



Early 20th Century Interurban Line Truck

3D Printable Models

Crafted in 'O' Scale (1:48)

By [Gary M. Reign](#)

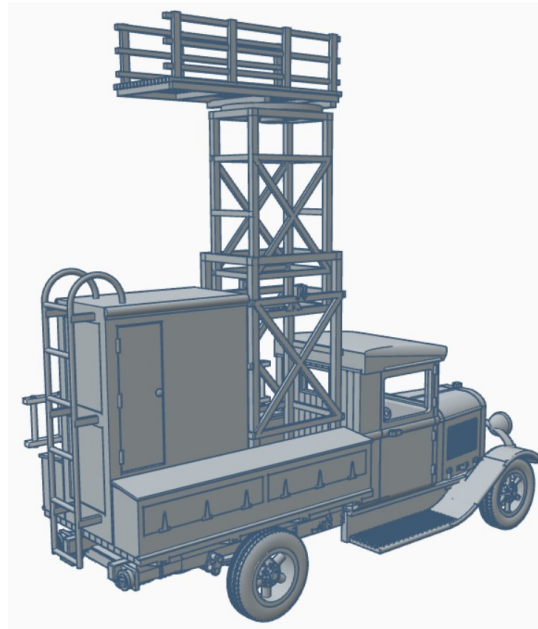
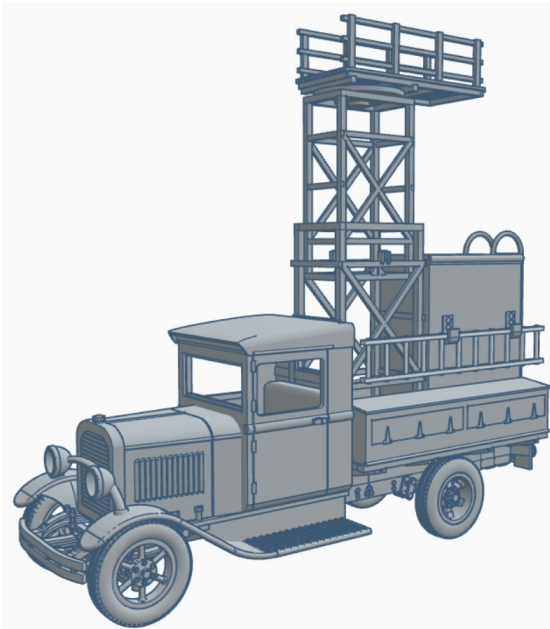
July 2022

The files provided will allow you to print and assemble a model of an early 20th century interurban/trolley line car truck modeled after the a version used on the Five Mile Beach Electric Railway in Wildwood, NJ. The model has been designed in multiple pieces to facilitate printing and assembly. This model was designed* and tested in 'O' scale or 1:48 (1/4" to the foot). It may not print well in other scales without significant modification. The model was also designed and tested using a .05mm or better resolution resin MSLA printer due to the fine details included. Use of other printing technologies may not yield the same results.

The files for this model are covered under the [Creative Commons Attribution-NonCommercial 4.0 International License](#). You may use or adapt these files as you wish but you may not use them to produce parts, kits or finished models for sale commercially.

The files can be found here: cults3d.com.

For any questions, please contact me at: 3dprint@reign.com. You can see my other models at www.reign.com/3dprint.html.



Due to the size and delectate nature of some of the parts, setting the model up in your slicer and getting the right set of supports is crucial to having a successful print. However, this may take some trial and error. Take great care when removing the supports to avoid removing part of the model instead of a support as some of the pieces are very small. Sections of the model have been enlarged or structurally strengthened compared to the prototype in order to increase the success rate for printing. These changes have mostly been hidden under the frame and other inconspicuous locations so the overall model retains its prototypical appearance.

