RESIN CAR WORKS
RCW

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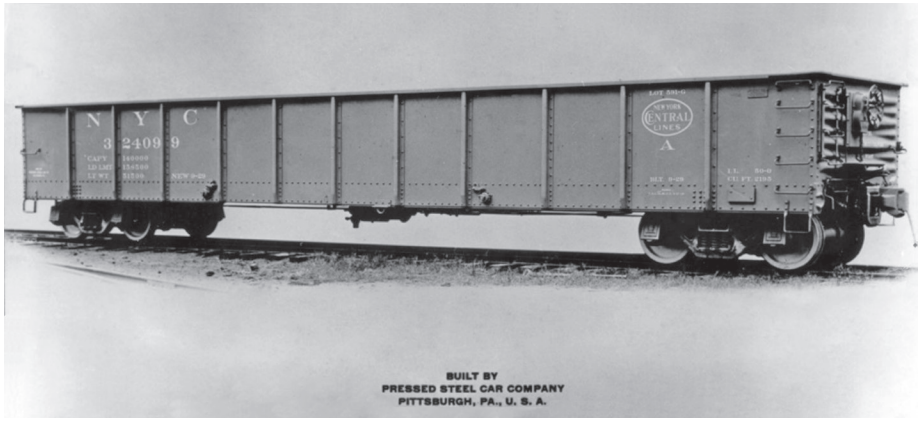
Freight Cars of Every Description

Kit No. 17.0

New York Central Lot 591-G 324000-324999 Series (751000-751999 Renumbered) 70 Ton 50'-0" IL Steel Gondola



NYC 324099, Pressed Steel Car Company photo, Rich Burg collection

NYC 751496, All Model and Construction photos by Frank Hodina

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; Pete Hall for building the first kit and drafting the instructions; Dave Campbell for the decal artwork; Ken Soroos for his help with formatting the instructions, insert sheet and labels; 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 AB brake set and turnbuckles; assorted wire sizes and grabs; Precision Design Company decals; and Tahoe Model Works 70-ton truck sideframes. The modeler is to supply any small styrene bits, couplers, weight and small screws needed to complete the model.

INSTRUCTIONS

The instructions and related materials are available in PDF form on the RCW website, www.resincarworks.com. This allows us to include car histories, in-progress model photos, completed model photos, and prototye photos. The website instructions also allow much more detailed step explanations, suggestions, and many in-progress kit-building photos. All photos can easily be enlarged on your computer or tablet. These should be very helpful in producing as accurate a model as possible with some meaningful background information.

Please locate and download this material from the RCW website as soon as possible after purchasing this kit. As with all web information, there is no guarantee that it will be available indefinitely.

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 and all 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-ventilated room. Wear a dust mask or respirator and safety glasses for protection. Always wash your hands when you're finished working.

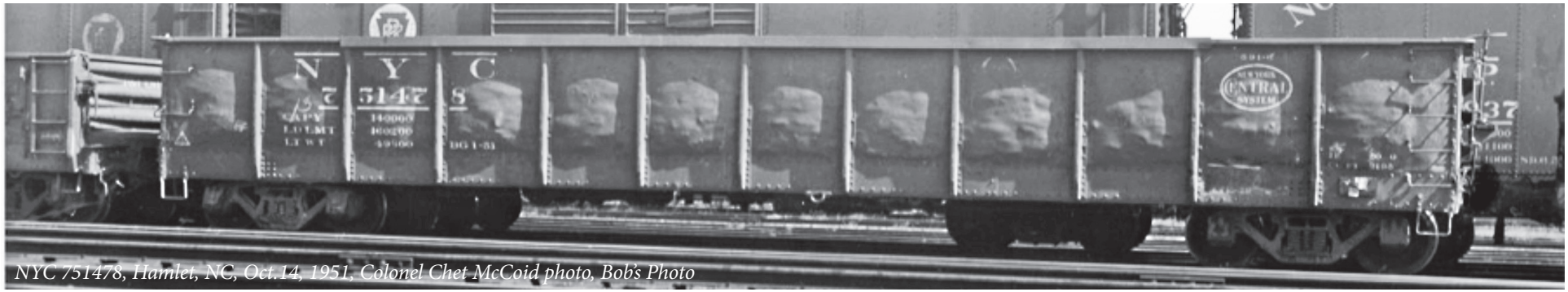
HISTORY

Pressed Steel Car Company constructed 1000 cars in 1929 under New York Central Lot 591-G. They were placed in the 324000 to 324999 series. 600 cars received horizontal Ajax power handbrakes while 400 cars were constructed with non-powered vertical hand brakes. We could not find a record of which cars received which type. When originally constructed, all cars had steel floors and four small drop-bottom doors. The cars had a 70-ton capacity and were generally of an AAR design with fixed Dreadnaught ends.

