

Freight Cars of Every Description

# Louisville & Nashville 50000-59999 Series (Original Numbers) 50 ton, 40' Drop Bottom Steel Gondola (Kits 17.1 and 17.2)



# **Introduction**

Thank you for your interest in Resin Car Works and this kit. Resin Car Works is not a business in the traditional sense. Its purpose is to share in the fun of prototype railroad freight car modeling to provide unique and different equipment that isn't readily available. Several friends assisted with various production phases so it's not quite a one-man operation. To list a few who helped with the production of this kit I would like to thank: Tom Madden for his casting work; Dave Campbell for the decal artwork; Ken Soroos for his help with formatting the instructions; and Eric Hansmann the keeper of the website and blog.

This is a "CRAFTMANS" level resin kit and its construction should not be attempted by anyone who has not built similar types of models or who doesn't have a knowledge of prototype freight car construction and components. The kit consists of a one piece resin body, floor and detail parts; Tichy Split K brake set and turnbuckles; assorted wire sizes and grabs; Precision Design Company decals; A-line stirrups; and Tahoe Model Works Dalman truck sideframes. The modeler is to supply any small styrene bits, couplers, weight and small screws needed to complete the model.

## **Warranty**

All sales are final. There will be no exchanges or returns. Resin Car Works will replace any part(s) found to be defective due to manufacturing or shipping to the original purchaser within the first 30 days after shipment. The damaged part(s) must be sent back with your request for replacement. As these are limited production kits don't ask for replacement of parts that you damage or lose after the 30 day period.

#### **Liability**

Resin Car Works will not be responsible or held liable for any and all personal injury and/or health problems, short and/or long term that may result from the use and/or misuse of tools, adhesives, materials, castings, paints or any other product(s) used to construct and/or contained in this kit. This kit contains polyurethane castings. Although non-toxic in its cured state, dust is created during filing, sanding and drilling. Air circulation and/or ventilation should be provided. Always work in a well in a well-ventilated room. Wear a dust mask or respirator and safety glasses for projection. Always wash your hands when you're finished working.

### **History**

(See L&N Steel Gon History)

# Construction

It's recommended that before you start construction that you familiarize yourself with the additional information and photos on the Resin Car Works website <a href="https://www.resincarworks.com">www.resincarworks.com</a> that pertain to this kit.

First give the resin parts a good cleaning with Dawn dish detergent and a toothbrush to remove any mold releasing agents. A light sanding of joints also helps parts to bond.

- The cast parts are best attached with ACC. When the term "cement" is used in these instructions, it refers to ACC. ACC is a strong adhesive which dries quickly. It can easily attach a part where it is not supposed to be. It will glue skin. Be careful. Place a few drops on a plate of glass and use a wire or pin to transfer small amounts of ACC to the area to be joined. Always wear safety glasses. ACC debonder is a useful tool for removing smudges of ACC from surfaces where it shouldn't be. Place a drop on the offending spot and wipe up.
- GOO or other such products are not recommended for construction except in small quantities as it will soften the casting material.
- > When a measurement is given it's in prototype feet and inches.
- When the word "scrap" is used it is referring to an item that the modeler is to supply.

## 1. Basic Body

As this is a one piece body kit most of the hard work has been done in creating the basic car shell. As I like to get the nasty tasks done first. Clean the resin parts of any flash and drill the holes for the various parts. I generally use a #79 drill for all the grabs and #76 for the stirrups. Refer to the prototype photos as to the location of the grabs and stirrups.

Remove the pour gate in the center of the car and file smooth.

Drill and tap coupler boxes and bolster for 2-56 screws.

Install weight of your choice. I used some 0.030" thick stamped sheet steal from the scrap box. One choice would be thin lead sheet which is available from McMaster-Carr at <a href="http://www.mcmaster.com">http://www.mcmaster.com</a>. As it is lead remember to wash your hands after installing the weight. Install the floor but note that the drop doors are offset. Align the floor with the doors on the bottom of the gon.

