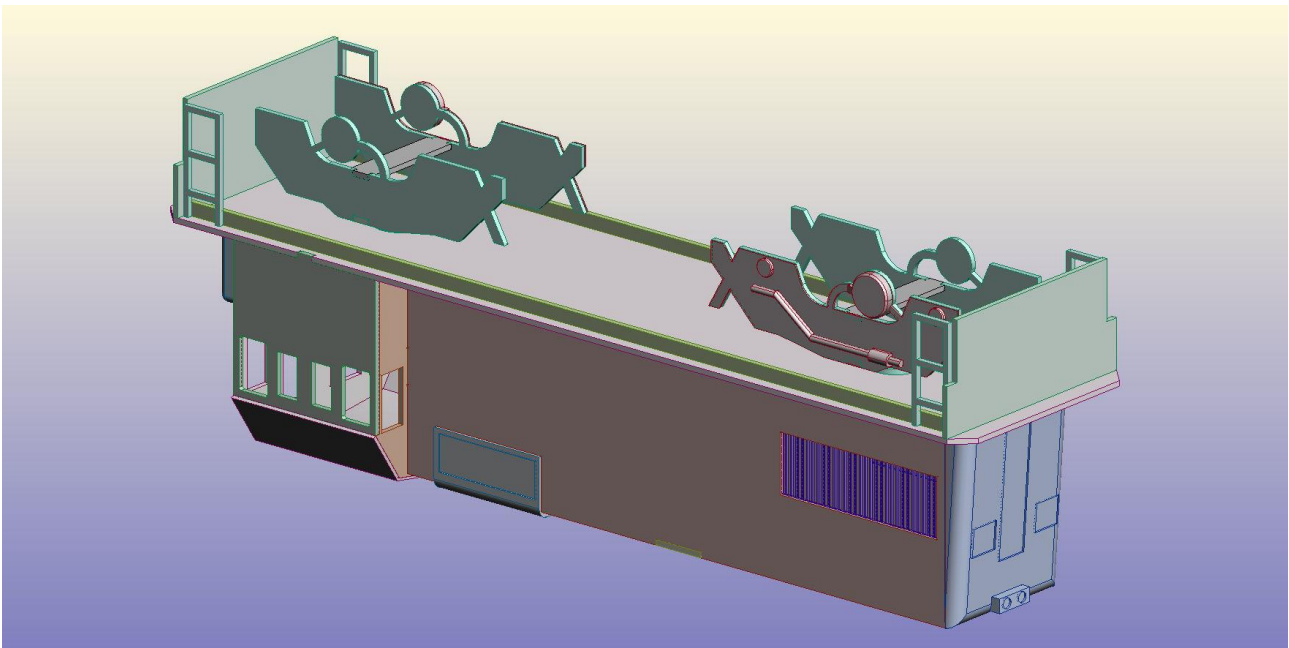
Start by gluing the bufferbeams onto the model. These sit just inside of the angled sections on the floor plate.



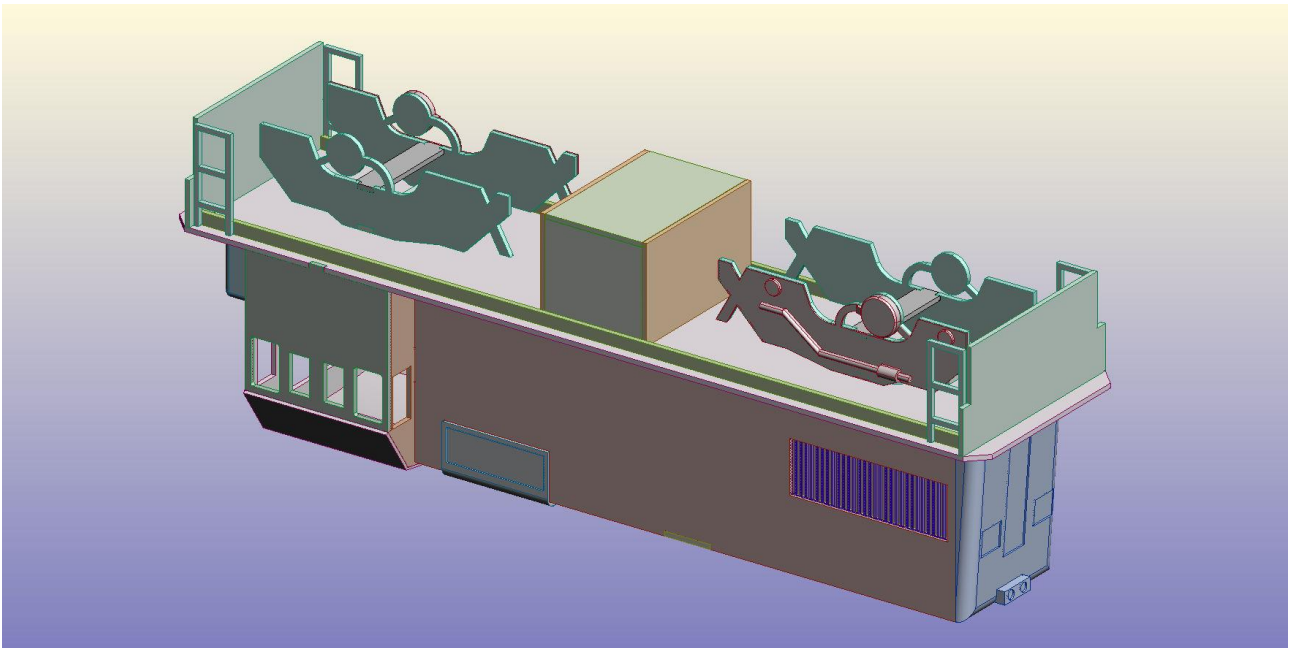
Next glue on the long pieces that run the length of the model between the bufferbeams.