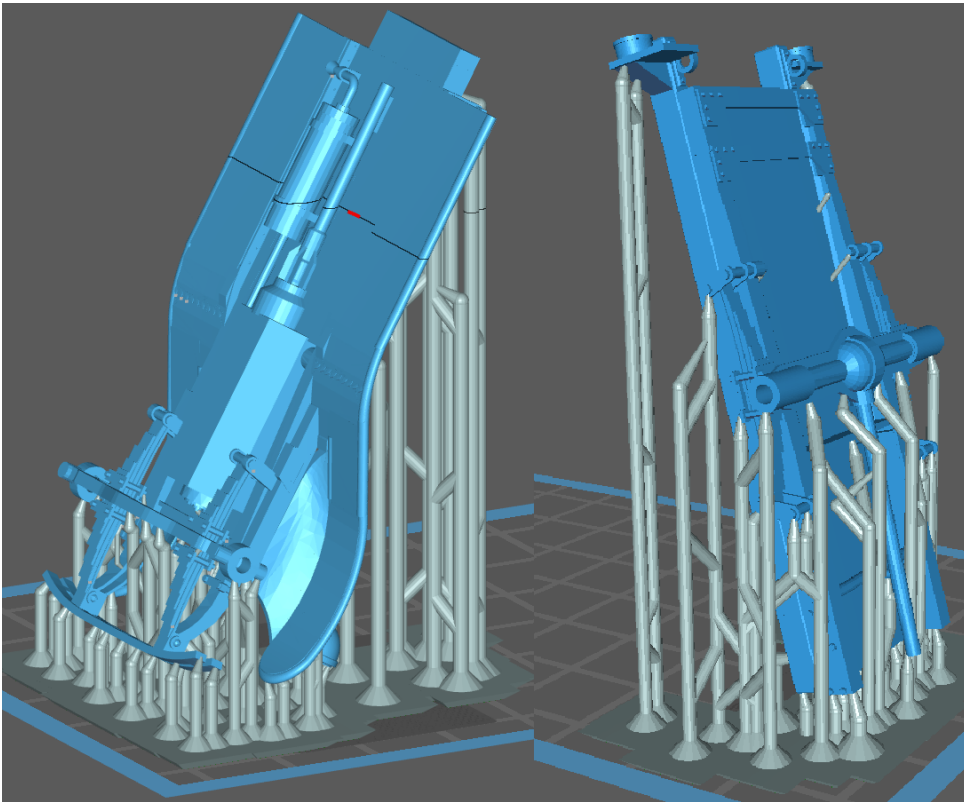
For gluing the parts together, I recommend CA (Cyanoacrylate) aka 'super glue'.

I strongly recommend pre-painting the main subassemblies of the model prior to final assembly. This will make it considerably easier to obtain a clean finish. Colors and finished used are completely your choice.

You will need to print two each of the tires and rims, two of the side tool boxes and two of the tower platform railings.

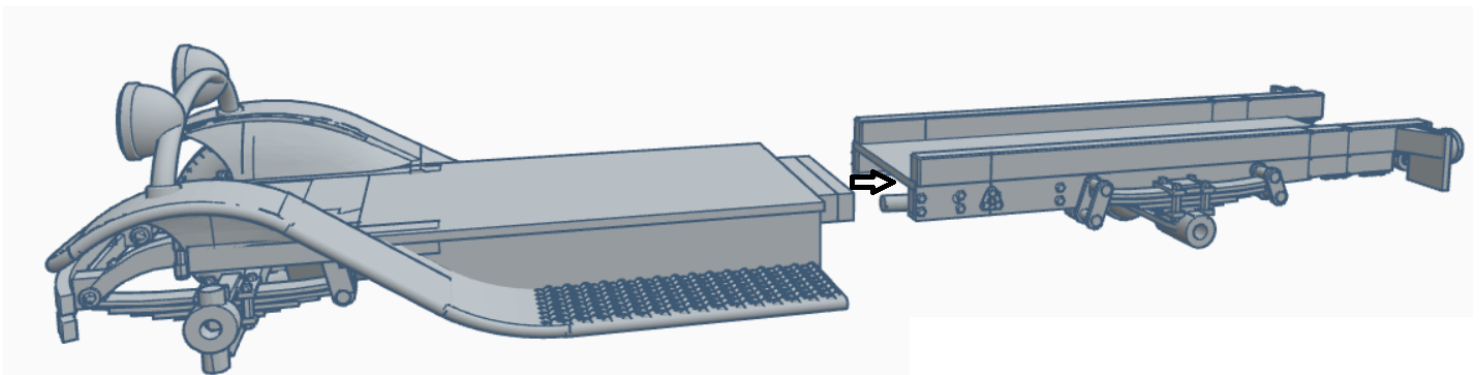
* The final 3D models provided may vary slightly from the picture shown above due to continued testing and refinement.

Printing Notes: As for printing the parts, it is assumed you are an experienced MSAL printer as many of these parts are complex and/or delicate and require some skill at setting up the supports. Two of the most complex parts to print are the front and rear truck frames. I have obtained the best results by printing them as shown in the photo below, i.e. place them facing down on their top side and angling them as shown. This minimizes the supports required. Also, be very judicious with the number and size of support used especially on the more delicate pieces such as the headlights.

