



Pressed Steel Car Builders photos. National Library and Archives Canada.

Road	# Series	Quantity Built	Month-Year Built	Builder
G.T.W.	145400 - 145699	300	6,7-44	Pressed Steel Car

**History**

With the rationing of steel during World War II, the railroads were forced to turn to composite construction for freight cars. This was caused by the short supply of steel sheet in particular. War emergency composite Gondolas were built for ATSF, PRR, N&W, NYC, CRI&P, ERIE, RDG, CNJ and **GTW**, which is the subject of this mini kit.

While most roads opted for drop end gondolas the GTW cars were built with fixed ends, using a car builder style end of Pressed Steel Car design. GTW started replacing the wood sides with steel plate in the mid 1950's but there were still a few with wood sides remaining in 1960.

**Parts Included in this kit**

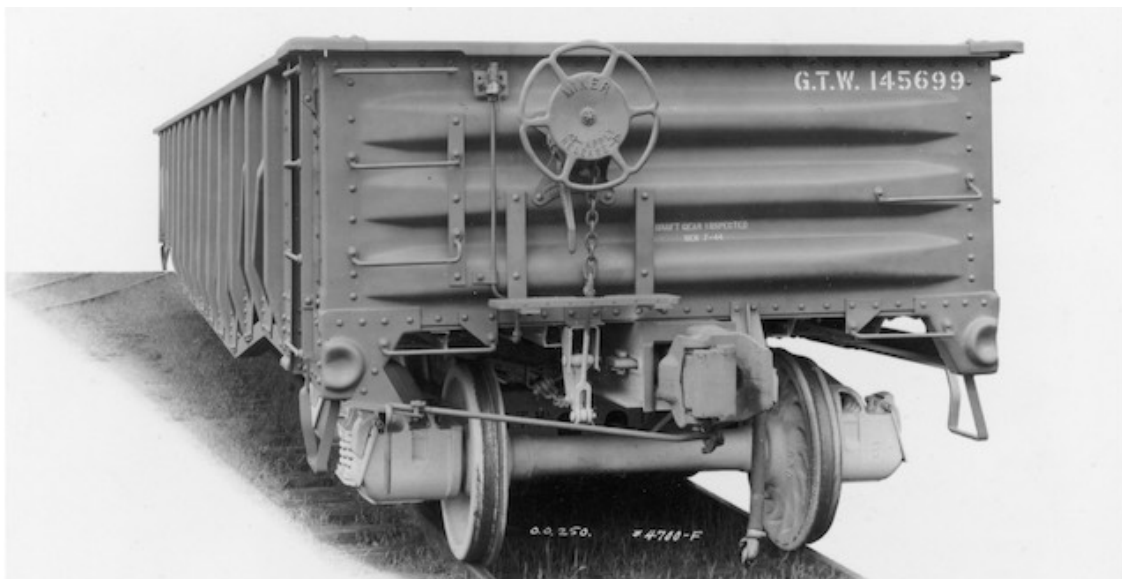
- Resin Ends and detail sheet (ladders, brake housing etc)
- Etched Brake Step
- Decals from Black Cat Publishing

**Parts the modeller will need to supply**

- Tichy War Emergency Gondola Kit
- Kadee Miner Brake Wheel
- A line sill steps
- Couplers
- Paint