Install the 12 small triangular gussets on both sides between the floor and side as per the model photos. These face into the center of the gon (see model photos 1 and 2).

Now's a good time to install the grabs and stirrups. The A-line stirrups are a little long compared to the prototype. If you wish, correct ones can be bent with flat copy machine staples using the bending jig on the resin parts sheet (it is right next to the coupler pockets). As the two bottom grabs on the sides and ends are half drop and half straight, they will have to be reformed to fit the prototype location (see model photo 9).

#### 2. Underframe

The bottom door locks were composed of a rod through the car sides and center sill, with chain connecting the rod to the doors. The locks and ratchets were located on the left side of the car as you look at the "B" end (the "B" end has the two vertical braces for the brake step). The right side had bolts which held the door rod. The doors were dropped by releasing the ratchet. To close the doors, the handle was used to ratchet the doors back up. There are two means to model the drop mechanism, resin "rods" or 0.020" wire drilled through the sides and center sill, and the wrapped chain. The model shows the resin rods being used. Trim these to fit and install (see photo 3). The photo is oriented with the B end to the right. Or you could skip this part and model a car where the drop doors had been welded shut.

The kit provides Tichy plastic split-K brake parts or resin "AB" ones. You'll have to pick which one you what to install. Reference the location of "AB" brake components and clevises using the model photos (4, 5, 6, 7 and 8). The levers locations would be the same for a spilt-K setup. An extra clevis is used to bring the brake rods into the center of the car to clear the drop doors. The end bracket for the extra clevis is a scrap piece of tapered 4"x12" styrene. It you have more skill then myself, you could attempt a metal one. Now install the various brake components and connecting piping using the 0.010" wire.

Install brake rods with 0.0125" wire using the Tichy turnbuckles with one end removed as clevis (again reference photos 4, 5, 6, 7 and 8). Also install a small piece of scrap chain between the clevises at the brake cylinder.

## 3. Final Detailing

Locate and attach the drop door ratchets on the left side of the car as you look at the "B" end (see photos 9 and 11). Locate and attach the bar bolts on the right side of the car (see photo 10). If modeling one of the renumbered cars, check prototype photos to see if the rachets and bolts remained or had been removed.

Install the retainer valve just to the right of the grabs on the left side on the end. Run a piece of 0.010" wire from the retainer valve through the top of the end sill (see photos 9 and 10). Cut one of the A-line stirrups in half and install at the bottom of the two brake step supports. Install the ratchet hand brake drilling a hole in the bottom before attaching it to the end. Install the bellcrank (?) using the Tichy part or bending one from a flat staple. Attach a piece of scrap 0.015" wire between the hand brake and bellcrank. Attach the lever to the hand brake. Form a brake step from a piece of scrap 1"x10" styrene or use the Tichy part (again reference photos 9 and 10).

Thin the Carmer cut levers by sanding on a piece of 240 sandpaper and attach to the small pads on the end sill. There are also brass Carmer available from both Yarmouth Model Works and Plano Model Products if desired.

Install couplers of your choice and your model is now ready for paint.

# 4. Painting and Lettering

Before painting wash the car again with Dawn dish detergent, rinse and left dry.

As per the freight car color chart in Railway Prototype Cyclopedia (RPC), Vol. 3, page 37, L&N's freight car color in the 40's was a red brown while in the 50's it was more to the red oxide side. I mixed up a 50/50 mix of Scalecoat Oxide Red and Boxcar Red #2. As my model is a repainted car the trucks were also painted this color.

The decals are from Precision Design Company. Nothing special about application, but it's recommended that there's water on the model for decal placement. I used Microscale Set (the blue bottle) for placement. Once the decals are dry several applications of Micro Sol (red bottle) were used to get the decals settled into sides. The decals were sealed with Scalecoat I Flat Glaze. Once everything is dry install the trucks. After weathering the model is ready for the layout. And don't forget to make the car/card for your new piece of freight equipment.

# 4. A note on trucks

The kit includes Tahoe Model Works #001 Dalman truck sideframes which as per the freight car diagrams cars is series 50000-51199, 51200-51699 and 55300-53999 where equipped with. The remainder of the series had a variety of trucks.