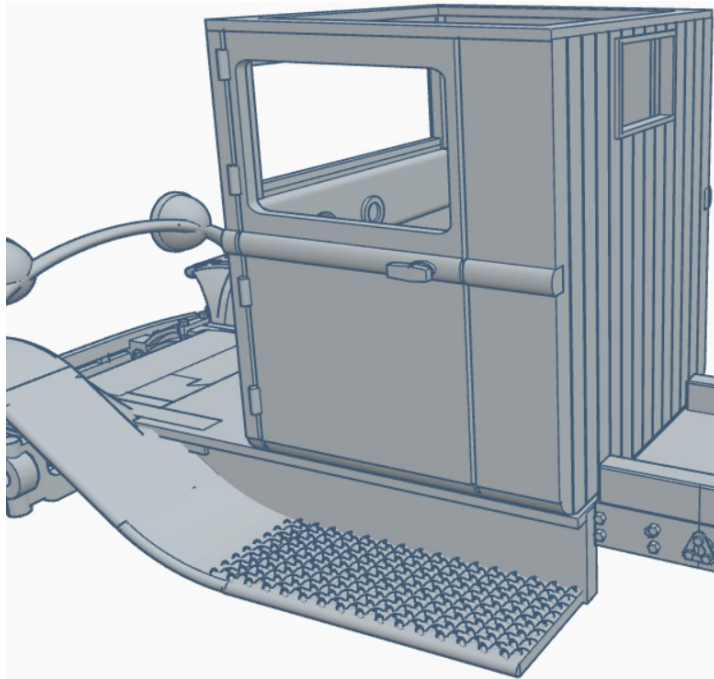


Assembly: After successfully printing all of the parts, start assembly with the two chassis halves.

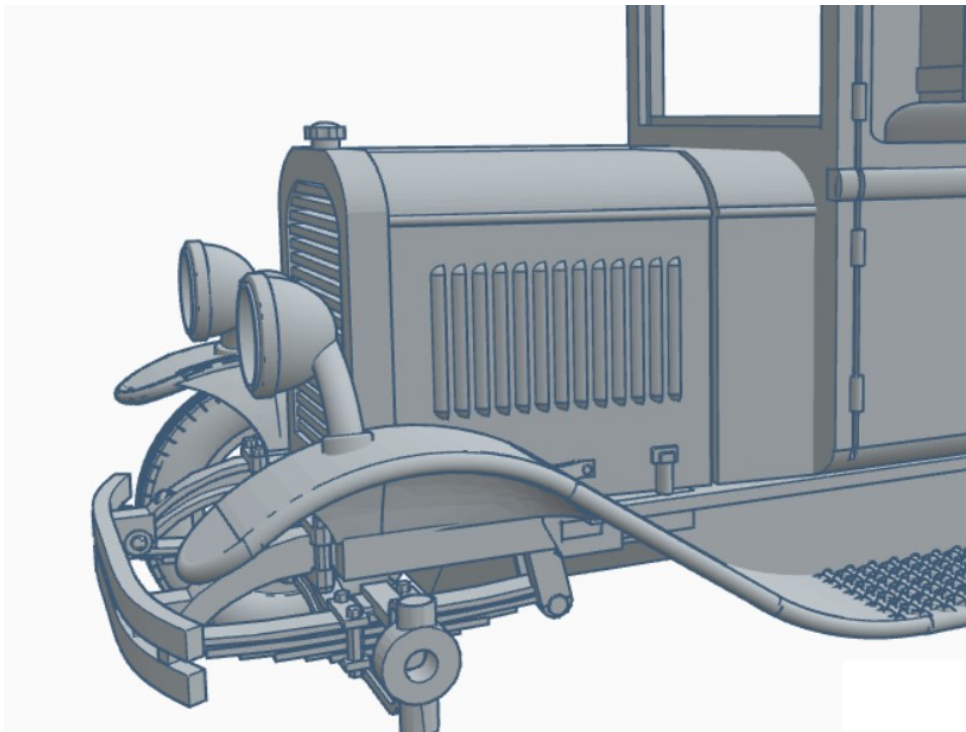
Chassis. Assemble the front and rear frames (chassis) together by sliding the extension on the front frame into the 'U' channel on the bottom of the rear frame as shown below. Be sure to use sufficient glue as this needs to be a strong joint. **TIP:** You may wish to stop and paint the frame at this point before adding the cab, hood and other pieces.



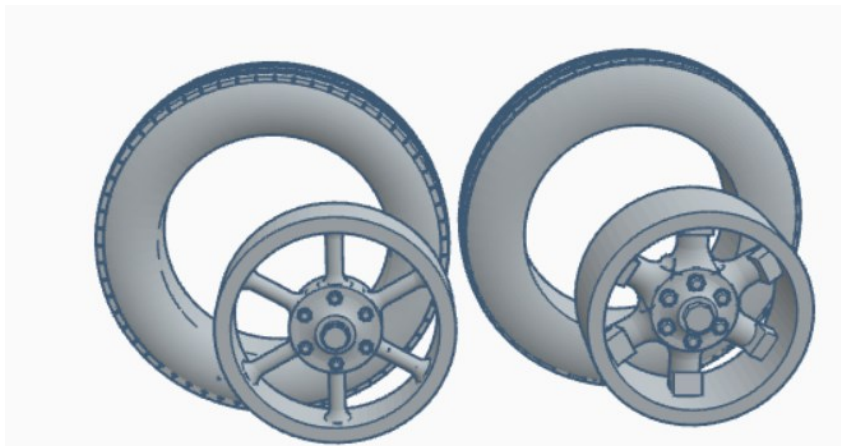
The cab sits centered on the frame with the back of the cab flush with the joint between the two frame sections.