During World War II, as cars needed refurbishment, they were rebuilt with wood floors without steel doors and renumbered into the 751000 to 751999 series. Some cars retained the steel floors and drop doors during rebuilding, being placed in the 750000 to 750999 series. As the wood floors were a wartime expediency, they were replaced with steel after wartime restrictions on steel were removed. None of the 751000 to 751999 series received drop doors. The chart shows which series had which type of floor until just about all the cars had solid steel floors.

NYC Lot 591-G 50' AAR Style 70 Ton Steel Gon						
Number Series/ Floor Type	ORER Year-Month					
	1930-01	1943-12	1945-01	1950-07	1955-01	1959-01
324000-324999 Steel Floor/Drop Doors	1000	457	163	16	1	0
750000-750999 Steel Floor/Drop Doors	0	0	49	9	2	2
751000-751999 Wood Floors	0	534	712	725	13	21
751000-751999 Steel Floors	0	4	70	212	939	898
Totals	1000	995	994	962	955	921

The model depicts a rebuilt car with a wood floor. As we are not aware of any drawings of these cars with the original steel floor with drop doors, they were not modeled. Parts are provide for either a vertical or horizontal hand brake.

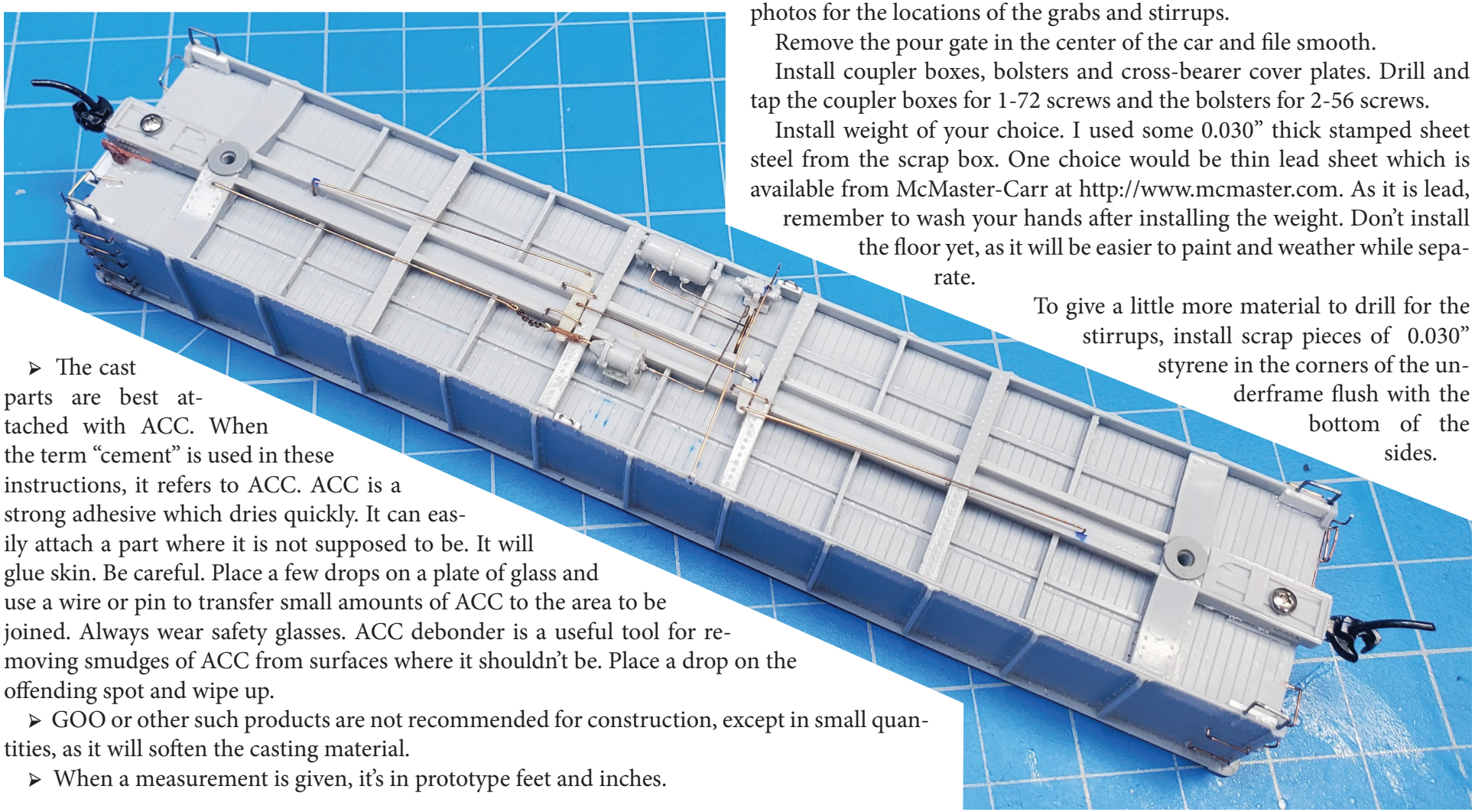


NYC 751478, Hamlet, NC, Oct.14, 1951, Colonel Chet McCoid photo, Bob's Photo

CONSTRUCTION

It's recommended that before you start construction you familiarize yourself with the additional information and photos that pertain to this kit on the Resin Car Works website, www.resincarworks.com. Especially helpful are a series of prototype drawings that show the placement of the various car parts.

➢ First give the resin parts a good cleaning with Dawn 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 refers to an item that the modeler is to supply.

1) BODY

As this is a one-piece body kit, most of the hard work has been done in creating the basic car shell. Actually, I think it was one of the easiest resin cars I've ever built. 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 of the grabs and #76 for the stirrups. Refer to the prototype photos for the locations of the grabs and stirrups.

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

Install coupler boxes, bolsters and cross-bearer cover plates. Drill and tap the coupler boxes for 1-72 screws and the bolsters for 2-56 screws.

Install weight of your choice. I used some 0.030" thick stamped sheet steel from the scrap box. One choice would be thin lead sheet which is available from McMaster-Carr at http://www.mcmaster.com. As it is lead, remember to wash your hands after installing the weight. Don't install the floor yet, as it will be easier to paint and weather while separate.

To give a little more material to drill for the stirrups, install scrap pieces of 0.030" styrene in the corners of the underframe flush with the bottom of the sides.