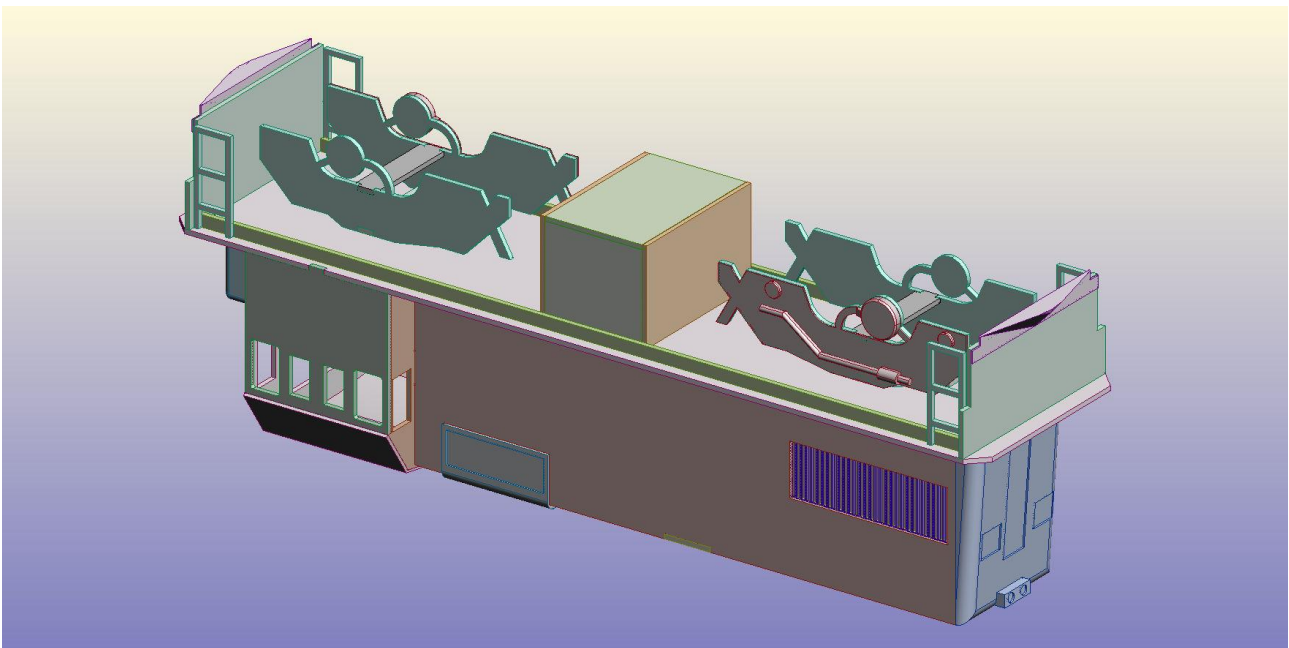
Now glue on the steps. These sit on each end of the model next to the bufferbeams in each corner.