**Suggested optional parts**

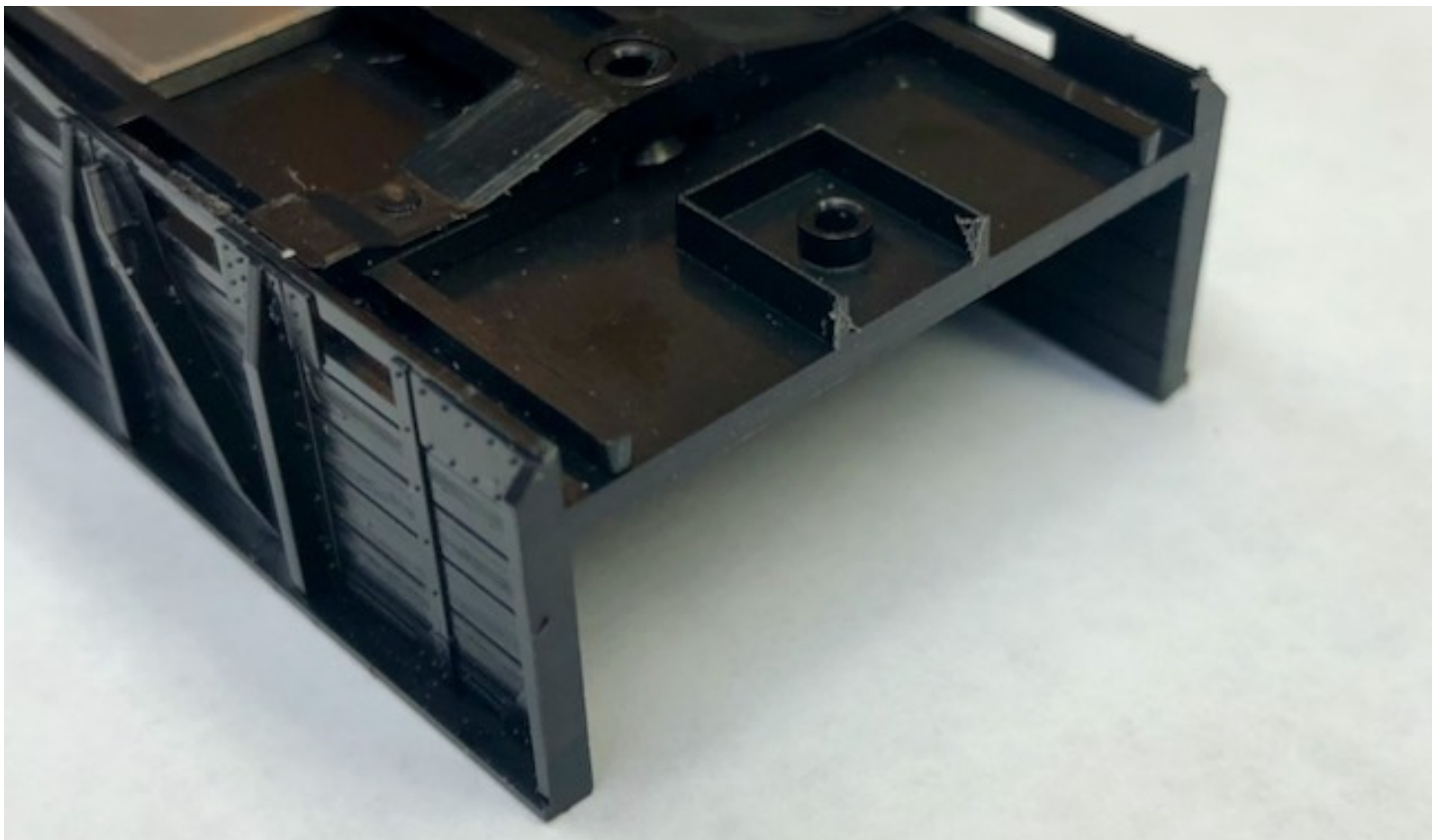
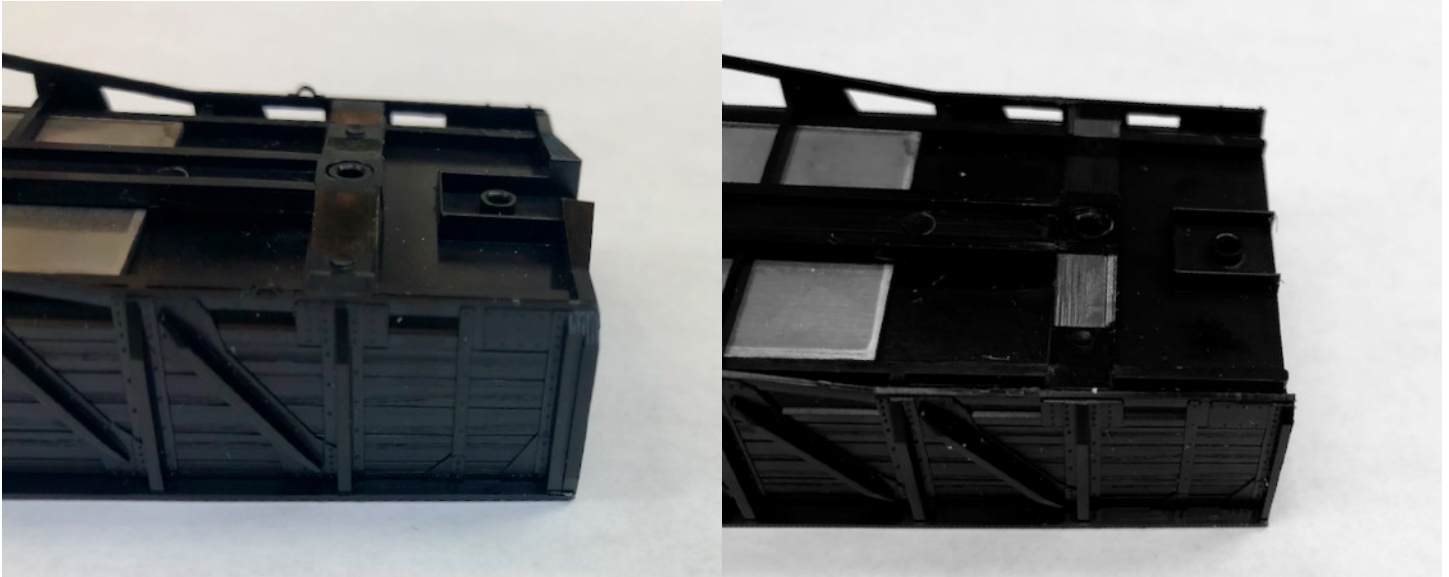
- Yarmouth Model Works etched brake levers and air hose brackets.