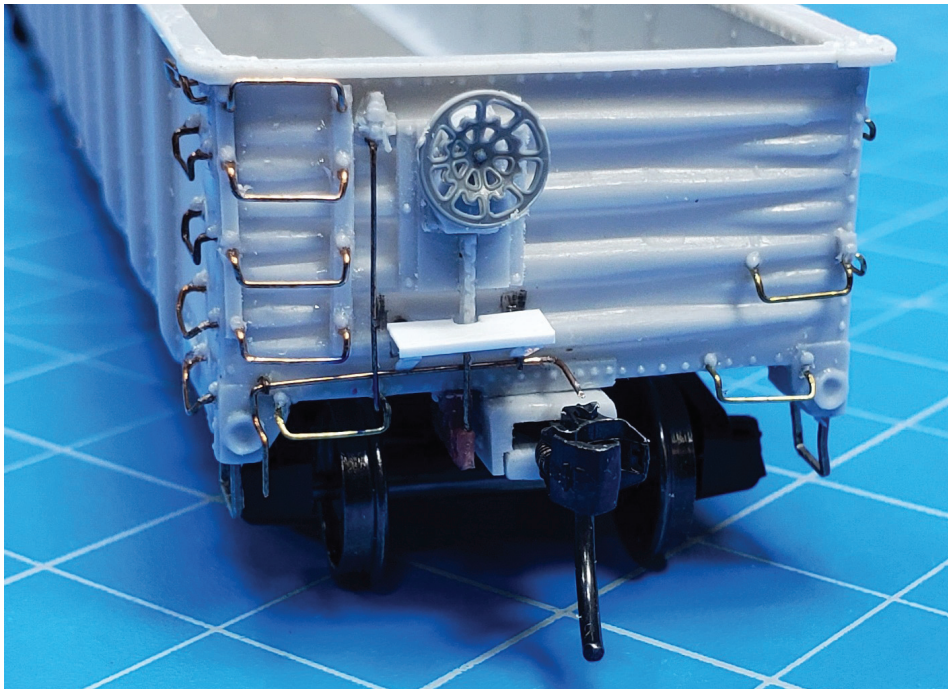
2) ENDS *(See also photo on page 9.)*

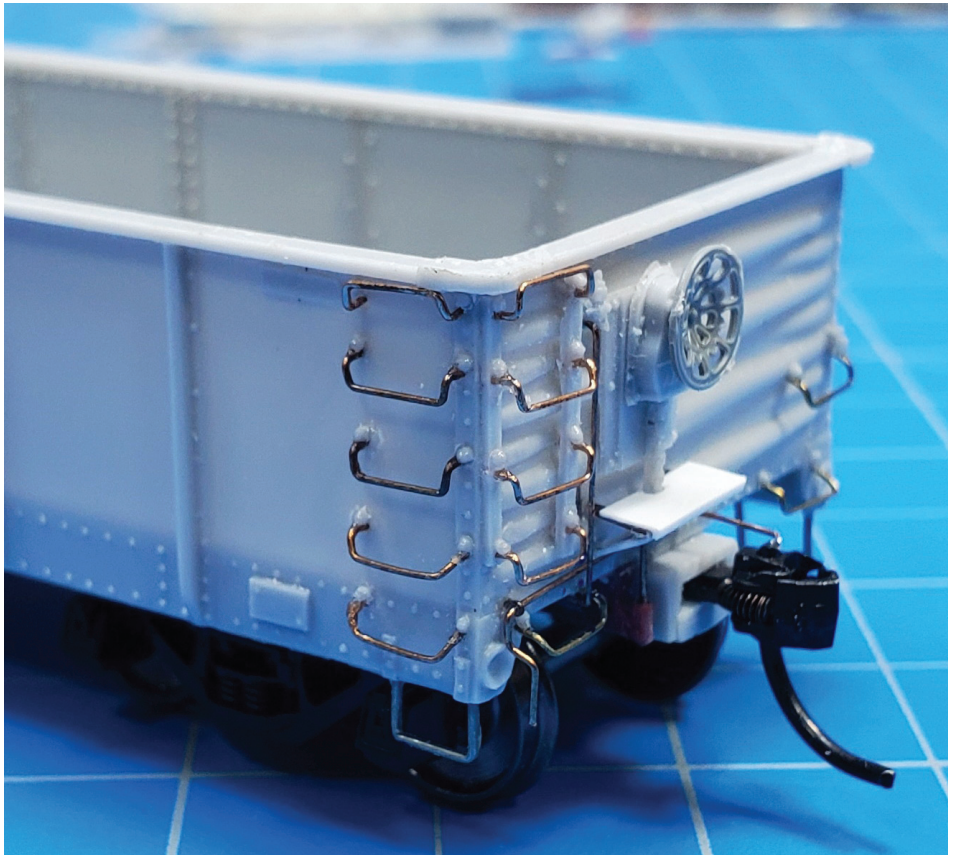
On the ends, install the right grab support, insuring that the nuts/bolts on the support line up with those to the left. There is a small bracket at the top of the end that the support is attached to. Now's a good time to install the grabs and stirrups. The A-line stirrups will need to be shortened some to match the prototype, or, you could bend new ones using flat copy machine staples.

Determine which will be the "B" end and attach the retainer valve to the top rib next to the grab support. Run 0.010" wire from the retainer valve to the bottom of the side.

Determine which hand brake type you would like to use—the Ajax or the vertical:

For the Ajax hand brake, install the wide bracket on the end and then the hand brake housing. Place a piece of the chain from the Tichy brake set between the brake housing and the bottom end rib. Install the brake clevis by running a piece of wire between the chain and clevis. There are insufficient prototype photos to determine exactly how the brake step for the Ajax hand brake was installed. The step is just above the bottom rib,





but the bracket type is unknown. I used some scrap flat staples attached horizontally into the end to attach the step.

For the vertical hand brake, use the Tichy parts to create the brake platform. From the prototype photo of 75478, it appears that the step is attached to the second end rib from the bottom.

Install Kadee #158 semi-scale Whisker couplers into the coupler boxes.