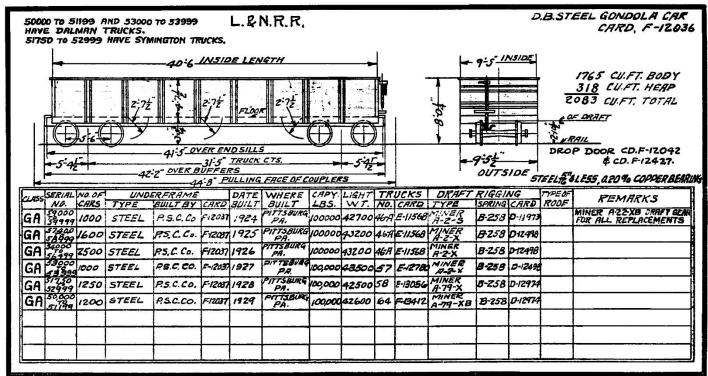




Photo 1



Photo 2

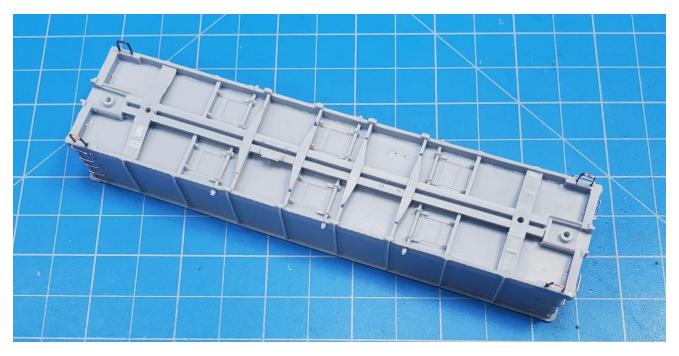


Photo 3



Photo 4



Photo 5



Photo 6

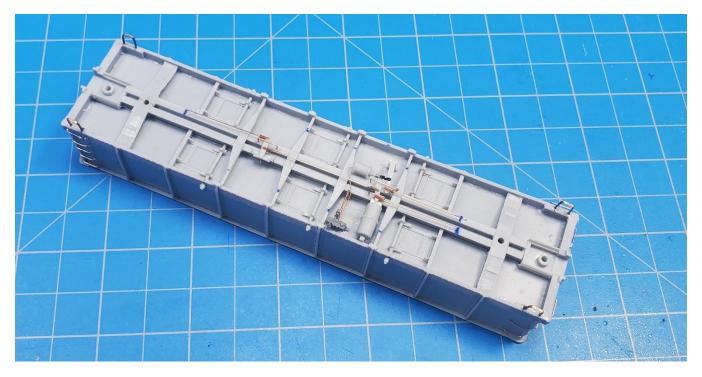


Photo 7

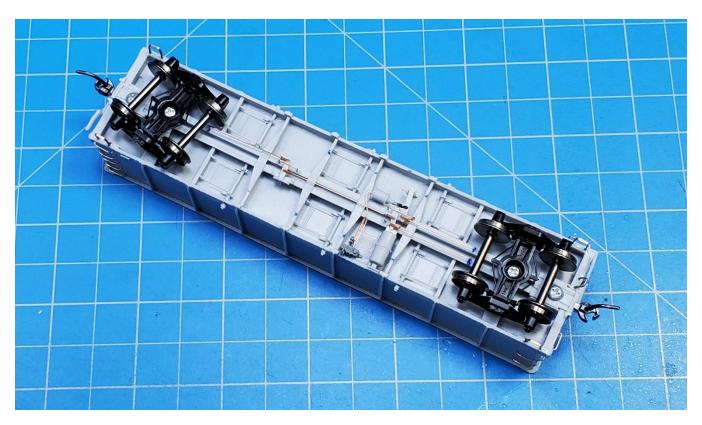


Photo 8



Photo 9



Photo 10



Photo 11



Left side with door latches



Right side no latches