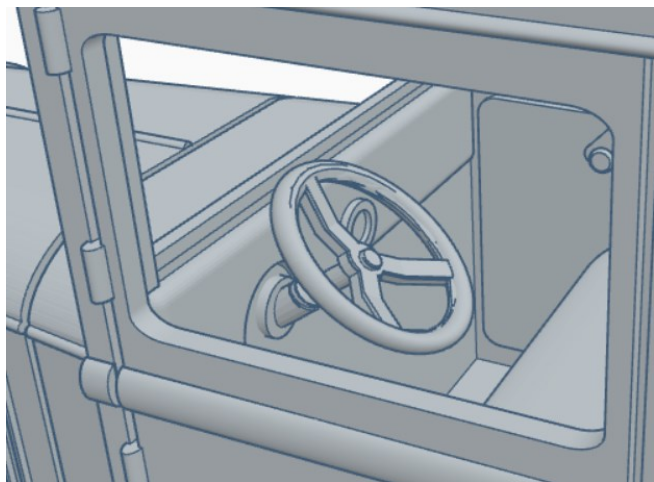
The hood is then installed, centered on the frame and snug up against the front wall of the cab.



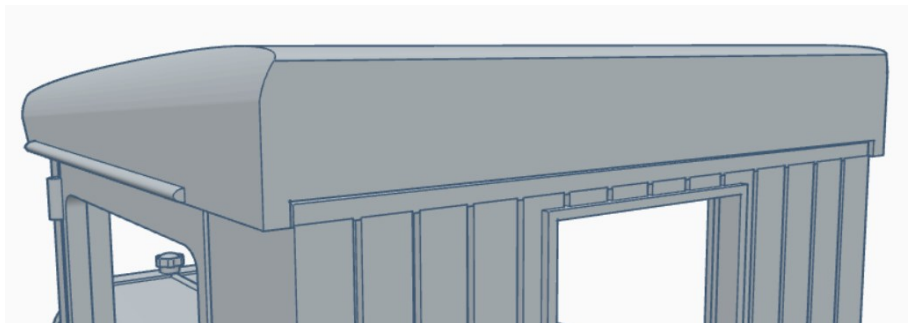
Wheels: Tires and rims are separate pieces to facilitate painting. There are two different rim/tire styles. The tire/rim on the left is for the front of the truck. The larger heavier duty tire/rim shown on the right are for the rear. Once painted, glue the two pieces together for mounting on the truck. The wheels will be mounted last.



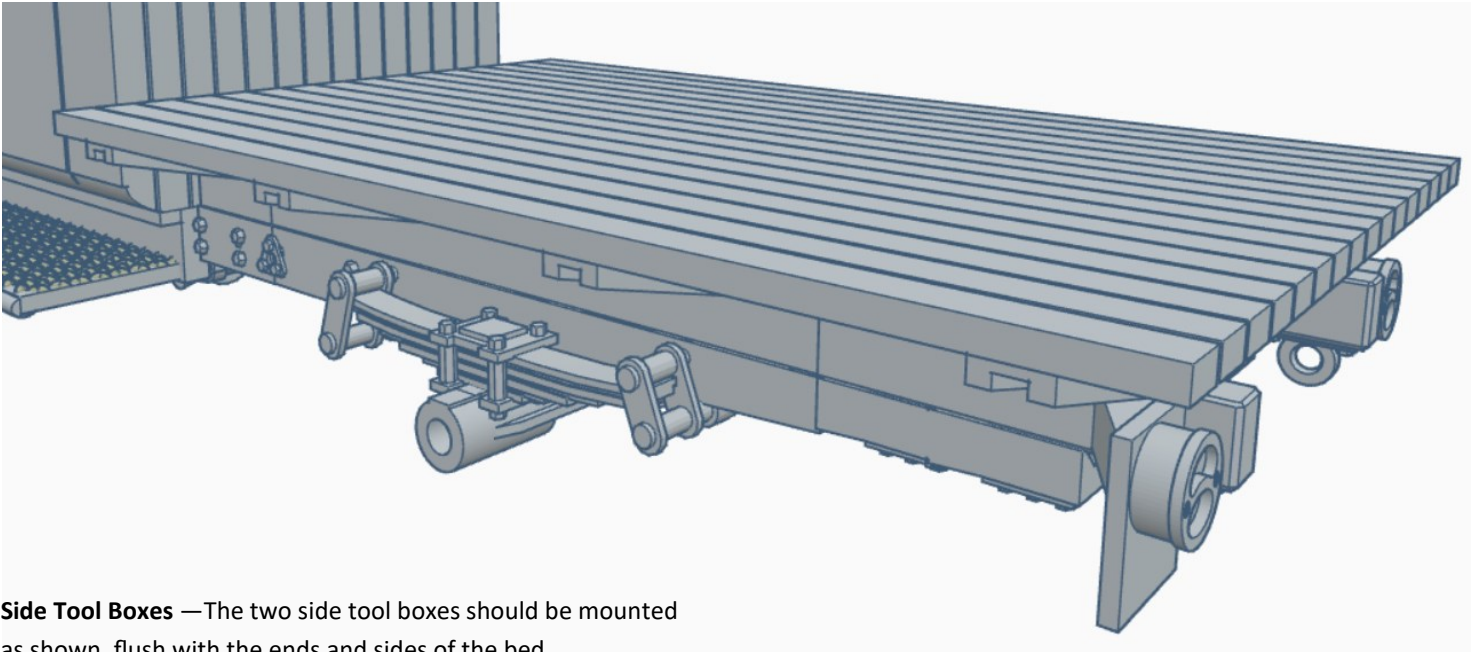
Steering Wheel: The steering wheel is easier to install if you do so before adding the roof. It fits into the curved recess on the dash.