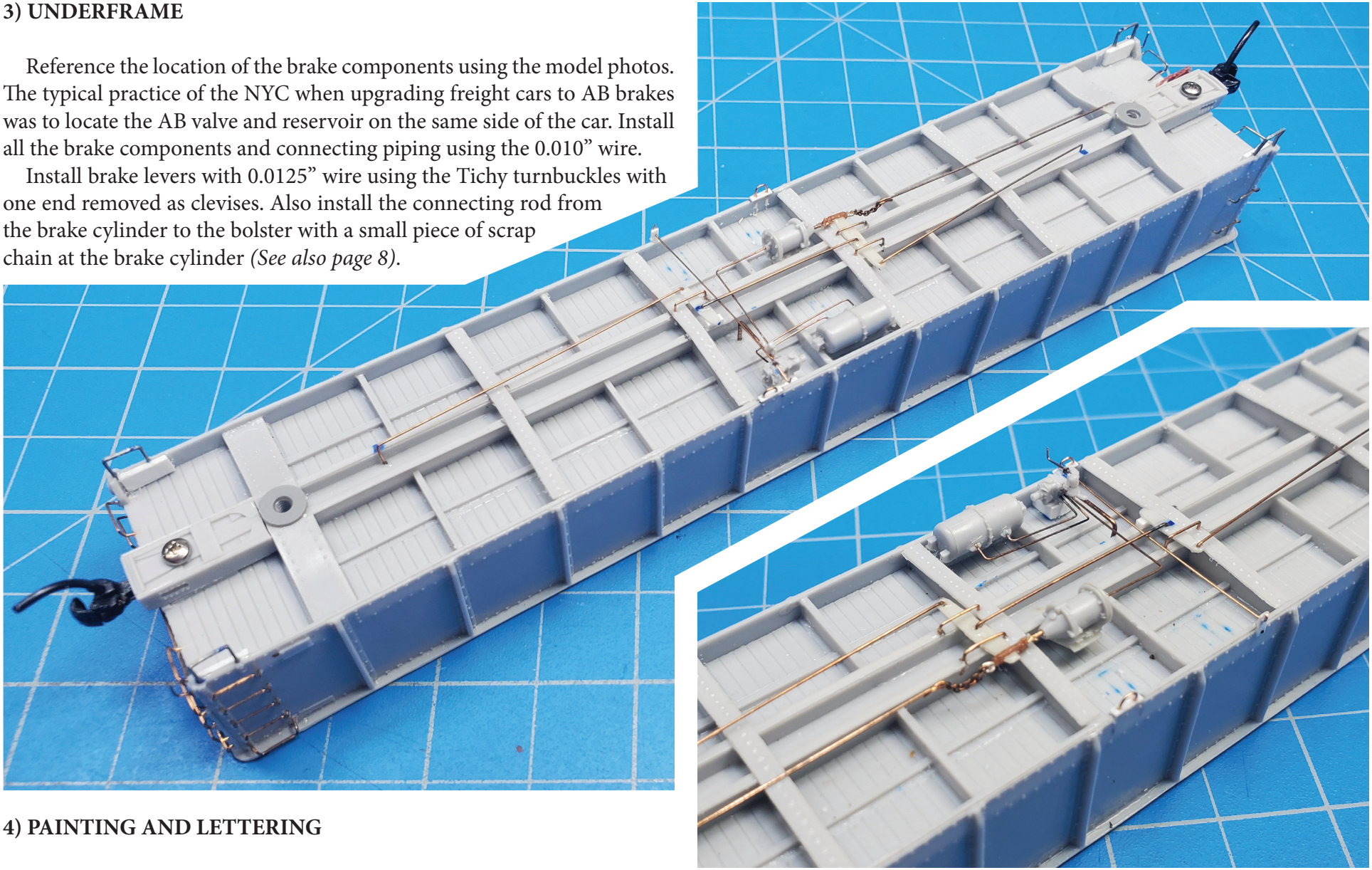
Cement the cut lever brackets to the left corners of the end sills. Attach etched eyebolts to cut lever brackets. Form cut levers from 0.0125" wire using the prototype photos to determine the shape. Attach to the end using the etched eyebolts, again using the prototype and model photos to determine the location.

The final body detail work is to create the towing loops. These are located on the center panels close to the outside side braces. They are created with a scrap piece of 1x3 styrene and a loop of 0.0125" wire.

3) UNDERFRAME

Reference the location of the brake components using the model photos. The typical practice of the NYC when upgrading freight cars to AB brakes was to locate the AB valve and reservoir on the same side of the car. Install all the brake components and connecting piping using the 0.010" wire.

Install brake levers with 0.0125" wire using the Tichy turnbuckles with one end removed as clevises. Also install the connecting rod from the brake cylinder to the bolster with a small piece of scrap chain at the brake cylinder *(See also page 8)*.



4) PAINTING AND LETTERING

Before painting, wash the car again with Dawn. Rinse and let dry.

The interior wood floor was painted with Testor's Model Master Random Tan (FS 33613) with a little yellow mixed in. When dry, the "wood" was weathered with AIM Products (now Monroe Models) weathering powders and sealed with Scalecoat I Flat Glaze *(See photo on page 8)*. After the model was painted the base color, the floor was installed.