**Instructions**

Start the conversion by removing the cast on sill steps and towing staples. Next glue the weight in place and affix the under frame. Remove the brake housing mounting plate from the B end.

Using a razor saw/mill file or milling machine, remove the drop end frame from both ends of the car up to the point shown on the photo to the right and bottom. The left photo shows the end of the car as molded.



Using a sprue nipper and modelling chisel remove the remaining flange on each corner of the end.

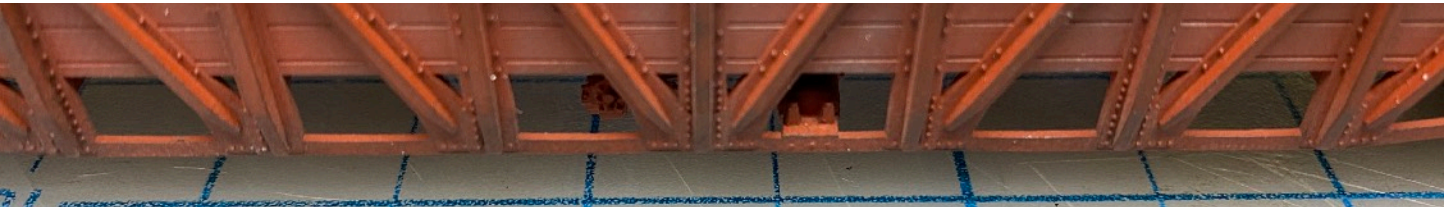


Prepare the brake cylinder, reservoir and AB valve by glueing them together and drilling holes for piping. Remove the Tichy cast on **reservoir** mounting tabs from the under frame as it mounts on a different location. Glue the cylinder into position per the Tichy instructions. Drill a hole for the AB valve mount post in the under frames cast on strap. Glue the AB valve into position so the dirt collector points to the B end of the car.