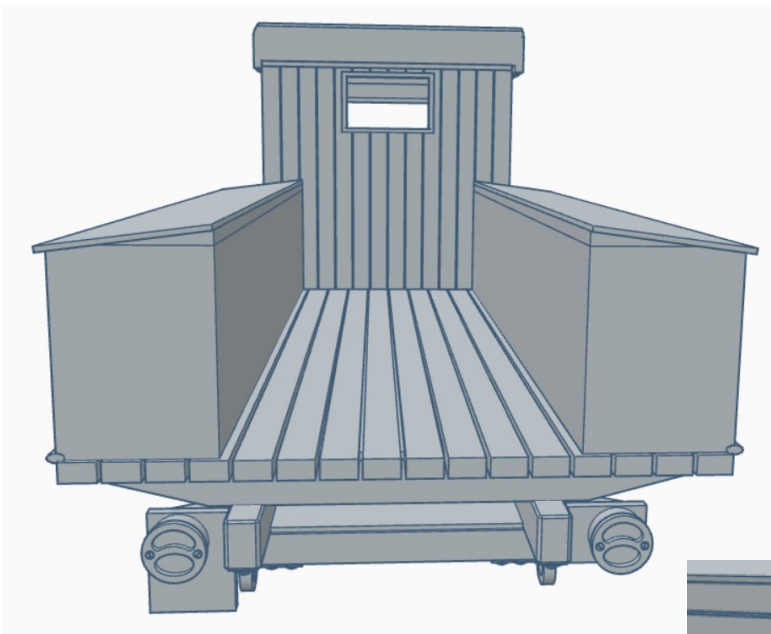
Cab Roof: The top of the roof is a separate piece that fits over the cab frame and is aligned flush with the back of the cab as shown below.



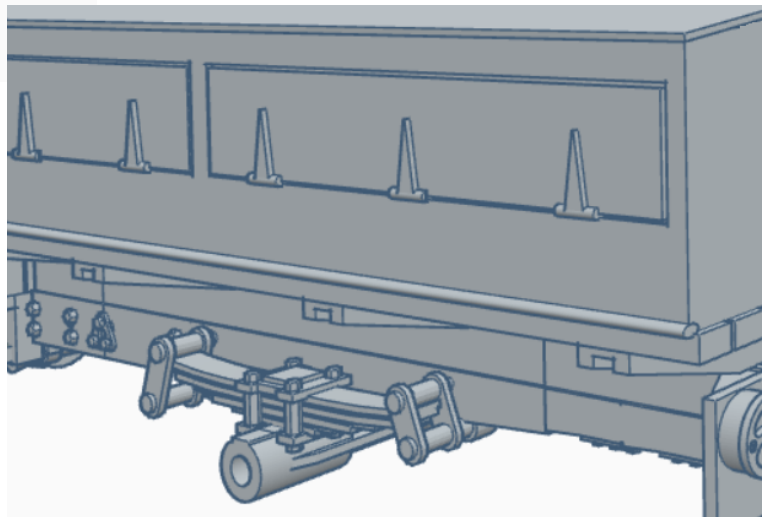
Truck Bed —The photo below shows the truck bed mounted on the lower rear frame. The bed should be centered on the rear frame with the front end flush with the back of the cab.