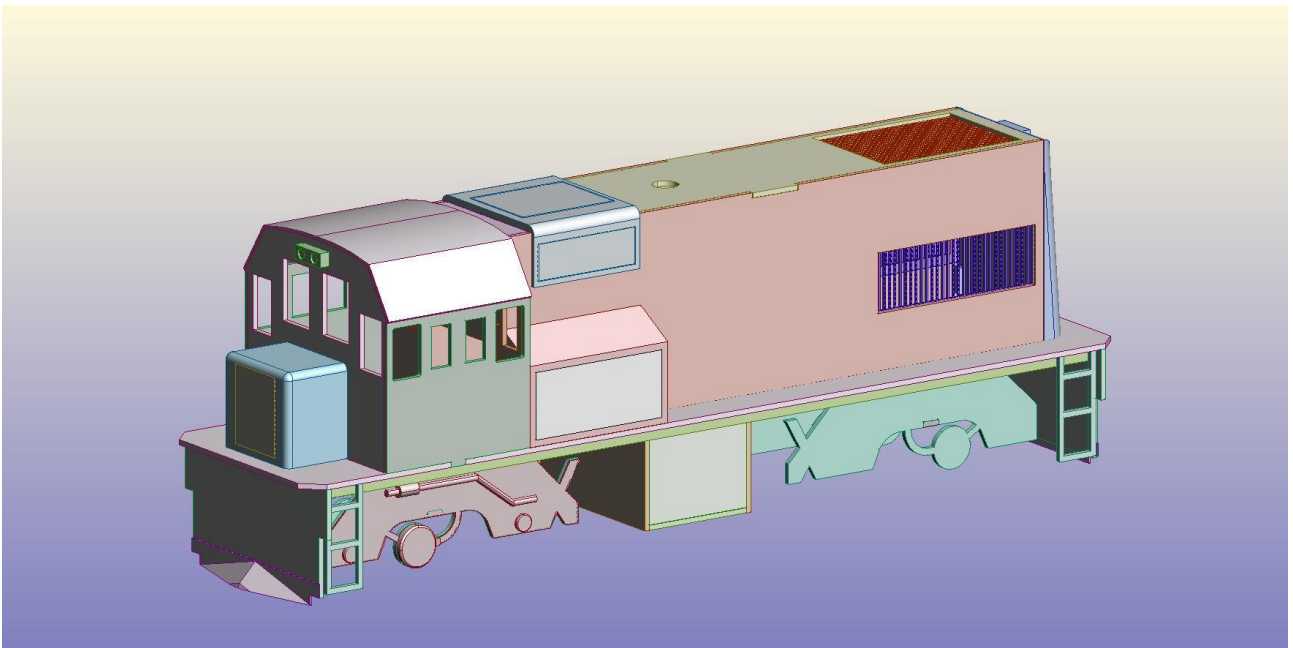
Now glue on the bogies. These sit below the holes in the model which allows for the wiring from the motors to any control gear.



Now glue on the underneath equipment box. This is made up of 5 laser cut sections which sets between the bogies.



Now glue on the cowcatchers on the bottom of the bufferbeams. The couplings should sit right above them in the middle of the bufferbeams.



Your model is now complete.



We hope you enjoy your Bowaters Models kit! If you have any questions, don't hesitate to contact us on info@bowatersmodels.co.uk

We thank you for your custom.

Chassis Instructions



First, start by gluing the gearbox spacers together. There are two the first of which is shown above. Shown is the bottom spacer which forms a H shape.



*Now start on assembling the top spacer. This one is the one that is used to attach onto the loco.
Start with the outframe first.*



Now glue on the top section.



Now is a good time to assemble the bogie sides. There are two 3D printed parts that overlay the wooden substructure.



While everything is drying, now's a good time to build the bogie mount. Yours will be wider than the one shown. Start by gluing one of the pieces with 3 holes in with one of those with a single larger hole in together. We recommend putting the one with 3 holes on the bottom as this is how you will mount the bogie onto the loco.



Next, glue on the second 3 hole section and the final significantly larger section on top making sure all the smaller holes line up. These are for the wiring runs when you go to power the engine.



Assemble the gearboxes making sure every thing is tight with the appropriate back to back as required for your railway. The bogie is designed for either 1 or 2 motors with the relevant gears/worms being supplied. Make sure you put flats into the motor shaft and axle to allow everything to stay in place during operation.