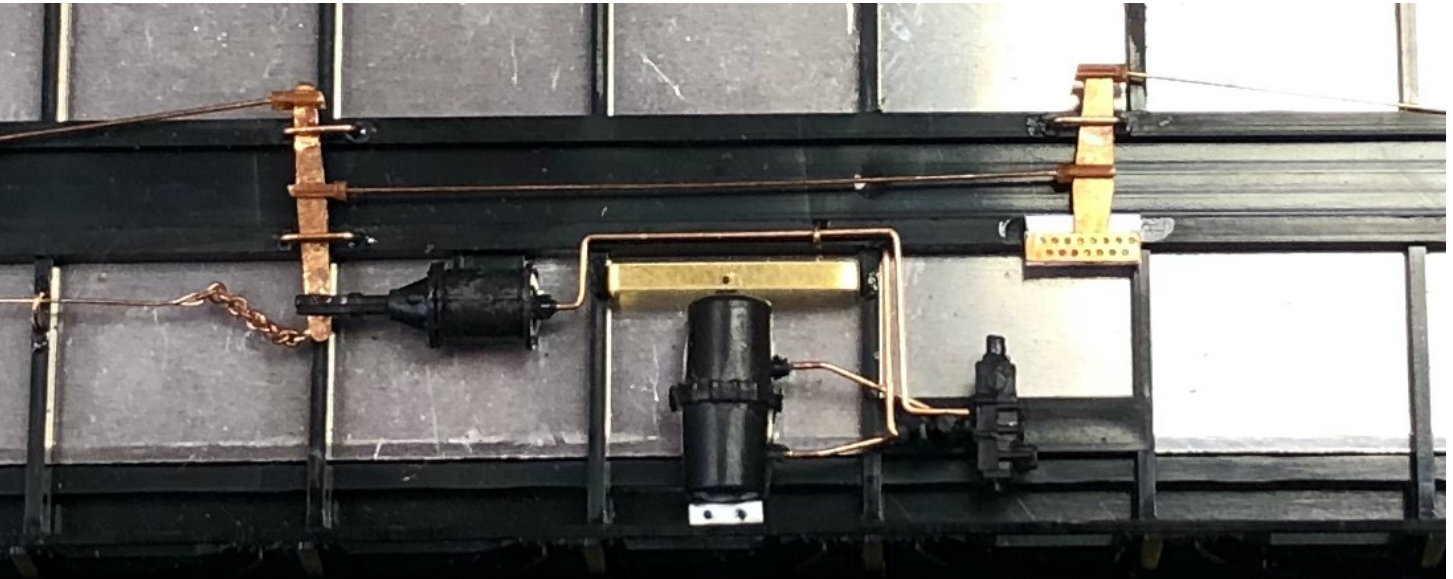


Sand the 0.010" x 0.080" x 0.130" long casting with two rivets free of the resin detail sheet and mount to the



end of the reservoir which has two fastening points. Glue the reservoir into position by glueing the mounting plate to the top end of the lower side sill as if you are looking down to the rails.

Fashion a mount for the inner end of the reservoir from brass strip or styrene strip. It should be glued between the cross ties and extend down to the rails so that it supports the end of the cylinder. Mount the