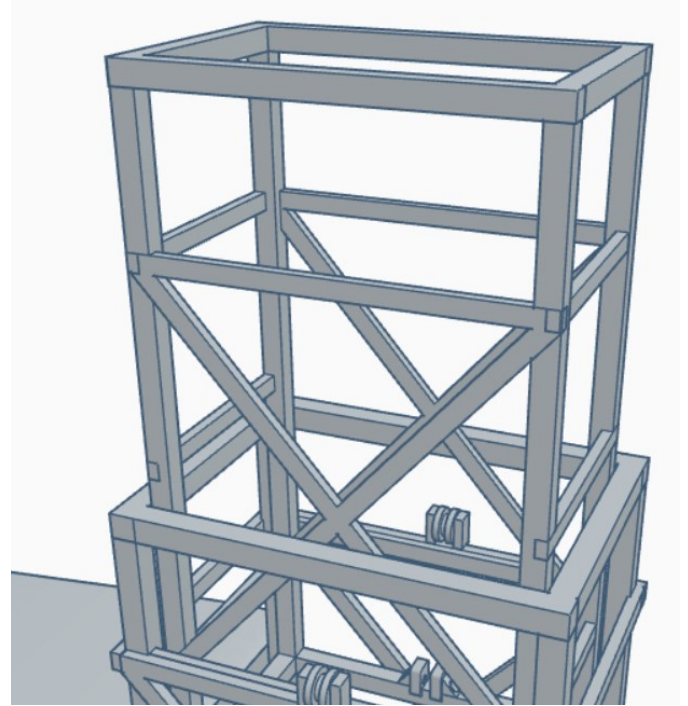
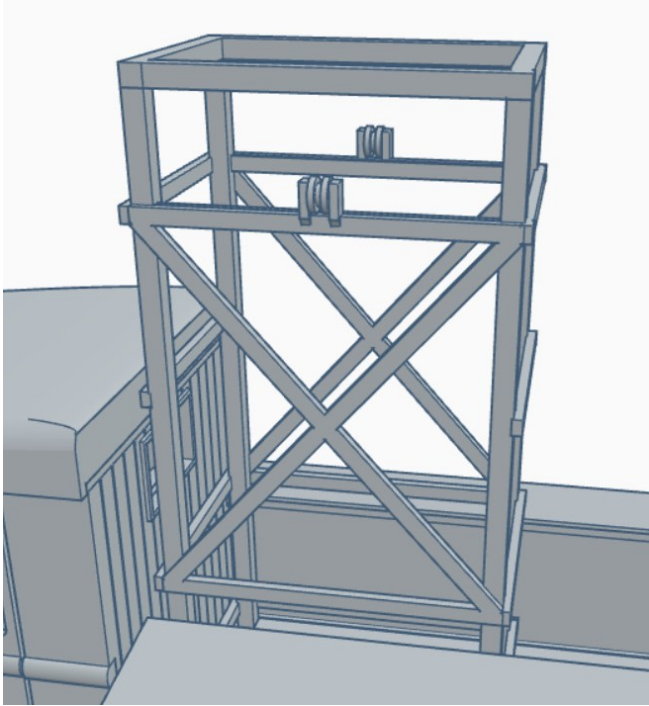
Side Tool Boxes —The two side tool boxes should be mounted as shown, flush with the ends and sides of the bed.



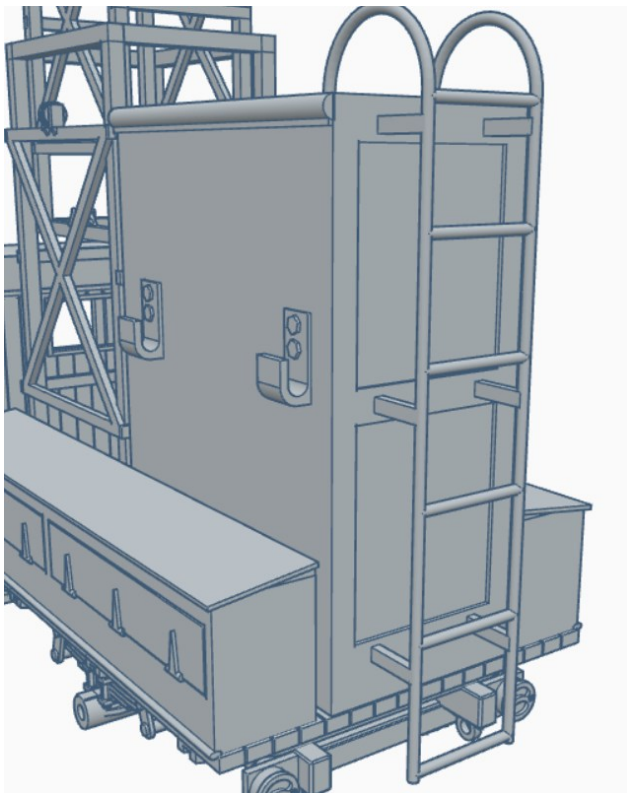
The boxes should also be mounted with the hinges pointing upwards as shown below.