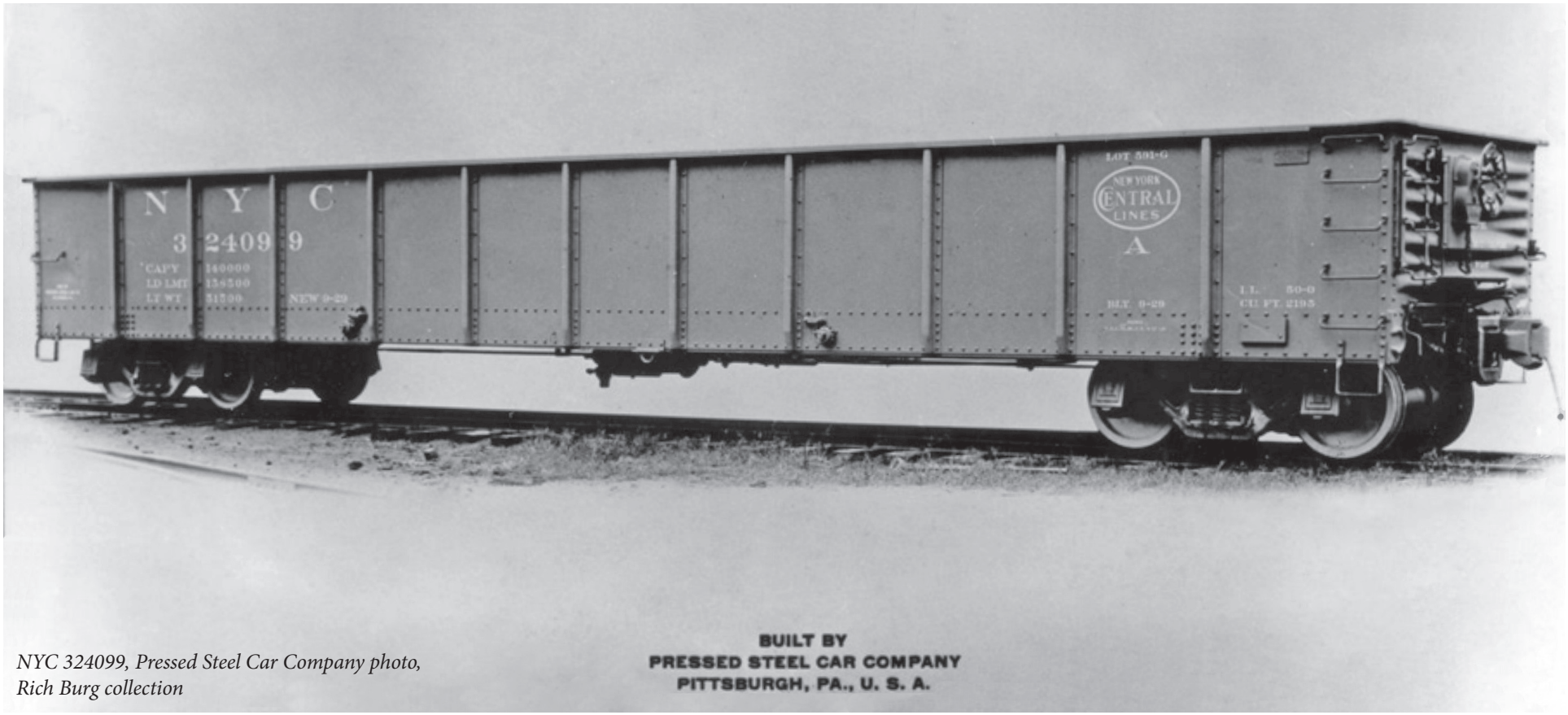
According to the railroad paint table on page 37 of RR CYC #3, a good match for the NYC's freight car color was one part Floquil #88 D&H Caboose Red and three parts #175 Southern Freight Car Brown. As I had a bottle mixed that was still good, I used it. For Scalecoat, a good mix appears to be Boxcar Red #3 with a little Boxcar Red #2 mixed in.

The decals are from Precision Design Company. There isn't anything special about application, but it's recommended that there's water on the model for decal placement. I used Microscale Micro Set (the blue bottle) for placement. Once the decals were dry, several applications of Micro Sol (red bottle) were used to get the decals settled into the 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.

5) A NOTE ON TRUCKS

The kit includes Tahoe Model Works #110 ACF 70-ton A-3 truck sideframes, as these are the only HO scale 70-ton trucks that are readily available (that I know of).



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