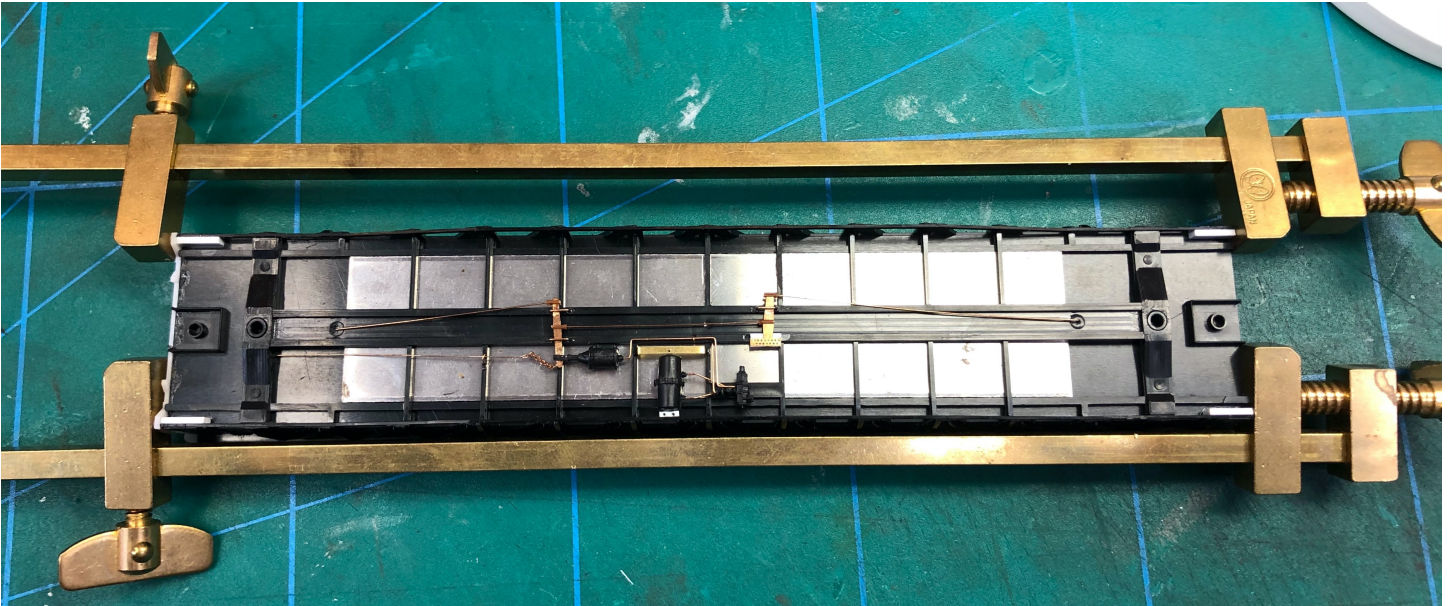


slack adjuster casting to the centre sill as shown. Drill holes and glue into place the brake lever hangers. For the pilot model, custom sized ones were bent from 0.010" phosphor bronze wire. Glue the brake levers into place. Glue the slack adjuster cover into place. It is the part with the grid of holes in it. Add the brake piping using 0.012" phosphor bronze wire and the brake rods using 0.010" phosphor bronze wire. The brake rods should terminate into drilled holes in the centre sill.

A piece of 40 links per inch chain can be used to connect the manual brake rod to the end of the cylinder lever. Fashion a hanger for the manual brake rod lever from 0.010" wire in the shape of a "U" and mount it to the cross tie by drilling holes and pressing it in with a drop of glue for good measure. The other end of the manual brake rod should terminate into a hole drilled into the side of the bolster close to the centre sill to prevent contact with the trucks.

Prepare the end castings by cleaning the resin parts of any remaining mold release. Cleaning with 'Shout', Orange type degreaser or dish soap and water will all give satisfactory results. Remove flash from the resin ends by sanding on a flat surface such as plate glass or a bench top. 200-grit sandpaper works well for this. Take your time and make sure to sand the parts to an even thickness. Rotate the part as you go to ensure you don't sand any one area more than the rest of the part. If the castings have any small pin holes, they can be filled with auto body glazing compound or Squadron filler for plastic models.

To glue the ends to the car body, first position the body upside down on your work surface. Using bar clamps clamp one end to the car body and wiggle into position with the top of the end is also resting on the work surface. Tack into place with CA along the floor. Repeat for the other end. Flip the body over and glue



along the side of the end, on the inside of the car body. Make sure there are no gaps and reposition your clamps if needed for a good fit. Add the four corner stiffeners from the kit.

Mount the brake housing and retainer valve to the 'B' end of the car. The Brake housing can be glue directly to the end. The retainer valve needs to be hung away from the end slightly so that the retainer pipe can enter it and not interfere with the ribs on the end. To do this drill into the back of the retainer valve and install a short piece of 0.010" phosphor bronze wire. Drill a corresponding hole into the end and slide the wire and retainer valve into the hole so that the back of the valve is even with the ribs on the end. Trim the short wire even with the inside of the end. Add the retainer pipe using 0.008" phosphor bronze wire. Glue the brake housing release handle to the lower left hand side of the housing. Add the brake rod and bell crank to the car end.