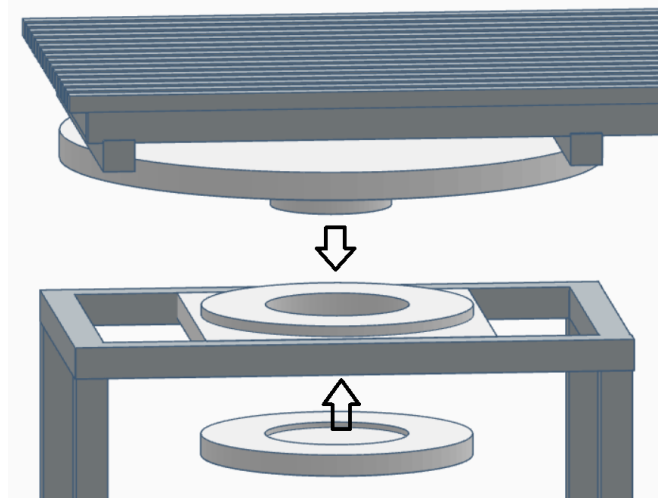
Tower Frames: The tower is designed so the smaller upper section fits inside the larger lower section. In that way, the tower can be set up in either the raised or lowered position. Some sanding may be required to ensure a good fit. Alternatively, you can print multiple copies of the tower and set one up as extended and the other as closed and swap them out on your layout as the scene requires.



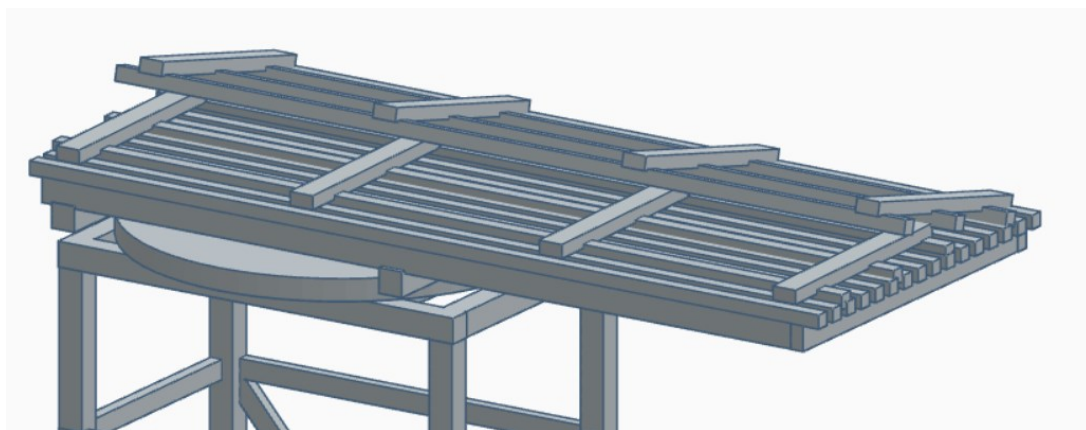
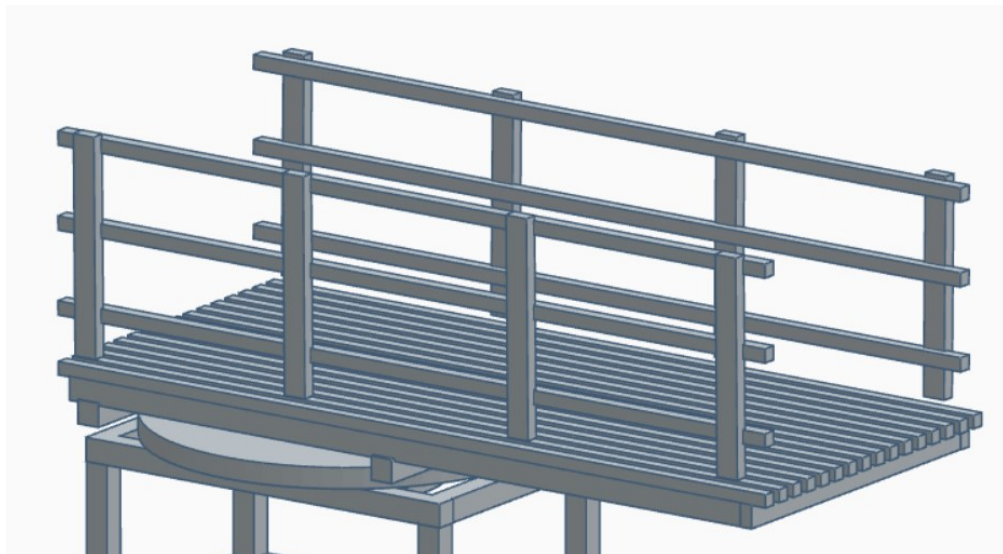
Large Box and Ladder: The large box with the ladder are installed between the two side tool boxes and with the box end flush with the back of the bed. Make sure the lower tower frame has room to fit between the box and the back of the cab.