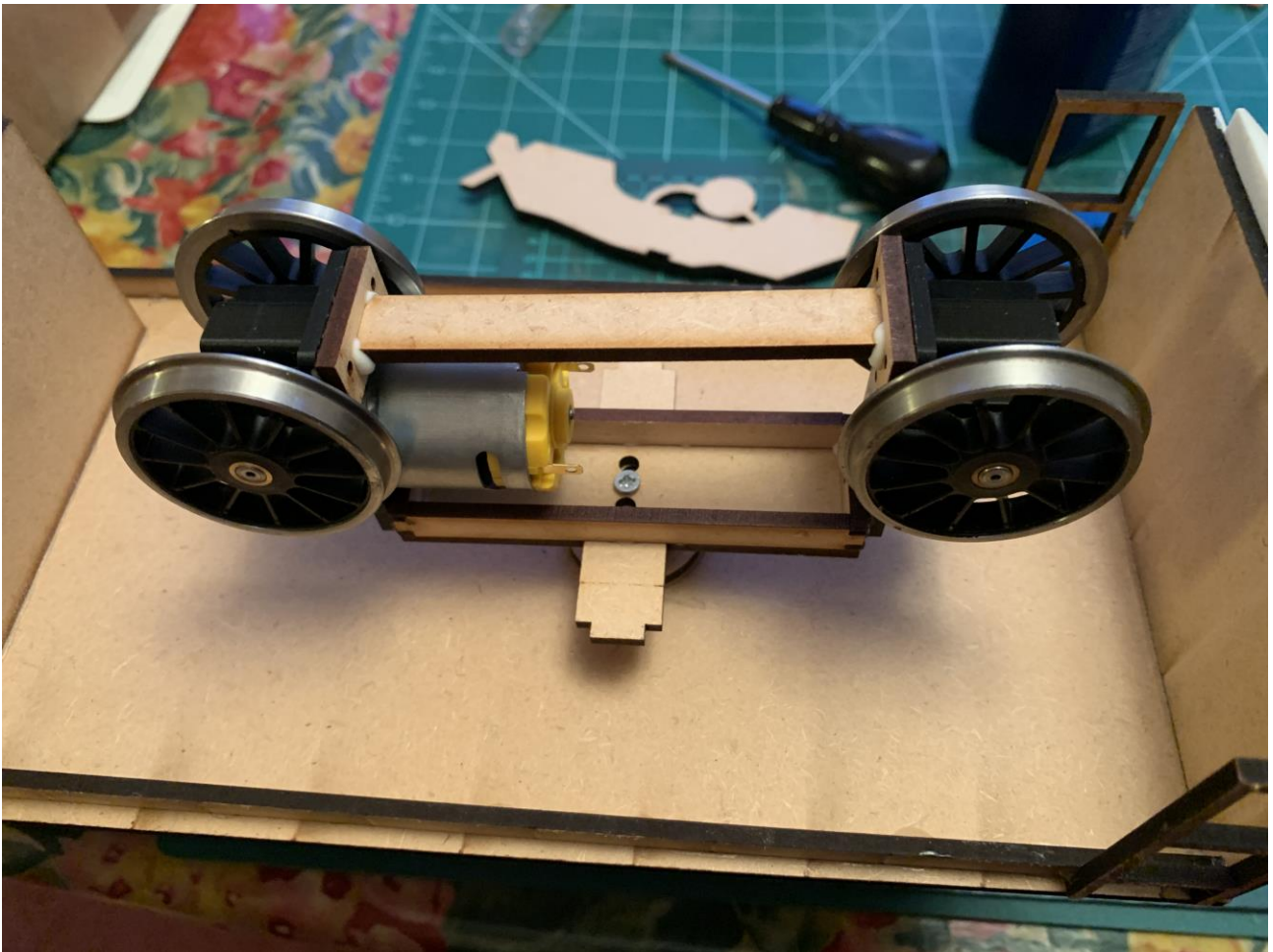
To make final assembly easier, attach the bottom spacer to the bottom of the gearboxes using the matching holes as a guide. You can either glue, bolt or do both when attaching these should you want



Attach the bogie pivots on the locomotive chassis making sure that it lines up with the laser cut holes in the bottom of the engine's body.



PLEASE NOTE – From this point onwards, we have assembled the bogie onto the engine. As it is a prototype, it doesn't match the end product. On your model, you can assemble and wire the bogie off the model before attaching as we have modified the design to allow this. However, we have left this in to show the assembly abet on the engine rather than on the workbench.



Next, glue the top spacer onto the top of the gearboxes. Take time to ensure everything is level for good running. You can either glue, bolt or do both when attaching these should you want. We recommend that you wire up and test the bogie to allow for installation as accessing the wiring points is harder with the bogie sides in place. Certainly no where near impossible, but harder.



The final step is to glue on the bogie sides along with the final bogie cross member which sits level with the gearboxes. Take your time to ensure its all level. Your bogie is now complete.