## MK108 GTW War Emergency Gondola

Glue short length of styrene strip behind the side sill in the location of the sill steps, as the sills themselves are too thin to drill mounting holes for the A line sill steps. Drill holes and mount the sill steps.



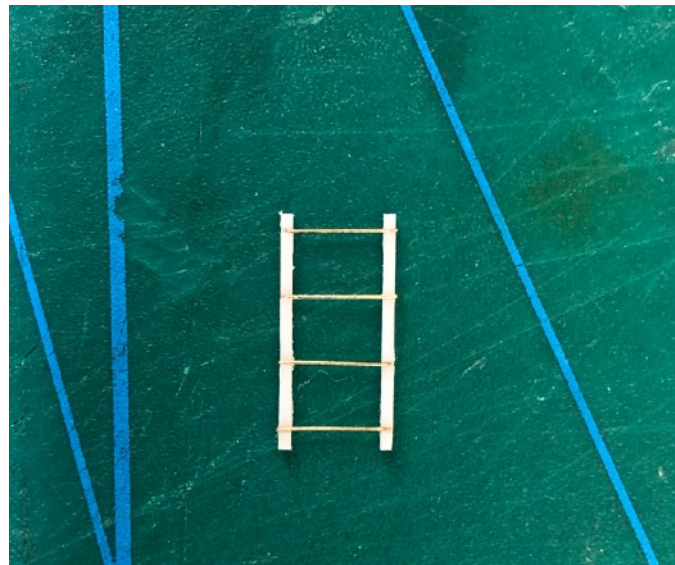
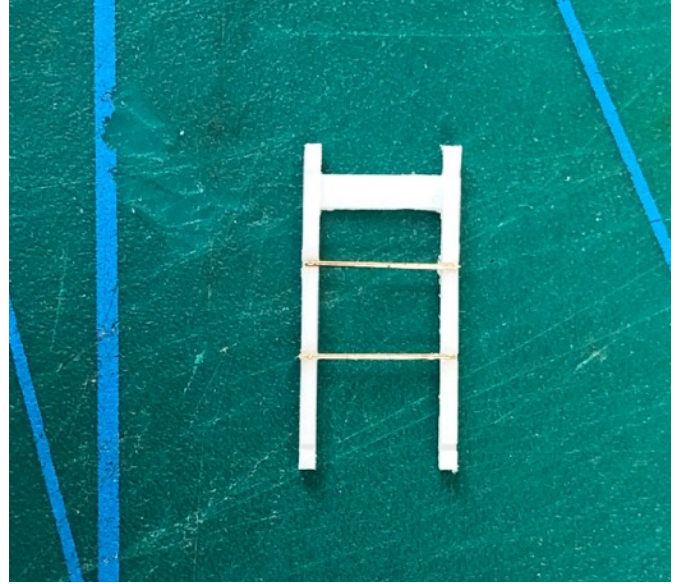
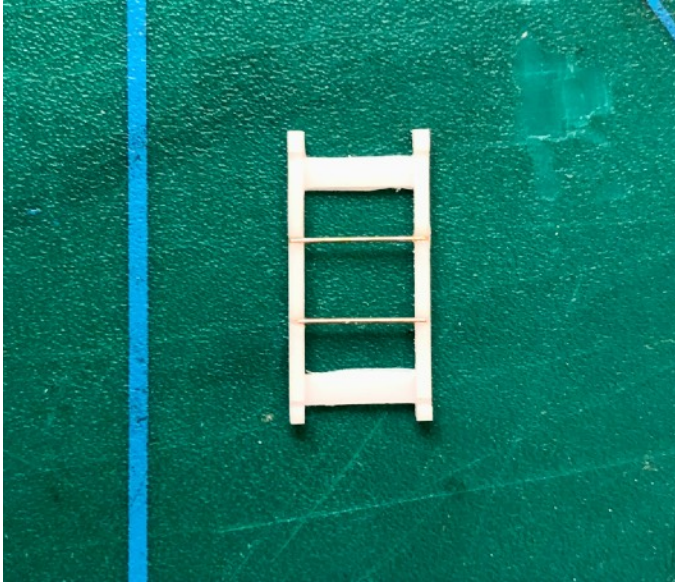
Glue in place the right hand ladder style to the end. They are the shortest ones on the resin detail sheet. Follow up by drilling and glueing the rungs in place. Note the lower rung is a combination drop grab/straight grab. The pilot model grabs were formed from 0.010" phosphor bronze wire. Add the remaining end grabs as shown in the photos.