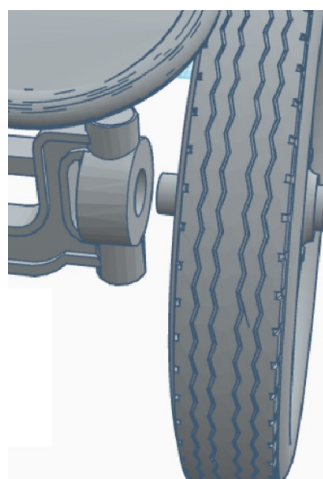
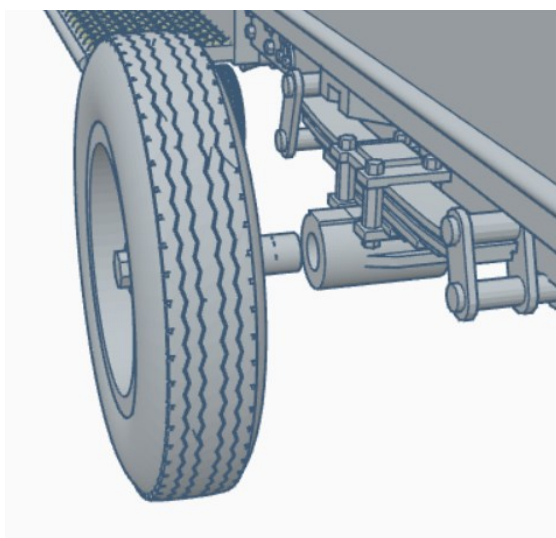
Rotating Plate: There are two parts to the mechanism that allows the tower platform to pivot sideways for better access to the overhead wire. The lower plate with the hole is glued to the top of the upper tower frame section centered all around. The upper plate is glued to the two large beams underneath the platform. Do not glue the upper disc to the lower tower unless you don't want it to be able to rotate. Optionally, Glue the lower disc stop to the bottom of the rotating pin if you don't plan to swap out the platform at any time.



Tower Railings: To display the tower in its raised position, the railings should be mounted as shown in the first photo below. To display the tower in its retracted position, the railings should be glued as shown in the second photo. I recommend printing multiple copies of the tower platform and associated pieces and assembling one as raised and one as lowered. The platform can then be swapped out as needed for a particular scene.

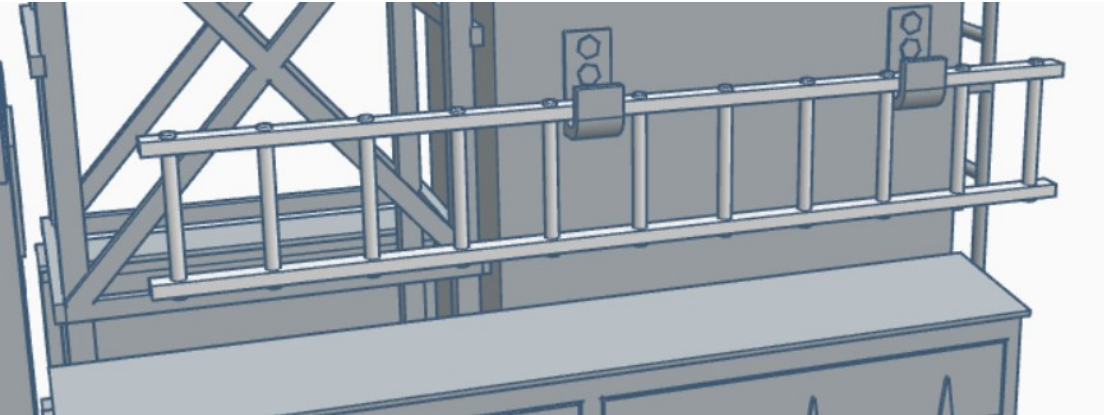
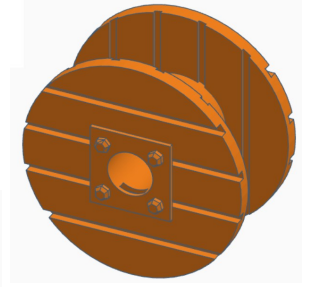


Wheels: The model is not designed to have wheels that roll nor have front wheels that can turn. The wheels are designed to be glued in place for static display. Glue the wheels into their corresponding holes in the axles. You may need to drill out the holes or sand the axles on the rims to get a good fit.



Wire Spool: A model of a small, wooden wire spool is also available to use as an extra detail on or around the line truck.

Ladder: Files for two different sizes of ladder are provided. These can be hung on the side or anywhere else you choose.



Finishing: As with any model there is an unlimited number of options for finishing. I recommend a fine surface primer (e.g. Tamiya Fine Surface Primer) be used to avoid masking the details.

I hope you have enjoyed building your model! Please send any photos of models you have completed to me at 3dprint@reighn.com.

Prototype Photo: The picture below is of the prototype Five Mile Beach Electric Railway Line Truck on which the model is based.