Bend the legs of the brake step 90 degrees and glue the brake step in place. Pin the step in place with short pieces of 0.012" phosphor bronze wire. Form cut levers and attach with wire eye bolts or form a prototypical cut lever hanger out of brass shim as was done on the pilot model. Add brake hoses with the mount of your choice.

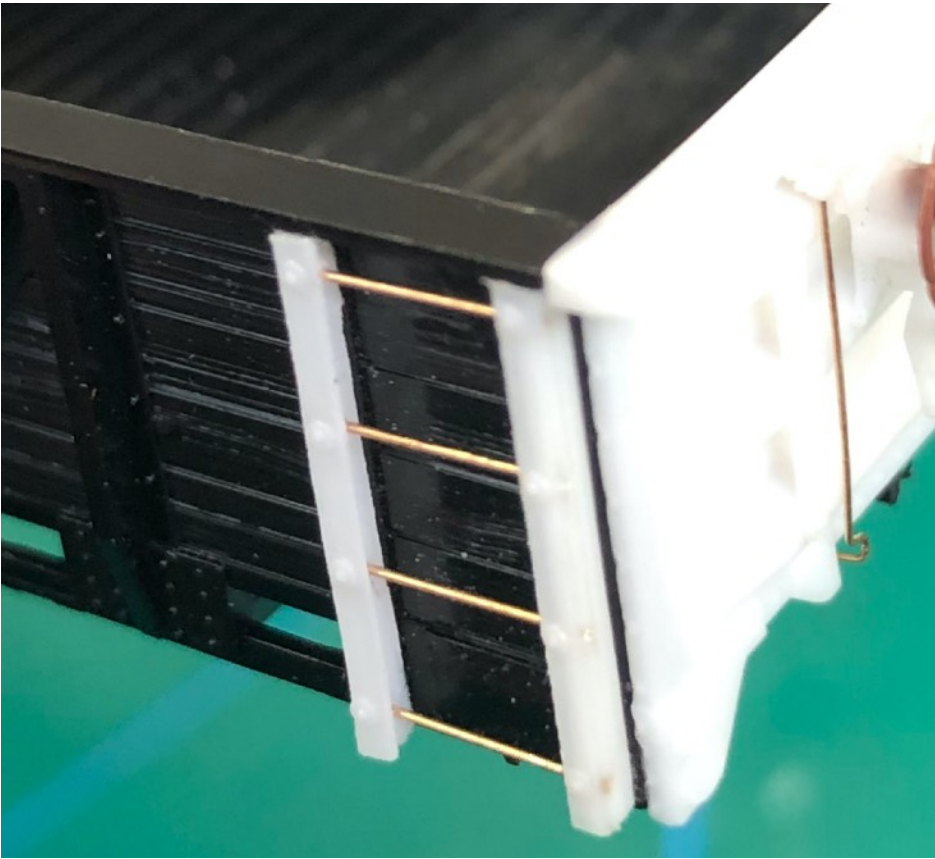




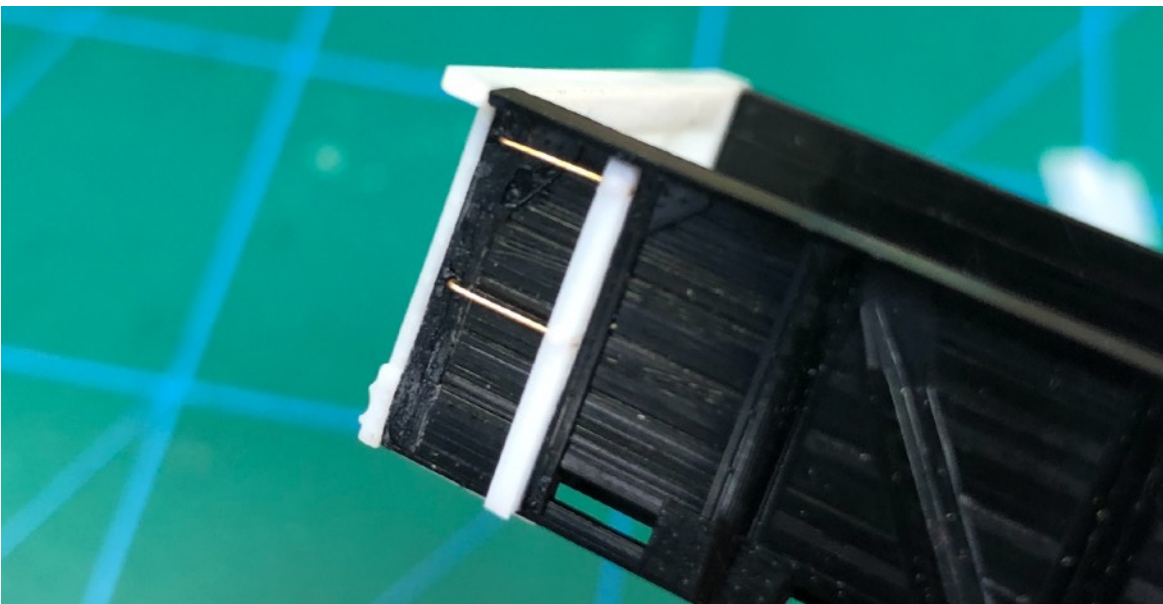
The final step of construction is the side ladders. Start by sanding the right hand ladder frame from the resin sheet. Do not remove the cast straps between the styles at this time. Cut short lengths of 0.010" phosphor bronze wire and glue into the two middle rung locations. Cut the bottom strap free and then glue in the bottom rung. Then cut the top strap free and glue in the last rung. Add the cover plates with rivets to each style. Repeat for the second right side ladder.



Glue the ladder assemblies into place as shown.



For the left hand side grabs, sand the single ladder style from the resin sheet. Glue into position as shown in the below photo. Drill holes in the car body and form wire grabs from 0.010" phosphor bronze wire. Glue to the car body holes and into the grooves in the ladder style. Glue the cover plate with the rivets into place.





## MK108 GTW War Emergency Gondola

Install Trucks and Couplers. The Tichy trucks included in the kit are closest to the prototype available representing ARR Spring plank less trucks of 70 Capacity.

Before painting be sure to clean the model with mild soap using a soft toothbrush. Let it dry completely. A primer coat will always yield better results in your paint finish. Take this opportunity to spot sand out any imperfections before applying the top coats of paint. The pilot model was painted with Tamiya fine surface primer using an airbrush. Scalecoat CN#11 mineral red paint was used for a top coat. If you use a different brand paint, make sure it has a gloss finish or apply a gloss coat prior putting on the decals.

Apply the decals using water or Microscale Microset. Allow them to dry completely before applying setting solution like Microscale Microsol. Just touch the decal edge with your brush and let capillary action pull the setting solution under the decal. Seal the decals with Tamiya XF-84, or your favourite clear flat. Weather the car using your favourite mediums. The pilot model was weathered using a combination of Pan Pastels and oil washes. Congratulations you're done.

Thank you for purchasing this Mini Kit. National Scale Car thanks Ted Culotta and Allen Ferguson for their support in bringing this kit to market. Prototype photos are courtesy of Ted Culotta. The castings are the property of National Scale Car and may not be reproduced in any form.

